

# ***CAMPS* v4**

MIDI Sequencer with Musical Intelligence

## **User's Manual**

***Microworks***

software for the arts  
P.O.Box 415, Butler, NJ, 07405  
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# Welcome to **CAMPS**

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## The Only MIDI Sequencer with Musical Intelligence

CAMPS Help provides detailed information on CAMPS features and functions. Use this Contents to find the information you're looking for.

### [CAMPS Overview](#)

CAMPS is different kind of Sequencer. Reading this Overview will give you an introduction to the unique functional and user-interface concepts in CAMPS, making them easier to understand and utilize.

### [Using CAMPS](#)

Common topics using CAMPS..

### [Editors](#)

Editors allow you to edit MIDI data while composing and arranging music.

### [Dialog boxes](#)

Dialog boxes allow you to adjust parameters for various features in CAMPS including Auto Composing and Harmonization.

### [Menu Bar](#)

The Menu Bar located at the top of the window allows you to access most features in CAMPS.

### [Toolbars](#)

Several Toolbars are implemented in CAMPS for MIDI data monitoring and control.

### [Music Glossary](#)

Music Terms used in CAMPS including Key / Mode / Harmonize / Voicing

### [License Agreement](#)

Please read this License carefully before Using your Microworks product.

### Support

Link to [Frequently Asked Questions](#) at our website  
Send your questions by email to **support@mxw.com**

# Using CAMPS v4

Here is a list showing the most common topics you may need to be familiar with in CAMPS v4.

## Getting Started

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## Other Features

- [The "EZ" tools in CAMPS](#)
- [SMPTE or manual Tap Tempo Synchronization](#)
- [Organizing a Composition](#)
- [Multiple Document editing environment](#)

## Environment

CAMPS allows you to open multiple documents and exchange data between them while maintaining an enhanced level of MIDI functionality. Most editing tasks can be carried out while CAMPS is in Playback mode. The more powerful your computer, the more you can exploit the power of CAMPS.

We'd like to point out that CAMPS devotes a large amount of its processing power to Music Theory. While CAMPS is a fully functional sequencer, some sequencer features have been left aside in favor of music theory implementation and tightly written software code.

With this point in mind, it should also be noted that CAMPS is a very "hands-on" application. The flexibility of the musical tools presented here would not be possible if their functions were made mostly automatic. For example, the "EZ" tools in CAMPS are designed to give a quick starting point and help in familiarization with CAMPS objects used for building compositions. They are not designed to automatically create some great music for you. Consequentially, the more parameters you define, the better your musical results will be. Bringing a previously written Standard MIDI File into CAMPS will immediately enable you to unleash CAMPS more powerful features. This is the nature of CAMPS; who's very name is an acronym for Computer Assisted Music Processing System.

[Menus](#)

To manage the wide range of available functions and their complex musical relationships with your object selection options, CAMPS uses an object-oriented approach to doing things, employing a conditional menu system. This not only effects menu item availability (inactive or "grayed out" status), but also whether menu items appear at all, how they manifest themselves, and in what combination. Attempting to "Browse" the user-interface (menus, etc.) without a file loaded will prove fruitless. In general, you'll first need to mouse-select an object to work on, after which all possible actions for that object will become available.

## Main Objects

[Tracks](#)

CAMPS organizes a song's MIDI Line data into Tracks, as any MIDI Sequencer. However, the first Track (unnumbered) is dedicated to Chords, a proprietary Track used to build a Tonality reference for use by Auto Composing and other unique features in CAMPS.

The rest of the Tracks are basically universal with regards to other MIDI Sequencers, but are assignable to different Orchestration Categories, a proprietary designation used for Auto Harmonizing and other unique features in CAMPS. Track Categories for Melodic or Harmonic Line data are typically referred to in these Help Documents as "Tonal", while Tracks used for Percussion Line data are considered "Drums".

## Chord Blocks

The Chord Track contains Chord Blocks, each Block being a set of Chord Containers. A Chord Block can vary in size, depending on the quantity and size of the Chord Containers residing within it. Rather than having one long Block of Chord Containers for a whole Composition, Chord Containers are typically grouped into smaller Blocks, each having its own Tonal tendencies corresponding to a section of your Composition. This allows CAMPS to assist in Chord Progression development within each Chord Block, which in turn will help you Harmonize individual sections of your Composition more accurately.

CAMPS automatically selects (highlights) a Chord Block for analysis whenever a Chord Container within it is selected. Conversely, if any Chord Containers are selected, Chord Block Menu items will not be available in favor of Chord Container items. To get control of Chord Blocks, make sure no Chord Containers are highlighted in the Block being selected, and click the thin horizontal Chord Block Selection Bar across the top of a Chord Block.

## Chord Containers

CAMPS stores both MIDI and musical analysis data for Chord Containers, enabling you to Audition them, as well as employ their Composition functions. Chord Containers include several modifiers, including individually assignable Chord Name, Key and Chord Functions which all contribute to resulting Chords. Drag the dividing bar between the Chord and Line areas down to view them all.

From a user interface point of view, the phrases "Chord" and "Chord Container" are generally synonymous in the CAMPS environment. There can be only one Chord per Container. However, for the purpose of differentiating between Musical Chords and their assignment as CAMPS Chord Definitions, the phrase "Chord Container" is used as much as possible throughout these Help documents to describe CAMPS Chord Definitions in the Chord Track. Simultaneous Notes constituting Musical Chords in Track Line data are typically referred to as "Chordal Line data", or "Voicings". Understanding these distinctions will help to avoid confusion when using these Help documents.

## Line Blocks

CAMPS organizes a song Track's MIDI Line data into Line Blocks for musical analysis and manipulation control. These Blocks are mostly separated by Line Phrases, that is, a Line of continuous Notes. When importing a Standard MIDI File or Recording in CAMPS, a "pause" in a Track's Note data at a Bar division typically constitutes the end of a Line Block, and the beginning of another.

## Chord data

CAMPS references the Chord Blocks to facilitate the musical changes and adjustments you choose to make in your Line data with the Auto Compose and Voicing features. Existing Chords in a given Chord Block are also referenced when manipulating Chords within that Block. Some of the richest features CAMPS has to offer depend on attention to accurate Chord Definitions, so taking the time to familiarize yourself with CAMPS Chords will help you get the best results.

## Track Categories

CAMPS uses its proprietary Track Categories such as "Melody", "Bass", etc., to associate a musical role with each Track. This role is in turn used by CAMPS during Auto Harmonization and other processes. As a simple example, Note data in a Drum Track represents Drum sounds mapped to certain Keys of a MIDI Keyboard. Since these "Notes" don't usually represent Pitches constituting Harmony in your Composition, you wouldn't want CAMPS to consider them when Auto Harmonizing. On the other hand, referencing a Drum Track is desirable for Rhythmic Composing. Properly assigning Track Categories is another important part of employing CAMPS special features.

## Editing Notes

Notes can be edited in the Event list, Pianoroll and Notation Editors, but the Pianoroll Editor is probably the best for visually editing the Notes in a Line Block. The Event List editor is useful for editing Notes and other MIDI data by their numerical values. The Notation Editor is intended mostly as a display tool, and precisely editing Note Duration values while the Notation display interprets them from absolute MIDI values can be challenging.

## Auditioning

While Auditioning in [Chord related dialog boxes](#), making a new result selection in the dialog box during Audition Playback resets the Playback Loop to it's beginning. This allows you to hear how your selection effects a given Chord Progression in its entirety.

While Auditioning in [Line related dialog boxes](#), making a new result selection in the dialog box during Audition Playback does not reset the Playback Loop to it's beginning, allowing selection changes to occur at any point in the Playback Loop without interrupting it's flow. This allows you to compare different MIDI Lines from intermediate points without interrupting the flow. Additionally, some Line related dialog boxes allow you to manipulate background window functions for added flexibility.

## MIDI operation

The MIDI Setup dialog box offers a vast array of MIDI settings, but one of niftiest MIDI features in CAMPS is the ability to assign a different MIDI Output Device to each Track. Depending on how many MIDI interfaces are installed on your computer, this allows you to send each Track's MIDI data to a different Synth module or other device. It is also possible to change these settings during Playback.

Each Track also provides a numerical entry area and a real-time flying fader control, each of which can have one of twelve MIDI Control Events assigned to it.

## Using your computer's keyboard

If you like using your keyboard in combination with or instead of your mouse, you'll find most of the CAMPS menu system is "hot key" implemented, using the customary **ALT + Underlined** keystroke combination.

Many graphic selection areas such as edit/selection boxes and graphic data itself can be manipulated with your computer keyboard arrow keys. The Home and End keys allow you to instantly jump to the top or end of a Composition Document. The Space Bar starts and stops the CAMPS Sequencer.

## Managing Files

CAMPS stores Chord Block and Line Block information along with MIDI Chord and Line data in its proprietary (\*.CDC) file format. When exporting your work out to a Standard MIDI File, Chord definitions are converted to Standard MIDI Chord change text. Text and Lyric Events are maintained, but Track Categories and Line Block information are discarded.

## On-Line Help

These Help documents are primarily arranged according to CAMPS areas and interfaces. A great level of detail has been included here, though probably not enough for some, and too much for others. It is assumed that the user has a basic understanding of music, MIDI and computers, as these Help documents focus on CAMPS functionality. We sincerely hope that this software helps your musical endeavors, and that these Help documents help you use this software.

# Installation

To install CAMPS v4, please follow the instructions below :

- 1 Turn off all programs. If you are using a virus protection program, deactivate it.
- 2 Place the CAMPS 4 CD-ROM in the CD-ROM drive.
- 3 Double-click the **CAMPS 4 Setup.exe** icon on the CD-ROM to start installation.
- 4 Follow the instructions asking you to specify the installation location.
- 5 Click the **Close** button in the Installation dialog box to complete installation.



## Authorization

If you are installing CAMPS v4 for the first time, the installed program will expire in 30 days. Reinstallation doesn't extend this valid period. Please [obtain your license](#) from us for unlimited use of CAMPS v4.

For the Licensing instructions, please refer to ReadMe.doc in the CAMPS 4 folder.



## Reinstallation

If you are reinstalling CAMPS v4 while having a licensed CAMPS v4 installed in a different directory or PC, you **MUST** transfer your digital license from the authorized program to the newly installed one. [Between directories](#), [Between PC's](#)

# Uninstallation

If you are using an [Authorized](#) copy of CAMPS v4, you MUST temporarily transfer your license from the currently Authorized copy of CAMPS v4 BEFORE any uninstallation. To uninstall CAMPS v4, please follow the instructions below :

- 1 Turn off all programs. If you are using a virus protection program, deactivate it.
- 2 Click the **Start** button at the left bottom corner of the Windows screen and then choose **Uninstall CAMPS 4** from the **Program / CAMPS 4** submenu.
- 3 Follow the instructions in the Uninstallation dialog box.
- 4 Click the **OK** button in the Uninstallation dialog box to complete uninstallation.



## Transferring your License

It is VERY important to understand that you need to transfer your digital license from the authorized program to the newly installed one BEFORE uninstalling the authorized program. Uninstalling CAMPS without License transferring also destroys your purchased license. [More details](#).

# Authorization

To enable your license for unlimited use of CAMPS v4, you need to authorize your copy of CAMPS v4. Otherwise your copy of CAMPS v4 will expire in 30 days. Once authorized, you can repeat Installations and Uninstallations between different directories and PC's by transferring the Digital License. To authorize your copy of CAMPS v4, please follow the instructions below :

## Opening the License Configuration dialog box

- 1 Turn off all programs. If you are using a virus protection program, deactivate it.
- 2 Double-click the **CAMPS** icon in the CAMPS 4 folder on your Hard Drive.
- 3 Hit the **Enter** key on your Computer Keyboard when the License Status dialog box appears right after launching.
- 4 The License Configuration dialog box appears.

## Automatically creating a Site Code

In the License Configuration dialog box, you'll receive a unique **Site Code** automatically created for you. As soon as you provide us with the Site Code via one of methods explained below, our 24-hour fully automated Authorization Server will issue a corresponding **Site Key** to the provided Site Code. Type in the Site Key in the License Configuration dialog box to unlock your copy for unlimited use.

- 5 Click the **Display Site Code...** button.
- 6 Click the **Yes** button if you agree to the terms of the License Agreement.
- 7 Make a copy of the generated Site Code for your record.

## Authorizing your copy with a Site Key

Please provide us with your Site Code and customer information via **mail, fax, email** or our **Authorization Site**. You will receive a Site Key in 24 hours by email or fax, or in a few days by mail.

Whether you've purchased CAMPS v4 through retailers or mail order, you must also provide us with your Serial Number.

- 8 Click the **Authorization Site** link in the message area of the dialog box to proceed the automated and secure Authorization over the Internet.
- 9 Follow the instructions asking for your Site Code and customer information.
- 10 When your Site Key is provided, type in the Key in the **Site Key** text box and then click **Validate** button.
- 11 Now your Digital License is preserved in the authorized copy of CAMPS v4.



### Relocating the authorized program

It is VERY important to understand that you must extract your Digital License from the authorized copy of CAMPS v4 BEFORE any relocation of CAMPS v4. [Uninstalling](#) or deleting CAMPS without License transferring destroys your purchased License. [More details](#).





## Reinstalling in another Directory

To move the current CAMPS 4 folder between directories on the same computer, you naturally need to duplicate the complete CAMPS 4 folder. More importantly, you also need to transfer the license from the currently [Authorized](#) program to the copy.

- 1 Turn off all programs. If you are using a virus protection program, deactivate it.
- 2 Make a duplication of the CAMPS 4 folder using either **CAMPS 4 Setup.exe** or Windows "Copy & Paste" function.
- 3 Double-click the [authorized](#) CAMPS icon in the CAMPS 4 folder on your Hard Drive.
- 4 Hit the **Enter** key on your Computer Keyboard when the License Status dialog box appears right after launching.
- 5 The License Configuration dialog box appears.
- 6 Choose **Transfer to Directory...** from the **License** menu.
- 7 Enter the destination directory for the license where prompted or press **Browse** to display a list of directories.
- 8 Press **OK**. The license will be moved from the source copy of the program to the destination copy.
- 9 You can now delete the source copy of the CAMPS 4 folder to avoid unnecessary future confusion.



### Uninstalling CAMPS

It is VERY important to understand that you NEVER delete or uninstall the licensed ([authorized](#)) copy of CAMPS v4. You MUST first extract your Digital license from the licensed copy of CAMPS v4. [More details.](#)

# Reinstalling in another PC

To reinstall CAMPS v4 into another PC, you MUST transfer a Digital License from this PC to a copy of CAMPS v4 on another PC via a **Floppy Disk**.

## On Another PC

- 1 Turn off all programs. If you are using a virus protection program, deactivate it.
- 2 Place the CAMPS 4 CD-ROM in the CD-ROM drive.
- 3 Install a set of CAMPS using **CAMPS 4 Setup.exe**.
- 4 Place a blank Floppy Disk in the Floppy Disk drive.
- 5 Double-click the **Non Licensed** CAMPS icon in the CAMPS 4 folder on your Hard Drive.
- 6 Hit **Enter** key on your Computer Keyboard when the License Status dialog box appears right after launching.
- 7 The License Configuration dialog box appears.
- 8 Choose **Transfer in from another computer...** from the **License** menu.
- 9 Enter a directory on a Floppy Disk that will be used to hold the temporary transfer information.
- 10 Press **OK**. The transfer information will be written to the Floppy Disk.

## On Source PC

- 11 Take the Floppy Disk to the **Licensed** computer.
- 12 Choose **Transfer out to another computer...** from the **License** menu.

## Back on Another PC

- 13 Bring the Floppy Disk back to this computer and then press **Continue Transfer**.
- 14 This program will now be authorized.

[More Details](#)

# Defragmentation

BEFORE using the defragmentation utility (such as **Speed Disk** of Symantec's Norton Utilities) on the volume the authorized CAMPS v4 resides, You MUST first extract your digital license from the licensed copy to a floppy disk. Otherwise the defragmentation utility will destroys your purchased license. After defragmentation, transfer your digital license back to the program on the volume from the floppy disk. See also [Reinstalling in another PC](#) and [Reinstalling in another Directory](#).

# MIDI Settings

The MIDI Setup dialog box offers a vast array of MIDI settings. Before making any setting in the dialog box, you need to choose a MIDI Driver software for use in CAMPS from **TWO** options, the Windows Operating System MIDI Mapper or MIDI Driver you've installed.

Choosing **MIDI Mapper** from the **MIDI** menu switches between enable or disable the Windows Operating System MIDI Mapper. When enabled, CAMPS passes MIDI Output Device selection control to the Windows Multimedia applet in the Control Panel. When disabled, MIDI Output Devices can be selected from within CAMPS, allowing much greater flexibility. A checkmark appears next to this item when enabled.

Choosing **MIDI Setup** from the **MIDI** menu opens the [MIDI Setup dialog box](#), allowing you to manage many MIDI signaling details. This includes settings for input, output, sync and Devices.



One of niftiest MIDI features in CAMPS is the ability to [assign a different MIDI Output Device to each Track](#). Depending on how many MIDI interfaces are installed on your computer, this allows you to send each Track's MIDI data to a different Synth module or other device. It is also possible to change these settings during Playback.

Each Track also provides a numerical entry area and a real-time flying fader control, each of which can have one of twelve MIDI Control Events assigned to it.

# Creating a New Document

Choose **New** from the [File](#) menu to create a New untitled Document as specified by the settings in the [New Document Setup](#) dialog box.

# Opening a Document

Choose **Open...** from the [File](#) menu to open previously saved CAMPS v4 Documents. CAMPS allows you to open **multiple documents** and exchange data between them.

[More Details](#)

## Opening a CAMPS v3 Document

Choose **Open...** from the [File](#) menu to open CAMPS v3 ( for Mac ) Documents with ".cdc" extension. CAMPS allows you to open **multiple documents** and exchange data between them.

CAMPS organizes a song Track's MIDI Line data into [Line Blocks](#) for musical analysis and manipulation control. These Blocks are mostly separated by Line Phrases, that is, a Line of continuous Notes. When importing a Standard MIDI File or CAMPS v3 Document, or Recording in CAMPS, a "pause" in a Track's Note data at a Bar division typically constitutes the end of a Line Block, and the beginning of another.

[More Details](#)



# Opening a Standard MIDI File

Choose **Open...** from the **File** menu to open Standard MIDI Files ( S.M.F.). CAMPS allows you to open **multiple documents** and exchange data between them.



When opening a Standard MIDI File, CAMPS automatically analyzes Line data and assigns [appropriate Line Blocks](#) and one of [six Category settings](#) to each Track. You can alter these settings at any time.

CAMPS organizes a song Track's MIDI Line data into [Line Blocks](#) for musical analysis and manipulation control. These Blocks are mostly separated by Line Phrases, that is, a Line of continuous Notes. When importing a Standard MIDI File or CAMPS v3 Document, or Recording in CAMPS, a "pause" in a Track's Note data at a Bar division typically constitutes the end of a Line Block, and the beginning of another.

[More Details](#)

## Saving a Document

Choose **Save** or **Save As...** from the [File](#) menu to save the current Document using its existing filename and location.

CAMPS stores Chord Block and Line Block information along with MIDI Chord and Line data in its proprietary (\*.CDC) file format.

## Exporting as a Standard MIDI File

Choose **Export SMF...** from the [File](#) menu to open the [Export Standard MIDI File](#) dialog box, allowing you to save the current Document as a Standard MIDI File. After specifying a filename and location and clicking **Save**, the [Export Options](#) dialog box opens, allowing you to make final file format conversion settings.

When exporting your work out to a Standard MIDI File, Chord definitions are converted to Standard MIDI Chord change text. Text and Lyric Events are maintained, but Track Categories and Line Block information are discarded.

# Creating New Tracks

CAMPS organizes a song's MIDI Line data into Tracks, as any MIDI Sequencer. Tracks are basically universal with regards to other MIDI Sequencers, but are assignable to different [Orchestration Categories](#), a proprietary designation used for Auto Harmonizing and other unique features in CAMPS. Each Track's MIDI Line data are organized into [Line Blocks](#) for musical analysis and manipulation control.

## **To Create New Tracks**

Since [Line Blocks](#) reside in Tracks, you'll first need to have [Tracks](#) in the Track Area of your Document before you can individually manipulate Line Blocks.

[More Details](#)

# Working with Lyric

Lyric Events allow you to include song Lyrics (sung words) in your Composition. You can create, edit, copy, duplicate, move or delete Lyric Events as needed. Lyrics can then be Saved and Exported with the rest of your Composition Document. Unlike general Text Events which have a common location in a Document, a different set of Lyrics can be saved with each Line Block.

You can display, create and edit Lyric Events in the [Pianoroll](#), [Control Draw](#) and [Event List](#) Editors. Lyric Events are also displayed in the [Notation](#) Editor.

## **From the Pianoroll / Control Draw Editors**

Right-click a desired location in the Lyric Area and choose **New Lyric** to create a new Lyric text box. Enter desired Lyric text data in the edit box.

## **From the Event List Editor**

Right click a desired location in the List Area and choose **New Lyric** to create a new Lyric Event. Double click the new Lyric Event to open the Edit a Text Event dialog box and then enter desired Lyric text data in the edit box.

[More Details](#)

# Playing back Lines and Chords

CAMPS offers a number of different methods for Playing back MIDI data. Depending on the [Editors](#) as well as the method you've chosen, CAMPS works in slightly different ways during Playback in order to provide the most useful settings for the various situations.

CAMPS provides FIVE basic methods for Playing back MIDI data :

- **Playback** from the right-click drop-down menu
- **Playback** from the **MIDI** menu
- **Play** from the **MIDI** menu
- **Playback Control** Toolbar
- The **Playback** Edit Button

Methods		in the Document Window	In the Other available Editors
<b>Playback Control</b> ( Toolbar )		Activated Tracks <b>2</b>	Activated Tracks + Line data <b>1, 2</b>
<b>Play</b> ( MIDI menu )		Activated Tracks <b>2</b>	Activated Tracks + Line data <b>1, 2</b>
<b>Playback</b> ( Right-click )	Chords	Chord Tracks <b>4, 5</b>	Chord Track <b>1</b> + Line data <b>1</b>
	Lines	Line Block <b>4, 5</b> + Chord <b>3</b>	Chord Track <b>3</b> + Line data <b>1</b>
<b>Playback</b> ( MIDI menu )		Activated Tracks <b>2</b>	Chord Track <b>3</b> + Line data <b>1</b>
<b>Playback</b> ( Edit Button )		X	Chord Track <b>3</b> + Line data <b>1</b>
<b>Playback with Others</b> ( Right-click )	Chords	Chord <b>4</b> + Activated Tracks <b>6</b>	Chord Track <b>1</b> + Line data <b>1</b> + Activated Tracks
	Lines	Line Block <b>4</b> + Activated Tracks <b>6</b> + Chord <b>3</b>	Chord Track <b>3</b> + Line data <b>1</b> + Activated Tracks
<b>Playback with Others</b> ( MIDI menu )		X	Chord Track <b>3</b> + Line data <b>1</b> + Activated Tracks
<b>Playback with Others</b> ( Edit Button )		X	Chord Track <b>3</b> + Line data <b>1</b> + Activated Tracks
Methods		in the <b>Chord</b> related dialog boxes	in the <b>Line</b> related dialog boxes
<b>Playback</b> ( Dialog boxes )		Chord Track <b>1</b>	Chord Track <b>3</b> + Line data <b>1</b>
<b>Playback with Others</b> ( Dialog boxes )		Chord Track <b>1</b> + Activated Tracks	Line data <b>1</b> + Activated Tracks

## Notes

- 1 even when Track is inactivated
- 2 plays back an existing Loop
- 3 only when Chord Track is activated
- 4 activates Track if it is inactivated
- 5 inactivates all the other Line Tracks
- 6 activates all the Line Tracks if no Track is activated

[More about the Dialog box related Playback](#)

# Recording Lines

CAMPS offers a number of different methods for Recording MIDI data. Depending on the [Editors](#) as well as the method you've chosen, CAMPS works in slightly different ways during Recording in order to provide the most useful settings for the various situations.

You can Record in real time, Over-Dub or Step modes in the Document Window, as well as the Event List, Pianoroll, Control Draw and Notation Editors.

You can only Record one Track at a time. In the [Document Window](#), the desired Track must be Armed for Recording. In the [Event List](#), [Pianoroll](#), [Control Draw](#) and [Notation](#) Editors, your Track (Line Block) selection has already been made, so Recording is immediately available.

CAMPS provides TWO paths to access Recording Control over MIDI data :

- **Record** from the **MIDI** menu
- **Record Control** Toolbar

CAMPS provides THREE methods for Recording Control over MIDI data :

- **Record** Starts Real-Time Recording
- **OverDub Record** Starts Over-Dubbing Recording
- **Step Record** Starts Step-Write Recording

## Notes

All activated Tracks will be played back simultaneously during Recording.

[More Details](#)



# Creating New Line Blocks

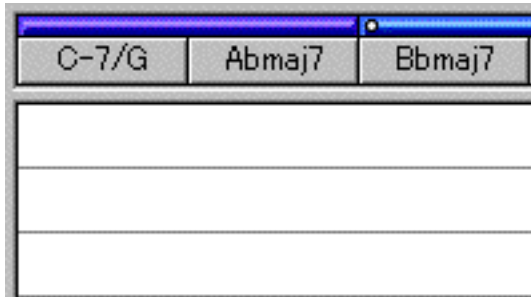
CAMPS organizes a song's MIDI Line data into Tracks, as any MIDI Sequencer. Tracks are basically universal with regards to other MIDI Sequencers, but are assignable to different [Orchestration Categories](#), a proprietary designation used for Auto Harmonizing and other unique features in CAMPS.

Each Track's MIDI Line data are organized into [Line Blocks](#) for musical analysis and manipulation control. These Blocks are mostly separated by Line Phrases, that is, a Line of continuous Notes.

## To Create New Line Blocks

Since [Line Blocks](#) reside in Tracks, you'll first need to have [Tracks](#) in the Track Area of your Document before you can individually manipulate Line Blocks.

CAMPS offers a number of different methods for creating new Line Blocks including the **Pen** tool. Select the **Pen** tool at the top of the [Document Window](#) and then click and drag horizontally in the desired region of the Line Area to assign the starting and ending locations of the Line Block you are about to create. ([Settings for Line Block](#) such as Location, Color and Duration are adjustable at any later time.)



C-7/G	Abmaj7	Bbmaj7

[More Details](#)

# Auto Composition from Scratch

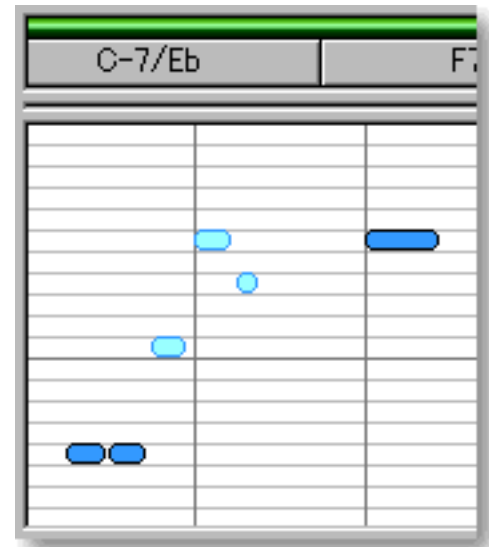
CAMPS offers a number of different methods for Auto Composition including the **Magic Wand** tool. Select the **Magic Wand** tool at the top of the [Document Window](#) and then click and drag horizontally in the desired region of the Line Area to assign the starting and ending locations of the Line Block you are about to create. ( [Settings for Line Block](#) such as Location, Color and Duration are adjustable at any later time.)

If any **Chords** exist in the same Bar region as the New Line Block being created with the **Magic Wand** tool, CAMPS will Auto Compose Line data using existing Chord Harmony instead of arbitrarily creating Line data.

Depending on the [Track Category](#) for the Line Block you select, an appropriate type of Line data for the Track Category will be created.

If any **Line data** exist in the Line Block being clicked with the **Magic Wand** tool, now CAMPS instantly analyzes the Line data and recreates them with a click of your mouse. Doing this repeatedly can yield hundreds of variations.

Using the **Magic Wand** tool in the [Pianoroll](#) and [Notation](#) Editors allows you to reCompose **a region of Notes**. Click the **Magic Wand** tool button at the top of the Editor. Then, click and hold your mouse button down at an empty location in the Pianoroll Area (or Notation Area) and drag your mouse over desired Note Events.



The flexibility of the musical tools presented in CAMPS would not be possible if their functions were made mostly automatic. The **Magic Wand** tool in CAMPS is designed to give a quick starting point and help in familiarization with CAMPS objects used for building compositions. They are not designed to automatically create some great music for you. Consequentially, the more parameters you define, the better your musical results will be.

[More Details](#)

[More Controls](#)

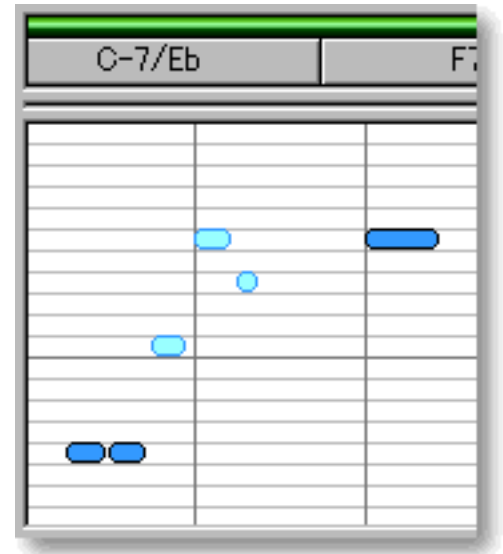
# Auto Composition based on Analysis of your Melody


Import your Standard MIDI File into CAMPS, [manually](#) or [automatically](#) assign Chord Definitions, and you're ready to go ! Once Chord Definitions are assigned, you can Auto Compose hundreds of new Lines based on Chord Definitions and auto analysis of existing Lines. CAMPS can yield very surprising results.

CAMPS offers a number of different methods for Auto Composition including the **Magic Wand** tool. Select the **Magic Wand** tool at the top of the [Document Window](#) and then click the desired Line Block to Auto Compose its new Line data based on its existing Line data. Doing this repeatedly can yield hundreds of variations.

Depending on the [Track Category](#) for the Line Block you select, an appropriate type of Line data for the Track Category will be reComposed.

Using the **Magic Wand** tool in the [Piano roll](#) and [Notation](#) Editors allows you to reCompose **a region of Notes**. Click the **Magic Wand** tool button at the top of the Editor. Then, click and hold your mouse button down at an empty location in the Pianoroll Area (or Notation Area) and drag your mouse over desired Note Events.



 The flexibility of the musical tools presented in CAMPS would not be possible if their functions were made mostly automatic. The **Magic Wand** tool in CAMPS is designed to give a quick starting point and help in familiarization with CAMPS objects used for building compositions. They are not designed to automatically create some great music for you. Consequentially, the more parameters you define, the better your musical results will be.

[More Details](#)

[More Controls](#)

# Customizing Auto Composition

Import your Standard MIDI File into CAMPS, [manually](#) or [automatically](#) assign Chord Definitions, and you're ready to go ! Once Chord Definitions are assigned, you can Auto Compose hundreds of new Lines based on Chord Definitions and auto analysis of existing Lines. CAMPS can yield very surprising results.

CAMPS offers a number of different methods for Auto Composition including the [Compose](#) dialog box. The Compose dialog box allows you to adjust guidelines for Auto Composing new Melodic, Chordal or Rhythmic Line data, and allows you to Auto Compose these Lines with the click of a button. Doing this repeatedly can yield hundreds of variations.

Depending on the [Track Category](#) for the Line Block you select, an appropriate type of Line data for the Track Category will be reComposed.

## **From the Document Window**

Select desired Line Blocks and then choose **Compose** from the [Line](#) menu to open the Compose dialog box. You can adjust guidelines for Auto Composing, and to Auto Compose the entire Line data in the selected Line Blocks.

## **From the Pianoroll/Notation Editors**

Select desired Notes and then choose **Compose** from the [Line](#) menu to open the Compose dialog box. You can adjust guidelines for Auto Composing, and to Auto Compose the selected Notes.

[More Details](#)

# Auto Composition based on a mouse-drawn contour

Import your Standard MIDI File into CAMPS, [manually](#) or [automatically](#) assign Chord Definitions, and you're ready to go ! Once Chord Definitions are assigned, you can Auto Compose hundreds of new Lines based on Chord Definitions and auto analysis of existing Lines. CAMPS can yield very surprising results.

CAMPS offers a number of different methods for Auto Composition including the [MelodyDraw](#) pane in the [Compose](#) dialog box. The MelodyDraw pane allows you a unique freestyle drawing for directing the Pitch occurrences in Line data being Auto Composed. MelodyDraw will guide the vertical motion of Melodic and Chordal Line data Auto Composition. Doing this repeatedly can yield hundreds of variations.

Depending on the [Track Category](#) for the Line Block you select, an appropriate type of Line data for the Track Category will be reComposed.

## **From the Document Window**

Select desired Line Blocks, choose **Compose** from the [Line](#) menu to open the Compose dialog box and then choose MelodyDraw pane. You can adjust drawing for Auto Composing, and to Auto Compose the entire Line data in the selected Line Blocks.

## **From the Pianoroll/Notation Editors**

Select desired Notes, choose **Compose** from the [Line](#) menu to open the Compose dialog box and then choose MelodyDraw pane. You can adjust drawing for Auto Composing, and to Auto Compose the selected Notes.

[More Details](#)

# Understanding Takes

CAMPS allows you to store different Takes within each Line Block. Takes are different versions of a given [Line Block](#). Except for MIDI Events in the Line data, Length and other attributes are the same as the original. This allows you to store and choose between alternate performances of a particular Line Block.

While a given location in the [Line Area](#) can contain multiple Line Blocks, Takes are stored in the "background" of each individual Line Block. If you delete a Line Block, all of its Takes will also be deleted.

## From the Document Window

Select a desired Line Block and then choose **Take List...** from the **Take** submenu of the [Line](#) menu to open the Take List dialog box. You can create an empty or EZcomposed Take, and select, remove, rename, duplicate an existing Take. Selecting an existing Take switches Line data for the Line Block.

## From the Event List / Pianoroll / Control Draw / Notation Editors

Choose **Take List...** from the **Take** submenu of the [Line](#) menu to open the Take List dialog box. You can create an empty or EZcomposed Take, and select, remove, rename, duplicate an existing Take. Selecting an existing Take switches an active Line data for the Line Block.

[More Details](#)

# Auto Voicing

Most often melody lines consist of a series of individual Notes, but sometimes Harmonies are added in certain places to provide musical variation or impact. The different arrangement of harmony Notes under the melody is known as [Voicing](#).

CAMPS automatically analyzes the selected Note data along with relevant Chords to provide you with various kinds of Voicing for your Line data.

## **From the Pianoroll / Notation Editors**

Select Notes being Voiced and then choose **Voicing...** from the **Line** menu to open the [Voicing](#) dialog box. You can select Voicing Modes, Harmonic Tensions, and quantity of Voices to be used for each selected Note's Voicing results. It is also possible to [temporarily assign a different Chord](#) by clicking the Note's **Chord** button and selecting "**Reharmonize...**" from the drop-down menu.

[More Details](#)

# Auto Scale Spelling

Unlike other MIDI sequencers, CAMPS automatically displays Scale Degree for each Melodic Note to relevant Chords as well as Avoid Notes, Chord Tones and Scale Notes corresponding to each Chord. These features may help users instantly recognize Melody - Harmony relationship by Note and by Chord.

## Scale Degree for each Note

Once Chord definitions are assigned, CAMPS displays Chord Tones and Tension Notes ( Root, b3, 9, etc.) as you move cursor over Notes in the Pianoroll and Notation Editors.

## Scale Spelling for each Chord

Once Chord definitions are assigned, CAMPS displays Scale Spelling, listing intervals from the Root (R, 3,5,7, etc.). Choose **Scale Spelling** from the **Chord View** submenu of the **View** menu to set Chord display to [Scale Spelling](#) in the Document Window and the Pianoroll Editor.

## Avoid Notes, Chord Tones and Scale Notes

Once Chord definitions are assigned, CAMPS displays Scale Notes, Chord Tones and Avoid Notes for each Chord in the Pianoroll Editor. Choose **Scale Notes**, **Chord Tones** or **Avoid Notes** from the **Note View** submenu of the **View** menu to display a light gray background color to differentiate between Scale Notes, Chord Tones or Avoid Notes in the Pianoroll Area.



# Creating New Chords

CAMPS organizes a song's MIDI Line data into Tracks, as any MIDI Sequencer. However, the first Track (unnumbered) is dedicated to Chords, a proprietary Track used to build a Tonality reference for use by Auto Composing and other unique features in CAMPS.

The Chord Track contains Chord Blocks, each Block being a set of Chord Containers. A Chord Block can vary in size, depending on the quantity and size of the Chord Containers residing within it.

Rather than having one long Block of Chord Containers for a whole Composition, Chord Containers are typically grouped into smaller Blocks, each having its own Tonal tendencies corresponding to a section of your Composition. This allows CAMPS to assist in Chord Progression development within each Chord Block, which in turn will help you Harmonize individual sections of your Composition more accurately.

## To Create New Chords

Since [Chord Containers](#) reside in Chord Blocks, you'll first need to have [Chord Blocks](#) in the Chord Area of your Document before you can individually manipulate Chords.

CAMPS offers a number of different methods for creating new Chord Blocks including the **Pen** tool. Select the **Pen** tool at the top of the [Document Window](#) and then click and drag from horizontally in the [Chord Area](#) to assign the starting and ending locations of the Chord Block you are about to create. [Settings for Chords](#) in the new Chord Block such as Key, Mode and Duration are adjustable at any later time.



[More Details](#)

# Auto Roman Numeral Analysis

CAMPS allows you to set display of Chord Containers to [Roman Numeral Analysis](#) (II-7, V7, etc.).

## In Editors

Choose **Roman Numeral** from the [View](#) menu to set display of Chord Containers to Roman Numeral Analysis.

## In Dialog boxes

Select **Roman Numeral** radio button in [Dialog boxes](#).

# Auto Scale Name Analysis

CAMPS allows you to set display of Chord Containers to [Scale Name](#), also known as Mode (Dorian, Mixolydian, etc.)

## In Editors

Choose **Scale Name** from the [View](#) menu to set display of Chord Containers to Scale Name Analysis.

# Tensions and Inversions

Right click desired Chord and then choose a Chord from the **Tensions** submenu. You can replace the desired Chord with/without a [Tension Chord](#) ( C-7, C-7(9)(11), etc.) or a simpler Triad ( C-, Eb, etc.).

Right click desired Chord and then choose a Chord from the **Inversions** submenu. You can replace the desired Chord with a [Inverted Chord](#) ( C-7/Eb, C-/G, etc.) or a non-Inverted Chord ( C-7, C-, etc.).

# Auto Chord Progression Generation

CAMPS organizes a song's MIDI Line data into Tracks, as any MIDI Sequencer. However, the first Track (unnumbered) is dedicated to Chords, a proprietary Track used to build a Tonality reference for use by Auto Composing and other unique features in CAMPS.

The Chord Track contains Chord Blocks, each Block being a set of Chord Containers. A Chord Block can vary in size, depending on the quantity and size of the Chord Containers residing within it.

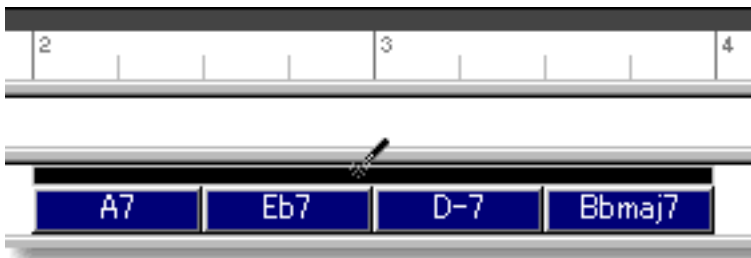
Rather than having one long Block of Chord Containers for a whole Composition, Chord Containers are typically grouped into smaller Blocks, each having its own Tonal tendencies corresponding to a section of your Composition. This allows CAMPS to assist in Chord Progression development within each Chord Block, which in turn will help you Harmonize individual sections of your Composition more accurately.

## To generate New Chord Progressions

Since [Chord Containers](#) reside in Chord Blocks, you'll first need to have [Chord Blocks](#) in the Chord Area of your Document before you can individually manipulate Chords.

CAMPS offers a number of different methods for creating new Chord Blocks with Chords including the **Magic Wand** tool. Select the **Magic Wand** tool at the top of the [Document Window](#) and then click and drag from horizontally in the [Chord Area](#) to assign the starting and ending locations of the Chord Block you are about to create. ( [Settings for Chords](#) in the new Chord Block such as Key, Mode and Duration are adjustable at any later time.)

If any **Chords** exist in the Chord Block being clicked with the **Magic Wand** tool, now CAMPS instantly analyzes the Chords and regenerates them with a click of your mouse. Doing this repeatedly can yield hundreds of variations.



[More Details](#)

[More Controls](#)

# Auto Harmonization

CAMPS organizes a song's MIDI Line data into Tracks, as any MIDI Sequencer. However, the first Track (unnumbered) is dedicated to Chords, a proprietary Track used to build a Tonality reference for use by Auto Composing and other unique features in CAMPS.

The Chord Track contains Chord Blocks, each Block being a set of Chord Containers. A Chord Block can vary in size, depending on the quantity and size of the Chord Containers residing within it.

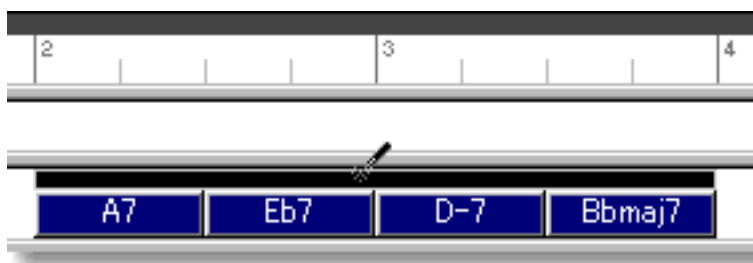
Rather than having one long Block of Chord Containers for a whole Composition, Chord Containers are typically grouped into smaller Blocks, each having its own Tonal tendencies corresponding to a section of your Composition. This allows CAMPS to assist in Chord Progression development within each Chord Block, which in turn will help you Harmonize individual sections of your Composition more accurately.

## To Auto Harmonize the existing Lines

Since [Chord Containers](#) reside in Chord Blocks, you'll first need to have [Chord Blocks](#) in the Chord Area of your Document before you can individually manipulate Chords.

CAMPS offers a number of different methods for Auto Harmonization including the **Magic Wand** tool. Select the **Magic Wand** tool at the top of the [Document Window](#) and then click and drag from horizontally in the [Chord Area](#) to assign the starting and ending locations of the Chord Block you are about to create. If any Line Blocks in [Categories](#) other than Drums exist in the same Bar region as the Chord being created with the **Magic Wand** tool, CAMPS will generate Chords that Harmonize with the existing Line data. ( [Settings for Chords](#) in the new Chord Block such as Key, Mode and Duration are adjustable at any later time.)

Click on desired Chord Block's Selection Bar (or a Chord) for alternative Harmonization. Doing this repeatedly can yield hundreds of variations.



[More Details](#)

[More Controls](#)

# The "EZ" tools in CAMPS

The "EZ" tools in CAMPS are designed to give a quick starting point and help in familiarization with CAMPS objects used for building compositions. They are not designed to automatically create some great music for you. Consequentially, the more parameters you define, the better your musical results will be. The flexibility of the musical tools presented in CAMPS is possible in various dialog boxes.

## "EZ" Tools

Menu items	EZcompose EZharmonize With EZgenerate EZharmonize EZharmonize with Same Key EZcompose Lines in Region EZharmonize All
Dialog boxes	EZgenerate Chords (The <a href="#">New Chord</a> and <a href="#">New Chord Block</a> ) EZgenerate Line data (The <a href="#">New Line Block</a> and <a href="#">New Take</a> )
Editors	Magic Wand

# Organizing a Composition

## Line Blocks

When Importing a Standard MIDI File, the original data is left unchanged, but CAMPS divides or encapsulates a Track's Line data into Line Blocks according to data continuity. If no MIDI Events span a given Bar line, the related Line Block ends and a new one starts at this point. Empty Bars are not initially assigned any Line Blocks.

Any or all of a Track's Line Blocks can be merged into a longer one, but you may find it more productive to work with smaller sections of MIDI Line data when using CAMPS Editors. Line Blocks can also be split at any point.

Line Blocks of any length can be created in any location of each Track, with or without Line data, and whether or not other Line Blocks already exist.

When Line Blocks are used to organize different Sections in your composition, such as a *Verse* or *Bridge*, they serve to enable quick musical arranging changes because they are referenced by CAMPS during Auto Harmonization and other functions. You can assign a unique name and color to each Line Block, making them easier to distinguish at a glance. You can create, edit, resize, split, copy, duplicate, move or delete Line Blocks as needed.

## Chord Blocks

A Chord Block is an array containing a group of Chords Containers. It is indicated and manipulated by its Chord Block Selection Bar, a thin horizontal bar across the top of a Chord Block.

Chord Blocks serve to enable quick musical arranging changes, as they are referenced by CAMPS during Auto Composition and other functions. They also help organize the Tonality of different Sections in your composition, such as a *Verse* or *Bridge*. When using CAMPS to Generate Chords, Tonality settings for the current or potential Chord Block are referenced, allowing creation of Chords that flow smoothly from one to the next within a Chord Block. You can create, copy, duplicate, move or delete Chord Blocks as needed.

[More Details](#)



# SMPTE or manual Tap Tempo Synchronization

## **MIDI Sequencers**

Besides its own Internal MIDI clock, you can set CAMPS to Playback and Record in "slave" mode using an [external MIDI Clock](#) source (another Sequence, etc.) with the Professional-Quality precision.

## **Your manual Tap Tempo Input**

You can also set CAMPS to the "[Tap Tempo](#)" mode using "freewheel" Tempo pulses input by you on your computer's keyboard or your MIDI Instrument.

## **Film and Video**

When synchronizing sounds with motion picture events in film and video, CAMPS provides all the ratios of [SMPTE](#) Time Code to be used.

[More Details](#)

## Multiple Document editing environment

CAMPS allows you to open multiple Documents and exchange data between them while maintaining an enhanced level of MIDI functionality. Most editing tasks can be carried out while CAMPS is in Playback mode. The more powerful your computer, the more you can exploit the power of CAMPS.

CAMPS's multi-document environment allows you to have a number of Document Window open simultaneously. This means you can copy & paste between Document Windows and listen to part of one Document while editing another part in a different Document.

[More Details](#)

Editors Eight Editors are employed in CAMPS for MIDI data monitoring and editing as follows:

## Editor Types

[Document Window](#)

The Document Window is the primary Editor in CAMPS.

[Event List Editor](#)

The Event List Editor allows you to directly edit a Line Block's MIDI Event data values.

[Pianoroll Editor](#)

The Pianoroll Editor allows you to visually edit a Line Block's MIDI Note data.

[Control Draw Editor](#)

The Control Draw Editor allows you to edit a Line Block's MIDI Control data with a unique freestyle curve drawing method.

[Notation Editor](#)

The Notation Editor allows you to edit a Line Block's MIDI Note data in musical notation form.

[Tempo List Editor](#)

The Tempo List Editor allows you to edit the master Tempo value.

[Tempo Draw Editor](#)

The Tempo Draw Editor allows you to change the master Tempo with a unique freestyle curve drawing method.

[Text List Editor](#)

The Text List Editor allows you to create and edit Text Events appearing in the Text Info Area of the Document Window and various other Editors.

# Document Window

**Description** The Document Window is the primary Editor in CAMPS.

To begin working with anything in CAMPS, you must first open a Document Window.

**Items** The Document Window contains various Controls and Editing Areas for manipulating objects. You can choose to Show or Hide the Controls with the **Edit Buttons** command in the **View** menu. You can adjust the size of each Editing Area by clicking and dragging the horizontal or vertical separator bar between Areas.

[Edit Buttons](#)

The Edit Buttons give you quick access to viewing and manipulation tools for the Document Window, as well as the many Editors available in CAMPS.

[Track Area](#)

The Track Area displays all a Document's MIDI Track Controls in separate rows, one for each Track of MIDI Line data, allowing you to manage each Track independently.

[Bar Area](#)

The Bar Area displays a range of Bar lines. Besides managing a song's Time Grid, this area also allows you to manipulate Playback Loop and Punch In/Out Recording functions.

[Text Info Area](#)

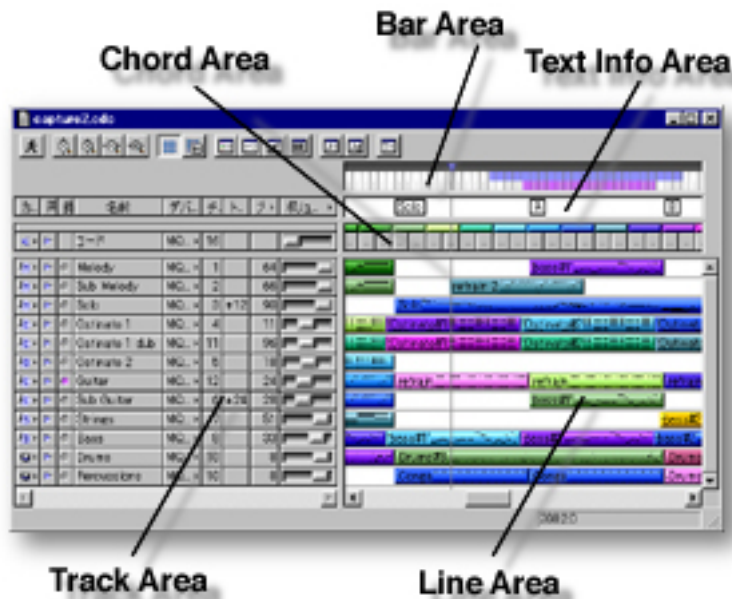
The Text Info Area allows you to create general Text Events such as Rehearsal Letters and Markers.

[Chord Area](#)

Document Chord Blocks reside in the Chord Area. Each Chord Block in this row contains Chord Containers to which you assign your song's Chords.

[Line Area](#)

Document Line Blocks for each Track reside the Line Area. Line Blocks are sectional containers for your MIDI Line data.

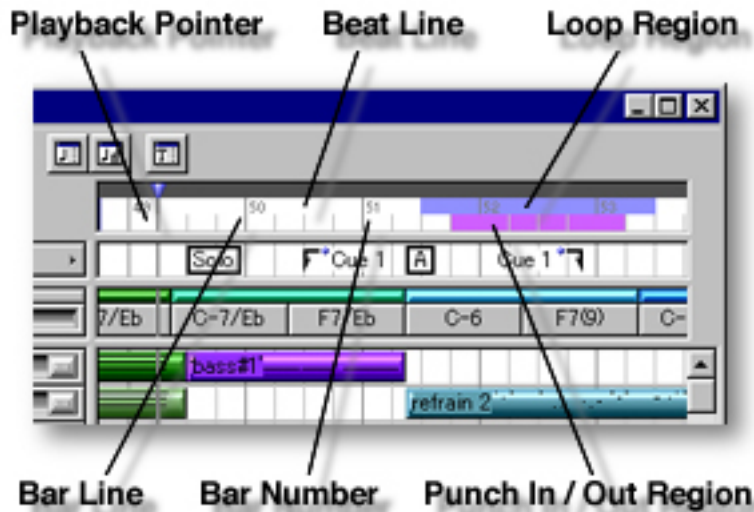


# Bar Area of the Document Window

**Description** The Bar Area displays Measures or divisions of musical Time, known as Bars, in a continuous row. This includes Bar Numbers, the Bar Grid and Beat Grid.

**Uses** Besides displaying Bar related information, the Bar Area allows you to manage a song's [Time Signature setup](#), location of the [Playback Pointer](#), and the Playback [Loop](#) and [Punch In/Out](#) Recording settings.

- Items**
- [Playback Pointer](#)
  - [Loop](#) region
  - [Punch In/Out](#) region
  - [Bar Number](#)
  - [Bar Grid](#)
  - [Beat Grid](#)
  - [Location Cursor](#)



## Items in the Bar Area

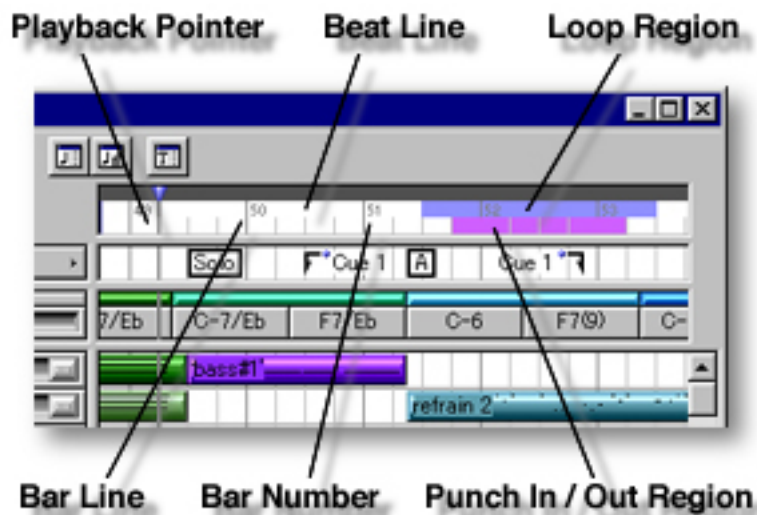
[Positioning the Playback Pointer](#)

[Inserting a Playback Loop](#)

[Inserting a Punch In/Out Record region](#)

Viewing Bar related items

<b>Playback Pointer</b>	The Playback Pointer resides in its own dark gray area at the top of the bar area, displaying the current Playback location in the Document Window. It also allows you to change the current Playback point.
<b>Loop region</b>	Displays your current Loop region. Starting Playback repeats (Loops) Playback in this region until you stop. This region is indicated by the color blue in the upper portion of the Bar Area in the Document Window.
<b>Punch In/Out region</b>	Displays your current Punch In/Out region. This region is indicated by the color magenta or dark gray in the lower portion of the Bar Area, depending on whether or not a Track is Armed for Recording.
<b>Bar Number</b>	A series of numbers given to Bars, starting on the left side with 1.
<b>Bar Grid</b>	Vertical lines horizontally spaced across the Bar Area indicating Bar divisions.
<b>Beat Grid</b>	Vertical lines horizontally spaced across Bars indicating Beat divisions.
<b>Location Cursor</b>	A vertical Location Cursor line in the Bar Area represents the horizontal position of your mouse as it relates to the time location in your Document. Corresponding numerical information is also displayed in the order of "Bar, Beat and Division" in the Interactive Information area at the bottom of the Document Window. The color of the Location Cursor depends on your settings in the Microsoft Windows Control Panel "Display" applet, under the heading "Selected Items" in the "Items" list of the "Appearance" pane.



Positioning the Playback Pointer

**Playback Pointer** and area

You can use the Playback Pointer to change the Playback point in the Document Window in two ways: Clicking a desired location in the dark gray Playback Pointer area at the top, or clicking and dragging the Playback Pointer to a desired location. Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. The Playback Pointer displays the current Playback location as CAMPS plays or records MIDI data.

Inserting a Playback Loop

**Loop** region

You can create a Loop region by clicking and dragging with your mouse in the upper portion of the Bar Area, below the Playback Pointer Area. As you drag your mouse, the Loop region appears blue in color, displaying a new Loop region. A Punch In/Out region of the same size is automatically inserted below the new Loop region.

Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. CAMPS repeats Loop region Playback until you stop it. Click anywhere in the upper portion of the Bar Area to delete a Loop region.



The start and end points of the Loop region snap to the Grid resolution set in the [Grid Setup dialog box](#), if **Align to Grid** is selected in the **Grid View** submenu of the **View** menu.

Inserting a Punch In/Out Record region

**Punch In/Out** region

You can create a Punch In/Out region by clicking and dragging your mouse in the lower portion of the Bar Area (below the Loop region). As you drag your mouse without any Track Armed for Recording, this region appears dark gray in color, displaying a new Punch In/Out region. A Loop of the same size is automatically inserted above the new Punch In/Out region. Click anywhere in the lower portion of the Bar Area to delete a Punch In/Out region.

If a Track is Armed using its **Record** button in the Track Area of the Document Window, the Punch In/Out region becomes magenta in color, indicating it is ready for recording. Choose **Record** from the **MIDI** menu (or click the **Record** button in the [Record Control toolbar](#)) to begin recording.

If the automatically inserted Playback Loop is removed, CAMPS begins Playback from the Playback Pointer's current position, but Recording is only active as the Playback Pointer travels through the Punch In/Out region. This provides a true Cued Punch In/Out environment.



By combining with a Loop region beginning before the Punch In/Out region, CAMPS provides a continuous Cued Punch In/Out recording environment. Remove the automatically inserted Loop and insert a new one starting before the Punch In/Out region, or remove the Punch In/Out region and insert a new one starting after the Loop region.

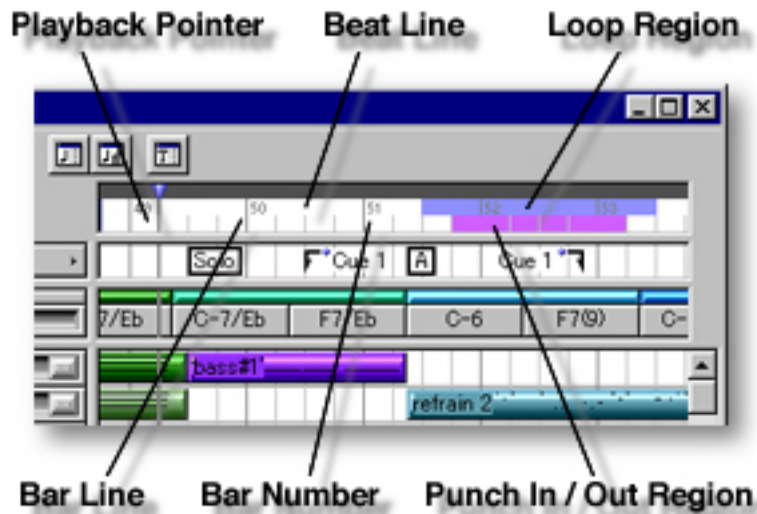
Assigning a Time Signature

Time Signature settings



The start and end points of the Punch In/Out region are aligned to the Grid resolution set in the [Grid Setup dialog box](#), if **Align to Grid** is selected in the **Grid View** submenu of the **View** menu.

CAMPS allows you to assign different Time Signatures to individual Bars. Right-click a Bar to which you are assigning a new Time Signature and then choose **Time Signature Setup...** to open the [Time Signature Setup dialog box](#). Set a Time Signature in the dialog box and click **OK**. (Choosing **Time Signature Setup...** from the **Edit** menu opens the same dialog box.)





## Edit Buttons Area of the Document Window

**Description** The Edit Buttons are located at the top of the Document Window. These Buttons give you quick access to frequently used items like View Adjustments, Tools and Editors.

**Uses** The Edit Buttons in the Document Window include most of the **View** menu commands and all of the **Editors** menu commands. Four of the seven Editor buttons on the right side only become available when Line Blocks are selected. The Tool buttons work in slightly different ways according to which Area of the Document Window you are working in. Choose **Edit Buttons** from the **View** menu to show or hide the Edit Buttons.

### [Items](#)

[Auto Scroll](#) button  
[Jump To Location](#) button  
[Zoom Out \(V\)](#) button  
[Zoom In \(V\)](#) button  
[Zoom Out \(H\)](#) button  
[Zoom In \(H\)](#) button  
[Align To Grid](#) button  
[Grid Setup](#) button  
[Arrow Tool](#) button  
[Pen Tool](#) button  
[Magic Wand Tool](#) button  
[Eraser Tool](#) button  
[Razor Tool](#) button  
[Event List Editor](#) button  
[Pianoroll Editor](#) button  
[Control Draw Editor](#) button  
[Notation Editor](#) button  
[Tempo List Editor](#) button  
[Tempo Draw Editor](#) button  
[Text List Editor](#) button



Adjusting View	<b>Auto Scroll</b> button	Sets the viewable area in the Bar, Text Info, Chord and Line Areas to follow the Playback Pointer during Playback and Recording.
	<b>Jump To Location</b> button	Opens the <a href="#">Jump To Location dialog box</a> which allows you to move the current viewpoint to a specified Bar in the Document Window.
	<b>Zoom Out (V)</b> button	Incrementally decreases the Vertical size of the Track and Line Areas, increasing their viewable area.
	<b>Zoom In (V)</b> button	Incrementally increases the Vertical size of the Track and Line Areas, decreasing their viewable area.
	<b>Zoom Out (H)</b> button	Incrementally decreases the Horizontal size of the Bar, Text Info, Chord and Line Areas, increasing their viewable area.
	<b>Zoom In (H)</b> button	Incrementally increases the Horizontal size of the Bar, Text Info, Chord and Line Areas, decreasing their viewable area.
	<b>Align To Grid</b> button	Switches between Activate or Deactivate Align To Grid in the Text Info, Chord and Line Areas. Grid Alignment is specified in the <a href="#">Grid Setup dialog box</a> .
<b>Grid Setup</b> button	Opens the <a href="#">Grid Setup dialog box</a> , allowing you to adjust the Alignment Grid Resolution for individual areas of the Document Window and applicable Editors. Depending on which Area of the Document Window is active before choosing this Menu Item, the corresponding pane in the Grid Setup dialog box will be preselected.	
Selecting Tools	<b>Arrow Tool</b> button	Selects the Arrow Tool, allowing you to select and manipulate objects in the Document Window. Objects need to be selected before related functions become available.
	<b>Pen Tool</b> button	Selects the Pen Tool, allowing you to quickly create objects or define values with a unique freestyle drawing method. The function of this Tool changes depending on the Area you are working in.
	<b>Magic Wand Tool</b> button	Selects the Magic Wand Tool, allowing you to quickly create Chord Blocks or Line Blocks with automatically filled-in data (EZgenerate).
	<b>Eraser Tool</b> button	Selects the Eraser Tool, allowing you to quickly delete objects in a Document.
	<b>Razor Tool</b> button	Selects the Razor Tool, allowing you to quickly split a Chord Block at any Chord boundary, or split a Line Block at any point.
Opening Editors	<b>Event List Editor</b> button	Opens the <a href="#">Event List Editor</a> , allowing you to edit individual Events of the selected Line Block in vertical list format. If multiple Line Blocks are selected, a separate Editor window will be opened for each Line Block with one click of this button.
	<b>Pianoroll Editor</b> button	Opens the <a href="#">Pianoroll Editor</a> , allowing you to edit Notes of a selected Line Block in Pianoroll graph format. If multiple Line Blocks are selected, a separate Editor window will be opened for each Line Block with one click of this button.



# Chord Area of the Document Window

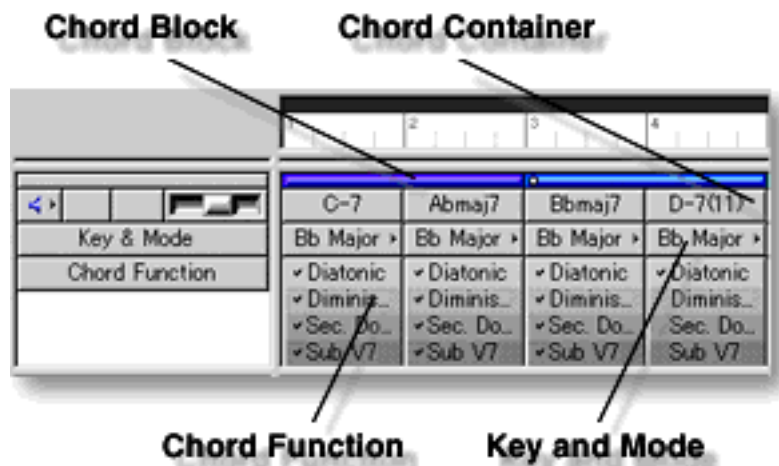
**Description** A Document's [Chord Blocks](#) reside in the Chord Area. Each Chord Block in this row contains [Chord Containers](#) to which you assign your song's Chords. These make up the Chord Track, which is used by the CAMPS Composition Logic Engine during the use of Auto Composition and other unique features in CAMPS.

**Uses** The Chord Area is where you [manage a song's Chords](#). Besides allowing you to [create, resize, duplicate, move and delete Chords](#) and [groups of Chords](#) (Chord Blocks), you can display Chords in various ways, such as Chord Name, Roman Numeral or Scale Name.

You can assign a Chord Name, [Key](#), [Mode](#) and several [Functions](#) to each Chord. These settings allow CAMPS to help you create a composition which modulates to desired Tonalties; following Chords as they change. This resulting Chord Track can also be [Played back](#) in [different voicing styles](#), alone or with your song's main Tracks, allowing you to audibly compare these Chord definitions with the Tonality of your Line data.

CAMPS provides a number of automated and manual methods of [assigning Chord Names](#), including Auto Harmonizing, Chord Generation and Chord Detection from your MIDI instrument. All settings can then be saved with the Document.

- Items**
- [Chord Block](#)
  - [Chord Container](#)
  - [Key and Mode](#) button
  - [Chord Function](#) check list
  - [Bar Grid](#)
  - [Beat Grid](#)



[Manipulating Chord Blocks](#)

## Chord Block

A Chord Block is an array containing a group of Chords Containers. It is indicated and manipulated by its Chord Block Selection Bar, a thin horizontal bar across the top of a Chord Block.

Chord Blocks serve to enable quick musical arranging changes, as they are referenced by CAMPS during Auto Composition and other functions. They also help organize the Tonality of different Sections in your composition, such as a *Verse* or *Bridge*.

When using CAMPS to Generate Chords, Tonality settings for the current or potential Chord Block are referenced, allowing creation of Chords that flow smoothly from one to the next within a Chord Block. You can [create](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Chord Blocks as needed.

[Manipulating Chords](#)

## Chord Container

You can assign a Chord Name in a Key and Mode of your choice to each Chord Container using various methods provided in CAMPS. A Chord Name must be assigned to each Chord Container to get appropriate results from musical tools in CAMPS, such as **Compose...** and **Voicing...** You can [create](#), [edit](#), [resize](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Chord Containers as needed.

[Assigning a Key and Mode](#)

## Key and Mode button

The **Key and Mode** button displays its current settings and opens a Chord's Key and Mode drop-down menu. This allows you to assign a Key and Mode (G major, D Mixolydian, etc.) to each Chord. This Key and Mode setting is referred to by CAMPS during Auto Chord Detection, Chord Progression Generation and Chord Construction.

[Selecting Chord Functions](#)

## Chord Function check list

The Chord Function check list (visible below each Chord's **Key and Mode** button when the Chord Area is extended downward) displays its current settings and allows you to assign Chord Functions such as Diatonic and Secondary Dominant. These settings are referred to by CAMPS during Auto Chord Detection, Chord Progression Generation and Chord Construction.

[Auditioning Chords](#)

## Chord Track

The Chord Track controls in the Track Area allow you to assign various settings for Chord Playback. See [Track Area](#) documentation for more details.

**Chord View**  
Menu Item

Choosing one of the five [Chord Display Modes](#) from the **Chord View** submenu of the **View** menu changes the Chord's naming convention. The current selection is indicated with a bullet. See [Chord Menu](#) documentation for more details.

Depending on the amount of info being displayed and the Document Window's current horizontal Display resolution, Chord, Key and Mode names may appear abbreviated. To see all of a Chord's Name, Key or Mode, use the **Zoom In/Out** (horizontal) buttons at the top of the Document Window to adjust the horizontal Display resolution.

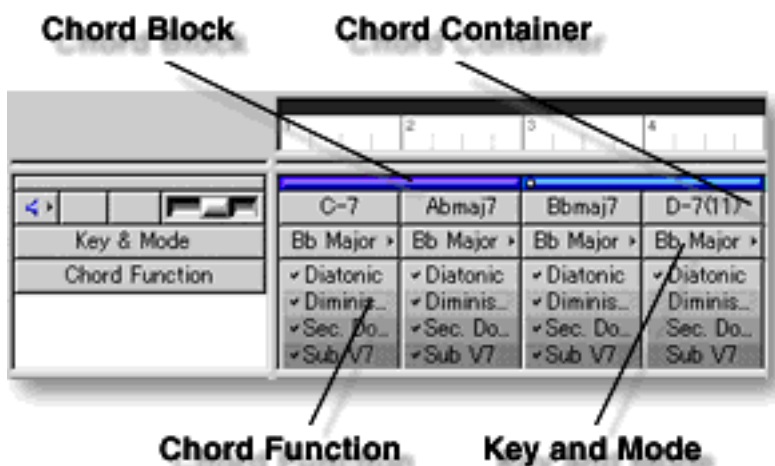


**Bar Grid**

Vertical lines horizontally spaced across the Chord Area indicating the dividing points between Bars.

**Beat Grid**

Vertical lines horizontally spaced across Bars indicating the dividing points between Beats.



Note:

Many Chord Block related operations require selection of only the Chord Block itself without highlighting any of its Chord Containers. To do this, click the Chord Block Selection Bar across the top of a Chord Block.

After using any of the special Tool buttons at the top of the Document Window, be sure to switch back to the standard **Arrow Tool** for regular manipulation operations.

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## CREATING A NEW BLANK CHORD BLOCK

---

Method 1:

Select the **Pen** tool at the top of the Document Window and then click and drag from horizontally in the Chord Area to assign the starting and ending locations of the Chord Block you are about to create. Settings for Chords in the new Chord Block such as Key, Mode and Duration are adjustable at any later time.



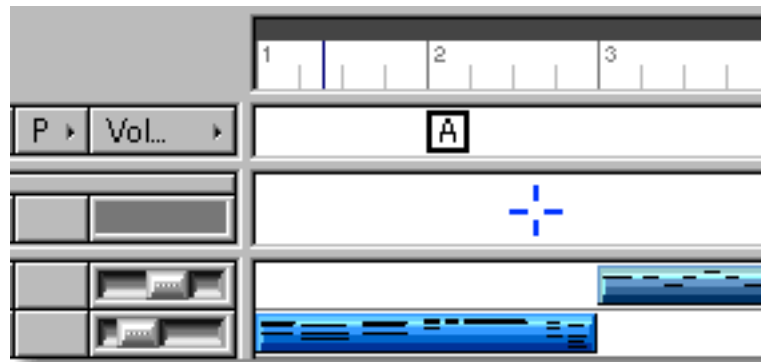
Method 2:

Right-click an empty location in the Chord Area and choose **New Chord Block...** to open the New Chord Block dialog box. Alternatively, select an empty location in the Chord Area and choose **New Chord Block...** from the **Edit** menu.

The [New Chord Block dialog box](#) allows you to set Quantity, Duration, Key and Mode of Chords in the new Chord Block. To create a new empty Chord Block without automatically assigned Chords, be sure the EZgenerate option is not checkmarked. These settings will be automatically saved and used as defaults for your next New Chord Block dialog box session. However, they can be changed at any time.



When choosing **New Chord Block...** from the **Edit** menu, you must have clicked an empty location in the Chord Area, otherwise the **New Chord Block...** item won't be available.



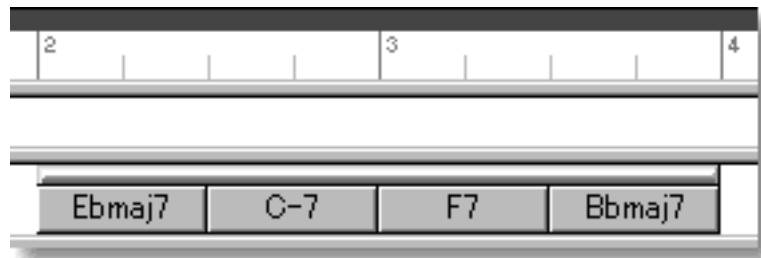

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## CREATING A NEW CHORD BLOCK WITH CHORDS

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### Method 1:

Select the **Magic Wand** tool at the top of the Document Window and then click and drag horizontally in the Chord Area to assign the starting and ending locations of the Chord Block you are about to create. If executed where a Chord Block already exists, this method will create a new Chord Block on top of the original. Settings for Chords in the new Chord Block such as Chord Name, Key, Mode and Duration are adjustable at any later time.



### Method 2:

Right-click an empty location in the Chord Area and choose **New Chord Block...** to open the New Chord Block dialog box. Alternatively, select an empty location in the Chord Area and choose **New Chord Block...** from the **Edit** menu.

The [New Chord Block dialog box](#) allows you to set Quantity, Duration, Key and Mode of Chords in a new Chord Block. Be sure to checkmark the EZgenerate Chords option in the dialog box if you want CAMPS to automatically generate a Chord Progression in the New Chord Block. These settings will be automatically saved and used as defaults for your next New Chord Block dialog box session. However, they can be changed at any time.



If any Line Blocks in Categories other than Drums exist in the same Bar region as the New Chord Block being created with the **Magic Wand** tool or the EZgenerate Chords option, CAMPS will generate Chords that Harmonize with the existing Line data instead of arbitrarily creating a Chord Progression.



When choosing **New Chord Block...** from the **Edit** menu, you must have clicked an empty location in the Chord Area, otherwise the **New Chord Block...** item won't be available.



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## EDITING CHORD BLOCKS

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Select the **Magic Wand** tool at the top of the Document Window and then click on desired Chord Block's Selection Bar.

See also [Manipulating Chords](#) in the Chord Area of the Document Window.



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## SELECTING CHORD BLOCKS

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Using the **Arrow** tool, you can select individual Chord Blocks. You can select multiple Chord Blocks by holding the Ctrl (or Shift) key down as you select. Alternatively, Clicking and holding your mouse button at an empty location in the Chord Area and dragging your mouse over desired Chord Blocks allows you to select multiple Chord Blocks in one quick operation

Selecting Chord Blocks enables use of Chord related commands under the **Chord** Menu bar item including **Harmonize...** and **Detect from MIDI Instrument.....** Once selected, you can then move, duplicate, make an Alias of, copy, paste or delete a group of Chord Blocks at one time using the right click, menu bar or click and drag method.



 Selecting multiple Chord Blocks will not be possible if the **Magic Wand** or **Eraser** tool button at the top of the Document Window is currently active. In these cases, Chord Blocks will be created, EZgenerated or deleted one at a time (depending on which of these buttons is active).



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## PLAYING BACK CHORD BLOCKS

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Select desired Chord Blocks, right-click the Chord Blocks and then choose **Playback Chord Block** from the drop-down menu to start Playback of the selected Chord Blocks. A Loop region for the selected Chord Blocks will be automatically created and CAMPS repeats (Loops) Playback in this region until you stop. The Loop to be created may include empty sub-regions depending on your Chord Block selections. Choose **Playback with Lines** from the drop-down menu to audition the selected Chord Blocks with Line Blocks on all the [activated](#) Line Tracks.

To stop Playback, choose **Stop** from the **MIDI** menu. Alternatively, click the **Stop** button of the Playback Toolbar.



Choosing **Playback Chord Block** will automatically activate the **Play** button for the [Chord Track](#) while deactivating the **Play** button for all the existing Line Tracks. If no Line Track is [activated](#), choosing **Playback with Lines** will automatically activate the **play** button for all the existing Line Tracks as well as the **Play** button for the Chord Track.

---

## MOVING CHORD BLOCKS

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Method 1:

Click and drag desired Chord Block Selection Bar to a new location in the Chord Area.

Method 2:

Select desired Chord Block with your mouse and use your computer keyboard's left/right arrow keys to move Chord Blocks a Division at a time.

Method 3:

This method allows you to move Chord Blocks between Documents.

Right-click a Chord Block's Selection Bar and choose **Cut Chord Block** to remove the Chord Block from its current location. Alternatively, click desired Chord Block Selection Bar and choose **Cut Chord Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Chord Blocks in one operation.

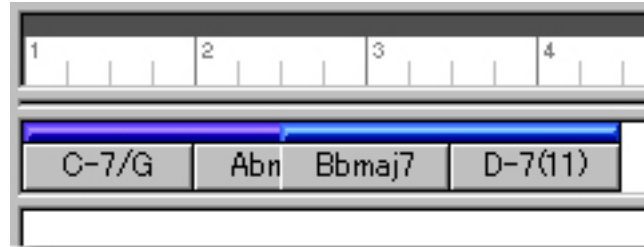
Next, right-click a desired location in the Chord Area of the desired Document's Document Window or Pianoroll Editor and choose **Paste Chord Block** to Paste the Cut Chord Block(s). Alternatively, select a desired location in the Chord Area and choose **Paste Chord Block** from the **Edit** menu.



When **Align To Grid** is activated, the Chord Block being moved will be Pasted to the nearest Horizontal Grid Resolution point of the selected Chord Area location as defined in the [Grid Setup dialog box](#).



When one Chord Block overlaps another Chord Block, CAMPS always refers to Chords appearing in front, ignoring the Chords in back. If only part of a Chord Block overlaps, then only the Chords in the overlapping area will be effected this way. Right-click a Chord Block's Selection Bar and use the **Bring to Front** or **Send to Back** commands to activate the desired overlapping Chord Block.



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## DUPLICATING CHORD BLOCKS

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Right-click a Chord Block's Selection Bar and choose **Duplicate Chord Block** to Duplicate the selected Chord Block. Alternatively, click desired Chord Block Selection Bar and choose **Duplicate Chord Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Duplicate multiple Chord Blocks in one operation.

Unlike the Copy/Paste operation which allows you to choose the location of the "copy" before it is created, Duplicating a Chord Block automatically places the "duplicate" on top of the original, offset slightly to the right. You can then move it at any time.

---

## COPYING / PASTING CHORD BLOCKS

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Right-click a Chord Block's Selection Bar and choose **Copy Chord Block** to copy the selected Chord Block. Alternatively, click desired Chord Block Selection Bar and choose **Copy Chord Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Chord Blocks in one operation.

Next, right-click a desired location in the Chord Area of the desired Document's Document Window or Pianoroll Editor and choose **Paste Chord Block** to Paste the Copied Chord Block(s). Alternatively, select a desired location in the Chord Area and choose **Paste Chord Block** from the **Edit** menu.



When **Align To Grid** is activated, the Chord Block being Copied will be Pasted to the nearest Horizontal Grid Resolution point of the selected Chord Area location as defined in the [Grid Setup dialog box](#).

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## CREATING AN ALIAS OF CHORD BLOCKS

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Right-click Chord Block Selection Bar and choose **Make Alias of Chord Block** to make an Alias of the selected Chord Block. Alternatively, select desired Chord Block Selection Bar and choose **Make Alias of Chord Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Make Aliases of multiple Chord Blocks in one operation.



An Alias is, in effect, an active copy of its original. Except for Copy/Paste, Duplicate, Move and Delete operations, changes you make to one of the Aliases effects all of its Aliases. This holds true whether you make changes to the original, or the Aliases. In fact, there is no effective difference between an Alias and its original. A small circle appearing in the left corner of the Chord Block Selection Bar at the top of a Chord Block indicates the Alias status.



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## DELETING CHORD BLOCKS

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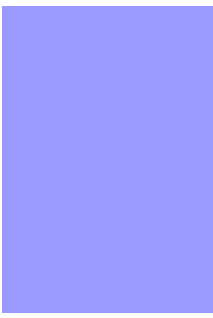
Method 1:

Select the **Eraser** tool at the top of the Document Window and simply click on a Chord Block's Selection Bar to delete it. The **Eraser** tool can be used to delete multiple Chord Blocks in one quick operation by clicking and holding your mouse button at an empty location in the Chord Area and dragging the **Eraser** over desired Chord Blocks.

Method 2:

Right-click a Chord Block Selection Bar and choose **Clear Chord Block** to delete the selected Chord Block. Alternatively, click desired Chord Block Selection Bar and choose **Clear Chord Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Chord Blocks in one operation.





See also:

[Manipulating Chords](#)

[Assigning a Key and Mode](#)

[Assigning Chord Functions](#)

[Adjusting the Grid display](#)

## Chord Container

Note:

Since Chord Containers reside in Chord Blocks, you'll first need to have Chord Blocks in the Chord Area of your Document before you can individually manipulate Chords.

Many of these operations will result in changes of Chord Block size. When adding to a Chord Block, existing Chords get moved to the right. Keep in mind that if another Chord Block already exists right after the Chord Block which increases in size, Chords being moved to the right will slip behind the next Chord Block, resulting in overlapping Chord Blocks. The visible Chords in an overlapping area will become the active Chords in that area for all Chord related CAMPS functions.

To choose which Chord Block is visible and active in an overlapping Chord Area, right click the desired Chord Block Selection Bar and choose **Bring to Front** or **Send to Back**.

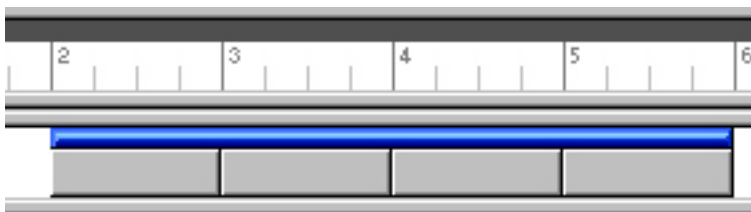
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### CREATING NEW BLANK CHORD CONTAINERS

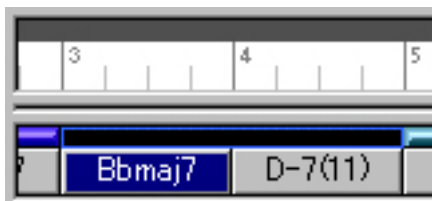
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Right-click the Chord at a desired location and choose **New Chord...** to open the New Chord dialog box. Alternatively, click the Chord at a desired location and choose **New Chord...** from the **Edit** menu.

The [New Chord dialog box](#) allows you set Quantity, Duration, Key and Mode of new Chords. To create a new empty Chord Container, be sure the EZgenerate option is not checkmarked. These settings will be automatically saved and used as defaults for your next New Chord dialog box session. However, they can be changed at any time.



 When choosing **New Chord...** from the **Edit** menu, you must have clicked a Chord, otherwise the **New Chord...** item won't be available.



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## CREATING NEW CHORD CONTAINERS WITH ASSIGNED CHORDS

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Right-click a Chord and then choose **New Chord...** to open the New Chord dialog box. Alternatively, select a Chord and choose **New Chord...** from the **Edit** menu.

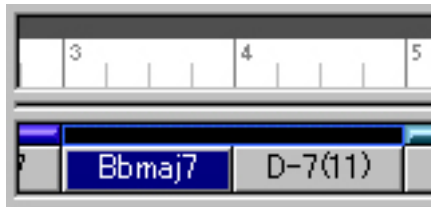
The [New Chord dialog box](#) allows you to set Quantity, Duration, Key and Mode of new Chord Containers being created. Be sure to checkmark the EZgenerate option in the dialog box to automatically generate a Chord. These settings will be automatically saved and used as defaults for your next New Chord dialog box session. However, they can be changed at any later time.



If any Line Blocks in Categories other than Drums exist in the same Bar region as the New Chord being created with the EZgenerate Chords option activated, CAMPS will generate Chords that Harmonize with the existing Line data instead of arbitrarily creating a Chord Progression.



When choosing **New Chord...** from the **Edit** menu, you must have clicked a Chord, otherwise the **New Chord...** item won't be available.



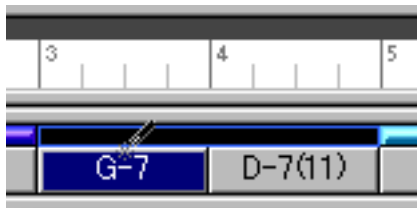
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## ASSIGNING AND EDITING CHORDS

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Method 1:

Select the **Magic Wand** tool at the top of the Document Window and simply click a Chord you wish to assign a Chord Name to. This can be done with empty or filled-in Chord Containers. In the latter case, existing Chords will be replaced. Settings for the new Chord such as Chord Name, Key, Mode and Duration are adjustable at any later time. To assign or reassign Chords to all Chord Containers in a Chord Block, click only the Chord Block Selection Bar with the **Magic Wand** tool.



If any Line Blocks in Categories other than Drums exist in the same Bar region as the Chord being created with the **Magic Wand** tool, CAMPS will generate Chords that Harmonize with the existing Line data instead of arbitrarily creating new Chords.

Other Methods:

Select desired Chords and choose a Chord assignment method from the [Chord menu](#). Alternatively, right click desired Chord and choose a Chord assignment method from the **Actions** submenu.

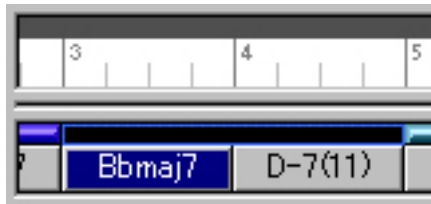
These options include **Generate...**, **EZgenerate**, **Harmonize...**, **EZharmonize**, **EZharmonize with Same Key**, **Detect from MIDI Instrument...** and **Construct...**. See an option's menu or dialog box documentation for more details.


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## SELECTING CHORD CONTAINERS

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Using the **Arrow** tool, you can select individual Chords. You can select multiple Chords by holding the Ctrl (or Shift) key down as you select. Alternatively, Clicking and holding your mouse button on a Chord, and then dragging your mouse over other Chords allows you to select multiple Chords in one operation. Once selected, you can then move, duplicate, make an Alias of, copy, paste or delete a group of Chords at one time using the right click, menu or click and drag method. This operation can be used with most of the commands in the **Chord Menu** as well.



 Selecting multiple Chords will not be possible if the **Pen**, **Magic Wand** or **Eraser** tool is currently selected from the top of the Document Window. In these cases, Chords will be created, generated or deleted (depending on which of these buttons is active).





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## PLAYING BACK CHORD CONTAINERS

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Select desired Chords, right-click the Chords and then choose **Playback Chord** from the drop-down menu to start Playback of the selected Chords. A Loop region for the selected Chords will be automatically created and CAMPS repeats (Loops) Playback in this region until you stop. Choose **Playback with Lines** from the drop-down menu to audition the selected Chords with Line Blocks on all the [activated](#) Line Tracks.

To stop Playback, choose **Stop** from the **MIDI** menu. Alternatively, click the **Stop** button of the Playback Toolbar.



Choosing **Playback Chord** will automatically activate the **Play** button for the [Chord Track](#) while [deactivating](#) the **Play** button for all the existing Line Tracks. If no Line Track is activated, choosing **Playback with Lines** will automatically [activate](#) the **play** button for all the existing Line Tracks as well as the **Play** button for the Chord Track.

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## MOVING CHORD CONTAINERS

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Method 1:

Select desired Chords and drag them to a new location in a Chord Block.

When moving Chords in this manner, a vertical indicator appears at the boundary between Chords being moved and other existing Chords. Drag the Chords being moved past this indicator to drop Chords in a new location.

Method 2:

This method allows you to move Chord Containers between Documents.

Right-click a Chord Container and then choose **Cut Chord** to remove a Chord Container from its current location. Alternatively, select a Chord Container and choose **Cut Chord** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Chord Containers in one operation.

Next, right-click a desired location in a Chord Block of the desired Document and choose **Paste Chord** to Paste the Cut Chord Container(s). Alternatively, select a location in a Chord Block and choose **Paste Chord** from the **Edit** menu.

When Pasting a Chord in an existing Chord Container's location, the existing Chord will be moved to the right. When a Chord is being moved from one Chord Block to another, the destination Chord Block will increase in size, while the originating Chord Block will decrease in size.

---

## RESIZING CHORD CONTAINERS

---

Using the **Arrow** Tool, position your mouse cursor over the right edge of a desired Chord Container until the cursor changes to a double arrow. Then click and drag the right edge of the Chord Container to the desired size.

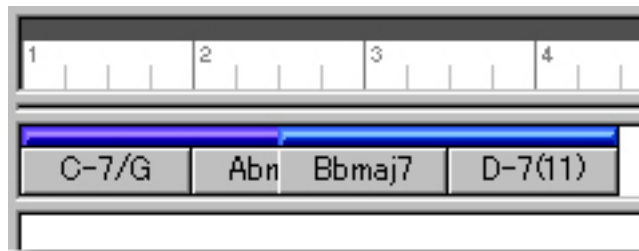
Keep in mind that this effects the size of the Chord Block in which the Chord Container is being resized, effecting its Playback time. Additionally, enlarging a Chord may cause Chord Blocks to overlap.



When **Align To Grid** is active in the Chord Area, the Chord size will snap to the nearest Horizontal Resolution Grid point.



When one Chord Block overlaps another Chord Block, CAMPS always refers to Chords appearing in front, ignoring the Chords in back. If only part of a Chord Block overlaps, then only the Chords in the overlapping area will be effected this way. Right-click a Chord Block's Selection Bar and use the **Bring to Front** or **Send to Back** commands to activate the desired overlapping Chord Block.



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## DUPLICATING CHORD CONTAINERS

---

Right-click a Chord Container and choose **Duplicate Chord** to duplicate the selected Chord Container. Alternatively, select a Chord and choose **Duplicate Chord** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Duplicate multiple Chord Containers in one operation.

Unlike the Copy/Paste operation which allows you to choose the location of the "copy" before it's actually created, Duplicating a Chord automatically places the "duplicate" to the right of the original. You can then move it at any time.

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## COPYING / PASTING CHORD CONTAINERS

---

Right-click a Chord and then choose **Copy Chord** to copy the selected Chord. Alternatively, select a Chord and choose **Copy Chord** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Chords in one operation.

Right-click a desired location in a Chord Block of the desired Document and choose **Paste Chord** to Paste the Copied Chord Container(s). Alternatively, select a location in a Chord Block and choose **Paste Chord** from the **Edit** menu.

When Pasting a Chord in an existing Chord Container's location, the existing Chord will be moved to the right, increasing the size of its Chord Block.

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## DELETING CHORD CONTAINERS

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Method 1:

Select the **Eraser** tool at the top of the Document Window and simply click on a Chord to delete it.

Method 2:

Right-click a Chord and choose **Clear Chord** to delete the selected Chord. Alternatively, select a desired Chord and choose **Clear Chord** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Chords in one operation.



See also:

[Manipulating Chord Blocks](#)

[Assigning a Key and Mode](#)

[Assigning Chord Functions](#)

[Adjusting the Grid display](#)

## Using the Chord Area

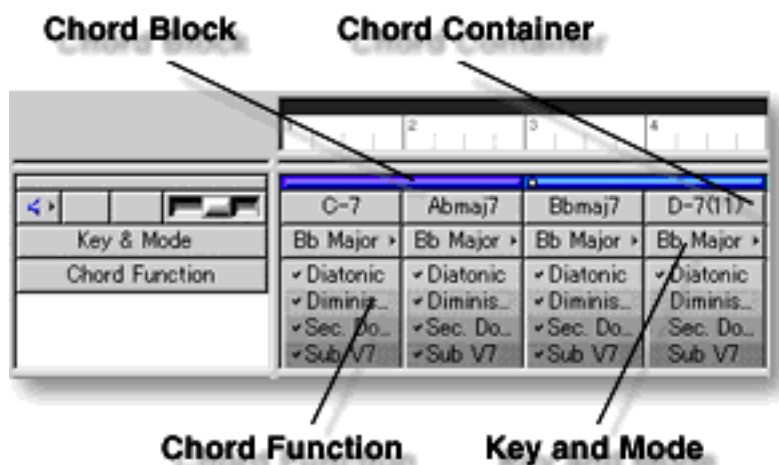
Assigning a Key and Mode

**Key and Mode** button

The **Key and Mode** button, located right below each Chord Name, displays its current settings and opens the Key and Mode drop-down menu. This allows you to adjust Chord Container Tonality settings originally made in the New Chord or New Chord Block dialog boxes. You can independently choose a Key and Mode such as G major, D Mixolydian, etc., for each Chord.

This Key and Mode setting is referred to by CAMPS during Auto Chord Detection, Chord Progression Generation and Chord Construction.

If Chord **Key and Mode** buttons are not visible, click on the dividing line between the Chord and Line Areas and drag your mouse downward, extending the bottom of the Chord Area.



See also:

[Manipulating Chord Blocks](#)

[Manipulating Chords](#)

[Assigning Chord Functions](#)

[Adjusting the Grid display](#)

## Using the Chord Area

Assigning  
Chord Functions

**Chord Function**  
check list

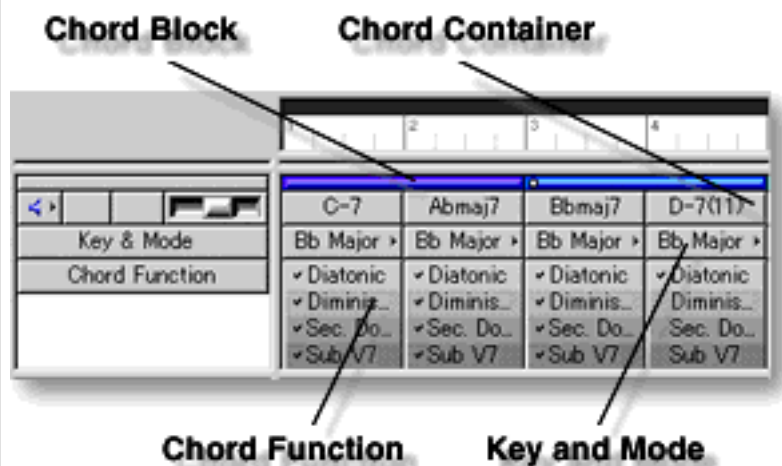
The Chord Function check list, located below each Chord's **Key and Mode** button, displays its current settings with checkmarks and allows you to turn individual Chord Functions on or off for each Chord. These settings are referred to by CAMPS during Auto Chord Detection, Chord Progression Generation and Chord Construction.

CAMPS comes with four "plug-in" [Chord Functions](#) for each Chord, including Diatonic, Diminished, Sub V7 and Secondary Dominant. The more Chord Functions you activate, the more types of Harmony CAMPS deals with. For example, if you activate Sub V7 (appearing in a darker shade of gray), you'll get more "Jazzy" Chords with the Auto Chord Detection, Chord Progression Generation and Harmonize functions.

If the Chord Function check lists are not visible under existing Chords, click on the dividing line between the Chord and Line Areas and drag it downward, extending the bottom of the Chord Area.



You must at least activate the Diatonic Chord Function for a Chord to be effective in directing CAMPS Composition functions.



See also:

[Manipulating Chord Blocks](#)

[Manipulating Chords](#)

[Assigning a Key and Mode](#)

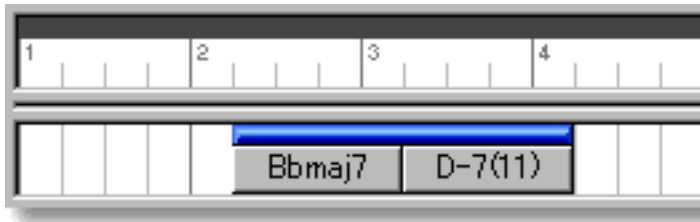
[Adjusting the Grid display](#)

## Using the Chord Area

Adjusting the  
Grid display

**Bar Grid** The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. Choose **Bar Grid** from the **Grid View** submenu of the **View** menu to show or hide the Bar Grid in the Chord Area, as well as the Text Info and Line Areas.

**Beat Grid** The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Beat Grid** from the **Grid View** submenu of the **View** menu to show or hide the Beat Grid in the Chord Area, as well as the Text Info and Line Areas.



See also:

[Manipulating Chord Blocks](#)

[Manipulating Chords](#)

[Assigning a Key and Mode](#)

[Assigning Chord Functions](#)

## Line Area of the Document Window

**Description** The Line Area is home to a Document's [Line Blocks](#), which contain each Track's MIDI Line data. A Track can contain multiple Line Blocks, depending on its musical phrasing. Each Line Block can have multiple [Takes](#), allowing you to make alternate edits of each Line Block. While a large degree of Playback control is available in the [Track Area](#), including [Category settings](#) used by the CAMPS Composition Logic Engine, a Track's permanent Playback Control data is stored and edited in Line Blocks along with Notes and other MIDI Event data.

**Uses** The Line Area is where you [manage a song's Line data](#). You can create, duplicate, move or delete Line data within each Line Block, as well as [create](#), [duplicate](#), [move](#), [delete](#), [merge](#) or [split](#) entire Line Blocks. Line Blocks serve to enable quick musical arranging changes.

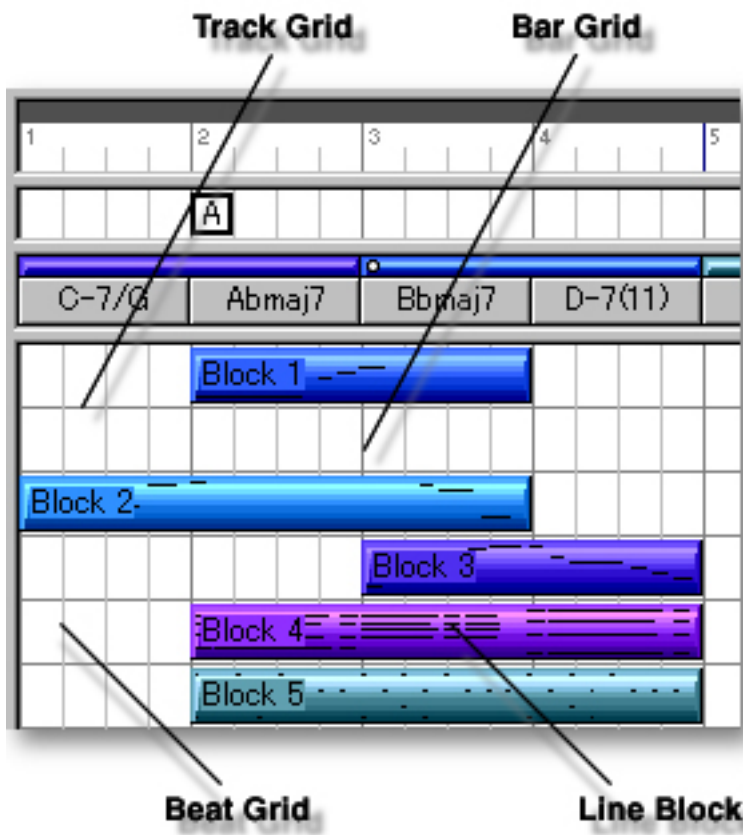
A Line Block must be selected to enable **Line** menu commands, Line related Editors other than the Document Window and some of the Edit Buttons at the top of the Document Window. Once a Line Block is selected, CAMPS provides a number of automated and manual [methods of composing and editing Line data](#), including Auto Composing, Articulation adjustment, Voicing, Dissonant Interval Detection and Recording from your MIDI instrument.

Line Blocks display their Note data contents with a miniaturized Pianoroll type of graphic. Each Line Block also displays a unique name, which can be edited or [hidden](#) at anytime.

Arranged in an end-to-end fashion, each Track's Line Blocks normally Playback in a continuous sequence as one Track. However, Line Blocks can be [Played back in different ways](#), alone or with other Tracks, allowing you to audibly compare a newly Composed "Take" with other existing "[Takes](#)". All settings can then be saved with the Document.

**Items**

- [Line Block](#)
- [Take](#)
- [Bar Grid](#)
- [Beat Grid](#)
- [Track Grid](#)





## Items in the Line Area

### [Manipulating Line Blocks](#)

**Line Block** A Line Block is a section of a Track's MIDI Line data.

When Importing a Standard MIDI File, the original data is left unchanged, but CAMPS divides or encapsulates a Track's Line data into Line Blocks according to data continuity. If no MIDI Events span a given Bar line, the related Line Block ends and a new one starts at this point. Empty Bars are not initially assigned any Line Blocks. Any or all of a Track's Line Blocks can be merged into a longer one, but you may find it more productive to work with smaller sections of MIDI Line data when using CAMPS Editors. Line Blocks can also be split at any point. Line Blocks of any length can be created in any location of each Track, with or without Line data, and whether or not other Line Blocks already exist.

When Line Blocks are used to organize different Sections in your composition, such as a Verse or Bridge, they serve to enable quick musical arranging changes because they are referenced by CAMPS during Auto Harmonization and other functions. You can assign a unique name and color to each Line Block, making them easier to distinguish at a glance. You can [create](#), [edit](#), [resize](#), [split](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Line Blocks as needed.

### [Understanding Takes](#)

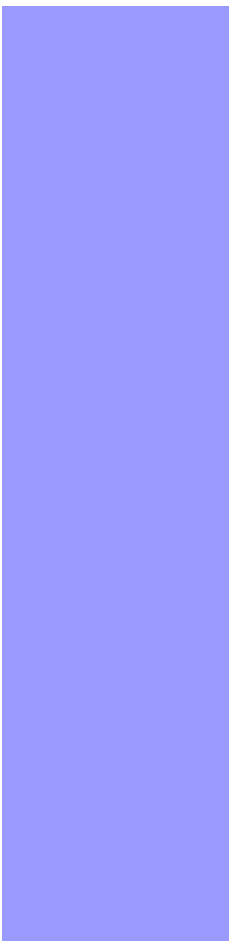
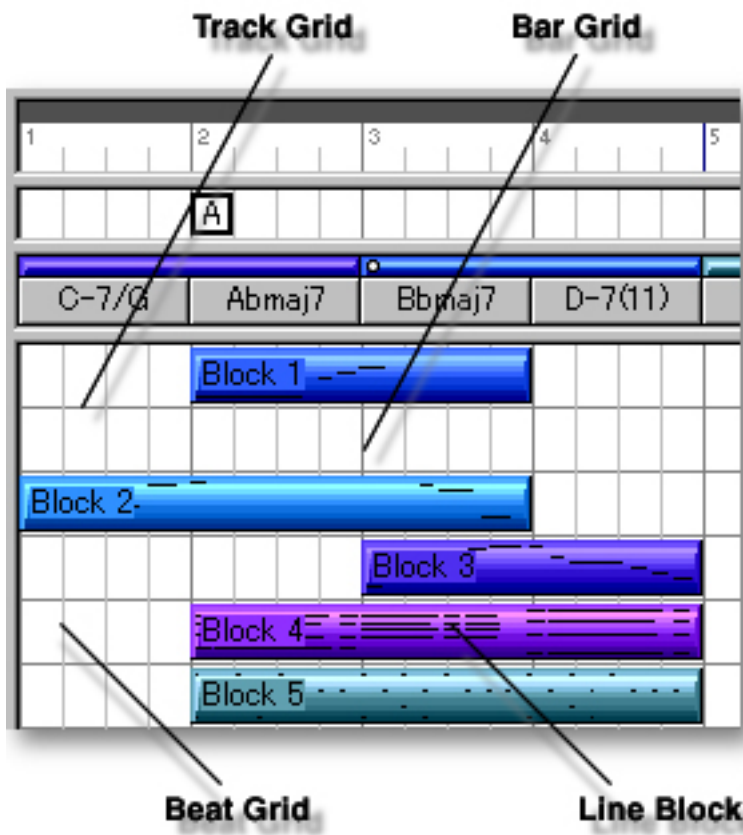
**Take** Each Line Block can contain different Takes, allowing you to create and store different musical versions of any Line Block.

### [Adjusting the Grid display](#)

**Bar Grid** Vertical lines horizontally spaced across the Line Area indicating the dividing lines between Bars.

**Beat Grid** Vertical lines horizontally spaced across Bars indicating the dividing lines between Beats.

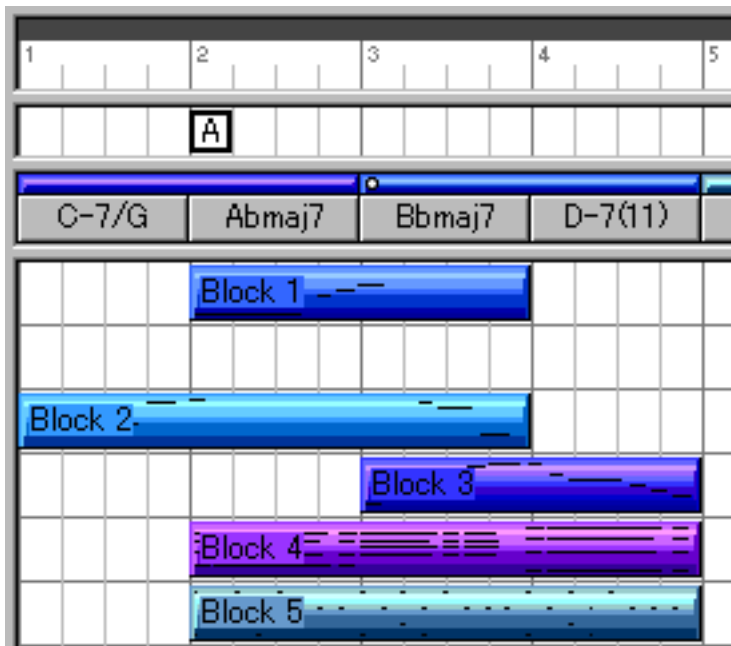
**Track Grid** Horizontal lines vertically spaced across the Line Area indicating the dividing lines between Tracks.



## Using the Line Area

Adjusting the Grid display

- Bar Grid** The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. Choose **Bar Grid** from the **Grid View** submenu of the **View** menu to show or hide the Bar Grid in the Line Area, as well as the Text Info and Chord Areas.
- Beat Grid** The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Beat Grid** from the **Grid View** submenu of the **View** menu to show or hide the Beat Grid in the Line Area, as well as the Text Info and Chord Areas.
- Track Grid** The Track Grid is a pattern of evenly spaced horizontal lines marking vertical divisions between MIDI Tracks for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Track Grid** from the **Grid View** submenu of the **View** menu to show or hide the Track Grid in the Line and Track Areas.



See also:

[Manipulating Line Blocks](#)  
[Understanding Takes](#)

## Line Block

Note:

Most Line Block operations require selection of a Line Block. After using any of the special Tool buttons at the top of the Document Window, be sure to switch back to the standard **Arrow Tool** for regular manipulation operations.

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### CREATING A NEW LINE BLOCK IN REAL TIME

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With the Playback Pointer at the beginning of your Document, Arm desired Track for recording, click the **Record** button in the [Record Control Toolbar](#) or choose the desired Recording command from the **Record** submenu of the **MIDI** menu and begin playing your MIDI Instrument.

If you wish to create a New Line Block "on the fly" from some point other than the beginning of a document, you'll first need to insert a Punch In/Out region for the desired location. In this case however, any existing Line Block matching the size and location of your Punch In/Out region and Armed Track will be **replaced**.

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### CREATING A NEW BLANK LINE BLOCK

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Method 1:

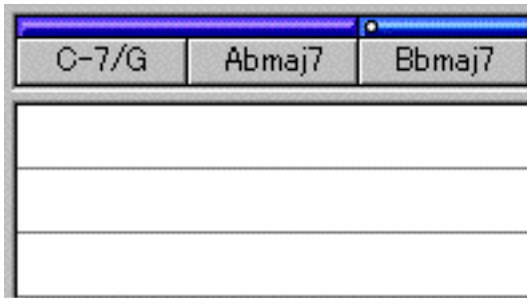
Select the **Pen** tool at the top of the Document Window and then click and drag from left to right in the Line Area to assign the starting and ending locations of the Line Block you are about to create. Settings for the Line Block such as Location, Color and Duration are adjustable at any time.


Method 2:

Right-click an empty location in the Line Area and then choose **New Line Block...** to open the [New Line Block dialog box](#). Alternatively, select an empty location in the Line Area and choose **New Line Block...** from the **Edit** menu to open the [New Line Block dialog box](#).

Depending on the Track Category for the Line Area you select and the menu path you use to execute the **New Line Block...** command, a different version of the New Line Block dialog box will appear.

The New Line Block dialog box allows you to set Bar Quantity and Take Name of the new Line Block. To create a new empty Line Block without automatically assigned Line data, be sure the EZgenerate option is not checkmarked. These settings will be saved and used as defaults for your next New Line Block dialog box session. However, they can be changed at any time.



 When choosing **New Line Block...** from the **Edit** menu, you must have clicked an empty location in the Line Area, otherwise the **New Line Block...** item won't be available.




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## CREATING A NEW LINE BLOCK WITH AUTO COMPOSED LINE DATA

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### Method 1:

Select the **Magic Wand** tool at the top of the Document Window and then click and drag horizontally in the desired region of the Line Area to assign the starting and ending locations of the Line Block you are about to create. Settings for Line Block such as Location, Color and Duration are adjustable at any later time.

 If any Chords exist in the same Bar region as the New Line Block being created with the **Magic Wand** tool, CAMPS will Auto Compose Line data using existing Chord Harmony instead of arbitrarily creating Line data.

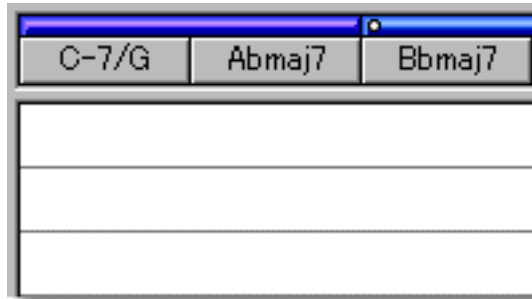
### Method 2:


Right-click an empty location in the Line Area and choose **New Line Block...** to open the [New Line Block dialog box](#). Alternatively, select an empty location in the Line Area and choose **New Line Block...** from the **Edit** menu to open the [New Line Block dialog box](#).

Depending on the [Track Category](#) for the Line Area you select and the menu path you use to execute the **New Line Block...** command, a different version of the New Line Block dialog box will appear.

The New Line Block dialog box allows you to set the Bar Quantity and Take Name of the new Line Block. Be sure to check mark the EZgenerate Line data option in

the dialog box if you want CAMPS to automatically generate Line data in the new Line Block. These settings will be automatically saved and used as defaults for your next New Line Block dialog box session. However, they can be changed at any time.



 When choosing **New Line Block...** from the **Edit** menu, you must have clicked an empty location in the Line Area, otherwise the **New Line Block...** item won't be available.



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## EDITING LINE BLOCKS

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Method 1:

Select the **Magic Wand** tool at the top of the Document Window and then click the desired Line Block to Auto Compose its new Line data based on its existing Line data.



If any Chords exist in the same Bar region as the New Line Block being created with the **Magic Wand** tool, CAMPS will Auto Compose Line data using existing Chord Harmony instead of arbitrarily creating Line data.

Method 2:

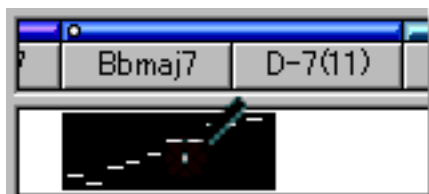
Select desired Line Block and click the desired **Editor** button in the Edit Buttons Area of the Document Window. Alternatively, click desired Line Block and choose desired Editor from the **Editors** menu.

Method 3:

Right click desired Line Block and choose desired dialog box command from the

**Actions** submenu. Alternatively, click desired Line Block and choose desired dialog box command from the **Line** menu.

See also [CREATING LINE BLOCKS](#) above.




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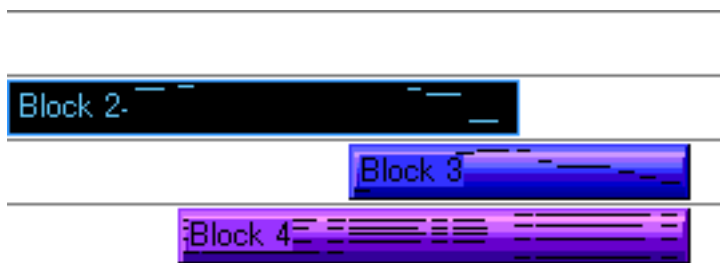
## SELECTING LINE BLOCKS

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Using the **Arrow** tool, you can select individual Line Blocks. You can select multiple Line Blocks by holding the Ctrl (or Shift) key down as you select. Alternatively, Clicking and holding your mouse button down at an empty location in the Line Area and dragging your mouse over desired Line Blocks allows you to select multiple Line Blocks in one quick operation. Once selected, you can then move, duplicate, make an Alias of, copy, paste or delete a group of Line Blocks at one time using the right click, menu bar or click and drag method.

Selecting Line Blocks enables use of Line related commands under the **Line** Menu bar item including **Compose...** and **Detect Dissonant Intervals...**

 Selecting multiple Line Blocks will not be possible if the **Pen**, **Magic Wand** or **Eraser** tool button at the top of the Document Window is currently active. In these cases, Line Blocks will be created, EZgenerated or deleted (depending on which of these buttons is active).



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## PLAYING BACK LINE BLOCKS

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Select desired Line Blocks, right-click the Line Blocks and then choose **Playback** from the drop-down menu to start Playback of the selected Line Blocks. A Loop region for the selected Line Blocks will be automatically created and CAMPS repeats (Loops) Playback in this region until you stop. The Loop to be created may include empty sub-regions depending on your Line Block selections. Choose **Playback with Others** from the drop-down menu to audition the selected Line Blocks with Line Blocks on all the [activated](#) Tracks.

To stop Playback, choose **Stop** from the **MIDI** menu. Alternatively, click the **Stop** button of the Playback Toolbar.



Choosing **Playback** will automatically [activate](#) the **Play** button for the selected Line Tracks while [deactivating](#) the **Play** button for the rest of existing Line Tracks. If no Track is activated, choosing **Playback with Others** will automatically activate the **Play** button for all the existing Line Tracks. Neither command effects the **Play** button settings for the [Chord Track](#).

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## MOVING LINE BLOCKS

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Method 1:

Click and drag desired Line Blocks to a new location in the Line Area. Vertical mouse motion while dragging will move the Line Block to a different Track.

Method 2:

Select a desired Line Block with your mouse and use your computer keyboard's arrow keys to move it more precisely. The up/down arrow keys move a Line Block from Track to Track, while the left/right arrow keys move a Line Block in time by Divisions.

Method 3:

This method allows you to move Line Blocks between Documents.

Right-click a Line Block and choose **Cut Line Block** to remove a Line Block from its current location. Alternatively, click desired Line Block and choose **Cut Line Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Line Blocks in one operation.

Next, right-click a desired location in the Line Area of the desired Document and choose **Paste Line Block** to Paste the Cut Line Block(s). Alternatively, select a desired location in the Line Area and choose **Paste Line Block** from the **Edit** menu. If you are moving a Line Block to a different Document, a new Track will be automatically created for it, regardless of destination Track selection.

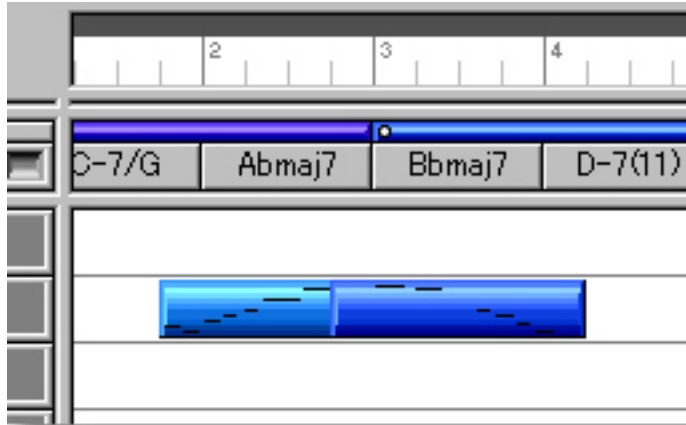


When **Align To Grid** is activated, the Line Block being moved will be Pasted to the nearest Horizontal Grid Resolution point of the selected Line Area location as defined in the [Grid Setup dialog box](#).





Even if Line Blocks overlap, CAMPS always refers to all Line Blocks for Auto Harmonizing and Playback. Right-click a Line Block and use the **Bring to Front** or **Send to Back** commands to move the desired overlapping Line Block in or out of view.



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## RESIZING LINE BLOCKS

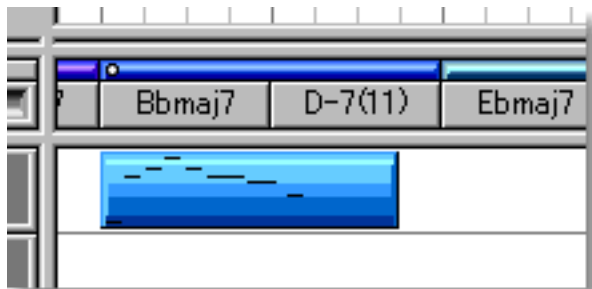
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Using the Arrow Tool, position your mouse cursor over the left or right edge of a desired Line Block until the cursor changes to a double arrow. Then click and drag the edge of the Line Block to the desired size.

Keep in mind that resizing a Line Block effects its total Playback time, but doesn't change the time value or position of its Line data. Enlarging a Line Block effectively adds empty space to it. However, shrinking a Line Block may abbreviate its Line data. Additionally, enlarging a Line Block may cause Line Blocks to overlap.



Even if Line Blocks overlap, CAMPS always refers to all Line Blocks for Auto Harmonizing and Playback. Right-click a Line Block and use the **Bring to Front** or **Send to Back** commands to move the desired overlapping Line Block in or out of view.

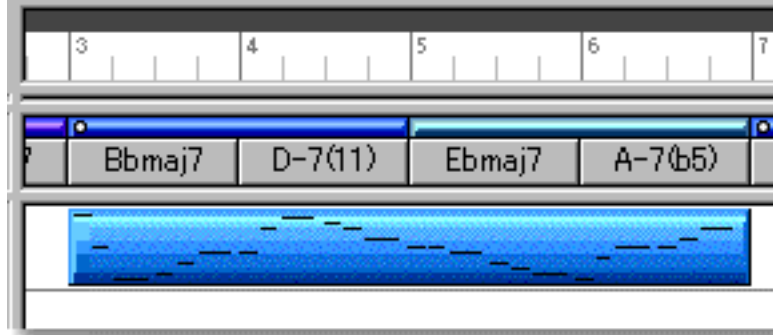


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## SPLITTING LINE BLOCKS

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Select the **Razor** tool at the top of the Document Window and simply click on a Line Block at the desired point to split it. When the [Interactive Information display](#) is enabled, you can watch it for an exact Bar, Beat and Division location while dragging the Razor Tool across a Line Block. Once you reach the desired location, click your mouse button to split the Line Block.



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## DUPLICATING LINE BLOCKS

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Right-click a Line Block and choose **Duplicate Line Block** to duplicate a Line Block. Alternatively, click desired Line Blocks and choose **Duplicate Line Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Duplicate multiple Line Blocks in one operation.

Unlike the Copy/Paste operation which allows you to choose the location of the "copy" before it is created, Duplicating a Line Block automatically places the "duplicate" on top of the original, offset slightly to the right. You can then move the "duplicate" at any time.

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## COPYING / PASTING LINE BLOCKS

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Right-click a Line Block and choose **Copy Line Block** to Copy a Line Block. Alternatively, click desired Line Block and choose **Copy Line Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Line Blocks in one operation.

Then, right-click a desired location in the Line Area of the desired Document and choose **Paste Line Block** to Paste the Copied Line Block(s). Alternatively, select a desired location in the Line Area and choose **Paste Line Block** from the **Edit** menu. If you are moving a Line Block to a different Document, a new Track will be automatically created for it, regardless of destination Track selection.



When **Align To Grid** is activated, the Line Block being Copied will be Pasted to the nearest Horizontal Grid Resolution point of the selected Line Area location as defined in the [Grid Setup dialog box](#).

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## CREATING AN ALIAS OF LINE BLOCKS

---

Right-click desired Line Block and choose **Make Alias of Line Block** to make an Alias of a Line Block. Alternatively, select desired Line Blocks and choose **Make Alias of Line Block** from the **Edit** menu to make Alias of the selected Line Blocks. Using the Ctrl (or Shift) key while selecting allows you to to Make Aliases of multiple Line Blocks in one operation.



An Alias is, in effect, an active copy of its original. Except for Copy/Paste, Duplicate, Move and Delete operations, changes you make to one of the Aliases effects all of its Aliases. This holds true whether you make changes to the original, or the "copies". In fact, there is no effective difference between an Alias and its original. A small circle appearing at the left of the Line Block indicates the Alias status.



---

## DELETING LINE BLOCKS

---

Method 1:

Select the **Eraser** tool at the top of the Document Window and simply click on a Line Block to delete it. With the **Eraser** tool, clicking and holding your mouse button down at an empty location in the Line Area and dragging the **Eraser** over desired Line Blocks allows you to delete multiple Line Blocks in one quick operation.

Method 2:

Right-click a Line Block and choose **Clear Line Block** to delete a Line Block. Alternatively, click desired Line Block and choose **Clear Line Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Line Blocks in one operation.



See also:

[Understanding Takes](#)

[Adjusting the Grid display](#)

## Understanding Takes

**Take** CAMPS allows you to store different Takes within each Line Block. Takes are different versions of a given Line Block. Except for Notes in the Line data, Length and other attributes are the same as the original. This allows you to store and choose between alternate performances of a particular Line Block.

For basic "Take" operations, open the [Take List dialog box](#) using one of the following methods.

Method 1:

Right-click a Line Block and then choose **Take List...** from the **Take** submenu. Alternatively, select a Line Block and then choose **Take List....** from the **Take** submenu of the **Line** menu.

Method 2:

Double-click a Line Block while holding the Ctrl key down.



Using the above methods with multiple Line Blocks opens the same number of Take List dialog boxes as the selected Line Blocks. As you close the Take List dialog box for one Line Block, the Take List dialog box for the next selected Line Block appears.

See also:

[Manipulating Line Blocks](#)

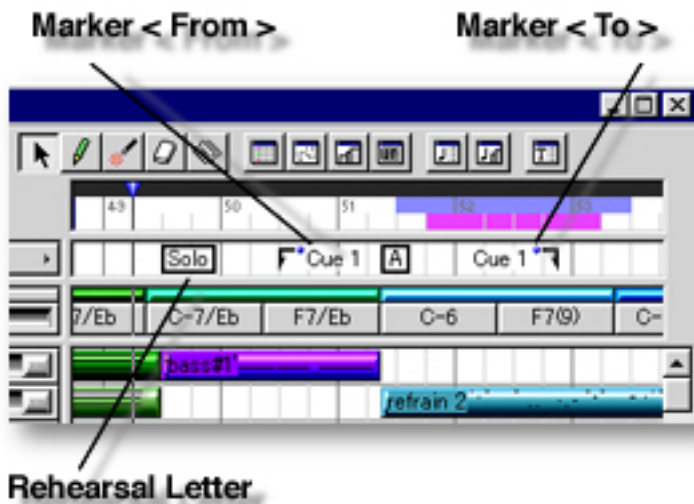
[Adjusting the Grid display](#)

# Text Info Area of the Document Window

**Description** The Text Info Area displays general Text Information in a continuous row, parallel to the Bar Area. It allows you to create/display Text Events such as "Rehearsal Letters" and "Markers".

**Uses** You can create, edit, copy, duplicate, move or delete Rehearsal Letters and Markers in the Text Info Area as needed. These items can help you organize your composition Document to more quickly locate a particular point in your music. These settings can then be saved with the Document.

- Items**
- [Rehearsal Letter](#) event
  - [Marker <From>](#) event
  - [Marker <To>](#) event
  - [Bar Grid](#)
  - [Beat Grid](#)



## Items in the Text Info Area

[Creating Text Events](#)

### Rehearsal Letter event

Rehearsal Letters such as A or B, generally appearing at obvious musical phrase boundaries, serve to provide Bar markings for rehearsal. These Text Events can also be phrases such as "Verse", "Chorus", "Head", "Bridge", or anything you desire. You can [create](#), [edit](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Rehearsal Letters as needed.

### Marker <From><To> events

Markers serve to provide Cue markings for rehearsal or sequencing work. You can use either <From> or <To> depending on your needs. You can [create](#), [edit](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Markers as needed.

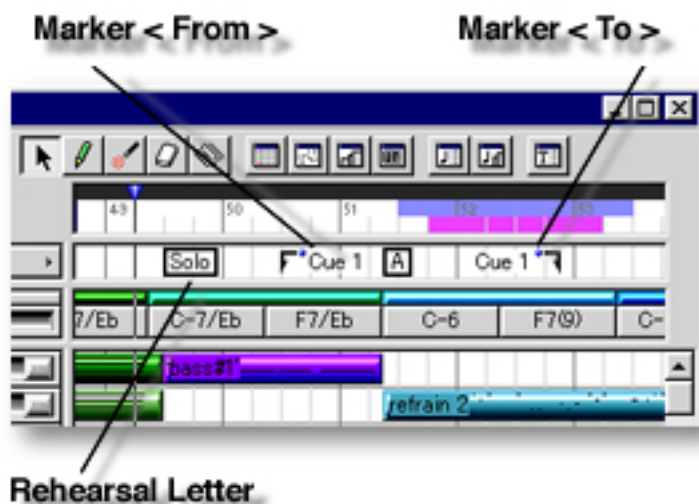
[Adjusting the Grid display](#)

### Bar Grid

Vertical lines horizontally spaced across the Text Info Area indicating the dividing points between Bars.

### Beat Grid

Vertical lines horizontally spaced across Bars indicating the dividing points between Beats.



Note:

After using any of the special Tool buttons at the top of the Document Window, be sure to switch back to the standard **Arrow Tool** for regular manipulation operations.



## Rehearsal Letter event


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### CREATING A REHEARSAL LETTER

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Right-click a desired location in the Text Info Area and choose **New Rehearsal Letter** to create a blank Rehearsal Letter. Enter desired text data in the edit box. When you are finished entering Text, click outside the edit box or press Enter on your computer's keyboard.

Alternatively, choose **New Text Event...** from the **Edit** menu to create a blank Rehearsal Letter. The [New Text Event dialog box](#) will open allowing you to choose a Rehearsal Letter, Marker <from> or Marker <To> text event.

 When choosing **New Text Event...** from the **Edit** menu, you must first have selected an empty Text Info Area, otherwise the **New Text Event...** item won't be available.

## Marker <From> Marker <To> events


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### CREATING A MARKER

---

Right-click a desired location in the Text Info Area and choose **New Marker <From>** or **New Marker <To>** to create a blank Marker. Enter desired text data in the edit box. When you are finished entering or editing Text, click outside the edit box, or press Enter on your computer's keyboard.

Alternatively, choose **New Text Event...** from the **Edit** menu to create a blank Marker. The [New Text Event dialog box](#) will open allowing you to choose a Rehearsal Letter, Marker <from> or Marker <To> text event.

 When choosing **New Text Event...** from the **Edit** menu, you must first have selected an empty Text Info Area, otherwise the **New Text Event...** item won't be available.

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## EDITING TEXT EVENTS

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To edit a Text Event, double click it to open its edit box. After typing your changes, hit the Enter key, or click someplace outside the edit box to close it.




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## SELECTING TEXT EVENTS

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Using the **Arrow** tool, you can select individual Text Events. You can select multiple Text Events by holding the Ctrl (or Shift) key down as you select. Alternatively, clicking and holding your mouse button down at an empty location in the Text Info Area and dragging your mouse over desired Text Events allows you to select multiple Text Events in one quick operation. Once selected, you can then move, duplicate, copy, paste or delete a group of Text Events at one time using the right click, Menu Bar or click and drag method.

 Selecting multiple Text Events will not be possible if the **Eraser** tool button at the top of the Document Window is currently active. In this case, Text Events will be deleted.





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## MOVING TEXT EVENTS

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### Method 1:

Click and drag desired Text Events to a new location in the Text Info Area.

### Method 2:

Select desired Text Event with your mouse and use your computer keyboard's left/right arrow keys to move Text Events a Division at a time.

### Method 3:

This method allows you to move Text Events between Documents.

Right-click a Text Event and choose **Cut Text Event** to remove a Text Event from its current location. Alternatively, click desired Text Event and choose **Cut Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Text Events in one operation.

Next, right-click a desired location in the Text Info Area of the desired Document's Document Window or Pianoroll, Control Draw or Tempo Draw Editor and choose **Paste Text Event** to Paste the Cut Text Event(s). Alternatively, select a desired location in the Text Info Area and choose **Paste Text Event** from the **Edit** menu.



When **Align To Grid** is activated, the Text Event being moved will be Pasted to the nearest Horizontal Grid Resolution point of the selected Text Info Area location as defined in the [Grid Setup dialog box](#).

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## DUPLICATING TEXT EVENTS

---

Right-click a Text Event and choose **Duplicate Text Event** to duplicate a Text Event. Alternatively, click desired Text Events and choose **Duplicate Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Duplicate multiple Text Events in one operation.

Unlike the Copy/Paste operation which allows you to choose the location of the "copy" before it is created, Duplicating a Text Event automatically places the "duplicate" on top of the original, offset slightly to the right. You can then move the "duplicate" at any time.

---

## COPYING / PASTING TEXT EVENTS

---

Right-click a Text Event and choose **Copy Text Event** to copy it. Alternatively, click desired Text Event and choose **Copy Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Text Events in one operation.

Next, right-click a desired location in the Text Info Area of the desired Document's Document Window or Pianoroll, Control Draw or Tempo Draw Editor and choose **Paste Text Event** to Paste the Copied Text Event(s). Alternatively, select a desired location in the Text Info Area and choose **Paste Text Event** from the **Edit** menu.



When **Align To Grid** is activated, the Text Event being Copied will be Pasted to the nearest Horizontal Grid Resolution point of the selected Text Info Area location as defined in the [Grid Setup dialog box](#).

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## DELETING TEXT EVENTS

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Method 1:

Select the **Eraser** tool at the top of the Document Window and simply click on a Text Event to delete it. With the **Eraser** tool, clicking and holding your mouse button down at an empty location in the Text Info Area and dragging the **Eraser** over desired Text Events allows you to delete multiple Text Events in one quick operation.

Method 2:

Right-click a Text Event and choose **Clear Text Event** to delete a Text Event. Alternatively, click desired Text Events and choose **Clear Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Text Events in one operation.



See also:

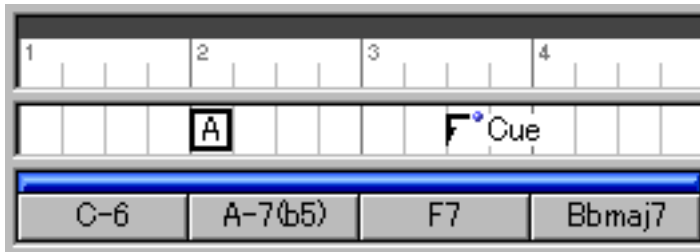
[Adjusting the Grid display](#)

## Using the Text Info Area

Adjusting the Grid display

**Bar Grid** The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. Choose **Bar Grid** from the **Grid View** submenu of the **View** menu to show or hide the Bar Grid in the Text Info Area, as well as the Chord and Line Areas.

**Beat Grid** The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Beat Grid** from the **Grid View** submenu of the **View** menu to show or hide the Beat Grid in the Text Info Area, as well as the Chord and Line Areas.



See also:

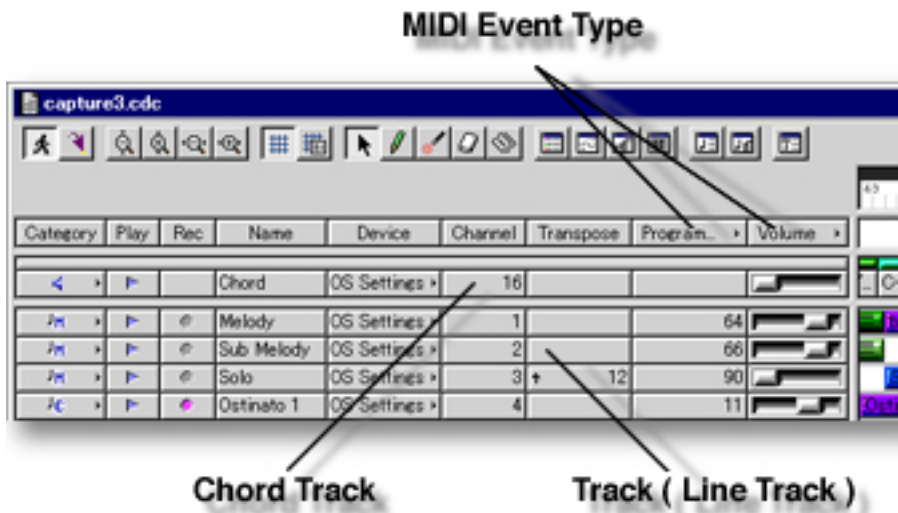
[Creating and Manipulating Text Events](#)

# Track Area of the Document Window

**Description** The Track Area displays all a Document's MIDI Track Controls in separate rows, one for each Track of Line data, allowing you to manage each Track independently. Each Track Control row corresponds horizontally with its Line Blocks in the Line Area of the Document Window. You can create as many Tracks as you like, limited only by the amount of memory installed in your computer. However, there will always be only one Chord Track.

**Uses** Besides displaying various Track related information, the Track Area allows you to [manage a song's Tracks](#), including creating, duplicating, moving and deleting Tracks. The Track Area also allows you to independently assign a [Name](#), [MIDI Driver](#) or [MIDI Channel](#), and temporary [MIDI Event](#) values such as Program (Patch) number, [Play Activate](#) and [Record Arm](#). Most importantly, the Track Area allows you to assign an [orchestration role](#) to each Track, referred to in CAMPS as a Category. At the upper portion of the Track Area is a special [Chord Track](#) in which settings effect Chord Playback in all Editors and dialog boxes. All of these settings can be saved with the Document.

- Items**
- [Chord](#) Track
  - [Line](#) Track
  - [MIDI Event Type](#) buttons/displays



Track  
Items

**Category** button/display

**Play** button/display

**Record** button/display

**Track Name** button/display

**MIDI Device** button/display

**MIDI Channel** button/display

**Transpose** button/display

**MIDI Event** button/display

**MIDI Event** slider/display

Category	Play	Rec	Name	Device	Channel	Transpose	Pro..	Vol..
< ▶	▶		Chord	MQ2P.. ▶	16		2	
JM ▶	▶	Ⓢ	Melody	MQ2P.. ▶	1		6	

## Items in the Track Area

[Adjusting the Chord Track](#)

**Chord Track**

The Chord Track allows you to assign various settings for Chord Playback in all Editors and dialog boxes. Unlike the Line Tracks, the Chord Track controls can't be recreated, copied, duplicated, moved or deleted. However, certain Chord Track parameters can be [edited](#).

[Manipulating Line Tracks](#)

**Line Track**

A Line Track (or simply "Track") allows you to assign various settings for MIDI Line data Playback in all Editors and dialog boxes. Besides editing, you can [create](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Line Tracks as needed.

[Assigning a Category](#)

**Category**  
button/display

The Chord Track Category button (located on the left side the Chord Track Area) allows you to choose one of six [Chord Playback methods](#) for your musical reference.

A Line Track's Category button (located on the left side the Line Track Area) displays its current setting, and opens a Track's Category drop-down menu. This allows you to assign a Category (orchestration role) such as Melody, Bass, etc., to the Track. This Category setting is referred to by CAMPS during Auto Composing and Harmonizing.

[Turning Playback On/Off](#)

**Play**  
button/display

A Track's **Play** button displays its current setting and allows you to activate or deactivate Playback for a Track. This setting is effective in all Editors and dialog boxes.

[Choosing a Record Track](#)

**Record**  
button/display

A Track's **Record** button displays its current setting and allows you to Arm a Track for recording. You can only choose one Track at a time. This setting is only effective in the Document Window.

[Assigning a Track Name](#)

**Track Name**  
button/display

A Track's **Track Name** button displays the current Track name. Single clicking this button allows you to select a Track for other operations, and double clicking this button allows you to edit a Track's Name.

[Assigning a MIDI Output Device](#)

**MIDI Device**  
button/display

A Track's **MIDI Device** button displays its current setting and allows you to assign a MIDI Output Device to each Track by choosing a MIDI Driver from its menu. All MIDI Drivers installed in your computer appear in this menu, unless **MIDI Mapper** is selected in the **MIDI** menu. The assigned MIDI Device also plays back during Recording (Cues) when a Track is Armed for Recording. Choose Mute from this menu to temporarily mute the Track.

[Assigning a MIDI Channel](#)

**MIDI Channel**  
button/display

A Track's **MIDI Channel** button displays its current setting and allows you to assign a MIDI Output Channel to a Track by choosing a value between 1 and 16. The assigned MIDI Channel is also used for Playback during Recording (Cue) when a Track is Armed for Recording.

[Transposing](#)

**Transpose**  
button/display

A Track's **Transpose** button displays its current setting and allows you to temporarily [transpose](#) a Track's Playback by choosing a value between -72 and 72 Half Steps. The actual Track data is not changed. This Transpose setting is also used for Playback during Recording (Cue) when a Track is Armed for Recording.

[Adjusting MIDI Events](#)

**MIDI Event Type**  
buttons/displays

The **MIDI Event Type** buttons display their current settings and allow you to choose a MIDI Event Type to edit or display in all Tracks, using a Track's **MIDI Event** button or slider.

**MIDI Event**  
button/display

The **MIDI Event** button allows you to temporarily assign a value for the currently active MIDI Event Type. The actual Track data is not changed. This MIDI Event setting is also used for Playback during Recording (Cue) when a Track is Armed for Recording. As MIDI Events are executed in a Track's Line data during Playback, this area displays the corresponding MIDI Event values in real time.

**MIDI Event**  
slider/display

The **MIDI Event** slider allows you to temporarily assign a value for the currently active MIDI Event type in each Track. The actual Track data is not changed. This MIDI Event setting is also used for Playback during Recording (Cue) when a Track is Armed for Recording. As MIDI Events are executed in a Track's Line data during Playback, the slider moves, displaying the corresponding MIDI Event value as real time slider position.

Category	Play	Rec	Name	Device	Channel	Transpose	Pro..	Vol..
< ▶	▶		Chord	MQ2P.. ▶	16		2	
JH ▶	▶	Ⓢ	Melody	MQ2P.. ▶	1		6	

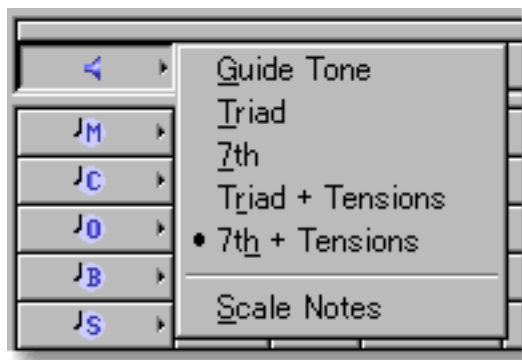
## Using the Track Area

### Controlling Chord Track Playback

#### Chord Track

Click the **Category** button (Speaker Icon) to open its drop-down menu. You can then select one of six methods for Chord Playback: Guide Tones, Triad, 7th, Triad + Tensions, 7th + Tensions or Scale Notes. ("7th + Tensions" is recommended.)

Guide Tones:	Chords using only Guide Tones
Triad:	Chords using Root, 3rd and 5th
7th:	Chords using Root, 3rd, 5th and 7th
Triad + Tensions:	Chords using Root, 3rd, 5th and Tensions
7th + Tensions:	Chords using Root, 3rd, 5th, 7th and Tensions
Scale Notes:	Scale Notes Arpeggiated from the Root



Click the **Play** button to activate or deactivate Chord Track Playback.

Click the **MIDI Device** button to open its drop-down menu. You can then choose one of your computer's installed MIDI Output Devices for Chord Track Playback. These Devices will not be individually selectable if **MIDI Mapper** is selected in the **MIDI** menu.

Click the **MIDI Channel** button to open the MIDI Channel edit box. You can then enter a value between 1 and 16 to assign a desired MIDI Channel to the Chord Track for Playback.

If necessary, Click the **Transpose** button to open the Transpose edit box. You can then enter a value between -72 and 72 to Transpose the Chord Track for Playback. (1 = a half step)

If you wish to edit a Chord Track MIDI Event numerically, click the **MIDI Event Type** at the top of the **MIDI Event** button column and choose the MIDI Event type to edit from the drop-down menu. Then click the Track's **MIDI Event** button to open its edit box. Use the up/down buttons or directly enter a number between -1 and 127. A setting of -1 indicates "not specified" or "none".

To edit a MIDI Event with the slider, click the **MIDI Event Type** button at the top of the MIDI Event slider column and choose the MIDI Event type to edit from the drop-down menu. Then click and drag the Track's slider to make your adjustment.





To hear Chord Playback anywhere in CAMPS, you must have adjusted the Volume for the Chord Track to a value higher than 0.

Category	Play	Rec	Name	Device	Channel	Transpose	Pro...	Vol...
< >	▶		Chord	MQ2P...	16		2	
JH >	▶	Ⓢ	Melody	MQ2P...	1		6	

See also:

[Manipulating Line Tracks](#)

[Assigning a Track Category](#)

[Controlling Track Playback](#)

[Controlling Track Recording](#)

[Assigning a Track Name](#)

[Assigning a MIDI Device](#)

[Assigning a MIDI Channel](#)

[Transposing](#)

[Assigning MIDI Events](#)

[Adjusting MIDI Events](#)

[Selecting MIDI Events](#)

## Using the Track Area

### Assigning MIDI Events


#### MIDI Event button/display

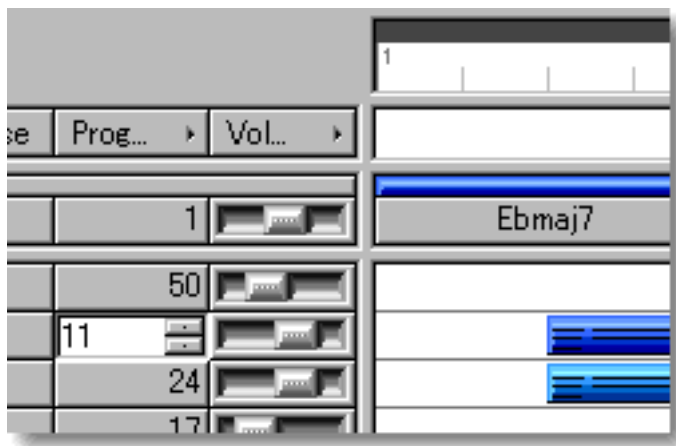
This is the second column in from the right side of the Track Area. Unaltered, it is typically set to a Program Change value.

Choose a MIDI Event you wish to edit from the **MIDI Event Type** button's drop-down menu in the top row of this column. You can then change MIDI Event values on a Track by Track basis using a Track's **MIDI Event** button to open its edit box.

These MIDI Event settings only temporarily effect a Track's Playback, and the actual Track Line data is not changed. The assigned MIDI Event settings are also used for Playback during Recording (Cue) when a Track is Armed for Recording.

As MIDI Events are executed in a Track's Line data during Playback, the **MIDI Event** button displays the corresponding MIDI Event values in real time.

 A Track's MIDI Event settings are effective for all the Line Blocks in that Track.



See also:

[Controlling Chord Track Playback](#)

[Manipulating Line Tracks](#)

[Assigning a Track Category](#)

[Controlling Track Playback](#)

[Controlling Track Recording](#)

[Assigning a Track Name](#)

[Assigning a MIDI Device](#)

[Assigning a MIDI Channel](#)

[Transposing](#)

[Adjusting MIDI Events](#)

[Selecting MIDI Events](#)

## Using the Track Area

### Adjusting MIDI Events


#### MIDI Event slider/display

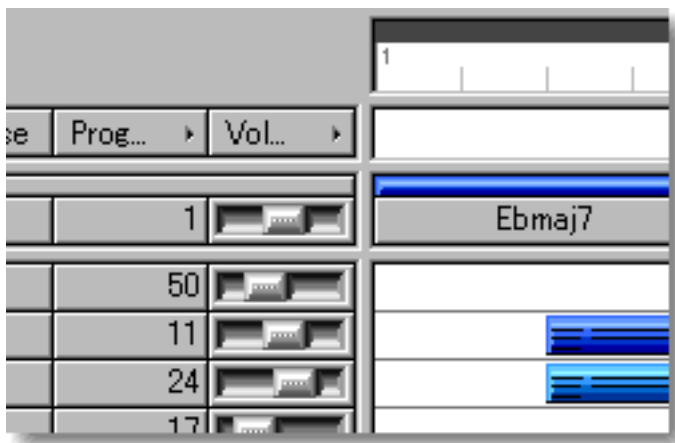
Unaltered, this slider is typically set to control Volume data.

Choose a MIDI Event you wish to edit from the **MIDI Event Type** button's drop-down menu at the top row of this column. You then can change MIDI Event settings on a Track by Track basis by using a Track's **MIDI Event** slider.

These MIDI Event settings only temporarily effect a Track's Playback, and the actual Track Line data is not changed. The assigned MIDI Event settings are also used for Playback during Recording (Cue) when a Track is Armed for Recording.

As MIDI Events are executed in a Track's Line data during Playback, the **MIDI Event** slider displays the corresponding MIDI Event values by moving in real time.

 A Track's MIDI Event settings are effective for all the Line Blocks in that Track.



See also:

[Controlling Chord Track Playback](#)

[Manipulating Line Tracks](#)

[Assigning a Track Category](#)

[Controlling Track Playback](#)

[Controlling Track Recording](#)

[Assigning a Track Name](#)

[Assigning a MIDI Device](#)

[Assigning a MIDI Channel](#)

[Transposing](#)

[Assigning MIDI Events](#)

[Selecting MIDI Events](#)

Selecting  
MIDI Events

**MIDI Event Type**  
buttons/displays

These buttons are in the top row (above the Chord Track), in the two right columns of the Track Area.

Unaltered, the left most **MIDI Event Type** button is typically set to Program Change, and determines the Type of MIDI Event to be adjusted with the MIDI Event buttons in the same column. The right most **MIDI Event Type** button is typically set to Volume controller, and determines the Type of MIDI Event to be adjusted with the MIDI Event sliders in the same column.

Choose a MIDI Event you wish to edit from either of these **MIDI Event Type** buttons' drop-down menus, and then adjust the value of the selected MIDI event for any Track using a Track's MIDI Event adjustment control in the appropriate column. This allows you to change MIDI Event values on a Track by Track basis using a Track's **MIDI Event** button or slider.

The resulting MIDI Event settings only temporarily effect a Track's Playback, and the actual Track Line data is not changed. The assigned MIDI Event settings are also used for Playback during Recording (Cue) when a Track is Armed for Recording.



A Track's MIDI Event settings are effective for all the Line Blocks in that Track.

See also:

[Controlling Chord Track Playback](#)

[Manipulating Line Tracks](#)

[Assigning a Track Category](#)

[Controlling Track Playback](#)

[Controlling Track Recording](#)

[Assigning a Track Name](#)

[Assigning a MIDI Device](#)

[Assigning a MIDI Channel](#)

[Transposing](#)

[Assigning MIDI Events](#)

[Adjusting MIDI Events](#)

The image shows a MIDI controller interface with a list of assignable functions. The interface includes a grid of buttons with numerical values and a dropdown menu. The dropdown menu is currently open, displaying a list of functions. The functions listed are:

- Volume
- Expression
- Panpot
- Modulation
- Reverb Send Level
- Chorus Send Level
- Delay Send Level
- Channel Aftertouch
- Pitch Bend
- Bank Select MSB
- Bank Select LSB
- Program Change

The interface also shows a grid of buttons with numerical values: 1, 50, 11, 24, 17, 18, 33, 48, and 0. The buttons are arranged in a grid with columns labeled 'se', 'Prog...', and 'Vol...'. The 'Vol...' column contains buttons with values 1, 50, 11, 24, 17, 18, 33, 48, and 0. The 'Prog...' column contains buttons with values 1, 11, 24, 17, 18, 33, 48, and 0. The 'se' column contains buttons with values 1, 11, 24, 17, 18, 33, 48, and 0. The interface also shows a dropdown menu with a list of functions: Volume, Expression, Panpot, Modulation, Reverb Send Level, Chorus Send Level, Delay Send Level, Channel Aftertouch, Pitch Bend, Bank Select MSB, Bank Select LSB, and Program Change.

## Using the Track Area

Manipulating  
Line Tracks

Line  
Track


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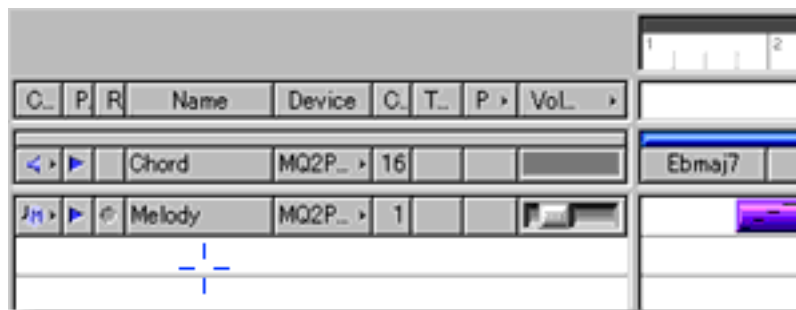
### CREATING A NEW BLANK TRACK

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Right-click in the Track Area and then choose **New Track** to create a blank Track. Tracks are created in an additive fashion. It is not possible to place a Track freely in an unused portion of the Track Area, rather, New Tracks are simply added underneath existing Tracks as the next Track.

Alternatively, choose **New Track** from the **Edit** menu to create a blank Track.

 When choosing **New Track** from the **Edit** menu, you must have clicked in the Track Area, otherwise the **New Track** item won't be available.




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### SELECTING TRACKS

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Using the **Arrow** tool, you can select individual Tracks. You can select multiple Tracks by holding the Ctrl (or Shift) key down as you select. Alternatively, Clicking and holding your mouse button down on a Track, and then dragging your mouse up or down to other Tracks allows you to select multiple Tracks in one operation. Once selected, you can then move, duplicate, copy, paste and delete a group of Tracks at one time using the right click, menu bar or click and drag method.

 Selecting multiple Tracks will not be possible if the **Eraser** tool button at the top of the Document Window is currently active. In this case, Tracks will be deleted.



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## MOVING TRACKS

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### Method 1:

Click and drag desired Tracks to a new location in the Track Area. This can only be done where Tracks already exist, in effect, reordering existing Tracks.

### Method 2:

This method allows you to move Tracks between Documents.

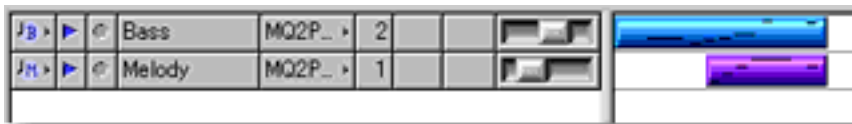
Right-click a Track and then choose **Cut Track** to remove a Track from its current location. Alternatively, select a Track and choose **Cut Track** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Tracks in one operation.

Next, right-click a desired location in the Track Area of the desired Document and choose **Paste Track** to Paste the Cut Track(s). Alternatively, select a location in the Track Area and choose **Paste Track** from the **Edit** menu.

When Pasting a Track, clicking an existing Track will cause the Track being moved to be Pasted above the selected Track. Pasting anywhere in the empty Track Area under existing Tracks will cause the Track being moved to be Pasted as the next Track under existing Tracks.



When moving Tracks in the Track Area, all a Track's Line Blocks will be moved with the Track.



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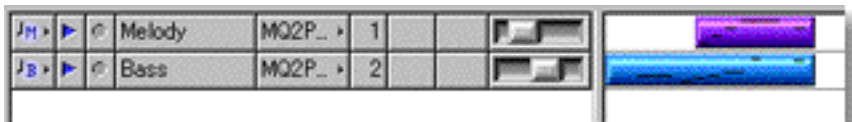
## DUPLICATING TRACKS

---

Right-click a Track and choose **Duplicate Track** to duplicate the selected Track. Alternatively, choose **Duplicate Track** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Duplicate multiple Tracks in one operation.



When Duplicating Tracks in the Track Area, all a Track's Line Blocks will also be Duplicated.



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## COPYING / PASTING TRACKS

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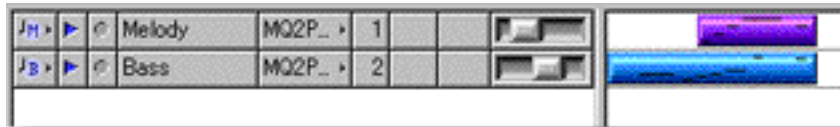
Right-click a Track and then choose **Copy Track** to copy a Track. Alternatively, select a Track and choose **Copy Track** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Tracks in one operation.

Next, right-click a desired location in the Track Area of the desired Document and choose **Paste Track** to Paste the Copied Track(s). Alternatively, select a location in the Track Area and choose **Paste Track** from the **Edit** menu.

When Pasting a Track, clicking an existing Track will cause the Track being Copied to be Pasted above the selected Track. Pasting anywhere in the empty Track Area under existing Tracks will cause the Track being Copied to be Pasted as the next Track under existing Tracks.



When copying Tracks in the Track Area, all a Track's Line Blocks will also be copied.



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## DELETING TRACKS

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Method 1:

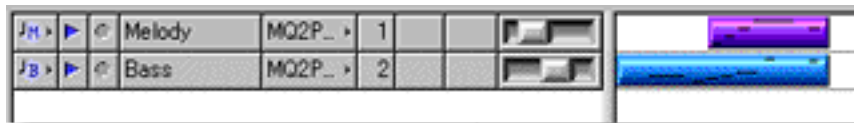
Select the **Eraser** tool at the top of the Document Window and simply click on a Track to delete it.

Method 2:

Right-click a Track and choose **Clear Track** to delete the selected Track. Alternatively, choose **Clear Track** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Tracks in one operation.



When deleting Tracks in the Track Area, all a Track's Line Blocks are also deleted.





See also:

[Controlling Chord Track Playback](#)

[Assigning a Track Category](#)

[Controlling Track Playback](#)

[Controlling Track Recording](#)

[Assigning a Track Name](#)

[Assigning a MIDI Device](#)

[Assigning a MIDI Channel](#)

[Transposing](#)

[Assigning MIDI Events](#)

[Adjusting MIDI Events](#)

[Selecting MIDI Events](#)

## Assigning Track Category

### Category button

Click a Track's **Category** button to open its Category drop-down menu. You can then select one of six Category settings for Auto Composing and Harmonizing: Melody, Comping, Obligato, Bass, Strings and Drums.



Melody: For the main Melody line



Comping: For accompaniments including a large number of harmonies



Obligato: For additional accompaniments to the Melody line



Bass: For the Bass line



Strings: For Strings including sustained Chord progressions



Drums: For Drums and Percussion

Because CAMPS is designed as a music composition tool, each Track (except the Chord Track) will always have one of these attributes. This does not directly effect MIDI line data Playback, but these attributes are referenced by the CAMPS Composition Logic Engine during Auto Composition and Harmonization. Depending on the Category assigned to a given Track, CAMPS automatically adjusts its internal Composition Logic to the Track Category for appropriate results. It is therefore important to assign the correct Category to each Line Track in order to obtain correct results from various CAMPS features.



A Track's Category setting is effective for all its Line Blocks.

See also:

[Controlling Chord Track Playback](#)

[Manipulating Line Tracks](#)

[Controlling Track Playback](#)

[Controlling Track Recording](#)

[Assigning a Track Name](#)

[Assigning a MIDI Device](#)

[Assigning a MIDI Channel](#)

[Transposing](#)

[Assigning MIDI Events](#)

[Adjusting MIDI Events](#)

[Selecting MIDI Events](#)

## Using the Track Area

### Controlling Track Playback

#### Play button/display

Click the **Play** button to activate or deactivate a Track's Playback. When a Track's Playback is active, the triangular "Play" Icon in this button turns blue in color. This setting is effective in all Editors and dialog boxes for the Track.

Other settings assigned to a Track including MIDI Device, MIDI Channel, Transpose and MIDI Event will be in effect when the **Play** button for the Track is turned on. However the Track's actual Line data is not changed.



Clicking a Track's turned on **Play** button while holding the Ctrl key down when no other Tracks are turned on results in all Tracks turning on. Additionally, doing this when some other Tracks are turned on works as a "Solo" function, turning all the other Tracks on or off except the Track whose **Play** button you are clicking while holding the Ctrl key down.



A Track's **Play** button setting is effective for all its Line Blocks.



To hear Playback of a Track anywhere in CAMPS, you must have adjusted the Volume for that Track to a value higher than 0, unless an appropriate Volume Event value is assigned to each Line Block in that Track.



See also:

[Controlling Chord Track Playback](#)

[Manipulating Line Tracks](#)

[Assigning a Track Category](#)

[Controlling Track Recording](#)

[Assigning a Track Name](#)

[Assigning a MIDI Device](#)

[Assigning a MIDI Channel](#)

[Transposing](#)

[Assigning MIDI Events](#)

[Adjusting MIDI Events](#)

[Selecting MIDI Events](#)

## Controlling Track Recording

### Record button/display

Click a Track's **Record** button to Arm the Track for recording. When a Track is Armed for Recording, the round "Record" Icon in this button turns magenta in color, and any Punch In/Out regions inserted in the Bar area of the Document Window change from dark gray to magenta, indicating that CAMPS is ready for Recording. Click the **Record** button again to disArm Recording for the Track. You can only select one Track at a time for Recording. This setting is only effective in the Document Window.

Other settings assigned to a Track including MIDI Device, MIDI Channel, Transpose and MIDI Event will be in effect for Playback during Recording (Cue) when that Track is Armed for Recording. However, new Line data is recorded exactly as you play it on your MIDI instrument.



A Track's **Record** button setting is effective for all its Line Blocks.



To hear Playback of the Track during Recording (Cue) in CAMPS, you must have adjusted the Volume for that Track to a value higher than 0.



See also:

[Controlling Chord Track Playback](#)

[Manipulating Line Tracks](#)

[Assigning a Track Category](#)

[Controlling Track Playback](#)

[Assigning a Track Name](#)

[Assigning a MIDI Device](#)

[Assigning a MIDI Channel](#)

[Transposing](#)

[Assigning MIDI Events](#)

[Adjusting MIDI Events](#)

[Selecting MIDI Events](#)

## Using the Track Area

Assigning a Track Name

**Track Name** button

Click the **Track Name** button to select a Track for Copying, Duplicating, Moving or other operations. Double click this button to open the Track Name edit box. Name the Track by entering text data in the edit box.

The length of the Name you type is limited only by available computer memory, but as it gets longer than the current size of the edit box, your typing will scroll out of view. Click and drag the right side of the Name column with your mouse to increase its size. When creating a new Track, it appears with the Track Name edit box opened for editing.

The Track Name will be used when exporting your data as Standard MIDI File.



Category	Play	Rec	Name	Device
< >	▶		Chord	MQ2P... >
JM >	▶	⊙	Melody	MQ2P... >
Jc >	▶	⊙	Comping	MQ2P... >
Jo >	▶	⊙	Obligato	MQ2P... >

See also:

[Controlling Chord Track Playback](#)

[Manipulating Line Tracks](#)

[Assigning a Track Category](#)

[Controlling Track Playback](#)

[Controlling Track Recording](#)

[Assigning a MIDI Device](#)

[Assigning a MIDI Channel](#)

[Transposing](#)

[Assigning MIDI Events](#)

[Adjusting MIDI Events](#)

[Selecting MIDI Events](#)

## Using the Track Area

Assigning a MIDI Device

**MIDI Device** button/display

Click a Track's **MIDI Device** button to open the MIDI Device drop-down menu. Here you can select any one of the MIDI Output Devices installed in your computer, unless **MIDI Mapper** is selected in the **MIDI** menu. You can change MIDI Device settings on a Track by Track basis using a Track's MIDI Device button. This gives you the ability to assign different MIDI Devices to different Tracks for Playback.

This can also be done for all Tracks at once by selecting all Track Names and clicking a **MIDI Device** button for any one of the selected Tracks.

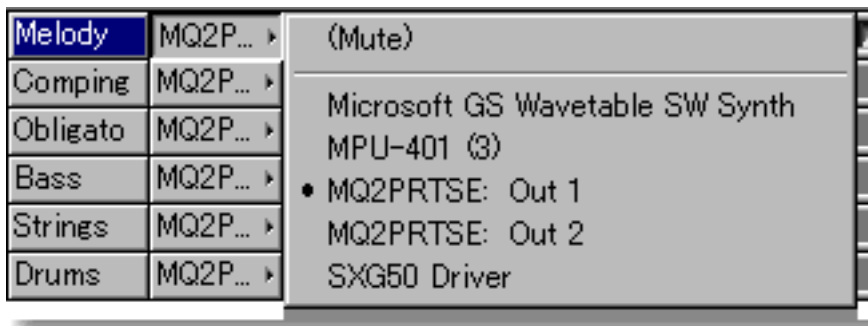
These features give you the ability to use the CAMPS multi-Document environment to some of it's fullest potential. Multiple Documents can be opened or saved, each with different MIDI Device configurations.



A Track's MIDI Device setting is effective for all its Line Blocks.



Virtual (Software) Synthesizers typically have a slower initial response time. Therefore, using them while a Hardware MIDI Device is assigned to other Tracks in the same Document may result in an unwanted offset of Playback time between Instruments in your song.



See also:

[Controlling Chord Track Playback](#)

[Manipulating Line Tracks](#)

[Assigning a Track Category](#)

[Controlling Track Playback](#)

[Controlling Track Recording](#)

[Assigning a Track Name](#)

[Assigning a MIDI Channel](#)

[Transposing](#)

[Assigning MIDI Events](#)

[Adjusting MIDI Events](#)

[Selecting MIDI Events](#)

## Using the Track Area

Assigning a MIDI Channel

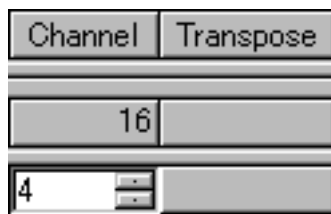
**MIDI Channel** button/display

Click a Track's **MIDI Channel** button to open its MIDI Channel edit box. Here, you can enter a value between 1 and 16 to assign a MIDI Channel to the Track for Playback.

You can change MIDI Channel settings on a Track by Track basis. This gives you the ability to assign different MIDI Channels to different Tracks for Playback. The assigned MIDI Channel is also used for Playback during Recording (Cue) when the Track is Armed for Recording.



A Track's MIDI Channel setting is effective for all its Line Blocks.



See also:

[Controlling Chord Track Playback](#)

[Manipulating Line Tracks](#)

[Assigning a Track Category](#)

[Controlling Track Playback](#)

[Controlling Track Recording](#)

[Assigning a Track Name](#)

[Assigning a MIDI Device](#)

[Transposing](#)

[Assigning MIDI Events](#)

[Adjusting MIDI Events](#)

[Selecting MIDI Events](#)

## Using the **Track Area**

Transposing

**Transpose**  
button/display

Click a Track's **Transpose** button to open it's Transpose edit box. Here you can enter a value between -72 and 72 to assign a Transpose value to the Track for Playback. (1= a Half Step.)

You can change Transpose settings on a Track by Track basis. Transpose settings are temporary, and the actual Track data is not changed. These Transpose settings are also used for Playback during Recording (Cue) when the Track is Armed for Recording.



A Track's Transpose settings are effective for all of its Line Blocks.

Channel	Transpose
16	
1	-12

See also:

[Controlling Chord Track Playback](#)

[Manipulating Line Tracks](#)

[Assigning a Track Category](#)

[Controlling Track Playback](#)

[Controlling Track Recording](#)

[Assigning a Track Name](#)

[Assigning a MIDI Device](#)

[Assigning a MIDI Channel](#)

[Assigning MIDI Events](#)

[Adjusting MIDI Events](#)

[Selecting MIDI Events](#)



# Pianoroll Editor

**Description** The Pianoroll Editor is probably the most familiar Sequencing Editor in CAMPS. The customary Pianoroll Grid allows you to quickly create and edit Notes using many methods, and each Note's Velocity can be adjusted independently. Chords, general Text Events and Lyrics can also be manipulated in their respective areas of the Pianoroll Editor. Finally, the same unique Harmony and Composition Tools found in the Document Window are also accessible in the Pianoroll Editor.

**Items** The Pianoroll Editor contains various Controls and Editing Areas for manipulating objects. You can choose to Show or Hide the Controls with the **Edit Buttons** command in the **View** menu. You can adjust the size of each Editing Area by clicking and dragging the horizontal separator bar between Areas.

## [Edit Buttons](#)

The Edit Buttons give you quick access to viewing and manipulation tools for the Pianoroll Editor, as well as the many Editors available in CAMPS.

## [Bar Area](#)

The Bar Area displays a range of Bar lines. Besides managing a song's Time Grid, this area also allows you to manipulate Loop functions.

## [Text Info Area](#)

The Text Info Area allows you to create Text Events such as Rehearsal Letters and Markers.

## [Chord Area](#)

Document Chord Blocks reside in the Chord Area. Each Chord Block in this row contains Chord Containers to which you assign your song's Chords.

## [Lyric Area](#)

The Lyric Area displays Lyrics, allowing you to create or edit them.

## [Pianoroll Area](#)

The Pianoroll Area is the main MIDI Note Event editing area in the Pianoroll Editor, offering graphical and menu-driven Note editing on individual and Compositional levels.

## [Velocity Area](#)

The Velocity Area allows you to graphically edit Velocity values of Notes in the Pianoroll Editor.

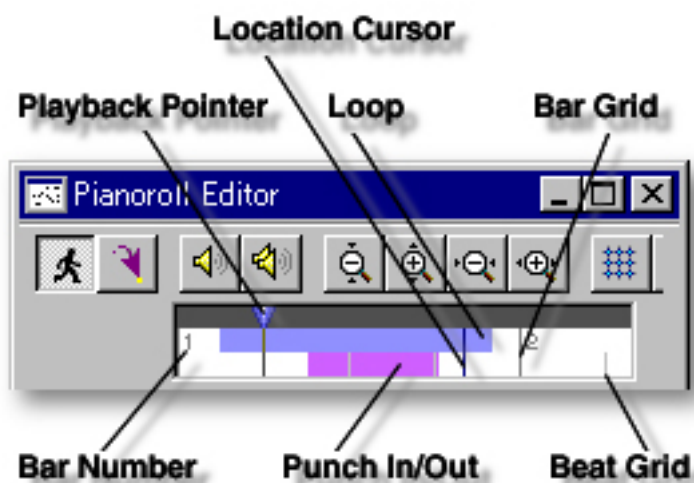
## Bar Area of the Pianoroll Editor

**Description** The Bar Area displays Measures or divisions of musical Time, known as Bars, in a continuous row. This includes Bar Numbers, the Bar Grid and the Beat Grid.

**Uses** Besides displaying Bar related information, the Bar Area allows you to manage a song's [Time Signature setup](#), location of the [Playback Pointer](#), and the Playback [Loop](#) and [Punch In/Out](#) Recording settings.

**Items**

- [Playback Pointer](#)
- [Loop](#) region
- [Punch In/Out](#) region
- [Bar Number](#)
- [Bar Grid](#)
- [Beat Grid](#)
- [Location Cursor](#)



## Items in the Bar Area

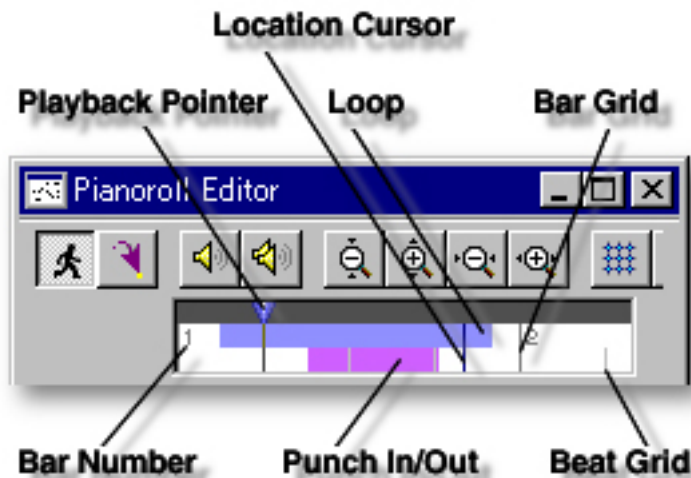
[Positioning the Playback Pointer](#)

[Inserting a Playback Loop](#)

[Inserting a Punch In/Out Record region](#)

Viewing Bar related items

<b>Playback Pointer</b>	The Playback Pointer resides in its own dark gray area at the top of the bar area, displaying the current Playback location in the Pianoroll Editor. It also allows you to change the current Playback point.
<b>Loop region</b>	Displays your current Loop region. Starting Playback repeats (Loops) Playback in this region until you stop. This region is indicated by the color blue in the upper portion of the Bar Area in the Pianoroll Editor.
<b>Punch In/Out region</b>	Displays your current Punch In/Out region. This region is indicated by the color magenta in the lower portion of the Bar Area.
<b>Bar Number</b>	A series of numbers given to Bars, starting on the left side with 1.
<b>Bar Grid</b>	Vertical lines evenly spaced across the Bar Area indicating Bar divisions.
<b>Beat Grid</b>	Vertical lines evenly spaced across Bars indicating Beat divisions.
<b>Location Cursor</b>	A vertical Location Cursor line in the Bar Area represents the horizontal position of your mouse as it relates to the time location in your Document. Corresponding numerical information is also displayed in the order of "Bar, Beat and Division" in the Interactive Information area at the bottom of the Pianoroll Editor. The color of the Location Cursor depends on your settings in the Microsoft Windows Control Panel "Display" applet, under the heading "Selected Items" in the "Items" list of the "Appearance" pane.



Positioning the Playback Pointer

**Playback Pointer** and area

You can use the Playback Pointer to change the Playback point in the Pianoroll Editor in two ways: Clicking a desired location in the dark gray Playback Pointer area at the top, or clicking and dragging the Playback Pointer to a desired location. Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. The Playback Pointer displays the current Playback location as CAMPS plays or records MIDI data.

Inserting a Playback Loop

**Loop** region

You can create a Loop region by clicking and dragging with your mouse in the upper portion of the Bar Area, below the Playback Pointer Area. As you drag your mouse, the Loop region appears blue in color, displaying a new Loop region. A Punch In/Out region of the same size is automatically inserted below the new Loop region. Click anywhere in the upper portion of the Bar Area to delete a Loop region.

Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. CAMPS repeats Loop region Playback until you stop it. Click anywhere in the upper portion of the Bar Area to delete a Loop region.



The start and end points of the Loop region snap to the Grid resolution set in the [Grid Setup dialog box](#) if **Align to Grid** is selected in the **Grid View** submenu of the **View** menu.

Inserting a Punch In/Out Record region

**Punch In/Out** region

You can create a Punch In/Out region by clicking and dragging your mouse in the lower portion of the Bar Area (below the Loop region). As you drag your mouse, this region appears magenta in color, displaying a new Punch In/Out region. A Loop of the same size is automatically inserted above the new Punch In/Out region. Click anywhere in the lower portion of the Bar Area to delete a Punch In/Out region.

Choose **Record** from the **MIDI** menu (or click the **Record** button in the [Record Control toolbar](#)) to begin recording.

If the automatically inserted Playback Loop is removed, CAMPS begins Playback from the Playback Pointer's current position, but Recording is only active as the Playback Pointer travels through the Punch In/Out region. This provides a true Cued Punch In/Out environment.



By combining with a Loop region beginning before the Punch In/Out region, CAMPS provides a continuous Cued Punch In/Out recording environment. Remove the automatically inserted Loop and insert a new one starting before the Punch In/Out region, or remove the Punch In/Out region and insert a new one starting after the Loop region.

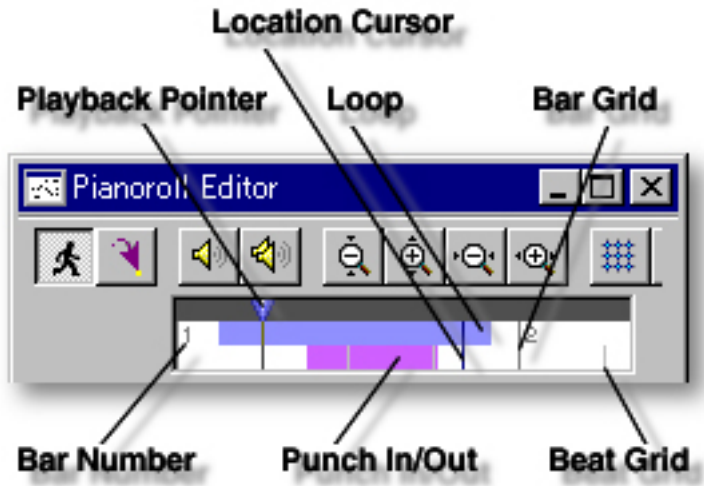


The start and end points of the Punch In/Out region snap to the Grid resolution set in the [Grid Setup dialog box](#), if **Align to Grid** is selected in the **Grid View** submenu of the **View** menu.

Assigning a Time Signature

**Time Signature settings**

CAMPS allows you to assign different Time Signatures to individual Bars. Right-click a Bar to which you are assigning a new Time Signature and then choose **Time Signature Setup...** to open the [Time Signature Setup dialog box](#). Set a Time Signature in the dialog box and click **OK**. (Choosing **Time Signature Setup...** from the **Edit** menu opens the same dialog box.)



# Edit Buttons Area of the Pianoroll Editor

**Description** The Edit Buttons are located at the top of the Pianoroll Editor. These Buttons give you quick access to frequently used items like View Adjustments, Tools and Editors.

**Uses** The Edit Buttons in the Pianoroll Editor include most of the **View** and **Editors** menu commands. The Tool buttons work in slightly different ways according to which Area of the Pianoroll Editor you are working in. Choose **Edit Buttons** from the **View** menu to show or hide the Edit Buttons.

- Items**
- [Auto Scroll](#) button
  - [Jump To Location](#) button
  - [Playback](#) button
  - [Playback with Others](#) button
  - [Zoom Out \(V\)](#) button
  - [Zoom In \(V\)](#) button
  - [Zoom Out \(H\)](#) button
  - [Zoom In \(H\)](#) button
  - [Align To Grid](#) button
  - [Grid Setup](#) button
  - [Arrow Tool](#) button
  - [I Beam Tool](#) button
  - [Pen Tool](#) button
  - [Magic Wand Tool](#) button
  - [Line Tool](#) button
  - [Oval Tool](#) button
  - [Stamp Tool](#) button
  - [Eraser Tool](#) button
  - [Razor Tool](#) button
  - [Event List Editor](#) button
  - [Pianoroll Editor](#) button
  - [Control Draw Editor](#) button
  - [Notation Editor](#) button



Adjusting View	<b>Auto Scroll</b> button	Sets the viewable area in the Bar, Text Info, Chord, Lyric, Pianoroll and Velocity Areas to follow the Playback Pointer during Playback and Recording.
	<b>Jump To Location</b> button	Opens the <a href="#">Jump To Location dialog box</a> which allows you to move the current viewpoint to a specified Bar in the Pianoroll Editor.
	<b>Zoom Out (V)</b> button	Incrementally decreases the Vertical size of the Pianoroll Area, increasing its viewable area.
	<b>Zoom In (V)</b> button	Incrementally increases the Vertical size of the Pianoroll Area, decreasing its viewable area.
	<b>Zoom Out (H)</b> button	Incrementally decreases the Horizontal size of the Bar, Text Info, Chord, Lyric, Pianoroll and Velocity Areas, increasing their viewable area.
	<b>Zoom In (H)</b> button	Incrementally increases the Horizontal size of the Bar, Text Info, Chord, Lyric, Pianoroll and Velocity Areas, decreasing their viewable area.
Auditioning	<b>Align To Grid</b> button	Switches between Activate or Deactivate Align To Grid in the Text Info, Chord, Lyric and Pianoroll Areas. Grid Alignment is specified in the <a href="#">Grid Setup dialog box</a> . Velocity Events automatically align with the starting edge of Notes in the Pianoroll Area, so their Horizontal Grid Alignment is not independently adjustable.
	<b>Grid Setup</b> button	Opens the <a href="#">Grid Setup dialog box</a> , allowing you to adjust the Alignment Grid Resolution for individual areas of the Pianoroll Editor and applicable Editors. Depending on which Area of the Pianoroll Editor is active before choosing this Menu Item, the corresponding pane in the Grid Setup dialog box will be preselected.
Auditioning	<b>Playback</b> button	Starts Audition Playback of the currently selected Notes with an automatically inserted Playback Loop. If no individual Notes are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.
	<b>Playback with Others</b> button	Starts Audition Playback of the currently selected Notes with an automatically inserted Playback Loop along with all the other activated Tracks in the same Bar region. If no individual Notes are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.
Selecting Tools	<b>Arrow Tool</b> button	Selects the Arrow Tool, allowing you to select and manipulate objects in the Pianoroll Editor. Objects need to be selected before related functions become available.
	<b>I Beam Tool</b> button	Selects the I Beam Tool, allowing you to quickly select regions in the Pianoroll and Velocity Areas.
	<b>Pen Tool</b> button	Selects the Pen Tool, allowing you to quickly create Notes of any desired length, or create and edit Velocity Events with a unique freestyle drawing method
	<b>Magic Wand Tool</b> button	Selects the Magic Wand Tool, allowing you to quickly create or recreate Chord Blocks or Line regions with automatically filled-in data (EZgenerate). In the Pianoroll Area, drag the Magic Wand Tool to create a selection region around Notes you wish to be EZgenerated.

**Line Tool**  
button

Selects the Line Tool, allowing you to quickly edit Velocity Events using a straight line drawing method.

**Oval Tool**  
button

Selects the Oval Tool, allowing you to quickly edit Velocity Events using an automatic curve drawing method.

**Stamp Tool**  
button

Selects the Stamp Tool, allowing you to quickly insert new Notes of a fixed length in the Pianoroll Area with a click of your mouse. Use the [Note Stamp toolbar](#) to adjust the length of Notes the **Stamp** tool creates. The Length is also adjustable at any later time.

**Eraser Tool**  
button

Selects the Eraser Tool, allowing you to quickly delete objects in the Pianoroll Editor with a click of your mouse.

**Razor Tool**  
button

Selects the Razor Tool, allowing you to quickly split a Chord Block at any Chord boundary.

**Event List Editor**  
button

Opens the [Event List Editor](#), allowing you to edit individual Events of the selected Line Block in vertical list format.

**Pianoroll Editor**  
button

Opens a new [Pianoroll Editor](#), allowing you to make alternate edits of the selected Line Block in Pianoroll graph format.

**Control Draw Editor**  
button

Opens the [Control Draw Editor](#), allowing you to edit MIDI Control events of a selected Line Block with a unique freestyle curve drawing method.

**Notation Editor**  
button

Opens the [Notation Editor](#), allowing you to edit Notes of a selected Line Block in Musical Notation form.



Opening  
Editors



## Chord Area of the Pianoroll Editor

**Description** A Document's [Chord Blocks](#) reside in the Chord Area. Each Chord Block in this row contains [Chord Containers](#) to which you assign your song's Chords. These make up the Chord Track, which is used by the CAMPS Composition Logic Engine during the use of Auto Composition and other unique features in CAMPS. These are the same Chord Blocks as seen in the Chord Area of the Document Window.

**Uses** The Chord Area is where you [manage a song's Chords](#). Besides allowing you to [create, resize, duplicate, move and delete Chords](#) and [groups of Chords](#) (Chord Blocks), you can display Chords in various ways, such as by Chord Name, Roman Numeral or Scale Name.

You can assign a Chord Name, [Key](#), [Mode](#) and several [Functions](#) to each Chord. These settings allow CAMPS to help you create a composition which modulates to different Tonalties; following Chords as they change. This resulting Chord Track can also be Played back in different voicing styles, alone or with your song's main Tracks, allowing you to audibly compare these Chord definitions with the Tonality of your Line data. See the [Chord Track of the Document Window](#) for Chord Playback settings.

CAMPS provides a number of automated and manual methods of [assigning Chord Names](#), including Auto Harmonizing, Chord Generation and Chord Detection from your MIDI instrument. All settings can then be saved with the Document.

### **Items**

[Chord Block](#)

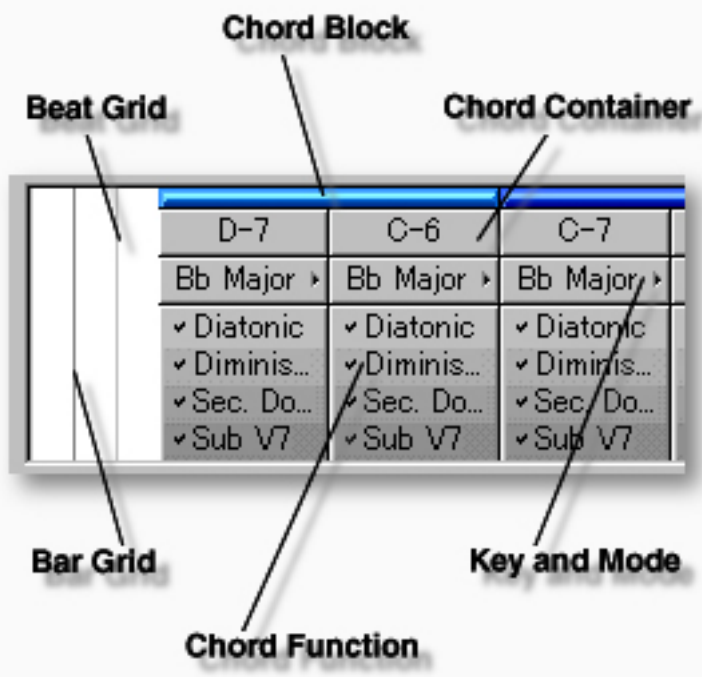
[Chord Container](#)

[Key and Mode](#) button

[Chord Function](#) check list

[Bar Grid](#)

[Beat Grid](#)



[Manipulating Chord Blocks](#)

## Chord Block

A Chord Block is an array containing a group of Chords, indicated and manipulated by its Chord Block Selection Bar, a thin horizontal bar across the top of each Chord Block.

Chord Blocks serve to enable quick musical arranging changes, as they are referenced by CAMPS during Auto Composition and other functions. They also help organize the Tonality of different Sections in your composition, such as a *Verse* or *Bridge*.

When using CAMPS to Generate Chords, Tonality settings for the current or potential Chord Block are referenced, allowing creation of Chords that flow smoothly from one to the next within a Chord Block. You can [create](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Chord Blocks as needed.

[Manipulating Chords](#)

## Chord Container

You can assign a Chord Name in a Key and Mode of your choice to each Chord Container using various methods provided in CAMPS. A Chord Name must be assigned to each Chord Container to get appropriate results from musical tools in CAMPS, such as **Compose...** and **Voicing...** You can [create](#), [edit](#), [resize](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Chord Containers as needed.

[Assigning a Key and Mode](#)

## Key and Mode button

The **Key and Mode** button displays its current settings and opens a Chord's Key and Mode drop-down menu. This allows you to assign a Key and Mode (G major, D Mixolydian, etc.) to each Chord. This Key and Mode setting is referred to by CAMPS during Auto Chord Detection, Chord Progression Generation and Chord Construction.

[Selecting Chord Functions](#)

## Chord Function check list

The Chord Function check list (visible below each Chord's **Key and Mode** button when the Chord Area is extended downward) displays its current settings and allows you to assign Chord Functions such as Diatonic and Secondary Dominant. These settings are referred to by CAMPS during Auto Chord Detection, Chord Progression Generation and Chord Construction.

[Auditioning Chords](#)

## Chord Track

The Chord Track controls in the Track Area of the Document Window allow you to assign various settings for Chord Playback. See [Track Area of the Document Window](#) documentation for more details.

**Chord View**  
Menu Item

Choosing one of the five [Chord Display Modes](#) from the **Chord View** submenu of the **View** menu changes the Chord's naming convention. The current selection is indicated with a bullet. See [Chord Menu](#) documentation for more details.

Depending on the amount of information being displayed and the Pianoroll Editor's current horizontal Display resolution, Chord, Key and Mode names may appear abbreviated. To see all of a Chord's Name, Key or Mode, use the **Zoom In/Out** (horizontal) buttons at the top of the Pianoroll Editor to adjust the horizontal Display resolution.

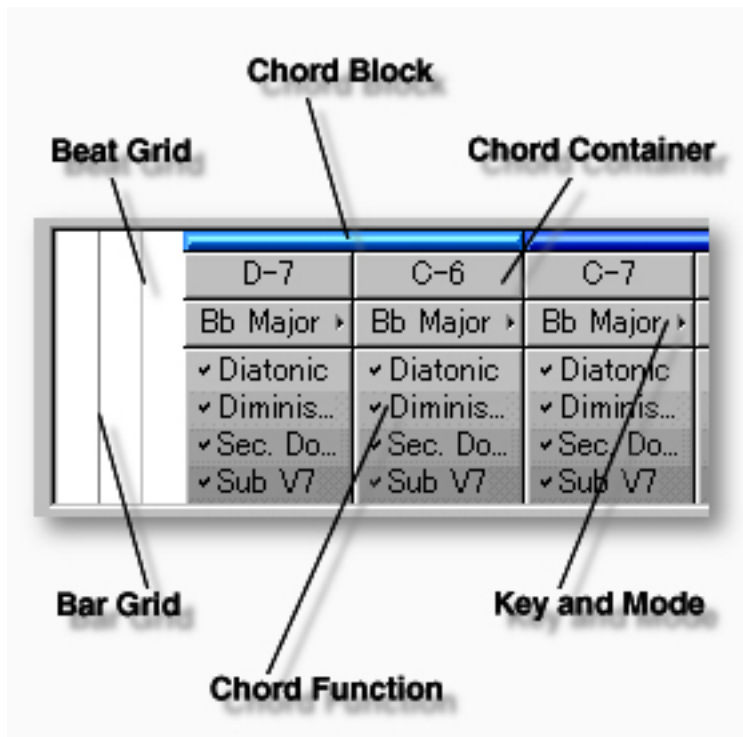


**Bar Grid**

Vertical lines horizontally spaced across the Chord Area indicating the dividing points between Bars.

**Beat Grid**

Vertical lines horizontally spaced across Bars indicating the dividing points between Beats.



## Chord Block

Note:

Many Chord Block related operations require selection of only the Chord Block itself without highlighting any of its Chord Containers. To do this, click the Chord Block Selection Bar across the top of a Chord Block.

After using any of the special Tool buttons at the top of the Pianoroll Editor, be sure to switch back to the standard **Arrow Tool** for regular manipulation operations.

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### CREATING A NEW BLANK CHORD BLOCK

---

Method 1:

Select the **Pen** tool at the top of the Pianoroll Editor and then click and drag from left to right in the Chord Area to assign the starting and ending locations of the Chord Block you are about to create. Settings for Chords in the new Chord Block such as Key, Mode and Duration are adjustable at any later time.



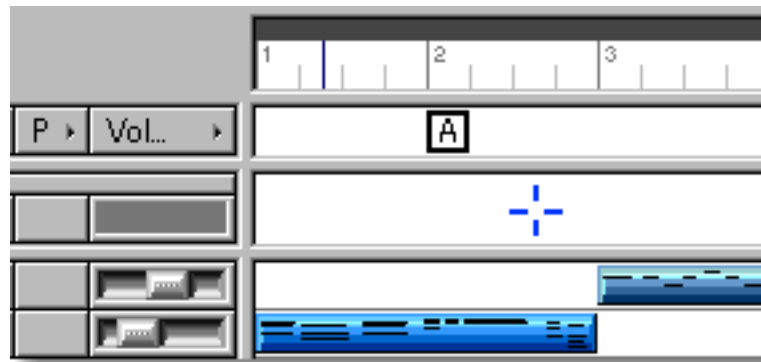
Method 2:

Right-click an empty location in the Chord Area and choose **New Chord Block...** to open the New Chord Block dialog box. Alternatively, select an empty location in the Chord Area and choose **New Chord Block...** from the **Edit** menu.

The [New Chord Block dialog box](#) allows you to set Quantity, Duration, Key and Mode of Chords in the new Chord Block. To create a new empty Chord Block without automatically assigned Chords, be sure the EZgenerate option is not checkmarked. These settings will be automatically saved and used as defaults for your next New Chord Block dialog box session. However, they can be changed at any time.



When choosing **New Chord Block...** from the **Edit** menu, you must have clicked an empty location in the Chord Area, otherwise the **New Chord Block...** item won't be available.



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## CREATING A NEW CHORD BLOCK WITH CHORDS

---

### Method 1:

Select the **Magic Wand** tool at the top of the Pianoroll Editor and then click and drag from left to right in the Chord Area to assign the starting and ending locations of the Chord Block you are about to create. If executed where a Chord Block already exists, this method will create a new Chord Block on top of the original. Settings for Chords in the new Chord Block such as Chord Name, Key, Mode and Duration are adjustable at any later time.



### Method 2:

Right-click an empty location in the Chord Area and choose **New Chord Block...** to open the New Chord Block dialog box. Alternatively, select an empty location in the Chord Area and choose **New Chord Block...** from the **Edit** menu.

The [New Chord Block dialog box](#) allows you to set Quantity, Duration, Key and Mode of Chords in a new Chord Block. Be sure to checkmark the EZgenerate Chords option in the dialog box if you want CAMPS to automatically generate a Chord Progression in the New Chord Block. These settings will be automatically saved and used as defaults for your next New Chord Block dialog box session. However, they can be changed at any time.



If any Line Blocks in Categories other than Drums exist in the same Bar region as the New Chord Block being created with the **Magic Wand** tool or the EZgenerate Chords option, CAMPS will generate Chords that Harmonize with the existing Line data instead of arbitrarily creating a Chord Progression.



When choosing **New Chord Block...** from the **Edit** menu, you must have clicked an empty location in the Chord Area, otherwise the **New Chord Block...** item won't be available.

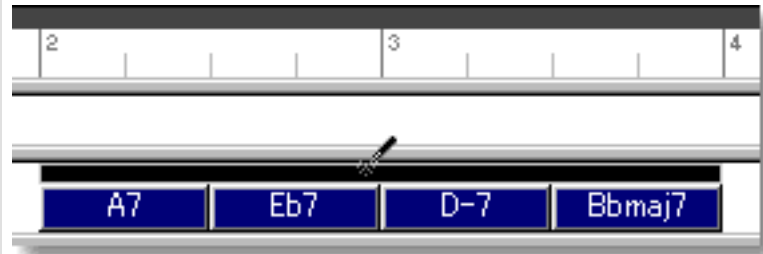
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## EDITING CHORD BLOCKS

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Select the **Magic Wand** tool at the top of the Document Window and click on desired Chord Block's Selection Bar.

See also [Manipulating Chords](#) in the Chord Area of the Pianoroll Editor.




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## SELECTING CHORD BLOCKS

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Using the **Arrow** tool, you can select individual Chord Blocks. You can select multiple Chord Blocks by holding the Ctrl (or Shift) key down as you select. Alternatively, Clicking and holding your mouse button at an empty location in the Chord Area and dragging your mouse over desired Chord Blocks allows you to select multiple Chord Blocks in one quick operation. Once selected, you can then move, duplicate, make an Alias of, copy, paste or delete a group of Chord Blocks at one time using the right click, menu bar or click and drag method.

Selecting Chords enables use of Chord related commands under the **Chord** Menu bar item including **Harmonize...** and **Detect from MIDI Instrument...**

 Selecting multiple Chord Blocks will not be possible if the **Magic Wand** or **Eraser** tool button at the top of the Pianoroll Editor is currently active. In these cases, Chord Blocks will be EZgenerated or deleted one at a time (depending on which of these buttons is active).



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## PLAYING BACK CHORD BLOCKS

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Select desired Chord Blocks, right-click the Chord Blocks and then choose **Playback Chord Block** from the drop-down menu to start Playback of the selected Chord Blocks. A Loop region for the selected Chord Blocks will be automatically created and CAMPS repeats (Loops) Playback in this region until you stop. The Loop to be created may include empty sub-regions depending on your Chord Block selections. Choose **Playback with Line** from the drop-down menu to audition the selected Chord Blocks with Note Events in the Pianoroll Area.

To stop Playback, choose **Stop** from the **MIDI** menu. Alternatively, click the **Stop** button of the Playback Toolbar.



Neither command effects the **Play** button settings for any Tracks.

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## MOVING CHORD BLOCKS

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Method 1:

Click and drag desired Chord Block Selection Bar to a new location in the Chord Area.

Method 2:

Select desired Chord Block with your mouse and use your computer keyboard's left/right arrow keys to move Chord Blocks a Division at a time.

Method 3:

This method allows you to move Chord Blocks between Documents.

Right-click a Chord Block's Selection Bar and choose **Cut Chord Block** to remove the Chord Block from its current location. Alternatively, click desired Chord Block Selection Bar and choose **Cut Chord Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Chord Blocks in one operation.

Next, right-click a desired location in the Chord Area of the desired Document's Pianoroll Editor or Document Window and choose **Paste Chord Block** to Paste the Cut Chord Block(s). Alternatively, select a desired location in the Chord Area and choose **Paste Chord Block** from the **Edit** menu.



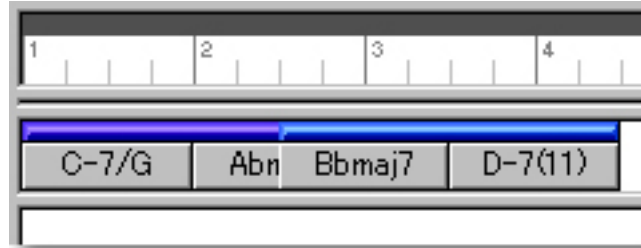
When **Align To Grid** is activated, the Chord Block being moved will be Pasted to the nearest Horizontal Grid Resolution point of the selected Chord Area location as defined in the [Grid Setup dialog box](#).



When one Chord Block overlaps another Chord Block, CAMPS always refers to Chords appearing in front, ignoring the Chords in back. If only part of a Chord Block overlaps, then only the Chords in the overlapping area will be effected this way. Right-click a Chord Block's Selection Bar and use the **Bring to Front** or **Send to Back** commands to activate the desired overlapping Chord



Block.



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## DUPLICATING CHORD BLOCKS

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Right-click a Chord Block's Selection Bar and choose **Duplicate Chord Block** to Duplicate the selected Chord Block. Alternatively, click desired Chord Block Selection Bar and choose **Duplicate Chord Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Duplicate multiple Chord Blocks in one operation.

Unlike the Copy/Paste operation which allows you to choose the location of the "copy" before it is created, Duplicating a Chord Block automatically places the "duplicate" on top of the original, offset slightly to the right. You can then move it at any time.

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## COPYING / PASTING CHORD BLOCKS

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Right-click a Chord Block's Selection Bar and choose **Copy Chord Block** to copy the selected Chord Block. Alternatively, click desired Chord Block Selection Bar and choose **Copy Chord Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Chord Blocks in one operation.

Next, right-click a desired location in the Chord Area of the desired Document's Pianoroll Editor or Document Window and choose **Paste Chord Block** to Paste the Copied Chord Block(s). Alternatively, select a desired location in the Chord Area and choose **Paste Chord Block** from the **Edit** menu.



When **Align To Grid** is activated, the Chord Block being Copied will be Pasted to the nearest Horizontal Grid Resolution point of the selected Chord Area location as defined in the [Grid Setup dialog box](#).

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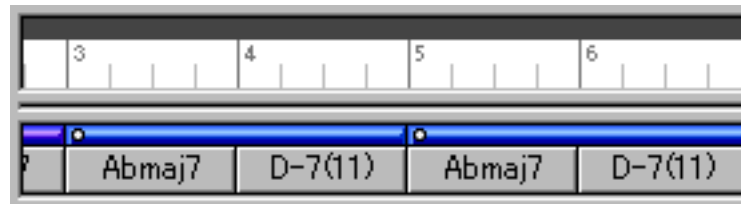
## CREATING AN ALIAS OF CHORD BLOCKS

---

Right-click Chord Block Selection Bar and choose **Make Alias of Chord Block** to make an Alias of the selected Chord Block. Alternatively, select desired Chord Block Selection Bar and choose **Make Alias of Chord Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Make Aliases of multiple Chord Blocks in one operation.



An Alias is, in effect, an active copy of its original. Except for Copy/Paste, Duplicate, Move and Delete operations, changes you make to one of the Aliases effects all of its Aliases. This holds true whether you make changes to the original, or the Aliases. In fact, there is no effective difference between an Alias and its original. A small circle appearing in the left corner of the Chord Block Selection Bar at the top of a Chord Block indicates the Alias status.



---

## DELETING CHORD BLOCKS

---

Method 1:

Select the **Eraser** tool at the top of the Pianoroll Editor and simply click on a Chord Block's Selection Bar to delete it. The **Eraser** tool can be used to delete multiple Chord Blocks in one quick operation by clicking and holding your mouse button at an empty location in the Chord Area and dragging the **Eraser** over desired Chord Blocks.

Method 2:

Right-click a Chord Block Selection Bar and choose **Clear Chord Block** to delete the selected Chord Block. Alternatively, click desired Chord Block Selection Bar and choose **Clear Chord Block** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Chord Blocks in one operation.



See also:

[Manipulating Chords](#)

[Assigning a Key and Mode](#)

[Assigning Chord Functions](#)

[Adjusting the Grid display](#)

## Chord Container

Note:

Since Chord Containers reside in Chord Blocks, you'll first need to have Chord Blocks in the Chord Area of your Document before you can individually manipulate Chords.

Many of these operations will result in changes of Chord Block size. When adding to a Chord Block, existing Chords get moved to the right. Keep in mind that if another Chord Block already exists right after the Chord Block which increases in size, Chords being moved to the right will slip behind the next Chord Block, resulting in overlapping Chord Blocks. The visible Chords in an overlapping area will become the active Chords in that area for all Chord related CAMPS functions.

To choose which Chord Block is visible and active in an overlapping Chord Area, right click the desired Chord Block Selection Bar and choose **Bring to Front** or **Send to Back**.

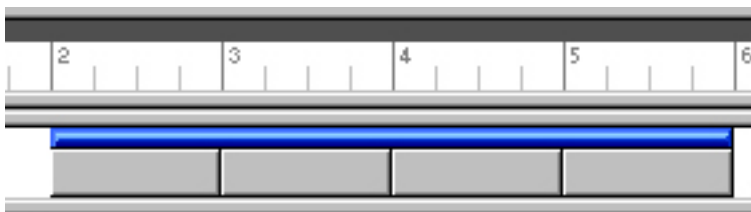
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### CREATING NEW BLANK CHORD CONTAINERS

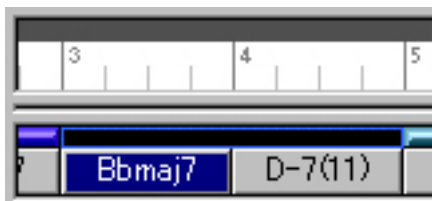
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Right-click the Chord at a desired location and choose **New Chord...** to open the New Chord dialog box. Alternatively, click the Chord at a desired location and choose **New Chord...** from the **Edit** menu.

The [New Chord dialog box](#) allows you set Quantity, Duration, Key and Mode of new Chords. To create a new empty Chord Container, be sure the EZgenerate option is not checkmarked. These settings will be automatically saved and used as defaults for your next New Chord dialog box session. However, they can be changed at any time.



When choosing **New Chord...** from the **Edit** menu, you must have clicked a Chord, otherwise the **New Chord...** item won't be available.



---

## CREATING NEW CHORD CONTAINERS WITH ASSIGNED CHORDS

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Right-click a Chord and then choose **New Chord...** to open the New Chord dialog box. Alternatively, select a Chord and choose **New Chord...** from the **Edit** menu.

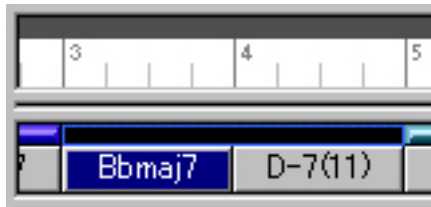
The [New Chord dialog box](#) allows you to set Quantity, Duration, Key and Mode of new Chord Containers being created. Be sure to checkmark the EZgenerate option in the dialog box to automatically generate a Chord. These settings will be automatically saved and used as defaults for your next New Chord dialog box session. However, they can be changed at any later time.



If any Line Blocks in Categories other than Drums exist in the same Bar region as the New Chord being created with the EZgenerate Chords option activated, CAMPS will generate Chords that Harmonize with the existing Line data instead of arbitrarily creating a Chord Progression.



When choosing **New Chord...** from the **Edit** menu, you must have clicked a Chord, otherwise the **New Chord...** item won't be available.



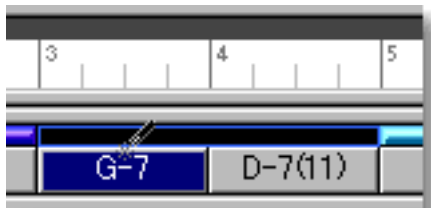
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## ASSIGNING AND EDITING CHORDS

---

Method 1:

Select the **Magic Wand** tool at the top of the Pianoroll Editor and simply click a Chord you wish to assign a Chord Name to. This can be done with empty or filled-in Chord Containers. In the latter case, existing Chords will be replaced. Settings for the new Chord such as Chord Name, Key, Mode and Duration are adjustable at any later time. To assign or reassign Chords to all Chord Containers in a Chord Block, click only the Chord Block Selection Bar with the **Magic Wand** tool.



If any Line Blocks in Categories other than Drums exist in the same Bar region as the Chord being created with the **Magic Wand** tool, CAMPS will generate Chords that Harmonize with the existing Line data instead of arbitrarily creating new Chords.

Other Methods:

Select desired Chords and choose a Chord assignment method from the **Chord menu**. Alternatively, right click desired Chord and choose a Chord assignment method from the **Actions** submenu.

These options include **Generate...**, **EZgenerate**, **Harmonize...**, **EZharmonize**, **EZharmonize with Same Key**, **Detect from MIDI Instrument...** and **Construct...**

The **EZharmonize All** command references existing Line data to Harmonize all Chords whether selected or not.

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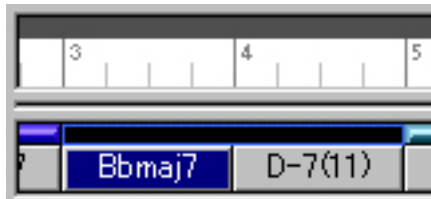
## SELECTING CHORD CONTAINERS

---

Using the **Arrow** tool, you can select individual Chords. You can select multiple Chords by holding the Ctrl (or Shift) key down as you select. Alternatively, Clicking and holding your mouse button on a Chord, and then dragging your mouse over other Chords allows you to select multiple Chords in one operation. Once selected, you can then move, duplicate, make an Alias of, copy, paste or delete a group of Chords at one time using the right click, Menu Bar or click and drag method. This operation can be used with most of the commands in the **Chord** Menu as well.



Selecting multiple Chords will not be possible if the **Magic Wand** or **Eraser** tool is currently selected from the top of the Pianoroll Editor. In these cases, Chords will be created, generated or deleted one at a time (depending on which of these buttons is active).



---

## PLAYING BACK CHORD CONTAINERS

---

Select desired Chords, right-click the Chords and then choose **Playback Chord** from the drop-down menu to start Playback of the selected Chords. A Loop region for the selected Chords will be automatically created and CAMPS repeats (Loops) Playback in this region until you stop. Choose **Playback with Lines** from the drop-down menu to audition the selected Chords with Note Events in the Pianoroll Area.

To stop Playback, choose **Stop** from the **MIDI** menu. Alternatively, click the **Stop** button of the Playback Toolbar.



Neither command effects the **Play** button settings for any Tracks.

---

## PLAYING BACK CHORD CONTAINERS

---

Select desired Chords, right-click the Chords and then choose **Playback** from the pull-down menu to start Playback of the selected Chords and Note Events in the Line Block. A Loop and Punch In/POut regions for the selected Chords will be automatically created and CAMPS repeats (Loops) Playback in this region until you stop. Choose **Playback with Others** from the pull-down menu to audition the selected Chords and Note Events in the Line Block with Line Blocks on the other [activated Tracks](#).

To stop Playback, choose **Stop** from the **MIDI** menu. Alternatively, click the **Stop** button of the Playback toolbar.

---

## MOVING CHORD CONTAINERS

---

Method 1:

Select desired Chords and drag them to a new location in a Chord Block.



When moving Chords in this manner, a vertical indicator appears at the boundary between Chords being moved and other existing Chords. Drag the Chords being moved past this indicator to drop Chords in a new location.

Method 2:

This method allows you to move Chord Containers between Documents.

Right-click a Chord Container and then choose **Cut Chord** to remove a Chord Container from its current location. Alternatively, select a Chord Container and choose **Cut Chord** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Chord Containers in one operation.

Next, right-click a desired location in a Chord Block of the desired Document's Pianoroll Editor or Document Window and choose **Paste Chord** to Paste the Cut Chord Container(s). Alternatively, select a location in a Chord Block and choose **Paste Chord** from the **Edit** menu.



When Pasting a Chord in an existing Chord Container's location, the existing Chord will be moved to the right. When a Chord is being moved from one Chord Block to another, the destination Chord Block will increase in size, while the originating Chord Block will decrease in size.

---

## RESIZING CHORD CONTAINERS

---

Using the Arrow Tool, position your mouse cursor over the right edge of a desired Chord Container until the cursor changes to a double arrow. Then click and drag the right edge of the Chord Container to the desired size.

Keep in mind that this effects the size of the Chord Block in which the Chord Container is being resized, effecting its Playback time. Additionally, enlarging a Chord may cause Chord Blocks to overlap.



When **Align To Grid** is active in the Chord Area, the Chord size will snap to the nearest Horizontal Resolution Grid point.



When one Chord Block overlaps another Chord Block, CAMPS always refers to Chords appearing in front, ignoring the Chords in back. If only part of a Chord Block overlaps, then only the Chords in the overlapping area will be effected this way. Right-click a Chord Block's Selection Bar and use the **Bring to Front** or **Send to Back** commands to activate the desired overlapping Chord Block.



---

## DUPLICATING CHORD CONTAINERS

---

Right-click a Chord Container and choose **Duplicate Chord** to duplicate the selected Chord Container. Alternatively, select a Chord and choose **Duplicate Chord** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Duplicate multiple Chord Containers in one operation.

Unlike the Copy/Paste operation which allows you to choose the location of the "copy" before it's actually created, Duplicating a Chord automatically places the "duplicate" to the right of the original. You can then move it at any time.

---

## COPYING / PASTING CHORD CONTAINERS

---

Right-click a Chord and then choose **Copy Chord** to copy the selected Chord. Alternatively, select a Chord and choose **Copy Chord** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Chords in one operation.

Next, right-click a desired location in a Chord Block of the desired Document's Pianoroll Editor or Document Window and choose **Paste Chord** to Paste the Copied Chord Container(s). Alternatively, select a location in a Chord Block and choose **Paste Chord** from the **Edit** menu.



When Pasting a Chord in an existing Chord Container's location, the existing Chord will be moved to the right, increasing the size of its Chord Block.

---

## DELETING CHORD CONTAINERS

---

Method 1:

Select the **Eraser** tool at the top of the Pianoroll Editor and simply click on a Chord to delete it.

Method 2:

Right-click a Chord and choose **Clear Chord** to delete the selected Chord. Alternatively, select a desired Chord and choose **Clear Chord** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Chords in one operation.



See also:

[Manipulating Chord Blocks](#)

[Assigning a Key and Mode](#)

[Assigning Chord Functions](#)

[Adjusting the Grid display](#)



## Using the Chord Area

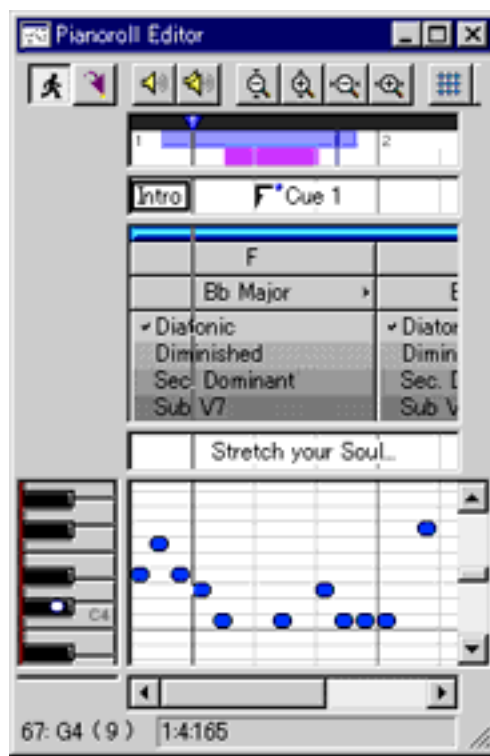
Assigning a Key and Mode

**Key and Mode** button

The **Key and Mode** button, located right below each Chord Name, displays its current settings and opens the Key and Mode drop-down menu. This allows you to adjust Chord Container Tonality settings originally made in the New Chord or New Chord Block dialog boxes. You can independently choose a Key and Mode such as G major, D Mixolydian, etc., for each Chord.

This Key and Mode setting is referred to by CAMPS during Auto Chord Detection, Chord Progression Generation and Chord Construction.

If Chord **Key and Mode** buttons are not visible, click on the dividing line between the Chord and Lyric Areas and drag your mouse downward, extending the bottom of the Chord Area.



See also:

[Manipulating Chord Blocks](#)

[Manipulating Chords](#)

[Assigning Chord Functions](#)

[Adjusting the Grid display](#)

## Using the Chord Area

Assigning  
Chord Functions

**Chord Function**  
check list

The Chord Function check list, located right below each Chord's **Key and Mode** button, displays its current settings with checkmarks and allows you to turn individual Chord Functions on or off for each Chord. These settings are referred to by CAMPS during Auto Chord Detection, Chord Progression Generation and Chord Construction.

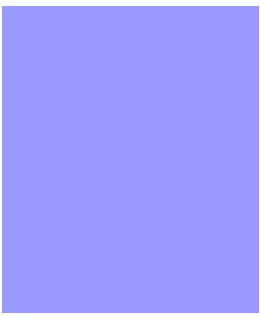
CAMPS comes with four "plug-in" Chord Functions for each Chord, including Diatonic, Diminished, Sub V7 and Secondary Dominant. The more Chord Functions you activate, the more types of Harmony CAMPS deals with. For example, if you activate Sub V7 (appearing in a darker shade of gray), you'll get more "Jazzy" Chords with the Auto Chord Detection, Chord Progression Generation and Harmonize functions.

If the Chord Function check lists are not visible under existing Chords, click on the dividing line between the Chord and Lyric Areas and drag it downward, extending the bottom of the Chord Area.



You must at least activate the Diatonic Chord Function for a Chord to be effective in directing CAMPS Composition functions.





See also:

[Manipulating Chord Blocks](#)

[Manipulating Chords](#)

[Assigning a Key and Mode](#)

[Adjusting the Grid display](#)

Adjusting the  
Grid display

**Bar Grid** The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. Choose **Bar Grid** from the **Grid View** submenu of the **View** menu to show or hide the Bar Grid in the Chord Area, as well as the Text Info, Lyric, Pianoroll and Velocity Areas.

**Beat Grid** The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. (This is not necessarily the same as the Alignment Grid). Choose **Beat Grid** from the **Grid View** submenu of the **View** menu to show or hide the Beat Grid in the Chord Area, as well as the Text Info, Lyric, Pianoroll and Velocity Areas.

See also:

[Manipulating Chord Blocks](#)

[Manipulating Chords](#)

[Assigning a Key and Mode](#)

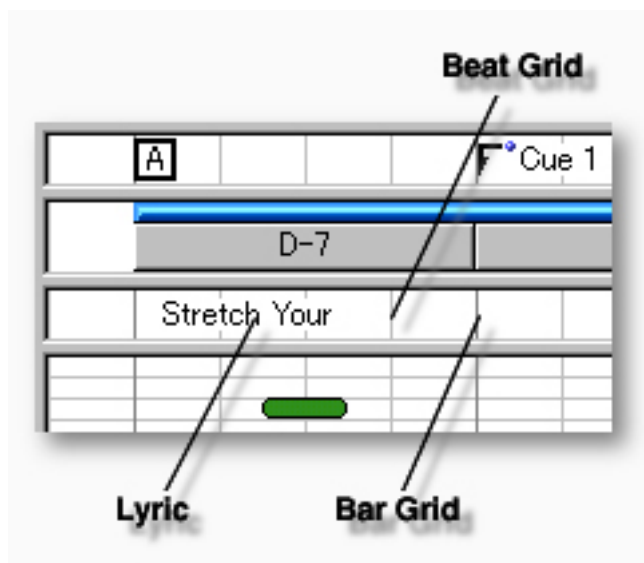
[Assigning Chord Functions](#)

## Lyric Area of the Pianoroll Editor

**Description** The Lyric Area displays a Line Block's Lyrics in a continuous row, parallel to the Chord and Pianoroll Areas.

**Uses** You can create, edit, duplicate, move or delete Lyrics in the Lyric Area. These song Lyrics can then be saved with the Document. Additionally, Lyrics are saved with your Composition when [exporting it to a Standard MIDI File](#).

**Items** [Lyric](#) Event  
[Bar Grid](#)  
[Beat Grid](#)



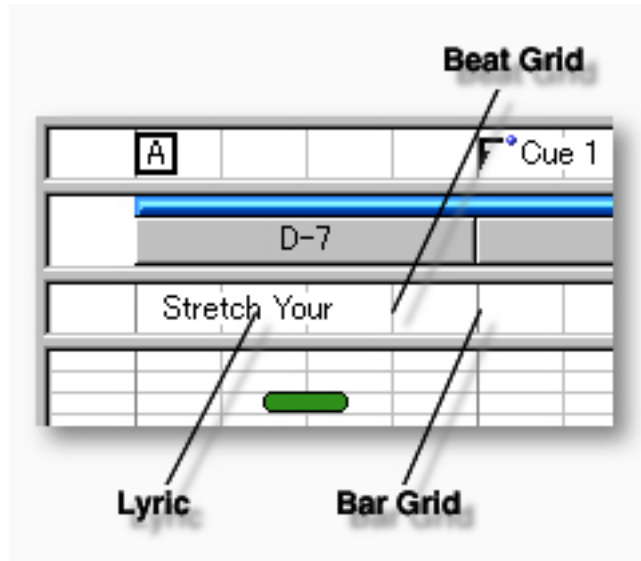
## Items in the Lyric Area

[Creating a Lyric](#)

**Lyric Event** Lyric Events allow you to include song Lyrics (sung words) in your Composition. You can [create](#), [edit](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Lyric Events as needed. Lyrics can then be Saved and Exported with the rest of your Composition Document. Unlike general Text Events which have a common location in a Document, a different set of Lyrics can be saved with each Line Block.

[Adjusting the Grid display](#)

**Bar Grid** Vertical lines horizontally spaced across the Lyric Area indicating Bar divisions.  
**Beat Grid** Vertical lines horizontally spaced across Bars indicating Beat divisions.



## Using the Lyric Area

Creating and  
Manipulating  
Lyrics

Lyric  
event


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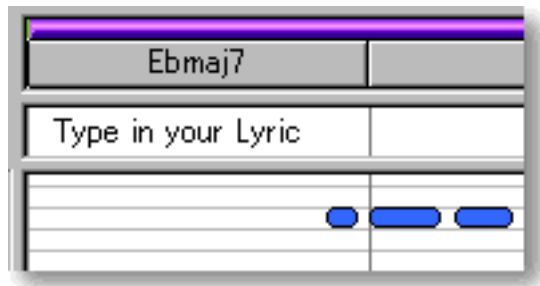
### CREATING LYRICS

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Right-click a desired location in the Lyric Area and choose **New Lyric** to create a new Lyric text box. Enter desired Lyric text data in the edit box. When you are finished entering Lyrics, click outside the edit box or press Enter on your computer's keyboard.

Alternatively, choose **New Lyric** from the **Edit** menu to create a blank Lyric text box.

 When choosing **New Lyric** from the **Edit** menu, you must first have selected an empty Lyric Area, otherwise the **New Lyric** item won't be available.

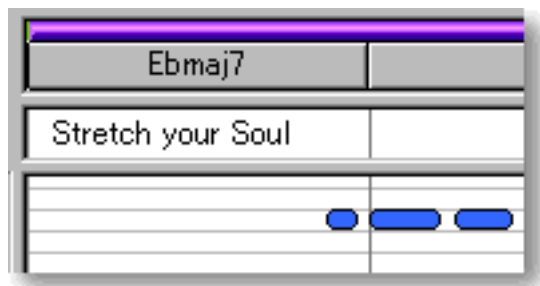


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### EDITING LYRICS

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To edit a Lyric, double click it, opening its edit box. After typing your changes, hit the Enter key, or click someplace outside the edit box to close it.




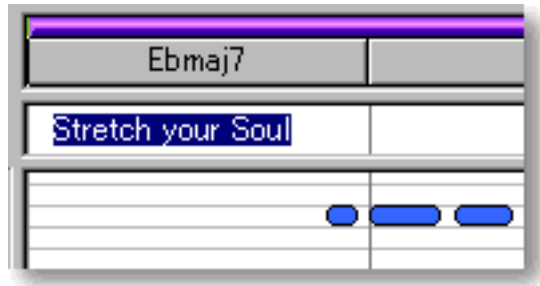
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## SELECTING LYRICS

---

Using the **Arrow** tool, you can select individual Lyrics. You can select multiple Lyrics by holding the Ctrl (or Shift) key down as you select. Alternatively, clicking and holding your mouse button down at an empty location in the Lyric Area and dragging your mouse over desired Lyrics allows you to select multiple Lyrics in one quick operation. Once selected, you can then move, duplicate, copy, paste or delete a group of Lyrics at one time using the right click, menu bar or click and drag method.

 Selecting multiple Lyrics will not be possible if the **Eraser** tool button at the top of the Pianoroll Editor is currently active. In this case, Lyrics will be deleted.



---

## MOVING LYRICS

---

Method 1:

Click and drag desired Lyrics to a new location in the Lyric Area.

Method 2:


Select desired Lyric with your mouse and use your computer keyboard's left/right arrow keys to move Lyrics a Division at a time.

Method 3:

This method allows you to move Lyrics between Documents.

Right-click a Lyric and choose **Cut Lyric** to remove a Lyric from its current location. Alternatively, click desired Lyric and choose **Cut Lyric** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Lyrics in one operation.

Next, right-click a desired location in the Lyric Area of the desired Document's Pianoroll or Control Draw Editor and choose **Paste Lyric** to Paste the Cut Lyric(s). Alternatively, select a desired location in the Lyric Area and choose **Paste Lyric** from the **Edit** menu.

 When **Align To Grid** is activated, the Lyric being moved will be Pasted to the nearest Horizontal Grid Resolution point of the selected Lyric Area location as defined in the Text Event tab of the [Grid Setup dialog box](#).



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## DUPLICATING LYRICS

---

Right-click a Lyric and choose **Duplicate Lyric** to duplicate a Lyric. Alternatively, click desired Lyrics and choose **Duplicate Lyric** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Duplicate multiple Lyrics in one operation.

Unlike the Copy/Paste operation which allows you to choose the location of the "copy" before it is created, Duplicating a Lyric automatically places the "duplicate" on top of the original, offset slightly to the right. You can then move the "duplicate" at any time.

---

## COPYING / PASTING LYRICS

---

Right-click a Lyric and choose **Copy Lyric** to copy a Lyric. Alternatively, click desired Lyric and choose **Copy Lyric** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Lyrics in one operation.

Next, right-click a desired location in the Lyric Area of the desired Document's Pianoroll or Control Draw Editor and choose **Paste Lyric** to Paste the Copied Lyric(s). Alternatively, select a desired location in the Lyric Area and choose **Paste Lyric** from the **Edit** menu.



When **Align To Grid** is activated, the Lyric being Copied will be Pasted to the nearest Horizontal Grid Resolution point of the selected Lyric Area location as defined in the Text Event tab of the [Grid Setup dialog box](#).

---

## DELETING LYRICS

---

Method 1:

Select the **Eraser** tool at the top of the Pianoroll Editor and simply click on a Lyric to delete it. With the **Eraser** tool, clicking and holding your mouse button down at an empty location in the Lyric Area and dragging the **Eraser** over desired Lyrics allows you to delete multiple Lyrics in one quick operation.



Method 2:

Right-click a Lyric and choose **Clear Lyric** to delete a Lyric. Alternatively, click desired Lyrics and choose **Clear Lyric** from the **Edit** menu to delete the selected Lyrics. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Lyrics in one operation.

See also:

[Adjusting the Grid display](#)

Adjusting the  
Grid display

### Bar Grid

The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. Choose **Bar Grid** from the **Grid View** submenu of the **View** menu to show or hide the Bar Grid in the Lyric Area, as well as the Text Info, Chord, Pianoroll and Velocity Areas of the Pianoroll Editor.

### Beat Grid

The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Beat Grid** from the **Grid View** submenu of the **View** menu to show or hide the Beat Grid in the Lyric Area, as well as the Text Info, Chord, Pianoroll and Velocity Areas of the Pianoroll Editor.

See also:

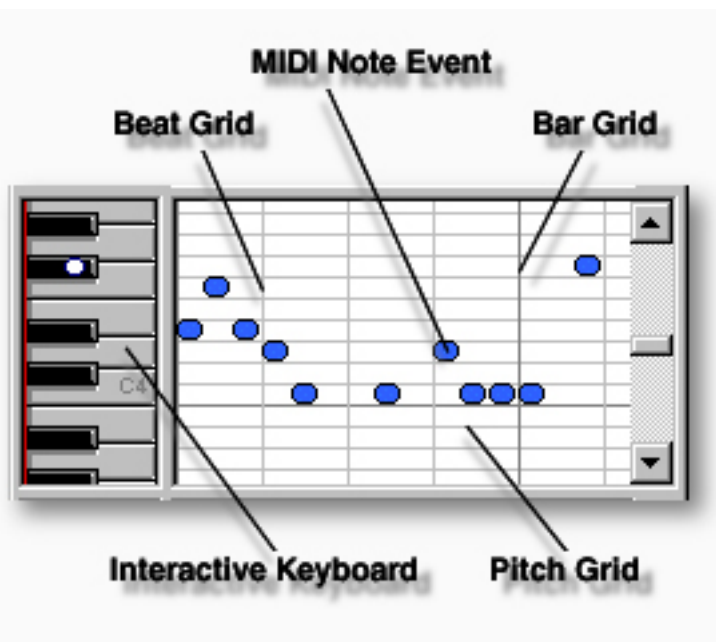
[Creating and Manipulating Lyrics](#)

## Pianoroll Area of the Pianoroll Editor

**Description** The Pianoroll Area is the main MIDI Note Event editing area in the Pianoroll Editor.

**Uses** Many editing tools facilitate a wide range of graphical editing and creation options for Notes in the Pianoroll Area. As usual, Notes can also be individually or collectively manipulated using the menu command system.

**Items** [MIDI Note Event](#)  
[Bar Grid](#)  
[Beat Grid](#)  
[Pitch Grid](#)  
[Interactive Keyboard](#) display



## Items in the Pianoroll Area

[Manipulating MIDI Note Events](#)

[Viewing MIDI Note Events](#)

### MIDI Note Event

A MIDI Note Event is MIDI data which executes Note generation. You can [create](#), [edit](#), [copy](#), [move](#) or [delete](#) MIDI Note Events as needed.

### Bar Grid

Vertical lines horizontally spaced across the Pianoroll Area indicating the dividing points between Bars.

### Beat Grid

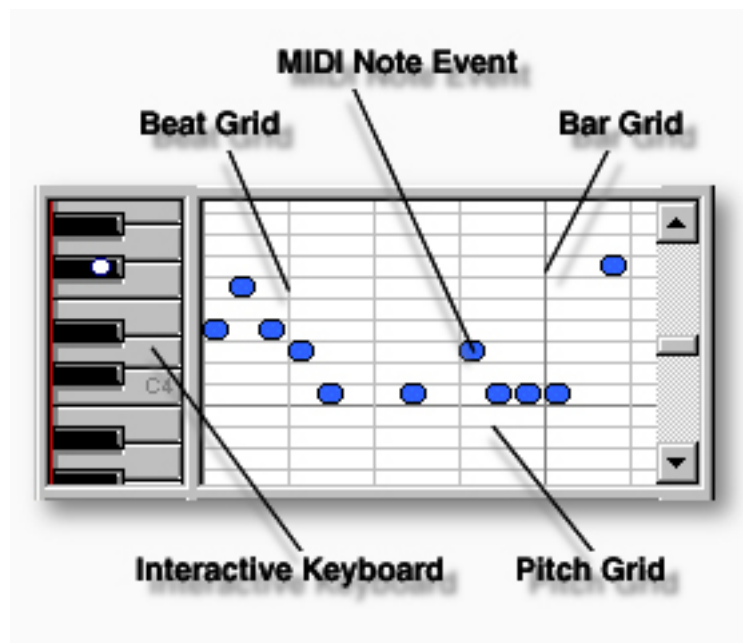
Vertical lines horizontally spaced across Bars indicating the dividing points between Beats.

### Pitch Grid

Horizontal lines vertically spaced across the Pianoroll Area indicating the dividing points between Note Pitch values.

### Interactive Keyboard display

The keys on this piano keyboard display are aligned with the Pianoroll Area Pitch Grid, and display Pitch occurrences during Playback in real time. Though it can't be used by itself as a recording instrument, it's possible to "play" this keyboard with your mouse for Pitch reference.



## MIDI Note Event

Note:

After using any of the special Tool buttons at the top of the Pianoroll Editor, be sure to switch back to the standard **Arrow Tool** for regular manipulation operations.

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### CREATING NEW MIDI NOTE EVENTS

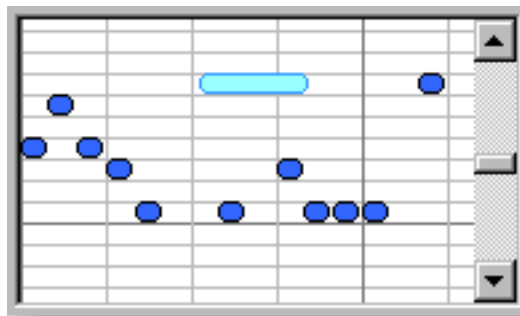
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Method 1:

Click the **Record** button in the [Record Control toolbar](#) or choose the desired Recording command from the **Record** submenu of the **MIDI** menu and begin playing your MIDI Instrument. Loop and Punch In/Out regions will be automatically assigned for the length of the currently selected Line Block. If you prefer, you can assign a specific Punch In/Out region before activating Record. Be aware that the Track Arming buttons found in the Document Window have no effect in the Pianoroll Editor. Once **Record** is activated and you begin playing, any existing data in the currently selected Line Block will be replaced.

Method 2:

Select the **Pen** tool at the top of the Pianoroll Editor and then click and drag from left to right in the Pianoroll Area to assign the starting and ending locations of the Note Events you are about to create. Notes will be created as you draw; their Pitch and Length following the **Pen** tool's position.



Method 3:

Select the **Stamp** tool at the top of the Pianoroll Editor and then click anywhere in the Pianoroll Area to assign Note Events. Notes will be created as you click; their Pitch and Location following the **Stamp** tool's position. Use the [Note Stamp toolbar](#) to adjust the length of Notes the **Stamp** tool creates. The Length and other attributes can also be adjusted at any later time.

---

## EDITING MIDI NOTE EVENTS

---

### Method 1:

Using the **Arrow** tool, click and drag desired Note Event to a new vertical Pitch and/or horizontal time position in the Pianoroll Area. If a tool other than the **Arrow** tool is active, it will change temporarily to the **Arrow** tool when positioning your mouse cursor over a Note event in the Pianoroll Area. See also [MOVING MIDI NOTE EVENTS](#) below.

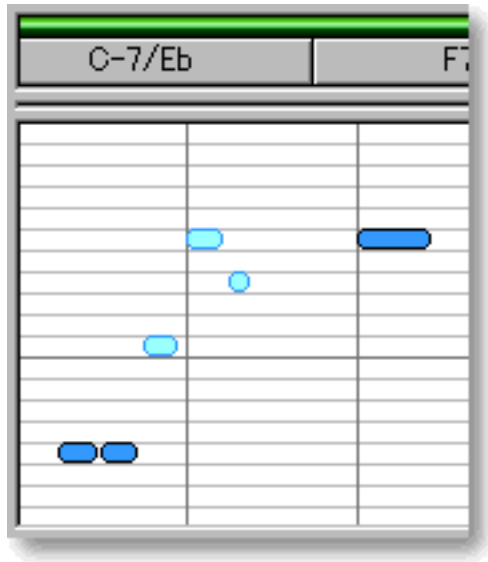


When **Align To Grid** is activated, the Note Event will snap to the nearest Grid Resolution point of the selected Pianoroll Area location as defined in the [Grid Setup dialog box](#).

Hovering any tool except the Eraser tool over the starting or ending edge of a Note Event turns the tool cursor into a double arrow, allowing you to drag the edge of the Note Event to change its length. Changing a Note's length from its starting edge also changes its start location, while changing a Note's length from its ending edge also changes its ending location.

### Method 2:

Use the **Magic Wand** tool to reCompose a region of Notes. Click the **Magic Wand** tool button at the top of the Pianoroll Editor. Then, click and hold your mouse button down at an empty location in the Pianoroll Area and drag your mouse over desired Note Events.



### Method 3:

Right Click desired Note Event and choose any one of the many commands available from the drop-down menu or submenus. Alternatively, click desired Note Event and choose desired command from the **Edit** or **Line** menus. Options include **Compose...**, **EZcompose**, **Voicing...**, **Detect Dissonant Intervals...**, **Quantize...**, **Transpose...**, **Adjust Articulation...**, **Adjust Velocity...** and **Map Pitches...**

See also [CREATING NEW MIDI NOTE EVENTS](#) above.

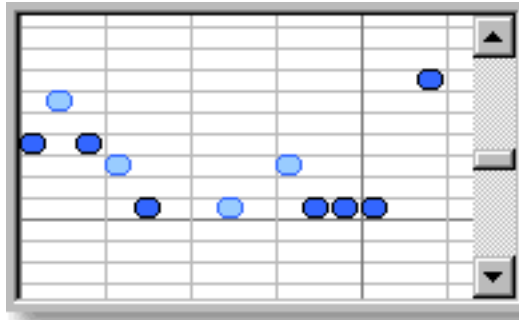
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## SELECTING MIDI NOTE EVENTS

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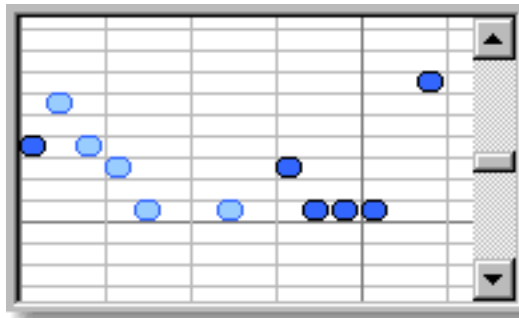
### Method 1:

Using the **Arrow** tool, you can select individual Note Events. You can select multiple Note Events by holding the Ctrl (or Shift) key down as you select. Alternatively, Clicking and holding your mouse button down at an empty location in the Pianoroll Area and dragging your mouse over desired Note Events allows you to select multiple Note Events in one quick operation.




### Method 2:

Using the **I Beam** tool, you can select all Note Events in a horizontal (time) region at once. After selecting the **I Beam** button at the top of the Pianoroll Editor, click and hold your mouse button down at an empty location in the Pianoroll Area and drag your the **I Beam** horizontally over the desired Note Event region.



Selecting Note Events enables use of Note Event related commands under the **Edit** and **Line** Menu bar items. Once selected, you can then move, copy, paste or delete a group of Note Events at one time using the right click, menu bar or click and drag method.

 Selecting entire Note regions will not be possible if the **Pen**, **Line**, **Oval** or **Eraser** tool button at the top of the Pianoroll Editor is currently active. In these cases, Note Events will be created or deleted (depending on which of these buttons is active).

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## MOVING MIDI NOTE EVENTS

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### Method 1:

Using the **Arrow** tool, click and drag desired Note Events to a new location in the Pianoroll Area. Any vertical motion during your dragging operation will effect the Note's Pitch as well. See [EDITING MIDI NOTE EVENTS](#) above.



When **Align To Grid** is activated, the Note Event will snap to the nearest Grid Resolution point of the selected Pianoroll Area location as defined in the [Grid Setup dialog box](#).

### Method 2:

Select a Note Event with your mouse and use the arrow keys on your computer's keyboard to move the selected Note with more precision. The up/down arrow keys move a Note's Pitch by intervals (half steps), and the left/right arrow keys move a Note's location in time by Divisions.

### Method 3:

This method allows you to move Note Events between Documents.

Right-click a Note Event and choose **Cut Note Event** to remove a Note Event from its current location. Alternatively, click desired Note Event and choose **Cut Note Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Note Events in one operation.

Next, right-click a desired location in the Pianoroll Editor's Pianoroll Area of the desired Document and choose **Paste Note Event** to Paste the Cut Note Event(s). Alternatively, select a desired location in the Pianoroll Area and choose **Paste Note Event** from the **Edit** menu.



When **Align To Grid** is activated, the Note Event being moved will be Pasted to the nearest Horizontal Grid Resolution point of the selected Pianoroll Area location as defined in the [Grid Setup dialog box](#).



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## COPYING / PASTING MIDI NOTE EVENTS

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Right-click a Note Event and choose **Copy Note Event** to copy a Note Event. Alternatively, click desired Note Event and choose **Copy Note Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Note Events in one operation.

Next, right-click a desired location in the Pianoroll Editor's Pianoroll Area of the desired Document and choose **Paste Note Event** to Paste the Copied Note Event(s). Alternatively, select a desired location in the Pianoroll Area and choose **Paste Note Event** from the **Edit** menu.



When **Align To Grid** is activated, the Note Event being Copied will be Pasted to the nearest Horizontal Grid Resolution point of the selected Pianoroll Area location as defined in the [Grid Setup dialog box](#).

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## DELETING MIDI NOTE EVENTS

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Method 1:

Select the **Eraser** tool at the top of the Pianoroll Editor and simply click on a Note Event to delete it. With the **Eraser** tool, clicking and holding your mouse button down at an empty location in the Pianoroll Area and dragging the **Eraser** over desired Note Events allows you to delete multiple Note Events in one quick operation.

Method 2:

Right-click a Note Event and choose **Clear Note Event** to delete a Note Event. Alternatively, click desired Note Event and choose **Clear Note Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Note Events in one operation.



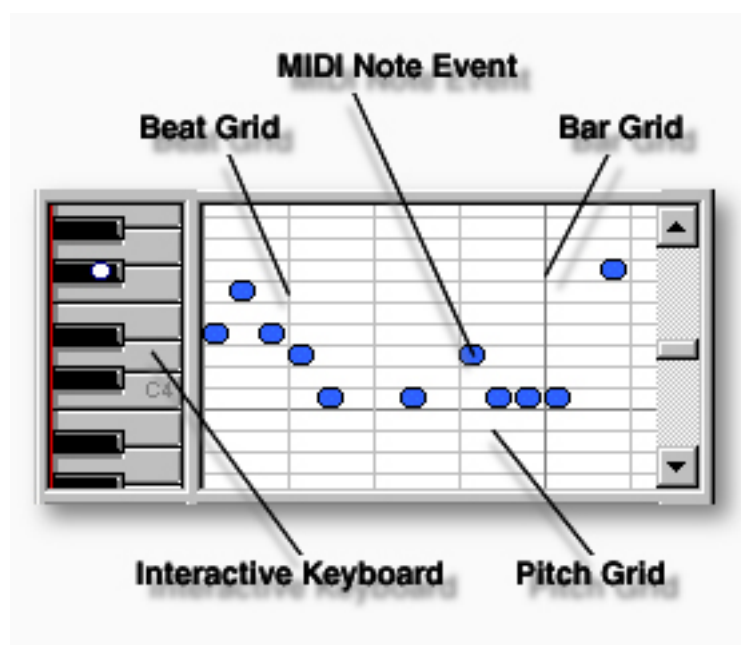
See also:

[Viewing MIDI Note Events](#)

## Using the Pianoroll Area

### Viewing MIDI Note Events

- Bar Grid** The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. Choose **Bar Grid** from the **Grid View** submenu of the **View** menu to show or hide the Bar Grid in the Pianoroll Area, as well as the Text Info, Chord, Lyric and Velocity Areas of the Pianoroll Editor.
- Beat Grid** The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Beat Grid** from the **Grid View** submenu of the **View** menu to show or hide the Beat Grid in the Pianoroll Area, as well as the Text Info, Chord, Lyric and Velocity Areas of the Pianoroll Editor.
- Pitch Grid** The Pitch Grid is a pattern of evenly spaced horizontal lines marking vertical divisions between Note Pitches for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Pitch Grid** from the **Grid View** submenu of the **View** menu to show or hide the Pitch Grid in the Pianoroll Area.



See also:

[Creating and Manipulating MIDI Note Events](#)

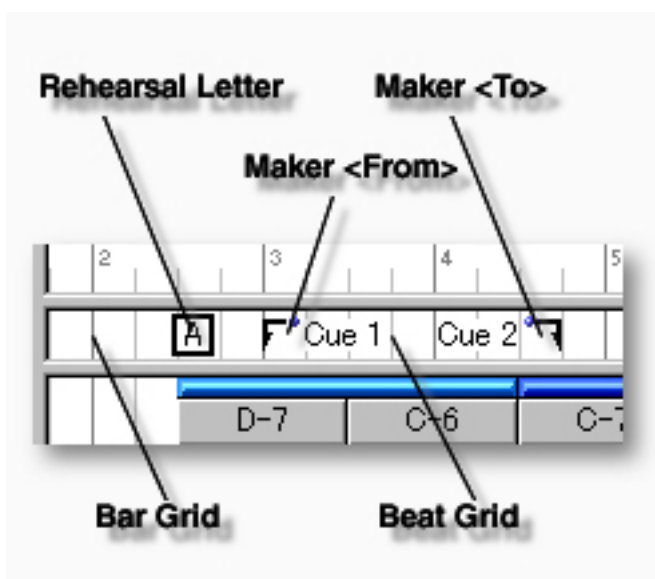
## Text Info Area of the Pianoroll Editor

**Description** The Text Info Area displays general Text Information in a continuous row, parallel to the Bar Area. It allows you to create/display Text Events such as Rehearsal Letters and Markers.

**Uses** You can create, edit, copy, duplicate, move or delete Rehearsal Letters and Markers in the Text Info Area as needed. These items can help you organize your composition Document to more quickly locate a particular point in your music. These settings can then be saved with the Document.

**Items**

- [Rehearsal Letter](#) event
- [Marker <From>](#) event
- [Marker <To>](#) event
- [Bar Grid](#)
- [Beat Grid](#)



## Items in the Text Info Area

### [Creating Text Events](#)

#### Rehearsal Letter event

Rehearsal Letters such as A or B, generally appearing at obvious musical phrase boundaries, serve to provide Bar markings for rehearsal. These Text Events can also be phrases such as "Verse", "Chorus", "Head", "Bridge", or anything you desire. You can [create](#), [edit](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Rehearsal Letters as needed.

#### Marker <From><To> events

Markers serve to provide Cue markings for rehearsal or sequencing work. You can use either <From> or <To> depending on your needs. You can [create](#), [edit](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Markers as needed.

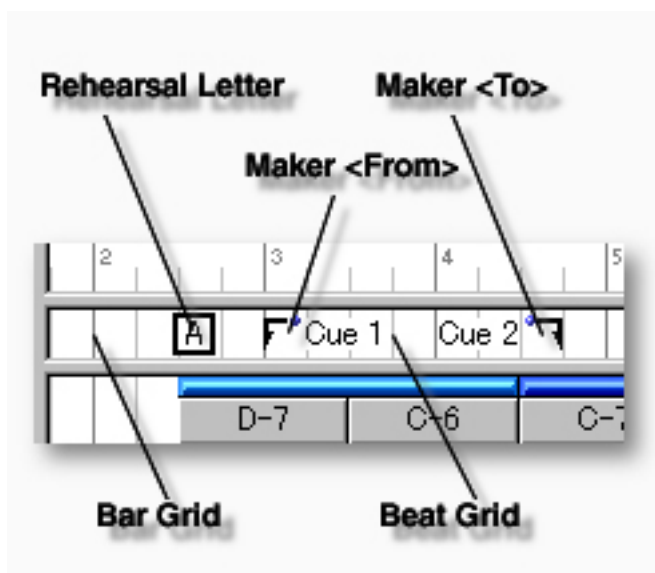
### [Adjusting the Grid display](#)

#### Bar Grid

Vertical lines horizontally spaced across the Text Info Area indicating the dividing points between Bars.

#### Beat Grid

Vertical lines horizontally spaced across Bars indicating the dividing points between Beats.




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## CREATING A REHEARSAL LETTER

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Right-click a desired location in the Text Info Area and choose **New Rehearsal Letter** to create a blank Rehearsal Letter. Enter desired text data in the edit box. When you are finished entering Text, click outside the edit box or press Enter on your computer's keyboard.

Alternatively, choose **New Text Event...** from the **Edit** menu to create a blank Rehearsal Letter. The [New Text Event dialog box](#) will open allowing you to choose a Rehearsal Letter, Marker <from> or Marker <To> text event.

 When choosing **New Text Event...** from the **Edit** menu, you must first have selected an empty Text Info Area, otherwise the **New Text Event...** item won't be available.


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## CREATING A MARKER

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Right-click a desired location in the Text Info Area and choose **New Marker <From>** or **New Marker <To>** to create a blank Marker. Enter desired text data in the edit box. When you are finished entering or editing Text, click outside the edit box, or press Enter on your computer's keyboard.

Alternatively, choose **New Text Event...** from the **Edit** menu to create a blank Marker. The [New Text Event dialog box](#) will open allowing you to choose a Rehearsal Letter, Marker <from> or Marker <To> text event.

 When choosing **New Text Event...** from the **Edit** menu, you must first have selected an empty Text Info Area, otherwise the **New Text Event...** item won't be available.

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## EDITING TEXT EVENTS

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To edit a Text Event, double click it to open its edit box. After typing your changes, hit the Enter key, or click someplace outside the edit box to close it.



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## SELECTING TEXT EVENTS

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Using the **Arrow** tool, you can select individual Text Events. You can select multiple Text Events by holding the Ctrl (or Shift) key down as you select. Alternatively, clicking and holding your mouse button down at an empty location in the Text Info Area and dragging your mouse over desired Text Events allows you to select multiple Text Events in one quick operation. Once selected, you can then move, duplicate, copy, paste or delete a group of Text Events at one time using the right click, Menu Bar or click and drag method.



Selecting multiple Text Events will not be possible if the **Eraser** tool button at the top of the Pianoroll Editor is currently active. In this case, Text Events will be deleted one at a time; each with a click of your mouse.



---

## MOVING TEXT EVENTS

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Method 1:

Click and drag desired Text Events to a new location in the Text Info Area.

Method 2:

Select desired Text Event with your mouse and use your computer keyboard's left/right arrow keys to move Text Events a Division at a time.

Method 3:

This method allows you to move Text Events between Documents.

Right-click a Text Event and choose **Cut Text Event** to remove a Text Event from its current location. Alternatively, click desired Text Event and choose **Cut Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Text Events in one operation.

Next, right-click a desired location in the Text Info Area of the desired Document's Pianoroll, Control Draw or Tempo Draw Editor or Document Window and choose **Paste Text Event** to Paste the Cut Text Event(s). Alternatively, select a desired location in the Text Info Area and choose **Paste Text Event** from the **Edit** menu.



When **Align To Grid** is activated, the Text Event being moved will be Pasted to the nearest Horizontal Grid Resolution point of the

selected Text Info Area location as defined in the [Grid Setup dialog box](#).

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## DUPLICATING TEXT EVENTS

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Right-click a Text Event and choose **Duplicate Text Event** to duplicate a Text Event. Alternatively, click desired Text Events and choose **Duplicate Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Duplicate multiple Text Events in one operation.

Unlike the Copy/Paste operation which allows you to choose the location of the "copy" before it is created, Duplicating a Text Event automatically places the "duplicate" on top of the original, offset slightly to the right. You can then move the "duplicate" at any time.

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## COPYING / PASTING TEXT EVENTS

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Right-click a Text Event and choose **Copy Text Event** to copy a Text Event. Alternatively, click desired Text Event and choose **Copy Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Text Events in one operation.

Next, right-click a desired location in the Text Info Area of the desired Document's Pianoroll, Control Draw or Tempo Draw Editor or Document Window and choose **Paste Text Event** to Paste the Copied Text Event(s). Alternatively, select a desired location in the Text Info Area and choose **Paste Text Event** from the **Edit** menu.



When **Align To Grid** is activated, the Text Event being Copied will be Pasted to the nearest Horizontal Grid Resolution point of the selected Text Info Area location as defined in the [Grid Setup dialog box](#).

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## DELETING TEXT EVENTS

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Method 1:

Select the **Eraser** tool at the top of the Pianoroll Editor and simply click on a Text Event to delete it. With the **Eraser** tool, clicking and holding your mouse button down at an empty location in the Text Info Area and dragging the **Eraser** over desired Text Events allows you to delete multiple Text Events in one quick operation.



Method 2:

Right-click a Text Event and choose **Clear Text Event** to delete a Text Event. Alternatively, click desired Text Events and choose **Clear Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Text Events in one operation.



See also:

[Adjusting the Grid display](#)



## Using the Text Info Area

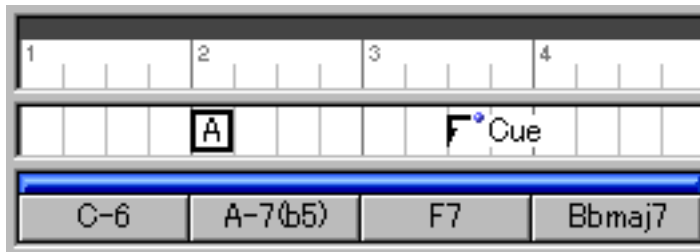
Adjusting the Grid display

**Bar Grid** The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. Choose **Bar Grid** from the **Grid View** submenu of the **View** menu to show or hide the Bar Grid in the Text Info Area, as well as the Chord, Lyric, Pianoroll and Velocity Areas.

**Beat Grid** The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Beat Grid** from the **Grid View** submenu of the **View** menu to show or hide the Beat Grid in the Text Info Area, as well as the Chord, Lyric, Pianoroll and Velocity Areas.

See also:

[Creating and Manipulating Text Events](#)



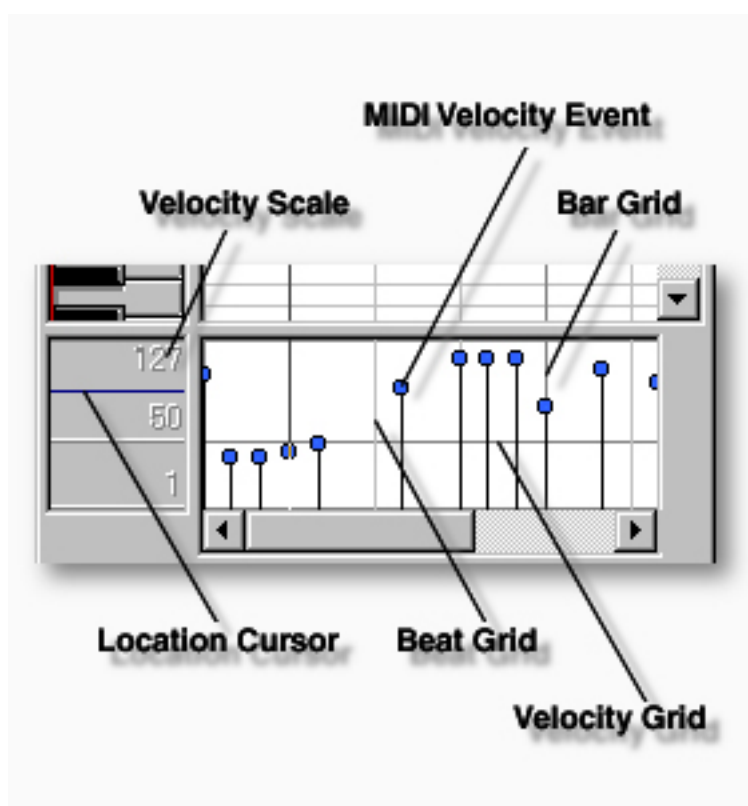
## Velocity Area of the Pianoroll Editor

**Description** The Velocity Area allows you to graphically edit Velocity values of Notes in the Pianoroll Editor.

**Uses** Choose the desired editing tool and simply draw desired changes in the Velocity Area with your mouse.

**Items**

- [MIDI Velocity Event](#)
- [Bar Grid](#)
- [Beat Grid](#)
- [Velocity Grid](#)
- [Velocity Scale](#)
- [Location Cursor](#)



[Manipulating MIDI Velocity Events](#)

**MIDI Velocity Event** A MIDI Velocity Event is MIDI data which executes a MIDI Volume (or attack) command at the beginning of each Note. As such, it is a component of Note data for most practical purposes. You can [create](#), [edit](#), [copy](#), [move](#) or [delete](#) MIDI Velocity Events, but in reality it is mostly the Note being manipulated. Except for editing actual Velocity values, perform most of these operations on Notes in the [Pianoroll Area](#) of the Pianoroll Editor or other Note related Editors.

[Adjusting the Grid display](#)

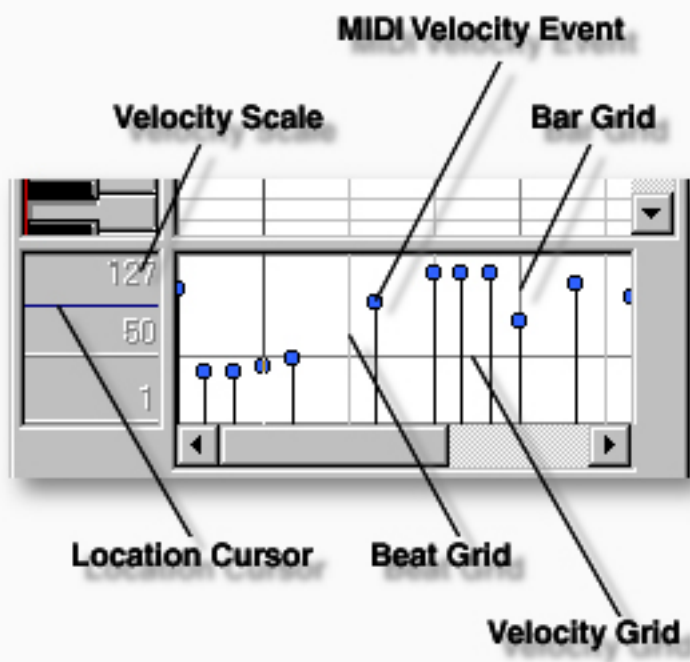
**Bar Grid** Vertical lines horizontally spaced across the Velocity Area indicating the horizontal dividing points between Bars.

**Beat Grid** Vertical lines horizontally spaced across Bars indicating the dividing points between Beats.

**Velocity Grid** Horizontal lines vertically spaced across the Velocity Area indicating the vertical dividing points between Velocity data values.

**Velocity Scale** Located on the left side of the Velocity Area, this Scale displays the Velocity range of the vertical Velocity Grid in the Velocity Area of the Pianoroll Editor.

**Location Cursor** A horizontal Location Cursor line in the Velocity Scale represents the vertical position of your mouse as it relates to Velocity in the Draw Area of the Control Draw Editor. Corresponding numerical information is also displayed in the Interactive Information area at the bottom of the Pianoroll Editor. The color of the Location Cursor depends on your settings in the Microsoft Windows Control Panel "Display" applet, under the heading "Selected Items" in the "Items" list of the "Appearance" pane.



## MIDI Velocity Event

Note:

While Velocity data can be manipulated separately, it exists as a component of Notes. For example, when you create a Note Event, there is "NOTE ON", "VELOCITY", "PITCH" and "NOTE OFF" data involved. As a result, performing operations like Cut/Paste on a Velocity Event actually acts upon its related Note. For this reason, most of the Velocity commands listed here are deferred to the [Pianoroll Area](#) of the Pianoroll Editor. Other note related Editors such as the Event List and Notation Editors are also good alternatives.

Draw operations require use of special Tools. After using any of the special Tool buttons at the top of the Pianoroll Editor, be sure to switch back to the standard **Arrow Tool** for regular manipulation operations.

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### CREATING NEW MIDI VELOCITY EVENTS

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There are many ways to create Notes in CAMPS. To create Notes and their associated Velocity Events in the Pianoroll Editor, see [CREATING NEW MIDI NOTE EVENTS](#) in the Pianoroll Area.

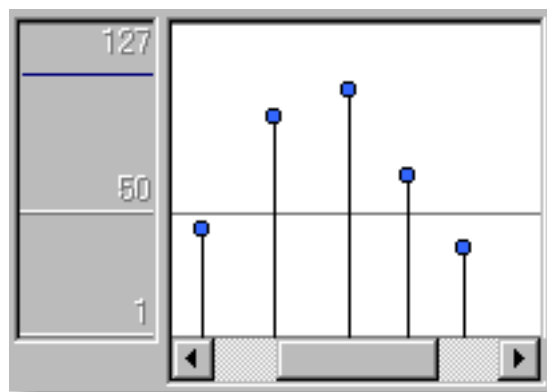
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### EDITING MIDI VELOCITY EVENTS

---

Method 1:

Using the **Arrow** tool, click and drag desired Velocity Event to a new vertical value position the Velocity Area..



 When **Align To Grid** is activated, the Velocity Event will snap to the nearest Grid Resolution point of the selected Velocity Area location as defined in the [Grid Setup dialog box](#).

Method 2:

Three Drawing tools are provided for various drawing results:

Select the **Pen** tool button at the top of the Pianoroll Editor to edit Velocity Events by freely drawing their vertical position.

Select the **Line** tool button at the top of the Pianoroll Editor to edit Velocity Events by directing them with an automatic straight line from the point you start dragging to your present cursor location.

Select the **Oval** tool button at the top of the Pianoroll Editor to edit Velocity Events by directing them with an automatic curved line from the point you start dragging to your present cursor location.

Using one of these tools, click and hold your mouse button down at the desired location in the Velocity Area and drag your mouse horizontally over Velocity Events while defining Velocity level with vertical cursor control.

Method 3:

Select a Velocity Event with your mouse and use the arrow keys on your computer's keyboard to move the selected Event with more precision. The up/down arrow keys move a Velocity Event's value by single increments.

Method 4:

Right Click desired Velocity Event and choose **Adjust Velocity...** from the **Actions** submenu. Alternatively, click desired Velocity Event and choose **Adjust Velocity** from the **Line** menu.

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## SELECTING MIDI VELOCITY EVENTS

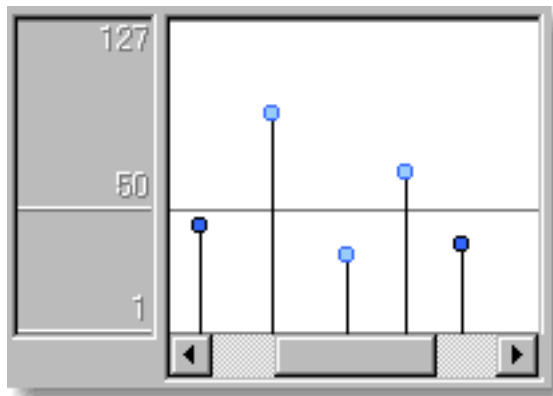
---

Method 1:

Using the **Arrow** tool, you can select individual Velocity Events. You can select multiple Velocity Events by holding the Ctrl (or Shift) key down as you select. Alternatively, Clicking and holding your mouse button down at an empty location in the Velocity Area and dragging your mouse over desired Velocity Events allows you to select multiple Velocity Events in one quick operation.

Method 2:

Using the **I Beam** tool, you can select all Velocity Events in a horizontal (time) region at once. After clicking the **I Beam** button at the top of the Pianoroll Editor, click and hold your mouse button down at an empty location in the Velocity Area and drag your mouse horizontally over the desired Velocity Event region.



Selecting Velocity Events enables use of Velocity Event related commands under the **Edit** and **Line** Menu bar items. Once selected, you can then move, copy, paste or delete a group of Velocity Events at one time using the right click, menu bar or click and drag method.



Selecting entire Velocity regions will not be possible if the **Pen**, **Line**, **Oval** or **Eraser** tool button at the top of the Pianoroll Editor is currently active. In these cases, Velocity Events will be moved or deleted (depending on which of these buttons is active).

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## MOVING MIDI VELOCITY EVENTS

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It is possible to move Velocity Events and their accompanying Pitch data using the same kind of MOVE options provided in similar editing areas of CAMPS. However, since moving Velocity Events is in reality moving Note Events, we suggest you see [MOVING MIDI NOTE EVENTS](#) in the Pianoroll Area of the Pianoroll Editor.

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## COPYING / PASTING MIDI VELOCITY EVENTS

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This operation is basically the same as Copying/Pasting Note Events. Since this operation is readily executable in the Velocity Area of the Pianoroll Editor, it is included here for completeness. However, we recommend you refer to [COPYING / PASTING MIDI NOTE EVENTS](#) in the Pianoroll Area.

Right-click a Velocity Event and choose **Copy Note Event** to copy a Velocity Event. Alternatively, click desired Velocity Event and choose **Copy Note Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Velocity Events in one operation.

Next, right-click a desired location in the Pianoroll Editor's Velocity Area of the desired Document and choose **Paste Note Event** to Paste the Copied Velocity Event(s). Alternatively, select a desired location in the Velocity Area and

choose **Paste Note Event** from the **Edit** menu.

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## DELETING MIDI VELOCITY EVENTS

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Once again, these operations are actually acting upon Note Events. Since this operation is readily executable in the Velocity Area of the Pianoroll Editor, it is included here for completeness.

### Method 1:

Select the **Eraser** tool at the top of the Pianoroll Editor and simply click on a Velocity Event to delete it. With the **Eraser** tool, clicking and holding your mouse button down at an empty location in the Velocity Area and dragging the **Eraser** over desired Velocity Events allows you to delete multiple Velocity Events in one quick operation.

### Method 2:

Right-click a Velocity Event and choose **Clear Note Event** to delete a Velocity Event. Alternatively, click desired Velocity Event and choose **Clear Note Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Velocity Events in one operation.



See also:

[Adjusting the Grid display](#)



## Using the Velocity Area

Adjusting the Grid display

### Bar Grid

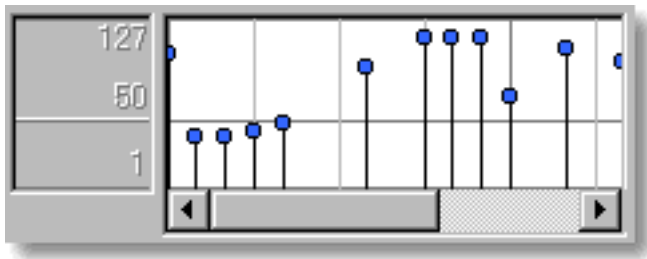
The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. Choose **Bar Grid** from the **Grid View** submenu of the **View** menu to show or hide the Bar Grid in the Velocity Area, as well as the Text Info, Chord, Lyric and Pianoroll Areas of the Pianoroll Editor.

### Beat Grid

The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Beat Grid** from the **Grid View** submenu of the **View** menu to show or hide the Beat Grid in the Velocity Area, as well as the Text Info, Chord, Lyric and Pianoroll Areas of the Pianoroll Editor.

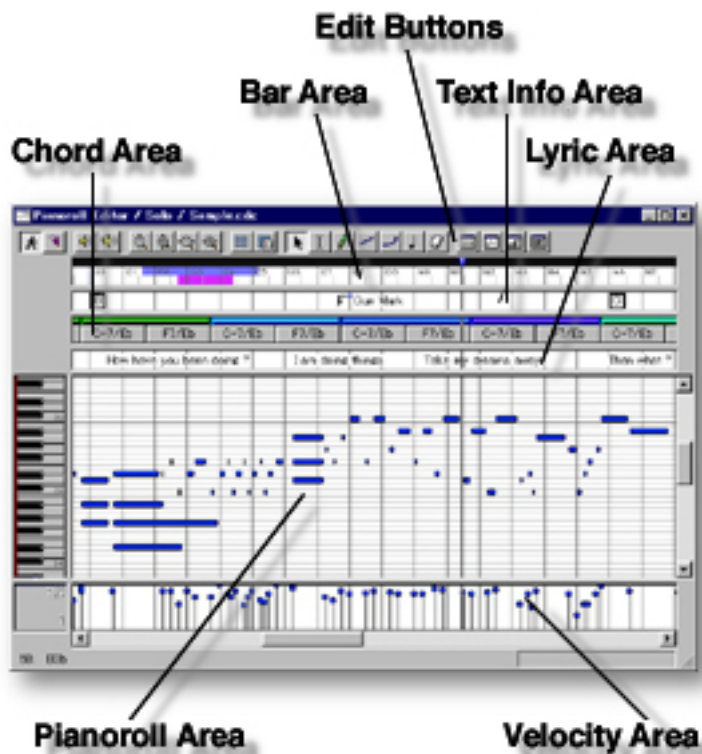
### Velocity Grid

The Velocity Grid is a pattern of evenly spaced horizontal lines marking vertical divisions between Velocity values for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Velocity Grid** from the **Grid View** submenu of the **View** menu to show or hide the Velocity Grid in the Velocity Area.



See also:

[Manipulating MIDI Velocity Events](#)



Opening

From the [Document Window](#)

From the...  
[Event List Editor](#)  
[Pianoroll Editor](#)  
[Control Draw Editor](#)  
[Notation Editor](#)

First, select a desired Line Block. Then, either choose **Pianoroll Editor** from the **Editors** menu, or simply click the **Pianoroll Editor** button at the top of the Document Window.

Choose **Pianoroll Editor** from the **Editors** menu, or simply click the **Pianoroll Editor** button at the top of the Editor Window.

## Opening

### Opening a Document

Choose **Open...** from the **File** menu to open previously saved CAMPS v4 Documents, as well as CAMPS v3 ( for Mac ) Documents and Standard MIDI Files ( S.M.F.).



When opening a Standard MIDI File, CAMPS automatically analyzes Line data and assigns [appropriate Line Blocks](#) and one of [six Category settings](#) to each Track. You can alter these settings at any time.

### Creating a new Document

Choose **New** from the **File** menu to create a new blank Document Window. To set defaults for new Documents, choose **New Setup...** from the **File** menu, opening the [New Document Setup dialog box](#).

# Event List Editor

**Description** The Event List Editor allows you to directly edit a Line Block's MIDI Note, Control and Lyric Event data values. Events are listed vertically from the top down.

**Items** The Event List Editor contains several Buttons and Data columns for manipulating MIDI Control Events. You can choose to Show or Hide the Buttons with the **Edit Buttons** command in the **View** menu. You can adjust the horizontal size of each Column by clicking and dragging the vertical separator bar between column headers at the top.

[Edit Buttons](#)

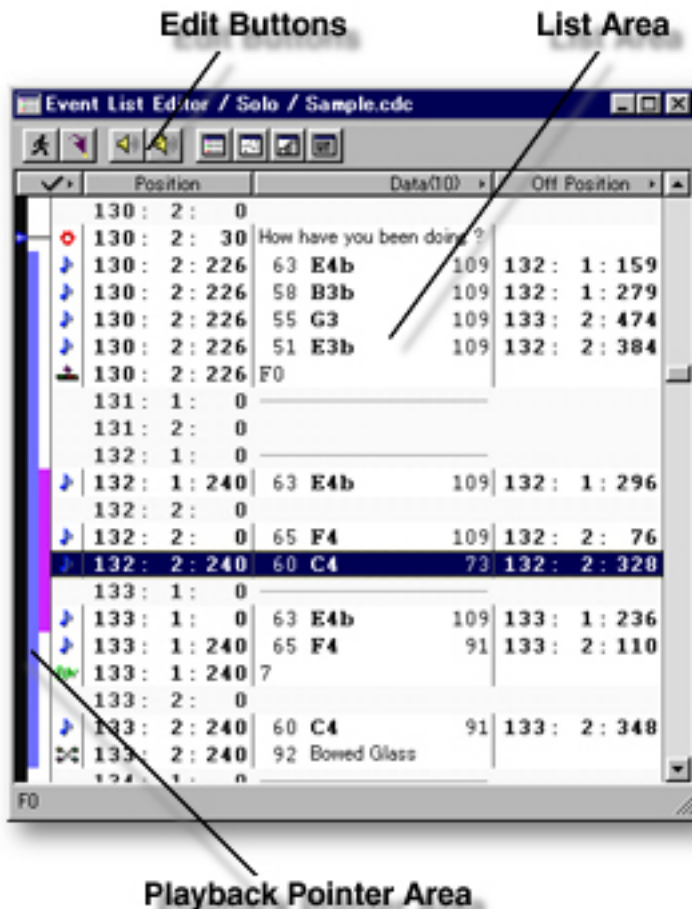
The Edit Buttons give you quick access to manipulation tools for the Event List Editor, as well as many of the Editors available in CAMPS.

[Playback Pointer Area](#)

The Playback Pointer Area displays the Playback Pointer, and allows you to manipulate Loop and Punch In/Out functions.

[List Area](#)

The List Area displays MIDI Note and Control Event data in the currently selected Line Block, listed vertically from the top down. Each Event's data appears in a horizontal row, and all data fields can be directly edited.



## Opening

From the  
[Document Window](#)

From the...  
Event List Editor  
[Pianoroll Editor](#)  
[Control Draw Editor](#)  
[Notation Editor](#)

First, select a desired Line Block. Then, either choose **Event List Editor** from the **Editors** menu, or simply click the **Event List Editor** button at the top of the Document Window.

Choose **Event List Editor** from the **Editors** menu, or simply click the **Event List Editor** button at the top of the Editor Window.

## Edit Buttons Area of the Event List Editor

**Description** The Edit Buttons at the top of the Event List Editor give you quick access to frequently used items, such as View settings and Editors.

**Uses** The Edit Buttons include many of the **View** and **Editors** menu commands. Choose **Edit Buttons** from the **View** menu to show or hide the Edit Buttons.

- Items**
- [Auto Scroll](#) button
  - [Jump To Location](#) button
  - [Playback](#) button
  - [Playback with Others](#) button
  - [Event List Editor](#) button
  - [Pianoroll Editor](#) button
  - [Control Draw Editor](#) button
  - [Notation Editor](#) button



Adjusting  
View**Auto Scroll**  
button

Sets the viewable area in the List Area to follow the Playback Pointer during Playback and Recording.

**Jump To Location**  
button

Opens the [Jump To Location dialog box](#) which allows you to move the current viewpoint to a specified Bar in the Event List Editor.

**Playback**  
button

Starts Audition Playback of the currently selected MIDI Events with an automatically inserted Playback Loop. If no Control Events are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.

**Playback with Others**  
button

Starts Audition Playback of the currently selected MIDI Events with an automatically inserted Playback Loop along with all the other activated Tracks in the same Bar region. If no Control Events are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.

Opening  
Editors**Event List Editor**  
button

Opens a new [Event List Editor](#) window, allowing you to make alternate MIDI Event edits of the selected Line Block.

**Pianoroll Editor**  
button

Opens the [Pianoroll Editor](#), allowing you to edit Notes of the selected Line Block in Pianoroll graph format.

**Control Draw Editor**  
button

Opens the [Control Draw Editor](#), allowing you to edit a Line Block's MIDI Event data with a unique freestyle curve drawing method.

**Notation Editor**  
button

Opens the [Notation Editor](#), allowing you to edit Notes of the selected Line Block in Musical Notation form.

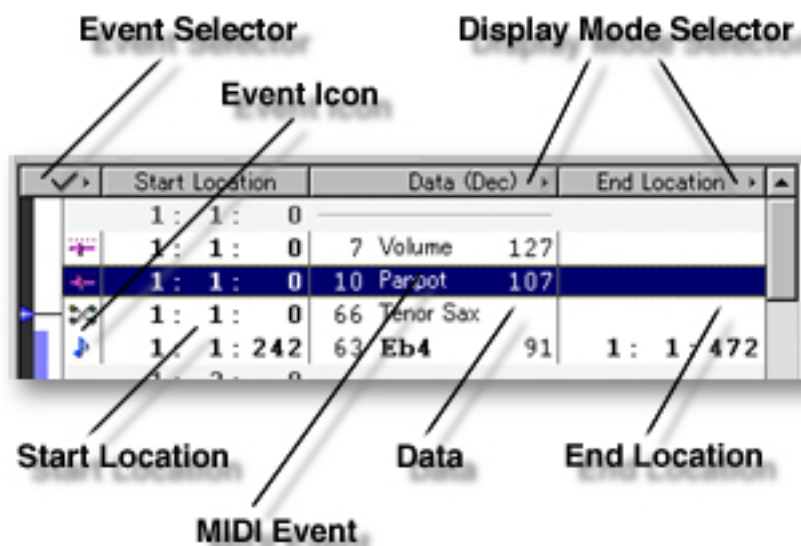


## List Area of the Event List Editor

**Description** The List Area is the main MIDI Event editing area of the Event List Editor.

**Uses** The List Area allows you to quickly create and edit MIDI data one Event at a time. The Event data can be displayed in [Hexadecimal or Decimal](#) format, and the End Location (Event ending point) can be displayed using [Bars, Beats and Divisions](#), or as a [duration value](#) expressed in MIDI time Divisions. To edit an Event value, double click the desired data field and make your changes in the edit or dialog box which opens.

- Items**
- [MIDI Event](#)
  - [Event Icon](#) column
  - [Start Location](#) column
  - [Data](#) column
  - [End Location](#) column
  - [Event Selector](#) button
  - [Display Mode Selector](#) buttons





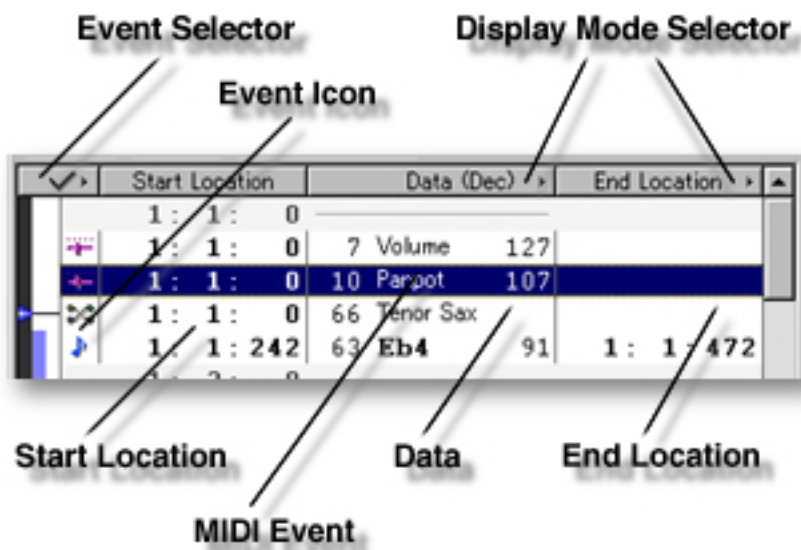
## Items in the List Area

### [Manipulating Events](#)

<b>MIDI Event</b>	A MIDI Event is MIDI data which executes MIDI commands, including Note generation, Control changes and Lyrics. You can <a href="#">create</a> , <a href="#">edit</a> , <a href="#">copy</a> , <a href="#">move</a> or <a href="#">delete</a> MIDI Events as needed.
<b>Event Icon</b> column	This column displays any applicable Event Icons for MIDI Events, and allows you to select an Event. Click on an Event's Icon in the far left column of the List Area, or in an Event's data row between any of the data fields to select an Event and all its data.
<b>Start Location</b> column	This column displays the Playback Start Location of MIDI Events in the format [Bar:Beat:Divisions].
<b>Data</b> column	This column displays MIDI Event Data in the format [Value Name Velocity]. While the data in the Value field is always an absolute MIDI Value, the data in the Name field changes depending on the type of MIDI Event. The Velocity field only displays a value for Events containing Velocity data. Additionally, the value display format depends on your settings with this column's Display Mode Selector button.
<b>End Location</b> column	This column displays the Playback End point of MIDI Events. The display format depends on your settings with this column's Display Mode Selector button.

### [Adjusting Event Display](#)

<b>Event Selector</b> button	The <b>Event Selector</b> button resides at the top of the Event Icon column. Clicking this button opens the Event menu which allows you to either change individual Events' show/hide status or open the <a href="#">Displayed Events dialog box</a> .
<b>Display Mode Selector</b> buttons	<p>These buttons reside at the top of the Data and End Location columns.</p> <p>The Data column's <b>Display Mode Selector</b> button allows you to choose between Hexadecimal (base 16) or Decimal (base 10) rendering of the data in an Event's Value and Velocity fields.</p> <p>The End Location column's <b>Display Mode Selector</b> button allows you to choose between an Event's End point expressed as [Bar:Beat:Divisions], or an Event's duration expressed in Divisions.</p>



## Using the List Area

Adjusting the List display

**Event Selector** button

Click the **Event Selector** button to open the **Event** menu. You can then select whether to show or hide individual Events. A checkmark appears next to Event names set to Show. The bottom choice in the Event menu opens the [Displayed Events dialog box](#). The Displayed Events dialog box allows you to set all desired Event Types to be displayed, while the rest of the Event menu only allows selection one at a time.




**Display Mode Selector** buttons

Click the Data column's **Display Mode Selector** button to open the Data column's **Display Mode** menu. You can then choose between Hexadecimal (base 16) or Decimal (base 10) rendering of the data values in an Event's Value and Velocity fields. A checkmark appears next to the currently selected option. MIDI equipment documentation may describe values in either form, or you may be more familiar with one of them. This adjustment is intended to ease your interpretation of the data. It effects display of the data column for an entire Event List.

Click the End Location column's **Display Mode Selector** button to open the End Location's **Display Mode** menu. You can then choose between Event end point expressed as [Bar:Beat:Divisions], or Event duration expressed in Divisions. A checkmark appears next to the currently selected option. This effects display of the End Location column for an entire Event List.

	Data (Dec)			
				<input checked="" type="radio"/> Decimal <input type="radio"/> Hex
0				
0	7 Volume	127		
0	10 Panpot	107		
0	66 Tenor Sax			
12	63 Eb4	91	1 : 1 :	472



See also:

[Creating and Manipulating MIDI Events](#)

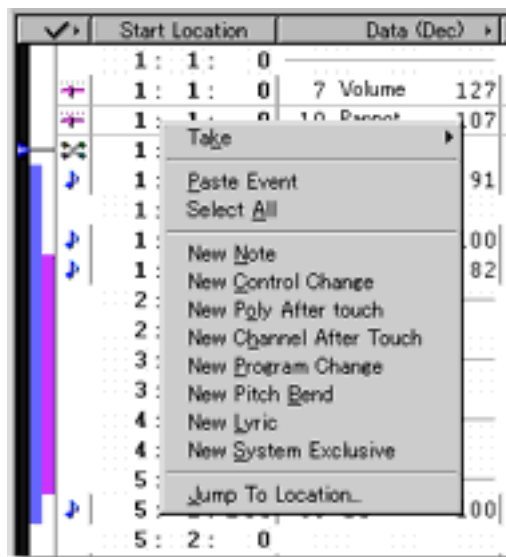
## CREATING NEW MIDI EVENTS

## Method 1:

Click the **Record** button in the [Record Control toolbar](#) or choose the desired Recording command from the **Record** submenu of the **MIDI** menu and begin playing your MIDI Instrument. Loop and Punch In/Out regions will be automatically assigned for the length of the currently selected Line Block. If you prefer, you can assign a specific Punch In/Out region before activating Record. Be aware that the Track Arming buttons found in the Document Window have no effect in the Event List Editor. Once **Record** is activated and you begin playing, any existing data in the currently selected Line Block will be replaced.

## Method 2:

Right click a desired location in the List Area and choose the desired Event Type to be inserted. Alternatively, click the desired location in the List Area and choose **New Event...** from the **Edit** menu to open the [New Event dialog box](#).



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## EDITING MIDI EVENTS

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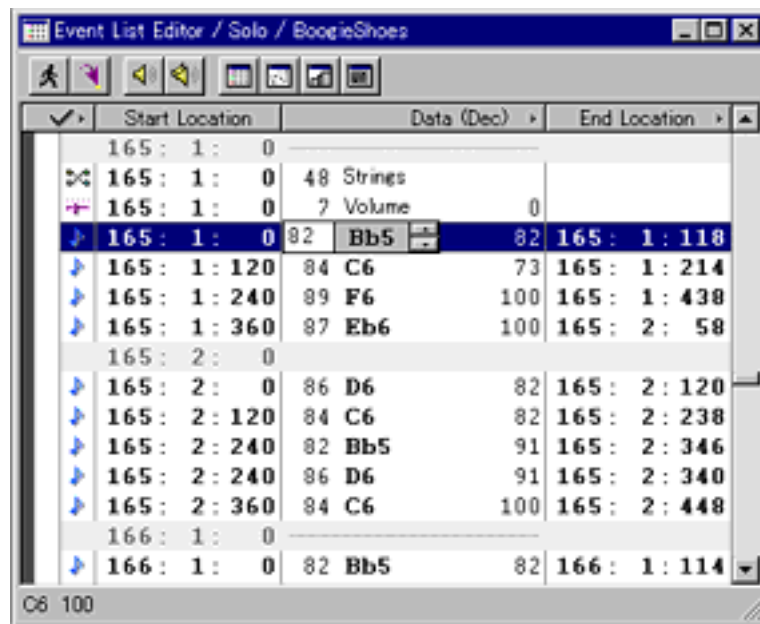
### Method 1:

Double click the desired data field to open its edit or dialog box, depending on the Event Type. With edit boxes, you can use the up/down buttons or directly edit the values with your computer's keyboard. In dialog boxes, edit the data field as desired and click **OK**.

### Method 2:

Click the desired Event and choose desired command from the **Line** menu. Available commands will vary depending on the Type of Event selected.

See also [CREATING NEW MIDI EVENTS](#) above.



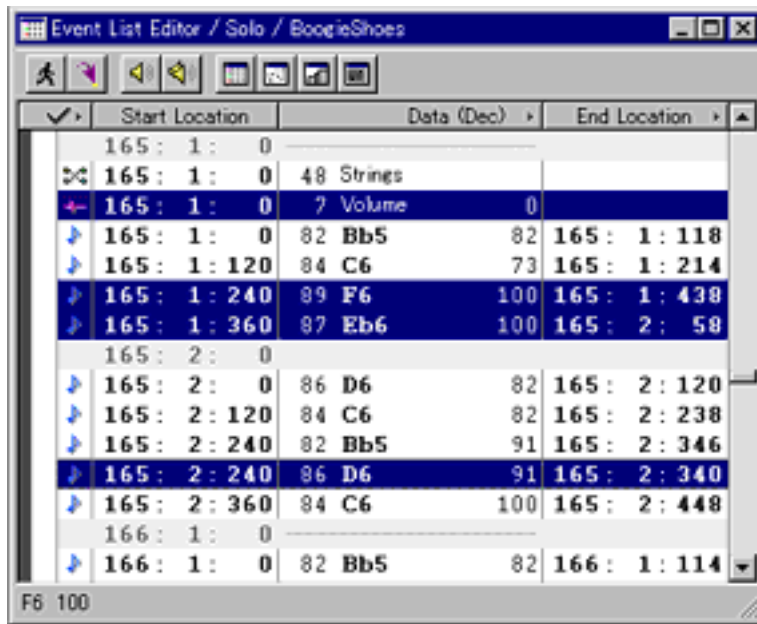
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## SELECTING MIDI EVENTS

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Using the **Arrow** tool, you can select individual MIDI Events. You can select multiple MIDI Events by holding the Ctrl (or Shift) key down as you select. Once selected, you can then move, copy, paste or delete a group of MIDI Events at one time using the right click, menu bar or click and drag method.

Selecting MIDI Events enables use of MIDI Event related commands under the **Edit** and **Line** menu bar items.




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## MOVING MIDI EVENTS

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### Method 1:

Click and drag desired MIDI Events to a new location in the Event List Area. As you drag an Event through the Event List, a black horizontal bar appears between existing Events indicating possible destinations. When this bar appears at the desired location, release your mouse button to drop the Event being moved to the new location.

### Method 2:

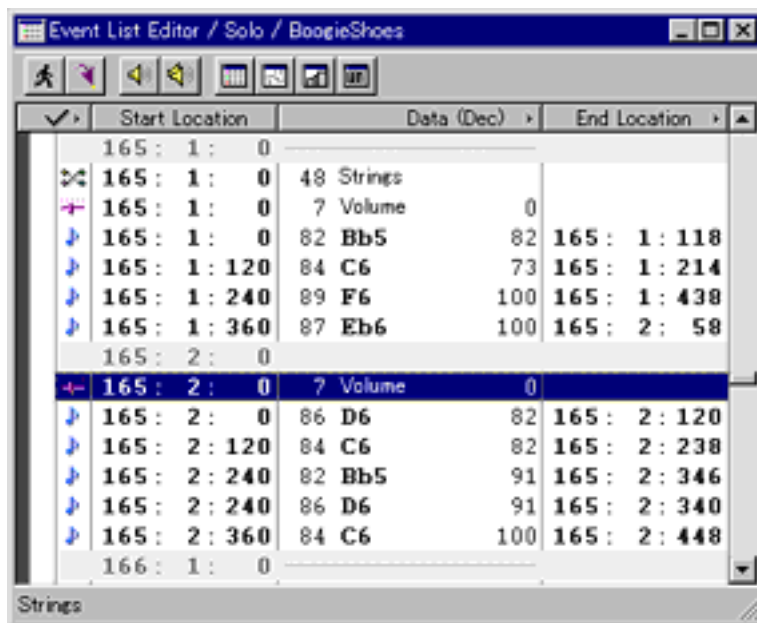
This method allows you to move MIDI Events between Documents.

Right-click a MIDI Event and choose **Cut Event** to remove a MIDI Event from its current location. Alternatively, click desired MIDI Event and choose **Cut Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple MIDI Events in one operation.

Next, right-click a desired location in the desired Document's Event List Editor and choose **Paste Event** to Paste the Cut MIDI Event(s). Alternatively, select a desired location in the List Area and choose **Paste Event** from the **Edit** menu.



The MIDI Event being moved will be Pasted immediately after the selected destination Event's location in the List.



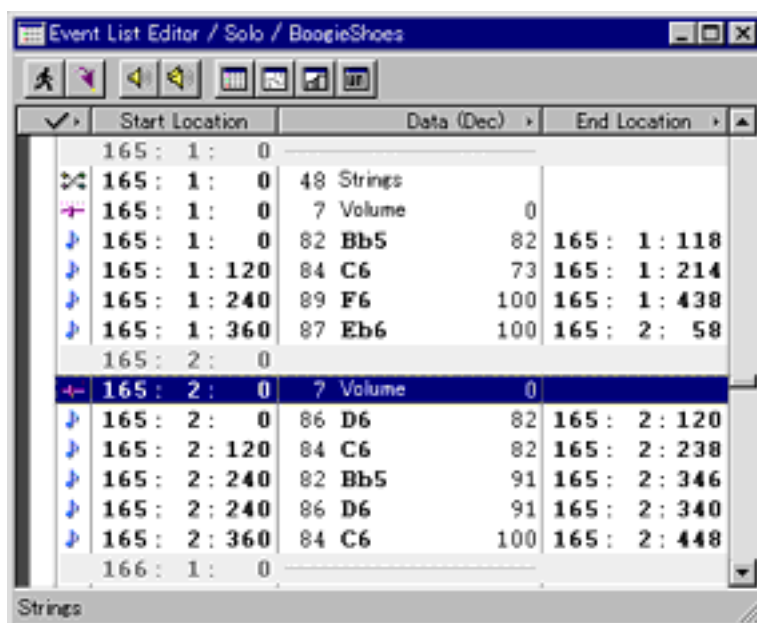
## COPYING / PASTING MIDI EVENTS

Right-click a MIDI Event and choose **Copy Event** to copy it. Alternatively, click desired MIDI Event and choose **Copy Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple MIDI Events in one operation.

Then, right-click a desired location in the desired Document's Event List Editor and choose **Paste Event** to Paste the Copied MIDI Event(s). Alternatively, select a desired location in the List Area and choose **Paste Event** from the **Edit** menu.



The MIDI Event being copied will be Pasted immediately after the selected destination Event's location in the List.





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## DELETING MIDI EVENTS

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Right-click a MIDI Event and choose **Clear Event** to delete it. Alternatively, click desired MIDI Event and choose **Clear Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple MIDI Events in one operation.

See also:

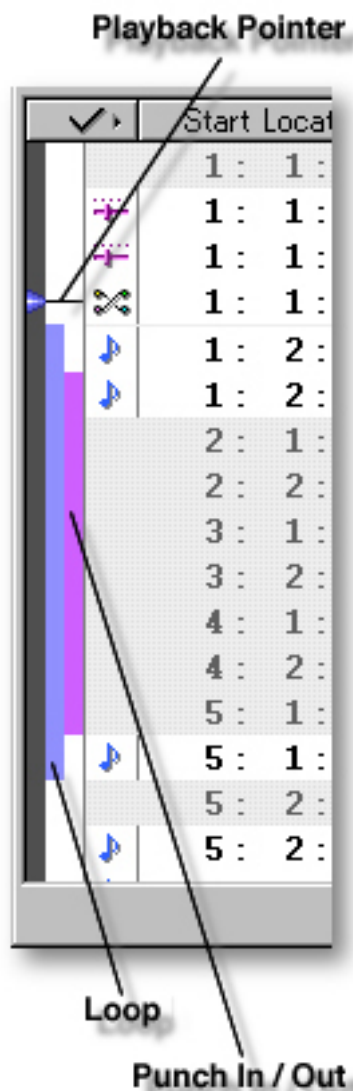
[Adjusting the List display](#)

# Playback Pointer Area of the Event List Editor

**Description** The Playback Pointer Area displays the current Playback location as well as Loop and Punch In/Out regions.

**Uses** The Playback Pointer Area allows you to manage the location of the [Playback Pointer](#), as well as the Playback [Loop](#) and [Punch In/Out](#) Recording settings.

**Items** [Playback Pointer](#)  
[Loop](#) region  
[Punch In/Out](#) region



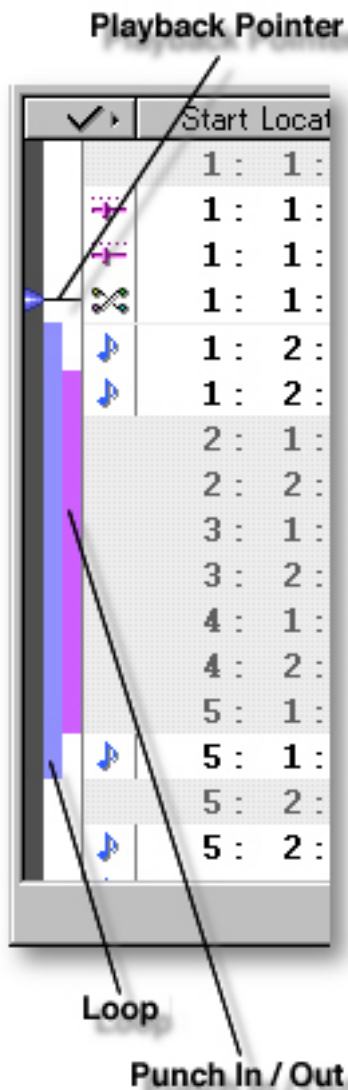
# Items in the Playback Pointer Area

[Positioning the Playback Pointer](#)

[Inserting a Playback Loop](#)

[Inserting a Punch In/Out Record region](#)

<b>Playback Pointer</b>	The Playback Pointer resides in its own dark gray column in the far left side of the Event List Editor window. It displays the current Playback location in the Event List Editor and allows you to change the current Playback point.
<b>Loop region</b>	Displays your current Loop region. Starting Playback repeats (Loops) Playback in this region until you stop. A Loop region is indicated vertically by the color blue to the right of the dark gray Playback Pointer column.
<b>Punch In/Out region</b>	Displays your current Punch In/Out region. Recording becomes active in this region of the currently selected Line Block as the Playback Pointer travels through it. A Punch In/Out region is indicated vertically by the color magenta between the Loop region and the Event Icon column.



Positioning the Playback Pointer

**Playback Pointer** and area

Unlike most of the other Editors in CAMPS, the Event List Editor's Playback displays vertically instead of horizontally. Since data is listed in actual sequence without respect to musical Bars, Playback display movement is not linear. For example, a large group of Pitch Bend data assigned to the same Note Event will cause the vertical Playback Pointer motion to accelerate through those Events as it stays synchronized with a song's Bar location during Playback.

You can use the Playback Pointer to change the Playback point in the Event List Editor in two ways: Clicking a desired location in the dark gray Playback Pointer area on the left, or clicking and dragging the Playback Pointer vertically to a desired location. Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. The Playback Pointer displays the current Playback location as CAMPS plays or records MIDI data.

Inserting a Playback Loop

**Loop** region

You can create a Loop region by clicking and dragging with your mouse vertically in the Loop Area, to the right of the Playback Pointer Area. As you drag your mouse, the Loop region appears blue in color, displaying a new Loop region. A Punch In/Out region of the same size is automatically inserted to the right of the new Loop region.

Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. CAMPS repeats Loop region Playback until you stop it.



The start and end points of the Loop region snap to the nearest vertical Event boundary. Click anywhere in the Loop Area to delete a Loop region.

Inserting a Punch In/Out Record region

**Punch In/Out** region

You can create a Punch In/Out region by clicking and dragging your mouse vertically in the Punch In/Out Area to the right of the Loop Area. As you drag your mouse, this region appears magenta, displaying a new Punch In/Out region. A Loop of the same size is automatically inserted to the left of the new Punch In/Out region.



The start and end points of the Punch In/Out region snap to the nearest vertical Event boundary. Click anywhere in the Punch In/Out Area to delete a Punch In/Out region.

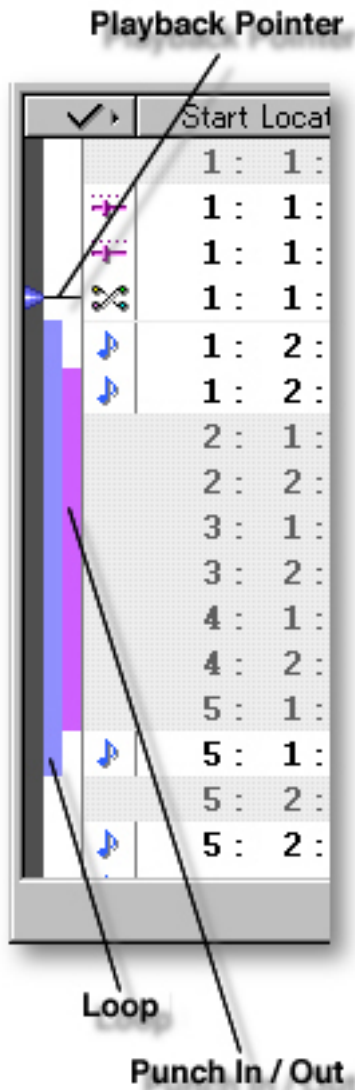
Choose **Record** from the **MIDI** menu (or click the **Record** button in the [Record Control toolbar](#)) to begin recording.

If the automatically inserted Playback Loop is removed, CAMPS begins Playback from the Playback Pointer's current position, but Recording is only active as the Playback Pointer travels through the Punch In/Out region. This provides a true Cued Punch In/Out environment.



By combining with a Loop region beginning before the Punch

In/Out region, CAMPS provides a continuous Cued Punch In/Out recording environment. Remove the automatically inserted Loop and insert a new one starting before the Punch In/Out region, or remove the Punch In/Out region and insert a new one starting after the Loop region.



## Displayed Events dialog box

Description	The Displayed Events dialog box allows you to choose which MIDI Events appear in the Event List Editor.	
Uses	Simply click the corresponding buttons to enable display of desired MIDI Event Types. Clicking a button again disables its corresponding Event Type display. This allows you to choose a "set" of Events to work on without repeatedly clicking the <b>Event Selector</b> button in the Event List Editor to set each Event Type's show/hide status individually. The Displayed Events dialog box does not deactivate or delete any actual Events.	
Items	<b>Note</b> button	Click this button to enable display of MIDI Note data Events in the Event List Editor. For Tonal (Melodic and Chordal) Instrument Programs, these Events represent Pitch and duration. For Drum Programs, these Events usually translate to different different Drum Sounds (Instruments).
	<b>Control Change</b> button	Click this button to enable display of MIDI Control Change data Events in the Event List Editor. Typical Control Change Events are Volume and Pan settings.
	<b>Poly After Touch</b> button	Click this button to enable display of MIDI Poly After Touch data Events in the Event List Editor. These Events represent a change in MIDI Instrument key pressure after initial attack on an individual key basis, which can be used to trigger modulation (vibrato) or a second sound, for example.
	<b>Channel After Touch</b> button	Click this button to enable display of MIDI Poly After Touch data Events in the Event List Editor. These Events represent a change in MIDI Instrument key pressure after initial attack on a MIDI channel-wide basis (all keys), which can be used to trigger modulation (vibrato) or a second sound, for example.
	<b>Program Change</b> button	Click this button to enable display of MIDI Program Change data Events in the Event List Editor. These Events control Synth Module Program (Patch) selection, representing different sounds (Musical Instruments).
	<b>Pitch Bend</b> button	Click this button to enable display of MIDI Pitch Bend data Events in the Event List Editor. These Events represent the position of a Pitch Bending control on your MIDI Instrument, such as a control wheel or joystick.
	<b>Lyric</b> button	Click this button to enable display of MIDI Lyric data Events in the Event List Editor. These Events represent Song Lyric Text embedded in a MIDI Document.
	<b>System Exclusive</b> button	Click this button to enable display of MIDI System Exclusive data Events in the Event List Editor. These are typically proprietary Events used differently by each MIDI Device for special functions such as Mode Change or Data Loading.
	<b>OK</b> button	Closes the Displayed Events dialog box and commits changes.
	<b>Cancel</b> button	Closes the New Text Event dialog box without committing changes.
	<b>Help</b> button	Opens this Help document.



Opening

From the [Event List Editor](#)

Choose **Select Event Types...** from the **List View** submenu of the **View** menu.

Alternatively, click the **Displayed Events** (Checkmark) button at the top of the event column on the left side of the Event List Editor window and choose **Select Event Types...**

## New Event dialog box

Description	The New Event dialog box allows you to add a new MIDI Event to your Line data.	
Uses	After selecting desired location in the <a href="#">Event List</a> and opening the New Event dialog box, click the corresponding Event type button for the New Event you wish to create. This closes the New Event dialog box and inserts your New Event immediately following the Event selected when opening the New Event dialog box.	
Items	<b>Note</b> button	The Note button inserts a new MIDI Note Event and closes the New Event dialog box.
	<b>Control Change</b> button	The Control Change button inserts a new MIDI Control Change Event and closes the New Event dialog box.
	<b>Poly After Touch</b> button	The Poly After Touch button inserts a new MIDI Poly After Touch Event and closes the New Event dialog box.
	<b>Channel After Touch</b> button	The Channel After Touch button inserts a new MIDI Channel After Touch Event and closes the New Event dialog box.
	<b>Program Change</b> button	The Program Change button inserts a new MIDI Program Change Event and closes the New Event dialog box.
	<b>Pitch Bend</b> button	The Pitch Bend button inserts a new MIDI Pitch Bend Event and closes the New Event dialog box.
	<b>Lyric</b> button	The Lyric button inserts a new MIDI Lyric Event and closes the New Event dialog box.
	<b>System Exclusive</b> button	The System Exclusive button inserts a new MIDI System Exclusive Event and closes the New Event dialog box.
	<b>Cancel</b> button	Closes the New Event dialog box without making changes.
	<b>Help</b> button	Opens this Help document.





Opening

From the  
[Event List Editor](#)

Click the Event after which a New Event is desired, and choose **New Event...** from the **Edit** menu.

## Select a Control dialog box

**Description** The Select a Control dialog box is used to assign a MIDI Control Event Type to a MIDI Control Change Event.

**Uses** After opening the Select a Control dialog box, select a Control Event Type from the Control Event scroll area and click **OK** to assign the Control Event Type and close the Select a Control dialog box.

**Items**


<b>Control Event</b> scroll area	Select the desired Control Event Type you wish to assign to the currently selected Control Change Event.
<b>OK</b> button	Closes the Select a Control dialog box and commits changes.
<b>Cancel</b> button	Closes the Select a Control dialog box without committing changes.
<b>Help</b> button	Opens this Help document.



**Opening** From the [Event List Editor](#) Double-click a Control Event's Name in the Data column.

## Select a Drum Key dialog box

**Description** The Select a Drum Key dialog box is used to assign a MIDI Instrument Key (Pitch value which translates to a Drum sound in the current Drum Program) to a MIDI Note Event in Percussion Line data.

 This dialog box is available only when the selected Track is assigned to the [Drums Category](#) and also a MIDI Synth Program (Patch) name is selected in the [Program Set selection box](#) of the [Output Device pane](#) in the MIDI Setup dialog box.

**Uses** After opening the Select a Drum Key dialog box, select a Drum Key from the Drum Key scroll area and click **OK** to assign the Drum Key and close the Select a Drum Key dialog box.

- Items**
- Drum Key** scroll area Select the desired Drum Key you wish to assign to the currently selected Drum Key.
  - OK** button Closes the Select a Drum Key dialog box and commits changes.
  - Cancel** button Closes the Select a Drum Key dialog box without committing changes.
  - Help** button Opens this Help document.



**Opening** From the [Event List Editor](#) Double-click a Drum Note Event's Name in the Data column.

## Select a Key dialog box

**Description** The Select a Key dialog box is used to assign a MIDI Instrument Key (Pitch value) for MIDI Poly After Touch Events in Tonal Line data.

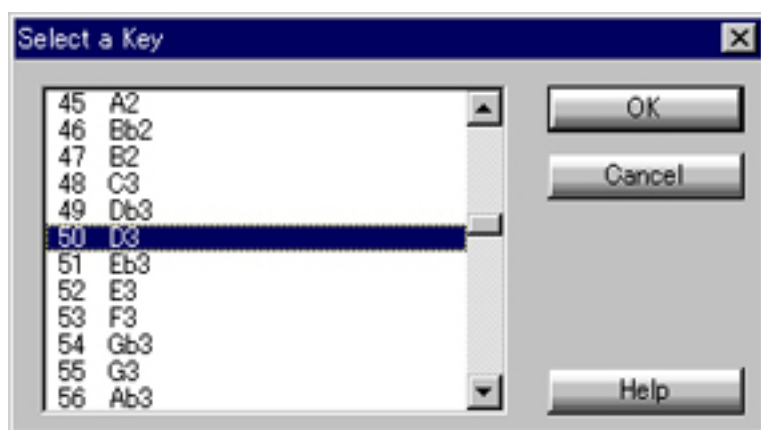
**Uses** After opening the Select a Key dialog box, select a Key from the Key scroll area and then click **OK** to assign Poly After Touch Events to the Key.

**Items** **Key scroll area** Select MIDI Instrument Key (Pitch value) you wish to assign Poly After Touch Events to.

**OK button** Closes the Select a Key dialog box and commits changes.

**Cancel button** Closes the Select a Key dialog box without committing changes.

**Help button** Opens this Help document.



**Opening** From the [Event List Editor](#) Double-click a Poly After Touch Event's Name in the Data column.

## Select a Program dialog box

Description	The Select a Program dialog box allows you to assign a MIDI Program (Patch) to a MIDI Program Change Event.								
Uses	After opening the Select a Program dialog box, select a Program (Patch) number from the Program scroll area and click <b>OK</b> to assign the MIDI Program and close the Select a Program dialog box.								
Items	<table><tr><td><b>Program</b> scroll area</td><td>Select the desired Control Event Type you wish to assign to the currently selected Control Change Event.</td></tr><tr><td><b>OK</b> button</td><td>Closes the Select a Program dialog box and commits changes.</td></tr><tr><td><b>Cancel</b> button</td><td>Closes the Select a Program dialog box without committing changes.</td></tr><tr><td><b>Help</b> button</td><td>Opens this Help document.</td></tr></table>	<b>Program</b> scroll area	Select the desired Control Event Type you wish to assign to the currently selected Control Change Event.	<b>OK</b> button	Closes the Select a Program dialog box and commits changes.	<b>Cancel</b> button	Closes the Select a Program dialog box without committing changes.	<b>Help</b> button	Opens this Help document.
<b>Program</b> scroll area	Select the desired Control Event Type you wish to assign to the currently selected Control Change Event.								
<b>OK</b> button	Closes the Select a Program dialog box and commits changes.								
<b>Cancel</b> button	Closes the Select a Program dialog box without committing changes.								
<b>Help</b> button	Opens this Help document.								



Opening	From the <a href="#">Event List Editor</a>	Double-click a Program Change Event's Name in the Data column.
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## Edit a System Exclusive Event dialog box

Description	The Edit a System Exclusive Event dialog box allows you to Edit MIDI System Exclusive messages. System Exclusive data is proprietary command information for your MIDI Device, and varies from manufacturer to manufacturer.																
Uses	After double-clicking a MIDI System Exclusive Event in the Event List Editor, the Edit a System Exclusive Event dialog box appears. You can then Edit, Save or Delete System Exclusive MIDI messages, as well as send them directly to your outboard MIDI equipment for immediate processing, such as Synth Module Mode Change, etc.																
Items	<table><tr><td><b>Event</b> scroll area</td><td>The Event scroll area allows you to freely Edit MIDI System Exclusive Events. Be aware that you need to have knowledge of MIDI System Exclusive message Implementation for the intended MIDI Device to effectively manipulate System Exclusive Events. This information is usually provided in your MIDI Equipment (Synth Module, etc.) Instruction Manual. Raw Event data appears in the Hexadecimal (Base 16) numbering system.</td></tr><tr><td><b>Saved Events</b> selection box</td><td>The Saved Events selection box is where MIDI System Exclusive events are stored and recalled using this dialog box's <b>Save</b> and <b>Delete</b> buttons.</td></tr><tr><td><b>Save</b> button</td><td>The Save button allows you to Save a MIDI System Exclusive Event while Editing another one. Saved Events appear in the Saved Events selection box, and are stored independently of Document data. These Events can then be recalled while working in different Documents and later CAMPS sessions.</td></tr><tr><td><b>Delete</b> button</td><td>The Delete button allows you to Delete MIDI System Exclusive Events from the Saved Events list in the Saved Events selection box.</td></tr><tr><td><b>Send</b> button</td><td>The <b>Send</b> button allows you to Send the MIDI System Exclusive Event highlighted in the Event scroll area directly to the currently selected MIDI Output Device. This serves as a manual System Exclusive command processor as well as a means of testing your Editing work.</td></tr><tr><td><b>OK</b> button</td><td>Closes the Edit a System Exclusive Event dialog box and commits changes.</td></tr><tr><td><b>Cancel</b> button</td><td>Closes the Edit a System Exclusive Event dialog box without committing changes.</td></tr><tr><td><b>Help</b> button</td><td>Opens this Help document.</td></tr></table>	<b>Event</b> scroll area	The Event scroll area allows you to freely Edit MIDI System Exclusive Events. Be aware that you need to have knowledge of MIDI System Exclusive message Implementation for the intended MIDI Device to effectively manipulate System Exclusive Events. This information is usually provided in your MIDI Equipment (Synth Module, etc.) Instruction Manual. Raw Event data appears in the Hexadecimal (Base 16) numbering system.	<b>Saved Events</b> selection box	The Saved Events selection box is where MIDI System Exclusive events are stored and recalled using this dialog box's <b>Save</b> and <b>Delete</b> buttons.	<b>Save</b> button	The Save button allows you to Save a MIDI System Exclusive Event while Editing another one. Saved Events appear in the Saved Events selection box, and are stored independently of Document data. These Events can then be recalled while working in different Documents and later CAMPS sessions.	<b>Delete</b> button	The Delete button allows you to Delete MIDI System Exclusive Events from the Saved Events list in the Saved Events selection box.	<b>Send</b> button	The <b>Send</b> button allows you to Send the MIDI System Exclusive Event highlighted in the Event scroll area directly to the currently selected MIDI Output Device. This serves as a manual System Exclusive command processor as well as a means of testing your Editing work.	<b>OK</b> button	Closes the Edit a System Exclusive Event dialog box and commits changes.	<b>Cancel</b> button	Closes the Edit a System Exclusive Event dialog box without committing changes.	<b>Help</b> button	Opens this Help document.
<b>Event</b> scroll area	The Event scroll area allows you to freely Edit MIDI System Exclusive Events. Be aware that you need to have knowledge of MIDI System Exclusive message Implementation for the intended MIDI Device to effectively manipulate System Exclusive Events. This information is usually provided in your MIDI Equipment (Synth Module, etc.) Instruction Manual. Raw Event data appears in the Hexadecimal (Base 16) numbering system.																
<b>Saved Events</b> selection box	The Saved Events selection box is where MIDI System Exclusive events are stored and recalled using this dialog box's <b>Save</b> and <b>Delete</b> buttons.																
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<b>Delete</b> button	The Delete button allows you to Delete MIDI System Exclusive Events from the Saved Events list in the Saved Events selection box.																
<b>Send</b> button	The <b>Send</b> button allows you to Send the MIDI System Exclusive Event highlighted in the Event scroll area directly to the currently selected MIDI Output Device. This serves as a manual System Exclusive command processor as well as a means of testing your Editing work.																
<b>OK</b> button	Closes the Edit a System Exclusive Event dialog box and commits changes.																
<b>Cancel</b> button	Closes the Edit a System Exclusive Event dialog box without committing changes.																
<b>Help</b> button	Opens this Help document.																



Opening

From the  
[Event List Editor](#)

Double-click the System exclusive Event to be Edited.

# Notation Editor

**Description** The Notation Editor allows you to view and edit a Line Block's MIDI Note data in a musical notation environment. Though provided more as a viewing tool, it is also a Line editor, and all Line related commands including CAMPS Compose features are available here. The CAMPS Notation Editor is not intended to be a sheet music preparation tool, so printing is not supported.

**Items** The Notation Editor contains various Controls for viewing and manipulating Notes. You can choose to Show or Hide the Controls with the **Edit Buttons** command in the **View** menu.

[Edit Buttons](#)

The Edit Buttons give you quick access to viewing and manipulation tools for the Notation Editor, as well as many other Editors available in CAMPS.

[Bar Area](#)

The Bar Area displays a range of Bar lines. Besides managing a song's Time Grid, this area also allows you to manipulate Loop and Punch In/Out recording functions.

[Text Info Area](#)

The Text Info Area displays a Document's general Text Events

[Chord Area](#)

The Chord Area displays a Document's Chords and Key Signatures.

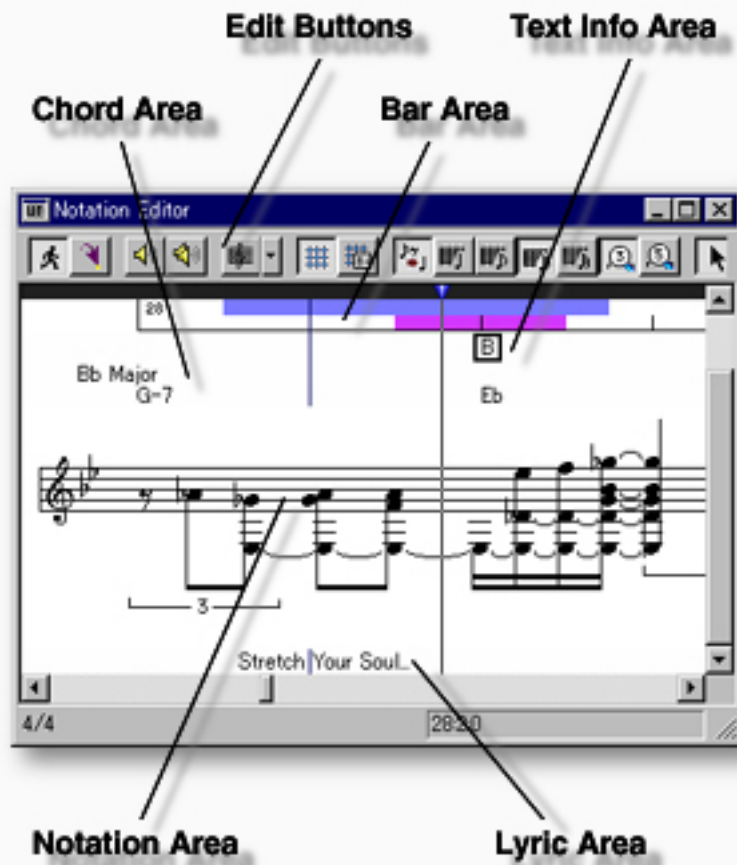
[Notation Area](#)

The Notation Area is the MIDI Note Event editing area in the Notation Editor, offering individual or collective graphical and menu-driven Note editing.

[Lyric Area](#)

The Lyric Area displays Line Block Lyrics.





Opening

From the [Document Window](#)

From the...  
[Event List Editor](#)  
[Pianoroll Editor](#)  
[Control Draw Editor](#)  
 Notation Editor

First, select a desired Line Block. Then, either choose **Notation Editor** from the **Editors** menu, or simply click the **Notation Editor** button at the top of the Document Window.

Choose **Notation Editor** from the **Editors** menu, or simply click the **Notation Editor** button at the top of the Editor Window.

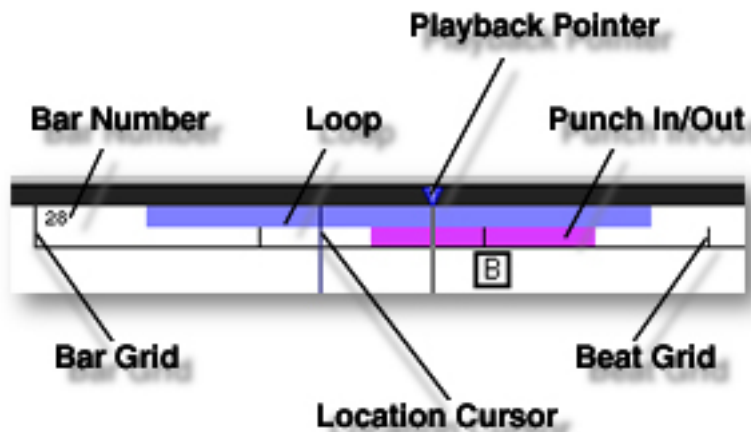
## Bar Area of the Notation Editor

**Description** The Bar Area displays Measures or divisions of musical Time, known as Bars, in a continuous row. This includes Bar Numbers and Beat divisions.

**Uses** Besides displaying Bar related information, the Bar Area allows you to manage a song's [Time Signature setup](#), location of the [Playback Pointer](#), and the Playback [Loop](#) and [Punch In/Out](#) Recording settings.

**Items**

- [Playback Pointer](#)
- [Loop](#) region
- [Punch In/Out](#) region
- [Bar Number](#)
- [Bar Grid](#)
- [Beat Grid](#)
- [Location Cursor](#)



## Items in the Bar Area

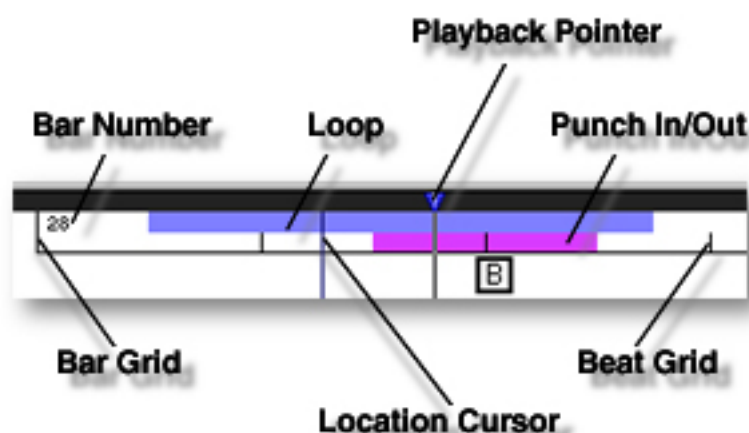
[Positioning the Playback Pointer](#)

[Inserting a Playback Loop](#)

[Inserting a Punch In/Out Record region](#)

Viewing Bar related items

<b>Playback Pointer</b>	The Playback Pointer resides in its own dark gray area at the top of the bar area, displaying the current Playback location in the Notation Editor. It also allows you to change the current Playback point.
<b>Loop region</b>	Displays your current Loop region. Starting Playback repeats (Loops) Playback in this region until you stop. This region is indicated by the color blue in the upper portion of the Bar Area in the Notation Editor.
<b>Punch In/Out region</b>	Displays your current Punch In/Out region. This region is indicated by the color magenta in the lower portion of the Bar Area.
<b>Bar Number</b>	A series of numbers given to Bars, starting on the left side with 1.
<b>Bar Grid</b>	Vertical lines across the Bar Area indicating Bar divisions. Because of the complexity of generating Notation display, the Bar Grid won't always be evenly spaced, but will always align with Bar Lines on the Staff in the Notation Area.
<b>Beat Grid</b>	Vertical lines evenly spaced across Bars indicating Beat divisions.
<b>Location Cursor</b>	A vertical Location Cursor line extends downward from the Bar Area through the Text Info, Chord and Lyric Areas. This cursor represents the horizontal position of your mouse as it relates to the time location in your Document. Corresponding numerical information is also displayed in the order of "Bar, Beat and Division" in the Interactive Information area at the bottom of the Notation Editor. The color of the Location Cursor depends on your settings in the Microsoft Windows Control Panel "Display" applet, under the heading "Selected Items" in the "Items" list of the "Appearance" pane.



Positioning the Playback Pointer

**Playback Pointer** and area

You can use the Playback Pointer to change the Playback point in the Notation Editor in two ways: Clicking a desired location in the dark gray Playback Pointer area at the top, or clicking and dragging the Playback Pointer to a desired location. Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. The Playback Pointer displays the current Playback location as CAMPS plays or records MIDI data.

Inserting a Playback Loop

**Loop** region

You can create a Loop region by clicking and dragging with your mouse in the upper portion of the Bar Area, below the Playback Pointer Area. As you drag your mouse, the Loop region appears blue in color, displaying a new Loop region. A Punch In/Out region of the same size is automatically inserted below the new Loop region. Click anywhere in the upper portion of the Bar Area to delete a Loop region.

Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. CAMPS repeats Loop region Playback until you stop it. Click anywhere in the upper portion of the Bar Area to delete a Loop region.



The start and end points of the Loop region snap to the resolution set with the **Resolution** buttons or the **Resolution** submenu of the **View** menu.

Inserting a Punch In/Out Record region

**Punch In/Out** region

You can create a Punch In/Out region by clicking and dragging your mouse in the lower portion of the Bar Area (below the Loop region). As you drag your mouse, this region appears magenta in color, displaying a new Punch In/Out region. A Loop of the same size is automatically inserted above the new Punch In/Out region. Click anywhere in the lower portion of the Bar Area to delete a Punch In/Out region.

Choose **Record** from the **MIDI** menu (or click the **Record** button in the [Record Control toolbar](#)) to begin recording.

If the automatically inserted Playback Loop is removed, CAMPS begins Playback from the Playback Pointer's current position, but Recording is only active as the Playback Pointer travels through the Punch In/Out region. This provides a true Cued Punch In/Out environment.



By combining with a Loop region beginning before the Punch In/Out region, CAMPS provides a continuous Cued Punch In/Out recording environment. Remove the automatically inserted Loop and insert a new one starting before the Punch In/Out region, or remove the Punch In/Out region and insert a new one starting after the Loop region.

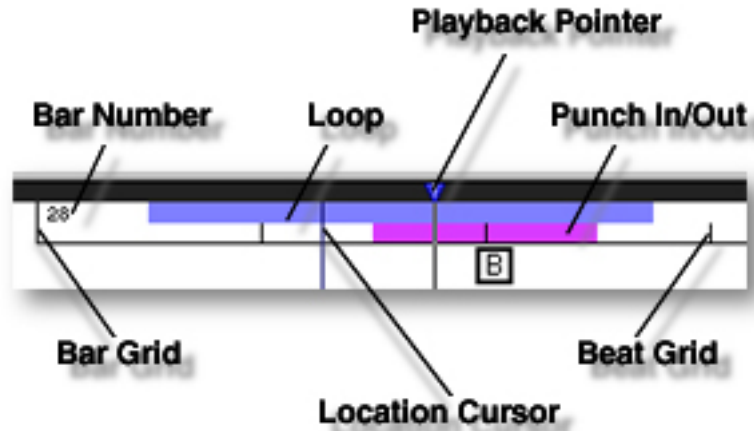


The start and end points of the Loop region snap to the resolution set with the **Resolution** buttons or the **Resolution** submenu of the **View** menu.

## Assigning a Time Signature

### Time Signature settings

CAMPS allows you to assign different Time Signatures to individual Bars. Right-click a Bar to which you are assigning a new Time Signature and then choose **Time Signature Setup...** to open the [Time Signature Setup dialog box](#). Set a Time Signature in the dialog box and click **OK**. Choosing **Time Signature Setup...** from the **Edit** menu opens the same dialog box.



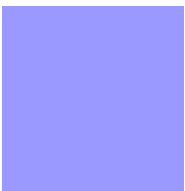
# Edit Buttons Area of the Notation Editor

**Description** The Edit Buttons are located at the top of the Notation Editor. These Buttons give you quick access to frequently used items like View Adjustments, Tools and Editors.

**Uses** The Edit Buttons in the Notation Editor include most of the **View** and **Editors** menu commands, including Notation-specific time display resolution and Note editing tools. Choose **Edit Buttons** from the **View** menu to show or hide the Edit Buttons.

- Items**
- [Auto Scroll](#) button
  - [Jump To Location](#) button
  - [Playback](#) button
  - [Playback with Others](#) button
  - [Clef](#) button
  - [Align To Grid](#) button
  - [Grid Setup](#) button
  - [Smart Notation](#) button
  - [Quarter Note Resolution](#) button
  - [Eighth Note Resolution](#) button
  - [Sixteenth Note Resolution](#) button
  - [32nd Note Resolution](#) button
  - [Triplet Resolution](#) button
  - [Quintuplet Resolution](#) button
  - [Arrow Tool](#) button
  - [I Beam Tool](#) button
  - [Magic Wand Tool](#) button
  - [Stamp Tool](#) button
  - [Eraser Tool](#) button
  - [Event List Editor](#) button
  - [Pianoroll Editor](#) button
  - [Control Draw Editor](#) button
  - [Notation Editor](#) button





Adjusting  
View**Auto Scroll**  
button

Sets the viewable area in the Bar, Text Info, Chord, Notation and Lyric Areas to follow the Playback Pointer during Playback and Recording.

**Jump To Location**  
button

Opens the [Jump To Location dialog box](#) which allows you to move the current viewpoint to a specified Bar in the Notation Editor.

**Clef**  
button

Click the Clef drop-down button to open a list of Clef choices for the Notation display Staff, or click the main **Clef** button to switch to the next Clef in the list. Changing this setting effects how Notes are displayed on the Notation Staff with respect to Line data's musical register (Pitch range). There is no actual change to Note Event data.

**Align To Grid**  
button

Switches between Activate or Deactivate Align To Grid in the Bar and Notation Areas. Grid Alignment is specified in the [Grid Setup dialog box](#).

**Grid Setup**  
button

Opens the [Grid Setup dialog box](#), allowing you to adjust the Alignment Grid Resolution for individual areas of the Notation Editor and applicable Editors. Depending on which Area of the Notation Editor is active before choosing this Menu Item, the corresponding pane in the Grid Setup dialog box will be preselected.

**Smart Notation**  
button

This function "filters" the exact Notation display of Rests (spaces) between Note Events to "clean up" the Notation display. Time between Notes is added to those Notes with respect to Note and Beat proximity. There is no actual change to Note Event data.

**Quarter Note Resolution**  
button

Sets the Note duration display in the Notation Area to resolve to the nearest Quarter Note. This does not change actual Note Event data.

**Eighth Note Resolution**  
button

Sets the Note duration display in the Notation Area to resolve to the nearest Eighth Note. This does not change actual Note Event data.

**Sixteenth Note Resolution**  
button

Sets the Note duration display in the Notation Area to resolve to the nearest Sixteenth Note. This does not change actual Note Event data. Results with this option may not be evident when **Smart Notation** is active.

**32nd Note Resolution**  
button

Sets the Note duration display in the Notation Area to resolve to the nearest 32nd Note. This does not change actual Note Event data. Results with this option may not be evident when **Smart Notation** is active.

**Triplet Resolution**  
button

Sets the Note duration display in the Notation Area to resolve to the nearest Note Resolution selected from Quarter, 8th, 16th, 32nd Note or corresponding Triplet. This does not change actual Note Event data. Results with this option may not be evident when **Smart Notation** is active.



Auditioning	<p><b>Quintuplet Resolution</b> button</p> <p><b>Playback</b> button</p> <p><b>Playback with Others</b> button</p>	<p>Sets the Note duration display in the Notation Area to resolve to the nearest Note Resolution selected from Quarter, 8th, 16th, 32nd Note or corresponding Quintuplet. This does not change actual Note Event data. Results with this option may not be evident when <b>Smart Notation</b> is active.</p> <p>Starts Audition Playback of the currently selected Notes with an automatically inserted Playback Loop. If no individual Notes are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.</p> <p>Starts Audition Playback of the currently selected Notes with an automatically inserted Playback Loop along with all the other activated Tracks in the same Bar region. If no individual Notes are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.</p>
Selecting Tools	<p><b>Arrow Tool</b> button</p> <p><b>I Beam Tool</b> button</p> <p><b>Magic Wand Tool</b> button</p> <p><b>Stamp Tool</b> button</p> <p><b>Eraser Tool</b> button</p>	<p>Selects the Arrow Tool, allowing you to select and manipulate Notes in the Notation Editor. Notes need to be selected before related functions become available.</p> <p>Selects the I Beam Tool, allowing you to quickly select regions in the Notation Area.</p> <p>Selects the Magic Wand Tool, allowing you to quickly recreate individual Notes or regions of Notes with automatically assigned Pitches (EZgenerate). In the Notation Area, drag the Magic Wand Tool to create a selection region around Notes you wish to be EZgenerated.</p> <p>Selects the Stamp Tool, allowing you to quickly insert new Notes of a fixed length in the Pianoroll Area with a click of your mouse. Use the <a href="#">Note Stamp toolbar</a> to adjust the length of Notes that the <b>Stamp</b> tool creates. The Length is also adjustable at any later time in the Pianoroll Editor.</p> <p>Selects the Eraser Tool, allowing you to quickly delete Notes in the Notation Area with a click of your mouse. Note that Rests can not be deleted; instead they are automatically adjusted to indicate the absence of Notes.</p>
Opening Editors	<p><b>Event List Editor</b> button</p> <p><b>Pianoroll Editor</b> button</p> <p><b>Control Draw Editor</b> button</p> <p><b>Notation Editor</b> button</p>	<p>Opens the <a href="#">Event List Editor</a>, allowing you to edit individual MIDI Events of the selected Line Block in vertical list format.</p> <p>Opens the <a href="#">Pianoroll Editor</a>, allowing you to edit Notes of the selected Line Block in Pianoroll graph format.</p> <p>Opens the <a href="#">Control Draw Editor</a>, allowing you to edit MIDI Control Events of a selected Line Block with a unique freestyle curve drawing method.</p> <p>Opens a new <a href="#">Notation Editor</a>, allowing you to make alternate edits of the selected Line Block in Musical Notation form.</p>



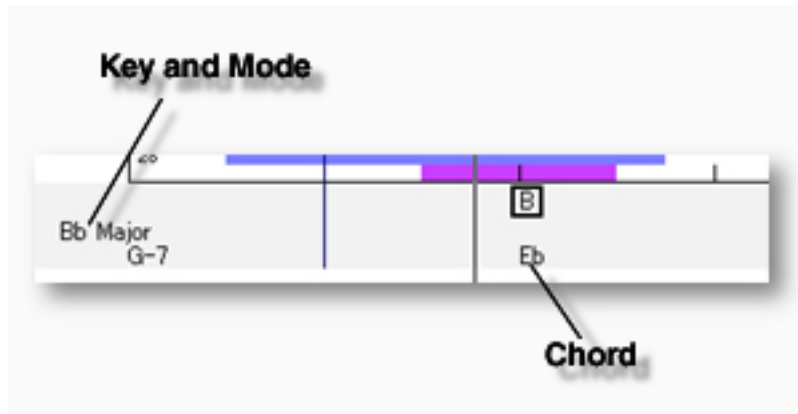
# Chord Area of the Notation Editor

**Description** The Chord Area displays a Document's Chords. It is provided as a visual reference in the Notation Editor.

**Uses** Reference the Chord Area for Key Signature and Chord display. To edit Chords, use the [Document Window](#) or [Pianoroll Editor](#).

**Items** **Key and Mode display** This display is Located in its own row below the Text Info Area and just before each Bar which contains a change of Key and Mode. It displays the Key and Mode of the first Chord Container in every Bar. Corresponding Key Signature Notation appears on the Staff in the Notation Area.

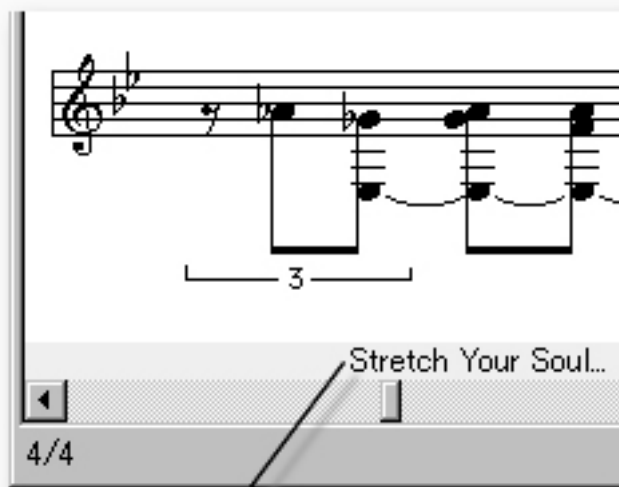
**Chord display** This display is Located in its own row just below the Key and Mode display. It displays the Chord Names of each Bar's Chord Containers.



## Lyric Area of the Notation Editor

**Description** The Lyric Area displays a Line Block's Lyrics in a continuous row at the bottom of the Notation Editor window. It is provided as a visual reference in the Notation Editor.

**Uses** Reference the Lyric Area as synchronizing Lyrics with your composition. To edit Lyric Events, use the [Pianoroll Editor](#) or [Control Draw Editor](#).



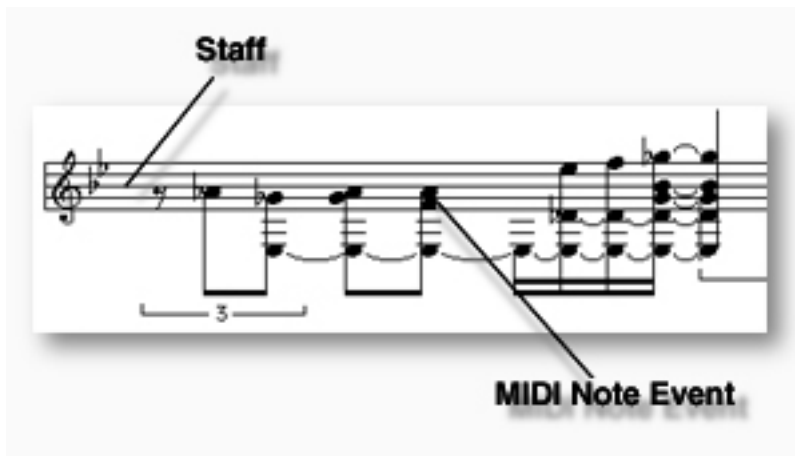
**Lyric Area**

## Notation Area of the Notation Editor

**Description** The Notation Area is the MIDI Note Event editing area in the Notation Editor, offering a musical Notation environment for editing individual Notes, groups of Notes or an entire Line Block at once.

**Uses** Many editing tools facilitate a wide range of editing and creation options for Notes in the Notation Area. As usual, Notes can also be individually or collectively manipulated using the menu command system.

**Items** [MIDI Note Event](#)  
[Staff](#)



## Items in the **Notation Area**

[Creating and Manipulating MIDI Note Events](#)

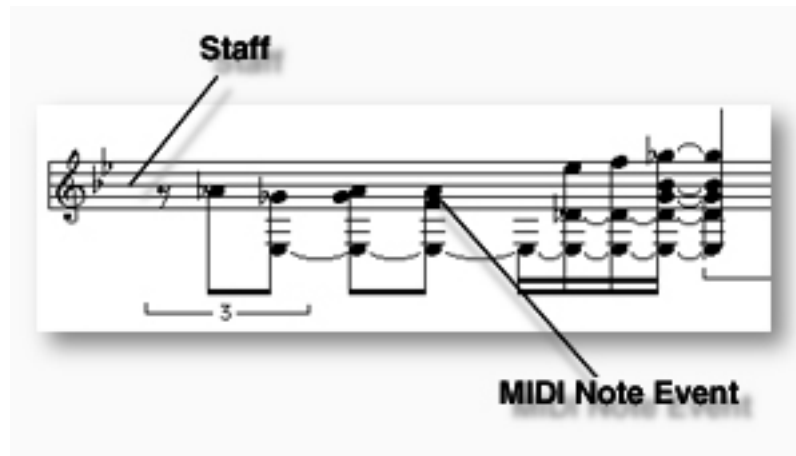
[Adjusting the View of the Notation Area](#)

### **MIDI Note Event**

A MIDI Note Event is MIDI data which executes Note generation. In the Notation Editor, MIDI Note Events are displayed in Notated form such as Whole Note, Half Note, etc. You can [create](#), [edit](#), [copy](#), [move](#) or [delete](#) MIDI Note Events as needed.

### **Staff**

In most cases, [Notes](#) are displayed on a standard 5-line musical Staff. The Staff display also includes [Clef](#), [Bar Lines](#), [Rests](#), [Dots](#) and [Ties](#), as well as initial and subsequent [Key Signatures](#) and [Time Signatures](#).



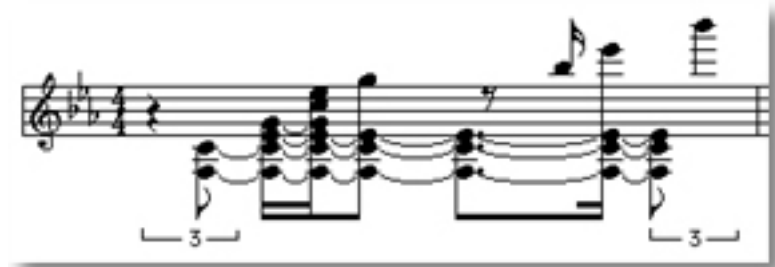
Adjusting the View of the Notation Area

<b>Staff</b>	<p>Tonal (Melodic) Notes are displayed on a standard 5-line musical Staff. The Staff's Clef is adjustable, but the rest of the symbols displayed on the Staff in the Notation Area are automatically prepared from your Line data using your <b>Smart Notation</b> and <b>Resolution</b> settings as guides.</p> <p>By default, the Staff display differs for Notes in the Drums Category, and its appearance for Percussion data is adjustable using the <a href="#">Drums Notation Setup dialog box</a>. In this dialog box the Percussion Notation Staff may be changed from five lines to one, and various Note symbols can be selected for each MIDI Pitch value to accommodate different arrangements of Drum sounds in MIDI Synth Programs. Additionally, Percussion Note Stems are drawn in different directions than usual, and Accidentals are not included when using a <b>[Drums Notation Set]</b> in your <b>Clef</b> settings. The default <b>[Drums Notation Set]</b> in CAMPS is "GM 5 Lines".</p>
<b>Clef</b>	<p>The Staff display includes the following Items for Tonal or Percussion Notes:</p> <p>The Clef defines how Notes are displayed on the Notation Staff with respect to Line data's musical register (Pitch range). Use the <a href="#">Clef button</a> or the <a href="#">Clef submenu</a> of the <b>View</b> menu to change the Clef on the Staff of the Notation Area. Actual Note Event data Pitch range is unaffected by this Notation display setting.</p>
<a href="#">Key Signature</a>	<p>Defined in the Chord Area of the Document Window or Pianoroll Editor, the initial Key Signature is Notated on the Staff with Sharps or Flats immediately following the Clef. Subsequent Key changes are Notated immediately following their first Bar Line.</p>
<a href="#">Time Signature</a>	<p>Defined in the Bar Area of various Editors, the initial Time Signature is Notated on the Staff with the customary numerical fraction display immediately following the Key Signature. Subsequent Time Signature changes are Notated immediately following their first Bar Line, after any Key Signature changes that may be present.</p>
<b>Note</b>	<p>Note durations in the Notation Editor are represented by their customary symbols such as Whole, Half, Quarter, Eighth, Sixteenth, 32nd and 64th Notes, including Dots and Ties. These designations are for viewing purposes, interpreting actual MIDI Note Event duration into Notated form under conditions you set with the <a href="#">Smart Notation</a> and <a href="#">Resolution</a> buttons or <a href="#">View</a> menu commands.</p>
<b>Rest</b>	<p>Rests are automatically prepared by the Notation Editor according to the "spaces" between Note Events. Any changes made to Notes in the Notation or other Editors causes recalculation of Rest values and locations in the Notation Editor. The display of Rests is further controlled by your settings of the <a href="#">Smart Notation</a> and <a href="#">Resolution</a> buttons or <a href="#">View</a> menu commands. Actual Note Event data is unaffected by these Notation display settings.</p>

<b>Dot</b>	A Dot is added to the right side of a Note to increase its duration by half its original time value. Any changes made to Notes in the Notation Editor causes recalculation of Notes' possible Dotted status. The display of Dots is further controlled by your settings of the <a href="#">Smart Notation</a> and <a href="#">Resolution</a> buttons or <a href="#">View</a> menu commands. Actual Note Event data is unaffected by these Notation display settings.
<b>Tie</b>	Ties are displayed between Note Events that actually overlap in your Line data, and therefore sound as one. Any changes made to Notes in the Notation Editor causes recalculation of Notes' possible Tied status. The display of Ties is further controlled by your settings of the <a href="#">Smart Notation</a> and <a href="#">Resolution</a> buttons or <a href="#">View</a> menu commands. Actual Note Event data is unaffected by these Notation display settings.
<b>Bar Line</b>	Bar Lines always represent actual Bars, but to conserve Editor window space, their positions are adjusted according to how many Notes are present.

See also:

[Creating and Manipulating MIDI Note Events](#)





## MIDI Note Event

Note:

The Notation Editor "rounds off" Note Event duration values to facilitate legitimate music Notation display. Note Event data is not changed by this process, it's just part of the Notation display process. The Notation Editor is a very handy tool, but you may find the Pianoroll Editor better suited for certain detailed MIDI Note editing tasks.

After using any of the special Tool buttons at the top of the Notation Editor, be sure to switch back to the standard **Arrow Tool** for regular manipulation operations.



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## CREATING NEW MIDI NOTE EVENTS

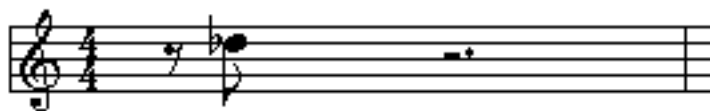
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Method 1:

Click the **Record** button in the [Record Control toolbar](#) or choose the desired Recording command from the **Record** submenu of the **MIDI** menu and begin playing your MIDI Instrument. Loop and Punch In/Out regions will be automatically assigned for the length of the currently selected Line Block. If you prefer, you can assign a specific Punch In/Out region before activating Record. Be aware that the Track Arming buttons found in the Document Window have no effect in the Notation Editor. Once **Record** is activated and you begin playing, any existing data in the currently selected Line Block will be replaced.

Method 2:

Select the **Stamp** tool at the top of the Notation Editor and then click anywhere in the Notation Area to assign Note Events. Notes will be created as you click; their Pitch and Location following the **Stamp** tool's position. Length and other attributes can be modified later.



Note Events will snap to the nearest horizontal (time) resolution point as you create them. This resolution depends on your settings with the **Resolution** buttons at the top of the Notation Editor or in the **Note View** submenu of the **View** menu.



Since the Notation Editor interprets Note duration for Notation

display, the [Pianoroll Editor](#) provides a more exact environment for creating Notes with your mouse.

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## EDITING MIDI NOTE EVENTS

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### Method 1:

Using the **Arrow** tool, click and drag desired Note Event to a new vertical Pitch and/or horizontal time position in the Notation Area. See also [MOVING MIDI NOTE EVENTS](#) below.



Note Events will snap to the nearest horizontal (time) resolution point as you drag them. This resolution depends on your settings with the **Resolution** buttons at the top of the Notation Editor or in the **Note View** submenu of the **View** menu.

### Method 2:

Use the **Magic Wand** tool to reCompose a region of Notes. Click the **Magic Wand** tool button at the top of the Notation Editor. Then, click and hold your mouse button down at an empty location in the Velocity Area and drag the **Magic Wand** over desired Note Events, or click each Note individually.

D Major  
D7(sus4) G

### Method 3:

Right Click desired Note Event and choose any one of the many commands available from the pop-up menu or submenus. Alternatively, click desired Note Event and choose desired command from the **Edit** or **Line** menus. See also [CREATING NEW MIDI NOTE EVENTS](#) above.

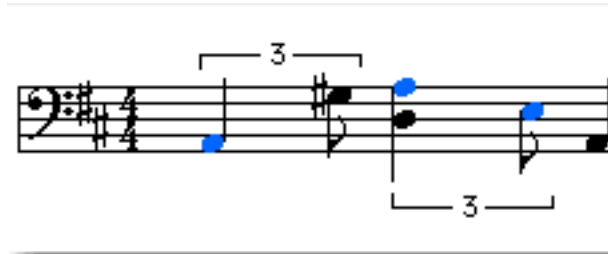
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## SELECTING MIDI NOTE EVENTS

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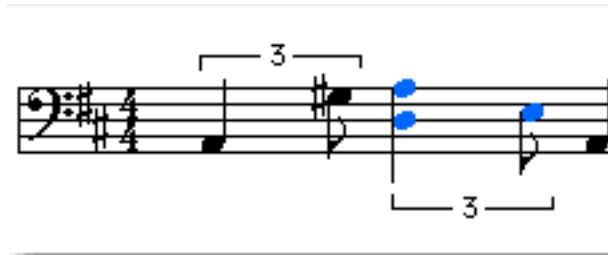
### Method 1:

Using the **Arrow** tool, you can select individual Note Events. You can select multiple Note Events by holding the Ctrl (or Shift) key down as you select. Alternatively, Clicking and holding your mouse button down at an empty location in the Notation Area and dragging the cursor over desired Note Events allows you to select multiple Note Events in one quick operation.




### Method 2:

Using the **I Beam** tool, you can select all Note Events in a horizontal (time) region at once. After selecting the **I Beam** tool at the top of the Notation Editor, click and hold your mouse button down at an empty location in the Notation Area and drag the **I Beam** horizontally over the desired Note Event region.



Selecting Note Events enables use of Note Event related commands under the **Edit** and **Line** Menu bar items. Once selected, you can then move, copy, paste or delete a group of Note Events at one time using the right click, menu bar or click and drag method.

 Selecting entire Note regions will not be possible if the **Magic Wand**, **Stamp** or **Eraser** tool button at the top of the Notation Editor is currently active. In these cases, Note Events will be changed, created or deleted (depending on which of these buttons is active).

---

## MOVING MIDI NOTE EVENTS

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### Method 1:

Using the **Arrow** tool, click and drag desired Note Events to a new location in the Notation Area. Any vertical motion during your dragging operation will effect the Note's Pitch as well. See [EDITING MIDI NOTE EVENTS](#) above.

### Method 2:

Select a Note Event with your mouse and use the arrow keys on your computer's keyboard to move the selected Note with more precision. The up/down arrow keys move a Note's Pitch by intervals (half steps), and the left/right arrow keys move a Note's location in time by Divisions.

### Method 3:

This method allows you to move Note Events between Documents.

Right-click a Note Event and choose **Cut Note Event** to remove a Note Event from its current location. Alternatively, click desired Note Event and choose **Cut Note Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Note Events in one operation.

Next, right-click a desired location in the Notation Editor's Notation Area of the desired Document and choose **Paste Note Event** to Paste the Cut Note Event(s). Alternatively, select a desired location in the Notation Area and choose **Paste Note Event** from the **Edit** menu.



Note Events will snap to the nearest horizontal (time) resolution point as you paste them. This resolution depends on your settings with the **Resolution** buttons at the top of the Notation Editor or in the **Note View** submenu of the **View** menu.

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## COPYING / PASTING MIDI NOTE EVENTS

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Right-click a Note Event and choose **Copy Note Event** to copy it. Alternatively, click desired Note Event and choose **Copy Note Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Note Events in one operation.

Next, right-click a desired location in the Notation Editor's Notation Area of the desired Document and choose **Paste Note Event** to Paste the Copied Note Event(s). Alternatively, select a desired location in the Notation Area and choose **Paste Note Event** from the **Edit** menu.



Note Events will snap to the nearest horizontal (time) resolution point as you paste them. This resolution depends on your settings with the **Resolution** buttons at the top of the Notation Editor or in the **Note View** submenu of the **View** menu.

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## DELETING MIDI NOTE EVENTS

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### Method 1:

Select the **Eraser** tool at the top of the Notation Editor and simply click on a Note Event to delete it. With the **Eraser** tool, clicking and holding your mouse button down at an empty location in the Notation Area and dragging the **Eraser** over desired Note Events allows you to delete multiple Note Events in one quick operation.



### Method 2:

Right-click a Note Event and choose **Clear Note Event** to delete it. Alternatively, click desired Note Event and choose **Clear Note Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Note Events in one operation.

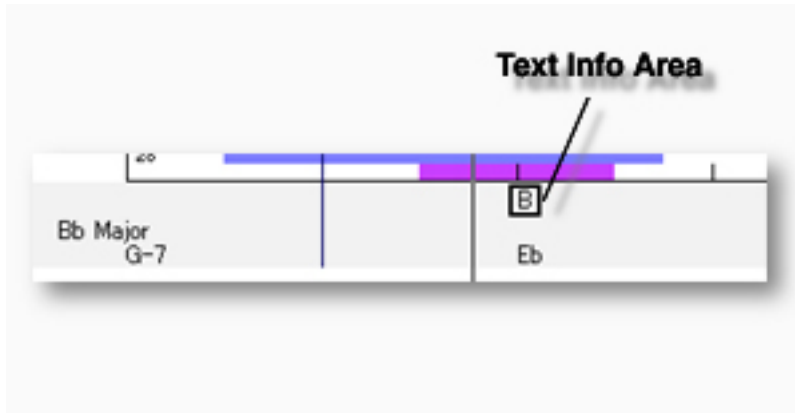
See also:

[Adjusting the View of the Notation Area](#)

## Text Info Area of the Notation Editor

**Description** The Text Info Area displays a Document's general Text Information in a continuous row under the Bar Area. It is provided as a visual reference in the Notation Editor.

**Uses** Reference the Text Info Area to more quickly locate a particular point in your music. To edit Text Events, use the [Document Window](#), [Pianoroll Editor](#), [Control Draw Editor](#), [Tempo Draw Editor](#) or [Text List Editor](#).

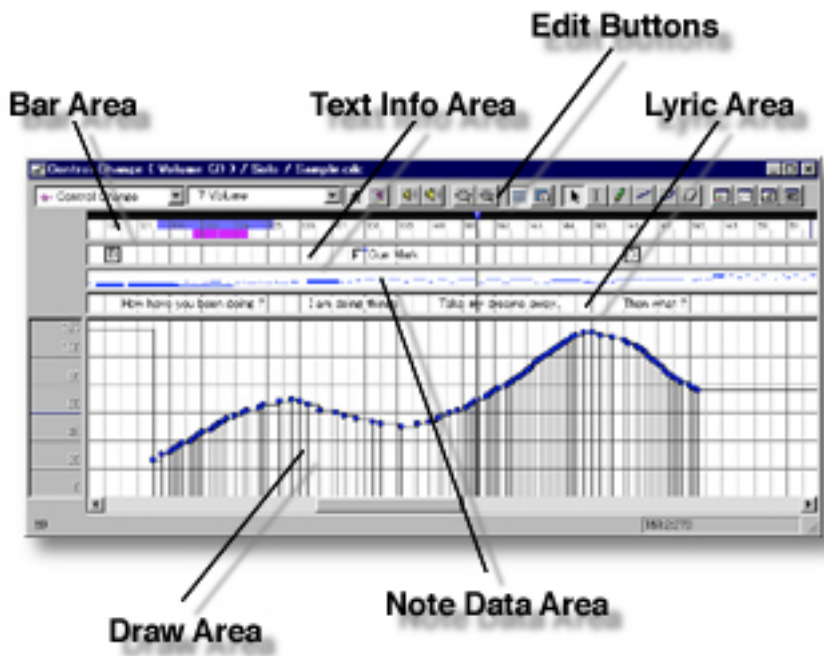


# Control Draw Editor

**Description** The Control Draw Editor allows you to edit a Line Block's MIDI Control data with a unique freestyle curve drawing method.

**Items** The Control Draw Editor contains various Controls and Editing Areas for manipulating MIDI Control Events and other objects. You can choose to Show or Hide the Controls with the **Edit Buttons** command in the **View** menu. You can adjust the vertical size of each Editing Area by clicking and dragging the horizontal or vertical separator bar between Areas.

- [Edit Buttons](#) The Edit Buttons give you quick access to Viewing and Manipulation Tools for the Control Draw Editor, as well as many of the Editors available in CAMPS.
- [Note Data Area](#) The Note Data Area displays the currently selected Line Block's Note data in Pianoroll form for you reference.
- [Bar Area](#) The Bar Area displays a range of Bar lines. Besides managing a song's Time Grid, this area also allows you to manipulate Loop and Punch In/Out functions.
- [Text Info Area](#) The Text Info Area displays Text Events such as Rehearsal Letters and Markers, allowing you to create or edit them.
- [Lyric Area](#) The Lyric Area displays Lyrics, allowing you to create or edit them.
- [Draw Area](#) The Draw Area allows you to edit MIDI Control Event data with a unique drawing method.



## Opening

From the  
[Document Window](#)

From the...  
[Event List Editor](#)  
[Pianoroll Editor](#)

Control Draw Editor  
[Notation Editor](#)

First, select a desired Line Block. Then, either choose **Control Draw Editor** from the **Editors** menu, or simply click the **Control Draw Editor** button at the top of the Document Window.

Choose **Control Draw Editor** from the **Editors** menu, or simply click the **Control Draw Editor** button at the top of the Editor Window.

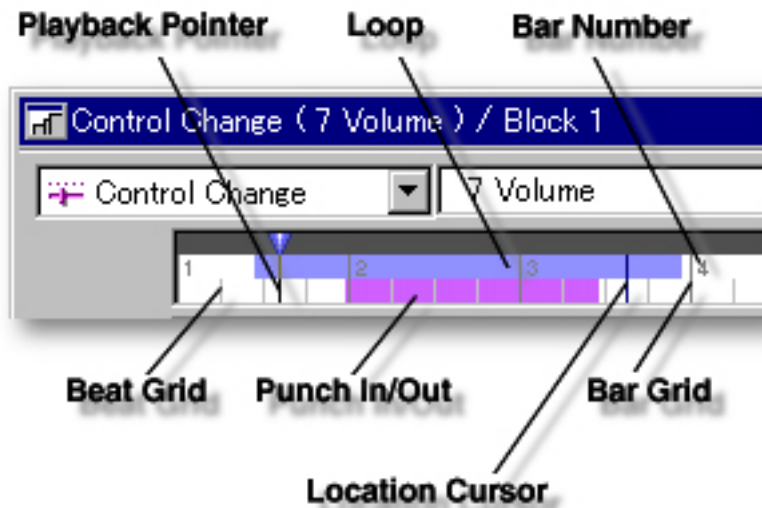


# Bar Area of the Control Draw Editor

**Description** The Bar Area displays Measures or divisions of musical Time, known as Bars, in a continuous row. This includes Bar Numbers, the Bar Grid and Beat Grid.

**Uses** Besides displaying Bar related information, the Bar Area allows you to manage a song's [Time Signature setup](#), location of the [Playback Pointer](#), and the Playback [Loop](#) and [Punch In/Out](#) Recording settings.

- Items**
- [Playback Pointer](#)
  - [Loop](#) region
  - [Punch In/Out](#) region
  - [Bar Number](#)
  - [Bar Grid](#)
  - [Beat Grid](#)
  - [Location Cursor](#)



## Items in the Bar Area

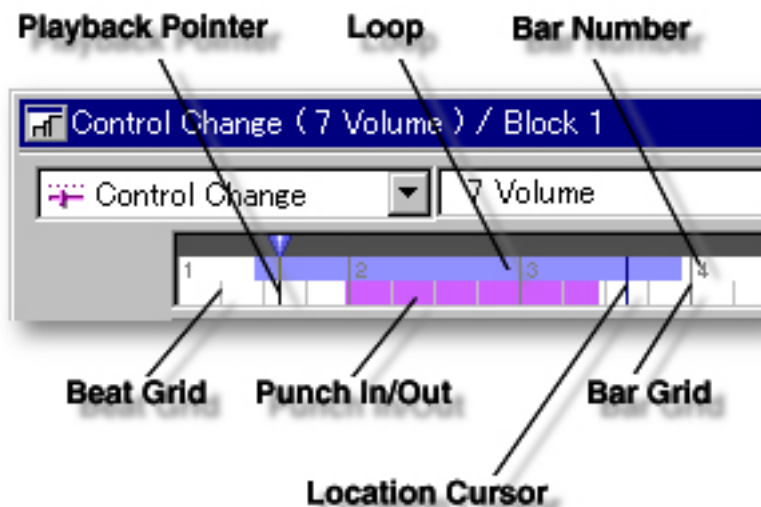
[Positioning the Playback Pointer](#)

[Inserting a Playback Loop](#)

[Inserting a Punch In/Out Record region](#)

Viewing Bar related items

<b>Playback Pointer</b>	The Playback Pointer resides in its own dark gray area at the top of the bar area, displaying the current Playback location in the Control Draw Editor. It also allows you to change the current Playback point.
<b>Loop region</b>	Displays your current Loop region. Starting Playback repeats (Loops) Playback in this region until you stop. This region is indicated by the color blue in the upper portion of the Bar Area in the Control Draw Editor.
<b>Punch In/Out region</b>	Displays your current Punch In/Out region. This region is indicated by the color magenta in the lower portion of the Bar Area.
<b>Bar Number</b>	A series of numbers given to Bars, starting on the left side with 1.
<b>Bar Grid</b>	Vertical lines horizontally spaced across the Bar Area indicating Bar divisions.
<b>Beat Grid</b>	Vertical lines horizontally spaced across Bars indicating Beat divisions.
<b>Location Cursor</b>	A vertical Location Cursor line in the Bar Area represents the horizontal position of your mouse as it relates to the time location in your Document. Corresponding numerical information is also displayed in the order of "Bar, Beat and Division" in the Interactive Information area at the bottom of the Control Draw Editor. The color of the Location Cursor depends on your settings in the Microsoft Windows Control Panel "Display" applet, under the heading "Selected Items" in the "Items" list of the "Appearance" pane.



Positioning the Playback Pointer

**Playback Pointer** and area

You can use the Playback Pointer to change the Playback point in the Control Draw Editor in two ways: Clicking a desired location in the dark gray Playback Pointer area at the top, or clicking and dragging the Playback Pointer to a desired location. Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. The Playback Pointer displays the current Playback location as CAMPS plays or records MIDI data.

Inserting a Playback Loop

**Loop** region

You can create a Loop region by clicking and dragging with your mouse in the upper portion of the Bar Area, below the Playback Pointer Area. As you drag your mouse, the Loop region appears blue in color, displaying a new Loop region. A Punch In/Out region of the same size is automatically inserted below the new Loop region. Click anywhere in the upper portion of the Bar Area to delete a Loop region.

Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. CAMPS repeats Loop region Playback until you stop it. Click anywhere in the upper portion of the Bar Area to delete a Loop region.



The start and end points of the Loop region snap to the Grid resolution set in the [Grid Setup dialog box](#), if **Align to Grid** is selected in the **Grid View** submenu of the **View** menu.

Inserting a Punch In/Out Record region

**Punch In/Out** region

You can create a Punch In/Out region by clicking and dragging your mouse in the lower portion of the Bar Area (below the Loop region). As you drag your mouse, this region appears magenta in color, displaying a new Punch In/Out region. A Loop of the same size is automatically inserted above the new Punch In/Out region. Click anywhere in the lower portion of the Bar Area to delete a Punch In/Out region.

Choose **Record** from the **MIDI** menu (or click the **Record** button in the [Record Control toolbar](#)) to begin recording.

If the automatically inserted Playback Loop is removed, CAMPS begins Playback from the Playback Pointer's current position, but Recording is only active as the Playback Pointer travels through the Punch In/Out region. This provides a true Cued Punch In/Out environment.



By combining with a Loop region beginning before the Punch In/Out region, CAMPS provides a continuous Cued Punch In/Out recording environment. Remove the automatically inserted Loop and insert a new one starting before the Punch In/Out region, or remove the Punch In/Out region and insert a new one starting after the Loop region.

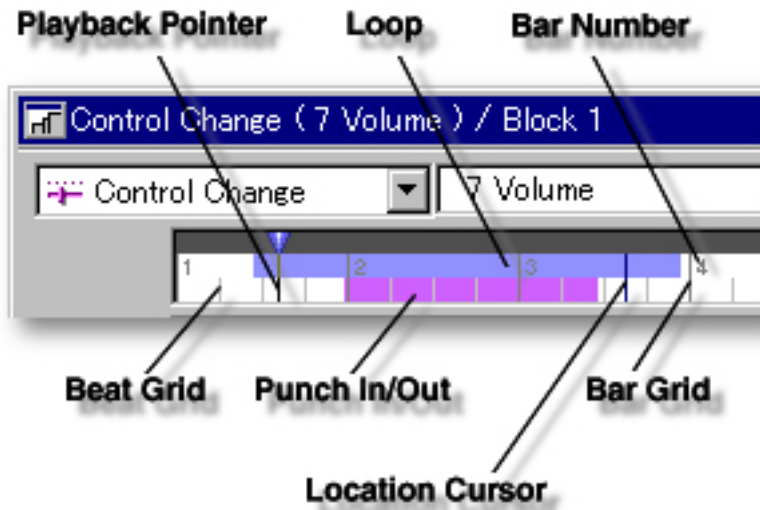


The start and end points of the Punch In/Out region align to the Grid resolution set in the [Grid Setup dialog box](#), if **Align to Grid** is selected in the **Grid View** submenu of the **View** menu.

Assigning a Time Signature

**Time Signature settings**

CAMPS allows you to assign different Time Signatures to individual Bars. Right-click a Bar to which you are assigning a new Time Signature and then choose **Time Signature Setup...** to open the [Time Signature Setup dialog box](#). Set a Time Signature in the dialog box and click **OK**. (Choosing **Time Signature Setup...** from the **Edit** menu opens the same dialog box.)



# Edit Buttons Area of the Control Draw Editor

**Description** The Edit Buttons are located at the top of the Control Draw Editor. These Buttons give you quick access to frequently used items like View Adjustments, Tools and Editors.

**Uses** The selection boxes in the left side of the Edit Buttons Area determine which MIDI Control Events are displayed in the Draw Area of the Control Draw Editor. The rest of the Edit Buttons include most of the **View** and **Editors** menu commands. The Tool buttons work in slightly different ways depending on which Area of the Control Draw Editor you are working in. Choose **Edit Buttons** from the **View** menu to show or hide the Edit Buttons.

- Items**
- [Control Event Type](#) selection box
  - [Control Event](#) selection box
  - [Auto Scroll](#) button
  - [Jump To Location](#) button
  - [Playback](#) button
  - [Playback with Others](#) button
  - [Zoom Out \(H\)](#) button
  - [Zoom In \(H\)](#) button
  - [Align To Grid](#) button
  - [Grid Setup](#) button
  - [Arrow Tool](#) button
  - [I Beam Tool](#) button
  - [Pen Tool](#) button
  - [Line Tool](#) button
  - [Oval Tool](#) button
  - [Eraser Tool](#) button
  - [Event List Editor](#) button
  - [Pianoroll Editor](#) button
  - [Control Draw Editor](#) button
  - [Notation Editor](#) button



Selecting  
Control Events**Control Event Type**  
selection box

This is where you select which Type of Control Events appear in the Draw Area of the Control Draw Editor. While any given location in a Line Block may contain several different types of MIDI Control Events, the Control Draw Editor is designed to deal with only one type at a time. Depending on the type of Control Event selected, the Control Event selection box will appear next to the Control Event Type selection box, allowing you to select exactly which type of Events to work with.

**Control Event**  
selection box

This selection box appears only when the Control Event Type is set to either Control Change or Poly After Touch. For the Control Change setting, the Control Event selection box allows you to choose which kind of Control Change Events, such as Volume or Pan, are displayed in the Draw Area. For the Poly After Touch setting, the Control Event selection box allows you to choose which Note's Poly After Touch Events are displayed.

Adjusting  
View**Auto Scroll**  
button

Sets the viewable area in the Bar, Text Info, Note Data, Lyric and Draw Areas to follow the Playback Pointer during Playback and Recording.

**Jump To Location**  
button

Opens the [Jump To Location dialog box](#) which allows you to move the current viewpoint to a specified Bar in the Control Draw Editor.

**Zoom Out (H)**  
button

Incrementally decreases the Horizontal size of the Bar, Text Info, Note Data, Lyric and Draw Areas, increasing their viewable area.

**Zoom In (H)**  
button

Incrementally increases the Horizontal size of the Bar, Text Info, Note Data, Lyric and Draw Areas, decreasing their viewable area.

**Align To Grid**  
button

Switches between Activate or Deactivate Align To Grid in the Text Info, Lyric and Draw Areas. Grid Alignment is specified in the [Grid Setup dialog box](#).

**Grid Setup**  
button

Opens the [Grid Setup dialog box](#), allowing you to adjust the Alignment Grid Resolution for individual areas of the Control Draw Editor and applicable Editors. Depending on which Area of the Control Draw Editor is active before choosing this Menu Item, the corresponding pane in the Grid Setup dialog box will be preselected.

Auditioning

**Playback**  
button

Starts Audition Playback of the currently selected Control Events with an automatically inserted Playback Loop. If no individual Control Events are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.

**Playback with Others**  
button

Starts Audition Playback of the currently selected Control Events with an automatically inserted Playback Loop along with all the other activated Tracks in the same Bar region. If no individual Control Events are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.

Selecting  
Tools**Arrow Tool**  
button

Selects the Arrow Tool, allowing you to select and manipulate objects in the Control Draw Editor. Objects need to be selected before related functions become available.

Opening Editors

<b>I Beam Tool</b> button	Selects the I Beam Tool, allowing you to quickly select regions in the Draw Area.
<b>Pen Tool</b> button	Selects the Pen Tool, allowing you to quickly create or define values of MIDI Control Events in the Draw Area with a unique freestyle drawing method.
<b>Line Tool</b> button	Selects the Line Tool, allowing you to quickly create and edit Control Events using a straight line drawing method.
<b>Oval Tool</b> button	Selects the Oval Tool, allowing you to quickly create and edit Control Events using an automatic curve drawing method.
<b>Eraser Tool</b> button	Selects the Eraser Tool, allowing you to quickly delete objects in the Control Draw Editor.
<b>Event List Editor</b> button	Opens the <a href="#">Event List Editor</a> , allowing you to edit individual Events of the selected Line Block in vertical list format.
<b>Pianoroll Editor</b> button	Opens the <a href="#">Pianoroll Editor</a> , allowing you to edit Notes of the selected Line Block in Pianoroll graph format.
<b>Control Draw Editor</b> button	Opens a new <a href="#">Control Draw Editor</a> window, allowing you to make alternate MIDI Control Event edits of the selected Line Block.
<b>Notation Editor</b> button	Opens the <a href="#">Notation Editor</a> , allowing you to edit Notes of the selected Line Block in Musical Notation form.



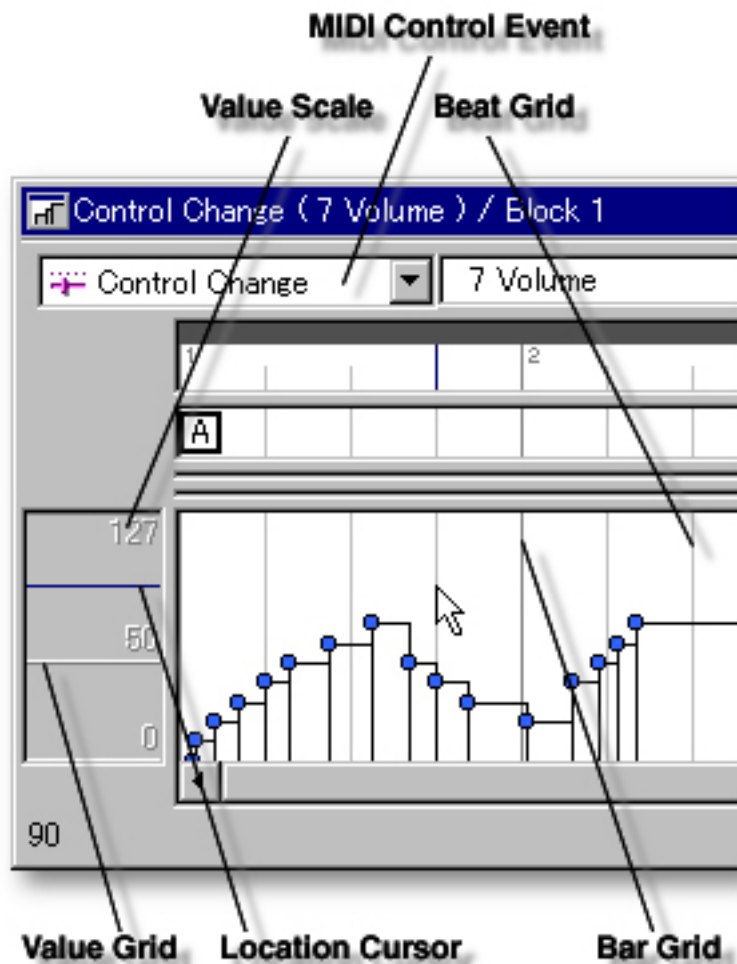
## Draw Area of the Control Draw Editor

**Description** The Draw Area is the main MIDI Control Event editing area of the Control Draw Editor.

**Uses** The Draw Area allows you to quickly create and edit Control Events using a [freestyle drawing method](#). [Choose the Control Event Type](#) you wish to create or edit from the selection boxes in the upper left-hand corner of the Control Draw Editor, choose the desired editing tool and simply draw desired changes in the Draw Area with your mouse.

**Items**

- [MIDI Control Event](#)
- [Bar Grid](#)
- [Beat Grid](#)
- [Value Grid](#)
- [Value Scale](#)
- [Location Cursor](#)





[Manipulating MIDI Control Events](#)

**MIDI Control Event** A MIDI Control Event is MIDI data which executes a specific MIDI controller task other than Note generation. Such tasks include Volume changes, Pitch Bend, Synth Program (Patch) changes and Poly After Touch to name a few. Events displayed in the Draw Area depend on your selections in the Control Event Type and Control Event selection boxes. You can [create](#), [edit](#), [copy](#), [move](#) or [delete](#) MIDI Control Events as needed.

[Adjusting the Grid display](#)

**Bar Grid** Vertical lines horizontally spaced across the Draw Area indicating the dividing points between Bars.

**Beat Grid** Vertical lines horizontally spaced across Bars indicating the dividing points between Beats.

**Value Grid** Horizontal lines vertically spaced across the Draw Area indicating the vertical dividing points between data Values.

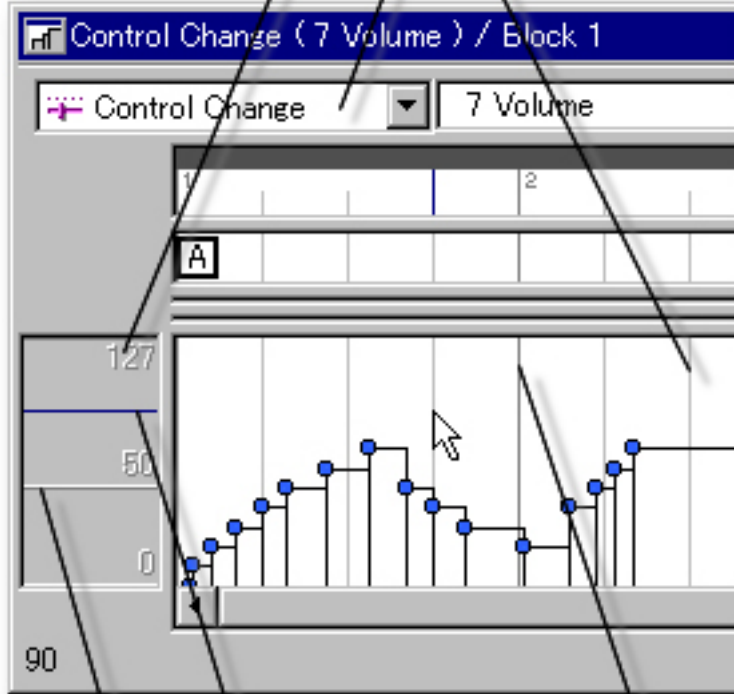
**Value Scale** Located on the left side of the Draw Area, this Scale displays the Value range of the vertical Value Grid in the Draw Area of the Control Draw Editor.

**Location Cursor** A horizontal Location Cursor line in the Value Scale represents the vertical position of your mouse as it relates to Event Value in the Draw Area of the Control Draw Editor. Corresponding numerical information is also displayed in the Interactive Information area at the bottom of the Control Draw Editor. The color of the Location Cursor depends on your settings in the Microsoft Windows Control Panel "Display" applet, under the heading "Selected Items" in the "Items" list of the "Appearance" pane.

# MIDI Control Event

Value Scale

Beat Grid



Value Grid

Location Cursor

Bar Grid

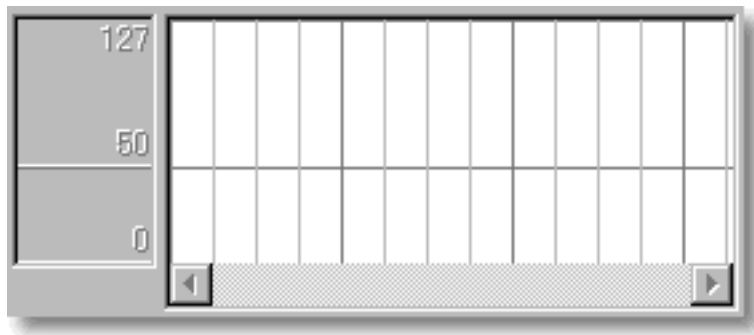
## Using the Draw Area

Adjusting the Grid display

- |                   |  |
|-------------------|--|
| <b>Bar Grid</b>   | The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. Choose <b>Bar Grid</b> from the <b>Grid View</b> submenu of the <b>View</b> menu to show or hide the Bar Grid in the Draw Area, as well as the Text Info and Lyric Areas of the Control Draw Editor.  |
| <b>Beat Grid</b>  | The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose <b>Beat Grid</b> from the <b>Grid View</b> submenu of the <b>View</b> menu to show or hide the Beat Grid in the Draw Area, as well as the Text Info and Lyric Areas of the Control Draw Editor. |
| <b>Value Grid</b> | The Value Grid is a pattern of evenly spaced horizontal lines marking vertical divisions between data Values for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose <b>Value Grid</b> from the <b>Grid View</b> submenu of the <b>View</b> menu to show or hide the Value Grid in the Draw Area.   |

See also:

[Creating and Manipulating MIDI Control Events](#)



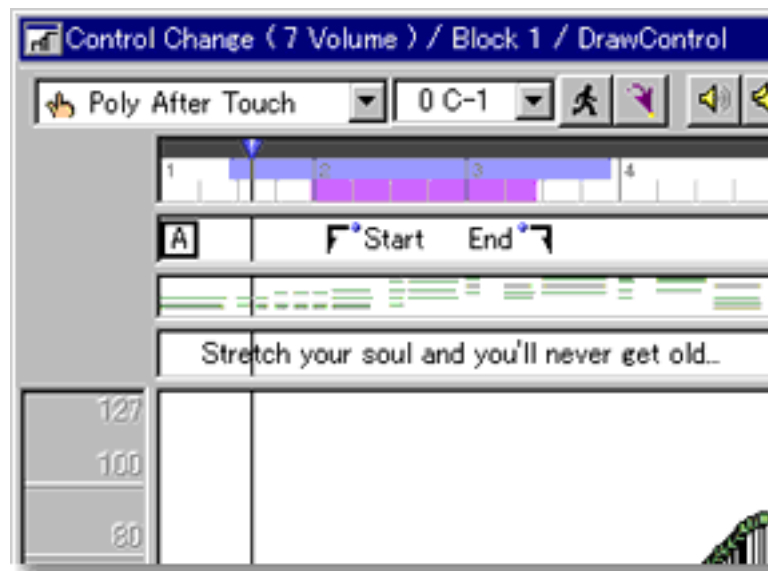
Creating and  
Manipulating  
MIDI Control Events

## MIDI Control Event

Note:

Before any actions are taken in the Draw Area, you must first select the **Control Event Type** and **Event** you wish to work with. Once these selections are made, any corresponding Events will be displayed in the Draw Area.

After using any of the special Tool buttons at the top of the Control Draw Editor, be sure to switch back to the standard **Arrow Tool** for regular manipulation operations.




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## CREATING NEW MIDI CONTROL EVENTS

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Method 1:

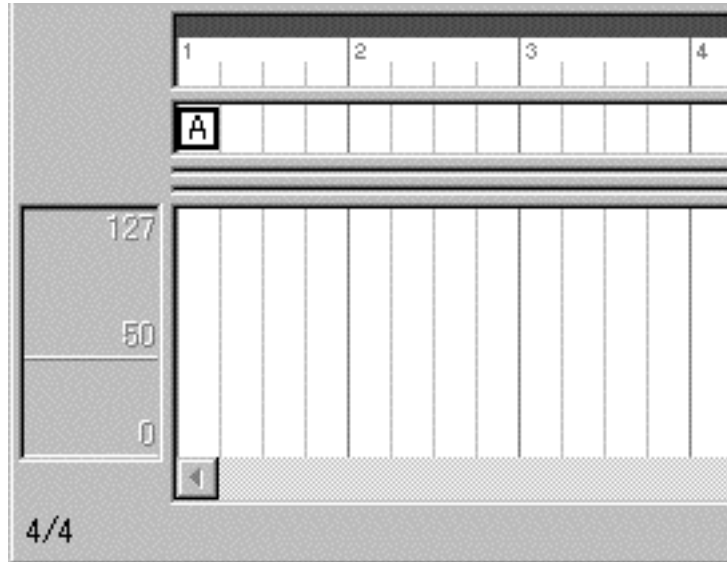
This method replaces all existing Line Block data, including Notes.

Click the **Record** button in the [Record Control toolbar](#) or choose the desired Recording command from the **Record** submenu of the **MIDI** menu and begin playing your MIDI Instrument. Loop and Punch In/Out regions will be automatically assigned for the length of the currently selected Line Block. If you prefer, you can assign a specific Punch In/Out region before activating Record. Be aware that the Track Arming buttons found in the Document Window have no effect in the Control Draw Editor. Once **Record** is activated and you begin playing, any existing data in the currently selected Line Block will be replaced.

Method 2:

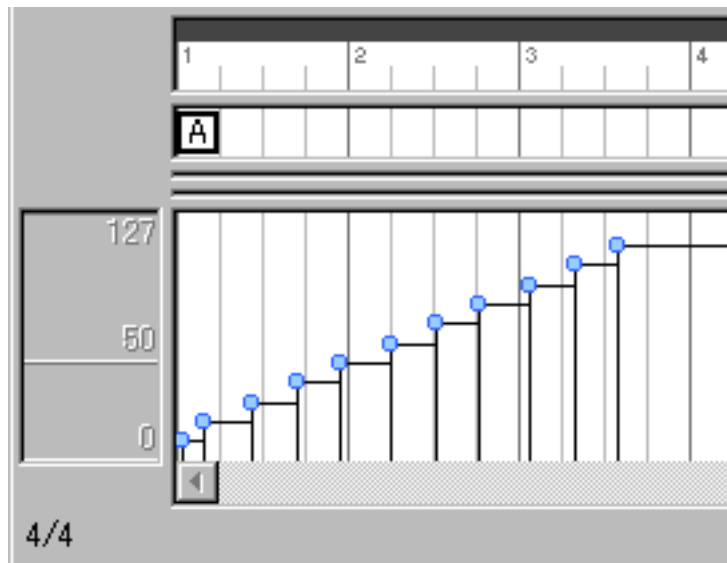
Select the **Pen** tool at the top of the Control Draw Editor and then click and drag horizontally in the Draw Area to assign Control

Events. Events will be created as you draw; their value (vertical position) following the **Pen** tool's position.



Method 3:

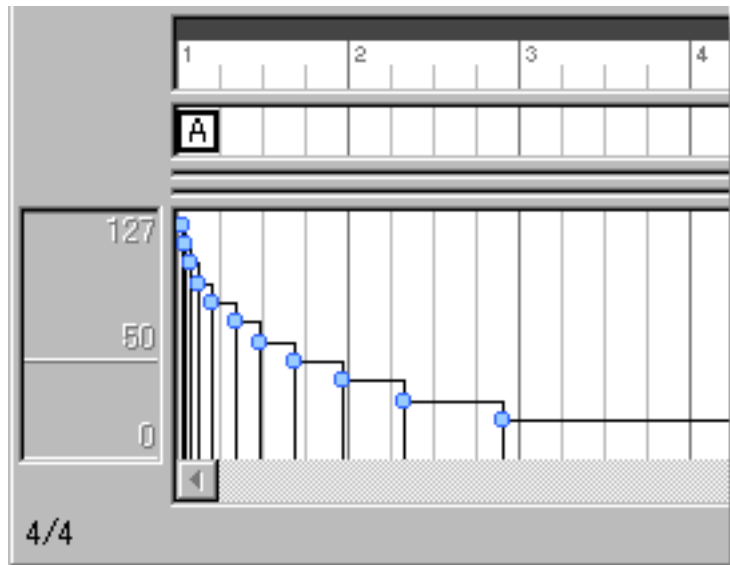
Select the **Line** tool at the top of the Control Draw Editor and then click and drag horizontally in the Draw Area to assign Control Events. Events will be created as you draw; their value (vertical position) following the straight line that results from your drawing action.



Method 4:

Select the **Oval** tool at the top of the Control Draw Editor and then click and drag horizontally in the Draw Area to assign Control

Events. Events will be created as you draw; their value (vertical position) following the curved line that results from your drawing action.



Besides creating new Event data, all of these methods can be used to edit existing Events as well. The horizontal (time) density of Events created or edited depends on your settings in the [Grid Setup dialog box](#). Other settings for Control Events such as Location, Color and Value are adjustable at any later time.

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## EDITING MIDI CONTROL EVENTS

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### Method 1:

Using the **Arrow** tool, click and drag desired Control Event to a new vertical value position the Draw Area. Any horizontal motion during your dragging operation will effect the Event's location in time. See [MOVING MIDI CONTROL EVENTS](#) below.



When **Align To Grid** is activated, the Control Event will snap to the nearest Grid Resolution point of the selected Draw Area location as defined in the [Grid Setup dialog box](#).

### Method 2:

Right Click desired Control Event and choose **Adjust Value...** from the **Actions** submenu. Alternatively, click desired Control Event and choose **Adjust Value** from the **Line** menu.

See also [CREATING NEW MIDI CONTROL EVENTS](#) above.

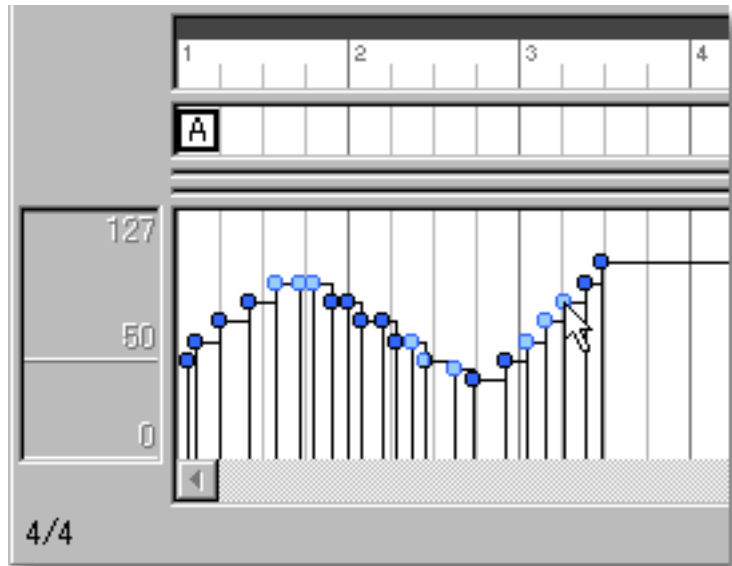
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## SELECTING MIDI CONTROL EVENTS

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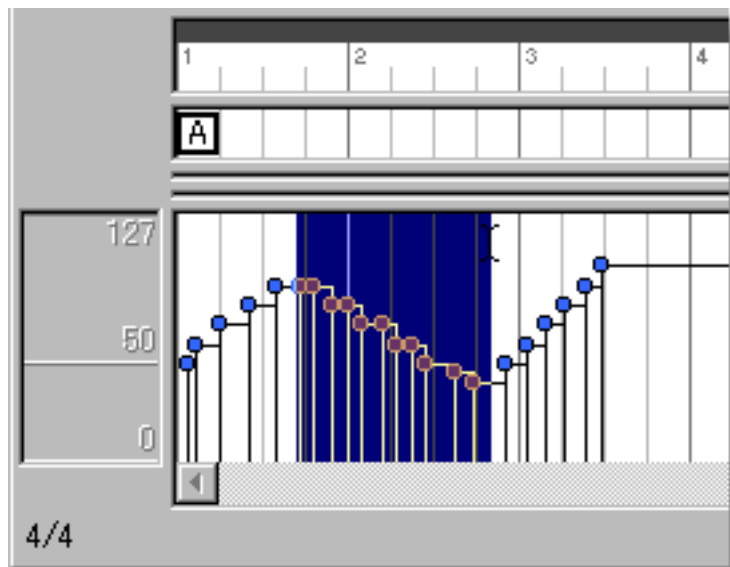
### Method 1:

Using the **Arrow** tool, you can select individual Control Events. You can select multiple Control Events by holding the Ctrl (or Shift) key down as you select. Alternatively, Clicking and holding your mouse button down at an empty location in the Draw Area and dragging your mouse over desired Control Events allows you to select multiple Control Events in one quick operation.



### Method 2:

Using the **I Beam** tool, you can select all Control Events in a horizontal (time) region at once. After clicking the **I Beam** button at the top of the Piano Roll Editor, click and hold your mouse button down in an empty location of the Draw Area and drag the **I Beam** horizontally over the desired Control Event region.



Selecting Control Events enables use of Control Event related commands under the **Edit** and **Line** Menu bar items. Once selected, you can then move, copy, paste or delete a group of Control Events at one time using the right click, menu bar or click and drag method.



Selecting entire Control Event regions will not be possible if the **Pen**, **Line**, **Oval** or **Eraser** tool button at the top of the Control Draw Editor is currently active. In these cases, Control Events will be created, edited or deleted (depending on which of these buttons is active).

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## MOVING MIDI CONTROL EVENTS

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### Method 1:

Using the **Arrow** tool, click and drag desired Control Events to a new location in the Draw Area. Any vertical motion during your dragging operation will effect the Event's value. See [EDITING MIDI CONTROL EVENTS](#) above.

### Method 2:

Select a Control Event with your mouse and use the arrow keys on your computer's keyboard to move the selected Event with more precision. The up/down arrow keys move an Event's value by single increments, and the left/right arrow keys move an Event's location in time by Divisions.

### Method 3:

This method allows you to move Control Events between Documents.



Right-click a Control Event and choose **Cut Event** to remove a Control Event from its current location. Alternatively, click desired Control Event and choose **Cut Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Control Events in one operation.

Next, right-click a desired location in the Control Draw Editor's Draw Area of the desired Document and choose **Paste Event** to Paste the Cut Control Event(s). Alternatively, select a desired location in the Draw Area and choose **Paste Event** from the **Edit** menu.



When **Align To Grid** is activated, the Control Event being moved will snap to the nearest Grid Resolution point of the selected Draw Area location as defined in the [Grid Setup dialog box](#).

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## COPYING / PASTING MIDI CONTROL EVENTS

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Right-click a Control Event and choose **Copy Event** to copy a Control Event. Alternatively, click desired Control Event and choose **Copy Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Control Events in one operation.

Then, right-click a desired location in the Control Draw Editor's Draw Area of the desired Document and choose **Paste Event** to Paste the Copied Control Event(s). Alternatively, select a desired location in the Draw Area and choose **Paste Event** from the **Edit** menu.



When **Align To Grid** is activated, the Control Event being Copied will be Pasted to the nearest Horizontal Grid Resolution point of the selected Draw Area location as defined in the [Grid Setup dialog box](#).

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## DELETING MIDI CONTROL EVENTS

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Method 1:

Select the **Eraser** tool at the top of the Control Draw Editor and simply click on a Control Event to delete it. With the **Eraser** tool, clicking and holding your mouse button down at an empty location in the Draw Area and dragging the **Eraser** over desired Control Events allows you to delete multiple Control Events in one quick operation.

Method 2:

Right-click a Control Event and choose **Clear Event** to delete it. Alternatively, click desired Control Event and choose **Clear Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting

allows you to Clear multiple Control Events in one operation.



See also:

[Adjusting the Grid display](#)

## Lyric Area of the Control Draw Editor

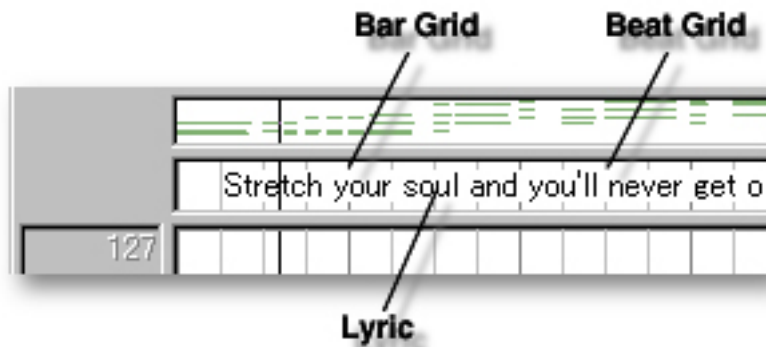
**Description** The Lyric Area displays a Line Block's Lyrics in a continuous row, parallel to the Note Data Area.

**Uses** You can create, edit, duplicate, move or delete Lyrics in the Lyric Area. These song Lyrics can then be saved with a Document. Additionally, Lyrics are saved with your Composition when exporting it to a Standard MIDI File.

**Items** [Lyric Event](#)

[Bar Grid](#)

[Beat Grid](#)



## Items in the Lyric Area

[Creating a Lyric](#)

**Lyric Event** Lyric Events allow you to include song Lyrics (sung words) in your Composition. You can [create](#), [edit](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Lyric Events as needed. Lyrics can then be Saved and Exported with the rest of your Composition Document. Unlike general Text Events which have a common location in a Document, a different set of Lyrics can be saved with each Line Block.

[Adjusting the Grid display](#)

**Bar Grid** Vertical lines horizontally spaced across the Lyric Area indicating Bar divisions.  
**Beat Grid** Vertical lines horizontally spaced across Bars indicating Beat divisions.



## Using the Lyric Area

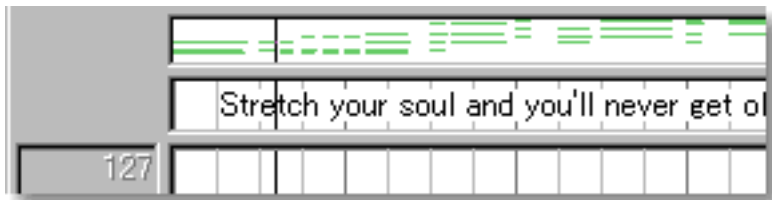
Adjusting the  
Grid display

**Bar Grid** The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. Choose **Bar Grid** from the **Grid View** submenu of the **View** menu to show or hide the Bar Grid in the Lyric Area, as well as the Text Info and Draw Areas of the Control Draw Editor.

**Beat Grid** The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Beat Grid** from the **Grid View** submenu of the **View** menu to show or hide the Beat Grid in the Lyric Area, as well as the Text Info and Draw Areas of the Control Draw Editor.

See also:

[Creating and Manipulating Lyrics](#)



## Using the Lyric Area

Creating and  
Manipulating  
Lyrics

**Lyric**  
event

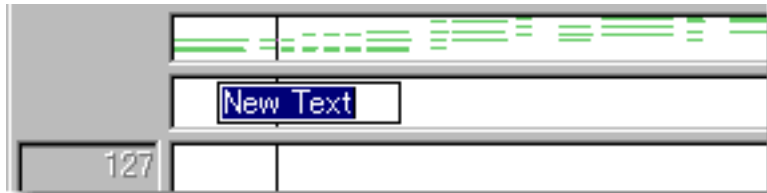
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### CREATING LYRICS

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Right-click a desired location in the Lyric Area and choose **New Lyric** to create a new Lyric text box. Enter desired Lyric text data in the edit box. When you are finished entering Lyrics, click outside the edit box or press Enter on your computer's keyboard.

Alternatively, choose **New Lyric** from the **Edit** menu to create a blank Lyric text box.



 When choosing **New Lyric** from the **Edit** menu, you must first have selected an empty Lyric Area, otherwise the **New Lyric** item won't be available.

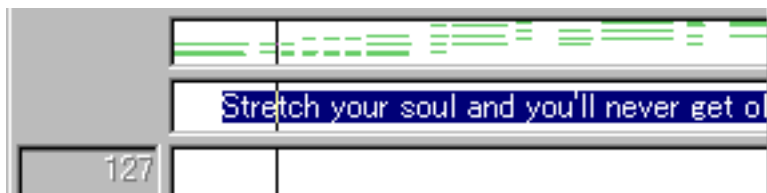


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### EDITING LYRICS

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To edit a Lyric, double click it, opening its edit box. After typing your changes, hit the Enter key, or click someplace outside the edit box to close it.




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## SELECTING LYRICS

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Using the **Arrow** tool, you can select individual Lyrics. You can select multiple Lyrics by holding the Ctrl (or Shift) key down as you select. Alternatively, clicking and holding your mouse button down at an empty location in the Lyric Area and dragging your mouse over desired Lyrics allows you to select multiple Lyrics in one quick operation. Once selected, you can then move, duplicate, copy, paste or delete a group of Lyrics at one time using the right click, menu bar or click and drag method.

 Selecting multiple Lyrics will not be possible if the **Eraser** tool button at the top of the Control Draw Editor is currently active. In this case, Lyrics will be deleted one at a time; each with a click of your mouse.



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## MOVING LYRICS

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Method 1:

Click and drag desired Lyrics to a new location in the Lyric Area.

Method 2:


Select desired Lyric with your mouse and use your computer keyboard's left/right arrow keys to move Lyrics a Division at a time.

Method 3:

This method allows you to move Lyrics between Documents.

Right-click a Lyric and choose **Cut Lyric** to remove a Lyric from its current location. Alternatively, click desired Lyric and choose **Cut Lyric** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Lyrics in one operation.

Next, right-click a desired location in the Lyric Area of the desired Document's Control Draw or Pianoroll Editor and choose **Paste Lyric** to Paste the Cut Lyric(s). Alternatively, select a desired location in the Lyric Area and choose **Paste Lyric** from the **Edit** menu.

 When **Align To Grid** is activated, the Lyric being moved will be Pasted to the nearest Horizontal Grid Resolution point of the selected Lyric Area location as defined in the Text Event tab of the [Grid Setup dialog box](#).

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## DUPLICATING LYRICS

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Right-click a Lyric and choose **Duplicate Lyric** to duplicate a Lyric. Alternatively, click desired Lyrics and choose **Duplicate Lyric** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Duplicate multiple Lyrics in one operation.

Unlike the Copy/Paste operation which allows you to choose the location of the "copy" before it is created, Duplicating a Lyric automatically places the "duplicate" on top of the original, offset slightly to the right. You can then move the "duplicate" at any time.

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## COPYING / PASTING LYRICS

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Right-click a Lyric and choose **Copy Lyric** to copy a Lyric. Alternatively, click desired Lyric and choose **Copy Lyric** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Lyrics in one operation.

Next, right-click a desired location in the Lyric Area of the desired Document's Control Draw or Pianoroll Editor and choose **Paste Lyric** to Paste the Copied Lyric(s). Alternatively, select a desired location in the Lyric Area and choose **Paste Lyric** from the **Edit** menu.



When **Align To Grid** is activated, the Lyric being Copied will be Pasted to the nearest Horizontal Grid Resolution point of the selected Lyric Area location as defined in the Text Event tab of the [Grid Setup dialog box](#).

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## DELETING LYRICS

---

Method 1:

Select the **Eraser** tool at the top of the Control Draw Editor and simply click on a Lyric to delete it. With the **Eraser** tool, clicking and holding your mouse button down at an empty location in the Lyric Area and dragging the **Eraser** over desired Lyrics allows you to delete multiple Lyrics in one quick operation.

Method 2:

Right-click a Lyric and choose **Clear Lyric** to delete a Lyric. Alternatively, click desired Lyrics and choose **Clear Lyric** from the **Edit** menu to delete the selected Lyrics. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Lyrics in one operation.



See also:

[Adjusting the Grid display](#)

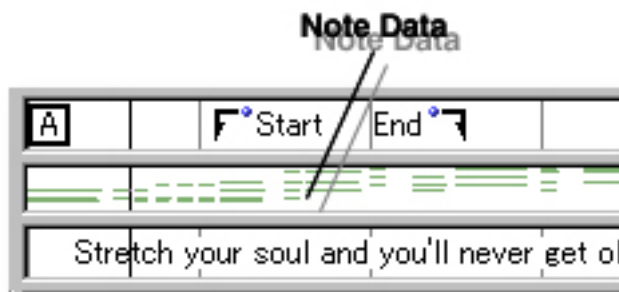


## Note Data Area of the Control Draw Editor

**Description** Located between the Text Info and Lyric Areas of the Control Draw Editor, the Note Data Area displays the currently selected Line Block's Note Data in Pianoroll form. This Area is for visual reference only, and does not provide any editing functions.

**Uses** Refer to the Note Data Area as editing Text, Lyric or MIDI Control Events in the Control Draw Editor. This will help you keep track of your current location within the Line Block you are editing.

**Items** **Note Data display** This Area displays the Note Data contained in the currently selected Line Block. The Notes are displayed in horizontal (time) alignment with other objects in the Control Draw Editor.

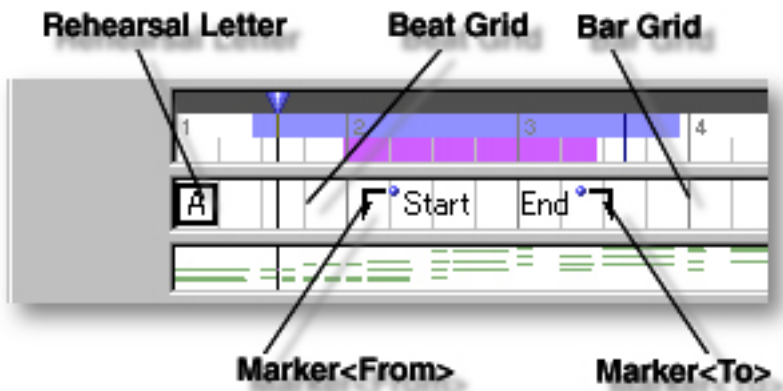


# Text Info Area of the Control Draw Editor

**Description** The Text Info Area displays general Text Information in a continuous row, parallel to the Bar Area. It allows you to create/display Text Events such as Rehearsal Letters and Markers.

**Uses** You can create, edit, copy, duplicate, move or delete Rehearsal Letters and Markers in the Text Info Area as needed. These items can help you organize your composition Document to more quickly locate a particular point in your music. These settings can then be saved with the Document.

- Items**
- [Rehearsal Letter](#) event
  - [Marker <From>](#) event
  - [Marker <To>](#) event
  - [Bar Grid](#)
  - [Beat Grid](#)



## Items in the Text Info Area

### [Creating Text Events](#)

#### **Rehearsal Letter event**

Rehearsal Letters such as A or B, generally appearing at obvious musical phrase boundaries, serve to provide Bar markings for rehearsal. These Text Events can also be phrases such as "Verse", "Chorus", "Intro.", "Bridge", or anything you desire. You can [create](#), [edit](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Rehearsal Letters as needed.

#### **Marker <From><To> events**

Markers serve to provide Cue markings for rehearsal or sequencing work. You can use either <From> or <To> depending on your needs. You can [create](#), [edit](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Markers as needed.

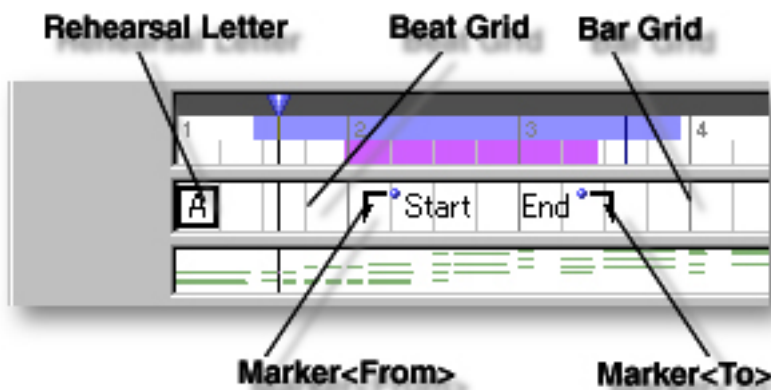
### [Adjusting the Grid display](#)

#### **Bar Grid**

Vertical lines horizontally spaced across the Text Info Area indicating Bar divisions.

#### **Beat Grid**

Vertical lines horizontally spaced across Bars indicating Beat divisions.



Adjusting the  
Grid display

**Bar Grid** The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. Choose **Bar Grid** from the **Grid View** submenu of the **View** menu to show or hide the Bar Grid in the Text Info Area, as well as the Lyric and Draw Areas of the Control Draw Editor.

**Beat Grid** The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Beat Grid** from the **Grid View** submenu of the **View** menu to show or hide the Beat Grid in the Text Info Area, as well as the Lyric and Draw Areas of the Control Draw Editor.

See also:

[Creating and Manipulating Text Events](#)

## Using the Text Info Area

Creating and Manipulating Text Events

**Rehearsal Letter event**


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### CREATING A REHEARSAL LETTER

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Right-click a desired location in the Text Info Area and choose **New Rehearsal Letter** to create a blank Rehearsal Letter. Enter desired text data in the edit box. When you are finished entering, click outside the edit box or press Enter on your computer's keyboard.

Alternatively, choose **New Text Event...** from the **Edit** menu to create a blank Rehearsal Letter. The [New Text Event dialog box](#) will open allowing you to choose a Rehearsal Letter, Marker <from> or Marker <To> text event.

 When choosing **New Text Event...** from the **Edit** menu, you must first have selected an empty Text Info Area, otherwise the **New Text Event...** item won't be available.



**Marker <From>  
Marker <To>  
events**


---

### CREATING A MARKER

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Right-click a desired location in the Text Info Area and choose **New Marker <From>** or **New Marker <To>** to create a blank Marker. Enter desired text data in the edit box. When you are finished entering, click outside the edit box or press Enter on your computer's keyboard.

Alternatively, choose **New Text Event...** from the **Edit** menu to create a blank Marker. The [New Text Event dialog box](#) will open allowing you to choose a Rehearsal Letter, Marker <from> or Marker <To> text event.

 When choosing **New Text Event...** from the **Edit** menu, you must first have selected an empty Text Info Area, otherwise the **New Text Event...** item won't be available.



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## EDITING TEXT EVENTS

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To edit a Text Event, double click it, opening its edit box. After typing your changes, hit the Enter key, or click someplace outside the edit box to close it.



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## SELECTING TEXT EVENTS

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Using the **Arrow** tool, you can select individual Text Events. You can select multiple Text Events by holding the Ctrl (or Shift) key down as you select. Alternatively, clicking and holding your mouse button down at an empty location in the Text Info Area and dragging your mouse over desired Text Events allows you to select multiple Text Events in one quick operation. Once selected, you can then move, duplicate, copy, paste or delete a group of Text Events at one time using the right click, menu bar or click and drag method.



Selecting multiple Text Events will not be possible if the **Eraser** tool button at the top of the Control Draw Editor is currently active. In this case, Text Events will be deleted one at a time; each with a click of your mouse.



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## MOVING TEXT EVENTS

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Method 1:

Click and drag desired Text Events to a new location in the Text Info Area.

Method 2:

Select desired Text Event with your mouse and use your computer keyboard's left/right arrow keys to move Text Events a Division at a time.

Method 3:

This method allows you to move Text Events between Documents.

Right-click a Text Event and choose **Cut Text Event** to remove a Text Event from its current location. Alternatively, click desired Text Event and choose **Cut Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Text Events in one operation.

Next, right-click a desired location in the Text Info Area of the desired Document's Control Draw, Tempo Draw or Pianoroll Editor, or Document Window and choose **Paste Text Event** to Paste the Cut Text Event(s). Alternatively, select a desired location in the Text Info Area and choose **Paste Text Event** from the **Edit** menu.



When **Align To Grid** is activated, the Text Event being moved will be Pasted to the nearest Horizontal Grid Resolution point of the selected Text Info Area location as defined in the [Grid Setup dialog box](#).

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## DUPLICATING TEXT EVENTS

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Right-click a Text Event and choose **Duplicate Text Event** to duplicate a Text Event. Alternatively, click desired Text Events and choose **Duplicate Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Duplicate multiple Text Events in one operation.

Unlike the Copy/Paste operation which allows you to choose the location of the "copy" before it is created, Duplicating a Text Event automatically places the "duplicate" on top of the original, offset slightly to the right. You can then move the "duplicate" at any time.

---

## COPYING / PASTING TEXT EVENTS

---

Right-click a Text Event and choose **Copy Text Event** to copy a Text Event. Alternatively, click desired Text Event and choose **Copy Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Text Events in one operation.

Next, right-click a desired location in the Text Info Area of the desired Document's Control Draw, Tempo Draw or Pianoroll Editor, or Document Window and choose **Paste Text Event** to Paste the Copied Text Event(s). Alternatively, select a desired location in the Text Info Area and choose **Paste Text Event** from the **Edit** menu.



When **Align To Grid** is activated, the Text Event being Copied will be Pasted to the nearest Horizontal Grid Resolution point of the selected Text Info Area location as defined in the [Grid Setup dialog box](#).

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## DELETING TEXT EVENTS

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Method 1:

Select the **Eraser** tool at the top of the Control Draw Editor and simply click on a Text Event to delete it. With the **Eraser** tool, clicking and holding your mouse button down at an empty location in the Text Info Area and dragging the **Eraser** over desired Text Events allows you to delete multiple Text Events in one quick operation.

Method 2:

Right-click a Text Event and choose **Clear Text Event** to delete it. Alternatively, click desired Text Events and choose **Clear Text Event** from the **Edit** menu to delete the selected Text Events. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Text Events in one operation.



See also:

[Adjusting the Grid display](#)



## Select a Key dialog box

**Description** The Select a Key dialog box is used to assign a MIDI Instrument Key (Pitch value) for Poly After Touch Events in Tonal Line data.

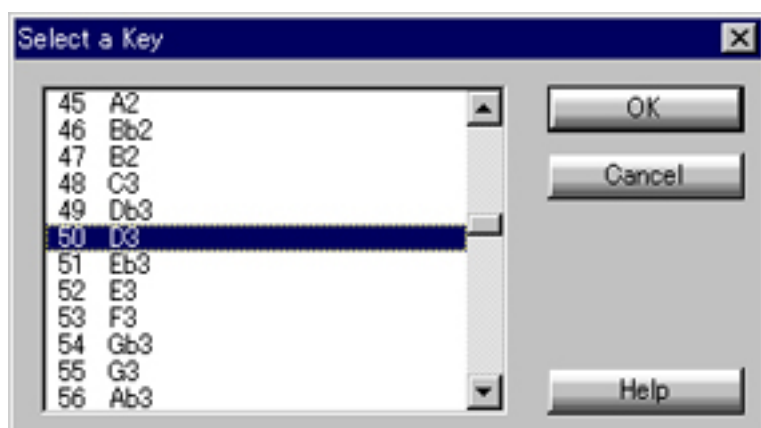
**Uses** After opening the Select a Key dialog box, select a Key from the Key scroll area and then click **OK** to assign Poly After Touch Events to the Key.

**Items** **Key scroll area** Select MIDI Instrument Key (Pitch value) you wish to assign Poly After Touch Events to.

**OK button** Closes the Select a Key dialog box and commits changes.

**Cancel button** Closes the Select a Key dialog box without committing changes.

**Help button** Opens this Help document.



**Opening** From the [Control Draw Editor](#) Choose **Poly After Touch...** from the **Control View** submenu of the **View** menu.

## Select a Control dialog box

**Description** The Select a Control dialog box is used to assign a MIDI Control Event Type to a MIDI Control Change Event.

**Uses** After opening the Select a Control dialog box, select a Control Event Type from the Control Event scroll area and click **OK** to assign the Control Event Type and close the Select a Control dialog box.

**Items**

<b>Control Event</b> scroll area	Select the desired Control Event Type you wish to assign to the currently selected Control Change Event.
<b>OK</b> button	Closes the Select a Control dialog box and commits changes.
<b>Cancel</b> button	Closes the Select a Control dialog box without committing changes.
<b>Help</b> button	Opens this Help document.



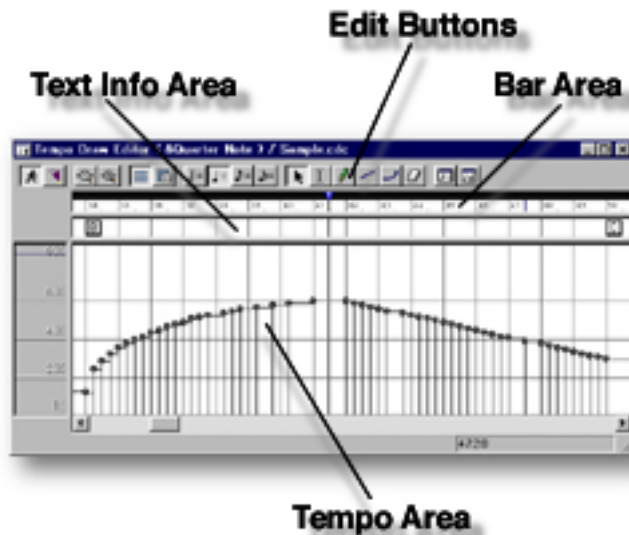
**Opening** From the [Control Draw Editor](#) Choose **Control Change...** from the **Control View** submenu of the **View** menu.

# Tempo Draw Editor

**Description** The Tempo Draw Editor allows you to edit a Line Block's MIDI Tempo data with a unique freestyle drawing method.

**Items** The Tempo Draw Editor contains various Buttons and Editing Areas for manipulating MIDI Tempo Events and other objects. You can choose to Show or Hide the Buttons with the **Edit Buttons** command in the **View** menu. You can adjust the vertical size of each Editing Area by clicking and dragging the horizontal or vertical separator bar between Areas.

- [Edit Buttons](#) The Edit Buttons give you quick access to viewing and manipulation tools for the Tempo Draw Editor.
- [Bar Area](#) The Bar Area displays a range of Bar lines. Besides managing a song's Time Grid, this area also allows you to manipulate Loop functions.
- [Text Info Area](#) The Text Info Area displays Text Events such as Rehearsal Letters and Markers, allowing you to create or edit them.
- [Draw Area](#) The Draw Area allows you to edit MIDI Tempo Event data with a unique drawing method.



**Opening**

- From the [Document Window](#) First, select a desired Line Block. Then, either choose **Tempo Draw Editor** from the **Editors** menu, or simply click the **Tempo Draw Editor** button at the top of the Document Window.
- From the... [Tempo List Editor](#) Choose **Tempo Draw Editor** from the **Editors** menu, or simply click the **Tempo Draw Editor** button at the top of the Editor Window.

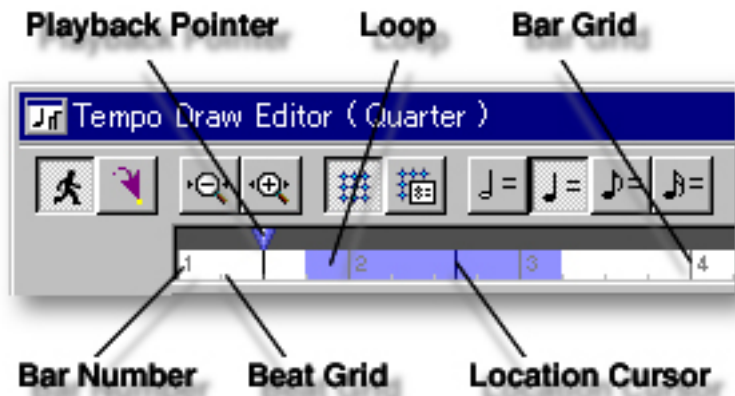
Tempo Draw Editor

# Bar Area of the Tempo Draw Editor

**Description** The Bar Area displays Measures or divisions of musical Time, known as Bars, in a continuous row. This includes Bar Numbers, The Bar Grid and Beat Grid.

**Uses** Besides displaying Bar related information, the Bar Area allows you to manage a song's [Time Signature setup](#), location of the [Playback Pointer](#), and the Playback [Loop](#) settings.

- Items**
- [Playback Pointer](#)
  - [Loop](#) region
  - [Bar Number](#)
  - [Bar Grid](#)
  - [Beat Grid](#)
  - [Location Cursor](#)



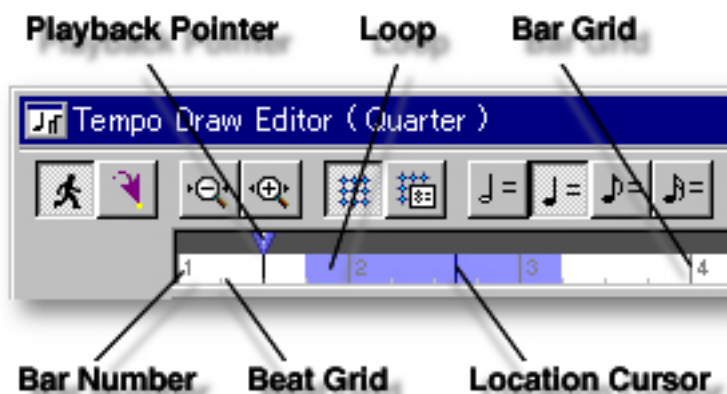
## Items in the Bar Area

[Positioning the Playback Pointer](#)

[Inserting a Playback Loop](#)

Viewing Bar related items

<b>Playback Pointer</b>	The Playback Pointer resides in its own dark gray area at the top of the bar area, displaying the current Playback location in the Tempo Draw Editor. It also allows you to change the current Playback point.
<b>Loop region</b>	Displays your current Loop region. Starting Playback repeats (Loops) Playback in this region until you stop. This region is indicated by the color blue in the upper portion of the Bar Area in the Tempo Draw Editor.
<b>Bar Number</b>	A series of numbers given to Bars, starting on the left side with 1.
<b>Bar Grid</b>	Vertical lines horizontally spaced across the Bar Area indicating Bar divisions.
<b>Beat Grid</b>	Vertical lines horizontally spaced across Bars indicating Beat divisions.
<b>Location Cursor</b>	A vertical Location Cursor line in the Bar Area represents the horizontal position of your mouse as it relates to the time location in your Document. Corresponding numerical information is also displayed in the order of "Bar, Beat and Division" in the Interactive Information area at the bottom of the Tempo Draw Editor. The color of the Location Cursor depends on your settings in the Microsoft Windows Control Panel "Display" applet, under the heading "Selected Items" in the "Items" list of the "Appearance" pane.



## Using the Bar Area

Positioning the Playback Pointer

**Playback Pointer** and area


You can use the Playback Pointer to change the Playback point in the Tempo Draw Editor in two ways: Clicking a desired location in the dark gray Playback Pointer area at the top, or clicking and dragging the Playback Pointer to a desired location. Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. The Playback Pointer displays the current Playback location as CAMPS plays MIDI data.

Inserting a Playback Loop

**Loop** region

You can create a Loop region by clicking and dragging with your mouse in the upper portion of the Bar Area, below the Playback Pointer Area. As you drag your mouse, the Loop region appears blue in color, displaying a new Loop region.

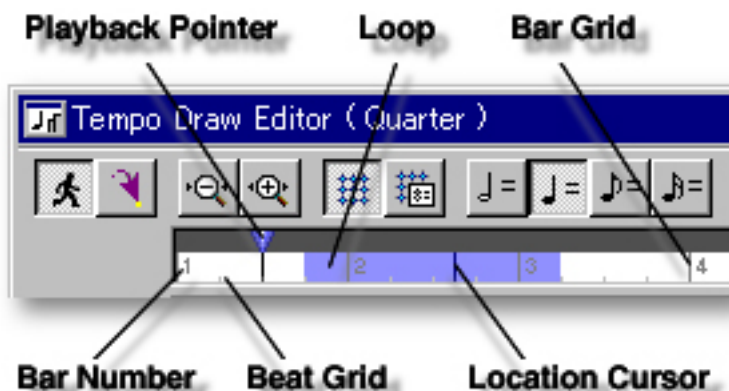
Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. CAMPS repeats Loop region Playback until you stop it. Click anywhere in the upper portion of the Bar Area to delete a Loop region.

 The start and end points of the Loop region snap to the Grid resolution set in the [Grid Setup dialog box](#), if **Align to Grid** is selected in the **Grid View** submenu of the **View** menu.

Assigning a Time Signature

**Time Signature** settings

CAMPS allows you to assign different Time Signatures to individual Bars. Right-click a Bar to which you are assigning a new Time Signature and then choose **Time Signature Setup...** to open the [Time Signature Setup dialog box](#). Set a Time Signature in the dialog box and click **OK**. (Choosing **Time Signature Setup...** from the **Edit** menu opens the same dialog box.)



# Edit Buttons Area of the Tempo Draw Editor

**Description** The Edit Buttons are located at the top of the Tempo Draw Editor. These Buttons give you quick access to frequently used items like View Adjustments, Tools and Editors.

**Uses** The Edit Buttons include most of the **View** and **Editors** menu commands. The Tool buttons work in slightly different ways depending on which Area of the Tempo Draw Editor you are working in. Choose **Edit Buttons** from the **View** menu to show or hide the Edit Buttons.

- Items**
- [Auto Scroll](#) button
  - [Jump To Location](#) button
  - [Zoom Out \(H\)](#) button
  - [Zoom In \(H\)](#) button
  - [Align To Grid](#) button
  - [Grid Setup](#) button
  - [Half Note Tempo View](#) button
  - [Quarter Note Tempo View](#) button
  - [8th Note Tempo View](#) button
  - [16th Note Tempo View](#) button
  - [Arrow Tool](#) button
  - [I Beam Tool](#) button
  - [Pen Tool](#) button
  - [Line Tool](#) button
  - [Oval Tool](#) button
  - [Eraser Tool](#) button
  - [Tempo List Editor](#) button
  - [Tempo Draw Editor](#) button



Adjusting View	<b>Auto Scroll</b> button	Sets the viewable area in the Bar, Text Info and Draw Areas to follow the Playback Pointer during Playback and Recording.
	<b>Jump To Location</b> button	Opens the <a href="#">Jump To Location dialog box</a> which allows you to move the current viewpoint to a specified Bar in the Tempo Draw Editor.
	<b>Zoom Out (H)</b> button	Incrementally decreases the Horizontal size of the Bar, Text Info and Draw Areas, increasing their viewable area.
	<b>Zoom In (H)</b> button	Incrementally increases the Horizontal size of the Bar, Text Info and Draw Areas, decreasing their viewable area.
	<b>Align To Grid</b> button	Switches between Activate or Deactivate Align To Grid in the Text Info and Draw Areas. Grid Alignment is specified in the <a href="#">Grid Setup dialog box</a> .
	<b>Grid Setup</b> button	Opens the <a href="#">Grid Setup dialog box</a> , allowing you to adjust the Alignment Grid Resolution for individual areas of the Tempo Draw Editor and applicable Editors. Depending on which Area of the Tempo Draw Editor is active before choosing this Menu Item, the corresponding pane in the Grid Setup dialog box will be preselected.
	<b>Half Note Tempo View</b> button	Sets the vertical Tempo scale in the Draw Area of the Tempo Draw Editor to use a Half Note time value as a basis, i.e. Half Note = 75 Beats Per Minute.
	<b>Quarter Note Tempo View</b> button	Sets the vertical Tempo scale in the Draw Area of the Tempo Draw Editor to use a Quarter Note time value as a basis (standard Metronome scale), i.e. Quarter Note = 150 Beats Per Minute.
	<b>8th Note Tempo View</b> button	Sets the vertical Tempo scale in the Draw Area of the Tempo Draw Editor to use an 8th Note time value as a basis, i.e. 8th Note = 300 Beats Per Minute.
<b>16th Note Tempo View</b> button	Sets the vertical Tempo scale in the Draw Area of the Tempo Draw Editor to use a 16th Note time value as a basis, i.e. 16th Note = 600 Beats Per Minute.	
Selecting Tools	<b>Arrow Tool</b> button	Selects the Arrow Tool, allowing you to select and manipulate objects in the Tempo Draw Editor. Objects need to be selected before related functions become available.
	<b>I Beam Tool</b> button	Selects the I Beam Tool, Allowing you to quickly select regions in the Draw Area.
	<b>Pen Tool</b> button	Selects the Pen Tool, allowing you to quickly create or edit MIDI Tempo Events in the Draw Area with a unique freestyle drawing method.
	<b>Line Tool</b> button	Selects the Line Tool, allowing you to quickly create and edit Tempo Events using a straight line drawing method.
	<b>Oval Tool</b> button	Selects the Oval Tool, allowing you to quickly create and edit Tempo Events using an automatic curve drawing method.
	<b>Eraser Tool</b> button	Selects the Eraser Tool, allowing you to quickly delete objects in the Tempo Draw Editor.



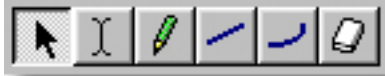
Opening Editors

**Tempo List Editor**  
button

Opens the [Tempo List Editor](#), allowing you to edit individual Tempo Events of the selected Line Block in vertical list format.

**Tempo Draw Editor**  
button

Opens a new [Tempo Draw Editor](#) window, allowing you to make alternate MIDI Tempo Event edits of the selected Line Block.

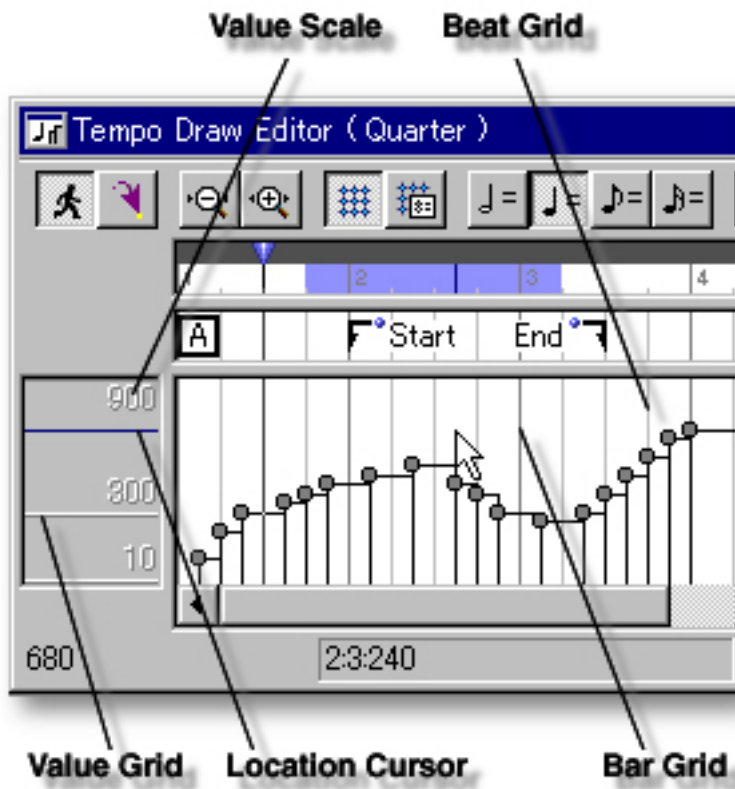


# Draw Area of the Tempo Draw Editor

**Description** The Draw Area is the main MIDI Tempo Event editing area of the Tempo Draw Editor.

**Uses** The Draw Area allows you to quickly create and edit Tempo Events using a freestyle drawing method. Choose the desired editing tool and simply draw desired changes in the Draw Area with your mouse.

- Items**
- [MIDI Tempo Event](#)
  - [Bar Grid](#)
  - [Beat Grid](#)
  - [Value Grid](#)
  - [Value Scale](#)
  - [Location Cursor](#)

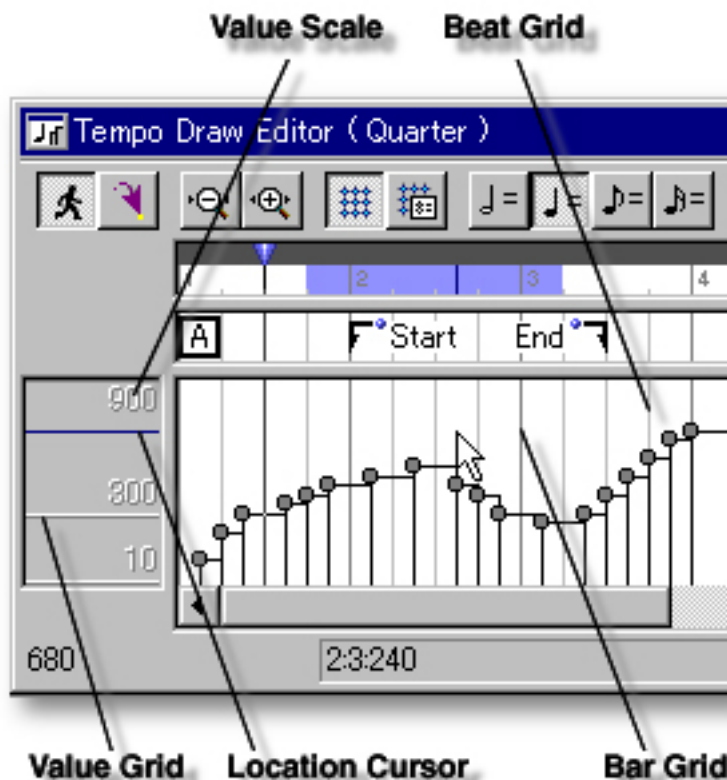


## Items in the Draw Area

[Manipulating MIDI Tempo Events](#)

[Adjusting the Grid display](#)

<b>MIDI Tempo Event</b>	A MIDI Tempo Event is MIDI data which executes MIDI Tempo commands. This data effects Playback Tempo of all MIDI devices connected to the output of CAMPS, including Sync output. You can <a href="#">create</a> , <a href="#">edit</a> , <a href="#">copy</a> , <a href="#">duplicate</a> , <a href="#">move</a> or <a href="#">delete</a> MIDI Tempo Events as needed.
<b>Bar Grid</b>	Vertical lines horizontally spaced across the Draw Area indicating the dividing points between Bars.
<b>Beat Grid</b>	Vertical lines horizontally spaced across Bars indicating the dividing points between Beats.
<b>Value Grid</b>	Horizontal lines vertically spaced across the Draw Area indicating the vertical dividing points between Tempo data values.
<b>Value Scale</b>	Located on the left side of the Draw Area, this Scale displays the Value range of the vertical Value Grid in the Draw Area of the Tempo Draw Editor.
<b>Location Cursor</b>	A horizontal Location Cursor line in the Value Scale represents the vertical position of your mouse as it relates to Tempo Event Value in the Draw Area of the Tempo Draw Editor. Corresponding numerical information is also displayed in the Interactive Information area at the bottom of the Tempo Draw Editor. The color of the Location Cursor depends on your settings in the Microsoft Windows Control Panel "Display" applet, under the heading "Selected Items" in the "Items" list of the "Appearance" pane.



## MIDI Tempo Event

Note:

After using any of the special Tool buttons at the top of the Tempo Draw Editor, be sure to switch back to the standard **Arrow Tool** for regular manipulation operations.

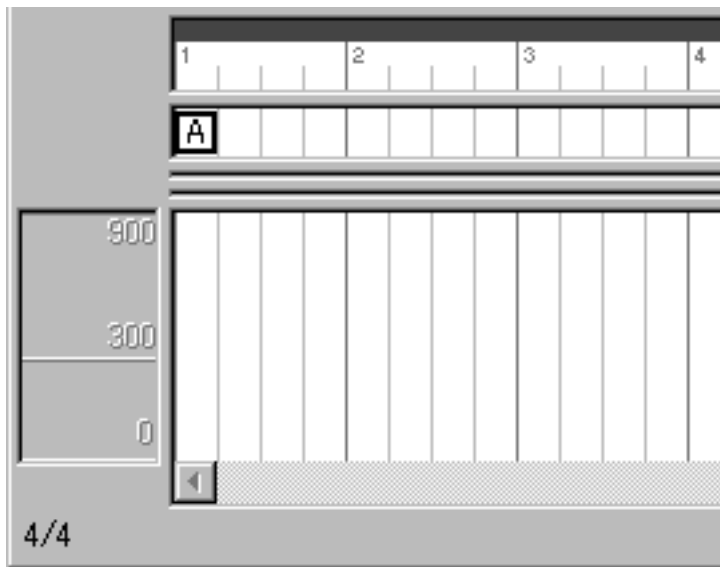
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### CREATING NEW MIDI TEMPO EVENTS

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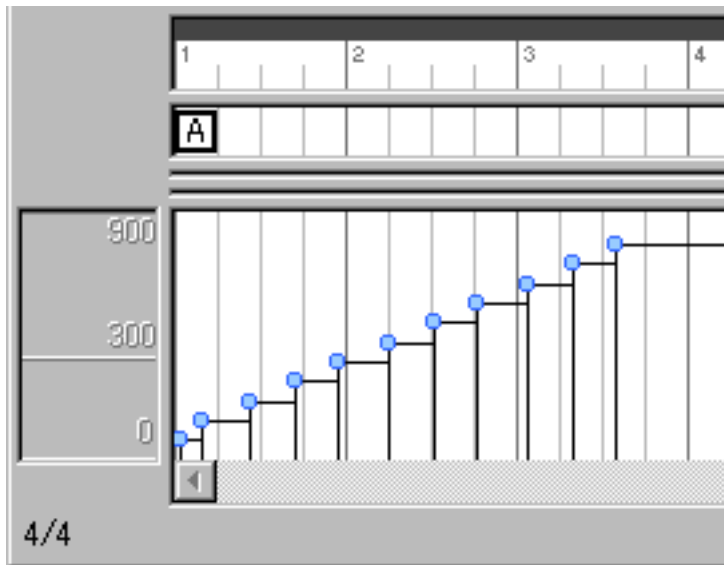
Method 1:

Select the **Pen** tool at the top of the Tempo Draw Editor and then click and drag horizontally in the Draw Area to assign Tempo Events. Events will be created as you draw; their value (vertical position) following the **Pen** tool's position.



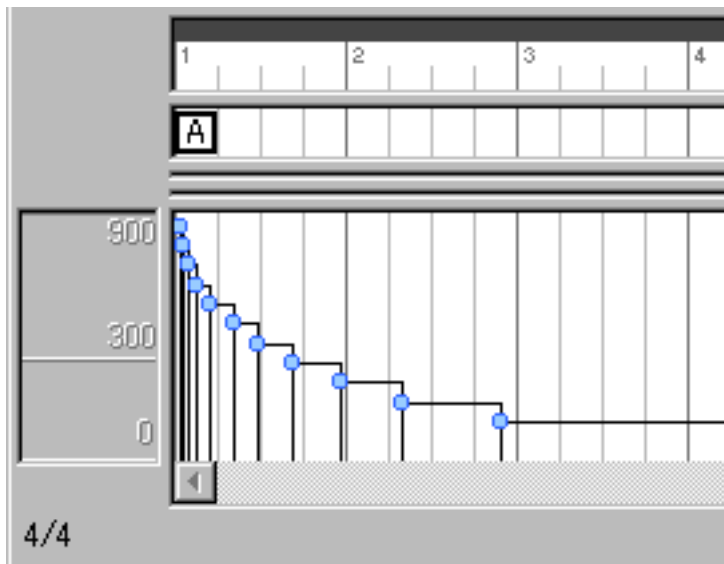
Method 2:


Select the **Line** tool at the top of the Tempo Draw Editor and then click and drag horizontally in the Draw Area to assign Tempo Events. Events will be created as you draw; their value (vertical position) following the straight line that results from your drawing action.



### Method 3:

Select the **Oval** tool at the top of the Tempo Draw Editor and then click and drag horizontally in the Draw Area to assign Tempo Events. Events will be created as you draw; their value (vertical position) following the curved line that results from your drawing action.



 Besides creating new Event data, all of these methods can also be used to edit existing Events. The horizontal (time) density of Events created or edited depends on your settings in the [Grid Setup dialog box](#). Other settings for Tempo Events such as Location, Color and Value are adjustable at any later time.

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## EDITING MIDI TEMPO EVENTS

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### Method 1:

Using the **Arrow** tool, click and drag desired Tempo Event to a new vertical position in the Draw Area. Any horizontal motion during your dragging operation will effect the Event's location in time. See [MOVING MIDI TEMPO EVENTS](#) below.



When **Align To Grid** is activated, the Tempo Event will snap to the nearest Grid Resolution points of the selected Draw Area location as defined in the [Grid Setup dialog box](#).

### Method 2:

Right Click desired Tempo Event and choose **Adjust Value...** from the **Actions** submenu. Alternatively, click desired Tempo Event and choose **Adjust Value** from the **Line** menu.

Besides these editing methods, see [CREATING NEW MIDI TEMPO EVENTS](#) above.

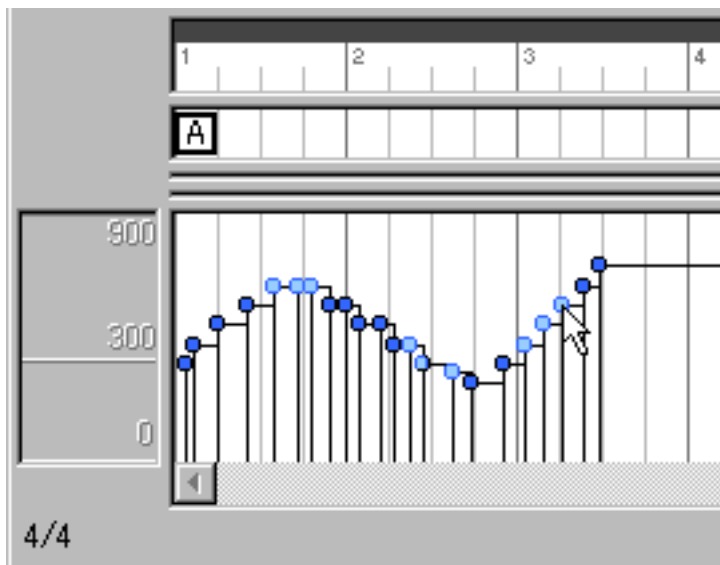
---

## SELECTING MIDI TEMPO EVENTS

---

### Method 1:

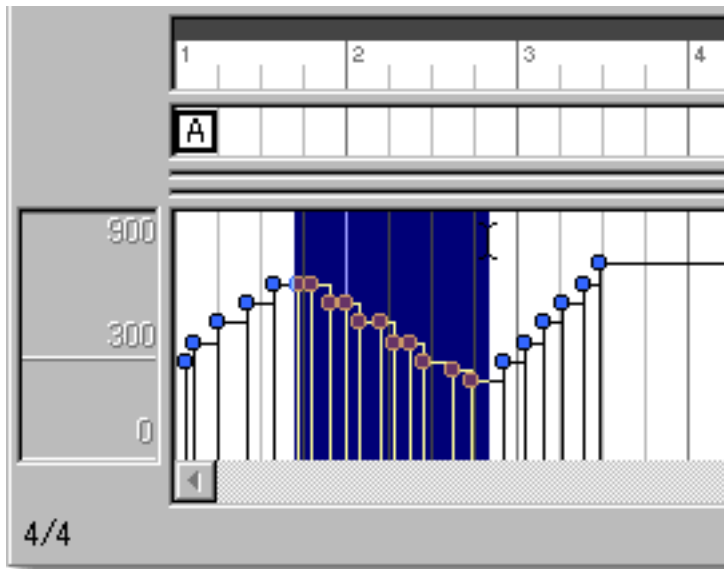
Using the **Arrow** tool, you can select individual Tempo Events. You can select multiple Tempo Events by holding the Ctrl (or Shift) key down as you select. Alternatively, Clicking and holding your mouse button down at an empty location in the Draw Area and dragging your mouse over desired Tempo Events allows you to select multiple Tempo Events in one quick operation.



### Method 2:

Using the **I Beam** tool, you can select all Tempo Events in a

horizontal (time) region at once. After clicking the **I Beam** button at the top of the Tempo Draw Editor, click and hold your mouse button down in an empty location of the Draw Area and drag your mouse horizontally over the desired Tempo Event region.



Selecting Tempo Events enables use of Tempo Event related commands under the **Edit** and **Line** Menu bar items. Once selected, you can then move, copy, paste or delete a group of Tempo Events at one time using the right click, menu bar or click and drag method.



Selecting entire Tempo Event regions will not be possible if the **Pen**, **Line**, **Oval** or **Eraser** tool button at the top of the Tempo Draw Editor is currently active. In these cases, Tempo Events will be created or deleted (depending on which of these buttons is active).

---

## MOVING MIDI TEMPO EVENTS

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Method 1:

Using the **Arrow** Tool, click and drag desired Tempo Events to a new location in the Draw Area. Any vertical motion during your dragging operation will effect the Event's value. See [EDITING MIDI TEMPO EVENTS](#) above.

Method 2:

Select a Tempo Event with your mouse and use the arrow keys on your computer's keyboard to move Events with more precision. The up/down arrow keys move a Tempo Event's value in single increments, and the left/right arrow keys move a Tempo Event's location by Divisions.

Method 3:

This method allows you to move Tempo Events between Documents.

Right-click a Tempo Event and choose **Cut Tempo Event** to remove a Tempo Event from its current location. Alternatively, click desired Tempo Event and choose **Cut Tempo Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Tempo Events in one operation.

Next, right-click a desired location in the Tempo Draw Editor's Draw Area of the desired Document and choose **Paste Tempo Event** to Paste the Cut Tempo Event(s). Alternatively, select a desired location in the Draw Area and choose **Paste Tempo Event** from the **Edit** menu.



When **Align To Grid** is activated, the Tempo Event being moved will be Pasted to the nearest Horizontal Grid Resolution point of the selected Draw Area location as defined in the [Grid Setup dialog box](#).

---

## DUPLICATING TEMPO EVENTS

---

Right-click a Tempo Event and choose **Duplicate Tempo Event** to duplicate a Tempo Event. Alternatively, click desired Tempo Events and choose **Duplicate Tempo Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Duplicate multiple Tempo Events in one operation.

Unlike the Copy/Paste operation which allows you to choose the location of the "copy" before it is created, Duplicating a Tempo Event automatically places the "duplicate" on top of the original. You can then move the "duplicate" at any time.

---

## COPYING / PASTING MIDI TEMPO EVENTS

---

Right-click a Tempo Event and choose **Copy Tempo Event** to copy a Tempo Event. Alternatively, click desired Tempo Event and choose **Copy Tempo Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Tempo Events in one operation.

Then, right-click a desired location in the Tempo Draw Editor's Draw Area of the desired Document and choose **Paste Tempo Event** to Paste the Copied Tempo Event(s). Alternatively, select a desired location in the Draw Area and choose **Paste Tempo Event** from the **Edit** menu.



When **Align To Grid** is activated, the Tempo Event being Copied will be Pasted to the nearest Horizontal Grid Resolution point of the selected Draw Area location as defined in the [Grid Setup dialog box](#).



---

## DELETING MIDI TEMPO EVENTS

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### Method 1:

Select the **Eraser** tool at the top of the Tempo Draw Editor and simply click on a Tempo Event to delete it. With the **Eraser** tool, clicking and holding your mouse button down at an empty location in the Draw Area and dragging the **Eraser** over desired Tempo Events allows you to delete multiple Tempo Events in one quick operation.

### Method 2:

Right-click a Tempo Event and choose **Clear Tempo Event** to delete a Tempo Event. Alternatively, click desired Tempo Event and choose **Clear Tempo Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Tempo Events in one operation.



See also:

[Adjusting the Grid display](#)

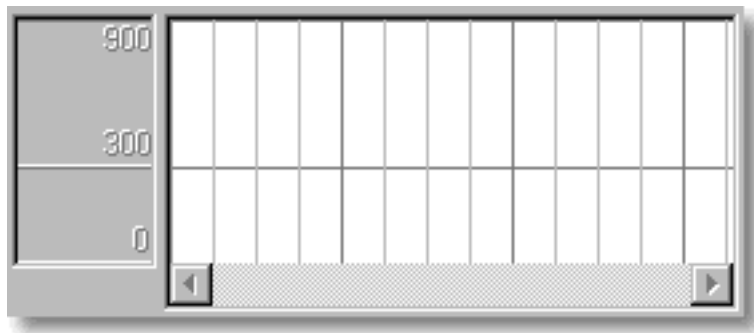
## Using the Draw Area

Adjusting the Grid display

- Bar Grid** The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. Choose **Bar Grid** from the **Grid View** submenu of the **View** menu to show or hide the Bar Grid in the Draw and Text Info Areas of the Tempo Draw Editor.
- Beat Grid** The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Beat Grid** from the **Grid View** submenu of the **View** menu to show or hide the Beat Grid in the Draw and Text Info Areas of the Tempo Draw Editor.
- Value Grid** The Value Grid is a pattern of evenly spaced horizontal lines marking vertical divisions between Tempo data Values for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Value Grid** from the **Grid View** submenu of the **View** menu to show or hide the Value Grid in the Draw Area.

See also:

[Creating and Manipulating MIDI Tempo Events](#)

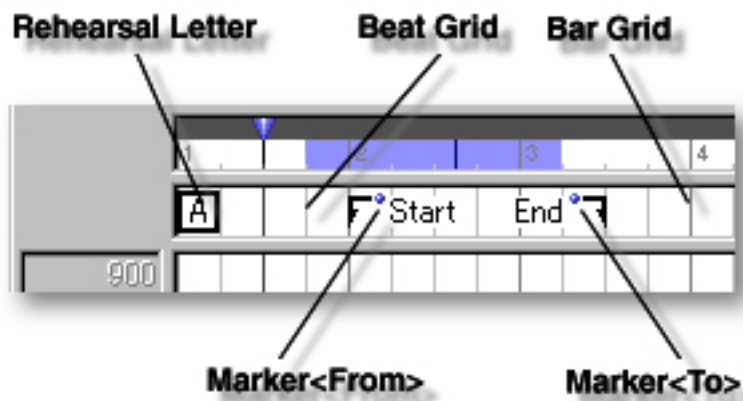


# Text Info Area of the Tempo Draw Editor

**Description** The Text Info Area displays general Text Information in a continuous row, parallel to the Bar Area. It allows you to create and display Text Events such as Rehearsal Letters and Markers.

**Uses** Text Events serve to help you organize your composition Document to more quickly locate a particular point in your music. These settings can then be saved with the Document.

- Items**
- [Rehearsal Letter](#) event
  - [Marker <From>](#) event
  - [Marker <To>](#) event
  - [Bar Grid](#)
  - [Beat Grid](#)



## Items in the Text Info Area

### [Creating Text Events](#)

#### Rehearsal Letter event

Rehearsal Letters such as A or B, generally appearing at obvious musical phrase boundaries, serve to provide Bar markings for rehearsal. These Text Events can also be phrases such as "Verse", "Chorus", "Head", "Bridge", or anything you desire. You can [create](#), [edit](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Rehearsal Letters as needed.

#### Marker <From><To> events

Markers serve to provide Cue markings for rehearsal or sequencing work. You can use either <From> or <To> depending on your needs. You can [create](#), [edit](#), [copy](#), [duplicate](#), [move](#) or [delete](#) Markers as needed.

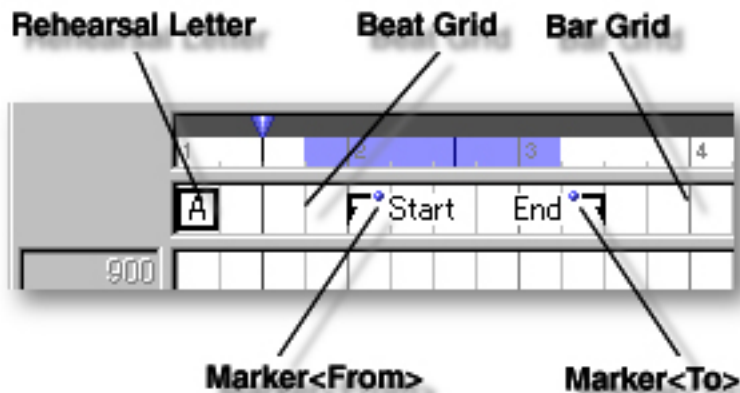
### [Adjusting the Grid display](#)

#### Bar Grid

Vertical lines horizontally spaced across the Text Info Area indicating Bar divisions.

#### Beat Grid

Vertical lines horizontally spaced across Bars indicating Beat divisions.



## Using the Text Info Area

Creating and Manipulating Text Events

**Rehearsal Letter event**


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### CREATING A REHEARSAL LETTER

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Right-click a desired location in the Text Info Area and choose **New Rehearsal Letter** to create a blank Rehearsal Letter. Enter desired text data in the edit box. When you are finished entering, click outside the edit box or press Enter on your computer's keyboard.

Alternatively, choose **New Text Event...** from the **Edit** menu to create a blank Rehearsal Letter. The [New Text Event dialog box](#) will open allowing you to choose a Rehearsal Letter, Marker <from> or Marker <To> text event.

 When choosing **New Text Event...** from the **Edit** menu, you must first have selected an empty Text Info Area, otherwise the **New Text Event...** item won't be available.



**Marker <From>  
Marker <To>  
events**


---

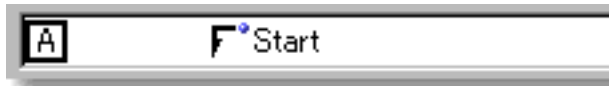
### CREATING A MARKER

---

Right-click a desired location in the Text Info Area and choose **New Marker <From>** or **New Marker <To>** to create a blank Marker. Enter desired text data in the edit box. When you are finished entering, click outside the edit box or press Enter on your computer's keyboard.

Alternatively, choose **New Text Event...** from the **Edit** menu to create a blank Marker. The [New Text Event dialog box](#) will open allowing you to choose a Rehearsal Letter, Marker <from> or Marker <To> text event.

 When choosing **New Text Event...** from the **Edit** menu, you must first have selected an empty Text Info Area, otherwise the **New Text Event...** item won't be available.



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## EDITING TEXT EVENTS

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To edit a Text Event, double click it, opening its edit box. After typing your changes, hit the Enter key or click someplace outside the edit box to close it.



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## SELECTING TEXT EVENTS

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Using the **Arrow** tool, you can select individual Text Events. You can select multiple Text Events by holding the Ctrl (or Shift) key down as you select. Alternatively, clicking and holding your mouse button down at an empty location in the Text Info Area and dragging your mouse over desired Text Events allows you to select multiple Text Events in one quick operation. Once selected, you can then move, duplicate, copy, paste or delete a group of Text Events at one time using the right click, menu bar or click and drag method.



Selecting multiple Text Events will not be possible if the **Eraser** tool button at the top of the Tempo Draw Editor is currently active. In this case, Text Events will be deleted.



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## MOVING TEXT EVENTS

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Method 1:

Click and drag desired Text Events to a new location in the Text Info Area.

Method 2:

Select desired Text Event with your mouse and use your computer keyboard's left/right arrow keys to move Text Events a Division at a time.

Method 3:

This method allows you to move Text Events between Documents.

Right-click a Text Event and choose **Cut Text Event** to remove a Text Event from its current location. Alternatively, click desired Text Event and choose **Cut Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Text Events in one operation.

Next, right-click a desired location in the Text Info Area of the desired Document's Tempo Draw, Control Draw or Pianoroll Editor, or Document Window and choose **Paste Text Event** to Paste the Cut Text Event(s). Alternatively, select a desired location in the Text Info Area and choose **Paste Text Event** from the **Edit** menu.



When **Align To Grid** is activated, the Text Event being moved will be Pasted to the nearest Horizontal Grid Resolution point of the selected Text Info Area location as defined in the [Grid Setup dialog box](#).

---

## DUPLICATING TEXT EVENTS

---

Right-click a Text Event and choose **Duplicate Text Event** to duplicate a Text Event. Alternatively, click desired Text Events and choose **Duplicate Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Duplicate multiple Text Events in one operation.

Unlike the Copy/Paste operation which allows you to choose the location of the "copy" before it is created, Duplicating a Text Event automatically places the "duplicate" on top of the original, offset slightly to the right. You can then move the "duplicate" at any time.

---

## COPYING / PASTING TEXT EVENTS

---

Right-click a Text Event and choose **Copy Text Event** to copy a Text Event. Alternatively, click desired Text Event and choose **Copy Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Text Events in one operation.

Next, right-click a desired location in the Text Info Area of the desired Document's Tempo Draw, Control Draw or Pianoroll Editor, or Document Window and choose **Paste Text Event** to Paste the Copied Text Event(s). Alternatively, select a desired location in the Text Info Area and choose **Paste Text Event** from the **Edit** menu.



When **Align To Grid** is activated, the Text Event being Copied will be Pasted to the nearest Horizontal Grid Resolution point of the selected Text Info Area location as defined in the [Grid Setup dialog box](#).

---

## DELETING TEXT EVENTS

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Method 1:

Select the **Eraser** tool at the top of the Tempo Draw Editor and simply click on a Text Event to delete it. With the **Eraser** tool, clicking and holding your mouse button down at an empty location in the Text Info Area and dragging your the **Eraser** over desired Text Events allows you to delete multiple Text Events in one quick operation.

Method 2:

Right-click a Text Event and choose **Clear Text Event** to delete a Text Event. Alternatively, click desired Text Events and choose **Clear Text Event** from the **Edit** menu to delete the selected Text Events. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Text Events in one operation.



See also:

[Adjusting the Grid display](#)



Adjusting the  
Grid display

### **Bar Grid**

The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. Choose **Bar Grid** from the **Grid View** submenu of the **View** menu to show or hide the Bar Grid in the Text Info and Draw Areas of the Tempo Draw Editor.

### **Beat Grid**

The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. (This is not necessarily the same as the Alignment Grid.) Choose **Beat Grid** from the **Grid View** submenu of the **View** menu to show or hide the Beat Grid in the Text Info and Draw Areas of the Tempo Draw Editor.

See also:

[Creating and Manipulating Text Events](#)

# Tempo List Editor

**Description** The Tempo List Editor allows you to directly edit a Document's MIDI Tempo Event data values. Events are listed vertically from the top down.

**Items** The Tempo List Editor contains several Buttons and Data columns for manipulating MIDI Tempo Events. You can choose to Show or Hide the Buttons with the **Edit Buttons** command in the **View** menu. You can adjust the horizontal size of each Column by clicking and dragging the vertical separator bar between column headers at the top.

[Edit Buttons](#)

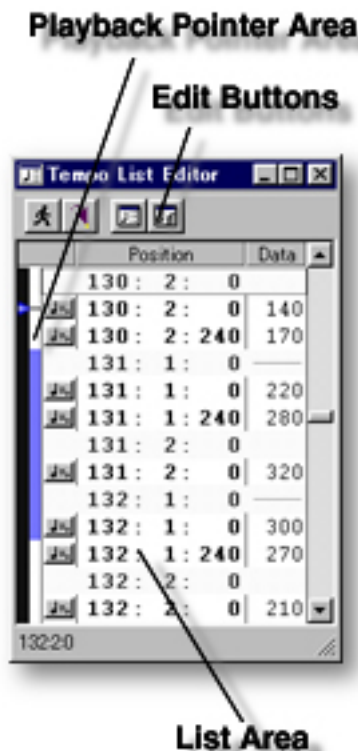
The Edit Buttons give you quick access to viewing tools for the Tempo List Editor, as well as Tempo related Editors available in CAMPS.

[Playback Pointer Area](#)

The Playback Pointer Area displays the Playback Pointer and allows you to manipulate Loop functions.

[List Area](#)

The List Area displays MIDI Tempo Event data, listed vertically from the top down. Each Event's data appears in a horizontal row, and all data fields can be directly edited.



## Opening

From the  
[Document Window](#)

First, select a desired Document. Then, either choose **Event List Editor** from the **Editors** menu, or simply click the **Tempo List Editor** button at the top of the Document Window.

From the...  
Tempo List Editor  
[Tempo Draw Editor](#)  
[Text List Editor](#)

Choose **Tempo List Editor** from the **Editors** menu, or simply click the **Tempo List Editor** button at the top of the Tempo List or Tempo Draw Editor Window.

## Edit Buttons Area of the Tempo List Editor

**Description** The Edit Buttons at the top of the Tempo List Editor give you quick access to frequently used items, such as View settings and Editors.

**Uses** The Edit Buttons include many of the **View** and **Editors** menu commands. Choose **Edit Buttons** from the **View** menu to show or hide the Edit Buttons.

**Items**

- [Auto Scroll](#) button
- [Jump To Location](#) button
- [Tempo List Editor](#) button
- [Tempo Draw Editor](#) button



Adjusting  
View

**Auto Scroll**  
button

Sets the viewable area in the List Area to follow the Playback Pointer during Playback.

**Jump To Location**  
button

Opens the [Jump To Location](#) dialog box which allows you to move the current viewpoint to a specified Bar in the Tempo List Editor.

Opening  
Editors

**Tempo List Editor**  
button

Opens a new [Tempo List Editor](#) window, allowing you to make alternate MIDI Tempo Event edits in the currently selected Document.

**Tempo Draw Editor**  
button

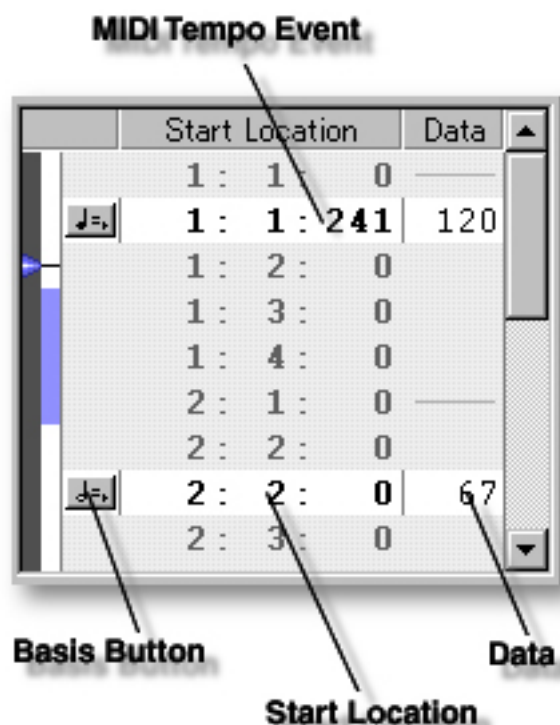
Opens the [Tempo Draw Editor](#), allowing you to edit a Document's MIDI Tempo Event data with a unique freestyle drawing method.



## Items in the List Area

### [Manipulating MIDI Tempo Events](#)

<b>MIDI Tempo Event</b>	A MIDI Tempo Event is MIDI data which executes MIDI Tempo commands. You can <a href="#">create</a> , <a href="#">edit</a> , <a href="#">copy</a> , <a href="#">move</a> or <a href="#">delete</a> MIDI Tempo Events as needed.
<b>Basis Button</b> column	This column displays a Tempo Event data display button for each MIDI Tempo Event, allowing you to select display time <a href="#">Basis</a> for each Tempo Event. Click on a Tempo Event's Basis button in the left column of the List Area to open the Basis drop-down menu.
<b>Start Location</b> column	This column displays the Playback Start Location of MIDI Tempo Events in the format [Bar:Beat:Divisions].
<b>Data</b> column	This column displays MIDI Tempo Event Data in a decimal value of Beats Per Minute. Each Tempo Event's data display is in the context of its Basis button setting.

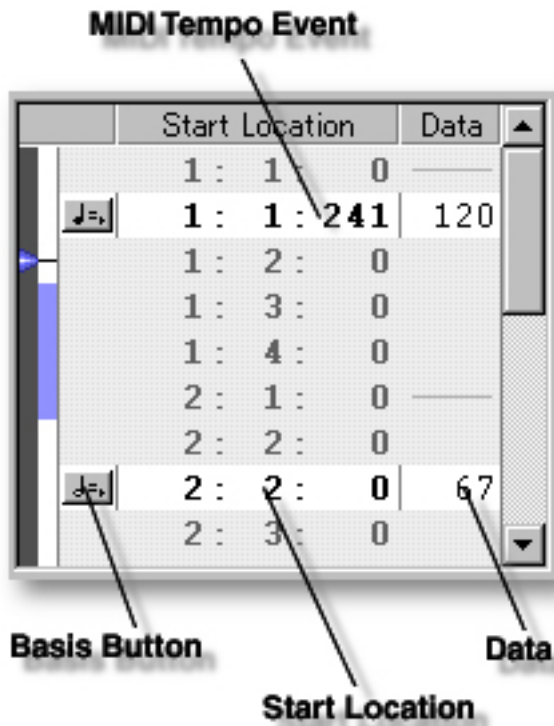


# List Area of the Tempo List Editor

**Description** The List Area is the main editing area of the Tempo List Editor.

**Uses** The List Area allows you to quickly create and edit MIDI Tempo Event data one Event at a time. To edit an Event value, double click the desired data field and make your changes in the edit box which opens.

- Items**
- [MIDI Tempo Event](#)
  - [Basis Button](#) column
  - [Start Location](#) column
  - [Data](#) column



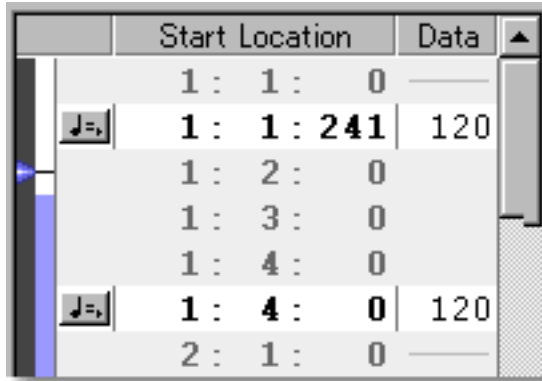
## Using the List Area

Creating and  
Manipulating  
MIDI Tempo Events

### MIDI Tempo Event

#### CREATING NEW MIDI TEMPO EVENTS

Right click desired location in the Tempo List and choose **New Tempo Event**. Alternatively, click the desired location in the Event List and choose **New Tempo Event** from the **Edit** menu.



The screenshot shows a MIDI Tempo List with the following data:

	Start Location	Data
	1 : 1 : 0	---
↓=,	1 : 1 : 241	120
	1 : 2 : 0	
	1 : 3 : 0	
	1 : 4 : 0	
↓=,	1 : 4 : 0	120
	2 : 1 : 0	---

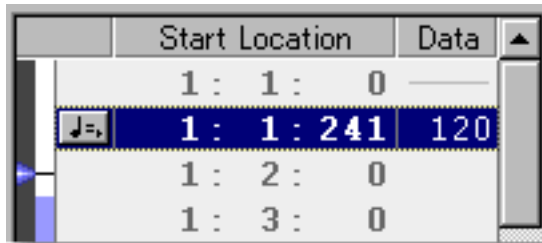
#### EDITING MIDI TEMPO EVENTS

Method 1:

Double click the desired data field to open its edit box. Use the up/down buttons or directly edit the values with your computer's keyboard.

Method 2:

Click the desired Tempo Event and choose **Adjust Value...** from the **Line** menu to open the [Value Adjustment dialog box](#).



The screenshot shows the same MIDI Tempo List as above, but the event at 1 : 1 : 241 with a value of 120 is highlighted in blue, indicating it is selected.

	Start Location	Data
	1 : 1 : 0	---
↓=,	1 : 1 : 241	120
	1 : 2 : 0	
	1 : 3 : 0	



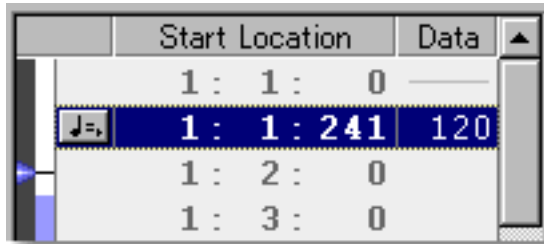
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## SELECTING MIDI TEMPO EVENTS

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Using the **Arrow** tool, you can select individual Tempo Events. You can select multiple Tempo Events by holding the Ctrl (or Shift) key down as you select. Once selected, you can then move, copy, paste or delete a group of Tempo Events at one time using the right click, menu bar or click and drag method.

Selecting Tempo Events enables use of Tempo Event related commands under the **Edit** and **Line** menu bar items.



Start Location	Data
1 : 1 : 0	
1 : 1 : 241	120
1 : 2 : 0	
1 : 3 : 0	

---

## MOVING MIDI TEMPO EVENTS

---

Method 1:

Click and drag desired Tempo Events to a new location in the Event List Area. As you drag a Tempo Event through the Tempo Event List, a black horizontal bar appears between existing Events indicating possible destinations. When this bar appears at the desired location, release your mouse button to drop the Tempo Event being moved to the new location.

Method 2:

This method allows you to move Tempo Events between Documents.

Right-click a Tempo Event and choose **Cut Tempo Event** to remove a Tempo Event from its current location. Alternatively, click desired Tempo Event and choose **Cut Tempo Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Tempo Events in one operation.

Next, right-click a desired location in the desired Document's Tempo List Editor and choose **Paste Tempo Event** to Paste the Cut Tempo Event(s). Alternatively, select a desired location in the List Area and choose **Paste Tempo Event** from the **Edit** menu.



The Tempo Event being moved will be pasted immediately after the selected destination Tempo Event's location in the List.

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## COPYING / PASTING MIDI TEMPO EVENTS

---

Right-click a Tempo Event and choose **Copy Tempo Event** to copy a Tempo Event. Alternatively, click desired Tempo Event and choose **Copy Tempo Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Tempo Events in one operation.

Next, right-click a desired location in the desired Document's Tempo List Editor and choose **Paste Tempo Event** to Paste the Copied Tempo Event(s). Alternatively, select a desired location in the List Area and choose **Paste Tempo Event** from the **Edit** menu.



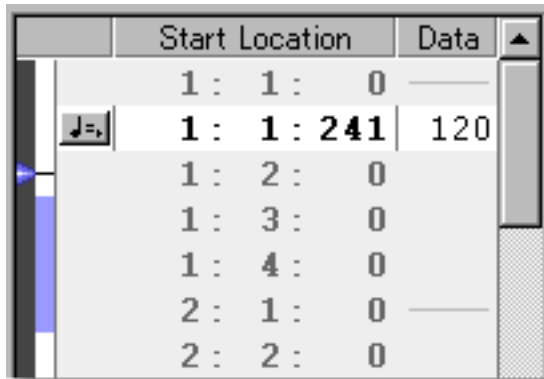
The Tempo Event being copied will be Pasted immediately after the selected destination Tempo Event's location in the List.

---

## DELETING MIDI TEMPO EVENTS

---

Right-click a Tempo Event and choose **Clear Tempo Event** to delete a Tempo Event. Alternatively, click desired Tempo Event and choose **Clear Tempo Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Tempo Events in one operation.



	Start Location	Data
	1 : 1 : 0	---
↓	1 : 1 : 241	120
	1 : 2 : 0	
	1 : 3 : 0	
	1 : 4 : 0	
	2 : 1 : 0	---
	2 : 2 : 0	

See also:

[Adjusting Tempo Data View](#)

## Using the List Area

Adjusting  
Tempo Data View

**Basis**  
button/display

Click a Tempo Event's Basis button in the left column of the Tempo List Editor to open its drop-down Basis menu. The current setting is indicated with the appropriate Notation symbol in the button face, and a bullet next to the corresponding item in the drop-down menu. Choices are as follows:

- Half Note** Sets the Tempo data display to use a Half Note time value as a basis, i.e. Half Note = 75 Beats Per Minute.
- Quarter Note** Sets the Tempo data display to use a Quarter Note time value as a basis (standard Metronome scale), i.e. Quarter Note = 150 Beats Per Minute.
- 8th Note** Sets the Tempo data display to use an 8th Note time value as a basis, i.e. 8th Note = 300 Beats Per Minute.
- 16th Note** Sets the Tempo data display to use a 16th Note time value as a basis, i.e. 16th Note = 600 Beats Per Minute.

	Start Location	Data
	1 : 1 : 0	—
↓=	1 : 1 : 241	120
	1 : 2 : 0	
	1 : 3 : 0	
	1 : 4 : 0	
	2 : 1 : 0	—
	2 : 2 : 0	

See also:

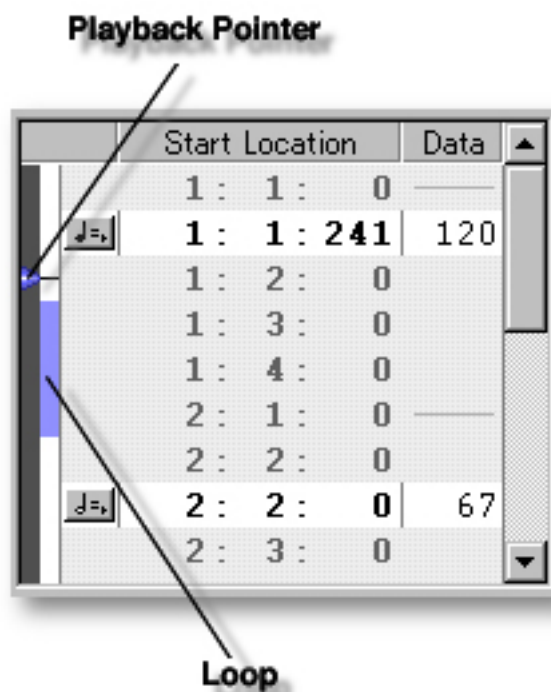
[Creating and Manipulating MIDI Tempo Events](#)

# Playback Pointer Area of the Tempo List Editor

**Description** The Playback Pointer Area displays the current Playback location and Loop region.

**Uses** The Playback Pointer Area allows you to manage the location of the [Playback Pointer](#), as well as Playback [Loop](#) settings.

**Items** [Playback Pointer](#)  
[Loop](#) region



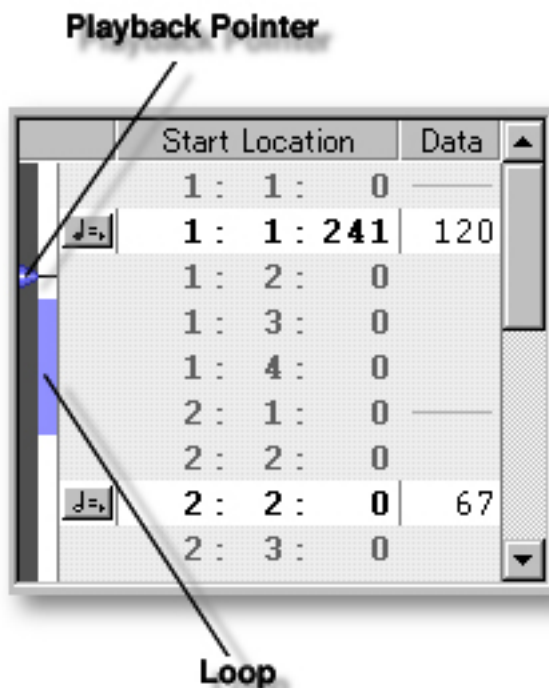
## Items in the **Playback Pointer Area**

[Positioning the Playback Pointer](#)

[Inserting a Playback Loop](#)

**Playback Pointer** The Playback Pointer resides in its own dark gray column in the far left side of the Tempo List Editor window. It displays the current Playback location in the Tempo List Editor and allows you to change the current Playback point.

**Loop region** Displays your current Loop region. Starting Playback repeats (Loops) Playback in this region until you stop. A Loop region is indicated vertically by the color blue to the right of the dark gray Playback Pointer column.



## Using the Playback Pointer Area

Positioning the Playback Pointer

**Playback Pointer** and area

Unlike most of the other Editors in CAMPS, the Tempo List Editor's Playback displays vertically instead of horizontally.


You can use the Playback Pointer to change the Playback point in the Tempo List Editor in two ways: Clicking a desired location in the dark gray Playback Pointer area on the left, or clicking and dragging the Playback Pointer vertically to a desired location. Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. The Playback Pointer displays the current Playback location as CAMPS plays MIDI data.

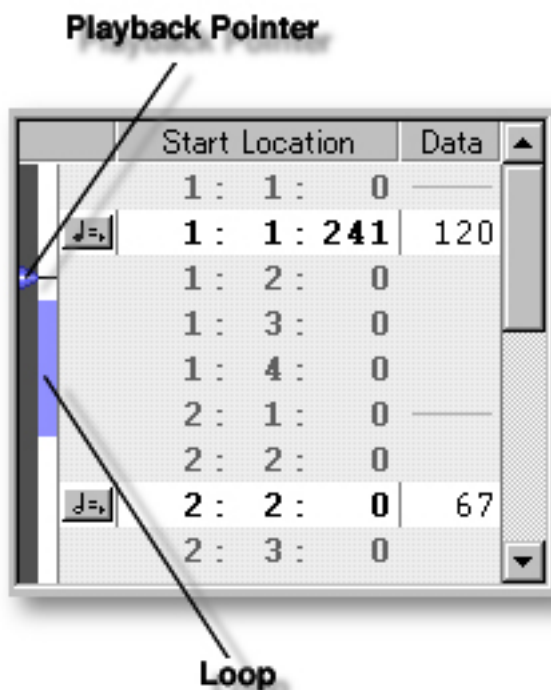
Inserting a Playback Loop

**Loop** region

You can create a Loop region by clicking and dragging with your mouse vertically in the Loop Area, to the right of the Playback Pointer Area. As you drag your mouse, the Loop region appears blue in color, displaying a new Loop region.

Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. CAMPS repeats Loop region Playback until you stop it.

 The start and end points of the Loop region snap to the nearest vertical Event boundary. Click anywhere in the Loop Area to delete a Loop region.

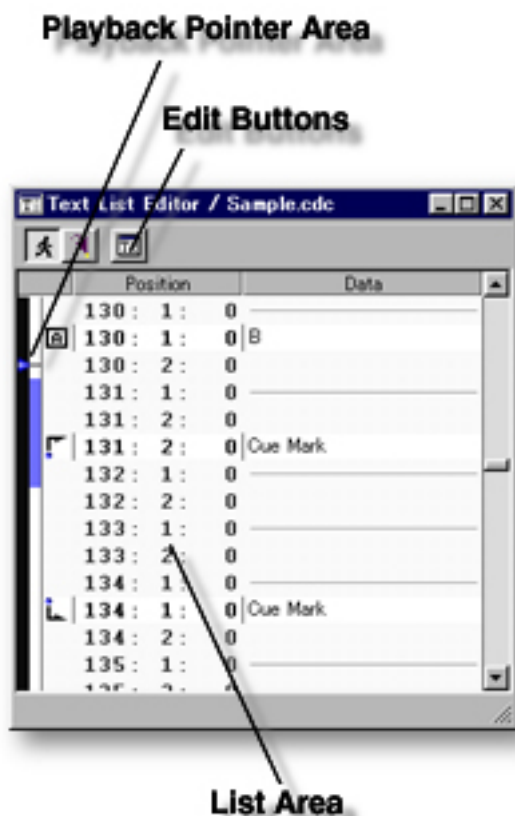


# Text List Editor

**Description** The Text List Editor allows you to directly edit a Document's general Text Event data values (other than Lyrics). Events are listed vertically from the top down.

**Items** The Text List Editor contains several Buttons and Data columns for manipulating Text Events. You can choose to Show or Hide the Buttons with the **Edit Buttons** command in the **View** menu. You can adjust the horizontal size of each Column by clicking and dragging the vertical separator bar between column headers at the top.

- [Edit Buttons](#) The Edit Buttons give you quick access to viewing tools for the Text List Editor, as well as Text related Editors available in CAMPS.
- [Playback Pointer Area](#) The Playback Pointer Area displays the Playback Pointer, and allows you to manipulate Loop functions.
- [List Area](#) The List Area displays Text Event data in the currently selected Document, listed vertically from the top down. Each Event's data appears in a horizontal row, and all data fields can be directly edited.



## Opening

From the  
[Document Window](#)

First, select a desired Document. Then, either choose **Event List Editor** from the **Editors** menu, or simply click the **Text List Editor** button at the top of the Document Window.

From the...  
[Tempo List Editor](#)  
[Tempo Draw Editor](#)  
Text List Editor

Choose **Text List Editor** from the **Editors** menu, or simply click the **Text List Editor** button at the top of the Text List Editor Window.



## Edit Buttons Area of the Text List Editor

**Description** The Edit Buttons at the top of the Text List Editor give you quick access to frequently used items, such as View settings and Editors.

**Uses** The Edit Buttons include two of the **View** and one of the **Editors** menu commands. Choose **Edit Buttons** from the **View** menu to show or hide the Edit Buttons.

**Items**

- [Auto Scroll](#) button
- [Jump To Location](#) button
- [Text List Editor](#) button



Adjusting  
View**Auto Scroll**  
button

Sets the viewable portion of the List Area to follow the Playback Pointer during Playback.

**Jump To Location**  
button

Opens [the Jump To Location dialog box](#) which allows you to move the current viewpoint to a specified Bar in the Text List Editor.

Opening  
Editors**Text List Editor**  
button

Opens a new [Text List Editor](#) window, allowing you to make alternate Text Event edits in the currently selected Document.

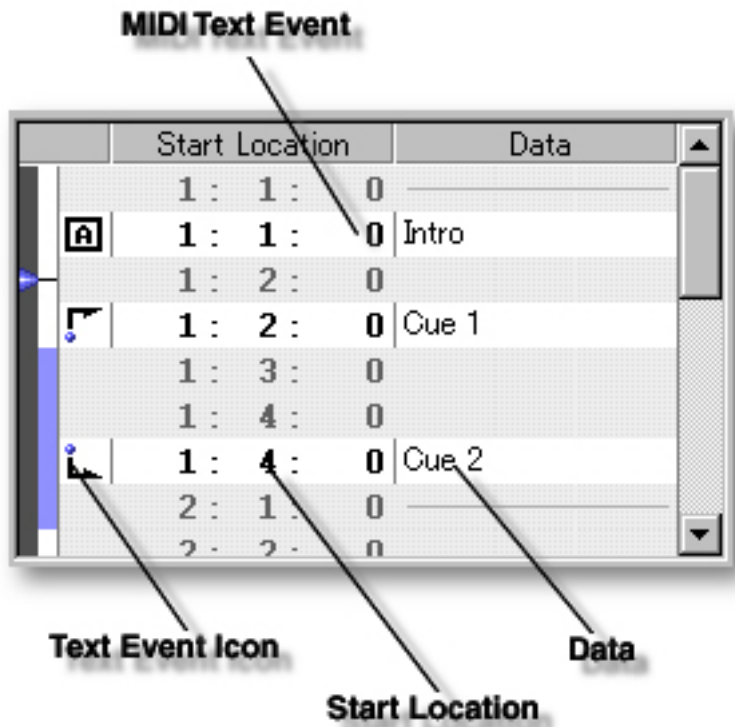


# List Area of the Text List Editor

**Description** The List Area is the main editing area of the Text List Editor.

**Uses** The List Area allows you to quickly create and edit Text Event data one Event at a time. To edit an Event value, double click the desired data field and make your changes in the edit or dialog box which opens.

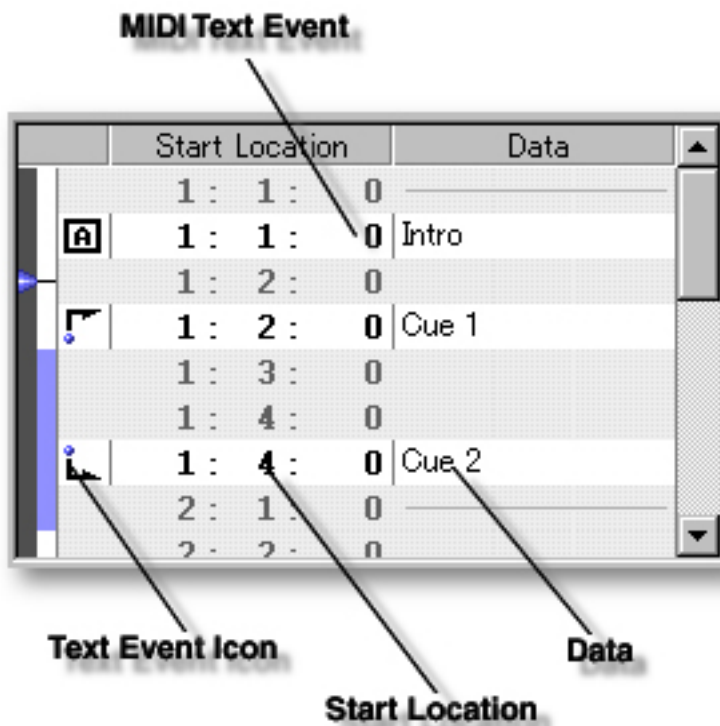
- Items**
- [MIDI Text Event](#)
  - [Text Event Icon](#) column
  - [Start Location](#) column
  - [Data](#) column



## Items in the List Area

### Manipulating Text Events

<b>MIDI Text Event</b>	A MIDI Text Event is MIDI data which containing Text used for general purposes, such as Rehearsal Letters or Markers. You can <a href="#">create</a> , <a href="#">edit</a> , <a href="#">copy</a> , <a href="#">move</a> or <a href="#">delete</a> Text Events as needed.
<b>Text Event Icon</b> column	This column displays any applicable Text Event Icons for Text Events, and allows you to select a Text Event. Click on a Text Event's Icon in the far left column of the List Area, or in an Event's data row between any of the data fields to select an Event and all its data.
<b>Start Location</b> column	This column displays the MIDI Location of Text Events in the format [Bar:Beat:Divisions].
<b>Data</b> column	This column displays Text Event Data in its readable Text form.



## Using the List Area

Creating and Manipulating Text Events

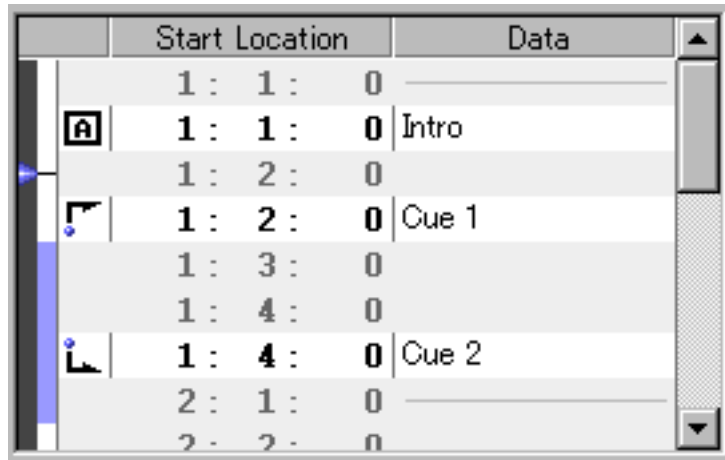
### Text Event




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#### CREATING NEW TEXT EVENTS

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Right click desired location in the Text List and choose **New Text Event**. Alternatively, click the desired location in the Event List and choose **New Text Event** from the **Edit** menu.



	Start Location	Data
	1 : 1 : 0	
	1 : 1 : 0	Intro
	1 : 2 : 0	
	1 : 2 : 0	Cue 1
	1 : 3 : 0	
	1 : 4 : 0	
	1 : 4 : 0	Cue 2
	2 : 1 : 0	
	2 : 2 : 0	

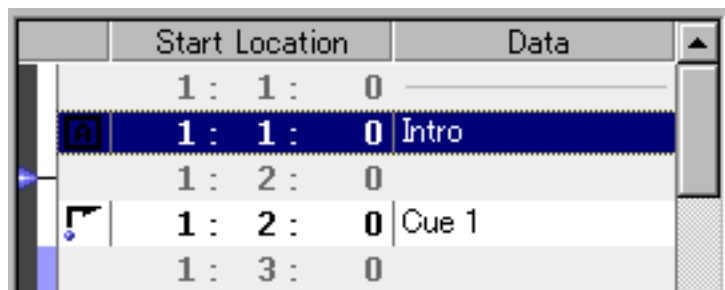
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#### EDITING TEXT EVENTS

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Double click the desired Position data field to open its edit box and use the up/down buttons or directly edit the values with your computer's keyboard.

Double click the desired Text data field to open its dialog box and enter desired changes in the dialog box with your computer's keyboard. Click **OK** when finished.



	Start Location	Data
	1 : 1 : 0	
	1 : 1 : 0	Intro
	1 : 2 : 0	
	1 : 2 : 0	Cue 1
	1 : 3 : 0	

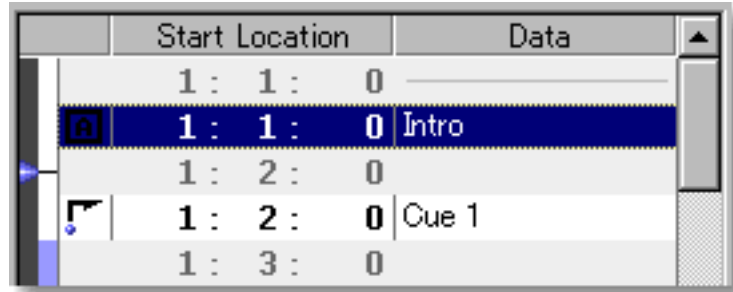
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## SELECTING TEXT EVENTS

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Using the **Arrow** tool, you can select individual Text Events. You can select multiple Text Events by holding the Ctrl (or Shift) key down as you select. Once selected, you can then move, copy, paste or delete a group of Text Events at one time using the right click, menu bar or click and drag method.

Selecting Text Events enables use of Text Event related commands in **Edit** menu.



	Start Location	Data
	1 : 1 : 0	
<b>A</b>	1 : 1 : 0	Intro
	1 : 2 : 0	
<b>⏏</b>	1 : 2 : 0	Cue 1
	1 : 3 : 0	

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## MOVING TEXT EVENTS

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Method 1:

Click and drag desired Text Events to a new location in the Event List Area. As you drag a Text Event through the Text Event List, a black horizontal bar appears between existing Events indicating possible destinations. When this bar appears at the desired location, release your mouse button to drop the Event being moved to the new location.

Method 2:

This method allows you to move Text Events between Documents.

Right-click a Text Event and choose **Cut Text Event** to remove a Text Event from its current location. Alternatively, click desired Text Event and choose **Cut Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Cut multiple Text Events in one operation.

Next, right-click a desired location in the desired Document's Text List Editor List Area and choose **Paste Text Event** to Paste the Cut Text Event(s). Alternatively, select a desired location in the List Area and choose **Paste Text Event** from the **Edit** menu.



The Text Event being moved will be Pasted immediately after the selected destination Text Event's location in the List.

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## COPYING / PASTING TEXT EVENTS

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Right-click a Text Event and choose **Copy Text Event** to copy it. Alternatively, click desired Text Event and choose **Copy Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to copy multiple Text Events in one operation.

Then, right-click a desired location in the desired Document's Text List Editor and choose **Paste Text Event** to Paste the Copied Text Event(s). Alternatively, select a desired location in the List Area and choose **Paste Text Event** from the **Edit** menu.



The Text Event being copied will be Pasted immediately after the selected destination Text Event's location in the List.

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## DELETING TEXT EVENTS

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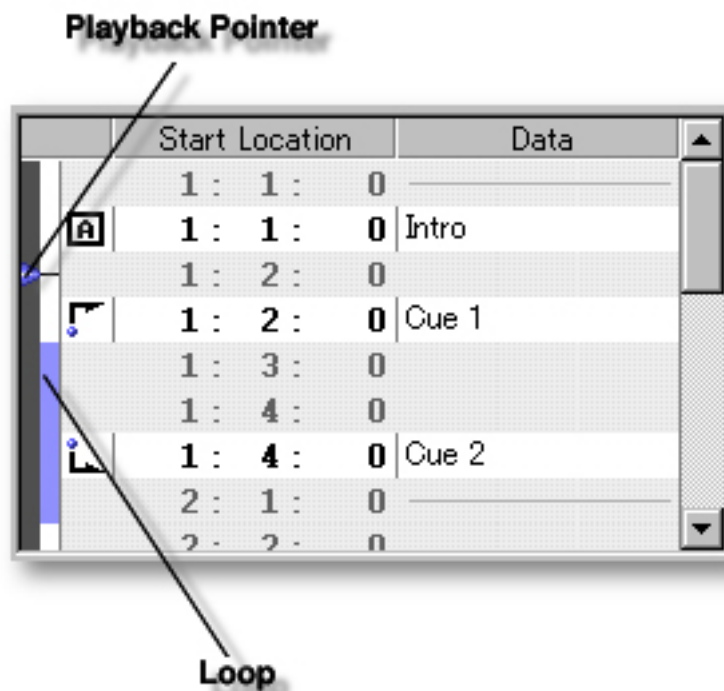
Right-click a Text Event and choose **Clear Text Event** to delete it. Alternatively, click desired Text Event and choose **Clear Text Event** from the **Edit** menu. Using the Ctrl (or Shift) key while selecting allows you to Clear multiple Text Events in one operation.

## Playback Pointer Area of the Text List Editor

**Description** The Playback Pointer Area displays the current Playback location and Loop region.

**Uses** The Playback Pointer Area allows you to manage the location of the [Playback Pointer](#), as well as Playback [Loop](#) settings.

**Items** [Playback Pointer](#)  
[Loop](#) region





## Items in the Playback Pointer Area

[Positioning the Playback Pointer](#)

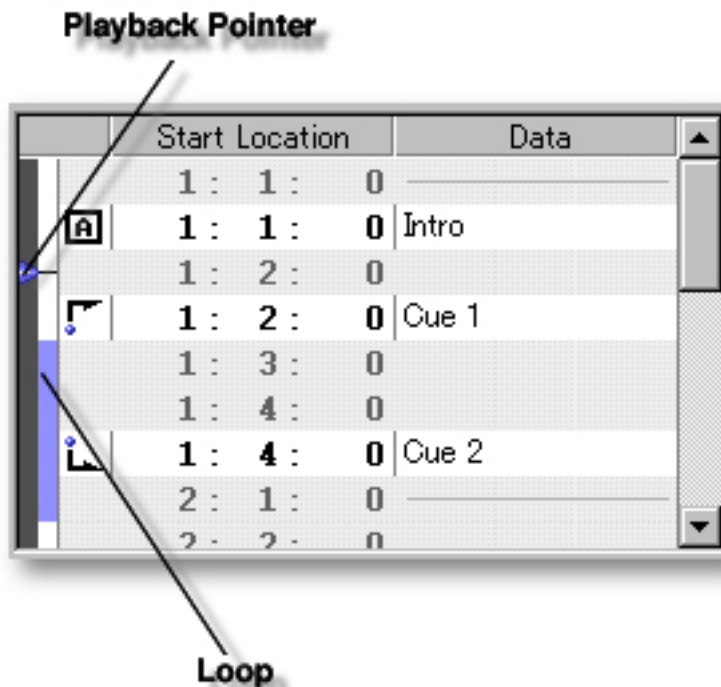
[Inserting a Playback Loop](#)

### Playback Pointer

The Playback Pointer resides in its own dark gray column in the far left side of the Text List Editor window. It displays the current Playback location in the Text List Editor and allows you to change the current Playback point.

### Loop region

Displays your current Loop region. Starting Playback repeats (Loops) Playback in this region until you stop. A Loop region is indicated vertically by the color blue to the right of the dark gray Playback Pointer column.



## Using the Playback Pointer Area

Positioning the Playback Pointer

**Playback Pointer** and area

Unlike most of the other Editors in CAMPS, the Text List Editor's Playback displays vertically instead of horizontally.


You can use the Playback Pointer to change the Playback point in the Text List Editor in two ways: Clicking a desired location in the dark gray Playback Pointer area on the left, or clicking and dragging the Playback Pointer vertically to a desired location. Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. The Playback Pointer displays the current Playback location as CAMPS plays MIDI data.

Inserting a Playback Loop

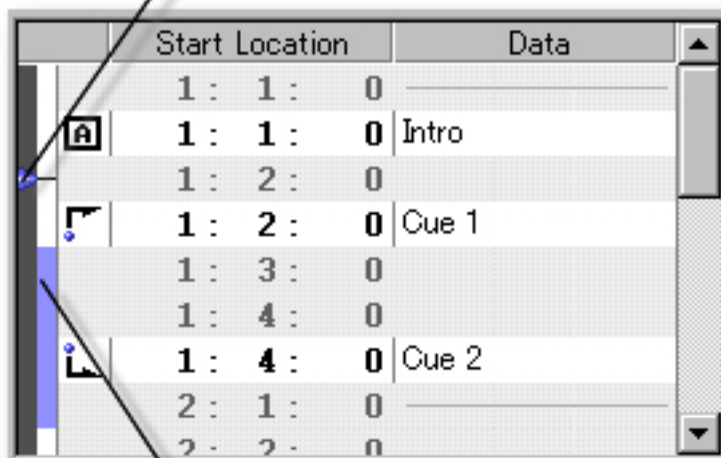
**Loop** region




You can create a Loop region by clicking and dragging with your mouse vertically in the Loop Area, to the right of the Playback Pointer Area. As you drag your mouse, the Loop region appears blue in color, displaying a new Loop region.

Choose **Play** from the **MIDI** menu (or click the **Play** button in the [Playback Control toolbar](#)) to begin Playback. CAMPS repeats Loop region Playback until you stop it.

 The start and end points of the Loop region snap to the nearest vertical Event boundary. Click anywhere in the Loop Area to delete a Loop region.

**Playback Pointer**



	Start Location	Data
	1 : 1 : 0	
	1 : 1 : 0	Intro
	1 : 2 : 0	
	1 : 2 : 0	Cue 1
	1 : 3 : 0	
	1 : 4 : 0	
	1 : 4 : 0	Cue 2
	2 : 1 : 0	
	2 : 2 : 0	

**Loop**

## Dialog Boxes

More than Forty Dialog Boxes are employed in CAMPS to assist in building your Composition.

The following is a list of Dialog Boxes unique to CAMPS:

## For Chords

### [Generate Chord Progression](#)

Provides a selection of possible Chord substitutions or Chord Progressions that can replace existing Chords or fill in missing Chords.

### [Harmonize](#)

Generates numerous alternate Chord Progressions for Melody harmonization.

### [Chord Detection](#)

Detects Chord Names, complete with Roman Numeral Analysis, from an external MIDI instrument.

### [Chord Construction](#)

Allows you to manually construct a Chord by assigning its Symbol, Quality and Tension.

### [New Chord](#)

Allows you to create and set defaults for new Chord Containers in existing Chord Blocks.

### [New Chord Block](#)

Allows you to create and set defaults for new Chord Blocks.

## For Lines

### [Compose](#)

Generates an infinite number of alternate Melodies to fit your Chord Progressions, based on extensive analysis of your original Melody and various parameters you can set, including MelodyDraw.

### [Voicing](#)

Provides you with possible Voicings for a selected "Lead Note".

### [Dissonant Intervals Detection](#)

Detects Dissonant Intervals in Line(s) and between Line(s) for selected Note(s).

### [Quantize](#)

Allows you to correct the start time of Notes in selected Line data.

### [Transpose](#)

Allows you to shift the Pitch of Notes in selected Line data by half steps.

### [Articulation Adjustment](#)

Allows you to adjust the Length of Notes in selected Line data.

### [Velocity Adjustment](#)

Allows you to adjust the Velocity of Notes in selected Line data .

### [Map Pitches](#)

Allows you to reassign Line data MIDI Pitch Values, primarily for remapping synth Drum Program sounds.

### [Drums Notation Setup](#)

Allows you to set up Percussion Notation for viewing Drum Tracks in the Notation Editor.

### **New Line Block**

(Edit Menu)

Opened from the **Edit** menu, this dialog box allows you to create and insert new Line Blocks with or without automatically generated Line data in any Track Category.

### **New Line Block**

Opened in the context of a Tonal Track, this dialog box allows you to create and insert new Line Blocks with or without automatically generated Tonal Line data.

### **New Line Block**

(Drums)

Opened in the context of a Drum Track, this dialog box allows you to create and insert new Line Blocks with or without automatically generated Percussion Line data.

### **Take List**

Allows you to create, select and Audition New Takes for a selected Line Block, with or without automatically generated Line data.

### **New Take**

Opened in the context of a Tonal Line Block, this dialog box allows you to create and select New Takes with or without automatically generated Tonal Line data.

### **New Take**

(Drums)

Opened in the context of a Line Block in the Drums Category, this dialog box allows you to create and select New Takes with or without automatically generated Percussion Line data.

For MIDI Events

### **New Event**

Allows you to create and edit specific MIDI Events in selected Line data.

### **Select a Control**

From Event List Editor

This dialog box is used to select a Control parameter (Bank, Program, etc.) for Control Change Events.

### **Select a Control**

From Control Draw Editor

This dialog box is used to select a Control parameter (Bank, Program, etc.) for Control Change Events.

### **Select a Program**

This dialog box is used to select a Program Number (sound; patch, etc.) for Program Change Events.

### **Select a Key**

From Event List Editor

This dialog box is used to select a desired Drum Key (Pitch value) you wish to assign to the currently selected Drum Key

### **Select a Key**

From Control Draw Editor

This dialog box is used to select a MIDI Instrument Key (Pitch value) for Poly After Touch Events.

### **Select a Drum Key**

This dialog box is used to select a MIDI Instrument Key (Pitch value which translates to a Drum sound in the current Drum Program) to a MIDI Note Event in Percussion Line data.

### **Edit a System Exclusive Event**

Allows you to selectively edit System Exclusive Event data.

### **Value Adjustment**

Allows you to adjust the value of selected MIDI Events.

### **Displayed Events**

Allows you to choose which MIDI Events appear in the Event List Editor.

For Text	<a href="#"><u>New Text Event</u></a>	Allows you to select a New Text Event, such as a Rehearsal Letter or Marker, and insert it in the Text Info Area of your Document.
	<a href="#"><u>Memo</u></a>	Allows you to insert and edit Memo text for selected Documents, Line Blocks or Tracks.
Miscellaneous	<a href="#"><u>Jump To Location</u></a>	Lets you jump to a specified Bar in the Document and Editor windows.
	<a href="#"><u>Preferences</u></a>	Allows you to set defaults for CAMPS general operation.
	<a href="#"><u>New Document Setup</u></a>	Allows you to set new blank Document Window defaults.
	<a href="#"><u>MIDI Setup</u></a>	Allows you to set defaults for MIDI Interfaces, MIDI Record Filtering and MIDI synchronization.
	<a href="#"><u>Time Signature Setup</u></a>	Allows you to assign Time Signatures to individual Bars.
	<a href="#"><u>Grid Setup</u></a>	Allows you to set Alignment Grid resolution defaults for various Editor areas.
	<a href="#"><u>SMPTE Offset Setup</u></a>	Allows you to offset SMPTE synchronization between CAMPS in slave mode and a master SMPTE device during Playback and Recording.
	<a href="#"><u>Export Standard MIDI File</u></a>	Allows save your composition as a Standard MIDI File.
	<a href="#"><u>Export Option</u></a>	Allows you to choose certain settings and information to include when exporting Standard MIDI Files.

## Articulation Adjustment dialog box

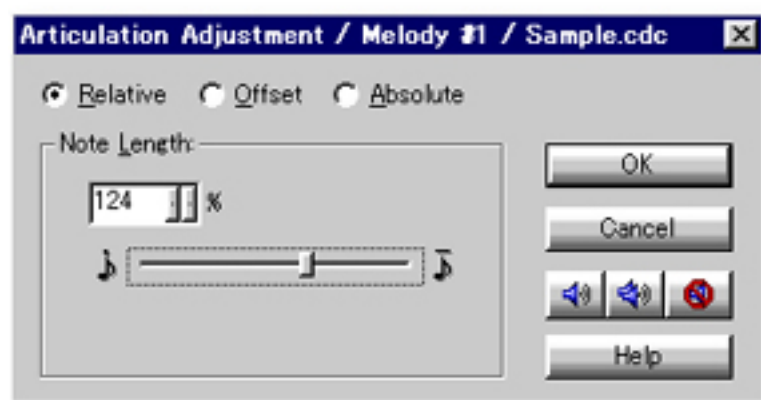
**Description** The Articulation Adjustment dialog box allows you to change the length of Notes on an individual or Line Block basis.

**Uses** There are three ways to specify the length of Notes in the Articulation Adjustment dialog box; [Relative](#), [Offset](#) and [Absolute](#). Which ever mode you use, setting the Note Length for more *Staccato* results in shorter Notes, while setting it for more *Tenuto* results in longer Notes.

Using the **Playback** buttons, you can then audition Articulation Adjustments and select one that sounds good to you.

**Items**


- [Relative](#) radio button
- [Offset](#) radio button
- [Absolute](#) radio button
- [Note Length](#) edit box
- [Note Length](#) slider
- [Playback](#) button
- [Playback with Others](#) button
- [Stop](#) button
- [OK](#) button
- [Cancel](#) button
- [Help](#) button



**Opening**

From the...  
[Document Window](#)  
[Event List Editor](#)  
[Pianoroll Editor](#)  
[Notation Editor](#)

Choose **Adjust Articulation...** from the **Line** menu. Alternatively, right-click desired Line data and choose **Actions, Adjust Articulation...**

 When choosing **Adjust Articulation...** from the **Line** menu, Line data must first be selected, otherwise the **Adjust Articulation...** item won't be available.

## Items in the **Articulation Adjustment** dialog box

### [Selecting an Adjustment Mode](#)

**Relative**  
radio button

Sets the Note Length adjustment to render a relative percentage of original Note Length.

**Offset**  
radio button

Sets the Note Length adjustment to increase or decrease divisions of the original Note Length.

**Absolute**  
radio button

Sets the Note Length adjustment to use an absolute amount of divisions for all Notes.

### [Adjusting Articulation](#)

**Note Length**  
edit box

Use the left/right buttons or directly edit the number in this box to change Note Length (Articulation).

**Note Length**  
slider

Click and drag this slider to the left for shorter (more Staccato) notes, or to the right for longer (more Tenuto) notes.

### [Auditioning](#)

 **Playback**

Click the **Playback** (Single Speaker) button to listen to Articulation Adjustments as you make them.

 **Playback with Others**

Click the **Playback with Others** (Double Speaker) button to listen to Articulation Adjustments you make along with all the other activated Tracks.

 **Stop**

Click the **Stop** (No Speaker) button to stop Playback.

### [Closing](#)

**OK**  
button

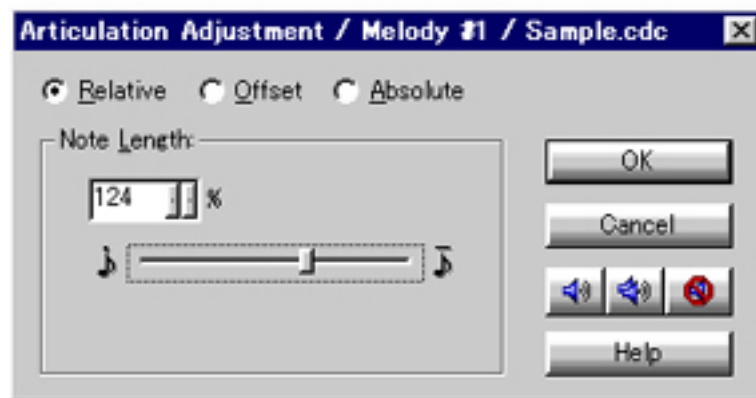
Closes the Articulation Adjustment dialog box and commits changes.

**Cancel**  
button

Closes the Articulation Adjustment dialog box without committing changes.

**Help**  
button

Opens this Help document.



## Using the **Articulation Adjustment** dialog box

Adjusting  
Articulation

**Relative,**  
**Offset,**  
**Absolute,**  
radio buttons

After selecting Note data to adjust and opening the Articulation Adjustment dialog box, choose an adjustment mode. There are three modes for specifying the length of Notes in the Articulation Adjustment dialog box.

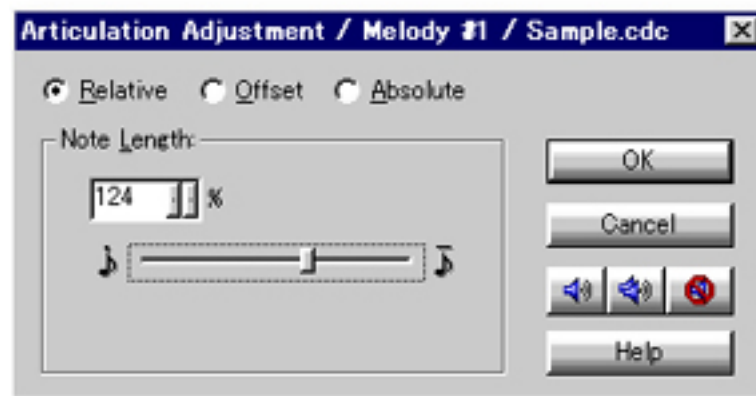
**Relative** ...Sets a relative percentage of the original Notes' length from 0% (none) to 200% (double), while still retaining differences in Length from Note to Note.

**Offset** ...Increases or decreases divisions of the original Notes' length at a rate of 480 divisions per Quarter Note, while still retaining differences in Length from Note to Note.

**Absolute** ...Increases or decreases divisions of the original Notes' length from .5 to 1.5 of the average divisions per Note in the currently selected region of Line data, making the length of all selected Notes the same.

**Note  
Length**  
adjustment  
area

Next, use the [Note Length](#) edit box or slider to adjust Articulation. Entering a smaller number in the box or dragging the slider to the left results in shorter (more Staccato) Notes, while entering a bigger number in the box or dragging the slider to the right results in longer (more Tenuto) Notes.



See Also:

[Getting Results](#)



## Using the **Articulation Adjustment** dialog box

Getting Results

**Playback, Playback with Others, Stop** buttons

Each time you make Articulation Adjustments, the selected Line data is temporarily replaced.

Click the **Playback** (Single Speaker) button to hear the results of articulation processing in "Solo" mode. This Auditioning mode will include any existing Chords if the Chord Track **Play** button in the Track Area of the Document Window is activated.

Click the **Playback with Others** (Double Speaker) button to hear the results of Articulation processing along with all the other activated Tracks.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of selected Line data with current Articulation Adjustments as you make them, until you click the **Stop** (No Speaker) button. With this feature, you can change and listen to different Articulation Adjustments "on the fly" or one by one.

**OK** button

Click **OK** when you have achieved the desired results. This closes the Articulation Adjustment dialog box and replaces the selected Line data.



Changing the length of Note data often causes Notes to overlap. As always, when Notes overlap you may encounter some unexpected MIDI performance.

See Also:

[Adjusting Articulation](#)

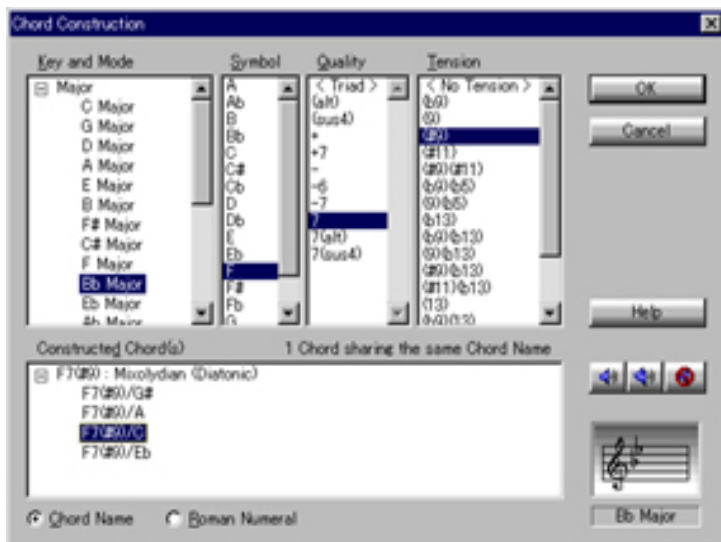
# Chord Construction dialog box

**Description** The Chord Construction dialog box allows you to replace Chords in selected Chord Container(s) with [Chords you manually build](#) by defining three elements: [Symbol](#) , [Quality](#) and [Tension](#).

**Uses** In the Chord Construction dialog box, CAMPS automatically displays lists of Symbols, Qualities and Tensions available in [the chosen Key and Mode](#), allowing you to select one of each element for constructing a Chord.

Using the **Playback** buttons, you can then audition Constructed Chords and select one that sounds good to you.

- Items**
- [Key and Mode](#) scroll area
  - [Symbol](#) scroll area
  - [Quality](#) scroll area
  - [Tension](#) scroll area
  - [Constructed Chord\(s\)](#) scroll area
  - [Key Signature](#) display
  - [Key and Mode](#) display
  - [Chord Name](#) radio button
  - [Roman Numeral](#) radio button
  - [Playback](#) button
  - [Playback with Others](#) button
  - [Stop](#) button
  - [OK](#) button
  - [Cancel](#) button
  - [Help](#) button



## Opening

From the...

[Document Window](#)

[Pianoroll Editor](#)

Choose **Construct...** from the **Chord** menu.

Alternatively, right-click desired Chord(s) and choose **Actions, Construct...**



When choosing **Construct...** from the **Chord** menu, you must have selected Chord Container(s) in the Chord Area, otherwise the **Construct...** item won't be available.

## Items in the **Chord Construction** dialog box

### [Selecting Chord Components](#)

<b>Key and Mode</b> scroll area	The Mode and Key you select here determine the range of Chords that can be built.
<b>Symbol</b> scroll area	The Symbol scroll area displays all of the conceivable Chord Symbols in the range specified by the Key and Mode scroll area. This is where you select the Chord Symbols you want to build.
<b>Quality</b> scroll area	All of the conceivable chord Qualities for the Symbol selected in the Symbol Scroll area appear in the Quality scroll area. This is where you select the Quality for the Chord you want to build.
<b>Tension</b> scroll area	The Tension scroll area displays all of the conceivable Tension sets from the combination of selected Symbol and Quality. This is where you select the Tension sets for the Chords you want to build.




### [Selecting a Constructed Chord](#)

<b>Constructed Chord(s)</b> scroll area	The Constructed Chord(s) scroll area displays a list of Constructed Chords based on your selections in the Key and Mode, Symbol, Quality and Tension scroll areas.
<b>Key Signature</b> display	Displays the musical notation form of the Key Signature selected in the Key and Mode scroll area.
<b>Key and Mode</b> display	Displays the alphabetic form of Key and Mode selected from the Key and Mode scroll area.

### [Appearance of Constructed Chord\(s\)](#)

<b>Chord Name</b> radio button	Sets the Chord display in the Constructed Chord(s) area to Chord Name form.
<b>Roman Numeral</b> radio button	Sets the Chord display in the Constructed Chord(s) area to Roman Numeral form.

### [Auditioning](#)

 <b>Playback</b>	Click the <b>Playback</b> (Single Speaker) button to listen to a selected Constructed Chord.
 <b>Playback with Others</b>	Click the <b>Playback with Others</b> (Double Speaker) button to listen to a selected Constructed Chord along with all the other activated Tracks.
 <b>Stop</b>	Click the <b>Stop</b> (No Speaker) button to stop Playback.

### [Closing](#)

<b>OK</b> button	Closes the Chord Construction dialog box and commits changes.
<b>Cancel</b> button	Closes the Chord Construction dialog box without committing changes.
<b>Help</b> button	Opens this Help document.

**Chord Construction**

Key and Mode	Symbol	Quality	Tension
Major	A	< Triad >	< No Tension >
C Major	Ab	(a9)	(b9)
G Major	B	(sus4)	(9)
D Major	Bb	*	(#11)
A Major	C	+7	(#9)(#11)
E Major	C#	-	(b9)(b5)
B Major	Cb	-6	(9)(b5)
F# Major	D	-7	(b13)
C# Major	Db	7(a9)	(b9)(b13)
F Major	E	7(sus4)	(9)(b13)
<b>Eb Major</b>	F		(#11)(b13)
Eb Major	F#		(13)
Bb Major	Fb		(#9)(#11)

Constructed Chord(s) 1 Chord sharing the same Chord Name

F7(b9) : Mixolydian (Diatonic)  
 F7(b9)/G#  
 F7(b9)/A  
**F7(b9)/B**  
 F7(b9)/Eb

Chord Name  Roman Numeral

OK  
 Cancel  
 Help

Eb Major

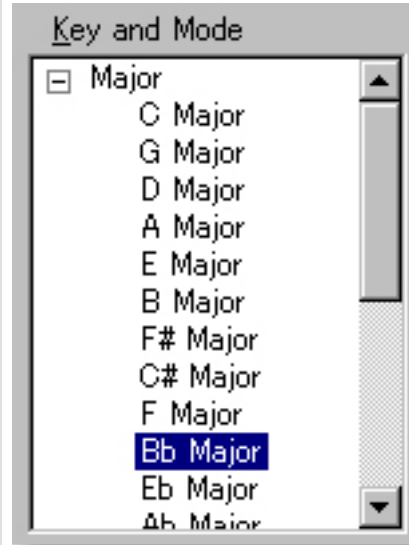
## Using the **Chord Construction** dialog box

Selecting  
Chord  
Components

### Key and Mode scroll area

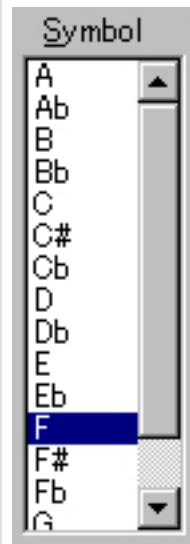
Upon selecting Chord Containers whose Chords you want to construct and opening the Chord Construction dialog box, CAMPS displays the [Key and Mode](#), [Symbol](#), [Quality](#) and [Tension](#) for the selected Chord. Use any desired combination of the following four steps to build Chords in the Chord Construction dialog box:

1. Select a Key and Mode from the Key and Mode scroll area.



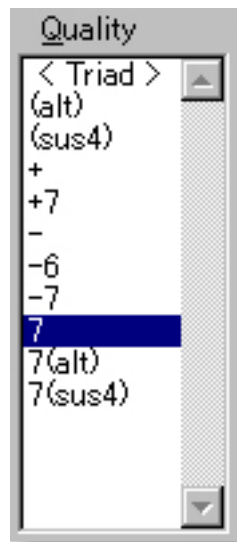
### Symbol scroll area

2. Select a Symbol from the Symbol scroll area. All of the conceivable Qualities for the selected Symbol appear in the Quality scroll area.



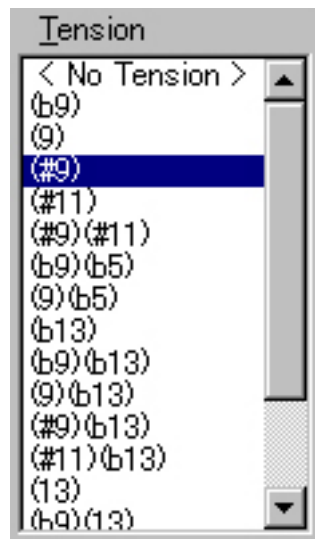
**Quality**  
scroll area

3. Select a Quality from the Quality Scroll Area. All of the conceivable Tension combinations resulting from Symbol and Quality selections appear in the Tension scroll area..



**Tension**  
scroll area

4. Select a Tension set from the Tension scroll area. All of the Chords of the same name that can logically be formed by combining the selected Symbol, Quality, and Tension appear in the Constructed Chord(s) area.



See also:

[Selecting a Chord](#)  
[Getting Results](#)

## Using the **Chord Construction** dialog box

Selecting a Chord

**Constructed Chord(s)** scroll area

When there are a number of Chords of the same name (but different Roman Numeral) in the [Constructed Chord\(s\)](#) scroll area, you can select any one you want. You can also alter the selected Chord to Inverted Chords. Refer to the [Key Signature](#) and [Key and Mode](#) Displays for the Chord when making your selection.



**Chord Name, Roman Numeral** radio buttons

Click the [Chord Name](#) or [Roman Numeral](#) radio button to choose your desired Chord display style in the Constructed Chord(s) area.



See also:

[Selecting Chord Components](#)  
[Getting Results](#)



## Using the **Chord Construction** dialog box

### Getting Results

**Playback, Playback with Others, Stop** buttons

Click the **Playback** (Single Speaker) button to listen to the Chord currently selected in the Constructed Chord(s) scroll area. Click the **Playback with Others** (Double Speaker) button to hear the Constructed Chord along with all the other activated Tracks.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of a Constructed Chord, even while selecting different Chord components, until you click the **Stop** (No Speaker) button. With this feature, you can change and listen to different Chord Constructions "on the fly" or one by one.

**OK** button

Selecting a Chord in the Constructed Chord(s) scroll area and clicking **OK** closes the Chord Construction dialog box and replaces the contents of the selected Chord Container(s) with your newly Constructed Chord.

See also:

[Selecting Chord Components](#)  
[Selecting a Chord](#)

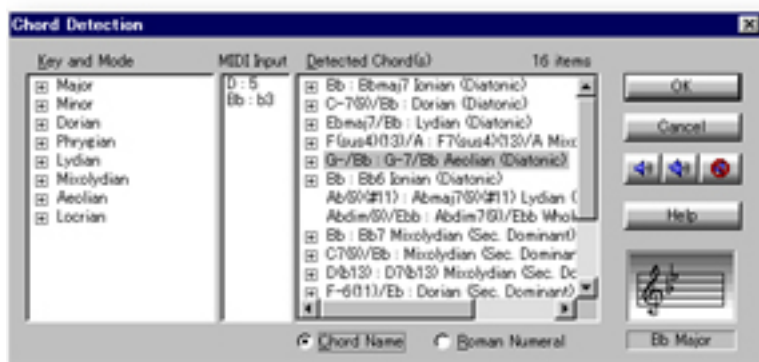
## Chord Detection dialog box

**Description** The Chord Detection dialog box allows you to replace Chords in selected Chord Containers with Chords detected from your MIDI instrument.


**Uses** In the Chord Detection dialog box, CAMPS automatically displays detected MIDI Notes and [resulting Chords](#) as you play Chords or Arpeggios on your MIDI instrument, based on [your selection of Key and Mode](#).

Using the **Playback** buttons, you can then audition the Detected Chords and select one that sounds good to you.

- Items**
- [Key and Mode](#) scroll area
  - [Key Signature](#) display
  - [Key and Mode](#) display
  - [MIDI Input](#) scroll area
  - [Detected Chord\(s\)](#) scroll area
  - [Chord Name](#) radio button
  - [Roman Numeral](#) radio button
  - [Playback](#) button
  - [Playback with Others](#) button
  - [Stop](#) button
  - [OK](#) button
  - [Cancel](#) button
  - [Help](#) button



**Opening** From the... [Document Window](#) [Pianoroll Editor](#) Choose **Detect...** from the **Chord** menu. Alternatively, right-click desired Chord Container(s) and choose **Actions, Detect....**

 When choosing **Detect...** from the **Chord** menu, you must have selected Chord Container(s) in the Chord area, otherwise the **Detect...** item won't be available.

# Items in the Chord Detection dialog box

## Specifying Chord Detection Parameters

**Key and Mode**  
scroll area

The Keys and Modes you select here determine the range of Chords that can be detected. Multiple combinations can be selected.

**Key Signature**  
display

Displays the musical notation form of the Key Signature selected in the Key and Mode scroll area.

**Key and Mode**  
display

Displays the alphabetic form of Key and Mode you select from the Key and Mode scroll area.

**MIDI Input**  
scroll area

This scroll area displays Notes detected from your MIDI instrument using the format "Note Name:relative Chord Tone".

## Selecting a Chord

**Detected Chord(s)**  
scroll area

The Detected Chord(s) scroll area displays all of the Chords that can be built with the Notes input from your MIDI instrument based on selections in the Key and Mode scroll area.

## Appearance of Detected Chords

**Chord Name**  
radio button

Sets the Chord display in the Detected Chord(s) scroll area to Chord Name form.

**Roman Numeral**  
radio button

Sets the Chord display in the Detected Chord(s) scroll area to Roman Numeral form.

## Auditioning

 **Playback**

Click the **Playback** (Single Speaker) button to listen to a selected Detected Chord.

 **Playback with Others**

Click the **Playback with Others** (Double Speaker) button to listen to a selected Detected Chord along with all the other activated Tracks.

 **Stop**

Click the **Stop** (No Speaker) button to stop Playback.

## Closing

**OK**  
button

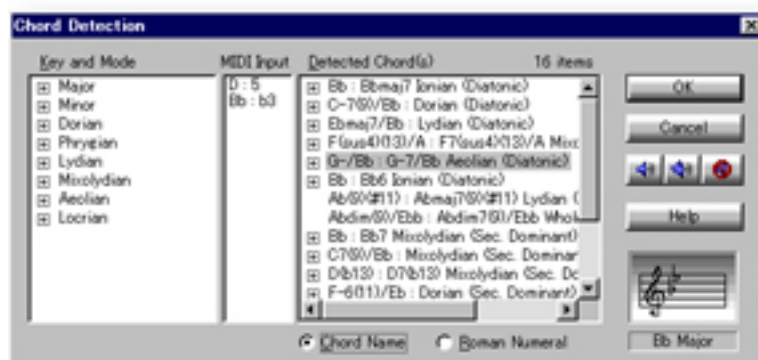
Closes the Chord Detection dialog box and commits changes.

**Cancel**  
button

Closes the Chord Detection dialog box without committing changes.

**Help**  
button

Opens this Help document.



## Using the **Chord Detection** dialog box

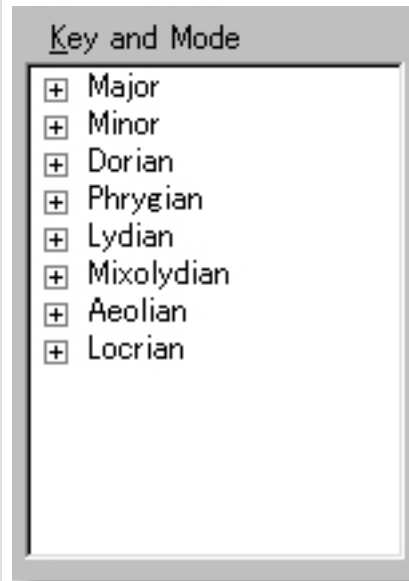
Chord Detection Parameters

**Key and Mode** scroll area

After selecting Chord Containers and opening the Chord Detection dialog box, CAMPS begins with the [Key and Mode](#) of the currently selected Chord Container for your convenience.

Select a different Key or Mode as needed. Multiple combinations can be selected simultaneously by holding the Control or Shift key down while clicking. This gives CAMPS a wider Tonality base with which to detect possible Chord spellings from your input.


As you change Key or Mode selections, CAMPS automatically adjusts the range of available Chords for the Notes input from your MIDI instrument.



**MIDI Input** Scroll area

The [MIDI Input](#) scroll area is where CAMPS displays information about the Notes you input from a MIDI instrument. Displayed are the Note Names and relative Chord Tones, based on the current Key and Mode selections.





See also:

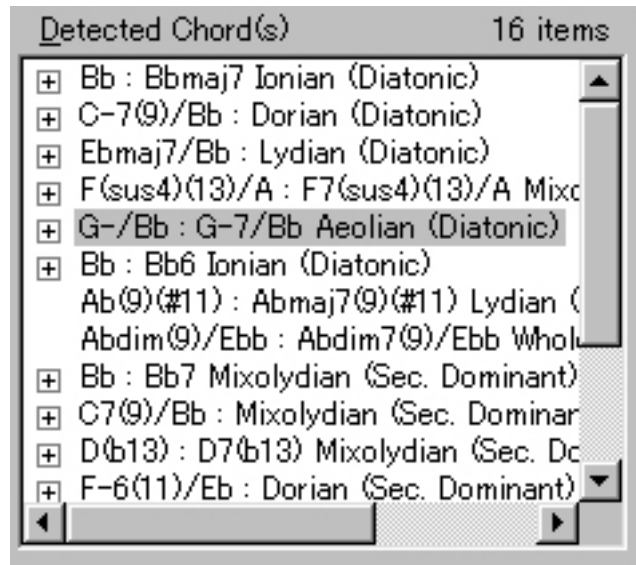
[Selecting a Chord](#)  
[Getting Results](#)

## Using the **Chord Detection** dialog box

Selecting a Chord

**Detected Chord(s)** scroll area

Basically, CAMPS compares the Notes you input with the current Key and Mode selections to calculate a list of available Chords. Note order is referenced to determine Inversion and Root possibilities. The results are displayed in the [Detected Chord\(s\)](#) scroll area. Simply select one as desired.



**Chord Name,**  
**Roman Numeral**  
radio buttons

Click the [Chord Name](#) or [Roman Numeral](#) radio button to choose your desired Chord display style in the Detected Chord(s) scroll area.



See also:

[Chord Detection Parameters](#)  
[Getting Results](#)

## Using the **Chord Detection** dialog box

Getting Results

**Playback, Playback with Others, Stop** buttons

Click the **Playback** (Single Speaker) button to listen to the Chord currently selected in the Detected Chord(s) scroll area. Click the **Playback with Others** (Double Speaker) button to hear the selected Detected Chord along with all the other activated Tracks.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of Detected Chord(s) as you select them, even while inputting new notes from your MIDI instrument, until you click the **Stop** (No Speaker) button. With this feature, you can change and listen to different Chords "on the fly" or one by one.

**OK** button

Selecting a Chord in the Detected Chord(s) scroll area and clicking **OK** closes the Chord Detection dialog box and replaces the contents of the selected Chord Container(s) with your newly Detected Chord.

See also:

[Chord Detection Parameters](#)  
[Selecting a Chord](#)

## Generate Chord Progression dialog box

**Description** The Generate Chord Progression dialog box provides a selection of new or substitute Chords or [Chord Progressions](#) for a selected Chord Block or Chord Containers.

**Uses** Upon opening the Generate Chord Progression dialog box, CAMPS automatically begins generating new or alternate Chord Progressions based on existing Chord, [Key and Mode](#) data, if any, **without referencing any Line data.**

Using the **Playback** buttons, you can then audition Generated Chord Progressions and select one that sounds good to you.

**Items** [Chord Progression\(s\)](#) scroll area

[Suspend/Continue](#) button

[Chord Name](#) radio button

[Roman Numeral](#) radio button

[Playback](#) button

[Playback with Others](#) button

[Stop](#) button

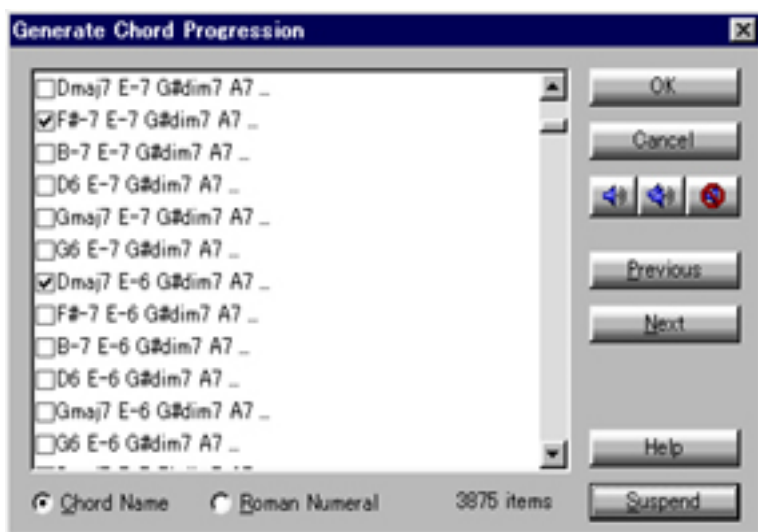
[Next](#) button

[Previous](#) button

[OK](#) button

[Cancel](#) button

[Help](#) button





## Opening

From the...

[Document Window](#)

[Pianoroll Editor](#)

Choose **Generate...** from the **Chord** menu.

Alternatively, right-click desired Chord Container and choose **Actions, Generate....**



When choosing **Generate** from the **Chord** menu, you must first have selected Chord Containers in the Chord Area, otherwise the **Generate** item won't be available.

## Items in the **Generate Chord Progression** dialog box

### [Selecting a Chord](#)

**Chord Progression(s)**  
scroll area

Displays a list of generated Chord Progressions in the Key and Mode of each Chord in the currently selected Chord Block.

**Suspend/Continue**  
button

Click the **Suspend/Continue** button to suspend or continue generating Chord Progressions in the Chord Progression(s) scroll area.

### [Appearance of Chords](#)

**Chord Name**  
radio button

Sets the Chord display in the Chord Progression scroll area to Chord Name form.

**Roman Numeral**  
radio button

Sets the Chord display in the Chord Progression scroll area to Roman Numeral form.

### [Auditioning](#)

 **Playback**

Click the **Playback** (Single Speaker) button to listen to a selected Chord Progression.

 **Playback with Others**

Click the **Playback with Others** (Double Speaker) button to listen to a selected Chord Progression along with all the other activated Tracks.

 **Stop**

Click the **Stop** (No Speaker) button to stop Playback.

**Next**  
button

Click the **Next** button to hear the next Chord Progression you have check marked in the Chord Progression(s) scroll area.

**Previous**  
button

Click the **Previous** button to hear the previous Chord Progression you have check marked in the Chord Progression(s) scroll area.

### [Closing](#)

**OK**  
button

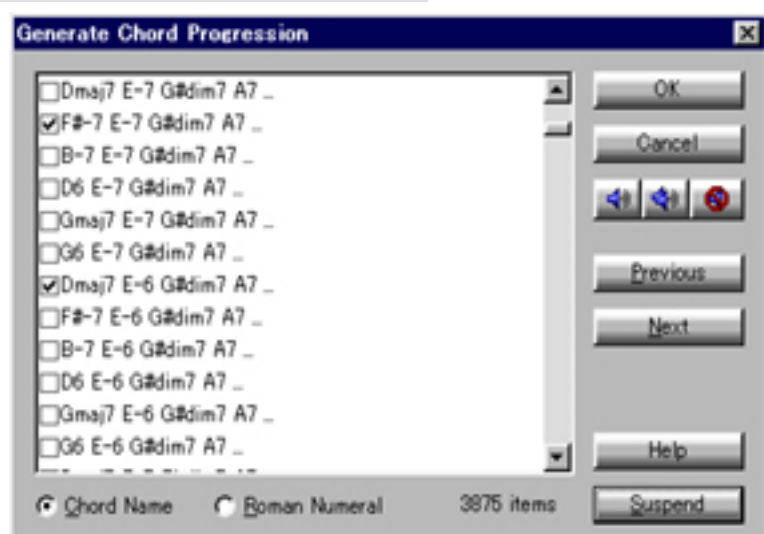
Closes the Generate Chord Progression dialog box and commits changes.

**Cancel**  
button

Closes the Generate Chord Progression dialog box without committing changes.

**Help**  
button

Opens this Help document.



## Generating Chord Progressions

In addition to its ability to generate alternatives for existing Chords like the contextual (right-click) **Alternatives** menu item, the Generate Chord Progression dialog box can actually generate a sequence of relative Chords (Progressions) at once. It can also generate Chords or Progressions for empty Chord Containers. Neighboring Chords are referenced to provide [harmonic continuity](#).

One of the most powerful features of the Generate Chord Progression dialog box is its ability to "fill in" missing Chords in a Chord Progression. To take advantage of this ability, select a range of empty Chord Containers in between completed ones before choosing the **Generate...** menu item.



See Also:

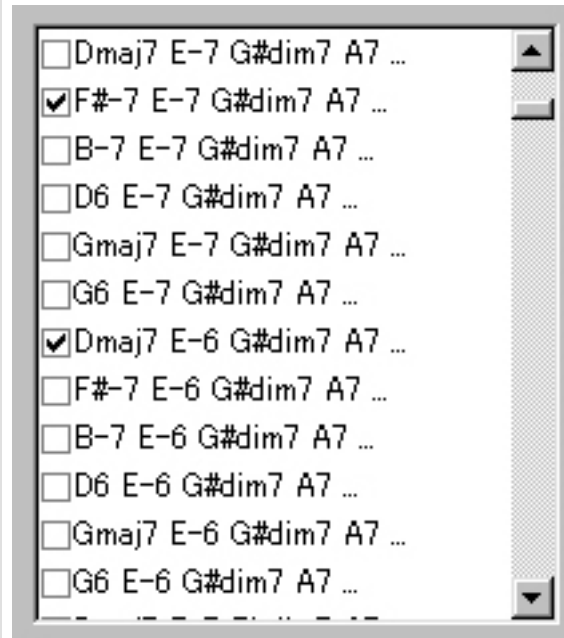
[Selecting a Chord Progression](#)  
[Getting Results](#)

## Using the **Generate Chord Progression** dialog box

Selecting a Chord Progression

**Chord Progression(s)** scroll area

Choose a desired Chord Progression in the Chord Progression(s) scroll area.



**Suspend/Continue** button

During the Chord Generation process, you can always suspend and continue generation by clicking the [Suspend/Continue](#) button. This feature is especially useful when CAMPS is generating a vast number of Chords or Chord Progressions. When CAMPS is finished generating Chord Progressions, the label on this button changes to "Done".

**Chord Name, Roman Numeral** radio buttons

Click the [Chord Name](#) or [Roman Numeral](#) radio button to choose your desired Chord display style in the Chord Progression(s) scroll area.



See Also:

[Generating Chord Progressions](#)  
[Getting Results](#)

## Getting Results

**Playback, Playback with Others, Stop** buttons

Click the [Playback](#) (Single Speaker) button to listen to the Chord Progression currently selected in the Chord Progression(s) scroll area. Click the [Playback with Others](#) (Double Speaker) button to hear the Chord Progression along with all the other activated Tracks.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of Chord Progressions as you select them, until you click the [Stop](#) (No Speaker) button. With this feature, you can change and listen to different Chord Progressions "on the fly" or one by one.

**Next, Previous** buttons

When CAMPS generates a vast number of Chord Progressions, check mark the ones that sound good to you as you listen. Use the [Next](#) and [Previous](#) buttons to instantly switch between the check marked chords.



**OK** button

Selecting a Chord Progression in the Chord Progression(s) scroll area and clicking [OK](#) closes the Generate Chord Progression dialog box and replaces the contents of the selected Chord Container(s) with the newly generated Chord Progression.



CAMPS will always generate Chord Progressions that flow smoothly into each other within a Chord Block.

See also:

[Generating Chord Progressions](#)  
[Selecting a Chord Progression](#)

## New Chord Block dialog box

**Description** The New Chord Block dialog box allows you to create New Chord Blocks with automatically assigned Chords, if desired.

**Uses** After selecting an empty Chord Area and opening the New Chord Block dialog box, select whether or not to [EZgenerate Chords](#) and choose the [Chord Quantity](#), [Chord Duration](#), [Mode and Key](#) for Chord Containers in the New Chord Block to be Generated.

Next, click the **New** button to save current settings and Generate a new Chord Block in the selected Chord Area.

**Items**

- [Chord Quantity](#) edit box
- [Chord Duration](#) radio buttons
- [Other divisions](#) edit box
- [EZgenerate Chords](#) check box
- [Mode](#) selection box
- [Key](#) selection box
- [New](#) button
- [Cancel](#) button
- [Help](#) button



**Opening** From the... [Document Window](#) [Pianoroll Editor](#) Choose **New Chord Block...** from the **Edit** menu. Alternatively, right-click desired empty Chord Area and choose **New Chord Block...**

 When choosing **New Chord Block...** from the **Edit** menu, you must first have selected an empty Chord Area, otherwise the **New Chord Block...** item won't be available.

## Items in the **New Chord Block** dialog box

### [Selecting Time parameters](#)

**Chord Quantity**  
edit box

Use the up/down buttons or directly edit the number in this box to change the desired quantity of Chord Containers for each New Chord Block.

**Chord Duration**  
radio buttons

Choose Chord Container time values of either a Quarter Note, Half Note, Dotted Half Note, Whole Note, or Other specified amount of divisions of a Chord Block.

**Other divisions**  
edit box

Use the up/down buttons or directly edit the number in this box to change how many Divisions the Chord Container size will be in relation to the New Chord Block.

### [Selecting Chord parameters](#)

**EZgenerate Chords**  
check box

Checkmark this item to have CAMPS automatically generate and insert Chords in each Chord Container of the New Chord Block.

**Mode**  
selection box

Click the drop-down list button on the right side of this box to choose the New Chord Block's Chord Container Mode (Tonality).

**Key**  
selection box

Click the drop-down list button on the right side of this box to choose the New Chord Block's Chord Container Key (Key Signature).

**Key Signature**  
display

Displays the musical notation form of the Key Signature resulting from your selections in the Key and Mode boxes.

### [Closing](#)

**New**  
button

Clicking the **New** button closes the New Chord Block dialog box, inserts a new Chord Block in the selected Chord Area and automatically assigns Chords to the Chord Containers in the New Chord Block if the EZgenerate Chords check box is checkmarked.

**Cancel**  
button

Clicking the **Cancel** button closes the New Chord Block dialog box without committing any changes.

**Help**  
button

Opens this Help document.



## Using the **New Chord Block** dialog box

### Selecting Time Parameters

#### Getting Started

If a new Chord Block is to span more than one Bar, be sure to select the first Bar of the Chord Area where you want the new Chord Block before opening the New Chord Block dialog box.

#### Chord Quantity edit box

When setting time related parameters in the New Chord Block dialog box, consider how many Chord Containers (Changes) per Beat or Bar you want your song to have. These settings will directly impact how many Beats or Bars long the new Chord Block will be.

#### Chord Duration radio buttons

For example, in 4/4 time, selecting a Chord Quantity of 4 and a Chord Duration of a Whole Note will result in a Chord Block spanning 4 Bars with one Chord Container per Bar

Alternatively, selecting a Chord Quantity of 1 and a Chord Duration of a Quarter Note will result in a Chord Block with only one Chord Container, and only 1/4 of a Bar long.

A more typical example would be to select a Chord Quantity of 2 and a Chord Duration of a Half Note, resulting in a Chord Block 1 Bar long with 2 Chord Containers having 2 Beats each.



Grabbing and dragging the right edge of a Chord Container's Chord box lets you freely change its Duration. Increasing a Chord's Duration will alter the start time of any following Chord Containers in the same Chord Block.

#### Other divisions edit box

Specifying a Chord Container time value other than standard music notation time values can be used for things like a more Human sounding transition point, a "freeform" piece of music, or compensating for small glitches when trying to synchronize with the outside world.




Division ratio is 480 per Quarter Note.



Using freeform sizes for Chord Containers can easily result in Chord Blocks not lining up with standard Bars or the Quantize Grid.







See also:

[Selecting Chord Parameters](#)

[Getting Results](#)

## Selecting Chord Parameters

### Overview

Since the function of Chord Containers in CAMPS is to determine the harmonic flow of your music so that CAMPS can do its magic, having the Chord Container structure match your song will yield the best results. Using the EZgenerate Chords check box creates New Chord Blocks whose Chord Containers will already be filled in with CAMPS-generated Chords. Letting CAMPS EZgenerate Chords without further Chord editing will actually define your song's harmonic structure.

This may not always result in desired harmony. The more harmony you define (either manually or via a song Imported into CAMPS), the better your musical results will be. While "EZ" functions in CAMPS can yield some interesting results, they are designed as a quick starting point for novice users, not song "wizards".

[Mode and Key](#) Selections in the New Chord Block dialog box set the Tonality for the Chord Containers in the New Chord Block being created, which CAMPS in turn uses to generate the Chords in the New Chord Block's Chord Containers.

### **EZgenerate Chords** check box

Checkmarking this item causes CAMPS to automatically generate and insert Chords in each Chord Container of the New Chord Block. EZgenerated Chords will follow settings made in the Mode and Key selection boxes. If any of the EZgenerated Chords are not to your liking, they can easily be edited later, using any one of many methods available in CAMPS.



If any Line Blocks in Categories other than Drums exist in the same Bar region as the New Chord Block being created with the EZgenerate Chords option activated, CAMPS will generate Chords that Harmonize with the existing Line data instead of arbitrarily creating a Chord Progression.

### **Mode** selection box

When you select a new Mode, CAMPS always compares the previous Key setting to your Mode selection and changes the Key setting to the Relative Major Key of the chosen Mode.






### **Key** selection box

Choosing a Key after selecting a Mode lets you completely define the Tonality of the Chord Block being generated.

### **Key Signature** display

To keep the resulting musical Scale's Note Names in mind, refer to the Key Signature display while making your selections.


Chord Quantity:   EZgenerate Chords

Chord Duration:          

Other:  divisions

Mode:

Key:



See also:

[Selecting Time Parameters](#)

[Getting Results](#)

## Using the **New Chord Block** dialog box

Getting Results

**New** button

Clicking the **New** button inserts a New Chord Block starting at the Bar in the Chord Area selected when opening the New Chord Block dialog box. If the EZgenerate Chords check box was selected, CAMPS also inserts generated Chords in the Chord Containers of the New Chord Block.



Keep in mind that if a New Chord Block exceeds the available space between your initial Chord Area selection and the starting point of a following Chord Block, then the end of the New Chord Block will overlap the beginning of the next Chord Block. The visible Chords in an overlapping area will become the active Chords in that area for all Chord related CAMPS functions.

To choose which Chord Block is visible and active in an overlapping Chord area, right click the desired Chord Block's Selection Bar and choose **Bring to Front** or **Send to Back**.

See also:

[Selecting Time Parameters](#)

[Selecting Chord Parameters](#)

## New Chord dialog box

**Description** The New Chord dialog box allows you to create new Chord Containers with automatically assigned Chords, if desired.

**Uses** After selecting a Chord Block or Chord Container and opening the New Chord dialog box, select whether or not to [EZgenerate Chords](#) and choose the [Chord Quantity](#), [Chord Duration](#), [Mode and Key](#) for the New Chord(s).

Next, click the **New** button to [create new Chord Containers](#) in the selected Chord Block.

**Items**

- [Chord Quantity](#) edit box
- [Chord Duration](#) radio buttons
- [Other divisions](#) edit box
- [EZgenerate Chords](#) check box
- [Mode](#) selection box
- [Key](#) selection box
- [New](#) button
- [Cancel](#) button
- [Help](#) button



**Opening** From the... [Document Window](#) [Pianoroll Editor](#) Choose **New Chord...** from the **Edit** menu. Alternatively, right-click desired Chord and choose **New Chord...**

 When choosing **New Chord...** from the **Edit** menu, you must first have selected a Chord Container, otherwise the **New Chord...** item won't be available.

## Items in the **New Chord** dialog box

### [Selecting Time Parameters](#)

**Chord Quantity**  
edit box

Use the up/down buttons or directly edit the number in this box to change the desired quantity of Chord Containers to create.

**Chord Duration**  
radio buttons

Choose Chord Container time values of either Quarter Note, Half Note, Dotted Half Note, Whole Note, or Other specified amount of divisions of the Chord Block where the New Chords will be created.

**Other divisions**  
edit box

Use the up/down buttons or directly edit the number in this box to change how many Divisions the Chord Container size will be in relation to the Chord Block.

### [Selecting Chord Parameters](#)

**EZgenerate Chords**  
check box

Checkmark this item to have CAMPS automatically generate and insert Chords in each New Chord Container.

**Mode**  
selection box

Click the drop-down list button on the right side of this box to choose the Chord Container Mode (Tonality).

**Key**  
selection box

Click the drop-down list button on the right side of this box to choose the Chord Container Key (Key Signature).

**Key Signature**  
display

Displays the musical notation form of the Key Signature resulting from your selections in the Key and Mode boxes.

### [Closing](#)

**New**  
button

Clicking the **New** button closes the New Chord dialog box, inserts new Chord Containers in the selected Chord Block, and automatically assigns Chords to the New Chord Containers if the EZgenerate Chords check box is checkmarked.

**Cancel**  
button

Clicking the **Cancel** button closes the New Chord dialog box without committing any changes.

**Help**  
button

Opens this Help document.



## Using the **New Chord** dialog box

### Selecting Time Parameters

#### Getting Started

Before opening the New Chord dialog box, select a Chord Container at the location where you want the new Chords inserted. When the New Chord is inserted, the selected and following Chords will be moved to the right. To insert new Chords at the end of a Chord Block, click only the Chord Block Selection Bar without highlighting any existing Chord Containers before opening the New Chord dialog box. In this case, you'll need to select **New Chord...** from the **Edit** menu, as the contextual (right-click) menu will only give Chord Block options.

#### Chord Quantity edit box

When setting time related parameters in the New Chord dialog box, consider how many Chord Containers (Changes) per Beat or Bar you want your song to have. These settings will directly impact how many Beats or Bars long the selected Chord Block will become.

#### Chord Duration radio buttons

For example, in 4/4 time, selecting a Chord Quantity of 4 and a Chord Duration of a Whole Note will result in a Chord Block spanning 4 additional Bars with one Chord Container per additional Bar

Alternatively, selecting a Chord Quantity of 1 and a Chord Duration of a Quarter Note will result in a Chord Block with only one additional Chord Container 1/4 of a Bar long.



Grabbing and dragging the right edge of a Chord Container lets you freely change its Duration. Increasing a Chord's Duration will alter the start time of any following Chord Containers in the same Chord Block, as well as the size of the current Chord Block.

#### Other divisions edit box

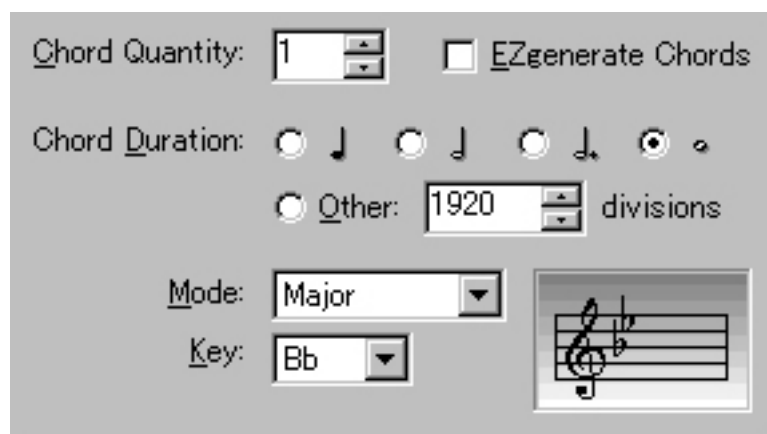
Specifying a Chord Container time value other than standard music notation time values can be used for things like a more Human sounding transition point, a "freeform" piece of music, or compensating for small glitches when trying to synchronize with the outside world.

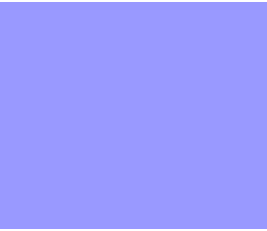


Division ratio is 480 per Quarter Note.



Using freeform sizes for Chord Containers may result in Chord Blocks not lining up with Bar Lines or the Quantize Grid.





See also:

[Selecting Chord Parameters](#)

[Getting Results](#)



## Selecting Chord Parameters

### Overview

Since the function of Chord Containers in CAMPS is to determine the harmonic flow of your music so that CAMPS can do its magic, having the Chord Container structure match your song will yield the best results. Using the EZgenerate Chords check box creates Chord Containers already filled in with CAMPS-generated Chords. Letting CAMPS EZgenerate Chords without further Chord editing will actually define your song's harmonic structure.

This may not always result in desired harmony. The more harmony you define (either manually or via a song Imported into CAMPS), the better your musical results will be. While "EZ" functions in CAMPS can yield some interesting results, they are designed as a quick starting point for novice users, not a song "wizard".

[Mode and Key](#) Selections in the New Chord dialog box set the Tonality for the Chord Containers being created, which CAMPS in turn uses to generate the Chords in the New Chord Containers. Upon opening the New Chord dialog box, Mode and Key settings default to those in the Chord Block you are currently working in.

### **EZgenerate Chords** check box

Checkmarking this item causes CAMPS to automatically generate and insert Chords in each New Chord Container. EZgenerated Chords will follow settings made in the Mode and Key selection boxes. If any of the EZgenerated Chords are not to your liking, they can easily be edited later, using any one of many methods available in CAMPS.



If any Line Blocks in Categories other than Drums exist in the same Bar region as the New Chord being created with the EZgenerate Chords option activated, CAMPS will generate Chords that Harmonize with the existing Line data instead of arbitrarily creating a Chord Progression.

### **Mode** selection box

When you select a new Mode, CAMPS always compares the previous Key setting to your Mode selection and changes the Key setting to the Relative Major Key of the chosen Mode.






### **Key** selection box

Choosing a Key after selecting a Mode lets you completely define the Tonality of the Chord Containers being generated.

### **Key Signature** display

To keep the resulting musical Scale's Note Names in mind, refer to the Key Signature display while making your selections.

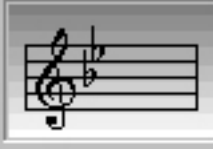
Chord Quantity:   EZgenerate Chords

Chord Duration:          

Other:  divisions

Mode:

Key:



See also:

[Selecting Time Parameters](#)

[Getting Results](#)

## Using the **New Chord** dialog box

Getting Results

**New** button

Clicking the **New** button inserts new Chord Containers at the location of the selected Chord in the selected Chord Block, moving existing Chord Containers to the right. If only the Chord Block itself was selected without highlighting one of its Chord Containers before opening the New Chord dialog box, the New Chords will be inserted at the end of the selected Chord Block. Either way, the Chord Block will increase in Length.



Keep in mind that if another Chord Block already exists right after the Chord Block you are adding to, Chords being moved to the right will slip behind the next Chord Block, resulting in overlapping Chord Blocks. The visible Chords in an overlapping area will become the active Chords in that area for all Chord related CAMPS functions.

To choose which Chord Block is visible and active in an overlapping Chord Area, right click the desired Chord Block Selection Bar and choose **Bring to Front** or **Send to Back**.

If the EZgenerate Chords check box was selected before clicking **New**, CAMPS also inserts automatically generated Chords in the new Chord Containers. These generated Chords will follow the tonality of your Key and Mode settings in the New Chord dialog box.

See also:

[Selecting Time Parameters](#)  
[Selecting Chord Parameters](#)

## Compose dialog box

**Description** The Compose dialog box allows you to adjust guidelines for Auto Composing new Melodic, Chordal or Rhythmic Line data, and allows you to Auto Compose these Lines with the click of a button.

**Uses** This is, by far, one of the most powerful and complex dialog boxes in CAMPS. Here you can adjust many subtleties and tendencies of projected results. Each time you click the **Compose** button, CAMPS combines your finer settings with automatic analysis of the selected Line data and it's assigned Chords to give you a different result.

Using the **Playback** buttons, you can then audition Compose results and select one that sounds good to you.

- Items**
- [Category](#) selection box
  - [Parameters](#) pane
  - [MelodyDraw](#) pane
  - [Rhythm Compose](#) check box
  - [Compose](#) button
  - [Remove](#) button
  - [Take](#) scroll area
  - [Name](#) edit box
  - [Playback](#) button
  - [Playback with Others](#) button
  - [Stop](#) button
  - [OK](#) button
  - [Cancel](#) button
  - [Help](#) button



## Opening

From the...  
[Document Window](#)  
[Pianoroll Editor](#)  
[Notation Editor](#)

Choose **Compose...** from the **Line** menu.  
Alternatively, right-click desired Line data and choose **Actions**,  
**Compose....**



When choosing **Compose...** from the **Line** menu, you must first have selected Line data, otherwise the **Compose...** item won't be available.

Items in the **Compose** dialog box[Adjusting  
Compose  
Parameters](#)**Category**  
selection box

The Category box displays the Category of the Track you selected before opening the Compose dialog box. Click the drop-down button to select a different Category for the Line data being Composed.

**Parameters**  
pane

Click the Parameters tab to open the Parameters pane. The Parameters pane has several subpanes which allow you to adjust several types of musical Parameters for use by the CAMPS Compose function.

**MelodyDraw**  
pane

Click the MelodyDraw tab to open the MelodyDraw pane. MelodyDraw is a unique freestyle drawing tool for "graphing" desired Pitch occurrences of Auto Compose results.

**Rhythm Compose**  
check box

The Rhythm Compose check box determines whether Rhythmic Auto Composition is added to the Compose function.

[Composing](#)**Compose**  
button

Clicking **Compose** in the Compose dialog box starts Auto Composition of the selected Line data.

**Remove**  
button

Click the **Remove** button to delete an undesired Auto Compose result from the Take scroll area.

**Take**  
scroll area

This is where CAMPS temporarily stores results from Auto Composing. As Takes are generated, they can be Auditioned, deleted or written over selected Track Line data.

**Name**  
edit box

The Name edit box allows you to rename Takes in the Take scroll area (except for the Original) to help you identify numerous Takes.

[Auditioning](#)**Playback**

Click the **Playback** (Single Speaker) button to listen to the Compose results.

**Playback with Others**

Click the **Playback with Others** (Double Speaker) button to listen to the Compose results along with all the other activated Tracks.

**Stop**

Click the **Stop** (No Speaker) button to stop Playback.

[Closing](#)**OK**  
button

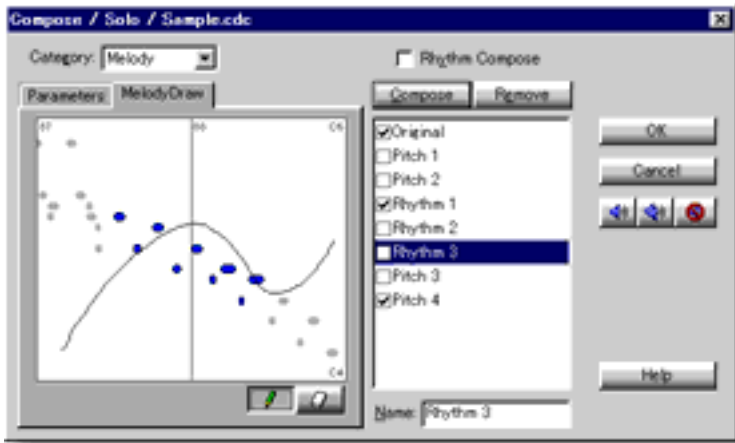
Closes the Compose dialog box and commits changes.

**Cancel**  
button

Closes the Compose dialog box without committing changes.

**Help**  
button

Opens this Help document.



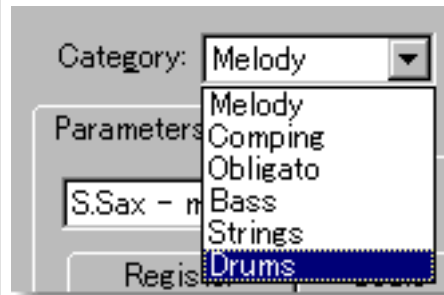
## Parameters pane

## Description

The Parameters pane has several subpanes which allow you to adjust several types of musical Parameters for use by the CAMPS Compose function.



The content and availability of the Parameters subpanes change depending on [Track Category](#) and [Rhythm Compose](#) selections.



After making many detailed Composition Parameter adjustments to your liking, you can save them to a name of your choice for future use before altering them again. Depending on your selections, repeatedly clicking the **Compose** button will often give you slightly different results with the same Set of Parameter adjustments.

## Managing Parameter Sets

**Parameters Set** selection box

Here you can store and retrieve Sets of Compose Parameters settings with desired names. The availability of Parameters Sets changes depending on the currently selected Track [Category](#). Use the drop-down button on the right side of this box to open the list of previously saved Sets for the currently selected Category. Parameter Sets get saved to an external file, so you can recall them in subsequent Compose dialog box sessions. CAMPS ships with some basic Sets for various Track Categories.

**Save** button

Saves the settings you made in the Parameters subpane to a Parameters Set file.

**Delete** button

Permanently deletes the currently selected Parameters Set without confirmation.



## Adjusting Tonality

[Register](#) subpane

Click the Register Tab to open the Register subpane. This subpane allows you to set the Compose function's Pitch range in the Melody, Comping, Obligato, Bass and Strings Track Categories.




The Register subpane is not available for Drums Category.




**Scale**  
subpane

Click the Scale Tab to open the Scale subpane. The Scale subpane allows you to set the Scale Pitches to use during Auto Composition in the Melody, Comping Obligato and Bass Track Categories.

 The Scale subpane is not available for the Strings or Drums Categories.


**Flavor**  
subpane

Click the Flavor Tab to open the Flavor subpane. This subpane allows you to set the Pitch Interval Flavor for the Melody, Comping, Obligato and Bass Track Categories. This translates to the degree of Harmony with Chords created by the Compose function.

 The Flavor subpane is not available for the Drums Category.


**Flavor**  
subpane  
(for Strings)

Click the Flavor Tab to open the Flavor subpane. This subpane allows you to set Pitch Interval Flavor for the Strings Track Category. This translates to the degree of Harmony with Chords created by the Compose function.

 The Flavor subpane is not available for the Drums Category.


**Flat 2/9**  
subpane

Click the Flat 2/9 Tab to open the Flat 2/9 subpane. The Flat 2/9 subpane allows you to set whether or not the occurrence of Flat 9 and Flat 2nd intervals, which tend to cause Dissonance, will be permitted when Auto Composing in the Melody, Comping, Obligato, Bass and Strings Track Categories.

 The Flat 2/9 subpane is not available for the Drums Category.


**Activity**  
subpane

Click the Activity Tab to open the Activity subpane. This subpane allows you to set the level of Pitch difference between Notes created by the Compose function in the Melody, Comping, and Obligato Track Categories.

 The Activity subpane is not available for the Strings or Drums Categories.


**Activity**  
subpane  
(for Bass)

Click the Activity Tab to open the Activity subpane. This subpane allows you to set the level of Pitch difference between Notes created by the Compose function in the Bass Track Category.

 The Activity subpane is not available for the Strings or Drums Categories.

**Overlap**  
subpane

Click the Overlap Tab to open the Overlap subpane. The Overlap subpane allows you to set a threshold value at which overlapping Notes become recognized as Chordal Line data during Auto Composition in the Melody, Comping, Obligato and Bass Track Categories.

 The Overlap subpane is not available for the Strings or Drums Categories.


**Voices**  
subpane

Click the Voices Tab to open the Voices subpane. This subpane is only available for the Strings Track Category.


## Adjusting Rhythm

[Rhythm](#)  
subpane


[Rhythm](#)  
subpane  
(for Drums)

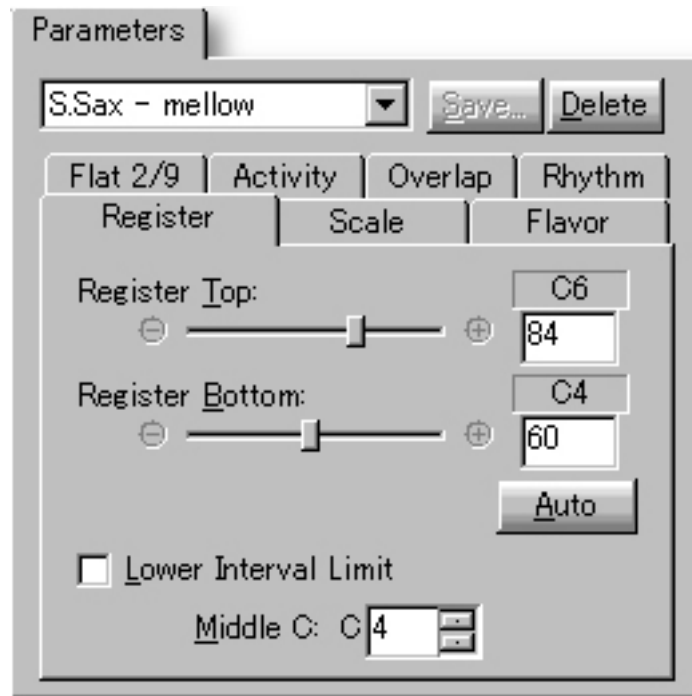
 This subpane is not available in the Melody, Comping, Obligato, Bass or Drums Categories. Additionally, Voices subpane settings will be unavailable unless the Rhythm Compose check box is selected.

Click the Rhythm Tab to open the Rhythm subpane. This subpane allows you to adjust Parameters for Rhythmic Auto Composition of Melodic and Harmonic Line data in the Melody, Comping, Obligato and Bass Track Categories.

 Rhythm subpane settings will not be available unless the Rhythm Compose check box is selected. The Rhythm subpane is not available for the Strings Category.

Click the Rhythm Tab to open the Rhythm subpane. This subpane allows you to adjust Parameters for Rhythmic Auto Composition of Line data in the Drums Track Category.

 The Rhythm subpane is not available for the Strings Category.



See also:

[Category selection box](#)

[MelodyDraw pane](#)

[Rhythm Compose check box](#)

[Compose button](#)

[Managing Takes](#)

[Getting Results](#)

## Using the **Compose** dialog box

### Register subpane

**Register Top, Register Bottom**  
slider,  
edit box,  
Pitch display

**Auto**  
button

**Lower Interval Limit**  
check box

**Middle C**  
edit box

The Register subpane is available for the [Melody, Comping, Obligato, Bass and Strings Track Categories](#).

Sets the highest and lowest allowed Pitches for the Compose function. The results of the Compose function will always fall within this Pitch range.

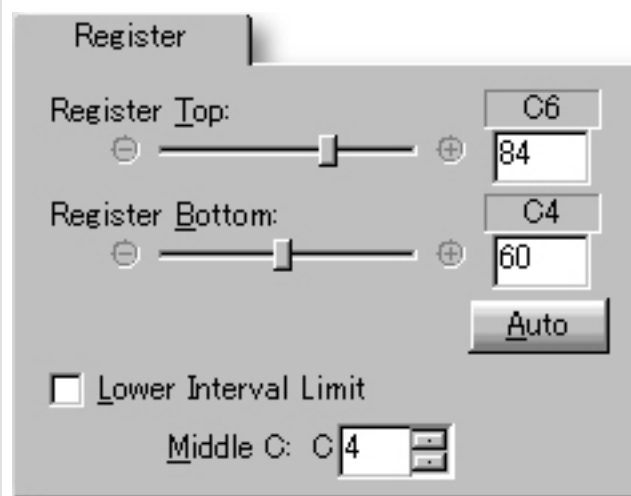
Click the **Auto** button to automatically detect the Pitch range in the currently selected Line Block. The results will be automatically entered in the appropriate Register Top/Bottom edit boxes.

Determines whether or not to set an additional lower Pitch range limit called the [Lower Interval limit](#) (L.I.L.), to the Pitch range defined by the Register Top/Bottom settings. If this is checkmarked, CAMPS will always perform L.I.L.sensitive Auto Composing.

In musical notation, a Staff combining the Bass Cleft and Treble Cleft known as the Great Staff is used for instruments that can produce a wide range of Notes such as the Piano or Organ. The center Note of the Great Staff is called [Middle C](#).

Depending on the selected Sound (Program/Patch number ) on your MIDI Sound Module, there are instances when pressing a given key on your MIDI instrument yields a Pitch one or two Octaves higher or lower than originally intended for that key. The Middle C setting lets you compensate for this.

The Middle C setting defines the center of the Pitch range, which in turn effects the value of the Lower Interval Limit (L.I.L.) and resulting Auto Composition. CAMPS performs a variety of musical processes such as Melody Auto Composition and Harmonization. Defining Middle C makes it possible to get the most out of these features.



See also:

[Scale subpane](#)

[Flavor subpane](#)

[Flavor subpane \(for Strings\)](#)

[Flat 2/9 subpane](#)

[Activity subpane](#)

[Activity subpane \(for Bass\)](#)

[Overlap subpane](#)

[Voices subpane](#)

[Rhythm subpane](#)

[Rhythm subpane \(for Drums\)](#)

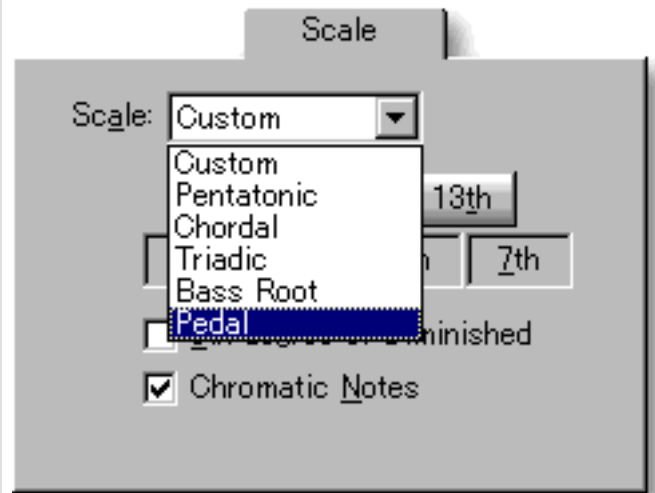
## Using the **Compose** dialog box

### Scale subpane

**Scale**  
selection box

The Scale subpane is available for the [Melody, Comping, Obligato and Bass Track Categories](#).

Settings in the Scale selection box determine the Scale Pitches used. The Auto Composition result will be in the Scale you select here. The scales available are Pentatonic, Chordal, Triadic, Bass Root, and Pedal.



Selecting Bass Root for Line data in the Bass Track Category associates Root motion to the Bass Line created by the Compose function. Selecting Pedal for a Bass Line associates Pedal Tone use.

If you want to set your own Scale, select Custom. However, there might be instances where your Scale settings will not be implemented by the Compose function due to music theory adherence.

**Interval**  
buttons

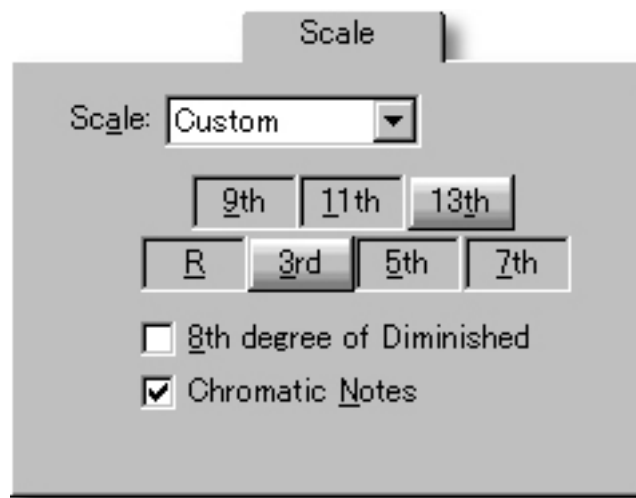
When you select Custom from the Scale box drop-down list, you can select the Scale Notes you want to use. These choices are expressed as Diatonic or Chord Tone Intervals: R (Root or 1), 3rd, 5th, 7th, 9th, 11th, & 13th.

**8th Degree of Diminished**  
check box

Select this check box if you wish to use the 8 Note symmetrical Diminished Scale in addition to 7 Note Scales.

**Chromatic Notes**  
check box

Select this check box if you want to include Chromatic Notes (Half Steps) more freely.



See also:

[Register subpane](#)

[Flavor subpane](#)

[Flavor subpane \(for Strings\)](#)

[Flat 2/9 subpane](#)

[Activity subpane](#)

[Activity subpane \(for Bass\)](#)

[Overlap subpane](#)

[Voices subpane](#)

[Rhythm subpane](#)

[Rhythm subpane \(for Drums\)](#)

## Using the **Compose** dialog box

### Flavor subpane

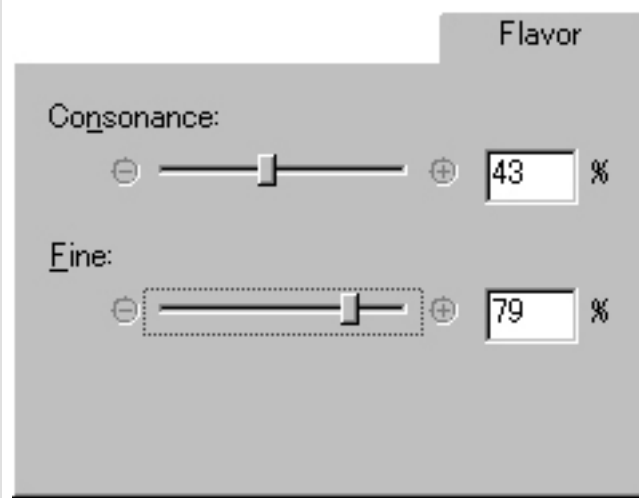
This mode of the Flavor subpane is available for the [Melody, Comping, Obligato and Bass Track Categories](#).

#### **Consonance** slider, edit box

Consonance sets the degree of smooth, agreeable Harmony created by the Compose function. Enter a value between 0 and 100%. Setting 100% results in maximum Consonant Harmony with Chords. This is a relative adjustment. Even if you set Consonance to 100%, the resulting Harmony will not be completely Consonant with respect to Chords.

#### **Fine** slider, edit box

These controls allow you to finely adjust Consonance from 0 to 100%. Their main use is controlling the degree to which Dissonant Harmony with Chords is avoided by the Compose function. This is a relative adjustment. Even if you set Fine to 100%, Dissonance will not be completely avoided with respect to Chords.



See also:

[Register subpane](#)

[Scale subpane](#)

[Flavor subpane \(for Strings\)](#)

[Flat 2/9 subpane](#)

[Activity subpane](#)

[Activity subpane \(for Bass\)](#)

[Overlap subpane](#)

[Voices subpane](#)

[Rhythm subpane](#)

[Rhythm subpane \(for Drums\)](#)

## Using the **Compose** dialog box

**Flavor**  
subpane  
(for Strings)

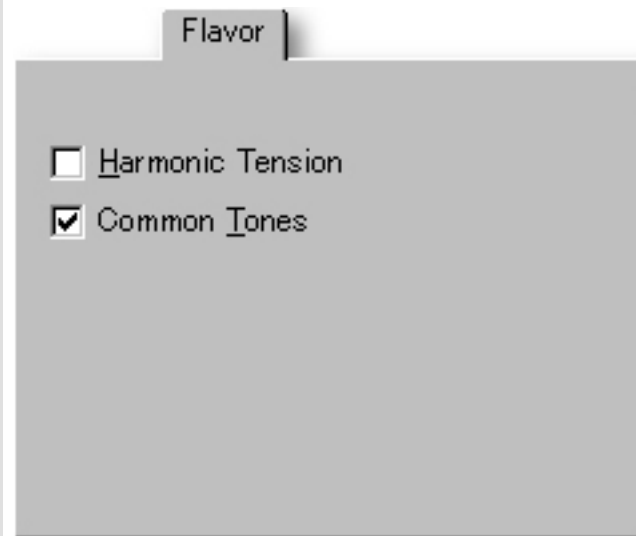
**Harmonic Tension**  
check box

**Common Tones**  
check box

This mode of the Flavor subpane is only available for the [Strings Track Category](#).

Selecting Harmonic Tension enables the Compose function to use Harmonic Tensions when creating Chordal Line data in the Strings Category. This may have the effect of producing less bland sounding supporting Harmony in your music.

Selecting Common Tones enables the Compose function to use Common (connecting) Tones when creating Chordal Line data in the Strings Category. Using some of the same Notes or Intervals as previous and subsequent Chords keeps Harmonic motion close, promoting continuity and smooth flow. This is typical of a String section's accompanying or supporting role in music.



See also:

[Register subpane](#)

[Scale subpane](#)

[Flavor subpane](#)

[Flat 2/9 subpane](#)

[Activity subpane](#)

[Activity subpane \(for Bass\)](#)

[Overlap subpane](#)

[Voices subpane](#)

[Rhythm subpane](#)

[Rhythm subpane \(for Drums\)](#)



## Using the **Compose** dialog box

### Flat 2/9 subpane

**Avoid Within Track** check boxes

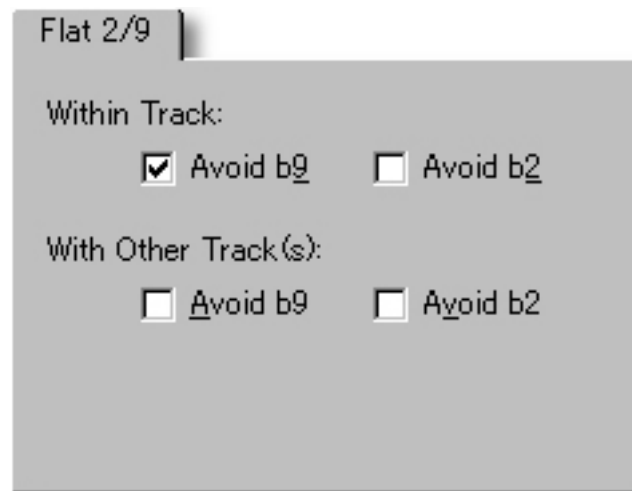
**Avoid With Other Track(s)** check boxes

The Flat 2/9 subpane is available for all [Track Categories](#) except Drums.

Flat 2nd and Flat 9 intervals are Dissonant sounding, but can add Tension to Harmony, if desired. These check boxes allow you to permit or exclude them from Auto Compose results.

Select the **Avoid b9** check box if you want to prevent the occurrence of Flat 9 intervals within the selected Track. Select the **Avoid b2** check box if you want to prevent the occurrence of Flat 2nd intervals.

Select the **Avoid b9** check box if you want to prevent the occurrence of Flat 9 intervals between the currently selected Track and other Tracks. Select the **Avoid b2** check box if you want to prevent the occurrence of Flat 2nd intervals between Tracks.



See also:

[Register subpane](#)

[Scale subpane](#)

[Flavor subpane](#)

[Flavor subpane \(for Strings\)](#)

[Activity subpane](#)

[Activity subpane \(for Bass\)](#)

[Overlap subpane](#)

[Voices subpane](#)

[Rhythm subpane](#)

[Rhythm subpane \(for Drums\)](#)

## Using the **Compose** dialog box

### Activity subpane

**Pitch Repeat**  
slider,  
edit box

This mode of the Activity subpane is available for the [Melody, Comping, and Obligato Track Categories](#).

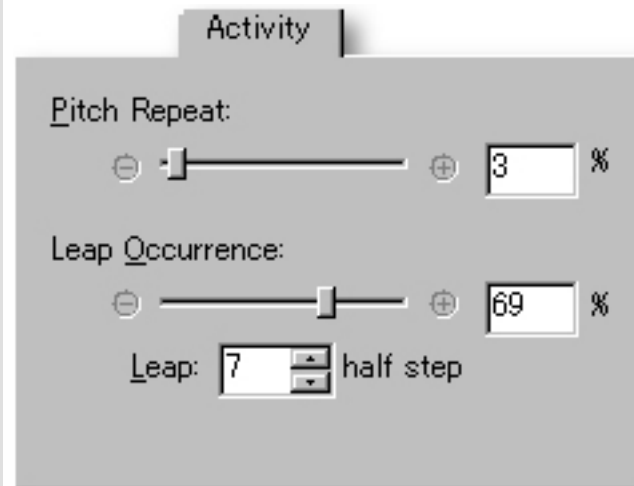
**Leap Occurrence**  
slider,  
edit box

These controls set how often a Pitch is reused by the Compose function. Use the slider or enter a value from 0 to 100%. A setting of 100% yields a higher incidence of Pitches being repeated in the Compose function's results. This is a relative setting. Even if you set 100%, all of the Notes will not be the same Pitch.

**Leap**  
edit box

These controls set how often Leaps (larger Intervals) occur between Note Pitches. Setting 100% makes it easy for Leaps to occur. This is a relative adjustment. Even if you set 100%, Leaps will not occur between all Notes.

When a Leap occurs between Notes, the Leap size will be as close as possible to the value set here, expressed as 3 to 12 Half Steps.



See also:

[Register subpane](#)

[Scale subpane](#)

[Flavor subpane](#)

[Flavor subpane \(for Strings\)](#)

[Flat 2/9 subpane](#)

[Activity subpane \(for Bass\)](#)

[Overlap subpane](#)

[Voices subpane](#)

[Rhythm subpane](#)

[Rhythm subpane \(for Drums\)](#)

## Using the **Compose** dialog box

### Activity subpane (for Bass)

#### **Pitch Repeat**

slider,  
edit box

This mode of the Activity subpane is only available for the [Bass Track Category](#).

These controls set how often a Pitch is reused by the Compose function. Use the slider or enter a value from 0 to 100%. A setting of 100% yields a higher incidence of Pitches being repeated in the Compose function's results. This is a relative setting. Even if you set 100%, all of the Notes will not be the same Pitch.

#### **Leap Occurrence**

slider,  
edit box

These controls set how often Leaps (larger Intervals) occur between Note Pitches. Setting 100% makes it easy for Leaps to occur. This is a relative adjustment. Even if you set 100%, Leaps will not occur between all Notes.

#### **Leap**

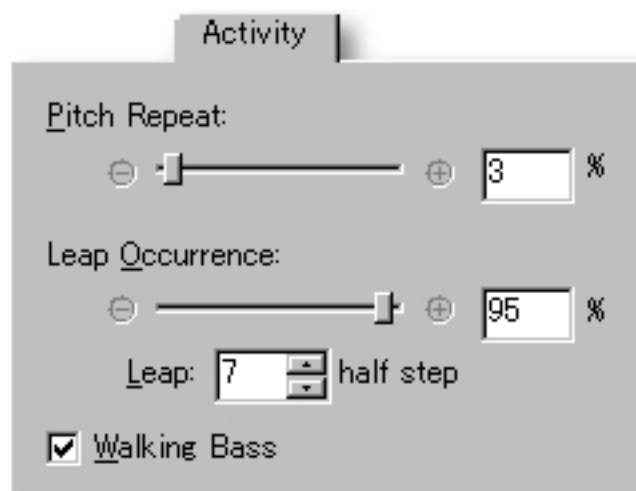
edit box

When a Leap occurs between Notes, the Leap size will be as close as possible to the value set here, expressed as 3 to 12 Intervals.

#### **Walking Bass**

check box

The Walking Bass check box allows you to set the Compose function to create Pitches in the style of Walking Bass Lines. Settings in the Scale and other subpanes effect Bass Line Tonality.



See also:

[Register subpane](#)

[Scale subpane](#)

[Flavor subpane](#)

[Flavor subpane \(for Strings\)](#)

[Flat 2/9 subpane](#)

[Activity subpane](#)

[Overlap subpane](#)

[Voices subpane](#)

[Rhythm subpane](#)

[Rhythm subpane \(for Drums\)](#)

## Using the **Compose** dialog box

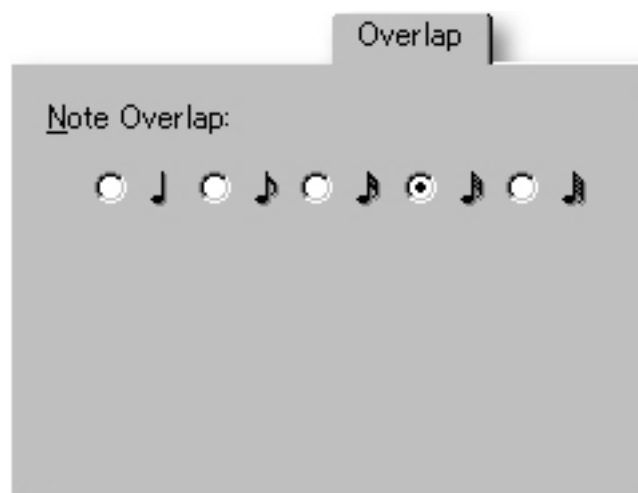
### Overlap subpane

#### Note Overlap radio buttons

The Overlap subpane is available for the [Melody, Comping, Obligato and Bass Track Categories](#).

The CAMPS Compose function yields different results depending on whether Notes in selected Line data are considered individual or Chordal. The **Note Overlap** radio buttons allow you to set a Time threshold for determining whether overlapping Notes will be recognized as Chord Tones by the CAMPS Composition Logic Engine. Notes that Overlap for a longer time period than the value set here will be recognized as forming a Chord during analysis.

Overlap Time limit values are expressed here as either a Quarter Note, Eighth Note, Sixteenth Note, Thirty Second Note or Sixty Fourth Note. For example, after selecting the **8th Note** radio button, any Note Overlap of 8th Note duration or less will not be considered Chordal during analysis by CAMPS.



See also:

[Register subpane](#)

[Scale subpane](#)

[Flavor subpane](#)

[Flavor subpane \(for Strings\)](#)

[Flat 2/9 subpane](#)

[Activity subpane](#)

[Activity subpane \(for Bass\)](#)

[Voices subpane](#)

[Rhythm subpane](#)

[Rhythm subpane \(for Drums\)](#)

Using the **Compose** dialog box**Rhythm**  
subpane**Analysis**  
radio buttons

This mode of the Rhythm subpane is available for the [Melody, Comping, Obligato and Bass Track Categories](#). However, Rhythm subpane settings will not be available unless the Rhythm Compose check box is selected.

**Auto/Custom**  
radio buttons

The **Analysis** radio buttons control the analysis of Rhythm components and Rhythmic Auto Composition sensitivity.

When you select **Auto**, analysis of Rhythm components and Rhythmic Auto Composition sensitivity are automatic. When you select **Custom**, the Custom Analysis slider becomes active.

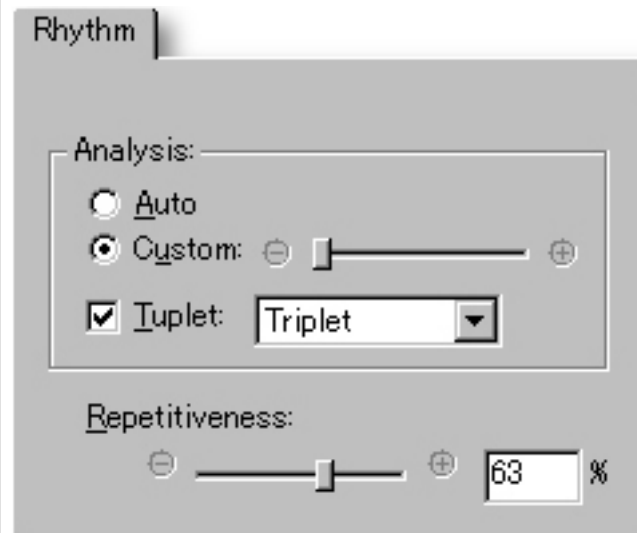
**Custom**  
**Analysis**  
slider

When the **Rhythm Compose** check box is selected, the **Auto/Custom** radio buttons will be available for all Track Categories except Strings.

Use the **Custom Analysis** slider to adjust the analysis of Rhythm components and Rhythmic Auto Composition sensitivity. The more you drag the slider toward complex, the higher the sensitivity to Rhythmic analysis and Auto Composition information.

**Tuplet**  
check box,  
box

If the original line data was created using Tuplets, selecting the **Tuplet** check box makes it possible to Auto Compose Rhythm that takes them into account. Activating the **Tuplet** check box with no original Tuplet feel adds it, though a bit more blindly. You can select Triplet, Quintuplet, or Septuplet from the drop-down list to the right of the **Tuplet** check box.



See also:

[Register subpane](#)

[Scale subpane](#)

[Flavor subpane](#)

[Flavor subpane \(for Strings\)](#)

[Flat 2/9 subpane](#)

[Activity subpane](#)

[Activity subpane \(for Bass\)](#)

[Overlap subpane](#)

[Voices subpane](#)

[Rhythm subpane \(for Drums\)](#)

## Using the **Compose** dialog box

### Rhythm subpane (for Drums)

**Analysis** radio buttons

This mode of the Rhythm subpane is only available for the [Drums Track Category](#). Also, the Rhythm Compose function is automatically selected for Drums.

**Auto/Custom** radio buttons

The **Analysis** radio buttons control the analysis of Rhythm components and Rhythmic Auto Composition sensitivity.

**Custom Analysis** slider

When you select **Auto**, analysis of Rhythm components and Rhythmic Auto Composition sensitivity are automatic. When you select **Custom**, the Custom Analysis slider becomes active.

**Tuplet** check box, box

Use the **Custom Analysis** slider to adjust the analysis of Rhythm components and Rhythmic Auto Composition sensitivity. The more you drag the slider toward complex, the higher the sensitivity to Rhythmic analysis and Auto Composition information.

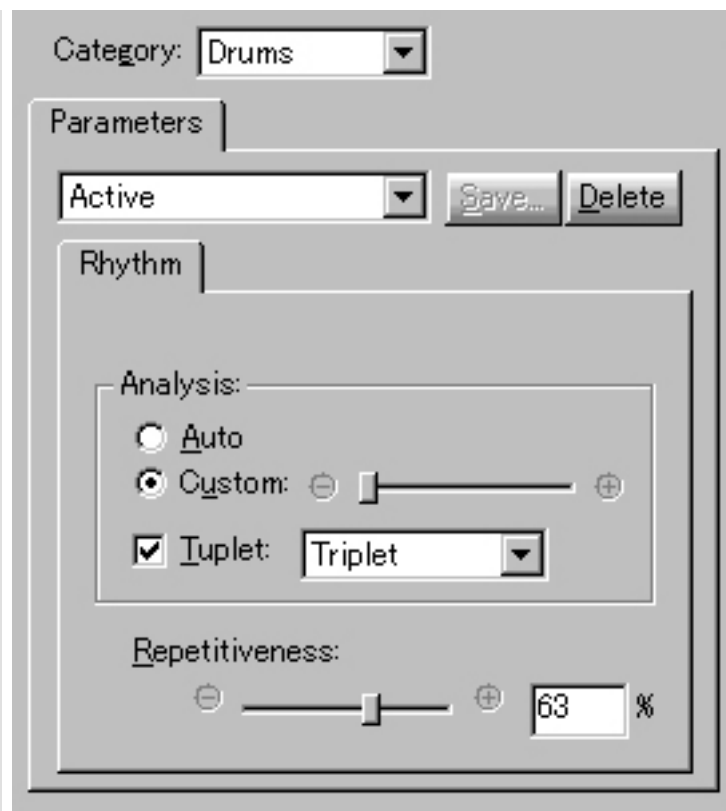
**Repetitiveness** slider, edit box

If the original line data was created using Tuplets, selecting the **Tuplet** check box makes it possible to Auto Compose Rhythm that takes them into account. Activating the **Tuplet** check box with no original Tuplet feel adds it. You can select Triplet, Quintuplet, or Septuplet from the drop-down list to the right of the **Tuplet** check box.

Here, you can adjust the regularity of Rhythm pattern repetition in the Compose function's Rhythm Compose results.



MIDI Pitches are translated into Drum Sounds by your MIDI Sound Module. When Auto Composing in the Drums Category, CAMPS analyzes Pitches (Drum Sounds) in conjunction with each other and Auto Composes appropriate Takes, regardless of your current Drum Sounds Map.



See also:

[Register subpane](#)

[Scale subpane](#)

[Flavor subpane](#)

[Flavor subpane \(for Strings\)](#)

[Flat 2/9 subpane](#)

[Activity subpane](#)

[Activity subpane \(for Bass\)](#)

[Overlap subpane](#)

[Voices subpane](#)

[Rhythm subpane](#)



## Using the **Compose** dialog box

### Voices subpane

#### Overview

The Voices subpane is only available for the [Strings Track Category](#). Furthermore, Voices subpane settings will be unavailable unless the [Rhythm Compose](#) check box is selected.



Without Rhythm Compose selected in the Strings Category, CAMPS refers to the existing Line data, recomposing new Line data according to Original Line data analysis, Compose dialog box Parameters and the currently assigned Chords.

In this case, CAMPS will only be able to provide limited results because of the amount of Sustaining and Overlapping Notes combined with Register and other limitations in Strings parts. Using the Rhythm Compose mode and Voices subpane settings when Auto Composing in the Strings Category may yield more practical results.

With Rhythm Compose selected in the Strings Category, CAMPS doesn't refer to the existing Line data for Pitch information, as it does for most other Categories. Instead, it generates Pitches from scratch, referencing only the Compose dialog box Parameters (including Number of Voices settings) and the currently assigned Chords.

#### Number of Voices buttons

In the Rhythm Compose mode for the Strings Category, Chordal Line data is Auto Composed with the Number of Voices specified here. Available options range from 2 to 6 Voices.

These Auto Composed Voices follow Chord changes while maintaining the Number of Voices assigned. Regardless of your Common Tones or Harmonic Tension settings, CAMPS always Auto Composes String parts with smaller Pitch Intervals between neighboring Voices for smooth continuity between Chord changes.



See also:

[Register subpane](#)

[Scale subpane](#)

[Flavor subpane](#)

[Flavor subpane \(for Strings\)](#)

[Flat 2/9 subpane](#)

[Activity subpane](#)

[Activity subpane \(for Bass\)](#)

[Overlap subpane](#)

[Rhythm subpane](#)

[Rhythm subpane \(for Drums\)](#)

## Using the **Compose** dialog box

### MelodyDraw pane

#### Overview

MelodyDraw is a unique freestyle drawing tool for directing the Pitch occurrences in Line data being Auto Composed. MelodyDraw will guide the vertical motion of Melodic and Chordal Line data Auto Composition.



MelodyDraw is available for all [Track Categories](#) except Drums.

#### MelodyDraw area

In the MelodyDraw area, you can actually draw a graph for the Compose function to follow.

#### Pen tool button

Click the **Pen** button to activate the Pen tool in the MelodyDraw area. By dragging the Pen tool, you can draw a graph for the Compose function to follow.

You can start at either side, or anywhere inside of the MelodyDraw area. Dragging the Pen tool in the opposite direction of a completed graph redraws that graph.

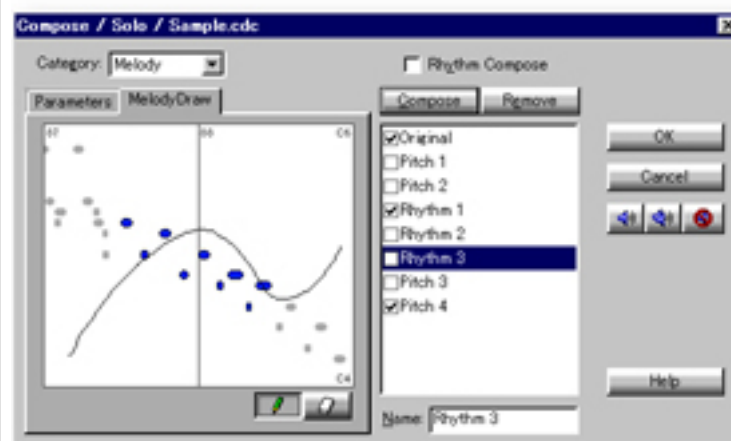
Drawing in only a certain part of the MelodyDraw area effects only that portion of Line data when the **Compose** button is clicked. The rest of the selected Line data will be Auto Composed as well, but without regard for MelodyDraw orientation.

#### Eraser tool button

If you want to alter only part of a completed MelodyDraw graph, Click the **Eraser** button to activate the Eraser tool. You can then Erase only the portion of your graph that needs to be changed.

CAMPS Auto Composes Line data Pitches according to its analysis of selected Line data (or Take) and your settings in the Parameters pane. The Pitches of the resulting Notes will always fit the current Tonality, while following your MelodyDraw graph.

Clicking the **Compose** button instantly Auto Composes Line data according to the vertical motion you specify with MelodyDraw. Depending on your Parameters settings, you can get slightly different results with the same graph by clicking the **Compose** button again and again, or you can draw a new graph anytime before clicking the **Compose** button.



Because settings in the Parameters pane effect the Compose function's results, you may need to adjust Register settings to bring all of the selected Line data into the MelodyDraw area's view.



MelodyDraw can be used with any length of Line data, including whole Line Blocks. For more detailed results, select a smaller region of Line data in the Pianoroll or Notation Editor before opening the Compose dialog box.



MelodyDraw may not always yield desirable results. In this case, adjust settings in the Parameters pane. Relaxing the Register and/or Scale settings may help you obtain better results.

See also:

[Category selection box](#)

[Parameters pane](#)

[Rhythm Compose check box](#)

[Compose button](#)

[Managing Takes](#)

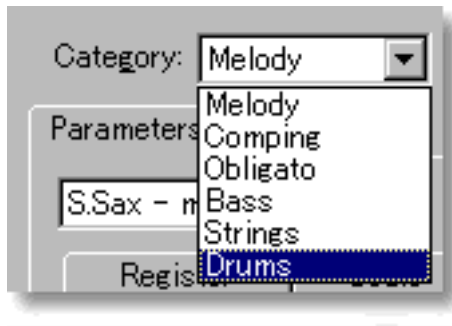
[Getting Results](#)

## Using the **Compose** dialog box

### Category selection box

Line data Tracks in CAMPS have an attribute known as a [Category](#). This is one of the parameters that CAMPS references when Auto Composing Line data. The Category selection box displays the Category of the Track you selected before opening the Compose dialog box.

Use the drop-down button to open the list of six Track Categories. You can select a different Category for the Line data being Auto Composed. Each Category has different Composition features, and therefore changes available options in the Parameters pane.



**Melody:** Use for the main Melody.

**Comping:** Use for accompaniments that include a large number of Harmonies.

**Obligato:** Use for additional accompaniments to the Melody Line.

**Bass:** Use for Bass.

**Strings:** Use for Strings and other Line data with sustained Chord Tones.

**Drums:** Use for Drums and Percussion.



Category attributes are assigned by Track in the Track Area of the Document window.

See also:

[Parameters pane](#)

[MelodyDraw pane](#)

[Rhythm Compose check box](#)

[Compose button](#)

[Managing Takes](#)

[Getting Results](#)

## Using the **Compose** dialog box

### **Compose** button

This is it...the magic button! While getting the best results from the CAMPS Auto Compose feature involves tweaking many detailed settings, clicking the **Compose** button can quickly produce quite a variety of interesting results.

The most important thing to remember when using the Compose dialog box is the need for relevant Chord data. Without Chord Blocks, CAMPS has no basic Tonality reference with which to perform Auto Composition, and Melodic or Chordal results can be, shall we say, extremely Discordant!

After selecting desired Line data to Auto Compose and opening the Compose dialog box, Clicking the **Compose** button starts Auto Composition of the selected Line data. Each time the **Compose** button is clicked, CAMPS analyzes the currently selected Line data, its assigned Chord data, and all of the many other adjustments available in the Compose dialog box to Auto Compose a result.

Once you've generated at least one Take, the currently selected Line data CAMPS analyzes the next time you click the **Compose** button is whichever Take is selected in the Take scroll area before the **Compose** button is clicked again. When a Take is generated, it is added to the Take scroll area in the selected state.

When the **Rhythm Compose** check box is not selected, only Pitches are Auto Composed. When the **Rhythm Compose** check box is selected, both Rhythmic and Pitch Auto Composition are performed. When the Track Category is Drums, the Rhythm Compose mode is automatically selected, and the "Pitch" data Auto Composed will fit the Drum Sounds Map of the standard General MIDI Drum Kit.

When using the MelodyDraw pane in the Compose dialog box, the Pitches of the resulting Notes will always fit the current Tonality, while following your MelodyDraw graph.



See also:

[Category selection box](#)

[Parameters pane](#)

[MelodyDraw pane](#)

[Rhythm Compose check box](#)

[Managing Takes](#)

[Getting Results](#)

## Using the **Compose** dialog box

### Rhythm Compose check box

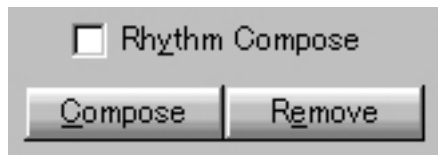
The **Rhythm Compose** check box determines whether Rhythmic Auto Composition is added to the Compose function. When checkmarked while Auto Composing Melodic or Chordal Line data, both Rhythmic and Pitch Auto Composition are performed. When not checkmarked, only Pitch Auto Composition is performed.

When Auto Composing Line data in the Drums Track Category, Rhythm Compose is automatically selected.

While optional, Rhythm Compose plays an important role when Auto Composing Line data in the Strings Track Category.

The Rhythm Compose function always analyzes rhythm information in the Original Line data, without regard for which Take is currently selected in the Take scroll area. CAMPS then Auto Composes a similar rhythmic figure based on this analysis and settings made in the Rhythm subpane of the Parameters pane. Finally, CAMPS Auto Composes Pitch data using the new Rhythm, analysis of the currently selected Line data (or Take) and settings in the Parameters and/or MelodyDraw panes.

Available options in the Rhythm subpane of the Parameters pane change depending on Track Category, and are not active if the Rhythm Compose check box is not selected.



See also:

[Category selection box](#)

[Parameters pane](#)

[MelodyDraw pane](#)

[Compose button](#)

[Managing Takes](#)

[Getting Results](#)

## Using the **Compose** dialog box

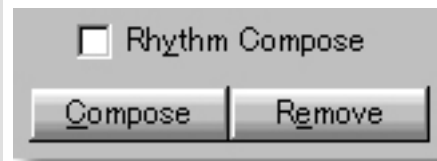
### Managing Takes

#### **Remove** button

The **Remove** button is provided for deleting undesirable Takes from the Take scroll area while working in the Compose dialog box. Simply select the Take to be deleted, and click the **Remove** button.

#### **Take** scroll area

This is where CAMPS temporarily stores results from Auto Composing. When the Compose dialog box is first opened, only the original form of the selected Line data is available in the Take scroll area, with the name "Original". The Original Take is the Line data analyzed when the **Compose** button is clicked for the first time.



Each time you click the **Compose** button, CAMPS performs Auto Composition on the selected Line data, adding the results, one by one, as new entries in the Take scroll area. The currently completed Auto Composition will be the active Take until you select another one.

Whichever Take is selected temporarily replaces the Line data selected in the Line Area of the Document Window, Pianoroll Editor or Notation Editor when the Compose dialog box was opened. This is important to remember, because besides enabling the Audition feature, it effects Auto Composition results. That is, the currently selected Line data CAMPS analyzes for Auto Composition is whichever Take is selected (highlighted) in the Take scroll area before the **Compose** button is clicked. If you wish to keep recomposing the Original Take, you must select it before each additional click of the **Compose** button, as Auto Composed Takes are added the scroll area in a selected state.

An **ORANGE TRIANGULAR WARNING** icon with a Note inside it next to any new Take indicates that some Notes were removed (instead of just relocated) in this version of the Line data to comply with Tonality settings in the Parameters pane. This happens mostly with Line data containing Harmonies, such as the Strings Category. More predefined Harmony results in more restrictions for the Compose function.

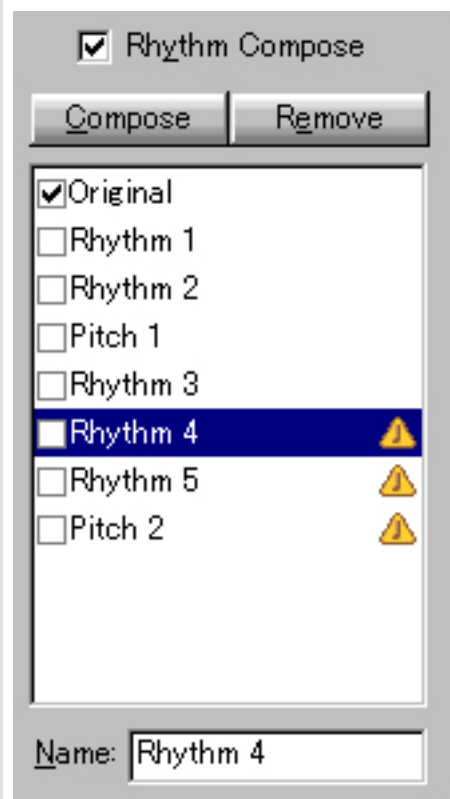
A check box is provided next to each Take for the purpose of saving them. When closing the Compose dialog box with the **OK** button, checkmarked Takes are saved to the currently selected Line Block's Take List.

The Take selected (highlighted) when **OK** is clicked replaces the Original, regardless of checkmarking. Once the Compose dialog box is closed, all the unselected Takes in the Take scroll area expire. When closing the Compose dialog box with the **Cancel** button, all the Auto Composed Takes expire, and the Original is left intact.

#### **Name** edit box

You can rename any entries in the Take scroll area except for the Original. To do this, select the Take you wish to rename and click anywhere in the Name edit box. You can then use the Backspace, Delete, and any other regular text keys on your computer's keyboard to rename the selected Take.





See also:

[Category selection box](#)

[Parameters pane](#)

[MelodyDraw pane](#)

[Rhythm Compose check box](#)

[Compose button](#)

[Getting Results](#)

## Using the **Compose** dialog box

### Getting Results

**Playback, Playback with Others, Stop** buttons

Each time you make click the **Compose** button, the selected Line data is temporarily replaced.

Click the **Playback** (Single Speaker) button to hear the currently selected Take in "Solo" mode. This Auditioning mode will include any existing Chords if the Chord Track **Play** button in the Track Area of the Document Window is activated.

Click the **Playback with Others** (Double Speaker) button to hear the currently selected Take along with all the other activated Tracks.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of selected Takes as you select them, until you click the **Stop** (No Speaker) button. With this feature, you can Auto Compose, select and Audition different Compose Takes "on the fly" or one by one.

**OK** button

When you have achieved the desired results, checkmark Takes you wish to save to the Take List, select (highlight) the Take you wish to have replace the currently selected Line data, and click **OK**. This closes the Compose dialog box, saves the checkmarked Takes to the currently selected Line Block's Take list, and replaces the selected Line data.

See also:

[Category selection box](#)

[Parameters pane](#)

[MelodyDraw pane](#)

[Rhythm Compose check box](#)

[Compose button](#)

[Managing Takes](#)

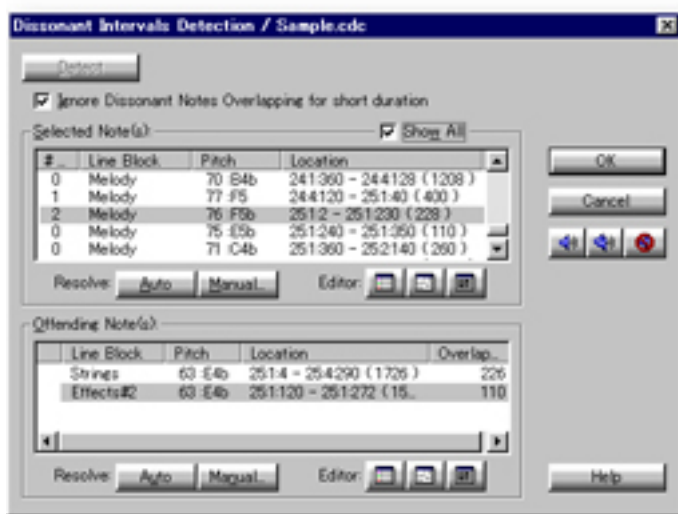
## Dissonant Intervals Detection dialog box

**Description** In the Dissonant Intervals Detection dialog box, CAMPS automatically Detects Dissonant (harsh sounding) Intervals between Notes in selected Line data and Notes occurring at the same time in Line Blocks of other Tracks. You can then automatically or manually Resolve Detected Dissonant Intervals to Consonant (smooth sounding) alternative Intervals.

**Uses** Upon opening the Dissonant Intervals Detection dialog box, CAMPS automatically performs [Dissonant Interval Detection](#), comparing Notes in selected Line data to Notes in all other Tracks in the same time slice. You can then alter the Pitch of either the [originally Selected Note\(s\)](#) or the other Tracks' [Offending Note\(s\)](#) to resolve the Dissonant Interval.

Using the **Playback** buttons, you can then audition results and select one that sounds good to you.

- Items**
- [Detect](#) button
  - [Status](#) display
  - [Ignore Dissonant Notes Overlapping for short duration](#) check box
  - [Selected Note\(s\)](#) area
  - [Offending Note\(s\)](#) area
  - [Playback](#) button
  - [Playback with Others](#) button
  - [Stop](#) button
  - [OK](#) button
  - [Cancel](#) button
  - [Help](#) button



## Opening

From the...

[Document Window](#)

[Pianoroll Editor](#)

[Event List Editor](#)

Choose **Detect Dissonant Intervals...** from the **Line** menu.

Alternatively, right-click desired Line data and choose **Actions, Detect Dissonant Intervals...**



When choosing **Detect Dissonant Intervals...** from the **Line** menu, you must first have selected Line data, otherwise the **Detect Dissonant Intervals...** item won't be available.

Items in the **Dissonant Intervals Detection** dialog box[Getting Started](#)**Detect**  
button

Click the **Detect** button to rerun the Detection process after making changes in the Dissonant Intervals Detection dialog box.

**Status**  
display

The Status display reports the current results in the Dissonant Intervals Detection dialog box. Between reports, it disappears.

**Ignore Dissonant Notes**  
**Overlapping for short duration**  
check box

Checkmark this option to exclude Notes in other Tracks from being considered as happening at the same time as Selected Notes when the Overlap time between these Notes equals a 32nd Note or less.

[Managing Intervals across Tracks from the Selected Line data](#)**Selected Note(s)**  
area

When the Show All option is checkmarked, this area lists all the Notes in the Line data selected for Detection of Dissonant Intervals, and which ones cause Dissonant Intervals. Without checkmarking the Show All option, only Notes found to cause Dissonant Intervals will be listed here. The Pitch of these Notes can then be altered to Resolve Dissonant Intervals.

[Managing Intervals across Tracks from the other Tracks](#)**Offending Note(s)**  
area

When a Note that is found to cause a Dissonant Interval is highlighted in the Selected Notes area, the other Notes making the Dissonant Interval and the Line Blocks they reside in are listed here. The Pitch of these Notes can then be altered to Resolve Dissonant Intervals.

[Auditioning](#)**Playback**

Click the **Playback** (Single Speaker) button to listen to a Selected Note.

**Playback with Others**

Click the **Playback with Others** (Double Speaker) button to listen to a Selected Note and its resulting Intervals along with all the other activated Tracks.

**Stop**

Click the **Stop** (No Speaker) button to stop Playback.

[Closing](#)**OK**  
button

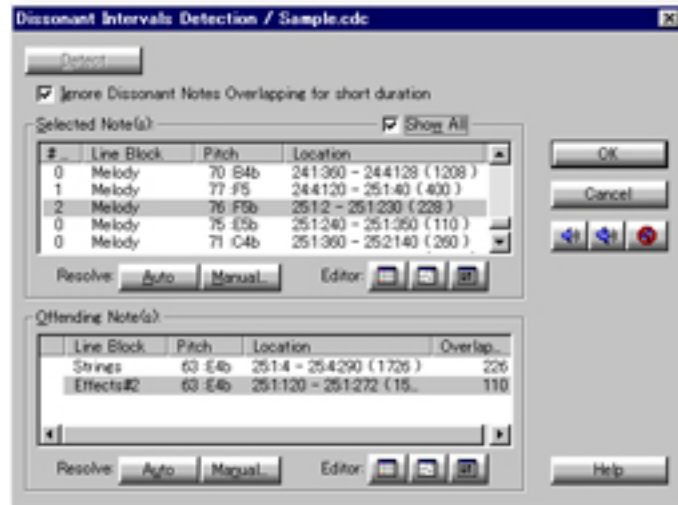
Closes the Dissonant Intervals Detection dialog box and commits changes.

**Cancel**  
button

Closes the Dissonant Intervals Detection dialog box without committing changes.

**Help**  
button

Opens this Help document.



## Using the **Dissonant Intervals Detection** dialog box

Getting Started

Overview

Dissonant Intervals are more harsh (less smooth) sounding Pitch combinations. This is not necessarily a bad thing. As a matter of fact, Dissonance may be desired as developing certain moods or tonalities in a Musical piece. The Dissonant Intervals Detection dialog box is provided to help you seek out these Intervals and decide if or how to Resolve them to more Consonant alternatives.

**Detect** button

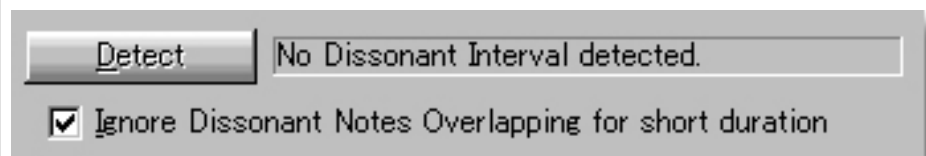
Because Detection is automatically performed when first opening the Dissonant Intervals Detection dialog box, the **Detect** button will be inactive at this time. The **Detect** button is provided for rerunning the Detection process after adjustments have been made, avoiding the need to close and reopen this dialog box. Changing the Detection criteria or Resolving a selected Interval immediately activates the **Detect** button, allowing you to rerun the Detection process for the new conditions.

**Status** display

The Status display will report whether Dissonant Intervals have been Detected or not. Additionally, the Status display reports Resolving of Dissonant Intervals. The Status display disappears when you begin working in the Dissonant Intervals Detection dialog box, but reappears with any new Status reports resulting from your actions.

**Ignore Dissonant Notes Overlapping for short duration** check box

Checkmark this option to exclude Notes in other Tracks from being considered as happening at the same time as Selected Notes when the Overlap time between these Notes equals a 32nd Note or less. Only Notes occurring at the same time are considered in the Dissonant Interval Detection process. Simultaneous Notes or Pitch Leap distance between separate Notes within one Track are not considered in the Dissonant Intervals Detection dialog box.



See also:

[Using the Selected Note\(s\) area](#)  
[Using the Offending Note\(s\) area](#)  
[Getting Results](#)

Using the Selected Note(s) area

**Show All** check box

A checkmark here causes all Notes in Line data selected before opening the Dissonant Intervals Detection dialog box to be listed in the Selected Note(s) scroll area, whether they cause Dissonant Intervals or not. By uncheckmarking this item, CAMPS will only display Notes that cause Dissonant Intervals.

**Selected Note(s)** scroll area

The **Number** column displays how many Dissonant Intervals across Tracks were Detected for each Note.

The **Line Block** column displays which Line Block each Note causing the Detected Dissonant Interval resides in.

The **Pitch** column displays the MIDI Pitch value and Note Name/Octave for each Note.

The **Location** column displays the starting and ending locations and the length of each Note. This display is for your reference. Changing these properties can be done freely in the Pianoroll or Notation Editor, or in controlled amounts with the Quantize and Articulation Adjustment dialog boxes.

**Auto** Resolve button

Clicking the **Auto** button in the Selected Note(s) area automatically changes the Pitch of a highlighted Note in the Selected Note(s) scroll area to Resolve a Dissonant Interval between that Note and Notes in other Tracks causing the Dissonant Interval. If there is no possible Resolution under the current Musical circumstances, this condition will be reported in the Status display and no Pitch change will occur.

**Manual...** Resolve button

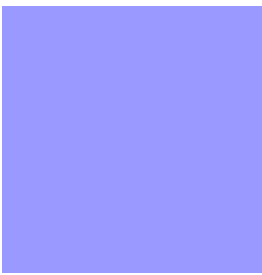
Clicking the **Manual...** button in the Selected Note(s) area opens the [Manual Pitch Adjustment](#) dialog box, allowing you to manually adjust the Pitch of a highlighted Note in the Selected Note(s) scroll area to Resolve a Dissonant Interval between that Note and Notes in other Tracks causing the Dissonant Interval.

**Editor** buttons

The **Editor** buttons allow you to choose which Editing environment displays your changes in the background while working in the Selected Note(s) area of the Dissonant Intervals Detection dialog box. Additionally, this will become the currently active Editor when closing the Dissonant Intervals Detection dialog box if your last actions were in the Selected Note(s) area.







See also:

[Getting Started](#)

[Using the Offending Note\(s\) area](#)

[Getting Results](#)

Using the Offending Note(s) area

**Offending Note(s)** scroll area

The **Line Block** column displays which Line Block each Offending Note causing the Detected Dissonant Interval resides in.

The **Pitch** column displays the MIDI Pitch value and Note Name/Octave for each Note.

The **Location** column displays the starting and ending locations and the length of each Offending Note. This display is for your reference. Changing these properties can be done freely in the Pianoroll or Notation Editor, or in controlled amounts with the Quantize and Articulation Adjustment dialog boxes.

The **Overlapping Duration** column displays the Duration of Note Overlap between the originally Selected Note and the Offending Note in Divisions, where one Quarter Note equals 480 Divisions.

**Auto** Resolve button

Clicking the **Auto** button in the Offending Note(s) area automatically changes the Pitch of a highlighted Offending Note to Resolve a Dissonant Interval between that Note and the originally Selected Note in another Track causing the Dissonant Interval. If there is no possible Resolution under the current Musical circumstances, this condition will be reported in the Status display and no Pitch change will occur.

**Manual...** Resolve button

Clicking the **Manual...** button in the Offending Note(s) area opens the [Manual Pitch Adjustment](#) dialog box, allowing you to manually adjust the Pitch of a highlighted Offending Note to Resolve a Dissonant Interval between that Note and the originally Selected Note in another Track causing the Dissonant Interval.

**Editor** buttons

The **Editor** buttons allow you to choose which Editing environment displays your changes in the background while working in the Offending Note(s) area of the Dissonant Intervals Detection dialog box. Additionally, this will become the currently active Editor when closing the Dissonant Intervals Detection dialog box if your last actions were in the Offending Note(s) area.



See also:

- [Getting Started](#)
- [Using the Selected Note\(s\) area](#)
- [Getting Results](#)

Getting Results

**Playback, Playback with Others, Stop** buttons

Each time you Resolve a Dissonant Interval, the selected Line data is temporarily replaced.

Click the **Playback** (Single Speaker) button to hear the Resolution of Dissonant Intervals in "Solo" mode. This Auditioning mode will include any existing Chords if the Chord Track **Play** button in the Track Area of the Document Window is activated.

Click the **Playback with Others** (Double Speaker) button to hear the Resolution of Dissonant Intervals along with all the other activated Tracks. Since selected Notes are being compared to Notes in other Tracks, this auditioning mode may be more useful when working in the Dissonant Intervals Detection dialog box.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of selected Line data with current Dissonant Interval Resolutions as you make them, until you click the **Stop** (No Speaker) button. With this feature, you can change and listen to different Dissonant Interval Resolutions for a highlighted Selected or Offending Note "on the fly" or one by one. To Audition a different Selected or Offending Note, highlight it and relick the **Playback** or **Playback with Others** button.

**OK** button

Click **OK** when you have achieved the desired results. This closes the Dissonant Intervals Detection dialog box and replaces the selected Line data.

See also:

[Getting Started](#)

[Using the Selected Note\(s\) area](#)

[Using the Offending Note\(s\) area](#)

Description	The Manual Pitch Adjustment dialog box allows you to manually adjust the Pitch of highlighted Notes in the Dissonant Intervals Detection dialog box.	
Uses	After selecting a Note to be Resolved from the <a href="#">Selected Note(s) area</a> or <a href="#">Offending Note(s) area</a> and clicking the appropriate <b>Manual...</b> button, adjust the Note's Pitch as desired and click the <b>OK</b> button to return to the Dissonant Intervals Detection dialog box.	
Items	<b>Pitch</b> edit box	Use the up/down buttons or directly edit the MIDI Pitch value in this box to change the Pitch of the Note being Resolved.
	<b>Pitch</b> display	The Pitch display shows the Note Name/Octave for the current MIDI Pitch value in the Pitch edit box.
	<b>Location</b> display	The Location display shows the starting and ending locations and the length of the Note subject to Manual Pitch Adjustment. This display is for your reference. Changing these properties can be done freely in the Pianoroll or Notation Editor, or in controlled amounts with the Quantize and Articulation Adjustment dialog boxes.
	<b>Line Block</b> display	Displays the Name of the Line Block in which the Note being resolved resides.
	<b>Editor</b> buttons	The <b>Editor</b> buttons allow you to choose which Editing environment displays your changes in the background while working in the Manual Pitch Adjustment dialog box. Additionally, this will become the currently active Editor when closing the Dissonant Intervals Detection dialog box if your last actions were in the Manual Pitch Adjustment dialog box.
	<b>OK</b> button	Closes the Manual Pitch Adjustment dialog box, returning to the Dissonant Intervals Detection dialog box and enters changes there.
	<b>Cancel</b> button	Closes the Manual Pitch Adjustment dialog box, returning to the Dissonant Intervals Detection dialog box without entering changes there.
<b>Help</b> button	Opens this Help document.	



Opening	From the Dissonant Intervals Detection dialog box	Select a Note to be Resolved from the <a href="#">Selected Note(s) area</a> or <a href="#">Offending Note(s) area</a> , and click the appropriate <b>Manual...</b> button.
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## Drums Notation Setup dialog box

- Description** The Drums Notation Setup dialog box allows you to customize the Notation Editor's Percussion Notation defaults for Tracks in the Drums Category.
- Uses** After selecting the Note whose Percussion Notation you wish to define and activating the **Assign** option, choose a Note head style and additional articulation Mark, if desired. You can also adjust where on the musical staff the Note will appear, and even the style of the Staff itself. Finally, you can [save](#) your changes to the current or a custom Drums Notation Set.
- Items**
- [Set](#) selection box
  - [Save](#) button
  - [Delete](#) button
  - [Note](#) scroll area
  - [Assign](#) check box
  - [Assignment](#) buttons
  - [Notes](#) radio buttons
  - [Marks](#) radio buttons
  - [Circled](#) check box
  - [Note](#) display
  - [5 Lines](#) radio button
  - [Single Line](#) radio button
  - [Apply](#) button
  - [OK](#) button
  - [Cancel](#) button
  - [Help](#) button



- Opening**
- From the [Notation Editor](#) Choose **Drums Notation Setup...** from the **Clef** submenu of the **View** menu. Alternatively, right-click anywhere in the Line Area and choose **Clef, Drums Notation Setup....**

Items in the **Drums Notation Setup** dialog box[Saving Sets of Assigned Drum Notes](#)**Set**  
selection box

The Set selection box is where you store and retrieve Drums Notation configurations made in the Drums Notation dialog box.

**Save**  
buttonUse the **Save** button to store your current Drums Notation configuration to a new Drums Notation Set.**Delete**  
buttonUse the **Delete** button to remove the currently selected Set from the list in the Set selection box.[Selecting Notes](#)**Note**  
scroll area

Use the Note scroll area to choose a Note for assignment of custom Drums Notation configuration.

[Assigning Percussion Notation to Drum Notes](#)**Assign**  
check box

Checkmarking the Assign option activates the Notation adjustment area of the Drums Notation Setup dialog box.

**Assignment**  
buttonsUse the up and down **Assignment** buttons to move the currently selected Note to the desired position on the Musical Notation Staff.**Notes**  
radio buttonsUse the **Notes** radio buttons to choose the desired Percussion Notation style for the head of the currently selected Note.**Marks**  
radio buttonsUse the **Marks** radio buttons to choose an articulation Mark to include with the currently selected Notation style being Assigned.**Circled**  
check box

Checkmarking this option causes a circle to be included around the head of the Note whose Notation you are assigning.

**Note**  
display

As you make adjustments to Percussion Notation being assigned to a Note, the results are immediately displayed in the Note display for your reference.

**5 Lines**  
radio button

Choosing this option sets the Musical Notation Staff in the current Drums Notation Set to the standard 5 Line format.

**Single Line**  
radio button

Choosing this option sets the Musical Notation Staff in the current Drums Notation Set to a Single Line.

**Apply**  
button

Commits changes without closing the Drums Notation Setup dialog box.

[Closing](#)**OK**  
button

Closes the Drums Notation Setup dialog box and commits changes.

**Cancel**  
button

Closes the Drums Notation Setup dialog box without committing changes.

**Help**  
button

Opens this Help document.



## Using the **Drums Notation Setup** dialog box

### Drums Notation Sets

#### Overview

While the Drums Notation Setup dialog box is available for all Track Categories, it is intended for use with Drums Tracks.

Adjustments in this dialog box can be saved as Sets, allowing you to recall custom Percussion Notation configurations for different situations. Uses for this feature include defining Percussion Notation styles for different MIDI Instruments or Drum Set Programs (Patches), as well as different Musical styles.

Drums Notation Sets are saved separately from Documents, and can therefore be reused in other songs.

#### **Set** selection box

The Set selection box is where you store and retrieve Drums Notation configurations made in the Drums Notation dialog box. Use the drop-down button on the right side of this box to open the list of Sets. You can then select a Set to use, edit or delete. Attempting to select a different Set after making unsaved changes to the currently selected Set opens an "Alert" dialog box asking if you want to Save changes to the current Set before changing to a different one.

#### **Save** button

Use the **Save** button to store your current Drums Notation configuration. Clicking **Save** opens the Naming dialog box. After specifying a Set name and closing the Naming dialog box, the new Set will appear in the drop-down list of the Set selection box.

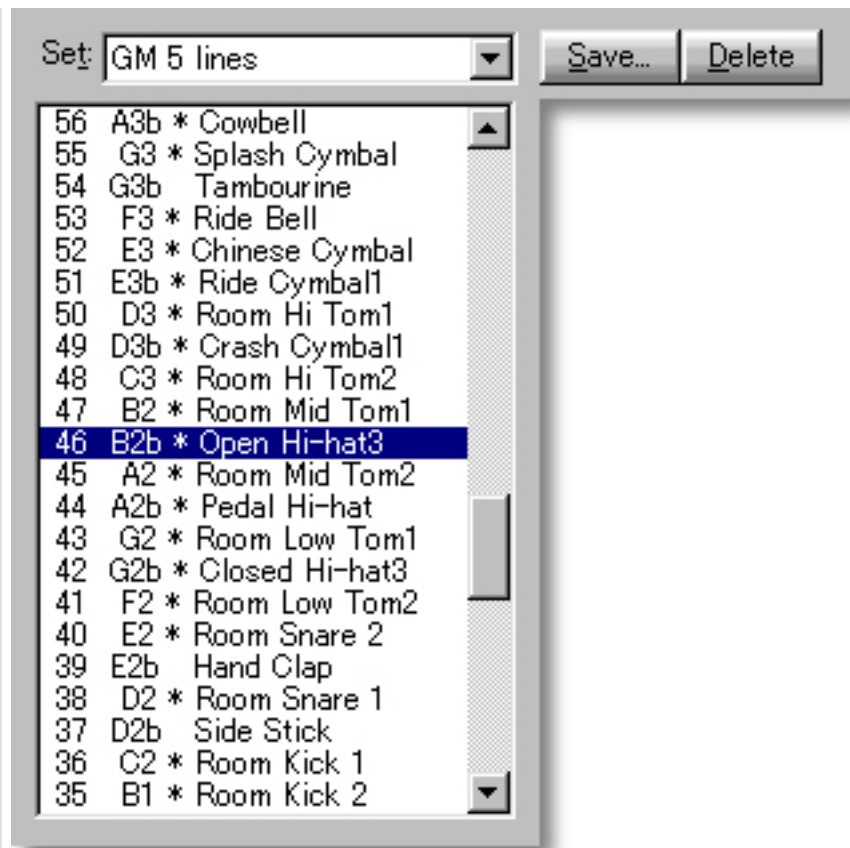
#### **Delete** button

The **Delete** button allows you to permanently remove the currently selected Set from the list in the Set selection box.



Clicking **Delete** immediately deletes the currently selected set without any additional confirmation.





See also:

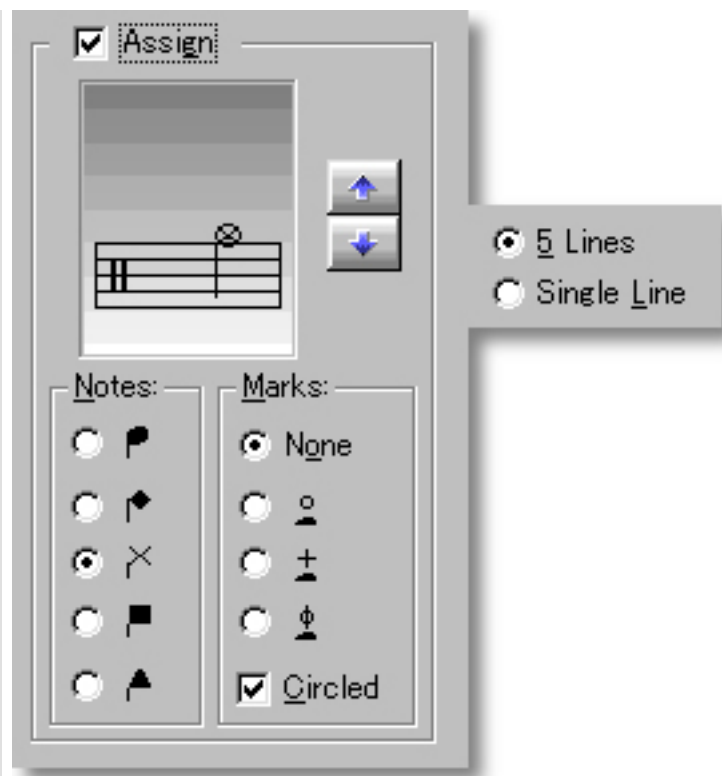
[Percussion Notation Assignment](#)

[Getting Results](#)

## Using the **Drums Notation Setup** dialog box

### Percussion Notation Assignment

<b>Note</b> scroll area	Use the Note scroll area to choose a Note for assignment of custom Drums Notation configuration. Double-clicking a Note automatically activates the Assign mode for that Note. Double-clicking the same Note again deactivates the Assign mode for that Note. Each Note is displayed with corresponding Sound definitions of the currently selected Program Set, which is defined in the MIDI Setup dialog box's Output Device pane.
<b>Assign</b> check box	Checkmarking the <b>Assign</b> option activates the Notation adjustment area of the Drums Notation Setup dialog box for the currently selected Note. You can then assign your choice of Musical Notation for the Note currently selected in the Notes scroll area.
<b>Assignment</b> buttons	Use the up and down <b>Assignment</b> buttons to move the currently selected Note to the desired position on the Musical Notation Staff. Adjustments are immediately displayed in the Note display to the left of these buttons.
<b>Notes</b> radio buttons	Use the <b>Notes</b> radio buttons to choose the desired Percussion Notation style for the head of the currently selected Note.
<b>Marks</b> radio buttons	If desired, choose an articulation Mark to include with the currently selected Notation style being Assigned.
<b>Circled</b> check box	Checkmarking this option causes a circle to be included around the head of the Note whose Notation you are assigning.
<b>Note</b> display	As you make adjustments to Percussion Notation being assigned to a Note, the results are immediately displayed in the Note display for your reference.
<b>5 Lines</b> radio button	Choosing this option sets the Musical Notation Staff in the current Drums Notation Set to the standard 5 Line format. Changes made here will appear the next time the Notation Editor is opened.
<b>Single Line</b> radio button	Choosing this option sets the Musical Notation Staff in the current Drums Notation Set to a Single Line. Changes made here will appear the next time the Notation Editor is opened.





See also:

[Drums Notation Sets](#)

[Getting Results](#)

## Using the **Drums Notation Setup** dialog box

Getting Results	Overview	<p>Any changes you make in the Drums Notation dialog box will be written to the currently selected Drums Notation Set in the Set selection box.</p> <p>To save changes to a new Set, click the <b>Save</b> button and specify a Set name. To save changes to a different existing Set, select the alternate Set from the drop-down list in the Set selection box before making changes.</p>
	<b>Apply</b> button	<p>Use the <b>Apply</b> button to immediately commit your changes to the currently selected Drums Notation Set without closing the Drums Notation dialog box.</p> <p> Changes committed with the <b>Apply</b> button are immediate, bypassing the <b>Cancel</b> option, and will therefore require manual adjustment to revert.</p>
	<b>OK</b> button	<p>Click <b>OK</b> when you have achieved the desired results. This closes the Drums Notation Setup dialog box and commits your changes to the currently selected Drums Notation Set.</p> <p> All changes committed by clicking <b>Apply</b> or <b>OK</b> will immediately be seen in the Notation Editor except the Staff Lines selections. These will take effect the next time you open the Notation editor.</p>



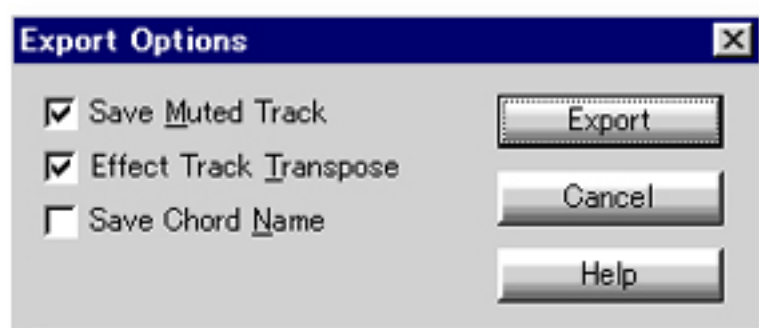
See also:

[Drums Notation Sets](#)

[Percussion Notation Assignment](#)

**Export Options** dialog box

Description	The Export Options dialog box allows you set final conditions for saving a Document in the Standard MIDI File format.	
Uses	After choosing <b>Export SMF...</b> from the <b>File</b> menu, specifying a file name and clicking <b>Save</b> , select desired Export Options and click the <b>Export</b> button to save your Document as a Standard MIDI File.	
Items	<b>Save Muted Tracks</b> check box	In a CAMPS native Document, the Track Mute settings are temporary "filters" that don't actually change the Line data in a Track's Line Blocks. Checkmarking the Save Muted Tracks check box sets CAMPS to save all your Document's Tracks with the Standard MIDI File being Exported, whether any Tracks have been Muted or not. Uncheckmarking this option sets CAMPS to exclude Muted Tracks from the Standard MIDI File being Exported.
	<b>Effect Track Transpose</b> check box	In a CAMPS native Document, the Track Transpose settings are temporary "filters" that don't actually change the Line data in a Track's Line Blocks. Checkmarking the Effect Track Transpose check box sets CAMPS to Transpose Line data in a Track's Line Blocks as per its Transpose settings in the Track area of the Document Window when Exporting a Document to a Standard MIDI File. Uncheckmarking this option sets CAMPS to Export Tracks in their original Key, regardless of Transpose settings.
	<b>Save Chord Names</b> check box	Checkmarking the Save Chord Names check box causes CAMPS to include Chord Names in their appropriate locations with the Standard MIDI File being Exported. Uncheckmarking this option sets CAMPS to ignore Chord Names when Exporting a Standard MIDI File.
	<b>Export</b> button	Closes the Export Options dialog box and Saves the current Document as a Standard MIDI File, using your settings for the options described above.
	<b>Cancel</b> button	Closes the Export Options dialog box without Saving a Standard MIDI File and returns you to the Export Standard MIDI File dialog box.
	<b>Help</b> button	Opens this Help document.



Opening

From the  
[Export Standard MIDI File](#)  
dialog box

Click the **Save** button.

## Export Standard MIDI File dialog box

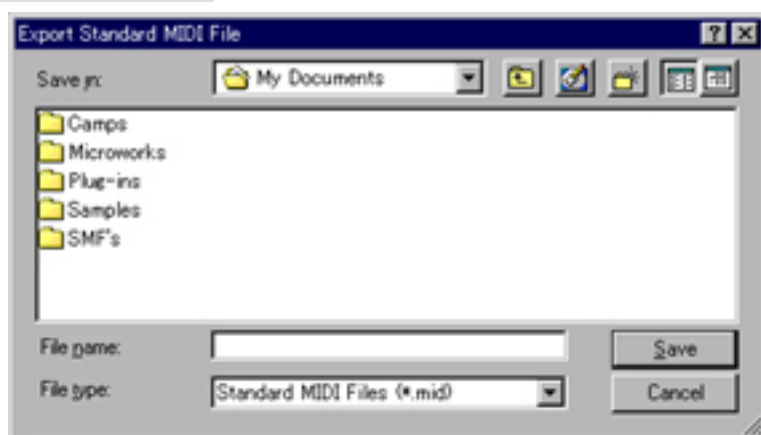
**Description** The Export Standard MIDI File dialog box allows save your composition as a Standard MIDI File.

Because certain CAMPS-specific data such as Chord Blocks, Line Blocks and Track Categories can not be included in a Standard MIDI File, the **Export SMF...** command leading to this dialog box has been implemented separately, enabling the additional [Export Options](#) dialog box.

It is also important to note that the appearance of this dialog box may vary depending on your computer's setup. While these variations are basically the same, Windows version (95/98/NT/2000), and whether or not you are using the Microsoft Internet Explorer's Active Desktop option on your system will effect the appearance of the Export Standard MIDI File dialog box.

**Uses** After making the Document to be Exported active and choosing **Export SMF...** from the **File** menu, specifying a file name and click **Save**.

- |              |  |
|--------------|--|
| <b>Items</b> | <p><b>Save in</b> selection box Use the drop-down button on the right side of this selection box to brows your computer's folder tree for a desired location in which to save your Standard MIDI File. Use this selection box in conjunction with the Location scroll area.</p> <p><b>Location</b> scroll area Use this scroll area in conjunction with the Save in selection box to specify a location for the Standard MIDI File to be saved in.</p> <p><b>File name</b> selection box Specify a valid Windows filename here.</p> <p><b>Save as type</b> selection box When Exporting a Standard MIDI File from CAMPS, this selection box is already set to the only choice of "Standard MIDI Files (*.mid)", and cannot be changed for reasons explained above.</p> <p><b>Save</b> button Closes the Export Standard MIDI File dialog box and opens the <a href="#">Export Options</a> dialog box.</p> <p><b>Cancel</b> button Closes the Export Standard MIDI File dialog box without Saving a Standard MIDI File.</p> |
|--------------|--|



Opening

From the...

[Document Window](#)

or

Any Editor in CAMPS

Choose **Export SMF...** from the **File** menu.



## Grid Setup dialog box

**Description** The Grid Setup dialog box allows you to adjust the Grid Resolution for individual areas of the Document Window and applicable Editors.

**Uses** In the Grid Setup dialog box, you can independently adjust the Grid Resolution for the Bar, Text, Chord and Line Block Areas of the Document Window, as well as similar areas in the Control Draw, Pianoroll and Tempo Draw Editors at any time during your work in them. You can then Apply and reApply new settings in the same Grid Setup dialog box session.

**Items**

- [Play&Rec Region](#) pane
- [Text Event](#) pane
- [Chord](#) pane
- [Line Block](#) pane
- [Pianoroll](#) pane
- [Control Draw](#) pane
- [Pitch Bend](#) pane
- [Notation](#) pane
- [Tempo Draw](#) pane
- [OK](#) button
- [Cancel](#) button
- [Apply](#) button
- [Help](#) button



**Opening**

From the...  
[Document Window](#)  
[Pianoroll Editor](#)  
[Control Draw Editor](#)  
[Tempo Draw Editor](#)

Choose **Grid Setup...** from the **Grid View** submenu of the **View** menu.

## Items in the **Grid Setup** dialog box

Document Window	<a href="#">Play&amp;Rec Region</a> pane	Click the Play&Rec Region tab to open the Play&Rec Region pane. This pane allows you to set Horizontal Grid Resolution for the Bar Area of relevant Editors.
	<a href="#">Text Event</a> pane	Click the Text Event tab to open the Text Event pane. This pane allows you to set Horizontal Grid Resolution for the Text Event Area of relevant Editors.
	<a href="#">Chord</a> pane	Click the Chord tab to open the Chord pane. This pane allows you to set Horizontal Grid Resolution for the Chord Area of relevant Editors.
Editors	<a href="#">Line Block</a> pane	Click the Line Block tab to open the Line Block pane. This pane allows you to set Horizontal Grid Resolution for the Line Area of the Document Window.
	<a href="#">Pianoroll</a> pane	Click the Pianoroll tab to open the Pianoroll pane. This pane allows you to set Horizontal Grid Resolution for the Line Area, and Vertical Grid Resolution for the Velocity Area of the Pianoroll Editor.
	<a href="#">Control Draw</a> pane	Click the Control Draw tab to open the Control Draw pane. This pane allows you to set Horizontal and Vertical Grid Resolution for the Control Draw Editor.
	<a href="#">Pitch Bend</a> pane	Click the Pitch Bend tab to open the Pitch Bend pane. This pane allows you to set Horizontal and Vertical Grid Resolution for Pitch Bend Events in the Control Draw Editor.
	<a href="#">Notation</a> pane	Click the Notation tab to open the Notation pane. This pane allows you to set Horizontal Grid Resolution for the Notation and Bar Areas of the Notation Editor.
Closing	<a href="#">Tempo Draw</a> pane	Click the Tempo Draw tab to open the Tempo Draw pane. This pane allows you to set Horizontal and Vertical Grid Resolution for Tempo Change Events in the Tempo Draw Editor.
	<b>OK</b> button	Closes the Grid Setup dialog box and commits changes.  Grid Resolution changes will only be effective if <b>Align to Grid</b> in the <b>Grid View</b> submenu of the <b>View</b> menu has been selected for the Editor in which Grid Resolution changes are being made. Additionally, Grid Resolution adjustments will revert to previous settings in the relevant Editor unless <b>Save Display Settings</b> in the <b>View</b> menu is selected before closing that Editor.
	<b>Cancel</b> button	Closes the Grid Setup dialog box without committing changes.
	<b>Apply</b> button	Commits changes without closing the Grid Setup dialog box.
	<b>Help</b> button	Opens this Help document.



## Using the **Grid Setup** dialog box

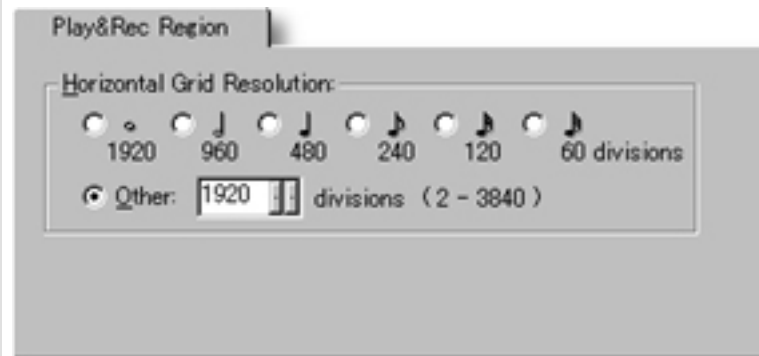
### Play&Rec Region pane


#### Horizontal Grid Resolution radio buttons

These radio buttons allow you to adjust Horizontal Grid Resolution of Loop and Punch In/Out region placement by absolute Note time values from Whole Notes (less resolution) to Thirty Second Notes (more resolution). This effects the size of time sections that Loop and Punch In/Out regions snap to as you create or edit them in the Bar Area of the Document Window, Pianoroll Editor, Control Draw Editor and Tempo Draw Editor.

#### Other divisions edit box

Use the left/right buttons or directly edit the number in this box to more finely set how many Divisions wide the Bar Area Horizontal Grid Resolution will be in the Bar Area of the Document Window, Pianoroll Editor, Control Draw Editor and Tempo Draw Editor.



 Grid Resolution changes will only be effective if **Align to Grid** in the **Grid View** submenu of the **View** menu has been selected for the Editor in which Grid Resolution changes are being made. Additionally, Grid Resolution adjustments will revert to previous settings in the relevant Editor unless **Save Display Settings** in the **View** menu is selected before closing that Editor.

See also:

[Text Event pane](#)

[Chord pane](#)

[Line Block pane](#)

[Pianoroll pane](#)

[Control Draw pane](#)

[Pitch Bend pane](#)

[Notation pane](#)

[Tempo Draw pane](#)

## Using the **Grid Setup** dialog box

### Text Event pane


#### Horizontal Grid Resolution radio buttons

These radio buttons allow you to adjust Horizontal Grid Resolution of Text Event placement by absolute Note time values from Whole Notes (less resolution) to Thirty Second Notes (more resolution). This effects the size of time sections that Text Events snap to as you create or move them in the Text Info Area of the Document Window, Pianoroll Editor, Control Draw Editor and Tempo Draw Editor.

#### Other divisions edit box

Use the left/right buttons or directly edit the number in this box to more finely set how many Divisions wide the Horizontal Grid Resolution of Text Event placement will be in the Text Info Area of the Document Window, Pianoroll Editor, Control Draw Editor and Tempo Draw Editor.



 Grid Resolution changes will only be effective if **Align to Grid** in the **Grid View** submenu of the **View** menu has been selected for the Editor in which Grid Resolution changes are being made. Additionally, Grid Resolution adjustments will revert to previous settings in the relevant Editor unless **Save Display Settings** in the **View** menu is selected before closing that Editor.

See also:

[Play&Rec Region pane](#)

[Chord pane](#)

[Line Block pane](#)

[Pianoroll pane](#)

[Control Draw pane](#)

[Pitch Bend pane](#)

[Notation pane](#)

[Tempo Draw pane](#)

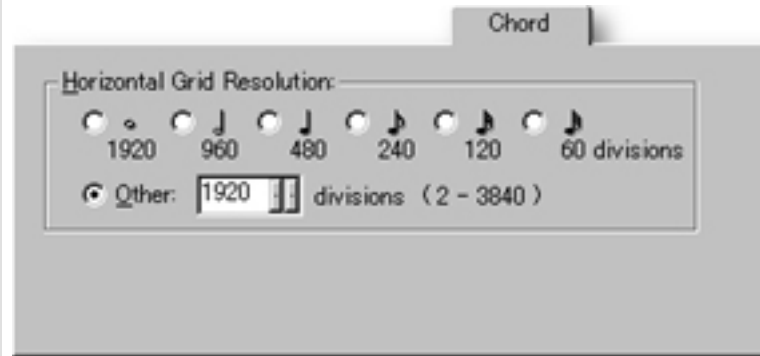
## Using the **Grid Setup** dialog box


**Chord** pane  
**Horizontal Grid Resolution** radio buttons

These radio buttons allow you to adjust Horizontal Grid Resolution of Chord Block placement by absolute Note time values from Whole Notes (less resolution) to Thirty Second Notes (more resolution). This effects the size of time sections that Chord Blocks snap to as you create or move them in the Chord Area of the Document Window and Pianoroll Editor.

**Other divisions** edit box

Use the left/right buttons or directly edit the number in this box to more finely set how many Divisions wide the Horizontal Grid Resolution of Chord Block placement will be in the Chord Area of the Document Window and Pianoroll Editor.



 Grid Resolution changes will only be effective if **Align to Grid** in the **Grid View** submenu of the **View** menu has been selected for the Editor in which Grid Resolution changes are being made. Additionally, Grid Resolution adjustments will revert to previous settings in the relevant Editor unless **Save Display Settings** in the **View** menu is selected before closing that Editor.

See also:

[Play&Rec Region pane](#)

[Text Event pane](#)

[Line Block pane](#)

[Pianoroll pane](#)

[Control Draw pane](#)

[Pitch Bend pane](#)

[Notation pane](#)

[Tempo Draw pane](#)

## Using the **Grid Setup** dialog box

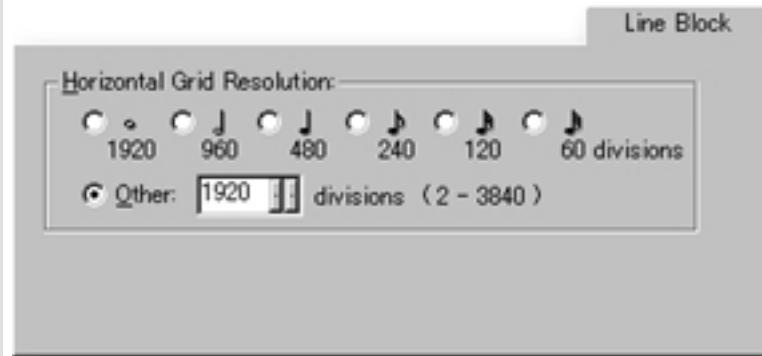
### Line Block pane


#### Horizontal Grid Resolution radio buttons

These radio buttons allow you to adjust Horizontal Grid Resolution of Line Block placement by absolute Note time values from Whole Notes (less resolution) to Thirty Second Notes (more resolution). This effects the size of time sections that Line Blocks snap to as you create or move them in the Line Area of the Document Window.

#### Other divisions edit box

Use the left/right buttons or directly edit the number in this box to more finely set how many Divisions wide the Horizontal Grid Resolution of Line Block placement will be in the Document Window.



 Grid Resolution changes will only be effective if **Align to Grid** in the **Grid View** submenu of the **View** menu has been selected for the Editor in which Grid Resolution changes are being made. Additionally, Grid Resolution adjustments will revert to previous settings in the relevant Editor unless **Save Display Settings** in the **View** menu is selected before closing that Editor.

See also:

[Play&Rec Region pane](#)

[Text Event pane](#)

[Chord pane](#)

[Pianoroll pane](#)

[Control Draw pane](#)

[Pitch Bend pane](#)

[Notation pane](#)

[Tempo Draw pane](#)

## Using the **Grid Setup** dialog box

### Pianoroll pane

#### Horizontal Grid Resolution radio buttons

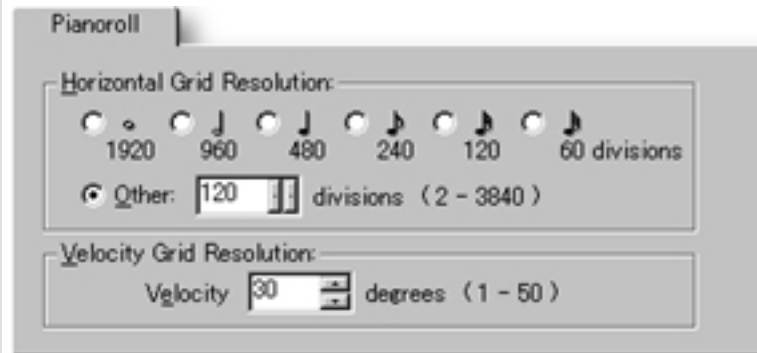
These radio buttons allow you to adjust the Horizontal Grid Resolution of the Pianoroll area in the Pianoroll Editor by absolute Note time values, from Whole Notes (less resolution) to Thirty Second Notes (more resolution). This effects the size of time sections Notes snap to when freely moving them Horizontally in the Pianoroll Editor.


#### Other divisions edit box

Use the left/right buttons or directly edit the number in this box to more finely set how many Divisions wide the Horizontal Grid Resolution of Note placement in the Line area of the Pianoroll Editor will be. By changing this value after first completing other parts of your song, effects like Rhythmic offset between Lines can more easily be achieved on a Note by Note basis.

#### Velocity edit box

Use the up/down buttons or directly edit the number in this box to set the Vertical resolution of the Velocity area in the Pianoroll Editor. This effects the size of Velocity increments that Velocity adjustments snap to when freely moving them Vertically in the Velocity area of the Pianoroll Editor.



 Grid Resolution changes will only be effective if **Align to Grid** in the **Grid View** submenu of the **View** menu has been selected for the Editor in which Grid Resolution changes are being made. Additionally, Grid Resolution adjustments will revert to previous settings in the relevant Editor unless **Save Display Settings** in the **View** menu is selected before closing that Editor.

See also:

[Play&Rec Region pane](#)

[Text Event pane](#)

[Chord pane](#)

[Line Block pane](#)

[Control Draw pane](#)

[Pitch Bend pane](#)

[Notation pane](#)

[Tempo Draw pane](#)



## Using the **Grid Setup** dialog box

### Control Draw pane

#### Horizontal Grid Resolution radio buttons

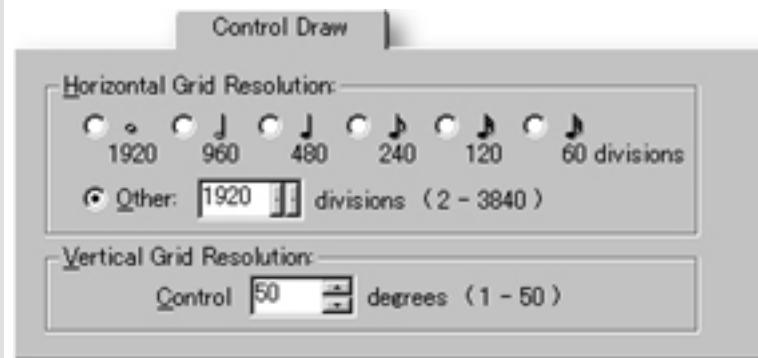
These radio buttons allow you to adjust the Horizontal Grid Resolution of MIDI Control Event placement by absolute Note time values, from Whole Notes (less resolution) to Thirty Second Notes (more resolution). This effects the size of time sections MIDI Control Events snap to when creating them with the Pen tool or freely moving them Horizontally in the Control Draw Editor.


#### Other divisions edit box

Use the left/right buttons or directly edit the number in this box to more finely set how many Divisions wide the Horizontal Grid Resolution of MIDI Control Event placement will be in the Control Draw Editor.

#### Control edit box

Use the up/down buttons or directly edit the number in this box to set the Vertical resolution of MIDI Control Events. This effects the size of MIDI Control increments when creating them with the Pen tool or freely moving them Vertically in the Control Draw Editor.



 Grid Resolution changes will only be effective if **Align to Grid** in the **Grid View** submenu of the **View** menu has been selected for the Editor in which Grid Resolution changes are being made. Additionally, Grid Resolution adjustments will revert to previous settings in the relevant Editor unless **Save Display Settings** in the **View** menu is selected before closing that Editor.

See also:

[Play&Rec Region pane](#)

[Text Event pane](#)

[Chord pane](#)

[Line Block pane](#)

[Pianoroll pane](#)

[Pitch Bend pane](#)

[Notation pane](#)

[Tempo Draw pane](#)

## Using the **Grid Setup** dialog box

### Pitch Bend pane

#### Horizontal Grid Resolution radio buttons

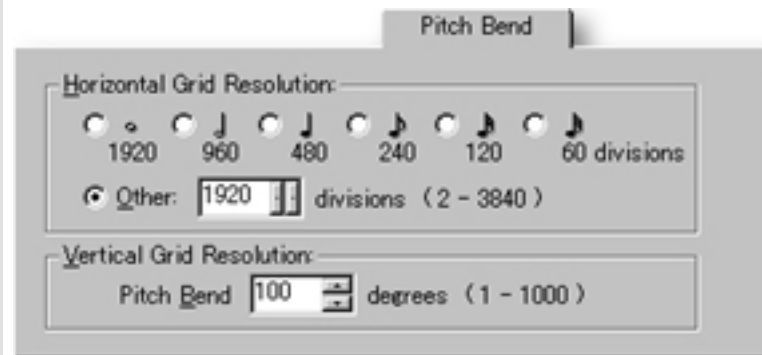
These radio buttons allow you to adjust the Horizontal Grid Resolution of Pitch Bend Event placement by absolute Note time values, from Whole Notes (less resolution) to Thirty Second Notes (more resolution). This effects the size of time sections Pitch Bend Events snap to when creating them with the Pen tool or freely moving them Horizontally in the Control Draw Editor.


#### Other divisions edit box

Use the left/right buttons or directly edit the number in this box to more finely set how many Divisions wide Horizontal Grid Resolution of Pitch Bend Event placement will be in the Control Draw Editor.

#### Pitch Bend edit box

Use the up/down buttons or directly edit the number in this box to set the Vertical resolution of Pitch Bend Events. This effects the size of Pitch Bend increments when creating them with the Pen tool or freely moving them Vertically in the Control Draw Editor. This number is expressed as degrees of change, and its actual value depends on the range of MIDI data values being edited in a given section of Line Data.



 Grid Resolution changes will only be effective if **Align to Grid** in the **Grid View** submenu of the **View** menu has been selected for the Editor in which Grid Resolution changes are being made. Additionally, Grid Resolution adjustments will revert to previous settings in the relevant Editor unless **Save Display Settings** in the **View** menu is selected before closing that Editor.

See also:

[Play&Rec Region pane](#)

[Text Event pane](#)

[Chord pane](#)

[Line Block pane](#)

[Pianoroll pane](#)

[Control Draw pane](#)

[Notation pane](#)

[Tempo Draw pane](#)

## Using the **Grid Setup** dialog box

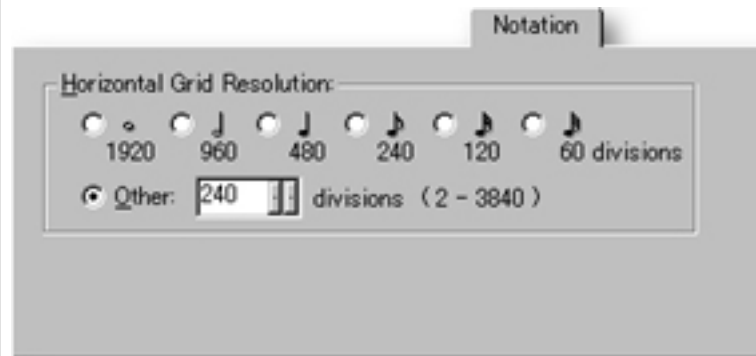
**Notation**  
pane


**Horizontal  
Grid Resolution**  
radio buttons

These radio buttons allow you to adjust the Horizontal Grid Resolution of the Notation and Bar areas in the Notation Editor by absolute Note time values, from Whole Notes (less resolution) to Thirty Second Notes (more resolution). This effects the size of time sections Notes snap to when freely moving them Horizontally in the Notation Editor.

**Other divisions**  
edit box

Use the left/right buttons or directly edit the number in this box to more finely set how many Divisions wide the Horizontal Grid Resolution of Note placement in the Notation and Bar Areas of the Notation Editor will be. By changing this value after first completing other parts of your song, effects like Rhythmic offset between Lines can more easily be achieved on a Note by Note basis.



 Grid Resolution changes will only be effective if **Align to Grid** in the **Grid View** submenu of the **View** menu has been selected for the Editor in which Grid Resolution changes are being made. Additionally, Grid Resolution adjustments will revert to previous settings in the relevant Editor unless **Save Display Settings** in the **View** menu is selected before closing that Editor.

See also:

[Play&Rec Region pane](#)

[Text Event pane](#)

[Chord pane](#)

[Line Block pane](#)

[Pianoroll pane](#)

[Control Draw pane](#)

[Pitch Bend pane](#)

[Tempo Draw pane](#)

## Using the **Grid Setup** dialog box

### Tempo Draw pane

#### Horizontal Grid Resolution radio buttons

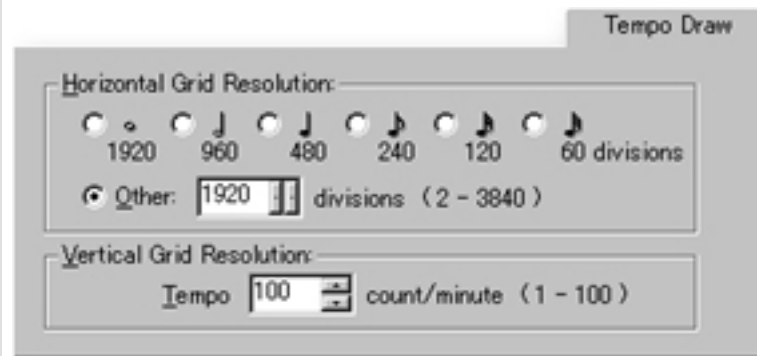
These radio buttons allow you to adjust the Horizontal Grid Resolution of MIDI Tempo Event placement by absolute Note time values, from Whole Notes (less resolution) to Thirty Second Notes (more resolution). This effects the size of time sections MIDI Tempo Events snap to when creating them with the Pen tool or freely moving them Horizontally in the Tempo Draw Editor.


#### Other divisions edit box

Use the left/right buttons or directly edit the number in this box to more finely set how many Divisions wide the Horizontal Grid Resolution of MIDI Tempo Event placement will be in the Tempo Draw Editor.

#### Tempo edit box

Use the up/down buttons or directly edit the number in this box to set the Vertical resolution of MIDI Tempo Events. This effects the size of MIDI Tempo increments when creating them with the Pen tool or freely moving them Vertically in the Tempo Draw Editor.



 Grid Resolution changes will only be effective if **Align to Grid** in the **Grid View** submenu of the **View** menu has been selected for the Editor in which Grid Resolution changes are being made. Additionally, Grid Resolution adjustments will revert to previous settings in the relevant Editor unless **Save Display Settings** in the **View** menu is selected before closing that Editor.

See also:

[Play&Rec Region pane](#)

[Text Event pane](#)

[Chord pane](#)

[Line Block pane](#)

[Pianoroll pane](#)

[Control Draw pane](#)

[Pitch Bend pane](#)

[Notation pane](#)

## Harmonize dialog box

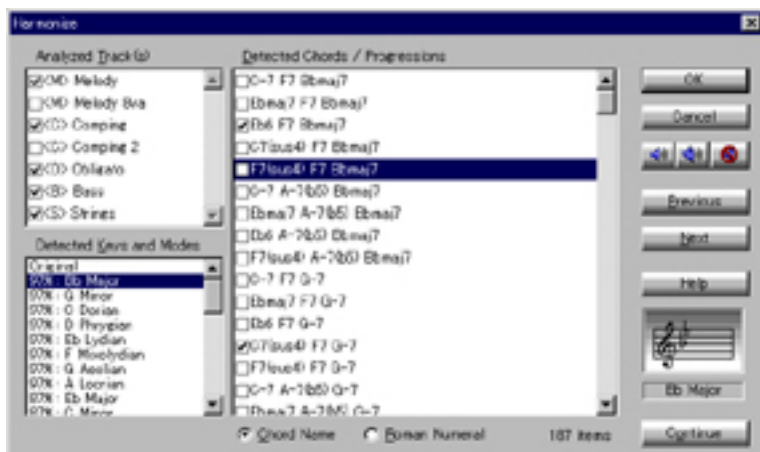
**Description** Generates numerous alternate Chord Progressions for [Melody harmonization](#).

**Uses** Upon opening the Harmonize dialog box, CAMPS automatically analyzes [Tracks in the Bar region of the selected Chords](#), and begins detecting Keys and Modes based on the Track Line data.

CAMPS will generate and [list available Chords or Chord Progressions](#) based on [your selection from a list of detected Keys and Modes](#) .

Using the **Playback** buttons, you can then audition the generated chords and select one that sounds good to you.

- Items**
- [Analyzed Track\(s\)](#) scroll area
  - [Detected Keys and Modes](#) scroll area
  - [Key Signature](#) display
  - [Key and Mode](#) display
  - [Detected Chords / Progressions](#) scroll area
  - [Suspend/Continue](#) button
  - [Chord Name](#) radio button
  - [Roman Numeral](#) radio button
  - [Playback](#) button
  - [Playback with Others](#) button
  - [Stop](#) button
  - [Next](#) button
  - [Previous](#) button
  - [OK](#) button
  - [Cancel](#) button
  - [Help](#) button



## Opening

From the...

[Document Window](#)

[Pianoroll Editor](#)

Choose **Harmonize...** from the **Chord** menu to open the Harmonize dialog box.

Alternatively, right-click desired Chord(s) and choose **Actions, Harmonize...**



When choosing **Harmonize...** from the **Chord** menu, you must have selected Chord Container(s) in the Chord Area, otherwise the **Harmonize...** item won't be available.

## Items in the **Harmonize** dialog box

### [Selecting Track\(s\)](#)

**Analyzed Track(s)**  
scroll area

This area contains a list of selected Track names in the Document Window for which you are attempting to find harmonizing Chords.

### [Selecting a Key and Mode](#)

**Detected Keys and Modes**  
scroll area

As the Auto Key Detection procedure is completed, this scroll area displays the results in the order of trueness using the format "Trueness %: Key Mode ".

**Key Signature**  
display

Displays the musical notation form of the Key Signature resulting from your selections in the Detected Keys and Modes scroll area.

**Key and Mode**  
display

Displays the alphabetic form of Key and Mode selected from the Detected Keys and Modes scroll area.

### [Selecting a Chord](#)

**Detected Chord(s)/Progression(s)**  
scroll area

Displays a list of harmonizing Chord Progressions in the Key and Mode selected in the Detected Keys and Modes scroll area.

**Suspend/Continue**  
button

Click the **Suspend/Continue** button to suspend or continue generating Chords or Chord Progressions in the Detected Chord(s) / Chord Progression(s) scroll area.

### [Appearance of Generated Chords](#)

**Chord Name**  
radio button

Sets the Chord display in the Detected Chord(s)/Chord Progression(s) scroll area to Chord Name form.

**Roman Numeral**  
radio button

Sets the Chord display in the Detected Chord(s)/Chord Progression(s) scroll area to Roman Numeral form.

### [Auditioning](#)

 **Playback**

Click the **Playback** (Single Speaker) button to listen to the Chord or Chord Progression selected in the Detected Chord(s)/Chord Progression(s) scroll area.

 **Playback with Others**

Click the **Playback with Others** (Double Speaker) button to listen to the Chord or Chord Progression selected in the Detected Chord(s)/ Progression(s) scroll area along with all the other activated Tracks.

 **Stop**

Click the **Stop** (No Speaker) button to stop Audition Playback.

**Next**  
button

Click the **Next** button to hear the next Chord or Chord Progression you have check marked in the Detected Chord(s)/Chord Progression(s) scroll area.

**Previous**  
button

Click the **Previous** button to hear the previous Chord or Chord Progression you have check marked in the Detected Chord(s)/Chord Progression(s) scroll area.

### [Closing](#)

**OK**  
button

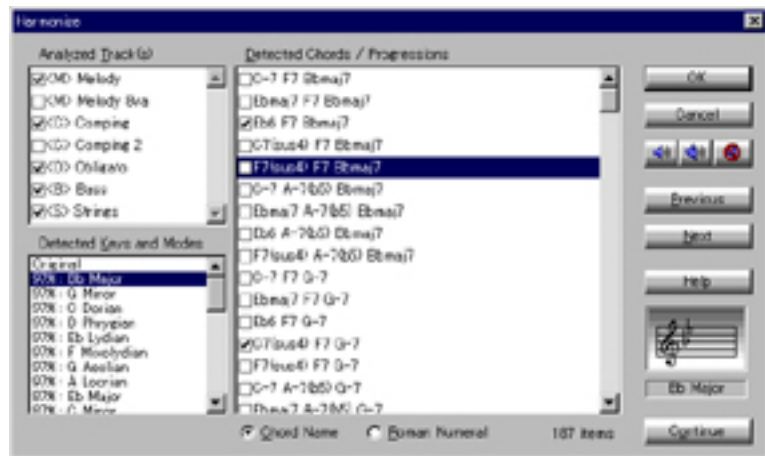
Closes the Harmonize dialog box and commits changes.

**Cancel**  
button

Closes the Harmonize dialog box without committing changes.

**Help**  
button

Opens this Help document.





## Using the **Harmonize** dialog box

Selecting Track(s)

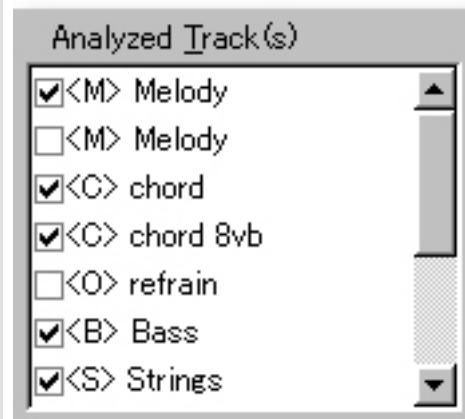
**Analyzed Track(s)** scroll area

Tracks that are "turned on" by using the **Play** button in the Track Area of the Document Window have already been selected for your convenience and will be referred to by CAMPS during the Auto Key Detection procedure.

Tracks that are assigned to the Drums Category are not displayed in the [Analyzed Track\(s\)](#) scroll area and will not be referred to by CAMPS during the Auto Key Detection procedure.

CAMPS will detect [Keys and Modes](#) based on Tracks you select. As you select Tracks to be Analyzed, consider previously defined categories like Melody, Comping, Obligato, Bass and Strings represented by the respective corresponding labels [M], [C], [O], [B] or [S] to the left of each Track's name.

When you change Track selections, CAMPS automatically begins the Auto Key Detection procedure all over again, erasing the previously detected Keys and Modes in the [Detected Keys and Modes](#) scroll area.



See also:

[Selecting a Key and Mode](#)

[Selecting a Chord](#)

[Getting Results](#)

## Using the **Harmonize** dialog box

Selecting  
a Key & Mode

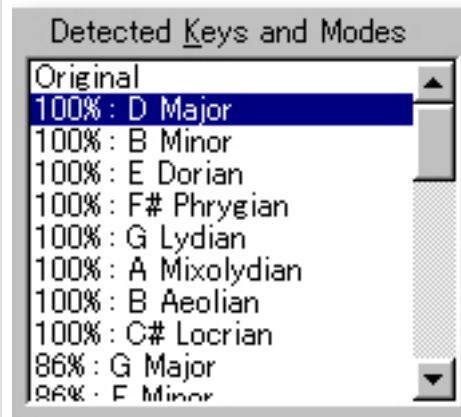
**Detected  
Keys and Modes**  
scroll area

Select a [Key and Mode](#) as needed, referring to the [Detected Keys and Modes](#) and [Key Signature](#) displays.

The word "Original" appearing at the top of this display area represents the original Key and Mode before opening the Harmonize dialog box.

Selecting a Key and Mode in this display area starts the Auto Chord Detection procedure, harmonizing with the selected Track data in that Key.

When you change Key and Mode selections, CAMPS automatically begins the Auto Chord Detection procedure all over again, erasing the previously detected Chords or Chord Progressions in the [Detected Chords or Progressions](#) scroll area.



See also:

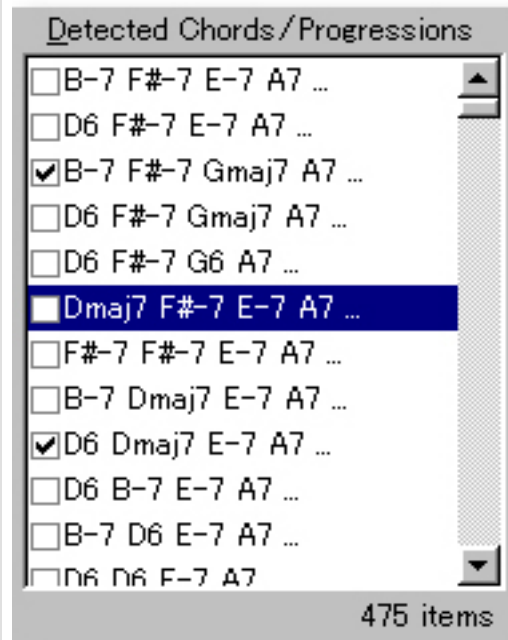
[Selecting Tracks](#)  
[Selecting a Chord](#)  
[Getting Results](#)

## Using the **Harmonize** dialog box

Selecting a Chord

**Detected Chord(s)/ Progression(s)** scroll area

Choose a desired Detected Chord or Progression from the Detected Chord(s)/Progression(s) scroll area.



**Suspend/Continue** button

During the Auto Chord Detection procedure, you can always suspend and continue the generation process by clicking the [Suspend/Continue](#) button. This feature is especially useful when CAMPS is generating a vast number of Chords or Chord Progressions. When CAMPS is finished Detecting Chords, the **Suspend/Continue** button's label changes to **Done**.

**Chord Name** and **Roman Numeral** radio buttons

Click the [Chord Name](#) or [Roman Numeral](#) radio button to choose your desired Chord display style in the Detected Chord(s)/Progression(s) area.



See also:

[Selecting Tracks](#)

[Selecting a Key and Mode](#)

[Getting Results](#)

## Using the **Harmonize** dialog box

### Getting Results

**Playback, Playback with Others, Stop** buttons

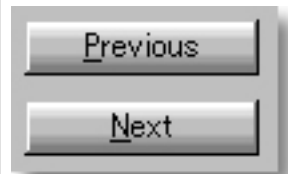
Click the **Playback** (Single Speaker) button to listen to the Chord or Chord Progression currently selected in the Detected Chord(s)/Progression(s) scroll area. Click the **Playback with Others** (Double Speaker) button to hear the Chord or Chord Progression along with all the other activated Tracks.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of Detected Chords and Progressions as you select them, even while selecting different Keys and Modes, until you click the **Stop** (No Speaker) button. With this feature, you can change and listen to different Chords or Chord Progressions "on the fly" or one by one.

**Next, Previous** buttons

When CAMPS detects a vast number of Chords or Chord Progressions, check mark the ones that sound good to you as you listen. Use the **Next** and **Previous** buttons to instantly switch between the check marked Chords.



**OK** button

Selecting a Chord or Chord Progression in the Detected Chord(s)/Progression(s) scroll area and clicking **OK** closes the Harmonize dialog box and replaces the contents of the selected Chord Container(s) with the newly generated Chord(s) or Progression(s).



CAMPS will always generate Chord Progressions that smoothly flow into each other unless you assign otherwise.

See also:

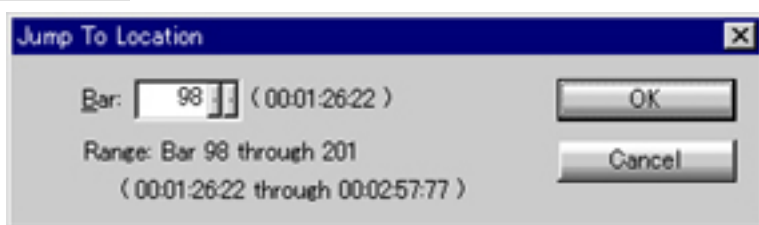
[Selecting Tracks](#)

[Selecting a Key and Mode](#)

[Selecting a Chord](#)



## Jump To Location dialog box

Description	The Jump To Location dialog box allows you to relocate the viewpoint in a CAMPS document to a specified Bar.	
Uses	After opening the Jump To Location dialog box, specify a Bar Number from which to begin a new viewpoint and click <b>OK</b> .	
Items	<b>Bar</b> edit box	Use the left/right buttons or directly edit the Bar Number in this box to specify a new viewpoint.
	<b>Time</b> display	The Time display shows your song Document's projected elapsed time at the Bar specified in the Bar edit box.
	<b>Range</b> display	The Range display only appears when opening the Jump To Location dialog box from the Event List, Pianoroll, Control Draw, and Notation Editors. This display shows the available Bar and Time Range for the Line Block being Edited.
	<b>OK</b> button	Closes the Jump To Location dialog box and relocates the current viewpoint to the specified Bar.
	<b>Cancel</b> button	Closes the Jump To Location dialog box without changing the current viewpoint.



Opening	<p>From the...  <a href="#">Document Window</a>  <a href="#">Pianoroll Editor</a>  <a href="#">Control Draw Editor</a>  <a href="#">Notation Editor</a>  <a href="#">Tempo Draw Editor</a></p>	Click the <b>Jump To Location</b> button. Alternatively, right-click an empty Bar, Chord or Line Area and choose <b>Jump To Location</b> .
	<p>From the...  <a href="#">Event List Editor</a>  <a href="#">Tempo List Editor</a>  <a href="#">Text List Editor</a></p>	Click the <b>Jump To Location</b> button. Alternatively, right-click the Playback Pointer Area or any of the Beat Sections and choose <b>Jump To Location</b> .

## New Line Block dialog box

Description	The New Line Block dialog box allows you to create and insert new Line Blocks with or without automatically generated Line data.	
Uses	After selecting the desired Line Area and opening the New Line Block dialog box, specify a <a href="#">Take Name</a> and how many Bars long you want the New Line Block to be. Checkmarking the <b>EZgenerate Line Data</b> option causes CAMPS to create Line data with the New Line Block, and enables the <b>Rhythm</b> radio buttons for adjusting the EZgenerated Line data's rhythmic tendencies.	
Items	<p><b>Take Name</b> edit box</p> <p><b>Bar Quantity</b> edit box</p> <p><b>EZgenerate Line Data</b> check box</p> <p><b>Rhythm</b> radio buttons</p> <p><b>New</b> button</p> <p><b>Cancel</b> button</p> <p><b>Help</b> button</p>	<p>Upon opening the New Line Block dialog box, this field is automatically filled in with the phrase "Block #", where "#" equals the next unused number above the current quantity of Line Blocks in your Document. You can leave this designation, or replace it with a Name of your choice.</p> <p>Use the up/down buttons or directly edit the number in this box to specify how many Bars long the New Line Block will be.</p> <p>Checkmarking this option causes CAMPS to automatically generate Line data in your New Line Block. It also enables the Rhythm radio buttons.</p> <p> EZgenerated Line data is created in the context of Harmony defined by Chord Blocks in the same Bar region as the New Line Block being created.</p> <p> If no Chords are defined in the Bar region where a New Line Block is being created, EZgenerated Line data will most likely not fit your composition; sounding totally "outside" or even quite unpleasant.</p> <p>When enabling the <b>EZgenerate Line Data</b> option, use these radio buttons to adjust the rhythmic complexity of EZgenerated Line data.</p> <p>Closes the New Line Block dialog box and creates the New Line Blocks you specify.</p> <p>Closes the New Line Block dialog box without creating a New Line Block.</p> <p>Opens this Help document.</p>



Opening

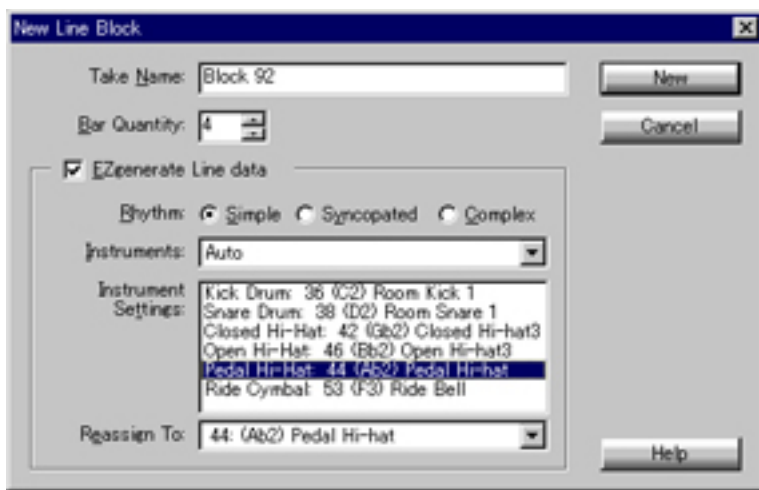
From the  
[Document Window](#)

There are 3 versions of this dialog box. This one appears when you right-click an empty Tonal Line Area (any Track except those in the Drums Category) and choose **New Line Block....**

## New Line Block dialog box

Description	The New Line Block dialog box allows you to create and insert new Line Blocks with or without automatically generated Line data.	
Uses	After selecting the desired Drums Line Area and opening the New Line Block dialog box, specify a <a href="#">Take</a> Name and how many Bars long you wish the New Line Block to be. Checkmarking the <b>EZgenerate Line Data</b> option causes CAMPS to create Line data with the New Line Block. This also enables the Rhythm and Instrument controls, allowing you to adjust rhythmic tendencies, and Percussion Instrumentation of EZgenerated Line data.	
Items	<b>Take Name</b> edit box	Upon opening the New Line Block dialog box, this field is automatically filled in with the phrase "Block #", where "#" equals the next unused number above the current quantity of Line Blocks in your Document. You can leave this designation, or replace it with a Name of your choice.
	<b>Bar Quantity</b> edit box	Use the up/down buttons or directly edit the number in this box to specify how many Bars long the New Line Block will be.
	<b>EZgenerate Line Data</b> check box	Checkmarking this option causes CAMPS to automatically generate Line data in your New Line Block. It also enables the Rhythm radio buttons, Instruments selection box, Instrument Settings display and Reassign To selection box.
	<b>Rhythm</b> radio buttons	When enabling the <b>EZgenerate Line Data</b> option, use these radio buttons to adjust the rhythmic complexity of EZgenerated Line data.
	<b>Instruments</b> selection box	When enabling the <b>EZgenerate Line Data</b> option, you can use this selection box to choose Percussion Instruments included in the EZgenerated Line data.
	<b>Instrument Settings</b> display	When enabling the <b>EZgenerate Line Data</b> option, this area displays Percussion Instruments to be included in the EZgenerated Line data, as selected in the Instruments selection box.
	<b>Reassign To</b> selection box	When enabling the <b>EZgenerate Line Data</b> option, you can use this selection box to reMap MIDI Keys of Percussion Instruments (Sounds) selected in the Instruments selection box.
	<b>New</b> button	Closes the New Line Block dialog box and creates the New Line Blocks you specify.
	<b>Cancel</b> button	Closes the New Line Block dialog box without creating a New Line Block.
	<b>Help</b> button	Opens this Help document.







Opening

From the [Document Window](#)

There are 3 versions of this dialog box. This one appears when you right-click an empty Drums Line Area and choose **New Line Block...**

## New Line Block dialog box

Description	The New Line Block dialog box allows you to create and insert new Line Blocks with or without automatically generated Line data.	
Uses	After opening the New Line Block dialog box, specify a <a href="#">Take</a> Name, Track, Starting Bar and how many Bars long you wish the New Line Block to be. Checkmarking the <b>EZgenerate Line Data</b> option causes CAMPS to create Line data with the New Line Block, and enables <b>Rhythm</b> radio buttons for adjusting the EZgenerated Line data's rhythmic tendencies. If the selected Track is in the Drums Category, you can also specify Percussion Instrumentation of EZgenerated Line data.	
Items	<b>Take Name</b> edit box	Upon opening the New Line Block dialog box, this field is automatically filled in with the phrase "Block #", where "#" equals the next unused number above the current quantity of Line Blocks in your Document. You can leave this designation, or replace it with a Name of your choice.
	<b>Track</b> selection box	Clicking the drop-down button on the right side of this box opens the list of available Tracks in your Document. Select the Track to which you wish to add a New Line Block. If you select a Track in the Drums Category and checkmark the <b>EZgenerate Line Data</b> option, the Instruments selection box, Instrument Settings display and Reassign To selection box are also enabled.
	<b>Start Bar</b> edit box	Use the up/down buttons or directly edit the number in this box to specify which Bar the New Line Block will start from.
	<b>Bar Quantity</b> edit box	Use the up/down buttons or directly edit the number in this box to specify how many Bars long the New Line Block will be.
	<b>EZgenerate Line Data</b> check box	Checkmarking this option causes CAMPS to automatically generate Line data with your New Line Block. It also enables the <b>Rhythm</b> radio buttons. If the Track selected in the Track selection box is in the Drums Category, then the Instruments selection box, Instrument Settings display and Reassign To selection box are also enabled.
	<b>Rhythm</b> radio buttons	 If you select a Track in a Category other than Drums, EZgenerated Line data is created in the context of Harmony defined by Chord Blocks in the same Bar region as the New Line Block being created.
	<b>Instruments</b> selection box	 If no Chords are defined in the Bar region where a New Line Block is being created, EZgenerated Line data will most likely not fit your composition; sounding totally "outside" or even quite unpleasant.
	<b>Instrument Settings</b> display	When enabling the <b>EZgenerate Line Data</b> option, use these radio buttons to adjust the rhythmic complexity of EZgenerated Line data.
	<b>Instrument Settings</b> display	When choosing a Track in the Drums Category and enabling the <b>EZgenerate Line Data</b> option, you can use this selection box to choose Percussion Instruments included in the EZgenerated Line data.
	<b>Instrument Settings</b> display	When choosing a Track in the Drums Category and enabling the <b>EZgenerate Line Data</b> option, this area displays Percussion Instruments to be included in the EZgenerated Line data, as selected in the Instruments selection box.

**Reassign To**  
selection box

When choosing a Track in the Drums Category and enabling the **EZgenerate Line Data option**, you can use this selection box to reMap MIDI Keys of Percussion Instruments (Sounds) selected in the Instruments selection box.

**New**  
button

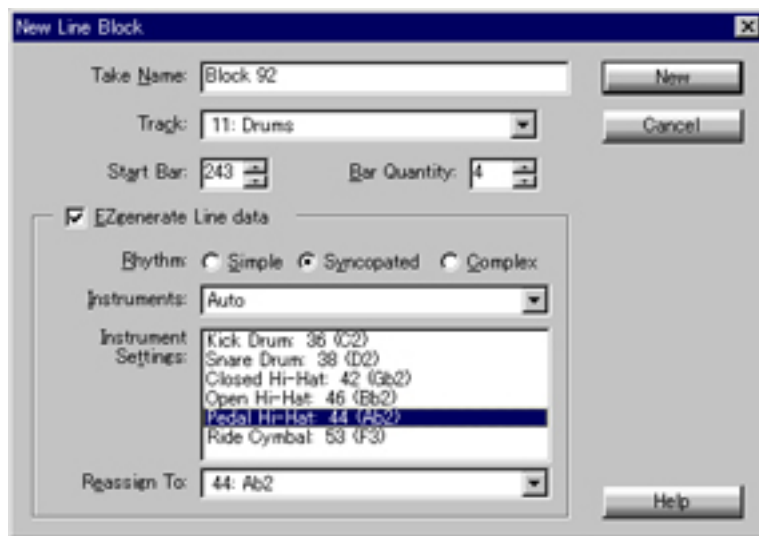
Closes the New Line Block dialog box and creates the New Line Blocks you specify.

**Cancel**  
button

Closes the New Line Block dialog box without creating a New Line Block.

**Help**  
button

Opens this Help document.



Opening

From the [Document Window](#)

There are 3 versions of this dialog box. This one appears when you click anywhere in the Line Area and choose **New Line Block...** from the **Edit** menu.

## Map Pitches dialog box

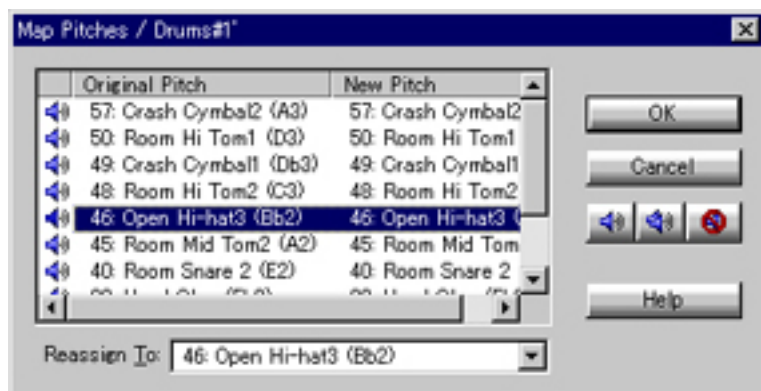
**Description** The Map Pitches dialog box allows you to shift the MIDI Pitch value of all occurrences of specified Notes in selected Line data.

**Uses** Upon opening the Map Pitches dialog box, CAMPS lists the selected Pitches in the Map Pitches scroll area.

[Select a Pitch](#) in the Map Pitches scroll area to reMap, and [choose a new Pitch](#) from the Reassign To box's drop-down list.

Using the **Playback** buttons, you can then audition Pitch Mappings and select one that sounds good to you.

- Items**
- [Map Pitches](#) scroll area
  - [Reassign To](#) selection box
  - [Playback](#) button
  - [Playback with Others](#) button
  - [Stop](#) button
  - [OK](#) button
  - [Cancel](#) button
  - [Help](#) button



**Opening**

From the... [Document Window](#) [Event List Editor](#) [Pianoroll Editor](#) [Notation Editor](#)

Choose **Map Pitches...** from the **Line** menu. Alternatively, right-click desired Line data and choose **Actions, Map Pitches....**

 When choosing **Map Pitches...** from the **Line** menu, you must first have selected Line data, otherwise the **Map Pitches...** item won't be available.

## Items in the **Map Pitches** dialog box

### [Selecting Pitches](#)

**Map Pitches**  
scroll area

Use this area to select a Pitch to reMap, and to select which Pitches sound during Auditioning.

**Reassign To**  
selection box

Select a Pitch from the drop-down list in this box that you want to use to replace the selected Pitch in the Map Pitches scroll area.

### [Auditioning](#)

 **Playback**

Click the **Playback** (Single Speaker) button to listen to the selected Pitch Mapping along with any existing Chords.

 **Playback with Others**

Click the **Playback with Others** (Double Speaker) button to listen to the selected Pitch Mapping along with all the other activated Tracks.

 **Stop**

Click the **Stop** (No Speaker) button to stop Playback.

### [Closing](#)

**OK**  
button

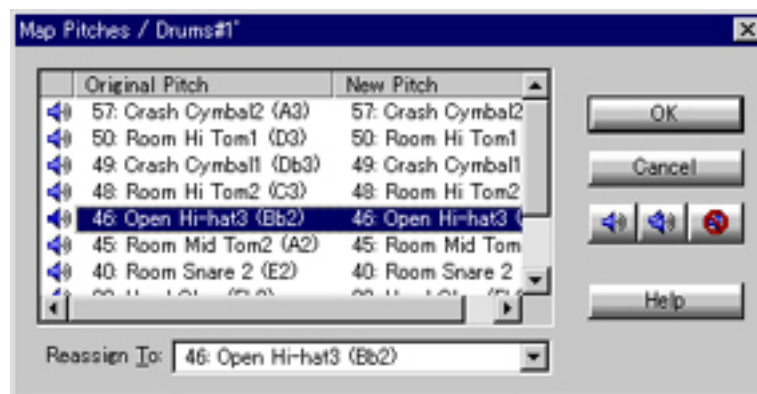
Closes the Map Pitches dialog box and commits changes.

**Cancel**  
button

Closes the Map Pitches dialog box without committing changes.

**Help**  
button

Opens this Help document.



## Using the Map Pitches dialog box

### Selecting and Mapping Pitches

#### Map Pitches scroll area

After selecting individual Notes or whole Line Blocks and opening the Map Pitches dialog box, CAMPS lists all selected Pitches and their current Mappings in three columns:

The Play column provides a check box you can use to select which Pitches sound during Auditioning.

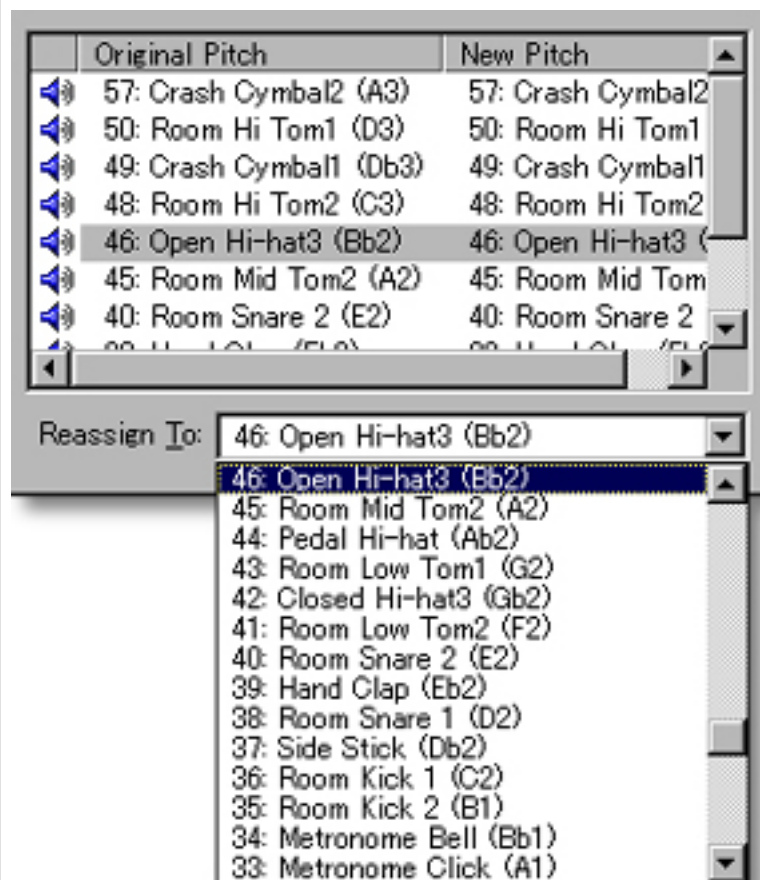
The Pitch column displays the MIDI Pitch value of each respective Pitch.


The Original Pitch -> New Pitch column displays the current Pitch Mappings. (Unaltered Pitches will always be Mapped to themselves.)

Upon selecting a Pitch in the Map Pitches scroll area, CAMPS automatically sounds the Original Pitch, immediately followed by the New (currently Mapped) Pitch. Simply select a Pitch you wish to reMap.

#### Reassign To selection box

Use the drop-down button on the right side of the [Reassign To](#) selection box to open the list of available Pitches, and choose one to Map to the Pitch selected in the Map Pitches scroll area. Upon selecting a new Pitch, CAMPS automatically re-enables its Play setting (if previously unchecked), sounds the corresponding New Pitch, and displays the New Pitch Mapping in the Original Pitch -> New Pitch column of the Map Pitches scroll area.





See also:

[Getting Results](#)

## Using the **Map Pitches** dialog box

Getting Results

**Playback, Playback with Others, Stop** buttons

Each time you reMap Pitches, the selected Line data is temporarily replaced.

Click the [Playback](#) (Single Speaker) button to hear the results of Pitch Mapping along with any existing Chords. Click the [Playback with Others](#) (Double Speaker) button to hear the results of Pitch Mapping along with all the other activated Tracks.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of selected Line data with current Pitch Maps as you make them, until you click the [Stop](#) (No Speaker) button. With this feature, you can change and listen to different Pitch Maps "on the fly" or one by one.

**OK** button

Click [OK](#) when you have achieved the desired results. This closes the Map Pitches dialog box and applies the new Pitch Maps to the selected Line data.



While reMapping Pitches can provide interesting results with harmonic Line data, Its main intended use is translating Drum sounds from one synth program to another.



Keep in mind that different Drum sounds may have different Control data sensitivity. After reMapping Pitches for Drum sound assignment, it may be necessary to adjust control data such as Velocity or After Touch to maintain originally desired sound.

See also:

[Selecting and Mapping Pitches](#)



## Memo dialog box

**Description** The Memo dialog box allows you to add background text, such as descriptions, to a CAMPS Document and its individual Tracks and Line Blocks.

**Uses** Different types of Memos are available depending on area selected. The Document Memo is always available. In the Tempo List, Tempo Draw and Text List Editors, only the Document Memo is available. In the Event List, Pianoroll, Control Draw and Notation Editors, the Document and Line Block Memos are available. Depending on your selection in the Document Window, the Document, Line Block and Track Memos are available.

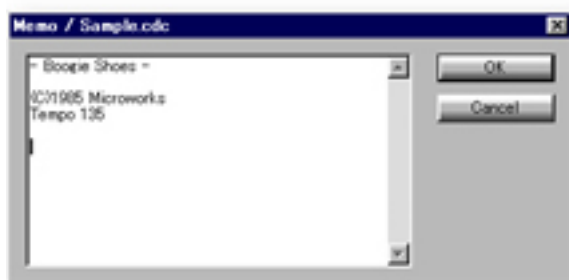
After selecting an area and choosing the appropriate Memo type, enter desired text and click OK.

**Items**

**Text scroll area** Enter or edit desired Text in this scroll area.

**OK button** Click the **OK** button to close the Memo dialog box and save text in the Text scroll area as a Memo for the selected area. As with all Editing in CAMPS, changes will not actually be saved in the Document until you save the Document File, either during your CAMPS session, or upon exiting

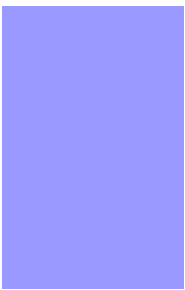
**Cancel button** Click the **Cancel** button to close the Memo dialog box and discard text changes.



**Opening**

From the [Document Window](#) Choose **Document Memo** from the **Help** menu. Select a desired Track in the Track Area and choose **Track Memo** from the **Help** menu. Alternatively, right-click desired Track and select **Track Memo**. Select a desired Line Block in the Line Area and choose **Line Block Memo** from the **Help** menu. Alternatively, right-click desired Line Block and select **Line Block Memo**.

From the...  
[Tempo List Editor](#)  
[Tempo Draw Editor](#)  
[Text List Editor](#) Choose **Document Memo** from the **Help** menu.



From the...  
[Event List Editor](#)  
[Pianoroll Editor](#)  
[Control Draw Editor](#)  
[Notation editor](#)

Choose **Document Memo** or **Line Block Memo** from the **Help** menu.

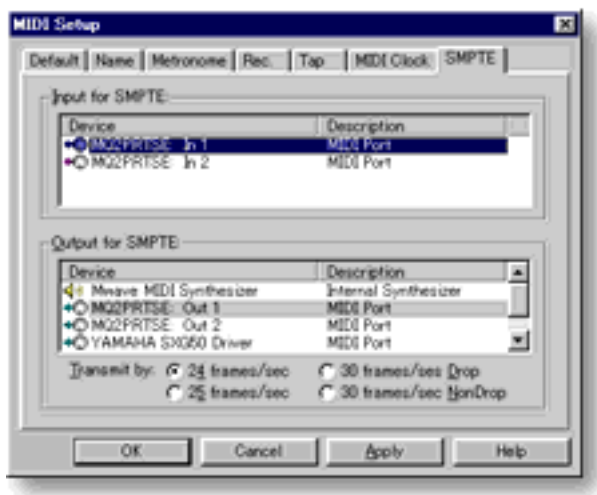
## MIDI Setup dialog box

**Description** The MIDI Setup dialog box allows you to make global settings for MIDI data Input and Output in CAMPS.

**Uses** The MIDI Setup dialog box can be accessed from any Editor screen in CAMPS. This way, you can adjust MIDI Input, Output, Sync and Metronome settings at any moment during your work.

**Items**

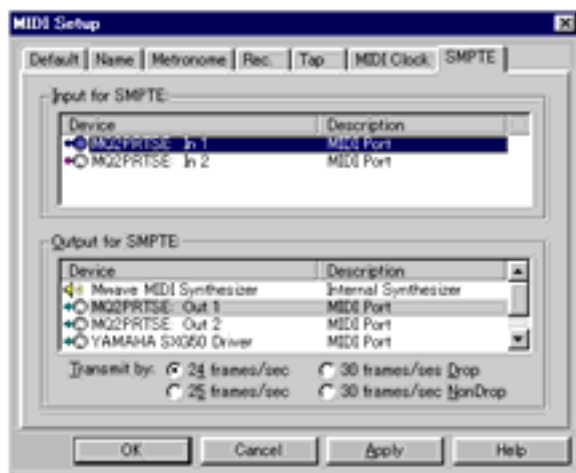
- [Default](#) pane
- [Output Device](#) pane
- [Metronome](#) pane
- [Record](#) pane
- [Tap](#) pane
- [MIDI Clock](#) pane
- [SMPTE](#) pane
- [OK](#) button
- [Cancel](#) button
- [Apply](#) button
- [Help](#) button



**Opening** Choose **MIDI Setup...** from the **MIDI** menu.

## Items in the MIDI Setup dialog box

MIDI Output	<b>Default</b> pane	Click the Default tab to open the Default pane. The Default pane shows which of your computer's MIDI Output resources will be associated with a newly created Track. This is also where you set the speed of the <a href="#">Playback Control toolbar</a> 's Fast Forward and Rewind functions.
	<b>Output Device</b> pane	Click the Device tab to open the Device pane. This pane allows you to select which of your computer's MIDI Output devices CAMPS sends MIDI data to, and lets you manage Synth Program (Patch) names used when selecting a Track's MIDI Program number.
	<b>Metronome</b> pane	Click the Metronome tab to open the Metronome pane. Here is where you set the default operation of the CAMPS Metronome.
MIDI Input	<b>Record</b> pane	Click the Record tab to open the Record pane. The Record pane gives you most of CAMPS MIDI input settings.
	<b>Tap</b> pane	Click the Tap tab to open the Tap pane. This is where you select the Input source for manual Tap Tempo.
MIDI Timing	<b>MIDI Clock</b> pane	Click the MIDI Clock tab to open the MIDI Clock pane. This is where you choose MIDI Clock Input and Output sync sources.
	<b>SMPTE</b> pane	Click the SMPTE tab to open the SMPTE pane. If you're using SMPTE to synchronize your MIDI performance, this is where you choose SMPTE Input and Output sync sources and timing.
Closing	<b>OK</b> button	Closes the MIDI Setup dialog box and commits changes.
	<b>Cancel</b> button	Closes the MIDI Setup dialog box without committing changes.
	<b>Apply</b> button	Commits changes without closing the MIDI Setup dialog box.
	<b>Help</b> button	Opens this Help document.



## Using the **MIDI Setup** dialog box

### Default pane

**Default Output for New Track**  
scroll area

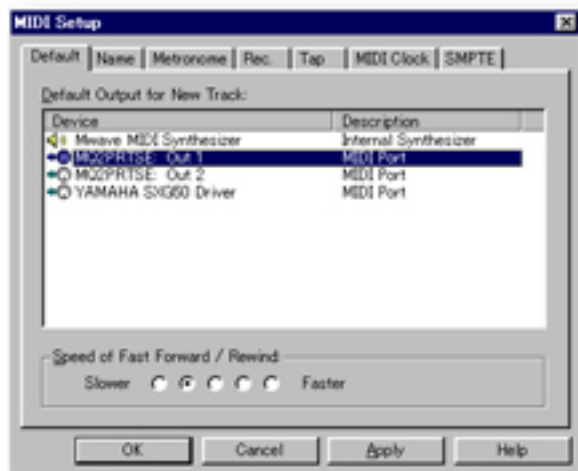
This area lets you choose the default MIDI Output device to be assigned to newly created Tracks in CAMPS.

**Fast Forward/Rewind Speed**  
radio buttons

Use these radio buttons to set the speed of the [Playback Control toolbar](#)'s Fast Forward and Rewind functions. There are 5 settings, with left-most buttons yielding slower shuttle action, and right-most buttons increasing shuttle speed.



Multiple MIDI Output Devices installed in your computer will not be available in the Default Output for New Track scroll area if the **MIDI Mapper** item is selected in the **MIDI** menu.



See also:

[Output Device pane](#)

[Metronome pane](#)

[Record pane](#)

[Tap pane](#)

[MIDI Clock pane](#)

[SMPTE pane](#)

## Using the MIDI Setup dialog box

### Output Device pane

### Output Device Settings scroll area

The Output Device Settings scroll area allows you to choose which of your computer's MIDI Devices CAMPS will send MIDI data to. Any Document open during Output Device changes will retain previous settings. However, you can change Output Device Settings for an open Document on a Track by Track basis by using a Track's **Device** button.



Virtual (Software) Synthesizers typically have a slower initial response time. Therefore, using them while a Hardware MIDI Device is assigned to some Tracks in the same Document may result in an unwanted offset of Playback time between Instruments in your song.

Because of the enhanced ability of CAMPS to manage MIDI Output Devices, the typical "override to OS Settings" **MIDI Mapper** selection has been placed in a higher level of the **MIDI** menu in CAMPS.

### Program Set selection box

In the Program Set selection box, you can choose between a few basic General MIDI Synth Program (Patch) name lists for the purpose of automatically displaying corresponding musical Instrument (Sound) names while adjusting a Track's Program number in the Document Window and Event List Editor. Use the drop-down button to see and choose from available Program Sets.

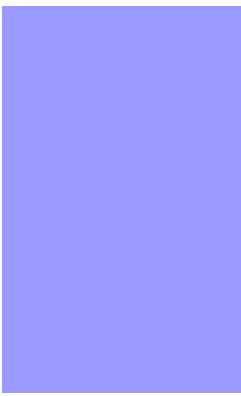
### Program Examples display

This display area shows a short list of Program name examples in the chosen Program Set.



Multiple MIDI Output Devices installed in your computer will not be available in the Output Device Settings scroll area if the **MIDI Mapper** item is selected in the **MIDI** menu.





See also:

[Default pane](#)

[Metronome pane](#)

[Record pane](#)

[Tap pane](#)

[MIDI Clock pane](#)

[SMPTE pane](#)

## Using the MIDI Setup dialog box

### Metronome pane

**Output**  
scroll area

The Metronome Output scroll area is where you choose the MIDI Device to which CAMPS directs the Metronome MIDI signal.

**Channel**  
edit box

Use the up/down buttons or directly edit the number in this box to choose the MIDI Channel to which CAMPS directs the Metronome MIDI signal.

**Program Change**  
edit box

Use the up/down buttons or directly edit the number in this box to set the Synth Program (Patch) for the Metronome Sounds.

**Sound A & B**  
boxes

CAMPS provides the ability to use 2 different Sounds (A and B) for Metronome "clicks", for the purpose of assigning each Sound to certain Beats per Bar. This feature lets you set stress or accent Beats for each Bar. Use the drop-down buttons to open a list from which to select a MIDI Pitch (Instrument Key) for each Metronome Sound.

Since Synth Module Drum Programs usually provide different Drum Sounds at different MIDI Pitch values, these Metronome Sounds can be 2 different Drum Sounds, as well as 2 different Pitches of a regular Keyboard Sound, depending on which Program Change value is specified.

**Velocity A & B**  
edit boxes

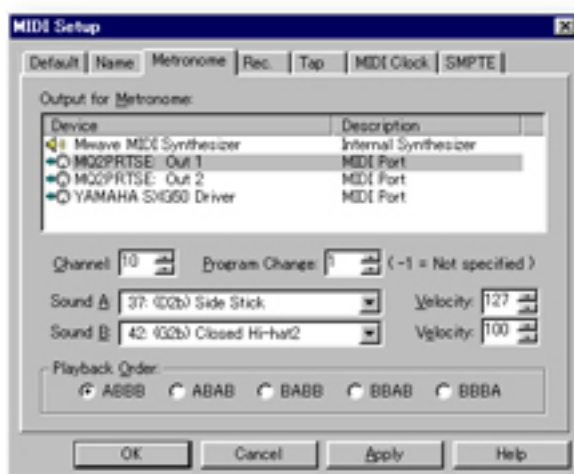
Use the up/down buttons or directly edit the numbers in these boxes to change the velocity (loudness) of each of the 2 Metronome "click" Sounds.

**Playback Order**  
radio buttons


Use these radio buttons to rearrange which Sound (A or B) is used for which Beat(s) in a Bar. These settings are based on a 4/4 Time Signature. If, for example, your song is in 2/4, only the first 2 of each 4 Sounds will be relevant for each radio button setting.



Multiple MIDI Output Devices installed in your computer will not be available in the Output scroll area if the **MIDI Mapper** item is selected in the **MIDI** menu.







See also:

[Default pane](#)

[Output Device pane](#)

[Record pane](#)

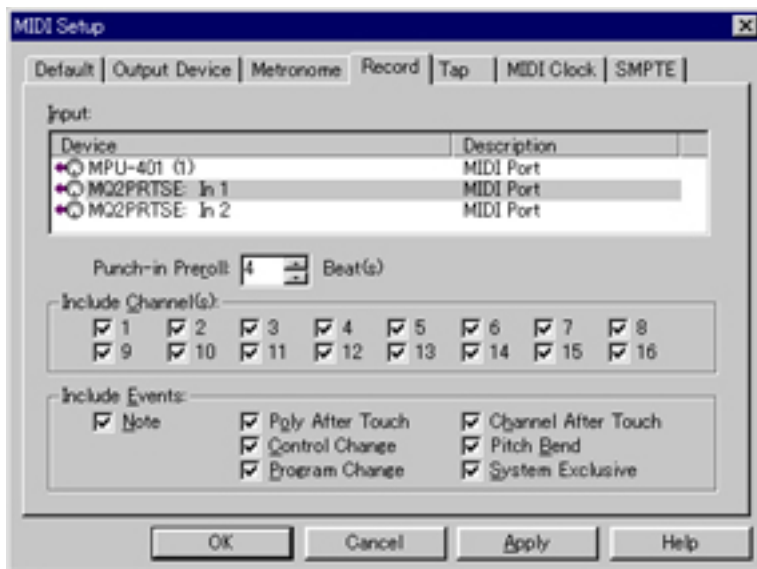
[Tap pane](#)

[MIDI Clock pane](#)

[SMPTE pane](#)

## Using the MIDI Setup dialog box

<b>Record pane</b>	<b>Input scroll area</b>	This area is where you select which of your computer's MIDI devices CAMPS listens to for incoming MIDI data during Recording.
	<b>Punch-in Preroll edit box</b>	Use the up/down buttons or directly edit the number in this box to change how many beats of your song CAMPS will Play before your Record Punch-In point. The term "Preroll" comes from the idea of rewinding a recording tape back farther than an intended Punch-In Recording point and letting it roll (Play) a few preceding Bars as an Intro for Punch-In Cue.
	<b>Include Channel(s) check boxes</b>	When Recording, all checkmarked MIDI channels will be received by CAMPS. Actually, CAMPS "translates" incoming MIDI Channel information to whichever Channel is being used for the Track currently being Recorded. Unselected Channels are simply ignored. All selected Channels will be "translated" to the Channel needed for your current task in CAMPS. It is therefore unnecessary to specify a particular MIDI Output channel on your MIDI Instrument when Recording in CAMPS.
	<b>Include Events check boxes</b>	When Recording, all checkmarked MIDI data Events will be received by CAMPS. Unselected Event Data types are simply ignored.



See also:

- [Default pane](#)
- [Output Device pane](#)
- [Metronome pane](#)
- [Tap pane](#)
- [MIDI Clock pane](#)
- [SMPTE pane](#)

## Using the MIDI Setup dialog box

<b>Tap pane</b>	<b>Input scroll area</b>	This is where you select which of your computer's devices CAMPS listens to for your manual Tap Tempo Input. To use your computer's keyboard instead of a MIDI Instrument, select [Shift] key from the Input Device list.
	<b>Click Key area</b>	The Click Key area becomes active when a MIDI Device is chosen from the Input scroll area instead of your computer's keyboard.
	<b>Channel, Key edit boxes</b>	Use the Channel and Key edit boxes to assign which MIDI Channel and which MIDI Instrument Key (Pitch value) will be used as a Tap Tempo reference by CAMPS. The Pitch display shows the current Pitch Mapping of the selected Instrument Key.
	<b>From MIDI Instrument button</b>	To directly assign a MIDI Instrument Key to Tap Input, click the <b>From MIDI Instrument</b> button and press any Key on your MIDI Instrument.
	<b>Sync with radio buttons</b>	Here, you can choose whether CAMPS uses the Song Beat (Time Signature) or an absolute Half, Quarter or Eighth Note time value (regardless of Time Signature) when receiving Sync information from the incoming Tap Tempo MIDI signal to Synchronize with.



See also:

- [Default pane](#)
- [Output Device pane](#)
- [Metronome pane](#)
- [Record pane](#)
- [MIDI Clock pane](#)
- [SMPTE pane](#)

## Using the **MIDI Setup** dialog box

### MIDI Clock pane

#### Overview

The MIDI Clock pane of the MIDI Setup dialog box allows you to select MIDI devices and data types that CAMPS will use for Sending and receiving MIDI Time Code Synchronization signals to and from the world outside your computer. This can include other MIDI Interfaces and Instruments, and digital or analog recording devices (Tape decks, etc.), among other things.

#### Input scroll area

Choose the MIDI device from the Input scroll area from which CAMPS will derive MIDI Clock Synchronization when the **MIDI** menu **Synchronize With** item is set to **MIDI Clock**.

#### Sync with radio buttons

Here, you can choose whether CAMPS uses the Song Beat (Time Signature) or an absolute Quarter Note time value (regardless of Time Signature) when receiving Sync information from the incoming MIDI signal to Synchronize with.

#### Output scroll area

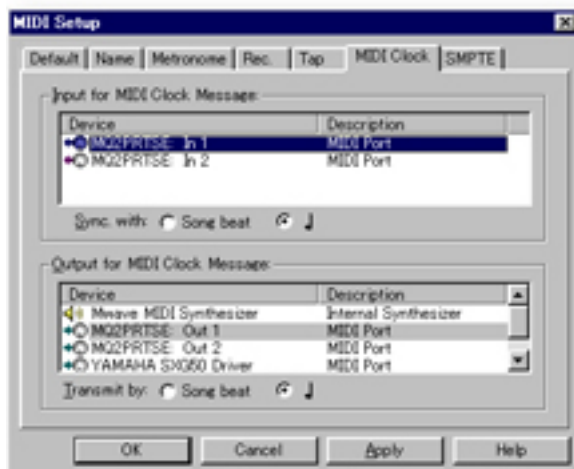
Choose the MIDI device from the Output scroll area to which CAMPS will send MIDI Clock Synchronization when the **MIDI** menu **Transmit Clock** item is set to **MIDI Clock**.

#### Sync To radio buttons

Here, you can choose whether CAMPS uses the Song Beat (Time Signature) or an absolute Quarter Note time value (regardless of Time Signature) to send Sync information to the outgoing MIDI signal for other MIDI devices to Synchronize with.



Multiple MIDI Output Devices installed in your computer will not be available in the Output scroll area if **MIDI Mapper** is selected in the **MIDI** menu.



See also:

[Default pane](#)

[Output Device pane](#)



[Metronome pane](#)

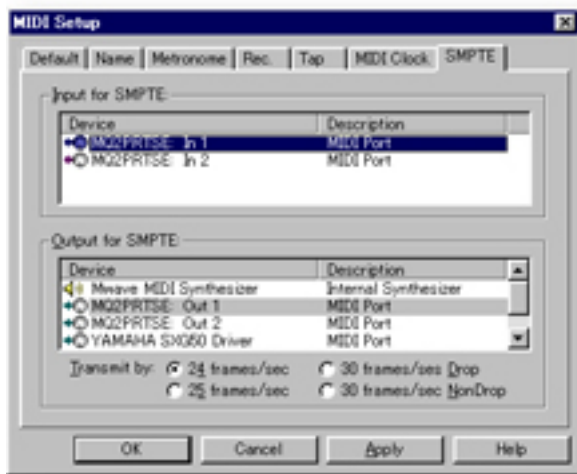
[Record pane](#)

[Tap pane](#)

[SMPTE pane](#)

## Using the **MIDI Setup** dialog box

<b>SMPTE</b> pane	Overview	<p>Motion pictures are comprised of a long series of still images, called Frames, displayed in rapid succession. Therefore, the exact moment an image event begins in a motion picture can be resolved to one of these Frames. When synchronizing sounds with motion picture events in film and video, SMPTE Time Code is used to reference how many of these Frames flip by in a given time period, defined as Frames per Second ("fps" or "f/s"). SMPTE Time Code also includes regular time (Hours/Minutes/Seconds) information.</p> <p>Because of its accuracy and standardization, SMPTE Time Code has become widely used for Synchronization in the professional audio production world. The audio version of SMPTE Time Code, called Longitudinal Time Code (LTC) is often used even when there is no accompanying motion picture, and this is the form used in CAMPS, simply called SMPTE.</p>
	Input scroll area	<p>Choose a MIDI device from the Input scroll area from which CAMPS will derive SMPTE Synchronization when the <b>MIDI</b> menu <b>Synchronize With</b> item is set to <b>SMPTE</b>.</p>
	Output scroll area	<p>Choose the MIDI device from the Output scroll area to which CAMPS will send SMPTE Synchronization signals when the <b>MIDI</b> menu <b>Transmit Clock</b> item is set to <b>SMPTE</b>.</p>
	Sync Rate radio buttons	<p>24 f/s is used for film (movies; cinema) in the US.</p> <p>25 f/s is used for film, television and video in Europe and other parts of the world. This includes the PAL and SECAM television standards.</p> <p>30 f/s Non-Drop is the most often used for audio-only Synchronization because of it's constant degree of accuracy and simpler rate calculation. It matches the first Television standard for Black &amp; White video in the US.</p> <p>30 f/s Drop is used for the NTSC color television standard in the US and some other countries. The term "Drop" refers to intentionally dropped Frame code numbers in the SMPTE LTC. SMPTE LTC drops (skips) 18 Frame code numbers every 10 minutes to compensate for color video's slightly slower Frame Rate. NTSC's Frame Rate is actually 29.97 due to the addition of color information to an originally B&amp;W standard. Although 30 f/s Drop is essential for proper Sync timing in NTSC color video projects, it exhibits slight time display inaccuracies due to the Drop pattern, making it less desirable for audio-only projects.</p>
		<p> CAMPS transmits and receives only MIDI protocol. These SMPTE settings allow CAMPS to treat MIDI Time Code as SMPTE Longitudinal Time Code for User Interface purposes. To read or generate actual SMPTE LTC, you'll need to connect conversion hardware to your computer's MIDI port.</p> <p> Multiple MIDI Output Devices installed in your computer will not be available in the Output Device Settings scroll area if the <b>MIDI Mapper</b> item is selected in the <b>MIDI</b> menu.</p>



See also:

[Default pane](#)

[Output Device pane](#)

[Metronome pane](#)

[Record pane](#)

[Tap pane](#)

[MIDI Clock pane](#)

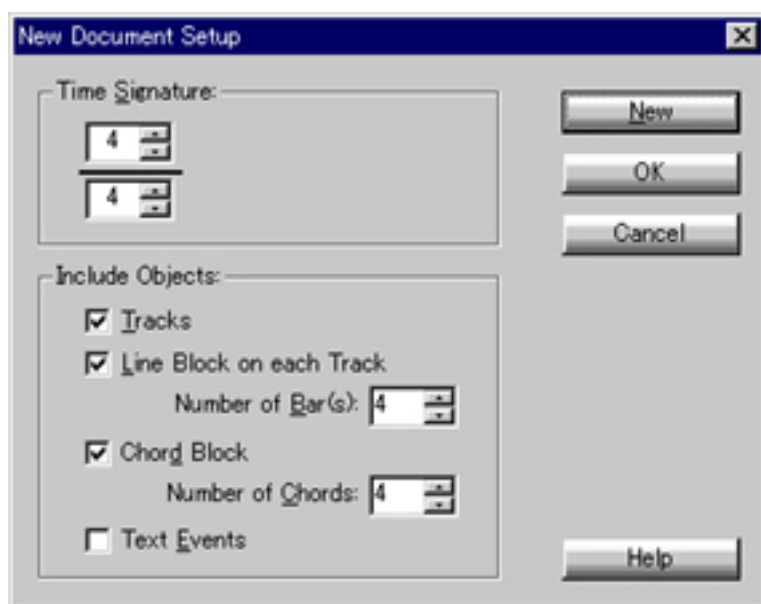
## New Document Setup dialog box

**Description** The New Document Setup dialog box allows you to set defaults for and create a New Document.

**Uses** After making desired settings for a New Document, click **New** to close the New Document Setup dialog box and create a New Document, saving settings for future use, or click **OK** to close the New Document Setup dialog box and save settings for future use without creating a New Document.

**Items**

- [Time Signature](#) edit boxes
- [Tracks](#) check box
- [Line Block on each Track](#) check box
- [Number of Bar\(s\)](#) edit box
- [Chord Block](#) check box
- [Number of Chord\(s\)](#) edit box
- [Text Events](#) check box
- [New](#) button
- [OK](#) button
- [Cancel](#) button
- [Help](#) button



**Opening** Choose **New Setup...** from the **File** menu.

## Items in the **New Document Setup** dialog box

### [Setting default Time Signature](#)

**Time Signature**  
edit boxes

Enter appropriate numbers in the Beats per Bar (Numerator) and Beat Note Type (Denominator) edit boxes to set desired Time Signature.

### [Selecting Objects to include](#)

**Tracks**  
check box

Checkmarking this option causes CAMPS to automatically create 6 basic empty Tracks with a New Document.

**Line Block on each Track**  
check box

Checkmarking this option causes CAMPS to automatically create a new empty Line Block for each automatically created Track.

**Number of Bar(s)**  
edit box

Use the up/down buttons or directly edit the number in this box to set how many Bars long automatically created Line Blocks will be.

**Chord Block**  
check box

Checkmarking this option causes CAMPS to automatically create one Chord Block with a New Document.

**Number of Chord(s)**  
edit box

Use the up/down buttons or directly edit the number in this box to set how many Chord Containers will be created in the automatically created Chord Block.

**Text Events**  
check box

Checkmarking this option causes CAMPS to automatically create a Text Event and a pair of Markers with a New Document.

### [Closing](#)

**New**  
button

Click **New** to close the New Document Setup dialog box, save your New Document default settings and create a New Document, using your settings.

**OK**  
button

Click **OK** to close the New Document Setup dialog box and save your New Document default settings without creating a New Document.

**Cancel**  
button

Click **Cancel** to close the New Document Setup dialog box without committing changes or creating a New Document.

**Help**  
button

Opens this Help document.



New Document Setup

Time Signature:

Include Objects:

- Tracks
- Line Block on each Track  
Number of Bars:
- Chord Block  
Number of Chords:
- Text Events

New

OK

Cancel

Help

Setting Default  
Time Signature

Getting Started

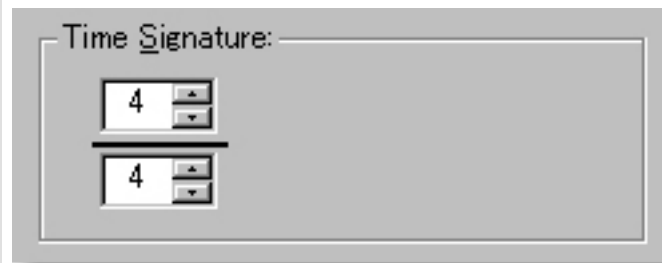
In musical Notation, Time Signature is indicated as a numerical fraction at the beginning of a musical staff after the Key Signature. The top number (Numerator) indicates how many Beats per Bar, and the bottom number (Denominator) indicates what kind of Note gets 1 Beat.

**Time Signature**  
edit boxes

The Time Signature area of the New Document Setup dialog box exactly mimics the Notation form of Time Signature. Simply enter appropriate numbers in the Beats per Bar (Numerator) and Beat Note Type (Denominator) edit boxes to set desired Time Signature.

Valid numbers for Beat Note Type (bottom Denominator field) include:

- 1 -Whole Note
- 2 -Half Note
- 4 -Quarter Note
- 8 -Eighth Note
- 16 -Sixteenth Note
- 32 -Thirty Second Note
- 64 -Sixty Forth Note



See also:

[Selecting Objects to Include](#)

[Getting Results](#)

## Using the **New Document Setup** dialog box

Selecting Objects to Include

**Tracks**  
check box

Checkmarking this option causes CAMPS to automatically create 6 basic empty Tracks with a New Document; one in each of the following [Categories](#):

Melody  
Comping  
Obligato  
Bass  
Strings  
Drums

**Line Block on each Track**  
check box

A checkmark here causes CAMPS to automatically create a new empty Line Block for each automatically created Track. Checkmarking this option also enables the Number of Bars edit box.

**Number of Bar(s)**  
edit box

Use the up/down buttons or directly edit the number in this box to set how many Bars long automatically created Line Blocks will be when the Line Block on each Track option is checkmarked.

**Chord Block**  
check box

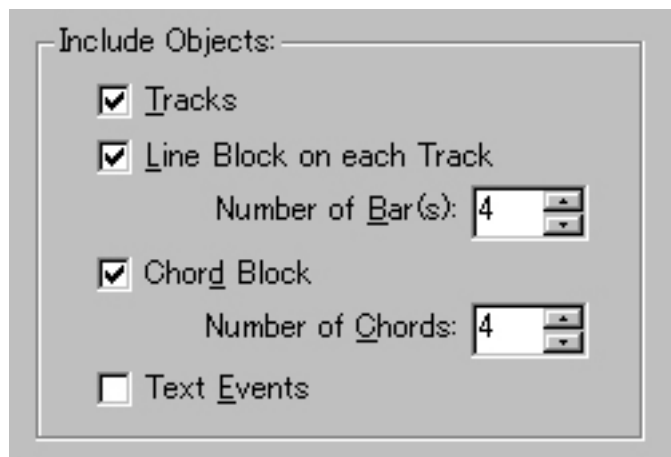
A checkmark here causes CAMPS to automatically create one Chord Block with a New Document. Checkmarking this option also enables the Number of Chords edit box.

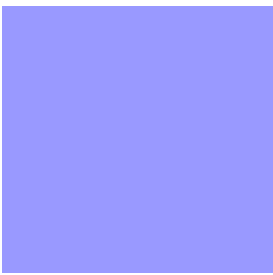
**Number of Chord(s)**  
edit box

Use the up/down buttons or directly edit the number in this box to set how many Chord Containers will be created in the automatically created Chord Block when the Chord Block option is checkmarked.

**Text Events**  
check box

Checkmarking this option causes CAMPS to automatically create a Text Event and a pair of Markers with a New Document.





See also:

[Setting Default Time Signature](#)

[Selecting Objects to Include](#)

[Getting Results](#)

## Using the **New Document Setup** dialog box

- Getting Results
- New** button Click **New** to close the New Document Setup dialog box, save your New Document default settings and create a New Document, using your settings.
- OK** button Click **OK** to close the New Document Setup dialog box and save your New Document default settings without creating a New Document.



When closing the New Document Setup dialog box with the **New** or **OK** buttons, settings in this dialog box will be saved for future use by the **New** command in the **File** menu, or by CAMPS at startup, when set to Launch with a Blank Document in the [Preferences](#) dialog box.

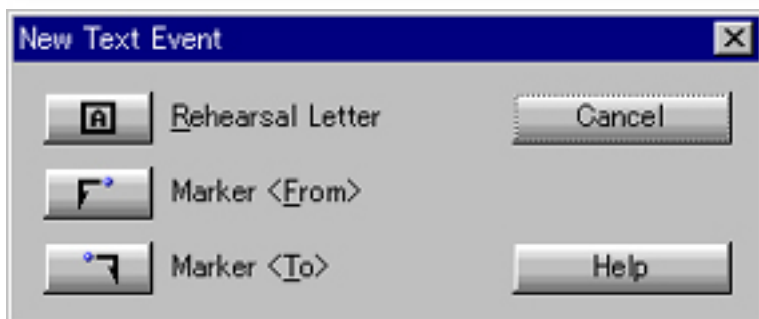
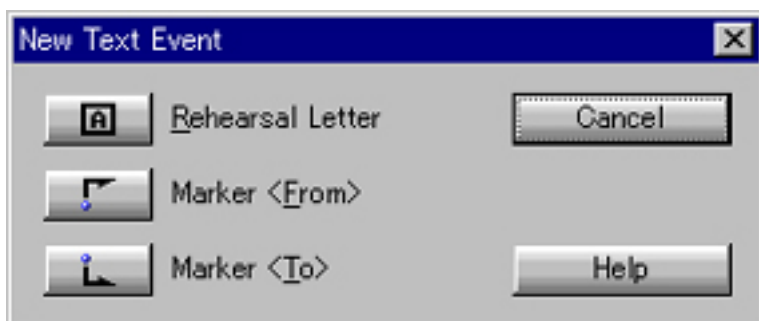


See also:

[Setting Default Time Signature](#)  
[Selecting Objects to Include](#)

## New Text Event dialog box

Description	The New Text Event dialog box allows you to select a New Text Event, such as a Rehearsal Letter or Marker, and insert it in the Text Info Area of your Document.										
Uses	After selecting a Text Info Area region and opening the New Text Event dialog box, simply click the button corresponding to the desired Text Event. These Events are for visual reference only, and do not effect Playback, Recording or any other functions in CAMPS.										
Items	<table border="0" style="width: 100%;"> <tr> <td style="background-color: #e0e0e0; padding: 5px;"><b>Rehearsal Letter</b> button</td> <td style="padding: 5px;">Clicking this button immediately creates a new Text Event in the selected region of the Text Info Area and closes the New Text Event dialog box. Double clicking the New Text Event opens an editing mode, allowing you to change the default phrase "New Text" to whatever you want.</td> </tr> <tr> <td style="background-color: #e0e0e0; padding: 5px;"><b>Marker &lt;From&gt;</b> button</td> <td style="padding: 5px;">Clicking this button immediately creates a new Text Event with a "starting point" arrow in the selected region of the Text Info Area and closes the New Text Event dialog box. Double clicking the New Text Event opens an editing mode, allowing you to change the default phrase "New Text" to whatever you want.</td> </tr> <tr> <td style="background-color: #e0e0e0; padding: 5px;"><b>Marker &lt;To&gt;</b> button</td> <td style="padding: 5px;">Clicking this button immediately creates a new Text Event with an "ending point" arrow in the selected region of the Text Info Area and closes the New Text Event dialog box. Double clicking the New Text Event opens an editing mode, allowing you to change the default phrase "New Text" to whatever you want.</td> </tr> <tr> <td style="background-color: #e0e0e0; padding: 5px;"><b>Cancel</b> button</td> <td style="padding: 5px;">Closes the New Text Event dialog box without committing changes.</td> </tr> <tr> <td style="background-color: #e0e0e0; padding: 5px;"><b>Help</b> button</td> <td style="padding: 5px;">Opens this Help document.</td> </tr> </table>	<b>Rehearsal Letter</b> button	Clicking this button immediately creates a new Text Event in the selected region of the Text Info Area and closes the New Text Event dialog box. Double clicking the New Text Event opens an editing mode, allowing you to change the default phrase "New Text" to whatever you want.	<b>Marker &lt;From&gt;</b> button	Clicking this button immediately creates a new Text Event with a "starting point" arrow in the selected region of the Text Info Area and closes the New Text Event dialog box. Double clicking the New Text Event opens an editing mode, allowing you to change the default phrase "New Text" to whatever you want.	<b>Marker &lt;To&gt;</b> button	Clicking this button immediately creates a new Text Event with an "ending point" arrow in the selected region of the Text Info Area and closes the New Text Event dialog box. Double clicking the New Text Event opens an editing mode, allowing you to change the default phrase "New Text" to whatever you want.	<b>Cancel</b> button	Closes the New Text Event dialog box without committing changes.	<b>Help</b> button	Opens this Help document.
<b>Rehearsal Letter</b> button	Clicking this button immediately creates a new Text Event in the selected region of the Text Info Area and closes the New Text Event dialog box. Double clicking the New Text Event opens an editing mode, allowing you to change the default phrase "New Text" to whatever you want.										
<b>Marker &lt;From&gt;</b> button	Clicking this button immediately creates a new Text Event with a "starting point" arrow in the selected region of the Text Info Area and closes the New Text Event dialog box. Double clicking the New Text Event opens an editing mode, allowing you to change the default phrase "New Text" to whatever you want.										
<b>Marker &lt;To&gt;</b> button	Clicking this button immediately creates a new Text Event with an "ending point" arrow in the selected region of the Text Info Area and closes the New Text Event dialog box. Double clicking the New Text Event opens an editing mode, allowing you to change the default phrase "New Text" to whatever you want.										
<b>Cancel</b> button	Closes the New Text Event dialog box without committing changes.										
<b>Help</b> button	Opens this Help document.										



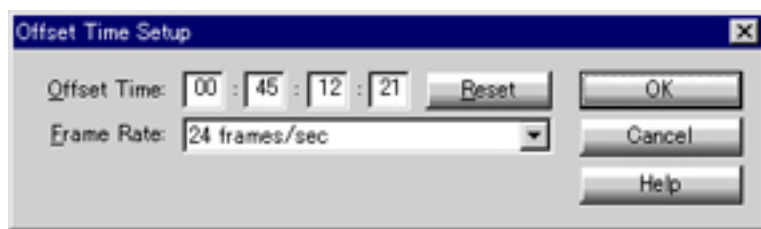
## Opening

From the...  
[Document Window](#)  
[Pianoroll Editor](#)  
[Control Draw Editor](#)  
[Text List Editor](#)

Select a region in the Text Info Area and choose **New Text Event...** from the **Edit** menu.

## SMPTE Offset Setup dialog box

Description	The SMPTE Offset Setup dialog box allows you to offset SMPTE synchronization between CAMPS in slave mode and a master SMPTE device during Playback and Recording.	
Uses	After opening the SMPTE Offset Setup dialog box, enter the desired Offset Time and click <b>OK</b> .	
Items	<b>Offset Time</b> edit boxes	Directly edit the numbers in these boxes to specify the exact amount of time CAMPS Playback or Recording will lag behind the master SMPTE Sync device. The format is Hours:Minutes:Seconds:Frames.
	<b>Reset</b> button	Resets the Offset Time to zero.
	<b>Frame Rate</b> selection box	Click the drop-down list button on the right side of this box to choose the SMPTE Offset Sync Frame Rate. This setting only reflects how you refer to Offset Time entered in the Frame Offset Time edit box of this dialog box. During Synchronized slave operation, CAMPS automatically locks to the SMPTE master's Frame Rate.
	<b>OK</b> button	Closes the SMPTE Offset Setup dialog box and commits changes.
	<b>Cancel</b> button	Closes the SMPTE Offset Setup dialog box without committing changes.
	<b>Help</b> button	Opens this Help document.



Opening	From the... <a href="#">Document Window</a> <a href="#">Event List Editor</a> <a href="#">Pianoroll Editor</a> <a href="#">Notation Editor</a> <a href="#">Control Draw Editor</a> <a href="#">Tempo List Editor</a> <a href="#">Tempo Draw Editor</a> <a href="#">Text List Editor</a>	Choose <b>SMPTE Offset Setup...</b> from the <b>Edit</b> menu.
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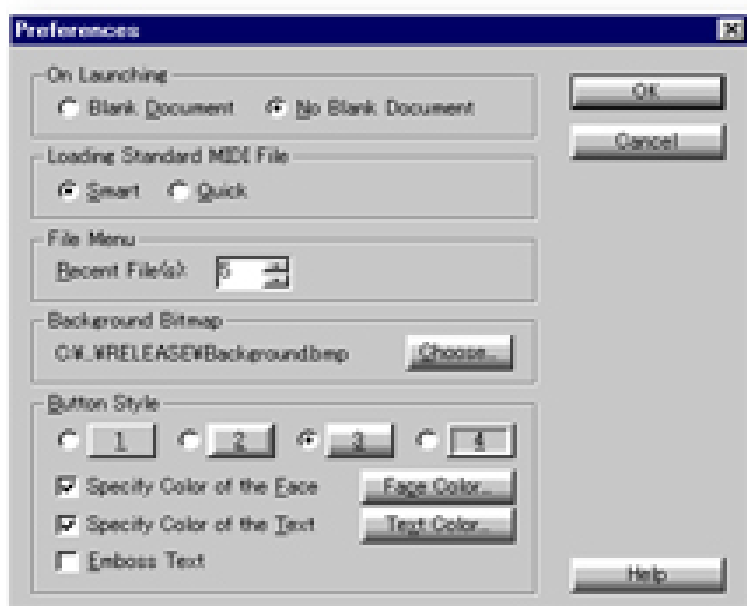
## Preferences dialog box

**Description** The Preferences dialog box allows you to set basic operational and appearance defaults in CAMPS.

**Uses** Using the various controls in the Preferences dialog box, you can choose how CAMPS [starts](#) and [loads Files](#), and select [Background wallpaper](#) and [Button Styling](#).

**Items**

- [Launch with](#) radio buttons
- [Loading Standard MIDI File](#) radio buttons
- [Recent Files](#) edit box
- [Choose \(Background Bitmap\)](#) button
- [Button Style](#) radio buttons
- [Background Color](#) check box
- [Change \(Background Color\)](#) button
- [Foreground Color](#) check box
- [Change \(Foreground Color\)](#) button
- [Emboss Text](#) check box
- [OK](#) button
- [Cancel](#) button
- [Help](#) button



**Opening** Choose **Preferences** from the **Edit** menu.

## Items in the **Preferences** dialog box

### [Setting File defaults](#)

**Launch with**  
radio buttons

Choose whether CAMPS starts with a new **Blank Document** or **No Document** loaded.

**Loading Standard MIDI File**  
radio buttons

Select whether CAMPS loads Standard MIDI Files in **Smart** or **Quick** mode.

**Recent Files**  
edit box

Use the up/down buttons or directly edit the number in this box to set how many recently opened Files CAMPS lists in the **File** menu.

### [Setting CAMPS appearance](#)

**Choose (Background Bitmap)**  
button

Use the **Choose** button to browse for and select a Bitmap Image File to use as Background wallpaper for the Grid area in the Document Window and other Editors.

**Button Style**  
radio buttons

Use these radio buttons to choose how the large Buttons appear in various CAMPS dialog boxes

**Background Color**  
check box

Checkmarking this option allows you to specify the color of large Buttons in various CAMPS dialog boxes.

**Change (Background Color)**  
button

The Background Color **Change** button allows you to edit and select a Color for large Buttons in various CAMPS dialog boxes.

**Foreground Color**  
check box

Checkmarking this option allows you to specify the color for the Text of large Buttons in various CAMPS dialog boxes.

**Change (Foreground Color)**  
button

The Foreground Color **Change** button allows you to edit and select a Color for the Text of large Buttons in various CAMPS dialog boxes.

**Emboss Text**  
check box

Checkmarking this option sets the Text for large Buttons in various CAMPS dialog boxes to appear engraved or 3-D.

### [Closing](#)

**OK**  
button

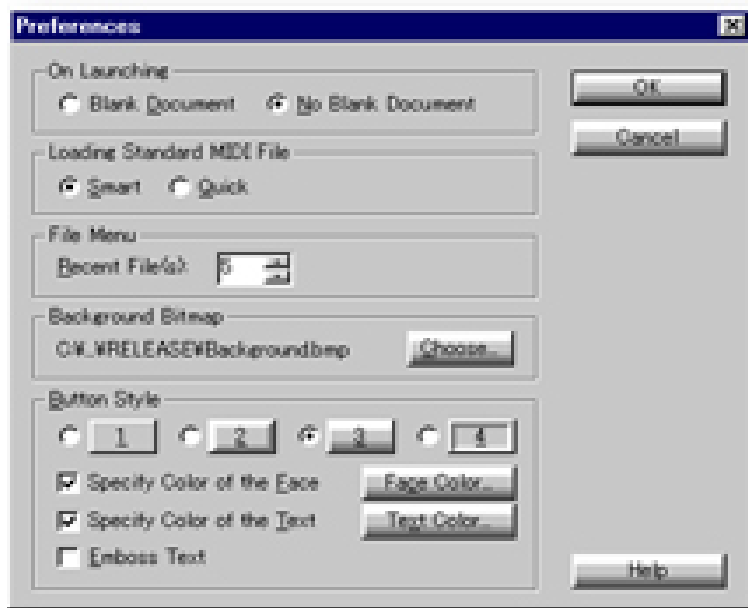
Closes the Preferences dialog box and commits changes.

**Cancel**  
button

Closes the Preferences dialog box without committing changes.

**Help**  
button

Opens this Help document.



## Using the **Preferences** dialog box

Setting File Defaults

**Launch with** radio buttons

Use these radio buttons to choose whether CAMPS starts with a new **Blank Document** or **No Document** loaded. When Launching CAMPS with a new Blank Document, the new Document will be created as specified in the [New Document Setup](#) dialog box. Upon opening the Preferences dialog box, current settings will be displayed.

**Loading Standard MIDI File** radio buttons

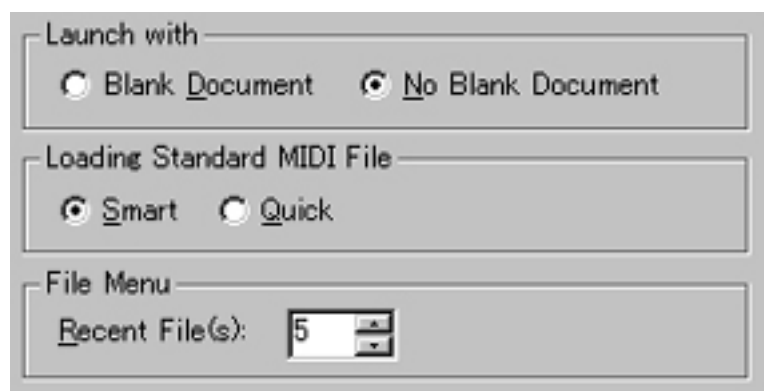
Choosing **Smart** sets CAMPS to *analyze a Standard MIDI File's Track Line data for Line Block preparation for use with **Harmonize** and **Compose** functions in CAMPS.* The main effect of this is the separation of Line data into phrases. CAMPS starts a new Line Block when it reaches a Note that doesn't span into the next Bar. While Line Blocks may still require finer adjustments with the **Razor** tool or **Merge Line Block** command to obtain desired results, *initial setup will be closer to what's required to immediately begin applying CAMPS unique features to a newly loaded Standard MIDI File.*

Choosing **Quick** sets CAMPS to load a Standard MIDI File in its original form without extra analysis. Each Track's Line data is prepared as one continuous Line Block without regard for *musical Category or Bar separation or Notes that don't overlap Bars.*

Upon opening the Preferences dialog box, current settings will be displayed.

**Recent Files** edit box

Use the up/down buttons or directly edit the number in this box to set how many recently opened Files CAMPS lists in the **File** menu for quick access when reopening. This list appears in the bottom of the **File** drop-down menu. Upon opening the Preferences dialog box, current settings for this will be displayed.



See also:

[Setting CAMPS Appearance](#)  
[Getting Results](#)

## Setting CAMPS Appearance

**Choose (Background Bitmap)** button

Use the **Choose** button to browse for and select a Bitmap Image File to use as Background wallpaper for the Grid area in the Document Window and other Editors using the Microsoft Windows Open dialog box. Your selection here can then be activated with the **Background Bitmap** option in the CAMPS **View** menu. Current settings will be displayed to the left of the **Choose** button.



Bitmap Files have the Windows Filename Extension "BMP".



If the File you choose here gets deleted or moved, the **Background Bitmap** option in the **View** menu will be unavailable until a new Bitmap Image File is specified.

**Button Style** radio buttons

Use these radio buttons to choose how the large Buttons appear in various CAMPS dialog boxes. Four different Styles are offered. Upon opening the Preferences dialog box, current settings will be displayed.

**Background Color** check box

Checkmarking this option allows you to specify the color of large Buttons in various CAMPS dialog boxes. A Checkmark here also enables the Background Color **Change** button. Upon opening the Preferences dialog box, current settings will be displayed.

**Change (Background Color)** button

The Background Color **Change** button allows you to edit and select a Color for large Buttons in various CAMPS dialog boxes using the Microsoft Windows Color dialog box. Upon opening the Preferences dialog box, current settings will be displayed.

**Foreground Color** check box

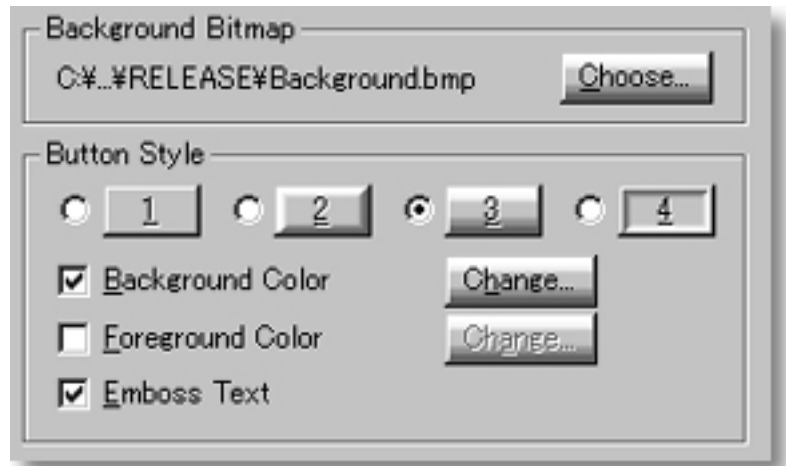
Checkmarking this option allows you to specify the color for the Text of large Buttons in various CAMPS dialog boxes. A Checkmark here also enables the Foreground Color **Change** button. Upon opening the Preferences dialog box, current settings will be displayed.

**Change (Foreground Color)** button

The Foreground Color **Change** button allows you to edit and select a Color for the Text of large Buttons in various CAMPS dialog boxes using the Microsoft Windows **Color** dialog box. Upon opening the Preferences dialog box, current settings will be displayed.

**Emboss Text** check box

Checkmarking this option sets the Text for large Buttons in various CAMPS dialog boxes to appear engraved or 3-D. Upon opening the Preferences dialog box, current settings will be displayed.




See also:

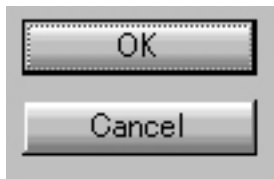
[Setting File Defaults](#)

[Getting Results](#)

## Using the **Preferences** dialog box

**Getting Results** **OK** button Click **OK** when you have achieved the desired results. This closes the Preferences dialog box and applies your settings to all applicable areas in CAMPS.

 Background Bitmap settings only take effect after the **Background Bitmap** option in the **View** menu is selected. Choosing a new Background Bitmap Image automatically inserts it in whichever CAMPS Windows or Editors for which this option has been activated.



See also:

[Setting File Defaults](#)

[Setting CAMPS Appearance](#)

## Quantize dialog box

**Description** The Quantize dialog box allows you to automatically correct the start time of Notes on an individual or Line Block basis by aligning or "snapping" them to a user-definable virtual correction Grid of perfectly spaced points.

**Uses** There are several ways to [set the Grid resolution and Grid point arrangement](#) for time correction, including Tuplet timing.

Additionally, there are [three "feel" adjustments](#) which allow you to smooth out that mechanical tendency of computer-generated music while still maintaining accurate Beat alignment of Notes.

Using the **Playback** buttons, you can then audition Quantize adjustments and select one that sounds good to you.

**Items** [Grid Resolution](#) radio buttons

[Tuplet](#) selection box

[Swing](#) slider

[Swing](#) edit box

[Offset](#) slider

[Offset](#) edit box

[Humanize](#) slider

[Humanize](#) edit box

[Playback](#) button

[Playback with Others](#) button

[Stop](#) button

[OK](#) button

[Cancel](#) button

[Help](#) button





## Opening

From the...

[Document Window](#)

[Event List Editor](#)

[Pianoroll Editor](#)

[Notation Editor](#)

Choose **Quantize...** from the **Line** menu.

Alternatively, right-click desired Line data and choose **Actions, Quantize...**



When choosing **Quantize...** from the **Line** menu, Line data must first be selected, otherwise the **Quantize...** item won't be available.

Items in the **Quantize** dialog box[Setting  
Quantize  
Resolution](#)**Grid Resolution**  
radio buttons

Sets the Quantize Grid Resolution to multiples or divisions of current Beats per Bar or absolute Note Lengths.

**Tuplet**  
selection box

Replaces each Beat per Bar with a string of evenly spaced faster beats in odd amounts.

[Adjusting  
Feel](#)**Swing**  
slider

Click and drag this slider to the left for Swing timing more ahead of Beats, or to the right for Swing timing more behind Beats.

**Swing**  
edit box

Use the left/right buttons or directly edit the number in this box to add Swing timing ahead of or behind Beats.

**Offset**  
slider

Click and drag this slider to the left to evenly shift Note start times more ahead of Beats, or to the right to evenly shift Note start times more behind Beats.

**Offset**  
edit box

Use the left/right buttons or directly edit the number in this box to evenly shift Note start times more ahead of or more behind Beats.

**Humanize**  
slider

Click and drag this slider to the left for Tighter (more exact) timing, or to the right for Looser (more fluctuating) timing.

**Humanize**  
edit box

Use the left/right buttons or directly edit the number in this box for Tighter (more exact) or Looser (more fluctuating) timing.

[Auditioning](#)**Playback**Click the **Playback** (Single Speaker) button to listen to Quantize adjustments as you make them.**Playback with Others**Click the **Playback with Others** (Double Speaker) button to listen to Quantize adjustments you make along with all the other activated Tracks.**Stop**Click the **Stop** (No Speaker) button to stop Playback.[Closing](#)**OK**  
button

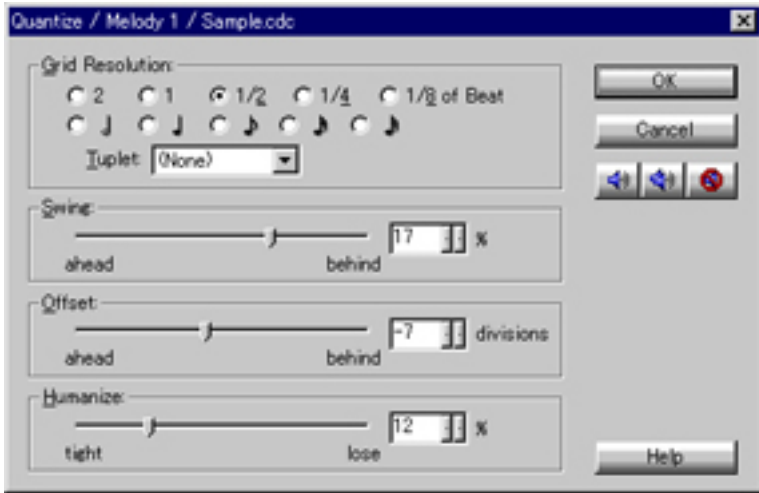
Closes the Quantize dialog box and commits changes.

**Cancel**  
button

Closes the Quantize dialog box without committing changes.

**Help**  
button

Opens this Help document.



## Using the **Quantize** dialog box

Setting  
Quantize  
Resolution

### **Grid Resolution** radio buttons

After selecting Note data to Quantize and opening the Quantize dialog box, set the Quantize [Grid Resolution](#) for the desired Note start time correction.

The top row of radio buttons allows you to adjust Quantize Grid Resolution by multiples or divisions of original Beats per Bar from 2X (less resolution) to 1/8 (more resolution).

The second row of radio buttons allows you to adjust Quantize Grid Resolution by absolute Note time values from 1/2 Notes (less resolution) to 1/32 Notes (more resolution), regardless of Time Signature.

### **Tuplet** selection box

[Tuplet](#) timing actually further divides the virtual Quantize Grid into 3, 5, or 7 smaller divisions per Beat. Another way to think of this is "overlying" odd numbers of faster, evenly spaced Beats on each Beat per Bar. Click the drop-down button on the right side of this box to select one of three types of Tuplet resolution:

Triplets divides each Beat per Bar into 3 smaller, evenly spaced divisions. Quintuplets divides each Beat per Bar into 5 smaller, evenly spaced divisions. Septuplets divides each Beat per Bar into 7 smaller, evenly spaced divisions. Select (None) if no Tuplet timing is desired.



 CAMPS resolves Quarter Notes to 480 divisions.

See Also:

[Adjusting Feel](#)  
[Getting Results](#)

## Using the Quantize dialog box

### Adjusting Feel

#### Swing adjustment area

The [Swing](#) adjustment allows you to add the special rhythmic quality of Swing to selected Line data by "sliding" every other (even numbered) Quantize Grid point away from original equidistant locations. For the purpose of musical practicality, the Swing adjustment sets the degree to which even numbered Beats are shifted out of evenly spaced alignment in a range of -50% ahead of perfect alignment to 50% behind perfect alignment. Leaving Swing set to "0" leaves Beats perfectly evenly spaced. Use the Swing slider or edit box to adjust Quantize Swing. Dragging the slider to the left or entering a lower number in the box Swings Notes ahead of the Beat, while dragging the slider to the right or entering a higher number in the box Swings Notes behind the Beat.

#### Offset adjustment area

The [Offset](#) adjustment allows you to make selected Line data "Lead" or "Lag" other Tracks by evenly shifting all Quantize Grid points away from original locations. For the purpose of musical practicality, the Offset adjustment sets the amount of Beat shift in a range of -240 divisions to 240 divisions. Leaving Offset set to "0" leaves Beats perfectly aligned with the Quantize Grid. Use the Offset slider or edit box to adjust Quantize Offset. Dragging the slider to the left or entering a smaller number in the box or results in Notes being shifted ahead of the Beat, while dragging the slider to the right or entering a bigger number in the box results in Notes being shifted behind the Beat.

#### Humanize adjustment area

When Line data's Note starting points are Quantized, they are distributed evenly or systematically (which is the purpose of Quantizing). Consequentially, when you hear the results, it can have a stiff or mechanical feeling to it. The [Humanize](#) adjustment adds a fluctuating quality, similar to the feel of time that varies from one musician to another. This function has been added to CAMPS in an attempt to help you Humanize your MIDI songs. For the purpose of musical practicality, the Humanize adjustment sets the amount of fluctuating Beat shift in a range of 0% to 50%. Leaving Humanize set to "0" leaves Beats perfectly aligned with the Quantize Grid. Use the Humanize slider or edit box to Humanize the time performance of you MIDI data. Drag the slider to the left or enter a lower number in the box for Tighter (more exact) timing. Drag the slider to the right or enter a higher number in the box for Looser (more fluctuating) timing.



CAMPS resolves Quarter Notes to 480 divisions.



See Also:

[Setting Quantize Resolution](#)

[Getting Results](#)

## Using the **Quantize** dialog box

Getting Results

**Playback, Playback with Others, Stop** buttons

Each time you make Quantize adjustments, the selected Line data is temporarily replaced.

Click the **Playback** (Single Speaker) button to hear the results of Quantize processing in "Solo" mode. This Auditioning mode will include any existing Chords if the Chord Track **Play** button in the Track Area of the Document Window is activated.

Click the **Playback with Others** (Double Speaker) button to hear the results of Quantize processing along with all the other activated Tracks.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of selected Line data with current Quantize adjustments as you make them, until you click the **Stop** (No Speaker) button. With this feature, you can change and listen to different Quantize adjustments "on the fly" or one by one.

**OK** button

Click **OK** when you have achieved the desired results. This closes the Quantize dialog box and replaces the selected Line data.



MIDI Control Events such as Pitch Bend and After Touch data are proportionally moved along with original Note Pitch and Length when correcting Note start time.



Changing the start time of Note data may cause Notes to overlap. As always, when Notes overlap you may encounter some unexpected MIDI performance.

See Also:

[Setting Quantize Resolution](#)  
[Adjusting Feel](#)

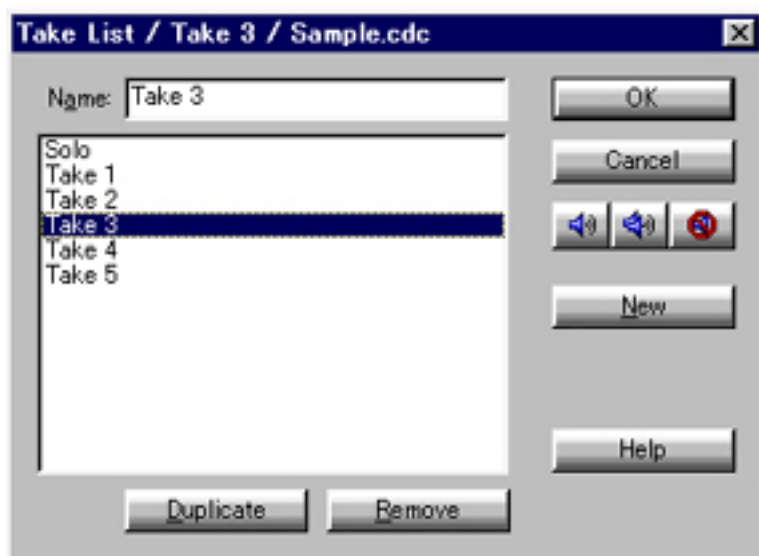
## Take List dialog box

**Description** The Take List dialog box allows you to [create](#), [insert](#) and [audition](#) New Takes with or without automatically generated Line data. Takes are different versions of a given Line Block. Except for Notes in the Line data, Length and other attributes are the same as the original.

**Uses** After selecting the desired Line Block and opening the Take List dialog box, specify a Take Name or select an existing Take.

Using the **Playback** buttons, you can then audition results and select one that sounds good to you.

- Items**
- [Name](#) edit box
  - [Take](#) scroll area
  - [Duplicate](#) button
  - [Remove](#) button
  - [New](#) button
  - [Playback](#) button
  - [Playback with Others](#) button
  - [Stop](#) button
  - [OK](#) button
  - [Cancel](#) button
  - [Help](#) button





## Opening

From the...  
[Document Window](#)  
[Event List Editor](#)  
[Pianoroll Editor](#)  
[Control Draw Editor](#)  
[Notation Editor](#)

Select desired Line Block and choose **Take List...** from the **Take** submenu of the **Line** menu. Alternatively, right-click desired Line Block and choose **Take, Take List...**






When choosing **Take List...** from the **Take** submenu of the **Line** menu, you must first have selected a Line Block, otherwise the **Take List...** item won't be available.

## Items in the **Take List** dialog box

### [Managing Takes](#)

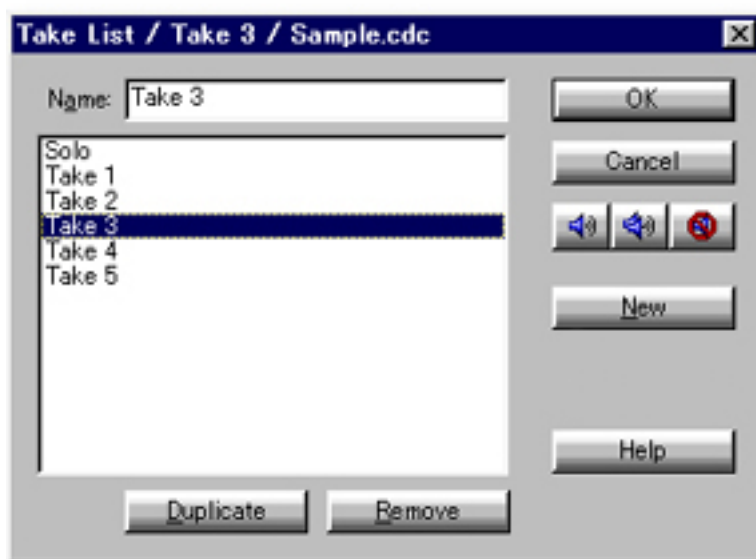
<b>Name</b> edit box	Use the Name edit box to edit the Name of the currently selected Take.
<b>Take</b> scroll area	Use the Take scroll area to select desired Take. As you create New Takes, they are added to this list.
<b>Duplicate</b> button	Creates a Copy of the currently selected Take.
<b>Remove</b> button	Deletes the currently selected Take.
<b>New</b> button	Clicking <b>New</b> opens the New Take dialog box. You can then create a New Take, with or without automatically generated Line data.

### [Auditioning](#)

 <b>Playback</b>	Click the <b>Playback</b> (Single Speaker) button to listen to the currently selected Take.
 <b>Playback with Others</b>	Click the <b>Playback with Others</b> (Double Speaker) button to listen to the currently selected Take along with all the other activated Tracks.
 <b>Stop</b>	Click the <b>Stop</b> (No Speaker) button to stop Playback.

### [Closing](#)

<b>OK</b> button	Closes the Take List dialog box and activates the currently selected Take.
<b>Cancel</b> button	Closes the Take List dialog box without changing Takes.
<b>Help</b> button	Opens this Help document.



## Using the **Take List** dialog box

### Managing Takes

#### Overview

Takes are different versions of a given Line Block. Except for MIDI Events in the Line data, Length and other attributes are the same as the original. This allows you to store and choose between alternate performances of a particular Line Block.

While a given location in the Line Area can contain multiple Line Blocks, Takes are stored in the "background" of each individual Line Block. If you delete a Line Block, all of its Takes will also be deleted.

#### **Name** edit box

Use the Name edit box to edit the Name of the currently selected Take. This field is automatically filled-in with a temporary Name when creating New or Duplicate Takes.

#### **Take** scroll area

Use the Take scroll area to select desired Take. As you create New or Duplicate Takes, they are added to this list and become the currently selected Take.

#### **Duplicate** button

Creates a Copy of the selected Take. This Copy then becomes the selected Take, with its designation in the Name edit box initially entered as "[Name] Copy". As with any Take Name, this can be edited whenever selected.

#### **Remove** button

Deletes the currently selected Take. CAMPS will not allow you to Remove the last remaining Take for any Line Block.

#### **New** button

Clicking **New** opens the New Take dialog box. You can then create a New Take, with or without automatically generated Line data. See the [New Take](#) or [New Take \(for Drums\)](#) documentation for details.



See also:

[Getting Results](#)

## Using the **Take List** dialog box

Getting Results

**Playback, Playback with Others and Stop** buttons

Click the **Playback** (Single Speaker) button to hear a selected Take in "Solo" mode. This Auditioning mode will include any existing Chords if the Chord Track **Play** button in the Track Area of the Document Window is activated.

Click the **Playback with Others** (Double Speaker) button to hear a Take along with all the other activated Tracks.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of Takes as you select them, until you click the **Stop** (No Speaker) button. With this feature, you can change and listen to different Takes "on the fly" or one by one.



**OK** button

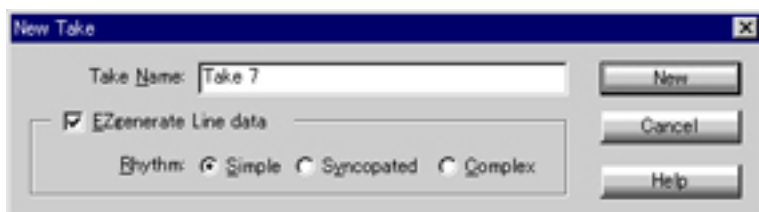
Click **OK** when you have achieved the desired results. This closes the Take List dialog box and activates the currently selected Take.

See Also:

[Managing Takes](#)

## New Take dialog box

Description	The New Take dialog box allows you to create and insert New Takes with or without automatically generated Line data. Takes are different versions of a given Line Block. Except for Notes in the Line data, Length and other attributes are the same as the original.	
Uses	After selecting the desired Line Area and opening the New Take dialog box, specify a Take Name. Checkmarking the <b>EZgenerate Line Data</b> option causes CAMPS to create Line data with the New Take, and enables the <b>Rhythm</b> radio buttons for adjusting the EZgenerated Line data's rhythmic tendencies.	
Items	<p><b>Take Name</b> edit box</p> <p><b>EZgenerate Line Data</b> check box</p> <p><b>Rhythm</b> radio buttons</p> <p><b>New</b> button</p> <p><b>Cancel</b> button</p> <p><b>Help</b> button</p>	<p>Upon opening the New Take dialog box, this field is automatically filled in with the phrase "Take #", where "#" equals the next unused number above the current quantity of Takes for the currently selected Line Block. You can leave this designation, or replace it with a Name of your choice.</p> <p>Checkmarking this option causes CAMPS to automatically generate Line data in your New Line Block. It also enables the <b>Rhythm</b> radio buttons.</p> <p> EZgenerated Line data is created in the context of Harmony defined by Chord Blocks in the same Bar region as the New Take being created.</p> <p> If no Chords are defined in the Bar region where a New Take is being created, EZgenerated Line data will most likely not fit your composition; sounding totally "outside" or even quite unpleasant.</p> <p>When enabling the <b>EZgenerate Line Data</b> option, use these radio buttons to adjust the rhythmic complexity of EZgenerated Line data.</p> <p>Closes the New Take dialog box and creates the New Take you specify.</p> <p>Closes the New Take dialog box without creating a New Take.</p> <p>Opens this Help document.</p>



From the...

[Document Window](#)

[Event List Editor](#)

[Pianoroll Editor](#)

[Control Draw Editor](#)

[Notation Editor](#)

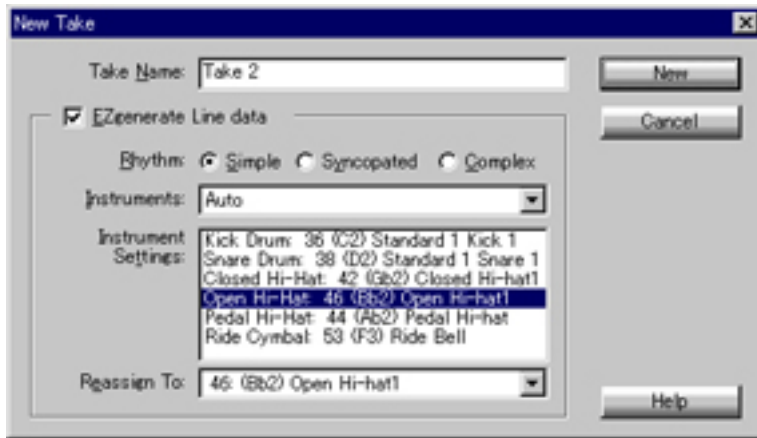
There are 2 versions of this dialog box. This one appears for Tonal Line Blocks (any Line Block except those in the Drums Category). After selecting a Line Block, choose **New Take...** from the **Take** submenu of the **Line** menu. Alternatively, right-click desired Line Block and choose **Take, New Take....**



When choosing **New Take...** from the **Take** submenu of the **Line** menu, you must first have selected a Line Block, otherwise the **New Take...** item won't be available.

## New Take dialog box

Description	The New Take dialog box allows you to create and insert New Takes with or without automatically generated Line data. Takes are different versions of a given Line Block. Except for Notes in the Line data, Length and other attributes are the same as the original.	
Uses	After selecting the desired Drums Line Area and opening the New Take dialog box, specify a Take Name. Checkmarking the <b>EZgenerate Line Data</b> option causes CAMPS to create Line data with the New Take. This also enables the <b>Rhythm</b> and <b>Instrument</b> controls, allowing you to adjust rhythmic tendencies, and Percussion Instrumentation of EZgenerated Line data.	
Items	<b>Take Name</b> edit box	Upon opening the New Take dialog box, this field is automatically filled in with the phrase "Take #", where "#" equals the next unused number above the current quantity of Takes for the currently selected Line Block. You can leave this designation, or replace it with a Name of your choice.
	<b>EZgenerate Line Data</b> check box	Checkmarking this option causes CAMPS to automatically generate Line data in your New Line Block. It also enables the Rhythm radio buttons, Instruments selection box, Instrument Settings display and Reassign To selection box.
	<b>Rhythm</b> radio buttons	When enabling the <b>EZgenerate Line Data</b> option, use these radio buttons to adjust the rhythmic complexity of EZgenerated Line data.
	<b>Instruments</b> selection box	When enabling the <b>EZgenerate Line Data</b> option, you can use this selection box to choose Percussion Instruments included in the EZgenerated Line data.
	<b>Instrument Settings</b> display	When enabling the <b>EZgenerate Line Data</b> option, this area displays Percussion Instruments to be included in the EZgenerated Line data, as selected in the Instruments selection box.
	<b>Reassign To</b> selection box	When enabling the <b>EZgenerate Line Data</b> option, you can use this selection box to reMap MIDI Keys of Percussion Instruments (Sounds) selected in the Instruments selection box.
	<b>New</b> button	Closes the New Take dialog box and creates the New Takes you specify.
	<b>Cancel</b> button	Closes the New Take dialog box without creating a New Take.
	<b>Help</b> button	Opens this Help document.



Opening

From the...  
[Document Window](#)  
[Event List Editor](#)  
[Pianoroll Editor](#)  
[Control Draw Editor](#)  
[Notation Editor](#)

There are 2 versions of this dialog box. This one appears for Line Blocks in the Drums Category. After selecting a Line Block in the Drums Category, choose **New Take...** from the **Take** submenu of the **Line** menu. Alternatively, right-click desired Line Block in the Drums Category and choose **Take, New Take...**



When choosing **New Take...** from the **Take** submenu of the **Line** menu, you must first have selected a Line Block, otherwise the **New Take...** item won't be available.



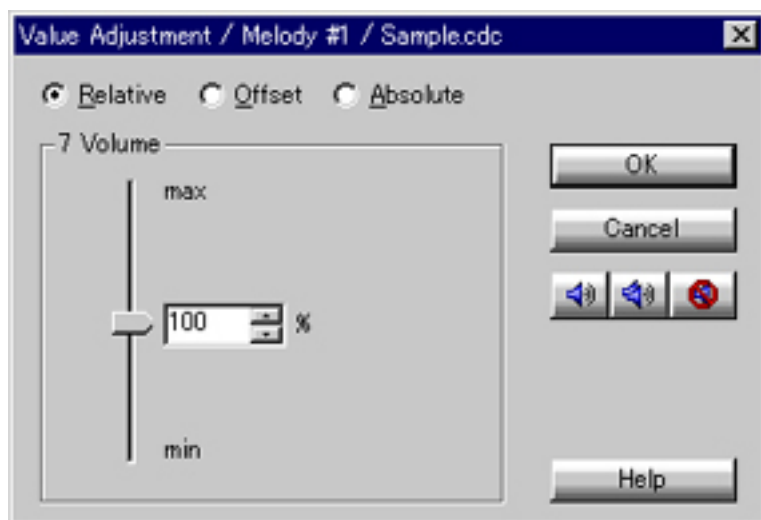
## Value Adjustment dialog box

**Description** The Value Adjustment dialog box allows you to adjust the value of selected MIDI Events.

**Uses** The function of this dialog box changes depending on the type of MIDI Event or Editor you are working with.

As you make Adjustments, use the Playback buttons to audition results and select settings that sound good to you.

- Items**
- [Relative](#) radio button
  - [Offset](#) radio button
  - [Absolute](#) radio button
  - [\[Value Adjustment\]](#) slider
  - [\[Value Adjustment\]](#) edit box
  - [Playback](#) button
  - [Playback with Others](#) button
  - [OK](#) button
  - [Cancel](#) button
  - [Help](#) button



**Opening**

From the...  
[Event List Editor](#)  
[Control Draw Editor](#)  
[Tempo List Editor](#)  
[Tempo Draw Editor](#)

Choose **Adjust Value...** from the **Line** menu.  
Alternatively, right-click desired MIDI Event and choose **Actions, Adjust Value...**

Items in the **Value Adjustment** dialog box

Adjusting value of MIDI Event

**Relative**  
radio button

Sets the Value Adjustment edit box to display a relative percentage of change from 0-200% as adjustments are made. This might be useful for adjusting Events like After Touch.

**Offset**  
radio button

Sets the Value Adjustment edit box to display an offset of the current absolute value, where the initial displayed value before adjustment is "0" and adjusting down displays a negative number, while adjusting up displays a positive number. This might be useful for adjusting Events like Volume.

**Absolute**  
radio button

Sets the Value Adjustment edit box to display the actual Event value (typically 0-127) as adjustments are made. This might be useful for adjusting Events like Program Change (Patch) number.

**[Value Adjustment]**  
slider

The name and function of this slider changes depending on the type of MIDI Event or Editor you are working with. For example, if the Event List Editor is active and you select a Program Change Event, this slider changes the Program (Patch) number associated with the currently selected Program Change Event.

**[Value Adjustment]**  
edit box

The name and function of this edit box changes depending on the type of MIDI Event or Editor you are working with. For example, if the Event List Editor is active and you select a Program Change Event, changing the number in this edit box changes the Program (Patch) number associated with the currently selected Program Change Event.

Auditioning

**Playback**

Click the **Playback** (Single Speaker) button to listen to the current Value Adjustment.

**Playback with Others**

Click the **Playback with Others** (Double Speaker) button to listen to the current Value Adjustment along with all the other activated Tracks.

**Stop**

Click the **Stop** (No Speaker) button to stop playback.

Closing

**OK**  
button

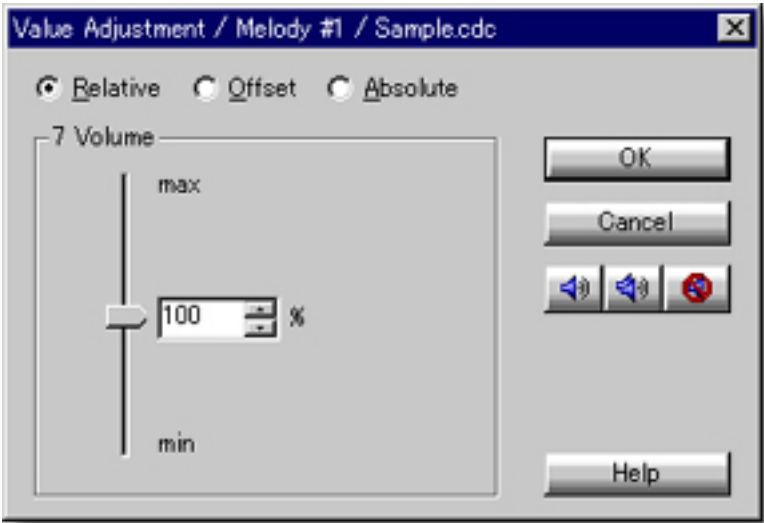
Closes the Value Adjustment dialog box and commits changes.

**Cancel**  
button

Closes the Value Adjustment dialog box without committing changes.

**Help**  
button

Opens this Help document.



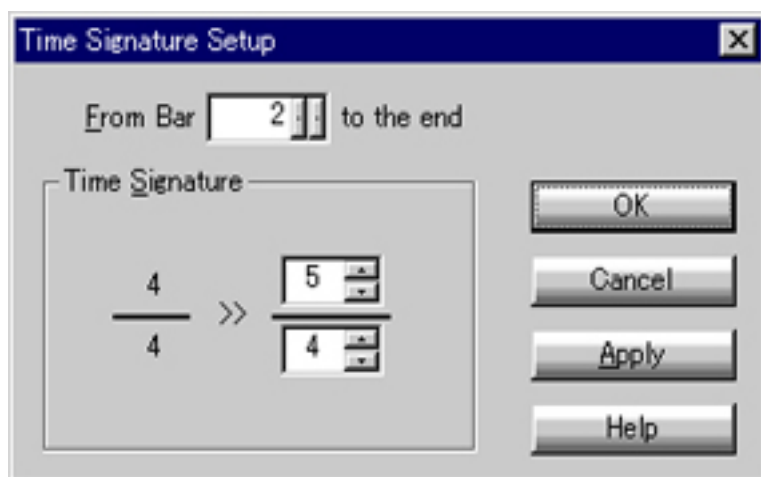
## Time Signature Setup dialog box

**Description** The Time Signature Setup dialog box allows you to set MIDI Time Signature values for different parts of your song.

**Uses** After opening the Time Signature Setup dialog box, select the Bar in your song where you want the specified [Time Signature](#) to start. Then simply edit the Notes per Bar (Numerator) and Beat Note Type (Denominator) fields.

**Items**


- [Bar](#) edit box
- [Time Signature](#) edit boxes
- [OK](#) button
- [Cancel](#) button
- [Apply](#) button
- [Help](#) button



**Opening**

From the...  
[Document Window](#)  
[Pianoroll Editor](#)  
[Control Draw Editor](#)  
[Notation Editor](#)  
[Tempo Draw Editor](#)

Choose **Time Signature Setup...** from the **Edit** menu. Alternatively, right-click desired Bar Area and choose **Time Signature Setup...**

 When choosing **Time Signature Setup...**, you must first have opened a Document, otherwise the **Time Signature Setup...** item won't be available.

## Items in the **Time Signature Setup** dialog box

### [Setting Time Signature](#)

**Bar**  
edit box

Use the left/right buttons or directly edit the number in this box to choose the Bar number from which you want your Time Signature settings to take effect.

**Time Signature**  
edit boxes

Use the up/down buttons or directly edit the numbers in the Beats per Bar (Numerator) and Beat Note Type (Denominator) edit boxes to enter desired Time Signature.

### [Closing](#)

**OK**  
button

Closes the Time Signature Setup dialog box and commits changes.

**Cancel**  
button

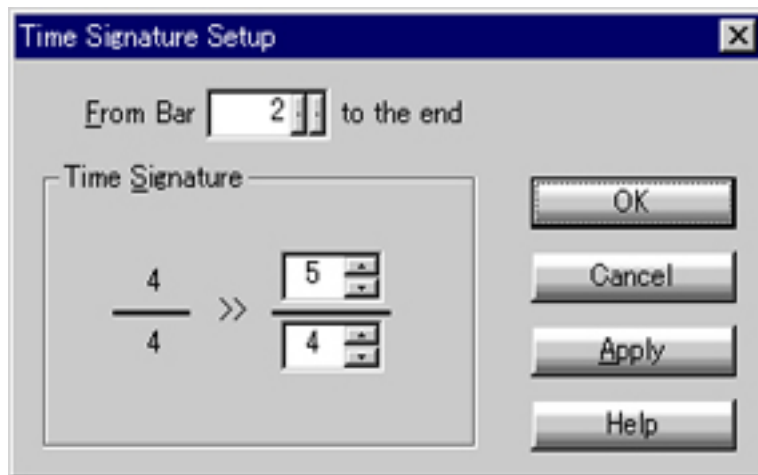
Closes the Time Signature Setup dialog box without committing changes.

**Apply**  
button

Commits changes without closing the Time Signature Setup dialog box.

**Help**  
button

Opens this Help document.



## Using the **Time Signature Setup** dialog box

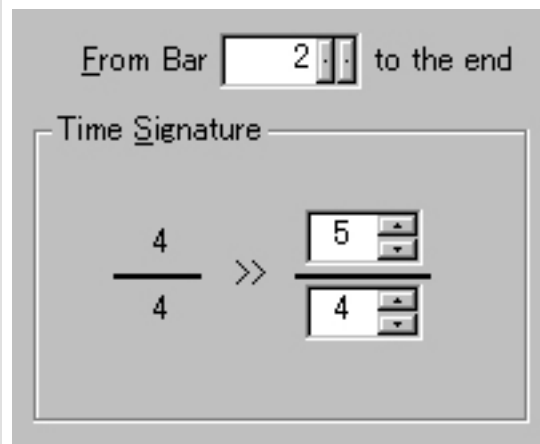
Setting  
Time Signature

**Bar**  
edit box

Enter the Bar number from which you want your Time Signature settings to take effect. To set the Time Signature for a whole song, enter "1" here.

If you need a Time Signature change somewhere in your song, enter the Bar number where the change starts and set the Numerator and Denominator fields accordingly.

To return to a previous Time Signature in a song, enter the Bar number where the original Time Signature returns and set the Numerator and Denominator fields accordingly.



**Time Signature**  
edit boxes

The Time Signature area of the Time Signature Setup dialog box exactly mimics the Notation form of Time Signature. Simply enter appropriate numbers in the Beats per Bar (Numerator) and Beat Note Type (Denominator) edit boxes to set desired Time Signature.

Valid numbers for Beat Note Type (bottom Denominator field) include:

- 1 -Whole Note
- 2 -Half Note
- 4 -Quarter Note
- 8 -Eighth Note
- 16 -Sixteenth Note
- 32 -Thirty Second Note
- 64 -Sixty Forth Note

See Also:

[Getting Results](#)

## Using the **Time Signature Setup** dialog box

Getting Results

**OK** button

When you've finished Setting Time Signature values, Click **OK** to close the Time Signature dialog box and write your settings to the current Document.



Time Signature settings primarily effect the MIDI Clock. Changes in Time Signature also effect the Bar Grid, and the Metronome and Recording/Preroll functions. Matching settings must be made in the New Chord or New Chord Block Setup dialog boxes to have newly created Chord Blocks automatically fit into a Time Signature's resulting Bar Grid. The Grid View menu's Align To Grid command can also be helpful.



Making Time Signature changes in a song that already has Line or Chord data will not change that data in any way. However, you can drag Chord Blocks to align them with a new Bar Grid and add or delete Chord Containers to match new Time Signatures. Additionally, Quantize settings may need to be adjusted.

See Also:

[Setting Time Signature](#)

## Transpose dialog box

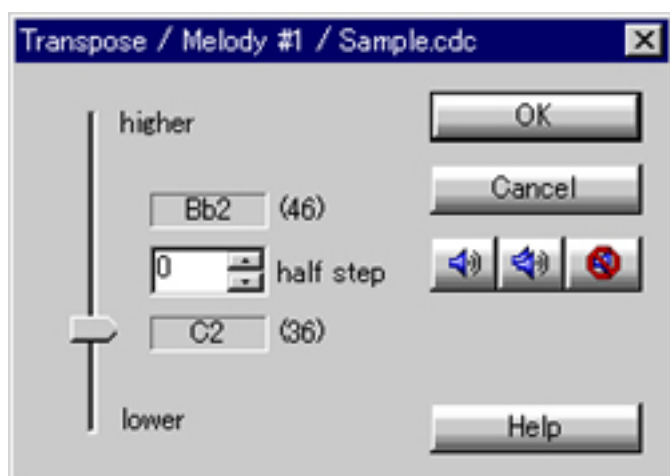
**Description** The Transpose Dialog Box allows you to [shift the Pitch of all selected Notes equally](#).

**Uses** Upon opening the Transpose dialog box, CAMPS displays the current relative Note Range and MIDI Pitch values of the selected Line data.

Use the **Transpose** slider or edit box to Transpose currently selected Line data up or down by Half Steps (Chromatic Intervals; Semitones).

Using the **Playback** buttons, you can then audition different Transposition settings and select one that sounds good to you.

- Items**
- [Transpose](#) slider
  - [Transpose](#) edit box
  - [Note Range](#) displays
  - [Pitch Value](#) displays
  - [Playback](#) button
  - [Playback with Others](#) button
  - [Stop](#) button
  - [OK](#) button
  - [Cancel](#) button
  - [Help](#) button





## Opening

From the...

[Document Window](#)

[Event List Editor](#)

[Pianoroll Editor](#)

[Notation Editor](#)

Choose **Transpose...** from the **Line** menu.

Alternatively, right-click desired Line data and choose **Actions**, **Transpose....**



When choosing **Transpose...** from the **Line** menu, you must first have selected Line data, otherwise the **Transpose...** item won't be available.

## Items in the **Transpose** dialog box

### [Transposing](#)

**Transpose**  
slider

Click and drag this slider down to Transpose selected Notes down, or up to Transpose selected Notes up.

**Transpose**  
edit box

Use the up/down buttons or directly edit the Chromatic Interval value in this box to Transpose Notes.

**Note Range**  
displays

These display areas show the upper and lower Note range of the Line data currently being Transposed.

**Pitch Value**  
displays

These display areas show the MIDI Pitch values of the upper and lower Note range.

### [Auditioning](#)



**Playback**

Click the **Playback** (Single Speaker) button to listen to Transposition adjustments as you make them.



**Playback with Others**

Click the **Playback with Others** (Double Speaker) button to listen to Transposition Adjustments you make along with all the other activated Tracks.



**Stop**

Click the **Stop** (No Speaker) button to stop Playback.

### [Closing](#)

**OK**  
button

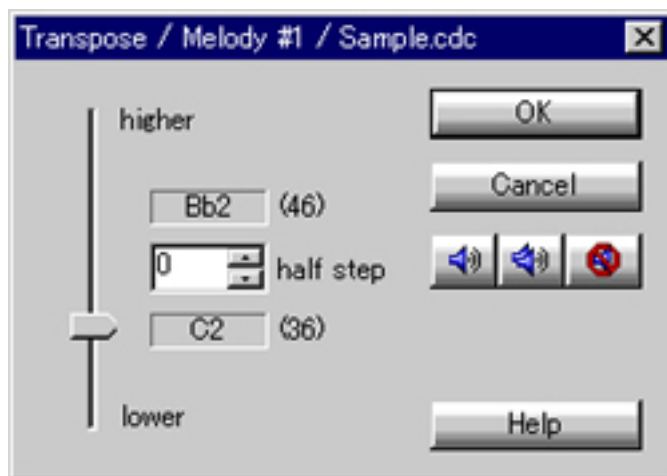
Closes the Transpose dialog box and commits changes.

**Cancel**  
button

Closes the Transpose dialog box without committing changes.

**Help**  
button

Opens this Help document.



## Using the **Transpose** dialog box

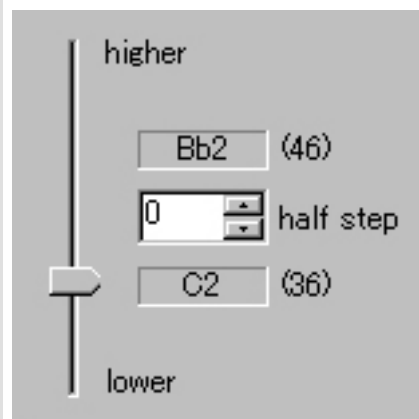
Transposing

**Transpose** slider, edit box

Click and drag this slider down to Transpose selected Notes down, or up to Transpose selected Notes up. Alternatively, use the up/down buttons or directly edit the Half Step (Chromatic Interval; Semitone) value in the Transpose edit box to Transpose Notes.

**Note Range, Pitch Value** displays

These display areas above and below the Transpose edit box show the upper and lower Note Range and corresponding MIDI Pitch values of the selected Line data with respect to the Note currently being Transposed and its current Transposition setting. Referring to these displays while adjusting Transposition will help you keep in mind where the highest and lowest Notes in the Line data you are Transposing will end up. As well, they give quick indication of how close you're getting to MIDI Pitch range limits (0-127).



See also:

[Getting Results](#)

## Using the **Transpose** dialog box

Getting Results

**Playback, Playback with Others, Stop** buttons

Each time you make Transposition Adjustments, the selected Line data is temporarily replaced.

Click the [Playback](#) (Single Speaker) button to hear the results of Transposition processing in "Solo" mode. This Auditioning mode will include any existing Chords if the Chord Track **Play** button in the Track Area of the Document Window is activated.

Click the [Playback with Others](#) (Double Speaker) button to hear the results of Transposition processing along with all the other activated Tracks.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of selected Line data with current Transposition Adjustments as you make them, until you click the [Stop](#) (No Speaker) button. With this feature, you can change and listen to different Transposition Adjustments "on the fly" or one by one.

**OK** button

Click [OK](#) when you have achieved the desired results. This closes the Transpose dialog box and replaces the selected Line data.

See Also:

[Transposing](#)

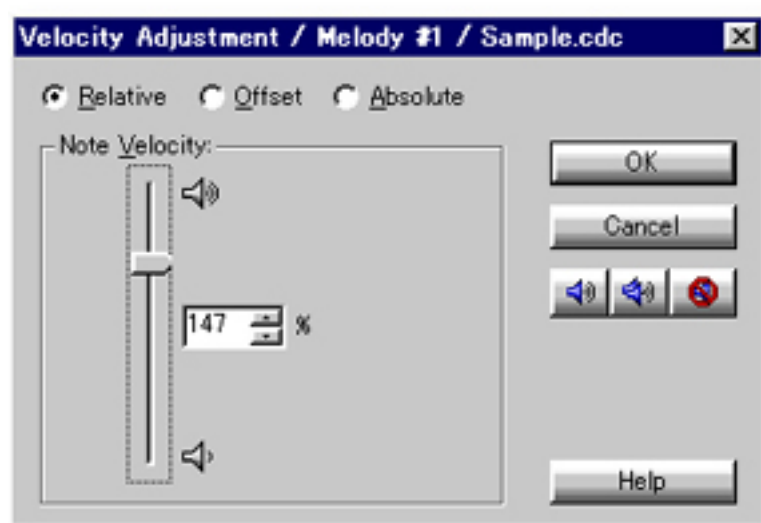
## Velocity Adjustment dialog box

**Description** The Velocity Adjustment dialog box allows you to change the loudness of Notes on an individual or Line Block basis.

**Uses** There are three ways to specify the Velocity of Note data in the Velocity Adjustment dialog box; [Relative](#), [Offset](#) and [Absolute](#). Which ever mode you use, setting the Note Velocity lower results in softer (more *Piano*) Notes, while setting it higher results in louder (more *Forte*) Notes.

Using the **Playback** buttons, you can then audition Velocity Adjustments and select one that sounds good to you.

- Items**
- [Relative](#) radio button
  - [Offset](#) radio button
  - [Absolute](#) radio button
  - [Note Velocity](#) slider
  - [Note Velocity](#) edit box
  - [Playback](#) button
  - [Playback with Others](#) button
  - [Stop](#) button
  - [OK](#) button
  - [Cancel](#) button
  - [Help](#) button



## Opening

From the...  
[Document Window](#)  
[Event List Editor](#)  
[Pianoroll Editor](#)  
[Notation Editor](#)

Choose **Adjust Velocity...** from the **Line** menu.  
Alternatively, right-click desired Line data and choose **Actions, Adjust Velocity...**



When choosing **Adjust Velocity...** from the **Line** menu, Line data must first be selected, otherwise the **Adjust Velocity...** item won't be available.

## Items in the **Velocity Adjustment** dialog box

### [Selecting an Adjustment Mode](#)

**Relative**  
radio button

Sets the Velocity adjustment to render a relative percentage of the original Note Velocity.

**Offset**  
radio button

Sets the Velocity adjustment to increase or decrease degrees of original Note Velocity MIDI value.

**Absolute**  
radio button

Sets the Velocity adjustment to use an absolute MIDI value to adjust original Note Velocity.

### [Adjusting Velocity](#)

**Note Velocity**  
slider

Click and drag this slider down for softer (more Piano) notes, or up for louder (more Forte) notes.

**Note Velocity**  
edit box

Use the up/down buttons or directly edit the Velocity value in this box to change Note loudness .

### [Auditioning](#)

 **Playback**

Click the **Playback** (Single Speaker) button to listen to Velocity Adjustments as you make them.

 **Playback with Others**

Click the **Playback with Others** (Double Speaker) button to listen to Velocity Adjustments you make along with all the other activated Tracks.

 **Stop**

Click the **Stop** (No Speaker) button to stop Playback.

### [Closing](#)

**OK**  
button

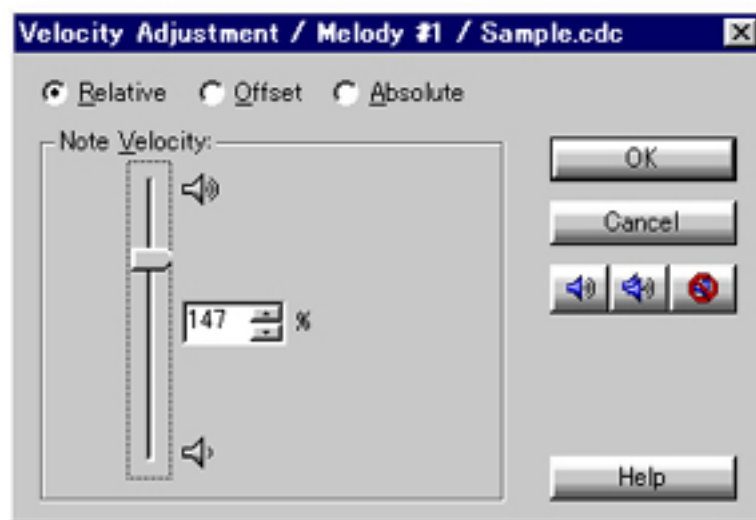
Closes the Velocity Adjustment dialog box and commits changes.

**Cancel**  
button

Closes the Velocity Adjustment dialog box without committing changes.

**Help**  
button

Opens this Help document.



## Using the **Velocity Adjustment** dialog box

Adjusting Velocity

**Relative, Offset, Absolute** radio buttons

After selecting Note data to adjust and opening the Velocity Adjustment dialog box, Choose an adjustment mode. There are three modes for specifying the Velocity of Note data in the Velocity Adjustment dialog box.

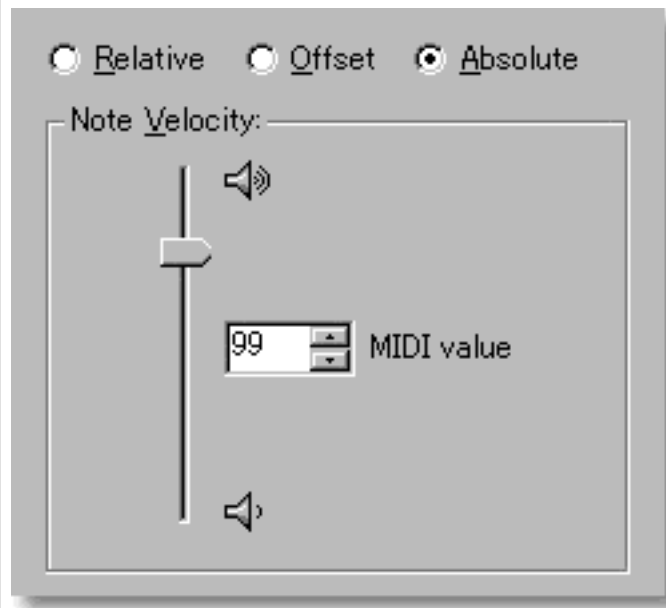
**Relative** ...Sets a relative percentage of the original Notes' Velocity from 0% (none) to 200% (double).

**Offset** ...Sets change of Velocity by degrees, based on the range of MIDI Velocity values in the currently selected region of Line data.

**Absolute** ...Uses an absolute MIDI value (0-127) to set the Velocity of all selected Notes.

**Note Velocity** adjustment area

Next, use the **Note Velocity** slider or edit box to adjust Velocity. Dragging the slider down or entering a smaller number in the box results in softer (more Piano) Notes, while dragging the slider up or entering a bigger number in the box results in louder (more Forte) Notes.



See Also:

[Getting Results](#)



## Using the **Velocity Adjustment** dialog box

Getting Results

**Playback, Playback with Others, Stop** buttons

Each time you make Velocity Adjustments, the selected Line data is temporarily replaced.

Click the **Playback** (Single Speaker) button to hear the results of Velocity processing in "Solo" mode. This Auditioning mode will include any existing Chords if the Chord Track **Play** button in the Track Area of the Document Window is activated.

Click the **Playback with Others** (Double Speaker) button to hear the results of Velocity processing along with all the other activated Tracks.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of selected Line data with current Velocity Adjustments as you make them, until you click the **Stop** (No Speaker) button. With this feature, you can change and listen to different Velocity Adjustments "on the fly" or one by one.

**OK** button

Click **OK** when you have achieved the desired results. This closes the Velocity Adjustment dialog box and replaces the selected Line data.

See Also:

[Adjusting Velocity](#)

## Voicing dialog box

**Description** In the Voicing dialog box, CAMPS automatically analyzes the selected Note data along with relevant Chords to provide you with various kinds of [Voicings](#) for your Line data.

**Uses** Selecting several Notes of Line data at a time is possible for Voicing. After selecting appropriate Line data from the Pianoroll or Notation Editor and opening the Voicing Dialog box, you can select [Voicing Modes, Harmonic Tensions, and quantity of Voices](#) to be used for each [Lead Note's](#) Voicing results. It is also possible to [alter the original Lead Note](#) to change a Voicing's Register from within the Voicing dialog box. To obtain Voicings that do not fall within the context of a Lead Note's Chord assignment, a provision is made to temporarily [alter a Lead Note's current Chord assignment](#).

Using the **Playback** buttons, you can then audition results and select one that sounds good to you.

**Items** [Voicing Parameters](#) scroll area

[Lead Note](#) edit box

[Location](#) display

[Voicings](#) scroll area

[Absolute Pitch](#) radio button

[Scale Spelling](#) radio button

[Playback](#) button

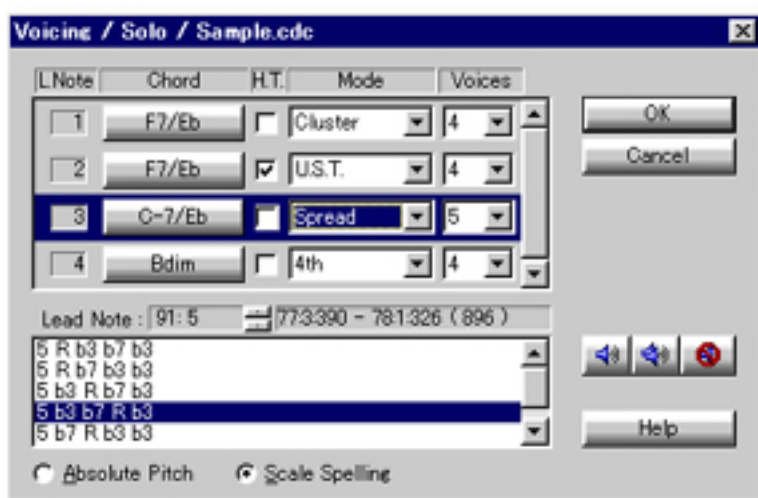
[Playback with Others](#) button

[Stop](#) button

[OK](#) button

[Cancel](#) button

[Help](#) button



## Opening

From the...  
[Pianoroll Editor](#)  
[Notation Editor](#)

Choose **Voicing...** from the **Line** menu.

Alternatively, right-click desired Line data and choose **Actions, Voicing...**



When choosing **Voicing...** from the **Line** menu, you must first have selected Line data, otherwise the **Voicing...** item won't be available.



*The Voicing feature is not available when the selected Track's Category is Drums.*

## Items in the **Voicing** dialog box

### [Adjusting Voicings](#)

**Voicing Parameters**  
scroll area

Here you can set Harmonic Tension, Voicing Mode and Voice Quantity. Additionally, The Voicing Parameters scroll area also provides a **Chord** reharmonizing button so you can temporarily change the Harmony CAMPS references during Voicing analysis to yield different results.

**Lead Note**  
edit box

Use the up/down buttons or directly edit the Note in this box to change a Voicing's Lead (Top) Note. This directly effects a Voicing's register.

**Location**  
display

The Location display shows song Location of the Line data being voiced. The display format is:  
"Beginning Bar:Beat:Divisions...Ending Bar:Beat:Divisions (Length in Divisions)".

### [Choosing Voicings](#)

**Voicings**  
scroll area

Voicing results are displayed here, listing a Voicing's Notes from top to bottom. Select a desired Voicing from this scroll area.

### [Viewing Voicings](#)

**Absolute Pitch**  
radio button

Sets the display of Notes in the Voicings scroll area to actual Note names.

**Scale Spelling**  
radio button

Sets the display of Notes in the Voicings scroll area to Scale Intervals.

### [Auditioning](#)

 **Playback**

Click the **Playback** (Single Speaker) button to listen to the selected Voicing.

 **Playback with Others**

Click the **Playback with Others** (Double Speaker) button to listen to the selected Voicing along with all the other activated Tracks.

 **Stop**

Click the **Stop** (No Speaker) button to stop Playback.

### [Closing](#)

**OK**  
button

Closes the Voicing dialog box and commits changes.

**Cancel**  
button

Closes the Voicing dialog box without committing changes.

**Help**  
button

Opens this Help document.

Voicing / Solo / Sample.cdc

LNote	Chord	H.T.	Mode	Voices
<input type="checkbox"/> 1	F7/Eb	<input type="checkbox"/>	Cluster	4
<input type="checkbox"/> 2	F7/Eb	<input checked="" type="checkbox"/>	U.S.T.	4
<input checked="" type="checkbox"/> 3	C-7/Eb	<input type="checkbox"/>	Spread	5
<input type="checkbox"/> 4	Bdim	<input type="checkbox"/>	4th	4

Lead Note : 91: 5      773-390 - 781-326 ( 896 )

- 5 R b3 b7 b3
- 5 R b7 b3 b3
- 5 b3 R b7 b3
- 5 b3 b7 R b3
- 5 b7 R b3 b3

Absolute Pitch     Scale Spelling

OK  
Cancel  
Help

Using the Voicing Parameters scroll area

## Overview

CAMPS supports all typical Voicing techniques including Closed, Drop 2, Spread U.S.T., and others, with or without Harmonic Tensions and with different Voice quantities. Depending on how the Lead Note you've selected relates to the currently assigned Chord and current Register for its region, certain techniques, Voice quantities and Voicings will not be available. Fewer techniques will be available when voicing a Lead Note that spans more than one Chord.

## Lead Note display column

The Lead Note display column simply displays a sequence number for each Lead Note selected for Voicing... "1" for "First"; "2" for "Second", etc. Use this column or the areas between columns in the Voicing Parameters scroll area to select which Lead Note will be Voiced.

## Chord button/display column

The Chord column shows the assigned Chord for the Lead Note that will undergo Voicing. When selecting a Lead Note which is neither a Chord Tone nor a valid Tension Note of its Chord, no techniques will be available. In this case, you can [temporarily assign a different Chord](#) by clicking the Lead Note's **Chord** button and selecting "**Reharmonize...**" from the drop-down menu. If no Chord is assigned, Voicing will not be possible.

## Harmonic Tension check box column

Checkmark the **Harmonic Tension** check box for the Note being Voiced when you want to include a [Harmonic Tension Note](#) in its Voicing. Depending on other Voicing settings, a Harmonic Tension may already exist in the current Voicing, rendering this check box ineffective. On the other hand, if you wish to manipulate Voicing Modes and Voices (quantity) while maintaining Harmonic Tension assignment, leave this check box selected. In this case, certain Voicing Mode and Voices selections may yield less alternate results.

## Voicing Mode selection box column

Using the drop-down button, select a [Voicing technique](#) from a Lead Note's Voicing Mode selection box. Depending on the Lead Note's current Chord and Register, different choices will be available here. Voicing techniques involve Scale Interval choices and their placement (order) from bottom to top. Their names directly reflect these factors.

## Voices selection box column

After choosing a Voicing Mode, the theoretically possible number of Voices appears in the Voices selection box. Using the drop-down button, select desired quantity of Voices from a Lead Note's Voices selection box and CAMPS will show available Voicing results in the [Voicings scroll area](#).

LNote	Chord	H.T.	Mode	Voices
<input type="checkbox"/> 1	F7/Eb	<input type="checkbox"/>	Cluster	4
<input type="checkbox"/> 2	F7/Eb	<input checked="" type="checkbox"/>	U.S.T.	4
<input type="checkbox"/> 3	C-7/Eb	<input type="checkbox"/>	Spread	5
<input type="checkbox"/> 4	Bdim	<input type="checkbox"/>	4th	4

See also:

[Choosing a Lead Note and Voicing](#)  
[Getting Results](#)

## Using the **Voicing** dialog box

Choosing a Lead Note and Voicing

**Lead Note** edit box

The Lead Note edit box shows the Pitch of the Lead Note subject to Voicing using the format "MIDI Pitch value:Note Name/Octave". Using the up/down buttons, you can alter the Pitch of the Lead Note being Voiced. As the Lead Note Pitch is changed, so are its available Voicings. Depending on the current Chord you are working in the context of, some Lead Note choices will have no available Voicings.

**Location** display

The Location Area of the Voicing dialog box shows the starting and ending locations and the length of the Lead Note subject to Voicing. This display is for your reference. Changing these properties can be done freely in the Pianoroll or Notation Editor, or in controlled amounts with the Quantize and Articulation Adjustment dialog boxes.

**Voicings** scroll area

When Voicing a Lead Note is successful using specified Voicing Parameters, the available Voicings will be detected and their Note spellings will be displayed from highest to lowest Pitch in the Voicings scroll area. When the Lead Note does not harmonize with the Chord in the Voicing Parameters scroll area or the Chord itself is not appropriate for the specified Voicing Parameters, no Voicing results will appear here.

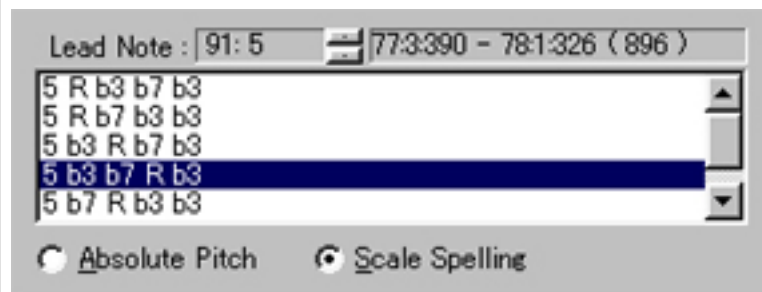
Select a Voicing shown in the Voicings scroll area to develop harmony in the selected Line data. When a Voicing is selected, any adjacent Note data overlapping the Lead Note in the Track is automatically removed.

**Absolute Pitch, Scale Spelling** radio buttons

The **Absolute Pitch** and **Scale Spelling** radio buttons are used to set up how a Voicing's Notes will be displayed in the Voicings scroll area.

Selecting Absolute Pitch displays a Lead Note's Voicing components by their absolute Pitch, enharmonically the same as the Notes for the Chord in that area.

Selecting Scale Spelling displays a Lead Note's Voicing components by their Intervallic Scale spelling for the Chord in that area.



See also:

[Using the Voicing Parameters scroll area](#)  
[Getting Results](#)



## Using the **Voicing** dialog box

Getting Results

**Playback**,  
**Playback with Others**,  
**Stop**  
buttons

Each time you make Voicing adjustments, the selected Line data is temporarily replaced.

Click the [Playback](#) (Single Speaker) button to hear a Voicing in "Solo" mode. This Auditioning mode will include any existing Chords if the Chord Track **Play** button in the Track area of the Document Window is activated.

Click the [Playback with Others](#) (Double Speaker) button to hear a Voicing along with all the other activated Tracks.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of selected Line data with current Voicing adjustments as you make them, until you click the [Stop](#) (No Speaker) button. With this feature, you can change and listen to different Voicings "on the fly" or one by one.

**OK**  
button

Click [OK](#) when you have achieved the desired results. This closes the Voicing dialog box and replaces the selected Line data with the Voicing highlighted in the Voicings scroll area.

See also:

[Using the Voicing Parameters scroll area](#)  
[Choosing a Lead Note and Voicing](#)

## Chord Construction dialog box

**Description** The Chord Construction dialog box allows you to temporarily assign a different Chord to the Lead Note by manually defining three elements: [Symbol](#) , [Quality](#) and [Tension](#).

**Uses** In the Chord Construction dialog box, CAMPS automatically displays lists of Symbols, Qualities and Tensions available in [the chosen Key and Mode](#), allowing you to select one of each element for constructing a Chord.

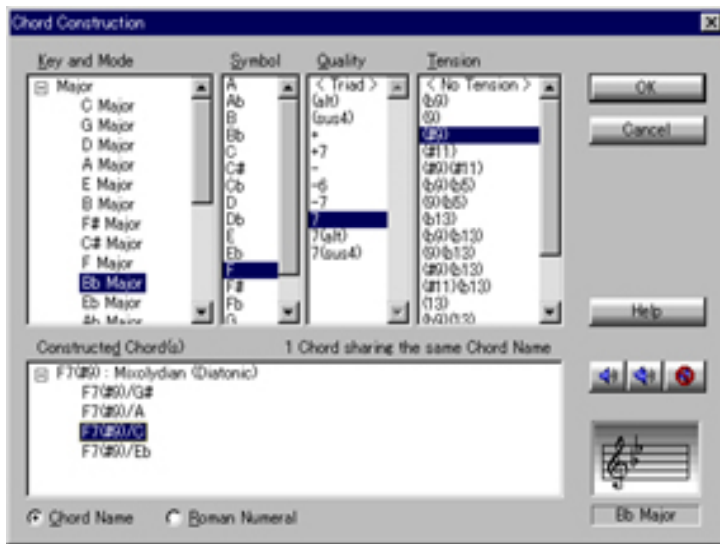


The Chord Construction dialog box, when opened from the Voicing dialog box, automatically displays only lists of Symbols, Qualities and Tensions based on the Lead Note as either a Chord Tone or a valid Tension Note.

Using the **Playback** buttons, you can then audition Constructed Chords and select one that sounds good to you.

**Items**

- [Key and Mode](#) scroll area
- [Symbol](#) scroll area
- [Quality](#) scroll area
- [Tension](#) scroll area
- [Constructed Chord\(s\)](#) scroll area
- [Key Signature](#) display
- [Key and Mode](#) display
- [Chord Name](#) radio button
- [Roman Numeral](#) radio button
- [Playback](#) button
- [Playback with Others](#) button
- [Stop](#) button
- [OK](#) button
- [Cancel](#) button
- [Help](#) button



Opening

From the...  
[Voicing dialog box](#)

Select "**Reharmonize...**" from the drop-down menu.

Items in the **Chord Construction** dialog box[Selecting Chord Components](#)**Key and Mode**  
scroll area

The Mode and Key you select here determine the range of Chords that can be built.

**Symbol**  
scroll area

The Symbol scroll area displays all of the conceivable Chord Symbols in the range specified by the Key and Mode scroll area. This is where you select the Chord Symbols you want to build.

**Quality**  
scroll area

All of the conceivable chord Qualities for the Symbol selected in the Symbol Scroll area appear in the Quality scroll area. This is where you select the Quality for the Chord you want to build.

**Tension**  
scroll area

The Tension scroll area displays all of the conceivable Tension sets from the combination of selected Symbol and Quality. This is where you select the Tension sets for the Chords you want to build.

[Selecting a Constructed Chord](#)**Constructed Chord(s)**  
scroll area

The Constructed Chord(s) scroll area displays a list of Constructed Chords based on your selections in the Key and Mode, Symbol, Quality and Tension scroll areas.

**Key Signature**  
display

Displays the musical notation form of the Key Signature selected in the Key and Mode scroll area.

**Key and Mode**  
display

Displays the alphabetic form of Key and Mode selected from the Key and Mode scroll area.

[Appearance of Constructed Chord\(s\)](#)**Chord Name**  
radio button

Sets the Chord display in the Constructed Chord(s) area to Chord Name form.

**Roman Numeral**  
radio button

Sets the Chord display in the Constructed Chord(s) area to Roman Numeral form.

[Auditioning](#)**Playback**Click the **Playback** (Single Speaker) button to listen to a selected Constructed Chord.**Playback with Others**Click the **Playback with Others** (Double Speaker) button to listen to a selected Constructed Chord along with all the other activated Tracks.**Stop**Click the **Stop** (No Speaker) button to stop Playback.[Closing](#)**OK**  
button

Closes the Chord Construction dialog box and commits changes.

**Cancel**  
button

Closes the Chord Construction dialog box without committing changes.

**Help**  
button

Opens this Help document.

**Chord Construction**

Key and Mode	Symbol	Quality	Tension
Major	A	< Triad >	< No Tension >
C Major	Ab	(a0)	(b0)
G Major	B	(sus4)	(0)
D Major	Bb	*	(9)
A Major	C	+7	(#11)
E Major	C#	-	(#0)(#11)
B Major	Cb	-6	(b0)(b6)
F# Major	D	-7	(b0)(b7)
C# Major	Db	7	(b13)
F Major	E	7(a0)	(b0)(b13)
<b>Eb Major</b>	<b>F</b>	7(sus4)	(b0)(b13)
Bb Major	F#		(#11)(b13)
A# Major	Fb		(13)
A Minor	F#		(#0)(#11)

Constructed Chord(s)      1 Chord sharing the same Chord Name

- F7(b9) : Mixolydian (Diatonic)
  - F7(b9)/G#
  - F7(b9)/A
  - F7(b9)/B**
  - F7(b9)/Eb

Chord Name     Roman Numeral

OK    Cancel    Help

←    →    ↻

Eb Major

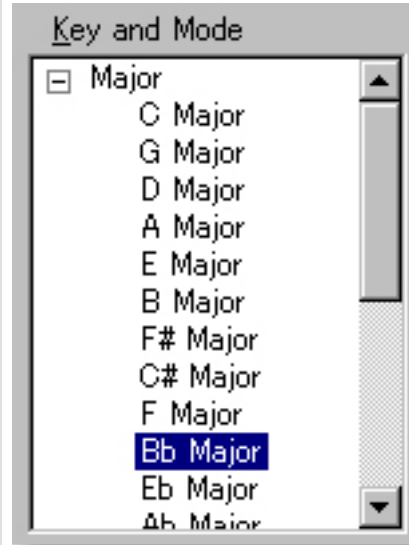
## Using the **Chord Construction** dialog box

Selecting Chord Components

**Key and Mode** scroll area

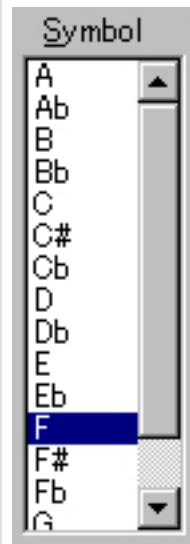
Upon selecting Chord Containers whose Chords you want to construct and opening the Chord Construction dialog box, CAMPS displays the [Key and Mode](#), [Symbol](#), [Quality](#) and [Tension](#) for the selected Chord. Use any desired combination of the following four steps to build Chords in the Chord Construction dialog box:

1. Select a Key and Mode from the Key and Mode scroll area.



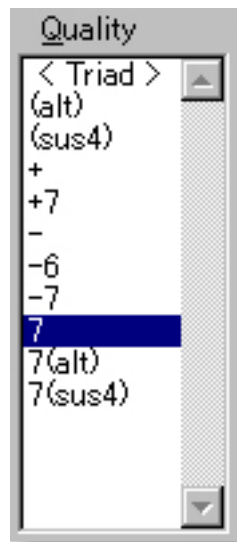
**Symbol** scroll area

2. Select a Symbol from the Symbol scroll area. All of the conceivable Qualities for the selected Symbol appear in the Quality scroll area.



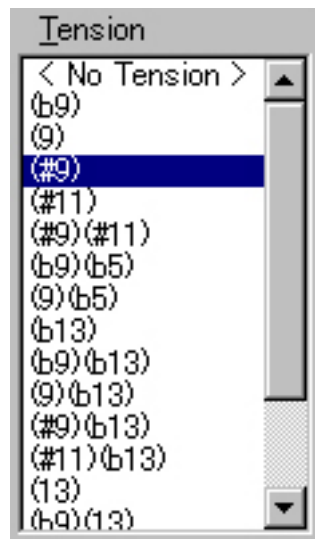
**Quality**  
scroll area

3. Select a Quality from the Quality Scroll Area. All of the conceivable Tension combinations resulting from Symbol and Quality selections appear in the Tension scroll area..



**Tension**  
scroll area

4. Select a Tension set from the Tension scroll area. All of the Chords of the same name that can logically be formed by combining the selected Symbol, Quality, and Tension appear in the Constructed Chord(s) area.



See also:

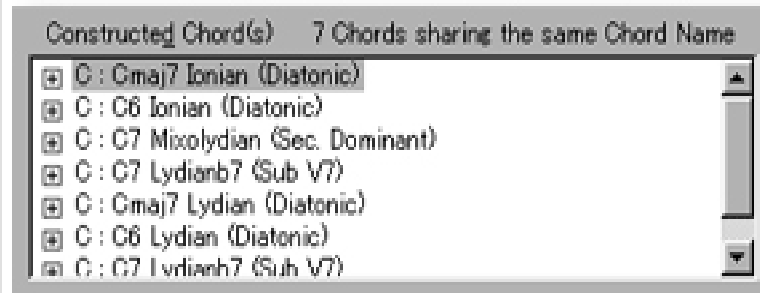
[Selecting a Chord](#)  
[Getting Results](#)

## Using the **Chord Construction** dialog box

Selecting a Chord

**Constructed Chord(s)** scroll area

When there are a number of Chords of the same name in the [Constructed Chord\(s\)](#) scroll area, you can select any one you want. Refer to the [Key Signature](#) and [Key and Mode](#) Displays for the Chord when making your selection.



**Chord Name, Roman Numeral** radio buttons

Click the [Chord Name](#) or [Roman Numeral](#) radio button to choose your desired Chord display style in the Constructed Chord(s) area.



See also:

[Selecting Chord Components](#)

[Getting Results](#)



Getting Results

**Playback, Playback with Others, Stop** buttons

Click the **Playback** (Single Speaker) button to listen to the Chord currently selected in the Constructed Chord(s) scroll area. Click the **Playback with Others** (Double Speaker) button to hear the Constructed Chord along with all the other activated Tracks.



Once either **Playback** button is clicked, CAMPS will repeat (Loop) Playback of a Constructed Chord, even while selecting different Chord components, until you click the **Stop** (No Speaker) button. With this feature, you can change and listen to different Chord Constructions "on the fly" or one by one.

**OK** button

Selecting a Chord in the Constructed Chord(s) scroll area and clicking **OK** closes the Chord Construction dialog box and replaces the Chord for the Lead Note with your newly Constructed Chord.

See also:

[Selecting Chord Components](#)  
[Selecting a Chord](#)

Overview CAMPS provides different Menu Items in the Menu Bar depending on which Editor or window is active. CAMPS also automatically changes some Menu Items according to the Editor Area clicked before opening menus.

[Menu items](#) for the **Document Window**

[Menu items](#) for the **Event List Editor**

[Menu items](#) for the **Pianoroll Editor**

[Menu items](#) for the **Control Draw Editor**

[Menu items](#) for the **Notation Editor**

[Menu items](#) for the **Tempo List Editor**

[Menu items](#) for the **Tempo Draw Editor**

[Menu items](#) for the **Text List Editor**

[Menu items](#) with no Document open

Description Here is a complete list of the Menu when no Document is open.

Items

**File**

<a href="#">New</a>	Ctrl + N
<a href="#">New Setup...</a>	Ctrl + Shift + N
<a href="#">Open...</a>	Ctrl + O
<a href="#">Close</a>	

1	<a href="#">[Recent Document]</a>
2	<a href="#">[Recent Document]</a>
:	

[Exit](#)

**Edit**

<a href="#">Undo</a>	Ctrl + Z
----------------------	----------

---

<a href="#">Cut</a>	Ctrl + X
<a href="#">Copy</a>	Ctrl + C
<a href="#">Paste</a>	Ctrl + V
<a href="#">Clear</a>	Del
<a href="#">Select All</a>	Ctrl + A

---

[Preferences...](#)

**MIDI**

<a href="#">Metronome</a>	Ctrl + M
---------------------------	----------

---

<a href="#">All Notes Off</a>	
<a href="#">Reset All Controllers</a>	

---

<a href="#">Synchronize With</a>	>
<a href="#">Transmit Clock</a>	>

---

[MIDI Mapper](#)  
[MIDI Setup...](#)

**Synchronize With**

<a href="#">Internal Clock</a>
<a href="#">Tap</a>
<a href="#">MIDI Clock</a>
<a href="#">SMPTE</a>

**Transmit Clock**

<a href="#">MIDI Clock</a>
<a href="#">SMPTE</a>

## View

**Toolbars** >

---

[Big Beat Window](#)

[Big Time Window](#)

## **Toolbars**

[Main Toolbar](#)

[Status Bar](#)

---

[Playback Control Toolbar](#)

[Record Control Toolbar](#)

---

[Clock Sync Toolbar](#)

[Device Control Toolbar](#)

[Tempo Toolbar](#)

---

[Note Stamp Toolbar](#)

[Rest Toolbar](#)

---

[Beat Toolbar](#)

[Time Toolbar](#)

## Help

[Help](#)

---

[About CAMPS](#)

# Menu Items for the Document Window

Description Here is a complete list of Menu Items when the Document Window is active.

Items

File	
<a href="#">New</a>	Ctrl + N
<a href="#">New Setup...</a>	Ctrl + Shift + N
<a href="#">Open...</a>	Ctrl + O
<a href="#">Close</a>	
<a href="#">Save</a>	Ctrl + S
<a href="#">Save As...</a>	
<a href="#">Revert</a>	
<a href="#">Export SMF...</a>	
<a href="#">1 [Recent Document]</a>	
<a href="#">2 [Recent Document]</a>	
:	
<a href="#">Exit</a>	

Edit	
<a href="#">Undo [Action] [Object]</a>	Ctrl + Z
<hr/>	
<a href="#">Cut [Object]</a>	Ctrl + X
<a href="#">Copy [Object]</a>	Ctrl + C
<a href="#">Paste [Object]</a>	Ctrl + V
<a href="#">Clear [Object]</a>	Del
<a href="#">Select All</a>	Ctrl + A
<hr/>	
<a href="#">New [Object]...</a>	Ctrl + I
<a href="#">Duplicate [Object]</a>	Ctrl + D
<a href="#">Make Alias of [Object]</a>	Ctrl + Shift + D
<a href="#">Suspend Alias</a>	
<a href="#">Merge [Object]</a>	
<hr/>	
<a href="#">Bring To Front</a>	
<a href="#">Send To Back</a>	
<hr/>	
<a href="#">Time Signature Setup...</a>	
<a href="#">SMPTE Offset Setup...</a>	
<hr/>	
<a href="#">Preferences...</a>	

## Chord

<a href="#">Generate...</a>	Ctrl + Shift + G
<a href="#">EZgenerate</a>	Ctrl + G
<hr/>	
<a href="#">Harmonize...</a>	Ctrl + Shift + H
<a href="#">EZharmonize</a>	Ctrl + H
<a href="#">EZharmonize with Same Key</a>	
<hr/>	
<a href="#">Detect from MIDI Instrument...</a>	
<a href="#">Construct...</a>	
<hr/>	
<a href="#">EZcompose Lines in Region</a>	Ctrl + R
<hr/>	
<a href="#">EZharmonize All</a>	

## Line

<b>Take</b>	>
<hr/>	
<a href="#">Compose...</a>	Ctrl + Shift + K
<a href="#">EZcompose</a>	Ctrl + K
<hr/>	
<a href="#">Detect Dissonant Intervals...</a>	
<hr/>	
<a href="#">Quantize...</a>	
<a href="#">Transpose...</a>	
<a href="#">Adjust Articulation...</a>	
<a href="#">Adjust Velocity...</a>	
<a href="#">Map Pitches....</a>	
<hr/>	
<a href="#">Half Time</a>	
<a href="#">Double Time</a>	
<hr/>	
<a href="#">EZharmonize With</a>	

## Take

<a href="#">Take List...</a>	Ctrl + F
<hr/>	
<a href="#">New Take...</a>	Ctrl + T
<a href="#">Duplicate Take</a>	Ctrl + U
<a href="#">Remove Take</a>	
<hr/>	
<a href="#">[Take #1]</a>	
<a href="#">[Take #2]</a>	
:	

## MIDI

<a href="#">Play</a>	
<a href="#">Stop</a>	
<b>Record</b>	>
<b>Jump To</b>	>
<hr/>	
<a href="#">Metronome</a>	Ctrl + M
<hr/>	
<a href="#">All Notes Off</a>	
<a href="#">Reset All Controllers</a>	
<hr/>	
<b>Synchronize With</b>	>
<b>Transmit Clock</b>	>
<hr/>	
<a href="#">MIDI Mapper</a>	
<a href="#">MIDI Setup...</a>	

## Record

<a href="#">Start Recording</a>	F5
<a href="#">Start Over-dubbing</a>	F7
<a href="#">Start Step Recording</a>	F8

## Jump To

<a href="#">Top</a>	Home
<a href="#">End</a>	End

## Synchronize With

<a href="#">Internal Clock</a>
<a href="#">Tap</a>
<a href="#">MIDI Clock</a>
<a href="#">SMPTE</a>

## Transmit Clock

<a href="#">MIDI Clock</a>
<a href="#">SMPTE</a>

## View

**Chord View** >  
**Grid View** >  
**Toolbars** >  
**Zoom** >

---

[Auto Scroll](#) Ctrl +L  
[Jump To Location...](#)

---

[Edit Buttons](#)  
[Interactive Information](#)

---

[Line Block Name](#)

---

[Big Beat Window](#)  
[Big Time Window](#)

---

[Background Bitmap](#)

---

[Save Display Settings](#)

## Chord View

[Roman Numeral](#)  
[Chord Name](#)  
[Scale Name](#)  
[Scale Spelling](#)  
[Key and Mode](#)

## Grid View

[Bar Grid](#)  
[Beat Grid](#)  
[Track Grid](#)  

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[Align To Grid](#)  
[Grid Setup...](#)

## Toolbars

[Main Toolbar](#)  
[Status Bar](#)  

---

[Playback Control Toolbar](#)  
[Record Control Toolbar](#)  

---

[Clock Sync Toolbar](#)  
[Device Control Toolbar](#)  
[Tempo Toolbar](#)  

---

[Note Stamp Toolbar](#)  
[Rest Toolbar](#)  

---

[Beat Toolbar](#)  
[Time Toolbar](#)

## Zoom

[Zoom Out \(V\)](#)  
[Zoom In \(V\)](#)  
[Zoom Out \(H\)](#)  
[Zoom In \(H\)](#)

## Editors

[Event List Editor](#) F9  
[Pianoroll Editor](#) F10  
[Control Draw Editor](#) F11  
[Notation Editor](#) F12  

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[Tempo List Editor](#)  
[Tempo Draw Editor](#)  

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[Text List Editor](#)

**Tool** >

## Tool

[Arrow](#)  
[Pen](#)  
[Magic Wand](#)  
[Eraser](#)  
[Razor](#)

## Window

[New](#)  
[Window](#)  
[Cascade](#)  
[Tile](#)  
[Arrange](#)  
[Icons](#)  

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- [\[Window\]](#)
- [\[Window\]](#)

:

## Help

[Help](#)

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[\[Object\] Memo...](#)


[Document Memo...](#)

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[About CAMPS](#)



**Description** The **File** menu allows you to manage Document files and shut down CAMPS.

<b>Items</b>	<p><b><u>N</u>ew</b></p> <p><b><u>N</u>ew <u>S</u>etup...</b></p> <p><b><u>O</u>pen...</b></p> <p><b><u>C</u>lose</b></p> <p><b>[<u>R</u>ecent Document]</b></p> <p><b><u>E</u>xit</b></p>	<p>Creates a New untitled Document as specified by the settings in the New Document Setup dialog box.</p> <p>Opens the <a href="#">New Document Setup dialog box</a>, allowing you to set basic defaults for New Documents.</p> <p>Opens the Open dialog box, allowing you to select and open a Document.</p> <p> When opening a Standard MIDI File, CAMPS automatically analyzes Line data and assigns <a href="#">appropriate Line Blocks</a> and one of <a href="#">six Category settings</a> to each Track. You can alter these settings at any time.</p> <p>Closes the current Document. If this Document has been altered since opening, you will be asked whether or not you wish to save changes before closing.</p> <p>Opens the recently opened Document named here. The number of Recent Documents listed here is adjustable in the <a href="#">Preferences dialog box</a> which can be opened from the Edit menu.</p> <p>Closes CAMPS and any open Documents. If any currently open Documents have been altered since opening, you will be asked whether or not you wish to save changes before closing.</p>
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**Description** The **Edit** menu allows you to manipulate objects in the Document Window and other Editors. However, with no Document open, the **Preferences...** command will be the only available command here.

<b>Items</b>	<b><u>U</u>ndo [Action] [Object]</b>	 This Menu Item won't be available unless a Document is open. See Help documentation on the <a href="#">Edit menu for the Document Window</a> and other Editors.
	<b>C<u>u</u>t [Object]</b>	 This Menu Item won't be available unless a Document is open. See Help documentation on the <a href="#">Edit menu for the Document Window</a> and other Editors.
	<b><u>C</u>opy [Object]</b>	 This Menu Item won't be available unless a Document is open. See Help documentation on the <a href="#">Edit menu for the Document Window</a> and other Editors.
	<b><u>P</u>aste [Object]</b>	 This Menu Item won't be available unless a Document is open. See Help documentation on the <a href="#">Edit menu for the Document Window</a> and other Editors.
	<b><u>C</u>lear [Object]</b>	 This Menu Item won't be available unless a Document is open. See Help documentation on the <a href="#">Edit menu for the Document Window</a> and other Editors.
	<b>S<u>e</u>lect <u>A</u>ll</b>	 This Menu Item won't be available unless a Document is open. See Help documentation on the <a href="#">Edit menu for the Document Window</a> and other Editors.
	<b><u>P</u>references...</b>	Opens the <a href="#">Preferences dialog box</a> , allowing you to set basic operational and appearance defaults in CAMPS.

Description The **MIDI** menu allows you to control the CAMPS Sequencer Engine and manage MIDI signals.



No Sequencer actions such as Playback or Record will be possible without a Document open.

Items	<b><u>M</u>etronome</b>	Switches between activate or deactivate the Metronome during Playback and Recording. A checkmark appears next to this item when activated.
	<b>All <u>N</u>otes Off</b>	Sends the "All Notes Off" MIDI Event to current MIDI Devices. Use this command to stop unwanted sustained Notes after stopping Playback or inadvertently interrupting MIDI signaling.
	<b><u>R</u>eset All Controllers</b>	Sends the "Reset All Controllers" MIDI Event to current MIDI Devices. Use this command to reset certain MIDI parameters such as Volume, Pan or Modulation.
	<b><u>S</u>ynchronize With/<u>I</u>nternal Clock</b>	Sets CAMPS to Playback and Record using its own internal MIDI Clock. A bullet appears next to the current selection.
	<b><u>S</u>ynchronize With/<u>T</u>ap</b>	Sets CAMPS to Playback and Record using "freewheel" Tempo pulses input by you on your computer's keyboard or your MIDI Instrument. A bullet appears next to the current selection.
	<b><u>S</u>ynchronize With/<u>M</u>IDI Clock</b>	Sets CAMPS to Playback and Record in "slave" mode using an external MIDI Clock source, such as another Sequencer. A bullet appears next to the current selection.
	<b><u>S</u>ynchronize With/<u>S</u>MPT</b>	Sets CAMPS to Playback and Record using MIDI Time Code converted from an external SMPTE Time Code source, such as a click track from an audio or video tape deck. A SMPTE converter must be employed between a raw SMPTE source and the MIDI port used by CAMPS. A bullet appears next to the current selection.
	<b><u>T</u>ransmit Clock/<u>M</u>IDI Clock</b>	Enables CAMPS to send its MIDI Clock signal to an external device. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer to synchronize with CAMPS. A checkmark appears next to this item when enabled.
	<b><u>T</u>ransmit Clock/<u>S</u>MPT</b>	Enables CAMPS to send MIDI Time Code to an external SMPTE converter. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer or other device to synchronize with CAMPS. A checkmark appears next to this item when enabled.

## **MIDI Mapper**

Switches between enable or disable the Windows Operating System MIDI Mapper. When enabled, CAMPS passes MIDI Output Device selection control to the Windows Multimedia applet in the Control Panel. When disabled, MIDI Output Devices can be selected from within CAMPS, allowing much greater flexibility. A checkmark appears next to this item when enabled.

## **MIDI Setup...**

Opens the [MIDI Setup dialog box](#), allowing you to manage many MIDI signaling details. This includes settings for input, output, sync and Devices.

Description	The <b>View</b> menu allows you to select objects to display and how to display them. Use <b>Save Display Settings</b> to save the current display settings of the Document Window for its next session.	
Items	<b><u>T</u>oolbars/<u>M</u>ain Toolbar</b>	Switches between Show or Hide the <a href="#">Main toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
	<b><u>T</u>oolbars/<u>S</u>tatus Bar</b>	Switches between Show or Hide the <a href="#">Status Bar</a> . A checkmark appears next to this Menu Item when set to Show.
	<b><u>T</u>oolbars/<u>P</u>layback Control Toolbar</b>	Switches between Show or Hide the <a href="#">Playback Control toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
	<b><u>T</u>oolbars/<u>R</u>ecord Control Toolbar</b>	Switches between Show or Hide the <a href="#">Record Control toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
	<b><u>T</u>oolbars/<u>C</u>lock Sync Toolbar</b>	Switches between Show or Hide the <a href="#">Clock Sync toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
	<b><u>T</u>oolbars/<u>D</u>evice Control Toolbar</b>	Switches between Show or Hide the <a href="#">Device Control toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
	<b><u>T</u>oolbars/<u>T</u>empo Toolbar</b>	Switches between Show or Hide the <a href="#">Tempo toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
	<b><u>T</u>oolbars/<u>N</u>ote Stamp Toolbar</b>	Switches between Show or Hide the <a href="#">Note Stamp toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
	<b><u>T</u>oolbars/<u>R</u>est Toolbar</b>	Switches between Show or Hide the <a href="#">Rest toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
	<b><u>T</u>oolbars/<u>B</u>eat Toolbar</b>	Switches between Show or Hide the <a href="#">Beat toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
	<b><u>T</u>oolbars/<u>T</u>ime Toolbar</b>	Switches between Show or Hide the <a href="#">Time toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
	<b>Big Beat Window</b>	Switches between Show or Hide the Big Beat Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its <b>Close</b> button to hide it again. See <a href="#">details</a> . See also <a href="#">Beat Toolbar</a> ..

## Big Time Window

Switches between Show or Hide the Big Time Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Time Toolbar](#)..

Description The **Help** menu allows you to access these Help documents.

Items **Help** Opens the Table of Contents for these Help documents.

**About **C**AMPS** Opens the CAMPS banner with a text scroll area containing information about CAMPS and the Microworks Corporation.

## Big Beat Window

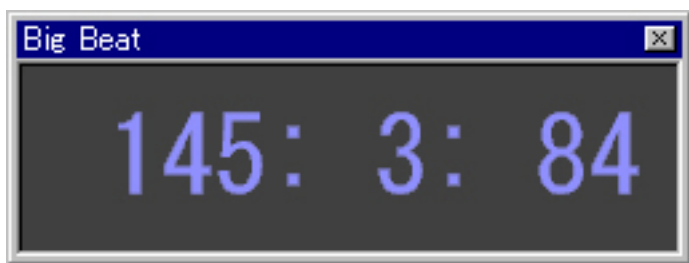
---

**Description** The Big Beat Window displays the Playback/Record Location in the current Document in MIDI form, expressed as "Bar:Beat:Divisions".

**Uses** You can drag this Window to any location in the top or bottom of the CAMPS Application window frame. Additionally, double clicking this toolbar between buttons or dragging it outside the CAMPS Application window brings it into its own window that can be put anywhere, even on the Microsoft Windows desktop. Double clicking it again or dragging it back into the top or bottom of the CAMPS Application window reintegrates it with the CAMPS Application window frame.

You can choose to Show or Hide this Window with the corresponding command in the **View** menu. When contained in its own window, you can hide this Window by clicking its top-right "Close window" ("X") button. Hiding or liberating Window can increase the useable work area in the CAMPS Application window.

You have three options to customize the Window display: **Font**, **Color** and **Background Color**. Right-click an empty location in the Window and then choose a command from the drop-down menu. Choose **Font...** for selecting a font, **Color...** for the font color, and **Background Color...** for the background color.





## Big Time Window

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**Description** The Big Time Window displays the Playback/Record Location in the current Document in SMPTE Time Code form, expressed as "Hours:Minutes:Seconds:Frames".

**Uses** You can drag this Window to any location in the top or bottom of the CAMPS Application window frame. Additionally, double clicking this toolbar between buttons or dragging it outside the CAMPS Application window brings it into its own window that can be put anywhere, even on the Microsoft Windows desktop. Double clicking it again or dragging it back into the top or bottom of the CAMPS Application window reintegrates it with the CAMPS Application window frame.

You can choose to Show or Hide this Window with the corresponding command in the **View** menu. When contained in its own window, you can hide this Window by clicking its top-right "Close window" ("X") button. Hiding or liberating Window can increase the useable work area in the CAMPS Application window.

You have three options to customize the Window display: **Font**, **Color** and **Background Color**. Right-click an empty location in the Window and then choose a command from the drop-down menu. Choose **Font...** for selecting a font, **Color...** for the font color, and **Background Color...** for the background color.

The drop-down menu also includes options which allow you to select **SMPTE Frame Rate**, as well as **Offset** display.



# Menu Items for the Control Draw Editor

Description Here is a complete list of Menu Items when the Control Draw Editor is active.

Items

File	
<a href="#">New</a>	Ctrl + N
<a href="#">New Setup...</a>	Ctrl + Shift + N
<a href="#">Open...</a>	Ctrl + O
<a href="#">Close</a>	
<a href="#">Save</a>	Ctrl + S
<a href="#">Save As...</a>	
<a href="#">Revert</a>	
<a href="#">Export SMF...</a>	
1	<a href="#">[Recent Document]</a>
2	<a href="#">[Recent Document]</a>
	:
<a href="#">Exit</a>	

Edit	
<a href="#">Undo [Action] [Object]</a>	Ctrl + Z
<a href="#">Cut [Object]</a>	Ctrl + X
<a href="#">Copy [Object]</a>	Ctrl + C
<a href="#">Paste [Object]</a>	Ctrl + V
<a href="#">Clear [Object]</a>	Del
<a href="#">Select All</a>	Ctrl + A
<a href="#">New [Object]...</a>	Ctrl + I
<a href="#">Duplicate [Object]</a>	Ctrl + D
<a href="#">Time Signature Setup...</a>	
<a href="#">SMPTE Offset Setup...</a>	
<a href="#">Preferences...</a>	

Line	
<a href="#">Take</a>	>
<a href="#">Quantize...</a>	
<a href="#">Adjust Value...</a>	
<a href="#">Half Time</a>	
<a href="#">Double Time</a>	

Take	
<a href="#">Take List...</a>	Ctrl + F
<a href="#">New Take...</a>	Ctrl + T
<a href="#">Duplicate Take</a>	Ctrl + U
<a href="#">Remove Take</a>	
<a href="#">[Take #1]</a>	

## MIDI

[Playback](#)

[Playback with Others](#)

[Play](#)

[Stop](#)

[Record](#) >

[Jump To](#) >

[Metronome](#) Ctrl +M

[All Notes Off](#)

[Reset All Controllers](#)

[Synchronize With](#) >

[Transmit Clock](#) >

[MIDI Mapper](#)

[MIDI Setup...](#)

## Record

[Start Recording](#) F5

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Description The **File** menu allows you to manage Document files and shut down CAMPS.



Some of these Menu Items won't be available unless a Document is open. Additionally, the **Save** and **Revert** commands won't be available until the current Document has been altered.

Items	<b><u>N</u>ew</b>	Creates a New untitled Document as specified by the settings in the New Document Setup dialog box.
	<b><u>N</u>ew Setup...</b>	Opens the <a href="#">New Document Setup</a> dialog box, allowing you to set basic defaults for New Documents.
	<b><u>O</u>pen...</b>	Opens the Open dialog box, allowing you to select and open a Document.   When opening a Standard MIDI File, CAMPS automatically analyzes Line data and assigns <a href="#">appropriate Line Blocks</a> and one of <a href="#">six Category settings</a> to each Track. You can alter these settings at any time.
	<b><u>C</u>lose</b>	Closes the current Document. If this Document has been altered since opening, you will be asked whether or not you wish to save changes before closing.
	<b><u>S</u>ave</b>	Saves the current Document using its existing filename and location.
	<b><u>S</u>ave <u>A</u>s...</b>	Opens the Save As dialog box, allowing you to save the current Document to a specified filename and location.
	<b><u>R</u>evert</b>	Allows you to close and reopen the current Document in one step, discarding any changes made after last saving it. You'll be asked if you're sure you want to proceed before this operation is completed.
	<b><u>E</u>xport SMF...</b>	Opens the <a href="#">Export Standard MIDI File dialog box</a> , allowing you to save the current Document as a Standard MIDI File. After specifying a filename and location and clicking <b>Save</b> , the <a href="#">Export Options dialog box</a> opens, allowing you to make final file format conversion settings.
	<b>[Recent Document]</b>	Opens the recently opened Document named here. The number of Recent Documents listed here is adjustable in the <a href="#">Preferences dialog box</a> which can be opened from the Edit menu.
	<b><u>E</u>xit</b>	Closes CAMPS and any open Documents. If any currently open Documents have been altered since opening, you will be asked whether or not you wish to save changes before closing.

Description The **Edit** menu allows you to Edit objects in the Control Draw Editor. For example, you can **Cut**, **Copy**, **Paste**, and **Clear** objects in the Text Info, Lyric and Draw Areas of the Control Draw Editor.



Many of these Menu Items won't be available unless a Document is open. Most also require a related object first be selected. Finally, most of these Menu Items change depending on the last object or Area selected in the Control Draw Editor.

Items	<b><u>U</u>ndo [Action] [Object]</b>	Reverses your last editing action. This command's name and function change depending on your last action. For example, if you just moved a Lyric, this command's name becomes <b>Undo Move Event</b> . Once executed, the <b>Undo</b> command becomes <b>Redo</b> and vice versa.
	<b><u>C</u>ut [Object]</b>	Removes selected object from a Document for reinsertion using the <b>Paste</b> command, if desired. This command's name and function change depending on your last selection. For example, if you just selected a Lyric, this command's name becomes <b>Cut Lyric</b> .
	<b><u>C</u>opy [Object]</b>	Specifies selected object for duplication using the <b>Paste</b> command. This command's name and function change depending on your last selection. For example, if you just selected a Lyric, this command's name becomes <b>Copy Lyric</b> .
	<b><u>P</u>aste [Object]</b>	Inserts the last object specified with the <b>Cut</b> or <b>Copy</b> command into the currently selected relative Area. This command's name and function change depending on your last action. For example, if you just <b>Cut</b> a Lyric and selected a region in the Lyric Area, this command's name becomes <b>Paste Lyric</b> .
	<b><u>C</u>lear [Object]</b>	Deletes the currently selected objects.
	<b><u>S</u>elect <u>A</u>ll</b>	Automatically selects all relative objects in the currently selected region or Area. For example, if you just selected a region in the Lyric Area, <b>Select All</b> selects all the Lyrics in the Lyric Area.
	<b><u>N</u>ew [Object]...</b>	Opens the appropriate New [Object] dialog box or inserts a new appropriate blank object, allowing you to create a New object. This command's name and function change depending on your last selection. For example, if you just selected a region in the Lyric Area, this command's name becomes <b>New Lyric...</b> and inserts a new Lyric text box in the Lyric Area.
	<b><u>D</u>uplicate [Object]</b>	Immediately creates a Duplicate of a selected object. This command's name and function change depending on your last selection. For example, if you just selected a Lyric, this command's name becomes <b>Duplicate Lyric</b> .
	<b><u>T</u>ime Signature Setup...</b>	Opens the <a href="#">Time Signature Setup dialog box</a> , allowing you to change the Time Signature in a specified region of Bars.
	<b><u>S</u>MPT<u>E</u> <u>O</u>ffset Setup...</b>	Opens the <a href="#">SMPTE Offset Setup dialog box</a> , allowing you to offset SMPTE synchronization between CAMPS and a master SMPTE source.

**Preferences...**

Opens the [Preferences dialog box](#), allowing you to set basic operational and appearance defaults in CAMPS.

Description The **Line** menu allows you to edit and manipulate a Line Block's Control Event data, including managing Takes.



The **Line** menu won't be available unless a Document is open. Additionally, most of these Menu Items won't be available unless a Control Event is selected.

Items	<b>Take/Take List...</b>	Opens the <a href="#">Take List dialog box</a> , allowing you to manipulate Takes for the selected Line Block.
	<b>Take/New Take...</b>	Opens the <a href="#">New Take dialog box</a> , allowing you to create a New blank or Auto Composed Take for the selected Line Block.
	<b>Take/Duplicate Take</b>	Duplicates the currently selected Take.
	<b>Take/Remove Take</b>	Deletes the currently selected Take. This command is only available when a Take other than the original is selected.
	<b>Take/[Take #1]</b>	Makes the Take named here currently active, appearing in front of any others. A bullet appears next to the current selection.
	<b>Quantize...</b>	Opens the <a href="#">Quantize dialog box</a> , allowing you to automatically correct the start time of selected Control Events.
	<b>Adjust Value...</b>	Opens the <a href="#">Value Adjustment dialog box</a> , allowing you to adjust the value of selected Control Events.
	<b>Half Time</b>	Halves the time value of a selected Control Event, doubling its Playback Tempo.
	<b>Double Time</b>	Doubles the time value of a selected Control Event, halving its Playback Tempo.



Description The **MIDI** menu allows you to control the CAMPS Sequencer Engine and manage MIDI signals.



Many of these Menu Items won't be available unless a Document is open.

Items

### **Playback**

Starts Audition Playback of the currently selected Control Events with an automatically inserted Playback Loop. If no individual Control Events are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.



If the [Chord Track](#) is activated, Chords in the same Bar region will be also played back.

### **Playback with Others**

Starts Audition Playback of the currently selected Control Events with an automatically inserted Playback Loop along with all the other activated Tracks in the same Bar region. If no individual Control Events are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.



If the [Chord Track](#) is activated, Chords in the same Bar region will be also played back.

### **Play**

Starts Playback of the current Document.

### **Stop**

Stops Playback of the current Document.

### **Record/Start Recording**

Starts Recording in the current Document.

### **Record/Start Over-dubbing**

Starts Over-Dub Recording in the current Document.

### **Record/Start Step Recording**

Starts Step Recording in the current Document.

### **Jump To/Top**

Moves the Playback Pointer position and viewpoint to the beginning of the current Line Block. Executing this command also enables the Auto Scroll function if previously disabled.

### **Jump To/End**

Moves the Playback Pointer position and viewpoint to the end of the current Line Block. Executing this command also enables the Auto Scroll function if previously disabled.

### **Metronome**

Switches between activate or deactivate the Metronome during Playback and Recording. A checkmark appears next to this item when activated.

### **All Notes Off**

Sends the "All Notes Off" MIDI Event to current MIDI Devices. Use this command to stop unwanted sustained Notes after stopping Playback or inadvertently interrupting MIDI signaling.

**Reset All Controllers**

Sends the "Reset All Controllers" MIDI Event to current MIDI Devices. Use this command to reset certain MIDI parameters such as Volume, Pan or Modulation.

**Synchronize With/Internal Clock**

Sets CAMPS to Playback and Record using its own internal MIDI Clock. A bullet appears next to the current selection.

**Synchronize With/Tap**

Sets CAMPS to Playback and Record using "freewheel" Tempo pulses input by you on your computer's keyboard or your MIDI Instrument. A bullet appears next to the current selection.

**Synchronize With/MIDI Clock**

Sets CAMPS to Playback and Record in "slave" mode using an external MIDI Clock source, such as another Sequencer. A bullet appears next to the current selection.

**Synchronize With/SMPTE**

Sets CAMPS to Playback and Record using MIDI Time Code converted from an external SMPTE Time Code source, such as a click track from an audio or video tape deck. A SMPTE converter must be employed between a raw SMPTE source and the MIDI port used by CAMPS. A bullet appears next to the current selection.

**Transmit Clock/MIDI Clock**

Enables CAMPS to send its MIDI Clock signal to an external device. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer to synchronize with CAMPS. A checkmark appears next to this item when enabled.

**Transmit Clock/SMPTE**

Enables CAMPS to send MIDI Time Code to an external SMPTE converter. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer or other device to synchronize with CAMPS. A checkmark appears next to this item when enabled.

**MIDI Mapper**

Switches between enable or disable the Windows Operating System MIDI Mapper. When enabled, CAMPS passes MIDI Output Device selection control to the Windows Multimedia applet in the Control Panel. When disabled, MIDI Output Devices can be selected from within CAMPS, allowing much greater flexibility. A checkmark appears next to this item when enabled.

**MIDI Setup...**

Opens the [MIDI Setup dialog box](#), allowing you to manage many MIDI signaling details. This includes settings for input, output, sync and Devices.

**Description** The **View** menu allows you to select objects to display and how to display them. Use **Save Display Settings** to save the current display settings of the Control Draw Editor for its next session.



Many of these Menu Items won't be available unless a Document is open. Also, some of these Menu Items will only be available when the Control Draw Editor is active.

<b>Items</b>	<b>Control View/Control Change...</b>	Sets the Draw Area to display Control Change Events and opens the <a href="#">Select a Control dialog box</a> , allowing you to specify the type of MIDI Control Change Event to display in the Draw Area. A bullet appears next to the current selection.
	<b>Control View/Poly After Touch...</b>	Sets the Draw Area to display Poly After Touch Events and opens the appropriate <a href="#">Select a Key dialog box</a> , allowing you to specify the MIDI Pitch of the Poly After Touch Events to display in the Draw Area. If the currently selected Line Block is in the Drums Track Category, the list of available Keys in the <a href="#">Select a Key dialog box</a> will change accordingly. A bullet appears next to the current selection.
	<b>Control View/Channel After Touch</b>	Sets the Draw Area to display Channel After Touch Events. A bullet appears next to the current selection.
	<b>Control View/Program Change</b>	Sets the Draw Area to display Program Change Events. A bullet appears next to the current selection.
	<b>Control View/Pitch Bend</b>	Sets the Draw Area to display Pitch Bend Events. A bullet appears next to the current selection.
	<b><u>G</u>rid View/<u>B</u>ar Grid</b>	Switches between Show or Hide the Bar Grid in the Text Info, Lyric and Draw Areas. The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. A checkmark appears next to this Menu Item when set to Show.
	<b><u>G</u>rid View/<u>B</u>eat Grid</b>	Switches between Show or Hide the Beat Grid in the Text Info, Lyric and Draw Areas. The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. A checkmark appears next to this Menu Item when set to Show.
	<b><u>G</u>rid View/<u>V</u>alue Grid</b>	Switches between Show or Hide the Value Grid in the Draw Area. The Value Grid is a pattern of evenly spaced horizontal lines marking vertical divisions between MIDI Control Event data Values for visual reference. A checkmark appears next to this Menu Item when set to Show.

### **Grid View/Align to Grid**

Switches between Activate or Deactivate Align To Grid in the Draw Area. The Align To Grid function causes Control Events being created or moved to snap their position to the nearest Grid point as specified in the Grid Setup dialog box. Depending on your settings in the Grid Setup dialog box, this Alignment Grid will not necessarily coincide with the visual Bar or Beat Grids described above. A checkmark appears next to this Menu Item when set to Activate.

### **Grid View/Grid Setup...**

Opens the [Grid Setup dialog box](#), allowing you to adjust the Alignment Grid Resolution for the Draw Area of the Control Draw Editor and various Areas of other Editors.

### **Toolbars/Main Toolbar**

Switches between Show or Hide the [Main toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Status Bar**

Switches between Show or Hide the [Status Bar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Playback Control Toolbar**

Switches between Show or Hide the [Playback Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Record Control Toolbar**

Switches between Show or Hide the [Record Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Clock Sync Toolbar**

Switches between Show or Hide the [Clock Sync toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Device Control Toolbar**

Switches between Show or Hide the [Device Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Tempo Toolbar**

Switches between Show or Hide the [Tempo toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Note Stamp Toolbar**

Switches between Show or Hide the [Note Stamp toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Rest Toolbar**

Switches between Show or Hide the [Rest toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Beat Toolbar**

Switches between Show or Hide the [Beat toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Time Toolbar**

Switches between Show or Hide the [Time toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Zoom/Zoom Out (H)**

Incrementally decreases the Horizontal size of the Bar, Text Info, Note Data, Lyric and Draw Areas, increasing their viewable area.

### **Zoom/Zoom In (H)**

Incrementally increases the Horizontal size of the Bar, Text Info, Note Data, Lyric, and Draw Areas, decreasing their viewable area.

### **Auto Scroll**

Sets the viewable area in the Bar, Text Info, Note Data, Lyric and Draw Areas to follow the Playback Pointer. A checkmark appears next to this item when enabled.

### **Jump To Location...**

Opens the [Jump To Location dialog box](#), allowing you to specify the beginning Bar of the viewable area. Once specified, **Auto Scroll** is temporarily deactivated.

### **Edit Buttons**

Switches between Show or Hide the Edit Buttons in the Control Draw Editor. A checkmark appears next to this Menu Item when set to Show.

### **Interactive Information**

Switches between Show or Hide the Interactive Information display. A checkmark appears next to this Menu Item when set to Show.

### **Big Beat Window**

Switches between Show or Hide the Big Beat Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Beat Toolbar](#)..

### **Big Time Window**

Switches between Show or Hide the Big Time Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Time Toolbar](#)..

### **Background Bitmap**

Switches between Show or Hide a Background Bitmap image. A checkmark appears next to this Menu Item when set to Show. This item will only be available if a Background Bitmap image is specified in the Preferences dialog box.

### **Save Display Settings**

Saves current Control Draw Editor Display Settings as defaults for future sessions. Settings included are Grid, Zoom, Dividing Bar positions, Background Bitmap, etc.

Description The **Editors** menu allows you to open Editors and select Editing Tools.



None of these Menu Items will be available unless a Document is open. Many also require a related object first be selected.

Items	<b><u>E</u>vent List Editor</b>	Opens the <a href="#">Event List Editor</a> , allowing you to edit individual Events of the selected Line Block in vertical list format.
	<b><u>P</u>ianoroll Editor</b>	Opens the <a href="#">Pianoroll Editor</a> , allowing you to edit Notes of the selected Line Block in Pianoroll graph format.
	<b><u>C</u>ontrol Draw Editor</b>	Opens a new <a href="#">Control Draw Editor</a> window, allowing you to make alternate Control Event edits in the selected Line Block.
	<b><u>N</u>otation Editor</b>	Opens the <a href="#">Notation Editor</a> , allowing you to edit Notes of the selected Line Block in Musical Notation form.
	<b><u>T</u>empo <u>L</u>ist Editor</b>	Opens the <a href="#">Tempo List Editor</a> , allowing you to edit individual Tempo Events of the current Document in vertical list format.
	<b><u>T</u>empo <u>D</u>raw Editor</b>	Opens the <a href="#">Tempo Draw Editor</a> , allowing you to edit Tempo Events of the current Document with a unique freestyle curve drawing method.
	<b><u>T</u>ext List Editor</b>	Opens the <a href="#">Text List Editor</a> , allowing you to edit Text Events of the current Document in vertical list format.
	<b><u>T</u>ool/<u>A</u>rrow</b>	Allows you to select and manipulate objects in the Control Draw Editor.
	<b><u>T</u>ool/<u>I</u> Beam</b>	Allows you to quickly select regions in the Draw Area.
	<b><u>T</u>ool/<u>P</u>en</b>	Allows you to quickly create and edit Control Events using a freestyle drawing method.
	<b><u>T</u>ool/<u>L</u>ine</b>	Allows you to quickly create and edit Control Events using a straight line drawing method.
	<b><u>T</u>ool/<u>O</u>val</b>	Allows you to quickly create and edit Control Events using an automatic curve drawing method.
	<b><u>T</u>ool/<u>E</u>raser</b>	Allows you to quickly delete objects.

**Description** The **Window** menu allows you to arrange Document and Editor windows in the work area of the CAMPS Application Window.



The **Window** Menu Item won't be available unless a Document is open.

<b>Items</b>	<b><u>N</u>ew Control Draw Editor</b>	Opens a new <a href="#">Control Draw Editor</a> window for the currently selected Line Block.
	<b><u>C</u>ascade</b>	Arranges windows in a diagonal overlapping manner, allowing you to individually select them. Any maximized windows will be reduced in size to accommodate the Cascade arrangement.
	<b><u>T</u>ile</b>	Arranges windows into horizontal blocks separated vertically, one above or below the next.
	<b><u>A</u>rrange Icons</b>	Arranges minimized window title bars in an orderly fashion within the CAMPS Application Window.
	<b>[Window]</b>	Makes the window named here currently active, appearing in front of any others. The number of windows listed here equals the number of open windows in CAMPS. A checkmark appears next to the current selection.



**Description** The **Help** menu allows you to access these Help documents. The Help menu also allows you to add a background text message to your Composition Document and the currently selected Line Block.



The **Memo** Menu Items won't be available unless a Document is open.


<b>Items</b>	<b><u>H</u>elp</b>	Opens the Table of Contents for these Help documents.
	<b>Line Block <u>M</u>emo...</b>	Opens the <a href="#">Memo dialog box</a> , allowing you to add an underlying text message to the currently selected Line Block.
	<b><u>D</u>ocument <u>M</u>emo...</b>	Opens the <a href="#">Memo dialog box</a> , allowing you to add an underlying text message to your Document.
	<b><u>A</u>bout <b>CAMPS</b></b>	Opens the CAMPS banner with a text scroll area containing information about CAMPS and the Microworks Corporation.



Description The **File** menu allows you to manage Document files and shut down CAMPS.



Some of these Menu Items won't be available unless a Document is open. Additionally, the **Save** and **Revert** commands won't be available until the current Document has been altered.

Items	<b><u>N</u>ew</b>	Creates a New untitled Document as specified by the settings in the New Document Setup dialog box.
	<b><u>N</u>ew Setup...</b>	Opens the <a href="#">New Document Setup dialog box</a> , allowing you to set basic defaults for New Documents.
	<b><u>O</u>pen...</b>	Opens the Open dialog box, allowing you to select and open a Document.
	<b><u>C</u>lose</b>	 When opening a Standard MIDI File, CAMPS automatically analyzes Line data and assigns <a href="#">appropriate Line Blocks</a> and one of <a href="#">six Category settings</a> to each Track. You can alter these settings at any time.
	<b><u>S</u>ave</b>	Closes the current Document. If this Document has been altered since opening, you will be asked whether or not you wish to save changes before closing.
	<b><u>S</u>ave <u>A</u>s...</b>	Saves the current Document using its existing filename and location.
	<b><u>R</u>evert</b>	Opens the Save As dialog box, allowing you to save the current Document to a specified filename and location.
	<b><u>E</u>xport SMF...</b>	Allows you to close and reopen the current Document in one step, discarding any changes made after last saving it. You'll be asked if you're sure you want to proceed before this operation is completed.
	<b>[Recent Document]</b>	Opens the <a href="#">Export Standard MIDI File dialog box</a> , allowing you to save the current Document as a Standard MIDI File. After specifying a filename and location and clicking <b>Save</b> , the <a href="#">Export Options dialog box</a> opens, allowing you to make final file format conversion settings.
	<b><u>E</u>xit</b>	Opens the recently opened Document named here. The number of Recent Documents listed here is adjustable in the <a href="#">Preferences dialog box</a> which can be opened from the Edit menu.
		Closes CAMPS and any open Documents. If any currently open Documents have been altered since opening, you will be asked whether or not you wish to save changes before closing.

Description The **Edit** menu allows you to Edit objects in the Document Window. For example, you can **Cut**, **Copy**, **Paste**, and **Clear** objects in the Text Info, Chord, Track and Line Areas of the Document Window.



Many of these Menu Items won't be available unless a Document is open. Most also require a related object first be selected. Finally, most of these Menu Items change depending on the last object or Area selected in the Document Window.

Items	<b><u>U</u>ndo [Action] [Object]</b>	Reverses your last editing action. This command's name and function change depending on your last action. For example, if you just moved a Chord, this command's name becomes <b>Undo Move Chord</b> . Once executed, the <b>Undo</b> command becomes <b>Redo</b> and vice versa.
	<b><u>C</u>ut [Object]</b>	Removes selected object from a Document for reinsertion using the <b>Paste</b> command, if desired. This command's name and function change depending on your last selection. For example, if you just selected a Chord, this command's name becomes <b>Cut Chord</b> .
	<b><u>C</u>opy [Object]</b>	Specifies selected object for duplication using the <b>Paste</b> command. This command's name and function change depending on your last selection. For example, if you just selected a Chord, this command's name becomes <b>Copy Chord</b> .
	<b><u>P</u>aste [Object]</b>	Inserts the last object specified with the <b>Cut</b> or <b>Copy</b> command into the currently selected relative Area. This command's name and function change depending on your last action. For example, if you just <b>Cut</b> a Chord and selected a region in a Chord Block, this command's name becomes <b>Paste Chord</b> .
	<b><u>C</u>lear [Object]</b>	Deletes the currently selected objects.
	<b><u>S</u>elect <u>A</u>ll</b>	Automatically selects all relative objects in the currently selected region or Area. For example, if you just selected a Chord, <b>Select All</b> selects the rest of the Chords in the current Chord Block.
	<b><u>N</u>ew [Object]...</b>	Opens an appropriate dialog box, allowing you to create a New object. This command's name and function change depending on your last selection. For example, if you just selected a Chord, this command's name becomes <b>New Chord...</b> and opens the New Chord dialog box.
	<b><u>D</u>uplicate [Object]</b>	Immediately creates a Duplicate of a selected object. This command's name and function change depending on your last selection. For example, if you just selected a Chord, this command's name becomes <b>Duplicate Chord</b> .
	<b><u>M</u>ake Alias of [Object]</b>	Immediately creates an Alias (active copy) of a selected Chord Block or Line Block. This command's name and function change depending on your last selection. For example, if you just selected a Chord, this command's name becomes <b>Make Alias of Chord Block</b> .
	<b><u>S</u>uspend Alias</b>	Disables the active status of all Aliases of a selected Chord Block or Line Block, changing them to independent copies.
	<b><u>M</u>erge [Line Block]</b>	Merges 2 or more selected Line Blocks into one.

**Bring To Front**

Brings the currently selected overlapping Chord Block or Line Block to the foreground. In the case of Chord Blocks, this command also makes the selected Chord Block active.

**Send To Back**

Sends the currently selected overlapping Chord Block or Line Block to the background. In the case of Chord Blocks, this command also makes the selected Chord Block inactive.

**Time Signature Setup...**

Opens the [Time Signature Setup dialog box](#), allowing you to change the Time Signature in a specified region of Bars.

**SMPTE Offset Setup...**

Opens the [SMPTE Offset Setup dialog box](#), allowing you to offset SMPTE synchronization between CAMPS and a master SMPTE source.

**Preferences...**

Opens the [Preferences dialog box](#), allowing you to set basic operational and appearance defaults in CAMPS.

**Description** The **Chord** menu allows you to automatically or manually assign Chords to your Composition Document. CAMPS in turn uses these Chord definitions for Auto Composing and other functions.



The **Chord** menu won't be available unless a Document is open. Many of these items also require a related object first be selected.

<b>Items</b>	<b><u>G</u>enerate...</b>	Opens the <a href="#">Generate Chord Progression dialog box</a> which uses existing Key and Mode as well as Chord Function settings to generate alternatives for selected Chords.
	<b><u>E</u>Zgenerate</b>	Automatically generates new Chords for selected Chords using existing Key and Mode as well as Chord Function settings without opening the Generate Chord Progression dialog box.
	<b><u>H</u>armonize...</b>	Opens the <a href="#">Harmonize dialog box</a> which uses existing Line and Chord data to provide choices for creating Chords and adjusting Key and Mode.
	<b><u>E</u>Zharmonize</b>	Automatically creates Chords and adjusts Key and Mode using existing Line and Chord data without opening the Harmonize dialog box.
	<b><u>E</u>Zharmonize with Same <u>K</u>ey</b>	Automatically creates new Chords in existing Key and Mode using selected Line data without opening the Harmonize dialog box.
	<b><u>D</u>etect from MIDI Instrument...</b>	Opens the <a href="#">Chord Detection dialog box</a> , allowing you to "spell" desired Chord on your MIDI Instrument to replace selected Chords.
	<b><u>C</u>onstruct...</b>	Opens the <a href="#">Chord Construction dialog box</a> , allowing you to manually build a desired Chord from lists of components to replace selected Chords.
	<b><u>E</u>Zcompose <u>L</u>ines in Region</b>	Automatically Composes Line data in a region of selected Chords.
	<b><u>E</u>Zharmonize <u>A</u>ll</b>	Automatically creates Chords for an entire Document using all existing Tonal Line data. See <a href="#">details</a> .

Description The **Line** menu allows you to edit and manipulate Line data, including managing Takes.



The **Line** menu won't be available unless a Document is open. Additionally, most of these items won't be available unless a Line Block is selected.

Items	<b>Take/Take List...</b>	Opens the <a href="#">Take List dialog box</a> , allowing you to manipulate Takes for a selected Line Block.
	<b>Take/New Take...</b>	Opens the <a href="#">New Take dialog box</a> , allowing you to create a New blank or Auto Composed Take for a selected Line Block.
	<b>Take/Duplicate Take</b>	Duplicates the currently selected Take.
	<b>Take/Remove Take</b>	Deletes the currently selected Take. This command is only available when a Take other than the original is selected.
	<b>Take/[Take #1]</b>	Makes the Take named here currently active, appearing in front of any others. A bullet appears next to the current selection.
	<b>Compose...</b>	Opens the <a href="#">Compose dialog box</a> , allowing you to adjust guidelines for Auto Composing, and to Auto Compose Notes in a selected Line Block.
	<b>EZcompose</b>	Automatically Composes Notes in a selected Line Block without opening the Compose dialog box.
	<b>Detect Dissonant Intervals...</b>	Opens the <a href="#">Dissonant Intervals Detection dialog box</a> , allowing you to automatically Detect and resolve Dissonant (harsh sounding) Intervals between Notes in a selected Line Block and Notes occurring at the same time in Line Blocks of other Tracks.
	<b>Quantize...</b>	Opens the <a href="#">Quantize dialog box</a> , allowing you to automatically correct the start time of Notes on an individual or Line Block basis.
	<b>Transpose...</b>	Opens the <a href="#">Transpose dialog box</a> , allowing you to shift the Pitch of all selected Notes equally.
	<b>Adjust Articulation...</b>	Opens the <a href="#">Articulation Adjustment dialog box</a> , allowing you to change the length of Notes on an individual or Line Block basis.
	<b>Adjust Velocity...</b>	Opens the <a href="#">Velocity Adjustment dialog box</a> , allowing you to change the loudness of Notes on an individual or Line Block basis.
	<b>Map Pitches....</b>	Opens the <a href="#">Map Pitches dialog box</a> , allowing you to shift the MIDI Pitch value of all occurrences of specified Notes in selected Line data.
	<b>Half Time</b>	Halves the time value of a selected Line Block, doubling its Playback Tempo.
	<b>Double Time</b>	Doubles the time value of a selected Line Block, halving its Playback Tempo.

## **EZharmonize With**

Automatically creates Chords and adjusts Key and Mode using selected Line Blocks without opening the [Harmonize dialog box](#).

## Song Form Detection and Orchestration Role Detection

**Description** This is, by far, one of the most powerful and unique features available only in CAMPS. With just a single mouse-click, CAMPS automatically creates Chord Blocks containing Chords for an entire Document using all existing Tonal Line data.

To enable this **100 % Automatic Chord Definition**, CAMPS analyzes:

- Tonal quality of all Tracks
- [Orchestration Role of all Tracks](#) such as "Melody", "Bass", etc.
- Song Form

of your Composition.

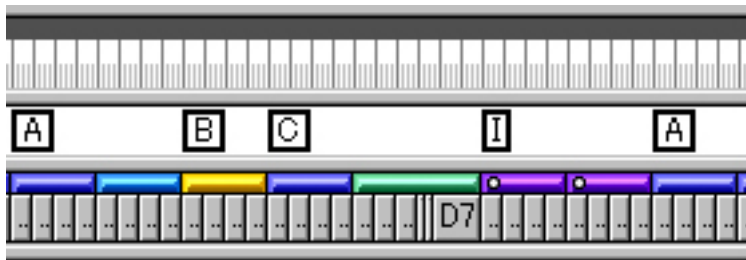
Based on the result of these analyses, CAMPS creates Chords for an entire Composition.

**Using** Simply import your MIDI Composition into CAMPS and then choose the **EZHarmonize All** command from the **Chord** menu. As you repeatedly choose the command, you will hear hundreds of different Chord Progressions based on the analysis of your original Composition.

By holding the **Shift** key down while choosing the **EZHarmonize All**, CAMPS will look for results with fewer Chord Blocks (more repetitions of Chord Blocks). By holding the **Ctrl** key down instead, CAMPS will look for results with fewer Chords in each Chord Block. You can combine both keys if you desire.



The flexibility of the musical tools presented here would not be possible if their functions were made mostly automatic. For example, the "EZ" tools in CAMPS are designed to give a quick starting point and help in familiarization with CAMPS objects used for building compositions. They are not designed to automatically create some great music for you. Consequentially, the more parameters you define, the better your musical results will be.



Description The **MIDI** menu allows you to control the CAMPS Sequencer Engine and manage MIDI signals.



Many of these Menu Items won't be available unless a Document is open.

Items

<b><u>P</u>lay</b>	Starts Playback of the current Document.
<b><u>S</u>top</b>	Stops Playback of the current Document.
<b><u>R</u>ecord/Start <u>R</u>ecording</b>	Starts Recording in the current Document.
<b><u>R</u>ecord/Start <u>O</u>ver-dubbing</b>	Starts Over-Dub Recording in the current Document.
<b><u>R</u>ecord/Start <u>S</u>tep Recording</b>	Starts Step Recording in the current Document.
<b><u>J</u>ump To/<u>T</u>op</b>	Moves the Playback Pointer position and viewpoint to the beginning of the current Document. Executing this command also enables the Auto Scroll function if previously disabled.
<b><u>J</u>ump To/<u>E</u>nd</b>	Moves the Playback Pointer position and viewpoint to the end of the current Document. Executing this command also enables the Auto Scroll function if previously disabled.
<b><u>M</u>etronome</b>	Switches between activate or deactivate the Metronome during Playback and Recording. A checkmark appears next to this item when activated.
<b>All <u>N</u>otes Off</b>	Sends the "All Notes Off" MIDI Event to current MIDI Devices. Use this command to stop unwanted sustained Notes after stopping Playback or inadvertently interrupting MIDI signaling.
<b><u>R</u>eset All Controllers</b>	Sends the "Reset All Controllers" MIDI Event to current MIDI Devices. Use this command to reset certain MIDI parameters such as Volume, Pan or Modulation.
<b><u>S</u>ynchronize With/<u>I</u>nternal Clock</b>	Sets CAMPS to Playback and Record using its own internal MIDI Clock. A bullet appears next to the current selection.
<b><u>S</u>ynchronize With/<u>T</u>ap</b>	Sets CAMPS to Playback and Record using "freewheel" Tempo pulses input by you on your computer's keyboard or your MIDI Instrument. A bullet appears next to the current selection.
<b><u>S</u>ynchronize With/<u>M</u>IDI Clock</b>	Sets CAMPS to Playback and Record in "slave" mode using an external MIDI Clock source, such as another Sequencer. A bullet appears next to the current selection.
<b><u>S</u>ynchronize With/<u>S</u>MPTE</b>	Sets CAMPS to Playback and Record using MIDI Time Code converted from an external SMPTE Time Code source, such as a click track from an audio or video tape deck. A SMPTE converter must be employed between a raw SMPTE source and the MIDI port used by CAMPS. A bullet appears next to the current selection.



**Transmit Clock/MIDI Clock**

Enables CAMPS to send its MIDI Clock signal to an external device. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer to synchronize with CAMPS. A checkmark appears next to this item when enabled.

**Transmit Clock/SMPTE**

Enables CAMPS to send MIDI Time Code to an external SMPTE converter. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer or other device to synchronize with CAMPS. A checkmark appears next to this item when enabled.

**MIDI Mapper**

Switches between enable or disable the Windows Operating System MIDI Mapper. When enabled, CAMPS passes MIDI Output Device selection control to the Windows Multimedia applet in the Control Panel. When disabled, MIDI Output Devices can be selected from within CAMPS, allowing much greater flexibility. A checkmark appears next to this item when enabled.

**MIDI Setup...**

Opens the [MIDI Setup dialog box](#), allowing you to manage many MIDI signaling details. This includes settings for input, output, sync and Devices.

**Description** The **View** menu allows you to select objects to display and how to display them. Use **Save Display Settings** to save the current display settings of the Document Window for its next session.



Many of these Menu Items won't be available unless a Document is open.

<b>Items</b>	<b><u>C</u>hord <u>V</u>iew/<u>R</u>oman <u>N</u>umeral</b>	Sets display of Chord Containers to <a href="#">Roman Numeral Analysis</a> (II-7, V7, etc.). A bullet appears next to the current selection.
	<b><u>C</u>hord <u>V</u>iew/<u>C</u>hord <u>N</u>ame</b>	Sets display of Chord Containers to <a href="#">Chord Name</a> (D-7, G7, etc.). A bullet appears next to the current selection.
	<b><u>C</u>hord <u>V</u>iew/<u>S</u>cale <u>N</u>ame</b>	Sets display of Chord Containers to <a href="#">Scale Name</a> , also known as Mode (Dorian, Mixolydian, etc.). A bullet appears next to the current selection.
	<b><u>C</u>hord <u>V</u>iew/<u>S</u>cale <u>S</u>pelling</b>	Sets display of Chord Containers to <a href="#">Scale Spelling</a> , listing intervals from the Root (R, 3,5,7, etc.). A bullet appears next to the current selection.
	<b><u>C</u>hord <u>V</u>iew/<u>K</u>ey and <u>M</u>ode</b>	Sets display of Chord Containers to <a href="#">Key and Mode</a> ; the same as each Chord Container's Key and Mode button. A bullet appears next to the current selection.
	<b><u>G</u>rid <u>V</u>iew/<u>B</u>ar <u>G</u>rid</b>	Switches between Show or Hide the Bar Grid in the Text Info, Chord and Line Areas. The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. A checkmark appears next to this Menu Item when set to Show.
	<b><u>G</u>rid <u>V</u>iew/<u>B</u>eat <u>G</u>rid</b>	Switches between Show or Hide the Beat Grid in the Text Info, Chord and Line Areas. The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. A checkmark appears next to this Menu Item when set to Show.
	<b><u>G</u>rid <u>V</u>iew/<u>T</u>rack <u>G</u>rid</b>	Switches between Show or Hide the Track Grid in the Track and Line Areas. The Track Grid is a pattern of evenly spaced horizontal lines marking vertical divisions between MIDI Tracks for visual reference. A checkmark appears next to this Menu Item when set to Show.

### **Grid View/Align To Grid**

Switches between Activate or Deactivate Align To Grid in the Text Info, Chord and Line Areas. The Align To Grid function causes objects being created or moved to snap their position to the nearest Grid point as specified in the Grid Setup dialog box. Depending on your settings in the Grid Setup dialog box, this Alignment Grid will not necessarily be the same as the visual Bar or Beat Grids described above. A checkmark appears next to this Menu Item when set to Activate.

### **Grid View/Grid Setup...**

Opens the [Grid Setup dialog box](#), allowing you to adjust the Alignment Grid Resolution for individual areas of the Document Window and applicable Editors. Depending on which Area of the Document Window is active before choosing this Menu Item, the corresponding pane in the Grid Setup dialog box will be preselected.

### **Toolbars/Main Toolbar**

Switches between Show or Hide the [Main toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Status Bar**

Switches between Show or Hide the [Status Bar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Playback Control Toolbar**

Switches between Show or Hide the [Playback Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Record Control Toolbar**

Switches between Show or Hide the [Record Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Clock Sync Toolbar**

Switches between Show or Hide the [Clock Sync toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Device Control Toolbar**

Switches between Show or Hide the [Device Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Tempo Toolbar**

Switches between Show or Hide the [Tempo toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Note Stamp Toolbar**

Switches between Show or Hide the [Note Stamp toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Rest Toolbar**

Switches between Show or Hide the [Rest toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Beat Toolbar**

Switches between Show or Hide the [Beat toolbar](#). A checkmark appears next to this Menu Item when set to Show.

## Toolbars/Time Toolbar

Switches between Show or Hide the [Time toolbar](#). A checkmark appears next to this Menu Item when set to Show.

## Zoom/Zoom Out (V)

Incrementally decreases the Vertical size of the Track and Line Areas, increasing their viewable area.

## Zoom/Zoom In (V)

Incrementally increases the Vertical size of the Track and Line Areas, decreasing their viewable area.

## Zoom/Zoom Out (H)

Incrementally decreases the Horizontal size of the Bar, Text Info, Chord and Line Areas, increasing their viewable area.

## Zoom/Zoom In (H)

Incrementally increases the Horizontal size of the Bar, Text Info, Chord and Line Areas, decreasing their viewable area.

## Auto Scroll

Sets the viewable area in the Bar, Text Info, Chord and Line Areas to follow the Playback Pointer. A checkmark appears next to this item when enabled.

## Jump To Location...

Opens the [Jump To Location dialog box](#), allowing you to specify the beginning Bar of the viewable area. Once specified, **Auto Scroll** is temporarily deactivated.

## Edit Buttons

Switches between Show or Hide the Edit Buttons in the Document Window. A checkmark appears next to this Menu Item when set to Show.

## Interactive Information

Switches between Show or Hide the Interactive Information display. A checkmark appears next to this Menu Item when set to Show.

## Line Block Name

Switches between Show or Hide Names at the beginning of Line Blocks. A checkmark appears next to this Menu Item when set to Show.

## [Big Beat Window](#)

Switches between Show or Hide the Big Beat Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Beat Toolbar](#)..

## [Big Time Window](#)

Switches between Show or Hide the Big Time Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Time Toolbar](#)..

## Background Bitmap

Switches between Show or Hide a Background Bitmap image. A checkmark appears next to this Menu Item when set to Show. This item will only be available if a Background Bitmap image is specified in the Preferences dialog box.

## Save Display Settings

Saves current Document Window Display Settings as defaults for future sessions. Settings included are Grid, Zoom, Dividing Bar positions, Background Bitmap, etc.

Description The **Editors** menu allows you to open Editors and select Editing Tools.



None of these Menu Items will be available unless a Document is open. Many also require a related object first be selected.

Items	<b><u>E</u>vent List Editor</b>	Opens the <a href="#">Event List Editor</a> , allowing you to edit individual Events of the selected Line Block in vertical list format.
	<b><u>P</u>ianoroll Editor</b>	Opens the <a href="#">Pianoroll Editor</a> , allowing you to edit Notes of a selected Line Block in Pianoroll graph format.
	<b><u>C</u>ontrol Draw Editor</b>	Opens the <a href="#">Control Draw Editor</a> , allowing you to edit MIDI Control events of a selected Line Block with a unique freestyle curve drawing method.
	<b><u>N</u>otation Editor</b>	Opens the <a href="#">Notation Editor</a> , allowing you to edit Notes of a selected Line Block in Musical Notation form.
	<b><u>T</u>empo <u>L</u>ist Editor</b>	Opens the <a href="#">Tempo List Editor</a> , allowing you to edit individual Tempo Events of the current Document in vertical list format.
	<b><u>T</u>empo <u>D</u>raw Editor</b>	Opens the <a href="#">Tempo Draw Editor</a> , allowing you to edit Tempo Events of the current Document with a unique freestyle curve drawing method.
	<b><u>T</u>ext List Editor</b>	Opens the <a href="#">Text List Editor</a> , allowing you to edit Text Events of the current Document in vertical list format.
	<b><u>T</u>ool/<u>A</u>rrow</b>	Allows you to select and manipulate objects in the Document Window.
	<b><u>T</u>ool/<u>P</u>en</b>	Allows you to quickly create objects or define values with a unique freestyle drawing method. The function of this Tool changes depending on the Area or Editor you are working in.
	<b><u>T</u>ool/<u>M</u>agic Wand</b>	Allows you to quickly create Chord Blocks or Line Blocks with automatically filled-in data (EZgenerate).
	<b><u>T</u>ool/<u>E</u>raser</b>	Allows you to quickly delete objects in a Document.
	<b><u>T</u>ool/<u>R</u>azor</b>	Allows you to quickly split a Chord Block or Line Block at any point in the selected Block.

Description The **Window** menu allows you to arrange Document and Editor windows in the work area of the CAMPS Application Window.



The **Window** Menu Item won't be available unless a Document is open.

Items	<b><u>N</u>ew Document Window</b>	Opens a new <a href="#">Document Window</a> , allowing you to make alternate edits of the current Document.
	<b><u>C</u>ascade</b>	Arranges windows in a diagonal overlapping manner, allowing you to individually select them. Any maximized windows will be reduced in size to accommodate the Cascade arrangement.
	<b><u>T</u>ile</b>	Arranges windows into horizontal blocks separated vertically, one above or below the next.
	<b><u>A</u>rrange Icons</b>	Arranges minimized window title bars in an orderly fashion within the CAMPS Application Window.
	<b>[W]indow</b>	Makes the window named here currently active, appearing in front of any others. The number of windows listed here equals the number of open windows in CAMPS. A checkmark appears next to the current selection.

**Description** The **Help** menu allows you to access these Help documents. The Help menu also allows you to add a background text message to your Composition Document and several of its individual objects.



The **Memo** Menu Items won't be available unless a Document is open. The **[Object] Memo** command also requires a related object first be selected.

**Items**

**Help**

Opens the Table of Contents for these Help documents.

**[Object] Memo...**

Opens the [Memo dialog box](#), allowing you to add an underlying text message to different objects in your Document. This command's name and function change depending on your last action. For example, if you just selected a Track, this command's name becomes **Track Memo....**

**Document Memo...**

Opens the [Memo dialog box](#), allowing you to add an underlying text message to your Document.

**About CAMPS**

Opens the CAMPS banner with a text scroll area containing information about CAMPS and the Microworks Corporation.

# Menu Items for the Event List Editor

**Description** Here is a complete list of Menu Items when the Event List Editor is active.

**Items**

File	
<a href="#">New</a>	Ctrl + N
<a href="#">New Setup...</a>	Ctrl + Shift + N
<a href="#">Open...</a>	Ctrl + O
<a href="#">Close</a>	
<a href="#">Save</a>	Ctrl + S
<a href="#">Save As...</a>	
<a href="#">Revert</a>	
<a href="#">Export SMF...</a>	
1	<a href="#">[Recent Document]</a>
2	<a href="#">[Recent Document]</a>
	:
<a href="#">Exit</a>	

Edit	
<a href="#">Undo [Action] [Object]</a>	Ctrl + Z
<a href="#">Cut Event</a>	Ctrl + X
<a href="#">Copy Event</a>	Ctrl + C
<a href="#">Paste Event</a>	Ctrl + V
<a href="#">Clear Event</a>	Del
<a href="#">Select All</a>	Ctrl + A
<a href="#">New Event...</a>	Ctrl + I
<a href="#">Duplicate Event</a>	Ctrl + D
<a href="#">SMPTE Offset Setup...</a>	
<a href="#">Preferences...</a>	

Line	
<a href="#">Take</a>	>
<a href="#">Detect Dissonant Intervals...</a>	
<a href="#">Quantize...</a>	
<a href="#">Transpose...</a>	
<a href="#">Adjust Articulation...</a>	
<a href="#">Adjust Velocity...</a>	
<a href="#">Map Pitches....</a>	
<a href="#">Adjust Value...</a>	
<a href="#">Half Time</a>	
<a href="#">Double Time</a>	

Take	
<a href="#">Take List...</a>	Ctrl + F
<a href="#">New Take...</a>	Ctrl + T
<a href="#">Duplicate Take</a>	Ctrl + U
<a href="#">Remove Take</a>	
<a href="#">[Take #1]</a>	



## MIDI

### Playback

[Playback with Others](#)

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[Play](#)

[Stop](#)

[Record](#) >

[Jump To](#) >

---

[Metronome](#) Ctrl  
+M

---

[All Notes Off](#)

[Reset All Controllers](#)

---

[Synchronize With](#) >

[Transmit Clock](#) >

---

[MIDI Mapper](#)

[MIDI Setup...](#)

### Record

[Start Recording](#) F5

[Start Over-dubbing](#) F7

[Start Step Recording](#) F8

### Jump To

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[End](#) End

### Synchronize With

[Internal Clock](#)

[Tap](#)

[MIDI Clock](#)

[SMPTE](#)

### Transmit Clock

[MIDI Clock](#)

[SMPTE](#)

## View

[Event View](#) >

[Toolbars](#) >

---

[Auto Scroll](#) Ctrl +L

[Jump To Location...](#)

---

[Edit Buttons](#)

[Interactive Information](#)

---

[Big Beat Window](#)

[Big Time Window](#)

---

[Save Display Settings](#)

### Event View

[Note](#)

[Control Change](#)

[Poly After Touch](#)

[Channel After Touch](#)

[Program Change](#)

[Pitch Bend](#)

[Lyric](#)

[System Exclusive](#)

---

[Select Event Types...](#)

### Toolbars

[Main Toolbar](#)

[Status Bar](#)

---

[Playback Control Toolbar](#)

[Record Control Toolbar](#)

---

[Clock Sync Toolbar](#)

[Device Control Toolbar](#)

[Tempo Toolbar](#)

---

[Note Stamp Toolbar](#)

[Rest Toolbar](#)

---

[Beat Toolbar](#)

[Time Toolbar](#)

## Editors

[Event List Editor](#) F9

[Pianoroll Editor](#) F10

[Control Draw Editor](#) F11

[Notation Editor](#) F12

---

[Tempo List Editor](#)

[Tempo Draw Editor](#)

---

[Text List Editor](#)

## Window

[New Event](#)

[List Editor](#)

[Cascade](#)

[Tile](#)

[Arrange](#)

[Icons](#)

---

1 [\[Window\]](#)

2 [\[Window\]](#)

:

## Help

[Help](#)

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[Line Block Memo...](#)

[Document Memo...](#)


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[About CAMPS](#)

Description The **File** menu allows you to manage Document files and shut down CAMPS.



Some of these Menu Items won't be available unless a Document is open. Additionally, the **Save** and **Revert** commands won't be available until the current Document has been altered.

Items	<b><u>N</u>ew</b>	Creates a New untitled Document as specified by the settings in the New Document Setup dialog box.
	<b><u>N</u>ew Setup...</b>	Opens the <a href="#">New Document Setup dialog box</a> , allowing you to set basic defaults for New Documents.
	<b><u>O</u>pen...</b>	Opens the Open dialog box, allowing you to select and open a Document.
	<b><u>C</u>lose</b>	 <p>When opening a Standard MIDI File, CAMPS automatically analyzes Line data and assigns <a href="#">appropriate Line Blocks</a> and one of <a href="#">six Category settings</a> to each Track. You can alter these settings at any time.</p> <p>Closes the current Document. If this Document has been altered since opening, you will be asked whether or not you wish to save changes before closing.</p>
	<b><u>S</u>ave</b>	Saves the current Document using its existing filename and location.
	<b><u>S</u>ave <u>A</u>s...</b>	Opens the Save As dialog box, allowing you to save the current Document to a specified filename and location.
	<b><u>R</u>evert</b>	Allows you to close and reopen the current Document in one step, discarding any changes made after last saving it. You'll be asked if you're sure you want to proceed before this operation is completed.
	<b><u>E</u>xport SMF...</b>	Opens the <a href="#">Export Standard MIDI File dialog box</a> , allowing you to save the current Document as a Standard MIDI File. After specifying a filename and location and clicking <b>Save</b> , the <a href="#">Export Options dialog box</a> opens, allowing you to make final file format conversion settings.
	<b>[Recent Document]</b>	Opens the recently opened Document named here. The number of Recent Documents listed here is adjustable in the <a href="#">Preferences dialog box</a> which can be opened from the Edit menu.
	<b><u>E</u>xit</b>	Closes CAMPS and any open Documents. If any currently open Documents have been altered since opening, you will be asked whether or not you wish to save changes before closing.

## Menu Items for the Event List Editor / Edit

**Description** The **Edit** menu allows you to Edit MIDI Events in the Event List Editor. For example, you can **Cut**, **Copy**, **Paste** and **Clear** Events.



These Menu Items won't be available unless a Document is open and the Event List Editor is currently active with an Event selected.

<b>Items</b>	<p><b><u>U</u>ndo [Action] [Object]</b> Reverses your last editing action. This command's name and function change depending on your last action. For example, if you just moved an Event, this command's name becomes <b>Undo Move Event</b>. Once executed, the <b>Undo</b> command becomes <b>Redo</b> and vice versa.</p> <p><b><u>C</u>ut Event</b> Removes selected Event from a Document for reinsertion using the <b>Paste</b> command, if desired.</p> <p><b><u>C</u>opy Event</b> Specifies an Event for duplication using the <b>Paste</b> command.</p> <p><b><u>P</u>aste Event</b> Inserts the last Event specified with the <b>Cut</b> or <b>Copy</b> command into the currently selected region of the Event List.</p> <p><b><u>C</u>lear Event</b> Deletes the currently selected Events.</p> <p><b><u>S</u>elect <u>A</u>ll</b> Automatically selects all Events in the List.</p> <p><b><u>N</u>ew Event...</b> Opens the <a href="#">New Event dialog box</a>, allowing you to create a New Event.</p> <p><b><u>D</u>uplicate Event</b> Immediately creates a Duplicate of a selected Event.</p> <p><b><u>S</u>MPT<u>E</u> <u>O</u>ffset <u>S</u>etup...</b> Opens the <a href="#">SMPTE Offset Setup dialog box</a>, allowing you to offset SMPTE synchronization between CAMPS and a master SMPTE source.</p> <p><b><u>P</u>references...</b> Opens the <a href="#">Preferences dialog box</a>, allowing you to set basic operational and appearance defaults in CAMPS.</p>
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Description The **Line** menu allows you to edit and manipulate Line data, including managing Takes.



The **Line** menu won't be available unless a Document is open. Additionally, most of these Menu Items won't be available unless a related Event is selected.

Items	<b>Take/Take List...</b>	Opens the <a href="#">Take List dialog box</a> , allowing you to manipulate Takes for the selected Line Block.
	<b>Take/New Take...</b>	Opens the <a href="#">New Take dialog box</a> , allowing you to create a New blank or Auto Composed Take for the selected Line Block.
	<b>Take/Duplicate Take</b>	Duplicates the currently selected Take.
	<b>Take/Remove Take</b>	Deletes the currently selected Take. This command is only available when a Take other than the original is selected.
	<b>Take/[Take #1]</b>	Makes the Take named here currently active, appearing in front of any others. A bullet appears next to the current selection.
	<b>Detect Dissonant Intervals...</b>	Opens the <a href="#">Dissonant Intervals Detection dialog box</a> , allowing you to automatically Detect and resolve Dissonant (harsh sounding) Intervals between a selected Note Event and Notes occurring at the same time in Line Blocks of other Tracks.
	<b>Quantize...</b>	Opens the <a href="#">Quantize dialog box</a> , allowing you to automatically correct the start time of selected Note Events.
	<b>Transpose...</b>	Opens the <a href="#">Transpose dialog box</a> , allowing you to shift the Pitch of all selected Note Events equally.
	<b>Adjust Articulation...</b>	Opens the <a href="#">Articulation Adjustment dialog box</a> , allowing you to change the length of selected Note Events.
	<b>Adjust Velocity...</b>	Opens the <a href="#">Velocity Adjustment dialog box</a> , allowing you to change the loudness of selected Note Events.
	<b>Map Pitches....</b>	Opens the <a href="#">Map Pitches dialog box</a> , allowing you to shift the MIDI Pitch value of selected Note Events.
	<b>Adjust Value...</b>	Opens the <a href="#">Value Adjustment dialog box</a> , allowing you to adjust the value of selected MIDI Control Events.
	<b>Half Time</b>	Halves the time value of a selected Note Event, doubling its Playback Tempo.
	<b>Double Time</b>	Doubles the time value of a selected Note Event, halving its Playback Tempo.

Description The **MIDI** menu allows you to control the CAMPS Sequencer Engine and manage MIDI signals.



Many of these Menu Items won't be available unless a Document is open.

Items

### **Playback**

Starts Audition Playback of the currently selected Note Events with an automatically inserted Playback Loop. If no individual Note Events are selected, CAMPS begins Playback of the entire selected Line Block.



If the [Chord Track](#) is activated, Chords in the same Bar region will be also played back.

### **Playback with Others**

Starts Audition Playback of the currently selected Note Events with an automatically inserted Playback Loop along with all the other activated Tracks in the same Bar region. If no individual Note Events are selected, CAMPS begins Playback of the entire selected Line Block.



If the [Chord Track](#) is activated, Chords in the same Bar region will be also played back.

### **Play**

Starts Playback of the current Document.

### **Stop**

Stops Playback of the current Document.

### **Record/Start Recording**

Starts Recording in the current Document.

### **Record/Start Over-dubbing**

Starts Over-Dub Recording in the current Document.

### **Record/Start Step Recording**

Starts Step Recording in the current Document.

### **Jump To/Top**

Moves the Playback Pointer position and viewpoint to the beginning of the current Line Block Event List. Executing this command also enables the Auto Scroll function if previously disabled.

### **Jump To/End**

Moves the Playback Pointer position and viewpoint to the end of the current Line Block Event List. Executing this command also enables the Auto Scroll function if previously disabled.

### **Metronome**

Switches between activate or deactivate the Metronome during Playback and Recording. A checkmark appears next to this item when activated.

### **All Notes Off**

Sends the "All Notes Off" MIDI Event to current MIDI Devices. Use this command to stop unwanted sustained Notes after stopping Playback or inadvertently interrupting MIDI signaling.

<b><u>R</u>eset All Controllers</b>	Sends the "Reset All Controllers" MIDI Event to current MIDI Devices. Use this command to reset certain MIDI parameters such as Volume, Pan or Modulation.
<b><u>S</u>ynchronize With/<u>I</u>nternal Clock</b>	Sets CAMPS to Playback and Record using its own internal MIDI Clock. A bullet appears next to the current selection.
<b><u>S</u>ynchronize With/<u>T</u>ap</b>	Sets CAMPS to Playback and Record using "freewheel" Tempo pulses input by you on your computer's keyboard or your MIDI Instrument. A bullet appears next to the current selection.
<b><u>S</u>ynchronize With/<u>M</u>IDI Clock</b>	Sets CAMPS to Playback and Record in "slave" mode using an external MIDI Clock source, such as another Sequencer. A bullet appears next to the current selection.
<b><u>S</u>ynchronize With/<u>S</u>MPTTE</b>	Sets CAMPS to Playback and Record using MIDI Time Code converted from an external SMPTE Time Code source, such as a click track from an audio or video tape deck. A SMPTE converter must be employed between a raw SMPTE source and the MIDI port used by CAMPS. A bullet appears next to the current selection.
<b><u>T</u>ransmit Clock/<u>M</u>IDI Clock</b>	Enables CAMPS to send its MIDI Clock signal to an external device. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer to synchronize with CAMPS. A checkmark appears next to this item when enabled.
<b><u>T</u>ransmit Clock/<u>S</u>MPTTE</b>	Enables CAMPS to send MIDI Time Code to an external SMPTE converter. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer or other device to synchronize with CAMPS. A checkmark appears next to this item when enabled.
<b><u>M</u>IDI Mapper</b>	Switches between enable or disable the Windows Operating System MIDI Mapper. When enabled, CAMPS passes MIDI Output Device selection control to the Windows Multimedia applet in the Control Panel. When disabled, MIDI Output Devices can be selected from within CAMPS, allowing much greater flexibility. A checkmark appears next to this item when enabled.
<b><u>M</u>IDI Setup...</b>	Opens the <a href="#">MIDI Setup dialog box</a> , allowing you to manage many MIDI signaling details. This includes settings for input, output, sync and Devices.

**Menu Items for the Event List Editor / View**

Description	<p>The <b>View</b> menu allows you to select objects to display and how to display them. Use <b>Save Display Settings</b> to save the current display settings of the Event List Editor for its next session.</p>	
	<p> Many of these Menu Items won't be available unless a Document is open. Also, some of these Menu Items will only be available when the Event List Editor is active.</p>	
Items	<b>Event <u>V</u>iew/<u>N</u>ote</b>	Switches between Show or Hide Note Events in the Event List Editor. A checkmark appears next to this Menu Item when set to Show.
	<b>Event <u>V</u>iew/<u>C</u>ontrol Change</b>	Switches between Show or Hide Control Change Events in the Event List Editor. A checkmark appears next to this Menu Item when set to Show.
	<b>Event <u>V</u>iew/<u>P</u>oly After Touch</b>	Switches between Show or Hide Poly After Touch Events in the Event List Editor. A checkmark appears next to this Menu Item when set to Show.
	<b>Event <u>V</u>iew/<u>C</u>hannel After Touch</b>	Switches between Show or Hide Channel After Touch Events in the Event List Editor. A checkmark appears next to this Menu Item when set to Show.
	<b>Event <u>V</u>iew/<u>P</u>rogram Change</b>	Switches between Show or Hide Program Change Events in the Event List Editor. A checkmark appears next to this Menu Item when set to Show.
	<b>Event <u>V</u>iew/<u>P</u>itch Bend</b>	Switches between Show or Hide Pitch Bend Events in the Event List Editor. A checkmark appears next to this Menu Item when set to Show.
	<b>Event <u>V</u>iew/<u>L</u>yric</b>	Switches between Show or Hide Lyric Events in the Event List Editor. A checkmark appears next to this Menu Item when set to Show.
	<b>Event <u>V</u>iew/<u>S</u>ystem Exclusive</b>	Switches between Show or Hide System Exclusive Events in the Event List Editor. A checkmark appears next to this Menu Item when set to Show.
	<b>Event <u>V</u>iew/<u>S</u>elect <u>E</u>vent Types...</b>	Opens the <a href="#">Displayed Events dialog box</a> , allowing you to choose which MIDI Event types are displayed in the Event List Editor using Icon buttons instead of Menu Items. These settings are the same as the <b>List View</b> submenu items listed above.
	<b><u>T</u>oolbars/<u>M</u>ain Toolbar</b>	Switches between Show or Hide the <a href="#">Main toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>S</u>tatus Bar</b>	Switches between Show or Hide the <a href="#">Status Bar</a> . A checkmark appears next to this Menu item when set to Show.



<b><u>T</u>oolbars/<u>P</u>layback Control Toolbar</b>	Switches between Show or Hide the <a href="#">Playback Control toolbar</a> . A checkmark appears next to this Menu item when set to Show.
<b><u>T</u>oolbars/<u>R</u>ecord Control Toolbar</b>	Switches between Show or Hide the <a href="#">Record Control toolbar</a> . A checkmark appears next to this Menu item when set to Show.
<b><u>T</u>oolbars/<u>C</u>lock Sync Toolbar</b>	Switches between Show or Hide the <a href="#">Clock Sync toolbar</a> . A checkmark appears next to this Menu item when set to Show.
<b><u>T</u>oolbars/<u>D</u>evice Control Toolbar</b>	Switches between Show or Hide the <a href="#">Device Control toolbar</a> . A checkmark appears next to this Menu item when set to Show.
<b><u>T</u>oolbars/<u>T</u>empo Toolbar</b>	Switches between Show or Hide the <a href="#">Tempo toolbar</a> . A checkmark appears next to this Menu item when set to Show.
<b><u>T</u>oolbars/<u>N</u>ote Stamp Toolbar</b>	Switches between Show or Hide the <a href="#">Note Stamp toolbar</a> . A checkmark appears next to this Menu item when set to Show.
<b><u>T</u>oolbars/<u>R</u>est Toolbar</b>	Switches between Show or Hide the <a href="#">Rest toolbar</a> . A checkmark appears next to this Menu item when set to Show.
<b><u>T</u>oolbars/<u>B</u>eat Toolbar</b>	Switches between Show or Hide the Beat toolbar. A checkmark appears next to this Menu item when set to Show.
<b><u>T</u>oolbars/<u>T</u>ime Toolbar</b>	Switches between Show or Hide the Time toolbar. A checkmark appears next to this Menu item when set to Show.
<b><u>A</u>uto Scroll</b>	Sets the viewable area to follow the Playback Pointer. A checkmark appears next to this item when enabled.
<b><u>J</u>ump To Location...</b>	Opens the <a href="#">Jump To Location dialog box</a> , allowing you to specify the beginning Bar of the viewable area. Once specified, <b>Auto Scroll</b> is temporarily deactivated.
<b><u>E</u>dit Buttons</b>	Switches between Show or Hide the Edit Buttons in the Event List Editor window. A checkmark appears next to this Menu item when set to Show.
<b><u>I</u>nteractive <u>I</u>nformation</b>	Switches between Show or Hide the Interactive Information display. A checkmark appears next to this Menu item when set to Show.
<b><a href="#">Big Beat Window</a></b>	Switches between Show or Hide the Big Beat Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its <b>Close</b> button to hide it again. See <a href="#">details</a> . See also <a href="#">Beat Toolbar</a> ..

## Big Time Window

Switches between Show or Hide the Big Time Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Time Toolbar](#)..

## **Save Display Settings**

Saves current Event List Editor Display Settings as defaults for future sessions. Settings included are List, Zoom, Dividing Bar positions, Background Bitmap, etc.

Description The **Editors** menu allows you to open Editors.



None of these Menu Items will be available unless a Document is open.

Items

**Event List Editor**

Opens a new [Event List Editor](#) window, allowing you to make alternate Event edits in the selected Line Block in vertical list format.

**Pianoroll Editor**

Opens the [Pianoroll Editor](#), allowing you to edit Notes of the selected Line Block in Pianoroll graph format.

**Control Draw Editor**

Opens the [Control Draw Editor](#), allowing you to edit MIDI Control events of the selected Line Block with a unique freestyle curve drawing method.

**Notation Editor**

Opens the [Notation Editor](#), allowing you to edit Notes of the selected Line Block in Musical Notation form.

**Tempo List Editor**

Opens the [Tempo List Editor](#), allowing you to edit individual Tempo Events of the current Document in vertical list format.

**Tempo Draw Editor**

Opens the [Tempo Draw Editor](#), allowing you to edit Tempo Events of the current Document with a unique freestyle curve drawing method.

**Text List Editor**

Opens the [Text List Editor](#), allowing you to edit Text Events of the current Document in vertical list format.

Description The **Window** menu allows you to arrange Document and Editor windows in the work area of the CAMPS Application Window.



The **Window** Menu Item won't be available unless a Document is open.

Items	<b><u>N</u>ew Event List Editor</b>	Opens a new <a href="#">Event List Editor</a> window for the currently selected Line Block.
	<b><u>C</u>ascade</b>	Arranges windows in a diagonal overlapping manner, allowing you to individually select them. Any maximized windows will be reduced in size to accommodate the Cascade arrangement.
	<b><u>T</u>ile</b>	Arranges windows into horizontal blocks separated vertically, one above or below the next.
	<b><u>A</u>rrange Icons</b>	Arranges minimized window title bars in an orderly fashion within the CAMPS Application Window.
	<b>[W]indow</b>	Makes the window named here currently active, appearing in front of any others. The number of windows listed here equals the number of open windows in CAMPS. A checkmark appears next to the current selection.

**Description** The **Help** menu allows you to access these Help documents. The Help menu also allows you to add a background text message to your Composition Document and the currently selected Line Block.



The **Memo** Menu Items won't be available unless a Document is open.

<b>Items</b>	<b><u>H</u>elp</b>	Opens the Table of Contents for these Help documents.
	<b>Line Block <u>M</u>emo...</b>	Opens the <a href="#">Memo dialog box</a> , allowing you to add an underlying text message to the currently selected Line Block.
	<b><u>D</u>ocument <u>M</u>emo...</b>	Opens the <a href="#">Memo dialog box</a> , allowing you to add an underlying text message to your Document.
	<b><u>A</u>bout <b>CAMPS</b></b>	Opens the CAMPS banner with a text scroll area containing information about CAMPS and the Microworks Corporation.

# Menu Items for the Notation Editor

Description Here is a complete list of Menu Items when the Notation Editor is active.

Items

## File

<a href="#">New</a>	Ctrl + N
<a href="#">New Setup...</a>	Ctrl + Shift + N
<a href="#">Open...</a>	Ctrl + O
<a href="#">Close</a>	
<a href="#">Save</a>	Ctrl + S
<a href="#">Save As...</a>	
<a href="#">Revert</a>	
<a href="#">Export SMF...</a>	
1	<a href="#">[Recent Document]</a>
2	<a href="#">[Recent Document]</a>
:	
<a href="#">Exit</a>	

## Edit

<a href="#">Undo [Action] Event</a>	Ctrl + Z
<a href="#">Cut Note Event</a>	Ctrl + X
<a href="#">Copy Note Event</a>	Ctrl + C
<a href="#">Paste Note Event</a>	Ctrl + V
<a href="#">Clear Note Event</a>	Del
<a href="#">Select All</a>	Ctrl + A
<a href="#">Time Signature Setup...</a>	
<a href="#">SMPTE Offset Setup...</a>	
<a href="#">Preferences...</a>	

## Line

<b>Take</b>	<b>&gt;</b>
<a href="#">Compose...</a>	Ctrl + Shift + K
<a href="#">EZcompose</a>	Ctrl + K
<a href="#">Voicing...</a>	
<a href="#">Detect Dissonant Intervals...</a>	
<a href="#">Quantize...</a>	
<a href="#">Transpose...</a>	
<a href="#">Adjust Articulation...</a>	
<a href="#">Adjust Velocity...</a>	
<a href="#">Map Pitches....</a>	
<a href="#">Half Time</a>	
<a href="#">Double Time</a>	

## Take

<a href="#">Take List...</a>	Ctrl + F
<a href="#">New Take...</a>	Ctrl + T
<a href="#">Duplicate Take</a>	Ctrl + U
<a href="#">Remove Take</a>	
<a href="#">[Take #1]</a>	

## MIDI

[Playback](#)

[Playback with Others](#)

[Play](#)

[Stop](#)

**Record** >

**Jump To** >

[Metronome](#) Ctrl +M

[All Notes Off](#)

[Reset All Controllers](#)

**Synchronize With** >

**Transmit Clock** >

[MIDI Mapper](#)

[MIDI Setup...](#)

### Record

[Start Recording](#) F5

[Start Over-dubbing](#) F7

[Start Step Recording](#) F8

### Jump To

[Top](#) Home

[End](#) End

### Synchronize With

[Internal Clock](#)

[Tap](#)

[MIDI Clock](#)

[SMPTE](#)

### Transmit Clock

[MIDI Clock](#)

[SMPTE](#)

## View

**Clef** >

**Chord View** >

**Note View** >

**Grid View** >

**Toolbars** >

[Auto Scroll](#) Ctrl +L

[Jump To Location...](#)

[Edit Buttons](#)

[Interactive Information](#)

[Big Beat Window](#)

[Big Time Window](#)

[Save Display Settings](#)

### Clef

[Treble](#)

[Octave Treble](#)

[Bass](#)

[Sub Bass](#)

[Soprano](#)

[Alto](#)

[Tenor](#)

[\[Drums Notation Set\]](#)

[Display Defined Notes Only](#)

[Drums Notation Setup...](#)

### Chord View

[Roman Numeral](#)

[Chord Name](#)

[Scale Name](#)

[Scale Spelling](#)

[Key and Mode](#)

### Note View

[Smart Notation](#)

[Quarter Note Resolution](#)

[8th Note Resolution](#)

[16th Note Resolution](#)

[32nd Note Resolution](#)

[Triplet Resolution](#)

[Quintuplet Resolution](#)

### Grid View

[Align To Grid](#)

[Grid Setup](#)

### Toolbars

[Main Toolbar](#)

[Status Bar](#)

[Playback Control Toolbar](#)

[Record Control Toolbar](#)

[Clock Sync Toolbar](#)

[Device Control Toolbar](#)

[Tempo Toolbar](#)

[Note Stamp Toolbar](#)

[Rest Toolbar](#)

[Beat Toolbar](#)

[Time Toolbar](#)

## Editors

[Event List Editor](#) F9

[Pianoroll Editor](#) F10

[Control Draw Editor](#) F11

[Notation Editor](#) F12

[Tempo List Editor](#)

[Tempo Draw Editor](#)

[Text List Editor](#)

**Tool** >

### Tool

[Arrow](#)

[I Beam](#)

[Magic Wand](#)

[Stamp](#)

[Eraser](#)

## Window

[New](#)

[Notation](#)

[Editor](#)

[Cascade](#)

[Tile](#)

[Arrange](#)

[Icons](#)

1 [\[Window\]](#)

2 [\[Window\]](#)

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## Help

[Help](#)

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[Line Block Memo...](#)

[Document Memo...](#)

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[About CAMPS](#)



Description The **File** menu allows you to manage Document files and shut down CAMPS.



Some of these Menu Items won't be available unless a Document is open. Additionally, the **Save** and **Revert** commands won't be available until the current Document has been altered.

Items	<b><u>N</u>ew</b>	Creates a New untitled Document as specified by the settings in the New Document Setup dialog box.
	<b><u>N</u>ew Setup...</b>	Opens the <a href="#">New Document Setup dialog box</a> , allowing you to set basic defaults for New Documents.
	<b><u>O</u>pen...</b>	Opens the Open dialog box, allowing you to select and open a Document.
		 <p>When opening a Standard MIDI File, CAMPS automatically analyzes Line data and assigns <a href="#">appropriate Line Blocks</a> and one of <a href="#">six Category settings</a> to each Track. You can alter these settings at any time.</p>
	<b><u>C</u>lose</b>	Closes the current Document. If this Document has been altered since opening, you will be asked whether or not you wish to save changes before closing.
	<b><u>S</u>ave</b>	Saves the current Document using its existing filename and location.
	<b><u>S</u>ave <u>A</u>s...</b>	Opens the Save As dialog box, allowing you to save the current Document to a specified filename and location.
	<b><u>R</u>evert</b>	Allows you to close and reopen the current Document in one step, discarding any changes made after last saving it. You'll be asked if you're sure you want to proceed before this operation is completed.
	<b><u>E</u>xport SMF...</b>	Opens the <a href="#">Exporting a Standard MIDI File dialog box</a> , allowing you to save the current Document as a Standard MIDI File. After specifying a filename and location and clicking <b>Save</b> , the <a href="#">Export Options dialog box</a> opens, allowing you to make final file format conversion settings.
	<b>[Recent Document]</b>	Opens the recently opened Document named here. The number of Recent Documents listed here is adjustable in the <a href="#">Preferences dialog box</a> which can be opened from the Edit menu.
	<b><u>E</u>xit</b>	Closes CAMPS and any open Documents. If any currently open Documents have been altered since opening, you will be asked whether or not you wish to save changes before closing.

**Description** The **Edit** menu allows you to Edit Notes in the Notation Editor. For example, you can **Cut**, **Copy**, **Paste**, and **Clear** Notes.



Many of these Menu Items won't be available unless a Document is open, and the Notation Editor is currently active with a Note selected.

<b>Items</b>	<p><b><u>U</u>ndo [Action] Event</b></p> <p><b><u>C</u>ut Note Event</b></p> <p><b><u>C</u>opy Note Event</b></p> <p><b><u>P</u>aste Note Event</b></p> <p><b><u>C</u>lear Note Event</b></p> <p><b><u>S</u>elect <u>A</u>ll</b></p> <p><b><u>T</u>ime Signature Setup...</b></p> <p><b><u>S</u>MPT<b><u>E</u></b> <u>O</u>ffset Setup...</b></p> <p><b><u>P</u>references...</b></p>	<p>Reverses your last editing action. This command's name and function change depending on your last action. For example, if you just moved a Note, this command's name becomes <b>Undo Move Event</b>. Once executed, the <b>Undo</b> command becomes <b>Redo</b> and vice versa.</p> <p>Removes selected Note from a Document for reinsertion using the <b>Paste</b> command, if desired.</p> <p>Specifies selected Note for duplication using the <b>Paste</b> command.</p> <p>Inserts the last Note specified with the <b>Cut</b> or <b>Copy</b> command into the currently selected relative Area.</p> <p>Deletes the currently selected Notes.</p> <p>Automatically selects all Notes in the currently selected region or Area.</p> <p>Opens the <a href="#">Time Signature Setup dialog box</a>, allowing you to change the Time Signature in a specified region of Bars.</p> <p>Opens the <a href="#">SMPTE Offset Setup dialog box</a>, allowing you to offset SMPTE synchronization between CAMPS and a master SMPTE source.</p> <p>Opens the <a href="#">Preferences dialog box</a>, allowing you to set basic operational and appearance defaults in CAMPS.</p>
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Description The **Line** menu allows you to edit and manipulate Line Data (Notes), including managing Takes.



The **Line** menu won't be available unless a Document is open. Additionally, most of these Menu Items won't be available unless a Note is selected.

Items	<b>Take/Take List...</b>	Opens the <a href="#">Take List dialog box</a> , allowing you to manipulate Takes for the selected Line Block.
	<b>Take/New Take...</b>	Opens the <a href="#">New Take dialog box</a> , allowing you to create a New blank or Auto Composed Take for the selected Line Block.
	<b>Take/Duplicate Take</b>	Duplicates the currently selected Take.
	<b>Take/Remove Take</b>	Deletes the currently selected Take. This command is only available when a Take other than the original is selected.
	<b>Take/[Take #1]</b>	Makes the Take named here currently active, appearing in front of any others. A bullet appears next to the current selection.
	<b>Compose...</b>	Opens the <a href="#">Compose dialog box</a> , allowing you to adjust guidelines for Auto Composing, and to Auto Compose selected Notes.
	<b>EZcompose</b>	Automatically Composes selected Notes without opening the Compose dialog box.
	<b>Voicing...</b>	Opens the <a href="#">Voicing dialog box</a> , allowing you to automatically analyze selected Notes along with relevant Chords to provide you with various kinds of voicings for your Line data.
	<b>Detect Dissonant Intervals...</b>	Opens the <a href="#">Dissonant Intervals Detection dialog box</a> , allowing you to automatically Detect and resolve Dissonant (harsh sounding) Intervals between selected Notes and Notes occurring at the same time in Line Blocks of other Tracks.
	<b>Quantize...</b>	Opens the <a href="#">Quantize dialog box</a> , allowing you to automatically correct the start time of selected Notes.
	<b>Transpose...</b>	Opens the <a href="#">Transpose dialog box</a> , allowing you to shift the Pitch of all selected Notes equally.
	<b>Adjust Articulation...</b>	Opens the <a href="#">Articulation Adjustment dialog box</a> , allowing you to change the length of selected Notes.
	<b>Adjust Velocity...</b>	Opens the <a href="#">Velocity Adjustment dialog box</a> , allowing you to change the loudness of selected Notes.
	<b>Map Pitches....</b>	Opens the <a href="#">Map Pitches dialog box</a> , allowing you to shift the MIDI Pitch value of all occurrences of selected Notes in selected Line data.
	<b>Half Time</b>	Halves the time value of selected Notes, doubling their Playback Tempo.
	<b>Double Time</b>	Doubles the time value of selected Notes, halving their Playback Tempo.

Description The **MIDI** menu allows you to control the CAMPS Sequencer Engine and manage MIDI signals.



Many of these Menu Items won't be available unless a Document is open.

Items

### **Playback**

Starts Audition Playback of the currently selected Notes with an automatically inserted Playback Loop. If no Note Events are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.



If the [Chord Track](#) is activated, Chords in the same Bar region will be also played back.

### **Playback with Others**

Starts Audition Playback of the currently selected Notes with an automatically inserted Playback Loop along with all the other activated Tracks in the same Bar region. If no Note Events are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.



If the [Chord Track](#) is activated, Chords in the same Bar region will be also played back.

### **Play**

Starts Playback of the current Document.

### **Stop**

Stops Playback of the current Document.

### **Record/Start Recording**

Starts Recording in the current Document.

### **Record/Start Over-dubbing**

Starts Over-Dub Recording in the current Document.

### **Record/Start Step Recording**

Starts Step Recording in the current Document.

### **Jump To/Top**

Moves the Playback Pointer position and viewpoint to the beginning of the currently selected Line Block. Executing this command also enables the Auto Scroll function if previously disabled.

### **Jump To/End**

Moves the Playback Pointer position and viewpoint to the end of the currently selected Line Block. Executing this command also enables the Auto Scroll function if previously disabled.

### **Metronome**

Switches between activate or deactivate the Metronome during Playback and Recording. A checkmark appears next to this item when activated.

### **All Notes Off**

Sends the "All Notes Off" MIDI Event to current MIDI Devices. Use this command to stop unwanted sustained Notes after stopping Playback or inadvertently interrupting MIDI signaling.

<b><u>R</u>eset All Controllers</b>	Sends the "Reset All Controllers" MIDI Event to current MIDI Devices. Use this command to reset certain MIDI parameters such as Volume, Pan or Modulation.
<b><u>S</u>ynchronize With/<u>I</u>nternal Clock</b>	Sets CAMPS to Playback and Record using its own internal MIDI Clock. A bullet appears next to the current selection.
<b><u>S</u>ynchronize With/<u>T</u>ap</b>	Sets CAMPS to Playback and Record using "freewheel" Tempo pulses input by you on your computer's keyboard or your MIDI Instrument. A bullet appears next to the current selection.
<b><u>S</u>ynchronize With/<u>M</u>IDI Clock</b>	Sets CAMPS to Playback and Record in "slave" mode using an external MIDI Clock source, such as another Sequencer. A bullet appears next to the current selection.
<b><u>S</u>ynchronize With/<u>S</u>MPTTE</b>	Sets CAMPS to Playback and Record using MIDI Time Code converted from an external SMPTE Time Code source, such as a click track from an audio or video tape deck. A SMPTE converter must be employed between a raw SMPTE source and the MIDI port used by CAMPS. A bullet appears next to the current selection.
<b><u>T</u>ransmit Clock/<u>M</u>IDI Clock</b>	Enables CAMPS to send its MIDI Clock signal to an external device. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer to synchronize with CAMPS. A checkmark appears next to this item when enabled.
<b><u>T</u>ransmit Clock/<u>S</u>MPTTE</b>	Enables CAMPS to send MIDI Time Code to an external SMPTE converter. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer or other device to synchronize with CAMPS. A checkmark appears next to this item when enabled.
<b><u>M</u>IDI Mapper</b>	Switches between enable or disable the Windows Operating System MIDI Mapper. When enabled, CAMPS passes MIDI Output Device selection control to the Windows Multimedia applet in the Control Panel. When disabled, MIDI Output Devices can be selected from within CAMPS, allowing much greater flexibility. A checkmark appears next to this item when enabled.
<b><u>M</u>IDI Setup...</b>	Opens the <a href="#">MIDI Setup dialog box</a> , allowing you to manage many MIDI signaling details. This includes settings for input, output, sync and Devices.

**Description** The **View** menu allows you to select objects to display and how to display them. Use **Save Display Settings** to save the current display settings of the Notation Editor for its next session.



Many of these Menu Items won't be available unless a Document is open. Also, some of these Menu Items will only be available when the Notation Editor is active.

**Items**

**Clef/Treble**

Sets the Notation Staff to display Note Pitch for Tonal Tracks in Treble Clef. This allows you to bring Notation display within the Staff if the current Register of Notes (Pitch range) falls too far above or below the Staff in Leger Lines. A bullet appears next to the current selection.

**Clef/Octave Treble**

Sets the Notation Staff to display Note Pitch for Tonal Tracks in Octave Treble Clef. This allows you to bring Notation display within the Staff if the current Register of Notes (Pitch range) falls too far above or below the Staff in Leger Lines. A bullet appears next to the current selection.

**Clef/Bass**

Sets the Notation Staff to display Note Pitch for Tonal Tracks in Bass Clef. This allows you to bring Notation display within the Staff if the current Register of Notes (Pitch range) falls too far above or below the Staff in Leger Lines. A bullet appears next to the current selection.

**Clef/Sub Bass**

Sets the Notation Staff to display Note Pitch for Tonal Tracks in Sub Bass Clef. This allows you to bring Notation display within the Staff if the current Register of Notes (Pitch range) falls too far above or below the Staff in Leger Lines. A bullet appears next to the current selection.

**Clef/Soprano**

Sets the Notation Staff to display Note Pitch for Tonal Tracks in Soprano Clef. This allows you to bring Notation display within the Staff if the current Register of Notes (Pitch range) falls too far above or below the Staff in Leger Lines. A bullet appears next to the current selection.

**Clef/Alto**

Sets the Notation Staff to display Note Pitch for Tonal Tracks in Alto Clef. This allows you to bring Notation display within the Staff if the current Register of Notes (Pitch range) falls too far above or below the Staff in Leger Lines. A bullet appears next to the current selection.



**Clef/Tenor**

Sets the Notation Staff to display Note Pitch for Tonal Tracks in Tenor Clef. This allows you to bring Notation display within the Staff if the current Register of Notes (Pitch range) falls too far above or below the Staff in Leger Lines. A bullet appears next to the current selection.

**Clef/[Drums Notation Set]**

Sets the Notation Staff to display Drum Notes according to your definitions in the [Drums Notation Setup dialog box](#). The default Drums Notation Set is "GM 5 Lines". A bullet appears next to the current selection.

**Clef/Display Defined Notes Only**

This setting filters out Notation display of any notes that are not defined in the currently selected Drums Notation Set. This item is only available when a Drums Notation Set has been chosen for the Clef View. A checkmark appears next to this item when selected.

**Clef/Drums Notation Setup...**

Opens the [Drums Notation Setup dialog box](#), allowing you to define the Notation of individual Drum Sounds.

**Chord View/Roman Numeral**

Sets display of Chord Text to Roman Numeral Analysis (II-7, V7, etc.). A bullet appears next to the current selection.

**Chord View/Chord Name**

Sets display of Chord Text to Chord Name (D-7, G7, etc.). A bullet appears next to the current selection.

**Chord View/Scale Name**

Sets display of Chord Text to Scale Name, also known as Mode (Dorian, Mixolydian, etc.). A bullet appears next to the current selection.

**Chord View/Scale Spelling**

Sets display of Chord Text to Scale Spelling, listing intervals from the Root (R, 3,5,7, etc.). A bullet appears next to the current selection.

**Chord View/Key and Mode**

Sets display of Chord Text to Key and Mode; the same as each Chord Container's Key and Mode button. A bullet appears next to the current selection.

**Note View/Smart Notation**

This setting allows you to adjust Rest time calculation to avoid excessive Rest displays in the Notation Editor. For example, if the current Resolution setting is Eighth Note, any Rest period less than an Eight Note will be added to the previous Note to avoid display of an additional Rest. A checkmark appears next to this item when selected.

**Note View/Quarter Note Resolution**

Sets Note duration display to resolve to the nearest Quarter Note, allowing the most possible number of Bars to fit in the Notation Editor window with the lowest time Notation accuracy.

**Note View/8th Note Resolution**

Sets Note duration display to resolve to the nearest 8th Note, allowing more Bars to fit in the Notation Editor window with the less time Notation accuracy (compared to the 16th Note Resolution setting).

**Note View/16th Note Resolution**

Sets Note duration display to resolve to the nearest 16th Note, allowing less Bars to fit in the Notation Editor window with the more time Notation accuracy (compared to the 8th Note Resolution setting).

**Note View/32nd Note Resolution**

Sets Note duration display to resolve to the nearest 32nd Note, allowing the least possible number of Bars to fit in the Notation Editor window with the highest time Notation accuracy.

**Note View/Triplet Resolution**

Sets Note duration display to resolve to the nearest Note Resolution selected from Quarter, 8th, 16th, 32nd Note or corresponding Triplet.

**Note View/Quintuplet Resolution**

Sets Note duration display to resolve to the nearest Note Resolution selected from Quarter, 8th, 16th, 32nd Note or corresponding Quintuplet.

**Grid View/Align to Grid**

Switches between Activate or Deactivate Align To Grid in the Pianoroll and Velocity Areas. The Align To Grid function causes Notes being created or moved to snap their position to the nearest Grid point as specified in the Grid Setup dialog box. Depending on your settings in the Grid Setup dialog box, this Alignment Grid will not necessarily coincide with the visual Bar or Beat Grids described above. A checkmark appears next to this Menu Item when set to Activate.

**Grid View/Grid Setup...**

Opens the [Grid Setup dialog box](#), allowing you to adjust the Alignment Grid Resolution for certain Areas of the Notation Editor and other Editors.

**Toolbars/Main Toolbar**

Switches between Show or Hide the [Main toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Status Bar**

Switches between Show or Hide the [Status Bar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Playback Control Toolbar**

Switches between Show or Hide the [Playback Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Record Control Toolbar**

Switches between Show or Hide the [Record Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Clock Sync Toolbar**

Switches between Show or Hide the [Clock Sync toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Device Control Toolbar**

Switches between Show or Hide the [Device Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Tempo Toolbar**

Switches between Show or Hide the [Tempo toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Note Stamp Toolbar**

Switches between Show or Hide the [Note Stamp toolbar](#). A checkmark appears next to this Menu Item when set to Show.



### **Toolbars/Rest Toolbar**

Switches between Show or Hide the [Rest toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Beat Toolbar**

Switches between Show or Hide the [Beat toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Toolbars/Time Toolbar**

Switches between Show or Hide the [Time toolbar](#). A checkmark appears next to this Menu Item when set to Show.

### **Auto Scroll**

Sets the viewable area in the Bar, Text Info, Chord, Lyric, and Notation Areas to follow the Playback Pointer. A checkmark appears next to this item when enabled.

### **Jump To Location...**

Opens the [Jump To Location dialog box](#), allowing you to specify the beginning Bar of the viewable area. Once specified, **Auto Scroll** is temporarily deactivated.

### **Edit Buttons**

Switches between Show or Hide the Edit Buttons in the Notation Editor. A checkmark appears next to this Menu Item when set to Show.

### **Interactive Information**

Switches between Show or Hide the Interactive Information display. A checkmark appears next to this Menu Item when set to Show.

### **[Big Beat Window](#)**

Switches between Show or Hide the Big Beat Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Beat Toolbar](#)..

### **[Big Time Window](#)**

Switches between Show or Hide the Big Time Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Time Toolbar](#)..

### **Save Display Settings**

Saves current Notation Editor Display Settings as defaults for future sessions. Settings included are Grid, Resolution, Dividing Bar positions, Background Bitmap, etc.

Description The **Editors** menu allows you to open Editors and select Editing Tools.



None of these Menu Items will be available unless a Document is open.

Items	<b><u>E</u>vent List Editor</b>	Opens the <a href="#">Event List Editor</a> , allowing you to edit individual Events of the selected Line Block in vertical list format.
	<b><u>P</u>ianoroll Editor</b>	Opens the <a href="#">Pianoroll Editor</a> , allowing you to edit Notes of the selected Line Block in Pianoroll graph format.
	<b><u>C</u>ontrol Draw Editor</b>	Opens the <a href="#">Control Draw Editor</a> , allowing you to edit MIDI Control events of the selected Line Block with a unique freestyle curve drawing method.
	<b><u>N</u>otation Editor</b>	Opens a new <a href="#">Notation Editor</a> window, allowing you to make alternate Musical Notation edits of Notes in the selected Line Block.
	<b><u>T</u>empo <u>L</u>ist Editor</b>	Opens the <a href="#">Tempo List Editor</a> , allowing you to edit individual Tempo Events of the current Document in vertical list format.
	<b><u>T</u>empo <u>D</u>raw Editor</b>	Opens the <a href="#">Tempo Draw Editor</a> , allowing you to edit Tempo Events in the current Document with a unique freestyle curve drawing method.
	<b><u>T</u>ext List Editor</b>	Opens the <a href="#">Text List Editor</a> , allowing you to edit Text Events of the current Document in vertical list format.
	<b><u>T</u>ool/<u>A</u>rrrow</b>	Allows you to select and manipulate Notes in the Notation Editor.
	<b><u>T</u>ool/<u>I</u> Beam</b>	Allows you to quickly select regions in the Note Area of the Notation Editor.
	<b><u>T</u>ool/<u>M</u>agic Wand</b>	Allows you to quickly Auto Compose existing Notes in the Notation Editor.
	<b><u>T</u>ool/<u>S</u>tamp</b>	Allows you to quickly create Notes using a point and click method.
	<b><u>T</u>ool/<u>E</u>raser</b>	Allows you to quickly delete Notes.

Description The **Window** menu allows you to arrange Document and Editor windows in the work area of the CAMPS Application Window.



The **Window** Menu Item won't be available unless a Document is open.

Items	<b><u>N</u>ew Notation Editor</b>	Opens a new <a href="#">Notation Editor</a> for the currently selected Line Block.
	<b><u>C</u>ascade</b>	Arranges windows in a diagonal overlapping manner, allowing you to individually select them. Any maximized windows will be reduced in size to accommodate the Cascade arrangement.
	<b><u>T</u>ile</b>	Arranges windows into horizontal blocks separated vertically, one above or below the next.
	<b><u>A</u>rrange Icons</b>	Arranges minimized window title bars in an orderly fashion within the CAMPS Application Window.
	<b>[Window]</b>	Makes the window named here currently active, appearing in front of any others. The number of windows listed here equals the number of open windows in CAMPS. A checkmark appears next to the current selection.

**Description** The **Help** menu allows you to access these Help documents. The Help menu also allows you to add a background text message to your Composition Document and the currently selected Line Block.



The **Memo** Menu Items won't be available unless a Document is open.

<b>Items</b>	<b><u>H</u>elp</b>	Opens the Table of Contents for these Help documents.
	<b>Line Block <u>M</u>emo...</b>	Opens the <a href="#">Memo dialog box</a> , allowing you to add an underlying text message to the currently selected Line Block.
	<b><u>D</u>ocument <u>M</u>emo...</b>	Opens the <a href="#">Memo dialog box</a> , allowing you to add an underlying text message to your Document.
	<b><u>A</u>bout <b>CAMPS</b></b>	Opens the CAMPS banner with a text scroll area containing information about CAMPS and the Microworks Corporation.

# Menu Items for the Pianoroll Editor

Description Here is a complete list of Menu Items when the Pianoroll Editor is active.

Items

File	
<a href="#">New</a>	Ctrl + N
<a href="#">New Setup...</a>	Ctrl + Shift + N
<a href="#">Open...</a>	Ctrl + O
<a href="#">Close</a>	
<a href="#">Save</a>	Ctrl + S
<a href="#">Save As...</a>	
<a href="#">Revert</a>	
<a href="#">Export SMF...</a>	
<a href="#">1 [Recent Document]</a>	
<a href="#">2 [Recent Document]</a>	
:	
<a href="#">Exit</a>	

Edit	
<a href="#">Undo [Action] [Object]</a>	Ctrl + Z
<hr/>	
<a href="#">Cut [Object]</a>	Ctrl + X
<a href="#">Copy [Object]</a>	Ctrl + C
<a href="#">Paste [Object]</a>	Ctrl + V
<a href="#">Clear [Object]</a>	Del
<a href="#">Select All</a>	Ctrl + A
<hr/>	
<a href="#">New [Object]...</a>	Ctrl + I
<a href="#">Duplicate [Object]</a>	Ctrl + D
<hr/>	
<a href="#">Bring To Front</a>	
<a href="#">Send To Back</a>	
<hr/>	
<a href="#">Time Signature Setup...</a>	
<a href="#">SMPTE Offset Setup...</a>	
<hr/>	
<a href="#">Preferences...</a>	

Chord	
<a href="#">Generate...</a>	Ctrl + Shift + G
<a href="#">EZgenerate</a>	Ctrl + G
<hr/>	
<a href="#">Harmonize...</a>	Ctrl + Shift + H
<a href="#">EZharmonize</a>	Ctrl + H
<a href="#">EZharmonize with Same Key</a>	
<hr/>	
<a href="#">Detect from MIDI Instrument...</a>	
<a href="#">Construct...</a>	
<hr/>	
<a href="#">EZcompose Lines in Region</a>	Ctrl + R

## Line

<b>Take</b>	>
<a href="#">Compose...</a>	Ctrl + Shift + K
<a href="#">EZcompose</a>	Ctrl + K
<a href="#">Voicing...</a>	
<a href="#">Detect Dissonant Intervals...</a>	
<a href="#">Quantize...</a>	
<a href="#">Transpose...</a>	
<a href="#">Adjust Articulation...</a>	
<a href="#">Adjust Velocity...</a>	
<a href="#">Map Pitches....</a>	
<a href="#">Half Time</a>	
<a href="#">Double Time</a>	

## Take

<a href="#">Take List...</a>	Ctrl + F
<a href="#">New Take...</a>	Ctrl + T
<a href="#">Duplicate Take</a>	Ctrl + U
<a href="#">Remove Take</a>	
<a href="#">[Take #1]</a>	

## MIDI

<a href="#">Playback</a>	
<a href="#">Playback with Others</a>	
<a href="#">Play</a>	
<a href="#">Stop</a>	
<b>Record</b>	>
<b>Jump To</b>	>
<a href="#">Metronome</a>	Ctrl + M
<a href="#">All Notes Off</a>	
<a href="#">Reset All Controllers</a>	
<b>Synchronize With</b>	>
<b>Transmit Clock</b>	>
<a href="#">MIDI Mapper</a>	
<a href="#">MIDI Setup...</a>	

## Record

<a href="#">Start Recording</a>	F5
<a href="#">Start Over-dubbing</a>	F7
<a href="#">Start Step Recording</a>	F8

## Jump To

<a href="#">Top</a>	Home
<a href="#">End</a>	End

## Synchronize With

<a href="#">Internal Clock</a>
<a href="#">Tap</a>
<a href="#">MIDI Clock</a>
<a href="#">SMPTE</a>

## Transmit Clock

<a href="#">MIDI Clock</a>
<a href="#">SMPTE</a>

## View

<b>Chord View</b>	>
<b>Note View</b>	>
<b>Grid View</b>	>
<b>Toolbars</b>	>
<b>Zoom</b>	>
<a href="#">Auto Scroll</a>	Ctrl + L
<a href="#">Jump To Location...</a>	
<a href="#">Edit Buttons</a>	
<a href="#">Interactive Information</a>	
<a href="#">Big Beat Window</a>	
<a href="#">Big Time Window</a>	
<a href="#">Background Bitmap</a>	
<a href="#">Save Display Settings</a>	

## Chord View

<a href="#">Roman Numeral</a>
<a href="#">Chord Name</a>
<a href="#">Scale Name</a>
<a href="#">Scale Spelling</a>
<a href="#">Key and Mode</a>

## Note View

<a href="#">All Pitches</a>
<a href="#">Scale Notes</a>
<a href="#">Chord Tones</a>
<a href="#">Avoid Notes</a>

## Grid View

<a href="#">Bar Grid</a>
<a href="#">Beat Grid</a>
<a href="#">Pitch Grid</a>
<a href="#">Velocity Grid</a>
<a href="#">Align To Grid</a>
<a href="#">Grid Setup...</a>

## Toolbars

<a href="#">Main Toolbar</a>
<a href="#">Status Bar</a>
<a href="#">Playback Control Toolbar</a>
<a href="#">Record Control Toolbar</a>
<a href="#">Clock Sync Toolbar</a>
<a href="#">Device Control Toolbar</a>
<a href="#">Tempo Toolbar</a>
<a href="#">Note Stamp Toolbar</a>
<a href="#">Rest Toolbar</a>
<a href="#">Beat Toolbar</a>
<a href="#">Time Toolbar</a>

## Zoom

<a href="#">Zoom Out (V)</a>
<a href="#">Zoom In (V)</a>
<a href="#">Zoom Out (H)</a>
<a href="#">Zoom In (H)</a>

## Editors

[Event List Editor](#) F9  
[Pianoroll Editor](#) F10  
[Control Draw Editor](#) F11  
[Notation Editor](#) F12

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[Tempo List Editor](#)  
[Tempo Draw Editor](#)

---

[Text List Editor](#)

---

**Tool** >

## Tool

[Arrow](#)  
[I Beam](#)  
[Pen](#)  
[Magic Wand](#)  
[Line](#)  
[Oval](#)  
[Stamp](#)  
[Eraser](#)  
[Razor](#)

## Window

[New](#)  
[Pianoroll Editor](#)  
[Cascade](#)  
[Tile](#)  
[Arrange](#)  
[Icons](#)

---

1 [\[Window\]](#)

2 [\[Window\]](#)

:

## Help

[Help](#)

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[Line Block Memo...](#)

[Document Memo...](#)

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[About CAMPS](#)

Description The **File** menu allows you to manage Document files and shut down CAMPS.



Some of these Menu Items won't be available unless a Document is open. Additionally, the **Save** and **Revert** commands won't be available until the current Document has been altered.

Items

**New**

Creates a New untitled Document as specified by the settings in the New Document Setup dialog box.

**New Setup...**

Opens the [New Document Setup dialog box](#), allowing you to set basic defaults for New Documents.

**Open...**

Opens the Open dialog box, allowing you to select and open a Document.



When opening a Standard MIDI File, CAMPS automatically analyzes Line data and assigns [appropriate Line Blocks](#) and one of [six Category settings](#) to each Track. You can alter these settings at any time.

**Close**

Closes the current Document. If this Document has been altered since opening, you will be asked whether or not you wish to save changes before closing.

**Save**

Saves the current Document using its existing filename and location.

**Save As...**

Opens the Save As dialog box, allowing you to save the current Document to a specified filename and location.

**Revert**

Allows you to close and reopen the current Document in one step, discarding any changes made after last saving it. You'll be asked if you're sure you want to proceed before this operation is completed.

**Export SMF...**

Opens the [Exporting a Standard MIDI File dialog box](#), allowing you to save the current Document as a Standard MIDI File. After specifying a filename and location and clicking **Save**, the [Export Options dialog box](#) opens, allowing you to make final file format conversion settings.

**[Recent Document]**

Opens the recently opened Document named here. The number of Recent Documents listed here is adjustable in the [Preferences dialog box](#) which can be opened from the Edit menu.

**Exit**

Closes CAMPS and any open Documents. If any currently open Documents have been altered since opening, you will be asked whether or not you wish to save changes before closing.



Description The **Edit** menu allows you to Edit objects in the Pianoroll Editor. For example, you can **Cut**, **Copy**, **Paste**, and **Clear** objects in the Text Info, Chord, Lyric and Line Areas of the Pianoroll Editor.



Many of these Menu Items won't be available unless a Document is open. Most also require a related object first be selected. Finally, most of these Menu Items change depending on the last object or Area selected in the Pianoroll Editor.

Items	<b><u>U</u>ndo [Action] [Object]</b>	Reverses your last editing action. This command's name and function change depending on your last action. For example, if you just moved a Chord, this command's name becomes <b>Undo Move Chord</b> . Once executed, the <b>Undo</b> command becomes <b>Redo</b> and vice versa.
	<b><u>C</u>ut [Object]</b>	Removes selected object from a Document for reinsertion using the <b>Paste</b> command, if desired. This command's name and function change depending on your last selection. For example, if you just selected a Chord, this command's name becomes <b>Cut Chord</b> .
	<b><u>C</u>opy [Object]</b>	Specifies selected object for duplication using the <b>Paste</b> command. This command's name and function change depending on your last selection. For example, if you just selected a Chord, this command's name becomes <b>Copy Chord</b> .
	<b><u>P</u>aste [Object]</b>	Inserts the last object specified with the <b>Cut</b> or <b>Copy</b> command into the currently selected relative Area. This command's name and function change depending on your last action. For example, if you just <b>Cut</b> a Chord and selected a region in a Chord Block, this command's name becomes <b>Paste Chord</b> .
	<b><u>C</u>lear [Object]</b>	Deletes the currently selected objects.
	<b><u>S</u>elect <u>A</u>ll</b>	Automatically selects all relative objects in the currently selected region or Area. For example, if you just selected a Chord, <b>Select All</b> selects the rest of the Chords in the current Chord Block.
	<b><u>N</u>ew [Object]...</b>	Opens an appropriate dialog box, allowing you to create a New object. This command's name and function change depending on your last selection. For example, if you just selected a Chord, this command's name becomes <b>New Chord...</b> and opens the New Chord dialog box.
	<b><u>D</u>uplicate [Object]</b>	Immediately creates a Duplicate of a selected object. This command's name and function change depending on your last selection. For example, if you just selected a Chord, this command's name becomes <b>Duplicate Chord</b> .
	<b><u>B</u>ring To <u>F</u>ront</b>	Brings the currently selected overlapping Chord Block or Line Block to the foreground. In the case of Chord Blocks, this command also makes the selected Chord Block active.
	<b><u>S</u>end To <u>B</u>ack</b>	Sends the currently selected overlapping Chord Block or Line Block to the background. In the case of Chord Blocks, this command also makes the selected Chord Block inactive.

**Time Signature Setup...**

Opens the [Time Signature Setup dialog box](#), allowing you to change the Time Signature in a specified region of Bars.

**SMPTE Offset Setup...**

Opens the [SMPTE Offset Setup dialog box](#), allowing you to offset SMPTE synchronization between CAMPS and a master SMPTE source.

**Preferences...**

Opens the [Preferences dialog box](#), allowing you to set basic operational and appearance defaults in CAMPS.

**Description** The **Chord** menu allows you to automatically or manually assign Chords to your Composition Document. CAMPS in turn uses these Chord definitions for Auto Composing and other functions.



The **Chord** menu won't be available unless a Document is open. Many also require a related object first be selected.

<b>Items</b>	<b><u>G</u>enerate...</b>	Opens the <a href="#">Generate Chord Progression dialog box</a> which uses existing Key and Mode as well as Chord Function settings to generate alternatives for selected Chords.
	<b><u>EZ</u>generate</b>	Automatically generates new Chords for selected Chords using existing Key and Mode as well as Chord Function settings without opening the Generate Chord Progression dialog box.
	<b><u>H</u>armonize...</b>	Opens the <a href="#">Harmonize dialog box</a> which uses existing Line and Chord data to provide choices for creating Chords and adjusting Key and Mode.
	<b><u>EZ</u>harmonize</b>	Automatically creates Chords and adjusts Key and Mode using existing Line and Chord data without opening the Harmonize dialog box.
	<b><u>EZ</u>harmonize with Same <u>K</u>ey</b>	Automatically creates new Chords in existing Key and Mode using selected Line data without opening the Harmonize dialog box.
	<b><u>D</u>etect from MIDI Instrument...</b>	Opens the <a href="#">Chord Detection dialog box</a> , allowing you to "spell" desired Chord on your MIDI Instrument to replace selected Chords.
	<b><u>C</u>onstruct...</b>	Opens the <a href="#">Chord Construction dialog box</a> , allowing you to manually build a desired Chord from lists of components to replace selected Chords.
	<b><u>EZ</u>compose <u>L</u>ines in Region</b>	Automatically Composes Line data in the region of selected Chords.

Description The **Line** menu allows you to edit and manipulate Line data, including managing Takes.



The **Line** menu won't be available unless a Document is open. Additionally, most of these Menu Items won't be available unless a Line Block is selected.

Items	<b>Take/Take List...</b>	Opens the <a href="#">Take List dialog box</a> , allowing you to manipulate Takes for the selected Line Block.
	<b>Take/New Take...</b>	Opens the <a href="#">New Take dialog box</a> , allowing you to create a New blank or Auto Composed Take for the selected Line Block.
	<b>Take/Duplicate Take</b>	Duplicates the currently selected Take.
	<b>Take/Remove Take</b>	Deletes the currently selected Take. This command is only available when a Take other than the original is selected.
	<b>Take/[Take #1]</b>	Makes the Take named here currently active, appearing in front of any others. A bullet appears next to the current selection.
	<b>Compose...</b>	Opens the <a href="#">Compose dialog box</a> , allowing you to adjust guidelines for Auto Composing, and to Auto Compose selected Notes.
	<b>EZcompose</b>	Automatically Composes selected Notes without opening the Compose dialog box.
	<b>Voicing...</b>	Opens the <a href="#">Voicing dialog box</a> , allowing you to automatically analyze the selected Note data along with relevant Chords to provide you with various kinds of voicings for Notes in the selected Line Block.
	<b>Detect Dissonant Intervals...</b>	Opens the <a href="#">Dissonant Intervals Detection dialog box</a> , allowing you to automatically Detect and resolve Dissonant (harsh sounding) Intervals between selected Notes and Notes occurring at the same time in Line Blocks of other Tracks.
	<b>Quantize...</b>	Opens the <a href="#">Quantize dialog box</a> , allowing you to automatically correct the start time of selected Notes.
	<b>Transpose...</b>	Opens the <a href="#">Transpose dialog box</a> , allowing you to shift the Pitch of all selected Notes equally.
	<b>Adjust Articulation...</b>	Opens the <a href="#">Articulation Adjustment dialog box</a> , allowing you to change the length of selected Notes.
	<b>Adjust Velocity...</b>	Opens the <a href="#">Velocity Adjustment dialog box</a> , allowing you to change the loudness of Notes in the selected Line Block.
	<b>Map Pitches....</b>	Opens the <a href="#">Map Pitches dialog box</a> , allowing you to shift the MIDI Pitch value of all occurrences of specified Notes in selected Line data.
	<b>Half Time</b>	Halves the time value of selected Notes, doubling their Playback Tempo.



**Double Time**

Doubles the time value of selected Notes, halving their Playback Tempo.

Description The **MIDI** menu allows you to control the CAMPS Sequencer Engine and manage MIDI signals.



Many of these Menu Items won't be available unless a Document is open.

Items

### **Playback**

Starts Audition Playback of the currently selected Note Events with an automatically inserted Playback Loop. If no individual Note Events are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.



If the [Chord Track](#) is activated, Chords in the same Bar region will be also played back.

### **Playback with Others**

Starts Audition Playback of the currently selected Note Events with an automatically inserted Playback Loop along with all the other activated Tracks in the same Bar region. If no individual Note Events are selected, CAMPS begins Playback from the currently selected Line Block with no Loop.



If the [Chord Track](#) is activated, Chords in the same Bar region will be also played back.

### **Play**

Starts Playback of the current Document.

### **Stop**

Stops Playback of the current Document.

### **Record/Start Recording**

Starts Recording in the current Document.

### **Record/Start Over-dubbing**

Starts Over-Dub Recording in the current Document.

### **Record/Start Step Recording**

Starts Step Recording in the current Document.

### **Jump To/Top**

Moves the Playback Pointer position and viewpoint to the beginning of the currently selected Line Block. Executing this command also enables the Auto Scroll function if previously disabled.

### **Jump To/End**

Moves the Playback Pointer position and viewpoint to the end of the currently selected Line Block. Executing this command also enables the Auto Scroll function if previously disabled.

### **Metronome**

Switches between activate or deactivate the Metronome during Playback and Recording. A checkmark appears next to this item when activated.

### **All Notes Off**

Sends the "All Notes Off" MIDI Event to current MIDI Devices. Use this command to stop unwanted sustained Notes after stopping Playback or inadvertently interrupting MIDI signaling.

<b><u>R</u>eset All Controllers</b>	Sends the "Reset All Controllers" MIDI Event to current MIDI Devices. Use this command to reset certain MIDI parameters such as Volume, Pan or Modulation.
<b><u>S</u>ynchronize With/<u>I</u>nternal Clock</b>	Sets CAMPS to Playback and Record using its own internal MIDI Clock. A bullet appears next to the current selection.
<b><u>S</u>ynchronize With/<u>T</u>ap</b>	Sets CAMPS to Playback and Record using "freewheel" Tempo pulses input by you on your computer's keyboard or your MIDI Instrument. A bullet appears next to the current selection.
<b><u>S</u>ynchronize With/<u>M</u>IDI Clock</b>	Sets CAMPS to Playback and Record in "slave" mode using an external MIDI Clock source, such as another Sequencer. A bullet appears next to the current selection.
<b><u>S</u>ynchronize With/<u>S</u>MPTTE</b>	Sets CAMPS to Playback and Record using MIDI Time Code converted from an external SMPTE Time Code source, such as a click track from an audio or video tape deck. A SMPTE converter must be employed between a raw SMPTE source and the MIDI port used by CAMPS. A bullet appears next to the current selection.
<b><u>T</u>ransmit Clock/<u>M</u>IDI Clock</b>	Enables CAMPS to send its MIDI Clock signal to an external device. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer to synchronize with CAMPS. A checkmark appears next to this item when enabled.
<b><u>T</u>ransmit Clock/<u>S</u>MPTTE</b>	Enables CAMPS to send MIDI Time Code to an external SMPTE converter. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer or other device to synchronize with CAMPS. A checkmark appears next to this item when enabled.
<b><u>M</u>IDI Mapper</b>	Switches between enable or disable the Windows Operating System MIDI Mapper. When enabled, CAMPS passes MIDI Output Device selection control to the Windows Multimedia applet in the Control Panel. When disabled, MIDI Output Devices can be selected from within CAMPS, allowing much greater flexibility. A checkmark appears next to this item when enabled.
<b><u>M</u>IDI Setup...</b>	Opens the <a href="#">MIDI Setup dialog box</a> , allowing you to manage many MIDI signaling details. This includes settings for input, output, sync and Devices.

**Description** The **View** menu allows you to select objects to display and how to display them. Use **Save Display Settings** to save the current display settings of the Pianoroll Editor for its next session.



Many of these Menu Items won't be available unless a Document is open.

<b>Items</b>	<b><u>C</u>hord View/<u>R</u>oman Numeral</b>	Sets display of Chord Containers to <a href="#">Roman Numeral Analysis</a> (II-7, V7, etc.). A bullet appears next to the current selection.
	<b><u>C</u>hord View/<u>C</u>hord Name</b>	Sets display of Chord Containers to <a href="#">Chord Name</a> (D-7, G7, etc.). A bullet appears next to the current selection.
	<b><u>C</u>hord View/<u>S</u>cale Name</b>	Sets display of Chord Containers to <a href="#">Scale Name</a> , also known as Mode (Dorian, Mixolydian, etc.). A bullet appears next to the current selection.
	<b><u>C</u>hord View/<u>S</u>cale Spelling</b>	Sets display of Chord Containers to <a href="#">Scale Spelling</a> , listing intervals from the Root (R, 3,5,7, etc.). A bullet appears next to the current selection.
	<b><u>C</u>hord View/<u>K</u>ey and Mode</b>	Sets display of Chord Containers to <a href="#">Key and Mode</a> ; the same as each Chord Container's Key and Mode button. A bullet appears next to the current selection.
	<b>Note View/<u>A</u>ll Pitches</b>	Sets Pianoroll Area background to display all horizontal Pitch areas without any additional background designation. A bullet appears next to the current selection.
	<b>Note View/<u>S</u>cale Notes</b>	Sets Pianoroll Area background to display a light gray background color to differentiate between Scale Notes and other Notes. A bullet appears next to the current selection.
	<b>Note View/<u>C</u>hord Tones</b>	Sets Pianoroll Area background to display a light gray background color to differentiate between Chord Tones and other Notes. A bullet appears next to the current selection.
	<b>Note View/<u>A</u>void Notes</b>	Sets Pianoroll Area background to display a light gray background color to differentiate between Avoid Notes and other Notes. A bullet appears next to the current selection.
	<b><u>G</u>rid View/<u>B</u>ar Grid</b>	Switches between Show or Hide the Bar Grid in the Text Info, Chord, Lyric, Pianoroll and Velocity Areas. The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. A checkmark appears next to this Menu Item when set to Show.



**Grid View/Beat Grid**

Switches between Show or Hide the Beat Grid in the Text Info, Chord, Lyric, Pianoroll and Velocity Areas. The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. A checkmark appears next to this Menu Item when set to Show.

**Grid View/Pitch Grid**

Switches between Show or Hide the Pitch Grid in the Pianoroll Area. The Note Grid is a pattern of evenly spaced horizontal lines marking vertical divisions between MIDI Pitches for visual reference. A checkmark appears next to this Menu Item when set to Show.

**Grid View/Velocity Grid**

Switches between Show or Hide the Velocity Grid in the Velocity Area. The Velocity Grid is a pattern of evenly spaced horizontal lines marking vertical divisions between MIDI Velocity values for visual reference. A checkmark appears next to this Menu Item when set to Show.

**Grid View/Align to Grid**

Switches between Activate or Deactivate Align To Grid in the Pianoroll and Velocity Areas. The Align To Grid function causes Notes being created or moved to snap their position to the nearest Grid point as specified in the Grid Setup dialog box. Depending on your settings in the Grid Setup dialog box, this Alignment Grid will not necessarily coincide with the visual Bar or Beat Grids described above. A checkmark appears next to this Menu Item when set to Activate.

**Grid View/Grid Setup...**

Opens the [Grid Setup dialog box](#), allowing you to adjust the Alignment Grid Resolution for certain Areas of the Pianoroll Editor and other Editors.

**Toolbars/Main Toolbar**

Switches between Show or Hide the [Main toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Status Bar**

Switches between Show or Hide the [Status Bar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Playback Control Toolbar**

Switches between Show or Hide the [Playback Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Record Control Toolbar**

Switches between Show or Hide the [Record Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Clock Sync Toolbar**

Switches between Show or Hide the [Clock Sync toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Device Control Toolbar**

Switches between Show or Hide the [Device Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

<b><u>T</u>oolbars/<u>T</u>empo <u>T</u>oolbar</b>	Switches between Show or Hide the <a href="#">Tempo toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
<b><u>T</u>oolbars/<u>N</u>ote Stamp <u>T</u>oolbar</b>	Switches between Show or Hide the <a href="#">Note Stamp toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
<b><u>T</u>oolbars/<u>R</u>est <u>T</u>oolbar</b>	Switches between Show or Hide the <a href="#">Rest toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
<b><u>T</u>oolbars/<u>B</u>eat <u>T</u>oolbar</b>	Switches between Show or Hide the <a href="#">Beat toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
<b><u>T</u>oolbars/<u>T</u>ime <u>T</u>oolbar</b>	Switches between Show or Hide the <a href="#">Time toolbar</a> . A checkmark appears next to this Menu Item when set to Show.
<b><u>Z</u>oom/<u>Z</u>oom <u>O</u>ut (V)</b>	Incrementally decreases the Vertical size of the Pianoroll Area, increasing its viewable area.
<b><u>Z</u>oom/<u>Z</u>oom <u>I</u>n (V)</b>	Incrementally increases the Vertical size of the Pianoroll Areas, decreasing its viewable area.
<b><u>Z</u>oom/<u>Z</u>oom <u>O</u>ut (H)</b>	Incrementally decreases the Horizontal size of the Bar, Text Info, Chord, Lyric Pianoroll and Velocity Areas, increasing their viewable area.
<b><u>Z</u>oom/<u>Z</u>oom <u>I</u>n (H)</b>	Incrementally increases the Horizontal size of the Bar, Text Info, Chord, Lyric, Pianoroll and Velocity Areas, decreasing their viewable area.
<b><u>A</u>uto <u>S</u>croll</b>	Sets the viewable area in the Bar, Text Info, Chord, Lyric, Pianoroll and Velocity Areas to follow the Playback Pointer. A checkmark appears next to this item when enabled.
<b><u>J</u>ump <u>T</u>o <u>L</u>ocation...</b>	Opens the <a href="#">Jump To Location dialog box</a> , allowing you to specify the beginning Bar of the viewable area. Once specified, <b>Auto Scroll</b> is temporarily deactivated.
<b><u>E</u>dit <u>B</u>uttons</b>	Switches between Show or Hide the Edit Buttons in the Pianoroll Editor. A checkmark appears next to this Menu Item when set to Show.
<b><u>I</u>nteractive <u>I</u>nformation</b>	Switches between Show or Hide the Interactive Information display. A checkmark appears next to this Menu Item when set to Show.
<b><a href="#">Big Beat Window</a></b>	Switches between Show or Hide the Big Beat Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its <b>Close</b> button to hide it again. See <a href="#">details</a> . See also <a href="#">Beat Toolbar</a> ..

### **Big Time Window**

Switches between Show or Hide the Big Time Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Time Toolbar](#)..

### **Background Bitmap**

Switches between Show or Hide a Background Bitmap image. A checkmark appears next to this Menu Item when set to Show. This item will only be available if a Background Bitmap image is specified in the Preferences dialog box.

### **Save Display Settings**

Saves current Pianoroll Editor Display Settings as defaults for future sessions. Settings included are Grid, Zoom, Dividing Bar positions, Background Bitmap, etc.

Description The **Editors** menu allows you to open Editors and select Editing Tools.



None of these Menu Items will be available unless a Document is open. Also, a line Block must be selected for these items to be available.

Items	<b><u>E</u>vent List Editor</b>	Opens the <a href="#">Event List Editor</a> , allowing you to edit individual Events of the selected Line Block in vertical list format.
	<b><u>P</u>ianoroll Editor</b>	Opens a new <a href="#">Pianoroll Editor</a> window, allowing you to make alternate edits in the selected Line Block.
	<b><u>C</u>ontrol Draw Editor</b>	Opens the <a href="#">Control Draw Editor</a> , allowing you to edit MIDI Control events of the selected Line Block with a unique freestyle curve drawing method.
	<b><u>N</u>otation Editor</b>	Opens the <a href="#">Notation Editor</a> , allowing you to edit Notes of the selected Line Block in Musical Notation form.
	<b><u>T</u>empo <u>L</u>ist Editor</b>	Opens the <a href="#">Tempo List Editor</a> , allowing you to edit individual Tempo Events of the current Document in vertical list format.
	<b><u>T</u>empo <u>D</u>raw Editor</b>	Opens the <a href="#">Tempo Draw Editor</a> , allowing you to edit Tempo Events of the current Document with a unique freestyle curve drawing method.
	<b><u>T</u>ext List Editor</b>	Opens the <a href="#">Text List Editor</a> , allowing you to edit Text Events of the current Document in vertical list format.
	<b><u>T</u>ool/<u>A</u>rrow</b>	Allows you to select and manipulate objects in the Pianoroll Editor.
	<b><u>T</u>ool/<u>I</u> Beam</b>	Allows you to quickly select regions in the Note and Velocity Areas of the Pianoroll Editor.
	<b><u>T</u>ool/<u>P</u>en</b>	Allows you to quickly create Notes and edit multiple Velocity Events using a freestyle drawing method.
	<b><u>T</u>ool/<u>M</u>agic Wand</b>	Allows you to quickly create Chord Blocks or Line Blocks with automatically filled-in data (EZgenerate).
	<b><u>T</u>ool/<u>L</u>ine</b>	Allows you to quickly create Notes and edit multiple Velocity Events using a straight line drawing method.
	<b><u>T</u>ool/<u>O</u>val</b>	Allows you to quickly create Notes using a straight line drawing method, and edit multiple Velocity Events using an automatic curve drawing method.
	<b><u>T</u>ool/<u>S</u>tamp</b>	Allows you to quickly create Notes using a point and click or straight line drawing method, and allows you to edit multiple Velocity Events using a freestyle drawing method.
	<b><u>T</u>ool/<u>E</u>raser</b>	Allows you to quickly delete objects.
	<b><u>T</u>ool/<u>R</u>azor</b>	Allows you to quickly split a Chord Block at any point.

Description The **Window** menu allows you to arrange Document and Editor windows in the work area of the CAMPS Application Window.



The **Window** Menu Item won't be available unless a Document is open.

Items	<b><u>N</u>ew Pianoroll Editor</b>	Opens a new <a href="#">Pianoroll Editor</a> for the currently selected Line Block.
	<b><u>C</u>ascade</b>	Arranges windows in a diagonal overlapping manner, allowing you to individually select them. Any maximized windows will be reduced in size to accommodate the Cascade arrangement.
	<b><u>T</u>ile</b>	Arranges windows into horizontal blocks separated vertically, one above or below the next.
	<b><u>A</u>rrange Icons</b>	Arranges minimized window title bars in an orderly fashion within the CAMPS Application Window.
	<b>[W]indow</b>	Makes the window named here currently active, appearing in front of any others. The number of windows listed here equals the number of open windows in CAMPS. A checkmark appears next to the current selection.

**Description** The **Help** menu allows you to access these Help documents. The Help menu also allows you to add a background text message to your Composition Document and the currently selected Line Block.



The **Memo** Menu Items won't be available unless a Document is open.

<b>Items</b>	<b><u>H</u>elp</b>	Opens the Table of Contents for these Help documents.
	<b><u>L</u>ine <b>B</b>lock <b>M</b>emo...</b>	Opens the <a href="#">Memo dialog box</a> , allowing you to add an underlying text message to the currently selected Line Block.
	<b><u>D</u>ocument <b>M</b>emo...</b>	Opens the <a href="#">Memo dialog box</a> , allowing you to add an underlying text message to your Document.
	<b><u>A</u>bout <b>C</b>AMPS</b>	Opens the CAMPS banner with a text scroll area containing information about CAMPS and the Microworks Corporation.

# Menu Items for the Tempo Draw Editor

Description Here is a complete list of Menu Items when the Tempo Draw Editor is active.

Items

File	
<a href="#">New</a>	Ctrl + N
<a href="#">New Setup...</a>	Ctrl + Shift + N
<a href="#">Open...</a>	Ctrl + O
<a href="#">Close</a>	
<a href="#">Save</a>	Ctrl + S
<a href="#">Save As...</a>	
<a href="#">Revert</a>	
<a href="#">Export SMF...</a>	
1 <a href="#">[Recent Document]</a>	
2 <a href="#">[Recent Document]</a>	
:	
<a href="#">Exit</a>	

Edit	
<a href="#">Undo [Action] [Object]</a>	Ctrl + Z
<hr/>	
<a href="#">Cut Tempo Event</a>	Ctrl + X
<a href="#">Copy Tempo Event</a>	Ctrl + C
<a href="#">Paste Tempo Event</a>	Ctrl + V
<a href="#">Clear Tempo Event</a>	Del
<a href="#">Select All</a>	Ctrl + A
<hr/>	
<a href="#">Duplicate Tempo Event</a>	Ctrl + D
<hr/>	
<a href="#">Time Signature Setup...</a>	
<a href="#">SMPTE Offset Setup...</a>	
<hr/>	
<a href="#">Preferences...</a>	

Line
<a href="#">Adjust Value...</a>

## MIDI

[Play](#)

[Stop](#)

[Jump To](#) >

[Metronome](#) Ctrl +M

[All Notes Off](#)

[Reset All Controllers](#)

[Synchronize With](#) >

[Transmit Clock](#) >

[MIDI Mapper](#)

[MIDI Setup...](#)

## Jump To

[Top](#) Home

[End](#) End

## Synchronize With

[Internal Clock](#)

[Tap](#)

[MIDI Clock](#)

[SMPTE](#)

## Transmit Clock

[MIDI Clock](#)

[SMPTE](#)

## View

[Tempo View](#) >

[Grid View](#) >

[Toolbars](#) >

[Zoom](#) >

[Auto Scroll](#) Ctrl +L

[Jump To Location...](#)

[Edit Buttons](#)

[Interactive Information](#)

[Big Beat Window](#)

[Big Time Window](#)

[Background Bitmap](#)

[Save Display Settings](#)

## Tempo View

[Half Note](#)

[Quarter Note](#)

[8th Note](#)

[16th Note](#)

## Grid View

[Bar Grid](#)

[Beat Grid](#)

[Value Grid](#)

[Align To Grid](#)

[Grid Setup...](#)

## Toolbars

[Main Toolbar](#)

[Status Bar](#)

[Playback Control Toolbar](#)

[Record Control Toolbar](#)

[Clock Sync Toolbar](#)

[Device Control Toolbar](#)

[Tempo Toolbar](#)

[Note Stamp Toolbar](#)

[Rest Toolbar](#)

[Beat Toolbar](#)

[Time Toolbar](#)

## Zoom

[Zoom Out \(H\)](#)

[Zoom In \(H\)](#)

## Editors

[Tempo List Editor](#)

[Tempo Draw Editor](#)

[Text List Editor](#)

[Tool](#) >

## Tool

[Arrow](#)

[I Beam](#)

[Pen](#)

[Line](#)

[Oval](#)

[Eraser](#)



## Window

[New Tempo](#)

[Draw Editor](#)

[Cascade](#)

[Tile](#)

[Arrange](#)

[Icons](#)

---

1 [\[Window\]](#)

2 [\[Window\]](#)

:

## Help

[Help](#)

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[Document Memo...](#)

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[About CAMPS](#)

Description The **File** menu allows you to manage Document files and shut down CAMPS.



Some of these Menu Items won't be available unless a Document is open. Additionally, the **Save** and **Revert** commands won't be available until the current Document has been altered.

Items

<b><u>N</u>ew</b>	Creates a New untitled Document as specified by the settings in the New Document Setup dialog box.
<b><u>N</u>ew Setup...</b>	Opens the <a href="#">New Document Setup dialog box</a> , allowing you to set basic defaults for New Documents.
<b><u>O</u>pen...</b>	Opens the Open dialog box, allowing you to select and open a Document.
	 <p>When opening a Standard MIDI File, CAMPS automatically analyzes Line data and assigns <a href="#">appropriate Line Blocks</a> and one of <a href="#">six Category settings</a> to each Track. You can alter these settings at any time.</p>
<b><u>C</u>lose</b>	Closes the current Document. If this Document has been altered since opening, you will be asked whether or not you wish to save changes before closing.
<b><u>S</u>ave</b>	Saves the current Document using its existing filename and location.
<b><u>S</u>ave <u>A</u>s...</b>	Opens the Save As dialog box, allowing you to save the current Document to a specified filename and location.
<b><u>R</u>evert</b>	Allows you to close and reopen the current Document in one step, discarding any changes made after last saving it. You'll be asked if you're sure you want to proceed before this operation is completed.
<b><u>E</u>xport SMF...</b>	Opens the <a href="#">Export Standard MIDI File dialog box</a> , allowing you to save the current Document as a Standard MIDI File. After specifying a filename and location and clicking <b>Save</b> , the <a href="#">Export Options dialog box</a> opens, allowing you to make final file format conversion settings.
<b>[Recent Document]</b>	Opens the recently opened Document named here. The number of Recent Documents listed here is adjustable in the <a href="#">Preferences dialog box</a> which can be opened from the Edit menu.
<b><u>E</u>xit</b>	Closes CAMPS and any open Documents. If any currently open Documents have been altered since opening, you will be asked whether or not you wish to save changes before closing.

Description The **Edit** menu allows you to Edit objects in the Tempo Draw Editor. For example, you can **Cut**, **Copy**, **Paste**, and **Clear** objects in the Text Info and Draw Areas of the Tempo Draw Editor.



Many of these Menu Items won't be available unless a Document is open. Most also require a related object first be selected. Finally, most of these Menu Items change depending on the last object or Area selected in the Tempo Draw Editor.

Items	<b><u>U</u>ndo [Action] [Object]</b>	Reverses your last editing action. This command's name and function change depending on your last action. For example, if you just moved a Tempo Event, this command's name becomes <b>Undo Move Event</b> . Once executed, the <b>Undo</b> command becomes <b>Redo</b> and vice versa.
	<b><u>C</u>ut [Object]</b>	Removes selected object from a Document for reinsertion using the <b>Paste</b> command, if desired. This command's name and function change depending on your last selection. For example, if you just selected a Tempo Event, this command's name becomes <b>Cut Tempo Event</b> .
	<b><u>C</u>opy [Object]</b>	Specifies selected object for duplication using the <b>Paste</b> command. This command's name and function change depending on your last selection. For example, if you just selected a Tempo Event, this command's name becomes <b>Copy Tempo Event</b> .
	<b><u>P</u>aste [Object]</b>	Inserts the last object specified with the <b>Cut</b> or <b>Copy</b> command into the currently selected relative Area. This command's name and function change depending on your last action. For example, if you just <b>Cut</b> a Tempo Event and selected a region in the Draw Area, this command's name becomes <b>Paste Tempo Event</b> .
	<b><u>C</u>lear [Object]</b>	Deletes the currently selected objects.
	<b><u>S</u>elect <u>A</u>ll</b>	Automatically selects all relative objects in the currently selected region or Area. For example, if you just selected a region in the Draw Area, <b>Select All</b> selects all the Tempo Events in the Draw Area.
	<b><u>D</u>uplicate [Object]</b>	Immediately creates a Duplicate of a selected object. This command's name and function change depending on your last selection. For example, if you just selected a Tempo Event, this command's name becomes <b>Duplicate Tempo Event</b> .
	<b><u>T</u>ime Signature Setup...</b>	Opens the <a href="#">Time Signature Setup dialog box</a> , allowing you to change the Time Signature in a specified region of Bars.
	<b><u>S</u>MPT<b>E</b> <u>O</u>ffset Setup...</b>	Opens the <a href="#">SMPTE Offset Setup dialog box</a> , allowing you to offset SMPTE synchronization between CAMPS and a master SMPTE source.
	<b><u>P</u>references...</b>	Opens the <a href="#">Preferences dialog box</a> , allowing you to set basic operational and appearance defaults in CAMPS.

Description The **Line** menu allows you to edit and manipulate Line Tempo Event data.



The **Line** menu won't be available unless a Document is open.

Items **Adjust Value...** Opens the [Value Adjustment dialog box](#), allowing you to adjust the value of selected MIDI Tempo Events.

Description The **MIDI** menu allows you to control the CAMPS Sequencer Engine and manage MIDI signals.



Many of these Menu Items won't be available unless a Document is open.

Items	<b><u>P</u>lay</b>	Starts Playback of the current Document.
	<b><u>S</u>top</b>	Stops Playback of the current Document.
	<b><u>J</u>ump To/<u>T</u>op</b>	Moves the Playback Pointer position and viewpoint to the beginning of the current Document. Executing this command also enables the Auto Scroll function if previously disabled.
	<b><u>J</u>ump To/<u>E</u>nd</b>	Moves the Playback Pointer position and viewpoint to the end of the current Document. Executing this command also enables the Auto Scroll function if previously disabled.
	<b><u>M</u>etronome</b>	Switches between activate or deactivate the Metronome during Playback and Recording. A checkmark appears next to this item when activated.
	<b>All <u>N</u>otes Off</b>	Sends the "All Notes Off" MIDI Event to current MIDI Devices. Use this command to stop unwanted sustained Notes after stopping Playback or inadvertently interrupting MIDI signaling.
	<b><u>R</u>eset All Controllers</b>	Sends the "Reset All Controllers" MIDI Event to current MIDI Devices. Use this command to reset certain MIDI parameters such as Volume, Pan or Modulation.
	<b><u>S</u>ynchronize With/<u>I</u>nternal Clock</b>	Sets CAMPS to Playback and Record using its own internal MIDI Clock. A bullet appears next to the current selection.
	<b><u>S</u>ynchronize With/<u>T</u>ap</b>	Sets CAMPS to Playback and Record using "freewheel" Tempo pulses input by you on your computer's keyboard or your MIDI Instrument. A bullet appears next to the current selection.
	<b><u>S</u>ynchronize With/<u>M</u>IDI Clock</b>	Sets CAMPS to Playback and Record in "slave" mode using an external MIDI Clock source, such as another Sequencer. A bullet appears next to the current selection.
	<b><u>S</u>ynchronize With/<u>S</u>MPTTE</b>	Sets CAMPS to Playback and Record using MIDI Time Code converted from an external SMPTE Time Code source, such as a click track from an audio or video tape deck. A SMPTE converter must be employed between a raw SMPTE source and the MIDI port used by CAMPS. A bullet appears next to the current selection.
	<b><u>T</u>ransmit Clock/<u>M</u>IDI Clock</b>	Enables CAMPS to send its MIDI Clock signal to an external device. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer to synchronize with CAMPS. A checkmark appears next to this item when enabled.

**Transmit Clock/SMPTE**

Enables CAMPS to send MIDI Time Code to an external SMPTE converter. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer or other device to synchronize with CAMPS. A checkmark appears next to this item when enabled.

**MIDI Mapper**

Switches between enable or disable the Windows Operating System MIDI Mapper. When enabled, CAMPS passes MIDI Output Device selection control to the Windows Multimedia applet in the Control Panel. When disabled, MIDI Output Devices can be selected from within CAMPS, allowing much greater flexibility. A checkmark appears next to this item when enabled.

**MIDI Setup...**

Opens the [MIDI Setup dialog box](#), allowing you to manage many MIDI signaling details. This includes settings for input, output, sync and Devices.

Description The **View** menu allows you to select objects to display and how to display them. Use **Save Display Settings** to save the current display settings of the Tempo Draw Editor for its next session.



Many of these Menu Items won't be available unless a Document is open. Also, some of these Menu Items will only be available when the Tempo Draw Editor is active.

Items	<b><u>T</u>empo <u>V</u>iew/<u>H</u>alf Note</b>	Sets the vertical Value scale in the Draw Area of the Tempo Draw Editor to use a Half Note time value as a basis, i.e. Half Note = 75 Beats Per Minute. A bullet appears next to the current selection.
	<b><u>T</u>empo <u>V</u>iew/<u>Q</u>uarter Note</b>	Sets the vertical Value scale in the Draw Area of the Tempo Draw Editor to use a Quarter Note time value as a basis (standard Metronome scale), i.e. Quarter Note = 150 Beats Per Minute. A bullet appears next to the current selection.
	<b><u>T</u>empo <u>V</u>iew/<u>8</u>th Note</b>	Sets the vertical Value scale in the Draw Area of the Tempo Draw Editor to use an 8th Note time value as a basis, i.e. 8th Note = 300 Beats Per Minute. A bullet appears next to the current selection.
	<b><u>T</u>empo <u>V</u>iew/<u>16</u>th Note</b>	Sets the vertical Value scale in the Draw Area of the Tempo Draw Editor to use a 16th Note time value as a basis, i.e. 16th Note = 600 Beats Per Minute. A bullet appears next to the current selection.
	<b><u>G</u>rid <u>V</u>iew/<u>B</u>ar <u>G</u>rid</b>	Switches between Show or Hide the Bar Grid in the Text Info and Draw Areas. The Bar Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Bars (Measures) for visual reference. A checkmark appears next to this Menu Item when set to Show.
	<b><u>G</u>rid <u>V</u>iew/<u>B</u>eat <u>G</u>rid</b>	Switches between Show or Hide the Beat Grid in the Text Info and Draw Areas. The Beat Grid is a pattern of evenly spaced vertical lines marking horizontal divisions between Beats in each Bar for visual reference. A checkmark appears next to this Menu Item when set to Show.
	<b><u>G</u>rid <u>V</u>iew/<u>V</u>alue <u>G</u>rid</b>	Switches between Show or Hide the Value Grid in the Draw Area. The Value Grid is a pattern of evenly spaced horizontal lines marking vertical divisions between MIDI Tempo Event data Values for visual reference. A checkmark appears next to this Menu Item when set to Show.

**Grid View/Align to Grid**

Switches between Activate or Deactivate Align To Grid in the Draw Area. The Align To Grid function causes Tempo Events being created or moved to snap their position to the nearest Grid point as specified in the Grid Setup dialog box. Depending on your settings in the Grid Setup dialog box, this Alignment Grid will not necessarily coincide with the visual Bar or Beat Grids described above. A checkmark appears next to this Menu Item when set to Activate.

**Grid View/Grid Setup...**

Opens the [Grid Setup dialog box](#), allowing you to adjust the Alignment Grid Resolution for the Text Info and Draw Areas of the Tempo Draw Editor and various Areas of other Editors.

**Toolbars/Main Toolbar**

Switches between Show or Hide the [Main toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Status Bar**

Switches between Show or Hide the [Status Bar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Playback Control Toolbar**

Switches between Show or Hide the [Playback Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Record Control Toolbar**

Switches between Show or Hide the [Record Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Clock Sync Toolbar**

Switches between Show or Hide the [Clock Sync toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Device Control Toolbar**

Switches between Show or Hide the [Device Control toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Tempo Toolbar**

Switches between Show or Hide the [Tempo toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Note Stamp Toolbar**

Switches between Show or Hide the [Note Stamp toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Rest Toolbar**

Switches between Show or Hide the [Rest toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Beat Toolbar**

Switches between Show or Hide the [Beat toolbar](#). A checkmark appears next to this Menu Item when set to Show.

**Toolbars/Time Toolbar**

Switches between Show or Hide the [Time toolbar](#). A checkmark appears next to this Menu Item when set to Show.



### **Zoom/Zoom Out (H)**

Incrementally decreases the Horizontal size of the Bar, Text Info and Draw Areas, increasing their viewable area.

### **Zoom/Zoom In (H)**

Incrementally increases the Horizontal size of the Bar, Text Info and Draw Areas, decreasing their viewable area.

### **Auto Scroll**

Sets the viewable area in the Bar, Text Info and Draw Areas to follow the Playback Pointer. A checkmark appears next to this item when enabled.

### **Jump To Location...**

Opens the [Jump To Location dialog box](#), allowing you to specify the beginning Bar of the viewable area. Once specified, **Auto Scroll** is temporarily deactivated.

### **Edit Buttons**

Switches between Show or Hide the Edit Buttons in the Tempo Draw Editor. A checkmark appears next to this Menu Item when set to Show.

### **Interactive Information**

Switches between Show or Hide the Interactive Information display. A checkmark appears next to this Menu Item when set to Show.

### **[Big Beat Window](#)**

Switches between Show or Hide the Big Beat Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Beat Toolbar](#)..

### **[Big Time Window](#)**

Switches between Show or Hide the Big Time Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Time Toolbar](#)..

### **Background Bitmap**

Switches between Show or Hide a Background Bitmap image. A checkmark appears next to this Menu Item when set to Show. This item will only be available if a Background Bitmap image is specified in the Preferences dialog box.

### **Save Display Settings**

Saves current Tempo Draw Editor Display Settings as defaults for future sessions. Settings included are Grid, Zoom, Dividing Bar positions, Background Bitmap, etc.

Description The **Editors** menu allows you to open Editors and select Editing Tools.



None of these Menu Items will be available unless a Document is open. Many also require a related object first be selected.

Items	<b>Tempo <u>L</u>ist Editor</b>	Opens the <a href="#">Tempo List Editor</a> , allowing you to edit individual Tempo Events of the current Document in vertical list format.
	<b>Tempo <u>D</u>raw Editor</b>	Opens a new <a href="#">Tempo Draw Editor</a> window, allowing you to make alternate Tempo Event edits in the current Document differently.
	<b>Text <u>L</u>ist Editor</b>	Opens the <a href="#">Text List Editor</a> , allowing you to edit Text Events of the current Document in vertical list format.
	<b>Tool/<u>A</u>rrow</b>	Allows you to select and manipulate objects in the Tempo Draw Editor.
	<b>Tool/<u>I</u> Beam</b>	Allows you to quickly select regions in the Draw Area.
	<b>Tool/<u>P</u>en</b>	Allows you to quickly create and edit Tempo Events using a freestyle drawing method.
	<b>Tool/<u>L</u>ine</b>	Allows you to quickly create and edit Tempo Events using a straight line drawing method.
	<b>Tool/<u>O</u>val</b>	Allows you to quickly create and edit Tempo Events using an automatic curve drawing method.
	<b>Tool/<u>E</u>raser</b>	Allows you to quickly delete objects.

**Description** The **Window** menu allows you to arrange Document and Editor windows in the work area of the CAMPS Application Window.



The **Window** Menu Item won't be available unless a Document is open.

<b>Items</b>	<b><u>N</u>ew Tempo Draw Editor</b>	Opens a new <a href="#">Tempo Draw Editor</a> window for the currently selected Line Block.
	<b><u>C</u>ascade</b>	Arranges windows in a diagonal overlapping manner, allowing you to individually select them. Any maximized windows will be reduced in size to accommodate the Cascade arrangement.
	<b><u>T</u>ile</b>	Arranges windows into horizontal blocks separated vertically, one above or below the next.
	<b><u>A</u>rrange Icons</b>	Arranges minimized window title bars in an orderly fashion within the CAMPS Application Window.
	<b>[W]indow</b>	Makes the window named here currently active, appearing in front of any others. The number of windows listed here equals the number of open windows in CAMPS. A checkmark appears next to the current selection.

**Description** The **Help** menu allows you to access these Help documents. The Help menu also allows you to add a background text message to your Composition Document.



The **Memo** Menu Items won't be available unless a Document is open.

- Items**
- Help** Opens the Table of Contents for these Help documents.
  - Document Memo...** Opens the [Memo dialog box](#), allowing you to add an underlying text message to your Document.
  - About **CAMPS**** Opens the CAMPS banner with a text scroll area containing information about CAMPS and the Microworks Corporation.

# Menu Items for the Tempo List Editor

Description Here is a complete list of the Menu Items when the Tempo List Editor is active.

Items

File	
<a href="#">New</a>	Ctrl + N
<a href="#">New Setup...</a>	Ctrl + Shift + N
<a href="#">Open...</a>	Ctrl + O
<a href="#">Close</a>	
<a href="#">Save</a>	Ctrl + S
<a href="#">Save As...</a>	
<a href="#">Revert</a>	
<a href="#">Export SMF...</a>	
1	<a href="#">[Recent Document]</a>
2	<a href="#">[Recent Document]</a>
	:
<a href="#">Exit</a>	

Edit	
<a href="#">Undo [Action] [Object]</a>	Ctrl + Z
<hr/>	
<a href="#">Cut Tempo Event</a>	Ctrl + X
<a href="#">Copy Tempo Event</a>	Ctrl + C
<a href="#">Paste Tempo Event</a>	Ctrl + V
<a href="#">Clear Tempo Event</a>	Del
<a href="#">Select All</a>	Ctrl + A
<hr/>	
<a href="#">New Tempo Event</a>	Ctrl + I
<a href="#">Duplicate Tempo Event</a>	Ctrl + D
<hr/>	
<a href="#">SMPTE Offset Setup...</a>	
<hr/>	
<a href="#">Preferences...</a>	

Line
<a href="#">Adjust Value...</a>

## MIDI

[Play](#)

[Stop](#)

[Jump To](#) >

[Metronome](#) Ctrl +M

[All Notes Off](#)

[Reset All Controllers](#)

[Synchronize With](#) >

[Transmit Clock](#) >

[MIDI Mapper](#)

[MIDI Setup...](#)

## Jump To

[Top](#) Home

[End](#) End

## Synchronize With

[Internal Clock](#)

[Tap](#)

[MIDI Clock](#)

[SMPTE](#)

## Transmit Clock

[MIDI Clock](#)

[SMPTE](#)

## View

[Toolbars](#) >

[Auto Scroll](#) Ctrl +L

[Jump To Location...](#)

[Edit Buttons](#)

[Interactive Information](#)

[Big Beat Window](#)

[Big Time Window](#)

[Save Display Settings](#)

## Toolbars

[Main Toolbar](#)

[Status Bar](#)

[Playback Control Toolbar](#)

[Record Control Toolbar](#)

[Clock Sync Toolbar](#)

[Device Control Toolbar](#)

[Tempo Toolbar](#)

[Note Stamp Toolbar](#)

[Rest Toolbar](#)

[Beat Toolbar](#)

[Time Toolbar](#)

## Editors

[Tempo List Editor](#)

[Tempo Draw Editor](#)

[Text List Editor](#)

## Window

[New Tempo](#)

[List Editor](#)

[Cascade](#)

[Tile](#)

[Arrange](#)

[Icons](#)

1 [\[Window\]](#)

2 [\[Window\]](#)

:



## Help

[Help](#)

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[Document Memo...](#)


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[About CAMPS](#)

Description The **File** menu allows you to manage Document files and shut down CAMPS.



Some of these Menu Items won't be available unless a Document is open. Additionally, the **Save** and **Revert** commands won't be available until the current Document has been altered.

Items	<b><u>N</u>ew</b>	Creates a New untitled Document as specified by the settings in the New Document Setup dialog box.
	<b><u>N</u>ew Setup...</b>	Opens the <a href="#">New Document Setup dialog box</a> , allowing you to set basic defaults for New Documents.
	<b><u>O</u>pen...</b>	Opens the Open dialog box, allowing you to select and open a Document.
	<b><u>C</u>lose</b>	 <p>When opening a Standard MIDI File, CAMPS automatically analyzes Line data and assigns <a href="#">appropriate Line Blocks</a> and one of <a href="#">six Category settings</a> to each Track. You can alter these settings at any time.</p> <p>Closes the current Document. If this Document has been altered since opening, you will be asked whether or not you wish to save changes before closing.</p>
	<b><u>S</u>ave</b>	Saves the current Document using its existing filename and location.
	<b><u>S</u>ave <u>A</u>s...</b>	Opens the Save As dialog box, allowing you to save the current Document to a specified filename and location.
	<b><u>R</u>evert</b>	Allows you to close and reopen the current Document in one step, discarding any changes made after last saving it. You'll be asked if you're sure you want to proceed before this operation is completed.
	<b><u>E</u>xport SMF...</b>	Opens the <a href="#">Export Standard MIDI File dialog box</a> , allowing you to save the current Document as a Standard MIDI File. After specifying a filename and location and clicking <b>Save</b> , the <a href="#">Export Options dialog box</a> opens, allowing you to make final file format conversion settings.
	<b>[Recent Document]</b>	Opens the recently opened Document named here. The number of Recent Documents listed here is adjustable in the <a href="#">Preferences dialog box</a> which can be opened from the Edit menu.
	<b><u>E</u>xit</b>	Closes CAMPS and any open Documents. If any currently open Documents have been altered since opening, you will be asked whether or not you wish to save changes before closing.



**Description** The **Edit** menu allows you to Edit MIDI Tempo Events in the Tempo List Editor. For example, you can **Cut**, **Copy**, **Paste** and **Clear** Tempo Events.



These Menu Items won't be available unless a Document is open and the Tempo List Editor is currently active with a Tempo Event selected.

<b>Items</b>	<b><u>U</u>ndo [Action] [Object]</b>	Reverses your last editing action. This command's name and function change depending on your last action. For example, if you just moved a Tempo Event, this command's name becomes <b>Undo Move Event</b> . Once executed, the <b>Undo</b> command becomes <b>Redo</b> and vice versa.
	<b><u>C</u>ut Tempo Event</b>	Removes selected Tempo Event from a Document for reinsertion using the <b>Paste</b> command, if desired.
	<b><u>C</u>opy Tempo Event</b>	Specifies a Tempo Event for duplication using the <b>Paste</b> command.
	<b><u>P</u>aste Tempo Event</b>	Inserts the last Tempo Event specified with the <b>Cut</b> or <b>Copy</b> command into the currently selected region of the Tempo List.
	<b><u>C</u>lear Tempo Event</b>	Deletes the currently selected Tempo Events.
	<b><u>S</u>elect <u>A</u>ll</b>	Automatically selects all Tempo Events in the List.
	<b><u>N</u>ew Tempo Event</b>	Inserts a New Tempo Event at the selected location.
	<b><u>D</u>uplicate Tempo Event</b>	Immediately creates a Duplicate of a selected Tempo Event.
	<b><u>S</u>MPTTE <u>O</u>ffset Setup...</b>	Opens the <a href="#">SMPTE Offset Setup dialog box</a> , allowing you to offset SMPTE synchronization between CAMPS and a master SMPTE source.
	<b><u>P</u>references...</b>	Opens the <a href="#">Preferences dialog box</a> , allowing you to set basic operational and appearance defaults in CAMPS.

Description The **Line** menu allows you to edit and manipulate Line data.



The **Line** menu won't be available unless a Document is open.

Items **Adjust Value...** Opens the [Value Adjustment dialog box](#), allowing you to adjust the value of selected MIDI Tempo Events.

Description The **MIDI** menu allows you to control the CAMPS Sequencer Engine and manage MIDI signals.



Many of these Menu Items won't be available unless a Document is open.

Items	<b><u>P</u>lay</b>	Starts Playback of the current Document.
	<b><u>S</u>top</b>	Stops Playback of the current Document.
	<b><u>J</u>ump To/<u>T</u>op</b>	Moves the Playback Pointer position and viewpoint to the beginning of the current Document. Executing this command also enables the Auto Scroll function if previously disabled.
	<b><u>J</u>ump To/<u>E</u>nd</b>	Moves the Playback Pointer position and viewpoint to the end of the current Document. Executing this command also enables the Auto Scroll function if previously disabled.
	<b><u>M</u>etronome</b>	Switches between activate or deactivate the Metronome during Playback and Recording. A checkmark appears next to this item when activated.
	<b>All <u>N</u>otes Off</b>	Sends the "All Notes Off" MIDI Event to current MIDI Devices. Use this command to stop unwanted sustained Notes after stopping Playback or inadvertently interrupting MIDI signaling.
	<b><u>R</u>eset All Controllers</b>	Sends the "Reset All Controllers" MIDI Event to current MIDI Devices. Use this command to reset certain MIDI parameters such as Volume, Pan or Modulation.
	<b><u>S</u>ynchronize With/<u>I</u>nternal Clock</b>	Sets CAMPS to Playback and Record using its own internal MIDI Clock. A bullet appears next to the current selection.
	<b><u>S</u>ynchronize With/<u>T</u>ap</b>	Sets CAMPS to Playback and Record using "freewheel" Tempo pulses input by you on your computer's keyboard or your MIDI Instrument. A bullet appears next to the current selection.
	<b><u>S</u>ynchronize With/<u>M</u>IDI Clock</b>	Sets CAMPS to Playback and Record in "slave" mode using an external MIDI Clock source, such as another Sequencer. A bullet appears next to the current selection.
	<b><u>S</u>ynchronize With/<u>S</u>MPTE</b>	Sets CAMPS to Playback and Record using MIDI Time Code converted from an external SMPTE Time Code source, such as a click track from an audio or video tape deck. A SMPTE converter must be employed between a raw SMPTE source and the MIDI port used by CAMPS. A bullet appears next to the current selection.
	<b><u>T</u>ransmit Clock/<u>M</u>IDI Clock</b>	Enables CAMPS to send its MIDI Clock signal to an external device. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer to synchronize with CAMPS. A checkmark appears next to this item when enabled.

**Transmit Clock/SMPTE**

Enables CAMPS to send MIDI Time Code to an external SMPTE converter. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer or other device to synchronize with CAMPS. A checkmark appears next to this item when enabled.

**MIDI Mapper**

Switches between enable or disable the Windows Operating System MIDI Mapper. When enabled, CAMPS passes MIDI Output Device selection control to the Windows Multimedia applet in the Control Panel. When disabled, MIDI Output Devices can be selected from within CAMPS, allowing much greater flexibility. A checkmark appears next to this item when enabled.

**MIDI Setup...**

Opens the [MIDI Setup dialog box](#), allowing you to manage many MIDI signaling details. This includes settings for input, output, sync and Devices.

**Description** The **View** menu allows you to select objects to display and how to display them. Use **Save Display Settings** to save the current display settings of the Tempo List Editor for its next session.



Many of these Menu Items won't be available unless a Document is open.

<b>Items</b>	<b><u>T</u>oolbars/<u>M</u>ain Toolbar</b>	Switches between Show or Hide the <a href="#">Main toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>S</u>tatus Bar</b>	Switches between Show or Hide the <a href="#">Status Bar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>P</u>layback Control Toolbar</b>	Switches between Show or Hide the <a href="#">Playback Control toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>R</u>ecord Control Toolbar</b>	Switches between Show or Hide the <a href="#">Record Control toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>C</u>lock Sync Toolbar</b>	Switches between Show or Hide the <a href="#">Clock Sync toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>D</u>evice Control Toolbar</b>	Switches between Show or Hide the <a href="#">Device Control toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>T</u>empo Toolbar</b>	Switches between Show or Hide the <a href="#">Tempo toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>N</u>ote Stamp Toolbar</b>	Switches between Show or Hide the <a href="#">Note Stamp toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>R</u>est Toolbar</b>	Switches between Show or Hide the <a href="#">Rest toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>B</u>eat Toolbar</b>	Switches between Show or Hide the <a href="#">Beat toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>T</u>ime Toolbar</b>	Switches between Show or Hide the <a href="#">Time toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>A</u>uto Scroll</b>	Sets the viewable area to follow the Playback Pointer. A checkmark appears next to this item when enabled.

### **Jump To Location...**

Opens the [Jump To Location dialog box](#), allowing you to specify the beginning Bar of the viewable area. Once specified, **Auto Scroll** is temporarily deactivated.

### **Edit Buttons**

Switches between Show or Hide the Edit Buttons in the Tempo List Editor. A checkmark appears next to this Menu item when set to Show.

### **Interactive Information**

Switches between Show or Hide the Interactive Information display. A checkmark appears next to this Menu item when set to Show.

### **Big Beat Window**

Switches between Show or Hide the Big Beat Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Beat Toolbar](#)..

### **Big Time Window**

Switches between Show or Hide the Big Time Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Time Toolbar](#)..

### **Save Display Settings**

Saves current Tempo List Editor Display Settings as defaults for future sessions. Settings included are List, Zoom, Dividing Bar positions, Background Bitmap, etc.

Description The **Editors** menu allows you to open Editors.



None of these Menu Items will be available unless a Document is open.

Items

**Tempo List Editor**

Opens a new [Tempo List Editor](#) window, allowing you to alternate edits of Tempo Events in the current Document.

**Tempo Draw Editor**

Opens the [Tempo Draw Editor](#), allowing you to edit Tempo Events in the current Document with a unique freestyle curve drawing method.

**Text List Editor**

Opens the [Text List Editor](#), allowing you to edit Text Events of the current Document in vertical list format.

Description The **Window** menu allows you to arrange Document and Editor windows in the work area of the CAMPS Application Window.



The **Window** Menu Item won't be available unless a Document is open.

Items	<b><u>N</u>ew Tempo List Editor</b>	Opens a new <a href="#">Tempo List Editor</a> window for the currently selected Document.
	<b><u>C</u>ascade</b>	Arranges windows in a diagonal overlapping manner, allowing you to individually select them. Any maximized windows will be reduced in size to accommodate the Cascade arrangement.
	<b><u>T</u>ile</b>	Arranges windows into horizontal blocks separated vertically, one above or below the next.
	<b><u>A</u>rrange Icons</b>	Arranges minimized window title bars in an orderly fashion within the CAMPS Application Window.
	<b>[W]indow</b>	Makes the window named here currently active, appearing in front of any others. The number of windows listed here equals the number of open windows in CAMPS. A checkmark appears next to the current selection.



**Description** The **Help** menu allows you to access these Help documents. The Help menu also allows you to add a background text message to your Composition Document.



The **Document Memo** Menu Item won't be available unless a Document is open.

**Items**

**Help**

Opens the Table of Contents for these Help documents.

**Document Memo...**

Opens the [Memo dialog box](#), allowing you to add an underlying text message to your Document.

**About CAMPS**

Opens the CAMPS banner with a text scroll area containing information about CAMPS and the Microworks Corporation.

# Menu Items for the Text List Editor

Description Here is a complete list of the Menu Items when the Text List Editor is active.

Items

File	
<a href="#">New</a>	Ctrl + N
<a href="#">New Setup...</a>	Ctrl + Shift + N
<a href="#">Open...</a>	Ctrl + O
<a href="#">Close</a>	
<a href="#">Save</a>	Ctrl + S
<a href="#">Save As...</a>	
<a href="#">Revert</a>	
<a href="#">Export SMF...</a>	
1	<a href="#">[Recent Document]</a>
2	<a href="#">[Recent Document]</a>
:	
<a href="#">Exit</a>	

Edit	
<a href="#">Undo [Action] [Object]</a>	Ctrl + Z
<hr/>	
<a href="#">Cut Text Event</a>	Ctrl + X
<a href="#">Copy Text Event</a>	Ctrl + C
<a href="#">Paste Text Event</a>	Ctrl + V
<a href="#">Clear Text Event</a>	Del
<a href="#">Select All</a>	Ctrl + A
<hr/>	
<a href="#">New Text Event...</a>	Ctrl + I
<a href="#">Duplicate Text Event</a>	Ctrl + D
<hr/>	
<a href="#">SMPTE Offset Setup...</a>	
<hr/>	
<a href="#">Preferences...</a>	

## MIDI

[Play](#)

[Stop](#)

[Jump To](#) >

[Metronome](#) Ctrl +M

[All Notes Off](#)

[Reset All Controllers](#)

[Synchronize With](#) >

[Transmit Clock](#) >

[MIDI Mapper](#)

[MIDI Setup...](#)

## Jump To

[Top](#) Home

[End](#) End

## Synchronize With

[Internal Clock](#)

[Tap](#)

[MIDI Clock](#)

[SMPTE](#)

## Transmit Clock

[MIDI Clock](#)

[SMPTE](#)

## View

[Toolbars](#) >

[Auto Scroll](#) Ctrl +L

[Jump To Location...](#)

[Edit Buttons](#)

[Interactive Information](#)

[Big Beat Window](#)

[Big Time Window](#)

[Save Display Settings](#)

## Toolbars

[Main Toolbar](#)

[Status Bar](#)

[Playback Control Toolbar](#)

[Record Control Toolbar](#)

[Clock Sync Toolbar](#)

[Device Control Toolbar](#)

[Tempo Toolbar](#)

[Note Stamp Toolbar](#)

[Rest Toolbar](#)

[Beat Toolbar](#)

[Time Toolbar](#)

## Editors

[Tempo List Editor](#)

[Tempo Draw Editor](#)

[Text List Editor](#)

## Window

[New Text](#)

[List Editor](#)

[Cascade](#)

[Tile](#)

[Arrange](#)

[Icons](#)

1 [\[Window\]](#)

2 [\[Window\]](#)

:



## Help

[Help](#)

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[Document Memo...](#)

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[About CAMPS](#)

Description The **File** menu allows you to manage Document files and shut down CAMPS.



Some of these Menu Items won't be available unless a Document is open. Additionally, the **Save** and **Revert** commands won't be available until the current Document has been altered.

Items

**New**

Creates a New untitled Document as specified by the settings in the New Document Setup dialog box.

**New Setup...**

Opens the [New Document Setup dialog box](#), allowing you to set basic defaults for New Documents.

**Open...**

Opens the Open dialog box, allowing you to select and open a Document.



When opening a Standard MIDI File, CAMPS automatically analyzes Line data and assigns [appropriate Line Blocks](#) and one of [six Category settings](#) to each Track. You can alter these settings at any time.

**Close**

Closes the current Document. If this Document has been altered since opening, you will be asked whether or not you wish to save changes before closing.

**Save**

Saves the current Document using its existing filename and location.

**Save As...**

Opens the Save As dialog box, allowing you to save the current Document to a specified filename and location.

**Revert**

Allows you to close and reopen the current Document in one step, discarding any changes made after last saving it. You'll be asked if you're sure you want to proceed before this operation is completed.

**Export SMF...**

Opens the [Export Standard MIDI File dialog box](#), allowing you to save the current Document as a Standard MIDI File. After specifying a filename and location and clicking **Save**, the [Export Options dialog box](#) opens, allowing you to make final file format conversion settings.

**[Recent Document]**

Opens the recently opened Document named here. The number of Recent Documents listed here is adjustable in the [Preferences dialog box](#) which can be opened from the Edit menu.

**Exit**

Closes CAMPS and any open Documents. If any currently open Documents have been altered since opening, you will be asked whether or not you wish to save changes before closing.

**Description** The **Edit** menu allows you to Edit Text Events in the Text List Editor. For example, you can **Cut**, **Copy**, **Paste** and **Clear** Text Events.



These Menu Items won't be available unless a Document is open and the Text List Editor is currently active with a Text Event selected.

<b>Items</b>	<p><b><u>U</u>ndo [Action] [Object]</b> Reverses your last editing action. This command's name and function change depending on your last action. For example, if you just moved a Text Event, this command's name becomes <b>Undo Move Event</b>. Once executed, the <b>Undo</b> command becomes <b>Redo</b> and vice versa.</p> <p><b><u>C</u>ut Text Event</b> Removes selected Text Event from a Document for reinsertion using the <b>Paste</b> command, if desired.</p> <p><b><u>C</u>opy Text Event</b> Specifies a Text Event for duplication using the <b>Paste</b> command.</p> <p><b><u>P</u>aste Text Event</b> Inserts the last Text Event specified with the <b>Cut</b> or <b>Copy</b> command into the currently selected region of the Text List.</p> <p><b><u>C</u>lear Text Event</b> Deletes the currently selected Text Events.</p> <p><b><u>S</u>elect <u>A</u>ll</b> Automatically selects all Text Events in the List.</p> <p><b><u>N</u>ew Text Event...</b> Opens the <a href="#">New Text Event dialog box</a>, allowing you to create a New Event.</p> <p><b><u>D</u>uplicate Text Event</b> Immediately creates a Duplicate of a selected Text Event.</p> <p><b><u>S</u>MPTE <u>O</u>ffset <u>S</u>etup...</b> Opens the <a href="#">SMPTE Offset Setup dialog box</a>, allowing you to offset SMPTE synchronization between CAMPS and a master SMPTE source.</p> <p><b><u>P</u>references...</b> Opens the <a href="#">Preferences dialog box</a>, allowing you to set basic operational and appearance defaults in CAMPS.</p>
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Description The **MIDI** menu allows you to control the CAMPS Sequencer Engine and manage MIDI signals.



Many of these Menu Items won't be available unless a Document is open.

Items	<b><u>P</u>lay</b>	Starts Playback of the current Document.
	<b><u>S</u>top</b>	Stops Playback of the current Document.
	<b><u>J</u>ump To/<u>T</u>op</b>	Moves the Playback Pointer position and viewpoint to the beginning of the current Document. Executing this command also enables the Auto Scroll function if previously disabled.
	<b><u>J</u>ump To/<u>E</u>nd</b>	Moves the Playback Pointer position and viewpoint to the end of the current Document. Executing this command also enables the Auto Scroll function if previously disabled.
	<b><u>M</u>etronome</b>	Switches between activate or deactivate the Metronome during Playback and Recording. A checkmark appears next to this item when activated.
	<b>All <u>N</u>otes Off</b>	Sends the "All Notes Off" MIDI Event to current MIDI Devices. Use this command to stop unwanted sustained Notes after stopping Playback or inadvertently interrupting MIDI signaling.
	<b><u>R</u>eset All Controllers</b>	Sends the "Reset All Controllers" MIDI Event to current MIDI Devices. Use this command to reset certain MIDI parameters such as Volume, Pan or Modulation.
	<b><u>S</u>ynchronize With/<u>I</u>nternal Clock</b>	Sets CAMPS to Playback and Record using its own internal MIDI Clock. A bullet appears next to the current selection.
	<b><u>S</u>ynchronize With/<u>T</u>ap</b>	Sets CAMPS to Playback and Record using "freewheel" Tempo pulses input by you on your computer's keyboard or your MIDI Instrument. A bullet appears next to the current selection.
	<b><u>S</u>ynchronize With/<u>M</u>IDI Clock</b>	Sets CAMPS to Playback and Record in "slave" mode using an external MIDI Clock source, such as another Sequencer. A bullet appears next to the current selection.
	<b><u>S</u>ynchronize With/<u>S</u>MPTTE</b>	Sets CAMPS to Playback and Record using MIDI Time Code converted from an external SMPTE Time Code source, such as a click track from an audio or video tape deck. A SMPTE converter must be employed between a raw SMPTE source and the MIDI port used by CAMPS. A bullet appears next to the current selection.
	<b><u>T</u>ransmit Clock/<u>M</u>IDI Clock</b>	Enables CAMPS to send its MIDI Clock signal to an external device. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer to synchronize with CAMPS. A checkmark appears next to this item when enabled.

**Transmit Clock/SMPTE**

Enables CAMPS to send MIDI Time Code to an external SMPTE converter. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer or other device to synchronize with CAMPS. A checkmark appears next to this item when enabled.

**MIDI Mapper**

Switches between enable or disable the Windows Operating System MIDI Mapper. When enabled, CAMPS passes MIDI Output Device selection control to the Windows Multimedia applet in the Control Panel. When disabled, MIDI Output Devices can be selected from within CAMPS, allowing much greater flexibility. A checkmark appears next to this item when enabled.

**MIDI Setup...**

Opens the [MIDI Setup dialog box](#), allowing you to manage many MIDI signaling details. This includes settings for input, output, sync and Devices.



**Description** The **View** menu allows you to select objects to display and how to display them. Use **Save Display Settings** to save the current display settings of the Text List Editor for its next session.



Many of these Menu Items won't be available unless a Document is open.

<b>Items</b>	<b><u>T</u>oolbars/<u>M</u>ain Toolbar</b>	Switches between Show or Hide the <a href="#">Main toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>S</u>tatus Bar</b>	Switches between Show or Hide the <a href="#">Status Bar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>P</u>layback Control Toolbar</b>	Switches between Show or Hide the <a href="#">Playback Control toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>R</u>ecord Control Toolbar</b>	Switches between Show or Hide the <a href="#">Record Control toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>C</u>lock Sync Toolbar</b>	Switches between Show or Hide the <a href="#">Clock Sync toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>D</u>evice Control Toolbar</b>	Switches between Show or Hide the <a href="#">Device Control toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>T</u>empo Toolbar</b>	Switches between Show or Hide the <a href="#">Tempo toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>N</u>ote Stamp Toolbar</b>	Switches between Show or Hide the <a href="#">Note Stamp toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>R</u>est Toolbar</b>	Switches between Show or Hide the <a href="#">Rest toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>B</u>eat Toolbar</b>	Switches between Show or Hide the <a href="#">Beat toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>T</u>oolbars/<u>T</u>ime Toolbar</b>	Switches between Show or Hide the <a href="#">Time toolbar</a> . A checkmark appears next to this Menu item when set to Show.
	<b><u>A</u>uto Scroll</b>	Sets the viewable area to follow the Playback Pointer. A checkmark appears next to this item when enabled.

### **Jump To Location...**

Opens the [Jump To Location dialog box](#), allowing you to specify the beginning Bar of the viewable area. Once specified, **Auto Scroll** is temporarily deactivated.

### **Edit Buttons**

Switches between Show or Hide the Edit Buttons in the Text List Editor. A checkmark appears next to this Menu item when set to Show.

### **Interactive Information**

Switches between Show or Hide the Interactive Information display. A checkmark appears next to this Menu item when set to Show.

### **Big Beat Window**

Switches between Show or Hide the Big Beat Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Beat Toolbar](#)..

### **Big Time Window**

Switches between Show or Hide the Big Time Window. A checkmark appears next to this Menu Item when set to Show. When Showing, you can drag this Window to desired location, or use its **Close** button to hide it again. See [details](#). See also [Time Toolbar](#)..

### **Save Display Settings**

Saves current Text List Editor Display Settings as defaults for future sessions. Settings included are List, Zoom, Dividing Bar positions, Background Bitmap, etc.

Description The **Editors** menu allows you to open Editors.



None of these Menu Items will be available unless a Document is open.

Items

**Tempo List Editor**

Opens the [Tempo List Editor](#), allowing you to edit individual Tempo Events of the current Document in vertical list format.

**Tempo Draw Editor**

Opens the [Tempo Draw Editor](#), allowing you to edit Tempo Events of the current Document with a unique freestyle curve drawing method.

**Text List Editor**

Opens a new [Text List Editor](#) window, allowing you to make alternate Text Event edits in the current Document in vertical list format.

Description The **Window** menu allows you to arrange Document and Editor windows in the work area of the CAMPS Application Window.



The **Window** Menu Item won't be available unless a Document is open.

Items	<b><u>N</u>ew Text List Editor</b>	Opens a new <a href="#">Text List Editor</a> window for the currently selected Line Block.
	<b><u>C</u>ascade</b>	Arranges windows in a diagonal overlapping manner, allowing you to individually select them. Any maximized windows will be reduced in size to accommodate the Cascade arrangement.
	<b><u>T</u>ile</b>	Arranges windows into horizontal blocks separated vertically, one above or below the next.
	<b><u>A</u>rrange Icons</b>	Arranges minimized window title bars in an orderly fashion within the CAMPS Application Window.
	<b>[W]indow</b>	Makes the window named here currently active, appearing in front of any others. The number of windows listed here equals the number of open windows in CAMPS. A checkmark appears next to the current selection.

# Menu Items for the Text List Editor / Help

**Description** The **Help** menu allows you to access these Help documents. The Help menu also allows you to add a background text message to your Composition Document.



The **Memo** Menu Items won't be available unless a Document is open.

- |              |                                       |   |
|--------------|---------------------------------------|---|
| <b>Items</b> | <b><u>H</u>elp</b>                    | Opens the Table of Contents for these Help documents.   |
|              | <b><u>D</u>ocument <u>M</u>emo...</b> | Opens the <a href="#">Memo dialog box</a> , allowing you to add an underlying text message to your Document.      |
|              | <b><u>A</u>bout <b>C</b>AMPS</b>      | Opens the CAMPS banner with a text scroll area containing information about CAMPS and the Microworks Corporation. |

## Using

Eleven "Toolbars" are employed in CAMPS for MIDI data recording, playback and editing control, as well as file management and situation monitoring. You can choose which Toolbars appear, and freely move them to desired locations in the top or bottom of the CAMPS application window. The View status and location of each Toolbar are saved when exiting CAMPS, and will appear as you last set them when CAMPS is relaunched unless you resize the CAMPS application window.

## Toolbar Types

### [Main](#)

Includes the basic commands from **File** and **Edit** menus as well as **MIDI Setup** and **Help** commands.

### [Status](#)

This area displays Tool Tips and computer keyboard status.

### [Playback Control](#)

Includes the commands from the **MIDI** menu for controlling Playback, including Location.

### [Record Control](#)

Includes the commands from the **MIDI** menu for controlling Recording, as well as two other related Toolbars' show/hide status.

### [Clock Sync](#)

Includes the MIDI Sync Input commands from the **MIDI** menu, as well as a Tempo control.

### [Device Control](#)

Includes the MIDI Sync Output, Metronome and Reset commands from the **MIDI** menu.

### [Note Stamp](#)

Sets the Length of Notes to be created with Step Recording or the Note Stamp Tool.

### [Rest](#)

Advances location between Note Events by each button's specified amount during Step Recording, effectively inserting Rests.

### [Beat](#)

Displays Playback and Recording Location in MIDI form, expressed as "Bar:Beat:Divisions".

### [Time](#)

Displays Playback and Recording Location in SMPTE Time Code form, expressed as "Hours:Minutes:Seconds:Frames".

### [Tempo](#)

## Beat Toolbar

**Description** The **Beat** toolbar displays the Playback/Record Location in the current Document in MIDI form, expressed as "Bar:Beat:Divisions".

**Uses** You can drag this toolbar to any location in the top or bottom of the CAMPS Application window frame. Additionally, double clicking this toolbar between buttons or dragging it outside the CAMPS Application window brings it into its own window that can be put anywhere, even on the Microsoft Windows desktop. Double clicking it again or dragging it back into the top or bottom of the CAMPS Application window reintegrates it with the CAMPS Application window frame.

You can choose to Show or Hide this toolbar with the corresponding command in the **Toolbars** submenu of the **View** menu. When contained in its own window, you can hide this toolbar by clicking its top-right "Close window" ("X") button. Hiding or liberating toolbars can increase the useable work area in the CAMPS Application window.



## Device Control Toolbar

**Description** The **Device Control** toolbar gives you quick access to the Metronome and Sync output settings.

**Uses** Use the **Device Control** toolbar for turning the Metronome on or off, as well as choosing a MIDI Sync output signal.

You can drag this toolbar to any location in the top or bottom of the CAMPS Application window frame. Additionally, double clicking this toolbar between buttons or dragging it outside the CAMPS Application window brings it into its own window that can be put anywhere, even on the Microsoft Windows desktop. Double clicking it again or dragging it back into the top or bottom of the CAMPS Application window reintegrates it with the CAMPS Application window frame.

You can choose to Show or Hide this toolbar with the corresponding command in the **Toolbars** submenu of the **View** menu. When contained in its own window, you can hide this toolbar by clicking its top-right "Close window" ("X") button. Hiding or liberating toolbars can increase the useable work area in the CAMPS Application window.

### [Items](#)

[Metronome](#) button

[Transmit MIDI Clock](#) button

[Transmit SMPTE](#) button

[All Notes Off](#) button

[Reset All Controllers](#) button





Controlling the  
Metronome

**Metronome**  
button

Switches between activate or deactivate the Metronome during Playback and Recording.

Setting Sync  
Output

**Transmit MIDI Clock**  
button

Enables CAMPS to send its MIDI Clock signal to an external device. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer to synchronize with CAMPS.

**Transmit SMPTE**  
button

Enables CAMPS to send MIDI Time Code to an external SMPTE converter. When using this setting in conjunction with Internal Clock Sync, CAMPS Plays and Records in "Master" mode, allowing an external Sequencer or other device to synchronize with CAMPS.

Resetting  
MIDI Devices

**All Notes Off**  
button

Sends the "All Notes Off" MIDI Event to current MIDI Devices. Click this button to stop unwanted sustained Notes after stopping Playback or inadvertently interrupting MIDI signaling.

**Reset All Controllers**  
button

Sends the "Reset All Controllers" MIDI Event to current MIDI Devices. Click this button to reset certain MIDI parameters such as Volume, Pan or Modulation.



## Main Toolbar

**Description** The **Main** toolbar offers quick access to the most common **File** and **Edit** menu commands, as well as **MIDI Setup** and **Help**.



This toolbar's functions won't be available unless a Document is open.

**Uses** The **Main** toolbar allows you to open and edit files, as well as set MIDI signaling defaults and open CAMPS on-line Help.

You can drag this toolbar to any location in the top or bottom of the CAMPS Application window frame. Additionally, double clicking this toolbar between buttons or dragging it outside the CAMPS Application window brings it into its own window that can be put anywhere, even on the Microsoft Windows desktop. Double clicking it again or dragging it back into the top or bottom of the CAMPS Application window reintegrates it with the CAMPS Application window frame.

You can choose to Show or Hide this toolbar with the corresponding command in the **Toolbars** submenu of the **View** menu. When contained in its own window, you can hide this toolbar by clicking its top-right "Close window" ("X") button. Hiding or liberating toolbars can increase the useable work area in the CAMPS Application window.

### [Items](#)

[New](#) button

[New Setup](#) button

[Open](#) button

[Save](#) button

[Cut](#) button

[Copy](#) button

[Paste](#) button

[Preferences](#) button

[MIDI Setup](#) button

[Help](#) button



## Managing Files

**New**  
button

Creates a New untitled Document as specified by your settings in the New Document Setup dialog box.

**New Setup**  
buttonOpens the [New Document Setup dialog box](#), allowing you to set basic defaults for New Documents.**Open**  
button

Opens the Open dialog box, allowing you to select and open a Document.

**Save**  
button

Saves the current Document using its existing filename and location.

## Editing and Preferences

**Cut**  
buttonRemoves selected objects from a Document for reinsertion using the **Paste** command, if desired. For example, if you just selected a Chord, this command's function becomes **Cut Chord**.**Copy**  
buttonSpecifies selected object for duplication using the **Paste** command. For example, if you just selected a Chord, this command's function becomes **Copy Chord**.**Paste**  
buttonInserts the last object specified with the **Cut** or **Copy** command into the currently selected relative Area. For example, if you just **Cut** a Chord and selected a region in a Chord Block, this command's function becomes **Paste Chord**.**Preferences**  
buttonOpens the [Preferences dialog box](#), allowing you to set basic operational and appearance defaults in CAMPS.

## Adjusting MIDI Defaults

**MIDI Setup**  
buttonOpens the [MIDI Setup dialog box](#), allowing you to manage many MIDI signaling details. This includes settings for input, output, sync and Devices.

## Getting Help


**Help**  
button

Opens these Help documents.



# Note Stamp Toolbar

**Description** The **Note Stamp** toolbar offers quick access to Step Recording and Stamp tool adjustments.

 This toolbar's functions won't be useable unless a Document is open. Further, you must be in Step Record mode or using the Stamp tool.

**Uses** The **Note Stamp** toolbar allows you to set the Length of Notes created with Step Recording or the Note Stamp Tool.

The Note Stamp toolbar is available for use with Step Recording from your MIDI Instrument in the Document Window, as well as the Event List, Pianoroll, Control Draw and Notation Editors. It also provides control of the Stamp tool in the Pianoroll and Notation Editors.

You can drag this toolbar to any location in the top or bottom of the CAMPS Application window frame. Additionally, double clicking this toolbar between buttons or dragging it outside the CAMPS Application window brings it into its own window that can be put anywhere, even on the Microsoft Windows desktop. Double clicking it again or dragging it back into the top or bottom of the CAMPS Application window reintegrates it with the CAMPS Application window frame.

You can choose to Show or Hide this toolbar with the corresponding command in the **Toolbars** submenu of the **View** menu. When contained in its own window, you can hide this toolbar by clicking its top-right "Close window" ("X") button. Hiding or liberating toolbars can increase the usable work area in the CAMPS Application window.

- Items**
- [Whole Note Stamp](#) button
  - [Half Note Stamp](#) button
  - [Quarter Note Stamp](#) button
  - [8th Note Stamp](#) button
  - [16th Note Stamp](#) button
  - [32nd Note Stamp](#) button
  - [64th Note Stamp](#) button
  - [Dotted](#) button
  - [Triplet](#) button
  - [Quintuplet](#) button
  - [Fine Adjustment](#) edit box



Setting  
Note Duration**Whole Note Stamp**  
button

Click this button to insert Whole Notes with the Stamp tool or in Step Record mode.

**Half Note Stamp**  
button

Click this button to insert Half Notes with the Stamp tool or in Step Record mode.

**Quarter Note Stamp**  
button

Click this button to insert Quarter Notes with the Stamp tool or in Step Record mode.

**8th Note Stamp**  
button

Click this button to insert 8th Notes with the Stamp tool or in Step Record mode.

**16th Note Stamp**  
button

Click this button to insert 16th Notes with the Stamp tool or in Step Record mode.

**32nd Note Stamp**  
button

Click this button to insert 32nd Notes with the Stamp tool or in Step Record mode.

**64th Note Stamp**  
button

Click this button to insert 64th Notes with the Stamp tool or in Step Record mode.

Modifying  
Note Duration**Dotted**  
button

Click this button to add half of the currently selected Note Stamp value to the Note Stamp value. For example, if the 8th Note Stamp button is currently active, clicking this button will "Dot" the 8th Note, adding a 16th Note value for a total duration of 8th + 16th (three 16ths). Unlike the Note Stamp buttons, this button toggles on and off.

**Triplet**  
button

Click this button to reduce a Note's duration by 1/3rd of its next greater value; the amount necessary to facilitate its role in a Triplet figure. For example, if the 8th Note Stamp button is currently active, clicking this button will reduce it to 1/3rd of a Quarter Note in length, preparing it for use in a triplet figure. Three of these Triplet-adjusted 8th Notes will equal the duration of a Quarter Note. Unlike the Note Stamp buttons, this button toggles on and off.

**Quintuplet**  
button

Click this button to reduce a Note's duration by 1/5th of its 2nd greater value; the amount necessary to facilitate its role in a Quintuplet figure. For example, if the 8th Note Stamp button is currently active, clicking this button will reduce it to 1/5th of a Half Note in length, preparing it for use in a Quintuplet figure. Five of these Quintuplet-adjusted 8th Notes will equal the duration of a Half Note. Unlike the Note Stamp buttons, this button toggles on and off.

**Fine Adjustment**  
edit box

This adjustment allows you to "smear" the actual Note length according to the percentage number entered in this box. For example, if the 8th Note Stamp button is currently active, entering 50% will reduce it by half, making its actual duration equal to a 16th Note. Choosing an "in between" value allows you to Stamp or Step Record Notes of irregular length.



## Playback Control Toolbar

**Description** The **Playback Control** toolbar offers one-touch control of CAMPS Sequencer Playback and Recording.



This toolbar's functions won't be available unless a Document is open.

**Uses** The **Playback Control** toolbar allows you to start and stop Playback, as well as reposition the current Playback point.

You can drag this toolbar to any location in the top or bottom of the CAMPS Application window frame. Additionally, double clicking this toolbar between buttons or dragging it outside the CAMPS Application window brings it into its own window that can be put anywhere, even on the Microsoft Windows desktop. Double clicking it again or dragging it back into the top or bottom of the CAMPS Application window reintegrates it with the CAMPS Application window frame.

You can choose to Show or Hide this toolbar with the corresponding command in the **Toolbars** submenu of the **View** menu. When contained in its own window, you can hide this toolbar by clicking its top-right "Close window" ("X") button. Hiding or liberating toolbars can increase the useable work area in the CAMPS Application window.

### [Items](#)

[Jump to Top](#) button

[Rewind](#) button

[Stop](#) button

[Play](#) button

[Fast Forward](#) button

[Jump to End](#) button




Executing a Function	<b>Jump to Top</b> button	Moves the Playback Pointer position and viewpoint to the beginning of the currently selected Document or Line Block, whichever is in the currently active window. Executing this command also enables the Auto Scroll function if previously disabled.
	<b>Rewind</b> button	Quickly moves the Playback Pointer and viewpoint behind its current position. This function can be performed whether CAMPS is Playing or Stopped. Executing this command also enables the Auto Scroll function if previously disabled. Rewind speed is adjustable in the <a href="#">Default pane</a> of the <a href="#">MIDI Setup dialog box</a> .
	<b>Stop</b> button	Stops Playback of the currently selected Document or Line data.
	<b>Play</b> button	Starts Playback of the currently selected Document or Line data.
	<b>Fast Forward</b> button	Quickly moves the Playback Pointer and viewpoint ahead of its current position. This function can be performed whether CAMPS is Playing or Stopped. Executing this command also enables the Auto Scroll function if previously disabled. Fast Forward speed is adjustable in the <a href="#">Default pane</a> of the <a href="#">MIDI Setup dialog box</a> .
	<b>Jump to End</b> button	Moves the Playback Pointer position and viewpoint to the end of the currently selected Document or Line Block, whichever is in the currently active window. Executing this command also enables the Auto Scroll function if previously disabled.



# Record Control Toolbar

**Description** The **Record Control** toolbar offers quick access to record functions in CAMPS.

 This toolbar's functions won't be available unless a Document is open. Further, a Track must be Armed for recording in the Document Window, or one of the other Editors must be opened.

**Uses** Use the **Record Control** toolbar to start real time, Over-Dub or Step Recording with a click of your mouse. Additionally, the [Note Stamp toolbar](#) and [Rest toolbar](#) can be enabled with their respective toggle buttons in the Record Control toolbar for use with Step Recording.

You can drag this toolbar to any location in the top or bottom of the CAMPS Application window frame. Additionally, double clicking this toolbar between buttons or dragging it outside the CAMPS Application window brings it into its own window that can be put anywhere, even on the Microsoft Windows desktop. Double clicking it again or dragging it back into the top or bottom of the CAMPS Application window reintegrates it with the CAMPS Application window frame.

You can choose to Show or Hide this toolbar with the corresponding command in the **Toolbars** submenu of the **View** menu. When contained in its own window, you can hide this toolbar by clicking its top-right "Close window" ("X") button. Hiding or liberating toolbars can increase the useable work area in the CAMPS Application window.

- Items**
- [Rec](#) button
  - [OverDub Rec](#) button
  - [Step Rec](#) button
  - [NoteStamp Toolbar Toggle](#) button
  - [Rest Toolbar Toggle](#) button





## Items in the **Record Control** Toolbar

### [Starting Recording](#)

**Rec**  
button

Starts real time Recording in the current Document.

**OverDub Rec**  
button

Starts Over-Dub Recording in the current Document.

**Step Rec**  
button

Starts Step Recording in the current Document.

### Activating Related Toolbars

**NoteStamp Toolbar Toggle**  
button

Toggles the show/hide status of the Note Stamp toolbar for use with Step Recording in the Document Window, as well as the Event List, Pianoroll, Control Draw and Notation Editors (and for use with the Stamp tool found in the Pianoroll and Notation Editors).

**Rest Toolbar Toggle**  
button

Toggles the show/hide status of the Rest toolbar for use with Step Recording in the Document Window, as well as the Event List, Pianoroll, Control Draw and Notation Editors.



## Using the Record Control Toolbar

Starting  
Recording

Overview

CAMPS can Record in real time, Over-Dub or Step modes in the Document Window, as well as the Event List, Pianoroll, Control Draw and Notation Editors.

CAMPS can only Record one Track at a time. In the Document Window, the desired Track must be Armed for Recording. In the Event List, Pianoroll, Control Draw and Notation Editors, your Track (Line Block) selection has already been made, so Recording is immediately available.

Rec  
button

In the Document Window:

With the Playback Pointer at the beginning of your Document, Arm desired Track for recording, click the **Record** button in the Record Control Toolbar and begin playing your MIDI Instrument to create a new Line Block from the beginning of the current Document. Whether or not a Line Block already exists, a new Line Block will be created as you play, located on top of any existing ones.

If you wish to create a New Line Block "on the fly" from some point other than the beginning of a document, you'll first need to insert a Punch In/Out region for the desired location. In this case however, any existing Line Block matching the **size** and **location** of your Punch In/Out region and Armed Track will be replaced.

If you wish to Record a new Take of a particular Line Block or otherwise manage Takes, use the [Take List dialog box](#).

In Other Editors:

Click the **Record** button in the Record Control toolbar and begin playing your MIDI Instrument to start Recording from the beginning of the currently selected Line Block. Unless you create them, a Loop and Punch In/Out region will be automatically created for the length of the Line Block, and any existing data will be replaced as soon as you start playing your MIDI Instrument. To Record new data in a specific location of the currently selected Line Block, insert a Punch In/Out region for that location. Recording will be active for the Punch In/Out region, but the rest of the Line Block will remain intact.

If you wish to Record a new Take of a particular Line Block or otherwise manage Takes in the Document Window or other Editors, use the [Take List dialog box](#).

## OverDub Rec button

In the Document Window:

Whether you are Over-Dubbing an entire Line Block or just a Punch In/Out region, Over-Dub Recording in the Document Window creates a new Line Block on top of the original. Besides Arming the desired Track for Recording, a Loop and Punch In/Out region must be defined for the **OverDub Rec** button to be available in the Record Control Toolbar.

In Other Editors:

Over-Dub Recording in the Editors is an additive process. Whether you are Recording an entire Line Block or just a Punch In/Out region, Over-Dub Recording in the Event List, Pianoroll, Control Draw or Notation Editors simply adds MIDI data to existing MIDI data in the currently selected Line Block. Unless you create them, a Loop and Punch In/Out region will be automatically created for the length of the Line Block. However, a Loop region is not mandatory to use Over-Dub Recording in the Editors. To Over-Dub in a specific location of the currently selected Line Block, insert a Punch In/Out region for that location. Over-Dub Recording will only be active for the Punch In/Out region.

If you wish to Over-Dub a different Take of a particular Line Block or otherwise manage Takes in the Document Window or other Editors, use the [Take List dialog box](#).

## Step Rec button

Unlike the real time and Over-Dub Recording modes, Step Recording doesn't run the Sequencer "Transport". In other words, the Playback Pointer remains stationary until you insert a Note with your MIDI Instrument or click a **Rest** button in the Rest toolbar. The Playback Pointer advances for the length of new data when you insert it, but remains stationary otherwise. Some other functions won't be available in CAMPS until you click the **Stop** button in the Playback Control Toolbar or choose **Stop** from the **MIDI** menu.

In the Document Window:

Whether you are Step Recording an entire Line Block or just a Punch In/Out region, Step Recording in the Document Window creates a new Line Block on top of any originals. A Track must be Armed for Recording for the **Step Rec** button to be available in the Record Control toolbar. Use the [Note Stamp Toolbar](#) to set the length of Step Recorded Notes. Use the [Rest Toolbar](#) to advance the Playback Pointer by a specified amount before inserting another Note.

In Other Editors:

Step Recording in the Editors is an additive process. Whether you are Recording an entire Line Block or a smaller Punch In/Out region, Step Recording in the Event List, Pianoroll, Control Draw or Notation Editors simply adds MIDI data to existing MIDI data in the currently selected Line Block. Unless you create them, a Loop and Punch In/Out region will be automatically created for the length of the Line Block. To Step Record in a specific location of the currently selected Line Block, insert a Punch In/Out region for that location. Step Recording will only be active for the Punch In/Out region. Use the [Note Stamp Toolbar](#) to set the length of Step Recorded Notes. Use the [Rest Toolbar](#) to advance the Playback Pointer by a specified amount before inserting another Note.


If you wish to Step Record a different Take of a particular Line Block or otherwise manage Takes in the Document Window or other Editors, use the [Take List dialog](#)

[box.](#)



# Rest Toolbar

**Description** The **Rest** toolbar provides one-click Rest insertion during Step Recording.

 This toolbar's functions won't be available unless a Document is open. Further, a Track must be Armed for recording in the Document Window, or one of the other Editors must be opened, and CAMPS must be in Step Record mode.

**Uses** Use the **Rest** toolbar to advance the Record Location between Note Events by each button's specified amount during Step Recording, effectively inserting Rests.

The Note Stamp toolbar is available for use with Step Recording from your MIDI Instrument in the Document Window, as well as the Event List, Pianoroll, Control Draw and Notation Editors.

You can drag this toolbar to any location in the top or bottom of the CAMPS Application window frame. Additionally, double clicking this toolbar between buttons or dragging it outside the CAMPS Application window brings it into its own window that can be put anywhere, even on the Microsoft Windows desktop. Double clicking it again or dragging it back into the top or bottom of the CAMPS Application window reintegrates it with the CAMPS Application window frame.

You can choose to Show or Hide this toolbar with the corresponding command in the **Toolbars** submenu of the **View** menu. When contained in its own window, you can hide this toolbar by clicking its top-right "Close window" ("X") button. Hiding or liberating toolbars can increase the usable work area in the CAMPS Application window.

- Items**
- [Whole Note Rest](#) button
  - [Half Note Rest](#) button
  - [Quarter Note Rest](#) button
  - [8th Note Rest](#) button
  - [16th Note Rest](#) button
  - [32nd Note Rest](#) button
  - [64th Note Rest](#) button
  - [Dotted](#) button
  - [Triplet](#) button
  - [Quintuplet](#) button



## Status Bar

**Description** The **Status** Bar displays Tool Tips and computer keyboard status at the bottom of the CAMPS Application window.

**Uses** The left side of the **Status** Bar displays Tool Tips when you "hover" your mouse cursor over any area in CAMPS which has them. The right side of the **Status** Bar displays the toggle status of you computer keyboard's "Num Lock", "Caps Lock" and "Scroll Lock" keys.

You can choose to Show or Hide the **Status** Bar with the corresponding command in the **Toolbars** submenu of the **View** menu. Hiding the Status Bar increases the useable work area in the CAMPS Application window.

Setting  
Rest Duration**Whole Note Rest**  
button

Click this button to insert a Whole Note Rest after the last Note entered in Step Record mode.

**Half Note Rest**  
button

Click this button to insert a Half Note Rest after the last Note entered in Step Record mode.

**Quarter Note Rest**  
button

Click this button to insert a Quarter Note Rest after the last Note entered in Step Record mode.

**8th Note Rest**  
button

Click this button to insert a 8th Note Rest after the last Note entered in Step Record mode.

**16th Note Rest**  
button

Click this button to insert a 16th Note Rest after the last Note entered in Step Record mode.

**32nd Note Rest**  
button

Click this button to insert a 32nd Note Rest after the last Note entered in Step Record mode.

**64th Note Rest**  
button

Click this button to insert a 64th Note Rest after the last Note entered in Step Record mode.

Modifying  
Note Duration**Dotted**  
button

Click this button to add half of the currently selected Rest value to the Rest value. For example, if the 8th Note Rest button is currently active, clicking this button will "Dot" the 8th Note Rest, adding a 16th Note value for a total duration of 8th + 16th (three 16ths). Unlike the Rest buttons, this button toggles on and off.

**Triplet**  
button

Click this button to reduce a Rest's duration by 1/3rd of its next greater value; the amount necessary to facilitate its role in a Triplet figure. For example, if the 8th Note Rest button is currently active, clicking this button will reduce it to 1/3rd of a Quarter Note Rest in length, preparing it for use in a triplet figure. Three of these Triplet-adjusted 8th Note Rests will equal the duration of a Quarter Note Rest. Unlike the Rest buttons, this button toggles on and off.

**Quintuplet**  
button

Click this button to reduce a Rest's duration by 1/5th of its 2nd greater value; the amount necessary to facilitate its role in a Quintuplet figure. For example, if the 8th Note Rest button is currently active, clicking this button will reduce it to 1/5th of a Half Note Rest in length, preparing it for use in a Quintuplet figure. Five of these Quintuplet-adjusted 8th Note Rests will equal the duration of a Half Note Rest. Unlike the Rest buttons, this button toggles on and off.



# Clock Sync Toolbar

**Description** The **Clock Sync** toolbar allows quick Tempo and Sync input changes.

**Uses** Use the **Clock Sync** toolbar for temporarily adjusting Playback and Record Tempo, as well as selecting a MIDI Sync input source.

You can drag this toolbar to any location in the top or bottom of the CAMPS Application window frame. Additionally, double clicking this toolbar between buttons or dragging it outside the CAMPS Application window brings it into its own window that can be put anywhere, even on the Microsoft Windows desktop. Double clicking it again or dragging it back into the top or bottom of the CAMPS Application window reintegrates it with the CAMPS Application window frame.

You can choose to Show or Hide this toolbar with the corresponding command in the **Toolbars** submenu of the **View** menu. When contained in its own window, you can hide this toolbar by clicking its top-right "Close window" ("X") button. Hiding or liberating toolbars can increase the useable work area in the CAMPS Application window.

- Items**
- [Tempo Adjustment](#) display
  - [Tempo Adjustment](#) slider
  - [Internal Sync](#) button
  - [Tap Sync](#) button
  - [MIDI Clock Sync](#) button
  - [SMPTE Sync](#) button





## Adjusting Tempo

**Tempo Adjustment**  
display

Displays the current Tempo Adjustment slider setting as a percentage of the current Document's MIDI Tempo data value. For example, 100% equals unchanged, 50% equals half, and 200% equals double the original Tempo data value.

**Tempo Adjustment**  
slider

Adjusts the current Playback and Record Tempo. This adjustment is temporary, and does not change a Document's actual MIDI Tempo data. To edit Tempo data permanently, use the [Tempo List Editor](#) or the [Tempo Draw Editor](#).

## Setting Sync Input

**Internal Sync**  
button

Sets CAMPS to Playback and Record using its own internal MIDI Clock.

**Tap Sync**  
button

Sets CAMPS to Playback and Record using "freewheel" Tempo pulses input by you on your computer's keyboard or your MIDI Instrument.

**MIDI Clock Sync**  
button

Sets CAMPS to Playback and Record in "slave" mode using an external MIDI Clock source, such as another Sequencer.

**SMPTE Sync**  
button

Sets CAMPS to Playback and Record using MIDI Time Code converted from an external SMPTE Time Code source, such as a click track from an audio or video tape deck. A SMPTE converter must be employed between a raw SMPTE source and the corresponding MIDI input port used by CAMPS.



## Tempo Toolbar

**Description** The **Tempo** toolbar simply displays the currently active Tempo setting of the current Document in the format "Basis=Tempo", where Basis is shown in musical Time Notation and Tempo is shown as the number of Beats Per Minute. If no Document is currently open, the Tempo of the last open Document during the current CAMPS session is displayed.

**Uses** Any Tempo changes that occur in your Composition Document will be displayed by the Tempo toolbar when the Playback Pointer reaches the corresponding region. This is true whether Playback is running or Stopped. The current Basis and Tempo displayed here are adjustable in the [Tempo List Editor](#) and the [Tempo Draw Editor](#).

You can drag this toolbar to any location in the top or bottom of the CAMPS Application window frame. Additionally, double clicking this toolbar between buttons or dragging it outside the CAMPS Application window brings it into its own window that can be put anywhere, even on the Microsoft Windows desktop. Double clicking it again or dragging it back into the top or bottom of the CAMPS Application window reintegrates it with the CAMPS Application window frame.

You can choose to Show or Hide this toolbar with the corresponding command in the **Toolbars** submenu of the **View** menu. When contained in its own window, you can hide this toolbar by clicking its top-right "Close window" ("X") button. Hiding or liberating toolbars can increase the useable work area in the CAMPS Application window.



## Time Toolbar

**Description** The **Time** toolbar displays the Playback/Record Location in the current Document in SMPTE Time Code form, expressed as "Hours:Minutes:Seconds:Frames".

**Uses** The **Time Display Mode** button on the right side of this toolbar includes a drop-down list button which allows you to select SMPTE Frame Rate, as well as Offset display. Clicking the main part of this button (clock icon) advances the Time Display Mode to the next Frame Rate choice in the list.

You can drag this toolbar to any location in the top or bottom of the CAMPS Application window frame. Additionally, double clicking this toolbar between buttons or dragging it outside the CAMPS Application window brings it into its own window that can be put anywhere, even on the Microsoft Windows desktop. Double clicking it again or dragging it back into the top or bottom of the CAMPS Application window reintegrates it with the CAMPS Application window frame.

You can choose to Show or Hide this toolbar with the corresponding command in the **Toolbars** submenu of the **View** menu. When contained in its own window, you can hide this toolbar by clicking its top-right "Close window" ("X") button. Hiding or liberating toolbars can increase the usable work area in the CAMPS Application window.



Overview Here is a list of several music terms often used in CAMPS. Understanding these terms will help you get more control of CAMPS features.

[Bar](#)

[Chord and Chord Progression](#)

[Chord Function](#)

[Chord Name](#)

[Continuity between Adjacent Chords](#)

[Harmonic Tension](#)

[Harmonize](#)

[Key and Mode](#)

[Lower Interval Limit](#)

[Middle C](#)

[Roman Numerals](#)

[Scale Name](#)

[Scale Notes](#)

[Scale Spelling](#)

[Time Signature](#)

[Transpose](#)

[Voicing](#)

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## Overview

The term "Bar" actually refers to vertical lines dividing a musical Notation Staff into Measures of time, but this term is commonly used to refer to the Measures themselves, as is the case in CAMPS.

That said, Bars are divisions of musical time containing Notes or Rests whose duration add up to the amount of time allotted to each Bar. This amount of time is defined by a [Time Signature](#).

CAMPS allows you to assign different **Time Signatures** to individual Bars.

## Chord and Chord Progression

### Chord

A **Chord** is two or more notes played at the same time. Chords create a variety of feelings or moods in music, such as reassurance, or unease and tension.

In nature, sounds consists of a fundamental frequency (**Pitch**) and many **Harmonics**. Harmonic overtones occur at different levels within the fundamental frequency, blending to form the sounds we hear. Pitches or **Notes** in western 12-tone musical **Scales** follow the same intervalic patterns as those found in nature's Harmonics, however, they are sounded at similar levels, each with a fundamental or tonic Pitch of it's own. Sounding these Notes simultaneously makes it possible to form a variety of **Chords**.

For example, Chords with three pitches comprised of the first, third, and fifth degree of the Scale to which the Chord corresponds are called **Triads**. Chords with four pitches comprised of the first, third, fifth, and seventh (or sixth) degree of the Scale are called **7th Chords**. CAMPS supports all types of Chords.

### Chord Progression

A **Chord Progression** is formed from a series of Chords sounded one after the next. Each Chord can evoke certain feelings and the order in which Chords are sounded creates changing feelings, thereby defining the mood of a Song as it progresses. CAMPS knows a broad spectrum of **Chord Progressions**, from classical music, to rock, blues and modal jazz. CAMPS always chooses Chords which flow smoothly from one to the next when Auto-Harmonizing and generating Chord Progressions.



# Chord Function

## Overview

A Chord's **Chord Function** settings describe how it functions within a Chord progression relative to its Key. **Chord Function** choices may differ depending on whether a Chord's Key is Major, Minor or "Modal".

In CAMPS, **Chord Functions** are organized from the top down in several levels from basic to advanced using music terms such as "Diatonic" and "Secondary Dominant".

CAMPS displays Chords in different shades of gray according to their corresponding **Chord Functions**. The more basic the **Chord Function**, the lighter the shade; The more advanced the **Chord Function**, the darker the shade.

## Chord Functions

CAMPS supports the following **Chord Functions**:

### Major

- Diatonic
- Diminished
- Secondary Dominant
- Related II of Secondary Dominant
- Substitute V
- Related II of Substitute V

### Minor

- Diatonic
- Diminished
- Secondary Dominant
- Related II of Secondary Dominant
- Substitute V
- Related II of Substitute V

### Modes


- Ionian
- Dorian
- Phrygian
- Lydian
- Mixolydian
- Aeolian
- Locrian

# Chord Name

## Overview

In CAMPS, a Chord is built by defining four elements: **Symbol** , **Quality**, **Tension** and **Inversion**. By skillfully using these elements with certain Chords in a Chord Progression, you can add to the complexity or uniqueness of the Chord motion in your composition.

## Four Elements

<b>Symbol</b>	<p>Indicates the pitch of a Chord's Root; its Tonic Note.</p> <p>The Notes which comprise a Chord are selected from a group of Harmonics which are naturally produced from this Root. The Root is the main element representing a Chord.</p>
<b>Quality</b>	<p>Special sound characteristics of the basic Chord (before a Tension or Inversion is applied).</p> <p>A Chord's Quality, such as Major or Diminished, defines its Tonality. These names are typically abbreviated as <b>maj</b>, <b>dim</b>, etc.</p>
<b>Tension</b>	<p>A Chord <b>Tension</b> is a Note above the first Octave of the Chord's Root (above the regular three or four Chord Tones) which adds relative dissonance to the Chord.</p> <p>Chords with Tensions tend to sound broader and more dissonant.</p> <p> The Tension Notes used in a Chord's construction are called <a href="#">Harmonic Tensions</a>.</p>
<b>Inversion</b>	<p>When a Chord is <b>Inverted</b>, the same Notes are used, but their order is changed. A Chord is Inverted when its lowest Note is not its Root. In an Inversion, one or more of a Chord's Notes can be moved by one octave.</p> <p>For example, the Chord "C" is composed in the ascending order of the Notes C, E, and G but the Chord "C/E" is inverted to the order of E, G, and C.</p>



## Continuity between Adjacent Chords

### Overview

To create pleasing Chord Progressions, we tend to arrange Chords for a feeling of continuity. However, when attempting to create unique Chord Progressions, it is sometimes difficult to find a Chord in the desired Tonality which still maintains a smooth transition from one Chord to the next. In such situations, Chord Progression continuity may be lost, which has the effect of drawing attention to the boundaries between parts of a song which have variation in its Chord Progressions.

### Musical continuity

CAMPS always tries to generate Chords that give a feeling of musical continuity between them when auto-generating Chords or auto-harmonizing Lines which fall within the boundaries of a Chord Block.

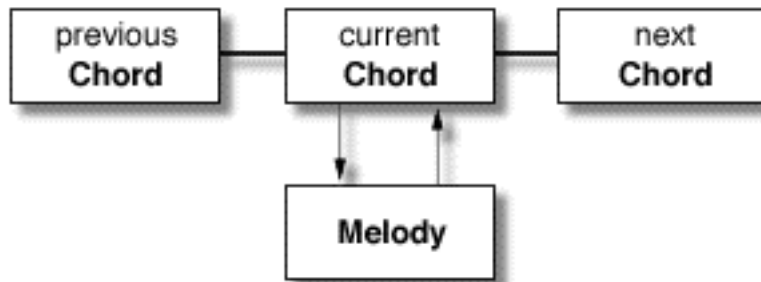
One way to take advantage of this feature is to assign a separate Chord Block or Blocks to each Section of your Composition, making a contrast in continuity between these different Sections.


# Harmonize

**Overview** In CAMPS, Harmonization is the process of creating Chord Progressions based on Melodic lines.

**How It Works** Chord progressions need to blend with the Melody when composing or arranging music. Sometimes a Chord Progression is composed first and the Melody is later composed to blend with the Chord Progression. There are usually a number of Chord Progressions that blend with a Melody, not just one. When looking for a Chord, you not only want one that blends with the Melody, but also one that allows smooth transitions with preceding and following Chords.

The CAMPS Harmonize feature looks at these elements when it runs. It automatically composes Chord Progressions that harmonize with the Melody, as well as preserve continuity.



 As explained above, during Auto-Harmonization, CAMPS automatically suggests Chords that will blend in smoothly and with continuity to chords preceding and following it. This, however, works only within a Chord Block.

# Key and Mode

Overview

A **Key** is established when a composition primarily uses one **Scale**.

Scales and Modes

CAMPS uses 10 different seven-note **Scales** and **Modes**. A Mode is simply a major scale where the starting point or root is changed to a different degree. For example, the 2nd degree of a Major Scale is the root of the "Dorian Mode".

Major

A seven note Scale having half step intervals between the third and fourth and the seventh and eighth degrees. The other intervals are whole steps.



Minor

A seven note Scale having half step intervals between the second and third and the fifth and sixth degrees. The other intervals are whole steps.



### Harmonic Minor

A seven note Scale having half step intervals between the second and third, the fifth and sixth, and the seventh and eighth degrees, as well as an augmented second (or minor 3rd) between the sixth and the seventh degrees. the other intervals are whole steps.



### Melodic Minor

A seven note Scale having half step intervals between the second and third and the seventh and eighth degrees. The other intervals are whole steps.



### Ionian ( same as Major )

A seven note Scale having half step intervals between the third and fourth and the seventh and eighth degrees. The other intervals are whole steps.



### Dorian

A seven note Scale having half step intervals between the second and third and the sixth and seventh degrees. The other intervals are whole steps.



Phrygian

A seven note Scale having half step intervals between the first and second and the fifth and sixth degrees. The other intervals are whole steps.



Lydian

A seven note Scale having half step intervals between the fourth and fifth and the seventh and eighth degrees. The other intervals are whole steps.



Mixolydian

A seven note Scale having half step intervals between the third and fourth and the sixth and seventh degrees. The other intervals are whole steps.



Aeolian  
( same as Minor )

A seven note Scale having half step intervals between the second and third and the fifth and sixth degrees. The other intervals are whole steps.



## Locrian

A seven note Scale having half step intervals between the first and second and the fourth and fifth degrees. The other intervals are whole steps.





## Lower Interval Limit

Overview	When forming Chords, there are instances when particular intervals in the low register result in a "muddy" sound. Each interval has a different point at which this "muddiness" occurs and that point is known as the interval's <b>Lower Interval Limit</b> .
How It Works	The CAMPS L.I.L. feature prevents intervals from occurring below their Lower Interval Limits during auto composition.

## Middle C

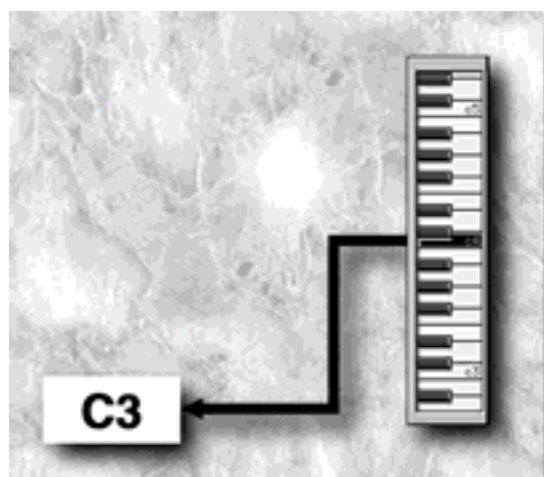
**Overview** In music, the center of the Great Staff is called **Middle C**. Middle C defines the base of the register.

**How It Works** There are instances when pressing a key on your MIDI instrument yields a pitch one or two octaves off depending on the MIDI device and sound Program you use. The Middle C setting makes it so that you hear the same pitch even when there is such a shift in register.

To get the most out of CAMPS features, it is important to understand defining the fundamental pitch.



A staff combining the Bass clef and Treble clef is known as the **Great Staff**. It is used for instruments that covers a wide register such as the piano or organ.

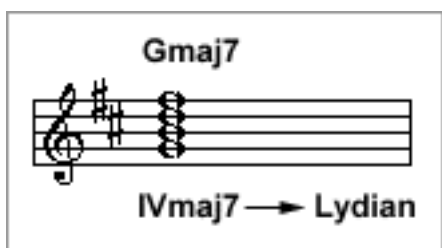


# Roman Numerals

**Overview** **Roman Numerals** are a way to display Chord Names that show a Chord's relationship to the Key.

Although ordinary [Chord Names](#) are called "Absolute Chord Names", Roman Numerals are known as "Relative Chord Names" because they do not depend on the actual Key.

**An example** For example, if **Gmaj7** is displayed with its Relative (Roman Numeral) Name as **IVmaj7**, this means the Chord is the **4th Diatonic** Chord in the Key of **D**, and its corresponding Scale Name is **Lydian**. If **Gmaj7** is displayed as Roman Numeral **I** **maj7**, this means the Chord is the **1st Diatonic** Chord in the Key of **G**, and its corresponding Scale Name is **Ionian**.



## Scale Name

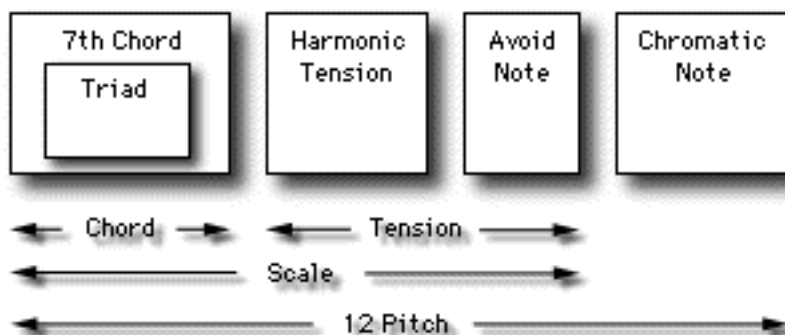
Overview [Chords](#) contain one or more Scales whose main constituents are harmonics derived from the Root of the Chords. Each Scale that has a name such as "Ionian" or "Lydian" for the Note arrangements is called a **Scale Name**.

# Scale Notes

**Overview** A Scale is typically comprised of 7 Notes called **Scale Notes**.



**Details** An octave has 12 Notes, so that the 5 remaining Notes, which are not included in the Scale are called **Chromatic Notes**. Chromatic Notes create dissonance (harsh or uneasy sound) when played simultaneously with Chords, and therefore they are generally played as momentary Passing Notes unless a dissonant Chord is desired. There are one or two Scale Notes called **Avoid Notes** in a Scale which also lend a dissonant flavor when played simultaneously with a corresponding Chord. In particular, the 9th, 11th and 13th degrees of a Scale are considered **Tension Notes**.



**Lightbulb** **Harmonic Tensions** are Tension Notes which are not Avoid Notes. Adding Harmonic Tensions Notes to a Chord makes it sound richer.

**Lightbulb** Depending on a given Scale, its 9th, 11th, and 13th degrees may be altered.

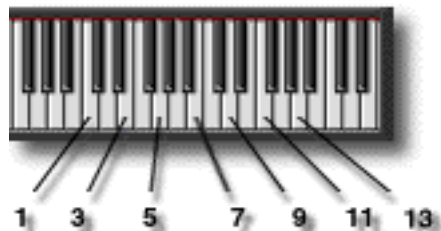
- ( 9th ) ----> ( b9th ), ( #9th )
- ( 11th ) ----> ( #11th )
- ( 13th ) ----> ( b13th )

**More** Depending on the Notes involved, certain Scales in CAMPS are named as follows:

- Pentatonic** A Scale comprised of 5 Notes, the Root, 9th, 3rd, 5th and 13th of the original Scale
- Chordal** A Scale comprised of 4 Notes, the Root, 3rd, 5th and 7th (or 13th) of the original Scale
- Triadic** A Scale comprised of 3 Notes, the Root, 3rd and 5th of the original Scale

# Scale Spelling

Overview The degrees of a Scale are called [Scale Notes](#), and each of these are given a name such as 9th or b7th. These numbers are based on the [Major Scale](#) starting with the Root as 1 and ascending consecutively. This is called **Scale Spelling**.



# Time Signature

Overview A **Time Signature** indicates the number of Beats in each [Bar](#) and the value of each Beat.

**Time Signatures** are expressed as a numerical fraction located at the beginning of a musical Notation Staff. The fraction numerator indicates the number of Beats per Bar, and the fraction denominator indicates the type (duration) of Note which gets one Beat. For example, 6/8 signifies six Beats in each Bar, with each Beat having the duration of an Eighth Note.

CAMPS allows you to [assign different Time Signatures to individual Bars](#).

# Transpose

Overview Changing to a different Key in the middle of a song is called **Modulation**. Changing an entire song to a different Key from the outset is called **Transposition**. CAMPS calls both of these **Transposition**.

Transposing allows you to give a song "Variation" or "Development" as it progresses.

CAMPS allows Transposition of individual Chords. It is also possible to temporarily transpose the entire Chord Track or entire Line Tracks during playback and recording.



# Voicing

## Overview

Most often melody lines consist of a series of individual Notes, but sometimes Harmonies are added in certain places to provide musical variation or impact. The different arrangement of harmony Notes under the melody is known as **Voicing**.



The top Note of a Voicing is called the **Lead Note**.



Voicing cannot be performed if the Lead Note is a [Chromatic Note](#) and is not specifically assigned by the user as a [Tension](#) or Passing Tone.

## How It Works

During the creation of Harmonies, available Notes are limited according to the Chord allocated to the Lead Note, but there is no limitation on the order of usage. Voicing is a technique related to this order of usage. There are actually a number of available notes with different nuances within the same chord while retaining the same Lead Note. A variety of Voicing techniques are available depending on several factors including the number of Notes used.

Voicing techniques are essential when arranging any accompaniment section.



## Voicing Techniques

CAMPS supports **3 to 6** voices, techniques ranging from **Closed** and **Spread** all the way to **U.S.T.**, and a [Harmonic Tension](#) feature for filtering Dissonance. These features make it easy to instantly compare a variety of Voicing nuances.

### Cluster

Harmonies consisting of Notes a 2nd apart, thereby developing in a relatively narrow pitch range. Clusters are very effective when used for low-tone melodies, backgrounds, and high-tone melodies that require bright sounds.

### Closed

The most basic Harmonies where Notes that form the nearest Harmony are arranged in order below the Lead Note.

### Drop2

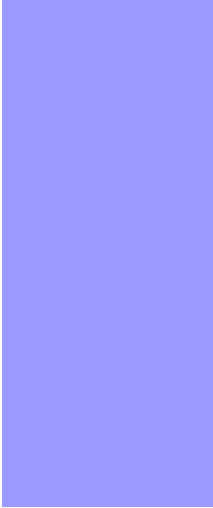
Harmonies developing in a somewhat wide register, dropping a Closed 2nd one octave below.

### Drop3

Harmonies developing in an even a wider register, dropping a Closed 3rd one octave below.

### Drop2+4

Harmonies developing in a relatively wide register, dropping a Closed 2nd and 4th one octave below.



4th	Harmonies developing in a relatively wide register. The interval between the Notes forming the Chord is the Perfect 4th. This is very effective when used for long Notes, rhythmic Melodies and Pedal Point, among other things.
Spread	Harmonies developing in a wide register including the Root as the lowest Note, with the 3rd and 7th above the Root. This is very effective when used for long Notes, rhythmic Melodies, backgrounds and vocals.
UST (Upper Structure Triad)	Harmonies consisting of three Notes forming Chord Tones and Tensions. This is very effective when used for rhythmic Melodies, climaxes and endings, among other things.

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