

# Forte 3

Music Notation Software

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Welcome!



Welcome and thank you for using Forte, a full-featured notation-based MIDI sequencer for Windows. Forte combines all the tools you need to create, edit, and perform MIDI and digital audio with a full-featured score notation engine and visual editing tools for creating professional-quality printed scores.

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## About the Documentation

This documentation is intended to provide a comprehensive explanation of the features of Forte.

Please notice that some of the features described here are not available in all editions of Forte. For more information on which features are available in your edition, please visit [www.forte-notation.eu](http://www.forte-notation.eu).

Click on one of the topics below to learn more:

The following topics are primarily useful when first installing the application:

### [Overview](#)

Provides an overview of the tools and views you will use to create and edit music. This road map of the program gives you a basic idea of the sorts of things that are possible to help you use the product better.

### [Getting Started](#)

This section familiarizes you with the basics of using the program. Basic steps on creating, editing, recording, playing and printing are covered. More detailed treatments are covered in later chapters.

### [Technical Support](#)

How to contact the Technical Support Team in case of problems or questions. Drop us an email and let us know how we're doing!

The following topics describe how to use the program:

### [Understanding Tracks & Staves](#)

This section describes the fundamentals of tracks and staves. Adding and removing tracks, measures, and general MIDI topics are covered.

### [Views](#)

This section describes the different views you can use to edit your document. Detailed instructions are provided for entering and editing music symbols in each view.

### [Actions](#)

Actions are plug-in music effects used for editing music. This section describes the available actions and how to use them.

### [Tutorials](#)

This section contains tutorials on how to perform common tasks in Forte.

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## What's new in Forte 3?

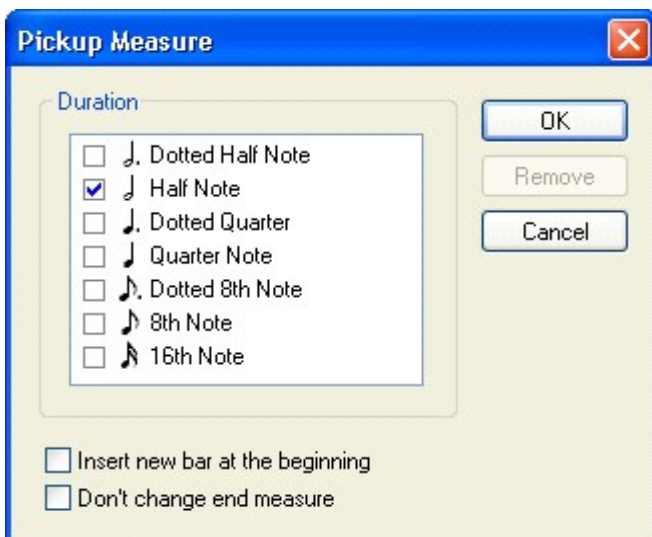
### 1. The Launch Assistant

The Launch Assistant is displayed when you start the program or when no documents are opened. It helps you to quickly start a new work or open existing Forte documents or other files.



### 2. Easy creation of Pickup Measures

Now you can create pickup measures on a very easy way. Just select the desired duration, set the parameters you want and Forte will do the rest for you. [More...](#)





### 3. Enhanced Lyrics Feature

The lyrics feature was improved and allows you now to enter or edit whole verses as a single text block. All changes you make on the text, like division, extension, displacement or insertion of words or syllables, will be automatically assigned to the score and vice versa. No other notation software allows you to handle your lyrics on such an efficient way. [More...](#)

### 4. The Audio Sequencer

The new Audio Sequencer brings you the great possibility of adding audio tracks into your score. Now you can import audio files or record your own audio tracks. You also have the possibility to change the tone or the tempo of some audio data. The Audio Sequencer brings also an integrated audio editor, the Forte Audio Editor, that allows you to open some audio data for making further audio processing. [More...](#)



## 5. Export audio files within seconds

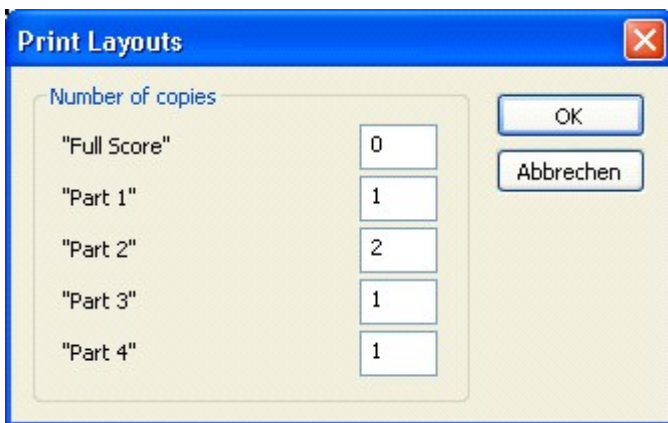
The Audio Export has been enhanced and can now convert your music score to audio files within seconds. This is possible due to an integrated sample-based synthesis using the SoundFont technology. And because Forte also lets you provide your own samples through an external SoundFont file, there will be no limit on increasing the quality of your audio files.

## 6. Enhanced Main Menu

The main menu became more intuitive. Some of the main entries have been renamed to more self-explanatory terms and many menu items have been moved to the place where you'd probably look for them first. It's important here to understand that your "Document" can be displayed in several different "Views" (the Music Score, the Audio Sequencer, the Piano Roll, the MIDI Events) and that you can perform "Actions" on your document or on the selected elements of a view.

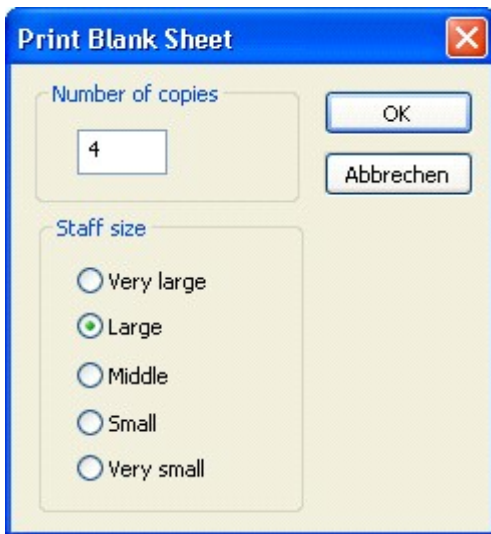
## 7. Print All Layouts

This new feature allows you to print as many copies you want of all available layouts of a document.



## 8. Print Blank Sheets

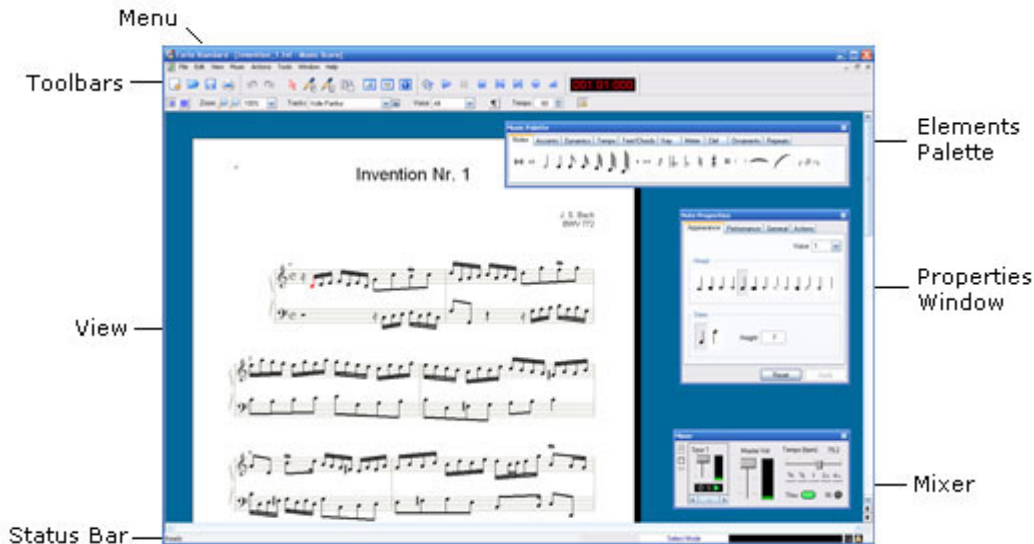
Despite all the comfort Forte provides, you may want to occasionally write your music score by hand. For these moments, you can now use Forte to print as many copies you want of empty sheets in five different sizes.



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## Overview

The workspace consists of the main application window, the menu and status bar, dockable toolbars, floating tool windows and views for each document. Click on an area of the image below for more details:



The following topics provide summaries of each area. Click on one of the links for detailed information about each component.

### Toolbars

The colored buttons along the top portion of the main window are actually separate [toolbars](#) that contains controls for accessing commonly-used features.

There are four different toolbars: the [File toolbar](#) contains buttons for managing documents; the [Edit toolbar](#) contains buttons for exporting, editing and changing an open document; the [Performance toolbar](#) contains transport controls for playing and recording your music; the [Time toolbar](#) contains a time display that counts out bars and beats during a performance.

### Views

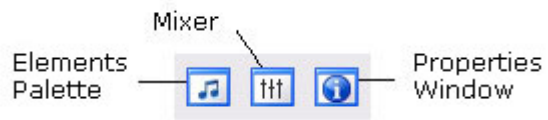
The main view displayed above is the [Music Score](#), which is one of several different [views](#) available for creating and editing a document. The views are the central work area for your music. Other view you can use are the [Piano Roll](#). Each document has its own set of views.

### View Tools

There are three main tool windows that you use during the course of creating your compositions. The [Elements Palette](#) contains all the music symbols that you can add to your score, the [Mixer](#) can be used to adjust tempo, volume and other performance properties, and the [Properties Window](#) provides a single location to edit hundreds of music symbol properties.

Many of these features can be accessed through menu commands as well, but the tool windows provide a convenient way to access the features you use most often. Use the

buttons on the Edit toolbar to toggle the display on any of the tool windows:

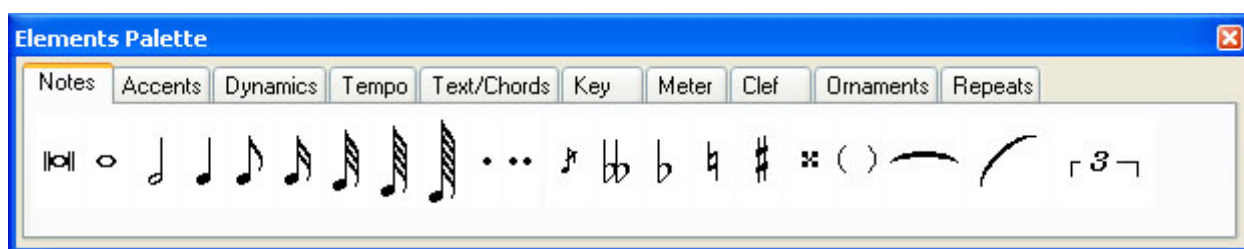


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## Overview

### The Elements Palette: An Introduction

The Elements Palette is quite literally a palette of music elements that you can add to your document. Whenever you want to add a music symbol you should go to the Elements Palette first.



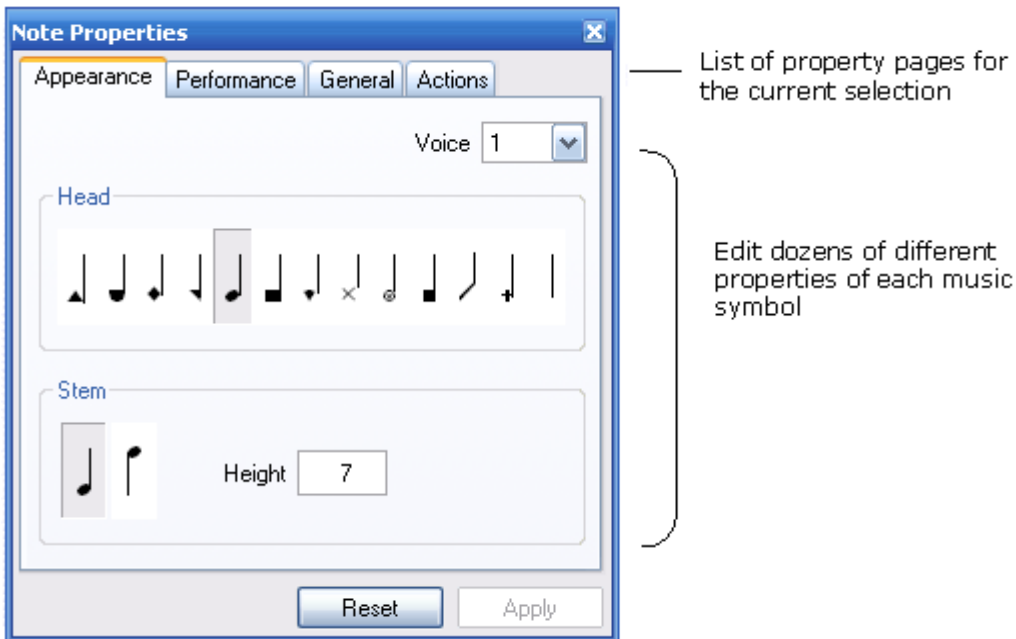
The music symbols are organized into different pages according to element type. All the notes are in one page, all the dynamic markings are in another page, all the ornaments are in yet another page, and so on. Once a music symbol is selected in the Elements Palette, it's a simple matter of clicking the mouse in the music to add the symbol.

Depending on which view you use, it may not always be possible to enter every symbol in every view. For example, the Piano Roll does not display slurs or ties so it is not possible to enter them there - you must use the Music Score.

For detailed information about the Elements Palette click [here](#).

## The Properties Window: An Introduction

The Properties Window displays a list of property pages for the current selection and is one of the most commonly-used tool windows in the entire application. The Properties Window is used to edit and modify elements after you have inserted them into your music document.



As the current selection changes, so too does the list of property pages displayed in the Properties Window. The Properties Window can be hidden or displayed as needed. You can even select different types of elements and the Properties Window displays property pages that are common to the entire selection.

The Properties Window is used to modify literally hundreds of different element characteristics. Everything from the style of a note, the shape of slurs and ties to the spacing around a staff can be changed using the Properties Window. The usual method of editing a music symbol is to select it then use the Properties Window to change the desired element properties.

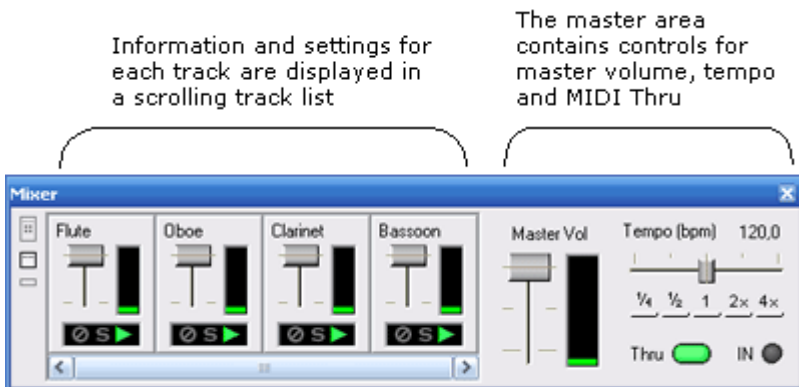
One of the most powerful features of the Properties Window is its ability to modify many different elements at once. You can select several notes, for example, and with a single operation change all their durations to 8th notes, or all the stem directions. As you begin to edit different music symbols you will appreciate how the Properties Window simplifies your work.

For detailed information about the Properties Window click [here](#).

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## The Mixer: An Introduction

The Mixer is used to control the interaction of different tracks in your music document. If you want one part to sound louder than another does, for example, you use the mixer to adjust the volumes to get the mix sounding just right. The Mixer is also used to select tracks and set characteristics such as Mute, Solo and Record states.



Each track indicator displays the track name, volume, and status. The master area contains master controls that affect the performance of all tracks. Tempo, for example, is controlled in the master area.

The Mixer can be docked/undocked to the main application window, just like a toolbar. When the Mixer is undocked you can resize it horizontally to take up less screen space.

For detailed information about the Mixer click [here](#).

## The Status Bar

The status bar is a small area at the bottom of the main application window where various status messages and other feedback are displayed.



The status message changes as you highlight different menu commands to display a more detailed description of the selected command. The message also updates when tool tips are displayed above toolbar buttons.

The performance state area is green during playback, red during recording and inactive otherwise.

The text in the entry mode display is red when the program is in Insert Mode, or blue when the program is in Select Mode. When in Insert Mode, the entry mode describes the current type of symbol selected from the Elements Palette.

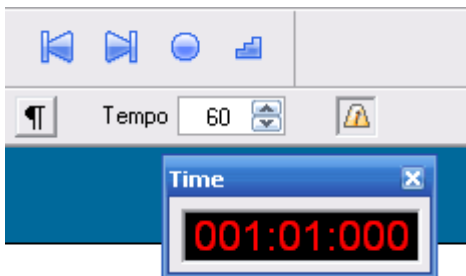


## The Toolbars

### The Toolbars

A toolbar is a small window that contains buttons or other controls for accessing commonly-used features. There are four toolbars for accessing music editing features - these serve as convenient shortcuts for commands and also provide visual feedback of the state of the document.

As you move the mouse over a button or control in the toolbar, [tool tips](#) appear over each button to identify the button (in case you don't remember what the icon means). You can rearrange the toolbars to fit your preferences, and you can show/hide toolbars as needed. By default, each toolbar is attached or "docked" to the main application window, but you can also "float" each toolbar in its own window.



#### To Float a Toolbar

- Click - but do not release - the mouse in an empty portion of the toolbar.
- Drag the toolbar away from its docked position. As you drag the window you will see a light outline of the window, showing where the toolbar will end up if you release the mouse.
- When the tool window is sufficiently far from its docked position, the outline changes to a larger size, indicating that the toolbar will be displayed in a floating window.
- Release the mouse to undock the toolbar. When undocked, the toolbar is displayed in a small floating window.



#### To Dock a Toolbar

- Click - but do not release - the mouse in an empty portion of the toolbar.
- Drag the toolbar outline toward one edge of the main application window. When the tool window approaches the edge of the window the outline changes to a smaller size, indicating that the toolbar will be docked.
- Release the mouse to dock the toolbar.

Note: You can also alternate between the docked and floating states of a toolbar by





double-clicking the mouse in an empty portion of the window.

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## File Toolbar

The File toolbar contains buttons for quickly accessing commands on the File menu. Using these buttons, you can create, open, save, and print files.

To display the File toolbar, select Tools ▶ Toolbars ▶ File from the menu to toggle the File toolbar. A check mark appears next to the File menu item when the File toolbar is visible.

New		Creates a new music document. Click New to select a template for your new music document.
Open		Opens an existing music document. The Open dialog appears, allowing you to select the file you want to open.
Save		Saves the active music document with its current filename, location, and file format.
Print		Prints all or a selected portion of your music document.

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## Edit Toolbar

The Edit toolbar contains buttons for switching between different entry modes and for displaying the music tools. The buttons function as both controls and indicators - a button is illuminated when something is on/displayed and dark when something is off/hidden.

To display the Edit toolbar, select Tools ► Toolbars ► Edit from the menu to toggle the Edit toolbar. A check mark appears next to the Edit menu item when the Edit toolbar is visible.

### Mode Buttons

The three blue buttons on the left are used to toggle between the different entry modes.

Select



Change to [Select Mode](#) so that you can select music symbols. Once selected, you can copy, edit, delete, or move symbols within the music document. You can also use the shortcut key, CTRL+1, to change to Select Mode.

Insert



Change to [Insert Mode](#) so that you can add new music symbols to your document using the mouse. You can also use the shortcut key, CTRL+2, to change to Insert Mode.

Keyboard



Change to [Keyboard Mode](#) so that you can add new music symbols to your document using the computer keyboard. You can also use the shortcut key, CTRL+3, to change to Keyboard Mode.

## Camera



Change to [Camera Mode](#) so that you can export part of you screen to other application. You can alsoUse the shortcut key, CTRL+4, to change to Camera Mode.

## Music Tool Buttons

The three yellow buttons on the right areUsed to toggle the display of music tools.

## Elements Palette



The [Elements Palette](#) contains dozens of music symbols that you can add to your document. You can alsoUse the shortcut key, ALT+1, to toggle the display of the Elements Palette.

## Properties Window



The [Properties Window](#) is used to inspect and change music symbol properties. As you select different elements in your music, the Properties Window changes to display properties for the selected items. You can alsoUse the shortcut key, ALT+2, to toggle the display of the Properties Window.

## Mixer



The [Mixer](#) contains controls for modifying the performance of each track in your document, and for modifying the master tempo and volume. You can alsoUse the

shortcut key,  
ALT+3, to toggle  
the display of the  
Mixer.

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## Performance Toolbar

The Performance toolbar contains buttons for playing and recording a composition. The buttons are familiar transport controls used on a tape deck or CD player and duplicate the commands available in the Music ► Perform menu.

To display the Performance toolbar, select Tools ► Toolbars ► Performance from the menu to toggle the Transport toolbar. A check mark appears next to the Edit menu item when the Edit toolbar is visible.

Performance  
Options



Click this button to display the Performance Options dialog, where you can specify performance options such as loop playback, loop recording, lead-in measures and other options which affect the performance.

Step Play



Use this button to step through your music. When the Record button is enabled, this button becomes the Step Record button.

Record



Lets you record music from your MIDI keyboard or other MIDI device.

Pause



Pauses playback or recording of the current document. When paused, you can click this button again to resume the performance.

Stop



Stops playback or recording in the current document.

Play



Begin playback of the current document. The performance begins at the time location displayed in the Time Toolbar.

Previous



This button moves the current performance position (the time displayed in the Time Toolbar) to the previous marker, or to the beginning of the music if no marker is found.

Next



This button moves the current performance position (the time displayed in the Time Toolbar) to the next marker, or to the end of the music if no marker is found.

The Rewind and Fast Forward buttons are only displayed during a performance. When the document is not playing or recording, the Previous and Next buttons are displayed instead.

Rewind



This button rewinds the current performance position (the time displayed in the Time Toolbar) to the last position where the playback was first started. Playback continues as normal.

Fast Forward



This button doubles the speed of the playback. Click the button again to return the playback



speed to its  
normal rate.

You can  
accomplish the  
same operation by  
adjusting the  
tempo slider in  
the Mixer.

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## Time Toolbar

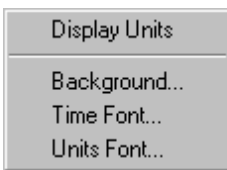
The Time toolbar displays the current performance location of the active document. When you play or record, the displayed time changes along with the music.



Click the mouse on the time value to display the [Goto Dialog](#). Using this dialog, you can set a new performance location for the document. When you change the location the views scroll to the proper location so you can see the music at that point.

The performance location is displayed in the form BARS:BEATS:TICKS. The TICKS value represents the number of divisions in one quarter note beat (also known as PPO, for pulses per quarter note). The minimum value is 0; the maximum value defaults to 480, although you can [change](#) this maximum value using the Options menu.

You can customize the appearance of the time displayed in the toolbar. Right-click the mouse to display a shortcut menu containing commands for changing the time display. Click on the menu displayed below for details:



To display the Time toolbar, select Tools ► Toolbars ► Time from the menu to toggle the Transport toolbar. A check mark appears next to the Edit menu item when the Edit toolbar is visible.

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# Views

## Views

A view is the primary work area that you use to create and edit music. There are several different views available. The Music Score, for example, is used when one is interested in creating music notation; the Audio Sequencer, on the other hand, is used only when setting up digital audio tracks to play along with the MIDI data. Different people have different preferences, so try out each view to see which one works best for you.

If you want to display a different view, select the desired view from the Tools menu. You can change your user preferences so that the program [automatically loads a particular view](#) - such as the Piano Roll - when a document is first opened. By default, the Music Score is the main view that is first displayed when you open a document.

Select one of the following topics for more information about each view:

[Music Score](#) This view displays music as standard music notation. The notes are organized into measures and systems along staff lines that represent the pitch of the notes.

[Audio Sequencer](#) This view displays the digital audio files which are to be played along with the MIDI information. The view displays wave files as bars along a timeline and provides basic controls for adjusting wave performance parameters.

[Piano Roll](#) This view represents music much as the scrolls on a player piano -- the notes are represented as bars along a grid that represents the underlying measures. The width of each bar represents the duration of the note.

[MIDI Events](#) This view is a simple table of events such as notes, dynamic markings and tempos. Different underlying properties such as note pitch, duration, etc. can be edited directly in the table.

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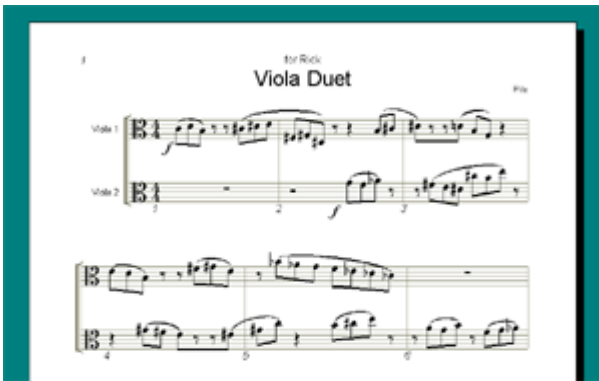
## Music Score: An Introduction

The Music Score represents a music document as standard music notation. Notes, text, dynamic markings, clefs, meters and dozens of other symbols are added directly to the music simply by choosing a symbol from the Elements Palette and clicking the mouse at the location in the music where the symbol should be added.

The Music Score further operates in two different view modes: [Page View](#) and [Track View](#). Both views display standard music notation - the difference is how staves and measures are displayed.

### Page View

[Page View](#) represents music as it will be printed on a piece of paper. Symbols are automatically spaced and aligned on staff lines to conform to the rules of music notation, staves and measures are divided into systems on a page, and so on. In Page View the number of tracks you can display at once is limited by what can fit on a printed page.



Formatting preferences are defined in what is known as a [layout](#), which is essentially a style sheet that describes how the music looks on a piece of paper. You can edit and create new layouts to suit your needs. Each layout defines the page size, fonts, margins, tiling options and so forth.

### Track View

[Track View](#) displays all tracks in one long scrolling view. A margin on the left side displays basic characteristics of each staff (clef, key, name, etc.). In Track View there is no limit to the number of tracks that can be displayed at once.



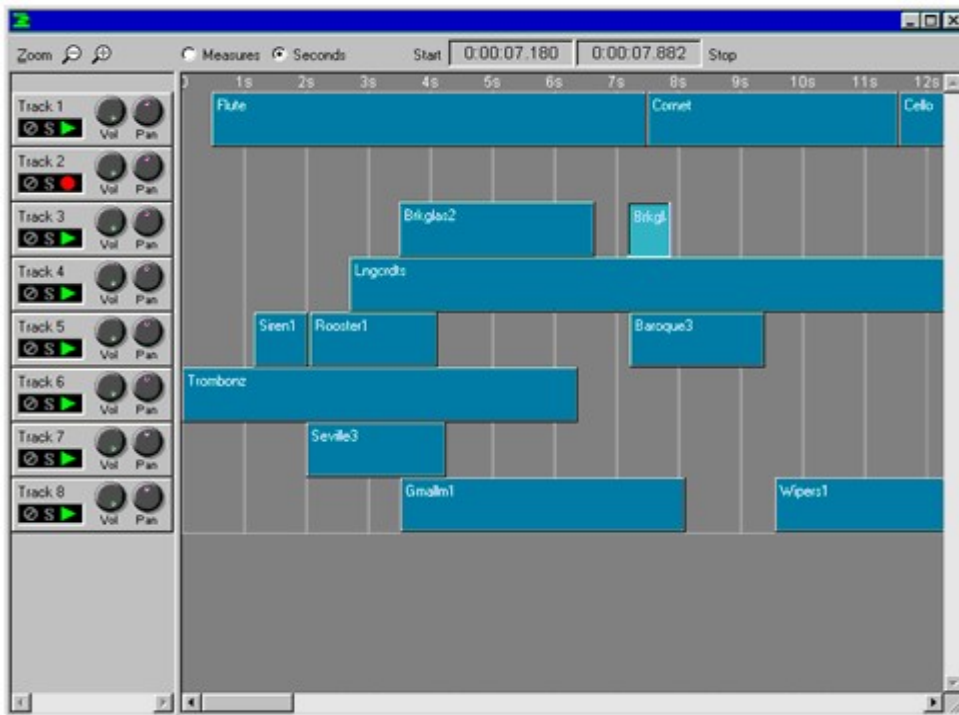
Entering notes and other symbols in Track View can be more convenient than working

between systems in Page View (it is unnecessary to scroll the music left or right to get to the next system on a page). Later, when you're ready to print out the music you can switch to Page View to do any formatting and fine tuning adjustments.

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## Audio Sequencer: An Introduction

The Audio Sequencer is used to add and position digital audio files in your music document. If you want to add sound effects or singing to your music, for example, you can record or insert new WAV files into the Audio Sequencer, then position them at the desired measure or time position. The Audio Sequencer also has several controls for managing the volume and balance of each wave file.

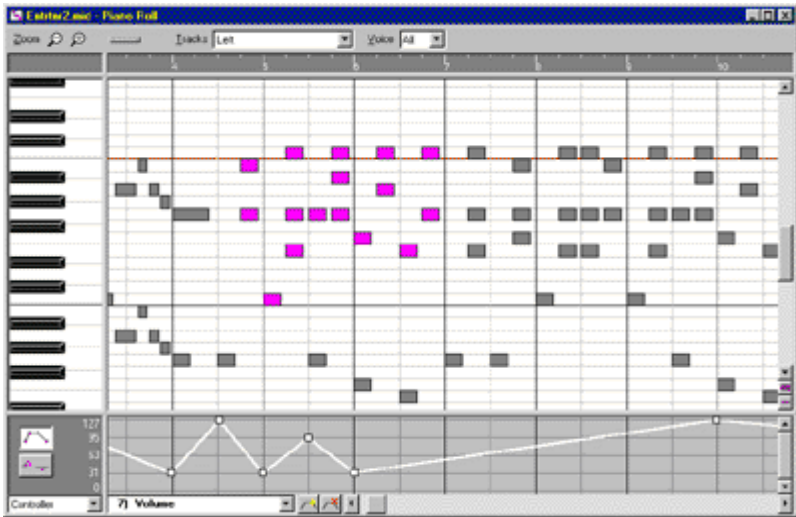


For detailed information about the Audio Sequencer click [here](#).

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## Piano Roll: An Introduction

The Piano Roll view displays notes as bars along a timeline, much like an old player piano. The up and down direction represents pitch, and the left and right direction represents measures (time). Since the piano roll is able to display the data more accurately with respect to how it is performed than standard music notation, it is a preferred method of editing MIDI for many people.



The Envelope View is another important view that is displayed in the same window as the Piano Roll. The Envelope View and the Piano Roll are aligned along the horizontal (e.g. time) axis. The Envelope View displays how various musical parameters -- such as volume, pan, reverb and tempo -- change with time. You can create and add new "envelopes" to describe how a chosen musical parameter behaves. The alignment of the two views allows you to synchronize the envelope with individual notes -- this is crucial when working with parameters such as pitch bend or modulation.

For detailed information about the Piano Roll click [here](#).

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## Audio Sequencer: An Introduction

The Event List displays a list of musical events in a table. The left portion of the window is used to select the portion of the document you wish to inspect. Different columns in the table describe important event parameters, such as the start time, duration and MIDI data values.

Description	Chan	Start	Duration	Pitch	Data1	Data2	Info
FX Send 1 (Reverb)	4	001:01:000			91	85	Data1 = controller type, [
FX Send 3 (Chorus)	4	001:01:000			93	0	Data1 = controller type, [
Dynamic Marking	4	001:01:000			7	94	Data1 = controller type, [
Damper Pedal	4	001:01:000			64	0	Data1 = controller type, [
Program Change	5	001:01:000			32	0:0	Data1 = program change
Pan	5	001:01:000			10	64	Data1 = controller type, [
FX Send 1 (Reverb)	5	001:01:000			91	0	Data1 = controller type, [
FX Send 3 (Chorus)	5	001:01:000			93	0	Data1 = controller type, [
Dynamic Marking	5	001:01:000			7	102	Data1 = controller type, [
Damper Pedal	5	001:01:000			64	0	Data1 = controller type, [
Note	5	001:01:000	0001:000	A#1	34	99	Data1 = note value, Data
Program Change	10	001:01:000			0	0:0	Data1 = program change
Pan	10	001:01:000			10	64	Data1 = controller type, [
FX Send 1 (Reverb)	10	001:01:000			91	100	Data1 = controller type, [
FX Send 3 (Chorus)	10	001:01:000			93	0	Data1 = controller type, [
Dynamic Marking	10	001:01:000			7	94	Data1 = controller type, [
Damper Pedal	10	001:01:000			64	0	Data1 = controller type, [
Note	10	001:01:005	0000:065	A#2	46	87	Data1 = note value, Data
Note	4	001:01:010	0000:255	A#4	70	101	Data1 = note value, Data
Note	4	001:01:010	0000:255	G4	67	96	Data1 = note value, Data
Note	4	001:01:010	0000:245	D4	62	89	Data1 = note value, Data
Note	3	001:01:370	0000:145	A#5	82	104	Data1 = note value, Data
Note	5	001:02:000	0001:015	C2	36	96	Data1 = note value, Data

You can sort the list of events in different ways - by time, duration, channel and so on. This makes it easy to find all the notes of a particular duration, or all the dynamic markings that occur within a specific time region, for example.

For detailed information about the Event List click [here](#).



## Options

Since no two people are alike, a number of options are offered that can be used to configure the program to behave in different ways.

The options are grouped into 3 broad categories: General, Sequencer and Notation. To display current preference settings, select Options then select the appropriate category.

The General Options are settings associated with how the application behaves as a whole. These include things like color preferences, which views are first opened when a document is loaded, automatic save preferences and the like.

The Sequencer Options are settings associated with MIDI and digital audio. This is the location to set default playback and record devices, quantization and other filtering options for recording, desired formats for digital audio recording and so forth.

The Notation Options are settings that affect only the music notation in the Music Score. Drum maps and notation settings can be modified with the corresponding options dialog.

There are other options that are automatically preserved by the program, but which do not require user input. For example, all window positions and sizes are stored and recalled from one session to the next, transposition settings, chord symbol entry and other interface components are also remembered.

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## Technical Support

### Technical Support

Contact the Technical Support Team if you have questions concerning any of our software applications.

#### Contact Information

Email: [support@forte-notation.eu](mailto:support@forte-notation.eu)

Internet: <http://www.forte-notation.eu>

Please include the following information when contacting us:

- Full name and how you can be reached
- Product and version number. Click Help ► About in the software to obtain this information.
- Computer description (CPU speed, RAM, and Operating System)
- Sound card manufacturer and model. If possible, also include your sound card driver information. See [Obtaining Information about your Sound Card](#) for instructions.

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## Obtaining Information about your Sound Card

When you work with the Technical Support Team it is helpful to know the specifics of the sound card on your system. Some sound cards have "known issues" that require workarounds, for example, and frequently newer components are available from the manufacturer which fix certain problems. There are two types of information that may be useful: the driver version number and the resource settings.

### Driver Version Number

The driver version number indicates when the driver software was written. Sound card manufacturers often release newer versions of their drivers for free, and usually there is a web site where you can download a full upgrade.

### Resource Information

The resource information affects how your sound card interfaces with your computer. There are three parameters to determine: the Input/Output Range, Interrupt Request (IRQ) and Direct Memory Access (DMA) setting. These terms may sound scary, but you can relax with the knowledge that they are simply ways to characterize how the sound card is sending and receiving signals from your computer. Sometimes conflicts with other devices may cause your sound card to malfunction or lead to unexpected symptoms.

The steps below describe how to obtain specific details about your sound card. Before calling technical support about issues that seem related to your computer hardware, obtain this information so we can better resolve your problem.

To obtain driver information

- Click on the Windows Start button and select Settings ► Control Panel.
- Double-click on System, and select the Device Manager tab when the System Properties dialog appears.
- In the Device Manager tab, locate the category named Sound, video & game controllers and double click to display your sound devices.
- Select the device you want to obtain driver information for, then click the Properties button to display properties for the device.
- Within the Device Properties dialog, select the Driver tab and record the value listed in the Version text field.

Note: If the field does not contain any actual version numbers, select the Driver File Details... button and record the value in the File Version text field.

To obtain resource information:

- Display the device properties dialog, steps 1-4 in the instructions to obtain driver information.
- Within the Device Properties dialog, select the Resources tab.
- 

The Resource Settings area displays different resource types and their corresponding values. Record the values of the Input/Output Range, the Interrupt Request, and the Direct Memory Access -- there may be more than one value in the list, so be sure to get everything.

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# Getting Started

## Getting Started

Before you begin, please take a few moments to familiarize yourself with the user interface. Click [here](#) for an overview of the various tools, windows and views you can use for creating music.

As you use the program you will discover that there are often several different ways to perform a command. Shortcuts, pop-up menus, toolbars and mouse actions can all be used to apply commands. Which method should you use? Of course, the one you like the most! Some people prefer to use menus, some like toolbars and still others prefer shortcut keys.

### Using Context-Sensitive Help

At any time in the program you can bring up a context sensitive help topic by selecting Shift+F1 from the keyboard and then clicking on a button, control or window. You can also move the mouse pointer over a button or control to display a [tool tip](#) describing what the control is used for.

### Using Shortcut Keys

Shortcut keys or "keyboard accelerators" save you the hassle of moving the mouse, selecting a menu and then selecting an appropriate command from the menu. For example, Pressing CTRL+N on the keyboard performs the same action as selecting the File menu with the mouse and choosing the New... command.

If you prefer to use shortcut keys, please notice the key combinations given at the right of some menu items. If there is not a set of shortcut keys given, that function does not work using shortcut keys.

Let's Get Started!

Click on one of the topics below to learn more about working with music documents.

 [Create a New Document](#)

 [Open an Existing Document](#)

 [Add Music to a Document](#)

 [Perform Music](#)

 [Edit Music](#)

 [Save a Document](#)

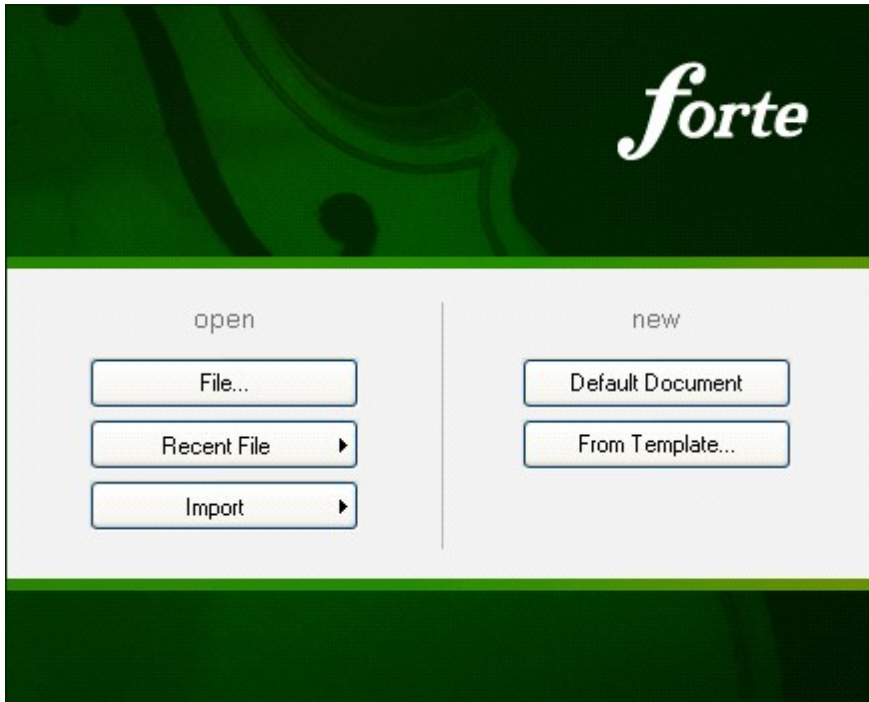
 [Print a Document](#)

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## The Launch Assistant

### The Launch Assistant

The Launch Assistant is displayed when you start the program or when no documents are opened. It helps you to quickly start a new work or open existing Forte documents or other files.



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## Create a New Document

You begin a new composition by creating a new document to store your music and formatting. All new documents are based on a starting file known as a [template](#). Each template contains a default number of tracks, voicing and so on. Templates are essentially blank documents with some basic structure already set up for you.

For example, if you want to write a four-part choral piece you can open the SATB template, which already has the soprano, alto, tenor and bass parts. Without the template you would need to set up four staves, add key signatures, clefs, and labels. While this is not difficult, the template saves you the time and effort of doing this each time you want to write a choral piece.

You can choose from a number of different templates including percussion, choral, orchestral, piano, and ensembles.

To create a new document

Select ▶File ▶New from the menu to display the New dialog.

-OR-

On the File toolbar, click the New button.



Select a template from the list in the dialog.

This is the starting point for your document.

Click the OK button.

A blank sheet of music will appear on the screen with a clef, time and key signatures, and part labels. If you would like a different instrumentation, you can try some of the other templates or create your own.

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## Open a Document

### Open a Document

You can open any music document that was created as either a Forte Notation File (.FNF), MusicXML (.XML) or a Standard MIDI (.MID) files.

If the program is not already open, you can double-click on a file from Windows Explorer to open the program with the selected file displayed.

You can also click on a file in the Explorer and drag it into the main application window to open that file.

Note: A list of the most recent documents you have opened or saved is shown in the File menu. Click on any of these file names to open that file without displaying the Open dialog.

To Open a Document

1. Select File ►Open... from the menu to display the Open dialog

-OR-

On the File toolbar, click the Open button.



-OR-

Type CTRL+O

1. Click on the file(s) you want to open. If the file you want does not appear in the list shown, use the Look In dropdown list to find the folder where the file is stored.
2. Click the Open button. It may take a few seconds to open the file.

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## Open Library of Scores

Forte includes over 90 scores that you can use. The Open Library command provides the easiest way for you to find and open the score that you want.

Note: You can always use the [normal open command](#) to open any file, including a score from the library.

You can also click on a file in the Explorer and drag it into the main application window to open that file.

To Open a Hymn

1. Select File ► Open Library... from the menu to display the Open Library dialog

-OR-

Type CTRL+H

1. Click on the score you want to open. Use the controls in the Search For area to display only scores matching specific search criteria.
2. Click the Open button. It may take a few seconds to open the file.

-O-

## Add Music to a Document

### Add Music to a Document

You can use the mouse to enter notes and other symbols into a view. Typically, you select a music symbol from the Elements Palette and click the location in the view where you want the symbol placed. Some symbols - such as crescendos - require you to select both a start location and a stop location.

If you prefer you can also [record music](#) directly into your document from a MIDI instrument.

For more details select one of the topics below:

 [\\_Select a Music Symbol](#)

 [\\_Enter music in the Music Score](#)

 [\\_Enter music in the Piano Roll](#)

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## Select a Music Symbol

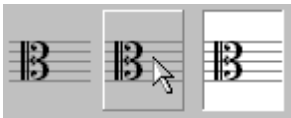
The [Elements Palette](#) is a floating window containing dozens of different music symbols that you can add to your document. The symbols are grouped into 8 different groups such as Notes, Accents, Dynamics, Tempos, and so on.

To Select a Symbol

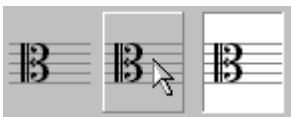
- Select the page in the Elements Palette containing the desired type of symbol (e.g. Note, Dynamic, Text).
- Move the mouse over the symbol you wish to select.

The button displaying the symbol becomes "active" when the mouse is over the button

- Click the mouse on the desired symbol to select it.

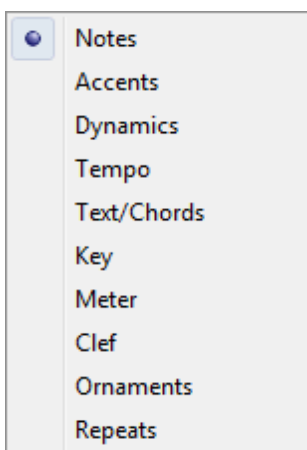


Selected symbols in the Elements Palette appear as highlighted buttons.



To Display other Symbols

- Click one of the tabs in the Elements Palette. The two arrows in the upper right hand corner are used to scroll through all of the tabs.
- You can right-click the mouse in the Elements Palette to display a popup menu containing a list of all the tabs -- simply select an item to display the page.









This method makes it much easier for you to navigate between the tabs.

## Playing Music

### Playing Music

After you have inserted or created music, you can play your composition to hear what it sounds like. There are many ways to control how the performance sounds. Click on one of the topics below for more information:

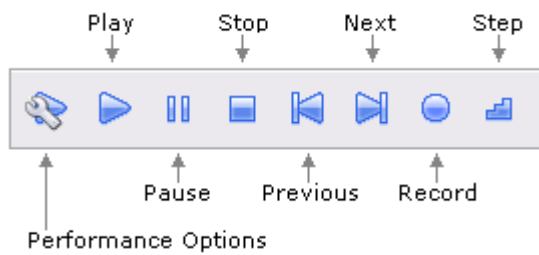
-  [\\_Play, Pause and Stop the Performance](#)
-  [\\_Change the Volume of a Track](#)
-  [\\_Change the Tempo](#)
-  [\\_Mute a Track, or Listen to Selected Tracks](#)
-  [\\_Change Reverb, Pan, and Chorus on a Track](#)
-  [\\_Change the Instrument for a Track](#)

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## Manage a Performance

### Managing a Performance

The Transport Controls are used to control playback and recording of a performance. You can play, stop, pause, record, skip between sections, fast forward and rewind within the document and configure looping options -- all from the Transport Controls.



#### To Begin Playing

- Click the play button to begin playing your music

#### To Pause

- Click the pause button during playback to pause the music. Click the button again to resume the performance.

#### To Stop the Music

- Click the stop button when you are done listening.

#### To Double the Tempo and Fast Forward

- Click the fast forward to double the tempo and fast forward through the music.

Click the button again to return to normal play speed.

#### To Play From the Last Start Point

- Click the rewind button to play from the last starting point.

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## Loop Playback

Loop playback allows you to continually play a section of music over and over. It is purely a sequencer playback feature (there is no notational symbol). For notation based repeats, see [Repeats](#).

Loop Playback is a great way to practice in the privacy of your own home. Lay down some changes, set the tempo really slow, setup a loop, and shed. Slowly [increase the tempo](#) (no need to stop the loop) or [transpose to a different key](#) (again, no need to stop the loop). Now go and impress your friends.

### To Loop Playback

- From the [Performance Options Dialog](#) check the Enable Loop Mode box.
- Check the Loop Region check box and specify the measures to loop over (You can still set the range even if the Loop Region check box is grayed out). For example, if you are looping over 32 bars, set the Start to 001:01:000 and the End to 033:01:000.
- OK out of the dialog and play as usual.
- The Loop Options button on the transport control will light up when looping is enabled.

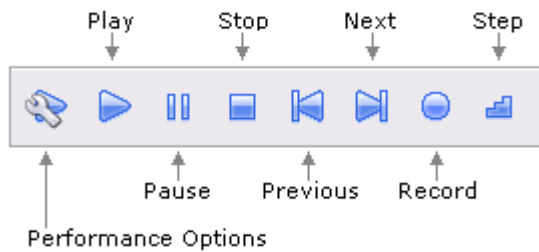
### To Stop Loop Playback

- From the [Performance Options Dialog](#) uncheck the Enable Loop Mode box.
- Make sure that the Play Region and Record Region check boxes are unchecked.
- OK out of the dialog.

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## Step Playback

Step Playback allows you to play back the piece in non-real time. Often this is a good way to hunt for wrong notes in dense passages.



To Step Playback using Mouse

Click the Step button on the Performance toolbar.



-OR-

Select Music ▶ Perform ▶ Step from the menu.

Click the Play button on the Performance toolbar.



-OR-

Select Music ▶ Perform ▶ Play from the menu to sound each note in the piece successively. Notes which occur within a certain threshold of each other will sound as chords.

To Stop Step Playback

Click the Stop button on the Performance toolbar.



-OR-

Select Music ▶ Perform ▶ Stop from the menu.

To Step Playback using Keyboard

1. Click the Step button on the Performance toolbar.





-OR-

Select Music ▶ Perform ▶ Step from the menu.

2. Hit the Space Bar to sound each note in the piece successively. Notes which occur within a certain threshold of each other will sound as chords.

-O-

## Punch In / Punch Out

Sometimes you'll record a passage, and with the exception of one bungled section, it's flawless. Instead of re-recording the entire passage, you can Punch In Punch Out and just re-record over the offending section.

The program will only record between the Start and End points (Punch In point and Punch Out point) so you can play along with the part to help you get into the flow.

### To Enable Punch In/Out

- From the [Performance Options Dialog](#) uncheck the Enable Loop Mode box.
- Check the Record Region check box and specify the measure, beat and tick where the recording will Start and End.
- Set the Play Region Start to a couple of measures before the Record Region Start, and set the End to a couple of measures after the Record Region End.
- Select the Replace existing radio button under the option When recording into a track containing data.
- OK out of the dialog and record.

### To Disable Punch In/Out

- From the [Performance Options Dialog](#) uncheck the Enable Loop Mode box.
- Make sure that the Play Region and Record Region check boxes are unchecked.
- OK out of the dialog.

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## Change Track Volume

The Mixer has several controls which allow you to control various characteristics of each track, including volume. Each track is represented as a group of controls in the mixer.

Within each group of track controls the vertical slider to the left of the display meter can be used to control the relative volume of each track.

To Display the Mixer

Use any of the following methods to display the Mixer:

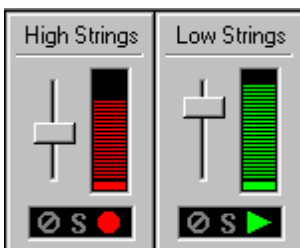
- Select Tools ►Mixer from the menu.
- Click the Mixer button in the Edit toolbar:



- Press ALT+2 on the computer keyboard.

To Change Track Volume

- Change the position of the volume slider on the desired track in the Mixer.



- All tracks are affected by the master volume, which is controlled in the Master Area for the Mixer.

-0-

## Change Tempo

The Mixer has several controls that allow you to control various characteristics of the performance, including the tempo.

The right portion of the Mixer contains a set of controls for changing the master volume and tempo. A horizontal slider in this "Master Area" represents the relative tempo for the performance.

### To Display the Mixer

Use any of the following methods to display the Mixer:

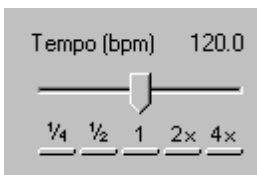
- Select Tools ►Mixer from the menu.
- Click the Mixer button in the Edit toolbar:



- Press ALT+2 on the computer keyboard.

### To Change the Tempo

- Change the position of the tempo slider in the Master Area of the Mixer.



Notice that the beats per minute are displayed to the right of the tempo slider and changes as you change the tempo.

- Click on the text displaying the current tempo - it becomes active so you can type a new tempo.
- Use the buttons below the tempo slider to easily set the tempo to twice or half normal speed.

-0-

## Mute and Solo Tracks

The Mixer has several controls which allow you to control various characteristics of each track, including volume. Each track is represented as a group of controls in the mixer.

### To Display the Mixer

Use any of the following methods to display the Mixer:

- Select Tools ▸ Mixer from the menu.
- Click the Mixer button in the Edit toolbar:



- Press ALT+2 on the computer keyboard.

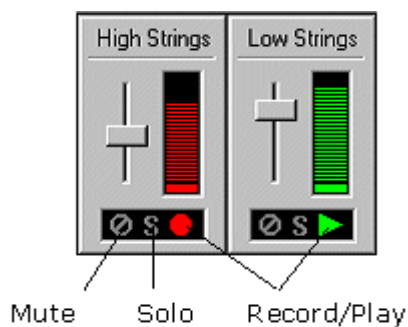
### To Mute a Track

Click on the Mute button for the desired track controls in the Mixer. The Mute button will light up when Mute is enabled.

### To Solo a Track

Click on the Solo button for the desired track controls in the Mixer. The Solo button will light up when Solo is enabled.

At the bottom of each group is a small box that displays 3 icons -- these are buttons you use to set the mute, solo and record states for each track:



### To Enable Track for Recording

Click on the Record/Play button and toggle the button into its record (red) state.

### To Enable Track for Playback

Click on the Record/Play button and toggle the button into its play (green) state.

-0-

## Add Reverb, Pan and Chorus

The Mixer has several controls which allow you to control various characteristics of each track, including effects such as reverb, pan and chorus. Each track is represented as a group of controls in the mixer.

Note: These effects are implemented as MIDI controllers. Since some sound synthesizers do not implement all MIDI controllers you may not hear any change.

### To Display the Mixer

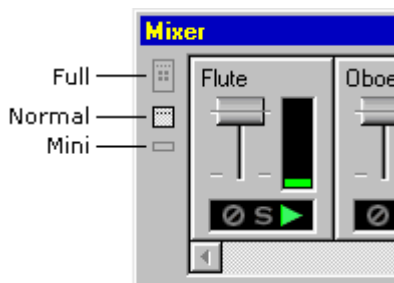
Use any of the following methods to display the Mixer:

- Select Tools ►Mixer from the menu.
- Click the Mixer button in the Edit toolbar:



- Press ALT+2 on the computer keyboard.

The 3 icons in the upper left-hand corner of the Mixer are buttons you use to change the Mixer's display mode:



### Changing Effects Values

When the Mixer is displayed in Full Mode, additional controller knobs appear which you can use to change the overall values for reverb, pan, chorus and modulation.



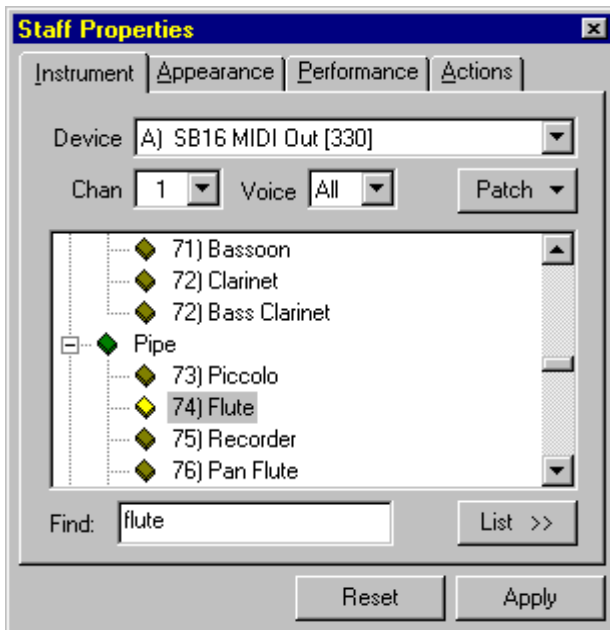
To Use the knobs, click the mouse and drag either up/down or left/right to increase/decrease the displayed value. You can double-click a knob to reset it to its default position.

Simply adjust one of the knobs to adjust the corresponding effect.

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## Changing an Instrument



The [Properties Window](#) can be used for inspecting numerous music symbols in your document.

The Properties Window is also used to inspect and edit tracks. Each track has numerous properties, including the staff name, type and instrument.

The instrument characterizes the sound made by notes on each track -- one track can play as a harmonica and another as a whistle.

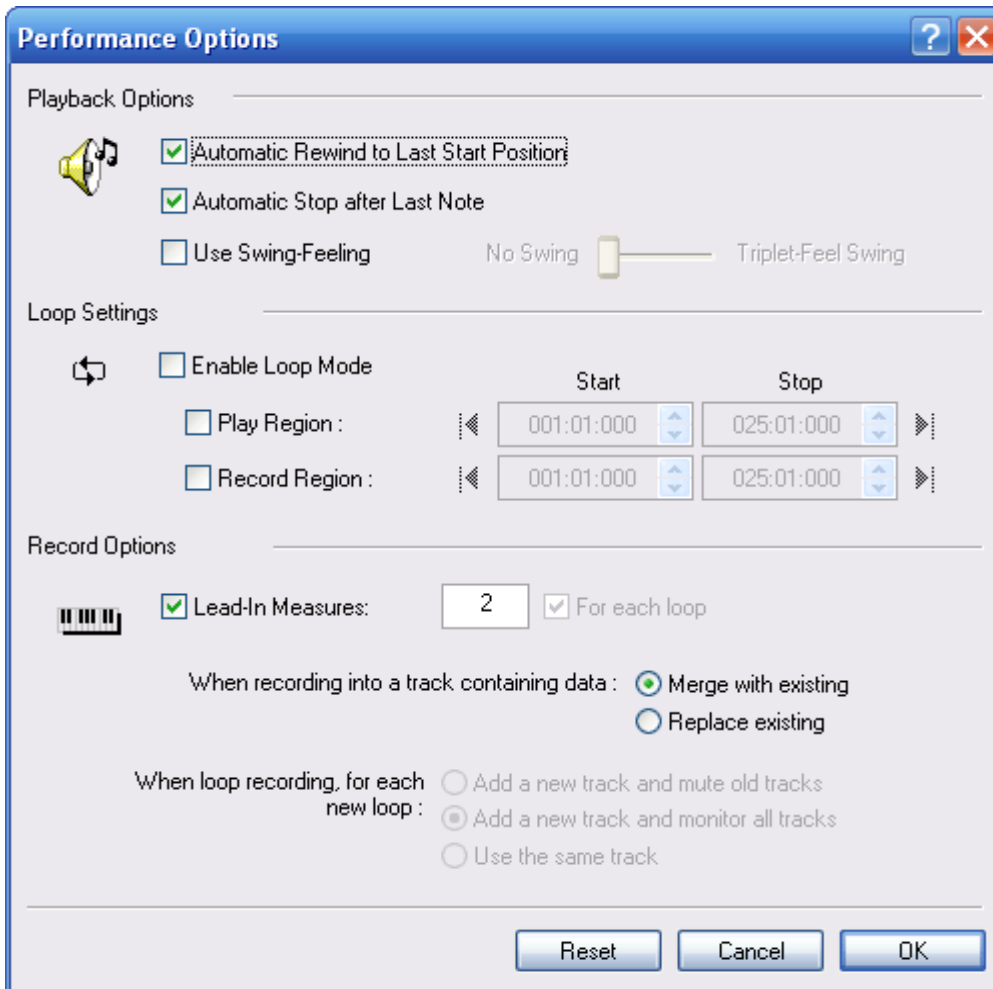
### To Change an Instrument

- Select the track(s) you want to change in the Mixer.
- Display the Properties Window and select the Instrument tab.
- Select the instrument you want to use in the list.
- Click the Apply button to apply the changes.

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## Performance Options

The Performance Options Dialog Allows you to control Transport behavior, Looping, Lead-In Measures, and Recording behavior. Click on an area below for more information about each section.



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## Editing Music

### Editing Music

Once you've added music to your document you can edit it to change how the music sounds or how it looks when printed.

There are hundreds of different ways you can edit your music; luckily, they can all be grouped into one of the following basic operations:

#### Cut, Copy, Paste & Delete

Use familiar edit commands to cut and splice portions of your music together in different ways.

#### Drag and drop

Click the mouse directly on a music symbol and drag the mouse to copy or move the element to another location in the music.

#### Edit with the Properties Window

Change dozens of element properties using the Properties Window. Edit multiple elements simultaneously.

#### Special Menus

Context and popup menus provide shortcuts to many commands, and offer a few special features not found elsewhere in the program.

#### Actions

Actions are plug-in effects for processing your music. [Quantize](#), [transpose](#), [merge](#), [split](#), and other effects make it easy to experiment and transform your compositions.

-o-

## Basic Operations

### Cut, Copy and Paste Objects

Cut, copy and paste is a common in many software programs. The idea is that you have a temporary storage area (the clipboard) that you can use to shuffle, reorder, copy and otherwise edit your document.

Here's how it works: you first copy elements into the clipboard. You then paste the elements from the clipboard into some location in your document. The cut command is just like copy, except it also removes the selection from the document. You can paste as many times as you want -- each time a copy of the clipboard contents is added to your music.

#### To Cut or Copy Elements

- Be sure the current mode is [Select Mode](#), then select the elements you want to cut/copy.
- ▶ Select Edit ▶ Copy from the menu to copy the notes to the clipboard.

-OR-

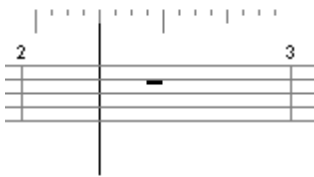
Hold down the Ctrl key and press the letter "C" from the keyboard.

You can choose Cut (Ctrl+X) instead if you want to remove the selection from the document.

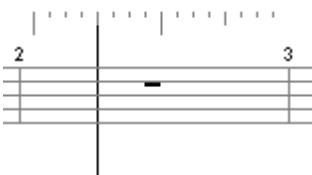
Elements are copied into the clipboard. The contents of the clipboard are replaced whenever you copy/cut other elements.

#### To Paste Elements

- Be sure the current mode is [Select Mode](#).



- Click the mouse above or below the measure where you want to paste the elements. This displays a blinking insert cursor and ruler:



Note: If you click the mouse inside the staff lines you will select the system instead of displaying the insert cursor.

- Click the mouse on the beat of the ruler where you want the elements to be pasted.
- Select Edit ▶ Paste from the menu to paste the objects from the clipboard into the measure.

-OR-

Hold down the Ctrl key and press the letter "V" from the keyboard.

-O-

## Deleting Objects

You can delete most objects in your music simply by selecting them and hitting the Delete key.

The Delete command is similar to Cut, except it does not copy the selected elements into the clipboard.

If you make a mistake you can usually undo your last action to recover the deleted elements.

### To Delete Objects

- Be sure the current mode is [Select Mode](#).
- Select the objects (notes, clefs, etc.) to be deleted.

(See [Selecting](#).)

- Click the delete key.

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## Drag and Drop

Drag and drop is a popular feature that allows you to visually edit your music.

You can move or copy elements from one place to another simply by clicking the mouse on an element, dragging it somewhere else, then dropping the element at the new location.

Drag and drop is essentially a shortcut for cut/copy/paste.

### To Drag and Drop

- Be sure the current mode is [Select Mode](#), then select the elements you want to copy/move.
- Place the mouse cursor over one of the selected objects.
- Click -- but do not release -- the mouse button.
- Drag the elements to their new location. As you move the mouse, the view provides the same visual feedback as when adding new elements from the Elements Palette.
- Release the mouse button to place the objects in their new location.

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## Undo/Redo

Sometimes you realize the changes you made were not what you really wanted to do. The Undo command lets you undo the things you have done. You can also redo an operation if you like the changes you made after all.

For example, if you transpose your entire piece up a half-step and realize that you really liked it better in its original position, you can undo the transpose. This will return the score to the condition it was in before you transposed it.

A multiple-layer undo/redo allows you to undo and redo thousands of actions. The Undo History feature displays all previous changes, making it easy to quickly revert to an earlier version of the file.

### To Undo an Operation

- Select Edit ►Undo from the menu, or press CTRL+Z on the computer keyboard.

-OR-

Click the Undo button on the Performance toolbar.



### To Redo an Operation

- Select Edit ►Redo from the menu, or press CTRL+Y on the computer keyboard.

-OR-

Click the Undo button on the Performance toolbar.



### To Display the Undo History List

- Select Edit ►History... from the menu.

-O-



## Editing with the Properties Window

### Displaying the Properties Window

The Properties Window allows you to change the properties of just about anything on the Music Score (e.g. positioning, appearance, spacing, performance, etc). You can even change the properties of more than one object at a time. For instance, you could select all of your dynamic markings and move all of them up at once.

To Display the Properties Window

- Select the objects you want to edit, then select Tools ▶ Properties Window from the menu.

-OR-

Double-click one of the selected objects.

-OR-

Right-click one of the selected objects to display a context menu, then select Properties Window...

-OR-

From the Tool Bar, select the button



-O-

## Save a Document

### Save a Document

When you save a music document for the first time, you will be prompted to give your document a file name.

When you save a previously saved document, you can use the Save As command to save it to a new name.

You can save your music documents in one of three [file formats](#).

#### Make a Backup Copy of your Document

- Select ▶File ▶Save As... from the menu.
- Type a file name in the file name box. (Make a note of where your file is being saved.)
- Choose the type of format you would like your file saved as.
- Click the Save button.

#### To Save a Music Document

- Select ▶File ▶Save

-OR-

On the File toolbar, click the Save button.



-OR-

Click CTRL+S.

If you have not yet saved the file, the Save dialog box will automatically open. If you have previously saved the file, it will save to that file name.

- In the Save In box, select a directory location for the file.
- In the File Name text box, type the file name you want for the music document.
- In the Save As Type box, select the [file format](#) you want.
- When you have made all your choices, click Save and your music will be saved to disk with the file name you specified.

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## File Formats (Save, Import and Export)



### Forte Notation File (.FNF)

This is a proprietary file format that stores all notational and performance information for a file. Files stored in this format can only be exchanged between Forte products.

Use this format when it is important to store both performance and notation for your music. All symbols and performance settings are preserved completely with the FNF format.



### Forte Template File (.FTF)

This format is essentially the same as the Forte Notation File except it resides in a special Templates directory and is used as a starting point for new documents.

If you find yourself continually working with keyboard, bass, and drums, for example, you can create your own template with those instruments. You can also define any page layout information such as staff size, measures per system, and fonts, and those will be saved with the template as well.



### Standard MIDI File (.MID)

A MIDI file is an industry standard file format that can be exchanged between nearly all sequencers and score processors. However, the MIDI file format is defined to include primarily performance information such as when notes start and stop -- it does NOT include much in the way of notation.

If you store a document as a MIDI file you will lose:

- slurs, lyrics, clef changes, special meters, barline types, articulation symbols, dynamics, ornaments, repeats, chord symbols, and hidden symbols
- note spelling (e.g. C-flat vs. B-natural)
- breaking and joining of beams and positional offsets or overrides
- all layout information, such as which tracks are visible, font preferences and margin information.
- output device information is not supported in the MIDI file format, so if you have more than 16 MIDI channels split across multiple output devices, you should use the .fnf format instead.
- articulations, dynamic markings, repeats and transpositions affect how the music sounds, but the symbols themselves are not stored. Consequently, if you reload such a file it will sound like it did originally, but the symbols will not appear in the music.

Use this format when you are concerned only with playback and/or would like other people with other sequencers to read the file.



### MusicXML File (.XML)

MusicXML is a universal translator for common Western musical notation from the 17th century onwards. It is designed as an interchange format for notation, analysis, retrieval, and performance applications. The MusicXML format is supported by over 50 applications.

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## Auto Save

The AutoSave feature can be set to save your work at regular intervals and create backup copies of the file.

The backup file is stored in the same directory and has the same name as the original file except its name is prepended with a "~" character.

When autosave happens, changes to all documents are saved into the backup file. The original file remains unaffected until you specifically save it.

### To use AutoSave

- Select Options ► General... from the Tools menu.
- Click the Save tab.
- Click on the checkboxes to select your preferences.
- Click the OK button when you are done.

### AutoSave Choices

- Always create backup file: Creates a backup copy of a file when you first open it.
- Automatic save every N minutes: Performs autosave every N minutes.
- Apply to new files: Applies these preferences to all new files you create.
- Prompt to save as FNF file: Asks whether you would like to save as a Forte Notation File in order to retain all music notation (a MIDI file will not retain the music notation).

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## Print a Document

### Print a Document

When you are ready to see your music on paper, use the following instructions to print your music.

To Print a Music Document

Select File ▶ Print from the menu.

-OR-

On the File toolbar, click the Print button.



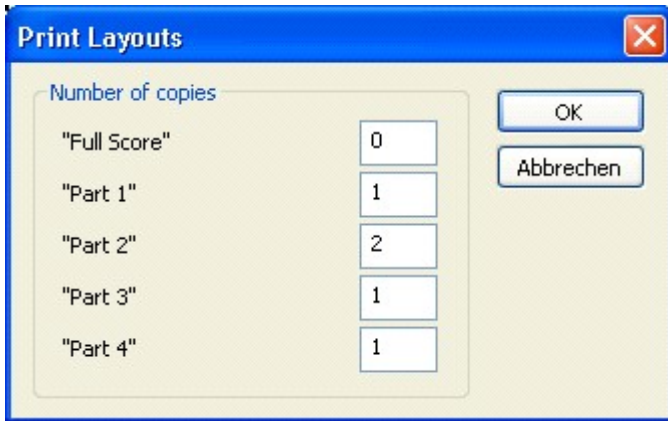
Adjust the printer settings to your preferences.  
Click the OK button to print your music score.

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## Print all Layouts

## Print all Layouts

This new feature allows you to print as many copies you want of all available layouts of a document.



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## Print Preview

You might want to see a preview of the music you are about to print. This will give you a better idea of how your score will look on the printed page.

To Select Print Preview

- Select ▶ File ▶ Print Preview from the menu to see a preview.
- Using the buttons at the top of the preview window, you can page through your score.

You can also zoom in/out, look at one or two pages, or print.

- To return to the Music Score, click the close button.

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## Print Setup

Use the Print Setup dialog to configure basic characteristics of your page, such as the paper size, source and orientation.

To Select Print Preview

- Select ▶ File ▶ Print Setup to display the standard Windows Print Setup dialog.
- Make necessary changes in the Print Setup dialog.
- Press the OK button.

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## Print Blanc Sheets

### Print Blank Sheets

Despite all the comfort Forte provides, you may want to occasionally write your music score by hand. For these moments, you can now use Forte to print as many copies you want of empty sheets in five different sizes.



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# Templates

## Templates

A [template](#) is a starting point for another document. Templates normally define a frequently-used track and instrument configuration, but a template could contain a complete drum and bass line if desired. There is no real difference between a template and a normal file saved with a different extension -- in fact, you can even use MIDI files as templates. Normally, however, templates are stored as Forte Template Files (\*.ftf) since they contain notation options and other information above and beyond what a MIDI file can store.

When you create a new document you select one of the templates displayed in the New dialog as a starting point for your document. The program then copies the selected template, initializes it, then opens the copy. The initialization step adjusts certain characteristics of the file according to current user preferences. For example, even though the individual tracks and instruments already exist in the template, the MIDI devices must be updated to reflect the current default MIDI device settings.

For more information about templates, click the topic below:

 [\\_Creating a Template](#)

-o-

## Create a Template

### How Templates Are used

The template list in the New dialog contains the names of template files that are stored in a special Templates folder. This folder is located in the same directory as the program.

New templates should be saved to this folder so that they appear as choices in the template list. You can do this manually, or by using the Save As Template command.

### To Create a Template

- Create a new document which will become your template. Add all necessary staves, measures and instrument settings required to define your template.
- ▶ Select File ▶ Save As Template... from the menu to display the Save As Template dialog.
- In the Template dialog box, type a descriptive name for the new template.
- The template will automatically be saved in the application's Templates folder as a read only file. This is located in the same directory as the application.

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## Menus

### Menus

There are several different types of menus available for changing different aspects of the music.

#### Context-Sensitive Menu

When an element is selected in a view, you can often right-click the mouse in the view to display commands that pertain to the selection.

Often, this popup menu contains items that are also found in the Properties Window or Tools menu, but certain features are available only in the context menu.

When a note is selected in the Music Score, for example, the context menu contains items for changing stem direction, enharmonic equivalents, slurs, beams and so on. When the selected item is an accidental the context menu contains items to place the symbol above or in front of a note.

Try right-clicking in views, on windows and so forth to get an idea of what's available.

#### Music menu

Use the Music menu to add or remove measures and staves. Other commands in the menu duplicate functions found in the tool bars and music tools.

For example, the Perform submenu contains commands found in the Transport Controls, and the Palette submenu contains commands to display a particular group of music symbols in the Elements Palette.

#### View and Actions Menu

In the main menubar, the Actions and View menus change as you select different elements and windows in a document.

When there are no available actions, for example, the Actions menu disappears altogether.

Select a topic to learn more:

 [The View Menu](#)

 [The Actions Menu](#)

 [The Context Menu](#)



## The View Menu

The View menu changes depending on which view is active. When the Music Score is active, for example, the View menu contains options for managing layouts and changing between Page/Track views. In general, the View menu contains items that related to the display of music in one of the views

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## The Actions Menu

If any actions can be used with the current selection a new Actions menu appears next to the Music menu. The Actions menu contains a list of all possible actions. When you select one of the commands the Actions tab in the Properties Window is displayed with the proper Actions Properties Window - you apply the action by clicking the Apply button in the Properties Window. You can Undo most actions by using the Undo feature.

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## Shortcut Menus

Shortcut menus are convenient ways to perform commands that you use often. When a specific item is selected in the music, or when the mouse is positioned over certain tools or buttons, you can right-click the mouse to display a popup menu containing relevant commands.

For example, if you right-click over the Elements Palette, a popup menu appears that allows you to quickly move to another tab of the Elements Palette. This is often easier than using the tabs and buttons in the Elements Palette, especially if you want to move from the Notes Tab to the Repeats tab.

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# Entry Modes

## About Entry Modes

When you write a piece of music by hand, you might use a pencil to create notes and other symbols on a piece of manuscript paper. When you want to change something you choose what notes to erase and then rewrite them. In other words, depending on what you're doing, you use a pencil, eraser or maybe even a new sheet of paper.

On a computer the mouse and keyboard take the place of a pencil and eraser, and the virtual surface in each view serves as your paper. There is only one mouse available for pointing and clicking in the views, so the program uses the notion of [entry modes](#) to further inform the computer of your intentions.

In some cases, when you click the mouse you really want to select a note so that you can move, edit or delete it, In other cases, you really want to add new notes to the music when you click the mouse.

Entry modes inform the computer what you are doing so it knows when to add new notes and when to select notes for editing or deletion.

Two main entry modes are used: [Select Mode](#), [Insert Mode](#), Keyboard Mode and [Camera Mode](#). Whether you know it or not, the program is always "in" one of these two modes.

To Change Modes

- Select the appropriate mode from the Edit menu.
- OR -
- Select one of the mode buttons in the Edit Toolbar.



- OR -
- Press CTRL+1, CTRL+2, CTRL+3 or CTRL+4 on the keyboard to switch to Select, Insert, Keyboard or Camera, respectively.

- OR -

- As you use the mouse in different locations in the program, the entry mode might change according to what you select.

When you select a symbol in the Elements Palette, for example, the program changes to Insert Mode under the assumption that you are now about to insert the selected symbol in the music.



## Select Mode

Select Mode is used when you want to select music symbols in order to perform some other task, such as copy, delete or edit. Select Mode allows you to target specific elements for different operations.

Once the software is in Select Mode, you can click the mouse on different elements to select them. As the selection changes, different components and music tools change to reflect the new state. For example, the Properties Window changes to display properties for the new selection.

To Change to Select Mode

Select Edit ▶ Select Mode from the menu.

- OR -

Press CTRL+1 on the keyboard.

-OR-

From the Tool Bar, select the button



-O-

## Insert Mode

Insert Mode is used to add notes and other music symbols to your composition using the mouse.

Once in Insert Mode, subsequent mouse clicks in different views will insert a specified music symbol into the music.

When you select a symbol in the Elements Palette the program switches to Insert Mode automatically.

To Change to Insert Mode

Select Edit ► Insert Mode from the menu.

- OR -

Press CTRL+2 on the keyboard.

-OR-

From the Tool Bar, select the button



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## Keyboard Mode

### Keyboard Mode

Keyboard Mode is used to add notes and other music symbols to your composition using the computer keyboard.

When you select a symbol in the Elements Palette the program switches to Keyboard Mode automatically.

To Change to Keyboard Mode

Select Edit ► Keyboard Mode from the menu.

- OR -

Press CTRL+3 on the keyboard.

-OR-

From the Tool Bar, select the button



For more information about the Keyboard Mode, click on the topic below:



[Keyboard Mode Schema](#)

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## Keyboard Mode Schema

A Keyboard Mode Schema is a combination of keys that are used on the Keyboard Mode to insert and edit notes. The current Keyboard Mode Schema can be set in [General Options](#).

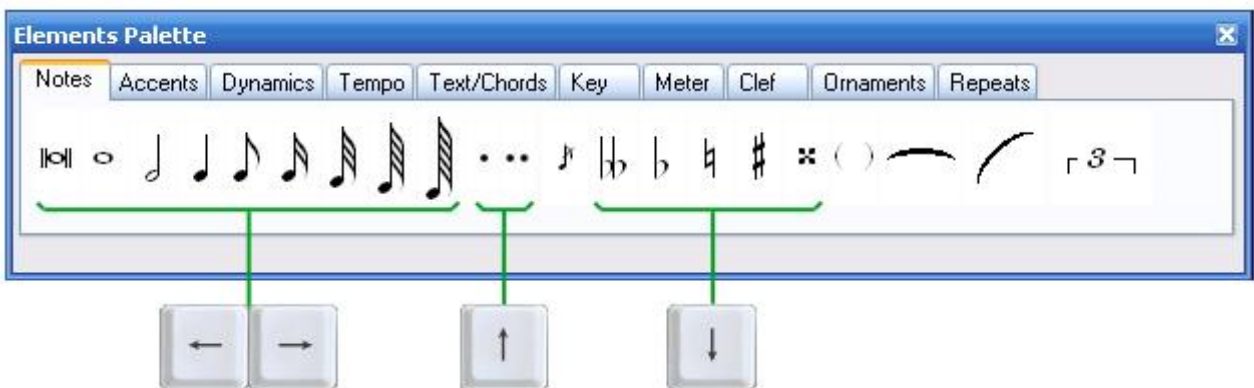
### Fast Input Schema

This schema allows you to write your score as you write a single text. Use this schema to avoid using the mouse when inserting notes and accidentals.



### Selection Schema

This schema allows you to select note values and accidentals quickly using the keyboard. Use this schema to avoid moving the mouse away from your score when inserting notes and accidentals.



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## Camera Mode

Camera Mode is used when you want to export a section of the Music Score view. Camera Mode allows you to copy it to the Windows Clipboard to paste to any other application or exported as a [graphics file](#).

During Camera Mode, [Edit Mode](#) and [Select Mode](#) are disabled.

To Change to Camera Mode

Select Edit ▶ Camera Mode from the menu.

- OR -

Press CTRL+4 on the keyboard.

-OR-

From the Tool Bar, select the button



-O-

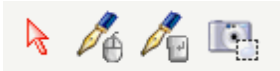


## Which Mode Am I In?

As you create and edit your music it is important to know when you are in Insert Mode and when you are in Select Mode. There are many different ways to determine what mode the program is in.

Look at the Edit Toolbar

The buttons on the left side of this toolbar are used to indicate and set the current mode. The highlighted button tells you which mode the application is in.



Look at the Status Bar

When the software is in [Select mode](#) the text is displayed in blue -- in [Camera Mode](#) the text is displayed in green -- in [Insert Mode](#) the text appears in red and describes which symbol in the Elements Palette is selected.



Look in the Edit menu

The different modes are listed along with a mark by the current mode.

Look at the Cursor

Most views provide some sort of feedback about the current entry mode by changing the display cursor. The Music Score, for example, displays a line that snaps to the ruler positions when a note is selected in the Elements Palette and the software is in Insert Mode, but displays a simple arrow cursor when in Select Mode.

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## Selection

### The Current Selection

In order to edit your composition, you need to be able to select the items you want to edit. Just as if you were telling someone what you wanted changed in the music, you must tell the computer what symbols to change by selecting them.

One often refers to a document's current selection. This refers to the collection of music elements that have been selected and are currently highlighted in the views. You can change the current selection by selecting other symbols.

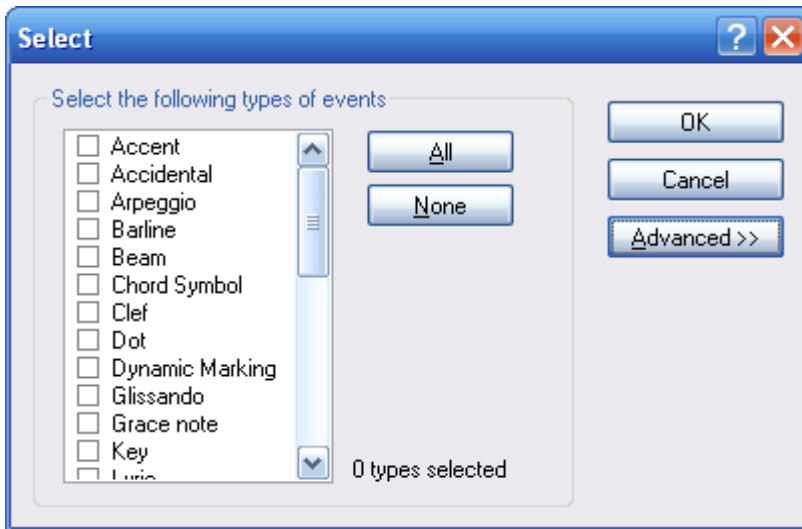
Once music symbols are selected, you can copy, cut, delete, edit and apply actions on them .

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## Select Elements

Sometimes you may want to select several elements at once, yet selecting each element individually is too tedious and troublesome. With the Select Elements dialog you can quickly select all sorts of combinations. Once the elements are selected, you can use the Properties Window to edit all the elements at once.

Click on areas of the image below for more information:



### To Display the Select Elements Dialog

Use any of the following methods to display the Select Elements dialog:

- Select Edit ► Select Elements... from the menu.
- Press CTRL+E on the computer keyboard.

### To Select Elements

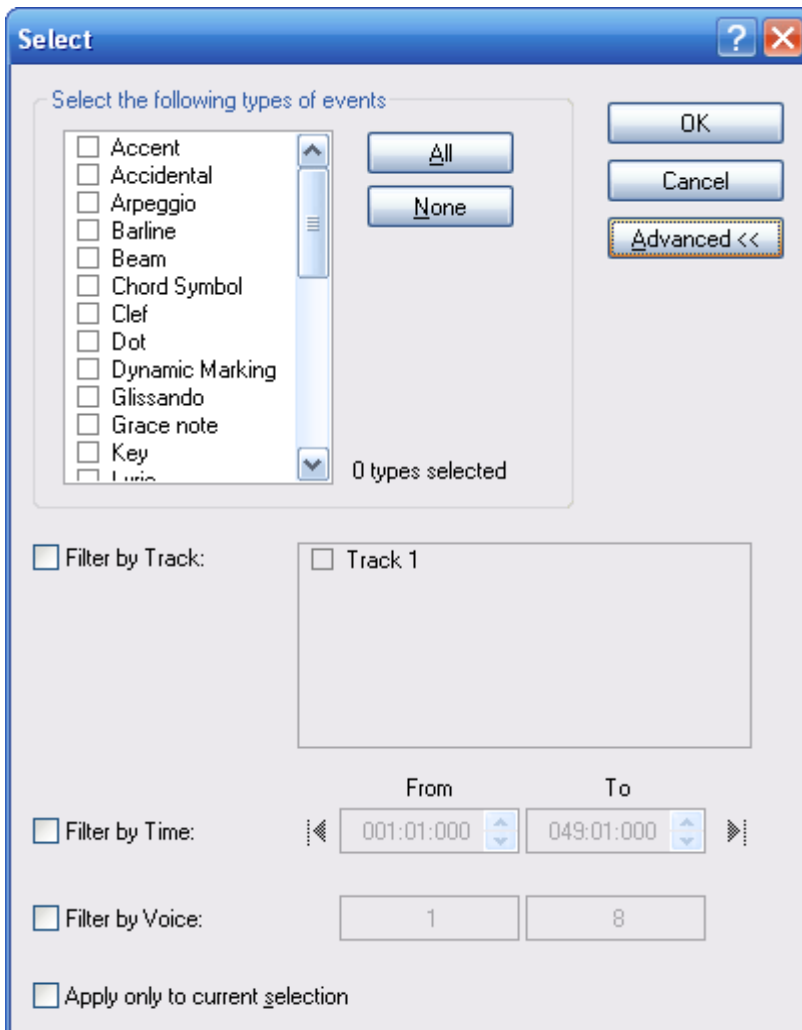
- Display the Select Elements dialog
- Choose at least one type of element that you want to select from the main list at the top of the window.

Press the All or None buttons to quickly check or uncheck all element types in the list.

- Press the OK button.

## Select Elements (Advanced)

Pressing the Advanced button in the [Select Elements](#) dialog expands the dialog to show additional controls for selecting elements by track, time or voice. Simply check one of the boxes to enable one of the select filters, then enter appropriate values.



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## Select with the mouse

### Select Music Symbols with the Mouse

The mouse is the most common way you use to select music symbols. Before using the mouse to select elements, make sure the application is in [Select Mode](#), then follow the steps below:

#### To Select a Music Symbol

In a view, place the mouse cursor over the symbol to be selected. Click on the symbol. The object is highlighted to indicate it is selected. If the Properties Window is visible, it updates to display the properties of the newly-selected element.



Selecting symbols in one view will select that same symbol in all other views (that can display the symbol). This means that you could sort the elements in some special way in the MIDI Events view, select them, and then edit them visually in the Music Score.

#### To Select Additional Symbols

Hold down the Ctrl key.

With the Ctrl key held down, click any other symbols to add them to the selection.

Notice that the objects you already selected remain selected (highlighted).

#### To Unselect a Music Symbol

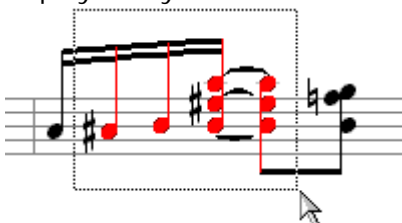
Hold down the Ctrl key.

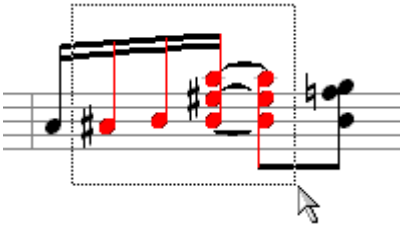
Click the object to be unselected. The object turns its original color.

#### To Drag-Select Multiple Symbols

Use this method to quickly select multiple objects.

Click - but do not release - the mouse. As you drag the mouse a selection rectangle is displayed. Symbols which fall within this rectangle become selected.





Release the mouse button to end the drag-select operation.

Note: By default, the selection rectangle selects notes only. You can change this behavior so that other element types are also selected during drag-selection.

#### To Clear the Selection

Click the mouse over some "empty space" in a view.

Some symbols are selected using a slightly different approach. Click on a topic below for more information:

 [Selecting Staves](#)

 [Selecting Measures](#)

 [Selecting the Document](#)

 [Non-selectable](#)

## Mouse Select Options

The Mouse Select Options Dialog determines which elements are selected when you drag-select with the mouse. By default, only notes are included when you drag-select a region with the mouse.

There are times, however, when you want to drag-select other symbols, too. For example, you could drag-select only accents, or only rests to make it easier to do editing on large groups of symbols in your music.

You can always choose to select specific elements using the Select Elements dialog. The mouse drag settings merely provides another convenient way to select the symbols you want and nothing else.

### To Display the Mouse Select Options Dialog

Use any of the following methods to display the dialog:

- Select Edit ► Mouse Select Options... from the menu.
- Press CTRL+M on the computer keyboard.

### To Select Elements

- Display the Mouse Select Options dialog
- Choose at least one type of element that you want to select from the main list at the top of the window.

Press the All or None buttons to quickly check or uncheck all element types in the list.

- Press the OK button. The next time you drag-select with the mouse, only the specified element types will get selected.

-0-

## Selecting All or None

The Select All command selects all visible elements in a view. Depending on the view, this may be all notes on a given track or all elements in the entire score.

The Select None command clears the selection. You can also clear the selection by clicking the mouse in an unused portion of a view.

When elements are selected they are displayed in the current selection color (default is red).

To Select All Elements in a View

Choose Edit ► Select All from the menu, or simply press CTRL+A.

To Clear the Selection

Choose Edit ► Select None from the menu, or simply press CTRL+D.

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## Selecting Measures

Select measures using the following views:

### Selecting a Measure in the Music Score

Measures cannot be selected individually in the Music Score. Instead the system that contains the measure is selected.

- Make sure the application is in [Select Mode](#).
- Click the mouse on the measure. The system which contains the measure will select.
- Select additional systems by right mouse clicking on the measure and selecting Extend Selection to Page, or Extend Selection to End

-OR-

Select additions systems by holding down the Ctrl key.

### Selecting a Measure from the MIDI Events

- Make sure the application is in [Select Mode](#).
- Click on the measure in the Overview Area.
- Select additional measures by holding down the Ctrl key.

-O-

## Selecting the Document

Selecting the Document allows you to run many actions on all of the staves, instead of having to Ctrl select each staff individually. To select the document, click on an "empty" space somewhere in the Music Score.

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## Selecting Staves

A staff may be selected with the mouse using any of the following views:

### Selecting a Staff in the Music Score

- Make sure the application is in [Select Mode](#).
- Position the mouse over a measure contained in the staff.
- Click the mouse on the measure. The system which contains the measure will highlight. Click the right mouse button to bring up the context menu and select Select Staff (Track).

-OR-

Double-click on the measure.

### Selecting a Staff from the MIDI Events

- Make sure the application is in [Select Mode](#).
- Click on the staff in the Overview Area.
- Select additional staves by holding down the Ctrl key.

### Selecting a Staff from the Mixer

- Make sure the application is in [Select Mode](#).
- Click on the track module which corresponds to the staff.
- Select additional staves by holding down the Ctrl key.

-OR-

Select all staves by right mouse clicking on the module and selecting Select All from the context menu.

-O-

## Non-selectable Symbols

Nearly all symbols that you see in a view are selectable by the mouse. However, some symbols are selectable only from certain views. For example, you cannot select a beam or slur from within the List View or the Piano Roll View. Likewise, you cannot select a Wave from within the Music Score. Some notable symbols that cannot be selected in the Music Score are Measures Numbers and Page Numbers. To control the display of these symbols, see the topics on [Layout Options](#) and [Layout Fonts](#) .

-0-

## Getting Around

### Getting Around

Each document has a current time position. The [Time toolbar](#) displays this position for the active document.

As the music plays the timer counts out bars, beats and ticks. When you stop a performance the program normally rewinds back to the last place you started playing from.

As you work with your document you will want to move around from place to place within the music easily. Several different ways to get to a particular spot in the music are available.

Click one of the links below for detailed information about each topic:

 [Use the Next/Previous controls](#)

 [Jump to a particular marker](#)

 [Jump to a specific time](#)

 [Change time location using the mouse](#)

-0-

## Next/Previous

You can use the Next and Previous commands to skip between markers and other section specifiers.

In addition to text markers, rehearsal letters and numbers, the Next/Previous command also obeys repeat endings.

Note: The Next/Previous buttons in the Transport Controls change to display FF/RW buttons during a performance.

To Jump to Next

Click the Next button in the Transport Controls.



To Jump to Previous

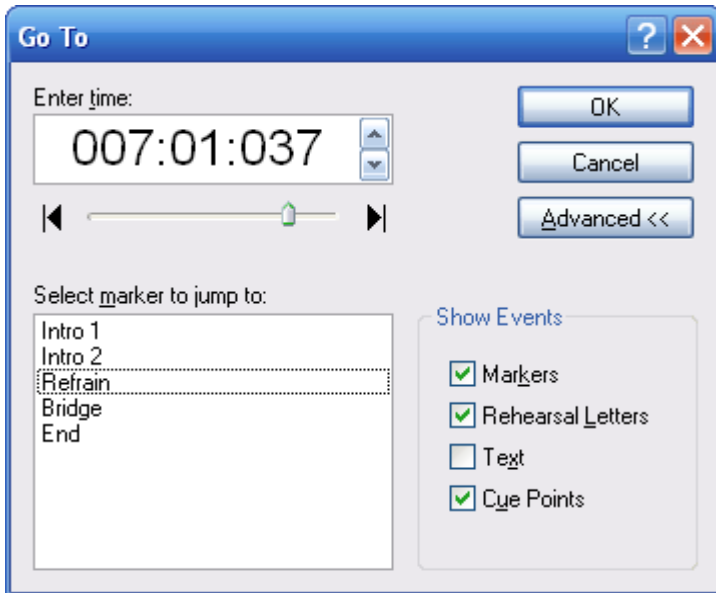
Click the Previous button in the Transport Controls.



-0-

## Jump to Marker

To display the Goto Dialog, click on the time display in the Time toolbar, or select Music ► Goto... from the menu.



A [marker](#) is a rehearsal number, rehearsal letter, custom marker, or cue point. Markers are used to create quick easy reference points in the music.

If you have defined markers, you can use the Goto Dialog to quickly jump to one of those markers.

### To Move to a Specific Marker

- Click the Advanced button to display additional controls.
- In the list of markers, click on the marker you want to skip to. As you select different markers, the time field updates to display the location of the selected marker.
- Click the OK button. You will return to the music score, positioned at the selected marker.

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## Goto Dialog

The Goto Dialog allows you to quickly jump to different parts of the music. For example, if you want to play from rehearsal letter G, you can use the Goto command to jump to that spot in the music. You can also enter a specific time location that you want to jump to.



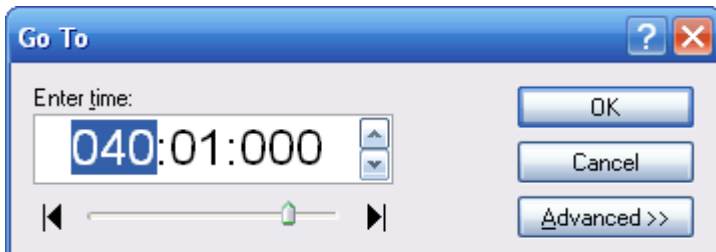
To display the Goto Dialog, click on the time display in the Time toolbar, or select Music ► Goto... from the menu.

-0-



## Jump to a Time

To display the Goto Dialog, click on the time display in the Time toolbar, or select Music ► Goto... from the menu.



### To Move to a Specific Time

- Display the Goto dialog.
- Click the Enter Time field to select it, and then type in the time you want.

You can click in different portion to select bars, beats or ticks.

-OR-

Drag the slider beneath the time field left or right - the time changes as you move the slider.

- Click the OK button to jump to the specified location

### To Move to the Beginning or End

- Display the Goto dialog.
- Click on the Beginning or End button to quickly move to the beginning or end of the piece.

-OR-

Drag the slider beneath the time field all the way to the left or right to move to the beginning or end of the document, respectively. Notice that the time changes as you move the slider.

- Click the OK button to jump to the specified location.

-o-

## Getting Around Using the Mouse

You can set the current time position using the mouse.

This allows you to quickly start playback from anywhere within a measure, or to set the time for your next recorded note during step record.

To Set the Current Time

- Make sure the application is in [Select Mode](#).
- Hold down the Ctrl key and click just above the measure where you would like the current time set (clicking in the measure will select the measure).
- The insert cursor will appear (a blinking vertical line). Move the mouse slightly and the [Music Ruler](#) will appear as well.
- The insert cursor will be at a specific mark on the ruler which corresponds to a time in the measure. To change the time, and update the current time, Ctrl click on the Music Ruler.

-o-

## Export

### Export to a MusicXML document

MusicXML is a universal translator for common Western musical notation from the 17th century onwards. It is designed as an interchange format for notation, analysis, retrieval, and performance applications. The MusicXML format is supported by over 50 applications.

#### Export to a MusicXML Document

- Select ▶File ▶Export
- In the Save In box, select a directory location for the file.
- In the File Name text box, type the file name you want for the music document.
- When you have made all your choices, click Save and your music will be saved to disk with the file name you specified.

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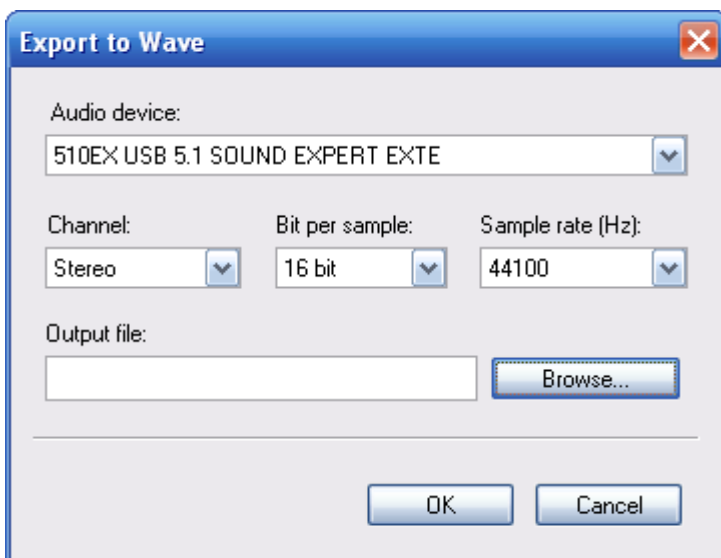
## Export to an Audio File

### Export to an Audio File

Export part or full composition to an [Audio File](#).

To Export to an Audio File

- Select File ▶ Audio Export from the menu.
- Select: Capture song to Wav...



- Select Audio Device.
- Select Quality.
- Assign a name and location to the file.

To control the recording volume, go to Windows Volume Control in Windows. Select Start ▶ All Programs ▶ Accessories ▶ Entertainment ▶ Volume Control. In Volume Control select Options ▶ Recording and adjust the recording volume.

-o-

## Audio Files

### Wave File (.WAV)

WAVE form audio format, is a Microsoft and IBM audio file format standard for storing audio on PCs. Though a WAV file can hold audio compressed with any codec, by far the most common format is pulse-code modulation (PCM) audio data. Since PCM uses an uncompressed, lossless storage method, which keeps all the samples of an audio track, professional users or audio experts may use the WAV format for maximum audio quality. WAV audio can also be edited and manipulated with relative ease using software.

### MP3 file (.MP3)

MPEG Audio Layer-3, or more commonly referred to as MP3, is a popular digital audio encoding and lossy compression format. It was designed to greatly reduce the amount of data required to represent audio, yet still sound like a faithful reproduction of the original uncompressed audio to most listeners.

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## Export to a Graphics File

### Export to a Graphics File

Export part or the full score to a [Graphics File](#). Forte gives you two ways to export part or the full score to a graphics file.

To Export to a Graphics File

- Select File ► Export Graphics... from the menu.
- Select What to Export.

What to export

Graphic selection

All

Pages:

Enter individual numbers or page rangers separated by commas (e.g. 1,4-6,9,11)

- Select one of the File Format: JPEG, TGA, TIFF, Bitmap, EPS.

Export to format:

Resolution:  dpi

File name prefix for multi-page export:

File name example: "Untitled 1, page1.jpg"

Select the Resolution.

- If necessary, assign a File Name Prefix.
- Click OK.

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## Graphics File

JPEG, TGA, TIFF, DIB/BMP Files (.jpg, .tga, .tif, .dib, bmp)

- JPEG is a commonlyUsed standard method of lossy compression for photographic images. JPEG is the most common formatUsed for storing and transmitting photographs on the World Wide Web.
- Truevision TGA is a raster graphics file format. The format can store image data with 1–32 bits of precision per pixel. Color data can be color-mapped, or in directcolor or truecolor format.
- TIFF is a flexible and adaptable file format. It can handle multiple images and data in a single file through the inclusion of "tags" in the file header. Tags can indicate the basic geometry of the image, such as its size, or define how the image data is arranged and whether various image compression options areUsed.
- BMP files are usually not compressed, so they are typically much larger than compressed image file formats for the same image.

Postscript Document (.EPS)

PostScript (PS) is a page description language and programming languageUsed primarily in the electronic and desktop publishing areas.

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## Recording Music

### Recording Music

When recording music you typically have some sort of MIDI instrument connected to the soundcard installed in your computer. The software records what you play on the keyboard and stores it with the document.

During normal recording you must keep time with the music. If you've added tempo markings you'll need to play along with the changing tempo, for example. The metronome sounds out beats to help you play at the correct tempo -- you can also disable the metronome if you wish. You can use lead-in measures to count out a few bars of introduction before the actual recording begins so you can get a feel for what the beat is.

There are two additional special recording modes you can use to assist you in creating your music. Step recording is used when you don't want to have to play in time with the music (or metronome). Loop recording is used when you want to try out different "takes" of a section of your music.

Click on one of the topics below for details about each aspect of recording:

 [\\_Preparing to Record](#)

 [\\_Normal Recording](#)

 [\\_Step Recording](#)

 [\\_Loop Recording](#)

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## Preparing To Record

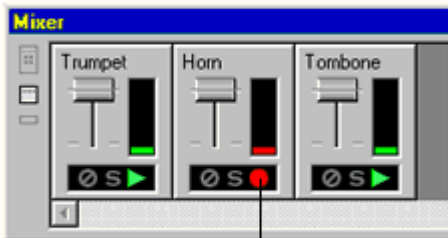
Before recording it is important to configure the software so that incoming notes and other information are placed on the correct track. You can also specify a particular voice for a recording, which is used for notating the music.

For example, if you are working on a brass trio you need to specify which of the three instruments you are recording. If you do not tell the program where you want notes to be placed it will try to do the best job it can -- sometimes this is what you want, but often it may not be. By default, the program looks for the first empty track and uses it for the recording.

You should also check that your MIDI keyboard is properly connected.

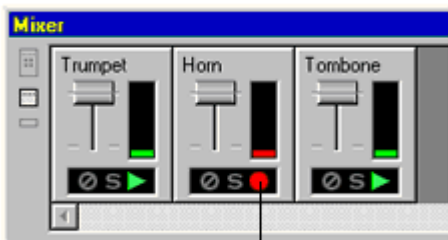
Select the track that you want to record into

Display the [Mixer](#).



Click the track mode control on the desired track to toggle between play and record modes.

Specify the desired record track by pressing the track mode control.



Click the track mode control on the desired track to toggle between play and record modes.

In this example the Horn track has been selected as the track for recording

Select the voice for recording

1. Display the [Music Score](#).
2. In the notation bar at the top of the view, select the desired voice from the Voice dropdown list.

If you leave the voice set to "All Voices" the notation engine will try to determine the proper voice for the recording.

Check your MIDI connection

1. Display the [Mixer](#).



The MIDI In light should light up briefly when you play notes on your MIDI instrument.

2. Play a few test notes on your MIDI instrument. You should see the small IN light in the lower right-hand corner of the Mixer light up momentarily.



The MIDI In light should light up briefly when you play notes on your MIDI instrument.

If your [MIDI Thru options](#) are [enabled](#), you will hear any notes that you play.

#### Other Record Settings

- When recording many different MIDI channels simultaneously, you can use the [Sequencer Options](#) dialog to change how the channels are split and routed to different tracks and voices.
- Use the [Performance Options](#) dialog to specify the behavior when you record into tracks that already contain music.

-0-

## Recording from a MIDI Keyboard

You can record standard MIDI information from any MIDI controller that is connected to your computer.

### To Start Recording

Be sure you have followed the steps to [prepare](#) for the recording.

Click the Record button on the Performance toolbar.



-OR-

Select Music ▶ Perform ▶ Record from the menu.

If [lead-in measures](#) are enabled, the clock will count off the lead-in measures. During this time, nothing will be recorded, so feel free to practice or test the instrument sound.

If the [Metronome](#) is enabled, the Metronome will click on every beat.

Play the part on the MIDI instrument. As you record, note heads will appear on the score.

### To Stop Recording

Click the Stop button on the Performance toolbar.

-OR-

Select Music ▶ Perform ▶ Stop from the menu.



### To Pause Recording

Click the Pause button on the Performance toolbar

-OR-

Select Music ▶ Perform ▶ Pause from the menu.



Click the Pause button again to restart recording.



-o-

## Step Recording

Step recording is similar to "normal" recording from a MIDI keyboard except that you do not play along with a specific tempo. The note pitches and velocities are recorded from your MIDI keyboard - just as for normal recording - but the note values (durations) are selected from the Elements Palette. There is no metronome and no lead-in measures during step recording.

The advantage of step recording is that you can be absolutely sure that notes are placed at the correct time and have exactly the desired duration. Often recording "live" results in notes that occur slightly too early or have a different duration than the "exact" value. This, in turn, complicates the notation since a given note may be played like an 8th note - even though you might want it notated as a quarter note.

### To Start Step-Recording

1. Be sure you have followed the steps to [prepare](#) for the recording.
2. Click the Step button in the Performance toolbar,  then click the Record button. 

-OR-

Select Music ▶ Perform ▶ Step from the menu, then select Music ▶ Perform ▶ Record.

The transport controls should look similar to the following:



1. Select a note value from the [Notes tab](#) of the Elements Palette.
2. Play a note on the MIDI instrument. The appropriate note will appear in the score, and the clock will automatically advance to the next position.
3. Follow steps 3-4 to enter notes with different values

### To Stop Step-Recording

Click the Stop button on the Performance toolbar.



-OR-

Select Music ▶ Perform ▶ Stop from the menu.

### To Step-Record Rests

1. Select the value of the rest from the [Notes tab](#) of the Elements Palette.

2. Click the Step button on the Performance toolbar.



-OR-

Select Music ▶ Perform ▶ Step from the menu.

-OR-

Press the space bar on the computer keyboard.

A rest with the desired duration will be entered in the music, the clock will advance and the next note recorded will cause the rest to be entered.

#### To Step-Record Chords

1. Press - but do not release - the key on the MIDI keyboard corresponding to the first pitch in the chord
2. Press - but do not release - the keys corresponding to other notes in the chord
3. Release all notes at once. The chord for all notes will be added to the music score as a chord.

-O-

## Loop Recording

Loop recording is a powerful variation of "normal" recording from a MIDI keyboard that allows you to lay down tracks, try alternate takes and otherwise piece together your music with fewer intermediate steps.

To begin loop recording, you must enable loop mode and configure other performance options depending on how you want the loops to behave. When loop mode is enabled the Performance Options button in the transport controls is illuminated to let you know:



### To Enable Loop Recording

- Press the Performance Options button in the performance toolbar - or select Music ► Perform ► Performance Options... from the menu. This displays the [Performance Options Dialog](#).
- Check the Enable Loop Mode box. Notice how certain other controls are now enabled.
- Configure other controls according to how you want to loop-record (details below).
- Press OK.

### To Disable Loop Recording

- Display the [Performance Options Dialog](#).
- Uncheck the Enable Loop Mode box. Notice how certain controls become disabled.
- Make sure that the Play Region and Record Region check boxes are unchecked.
- Press OK.

## Loop Recording Options

There are four variations of Loop Recording. The instructions below describe how to configure the [Performance Options Dialog](#) for each variation.

### Overdubbing

Recording onto the same track for each loop. The new material is merged with the existing material.

This method is excellent for laying down drum grooves. You can record the bass drum on the first pass, the snare on the second, the hi hat on the third...

### Alternate Takes

Recording onto different tracks for each loop. Each previously recorded track is muted. Use this method to lay down a couple of takes for a difficult passage, or try different ideas over a section of music. Then using the [loop play](#) feature, mute and solo each track to choose which one sounds best.

### Multiple Takes

Like the Alternate Takes method except that each loop records onto the same track, and

previously recorded material is deleted.

This method is good for recording difficult passages - once you get it right, stop recording and there's your perfect take.

### Layering

Like the Overdubbing method except that each loop records onto a new track.

For the more experimentally inclined...

## Performance Options Settings

- Check the Record Region check box and specify the measure where the loop Starts and where the loop Ends.
- Set the Loop Region Start and Stop to the same values as the Record Region Start and Stop.
- Check the Lead-In Measures box and the For each loop box to enable lead-in counts for each loop.
- Select the Merge with existing radio button under the option When recording into a track containing data.
- Select the Use same track radio button under the option When loop recording, for each new loop.

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## The Device Wizard

### The Device Wizard

The Device Wizard is an easy way to configure common device settings while using the program. It appears when you run the application for the first time, but can be used anytime as an alternative to the Sequencer Options dialog.

#### Using the Device Wizard

To use the Device Wizard you complete different forms that describe the properties and settings for your MIDI and digital audio devices.

Simply complete each form, and then click Next to proceed to the next form. When you have reached the end the Next button changes to read, "Finish" - click the Finish button to complete the wizard.

#### Device Wizard Pages

You can move between the different pages using the Back and Next buttons.

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## MIDI Playback



This page in the Device Wizard is used to select the default device used to play back your music files.

To Specify Instrument Definition Files

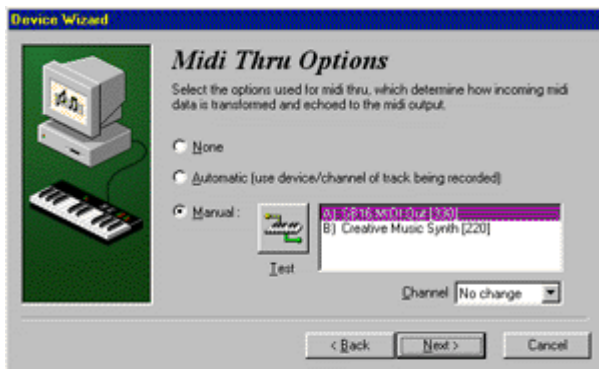
- Click the Device Properties... button to specify the instrument definition files to be associated with the default MIDI device.

Setting Options

- Select the MIDI device you want to use as the default
- Click the Test button to send a test note to the selected device. If you do not hear anything, check your MIDI connections, volume and power settings.
- Click Next to move to the next page.

-0-

## MIDI Thru



This page in the Device Wizard is used to select the MIDI device and channel that you want to use for MIDI Thru.

Incoming MIDI data is sent back out through the MIDI Thru device. This type of setup allows you to play on one instrument yet hear the notes on several different instruments.

To Send a Test Note to a Device

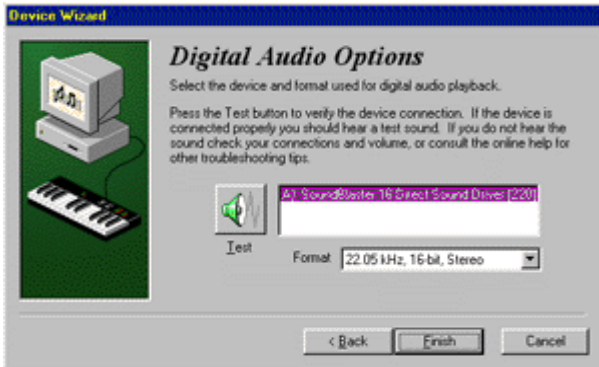
- Click the Test button to send a test note to the selected device. If you do not hear anything, check your MIDI connections, volume and power settings.

Setting Options

- Choose one of the radio buttons to specify MIDI Thru mode.
- Click Back or Next to navigate to another page.
- In Automatic mode, the MIDI thru device is configured to the same device and channel used for the track currently being recorded
- In Manual mode, you specify the device and MIDI channel to use for MIDI output. In the Channel combo box you can select a specific channel number or "No change" to send the data out on the same channel that it came in on.

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## Digital Audio Options



This page in the Device Wizard is used to select the device used for playing digital audio (.WAV) files.

To Send a Test Sound

- Click the Test button to send a test sound to the selected device. If you do not hear anything, check your speaker connections, volume and power settings.

Other Setting Options

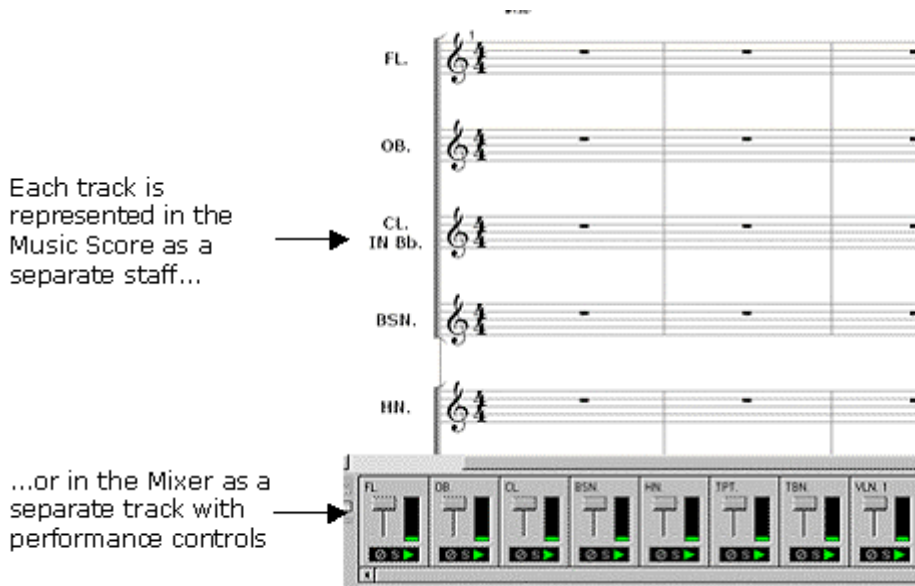
- Select the device you want to use as the default audio playback device
- Use the Format combo box to select the format used for playback
- Click Back to navigate to another page.

-0-

# Understanding Tracks and Staves

## Understanding Tracks and Staves

MIDI files may contain single instrument or multiple instrument parts. Tracks and staves are basically two alternative ways of referring to a part.



### Staves

The staff is displayed in the Score View as a standard music staff with five horizontal lines and intermediate spaces on which music can be written (Grand Staff combines 2 individual staves with a bracket). Each instrument part will have its own designated and labeled staff, matching the order of tracks in the Mixer.

### Tracks

The track provides controls for the part much like that found on a studio mixing board. Each individual track is displayed in the Mixer with its own volume control and effects knobs. When a track is selected in the Mixer, the Properties Window displays property pages for adjusting the part's instrument, MIDI channel and device.

## Staff Name

You can change the name of a selected track in the Mixer View.

Note: This function will also affect how the Staff name appears in the Music Score.

To Change the Name of a Staff

- Open the [Mixer View](#).
- With the [Properties Window](#) open, select the desired track module in the Mixer View then click on the Appearance tab.
- Click in the box under Staff Name and type in the new name.

-OR-

- Open the Mixer View.
- Select the track you want to rename.
- Click again on the text in the track. This causes the text to become editable and select.
- Type the new name for the track and hit the Return key.

-0-

## Staff Type

Four different staff types may be used to suite the instrument part.

For example, drum notation may be displayed on a drum staff or piano notation may be displayed on a grand staff (including left and right hand parts).

To Select a Staff Type

- Open the Mixer View.
- With the Properties Window open, select the desired track module in the Mixer View then click on he Appearance tab.
- Next to Staff Type, choose one of the options on the drop-down list: Normal Staff, Grand Staff (Piano), Drum Staff, or Vocal Staff.

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## Voices

A voice is the term used to describe a unique melodic line or part. Most of the time each staff contains only one voice, but occasionally the need arises to put more than one melodic line on a single staff. One example is two part vocal writing, where the soprano and alto share the same staff. Other examples include keyboard notation, drum notation, and barbershop quartets.

### Support of Voices

You can use up to 8 voices for each staff. To notate several different musical lines, as for choral parts, you would enter notes for each part as a separate voice. The notation engine uses the voice designation to determine things like stem direction, beaming patterns, and note groupings. This technique for handling notes and voices keeps each part visually distinct, even though 2 notes might occur at the same time. The default voice when adding notes is All. By default, odd-numbered voices (1, 3, 5, ...) are displayed with stems up and even-numbered voices (2, 4, 6, ...) are displayed with stems down. In a Grand Staff, voices 1-4 are used for the treble clef and voices 5-8 (1 L.H. - 4 L.H.) are used for the bass clef. If you merge or split staves you will want to do so with these default rules in mind since they greatly affect how the notation will end up.

### Manipulating Voices Independently

Voices are primarily used for notational purposes, but even so it is sometimes desirable to manipulate the sound of each voice independently. The most common example is when all parts are to be notated in a Grand Staff, but are to be played through different instruments (a piano playing an alto part and a saxophone playing the tenor part). Using the Staff Properties Window you can specify completely independent MIDI channels and/or devices for each voice on each track. Although unorthodox, you could have voices 1-3 playing as a harmonica on the internal synth, voices 4-6 as an organ on an external keyboard, and voice 7-8 as percussion sounds on a drum machine. Keep in mind that ultimately you are still constrained by the number of independent MIDI channels you actually have. The ability to control the output of each voice makes it easier to manage routing but it does not increase the available MIDI output.

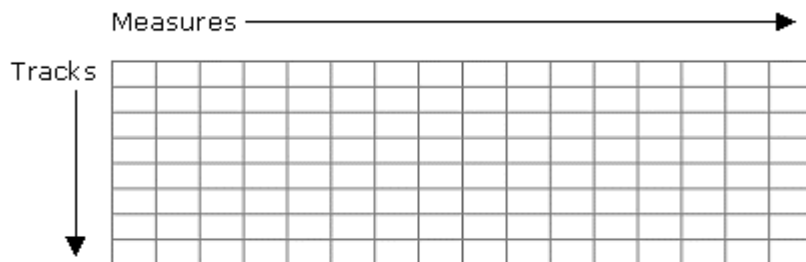
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## The Music Grid

### The Music Grid

One can imagine a single staff of music displayed as one long horizontal row of measures. Two staves could be represented as two rows of measures, and so on.

In this way, all the measures and staves in the document can be thought of as a large rectangular "music grid", upon which the notes and other elements are placed.



The Music Score has two different view modes for representing music: Page View and Track View. In Track View, the music is displayed as a music grid, with all the tracks and measures displayed in one long scrolling view.

It is important to understand that as you change the number of measures and staves (even indirectly) the grid is resized as well.

To learn more about adding measures and staves, click one of the topics below.

[» Keeping the Grid Square](#)

[» Adding Staves](#)

[» Deleting Staves](#)

[» Adding Measures](#)

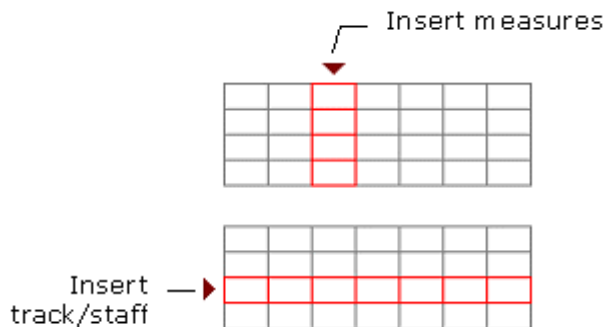
[» Deleting Measures](#)



## Keeping the Grid Square

When you add staves and measures, you are in fact adding rows and columns to the music grid. When you add a staff, a new row is inserted and filled with the same number of measures as other staves. When you add a measure, a new column is added -- this corresponds to a new measure for each staff.

For notational and organizational purposes, it is desirable -- and often necessary -- to keep the number of columns in the music grid consistent from row to row. In other words, every staff must have the same number of measures.



Usually you won't even notice what's going on behind the scenes when you add measures or staves. If you are viewing the Music Score in Page View, however, it may not be possible to display all the music on a page with the current display options. If this is the case, you are prompted with a "too-many-staves" dialog for you to adjust the display properties (using a layout) so that all of the music fits.

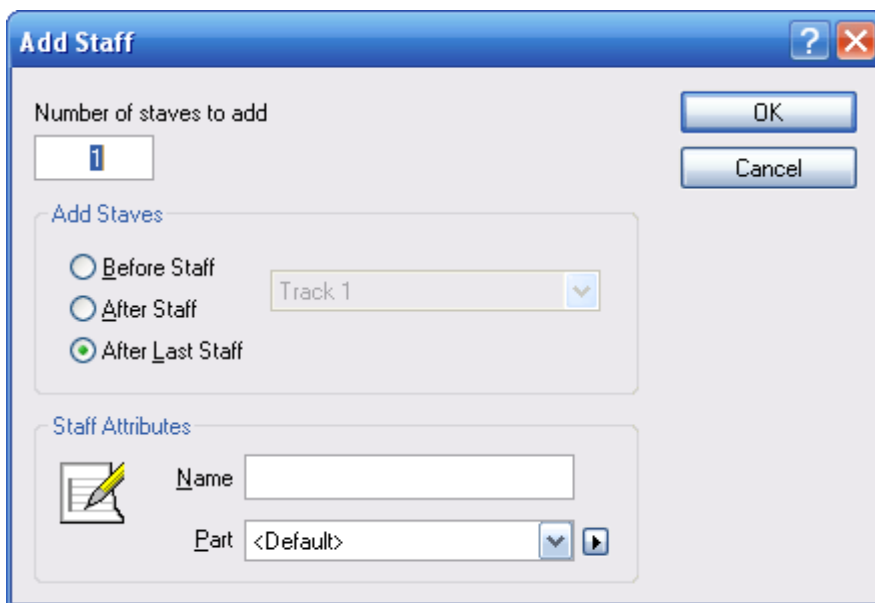
Note: If you are in the early stages of your composition, it may be useful to work in Track View until you're ready to print your music. This is because you may be adding and removing staves and measures frequently - you can avoid the "too-many-staves" dialog by working in Track View.

## Add Staves

Use the Add Staff dialog to add any number of new staves to your music. Each staff is of a particular type (e.g. drum staff, grand staff), it has a clef, a key, an instrument and a name. Collectively, these are all referred to as a part. The Add Staff dialog is really used to add parts to your music.

Select Music ▸ Add Staff... to display the Add Staff dialog. Click on the image below for details on each control. When you are ready to add the staves, press the OK button; or, press the Cancel button to abort the operation.

Click on areas of the image below for more information:



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## Remove Staves

Use the Remove Staves dialog to remove one or more staves from your music document.

Note: Removal of staves is one of the few things that cannot be undone -- you are prompted with a dialog to warn you.

To Delete a Staff

- Select **Music** **Remove Staff...** to display the Remove Staves dialog.
- In the Remove Staves dialog box, select the checkbox next to the staff (or staves) you wish to remove.

Use the Select buttons at the bottom of the list to quickly check or uncheck all boxes. Click OK to remove the staves.

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## Add Measures

A measure groups a specific number of beats together according to the time signature indicated at the beginning of the staff.

When adding measures, the new measures will contain the same staff information, layout, time signature changes and other score markings as found in the music document.

To Add a Measure

- Select ► Music ► Add Measures... to display the Add Measures dialog.
- In the Add Measures dialog box, type the number of measures you want to add.
- Specify where to place the measure(s) - Before or After the specified measure or at the End of the score.
- Click the OK button to add the measures.
- 
- 

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## Remove Measures

You may remove measures from your music score so that it no longer appears in the music document.

Note: To delete the contents of a measure without removing the actual measure, select the notes, text or other symbols, then use the Cut or Delete command.

To Remove a Measure

- Select **Music** **Remove Measures...** to display the Remove Measures dialog.
- In the Remove Measure dialog, type the number of measures you want to delete.
- In the Remove Measures area, specify the range of measures to remove by entering measure numbers in the From and To controls.
- Click the OK button to remove the specified measures.

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# Understanding Midi and Instruments

## Understanding MIDI and Instruments

Any music that you create can be played through an instrument. An instrument can be anything from a sound card in a computer to a sophisticated external synthesizer. All instruments translate signals from the computer into specific musical equivalents. Different instruments synthesize sounds which can be dramatically different from one another. The problem of how to ensure that the resulting performance really sounds the way the composer (or arranger) intended requires the adoption of a standard set of sounds, shared by software and hardware vendors alike.

### The First Standard

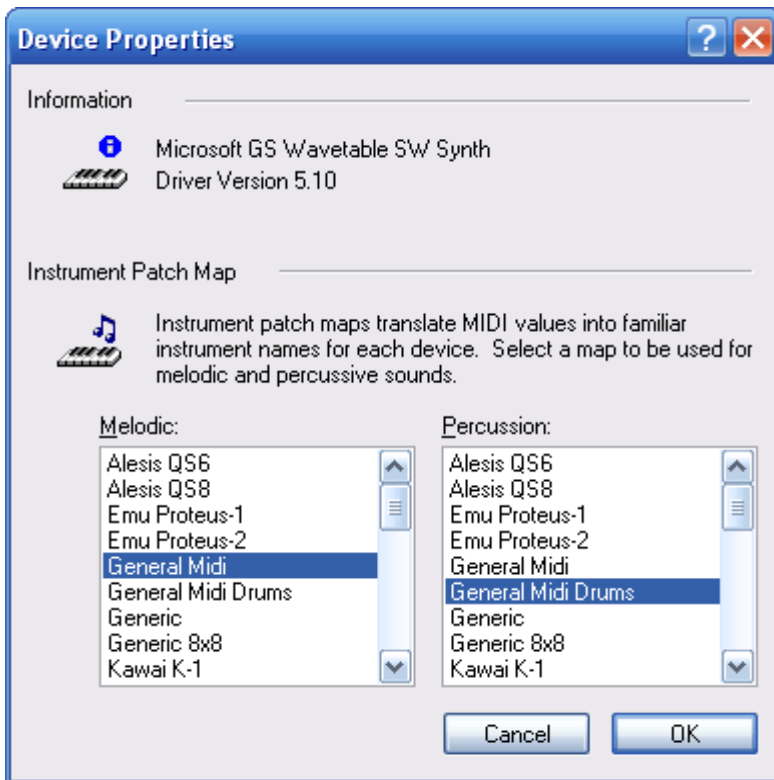
The first such standard was called General MIDI (GM), a set of definitions for MIDI program changes. Under this standard, for example, program change 0 is always a piano, program change 23 is always a harmonica, and so on. Other extensions to General MIDI were later created by Roland Corporation (GS) and Yamaha International (XG). In all cases, the goal is the same: to agree on a numbering scheme so that compositions sound more-or-less the same as they are performed on different instruments.

### Other Supported Standards

These standards are only half the story, however. Many instruments support standards such as GM, GS and XG, but also offer additional sounds or features that are unique to each instrument. The precise manner in which each instrument responds to the computer's instructions may differ from instrument to instrument. To solve this problem a special text file is used to describe the mapping between certain MIDI messages and the desired outcome for a specific device.

There are actually 2 different [instrument map](#) files required to describe an instrument completely - one to describe melodic sounds and one to describe percussive sounds. This is because many percussive instruments do not have anything that could be described as a "pitch" (what is the pitch of a hand clap?) -- most instruments instead utilize each pitch value to represent a different percussive sound. These "drum maps" are also quite specific to each instrument and are usually displayed with a specific symbol or notehead type. You can edit the drum map to automatically associate display styles with percussive values -- see the Notation Options for more details.

Nearly every instrument you find these days supports General MIDI, so the map files for General MIDI instruments is the default. If you are using, say, a Roland SC-88 Pro or a Yamaha synth, it makes sense to use appropriate map files so that you have access to all the features and sounds for your device. To change the map files for a device, select Options ► Sequencer... command from the menu, display the MIDI Out tab, and then select the Properties button for the selected device.



Note that the terms instrument and device have been used interchangeably in these discussions. For the most part a device is the piece of hardware through which MIDI instructions are sent, whereas an instrument is the actual equipment that translates MIDI messages into sounds. The MPU-401 device on your sound card, for example, may be connected with a MIDI cable to your K-2000 keyboard, which creates the actual sounds. When viewing routing connections with the Track Properties Window you can view the connections by device name or by instrument.

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## Adding Instruments to Staves


When you add a staff to the score, a program change, or patch, is added at the start of the very first measure. The program change tells the receiving MIDI device which instrument to use, and that instrument is used throughout the entire performance of the piece. Often, you may want to change patches in the middle of the piece, to simulate arco strings switching to pizzicato, for example. To achieve this you need to add a program change to the staff.

### To Add a Program Change to a Staff

Inspect a staff by double-clicking on a measure.

-OR-

Select a staff on the [Mixer](#) and Select Tools ► Properties Window from the menu.


- Go to the [Instrument](#) tab and select the List >> button. Additional controls will become visible on the Instrument tab.
- To enable the time control, click the New Patch button. 
- Enter a time other than 001:01:000 in the [time control](#) field.
- Select the new patch from the list of patches and hit the Apply button. The new patch will appear in the patch list box.

### To Remove a Program Change from a Staff

Inspect a staff by double-clicking on a measure.

-OR-

Select a staff on the [Mixer](#) and Select Tools ► Properties Window from the menu.

- Go to the [Instrument](#) tab and select the List >> button. Additional controls will become visible on the Instrument tab.
- Select the patch in the patch list by clicking the piano icon or the Measure:Beat:Tick area.
- To remove the patch, click the Delete Patch button. 

-o-



## Instrument File Format

The Instrument File Format (IFF) is used to specify instrument maps for physical devices and aids in translating MIDI program changes and bank numbers into legible, easy-to-read strings. IFF files appear as .ini files in the Instruments folder of the directory where you have Forte installed. IFF files for several common MIDI synthesizers are provided in this folder. Users can create their own map files for other instruments using the guidelines in this document.

One special note about the Yamaha XG files: the file "Yamaha XG.ini" contains a list of the complete set of what Yamaha terms "basic voices." The file "Yamaha XG Ext.ini" includes all the voices in the basic set, plus the voices which Yamaha terms "extended voices." Please note, however, that not all XG instruments support the complete basic set. If you have a Yamaha XG instrument which supports less than the full set, you may want to make a copy of the basic XG file, and then simply remove those voices which your instrument does not support.

The IFF file is a standard Windows INI file which is organized according to sections, keys and values, like so:

```
[Section1]
```

```
Key1=Value1
```

```
Key2=Value2
```

```
[Section2]
```

```
Key1=Value1
```

```
Key2=Value2
```

Note that there cannot be any spaces around the equality ("=") sign.

There are several required sections: [Info], [Groups], and [Banks]. In addition, each value in the [Groups] section corresponds to an additional section that describes voices in that group. Each of these sections is detailed in the following paragraphs.

### Info Section

The [Info] section contains basic header information about the instrument, such as its name and how it handles bank selection.

```
[Info]
```

```
Name=Filename
```

```
Type=BankMSB
```

```
Name
```

The value for this key is the actual filename of the INI file (without the INI extension). If your instrument file is called "My Instrument File.INI", for example, the entry should read:

Name=My Instrument File

#### Type

This key indicates the type of device and isUsed to indicate the bank selection protocol followed by the instrument. Some instruments ignore all bank change messages. Some instruments recognize only bank change MSB (controller 0), and some recognize both bank change MSB and LSB (controller 32). The key must be one of the following:

NoBank

BankMSB

BankMSBLSB

If you are unsure, use a value of NoBank.

#### Groups Section

This section isUsed to group voices with similar characteristics together. For example, all piano variations can be placed under a single group called "Piano". The General MIDI (GM) specification breaks the 128 different program changes down into 8 different groups. Other grouping categories can be defined as needed to best organize the different voices on a particular instrument. It should be noted, however, that the GM specification is a widely adopted standard and should be used whenever possible for grouping different voices. For a listing of specific groups in the GM specification, see the "General Midi.ini" file located in the Instruments directory.

[Groups]

1=Pianos

2=Basses

3=Strings

...etc.

The key for each entry in this section (e.g. 1, 2, 3 above) is ignored but must be unique.

#### Banks Sections

This section lists bank names, which areUseful if you view the instrument file organized by banks.

[Banks]

0=General Midi

1=MyBank

2=TheirBank 1

3=TheirBank 2

... etc.

Unlike the [Groups] section, the key for each entry is NOT ignored and represents the MIDI bank number (from 0-127). In this example, bank 0 would be labeled "General Midi" in the instrument view.

A file of type NoBank has one bank entry (yes, we know it doesn't make sense, but, you know, computers...). Examples of this type are "General Midi.ini" and "Korg M-1 Native.ini".

A file of type BankMSB may have several bank entries. An example of this type is "Alesis QS-8.ini".

A file of type BankMSBLSB will probably have many bank entries. The key value in this type is the decimal equivalent of the bank MSB and LSB represented as a 14-bit number. To calculate this number, multiply the bank MSB by 128 and add to it the bank LSB. The result is the key value. Some examples to illustrate this:

MSB LSB calculation key

0 12 (0 \* 128) + 12 12

40 3 (40 \* 128) + 3 5123

127 127 (127 \* 128) + 127 16383

The file "Roland SC-88 Pro.ini" is an example of this type.

#### Other Sections

For each value in the [Groups] section there must be a corresponding section containing voices for that group. Using the values above we must therefore have sections entitled [Pianos], [Basses], [Strings], and so on.

Each voice entry represents the name of the voice, the bank number and the program change number, in that order. Note that bank numbers are zero-based (0-127) whereas program changes are one-based (1-128). The preferred method is to separate each value by a comma, as follows:

[Pianos]

0=Acoustic Grand Piano, 0, 1 ; Bank 0, Program Change 1

1=Bright Acoustic Piano, 3, 1 ; Bank 3, Program Change 1

2=Electric Grand Piano, 6, 2 ; Bank 6, Program Change 2

3=Electric Piano 2, 13, 5 ; Bank 13, Program Change 5

etc.

If an entry does not have a bank and program number, bank zero is assumed, and the program number is taken from the key (the number of the left side of the "=" sign). In this case the key number is significant and should be 1-based rather than 0-based:

[Pianos]

1=Acoustic Grand Piano ; Bank 0, Program Change 1

2=Bright Acoustic Piano ; Bank 0, Program Change 2

5=Electric Piano 2 ; Bank 0, Program Change 5

etc.

If an entry has a bank value but does not have a program change value, the key is used as the program change. For example:

[Native Drums]

1=Standard, 0 ; Bank 0, Program Change 1

9=Room, 8 ; Bank 8, Program Change 9

17=Power, 16 ; Bank 16, Program Change 17

etc.

An entry must NOT be empty. In other words, don't do this:

[Pianos]

1=Piano

2= ; This entry is INVALID!

3=Bass

Note:

EnterprisingUsers who manage to create a well-behaved IFF file and who wish to share it with other owners of the same instrument are encouraged to e-mail the fruits of their labor to [support@forte-notation.eu](mailto:support@forte-notation.eu). We will include it with future releases of our products.

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# System Exclusive Messages

## System Exclusive Messages

MIDI System Exclusive (Sys/Ex) messages are special messages which lie outside the domain of normal musical elements. They are intended to set performance parameters on specific hardware devices, exclusive of other devices in your set-up. Sys/Ex messages may be edited, added and deleted from your music in the Sys/Ex dialog.

Four of the most common messages (General MIDI On/Off, Yamaha XG On, and Roland GS On) are provided as conveniences. You may also create your own custom messages. Ordinarily, Sys/Ex messages are added "in-line," that is, you give them a timestamp like any other element in music, and they will be performed at that time. In many cases, however, it is desirable to have a short sequence of Sys/Ex messages (for example, General MIDI On followed by XG On) which will be transmitted before the beginning of the song. We call this the Pre-Start sequence. The purpose of a Pre-Start sequence is to perform important initialization and set-up procedures in your playback devices before the music begins. The reason these messages should be transmitted before the piece, and not right at the beginning, is that synthesizers typically require from 300 to 500 milliseconds after reception of a system configuration message before they are ready to begin performing "normal" data such as notes and controllers.

Messages in the Pre-Start list are automatically spaced 500 milliseconds apart. Thus, for example, if you have four messages in the Pre-Start list, there will be a delay of 2 seconds after you hit the "Play" transport control button before your music actually starts.

### To Add Pre-Start Messages

1. Display the System Exclusive dialog by selecting Music ▶SysEx... from the menu.
2. Click the New... button to bring up the System Exclusive Editor dialog.
3. Select the Pre-Start Message check box to the right of the time control field.
4. Click the Add ▶button and select from among pre-defined sysex messages or New to define your own.

-OR-

Click the Import button to load a SysEx binary from a file.

1. When defining your own custom message, give it a descriptive name in the Name field and enter the data directly into the Message Data box.
2. Click OK to apply the changes.

### To Add In-Line Messages

1. Display the System Exclusive dialog by selecting Music ▶SysEx... from the menu.
2. Click the New button to bring up the System Exclusive Editor dialog.
3. Set the time for the message in the [time control](#) .

4. Click the Add ▶ button and select from among pre-defined sysex messages or New to define your own.

-OR-

Click the Import button to load a SysEx binary from a file.

3. When defining your own custom message, give it a descriptive name in the Name field and enter the data directly into the Message Data box.
4. Click OK to apply the changes.

To Export SysEx binaries (files)

You can export any SysEx message to a binary file for use in other files.

1. Display the System Exclusive dialog by selecting Music ▶ SysEx... from the menu.
2. Select the message you would like to save.
3. Click the Edit... button to bring up the System Exclusive Editor dialog.
4. Click the Export button to bring up the Save As dialog.

To Reorder Pre-Start Messages

1. Display the System Exclusive dialog by selecting Music ▶ SysEx... from the menu.
2. Select the message you would like to move in the Pre-Start Messages list.
3. Click the up arrow or the down arrow to move the message.
4. Click OK to apply the changes.

To Edit Messages

1. Display the System Exclusive dialog by selecting Music ▶ SysEx... from the menu.
2. Select the message you would like to edit in either the Pre-Start Messages list or the Normal Messages list.
3. Click the Edit... button to bring up the Edit System Exclusive dialog.
4. Edit the message data and click OK to apply the changes.

To Remove Messages

1. Display the System Exclusive dialog by selecting Music ▶ SysEx... from the menu.
2. Select the message you would like to remove in either the Pre-Start Messages list or the Normal Messages list.
3. Click the Remove button.
4. Click OK to apply the changes.

Note: if you have messages in the Pre-Start list and you save your music as a MIDI file, then

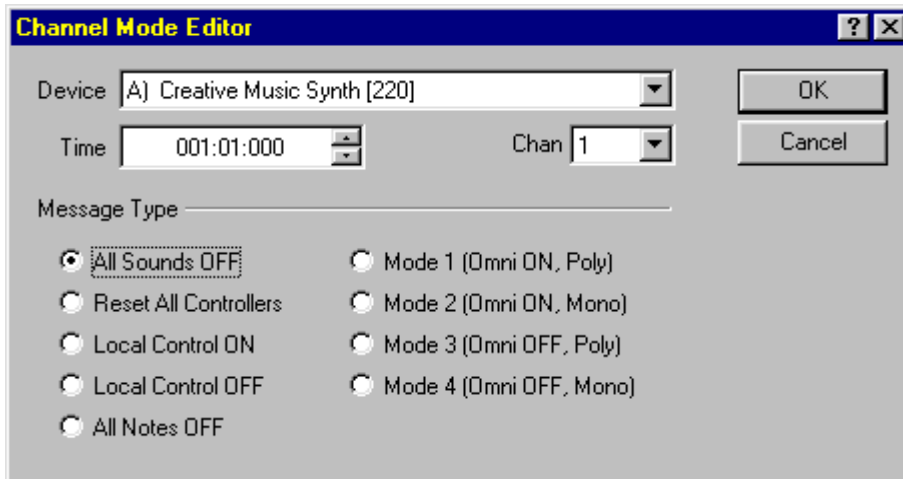
an extra measure (or more if required) will be created at the beginning of the MIDI file to contain your Pre-Start messages. The reason for this is that the standard MIDI file format does not have a concept of Pre-Start, or "negative" time, and must therefore delay the entire song in order to accommodate the messages in the Pre-Start list.

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## Channel Mode Messages

### Channel Mode Editor

The Channel Mode Editor is where you set the message type, time, channel, and receiving device of a channel mode message.



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## Channel Mode Messages

Channel Mode Messages provide a way to control how the receiving device will respond to all incoming voice messages (like notes and pitch bends). In addition, some channel mode messages may be used for such specialized tasks as controlling lights on a MIDI controlled lighting console or for clearing buffers on a MIDI controlled signal processor.

### To Add Channel Mode Messages

1. Display the Channel Mode dialog by selecting Music ▶Channel Mode... from the menu.
2. Click the New... button to bring up the [Channel Mode Editor](#) dialog.
3. Select the message type, the insertion time, the MIDI channel for the message, and the device to receive the message.
4. Click OK to insert the message. Click OK again to close the Channel Message dialog.

### To Remove Channel Mode Messages

5. Display the Channel Mode dialog by selecting Music ▶Channel Mode... from the menu.
6. Select the message you would like to remove by clicking on the message name.
7. Click the Remove button.

### To Edit Channel Mode Messages

1. Display the Channel Mode dialog by selecting Music ▶Channel Mode... from the menu.
2. Select the message you would like to edit and click the Edit... button

-OR-

Double click on the message you would like to edit.

3. From the [Channel Mode Editor](#) edit the message type, change the time, change the channel, or change the receiving device.
4. Click OK to apply the changes.

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## Views

### Views

Views are the primary work area that you use to create and edit music. There are several different views available. If you want to display a different view, click on the Tools menu and select the desired view from the menu.

Each view is very different from the rest and emphasizes a different aspect of the music. The Music Score, for example, is used when one is interested in creating music notation; the Audio Sequencer, on the other hand, is used only when setting up digital audio tracks to play along with the MIDI data. Different people have different preferences, so try out each view to see which one works best for you.

Click one of the following topics for more information about each view:

 [Music Score](#)

This view displays music as standard music notation. The notes are organized into measures and systems along staff lines which represent the pitch of the notes.

 [Audio Sequencer](#)

This view displays the digital audio files which are to be played along with the MIDI information. The view displays wave files as bars along a timeline and provides basic controls for adjusting wave performance parameters.

 [Piano Roll](#)

This view represents music much as the scrolls on a player piano -- the notes are represented as bars along a grid which represents the underlying measures. The width of each bar represents the duration of the note.

 [MIDI Events](#)

This view is a simple table of events such as notes, dynamic markings and tempos. Different underlying properties such as note pitch, duration, etc. can be edited directly in the table.

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## View Tools

### View Tools

Several tools for creating, editing and managing your music are provided.

The Elements Palette, Properties Window and Mixer are the primary view tools you use to create, perform and edit your composition.

For more information about specific tools, click on a topic below:

 [\\_Displaying a Tool](#)

 [\\_Elements Palette](#)

 [\\_Properties Window](#)

 [\\_Mixer](#)

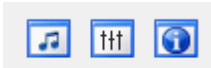
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## Displaying a View Tool

To Display a View Tool

Use any of the following methods to display a view tool:

- Select the appropriate item from the View menu.
- Press the appropriate tool button in the Edit toolbar.



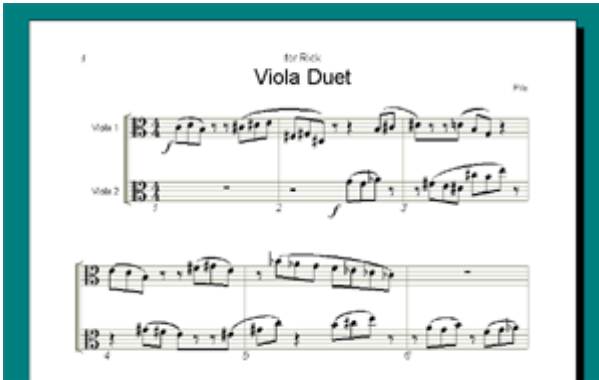
If you forget what a button represents, you can move the mouse pointer over the button to display a [tooltip](#).

- Press the appropriate shortcut key: CTRL+1, CTRL+2 or CTRL+3 to toggle display of the Elements Palette, the Properties Window and the Mixer, respectively.

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## Page View

In Page View, the music is displayed as it would be on a piece of paper. Measures are arranged horizontally across the page and begin a new line when they reach the right margin. If there is more than one staff, the staves are grouped into systems. Systems are arranged vertically on the page and begin a new page when they reach the bottom margin. On rare cases a measure may split a line break, but a system may never split a page break.



There are dozens of ways to control how the music looks on a piece of paper. Sometimes you may want smaller notes in order to fit music with many staves on a page, other times you may want larger notes when printing out a part extraction.

All of these formatting preferences are defined in what is known as a [layout](#). A layout is essentially a style sheet that describes how the music looks on a piece of paper - it defines the page size, margins, fonts, tiling options and so forth. You can edit and create new layouts to suit your needs.

Keep in mind that the layouts define global settings for the score. You can always edit spacing and layout settings independently for each system on the page. For example, you could specify 3 measures on the first system and 7 measures on the next system. Simply select a system and use the Properties Window to edit its appearance. Every symbol in the music can be edited using the Properties Window to get your music looking crisp and professional.

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## Track View

In Track View, the measures are displayed horizontally in one long scrolling view. There are no line breaks or page breaks in Track View and there is no limit to the number of tracks that can be displayed. You can display all tracks or any combination of tracks using the Track drop list found in the [Notation Bar](#) above the score.



A margin on the left side displays basic characteristics of each staff ([clef](#), [key](#), name, etc.). Move the mouse to the edge of the margin to resize or hide the margin.

Track View is often an easier way to enter notes into the score since you do not need to continually scroll the page left/right as you must when working with systems in [Page View](#). Later, when you're ready to print the music you can switch to Page View for any fine-tuning adjustment to the appearance or location of musical symbols.

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## Notation Bar

The Notation Bar is the area of controls displayed the top of the Music Score (but still inside the window). The bar contains controls for setting view mode, zoom factor, visible staves & layouts, voice, and margin display. These commands are also visible in the View menu when the Music Score is the active view.



### View Mode

The two buttons on the far left of the Notation Bar are used to set the viewing mode between Page View and Track View.

### Zoom

There are two sets of controls. The drop list contains several zoom factors you can select from. Use the magnifying glass buttons to zoom the score to the next or previous magnification factor listed in the zoom factor list.

### Layout/Track

In Page View, the Layout drop list is used to select the current layout. If you press the small arrow button next to the list, a popup menu appears where you can edit or create layouts.

In Track View, the drop list displays the list of tracks to view and the label reads, "Tracks". You can select from the list, or type in numerical values that represent the staves. Acceptable values are in the form, "1", "1-3", "1, 2-5, 9, 10", "1 2 3 4". For example, if you are viewing a large orchestral piece and you want to view the winds, type in either "1-4", or "1 2 3 4". Selecting the small arrow button next to the list will allow you to edit the layout. There is only one Track Layout per file.

### Voice

The Voice drop list selects which voices to view, and which [voice](#) is used when entering notes (either via mouse entry, step recording, or real time recording). Selecting All will view all voices. Selecting 1-8 will show the selected voice in its normal color, and all other voices will be grayed out. You can also view what objects are hidden. Hidden objects will appear grayed out when Hidden is selected.

### Margin Display

Toggling the Margin Display button shows or hides the margins and system sizes. This is useful when fine-tuning the positions of staves on the page.

## Layouts

### Layouts








Layouts are style sheets that control page layout, sizing and positioning options. Each layout stores all user overrides in the score, making it possible to adjust measure spacing, notes and other symbols independently of other layouts. Properties Window pages for controlling the appearance of measures and systems can be used in conjunction with a layout to get the music looking just right.

Each music document contains its own set of layouts - you can add as many layouts as you wish. A common scenario is to create a full score layout for the conductor, and individual part layouts for each performer.

Layouts control only the visual appearance of your music - they do not affect the music itself. This makes it very easy for you to work on compositions and create printed parts without the hassle of creating different documents for each part.

As an example, suppose you have written a string quartet and you'd like to try it out with your musician friends. You would create a layout for each part and print out the 4 parts so your friends could try it out. After hearing the result and feedback from the performers, you might decide to add or rearrange some sections of the composition. You could do this in the main "Full Score" layout where you can see all the parts and how they interact - then, you could use the same layouts you originally created to print out revised parts for each performer. The music you added would appear in all the different layouts, saving you the time and effort of entering the new portions for each part.

Click on a topic below to learn more about using Layouts with your music document.

-  [\\_How Music is Displayed](#)
-  [\\_Create a Layout](#)
-  [\\_Layout Properties](#)
-  [\\_Edit a Layout](#)
-  [\\_Edit a Layout with the Properties Window](#)
-  [\\_Remove a Layout](#)
-  [\\_Track View Layout](#)

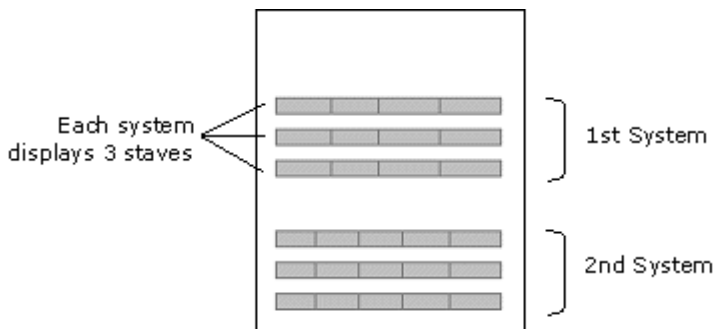
-0-



## How Music is Displayed

When displaying music on a piece of paper it becomes necessary to break the measures apart into lines, just like words in a book. A "system" is a horizontal block of staves on a piece of paper. Depending on how many staves are in the music, a system can be large or small. Measures in each staff are displayed within the system.

The illustration below depicts a composition that contains 3 staves as it might be displayed on a piece of paper:



The number of systems that fit onto a page depends on many factors, including the page and staff size, spacing around each system, and the number of staves that are in the music. A composition containing 6 staves, for example, takes more vertical space on the page than does a single-staff piece.

The number of measures that can be reasonably displayed within a given system depends entirely on the music - lots of 32nd notes, for example, takes more horizontal space to display, whereas a single whole note doesn't take much room at all.

Note in the illustration that the second system contains more measures than does the first system. By changing the number of measures in each system to fit your music you can create professional-looking printouts that are clean and easy-to-read.

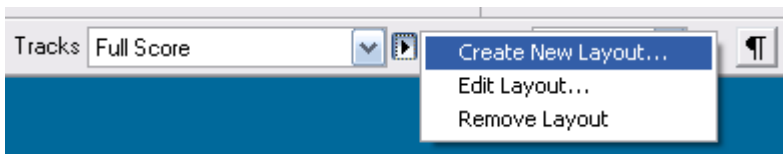
## Create a New Layout

By default, a layout named "Full Score" is created when a file is loaded.

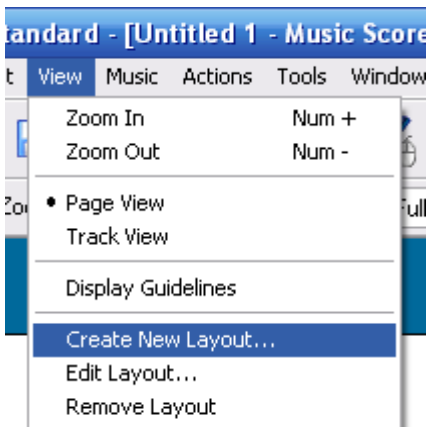
As its name implies, this layout has all staves visible, a regular staff size, and default settings for measures per system and systems per page.

You can also create as many new layouts as you like, edit and remove existing layouts.

By default the new layout will be created as an individual part extraction, meaning only one staff is displayed in the Display Staves field.



or



To Create a New Layout

- Display the Music Score in Page View.
- Select View ► Create New Layout... from the menu or from the popup Layout Actions button at the top of the Music Score:
- Make desired changes to layout using the Layout Dialog.
- Click the OK button to save the new layout and close the dialog.

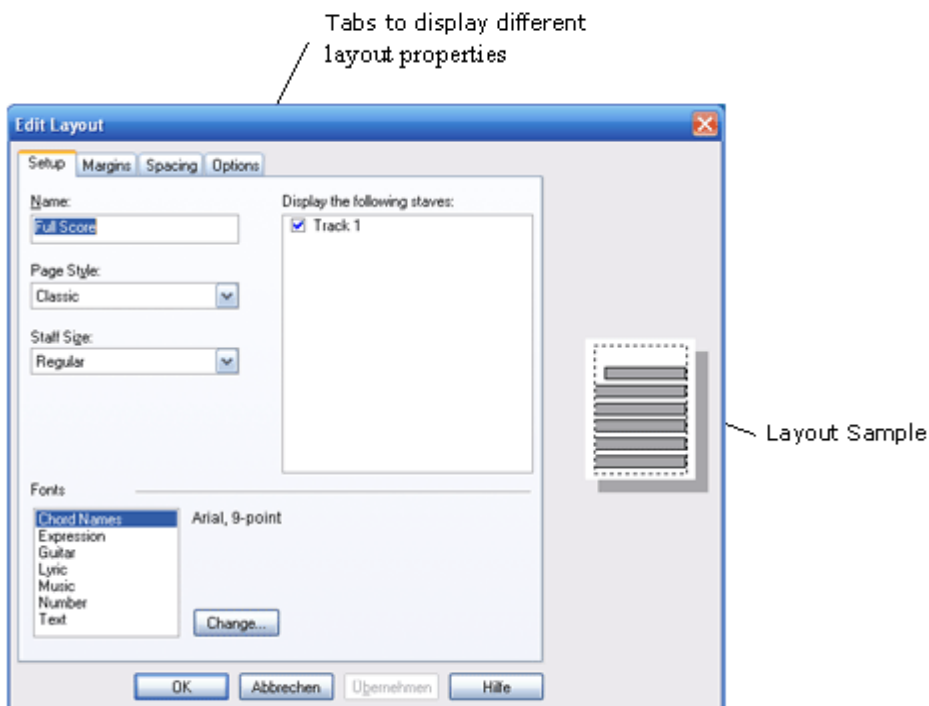
- OR -

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## Layout Dialog

### Layout Dialog

The Layout Dialog is used to specify overall properties of new layouts or to change the properties of an existing layout. In addition to the Layout Dialog, you can change the position and spacing of your music using the Properties Window - these changes are stored along with the layout.



The layout dialog is organized into the following tabs (click on the name of the tab in the table below for details):

#### Setup

Basic information about which staves are visible, title page style, staff size and fonts.

#### Margins

Margin information for left and right pages and first system. Paper sizes and orientation and tiling

#### Spacing

Default measures/system and systems/page, and spacing around staves.

#### Options

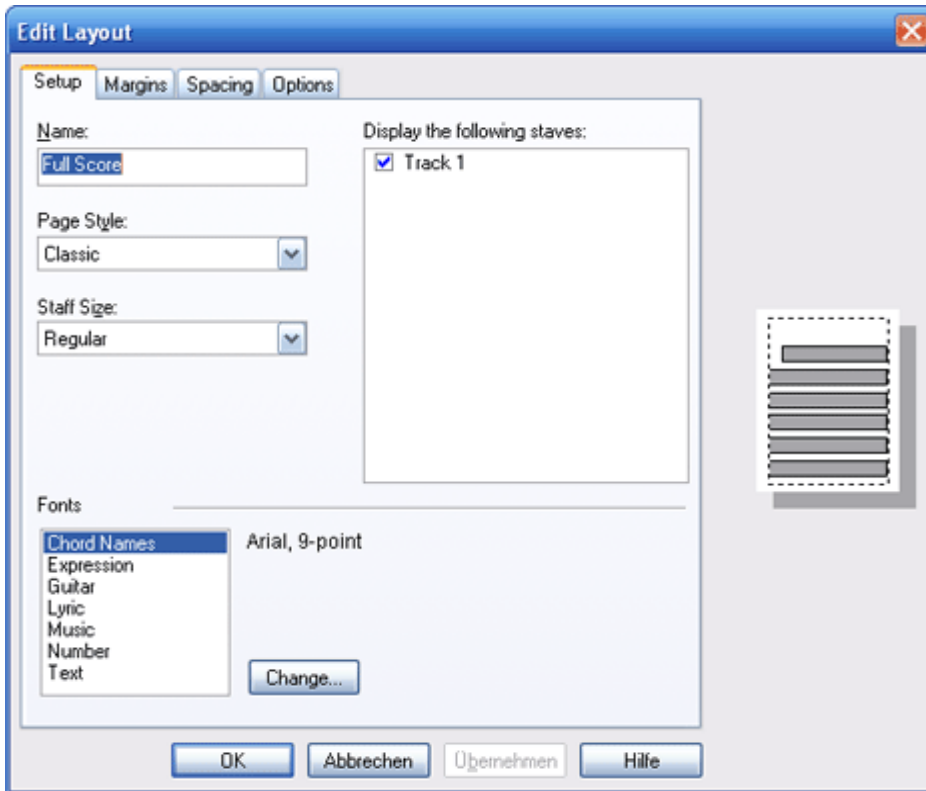
Miscellaneous options such as multiple-measure rests and measure and page numbering options

The Layout Sample window is a crude representation of how staves and system will fit onto a piece of paper. As you change the staff size, tiling options and so on the layout sample window changes to give a general idea of how things will look on the page.

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## Layout Setup

Click on areas of the image below for more information:

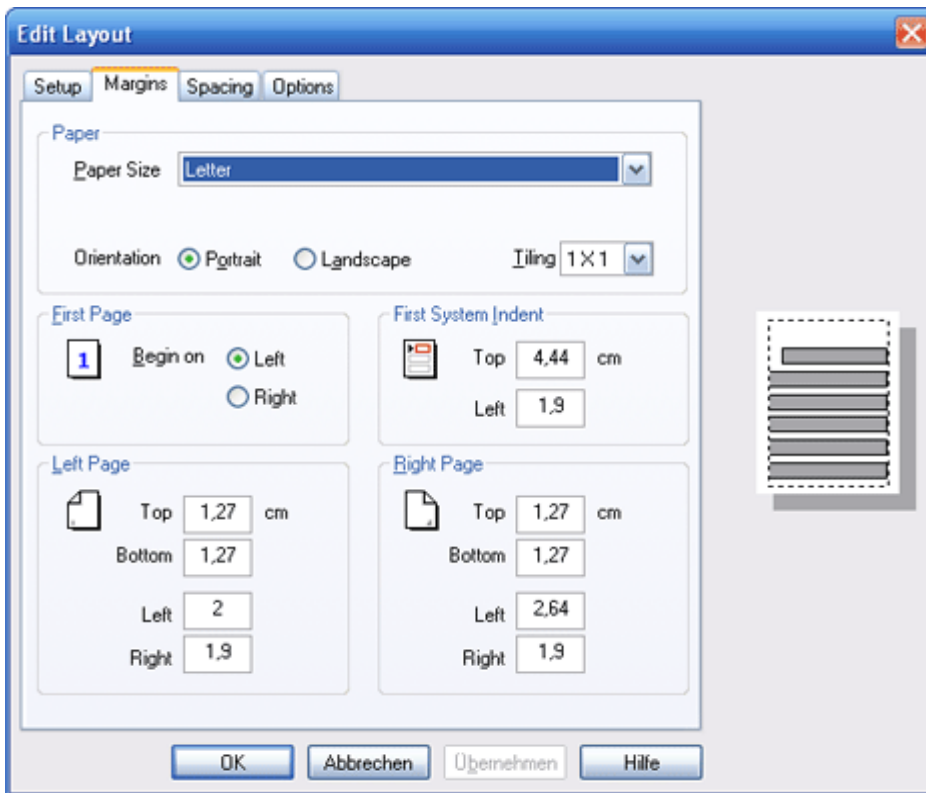


This tab contains settings for the layout name, which staves to display, title page style, staff size, and fonts.

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## Layout Margins

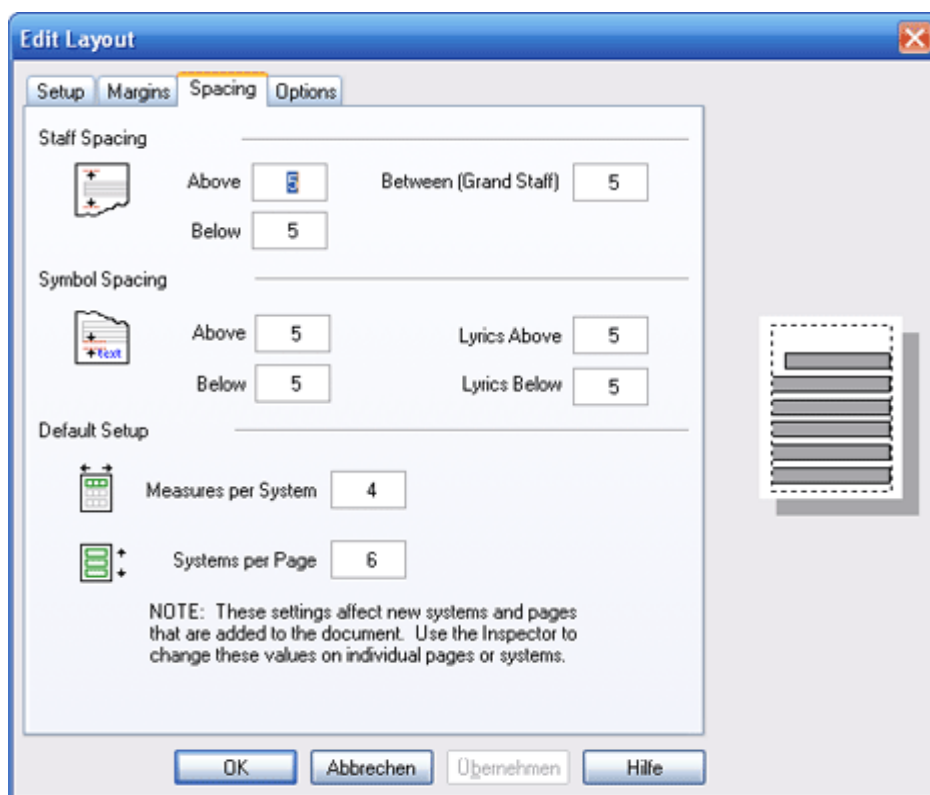
Click on an area in the image below for details on each control:



This tab contains settings for left page and right page margins, and first system indent.

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## Layout Spacing

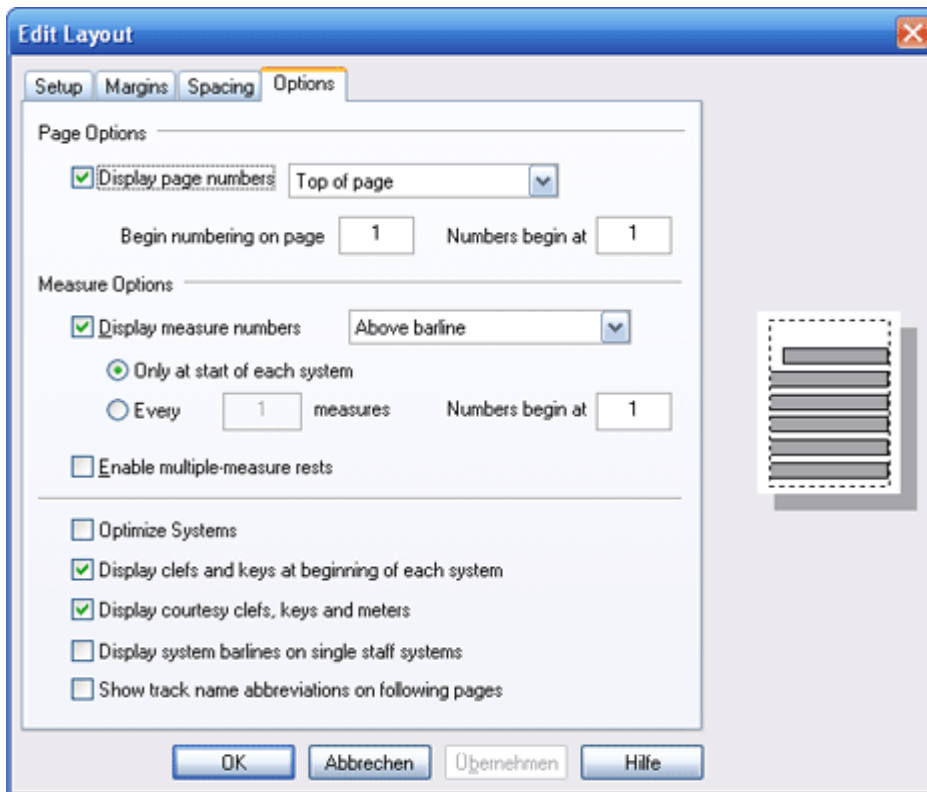


This tab contains settings for measures per system, systems per page, spacing above and below the staves, and spacing of lyrics and other symbols. These are defaults only - you can always use the Properties Window to change values for a specific system or page.

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## Layout Options



This tab contains various settings for page numbering, measure numbering and multiple measure rests.

-0-

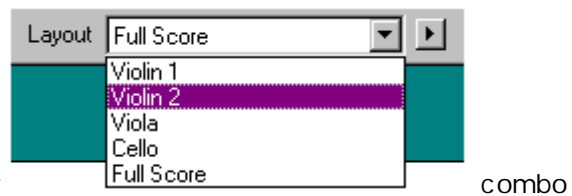
## Edit a Layout

You can edit any existing layout. The Edit Layout dialog is exactly the same as the dialog used to create new layouts.

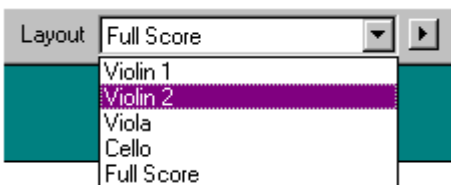
You can edit any existing layout. The Edit Layout dialog is exactly the same as the dialog used to create new layouts.

To edit an existing layout

Display the Music Score in Page View.



Select the layout you want to edit in the Layout box:



Make desired changes to layout using the [Layout Dialog](#).

Click the Apply button to see how the music looks using the current settings. Click the OK button to save the changes and close the dialog.

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## Edit Layout with the Properties Window

Rarely does a score contain the same number of measures per system throughout. For general readability, four measures per system is usually recommended.

However, dense musical passages, measures containing only footfalls, page turn considerations, and what looks good may require that some systems contain more measures than others. Spacing between staves may also vary from system to system.

The Properties Window provides a way to quickly modify these parameters at a per-system and per-page level.

### To Display the Appropriate Properties Window

1. Display the [Music Score](#) in Page View.
2. In [Select Mode](#), click on a measure.
3. After clicking on a measure, the system that contains the measure is highlighted.
4. Click the right mouse button to display a popup menu, and choose Extend Selection to Page, Extend Selection to End or Select Staff to select related items.

### To Edit the Layout

1. Select the systems you want to edit.
2. Select the [Staff Spacing](#) or [System](#) tab in the Properties Window.
3. Make changes to appropriate fields.
4. Click the Apply button to apply the changes to the score.

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## Remove a Layout

Sometimes you may wish to delete layouts that you are no longer using.

You can delete any layout except the default layout -- you can edit the default layout, however.

To Delete a Layout

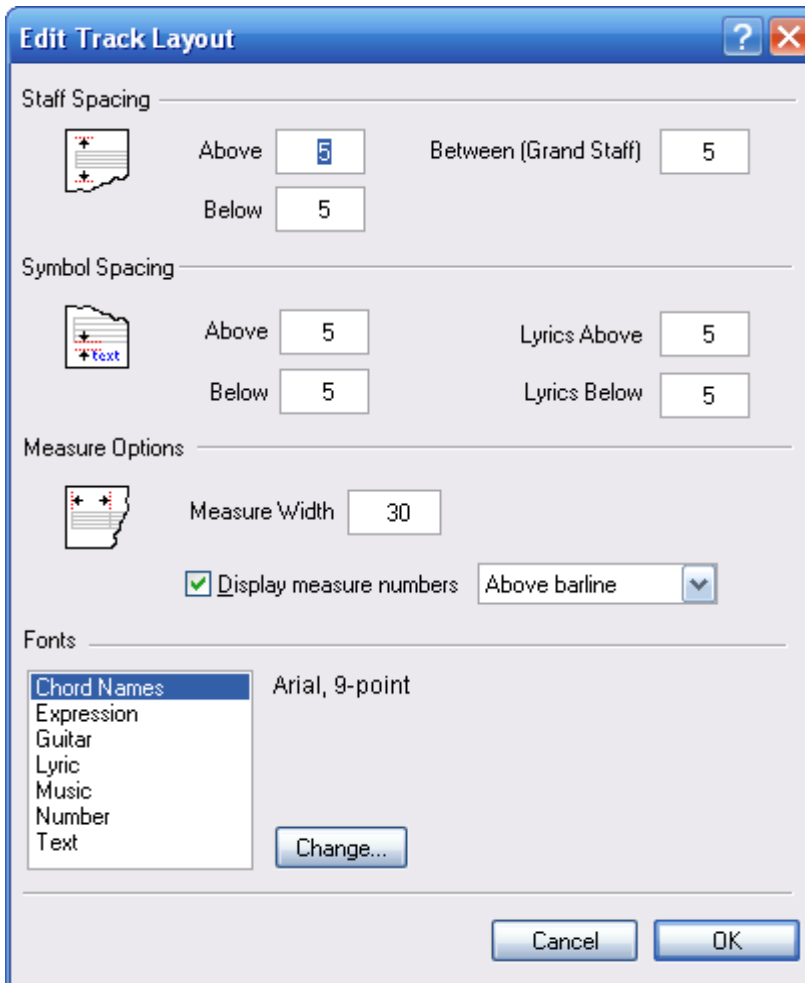
- Display the Music Score in Page View.
- Select the layout you want to remove in the Layout combo box.
- ▶ Select View ▶ Remove Layout from the View from the menu or from the popup Layout Actions button at the top of the Music Score.

Note that you cannot remove the original "Full Score" layout from a document

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## Track Layout

The Edit Track Layout Dialog controls the appearance of track view. Like the layouts for page view, this layout contains settings for staff spacing, symbols spacing, measure options, and fonts. It differs from the page view layouts in that there is only one track layout. There is no concept of systems, pages, and part extractions in track view. To view only specific staves, see the Layout/Track discussion in the topic [The Notation Bar](#) .



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## Working with Large Scores

When working with large orchestral scores or MIDI files with many staves, the layout may need to be edited to fit all of the staves onto a single page.

If this is the case, you will be prompted to edit the layout before Music Score is first displayed. If you do not edit the layout such that all systems can properly fit, you should switch to Track View to do your editing.

There are many ways to modify the layout so that everything fits. The most common approach is to select a smaller staff size (Giant is the largest, Pearl is the smallest). This reduces the size of the font and allows for more music to fit on a page. Another approach is to create a larger virtual page by tiling 2 or 4 pages together. For an 8 ½ X 11 piece of paper, selecting a tiling value of 2 X 1 with landscape mode creates a virtual page of size 11 X 17, for example.

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## The Music Score

### The Music Score

The Music Score represents a music document as standard music notation. To display the view, select Tools ► Music Score from the menu.

Notes, text, dynamic markings, clefs, meters and dozens of other symbols are added directly to the music simply by choosing a symbol from the [Elements Palette](#) and clicking the mouse at the location in the music where the symbol should be added.

The Music Score further operates in two different view modes: [Page View](#) and [Track View](#). Both views display standard music notation - the difference is how staves and measures are displayed.

At the top of the Music Score is the [Notation Bar](#). This bar contains controls for toggling view modes, zoom factors and which tracks to display. A control is also provided for selecting the voice that is displayed in the view.

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## The Music Cursor

When you enter symbols into the Music Score, the Music Cursor provides you with visual feedback to help you position and place elements.

If you select a note in the Elements Palette and move the mouse to enter a note in the score, for example, a light frame appears around each measure as the mouse moves through it. Above the measure is a [Music Ruler](#) which displays the beat marks in the measure. In addition to the measure feedback, the "note cursor" displays a dotted line and a small indicator box at an appropriate pitch value in the staff. These help you locate a precise time location and pitch where the note is to be added.

Cursors for other elements provide different feedback to help you place music symbols more easily. The table below gives a brief description of the different cursors and their behavior.

Symbol	Description
Note, Gracenote	<p>When the mouse enters a measure, a light frame is drawn around the measure along with a <a href="#">Music Ruler</a> indicating the beats and subdivisions in the measure.</p> <p>A dotted vertical line appears at the current time location of the mouse in the measure -- the line snaps to the tick marks in the Music Ruler.</p> <p>A small indicator box is also displayed at the current pitch location in the measure (with ledger lines if necessary).</p> <p>The vertical line and indicator box allow you to precisely control where notes are inserted in the score.</p>
Tuplet	<p>Same as for notes, with the following addition:</p> <p>When the mouse enters a measure, the tick marks displayed in the Music Ruler change to display the irregular tuplet divisions.</p>
Rest	Same as for notes, except the pitch indicator box does not appear (since rests do not have a pitch).
Accidentals	Pointer changes to a "bulls-eye" when the cursor is over a note or chord; otherwise, the cursor is a standard cross cursor.
Accents	
Dots	You can click and drag out a selection rectangle to select notes. When you release the mouse, new elements are added to the selected notes.
Ornaments	
Slurs	The mouse pointer appears as a cross. You click and drag a selection frame to select 2 or more adjacent notes. The selected notes are tied/slurred together when you release the mouse
Ties	
Chords	A vertical line appears - just as for entering notes - for



	specifying the location of the symbol.
Dynamics	
Pedals	For tempos and dynamics that are used to specify constant values (e.g. <i>mf</i> , <i>andante</i> ) the line indicates the location of the element.
Repeats	
Tempos	For symbols that specify changing values (e.g. <i>cresc.</i> , <i>accel.</i> ), the dotted vertical line represents only one side of the symbol. After clicking the mouse once, another line appears for specifying the other end of the symbol. After both positions have been specified, the symbol is added.
Text	Same as above with the following addition:  Clicking the cursor above the staff will add the text above the staff, below the staff will add the text below the staff. Clicking the cursor between the upper and lower staff of a grand staff will add the text between the upper and lower staff.
Clefs	The cursor is a pointing hand. As the mouse moves over each measure, a dotted line appears to indicate where the clef will be added.
Key	The cursor is a pointing hand. As the mouse moves over each measure, the measure highlights. If the mouse is released while over a highlighted measure, the symbol is added at the beginning of that measure.
Meter	

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# Entering Music in Music Score

## Entering Music in the Music Score

When you add music symbols to a document the notation engine properly aligns and positions them according to standard music notation practices. Notes are beamed together or flagged, rests are added around notes, measures resized, etc. in order to get the music to fit properly.

- Entering music begins with selecting a symbol from the Elements Palette. This places the application into [Insert Mode](#) (if it was not already), and changes the cursor to the appropriate type for the element that is selected in the Elements Palette.
- In order to control where elements are added, the Music Score uses several different [music cursors](#) to guide the process. Essentially, the music cursor ensures that you place symbols in meaningful locations. For example, you cannot place a key signature on a dynamic marking -- after all, what would that mean?
- When appropriate, the music cursors provide additional visual feedback so it is clear exactly where the music symbol will end up. For example, as you move the mouse, the note cursor displays a small rectangle where the note will be placed so you can see exactly what the pitch will be for the note.
- Inserting the selected music symbol is normally as simple as clicking the mouse in the music at the location currently displayed by the music cursor. In some cases, additional input is required before the symbol is added. For example, when entering lyrics you still need to type in the actual text.

Click on one of the following topics to learn how to add the symbol to your music:

» [General Editing](#)

» [Notes](#)

» [Accents](#)

» [Octavas](#)

» [Accidentals](#)

» [Ornaments](#)

» [Chord Symbols](#)

» [Pedal Marks](#)

» [Clefs](#)

» [Repeats](#)

» [Dynamic Markings](#)

» [Rests](#)

» [Grace Notes](#)

» [Slurs](#)

» [Images](#)

» [Tempos](#)

» [Key Signatures](#)

» [Text](#)

» [Lyrics](#)

» [Ties](#)

» [Meters](#)

» [Tuplets](#)

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# Accents

## Add and Remove Accents

There are several types of accents displayed in the Elements Palette such as articulations, breath marks and bowing symbols.

All accents are associated with particular notes and are added to the music in the same manner. When you add an accent to a note it is automatically positioned either above or below the note, depending on a variety of factors such as the stem direction of the note, voicing and staff type.

Accents affect the playback of the note that they have added to. However, they do not change the performance data of the note. To return the note to its original state, simply delete the accent.

Once an accent is added to your music you can edit its position, appearance and performance properties.

To Add an Accent to a Note

1. Select the [Accents](#) tab in the Elements Palette, then select one of the accents.



2. Move the cursor over the note to which you want to add the accent. Notice that the cursor changes into a bullseye and the note highlights when the cursor is over the note.



3. Click the mouse to add the accent to the note.

To Remove Accents

To remove accents, simply select them with the mouse and select Edit ▶ Delete from the menu.

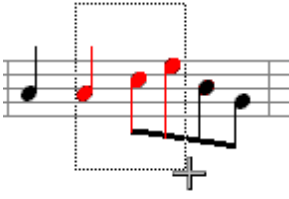
-OR-

Select the accents and press the Delete key.

To Add Accents to Several Notes

1. Select the [Accents](#) tab in the Elements Palette, then select one of the accents.
2. Click - but do not release - the mouse in an empty area that is not over a note.

- ▶ Drag the mouse to sweep out a rectangular area. Notice that notes that are included in the selection area are highlighted.



Release the mouse to add accents of the specified type to all the selected notes.

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## Edit Accents with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including accents.

Be sure the application is in [Select Mode](#), then select the accents you want to edit.

You can select several different accents and change all of their properties at once.

### Edit Accents with the Properties Window

- Select the accents you want to edit, then [display the Properties Window](#) .
- To change how the accent appears in the notation, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change how the accent sounds during a performance, select the [Performance](#) tab in the Properties Window and adjust the performance properties.
- Click the Apply button when you are done making changes.

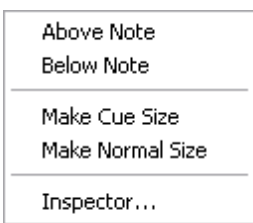
-0-

## Edit Accents with the Shortcut Menu

If an accent is selected you can right-click the mouse to display a special shortcut menu. The menu contains commands for changing accent properties. For simple operations this method can be faster and easier than using the Properties Window.

### Using the Shortcut Menu

- Be sure the current mode is [Select Mode](#), then select the accents you want to edit.
- Right-click the mouse to display the shortcut menu.
- Select an item from the context menu to perform the command.



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## Reminder Accidentals (Courtesy Accidentals)

Reminder Accidentals are accidentals placed in front of notes where the accidental is already implied from the rules of notation. For example, if a C sharp is in a previous measure, and a C natural is in the following measure, a natural is not needed in front of the C since the sharp only carries through the previous measure. However, to make things absolutely clear to the player, you may want to put a natural in front of the C as a reminder. Click [here](#) for some more examples of where reminder accidentals are used.

### To Add Reminders to Existing Notes

- Select the [Notes](#) tab in the Elements Palette.
- Choose an accidental in the Notes tab.
- Click on the reminder symbol (the parentheses to the right of the accidentals).
- Make sure that no note value is selected (To unselect a note value, click on it).
- Place the cursor over the note that you want to add the reminder to (The cursor will turn into a bullseye and the note will become highlighted when you are positioned over the note). Click to place the reminder.

### Entering Notes With Reminders

- Select the [Notes](#) tab in the Elements Palette.
- Choose a note in the Notes tab.
- Choose an accidental in the Notes tab.
- Click on the reminder symbol. All three symbols should be selected.
- Enter the note as you would normally.

### Removing Parentheses from Reminder Accidentals

- See the topic [Editing Accidentals with the Menu](#).

### To Add Reminders to Tied Notes

When you tie two notes together that have accidentals, the second accidental is hidden. If the tie is over a system break, you may want to unhide the second accidental to turn it into a reminder.

- From the Voice drop list in the [Notation Bar](#), select Hidden.
- The second accidental will appear in a grayed state. Select it, and with the [Properties Window](#), uncheck the Hidden box.



# Accidentals

## Add and Remove Accidentals

Accidentals (sharps, flats, etc.) are used to represent notes whose pitches do not correspond to the normal staff lines or spaces.

Depending on the clef and key signature, a given pitch may need to be displayed with sharps or flats. Likewise, adding an accidental to a note effectively changes the note's pitch. As you add or remove accidentals to notes, keep in mind that you are really changing the pitch of notes, and the accidentals you originally added may or may not be displayed in the score (depending on the clef and key).

You can add an accidental to an existing note, or you can attach an accidental to new notes as they are added. Once an accidental is added to your music you can edit its position and appearance properties.

To Add an Accidental to a Note

Select the [Notes](#) tab in the Elements Palette, then select one of the accidentals.



Move the cursor over the note to which you want to add the accidental. Notice that the cursor changes into a bullseye and the note highlights when the cursor is over the note.



Click the mouse to add the accidental to the note.

See [Reminder Accidentals](#) to add an accidental that is already in the key or an accidental that already appears in the measure.

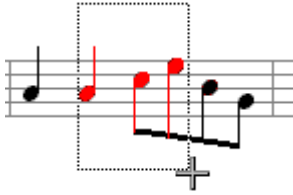
To Enter a Note with an Accidental

Select the [Notes](#) tab in the Elements Palette and choose a new note to add. Choose an accidental to go along with the note.

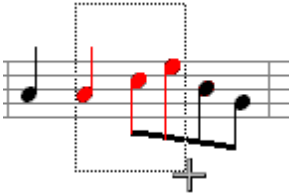
Enter the note [as usual](#).

To Add Accidentals to Several Notes

Select the [Notes](#) tab in the Elements Palette, then select one of the accidentals. Click - but do not release - the mouse in an empty area that is not over a note.



3. Drag the mouse to sweep out a rectangular area. Notice that notes that are included in the selection area are highlighted.



Release the mouse to add accidentals of the specified type to all the selected notes.

#### To Remove Accidentals

To remove accidentals, simply select them with the mouse and select Edit ▶ Delete from the menu.

-OR-

Select the accidentals and press the Delete key.

Note that removing an accidental effectively changes the pitch other accidentals may be re-added to properly represent the note in the current clef and key.

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## Edit Accidentals with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including accidentals.

Be sure the application is in [Select Mode](#), then select the accidentals you want to edit. You can select several different accidentals and change all of their properties at once.

To Edit Accidentals with the Properties Window

- Select the accidentals you want to edit, then [display the Properties Window](#) .
- To change how the accidental appears in the notation, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change general properties of the accidental, such as its position, visibility and color, select the [General](#) tab in the Properties Window and adjust the general properties.
- Click the Apply button when you are done making changes.

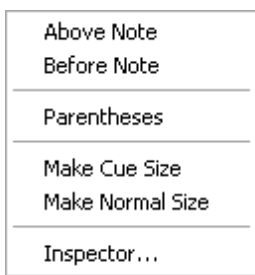
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## Edit Accidentals with the Shortcut Menu

If an accidental is selected you can right-click the mouse to display a special shortcut menu. The menu contains commands for changing accidental properties. For simple operations this method can be faster and easier than using the Properties Window.

### Using the Shortcut Menu

- Be sure the current mode is [Select Mode](#), then select the accidentals you want to edit.
- Right-click the mouse to display the shortcut menu.
- Select an item from the context menu to perform the command.



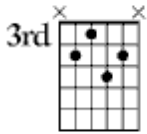
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## Chord Symbols

### Add and Remove Chord Symbols

Chord grids and chord names are two commonly-used ways to represent the overall harmonic structure of the music.

Chord symbols are displayed above measures - much like tempo markings. Once a chord symbol is added to your music you can edit its position and appearance properties.



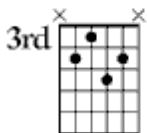
Chord grids depict the underlying chords as finger patterns on a 6-string guitar. There is one vertical line for each string on the guitar.

The horizontal lines give the guitarist a guide for which fret to play. An "x" above a string means it's not played and an "o" above a string means it's played open. You will most often find these symbols in popular music.

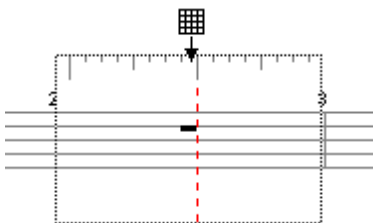
There are hundreds of different sorts of chords that are used by guitarists, each a different combination of fingers, strings, tunings and patterns. 256 of the most common chords are supported.

To Add a Chord Symbol to a Measure

- Select the [Text/Chords](#) tab in the Elements Palette, then select the chord grid symbol.



- Move the cursor over the measure to which you want to add the symbol. Notice that the cursor changes into a chord grid and a red dotted line is displayed at the current location in the Music Score.



- Align the dashed red line with the beat on the [Music Ruler](#) where you want the chord symbol.
- Click the mouse to display the [Insert Chord](#) dialog.
- In the [Insert Chord](#) dialog, specify the properties of the chord, then click the Insert

button to add the chord at the specified location in the measure.

## C|maj7 (add 9)

Chord names can be used in addition to, or in place of chord grids. Many performers prefer chord names since they take up less space than grids. They also allow the performer some flexibility as to a specific fingering or voicing required to play the chord.

If you want to enter a chord that does not have a corresponding chord grid, you can always enter it as a chord name.

You can use special formatting characters to create chord names using a variety of shorthand styles. For example, you may prefer "-7" instead of "minor7", "min7", or "m7" to represent a minor 7th chord.

### To Remove a Chord Symbol

To remove a clef, simply select it with the mouse and select Edit ▶ Delete from the menu.

-OR-

Select the accents and press the Delete key.

-o-

## Edit Chord Symbols with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including chord symbols.

Be sure the application is in [Select Mode](#), then select the chord symbol you want to edit.

You can select several different chord symbols and change all of their properties at once.

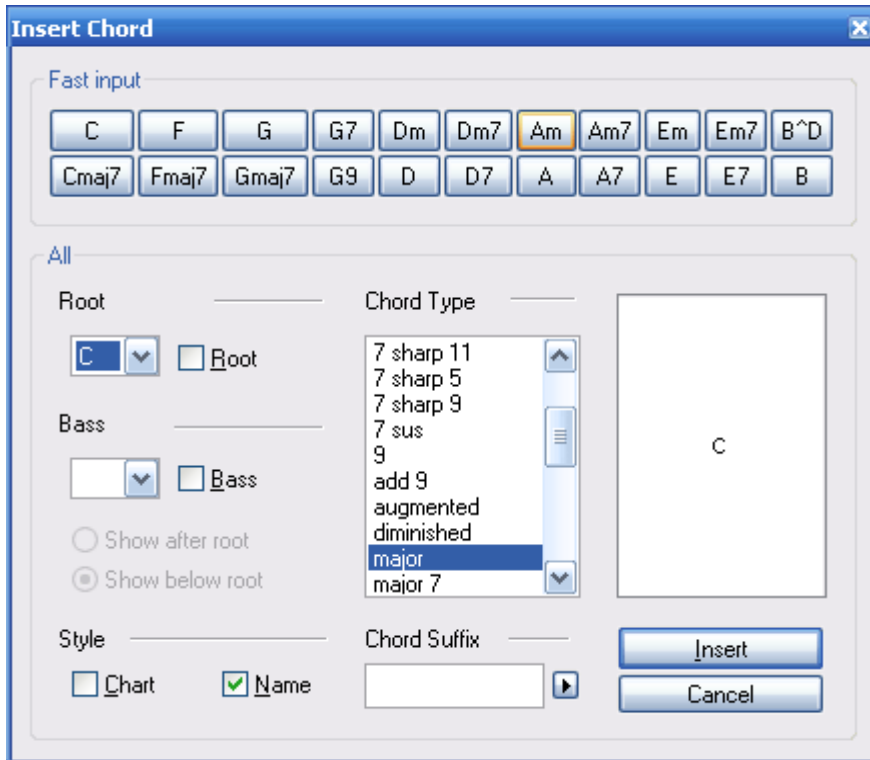
Note: If you are finding that you need to move all of the chord symbols higher to clear some notes, consider adjusting the [Symbol Spacing Above](#) setting for the system instead of adjusting their position.

### Edit a Chord Symbol

- Select the chord symbols you want to edit, then [display the Properties Window](#) .
- To change the type of chord symbol select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change general properties of the clef, such as its position, visibility and color, select the [General](#) tab in the Properties Window and adjust the general properties.
- To perform an action, such as transpose or move, select the [Actions](#) tab in the Properties Window.
- Click the Apply button when you are done making changes.

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## Insert Chord Dialog



The Insert Chord dialog is displayed immediately when you are just about to insert a chord into the music. The dialog is used to specify the type of chord you wish to insert.

-0-



## Move Chord Symbols

Sometimes you may wish to move an existing symbol to a different location.

Although you can certainly achieve the same results by adding a new symbol and deleting the old one, it may be easier to simply move the symbol.

First, be sure the application is in [Select Mode](#).

### Move an Symbol

- Click - but do not release - the mouse on the symbol that you wish to move.
- As you drag the mouse, the music cursor changes to the sameUsed when entering a new symbol from the Elements Palette.
- Align the dashed line with the beat where you want the symbol moved to.
- Release the mouse to move the symbol to the specified location.

-o-








## Chord Suffix

In addition to root (and possible bass) pitches, every chord also has a suffix that further characterizes the chord. You can select from many common chord suffixes using the list, or you can "roll your own" if the desired chord does not appear among the list of choices.

The text field directly below the chord list provides a place for you to edit the name of the chord. As you select different options from the list the text updates to reflect the new selection.

The text field displays a special, unformatted version of the chord name. For many chords this value is exactly the same as the chord name displayed in the list. However, some chords (augmented, diminished, 7 flat 9, etc.) can be displayed using a special shorthand notation. For example, rather than writing out "dim" or "diminished" you can use the special symbol that takes less space on the page.

Special format characters (e.g. ^N, ^A, etc.) are used in the unformatted text field to indicate shorthand symbols in the chord. Click the small button next to the text field to display a popup menu. Select an item from the menu to add the appropriate formatting code. The chord example updates to show how the chord will actually appear in the music.

How it looks	Format character	Shortcut for...
	^M	major
	^N	minor
	^A	augmented
	^D	diminished
	^R	minor-major
	^S	Sharp or raised
	^F	Flat or lowered

If you want symbols or text to appear as superscript at the end of the chord, enclose the text in brackets [ ].

Below are several examples of the chord suffix as it appears in the music as well as the corresponding unformatted suffix:

How it looks	Corresponding suffix
--------------	----------------------

Cmaj7<sup>#4</sup>

maj7[^S4]

C△7

^M7

Cm7<sup>b</sup>5

m7[^F5]

-0-

# Clefs

## Add and Remove Clefs

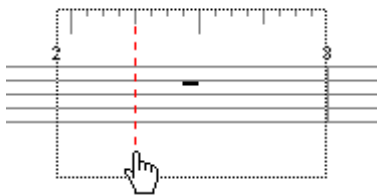
There are nine standard types of [clefs](#) in the Elements Palette that you can add to your music at any location. The clef defines what pitch each line in the staff represents. In a treble clef, for example, the lowest line in the staff is an E; in a bass clef, however, the lowest line represents a G that is nearly 2 octaves lower.

Clefs are added at a particular location in a measure. When you view the music in Page View (vs. Track View) the clef is drawn at the left edge of each system - just as it should be when printed. The notation engine automatically handles correct display of clefs on each system as well as "reminder clefs" at the end of a system when a clef begins at the start of the next system.

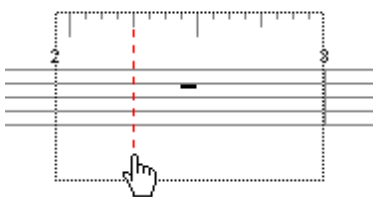
Once a clef is added to your music you can edit its type, position and appearance.

### To Add a Clef

1. Select the [Clef](#) tab in the Elements Palette, then select one of the clefs.



2. Move the cursor over the measure to which you want to add the clef. Notice that the cursor changes into a pointing finger and a red dotted line is displayed at the current location in the Music Score.



1. Align the dashed line with the beat on the [Music Ruler](#) where you want the clef.
2. Click the mouse to add the clef at the specified location in the measure.

### To Remove a Clef

To remove a clef, simply select it with the mouse and select Edit ►Delete from the menu.

-OR-

Select the clef and press the Delete key.

Note: You cannot remove the first clef and you cannot remove the clefs that appear at the start of each system. To make it such that clefs do not appear at the start of each system,

see [Lead Sheet options](#) in the Edit Layout topic.

-0-

## Edit Clefs with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including clefs.

Be sure the application is in [Select Mode](#), then select the clef you want to edit.

You can select several different clefs and change all of their properties at once.

### Edit a Clef

- Select the clefs you want to edit, then [display the Properties Window](#) .
- To change the type of clef or its location in the music, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change general properties of the clef, such as its position, visibility and color, select the [General](#) tab in the Properties Window and adjust the general properties.
- Click the Apply button when you are done making changes.

-0-

## Move Clefs

Sometimes you may wish to move an existing clef to a different location.

Although you can certainly achieve the same results by adding a new clef and removing the old clef, or by editing the start time of the selected clef, it may be easier to simply move the clef.

First, be sure the application is in [Select Mode](#).

### Move a Clef

- Click - but do not release - the mouse on the clef you wish to move.
- As you drag the mouse, the music cursor changes to the sameUsed when entering a new clef from the Elements Palette.
- Align the dashed line with the beat where you want the clef moved to.
- Release the mouse to move the clef to the specified location.

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# Dynamic Markings

## Add and Remove Dynamic Markings

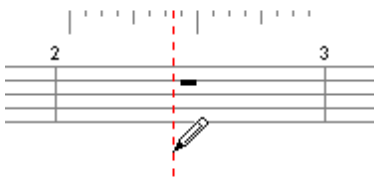
Dynamic markings effectively vary the volume of each track during a performance, and can be divided into 2 distinct groups: dynamic expressions are used to set a particular volume, and changing dynamic markings - such as crescendos and hairpins - are instructions to slowly change from one volume level to another.

Dynamic markings are generally associated with a particular staff. During a performance, MIDI volume controller messages added to the performance correspond to the various dynamic markings.

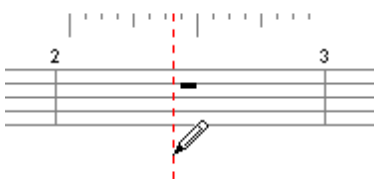
Once a dynamic marking is added to your music you can edit its appearance and performance properties.

### To Add a Dynamic Expression

1. Select the [Dynamics](#) tab in the Elements Palette, then select one of the dynamic expressions. This includes all the symbols from pppp to ffff.



2. Move the cursor to the location in a staff where you wish to add the dynamic. Notice that the cursor changes into a pencil and a dotted line is displayed at the current location in the Music Score.



1. Align the dashed line with the beat on the [Music Ruler](#) where you want the dynamic expression.
2. Click the mouse to add the dynamic at the specified location in the staff.

### To Remove a Dynamic

To remove a dynamic, simply select it with the mouse and select **Edit ▶ Delete** from the menu.

-OR-

Select the dynamics and press the Delete key.

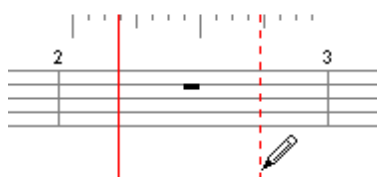


## To Add a Changing Dynamic

1. Select the [Dynamics](#) tab in the Elements Palette, then select one of the changing dynamics. This includes all symbols except the expressions from pppp to ffff.
2. Move the cursor to the location in a staff where you wish to add the dynamic. Notice that the cursor changes into a pencil and a dotted line is displayed at the current location in the Music Score.
3. Align the dashed line with the beat [Music Ruler](#) where you want the dynamic to begin, then click the mouse.

This is the "anchor position" for the dynamic and typically represents the start point for a changing dynamic such as a crescendo.

▶ As you move the mouse a solid line remains at the anchor position, while a second dotted line tracks your mouse movements.



Click the mouse again to define the end point of the dynamic.

Note: You can also click and drag the mouse to define both the start and stop positions.

## Edit Dynamics with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including dynamic markings.

Be sure the application is in [Select Mode](#), then select the dynamic you want to edit.

You can select several different dynamics and change all of their properties at once.

Note: If you are finding that you need to move all of the dynamics lower to clear some notes, consider adjusting the [Symbol Spacing Below](#) setting for the system instead of adjusting their position.

### Edit a Dynamic Marking

- Select the dynamics you want to edit, then [display the Properties Window](#) .
- To change how the dynamic appears in the notation, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change how the dynamic sounds during a performance, select the [Performance](#) tab in the Properties Window and adjust the performance properties.
- To perform an action, such as move, select the [Actions](#) tab in the Properties Window.
- Click the Apply button when you are done making changes.

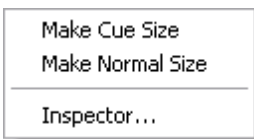
-0-

## Edit Dynamics with the Shortcut Menu

If a symbol is selected you can right-click the mouse to display a special shortcut menu. The menu contains commands for changing symbol properties. For simple operations this method can be faster and easier than using the Properties Window.

### Using the Shortcut Menu

- Be sure the current mode is [Select Mode](#), then select the symbols you want to edit.
- Right-click the mouse to display the shortcut menu.
- Select an item from the context menu to perform the command.



-0-

## Move a Dynamic

Sometimes you may wish to move an existing dynamic marking to a different location.

Although you can certainly achieve the same results by adding a new dynamic and deleting the old one, or by editing the start time of the selected dynamic, it may be easier to simply move the dynamic marking.

The move operation changes only the start time of the dynamic. Markings such as crescendos and hairpins still retain their original durations.

First, be sure the application is in [Select Mode](#).

### Move a Dynamic

- Click - but do not release - the mouse on the dynamic marking you wish to move.
- As you drag the mouse, the music cursor changes to the sameUsed when entering a new dynamic from the Elements Palette.
- Align the dashed line with the beat where you want the dynamic moved to.
- Release the mouse to move the marking to the specified location.

-0-

## Grace Notes

### Add and Remove Grace Notes

Grace notes are ornaments that are placed prior to the note that they embellish. They appear as smaller notes in the music, normally slurred to the note they embellish. You can add multiple grace notes to a single note to create more sophisticated embellishments. Multiple grace notes are beamed together just like normal notes.

Grace notes are always added to an existing "normal" note. Once a grace note is added to your music you can edit its position, appearance, and performance properties.

To Add a Grace Note

Select the [Notes](#) tab in the Elements Palette, then select the grace note symbol (next to the parentheses).



Move the cursor just to the left of an existing "normal" note in the music. Notice that this note is highlighted to indicate where the grace note will be attached, and that a small red dot appears to indicate the pitch of the grace note.



Align the red dot on the pitch you would like for the grace note.

Click the mouse to add the grace note to the highlighted note at the specified pitch.

To Add Multiple Grace Notes

Follow the same steps for adding a single grace note. You can place new grace notes before, after or between existing grace notes.



### To Remove Grace Notes

To remove grace notes, simply select them with the mouse and select Edit ►Delete from the menu.

-OR-

Select the grace notes and press the Delete key.

Note: If you remove a note that has a grace note attached, the grace note is discarded as well.

-O-

## Edit Grace Notes with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including grace notes.

Be sure the application is in [Select Mode](#), then select the grace notes you want to edit.

You can select several different grace notes and change all of their properties at once.

To Edit Grace Notes with the Properties Window

- Select the grace notes you want to edit, then [display the Properties Window](#).
- To change how the grace note appears in the notation, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change how the grace note sounds during a performance, select the [Performance](#) tab in the Properties Window and adjust the performance properties.
- Click the Apply button when you are done making changes.

-o-

## Images

### Add and Remove Images

In order to display images, it is necessary for some kind of image-viewing application or component to be installed on your computer. This application must also be capable of being what is known as an OLE server.

The server application does the work of actually displaying a given image, but it does so inside of the Music Score instead of in a separate window. Normally, the Microsoft application, MSPAINT, is included with every Windows operating system which satisfies these requirements for Windows bitmap (BMP) files.

If you insert images that are not bitmap files (Adobe Photoshop images, for example) or have installed other software which is associated with BMP files, it is crucial that the application be able to render the image as an OLE server. If this is not the case, the image will not display in the Music Score.

To add an image

Drag & Drop

Drag a selection of an image from the other application into your score.

Copy & Paste

1. Copy a selection of an image in the other application.
2. Left-Click at the location where you want to insert the image in your score.
3. Paste the selection in your score.

To remove an image

To remove images, simply select them with the mouse and select Edit ►Delete from the menu.

-OR-

Select the image and press the Delete key.

-o-



## Edit an Image

Images that you add to the Music Score can later be edited, if desired.

The program does not perform the actual editing of images - instead, it is up to the server application associated with the image to do the editing.

You can double-click the mouse on the image to perform the default command listed in the menu.

Make appropriate changes to the file in the associated application.

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## Move and Resize an Image

Once an image has been added to your music score, you can move or resize it. Be sure the application is in [Select Mode](#).

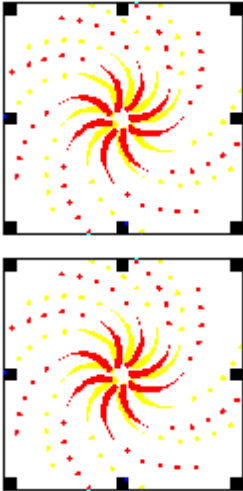
### To Move an Image

- Click - but do not release - the mouse in the center of the image you wish to move.
- As you drag the mouse, a rectangular frame is displayed, indicating where the image will be moved to.
- Release the mouse to move the image to the specified location, or press the Escape key to cancel the operation.

Note: If you hold down the Control key when you release the mouse, the image is copied to the new location instead of moved.

### To Resize an Image

- Select the image you wish to resize. Notice that the 8 "handles" are displayed around the border of the image:



- Place the mouse cursor over one of the handles. Notice how the cursor changes into a double-headed arrow, indicating the resizing
- Click - but do not release - the mouse on one of the handles. As you drag the mouse, a thin border is displayed to show the new size of the image.
- Release the mouse button to perform the resize, or press the Escape key to cancel the operation.

-0-

## Key Signatures

### Add and Remove Key Signatures

There are 15 standard types of keys in the Elements Palette that you can add to your music. The key displays the accidentals (sharps and flats) normally required to define the pitches on the staff. For example, in the key of G Major the sharp on the F indicates that all F notes that do not have an explicit accidental (such as a natural) are to be played as F-sharp.

Keys are always added to the beginning of a measure. When you view the music in Page View (vs. Track View) the key is drawn at the left edge of each system - just as it should be when printed. The notation engine automatically handles correct display of keys on each system as well as "reminder keys" at the end of a system when a key begins at the start of the next system.

Adding key does not change or [transpose](#) the playback of the music. Instead itUsed to makes the notation less cluttered by removing accidentals.

#### To Add a Key

Select the [Key](#) tab in the Elements Palette, then select a key to insert.

Move the cursor over the measure to which you want to add the key. Notice that the cursor changes into a pointing finger and that each measure highlights as you move the cursor over it.



Click the mouse to add the key at the beginning of the highlighted measure.

Once a key is added to your music you can edit its type, position and appearance.

#### To Remove a Key

To remove a key, simply select it with the mouse and select Edit ▶Delete from the menu.

-OR-

Select the key and press the Delete key.

Note: You cannot remove the first key and you cannot remove the keys that appear at the start of each system. To make it such that keys do not appear at the start of each system, see [Lead Sheet options](#) in the Edit Layout topic..



## Edit Keys with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including keys.

Be sure the application is in [Select Mode](#), then select the key you want to edit.

You can select several different keys and change all of their properties at once.

Note that changing the key does not change or [transpose](#) the playback of the music.

### Edit a Key

- Select the keys you want to edit, then [display the Properties Window](#) .
- To change the type of key or its location in the music, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change general properties of the key, such as its position, visibility and color, select the [General](#) tab in the Properties Window and adjust the general properties.
- Click the Apply button when you are done making changes.

-0-

## Move Keys

Sometimes you may wish to move an existing symbol to a different location.

Although you can certainly achieve the same results by adding a new symbol and deleting the old one, it may be easier to simply move the symbol.

First, be sure the application is in [Select Mode](#).

### Move an Symbol

- Click - but do not release - the mouse on the symbol that you wish to move.
- As you drag the mouse, the music cursor changes to the sameUsed when entering a new symbol from the Elements Palette.
- Align the dashed line with the beat where you want the symbol moved to.
- Release the mouse to move the symbol to the specified location.

-0-

# Lyrics

## Add and Remove Lyrics

You can enter up to 16 separate lyric verses into your music document either beneath a staff, above a staff, or as block text at the end of the piece. You can also enter any number of single or double line chorus (refrain) sections throughout the piece. The program automatically justifies lyrics under notes, spaces hyphens between syllables, and extends extenders over multiple notes. Although you can enter lyrics on staves of any type, using a [Vocal Staff](#) will automatically position articulations, dynamics, and other symbols using established rules of vocal notation.

Once lyrics are added to your music you can edit their text and appearance.

### To Add Lyrics

- Select the [Text/Chords](#) tab in the Elements Palette, then select the button labeled "Lyric". Notice how the Elements Palette resizes to display additional controls. See the topics on [adding verses](#) and [choruses](#) for an explanation the additional controls.
- Move the cursor over the note to which you want to add the lyric. Notice that the cursor changes into a standard text insert cursor and a red dotted line is displayed at the current location in the Music Score.



- Click the mouse either in the staff or below the staff to display a text edit box, then type in text for the new lyric:



- Press the space bar or the Tab key to add the lyric and advance the text box to the next note. You can also press Shift-Tab to move the lyric box to the previous note.
- Press the Return or Escape keys on the keyboard to cancel adding lyrics.

### To Add Hyphens Between Syllables

Syllables should be separated by hyphens.

Type a dash ("-") to add a hyphen to the word and advance the text box to the next note.



If there are one or more notes between the two syllables, continue adding dashes to advance the text box.



### To Add Extender Lines

One-syllable words sung over more than one note or the last syllable of a word sung over more than one note should have an extender line.

Type an underscore ("\_") to add an extender to the word and advance the text box to the next note. Continue adding underscores to continue the extender line over many notes.



### To Remove Lyrics

To remove lyrics, simply select them with the mouse and select Edit ►Delete from the menu.

-OR-

Select the lyrics and press the Delete key.

-OR-

Edit the lyric and give it an empty value.



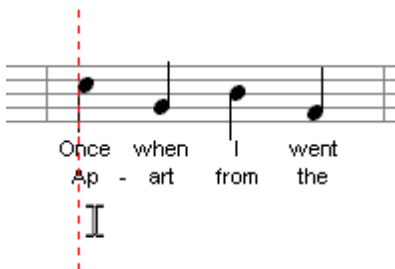


## Add and Remove Multiple Verses

Often a section is repeated, or the entire form is repeated, and each time through different text is sung over the same music. To display lyrics in a multi-line fashion, the lyric must be of type Verse.

### To Add Multiple Verses

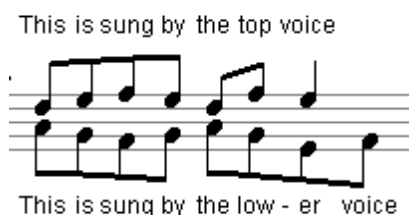
- From the [Elements Palette](#), select Verse from the Lyric Type drop list and either Below Staff or Between Staves from the Lyric Position drop list.
- Below Staff will position the lyrics using the symbol [spacing settings](#) from the system. Between Staves will center the lyrics between the staff that the lyrics are in, and the staff directly below. If you are entering lyrics into a Grand Staff, or a four voice arrangement (such as a hymn or a barbershop quartet), we recommend using the Between Staves setting.
- Add lyrics as discussed in the [Add Remove Lyric](#) topic. [Verse Numbers](#) will automatically be added when a new verse is added to the staff.
- When all the notes on a track have lyrics, pressing the space bar or the Tab key advances the lyric cursor to the next verse.
- You can continue to fill up all 16 verses simply by typing from the keyboard.
- You can also click the lyric cursor below existing lyrics (or in an area that is not currently occupied by a lyric) to add a new verse.



- If the lyrics are too high or too low in the score and they were entered using the Below Staff or the Above Staff setting, you can adjust them by inspecting the system and [editing the symbol spacing](#) or you can edit the entire [layout](#).

### To Add a Verse Above the Staff and a Verse Below the Staff

Some vocal styles have two independent lines of music on one staff, each singing different text. The line sung by the upper voice should go above the staff, and the line sung by lower voice should go below the staff.



- To add the upper line, from the Elements Palette, select Verse from the Lyric Type drop

list and select Above Staff from the Lyric Position drop list.

- Enter the lyrics in the staff.
- To add the lower line, from the Elements Palette, select Verse form the Lyric Type drop list and select Below Staff from the Lyric Position drop list.
- Enter the lyrics in the staff.
- If the lyrics are too high or too low in the score and they were entered using the Below Staff or the Above Staff setting, you can adjust them by inspecting the system and [editing the symbol spacing](#) or you can edit the entire [layout](#)

#### To Remove a Verse

Selecting and deleting all of the lyrics in a verse including the verse number will remove the verse. Subsequent verses will replace the deleted verse. To redo a verse without moving subsequent verses, do not remove the verse number.

#### To Edit a Particular Verse

Be sure the application is in [Insert Mode](#), then select the Lyric button in the Elements Palette (just as if you are entering a new lyric). Select Verse from the Lyric Type drop list.

This is sung by the top voice



This is sung by the low - er voice

Move the lyric cursor over a word in the verse you want to edit, and then click and release the mouse. A text box should appear with the old verse selected.



Type a new verse to replace the old one and hit the Return key. Press the space bar to proceed to the next lyric (as usual).



## Edit Lyrics with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including lyrics.

Be sure the application is in [Select Mode](#), then select the lyrics you want to edit.

Note: If you are finding that you need to move all of the lyrics lower to clear some notes, consider adjusting the [Symbol Spacing Lyrics Below](#) setting for the system instead of adjusting their position.

To Edit Lyrics with the Properties Window

- Select the lyrics you want to edit, then [display the Properties Window](#).
- To edit the lyrics as a text block, select the [Text](#) tab in the Properties Window.
- To change how the lyrics appear in the notation, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change general properties of the lyrics, such as their position, visibility and color, select the [General](#) tab in the Properties Window and adjust the general properties.
- Click the Apply button when you are done making changes.

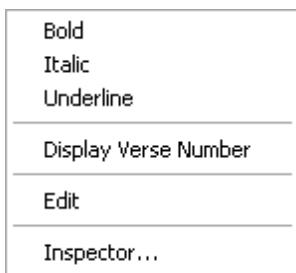
-0-

## Edit Lyrics with the Shortcut Menu

If a lyric is selected you can right-click the mouse to display a special shortcut menu. The menu contains commands for changing lyric properties. For simple operations this method can be faster and easier than using the Properties Window.

### Using the Shortcut Menu

- Be sure the current mode is [Select Mode](#), then select the lyrics you want to edit.
- Right-click the mouse to display the shortcut menu.
- Select an item from the context menu to perform the command.



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## Add Remove Verse Numbers

Verse Numbers are automatically added whenever a new verse is added. However, there may be times when verse numbers need to be added or removed.

### To Add a Verse Number

Be sure the current mode is [Select Mode](#), then select the first lyric in the verse where the verse number should appear.

Right-click the mouse to display the shortcut menu.

Select the item Display Verse Numbers from the context menu to perform the command.

### To Remove a Verse Number

Be sure the current mode is [Select Mode](#), then select the Verse Number and hit the Delete key.

### To Edit a Particular Verse Number

Verse Numbers can be edited just as lyrics are using the [Lyric Properties Window](#) .

-o-

## Add a Chorus or a Refrain

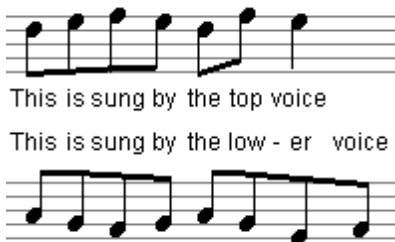
Often in vocal music where the entire form is repeated, there is a section where the same text is sung each time through. This is called a chorus or a refrain. When denoting a chorus or a refrain in a multi-verse setting, the lyric must be of type Chorus.

### To Add a Chorus

1. From the [Elements Palette](#), select Chorus from the Lyric Type drop list and either Below Staff or Between Staves from the Lyric Position drop list.
2. Below Staff will position the lyrics using the symbol [spacing settings](#) from the system. Between Staves will center the lyrics between the staff that the lyrics are in, and the staff directly below. If you are entering lyrics into a Grand Staff, or a four voice arrangement (such as a hymn or a barbershop quartet), we recommend using the Between Staves setting.
3. Add lyrics as discussed in the [Add Remove Lyric](#) topic.

### To Add a Two Line Chorus

Some vocal styles contain multi-line choruses or refrains. Typically one line is sung by the upper two voices and the other line is sung by the lower two voices (call and response). Other times the additional chorus line may be an alternate chorus.



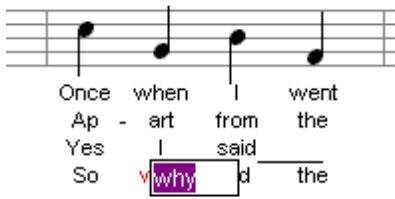
1. To add the upper line, from the Elements Palette, select Chorus from the Lyric Type drop list and select Below Staff from the Lyric Position drop list.
2. Enter the lyrics in the upper staff.
3. To add the lower line, from the Elements Palette, select Chorus from the Lyric Type drop list and select Above Staff from the Lyric Position drop list.
4. Enter the lyrics in the lower staff.
5. If the lyrics are too high or too low in the score and they were entered using the Below Staff or the Above Staff setting, you can adjust them by inspecting the system and [editing the symbol spacing](#) or you can edit the entire [layout](#)

### To Edit a Chorus

1. Be sure the application is in [Insert Mode](#), then select the Lyric button in the Elements Palette (just as if you are entering a new lyric). Select Chorus from the Lyric Type drop list.



2. Move the lyric cursor over a word in the chorus you want to edit, and then click and release the mouse. A text box should appear with the old verse selected.



Type a new chorus to replace the old one and hit the Return key. Press the space bar to proceed to the next lyric (as usual).

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## Block Lyrics

### Add and Remove Block Lyrics

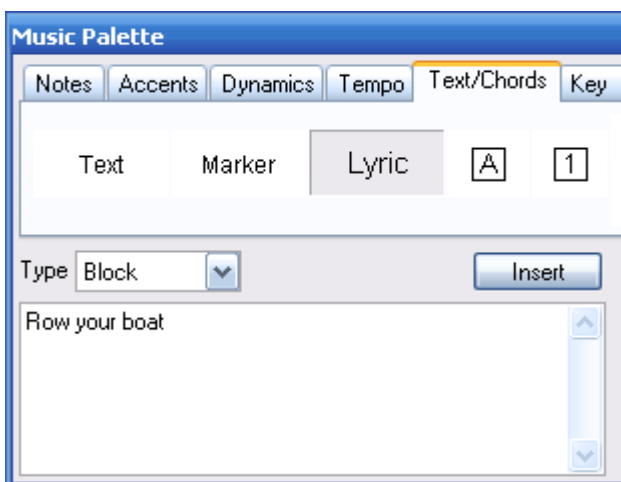
Block lyrics are normally used when there are far too many verses to display beneath the notes.

In cases where there are many verses the first few verses are typically displayed beneath the notes, and the last few verses are displayed as block text at the end of the score.

To Add Block Lyrics

- Select the [Text/Chords](#) tab in the Elements Palette, then select the button labeled "Lyric". Notice how the Elements Palette resizes to display additional controls.
- Check the Block text box to display a large text entry field.
- Enter text for the verse into the field exactly how you want it to appear in the block.
- Press the Insert button in the Elements Palette to insert the block text at the end of the score.

Note: Additional lyric blocks always appears after existing text blocks.



To Remove Block Lyrics

To remove block lyrics, simply select it with the mouse and select Edit ►Delete from the menu.

-OR-

Select the accents and press the Delete key.

-o-

## Edit Block Lyrics with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including lyric blocks.

Be sure the application is in [Select Mode](#), then select the lyrics you want to edit.

Inspecting lyric block is mainly used for controlling how many blocks appear per line.

### Edit a Lyric Block

- Select the lyric block you want to edit, then [display the Properties Window](#) .
- To change the text in the block lyric, alignment, or number of blocks per line, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change general properties of the block lyric, such as its position, visibility and color, select the [General](#) tab in the Properties Window and adjust the general properties.
- Click the Apply button when you are done making changes.

-0-

# Meters

## Add and Remove Meters

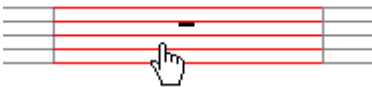
Meters define how many beats there are in each measure (the top number) and which note value gets the beat (the bottom number). For example, 4/4 means there are 4 beats to a measure and the quarter note gets the beat. When you add or remove meters, all measures on all staves are effected by the new meter.

Meters are always added to the beginning of a measure. When you view the music in Page View (vs. Track View) the meter is drawn at the left edge of each system - just as it should be when printed. The notation engine automatically handles correct display of meters on each system as well as "reminder meters" at the end of a system when a meter begins at the start of the next system.

Once a meter is added to your music you can edit its type, position and appearance.

### To Add a Meter

Select the [Meter](#) tab in the Elements Palette, then select one of the meters.



Move the cursor over the measure to which you want to add the meter. Notice that the cursor changes into a pointing finger and that each measure highlights as you move the cursor over it.



Click the mouse to add the meter at the beginning of the highlighted measure.

If a meter already exists in the measure, it will change to the one you have selected.

### To Remove a Meter

To remove a meter, simply select it with the mouse and select Edit ►Delete from the menu.

-OR-

Select the meter and press the Delete key.

Note: You cannot remove the first meter, you can only edit it.

-0-

## Edit Meters with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including meters.

Be sure the application is in [Select Mode](#), then select the meter you want to edit.

You can select several different meters and change all of their properties at once.

### Edit a Meter

- Select the meters you want to edit, then [display the Properties Window](#) .
- To change the type of meter or its location in the music, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change general properties of the key, such as its position, visibility and color, select the [General](#) tab in the Properties Window and adjust the general properties.
- Click the Apply button when you are done making changes.

-o-

# Octavas

## Add and Remove Octavas

Octavas are instructions to the performer to play the notes higher or lower than the written values (by octaves). Octavas are typically used to make the music easier to read since the performer doesn't have to read numerous clef changes or numerous ledger lines above or below the staff.

Octavas have a start time as well as a duration during which they are active. During a performance, octavas cause the performed music to transpose (just as a real player would do) so you can hear how the music is supposed to sound.

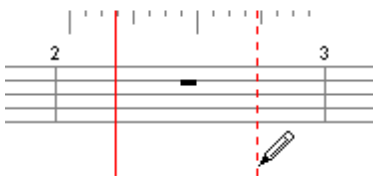
### To Add an Octava

Select the [Clef](#) tab in the Elements Palette, then select one of the octavas.

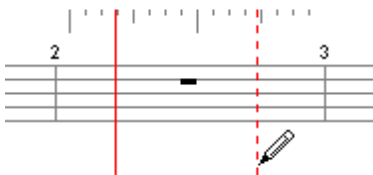
Move the cursor to the location in a staff where you wish to add the octava. Notice that the cursor changes into a pencil and a dotted line is displayed at the current location in the Music Score.

Align the dashed line with the beat on the [Music Ruler](#) where you want the octava to begin, then click the mouse.

This is the "anchor position" for the octava and typically represents the start point for the octava.



As you move the mouse a solid line remains at the anchor position, while a second dotted line tracks your mouse movements.



Click the mouse again to define the end point of the octava.

Note: You can also click and drag the mouse to define both the start and stop positions.

### Types of Octavas

8va Transpose notes up by one octave.

8vb Transpose notes down by one octave.

15ma Transpose notes up by 2 octaves.

To Remove an Octava

To remove an octava, simply select it with the mouse and select Edit ▶Delete from the menu.

-OR-

Select the octava and press the Delete key.

-o-

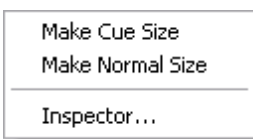


## Edit Octavas with the Shortcut Menu

If a symbol is selected you can right-click the mouse to display a special shortcut menu. The menu contains commands for changing symbol properties. For simple operations this method can be faster and easier than using the Properties Window.

### Using the Shortcut Menu

1. Be sure the current mode is [Select Mode](#), then select the symbols you want to edit.
2. Right-click the mouse to display the shortcut menu.
3. Select an item from the context menu to perform the command.



-0-

## Move Octavas

Sometimes you may wish to move an existing octava marking to a different location.

Although you can certainly achieve the same results by adding a new octava and deleting the old one, it may be easier to simply move the octava.

The move operation changes only the start time of the octava. The octava still retains its original duration.

First, be sure the application is in [Select Mode](#).

### Move an Octava

- Click - but do not release - the mouse on the octava that you wish to move.
- As you drag the mouse, the music cursor changes to the sameUsed when entering a new octava from the Elements Palette.
- Align the dashed line with the beat where you want the octava moved to.
- Release the mouse to move the symbol to the specified location.

-0-

# Ornaments

## Add and Remove Ornaments

Ornaments are symbols which embellish notes. There are all sorts of ornaments which instruct the player to trill, twist and vary the main note in different ways.

There are essentially 3 classes of ornaments (listed below) - all ornaments within each group are added to the music in the same way:

» [\\_Single-Note Ornaments](#)

» [\\_Glissando](#)

» [\\_Arpeggio](#)

Once an ornament is added to your music you can edit its position and appearance properties.

### To Add an Ornament to a Note

Select the [Ornaments](#) tab in the Elements Palette, then select one of the single-note ornaments (e.g. trill).

» Move the cursor over the note to which you want to add the ornament. Notice that the cursor changes into a bullseye and the note highlights when the cursor is over the note.



Click the mouse to add the ornament to the note.

### To Add an Arpeggio

Select the [Ornaments](#) tab in the Elements Palette, then select one of the arpeggios.

Move the cursor over a chord to which you want to add the arpeggio. Notice that the cursor changes into a bullseye and the chord highlights when the cursor is over the note.



Click the mouse to add the arpeggio to the chord.

### To Remove Ornaments

To remove ornaments, simply select them with the mouse and select Edit ▶Delete from the menu.

-OR-


Select the ornaments and press the Delete key.

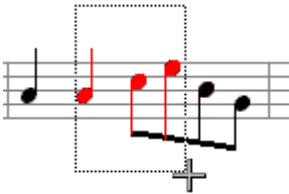
Note that removing an accidental effectively changes the pitch other accidentals may be re-added to properly represent the note in the current clef and key.

To Add an Ornament to Several Notes

Select the [Ornaments](#) tab in the Elements Palette, then select one of the single-note ornaments (e.g. trill).

Click - but do not release - the mouse in an empty area that is not over a note.

 Drag the mouse to sweep out a rectangular area. Notice that notes that are included in the selection area are highlighted.



Release the mouse to add ornaments of the specified type to all the selected notes.

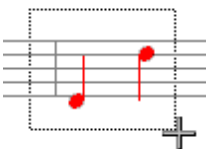
To Add an Glissando

Select the [Ornaments](#) tab in the Elements Palette, then select the glissando symbol.

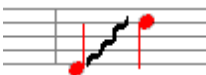
Click - but do not release - the mouse in an empty area that is not over a note.

Drag the mouse to sweep out a rectangular area. Notice that notes that are included in the selection area are highlighted.

Using the selection rectangle, select two adjacent notes that you want the glissando to go between.



Release the mouse to add a glissando between the two selected notes.



-OR-

Select two adjacent notes you want a glissando between.

Use the shortcut menu to add a glissando to the selected notes.

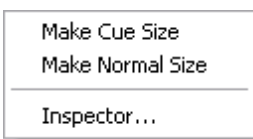
-O-

## Edit Ornaments with the Shortcut Menu

If a symbol is selected you can right-click the mouse to display a special shortcut menu. The menu contains commands for changing symbol properties. For simple operations this method can be faster and easier than using the Properties Window.

### Using the Shortcut Menu

1. Be sure the current mode is [Select Mode](#), then select the symbols you want to edit.
2. Right-click the mouse to display the shortcut menu.
3. Select an item from the context menu to perform the command.



-0-

## Pedal Marks

### Add and Remove Pedal Marks

Pedal markings are instructions to the performer to press and release the sustain pedal. On a piano, for example, this allows notes to continue to sound, even after the note has finished playing.

Pedal markings are generally associated with a particular staff. During a performance, MIDI pedal controller messages added to the performance correspond to the various pedal markings.

Once a pedal marking is added to your music you can edit its appearance and performance properties.

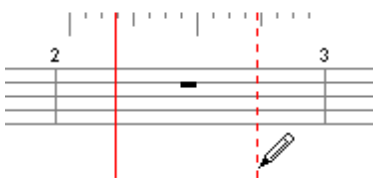
#### To Add a Pedal Marking

Select the [Text/Chords](#) tab in the Elements Palette, then select the pedal marking symbol. Notice how the Elements Palette resizes to display additional controls.

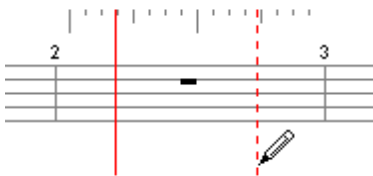
Select a pedal marking style from the Pedal Style drop-down list.

Move the cursor to the location in a staff where you wish to add the pedal marking. Notice that the cursor changes into a pencil and a dotted line is displayed at the current location in the Music Score.

Align the dashed line with the beat on the [Music Ruler](#) where you want the pedal to begin, then click the mouse - this is the "anchor position" for the pedal.



As you move the mouse a solid line remains at the anchor position, while a second dotted line tracks your mouse movements.



Click the mouse again to define the end point of the pedal.

Note: You can also click and drag the mouse to define both the start and stop positions.

#### To Remove a Pedal Marking

To remove a pedal marking, simply select it with the mouse and select Edit ▶Delete from the menu.

-OR-

Select the pedal and press the Delete key.

-O-



## Edit Pedal Marks with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including pedals.

Be sure the application is in [Select Mode](#), then select the pedal you want to edit.

You can select several different pedals and change all of their properties at once.

Note: If you are finding that you need to move all of the pedal markings lower to clear some notes, consider adjusting the [Symbol Spacing Below](#) setting for the system instead of adjusting their position.

### Edit a Pedal

1. Select the pedals you want to edit, then [display the Properties Window](#) .
2. To change the start time or its MIDI data, select the [Performance](#) tab in the Properties Window and adjust the performance properties.
3. To change general properties of the pedal, such as its position, visibility and color, select the [General](#) tab in the Properties Window and adjust the general properties.
4. To perform an action on the pedal, such as moving it, select the [Actions](#) tab in the Properties Window.
5. Click the Apply button when you are done making changes.

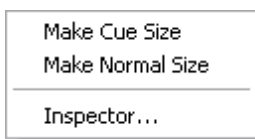
-0-

## Edit Pedal Marks with the Shortcut Menu

If a symbol is selected you can right-click the mouse to display a special shortcut menu. The menu contains commands for changing symbol properties. For simple operations this method can be faster and easier than using the Properties Window.

### Using the Shortcut Menu

1. Be sure the current mode is [Select Mode](#), then select the symbols you want to edit.
2. Right-click the mouse to display the shortcut menu.
3. Select an item from the context menu to perform the command.



-0-

## Move Pedal Marks

Sometimes you may wish to move an existing pedal marking to a different location.

Although you can certainly achieve the same results by adding a new pedal and deleting the old one, or by editing the start time of the selected pedal, it may be easier to simply move the pedal marking.

The move operation changes only the start time of the pedal - the marking still retains its original durations.

First, be sure the application is in [Select Mode](#).

### Move an Symbol

- Click - but do not release - the mouse on the symbol that you wish to move.
- As you drag the mouse, the music cursor changes to the sameUsed when entering a new symbol from the Elements Palette.
- Align the dashed line with the beat where you want the symbol moved to.
- Release the mouse to move the symbol to the specified location.

### Move a Pedal Marking

- Click - but do not release - the mouse on the pedal marking you wish to move.
- As you drag the mouse, the music cursor changes to the sameUsed when entering a new pedal from the Elements Palette.
- Align the dashed line with the beat where you want the pedal moved to.
- Release the mouse to move the marking to the specified location.

-0-

# Repeats

## Add and Remove Repeats

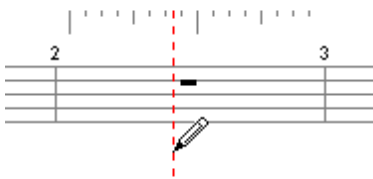
Repeats are used to control the flow of your music. The [repeat bars](#), endings and [expressions](#) direct the performer to repeat certain sections of your music and/or jump to other specially marked sections during a performance. Often, repeats are used to reduce the amount of music that is written on a page.

Repeats are added to particular staff, although they affect the performance of the entire piece of music. During a performance, the sequencer determines where to repeat and where to jump to based on the types of repeat expressions that are in the music.

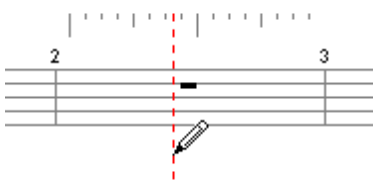
Once a repeat is added to your music you can edit its position and appearance properties.

To Add a Repeat Sign or Expression

Select the [Repeats](#) tab in the Elements Palette, then select one of the repeat signs.



Move the cursor over the staff where you wish to add the repeat. Notice that the cursor changes into a pencil and a dotted line is displayed at the current location in the Music Score.



Align the dashed line with the beat on the [Music Ruler](#) where you want the repeat.

Click the mouse to add the repeat at the specified location in the staff.

Note: To add a repeat end bracket at the very end of the piece, insert the repeat on the last div mark of the Music Ruler. This is a special way to give the repeat a time that is outside the measure. If you really want a repeat bracket with a time of the last div, see the [Repeat Properties Window](#) topic to change the time of the repeat.

To Remove Repeats

To remove repeats, simply select them with the mouse and select Edit ▶ Delete from the menu.

-OR-

Select the repeats and press the Delete key.

#### To Add a Repeat Ending

Select the [Repeats](#) tab in the Elements Palette, then select the repeat ending symbol.

Move the cursor over the staff where you wish to add the ending. Notice that the cursor changes into a pencil and a dotted line is displayed at the current location in the Music Score.

Align the dashed line with the beat where you want the repeat. You should normally place a repeat ending at the start of the measure.

Click the mouse to insert the repeat ending at the specified location in the staff. Notice that the ending is automatically positioned to cover the entire measure.

Note: In general, the repeat is automatically sized so that it continues until the next end repeat sign. If no such repeat can be found, a duration of one measure is used.

-O-

## Edit Repeats with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including repeats.

Be sure the application is in [Select Mode](#), then select the repeats you want to edit.

You can select several different repeat markings and change all of their properties at once.

### Edit Repeats

1. Select the repeats you want to edit, then [display the Properties Window](#) .
2. To change how the repeat appears in the notation, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
3. To change performance properties of the repeat, such as time location, and how many times to repeat, select the [Performance](#) tab in the Properties Window and adjust the performance properties.
4. To change general properties of the repeat, such as its position, visibility and color, select the [General](#) tab in the Properties Window and adjust the general properties.
5. Click the Apply button when you are done making changes.

-0-

## Move a Repeat

Sometimes you may wish to move an existing repeat to a different location. Although you can certainly achieve the same results by adding a new repeat and deleting the old one, it may be easier to simply move the repeat marking. First, be sure the application is in [Select Mode](#).

### Move a Pedal Marking

- Click - but do not release - the mouse on the repeat marking you wish to move.
- Use As you drag the mouse, the music cursor changes to the sameUsed when entering a new repeat from the Elements Palette.
- Align the dashed line with the beat where you want the repeat moved to.
- Release the mouse to move the marking to the specified location.

-o-

## Notes

### Add and Remove Notes

There are several different ways to add notes to your music. The most straightforward approach is to use the mouse to add notes from the Elements Palette (you can also [record](#) pitches directly into your score).

Notes are always added to measures in a particular staff. When you enter a new note, the notation engine automatically determines stem direction, spacing, and so forth. If necessary, the measure is widened to accommodate the new note. If you add a note that will not musically fit into the time span of a measure, the note is tied to a complementary note in the next measure.

There are dozens of other parameters that affect how a given note is displayed: key signature, measure width, layout properties, part, and so on. Once a note is added to your music you can edit its appearance and performance properties, slur and beam notes together and perform dozens of other actions on groups of notes to get the music looking just right.

#### To Add a Note

Select the [Notes](#) tab in the Elements Palette, then select one of the notes.

Select the voice for the note from the Voice drop list on the [Notation Bar](#) if you are going to be notating more than [two lines of music on a single staff](#) .



Move the cursor over the measure to which you want to add the note. Notice the feedback provided by the note cursor:



- The [Music Ruler](#) is drawn around the measure to indicate the beats and subdivisions within the measure.

- The dotted red line shows the time location where the note is to be added.

- The small highlighted dot shows the pitch for the new note.

- 1.

1. Align the dashed line with the beat on the Music Ruler where you want the note, then



- align the dot with the desired pitch.
- 2.
2. Click the mouse to add the note.

#### To Remove a Note

To remove a note, simply select it with the mouse and select Edit ▶Delete from the menu.

-OR-

Select the note and press the Delete key.

-O-

## Edit Notes with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including notes.

Be sure the application is in [Select Mode](#), then select the notes you want to edit.

You can select several different notes and change all of their properties at once.

### Edit Notes

1. Select the notes you want to edit, then [display the Properties Window](#) .
2. To change how the note appears in the notation, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
3. To change how the note sounds during a performance, select the [Performance](#) tab in the Properties Window and adjust the performance properties.
4. Click the Apply button when you are done making changes.

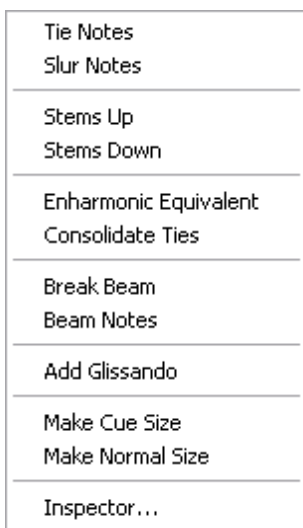
-0-

## Edit Notes with the Shortcut Menu

If a note is selected you can right-click the mouse to display a special shortcut menu. The menu contains commands for changing note properties. For simple operations this method can be faster and easier than using the Properties Window.

### Using the Shortcut Menu

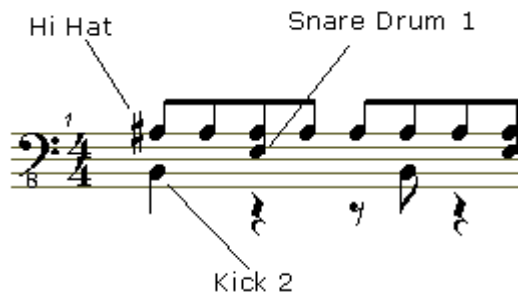
1. Be sure the current mode is [Select Mode](#), then select the notes you want to edit.
2. Right-click the mouse to display the shortcut menu.
3. Select an item from the context menu to perform the command.



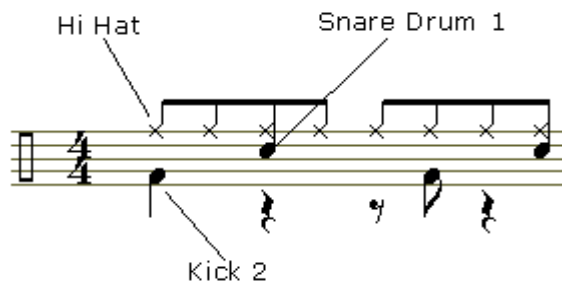
-0-

## Notes and the Drum Staff

Most MIDI devices reserve a single MIDI channel for their indefinite pitched percussion sounds (snares, kicks, toms, cymbals, ect). Each percussion instrument is then assigned to an individual pitch. For example, to get your GM device to play a Kick 2 sound, you would send it MIDI note number 35 (the B two octaves below middle C) on MIDI channel 10. To get the Snare 1 sound, you would send it MIDI note number 38 (the D two octaves below middle C) on MIDI channel 10. Below is an example of what a percussion part with snare, kick, and hi hat would look like on a regular staff:

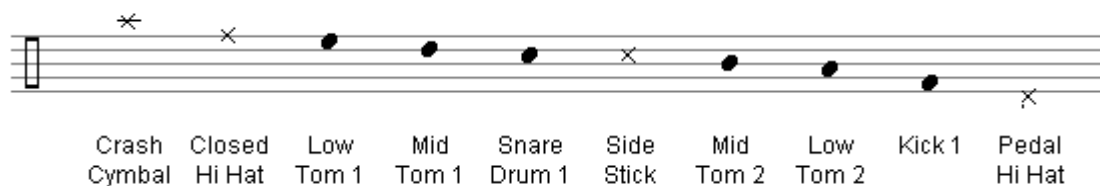


However, when notating indefinite pitched instruments, a special staff, the Drum Staff, should be used instead of a regular staff. The Drum Staff allows you to [assign](#) any staff space to any indefinite pitched instrument. Below is the same percussion example notated on a Drum Staff:



### Adding Notes on a Drum Staff using the Elements Palette

When you add notes onto a drum staff using the mouse, the percussion instrument is determined by two things; where in the staff the note is dropped, and the note shape selected in the Elements Palette. You may want to set the status bar to update using [drum names](#) instead of note names when entering onto a drum staff. You can do this by [inspecting](#) the performance of a note and right clicking on the Pitch control. Below are some common note shape/staff locations and their default mappings for percussion instruments:




For example, to add a Crash Cymbal you would select the notehead style X from the Elements Palette and enter the note on the first line above the top line of the drum staff. To

add a Kick Drum you would select the notehead style Normal from the Elements Palette and enter the note on the first space above the bottom line of the drum staff.

### Adding flams, ruffs, and rolls

Many special notational elements may be achieved by combining percussion notes with various articulation symbols. Click on an area of the score below to see what symbols are involved in notating flams, ruffs, and rolls.



The image shows a single musical staff with five notes. The first note is a quarter note with an accent (>) and a vertical line below it, labeled 'flam (open)'. The second note is a quarter note with an accent (>) and a horizontal line below it, labeled 'flam (closed)'. The third note is a quarter note with an accent (>) and a horizontal line below it, labeled 'ruff (three-stroke)'. The fourth note is a quarter note with an accent (>) and a horizontal line below it, labeled 'ruff (four-stroke)'. The fifth note is a half note with an accent (>) and a wavy line above it, labeled 'roll'.

flam    flam    ruff    ruff    roll  
(open) (closed) (three-stroke) (four-stroke)

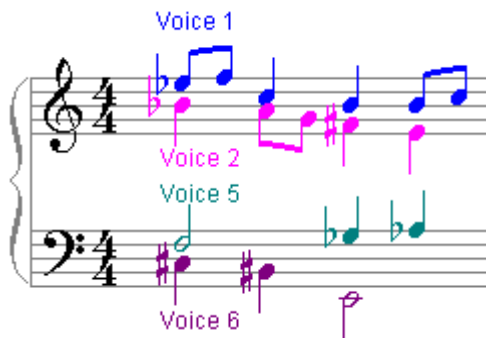
-0-

## Notes and the Grand Staff

The Grand Staff is a special staff used for notating keyboard music. The staff consists of two parts, an upper staff and a lower staff. When adding notes onto a Grand Staff with the mouse, notes entered above "middle C" will be placed in the upper staff, and those below "middle C" in the lower staff. If notes from the upper staff need to go into the lower staff's territory, or visa-versa, then the additional step of specifying a voice needs to be done.



When specifying a voice from the [Notation Bar](#), voices 1-4 will be placed in the upper staff, and 5-8 in the lower staff. A very common scenario is to have two independent voices on each part of the staff. To do this, use voices 1 and 2 for the upper staff, and voices 5 and 6 for the lower staff.



When only part of the measure has independent voices, you can either [hide](#) or delete unwanted rests.

-0-

## Move Notes

Sometimes you may wish to move existing notes to a different location.

This technique is especially useful when you want to move large groups of notes while preserving their time and pitch locations relative to one another.

First, be sure the application is in [Select Mode](#).

### Move Notes

- Select the notes you wish to move.
- Click - but do not release - the mouse on one of the selected notes.
- As you drag the mouse, the music cursor changes to the same used when entering a new note from the Elements Palette.
- Align the dashed line with the beat where you want the note, then align the dot with the desired pitch.

When you move a group of notes, the first note serves as the "guide note" - all other notes are placed relative to the guide note, just as they were originally.

- Release the mouse to move the notes to the specified location.

Note: If you hold the Control key down when you release the mouse, the notes are copied to the new location instead of moved.

## Rests

### Add and Remove Rests

The application automatically adds rests around notes that are added to the score. Usually the default rests are what you want, but sometimes it is desirable to change the rests. You can enter rests in the Music Score similarly as you enter notes.

You can also think of rests as "anti-notes" - when a rest is inserted in the Music Score the notation automatically fills the remaining time of the measure with rests of the required value (just like a note) but a rest is entered instead of a note.

You can edit the position and appearance of rests using the Properties Window.

#### To Add a Rest

Select the [Notes](#) tab in the Elements Palette, then select one of the notes. Notice how the Elements Palette resizes to display additional controls.

In the Elements Palette, check the box labeled Display Rests. Notice how all the notes in the Elements Palette change to their rest equivalents. Select a different rest if desired.



Move the cursor over the measure to which you want to add the rest. Notice the feedback provided by the rest cursor:



- The [Music Ruler](#) is drawn around the measure to indicate the beats and subdivisions within the measure.

- The dotted red line shows the time location where the rest is to be added.

Align the dashed line with the beat on the Music Ruler where you want the rest, then click the mouse to add the rest.

#### To Remove a Rest



To remove a rest, simply select it with the mouse and select Edit ▶Delete from the menu.

-OR-

Select the rest and press the Delete key.

Note: Whenever you add notes or rests to a measure, the notation engine fills in the space from the insert point to the end of the measure with appropriate rests.

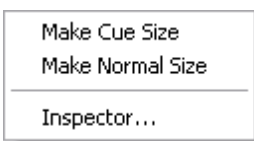
-O-

## Edit Rests with the Shortcut Menu

If a symbol is selected you can right-click the mouse to display a special shortcut menu. The menu contains commands for changing symbol properties. For simple operations this method can be faster and easier than using the Properties Window.

### Using the Shortcut Menu

- Be sure the current mode is [Select Mode](#), then select the symbols you want to edit.
- Right-click the mouse to display the shortcut menu.
- Select an item from the context menu to perform the command.



-0-

# Slurs

## Add and Remove Slurs

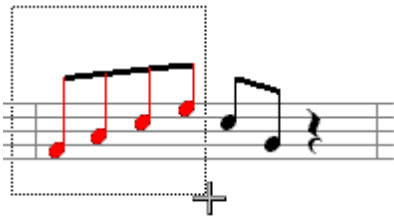
Slurs are markings that instruct the performer to play the specified notes smoother. Slurs are always displayed above or below the notes they affect.

Once a slur is added to your music you can edit its position and appearance properties.

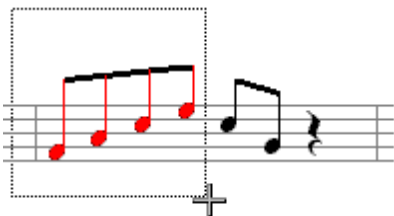
To Add a Slur

Select the [Notes](#) tab in the Elements Palette, then select the slur symbol.

Click - but do not release - the mouse in an empty area that is not over a note.



Drag the mouse to sweep out a rectangular area. Notice that notes that are included in the selection area are highlighted.



Select adjacent notes that you wish to slur together, then release the mouse to add the slur.



-OR-

Select the notes that you want to slur together - the notes must be adjacent.

Use the shortcut menu to add a slur to the selected notes.

To Remove a Slur

To remove a slur, simply select it with the mouse and select Edit ▶Delete from the menu.

-OR-

Select the slurs and press the Delete key.

-O-

## Edit Slurs with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including slurs.

Be sure the application is in [Select Mode](#), then select the slurs you want to edit.

You can select several different slurs and change all of their properties at once.

### Edit Slurs

- Select the slurs you want to edit, then [display the Properties Window](#) .
- To change how the slur appears in the notation, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change general properties of the slur, such as its position, visibility and color, select the [General](#) tab in the Properties Window and adjust the general properties.
- Click the Apply button when you are done making changes.

-0-

# Tempos

## Add and Remove Tempos

Tempo markings vary the tempo of a performance, and can be divided into 3 distinct groups: tempo [expressions](#) are used to set a particular tempo, [changing](#) tempo markings - such as *accelerandos* and *ritardandos* - are instructions to slowly change from one tempo to another, and [pauses](#) are instructions to pause the performance briefly before continuing.

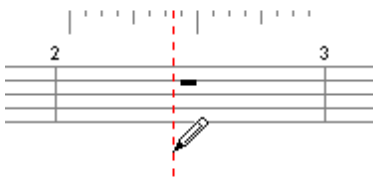
Although tempo markings are displayed above a particular staff, they affect the performance of the entire piece. During a performance, the tempo is automatically changed according to the various tempo markings.

Once a tempo marking is added to your music you can edit its appearance and performance properties.

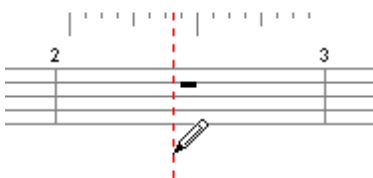
### To Add a Tempo Expression

Select the [Tempo](#) tab in the Elements Palette, then select one of the tempo expressions. Notice how the Elements Palette resizes to display additional controls.

In the Elements Palette, type in text for the tempo expression if desired (e.g. "Not too fast"). You can also select the small button next to the text field to display a list of standard tempo expressions such as *Andante*, *Adagio* and so on.



Move the cursor to the location in a staff where you wish to add the tempo. Notice that the cursor changes into a pencil and a dotted line is displayed at the current location in the Music Score.



Align the dashed line with the beat where you want the tempo expression.

Click the mouse to add the tempo at the specified location.

### To Remove a Tempo

To remove a tempo, simply select it with the mouse and select **Edit** ▶ **Delete** from the menu.

-OR-

Select the tempos and press the Delete key.

#### To Add a Changing Tempo or a Pause

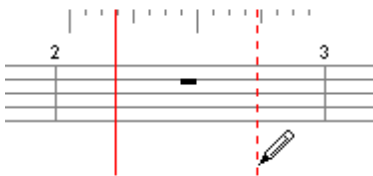
Select the [Tempo](#) tab in the Elements Palette, then select one of the changing tempos or a pause.

Move the cursor to the location in a staff where you wish to add the tempo. Notice that the cursor changes into a pencil and a dotted line is displayed at the current location in the Music Score.

Align the dashed line with the beat where you want the tempo to begin, then click the mouse.

This is the "anchor position" for the tempo and typically represents the start point for a changing tempo such as an accelerando.

▶ As you move the mouse a solid line remains at the anchor position, while a second dotted line tracks your mouse movements.



Click the mouse again to define the end point of the tempo.

Note: You can also click and drag the mouse to define both the start and stop positions.

#### To Add a Fermata or a Comma (Breath Mark)

Select the [Tempo](#) tab in the Elements Palette for the Fermata, or the [Accents](#) tab for the Comma.

Move the cursor over the note or rest to which you want to add the fermata or comma. Notice that the cursor changes into a bullseye and the note highlights when the cursor is over the note.

Click the mouse to add the fermata or comma to the note.

-o-





## Edit Tempos with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including tempos.

Be sure the application is in [Select Mode](#), then select the tempo you want to edit.

You can select several different dynamics and change all of their properties at once.

Note: If you are finding that you need to move all of the tempos higher to clear some notes, consider adjusting the [Symbol Spacing Above](#) setting for the system instead of adjusting their position.

### Edit a Tempo

- Select the tempos you want to edit, then [display the Properties Window](#) .
- To change how the tempo appears in the notation, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change how the dynamic sounds during a performance, select the [Performance](#) tab in the Properties Window and adjust the performance properties.
- To perform an action, such as move, select the [Actions](#) tab in the Properties Window.
- Click the Apply button when you are done making changes.

-0-

## Move a Tempo

Sometimes you may wish to move an existing tempo to a different location. Although you can certainly achieve the same results by adding a new tempo and removing the old, or by editing the start time of the selected tempo, it may be easier to simply move the tempo.

First, be sure the application is in [Select Mode](#).

### Move a Tempo

- Click - but do not release - the mouse on the key you wish to move.
- Use As you drag the mouse, the music cursor changes to the sameUsed when entering a new tempo from the Elements Palette.
- Position the cursor over the measure where you want the tempo moved to, then release the mouse to move the tempo.

Note: If you hold the Control key down when you release the mouse, the tempo is copied to the new location instead of moved.

-0-

# Text

## Add and Remove Text

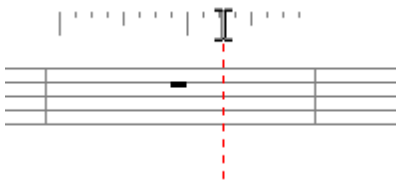
You can add text expressions anywhere in your music. In general, text expressions are simple messages to a performer for reminders about how a given section should be played. You can also add special title page text that is used for the song title, composer and so forth - for details, click [here](#).

Although text symbols have no performance value, rehearsal markings and text act as reference points within a document. When you press the Previous/Next buttons in the transport controls, the document jumps to the previous/next marker in the music.

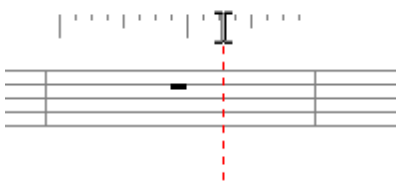
Text is always added to a particular staff. Once text is added to your music you can edit its appearance.

### To Add Text

Select the [Text/Chords](#) tab in the Elements Palette, then select one of the text symbols. This includes the Text and Marker symbols as well as the two rehearsal markings.



Move the cursor over the staff where you want to add the text. Notice that the cursor changes into a standard text insert cursor and a red dotted line is displayed at the current location in the Music Score.



Click the mouse to display a text edit box, then type in text:



Clicking above the staff will add the text above the staff. Clicking below the staff will add the text below the staff. On a Grand Staff, clicking between the staves will add the text between the staves. Note that Markers and Rehearsal Markings are always above the top most staff.

Press the Return key to add the text, or the Escape key to abort the operation.

#### To Remove Text

To remove text, simply select it with the mouse and select Edit ▶Delete from the menu.

-OR-

Select the text and press the Delete key.

#### Rehearsal Markings

Rehearsal numbers and letters are commonly used by performers to mark certain sections of the music for rehearsals ("Let's start at letter D").

Typically, rehearsal markings are single letters or numbers (A, B, C, S1, S2, etc.)

When you add rehearsal markings a box is automatically displayed around the text.

-0-

## Add and Remove Title Page Text

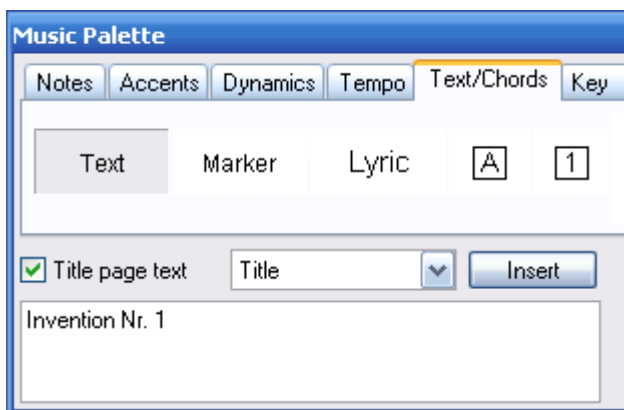
Title page text is displayed on the first page (the title page) and includes the song title, subtitle, composer, arranger, text author, a dedication and copyright information.

All title page text is automatically formatted and positioned according to what title page style is selected in the [layout](#). For example, with the "classic" style selected, the song title is displayed in a larger font and centered at the top of the page, the copyright information is centered in small type along the bottom edge of the first page, and so forth.

Once you've added title page text, you can edit its position and appearance properties - just like normal text.

### To Add Title Page Text

1. Select the [Text/Chords](#) tab in the Elements Palette, then select the button labeled "Text". Notice how the Elements Palette resizes to display additional controls.
2. Check the Title page text box to display additional controls, including a drop-down list and a large text entry field.
3. Select the type of title text you wish to add from the drop-down list, then enter text for the symbol into the text entry field.
4. Press the Insert button in the Elements Palette to insert the text at the end of the score.



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## Edit Text with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including text.

Be sure the application is in [Select Mode](#), then select the text you want to edit.

You can select several different text symbols and change all of their properties at once.

Note: If you are finding that you need to move all of the text higher to clear some notes, consider adjusting the [Symbol Spacing Above](#) setting for the system instead of adjusting their position.

### Edit Text

- Select the text you want to edit, then [display the Properties Window](#) .
- To change the text formatting and size, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change general properties of the text, such as its position, visibility and color, select the [General](#) tab in the Properties Window and adjust the general properties.
- To perform an action, such as move, select the [Actions](#) tab in the Properties Window.
- Click the Apply button when you are done making changes.

## Edit Text with the Shortcut Menu

If text is selected you can right-click the mouse to display a special shortcut menu. The menu contains commands for changing text properties. For simple operations this method can be faster and easier than using the Properties Window.

### Using the Shortcut Menu

- Be sure the current mode is [Select Mode](#), then select the lyrics you want to edit.
- Right-click the mouse to display the shortcut menu.
- Select an item from the context menu to perform the command.



-0-

## Move Text

Sometimes you may wish to move an existing text symbol to a different location. Although you can certainly achieve the same results by adding new text and removing the old, it may be easier to simply move the text. First, be sure the application is in [Select Mode](#).

### Move Text

- Click - but do not release - the mouse on the text you wish to move.
- Use As you drag the mouse, the music cursor changes to the sameUsed when entering new text from the Elements Palette.
- Align the dashed line with the beat where you want the text moved to.
- Release the mouse to move the text to the specified location.

-o-

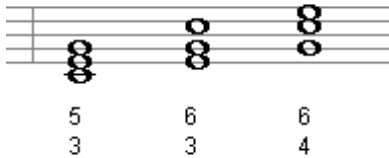


## Multi-Line Text

Often, copyrights and other text symbols have multiple lines. You can achieve this by editing the text symbol with the Properties Window. Below is an example of a multiple line copyright text symbol and some multiple line general text symbols used as figured bass.



Music and Lyrics Copyright © 1999 My Music Company  
 English Lyrics Copyright © 1927 My Music Company  
 This music is copyright. Photocopying is illegal.  
 All Performance Rights Restricted.



### To Enter Multi-Line Text

- Select the text you want to edit, then [display the Properties Window](#).
- Select the [Appearance](#) tab in the Properties Window.
- Place your cursor at the end of the text in the edit box and hit the Enter key. The cursor will now be at a new line.
- Type in the new line of text. Repeat steps 3 and 4 for each new line.
- Click the Apply button when you are done making changes.

Note: You can select a copyright symbol © from inside the text edit box, right click, and select Copy. Then you can right click Paste it on a new line or in a different text edit box.

## Ties

### Add and Remove Ties

Ties are notational markings which visually break a single note into two or more notes without affecting the performance. The tied notes are grouped together within the tie marking and have a total duration equal to the original note. Tied notes are typically used when notes do not logically fit within a measure.

When you tie notes together they appear as several different notes, but they are performed as a single note with a longer duration. Ties are always displayed above or below the notes they affect.

Once a tie is added to your music you can edit its position and appearance properties.

To Add a Tie

Select the [Notes](#) tab in the Elements Palette, then select the tie symbol.

Click - but do not release - the mouse in an empty area that is not over a note.



Drag the mouse to sweep out a rectangular area. Notice that notes that are included in the selection area are highlighted.



Select adjacent notes with the same pitch that you wish to tie together, then release the mouse to add the tie.



-OR-

Select the notes that you want to tie together - the notes must be adjacent and have the same pitch.

Use the shortcut menu to add a tie to the selected notes.

To Remove a Tie

To remove a tie, simply select it with the mouse and select Edit ►Delete from the menu.

-OR-

Select the ties and press the Delete key.

-0-

## Edit Ties with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including ties.

Be sure the application is in [Select Mode](#), then select the ties you want to edit.

You can select several different ties and change all of their properties at once.

### Edit Ties

- Select the ties you want to edit, then [display the Properties Window](#) .
- To change how the slur appears in the notation, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change general properties of the tie, such as its position, visibility and color, select the [General](#) tab in the Properties Window and adjust the general properties.
- Click the Apply button when you are done making changes.

-0-

# Tuplets

## Add and Remove Tuplets

A [tuplet](#) is a group of notes that form an irregular subdivision of the beat. Triplets (the most common being 3 8ths in a beat), quintuplet (5 divisions of a beat), and sextuplet (6 divisions of a beat) are some examples.

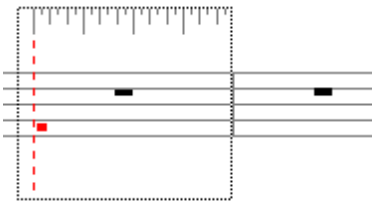
Adding tuplets is the same as adding notes, but you must also specify the type of tuplet you are creating. The notation engine uses this information to properly notate the notes in the tuplet. The tuplet type is defined by 3 values: a note value, the number of these values that make up the "beat", and the number of irregular divisions against the "beat".

Once a tuplet is added to your music you can edit its position and appearance properties. You can also edit the notes contained within the tuplet just like any other note.

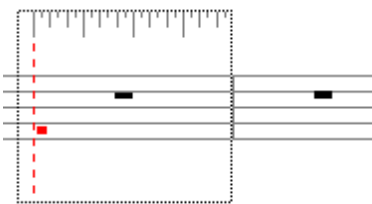
### To Add a Tuplet

Select the [Notes](#) tab in the Elements Palette, then select both a note and the tuplet symbol. Notice how the Elements Palette resizes to display additional controls.

Enter [appropriate values](#) for the tuplet using the controls in the Tuplet controls of the Elements Palette.



Move the cursor over the measure to which you want to add the tuplet. Notice the feedback provided by the note cursor:



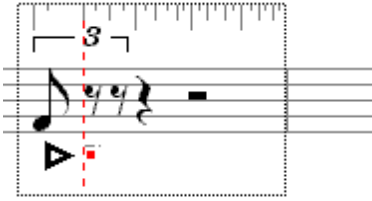
- The [Music Ruler](#) is drawn around the measure to indicate the beats and tuplet subdivisions within the measure.

- The dotted red line shows the time location where the note is to be added.

- The small highlighted dot shows the pitch for the new note.

1. Align the dashed line with the beat where you want the note, then align the dot with the desired pitch.
- 2.

2. Click the mouse to add the note. The tuplet is automatically positioned above or below the note you added.
- 3.
3.  Continue adding other notes to the tuplet following the same steps. You can select any other enabled note in the Elements Palette.



#### To Remove a Tuplet

To remove a tuplet, simply select all the notes contained within the tuplet and select **Edit ▶ Delete** from the menu.

-OR-

Select the notes in the tuplet and press the Delete key.

-O-

## Edit Tuplets with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including tuplets.

Be sure the application is in [Select Mode](#), then select the tuplet you want to edit. You can select several different tuplets and change all of their properties at once.

### Edit a Tuplet

- Select the tuplets you want to edit, then [display the Properties Window](#) .
- To change the appearance or placement of the tuplet, select the [Appearance](#) tab in the Properties Window and adjust the appearance properties.
- To change general properties of the tuplet, such as its position, visibility and color, select the [General](#) tab in the Properties Window and adjust the general properties.
- Click the Apply button when you are done making changes.

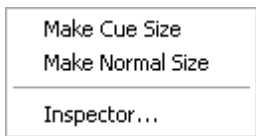
-o-

## Edit Tuplets with the Shortcut Menu

If a symbol is selected you can right-click the mouse to display a special shortcut menu. The menu contains commands for changing symbol properties. For simple operations this method can be faster and easier than using the Properties Window.

### Using the Shortcut Menu

- Be sure the current mode is [Select Mode](#), then select the symbols you want to edit.
- Right-click the mouse to display the shortcut menu.
- Select an item from the context menu to perform the command.



-0-



## About Tuplet Values

Display Rests      Notehead Style Normal

Tuplet

Number of notes:       8th Note

Against:       8th Note

One of the difficulties of notating a tuplet is determining what note values to use. Even in published music, there are many examples of incorrectly notated tuplets, such as 7 32nds against 4 16ths (it should be 7 16ths against 4 16ths).

The notation engine automatically calculates the correct tuplet note values for you - when you set up a tuplet all that is needed is a representation of the beat that the tuplet is set against.

### To Setup Tuplet Values

1. Note the duration that the tuplet will occupy in normal beats. For example, you might say something like, "I want five notes equally spaced in two beats". So the duration would be two beats.
2. Find a note value that can represent that duration. In the above example, two quarters would work, or 4 8ths, or 8 16ths. However, if your duration was a dotted quarter, then a quarter note value would not work, but 3 8ths or 6 16ths would.
3. Take the note value that can represent the duration, and the number of values needed to represent the duration. Set the note value in the Tuplet drop list, and set the number in the Against field. The above example would use Quarter Note for the value and 2 for the Against.
4. Now set the tuplet number in the Number of notes field. A note value will update to the right of the field. That is the value to select in the palette if you want the notes at equally spaced intervals. The above example would use 5, and 8th notes would be the value to choose to get 5 equally spaced notes in the span of 2 quarter notes.

Below are some tuplet examples with their corresponding palette settings.

Tuplet

Number of notes:       8th Note

Against:       Quarter Note

5 8ths against...

5

5

...2 quarters

Detailed description: This musical notation shows a five-note eighth note tuplet on a treble clef staff. A bracket above the notes is labeled '5'. Below the staff, a bracket spans two quarter notes, labeled '...2 quarters'. The notes in the tuplet are: quarter, eighth, eighth, eighth, eighth.

Tuplet

Number of notes	<input type="text" value="5"/>	8th Note
Against:	<input type="text" value="3"/>	<input type="text" value="8th Note"/>

5 8ths against...

5

5

...1 dotted quarter (3 8ths)

Detailed description: This musical notation shows a five-note eighth note tuplet on a treble clef staff. A bracket above the notes is labeled '5'. Below the staff, a bracket spans one dotted quarter note, labeled '...1 dotted quarter (3 8ths)'. The notes in the tuplet are: quarter, eighth, eighth, eighth, eighth.

Tuplet

Number of notes	<input type="text" value="7"/>	16th Note
Against:	<input type="text" value="4"/>	<input type="text" value="16th Note"/>

7 16ths against...

7

7

5

...4 16ths

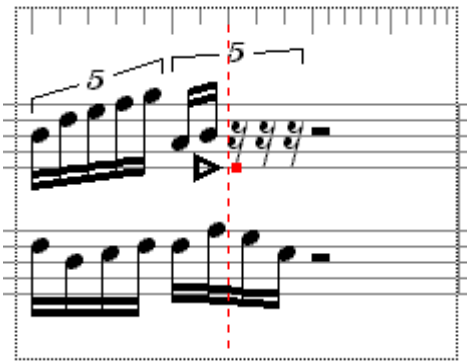
Detailed description: This musical notation shows a seven-note sixteenth note tuplet on a treble clef staff. A bracket above the notes is labeled '7'. Below the staff, a bracket spans four sixteenth notes, labeled '...4 16ths'. The notes in the tuplet are: eighth, eighth, eighth, eighth, eighth, eighth, eighth. A '5' is written above the final note of the tuplet.

-0-

## About Tuplets

A tuplet is a group of notes that form an irregular subdivision of the beat. In an 8th note triplet, for example, 3 8th notes (which normally take  $1\frac{1}{2}$  beats in a 4/4 meter) are played in the time normally occupied by 2 8th notes (only 1 beat). As a result, each note of the tuplet is slightly shorter so that the notes take the same amount of time to play.

There are many types of tuplets (duplet, triplet, sextuplet, quintuplet, etc.) that can be added to your score. For example, a 16th quintuplet is a group of 5 16th notes played in the time that is usually taken up by only 4 16th notes. Another description of this tuplet is "5 against 4" - 5 represents the "irregular" divisions of the beat and the 4 represents the "regular" divisions. The 16th note specifies the size of each regular division.



Notice how the ruler changes to display divisions for the quintuplet. The ruler always displays the correct subdivisions of the beat for the type of tuplet you are entering.

You do not have to confine yourself to the "regular" notes that define the duration of the tuplet. You can place any note in the tuplet, as long as it fits within the total duration of the tuplet. Contrast the quintuplets above with those in the following example:



Depending on the tuplet and the note type, there are specific tuplet types that can be created. For example, in the time that 2 8th notes normally take, you can create a triplet that consists of 3 8th notes, a quintuplet that consists of 5 16th notes, a nonuplet that consists of 9 32nd notes, and so on. Some tuplets are never used in certain meters. For example, you cannot have a half-note triplet in a 3/4 bar since the triplet spans 4 beats and there are only 3 beats in the measure.

## Nudging Symbols

### Nudge

The arrow keys can be used to "nudge" elements and symbols in the view.

To Nudge an Element

- Select the element(s) you want to nudge. You can select multiple elements and types and nudge an entire group of symbols together.
- Hold down the CTRL key and press an arrow key to nudge the element up, down, left or right.

-0-

## Nudging Beams

### Nudge using Shortcut Keys

- Hold down the Ctrl key, then use the arrow keys to move the beam up or down. The beam will retain its beam angle (all stems will lengthen or shorten equally). To change the beam angle, use the [Properties Window](#) or edit an individual [stem length](#) .
- The left and right arrow keys have no effect.

-0-

## Nudging Barlines

### Nudge using Shortcut Keys

- Hold down the Ctrl key, then use the arrow keys to move the barline left or right. The measure will lengthen or shorten accordingly, and notes in the measure will reposition themselves. To move the barline without affecting the measure, use the [Properties Window](#) instead.
- Once a barline has been moved, the measure will remain at that width (even if notes are added or removed). If a meter is added, or if measures per system are changed, then the measure will lose its barline override.
- The up and down arrow keys have no effect.

-0-

## Nudging Notes

### Nudge using Shortcut Keys

- Hold down the Ctrl key, then use the arrow keys to nudge the note right or left. The actual performed start time of the note does not change, just how it appears in the score. To change the performed start time, use the [Properties Window](#) instead.
- Hold down the Ctrl key, then use the arrow keys up and down to chromatically change the pitch up or down. To just change the position of the note, use the [Properties Window](#) instead.

-0-

## Nudging Symbols

When music symbols are added to the music, the notation engine automatically places and positions them. Sometimes you may wish to make adjustments to the default positions - this is what nudging is for.

For example, if a dynamic marking is overlapping a note you can move the dynamic marking up, down, left, or right. You can nudge the symbols using the Properties Window or by using shortcut keys.

When using shortcut keys to nudge, the symbols will move as you press the arrow keys. This is nice because you immediately see what your changes look like.

Note: There is a difference in slightly adjusting the position of something, and moving it's performed location. For example, you may want to nudge a note head to the right to avoid an interval of a second collision, or you may want to move a note head to another beat. See the Move topics for discussions on moving performed locations.

### Nudge with the Properties Window

- Select the symbols you wish to nudge.
- Display the Properties Window, then select the [General](#) page.
- Use the Position controls to specify offsets from the default values.

### Nudge using Shortcut Keys

- Select the symbols you wish to nudge.
- Hold down the Ctrl key, then use the arrow keys to move the symbols.

Some symbols have slightly different behavior when using the shortcut keys for nudging. See the following topics for more information:

 [\\_Nudging Barlines](#)

 [\\_Nudging Beams](#)

 [\\_Nudging Notes](#)

 [\\_Nudging Symbols that split System Breaks](#)

 [\\_Nudging Systems](#)



## Nudging Systems

### Nudge using Shortcut Keys

- Select a system by single clicking in a measure.
- Hold down the Ctrl key, then use the arrow keys to move the system up or down.
- The left and right arrow keys have no effect.

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## Nudging Symbols that split System Breaks

Many symbols are capable of splitting the system break, that is, they span across the last measure on a line and the first measure on the next line. You can nudge these independently.

### Nudge using Shortcut Keys

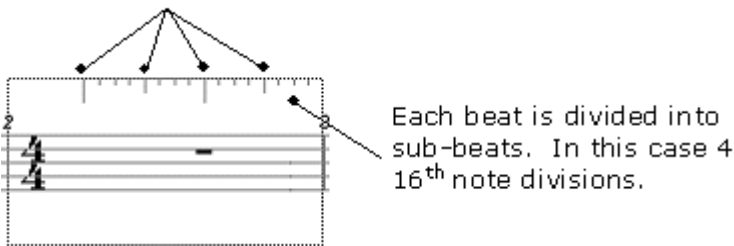
- Select the segment of the symbol you would like to nudge. For segment that are just lines, you may find it easier to set your [Mouse Drag Options](#) and drag select the line.
- Hold down the Ctrl key, then use the arrow keys to move the symbol up, down, right, or left. The symbol will move independently from it's other segments. To move all of the splits simultaneously, use the [Properties Window](#) instead

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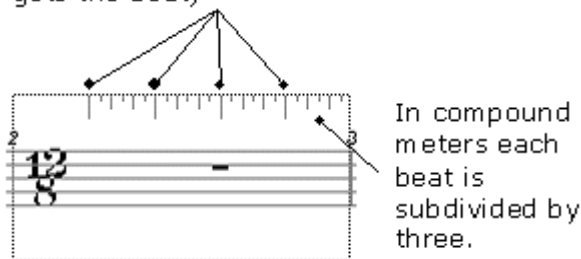
## Music Ruler

Symbols that need precise musical start times such as notes, tuplets, and clefs, use the ruler when they are entered in the score. The ruler provides a way of specifying which beat or sub-beat in the measure the symbol is to be entered. The ruler is divided into a series of different sized marks that correspond to strong beats (the longest), weak beats (slightly shorter), and sub-beats (the shortest). Below are some examples different rulers over different meters.

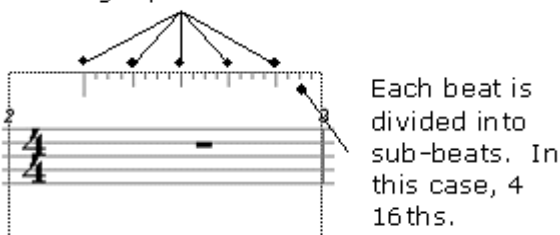
Beats 1, 2, 3, and 4.  
(Quarter note gets the beat)



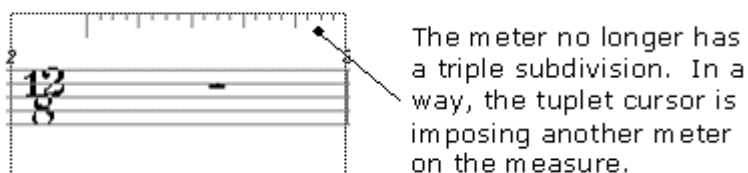
Beats 1, 2, 3, and 4. (Dotted quarter gets the beat)



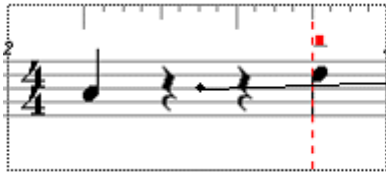
"Beats" 1, 2, 3, 4, and 5. The 5:4 tuplet cursor has changed the beats of the ruler to facilitate entering tuplets.



"Beats" 1, 2, 3, 4, and 5. The 5:6 tuplet cursor has changed the beats in the ruler to facilitate entering tuplets.

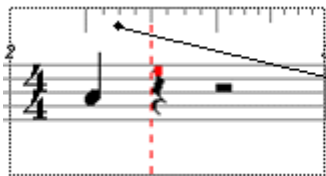


The music ruler allows you to enter notes anywhere in the measure without first having to enter rests. By default, the ruler is at a resolution of 16th notes allowing you to enter a note on the "1", "e", "and", or "a" of the beat. You can [globally change the resolution](#) of all of the measures, or you can just change the current measure's resolution by entering a note with a value less than a 16th note.

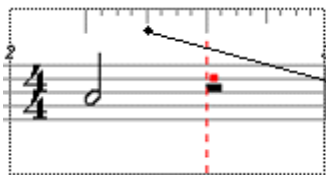


Rests are automatically created to fill in the space when a note is entered at beat 1 and beat 4.

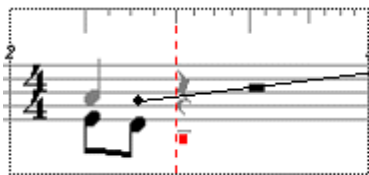
As you move the cursor across a measure, a dotted vertical line (in the [selection color](#)) snaps to the beats and sub-beats of the measure, and the current beat and tick is displayed in the [status bar](#). Clicking the mouse will enter the symbol on the beat or sub-beat where the vertical line is. If the measure is without notes, and you are entering notes, you can enter on any beat or sub-beat of the measure. However, if there are notes in the measure, the cursor will not allow you to enter a note that starts within the duration of a previous note. See below for some examples:



The quarter note occupies the entire beat, so the cursor only snaps to beat 1 (to enter an interval), or beat 2 and any beat or sub-beat after.



The half note duration occupies beats 1 and 2 so the cursor will only snap to beat 1 (to enter an interval) or beat 3 and any beat or sub-beat after.



However, you can enter a note inside the duration of another note if you are on a different voice.

## Advanced Techniques

### Advanced Techniques

Once you've mastered the ins and outs of entering and editing notes, you may find it useful to try out some advanced techniques.

Select from the following to learn more:

[Notating two lines of music on one staff \(Multivoicing\)](#) Create staves that contain independent lines of music on the same staff.

[Beaming](#) Control how notes are beamed together to emphasize different rhythms or phrasing.

[Hidden Symbols](#) Any music symbol can be hidden so that it does not appear when printed - using this feature you can create pickup measures, split measures between systems and create meterless music.

[Pickup Measures](#) Pickup measures are used for phrases that start before the initial barline.

[Splitting Measures](#) For phrasing considerations, you may wish to display part of a measure on one system, and another part on a following system.

[Small Meter Changes](#) If you want to insert a meter over a small range of measures (for example, to split the measure or perform other "tricks" with the score) without affecting the entire score, a few extra steps are necessary.

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## Notating two lines of music on one staff (Multivoicing)

Each staff can support up to 8 different [voices](#) (parts) for notating several melodic lines together on the same staff. Quite often in keyboard, instrumental, and vocal music, two distinct lines of music occupy the same staff. If the two lines differ rhythmically, they should be notated using separate voices so that their independent rhythms are preserved. If the two lines share the same rhythmic pattern, they may be notated using a single voice.

The example below illustrates how multivoicing looks in the Music Score:



The first staff shows a single melodic line with a slur over four notes, labeled "Non-Multivoiced". The second staff shows two distinct melodic lines on the same staff, each with its own slur, labeled "Multivoiced".

The notation engine automatically handles many of the nuances of multivoicing music. For example, there are different rules for stem direction and length, and for how slurs, ties and accents are displayed. Note that the notation engine automatically fills each voice with its own set of rests. In keyboard music, one may want to [hide rests](#) for improved readability.

### Change voice with the Properties Window

- Select the notes you want to change.
- Display the Appearance page in the Properties Window.
- Select the desired voice from the Voice dropdown list, then hit the Apply button to apply the changes.

### Change voice using an action

- Select the notes you want to change.



The first staff shows a single melodic line with a slur over four notes, labeled "Non-Multivoiced". The second staff shows two distinct melodic lines on the same staff, each with its own slur, labeled "Multivoiced".

- Select Actions ▸ Voice from the menu.

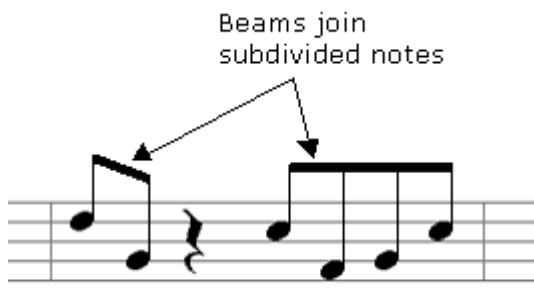
- Select the desired options in the Actions page of the Properties Window, then hit the Apply button.
- Insert notes using a different voice
- Select the desired voice in the [notation bar](#) displayed at the top of the Music Score.
- Insert notes as usual.

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## Beaming

### Beaming

A beam is a connecting line that joins 2 or more notes that are subdivisions of a beat in a measure.



Beaming decisions are based on the metric divisions within a measure. In general, the notes are beamed so that the note groups match the intended rhythmic beat as specified in the current meter.

Certain phrasing considerations, hemiolas, old vocal notation, and emphasizing different beats are all reasons to override the default beaming patterns.

Select from the following to learn more

[Break and Join Beams](#)

[Change Metric Division](#)

[Metric Division Example](#)

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## Break and Join Beams

The most direct way to override a beaming decision is to break or join beams.

### To Break a Beam

1. Select any two adjacent beamed notes
2. Click the right mouse button to display a popup menu. Select Break Beam from the menu.
3. It is also possible to select a group of beamed notes and break all beams at once by selecting Break Beam.

### To Join a Beam

1. Select any two adjacent notes
2. Click the right mouse button to display a popup menu. Select Beam Notes from the menu.

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## Change Metric Divisions

Often an easier way to achieve desired beaming patterns is to redefine the metric division of the meter.

Since the underlying beaming patterns are based on divisions of the beat, changing those divisions (or the beat itself) results in different beaming patterns.

This method is far more efficient than individually breaking/joining beams (which can be tedious for a long piece) when changing beaming patterns throughout the score.

An example should help explain things:

In 5/8 meter, the default metric division is 2 8th notes + 3 8th notes, so it will beam 8th notes in groups of 2 + 3.

But another common metric division of 5/8 is 3 + 2. If the underlying meter is changed from a 5/8 to a (3+2)/8 meter the 8th notes will be beamed in groups of 3 + 2 instead of the default 2 + 3.

To Change the Metric Division of the Meter

1. Select the appropriate meter for the section you want to affect.
2. Display the Properties Window for the meter. Select the Appearance tab.
3. Change the meter type to an equivalent custom meter to get the desired beaming pattern. In our 5/8 example, we would change the 5/8 meter into a (3+2)/8 meter.
4. Check the Display As box at the bottom of the Properties Window and type in the meter you want displayed in the score. In our example we would type in 5/8.
5. Click the Apply button. The beaming patterns should now match the underlying meter, as it really is (i.e. not the "displayed" version).

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## Hiding and Displaying Hidden Symbols

You can hide any symbol in the Music Score. This becomes an extremely powerful tool when used in conjunction with different meters.

Use the General page of the Properties Window to hide or unhide any symbol in the Music Score.

To display Hidden Symbols

- Display the Music Score in Page View
- In the Voice combo box at the top of the Music Score, select the choice named "Hidden"
- All symbols that have been defined as hidden are now displayed in light gray.

To Hide a Symbol

- Display the Music Score in Page View.
- Select the symbols you want to hide and display the Properties Window.
- Select the General tab in the Properties Window and click the "Hidden" checkbox
- Click the Apply button to apply the changes.

To Unhide a Symbol

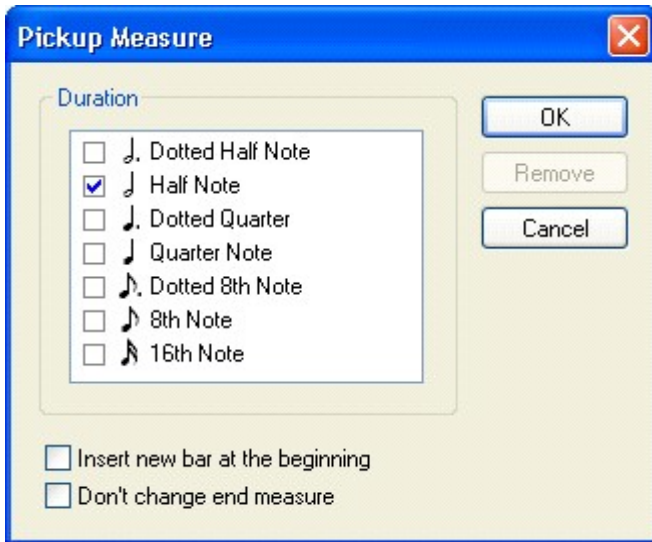
- Display the Music Score in Page View
- Display hidden symbols in the view and select the symbols you want to unhide.
- Display the General tab in the Properties Window, and uncheck the "Hidden" checkbox.
- Click the Apply button.

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## Pickup Measures

Pickup measures (also known as an Anacrusis or Upbeats) are used for phrases that start before the initial barline.

A pickup measure can be created, edited or removed by clicking on the menu "Document" and selecting "Pickup Measure...".



- Duration

The duration of the pickup measure consists of the total duration of the selected note values. The information about which note values are selected is irrelevant, only the total duration will be used to create or edit the pickup measure.

- Options

a) "Insert new bar at the beginning" – If this option is not selected, the first bar of the music piece will be reduced to a pickup measure. Any content that exceeds the duration of the pickup measure will be removed. This option is only available while creating a pickup measure.

b) "Don't change end measure" – If this option is not selected, the last bar of the music piece will be reduced to an incomplete end measure. And any content that exceeds the new duration of the end measure will be removed.

You can also use custom meters and hidden symbols to display pickup measures. This is necessary if you have a repeat sign and the measures must be incomplete.

Note: We recommend that you create a pickup measure before you really start working in a piece. This is because changing meters after there are lots of notes in the score can result in loss of any user formatting or other customizations you may have done.

### To Create a Incomplete Measure

- Add a new measure at the beginning of a piece
- Add the [same kind of meter](#) that is in measure 1 to what is now measure 2.
- Select the meter in the first measure and bring up the Properties Window.
- Change the meter type in the first measure to correspond to the number of beats you will need in your pickup measure. Select the Display as checkbox and enter the same meter that appears at measure.

- Click the Apply button to apply the changes.
- Select the meter at measure 2, then display the General tab in the Properties Window and check the Hidden checkbox. Click the Apply button to hide the meter.

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## Split Measures Across Systems



You may want to break a measure across a system break to denote phrasing that starts on an upbeat.

Like pickup measures, splitting measures involves custom meters and hidden symbols.

Note: Before splitting measures, make sure that you are finished adding and removing measures and staves. Where the measure is split depends on its relationship to the systems in Page View. Adding measures and Staves will change these relationships. Also, like pickup measures, it is recommended to split measures before adding any notes.

To split a Measure Between Two Systems

- Insert a [redundant](#) meter two measures after the measure that you want to split.
- Insert a meter at the measure you want to split. Set the meter to correspond with the number of beats that the end of the phrase will go over the barline.
- Insert a meter at the beginning of the next measure. Set the meter to correspond to the number of beats needed for the upbeat.
- Hide all 3 meters that you added in the previous 3 steps.
- Hide the barline at the end of the measure in the first system

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## Small Meter Changes

Insertion of a new meter affects all the music from the measure of insertion until either the end of the piece or until the next meter is found, whichever comes first. If you want to change the meter of a section of your music without affecting the entire piece, a few extra steps are necessary.

As an example, let's say that you are working on a song which is in 4/4 time. You would like to change the meter in measures 10-19 to 3/4, leaving subsequent measures in the original 4/4 meter. The first step is to define the endpoint of your new 3/4 section by inserting another 4/4 meter at measure 20. A dialog box appears, warning you that the new 4/4 meter is redundant (strictly speaking, it is, but the notation engine doesn't know what you intend to do - hence the warning). Click on the OK button; the 4/4 time signature at measure 20 appears. Now you can insert your 3/4 meter at measure 10, and only measures 10 through 19 will be affected.

One word of warning, though. If you are changing the meter such that there are fewer beats per measure in the new meter than in the old, and you've got notes throughout the entire section that you are changing, you run the risk of some of these notes getting displaced into the following section. This is because the length (in beats) of your original section may be longer than the new section will allow, given the same number of measures.

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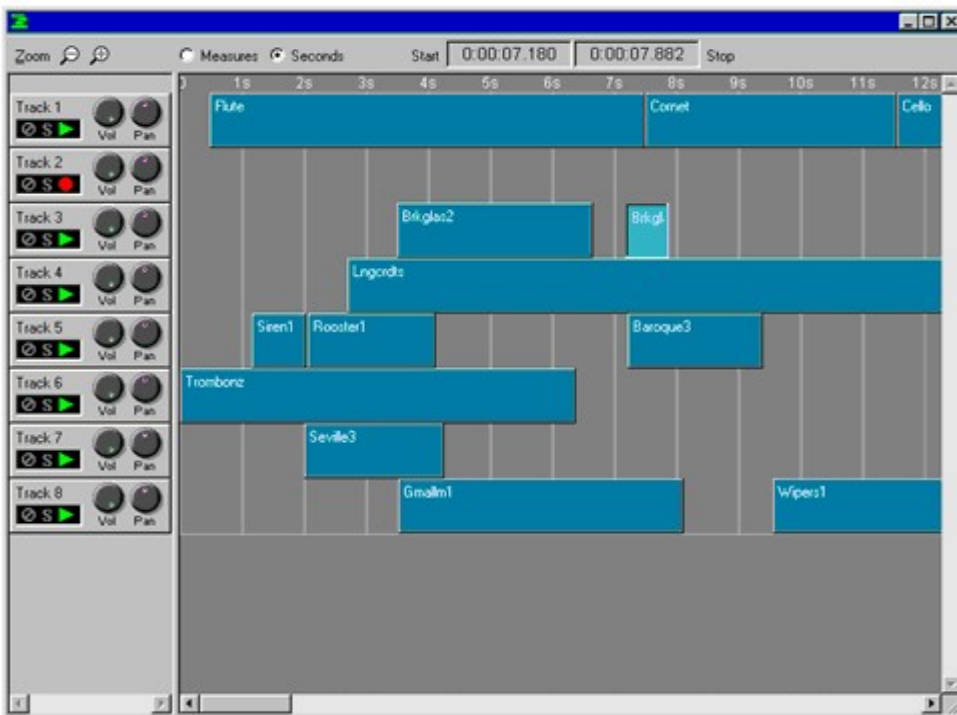


## The Audio Sequencer

## The Audio Sequencer

The Audio Sequencer is used to record, position and configure digital audio files which are played along with your music. The Audio Sequencer is so named after the commonly-used file format (.WAV).

The Audio Sequencer displays digital audio files as horizontal bars positioned along a timeline. By arranging the bars along the time ruler you can specify precisely when a digital audio file will begin playing. After creating your music score, for example, you could try singing along with it and have both the music and the singing playing together.



On the left side of the window, each track contains a set of controls that affect the volume, pan and frequency of the sounds on that track. Other controls for each track are identical to those in the Mixer and are used to set mute, solo or record/play status of a wave track.

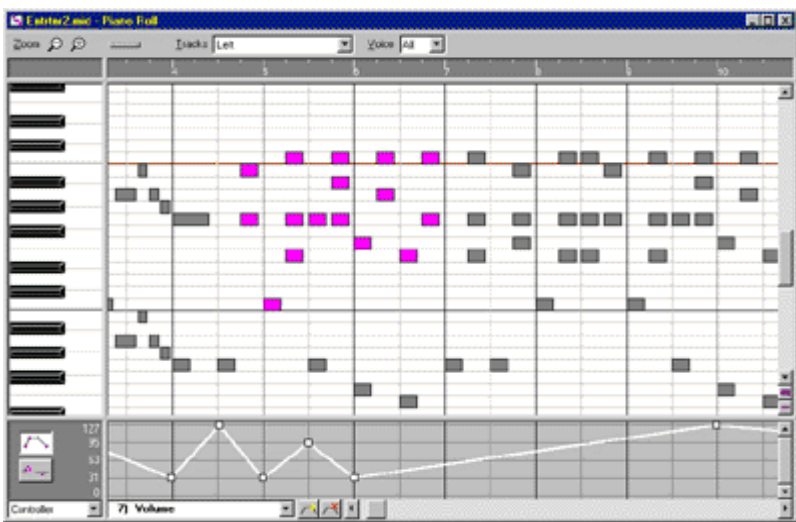
Wave files which occur at the same time are mixed together in realtime so that the end result is a single left/right channel combination. By adjusting the relative volumes and pans of each track, you can change the composition.

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## The Piano Roll

### The Piano Roll

The Piano Roll view displays notes as bars along a timeline, much like an old player piano. The piano roll is the preferred method of editing MIDI for many people, either because they do not know how to read notated music or because they find it more intuitive and useful.



The controls at the top of the window are used to specify which track and voice is currently displayed in the Piano Roll and Envelope View.

The Vertical Scale Controls in the lower right-hand corner of the piano roll are used to control the height of the bars in the Piano Roll, which affects how many pitches are visible. Vertical scaling also changes the height of the piano keys on the left side of the window.

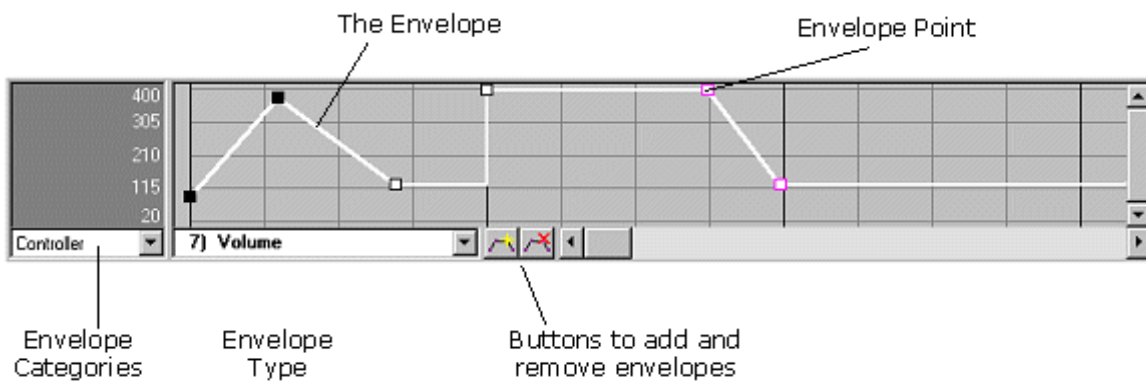
The [Envelope View](#) and Controls at the bottom of the window are used to create and edit envelopes. An envelope is a representation of how a musical parameter, such as tempo, volume or balance, varies over time.

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## Envelope View

### Envelope View

The Envelope View is included in the same window with the [Piano Roll](#), and graphically illustrates how different musical parameters change with time. The Envelope View is integrated with the Piano Roll view in a single window, aligned along the horizontal (time) axis.



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## What is an Envelope?

An envelope is a representation of how a particular musical parameter changes with time. An envelope itself is a graph with the horizontal axis (x) representing time and the vertical axis (y) representing the value of the parameter. By changing the shape of an envelope you can change how different parameters (such as volume, pan, reverb and so on) change with time.

The continuous line displayed in the [Envelope View](#) represents the envelope. Sometimes the envelope fades continually from one point to the next, other times it seems to change abruptly. The shape of the envelope (and the musical parameter it represents) is controlled entirely by the [envelope points](#).

Envelopes allow you to shape different parts of your music for richer compositions. Rather than specify each individual controller for, say, master volume, you can create a master volume envelope that describes how the master volume changes with time. You can always reshape the envelope simply by moving around displayed points on the envelope.

It's also fun to loop perform a particular area and adjust various envelopes while the music is playing until you get the sound you want.

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## Envelope Types

The following types of envelopes may be added to your document. Click on an envelope type to learn more about the envelope.

### [Tempo](#)

Create envelopes which change the tempo dynamically during a performance. This can be used to add rubatos, expressions and other "human" elements.

### [Controller](#)

Choose from 128 standard MIDI controllers for specifying volume, pan, reverb, chorus and dozens of other choices.

### [RPN](#)

Create an envelope to change a Registered Parameter Number (RPN) dynamically.

### [NRPN](#)

Create an envelope to change a Non-Registered Parameter Number (NRPN) dynamically.

### [Pitch Bend](#)

Create an pitch-bend envelope for each track.

### [Poly Pressure](#)

### [Channel Pressure](#)

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## Displaying Envelopes

There can be literally dozens of different envelopes that are applied to a piece of music. For each track there might be volume and balance, possibly reverb and chorus effects. For 8 tracks this totals 32 different envelopes, not including tempo or master volume. The controls at the bottom of the Envelope View are used to divide envelopes into specific categories and types. In addition, the controls at the top of the window may affect which envelope is displayed in the Envelope View.

The Envelope Category box displays several categories. Depending on which category is selected the Envelope Type box may or may not be activated.

The table below summarizes the behavior:

What is Selected	Which Envelope is Displayed
Controller	When this is selected the Envelope Type box is filled with the names of all MIDI controller envelopes defined for the currently selected track/voice combination. The displayed envelope will be whatever is selected in the Type box. If there are no controller envelopes defined the envelope view indicates this.
Pitch Bend	The Envelope View displays the MIDI pitch bend envelope for the currently selected track/voice combination. The Envelope Type box is deactivated since there is only one pitch bend envelope available for each track/voice.
Chan Pressure	The Envelope View displays the channel pressure (aftertouch) envelope for the currently selected track/voice combination. The Envelope Type box is deactivated since there is only one channel pressure envelope available for each track/voice.
Poly Pressure	The Envelope View displays the polyphonic key pressure envelope for the currently selected track/voice combination. The Envelope Type box is deactivated since there is only one poly pressure envelope available for each track/voice.
RPN	When this is selected the Envelope Type box is filled with the names of all RPN (Registered Parameter Number) envelopes defined for the currently selected track/voice combination. The displayed envelope will be whatever is selected in the Type box. If there are no RPN envelopes defined the envelope view indicates this.
NRPN	When this is selected the Envelope Type box is filled with the names of all NRPN (Non-Registered Parameter Number) envelopes defined for the currently selected track/voice combination. The displayed envelope will be whatever is selected in the Type box. If there are no

NRPN envelopes defined the envelope view indicates this.

Tempo

The Envelope View displays the tempo envelope for the document. The Envelope Type box is deactivated since there is only one tempo envelope for the entire piece.

You can add and remove MIDI controller, RPN and NRPN envelopes. When one of these categories is selected in the Envelope Category box the buttons next to the Envelope Type box are enabled. These buttons are used to add and remove envelopes.

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## Add and Remove Envelopes

### Add and Remove Envelopes

#### To Add an Envelope

1. Select the appropriate envelope category. Only MIDI controller, RPN and NRPN envelopes can be added or removed.
2. Click the Add Envelope button next to the Envelope Type box or select Add Envelope... from the View menu.

A dialog appears for you to select or define an appropriate envelope. When adding a MIDI controller envelope, for example, the dialog contains a list of all available MIDI controllers along with their familiar association (e.g. Volume for controller 7).

#### To Remove an Envelope

1. Display the envelope you want to remove
2. Click the Remove Envelope button next to the Envelope Type box or select Remove Envelope from the View menu.

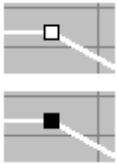
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## Envelope Points

Envelope points are the backbone of an envelope. By adding, removing and adjusting envelope points you can dramatically change the way the envelope looks as well as how the music sounds.

You should understand the visual appearance of the various envelope points displayed in the Envelope View. The figure below describes the different types of points you may see in an envelope.



Points that look "hollow" represent "normal" envelope points. These are points that comprise most envelopes and have absolutely no connection with any notated symbol in the Music Score.

The "solid" envelope points correspond to notated symbols. If these points are moved the symbol in the Music Score is also moved. Similarly, if the symbol in the score is deleted the points in the envelope are also deleted.

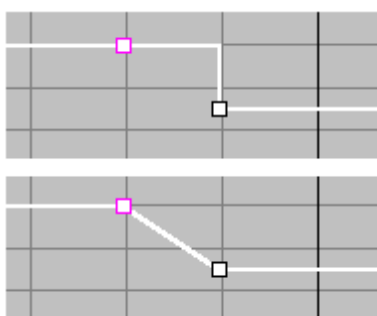
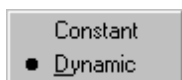
Some symbols in the Music Score actually correspond to 2 envelope points since they have both a start time and a duration - crescendos and accelerandos, for example. For these symbols there is one point representing the start time of the element and another point representing the stop time. Adjusting the second point effectively changes the duration of the element as it is notated in the score.

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## Envelope Transitions

Envelope points have another property called its flavor, which describes how the shape of the envelope behaves around that point. The shape of an envelope depends entirely on the position and flavor of each envelope point.

You can always change a point's flavor simply by selecting it and clicking the right mouse button to display a popup menu. Currently we have two flavors, Constant and Dynamic.



A constant point means the value of the envelope is the same after the point. This type of point is normally used for notated symbols such as *ff* and *mp* since those symbols mean to set the dynamic marking to a certain value.

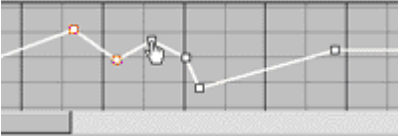
A dynamic point means the value of the envelope changes dynamically from the point to the next point. This type of point is used for markings such as a crescendo where the meaning is to gradually increase the dynamic value.

It can be helpful to loop over a region and experiment with different envelope points, positions and flavors to see how things change.

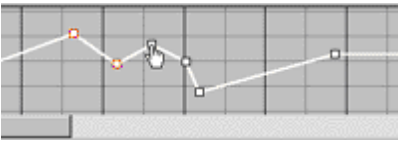
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## Select Envelope Points

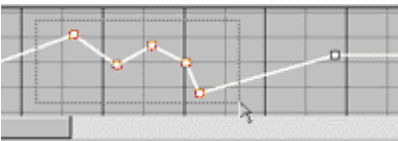
- Be sure the current mode is [Select Mode](#).
- Move the cursor over the point until it becomes a pointing finger.



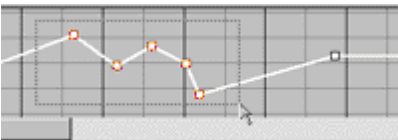
- Click and release the mouse to select the point beneath the cursor.



- Drag-Select Several Envelope Points
- Be sure the current mode is [Select Mode](#).
- Move the cursor in Envelope View so that it is not on top of a point.



- Click and drag the mouse to sweep out a rectangular region. As points are included in this rectangle they are selected, as they fall outside the rectangle they are unselected.



- Release the mouse when the desired points are selected.

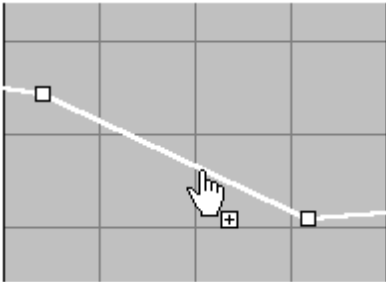
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## Add and Remove Envelope Points

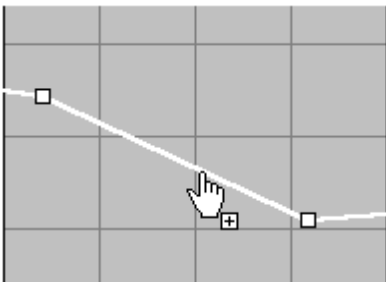
You can control the shape of the envelope by adding, removing and positioning envelope points. Once added, you can edit the location and value of any envelope point.

### To Add an Envelope Point

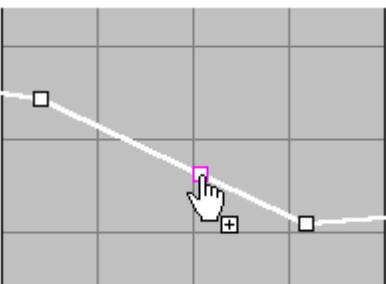
Be sure the current mode is Edit Mode.



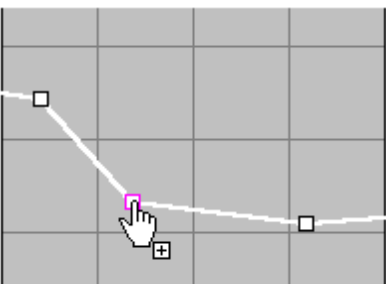
Move the cursor over the envelope until the cursor turns into a pointing finger:



Click (but do not release) the mouse. A new point is created directly beneath the cursor:



As you drag the cursor the new point moves along with it:



Release the mouse to add the point at the desired position.

### To Remove Envelope Points

To remove envelope points, simply select them with the mouse and select Edit ►Delete from the menu.

-OR-

Select the envelope points and press the Delete key.

Note: You cannot remove the first or last envelope point.

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## Associate Envelope Points with Notation

Some envelope points may represent parameters that are also notated in the Music Score.

For example, a crescendo marking in the score actually sends a MIDI volume controller to implement the crescendo. If you move the crescendo the underlying envelope points must also move. Likewise, if you delete an envelope point in the Envelope View that corresponds to a crescendo, the symbol in the Music Score should be deleted.

As a general rule, symbols entered into the Music Score will create corresponding envelope points in the Envelope View, whereas symbols entered directly into the Envelope View will not create corresponding symbols in the Music Score.

-0-

## Edit Envelope Points with the Properties Window

The Properties Window is a useful tool for changing the properties of any symbol, including envelopes.

The appropriate Properties Window for the envelope point depends on the type of envelope it is part of.

For example, the volume controller envelope corresponds to dynamic markings in the Music Score, so the dynamic markings Properties Window is used. Similarly, when editing points in the tempo envelope, the Properties Window for tempo markings is used. For all other points, the Properties Window shows generic performance properties.

Be sure the application is in [Select Mode](#), then select the envelope point you want to edit.

You can select several different points and change all of their properties at once.

### Edit an Envelope Point

1. Select the point you want to edit, then [display the Properties Window](#).
2. Select the Performance page in the Properties Window to change the time and value for the selected envelope points.
3. If you have selected a symbol which also has notational equivalents, select the appropriate Appearance tab and adjust the appearance properties, if desired.
4. Click the Apply button when you are done making changes.

-o-

## Move Envelope Points

Sometimes you may wish to move existing envelope points to a different location.

This technique is especially useful when you want to move several envelope points together because they define a certain "shape" to the envelope.

Vertical changes correspond to larger or smaller envelope values and horizontal changes correspond to time.

Certain symbols in the Music Score have 2 envelope points in the Envelope View. Changing the horizontal position on the second point corresponds to editing the duration of the element.

First, be sure the application is in [Select Mode](#).

### Move Envelope Points

- Select the envelope points that you want to move.
- Click - but do not release - the mouse on one of the selected points.
- As you drag the mouse, the points move along together as a group.
- Release the mouse to move the points to the specified location.

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## Entering Music in Piano Roll

### Entering Music in Piano Roll

#### To Add Notes

- Be sure the current mode is [Insert Mode](#).
- Display the Elements Palette and select the Notes tab.
- Select a note you want to add.
- Click in the piano roll to add the note. As long as the mouse button is held down you can drag the bar representing the note to the desired pitch and time.
- Release the mouse to add the note.

#### To Remove Notes

- Be sure the current mode is [Select Mode](#).
- Select the notes you want to remove.
- Press the Delete key or select Delete from the Edit menu

#### To Select a Note

- Be sure the current mode is [Select Mode](#).
- Click and release on a bar representing a note to select the note.

-OR-

Click and drag the mouse to sweep out a rectangular region. As you drag the cursor the notes which intersect the rectangle are selected.

#### To Move Notes

- Be sure the current mode is [Select Mode](#).
- Select the notes you want to move.
- Click and drag the mouse to move the bars representing the selected notes.
- Release the mouse to insert the notes. If during the drag you decide not to move the notes, simply hit the escape key to abort the operation.

#### To Change the Duration of a Note

- Select the note you want to change.
- Move the cursor the right edge of the bar representing the note. When the cursor changes to the horizontal resize cursor you know the mouse is in the correct place.
- Click and drag the mouse to reposition the right edge of the note bar. . If during the drag you decide not to change the note, simply hit the escape key to abort the operation.
- When you release the mouse the note's duration is changed.

-o-



# The MIDI Events

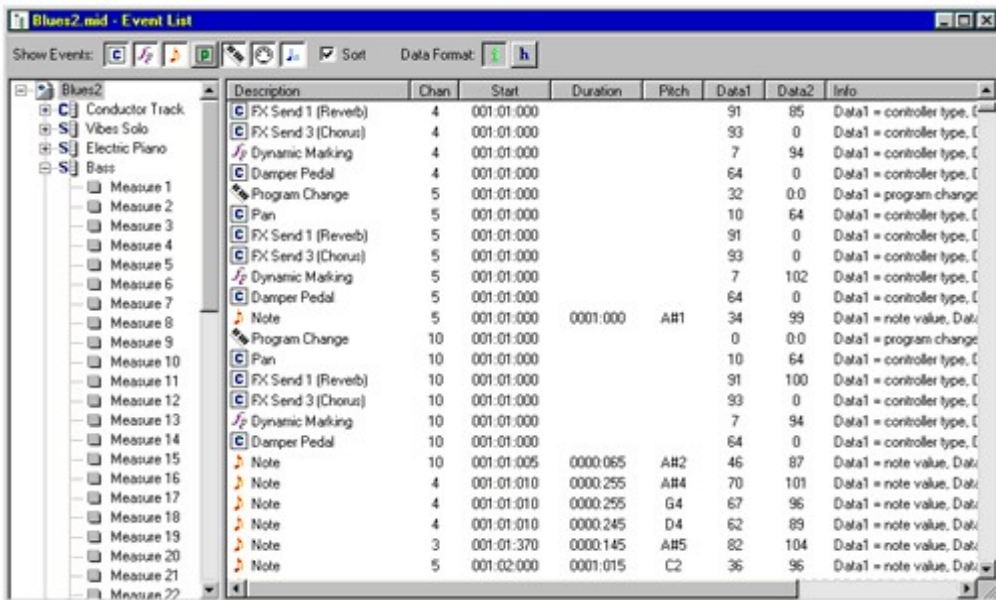
## The MIDI Events

## The MIDI Events

The MIDI Events view displays a list of events in a table. Different columns in the table describe important event parameters, such as the start time, the MIDI information and the track the events occur on.

You can sort the MIDI events in different ways - by time, by duration, by channel - making it easy to find all the notes of a particular duration, or all the dynamic markings which occur within a specific time region, for example.

Click on an area of the image below for more details:



-0-

## List Area

## List Area

The List Area is a table containing a display of events. The rows in the table represent individual events, the columns represent specific bits of information about the event. As you make different selections in the Overview Area, the items in the list change to reflect the new selection. If you select an item which contains a very large number of events, a dialog warns you - this is because displaying a large number of items (more than 5000) can consume a lot of your computer's memory and resources. You can always select a smaller portion of the document.

The items in the list can be sorted in a variety of ways - by name, event type, start time, duration and so on. Select one of the column headers in the list to sort alphabetically or numerically by that column. As the list updates, different items are automatically added to the end of the list. If you check the Sort box at the top of the Event List window, the list will remain sorted at all times.

The following table describes each column displayed in the list:

### Description

A general description of the event, such as "Note" or "Tempo". An icon for the event is also displayed in this column.

### Chan

The current MIDI channel that the event is performed on. You cannot edit this value here - you must use the Track Inspector to change the routing of a track.

### Start

The start time - in bars, beats and ticks - of the event

### Duration

The duration of the event. This field is blank for events that do not have a duration

### Pitch

This field is used only for notes - it provides a more "user-friendly" way to view the pitch of the note (rather than MIDI numbers)

### Data1, Data 2

These are the MIDI data byte fields. Depending on the event, these values may represent completely different parameters.

### Info

A description of what the numbers in Data1 and Data2 really mean for the event.

-o-

## Overview Area

### Overview Area

The Overview Area contains a hierarchical list containing the document, the staves in the document, and the measures in each staff. As you select different items in the Overview Area, the List Area updates to reflect the appropriate events for the selected items. You can select multiple items, make discontinuous selections and so on so that you can display as much or as little in the Event List as you want.

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## Filtering Events

## Filtering Events

The buttons at the top of the Event List window are used to select the types of events that you want to display in the list.



Depending on the situation, you may be interested only in notes, for example, or only program changes or controllers of a particular type. When a button is depressed (on) the event type is displayed; otherwise, it is not.

As you change the filter settings, the list updates to reflect the new choices. Usually there is a slight delay to allow you to select many different choices.

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# Actions

## Actions

Actions are plug-in effects for changing music. Sometimes you might want to use an action to transpose and move notes, or perhaps you'd like to merge 2 staves into a single Grand Staff. Other times, however, you might simply want to experiment with the music. Actions are good way to accomplish both tasks.

Actions are always applied to the current selection. As the selection changes, so does the set of possible actions that can be applied. The Actions tab in the Properties Window displays all actions possible for the current selection. Just as the Properties Window changes as the selection changes, so too do the contents of the Actions tab.

Whenever there are any actions available for the current selection an Actions menu appears next to the Music menu. When you select an item from the Actions menu the appropriate form in the [Properties Window](#) is displayed.

For more information about actions, click on one of the topics below.

 [Using Actions](#)

 [Chord Symbol Actions](#)

 [Document Actions](#)

 [Dynamic Actions](#)

 [Note Actions](#)

 [Octava Actions](#)

 [Pedal Actions](#)

 [Staff Actions](#)

 [Tempo Actions](#)

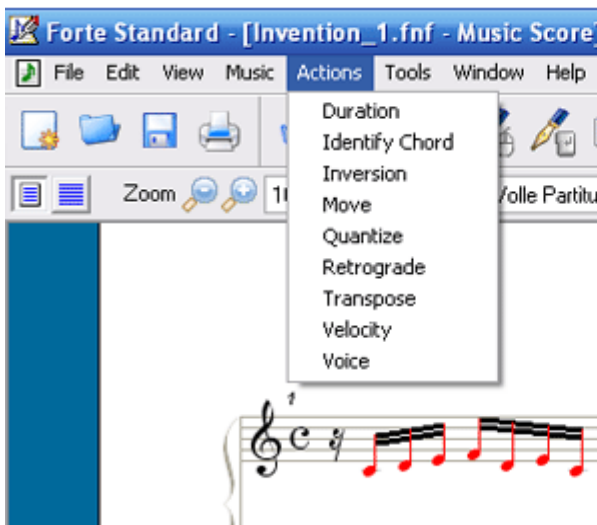
 [Text Actions](#)

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## Using Actions

Once you've got something selected it's a simple matter of seeing what actions are available. The easiest way to do this is to look for an Actions menu in the main menubar:

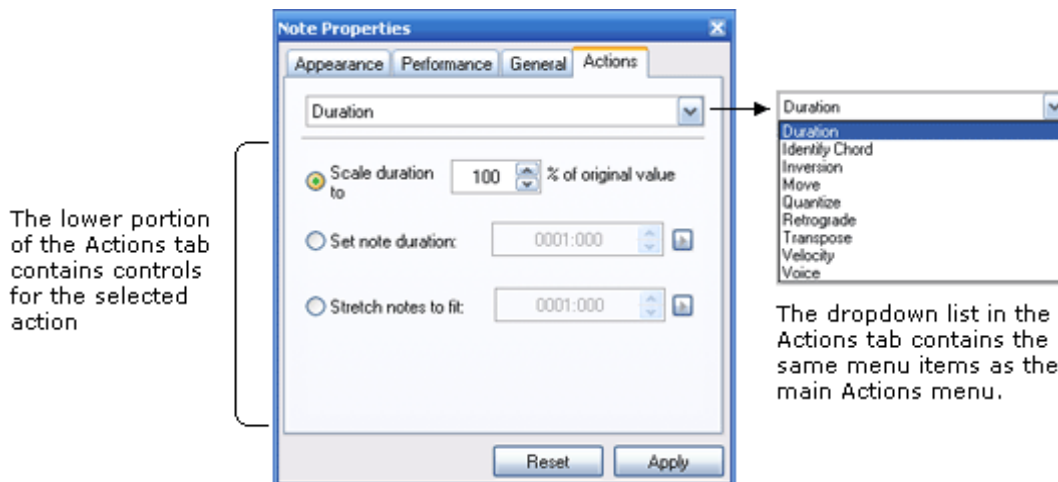
Look in the main menubar for the Actions menu, which displays the actions available for the current selection.



The possible actions changes as the selection changes.

The Actions menu always shows actions available for the current selection (notes in this example).

The Actions menu displays a list of the available actions for the current selection. If no actions are available the Actions menu does not appear in the menubar. When you select an action from the menu the Properties Window appears (if it not already visible) and automatically switches to display the Actions tab:



The lower portion of the Actions tab contains controls for the selected action

The dropdown list in the Actions tab contains the same menu items as the main Actions menu.

You can use the dropdown list in the Properties Window as an alternative to selecting an item from the Actions menu. In either case, the appropriate controls are displayed in the Properties Window for the chosen action.



## Applying an Action

Once you have configured the controls for an action, simply press the Apply button to apply the action to the current selection.

One of the easiest ways to try out an action is to select a loop region and play it while applying different actions. Most actions can be undone, so you can change your mind later.

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## Chord Symbol Actions

Once you have chord symbols selected it's a simple matter of seeing what actions are available. You can use the Actions menu or look at the Properties Window.

To View Available Chord Symbol Actions


- Select the chord symbols you want to perform an action on.
- Select an item from the Actions menu, or click on the Actions tab in the Properties Window.

Note: Chord Symbol actions are also available when you select a staff, and apply to all chord symbols on the selected staff.

Chord Symbol Actions

Click on one of the topics below for more information about each action:

 [Move](#)

 [Transpose](#)

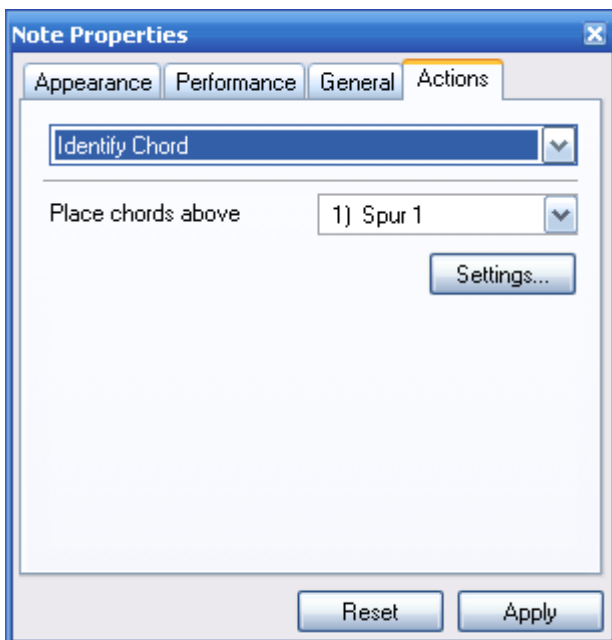
# Identify Chords

## Identify Chord

The Identify Chord action analyzes selected notes and adds a chord symbol that reflects the basic chord structure of the selected notes.

For example, if you've selected an F, E-flat, A and C, the analysis would conclude that the 4 notes are part of an F7 chord.

Note that this action treats all of the notes selected as one chord for analysis. This allows you to analyze notes that don't share the same start time, which can be important for compensating for chord anticipations, suspensions, or appoggiaturas.



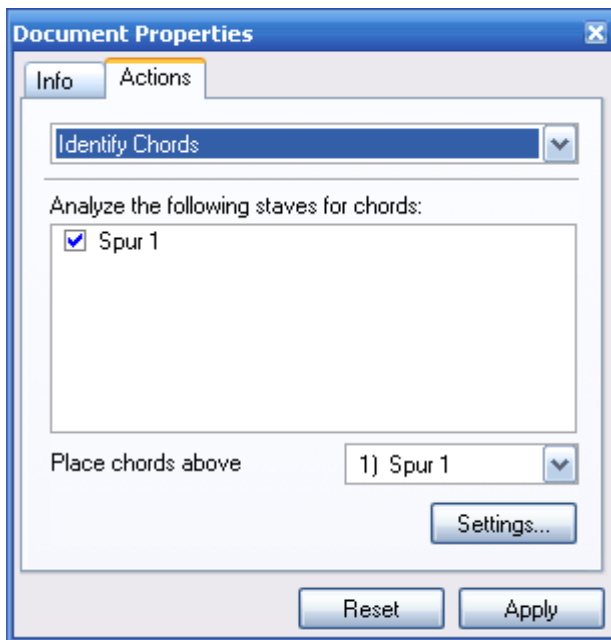
-0-

## Identify Chords

The Identify Chords action analyzes notes in staves and determines the corresponding chords that the notes comprise.

For example, if there is an F and E-flat in the bass clef and an A and C in the treble clef, the analysis would conclude that the 4 notes are part of an F7 chord.

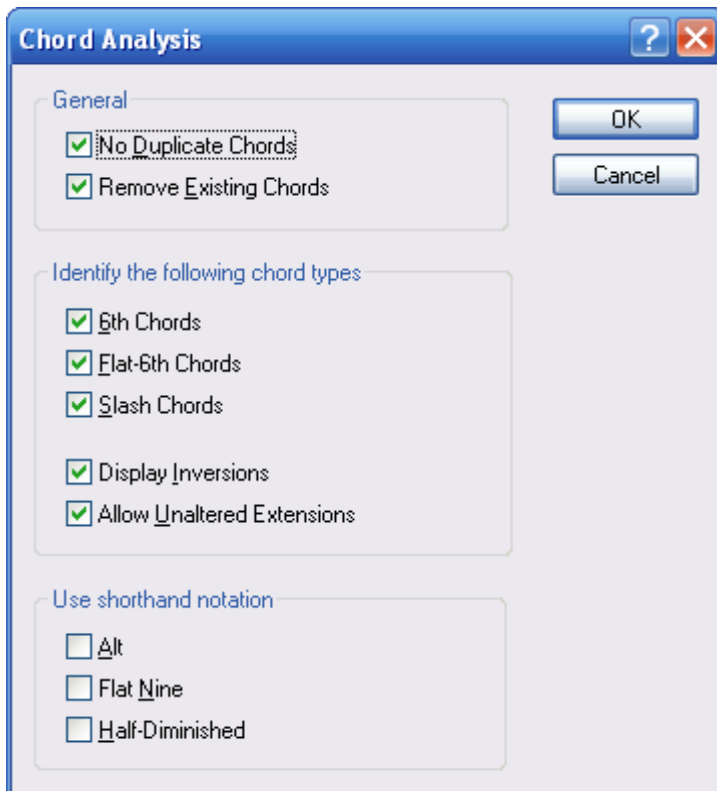
You can control which staves are used in the analysis as well as other behavior such as whether to prevent duplicate chords.



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## Chord Analysis Settings

The Chord Analysis dialog is used to specify different analysis choices that are used by the Analyze Chords action. Chord analysis is a theory rather than a science, and these options allow you to more precisely control the behavior of the algorithm.



To display the Chord Analysis settings dialog select one of the Identify Chords actions and press the Settings... button in the Properties Window.

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## Document Actions

Many actions that normally apply to individual notes or staves can also be applied to the document as a whole. When nothing else is selected the Properties Window displays the properties for the active document. The available "document actions" are displayed in the Actions menu as well as the Actions tab of the Properties Window.

For example, suppose you want to transpose or quantize the entire document. One way would be to select each staff individually, then apply the action on the selected staves. An easier way, however, is to clear the selection and apply an action to all staves at once.

### To View Available Document Actions

- Select a blank area in the Music Score.
- Select an item from the Actions menu, or click on the Actions tab in the Properties Window.

### Staff Actions

The actions listed below can be applied to the document as a whole, or to individual staves:

 [\\_Copy](#)

 [\\_Group](#)

 [\\_Identify Chords](#)

 [\\_Merge](#)

 [\\_Order](#)

 [\\_Split](#)

### Note Actions

The actions listed below can be applied to the document as a whole, or to individual notes:

 [\\_Quantize](#)

 [\\_Retrograde](#)

 [\\_Transpose](#)

 [\\_Velocity](#)

 [\\_Voice](#)



## Dynamic Actions

Once you have dynamics selected it's a simple matter of seeing what actions are available. You can use the Actions menu or look at the Properties Window.

To View Available Dynamic Actions

- Select the dynamics you want to perform an action on.
- Select an item from the Actions menu, or click on the Actions tab in the Properties Window.

Dynamic Actions

Click on one of the topics below for more information about each action:



[Move](#)

-0-



## Note Actions

Once you have notes selected it's a simple matter of seeing what actions are available. You can use the Actions menu or look at the Properties Window.

To View Available Note Actions

- Select the notes you want to perform an action on.
- Select an item from the Actions menu, or click on the Actions tab in the Properties Window.

Note Actions

Click on one of the topics below for more information about each action:

 [\\_Duration](#)


 [\\_Identify Chord](#)

 [\\_Inversion](#)

 [\\_Move](#)

 [\\_Quantize](#)

 [\\_Retrograde](#)

 [\\_Transpose](#)

 [\\_Velocity](#)

 [\\_Voice](#)

## Octava Actions

Once you have octavas selected it's a simple matter of seeing what actions are available. You can use the Actions menu or look at the Properties Window.

To View Available Octava Actions

- 1.
1. Select the octavas you want to perform an action on.
- 2.
2. Select an item from the Actions menu, or click on the Actions tab in the Properties Window.

Octava Actions

Click on one of the topics below for more information about each action:

 [Move](#)

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## Staff Actions

Once you have a staff selected it's a simple matter of seeing what actions are available. You can use the Actions menu or look at the Properties Window.

Many actions that normally apply to individual notes can be applied to the staff as a whole. When a staff is selected the available actions includes those that also apply to notes.

### To View Available Staff Actions

- Select the staves you want to perform an action on.
- Select an item from the Actions menu, or click on the Actions tab in the Properties Window.

### Staff Actions

Click on one of the topics below for more information about each action:

 [\\_Copy](#)

 [\\_Group](#)

 [\\_Identify Chords](#)

 [\\_Merge](#)

 [\\_Order](#)

 [\\_Split](#)

### Note Actions

The actions listed below can be applied to the staff as a whole, or to individual notes:

 [\\_Duration](#)

 [\\_Inversion](#)

 [Move](#)

 [\\_Quantize](#)

 [\\_Retrograde](#)

 [\\_Transpose](#)

 [\\_Velocity](#)

 [\\_Voice](#)

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## Pedal Actions

Once you have pedals selected it's a simple matter of seeing what actions are available. You can use the Actions menu or look at the Properties Window.

To View Available Pedal Actions

- Select the pedal markings you want to perform an action on.
- Select an item from the Actions menu, or click on the Actions tab in the Properties Window.

Pedal Actions

Click on one of the topics below for more information about each action:



[Move](#)

-0-

## Tempo Actions

Once you have tempos selected it's a simple matter of seeing what actions are available. You can use the Actions menu or look at the Properties Window.

To View Available Tempo Actions

- Select the tempos you want to perform an action on.
- Select an item from the Actions menu, or click on the Actions tab in the Properties Window.

Tempo Actions

Click on one of the topics below for more information about each action:

 [Move](#)

-0-

## Text Actions

Once you have text selected it's a simple matter of seeing what actions are available. You can use the Actions menu or look at the Properties Window.

To View Available Text Actions

- Select the text you want to perform an action on.
- Select an item from the Actions menu, or click on the Actions tab in the Properties Window.

Text Actions

Click on one of the topics below for more information about each action:

 [Move](#)

-0-

# Transposition

## Transposition

Transposition is moving pitches up or down by some interval. All [pitches](#) are raised or lowered the same number of [half-steps](#), so melodic contour is preserved and all that has really changed is the "key" or pitch.

There are several transposition options that allow you to do such things as transpose entire scores into a new keys, transpose individual parts for part extractions, work in transposed scores, and transpose sections of music.

Click on a topic for more information:

 [\\_Working with Transposed Scores](#)

 [\\_Working with C Scores](#)

 [\\_Transposing to new keys](#)

 [\\_Transposing sections of music](#)

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## Working with Transposed Scores

Some instruments, such as B-flat clarinet, do not sound as written. For example, when a clarinet reads a C off of a sheet of music, what is actually heard is a B-flat. Instruments which do not sound as written are known as transposing instruments.

When working with scores containing transposing instruments, it is common practice to work with what is known as a transposed score as well as a C score.

A transposed score contains all of the parts as written. That is, a B-flat clarinet part on the score is transposed such that when played by a clarinet, it will sound correctly. Many older scores are transposed scores (one way to tell is that many staves will be in different key signatures). One benefit of using transposed scores is that when it comes time to print out the individual parts, the parts are already transposed.

### To Turn a C Score into a Transposed Score

- [Select the staff/track](#) you want to change.
- Select Transpose by Instrument from the list of Actions in the Properties Window

- OR -

Select Transpose by Instrument from the Actions menu.

- In the From drop list, choose Concert C (assuming that the part was entered as sounds). In the To drop list, select the instrument for which you are transposing into (for example, Alto Saxophone).
- Uncheck the Performance box in the Transposition Affects section. This is so that the actual playback will not be altered.
- Check the Notation box.
- Check the Change Key box.
- Click the Apply button to transpose the music.

### Entering Music from a Transposed Score

- Determine the key of the piece. You can do this by finding the key signature that a non-transposing instrument is in (such as Flute, Piano, or Violin).
- Transpose the [entire piece into that key](#).
- Following the steps for changing from a C score to a transposed score, setting each staff to the instrument that it is scored for.
- Now you can enter the music, as it appears written on the score, and it will playback as it is supposed to sound.

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## Working with C Scores

Some instruments, such as B-flat clarinet, do not sound as written. For example, when a clarinet reads a C off of a sheet of music, what is actually heard is a B-flat. Instruments which do not sound as written are known as transposing instruments.

When working with scores containing transposing instruments, it is common practice to work with what is known as a transposed score as well as a C score.

A C Score contains all of the parts written as they sound. So a B-flat clarinet playing in unison with a flute on the score would appear identical. However, if a flute player and a clarinet player were to play that same unison part, it would sound a major 2nd off. The benefit of working in a C Score is that you work with all parts as they sound, and it is easier to "see" the harmonic and melodic relationships between instruments.

Working in a C Score involves no transposition until it comes time to extract and print out individual parts.

To Transpose an Extracted Part

- [Select the extracted staff/track](#) you want to change.
- Select Transpose by Instrument from the list of Actions in the Properties Window

-OR-

Select Transpose by Instrument from the Actions menu.

- In the From drop list, choose Concert C. In the To drop list, select the instrument for which you are transposing into (for example, Alto Saxophone).
- Uncheck the Performance box in the Transposition Affects section. This is so that the actual playback will not be altered.
- Check the Notation box.
- Check the Change Key box.
- Click the Apply button to transpose the music.

-o-

## Transposing to New Keys

There are many reasons to transpose an entire score up or down. You may need a new key to accommodate the range of a vocalist, or perhaps after transposing a part for extraction, you realize that the part goes out of the range of the instrument.

Transposing to a new key transposes both the Performance (sound) and Notation (display) of the music.

To Transpose to a New Key

- [Select the staff/track](#) you want to change. You can transpose all of the staves at once by running this action on the [selected document](#).
- Select Transpose from the list of Actions in the Properties Window

- OR -

Select Transpose from the Actions menu.

- In the Interval section, select the interval of transposition from the drop list. Predefined intervals range from Prime (no transposition) to Augmented 13th (1 octave + 10 half steps).

- OR -

Set the octave and number of half steps in the Octave and Half Steps fields.

- Check the Performance box in the Transposition Affects section.
- Check the Notation box.
- Check the Change Key box.
- Click the Apply button to transpose the music.

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## Transposing Sections of Music

Often you may just want to transpose just a small section of music. Perhaps you are experimenting and want to try the "bridge" in a different key relative to the rest of the song, or for compositional purposes, you are transposing a theme or motive.

You can also select notes and/or chord symbols and transpose them individually.

To Transpose a Selected Portion of Music

- [Select the notes](#) you want to change.
- Select Transpose from the list of Actions in the Properties Window

-OR-

Select Transpose from the Actions menu.

- In the Interval section, select the interval of transposition from the drop list. Predefined intervals range from Prime (no transposition) to Augmented 13th (1 octave + 10 half steps).

-OR-

Set the octave and number of half steps in the Octave and Half Steps fields.

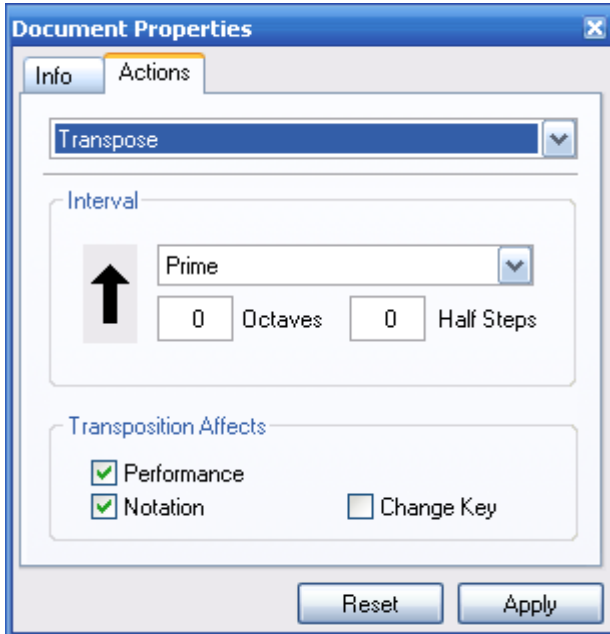
- Check the Performance box in the Transposition Affects section.
- Check the Notation box.
- Click the Apply button to transpose the music.

-O-

## Transposing By Intervals

This actions shifts pitches up or down by some interval. All [pitches](#) are raised or lowered the same number of [half-steps](#), so the melodic contour is preserved.

Click on the image below for details about each control:

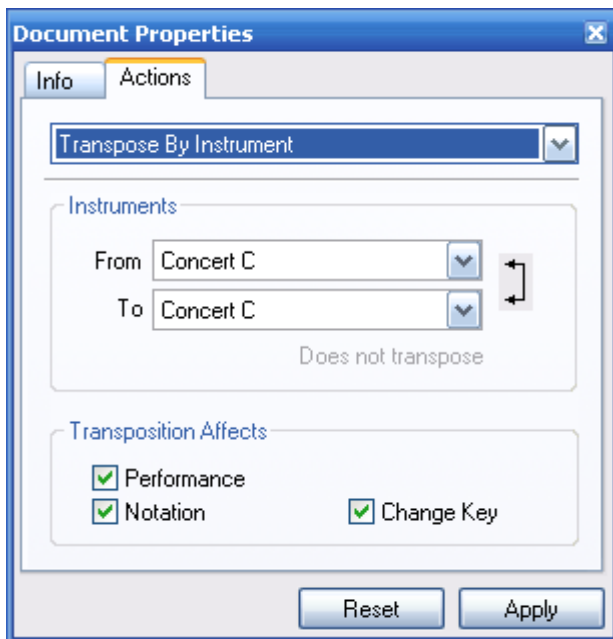


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## Transposing by Instrument

This action is similar to the [Transpose](#) action, except that the interval settings are pre-set for creating transposed part extractions. This is so that you're not saddled with questions like "what is the transposition for an English Horn" or "do I transpose a B-flat Tenor up or down a major 2nd".

To use this action just select where you're transposing from (usually Concert C) and what you're transposing for (for my B-flat clarinet playing friend).



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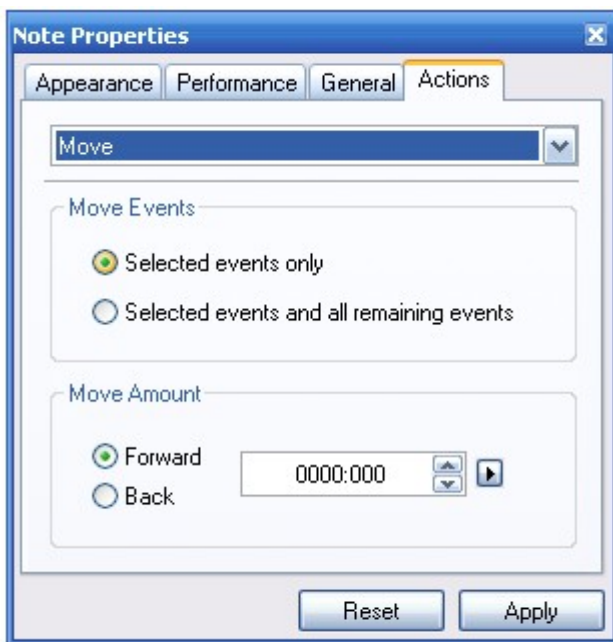
## Move

## Move

The Move action applies to several different types of elements, including notes, dynamics, pedal markings and tempos. This action will move elements forward or backward in time in your music.

You can move elements using other methods (drag and drop, for example) but the Move action can be used to move by specific time values or when you want to move many elements at once.

Click on the image below for details about each control:

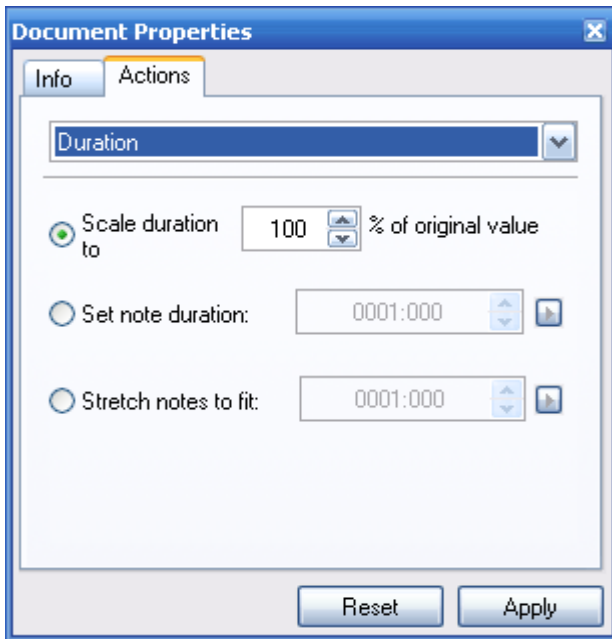


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## Duration

This action changes the duration of notes in a variety of ways.

Click on the image below for details about each control:



Note: Changing the duration from this page changes the performed duration, but may not change the notated duration. If the note carries into another note of the same voice, the following note will not be moved and it's possible that the note will be displayed in the score unchanged. If you want the following notes to "make room" for the new duration, see the topics on changing the duration using the [Performance tab](#) or on Moving elements using the actions tab.

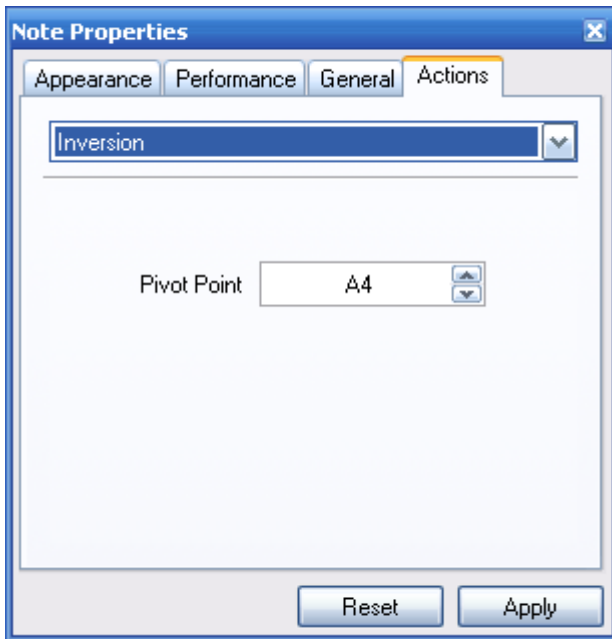
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## Inversion

This action flips a melodic line about a horizontal axis (pivot point) in such a way that the melodic intervals between any two notes merely changes direction. For example, if the first interval was an ascending Perfect 4th, after inversion the interval would be a descending Perfect 4th.

Click on the image below for details about each control:



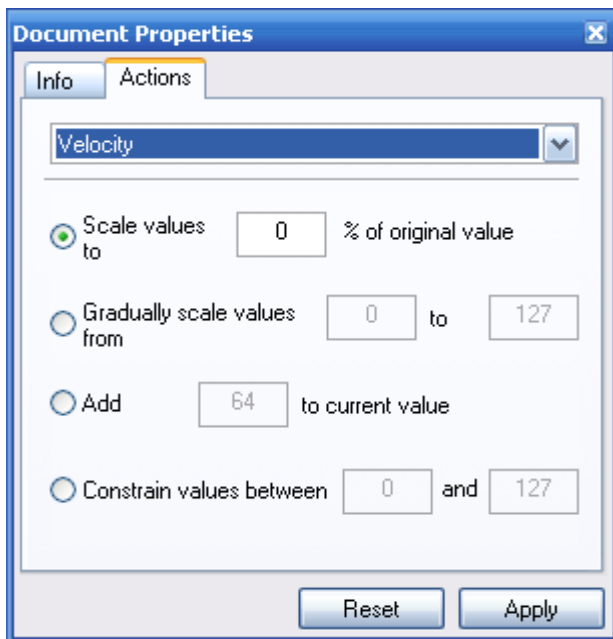
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## Velocity

The velocity is the intensity of a sound, such as whether you pluck a guitar string or press a piano key hard or softly. Pressing the key softly creates a low-intensity, high-velocity sound; plucking a string hard creates a high-intensity, high-velocity sound. You can use velocity scaling to "fade out" at the end of a song.

The Velocity action allows you to scale velocity for all notes between specified points for a selected track.

Click on the image below for details about each control:

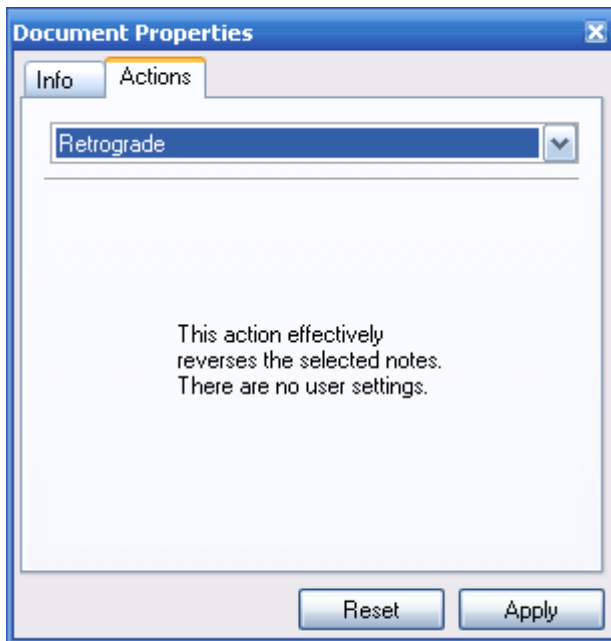


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## Retrograde

Retrograde reverses the order of the notes, yet retains each notes duration. The effect is that of rotating the notes around a fixed vertical line in the middle of the selection.

There are no User settings for retrograde. Just click the Apply button.

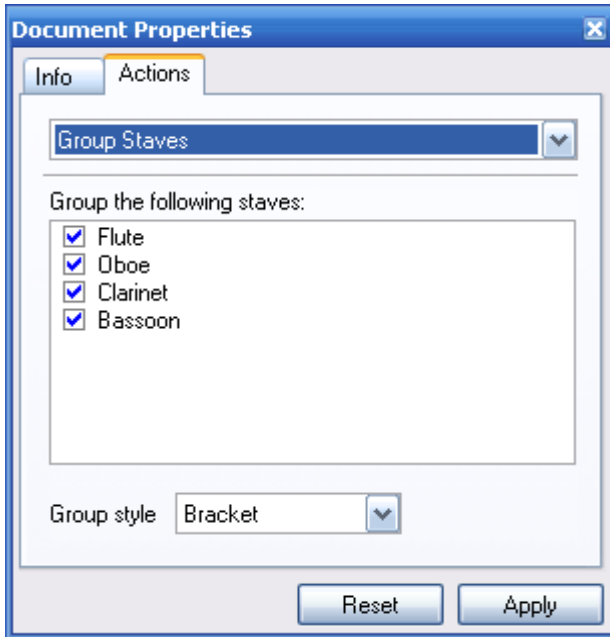


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## Group Staves

This action allows you to group multiple staves with either a bracket or a brace.

Click on the image below for details about each control:

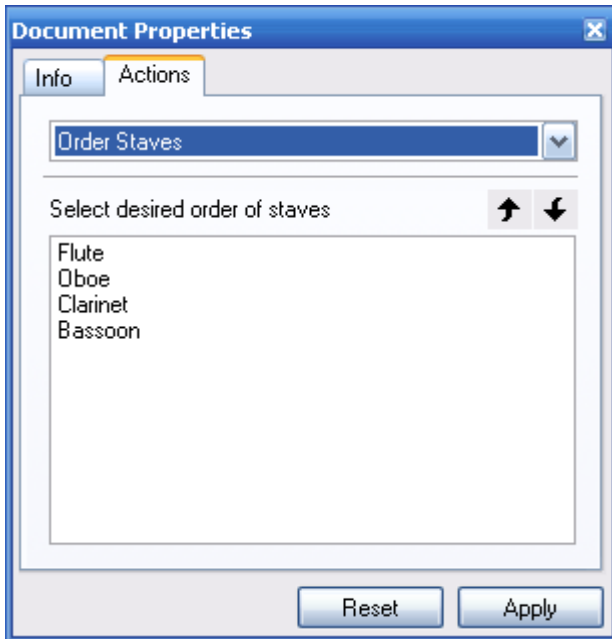


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## Order Staves

The Order Staves action lets you to rearrange the order of the staves on the Music Score. You can change the order of staves as often as you'd like.

Click on the image below for details about each control:

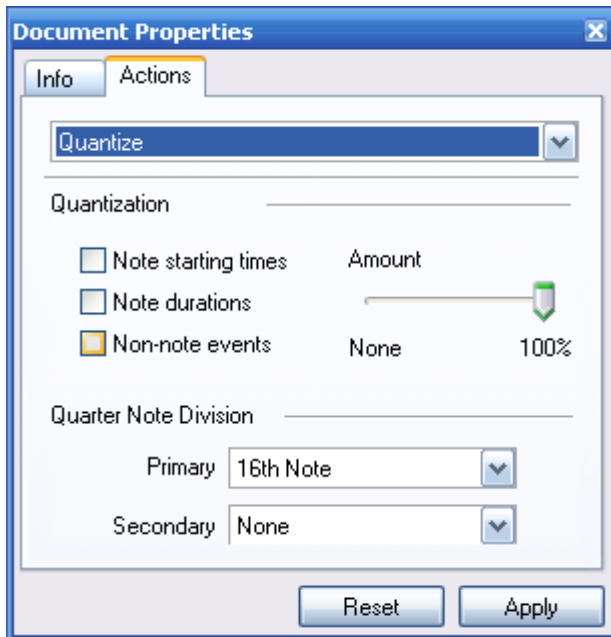


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## Quantize

Quantize is a feature that adjusts the start times and durations of elements as a way to fix up a performance in which notes were played too soon or too late (relative to the exact beats). A quantized performance sounds more rhythmically "perfect".

Click on the image below for details about each control:

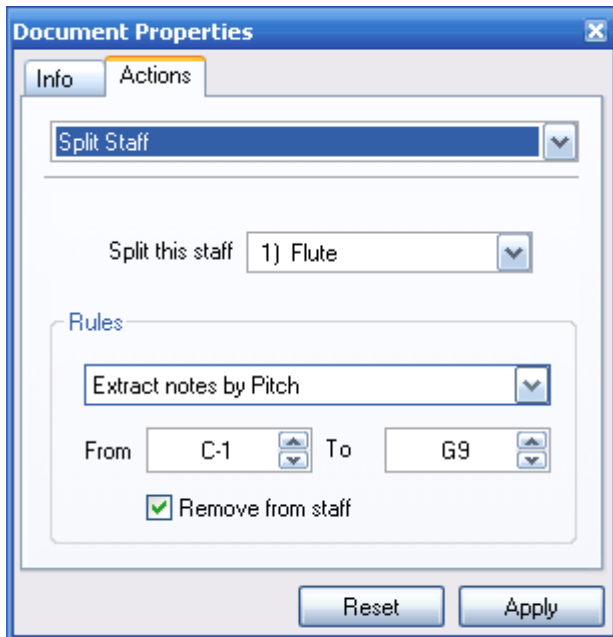


-0-

## Split Staff

This action splits notes on a staff into other staves. This can be useful, for example, when you have a Grand Staff and you'd like to turn it into two separate staves. The Merge Staves action, in contrast, performs the reverse operation by merging a range of staves into a new track.

Click on the image below for details about each control:

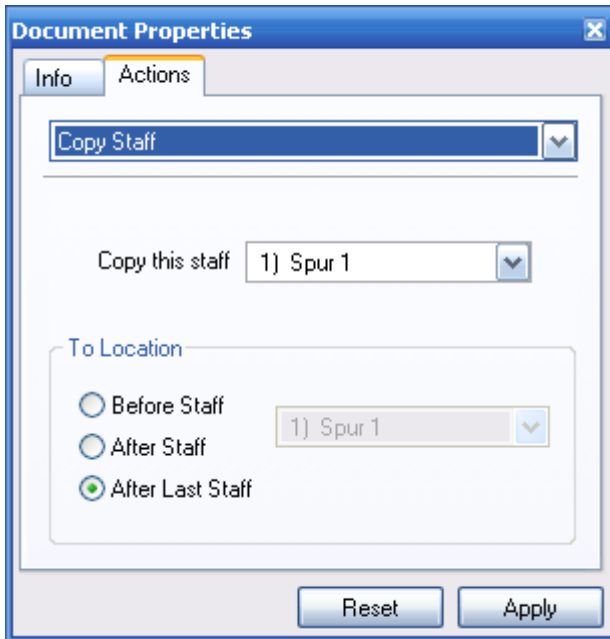


-0-

## Copy Staff

This action copies an existing staff (track) and inserts the new copy at a specific location in your music.

Click on the image below for details about each control:



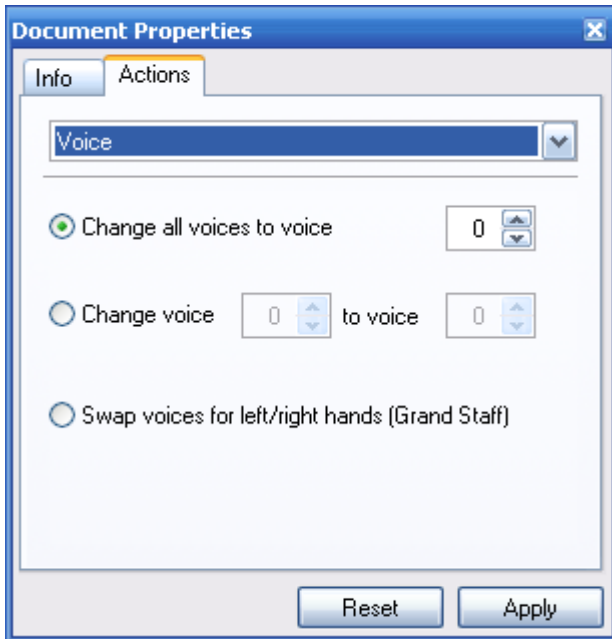
-0-



## Voice

This action quickly changes voices for all selected notes (or all notes in the selected staff/document).

Click on the image below for details about each control:



There are often many voices (or parts) in a piece of music. In choral music, soprano and alto share the upper staff, and tenor and bass share the lower staff. In keyboard scores ([grand staff](#)), the voices may not be quite as clear cut, but there still is typically more than one. A great example of [multivoicing](#) occurs in Bach's Preludes and Fugues. There are often as many as four voices occurring at any one time in the piece.

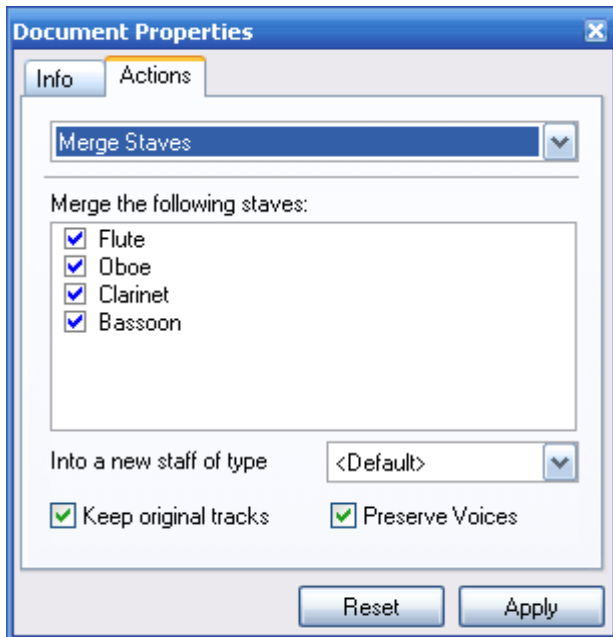
Each staff can have up to 8 different voices. The piano grand staff, however, has a total of eight voices. Four voices in [treble clef](#) and four voices in [bass clef](#). You can move your melodies to a different voice line using the voice action.

-0-

## Merge Staves

Use the Merge Staves action to combine two or more staves together. This can be useful, for example, when you have two separate staves that you'd like to combine into a single Grand Staff. The Split Staves action, in contrast, performs the reverse operation by splitting a given staff into several new tracks.

Click on the image below for details about each control:

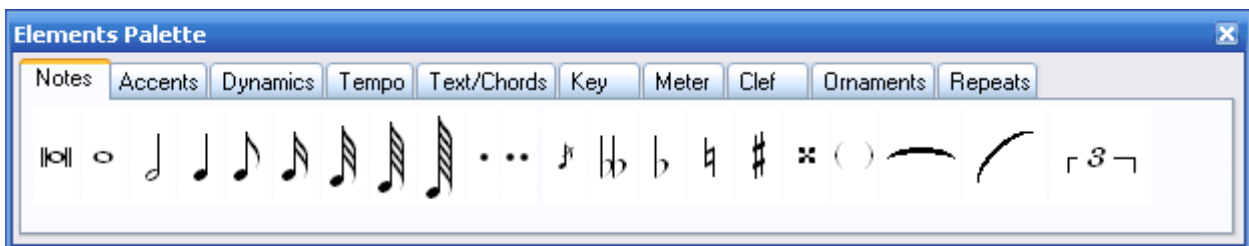


-0-

## Elements Palette

### Elements Palette

The Elements Palette contains notes, accents, dynamics, meters and dozens of other music symbols grouped into different music "tabs" or "pages". Similar symbols are grouped together on the same tab. For example, notes, accidentals, slurs, ties, tuplets and dots are all grouped in the Notes tab, since they all have to do with notes.



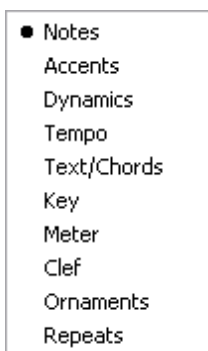
#### To Display the Elements Palette

Use any of the following methods to display the Properties Window

- On the Edit toolbar, click the Elements Palette button.
- Select Tools ▶ Elements Palette from the menu.
- Change from Select Mode to Insert Mode.

#### To Select Music Pages

- To view a set of notation elements, click a tab to bring it to the front of the palette. If a tab is not visible, use the small arrow keys to move the tabs left and right.
- Right-click the mouse anywhere in the Elements Palette to display a shortcut menu:



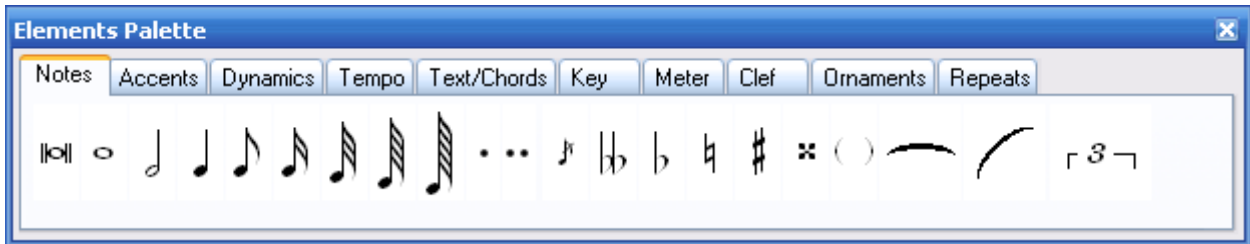
Select an item from the menu to display the corresponding music page.



## Notes Tab

The Notes tab contains the tools for adding notes with durations ranging from double whole notes to 128th notes. The Notes tab also contains other symbols generally associated with notes, such as accidentals, tuplets, slurs, ties and grace notes.

Click on the image below for details about each control:

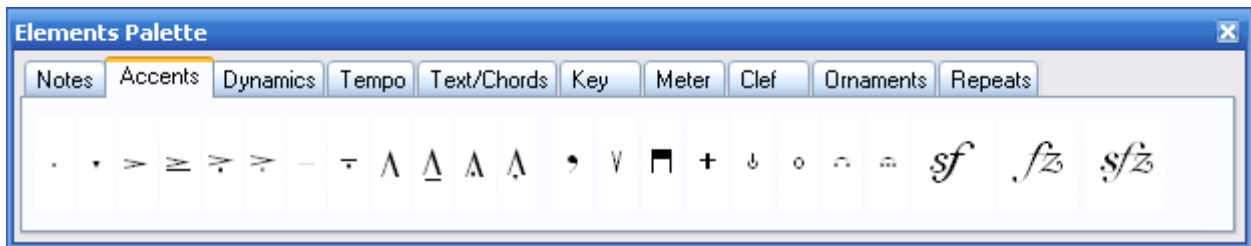


-0-

## Accents Tab

The Accents tab contains symbols for accent marks, string and wind instrument marks, and abbreviated accent terms.

Click on the image below for details about each control:

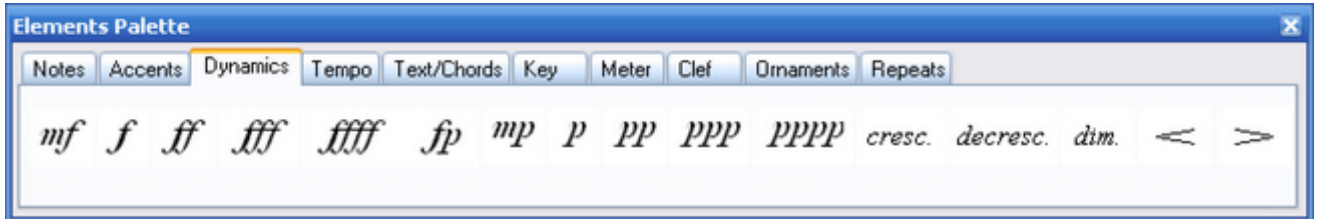


-0-

## Dynamics Tab

The Dynamics tab contains dynamic markings, divided into two basic groups. The upper portion of the window contains symbols that set a particular dynamic value; those in the lower portion contain markings that change from one value to another.

Click on the image below for details about each control:

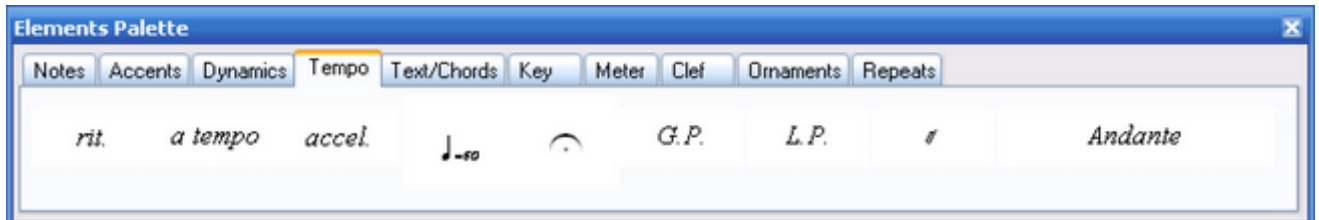


-0-

## Tempo Tab

The Tempo tab contains symbols for tempo marks and expressions, tempo changes, and pause marks.

Click on the image below for details about each control:



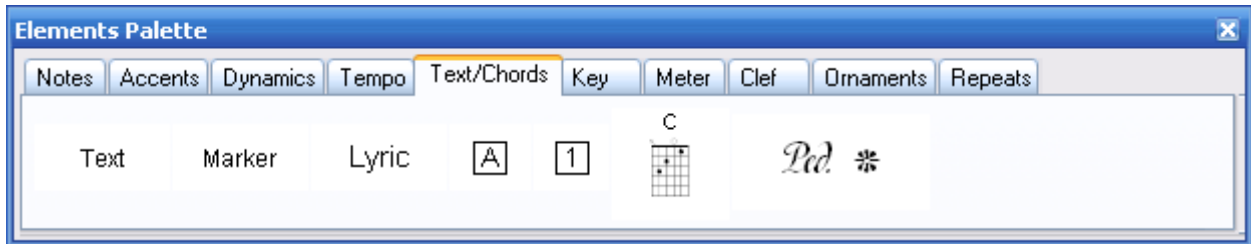
-0-



## Text/Chords Tab

The Text/Chords tab contains a variety of text and graphics symbols, including simple text, rehearsal markings, lyrics, chords and pedal markings.

Click on the image below for details about each control:

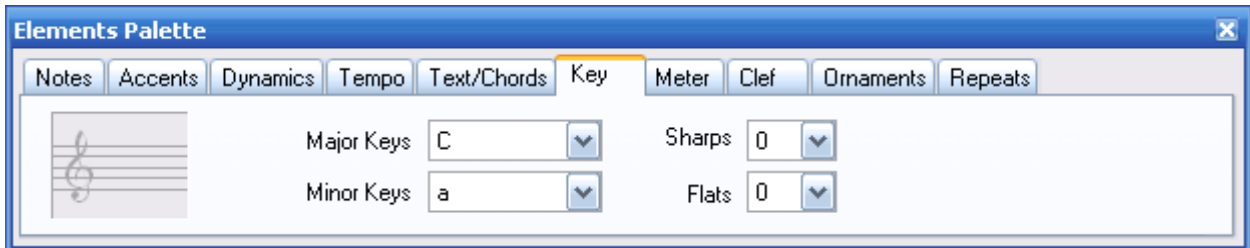


-0-

## Key Tab

The Key tab contains options for selecting or creating key signatures. All keys, including those with up to seven sharps or seven flats, are available.

Click on the image below for details about each control:

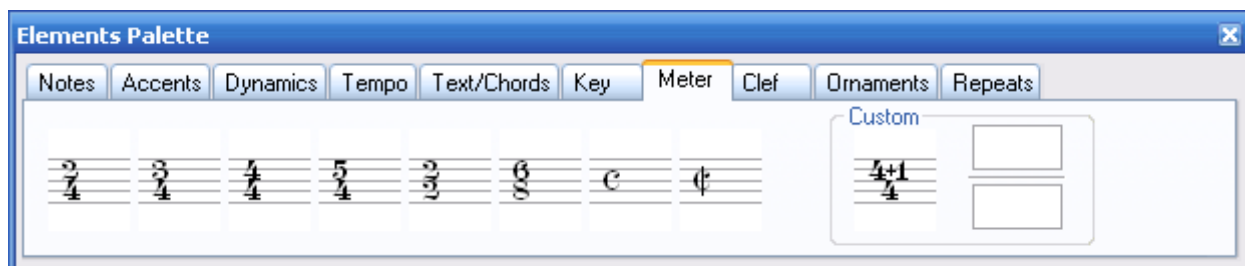


-0-

## Meter Tab

The Meter tab contains symbols you can use to enter meters, also known as time signatures. The left portion of the tab contains some common meters; the controls on the right portion of the tab allow you to enter custom meters, including compound and complex meters.

Click on an area in the image below for more information:

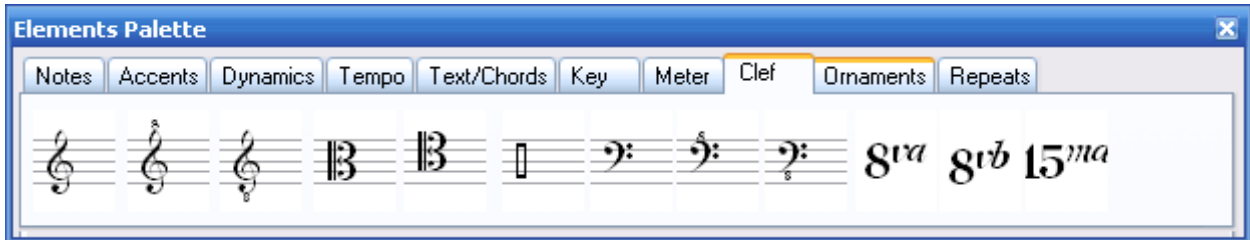


-0-

## Clef Tab

The Clef tab contains 9 different clef types and 3 octava symbols.

Click on an area in the image below for more information:



-0-

## Ornaments Tab

The Ornaments tab contains symbols for adding various ornaments, including trills, mordents, turns, arpeggios, tremolos, and some modern notational ornaments.

Click on an area in the image below for more information:



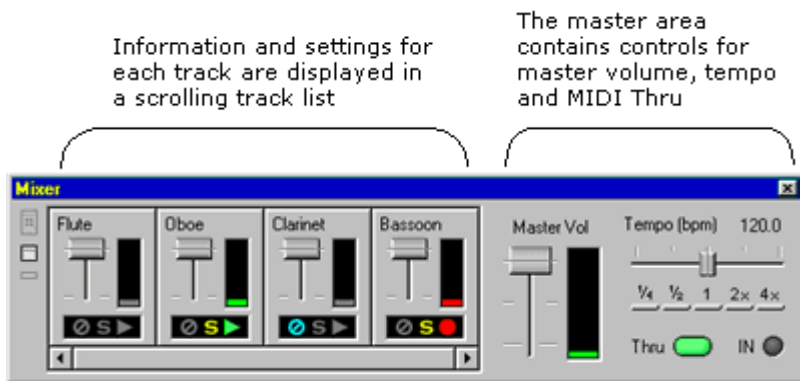
-0-



## Mixer

### Mixer

The Mixer is used to control the interaction of different tracks during a performance, and to change the overall properties of the music such as tempo and master volume. If you want one part to sound louder than another, for example, you could use the mixer to adjust the volumes of the tracks until everything sounds right.



To Display the Mixer

Use any of the following methods to display the Mixer:

- On the Edit toolbar, click the Mixer button.
- Select Tools ▶ Mixer from the menu.

Docking and Sizing the Mixer

The Mixer can be docked or undocked to the main application window, just like a toolbar.

When the Mixer is undocked you can resize it horizontally to take up less screen space.

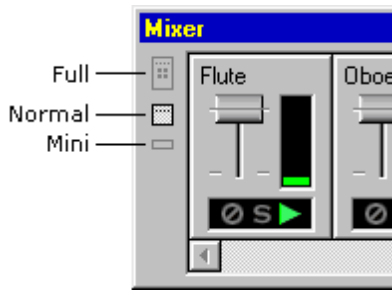
Move the mouse over one side of the window until the cursor changes to a resize cursor, then click and drag to resize the window.

Display Modes

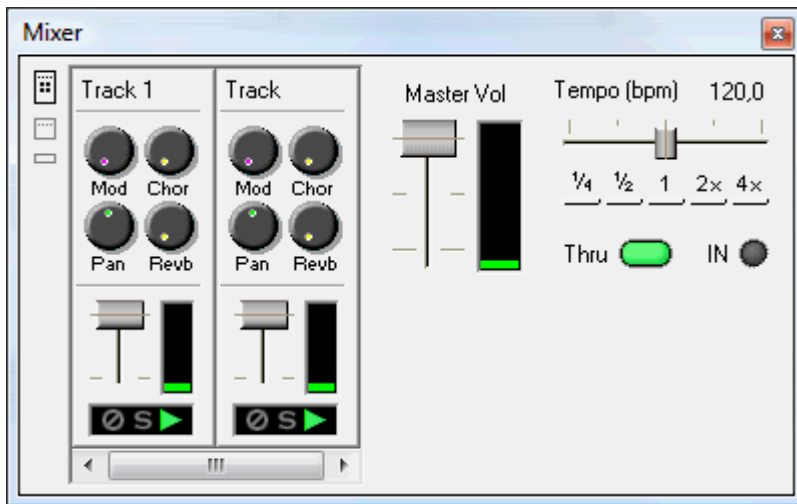
The Mixer can be displayed in different modes: Full, Normal and Mini.

In Full mode, all controls are displayed for each track, including knobs for specifying Reverb, Pan, Chorus and Modulation. In Mini mode, only the track name and state controls are displayed.

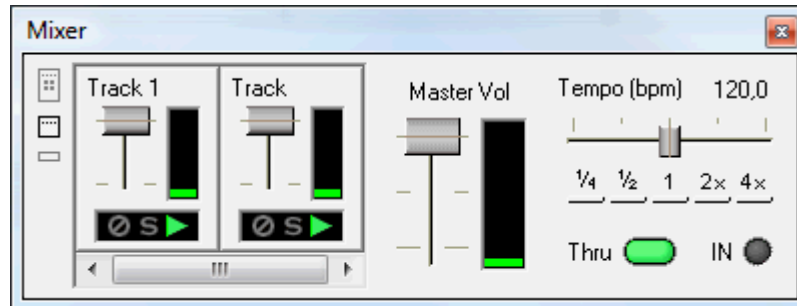
The 3 icons in the upper left-hand corner of the Mixer are buttons you use to change the Mixer's display mode:



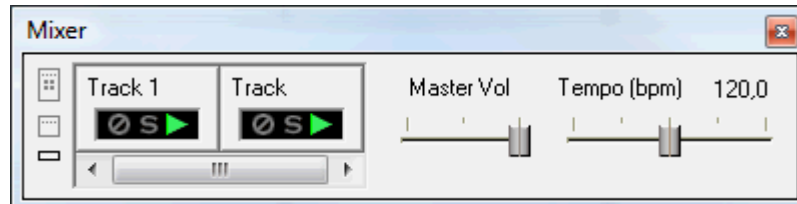
Full



Normal



Mini



-0-



## Track Controls

Each track in a music document is represented in the Mixer as a group of track controls in a scrolling list. Every track module has several controls for specifying track name, volume, and other performance settings.

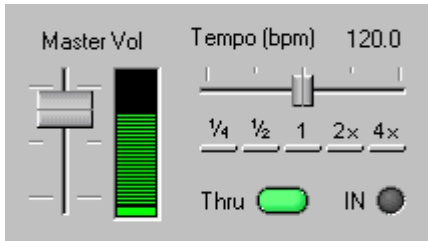
Click on an area in the image below for more information:



-0-

## Master Controls

The Master Control area in the Mixer contains controls that affect the performance of all tracks. Click on areas of the Master controls displayed above to learn more about them.



Located on the Master control console are a volume slider, a VU meter, tempo controls, a MIDI In indicator, and a MIDI Thru button.

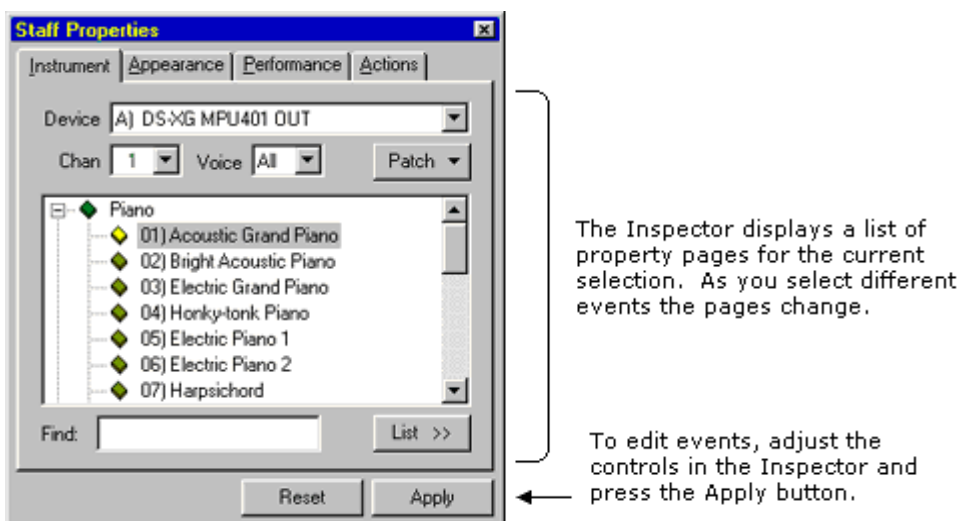
-0-

# Properties Window

## Properties Window

The Properties Window is used to modify hundreds of different element properties. Everything from the pitch of a note, the shape of slurs and ties to the spacing around a staff can be changed using the Properties Window.

The usual method of editing a music symbol is to select it and use the Properties Window to change the desired element properties. One of the most powerful features of the Properties Window is its ability to modify many different elements at once. You can select several notes, for example, and with a single operation change all their durations to 8th notes, or all the stem directions.



To Display the Properties Window

Use any of the following methods to display the Properties Window:

- On the Edit toolbar, click the Properties Window button.
- Select Tools ▶ Properties Window from the menu.
- Double click the mouse on a music symbol.
- Right-click on a selected element, then select Properties Window... from the shortcut menu.

To use the Properties Window

- Select elements that you want to edit.
- Display the Properties Window and use the different property pages to change characteristics.
- Press the Apply button to make the changes to the selected elements.
- If you've made changes in the Properties Window - but haven't applied those changes yet - press the Reset button to reset the controls to the current values.

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## Properties Window Pages

### Common Pages

In general, element properties are classified in terms of the following:

- Appearance Properties affect the way the element appears on the score.
- Performance Properties affect how the element sounds during playback.
- General Properties include some common properties that also affect how elements look on the score.

Each of these categories is represented by a "page" or "tab" in the Properties Window.

### Action Page

If a selected element has actions associated with it (e.g. notes, staves) the Properties Window also displays the Actions tab. This tab contains a list of actions that can be applied to the selected element(s).

### Other Pages

Some elements have other pages beyond the standard Appearance, Performance and General. For example, the Staff Properties Window has pages for specifying instrumentation and routing for each track.

## Notation Element Properties

### Symbol Properties

Click on any music symbol in the image below to learn about its properties, or select an item from the list below:

The image shows a musical score for a piece titled "Moderate ballad" in 4/4 time. The score is written for piano and includes lyrics. The tempo is marked "Moderate ballad" and the dynamics range from "mp" (mezzo-piano) to "pp" (pianissimo). The score includes various musical notations such as chords (E $\emptyset$ , A7alt, D $\Delta$ ), a repeat sign with first and second endings, a fermata, and a "N.C." (No Chord) instruction. The lyrics are: "1. Do - be do be do be do. 2. La - de da de la be boo. Dee Da".

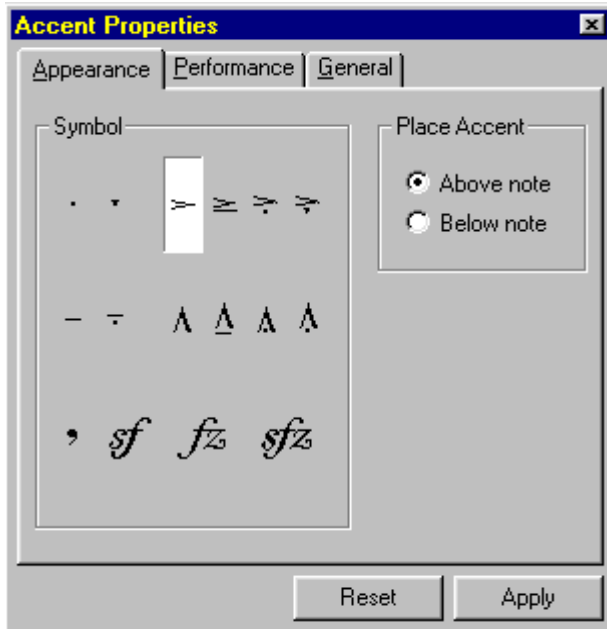
- |   |   |
|---|---|
| <a href="#">»» Accent Properties</a>        | <a href="#">»» Meter Properties</a>         |
| <a href="#">»» Accidental Properties</a>    | <a href="#">»» Note Properties</a>          |
| <a href="#">»» Barline Properties</a>       | <a href="#">»» Pedal Properties</a>         |
| <a href="#">»» Beam Properties</a>          | <a href="#">»» Repeat Properties</a>        |
| <a href="#">»» Brace/Bracket Properties</a> | <a href="#">»» Slur Properties</a>          |
| <a href="#">»» Clef Properties</a>          | <a href="#">»» Staff Properties</a>         |
| <a href="#">»» Chord Symbol Properties</a>  | <a href="#">»» Staff Spacing Properties</a> |
| <a href="#">»» Document Properties</a>      | <a href="#">»» System Properties</a>        |
| <a href="#">»» Dot Properties</a>           | <a href="#">»» Tempo Properties</a>         |
| <a href="#">»» Dynamics Properties</a>      | <a href="#">»» Text Properties</a>          |
| <a href="#">»» Glissando Properties</a>     | <a href="#">»» Tie Properties</a>           |
| <a href="#">»» Grace Note Properties</a>    | <a href="#">»» Triplet Properties</a>       |
| <a href="#">»» Key Properties</a>           | <a href="#">»» Wave Properties</a>          |
| <a href="#">»» Lyric Properties</a>         |   |

 [Lyric Block Properties](#)

-0-

## Accent Properties: Appearance

Click on the image below for details about each control:



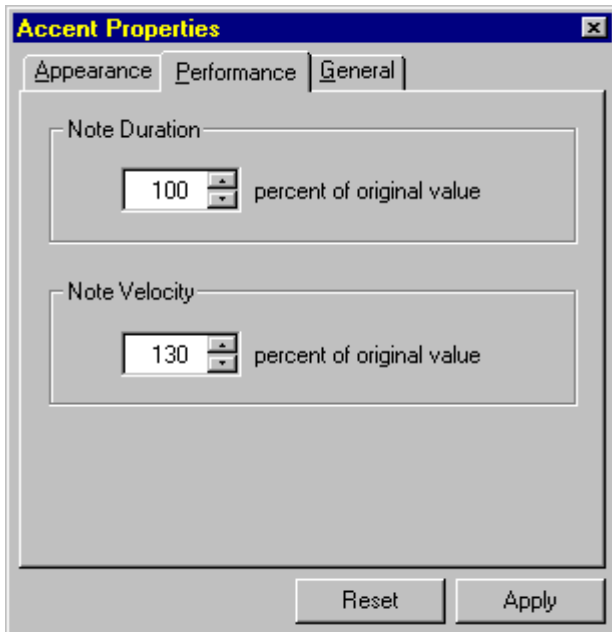
Use controls on this page to change the accent type and placement. These settings affect only how the accent appears in the music.

-0-



## Accent Properties: Performance

Click on the image below for details about each control:

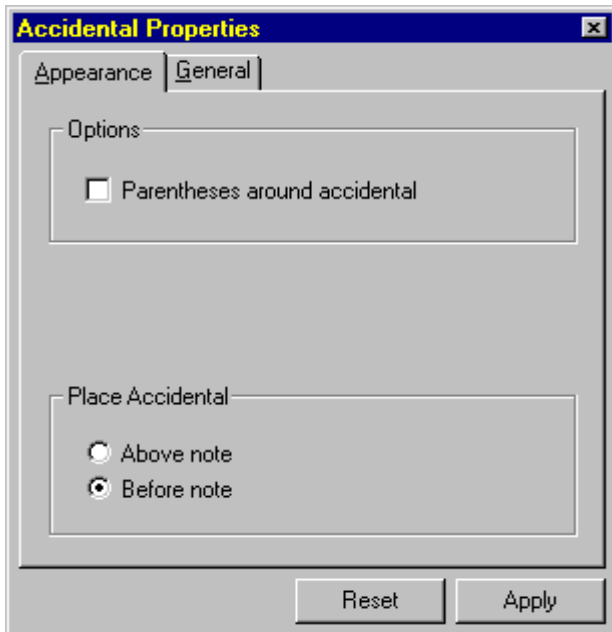


Use controls on this page to edit parameters that change how the note attended by the accent mark sounds during playback. These settings affect only the performed music, not the original note values.

-0-

## Accidental Properties: Appearance

Click on the image below for details about each control:



Use controls on this page to change the accidental appearance. These settings affect only how the accidental appears in the music.

-0-

## Barline Properties: Appearance

Click on the image below for details about each control:



Use controls on this page to change the barline appearance. These settings affect only how the barline appears in the music.

-0-

## Beam Properties: Appearance

Click on the image below for details about each control:

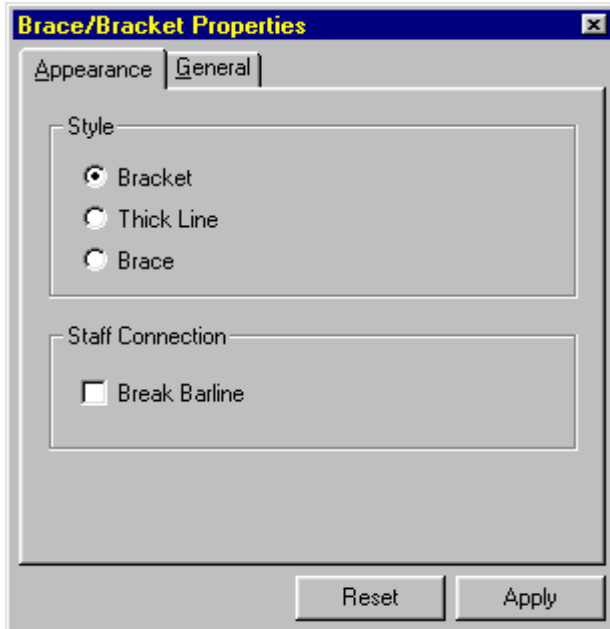


Use controls on this page to change the beam appearance. These settings affect only how the beam appears in the music.

-0-

## Brace Properties: Appearance

Click on the image below for details about each control:

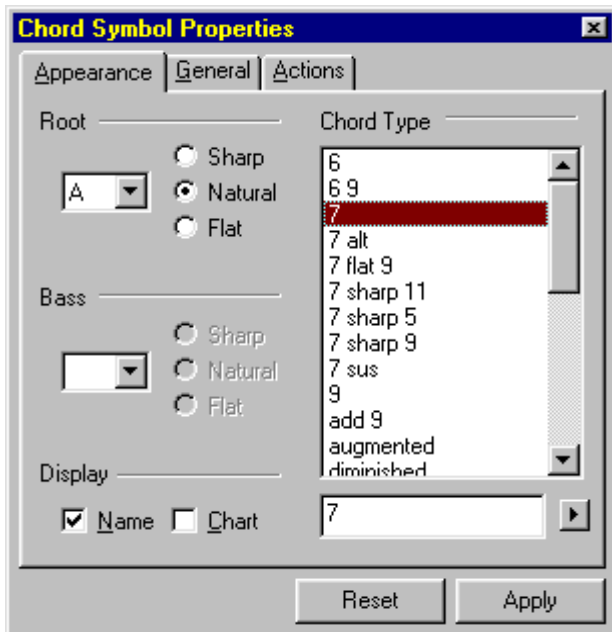


Use controls on this page to change how the selected braces or brackets appear in the Music Score.

-0-

## Chord Symbol Properties: Appearance

Click on the image below for details about each control:

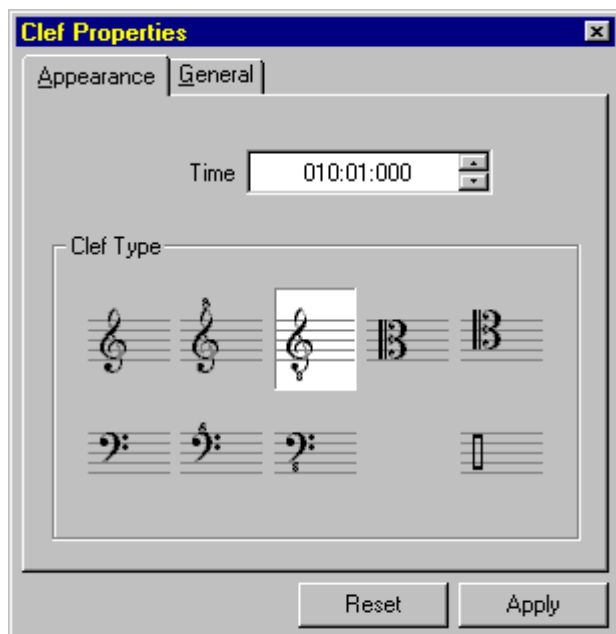


Use controls on this page to change the chord letter and suffix.

-0-

## Clef Properties: Appearance

Click on the image below for details about each control:



Use controls on this page to change the start time of the clef and the clef type. Note that changing the clef type will any notes that follow it.

-0-

## Dot Properties: Appearance

Click on the image below for details about each control:



-0-



## Dynamics Properties: Appearance (constant dynamics)

Click on the image below for details about each control:



Use controls on this page to change how constant dynamic markings, such as *p*, *mf* and *ff*, appear in the music notation. Other dynamic markings, such as crescendos and hairpins, have slightly different appearance properties.

Click on one of the links below to display appearance properties for other types of dynamic markings:

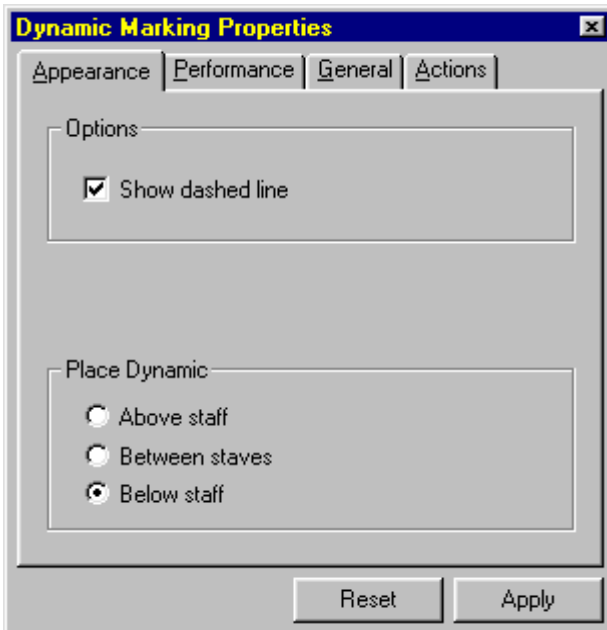
[» Appearance \(changing dynamics\)](#)

[» Appearance \(hairpins\)](#)

-0-

## Dynamics Properties: Appearance (changing dynamics)

Click on the image below for details about each control:



Use controls on this page to change how changing dynamic markings, such as *cresc.*, *descre.* and *dim.*, appear in the music notation. Other dynamic markings, such as *p*, *mf* and hairpins, have slightly different appearance properties.

Click on one of the links below to display appearance properties for other types of dynamic markings:

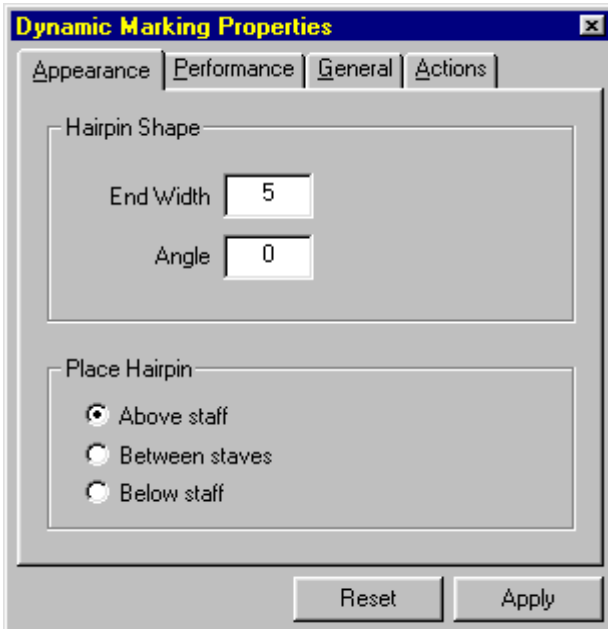
[» Appearance \(constant dynamics\)](#)

[» Appearance \(hairpins\)](#)

-0-

## Dynamics Properties: Appearance (hairpins)

Click on the image below for details about each control:



Use controls on this page to change how hairpins appear in the music notation. Other dynamic markings, such as *p*, *mf* and crescendos, have slightly different appearance properties.

Click on one of the links below to display appearance properties for other types of dynamic markings:

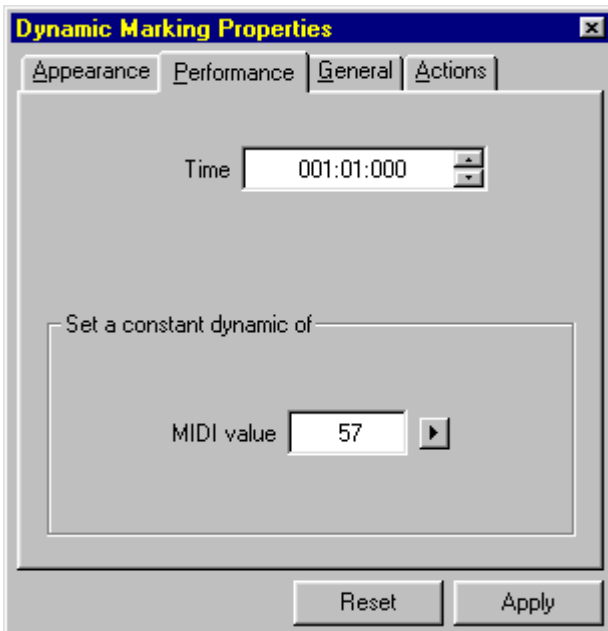
[» Appearance \(constant dynamics\)](#)

[» Appearance \(changing dynamics\)](#)

-0-

## Dynamics Properties: Performance (constant dynamics)

Click on the image below for details about each control:



Use controls on this page to change how constant dynamic markings, such as p, mf and ff, affect the music performance.

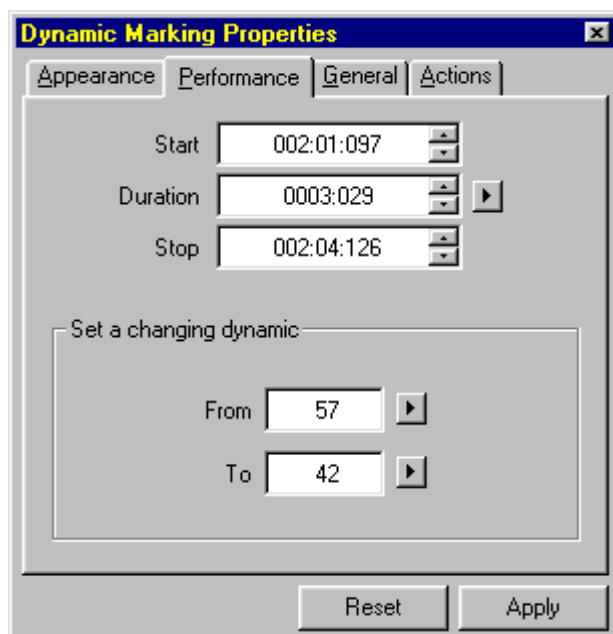
Dynamic markings which change over time, such as crescendos and diminuendos, have slightly different performance properties. Click on one of the links below to display performance properties for other types of dynamic markings:

[» Performance \(changing dynamics\)](#)

-0-

## Dynamics Properties: Performance (changing dynamics)

Click on the image below for details about each control:



Use controls on this page to change how changing dynamic markings, such as crescendos, hairpins and diminuendos, affect the music performance.

Dynamic markings which are used to specify constant values, such as *p*, *mf* and *ff*, have slightly different performance properties. Click on one of the links below to display performance properties for other types of dynamic markings:

[» Performance \(constant dynamics\)](#)

-0-

## Grace Note Properties: Appearance

Click on the image below for details about each control:

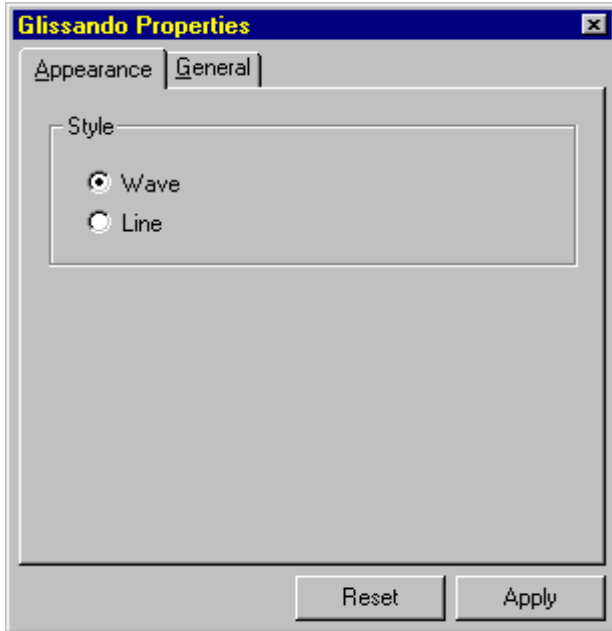


Use controls on this page to change how a grace note looks in the Music Score.

-0-

## Glissando Properties: Appearance

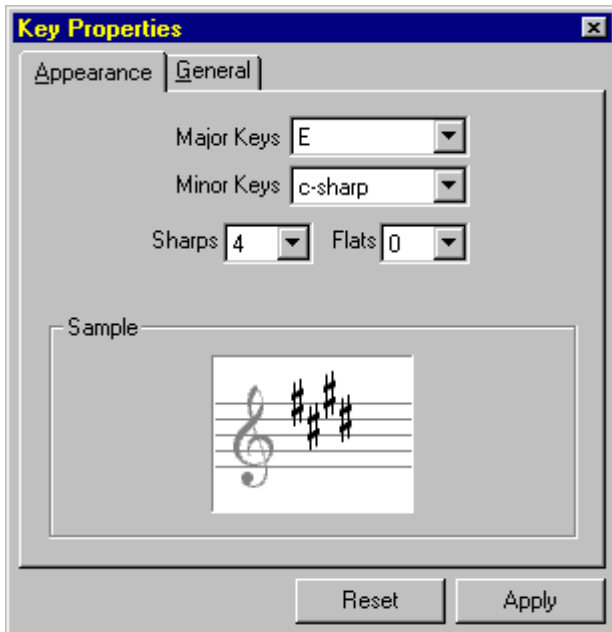
Click on the image below for details about each control:



-0-

## Key Properties: Appearance

Click on the image below for details about each control:



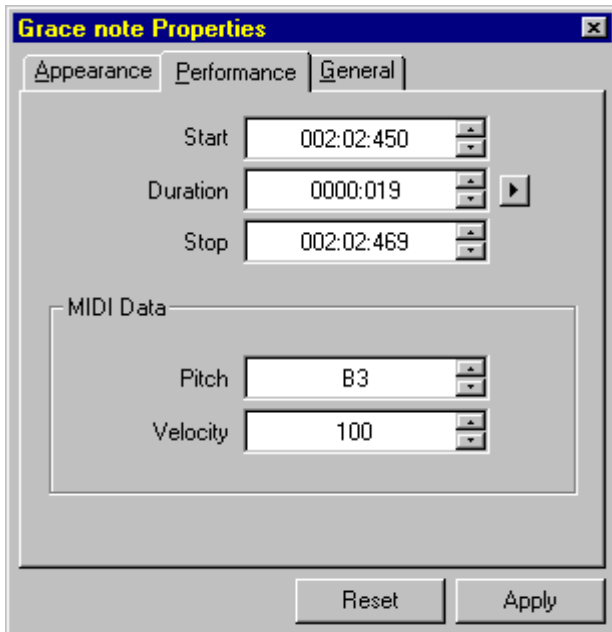
Use controls on this page to change the properties of the selected key signatures in the Music Score.

-0-



## Grace Note Properties: Performance

Click on the image below for details about each control:

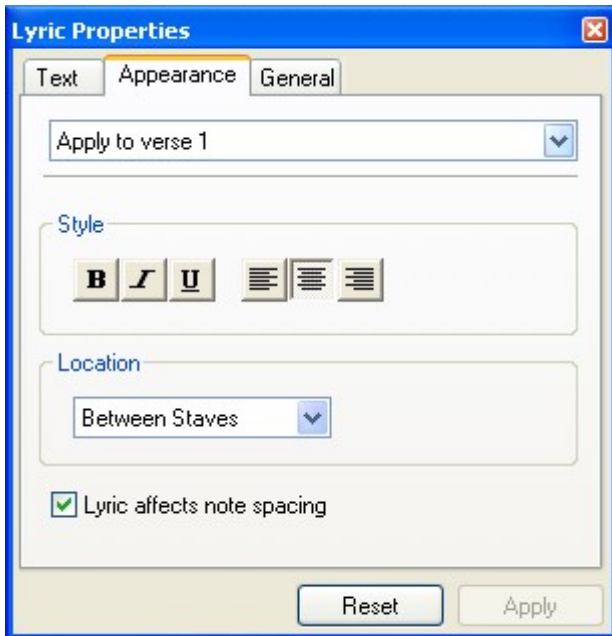


Use controls on this page to change how a grace note looks in the Music Score.

-0-

## Lyric Properties: Appearance

Click on the image below for details about each control:



Use controls on this page to change how the selected lyrics appear in the Music Score. The changes can be applied to a whole verse/chorus or only to the selected elements.

-0-

## Lyric Properties: Text

## Lyric Properties: Text

The Text tab in the Lyric Properties window allows you to enter or edit whole verses as a single text block. The basic element of the text block is the syllable. Each syllable will be automatically placed in an appropriated position on your score (under notes or chords). Beside the syllables, there are three special elements you can use to adjust the position and appearance of the lyric text:

- The Place Holder (•)

The place holder is represented by the special character "•" and it will always "hold" the place of a position (note or chord) that contains no syllable. Place holders can be seen as spaces in a normal text. You can add or remove them by pressing <space bar>, <backspace> or <delete>.

- The Hyphen (-)

The hyphen is represented by a "hyphen" or "minus sign" and can be used to divide a word in two or more syllables.

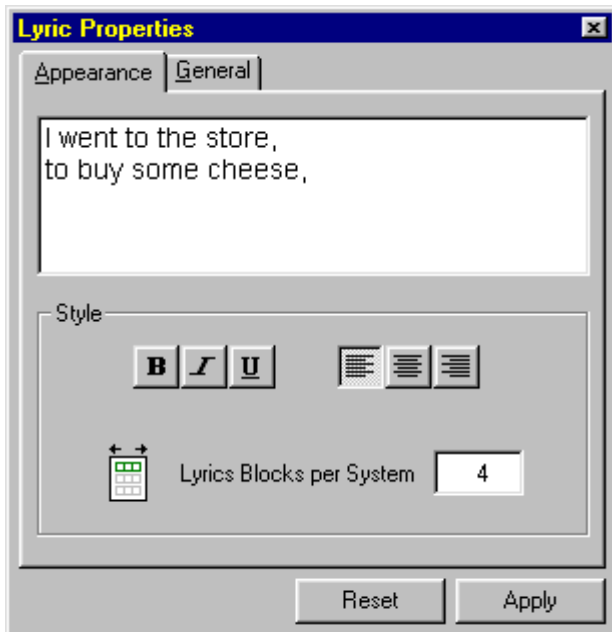
- The Extender (\_)

The extender is represented by an "underscore" and can be used to extend the duration of a syllable over one or more positions. Each extended position is represented in the text by a single underscore character.

The image shows a screenshot of a music score with a 'Lyric Properties' dialog box open. The dialog box has three tabs: 'Text', 'Appearance', and 'General'. The 'Text' tab is active, showing a text area with the following lyrics: 'maz-ing • grace! how sweet the sound-That saved a • wretch like me! • I once • was • lost but now • am • found, Was blind but • now I see. •'. Above the text area, there are dropdown menus for 'Verse' and '1'. The background shows musical notation with lyrics: '1. A - maz - grace -', '2. Twas grace', '3. The Lord', '4. Thru man -', '5. When we've', 'That saved', 'And grace', 'His word', 'I have', 'Bright shin'.

## Lyric Block: Appearance

Click on the image below for details about each control:

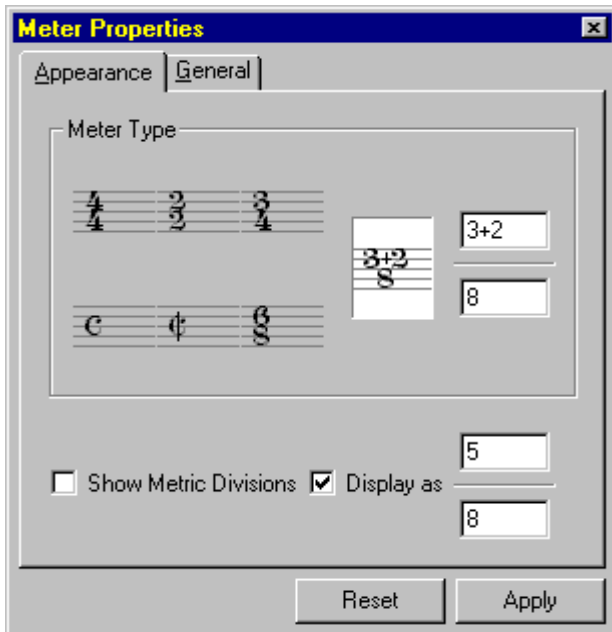


Use controls on this page to change how the selected lyric blocks appear and to control the number of blocks per line.

-0-

## Meter Properties: Appearance

Click on the image below for details about each control:



Use controls on this page to change how the selected meters (time signatures) appear in the Music Score.

-0-

## Note Properties: Appearance

Click on the image below for details about each control:

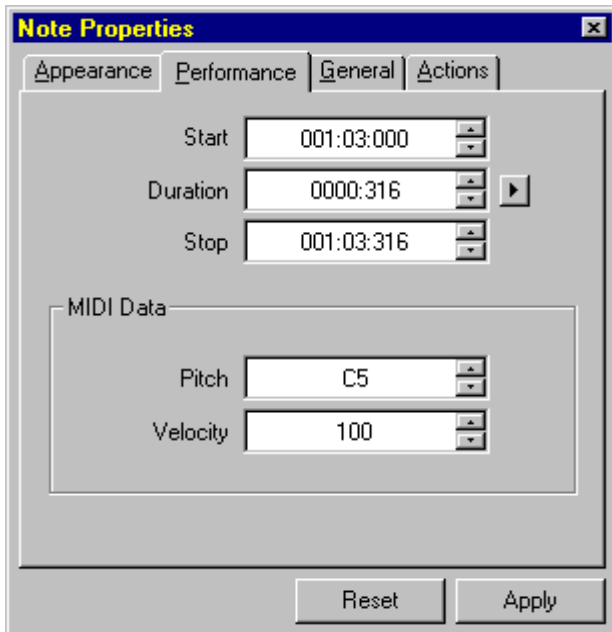


Use controls on this page to change how a note appears in the Music Score.

-0-

## Note Properties: Performance

Click on the image below for details about each control:

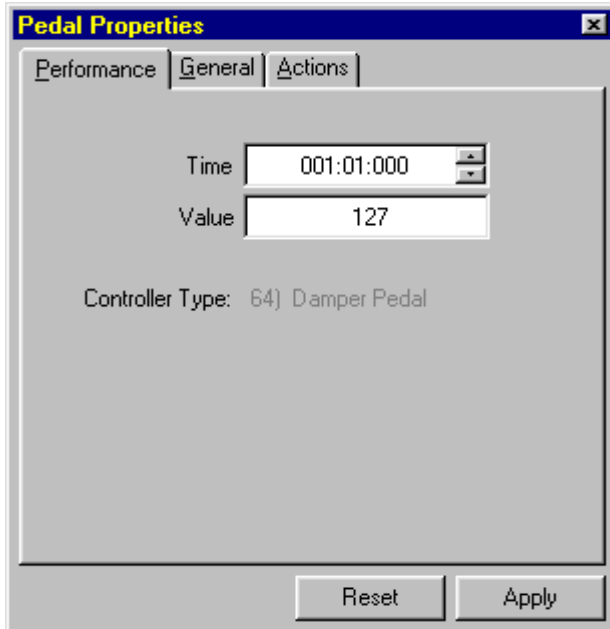


Use controls on this page to change how a note performs.

-0-

## Pedal Properties: Performance

Click on the image below for details about each control:



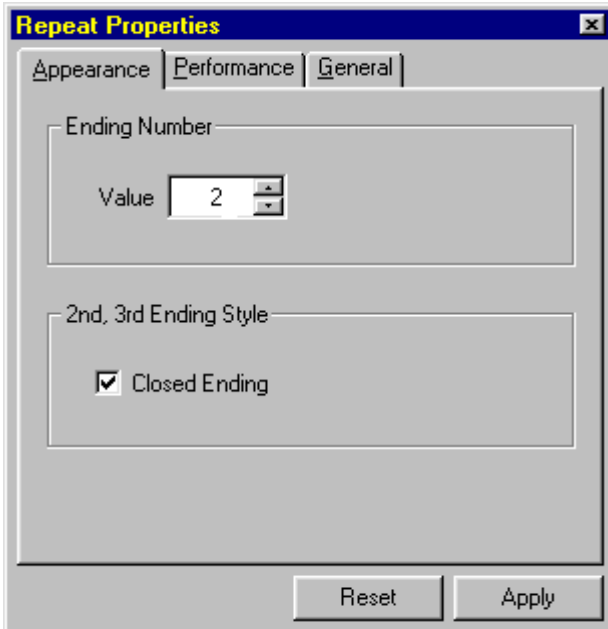
Use controls on this page to change how the selected pedal markings affect the music performance.

-0-



## Repeat Properties: Appearance (endings)

Click on the image below for details about each control:



Use controls on this page to change how the selected repeat endings appear in the Music Score.

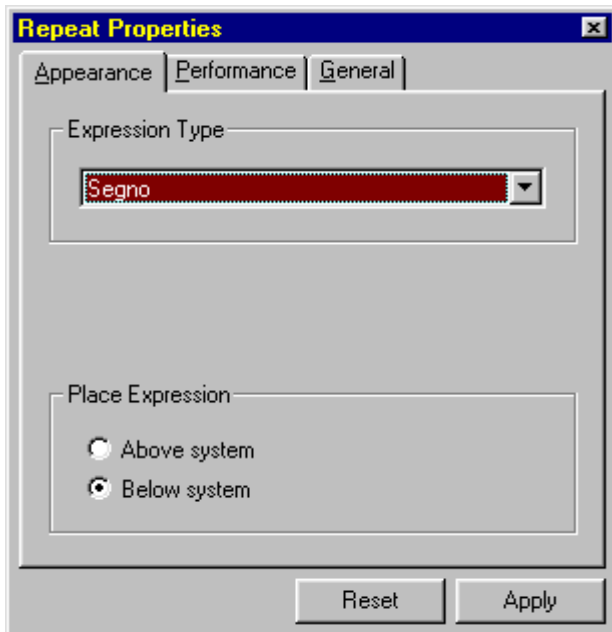
Click on one of the links below to display appearance properties for other types of repeat markings:

 [Appearance \(expressions\)](#)

-0-

## Repeat Properties: Appearance (expressions)

Click on the image below for details about each control:



Use controls on this page to change how the selected repeat expressions appear in the Music Score.

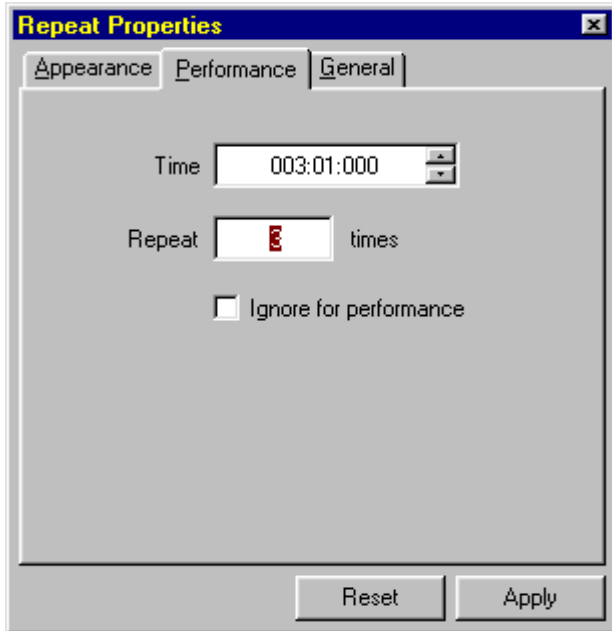
Click on one of the links below to display appearance properties for other types of repeat markings:

 [Appearance \(endings\)](#)

-0-

## Repeat Properties: Performance (End Bracket)

Click on the image below for details about each control:



Use controls on this page to change how the selected repeat bracket performs in the Music Score.

Click on one of the links below to display appearance properties for other types of repeat markings:

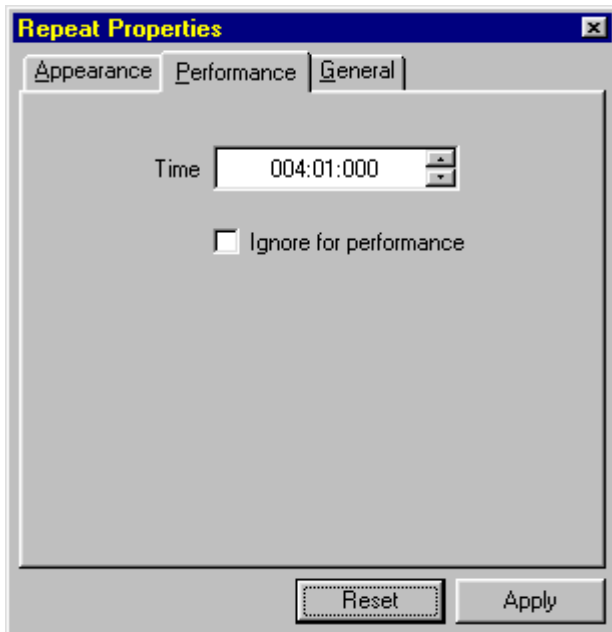


[Performance \(expressions\)](#)

-0-

## Repeat Properties: Performance

Click on the image below for details about each control:



Use controls on this page to change how the selected repeat performs in the Music Score.

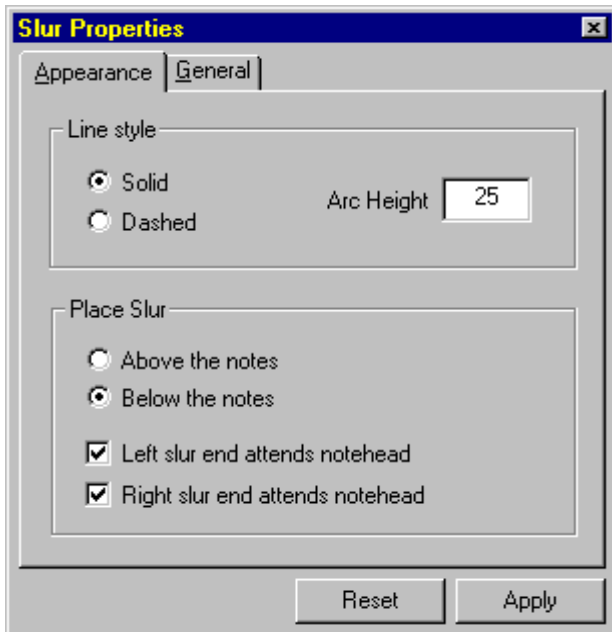
Click on one of the links below to display appearance properties for other types of repeat markings:

 [Performance \(End Bracket\)](#)

-0-

## Slur Properties: Appearance

Click on the image below for details about each control:

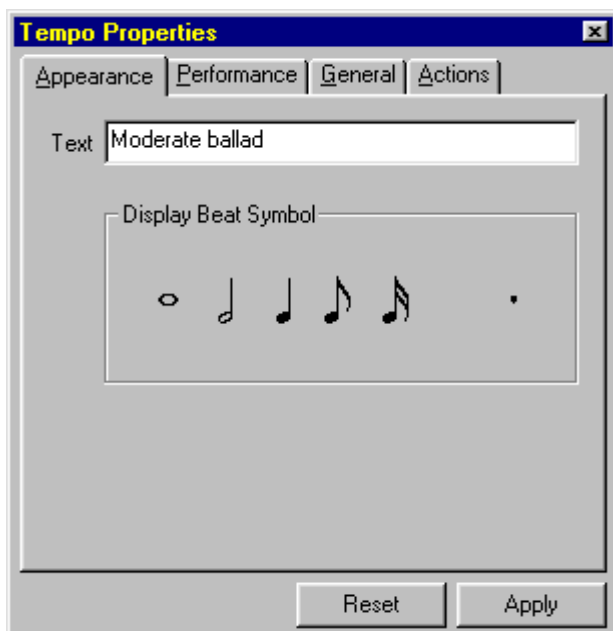


Use controls on this page to change how the selected slurs appear in the Music Score.

-0-

## Tempo Properties: Appearance (constant tempo)

Click on the image below for details about each control:



Use controls on this page to change how constant tempo markings, such as Andante, Allegro and  $q=$ , appear in the Music Score.

Other tempo markings, such as accelerandos, ritardandos and pauses, have slightly different appearance properties. Click on one of the links below to display appearance properties for other types of dynamic markings:

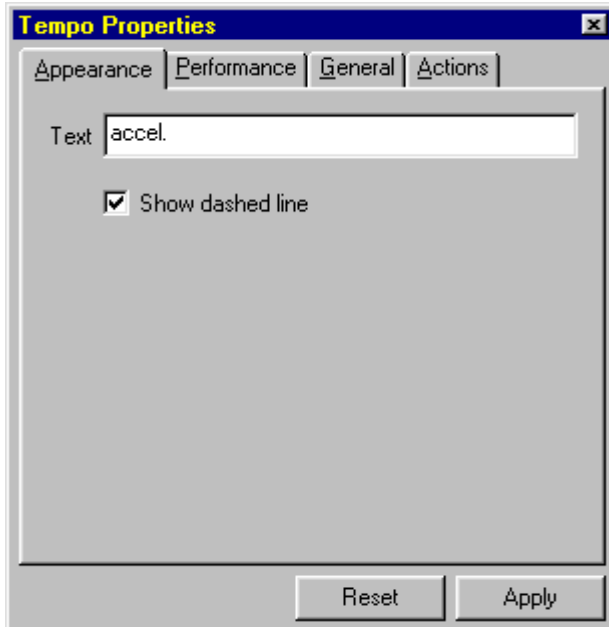
[» Appearance \(changing tempo\)](#)

[» Appearance \(pauses\)](#)

-0-

## Tempo Properties: Appearance (changing)

Click on the image below for details about each control:



Use controls on this page to change how changing tempo markings, such as accelerandos and ritardandos, appear in the Music Score.

Other tempo markings, such as Andante, Allegro and pauses, have slightly different appearance properties. Click on one of the links below to display appearance properties for other types of dynamic markings:

[» Appearance \(constant tempo\)](#)

[» Appearance \(pauses\)](#)

-0-

## Tempo Properties: Appearance (pauses)

Click on the image below for details about each control:



Use controls on this page to change how pauses appear in the Music Score.

Other tempo markings, such as accelerandos, Andante, and the beat symbol, have slightly different appearance properties. Click on one of the links below to display appearance properties for other types of dynamic markings:

[» Appearance \(constant tempo\)](#)

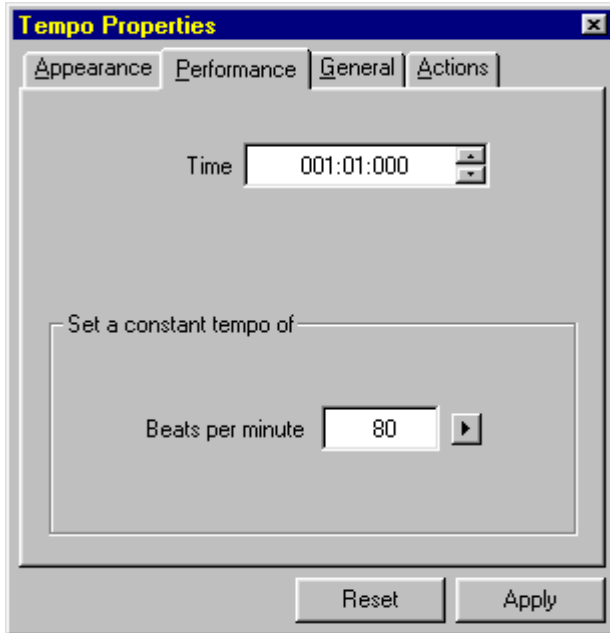
[» Appearance \(changing tempo\)](#)

-0-



## Tempo Properties: Performance (expressions)

Click on the image below for details about each control:



Use controls on this page to change how constant tempo markings, such as Andante, Allegro and  $q = 60$ , affect the music performance.

Other tempo markings, such as accelerandos, ritardandos and pauses, have slightly different performance properties. Click on one of the links below to display appearance properties for other types of dynamic markings:

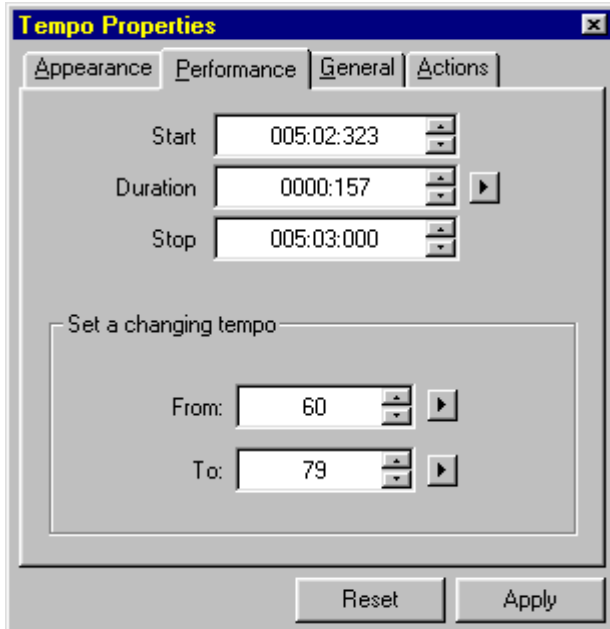
[» Performance \(changing tempo\)](#)

[» Performance \(pauses\)](#)

-0-

## Tempo Properties: Performance (changing)

Click on the image below for details about each control:



Use controls on this page to change how changing tempo markings, such as accelerandos and ritardandos, affect the music performance.

Other tempo markings, such as Andante, Allegro and pauses, have slightly different performance properties. Click on one of the links below to display performance properties for other types of tempos:

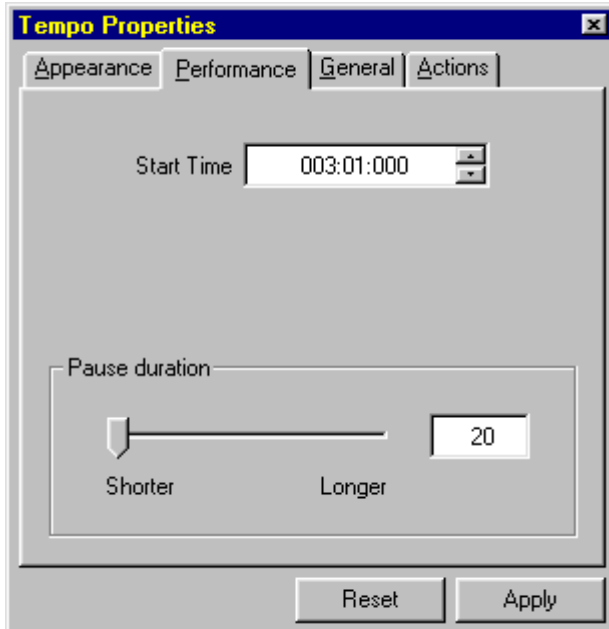
[» Performance \(constant tempo\)](#)

[» Performance \(pauses\)](#)

-0-

## Tempo Properties: Performance (pauses)

Click on the image below for details about each control:



Use controls on this page to change how pauses affect the music performance.

Other tempo markings, such as Andante, Allegro and accelerandos, have slightly different performance properties. Click on one of the links below to display performance properties for other types of tempos:

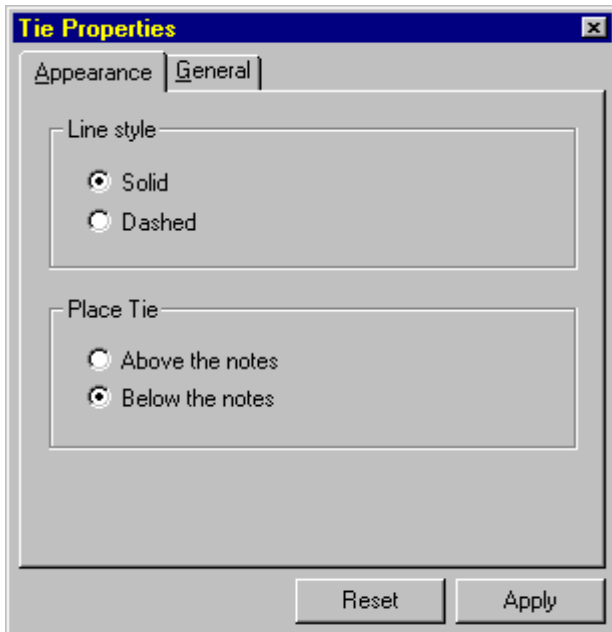
[» Performance \(constant tempo\)](#)

[» Performance \(changing tempo\)](#)

-0-

## Tie Properties: Appearance

Click on the image below for details about each control:



Use controls on this page to change how the selected ties appear in the Music Score.

-0-

## Document Properties: Info

Click on the image below for details about each control:

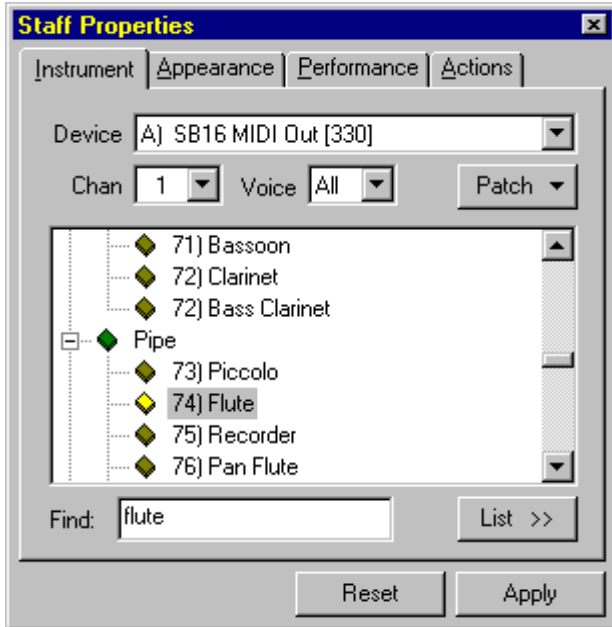


This page gives information about the current document such as file name, and date created.

-0-

## Staff Properties: Instrument

Click on the image below for details about each control:

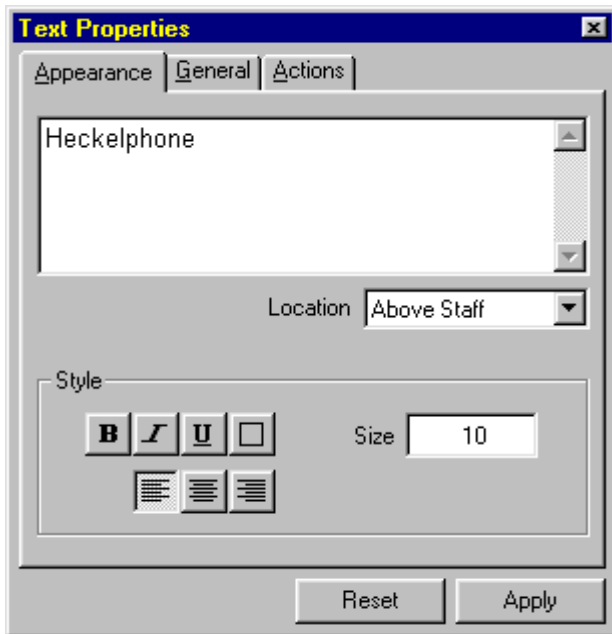


Use controls on this page to change the instrumentUsed for the selected staves, and to configure the routingUsed to play the specified tracks.

-0-

## Text Properties: Appearance

Click on the image below for details about each control:

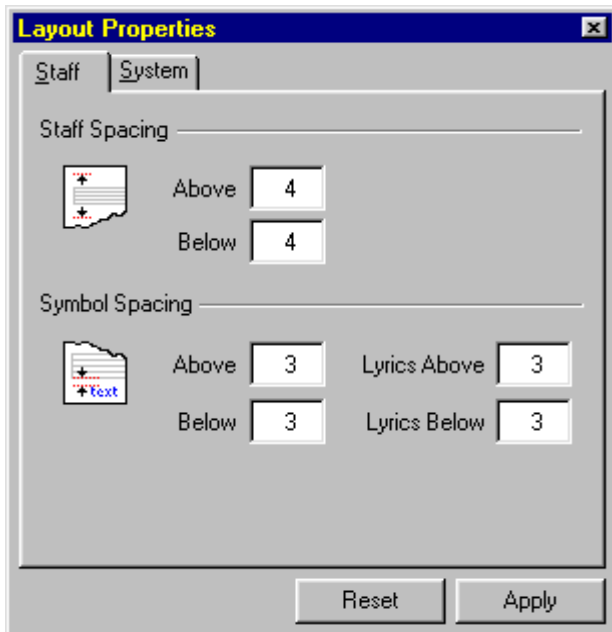


Use controls on this page to change how the selected lyrics appear in the Music Score.

-0-

## Layout Properties: Staff

Click on the image below for details about each control:



Use controls on this page to change staff spacing settingsUsed by lyrics, text, dynamics, andOther symbols.

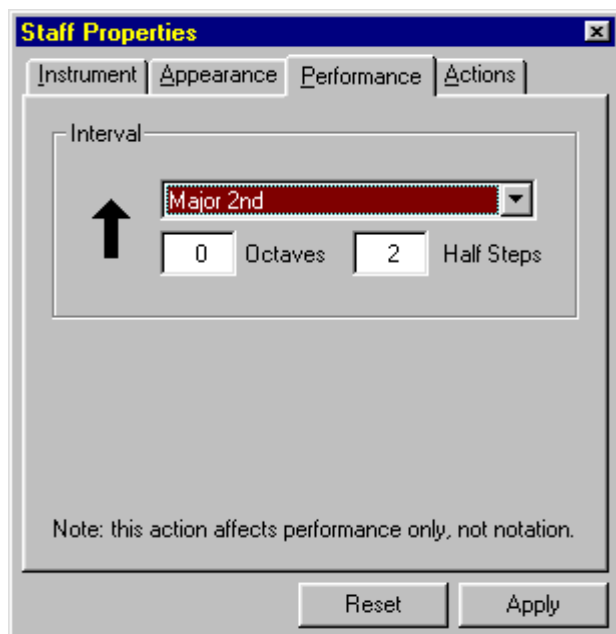
To bring up this Properties Window, single click on a measure to select the system, right mouse click, and from the context menu, select Properties Window...

-0-



## Staff Properties: Performance

Click on the image below for details about each control:

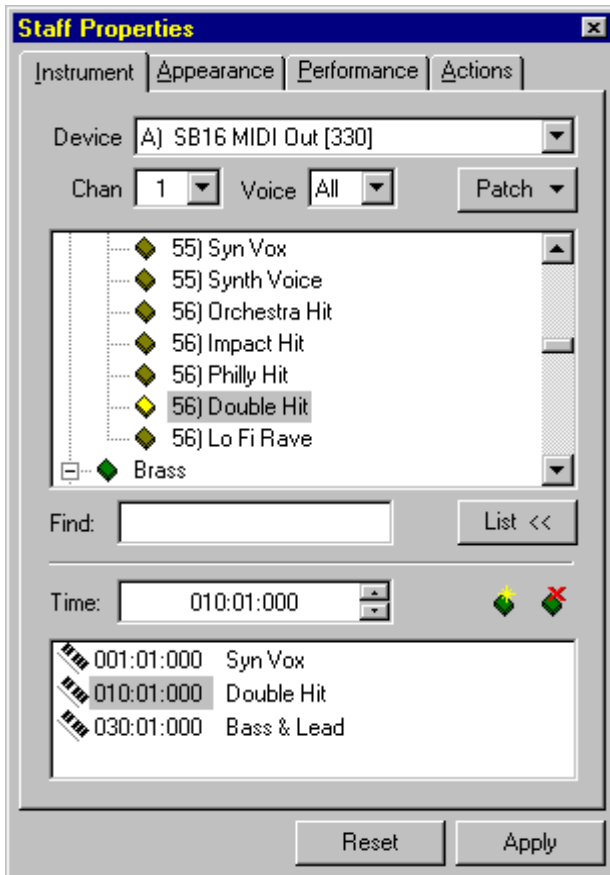


Use controls on this page to change the transposition used for the track during a performance. These settings affect only the performance - they do not change how the music looks in the Music Score.

-0-

## Staff Properties: Instrument (advanced)

Click on the image below for details about each control:

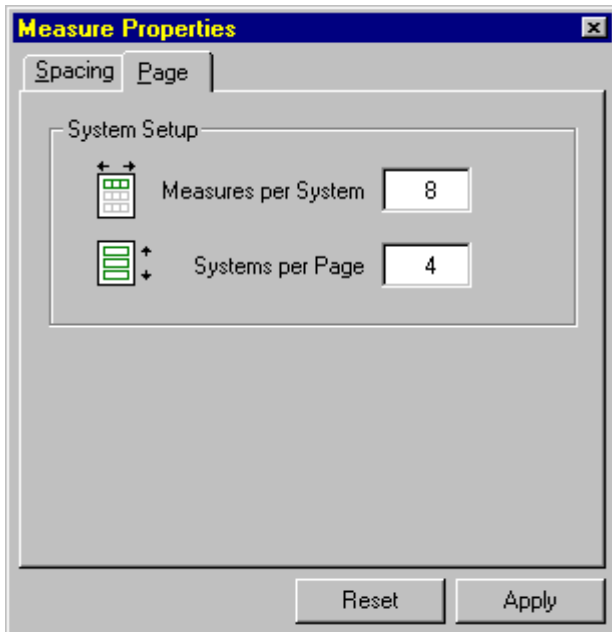


Use controls on this page to change the instrumentUsed for the selected staves, and to configure the routingUsed to play the specified track.

-0-

## Layout Properties: System

Click on the image below for details about each control:

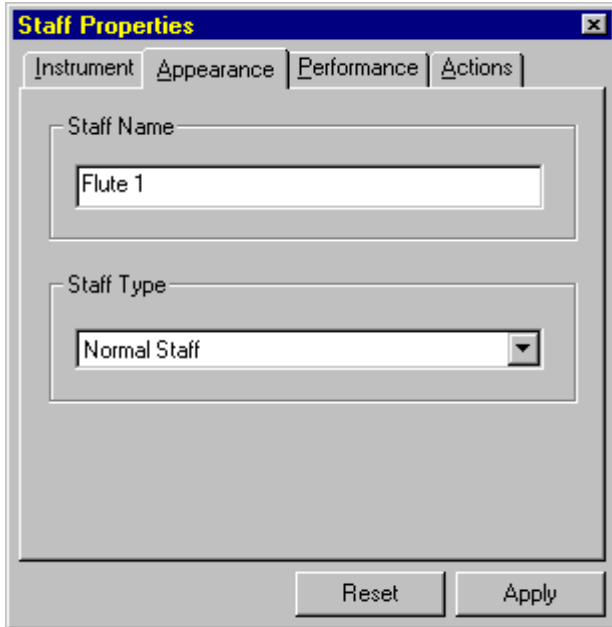


Use controls on this page to change measures per system on a system by system basis and systems per page on a page by page basis.

-0-

## Staff Properties: Appearance

Click on the image below for details about each control:

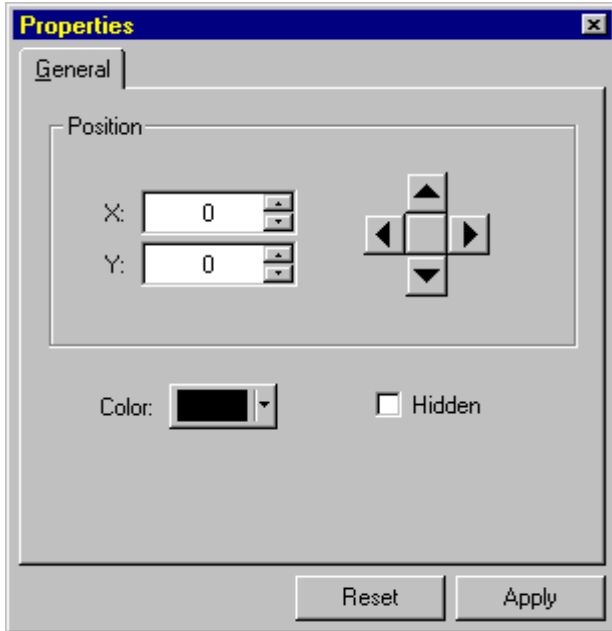


Use controls on this page to change the staff type, name and other appearance properties.

-0-

## General Properties

Click on the image below for details about each control:

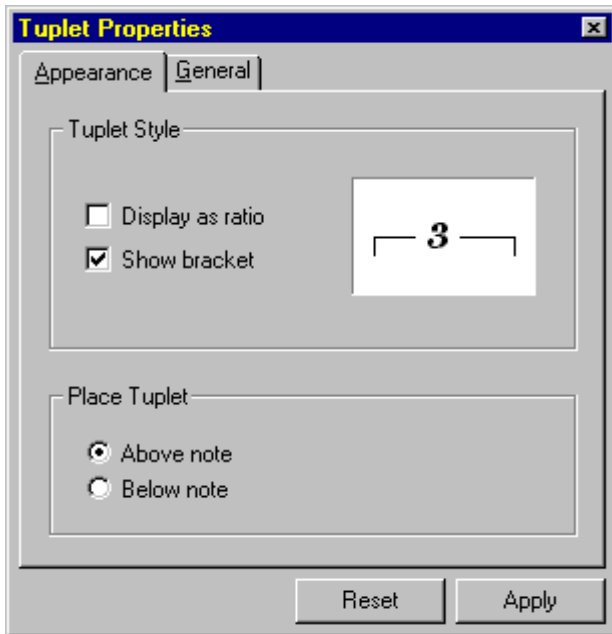


Nearly all notation elements have some common display properties (color, visibility, position) that are represented in the General page.

-0-

## Tuplet Properties: Appearance

Click on the image below for details about each control:

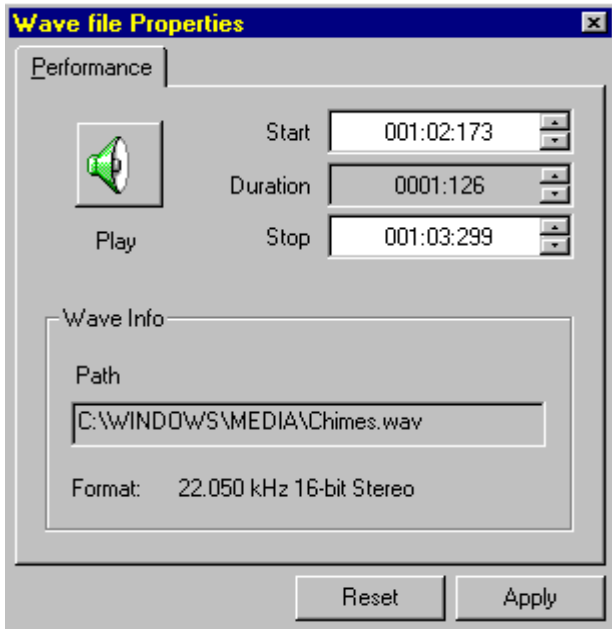


Use controls on this page to change how the selected tuplets appear in the Music Score.

-0-

## Wave Properties: Performance

Click on the image below for details about each control:




Use controls on this page to change how the selected tuplets appear in the Music Score.

-0-


# Options


## Options

Select Options from the menu to change options in Forte.  
For more information about specific options, click on a topic below:

 [\\_General Options](#)

 [\\_Notation Options](#)

 [\\_Sequencer Options](#)

Select  from the Performance Toolbar to set the performance options.

 [\\_Performance Options](#)

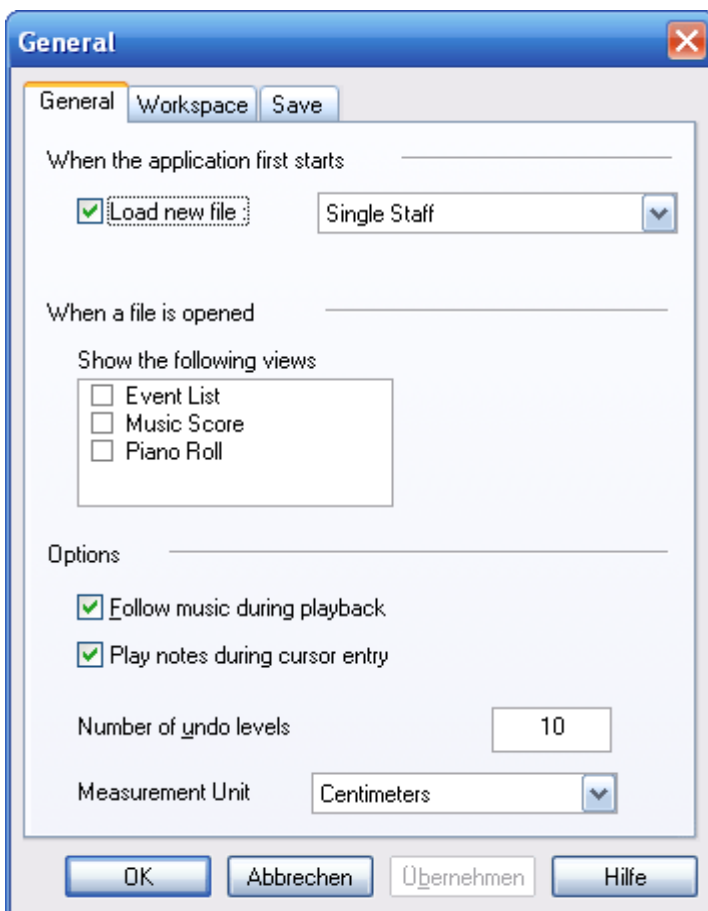
-0-



## General Options

### General Options

The General tab contains miscellaneous options for specifying how the application behaves as a whole. Click on the image below for details on each control.

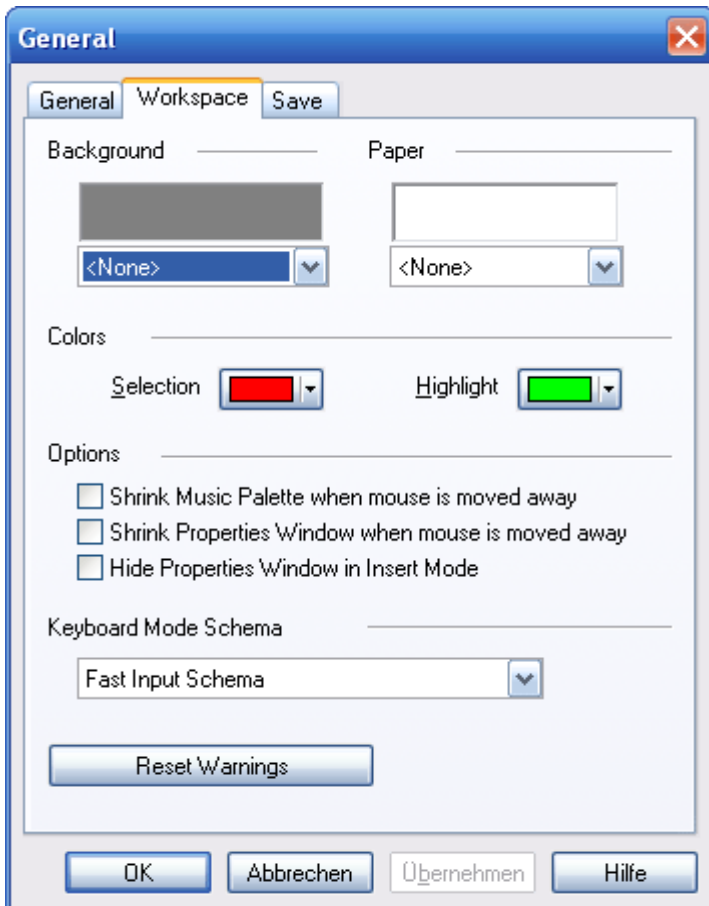


To display the tab, select Options ► General then select the General tab.

-0-

## Workspace Options

The Workspace tab contains miscellaneous options for setting up the look of the workspace. Click on the image below for details on each control.

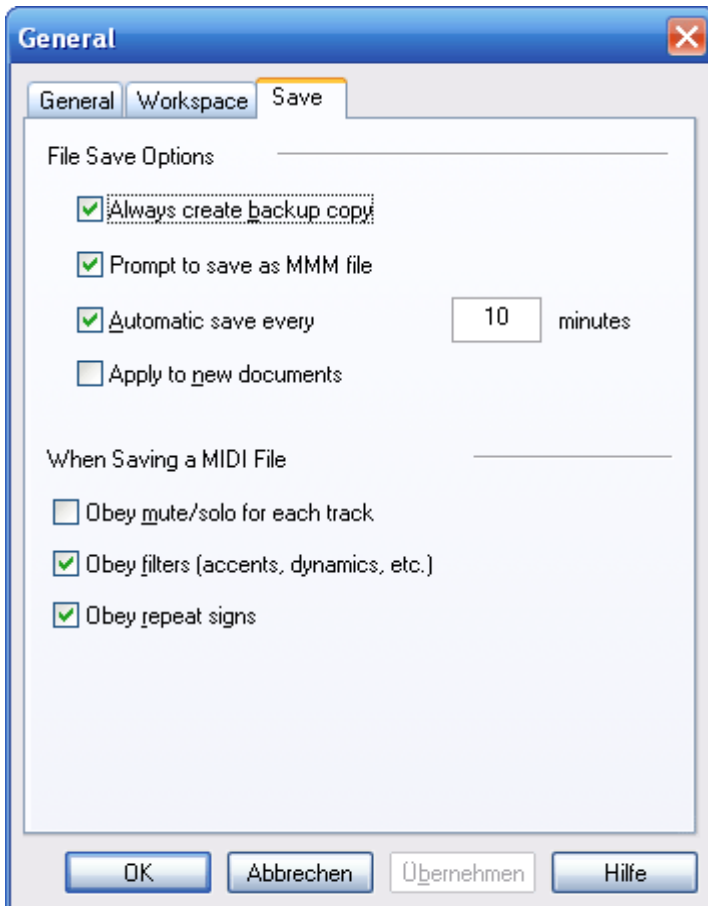


To display the tab, select Options ►General then select the Workspace tab.

-0-

## Save Options

The Save tab contains options used when saving files. Click on the image below for details on each control.



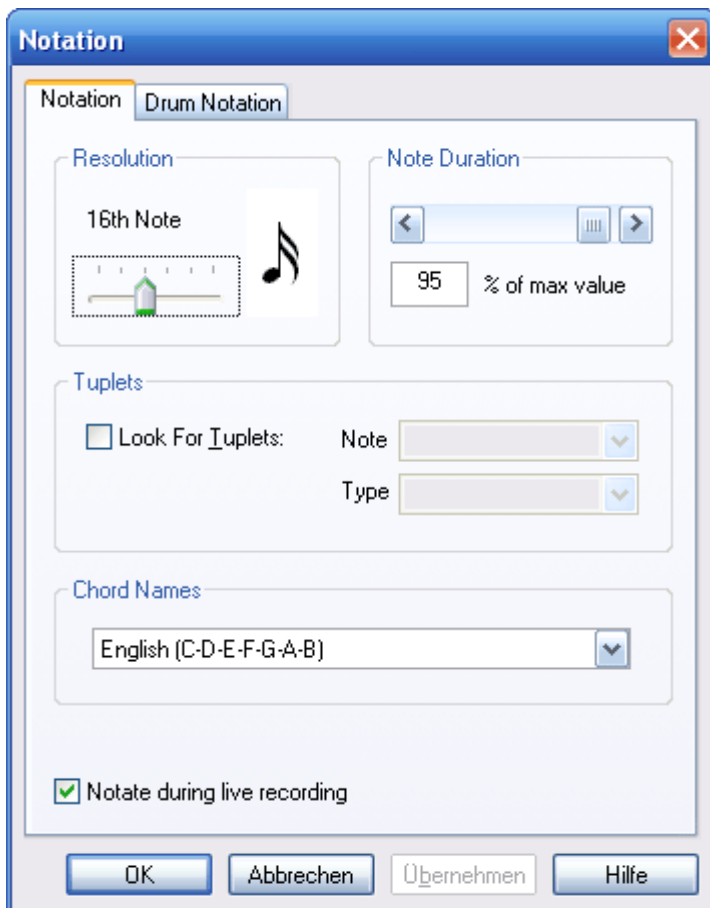
To display the tab, select Options ► General then select the Save tab.

-0-

## Notation Options

### Notation Options

The Notation tab contains options for controlling how music is notated in the Music Score. Click on the image below for details on each control.

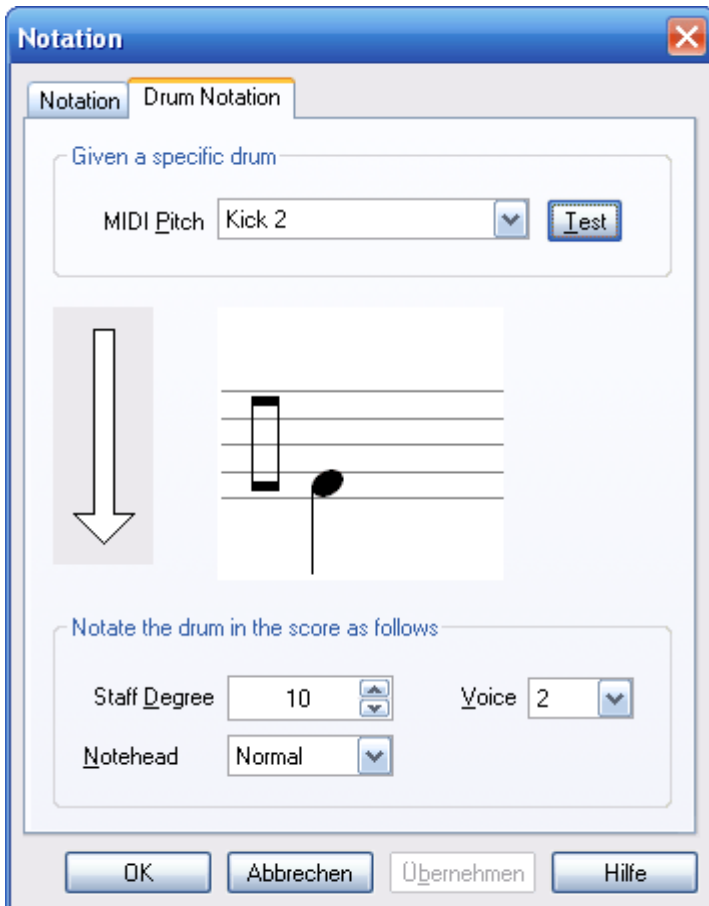


To display the tab, select Options ▶ Notation then select the Notation tab.

-0-

## Drum Notation Tab

The Drum Notation tab contains options for controlling how drum notation is displayed and entered in the Music Score. Click on the image below for details on each control.



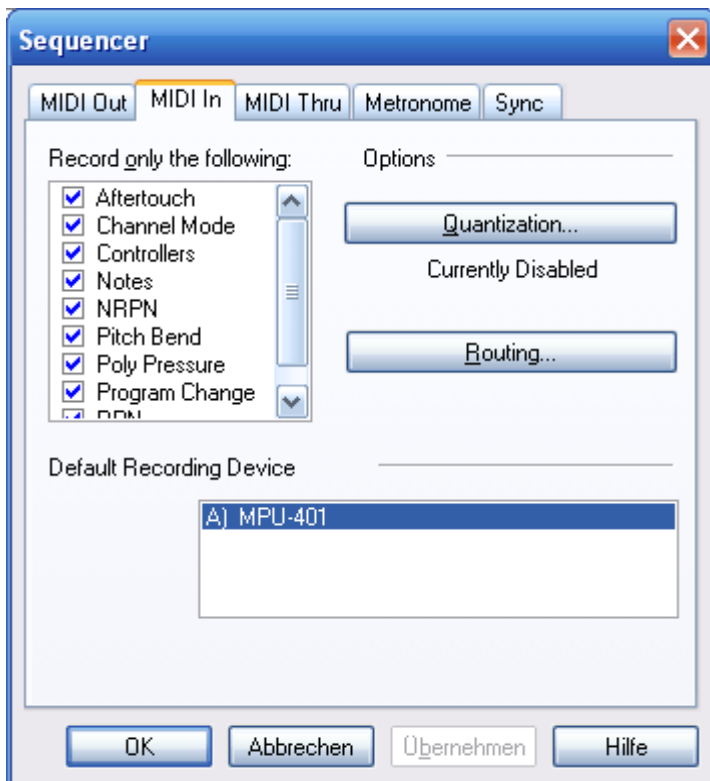
To display the tab, select Options ► Notation then select the Drum Notation tab.

-0-

## Sequencer Options

### MIDI In Options

The MIDI In tab contains various options used for recording MIDI data from an external keyboard. Click on the image below for details on each control.



To display the tab, select Options ► Sequencer then select the MIDI In tab.

-0-

## MIDI Out Options

The MIDI Out tab contains various options used for playing MIDI. Click on the image below for details on each control.

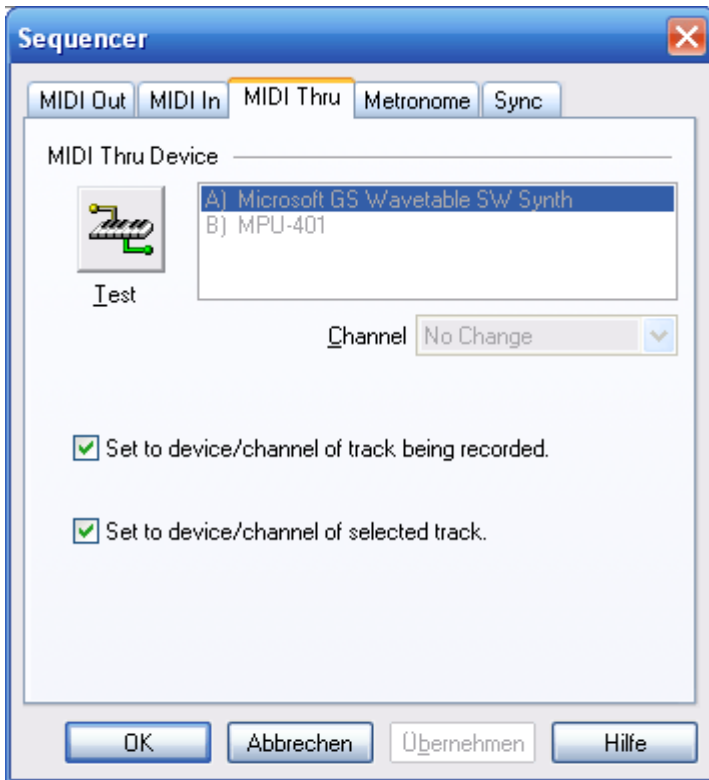


To display the tab, select Options ▶ Sequencer then select the MIDI Out tab.

-0-

## MIDI Thru Options

The MIDI Thru tab contains options for setting up MIDI Thru.. Click on the image below for details on each control.



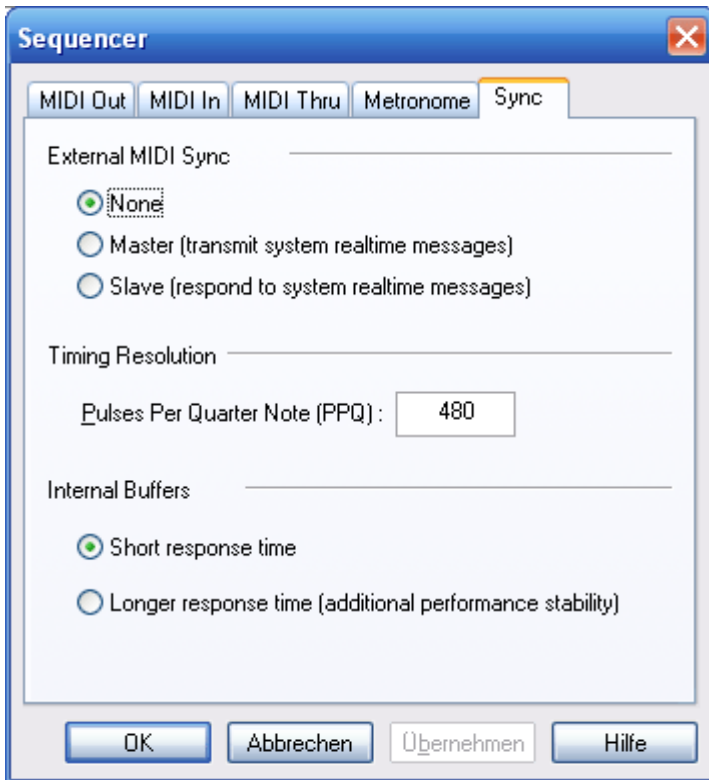
To display the tab, select Options ► Sequencer then select the MIDI Thru tab.

-0-



## Sync Options

The Sync tab contains various options so that you can synchronize the performance with other devices. Click on the image below for details on each control.

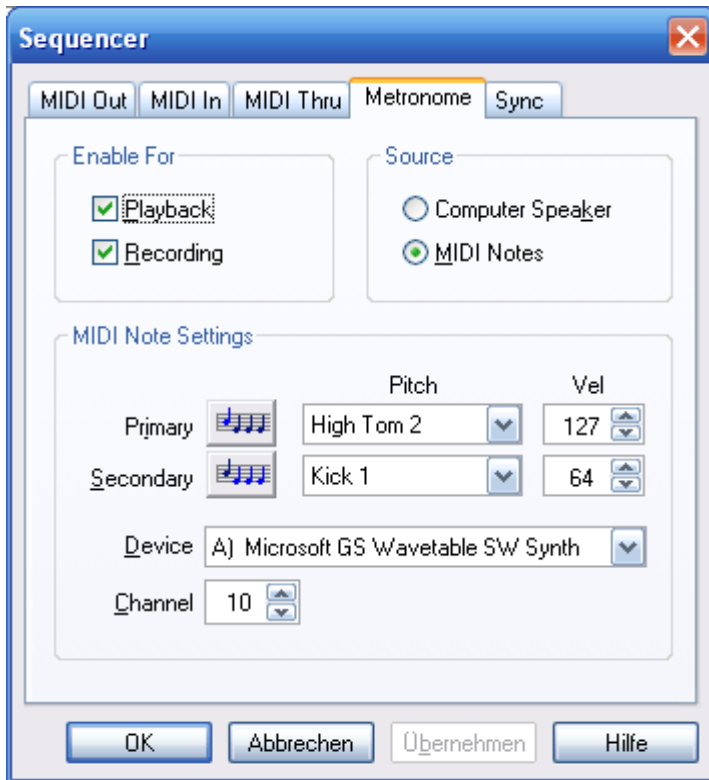


To display the tab, select Options ▶ Sequencer then select the Sync tab.

-0-

## Metronome Options

The Metronome tab contains various options used for configuring the metronome. Click on the image below for details on each control.



To display the tab, select Options ► Sequencer then select the Metronome tab.

-0-

## Performance Options

### Swing Time

In jazz, there is a convention that pairs of written beats are not played equally, as the notation is otherwise understood, but with the first longer than the second and the shorter second note having an accent. Generally the first note of each of these pairs is twice as long as the second, giving a triplet feel.

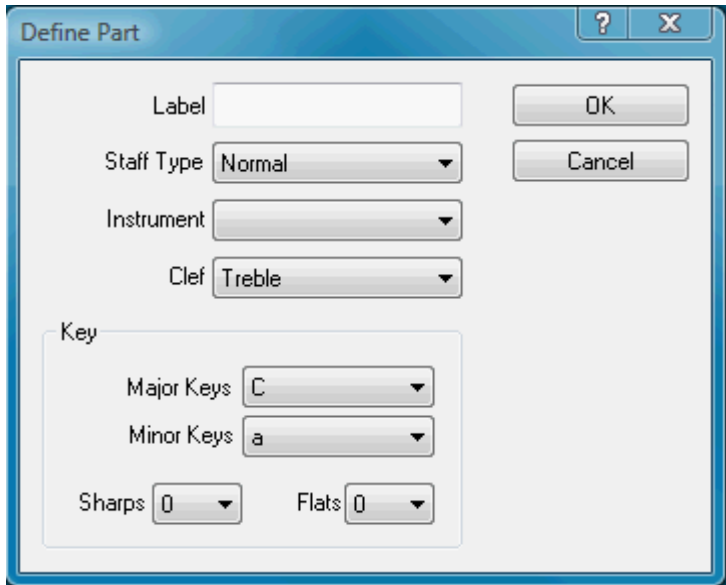
The swing feeling alters the way two eighth notes on the same beat are played. When the slider is in "No Swing" position, each of the notes corresponds to  $\frac{1}{2}$  (50%) and  $\frac{1}{2}$  (50%) of the beat. When the slider is in "Triple-feel Swing" position, the duration of the first eighth note will be  $\frac{2}{3}$  of the beat, and the second eighth note will correspond to the remaining  $\frac{1}{3}$ . By changing the slider, the user is able to smoothly alter the swing level, changing the duration of the first note of the eighth pair from  $\frac{1}{2}$  to  $\frac{2}{3}$  of the beat.

-0-

## Parts

### Define a New Part

A part is the collection of the staff type, a clef, a key and an instrument. Use the Define Part dialog to define these characteristics of a new part.



The image shows a dialog box titled "Define Part" with a blue header bar containing a question mark icon and a close button (X). The dialog contains the following fields and controls:

- Label:** An empty text input field.
- Staff Type:** A dropdown menu currently set to "Normal".
- Instrument:** An empty dropdown menu.
- Clef:** A dropdown menu currently set to "Treble".
- Key:** A group box containing:
  - Major Keys:** A dropdown menu currently set to "C".
  - Minor Keys:** A dropdown menu currently set to "a".
  - Sharps:** A dropdown menu currently set to "0".
  - Flats:** A dropdown menu currently set to "0".

On the right side of the dialog, there are two buttons: "OK" and "Cancel".

-0-

## Remove Part

Select the Remove Part command from the popup menu to remove the part currently displayed in the drop-down list.

When all parts are removed, the list is repopulated with the standard choices. There must always be at least one part defined at all times.

-0-

## Instrument

Select an instrument for the new part from the drop-down list. The instruments are listed in alphabetical order.

You can always change the instrument for the staff after it has been added to the music using the Properties Window.

-0-

## Tutorials

### Tutorials

Hier you find some tutorials on how to perform common tasks in Forte.

» [\\_Adding Notes](#)

» [\\_Changing Instruments within a Track](#)

» [\\_Merging Tracks](#)

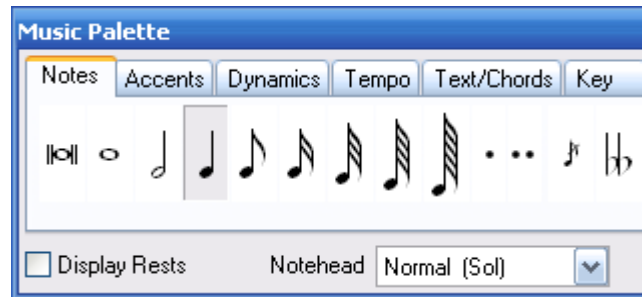
» [\\_Multivoicing](#)

» [\\_Multiple](#) Endings

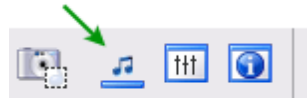
-0-

## Adding Notes

There are several different ways to add notes to your music. The most straightforward approach is to use the mouse to add notes from the Elements Palette.

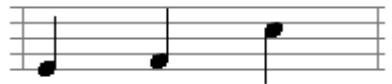


To view the Elements Palette, click on the "note" button on the Music Edit Toolbar.



(You can also record pitches directly into your score - see Recording from a Keyboard.)

Notes are always added to measures in a specific staff. When you enter a new note, the notation engine automatically determines stem direction, spacing, etc. for the note.



If necessary, the measure is widened to accommodate the new note.



If you add a note that will not logically fit into the time span of a measure, the note is tied to a complementary note in the next measure.



*This example uses two dotted half notes totaling 6 beats.*

There are dozens of other parameters that affect how a given note is displayed: Key signature, measure width, layout properties, voicing, etc. Once a note is added to your music you can edit its appearance and performance properties, slur and beam notes together and perform dozens of other actions on groups of notes to get the music looking just right.

Here's How To Add a Note



Select the Notes tab in the Elements Palette, then select one of the notes.

Move the cursor over the measure to which you wish to add the note. (Notice the feedback provided by the note cursor.)

- The ruler is drawn around the measure to indicate the beats and subdivisions within the measure.
- The dotted red line shows the time location where the note is to be added.
- The small highlighted dot shows the pitch for the new note.



Align the dashed line with the beat where you want the note, then align the dot with the desired pitch.

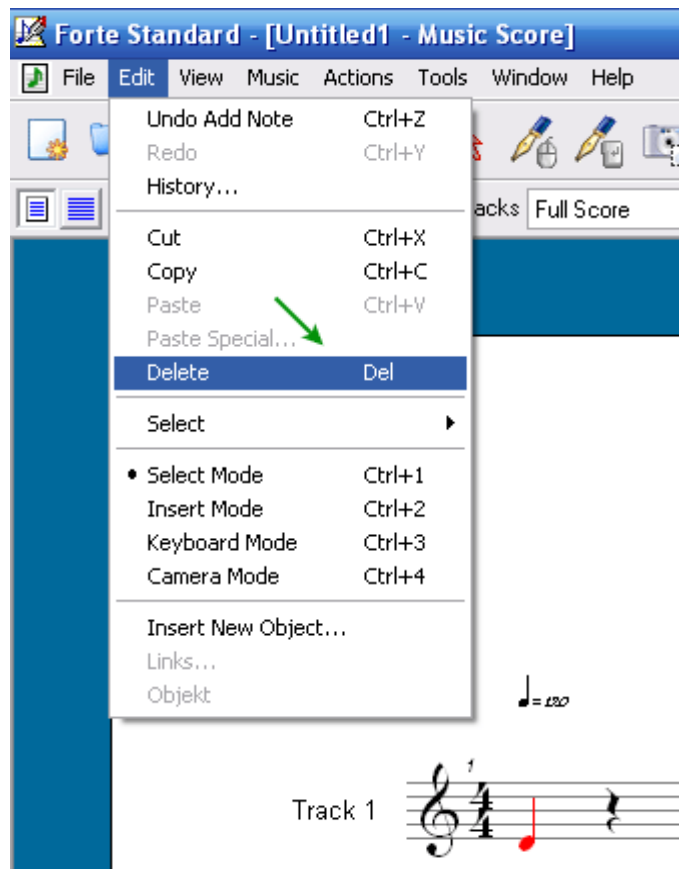
Click the mouse to add the note.

#### How To Remove a Note

To remove a note, select it with the mouse and select Edit / Delete from the menu.

–OR–

Select the note and press the Delete key on your keyboard.



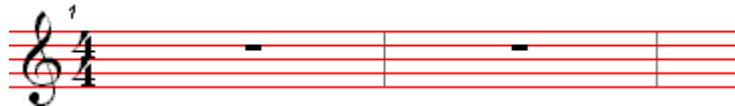
-o-

## Changing Instruments within a Track

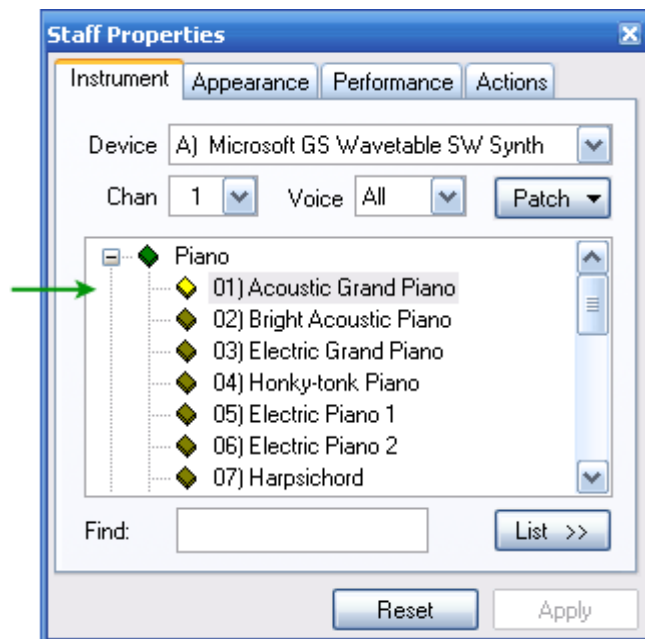
Selecting an Instrument for a specific Track is fairly straightforward. Using Select Mode....



...double-click on the Staff in question.

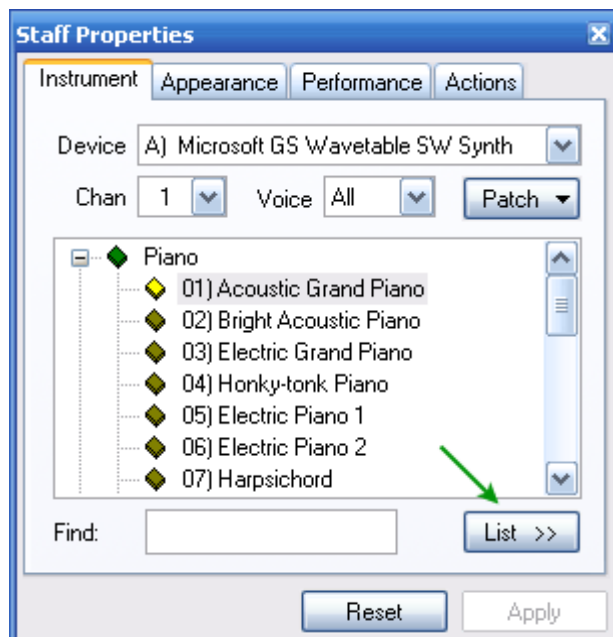


When the Staff Properties window appears, select an instrument from the Instrument tab.



Changing Instruments within a Track, however, is less clearly documented. For our example, we will select to change Instruments within a Track on the first beat of the 16th measure.

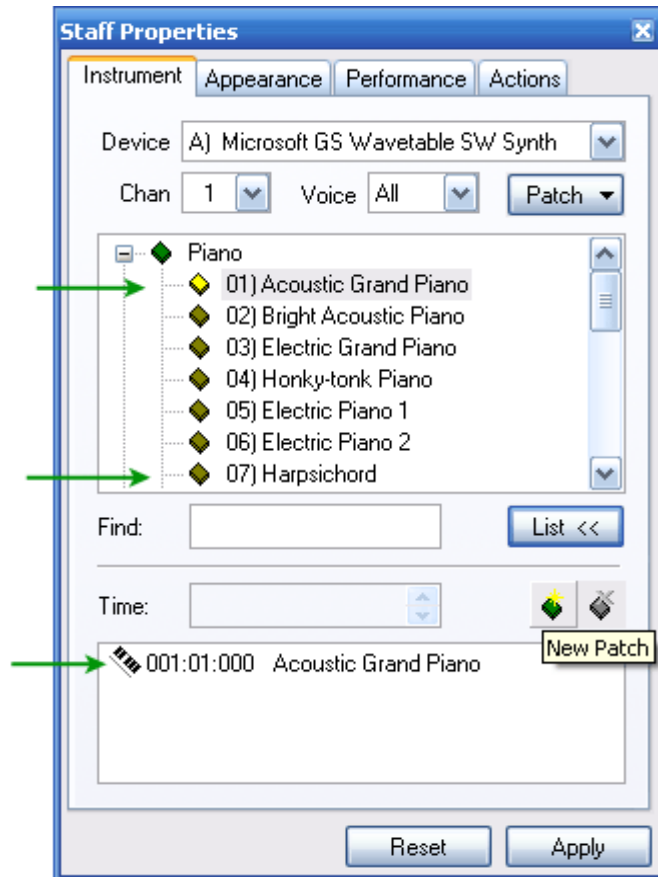
Using the same Staff Properties window, we will click once on the List button.



An expanded window will appear containing the current Instrument selected. (This is also known as the Patch or Program Change, but for our purposes we will stick to the more generic term of Instrument.)

Note the current Instrument selected in the expanded List View.

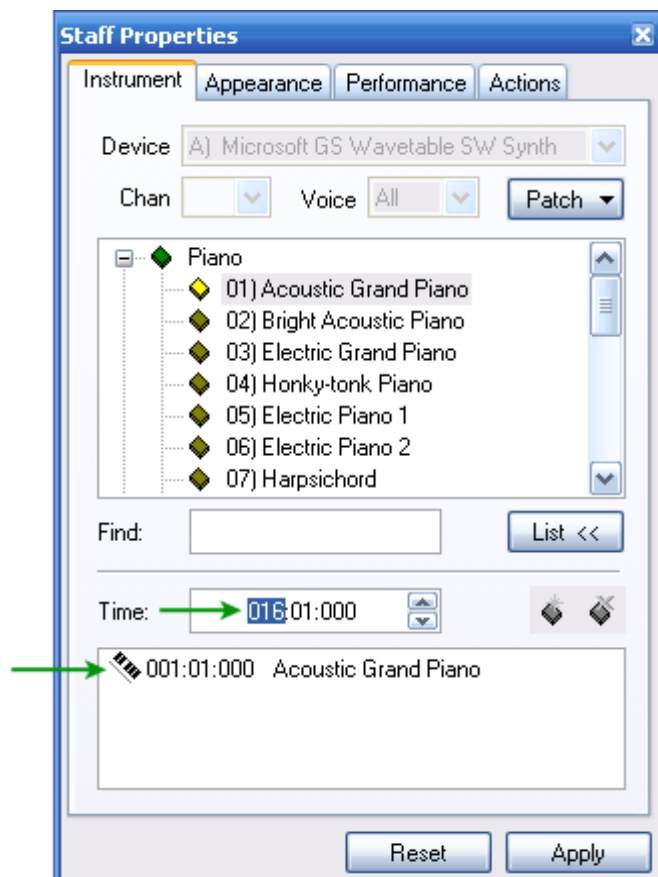
To change the Instrument beginning at measure 16 first click on the New Patch button.



Within the Instrument List select a different Instrument, for this example Use (07) Harpsichord.

Now click in the Time box and using the up arrow, move the Time Counter forward to 016:01:000 and click Apply.

The new Instrument change will appear beneath the current Instrument and include the measure number in which the change occurs. The next time the file is played the new Instrument will begin playing in measure 16.



There are times when several different instrument sounds are required within a Track, like using Tremolo Strings (slash on stem) for one section, switching to Pizzicato (pizz) Strings and then to back to the regular Violin Instrument sound (arco).

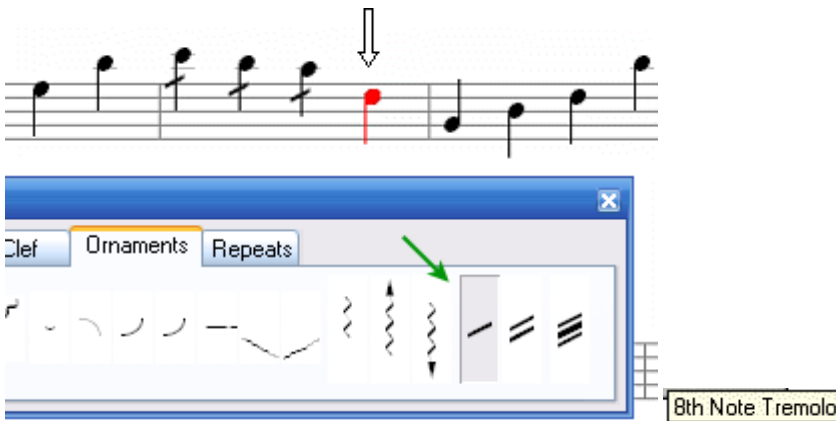
One way to accomplish this would be to have separate tracks for each instrument sound. However this procedure would be cumbersome for a String Quartet or Full Orchestra.

To conserve Score space the Properties Window can be used to perform these changes. See the printed example below:




This is how a string player might expect the music to be written. To hear this played back appropriately through your computer or MIDI keyboard, the following is a step-by-step procedure to enter these changes.

- Enter the notes either by playing them in from your MIDI keyboard or by dropping in the notes from the Elements Palette.
- Add Tremolo markings to the notes in measure 2 using the Ornaments Tab on the Elements Palette.

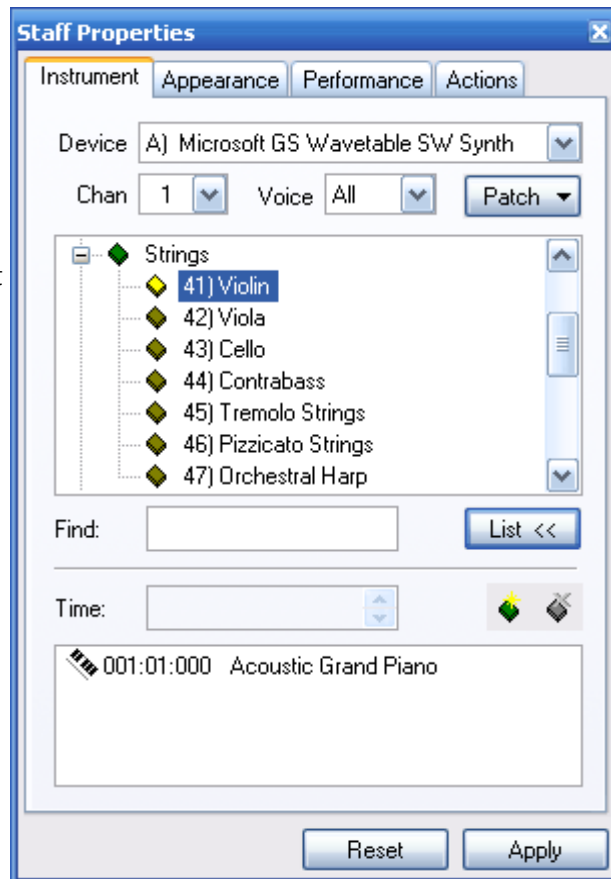


Now that the appearance is appropriate for Tremolo Strings, let's enter the Patch or Program Change so the notes sound like Tremolo Strings.

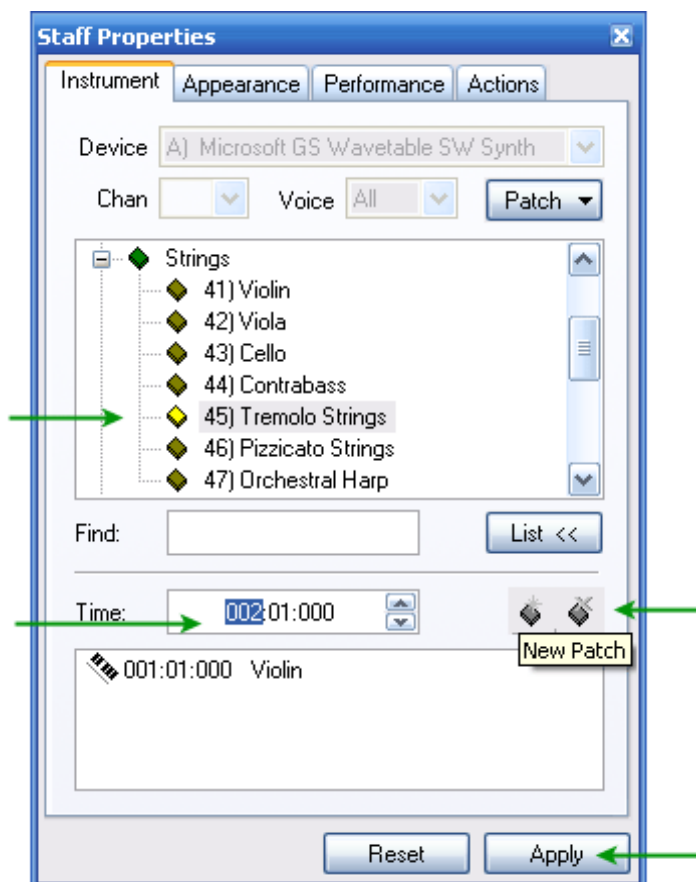
In Select mode  double-click on the Track/Staff in Score View or Mixer View to bring up the Properties Window containing Staff

Properties.

To expose the Program Change window click on the List button [Toggle Patch List Editor]. As you can see in this example, the Violin instrument has already been selected.

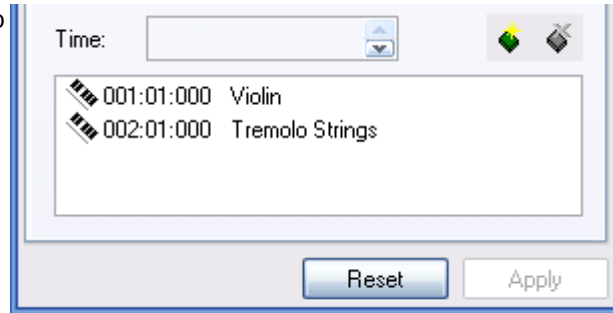


To change the sound to Tremolo Strings for measure 2 click the New Patch button and edit the Time dialog box content to reference the first beat of measure 2. Select Tremolo Strings and click Apply.



As you can see in this example, the Patch or Program Change List has

updated reflecting the Tremolo Strings playing on the first beat of measure 2.



All that is needed now is to repeat the process and add Pizzicato Strings (pizz) to the first beat of measure 3 and change back to the regular Violin Instrument (arco) on the first beat of measure 4.



This method of using multiple instruments within a track is especially handy when working with sound effects. Instead of having several tracks, one for each sound effect, all the sound effects can be entered on one track.

-0-

## Merging Tracks

In some instances it may be more desirable to have two parts together on a Track or Staff rather than have them occupy separate Tracks or Staves.

When creating a composition, this can be accomplished by entering the first part or instrument (default Voice number is 1) and then switching to Voice 2, entering the second part. (See Multivoicing.)

But when working with an existing composition, the Merge command offers a more efficient way of accomplishing this. This illustration gives step-by-step instructions to Merge two parts or instruments from two separate Tracks or Staves...

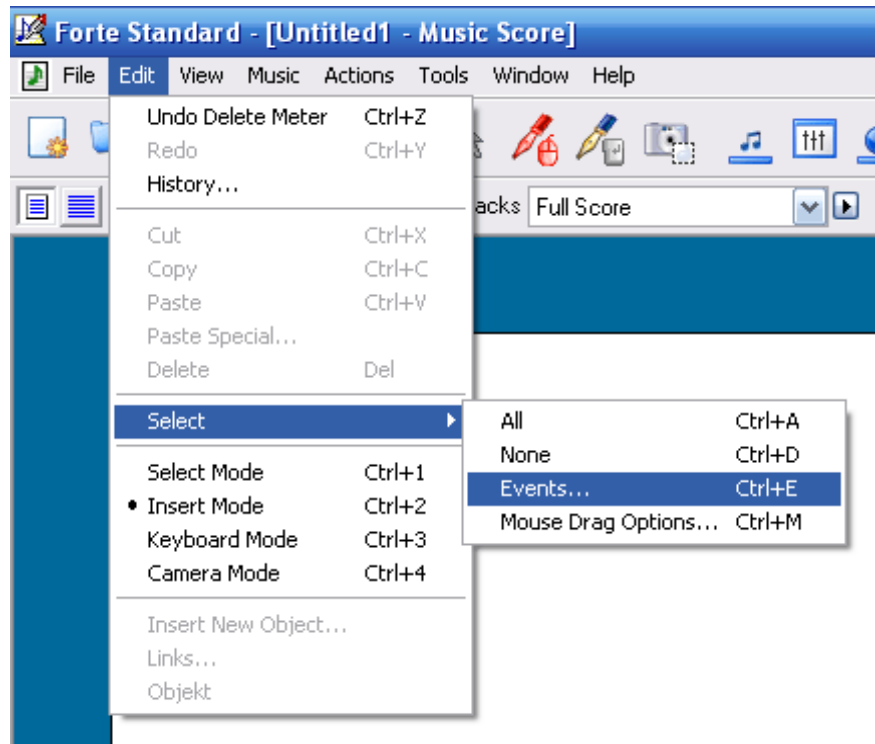
...into one Track or Staff.

To set this up, change the Voice Assignment for all the Part 2 notes.

This is accomplished by clicking Edit...

...Select...

...Elements.



In the Select Element window click on the None button clearing out the element types.

Scroll down and select Note.

Click the Advanced button.

Click to select Filter by Track.

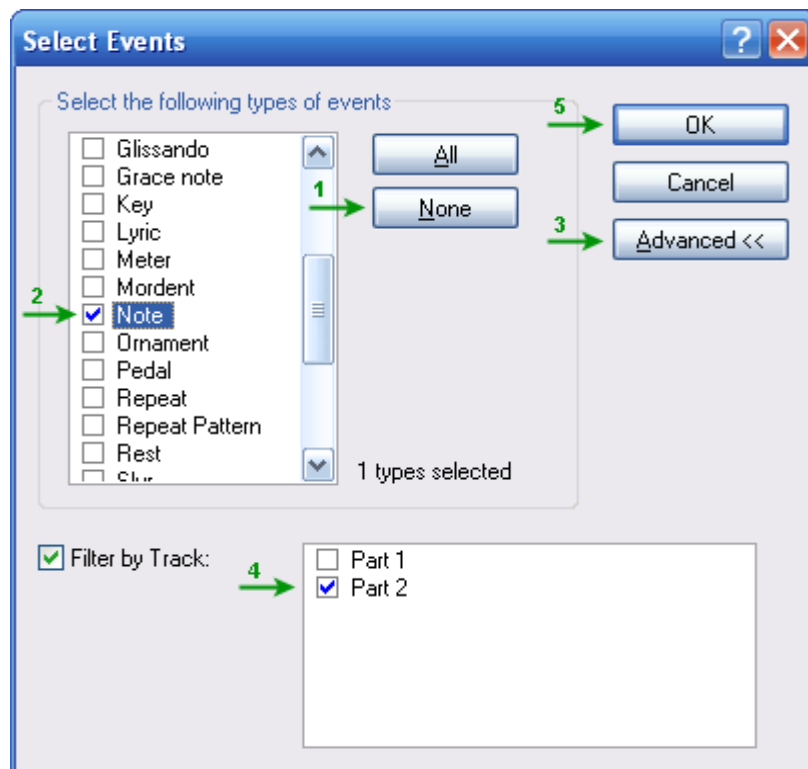
Click to select Part 2.

Click OK.

All the notes in Part 2 should change to the highlight color (red) indicating that they have been selected.

Click on the Properties

bringing up the Note



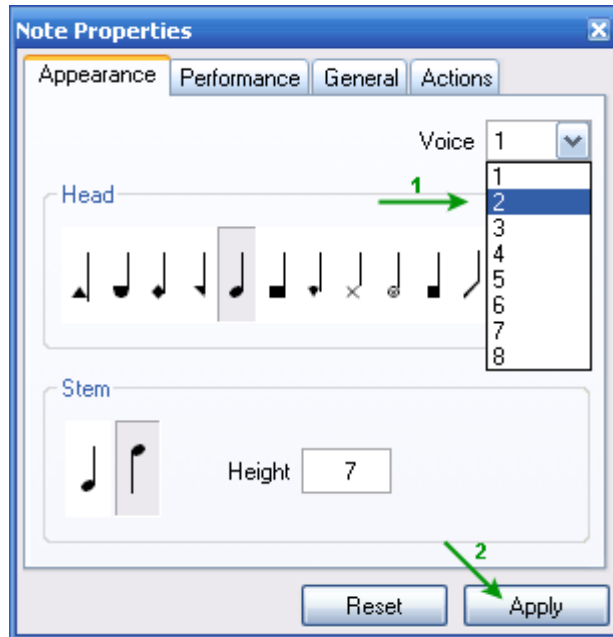


Window button

Properties window.

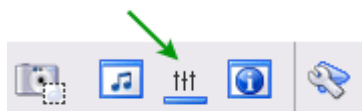


Using the Appearance Tab change the number for Voice to 2.



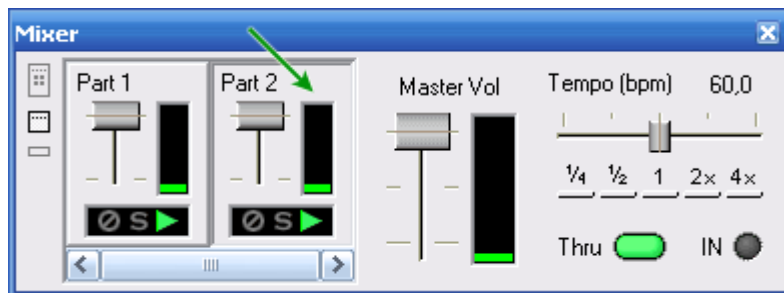
Click Apply. (Nothing will appear to happen.)

Click the Mixer button



if the Mixer is not already displayed.

In the Mixer View, double-click on Track Part 2...



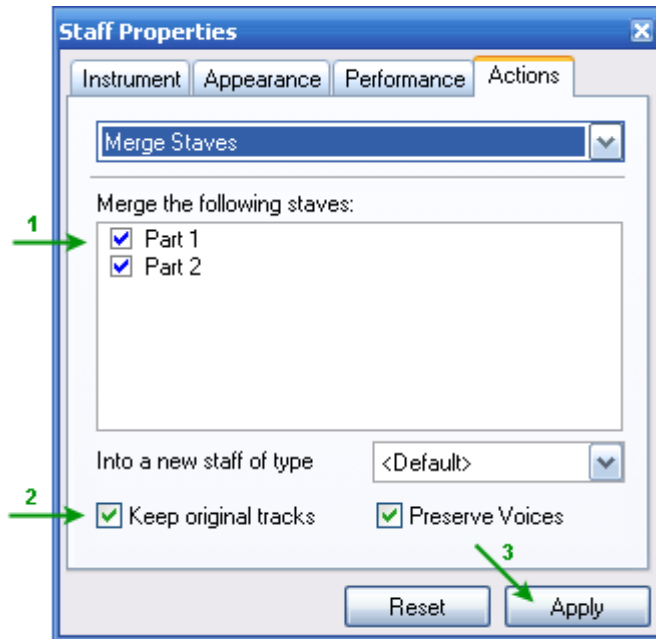
...bringing up the Staff Properties window.

Using the Actions Tab select Merge Staves.

Click to select Part 1 as well.

Click to select Keep original tracks and Preserve Voices.

Click Apply.



The Merged Staff will appear along with Part 1 and Part 2.



At this point Part 1 and Part 2 can be hidden in this Layout if you desire. To accomplish this, click on the Layout Operations button and select Edit Layout.



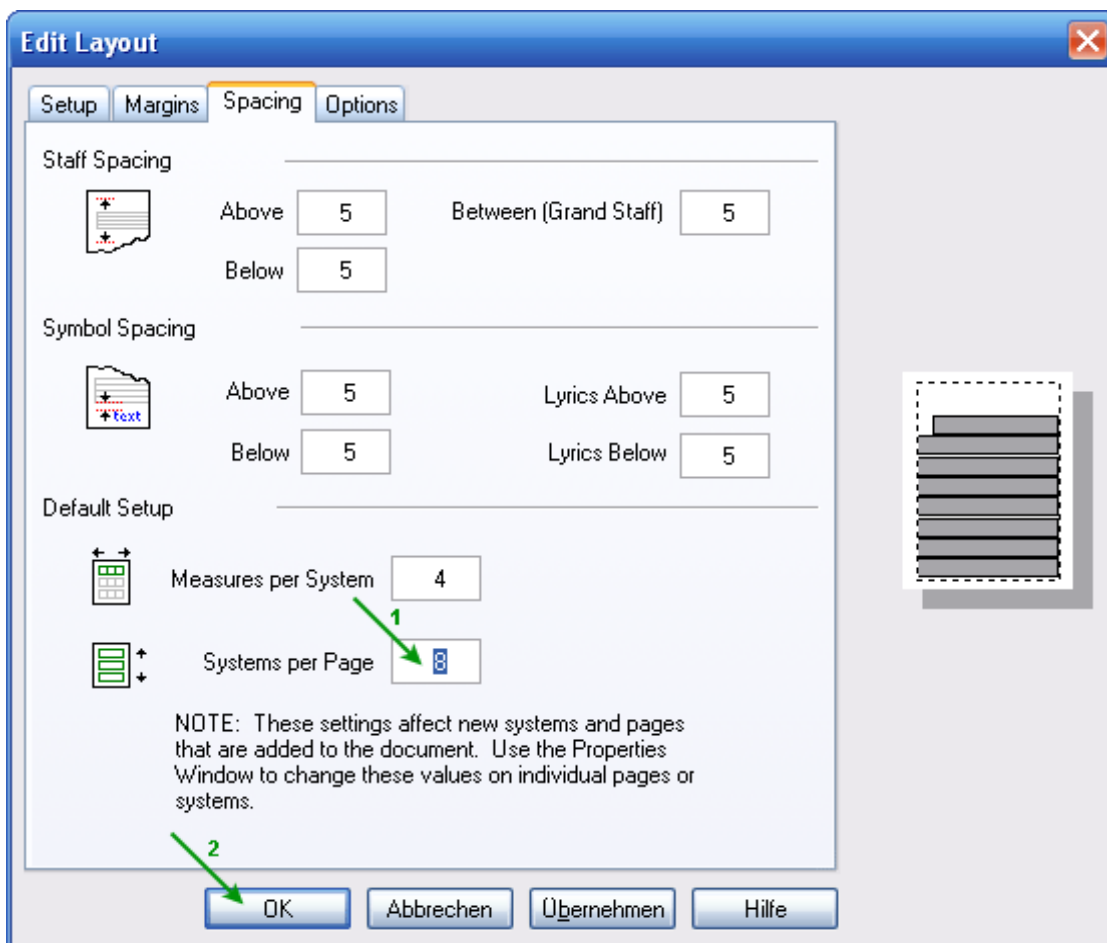
### System Layout

Using the Setup Tab remove the "checkmarks" from Part 1 and Part 2.

If you do not like the current System Layout of the page...

...use the Spacing Tab and increase the Systems per page number.

## New System Layout



In this example 8 was selected, but the piece only required 6 Systems.

Click Apply and OK.

The final result will look something like this...

Merged Staff

The stems of what were Part 2 notes are now facing down because we assigned them to Voice 2. The stem direction default is:

Odd Numbered Voice = Stem Up

Even-Numbered Voice = Stem Down

For more information on using Layouts, see Working with Layouts .

## Multivoicing

Each staff can support up to 8 different voices for notating several melodic lines together on the same staff. Quite often in keyboard, instrumental, and vocal music, two distinct lines of music occupy the same staff. If the two lines differ rhythmically, they should be notated using separate voices so that their independent rhythms are preserved. If the two lines share the same rhythmic pattern, they may be notated using a single voice. The example below illustrates how multivoicing looks in the Music Score:

Non-Multivoiced



Multivoiced



The notation engine automatically handles many of the nuances of multivoicing music. For example, there are different rules for stem direction and length, and for how slurs, ties and accents are displayed. Note that the notation engine automatically fills each voice with its own set of rests. In keyboard music, one may want to hide rests for improved readability.

Let's look at an example using a familiar tune.



Change voice with the Properties Window

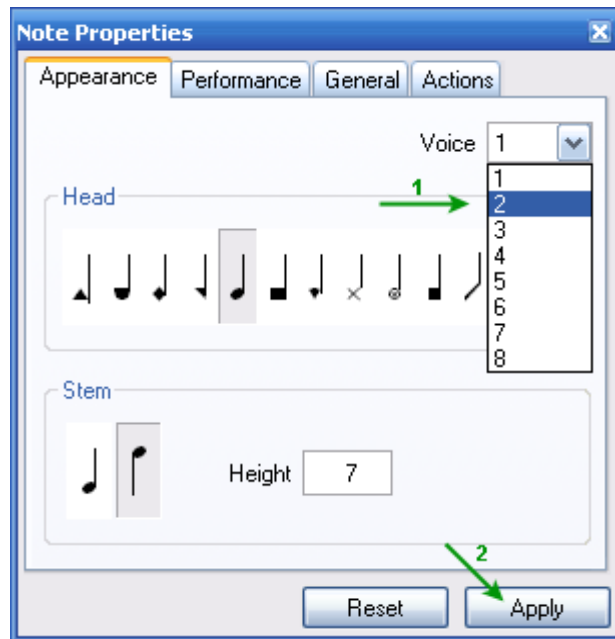
Select the notes you wish to change.



Display the Appearance page in the Properties Window.

Select the desired voice from the Voice dropdown list.

Click the Apply button to apply the changes. See Final Result at the end of this document.



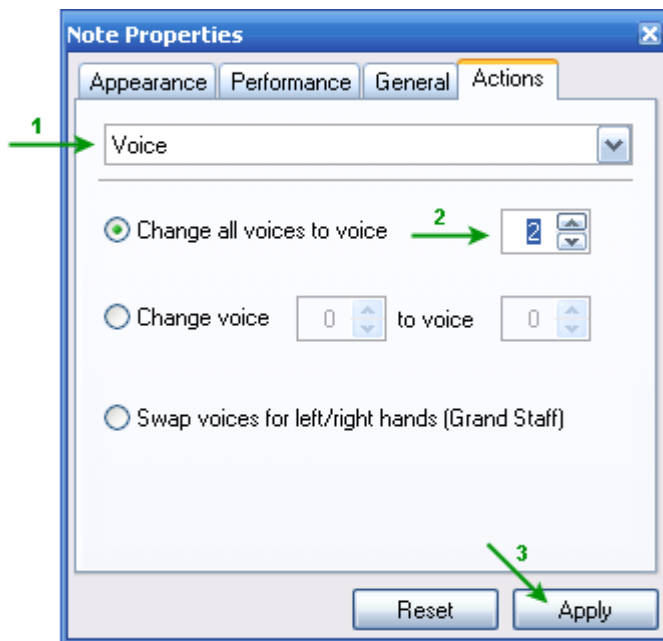
### Change voice using an Action

Select the notes you wish to change by either drag selecting or holding down the CTRL key and selecting each one. [See #1 above – Changing voice with Properties Window]

Select Actions / Voice from the menu.

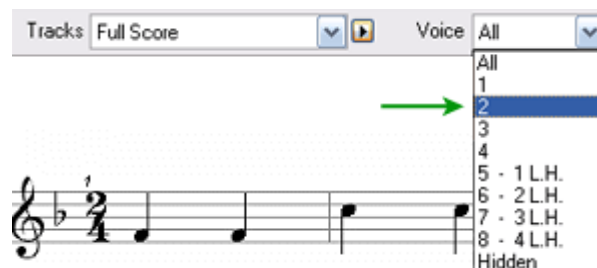
Select Change all voices to voice [2]

Click the Apply button.

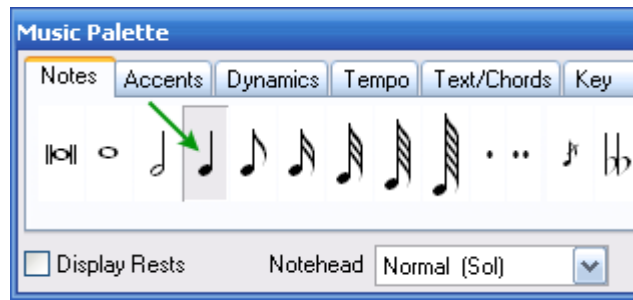


### Insert notes using a different voice

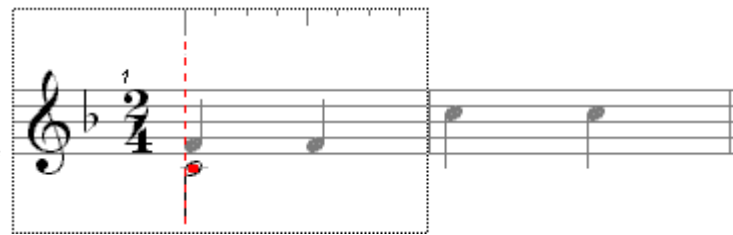
Display the Music Score in Page View. At the top of the Music Score window, select Voice 2 from the Voice drop-down list.



On the Notes tab, select the half note.



On the Music Score, position the Note Entry cursor on the Staff where you wish to place the note. To help with note placement, a dotted vertical line will extend from the ruler guide through the Staff. Click on the pitch location you desire on the Staff and the note will appear as that pitch. [Note the greyed out Voice 1 notes. They will return to normal when Voice All is once again selected.]



Final result

After placing or changing your notes [in this example, Voice 2] this is the end product. Using multivoicing you allow the possibility of multiple moving/rhythmic lines on the same Staff.



## Multiple Endings

In many songs containing multiple verses, the melody is not exactly the same for each verse. Some times the last measure of the first verse will be slightly different than the last measure of the second verse. Take for example the song 'Dixie', or as it is also known, "I wish I was in the land of cotton."

### Dixie

Traditional

1. Oh, I wish I was in the land of cot - ton. . . Old times there are  
 2. Dix - ie - land where I was born in, Ear - ly on one

not for - oot - ten, Look a - way, Look a - way, look a - way Dix - ie - land. In  
 fros - ty mornin', Look a - way, Look a - way, look a - way Dix - ie -

2.  
 land. Oh, I wish I was in Dix - ie, Hoo - ray, Hoo -

ray. In Dix - ie - land I'll make my stand, to live and die in

Dix - ie, A - way, a - way, a - way down South in

Dix - ie. A - way, a - way, a - way down South in Dix - ie.

To shorten the music to one page, multiple Endings were Used on the verses.

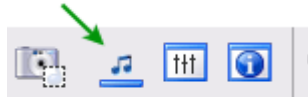
At the end of the second system (measure 9) is the first Ending and at the beginning of the third system (measure 10) is the second Ending.

Without doubling up on the verses this composition would be two pages long instead of the one page seen here.

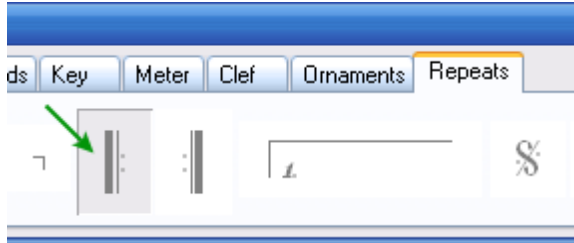
Now we will begin a step-by-step process of inserting the Ending(s) and making any other changes to improve the "look and play of the composition."



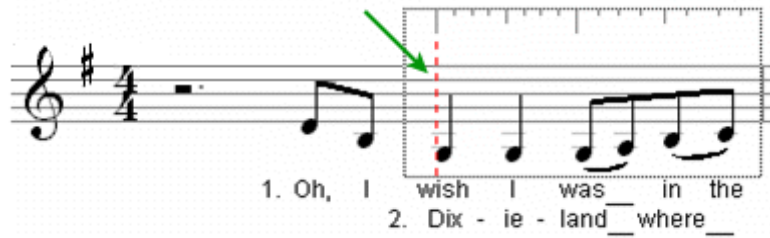
After creating the music using either the Elements Palette or recording the MIDI data from a MIDI keyboard, we will add a repeat sign at the beginning of the piece, just after 'Oh, I'. Click on the Elements Palette and choose the Repeats tab.



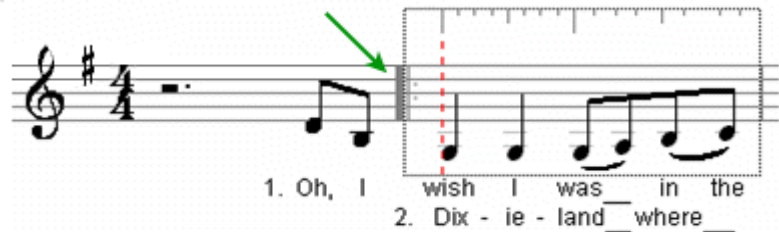
Now select the Left Repeat bar to place at the beginning of measure 2 so that when the first Ending is played the performer (and the software) will know where to begin to play to the second Ending.



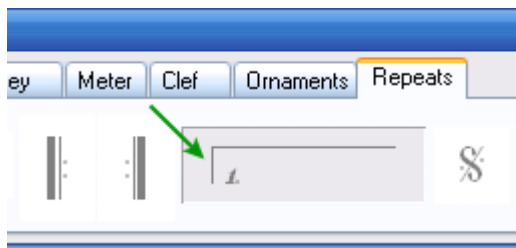
Line the cursor up with the first beat of the second measure as seen here and click the mouse button to place the Left Repeat bar.



Voila! The Left Repeat bar appears to the right of the measure line at the beginning of measure 2.



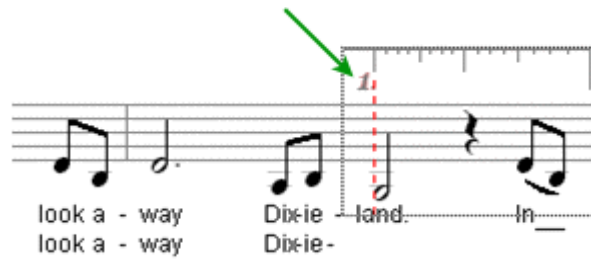
Now it is time to enter the First Ending at the end of the first verse in measure 9. Once again, using the Elements Palette and the Repeats tab select the Ending marker.



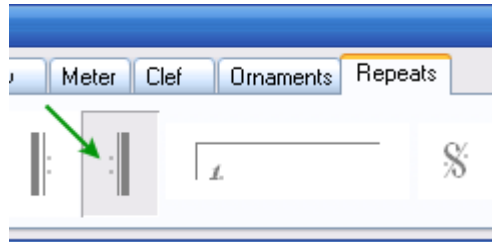
In measure 9 line up the cursor with the first beat and click the mouse button to enter the Ending marker appropriately.



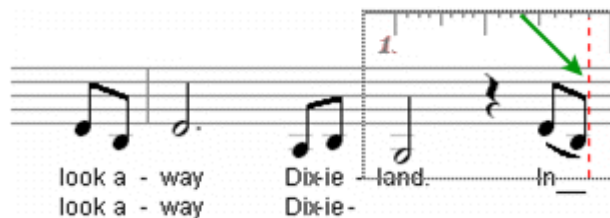
Once again, the selected item (in this case the Ending marker) appears.



To compliment the Left Repeat bar added earlier we need to add a corresponding Right Repeat bar. From the Elements Palette using the Repeats tab select the Right Repeat bar.



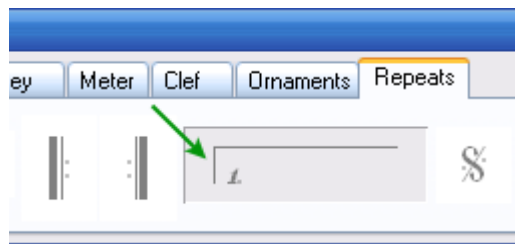
Now place the Right Repeat bar at the end of measure 9 by lining up the cursor with the last beat of that measure and clicking the mouse button.



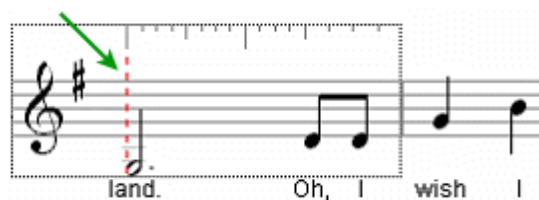
The result will be measure 9 containing both the Ending marker and the Right Repeat bar.



Adding the second Ending entails selecting the Ending marker from the Elements Palette's Repeats tab.

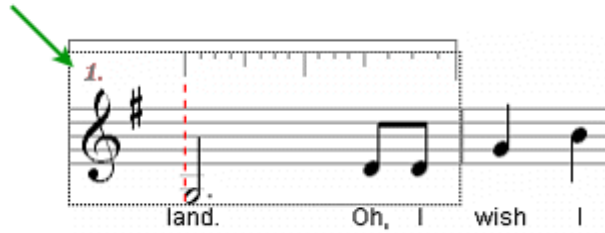


Line up the cursor with the first beat of measure 10.



Click the mouse to place the second

Ending marker appropriately. The Ending appears, but it still indicates the first Ending.



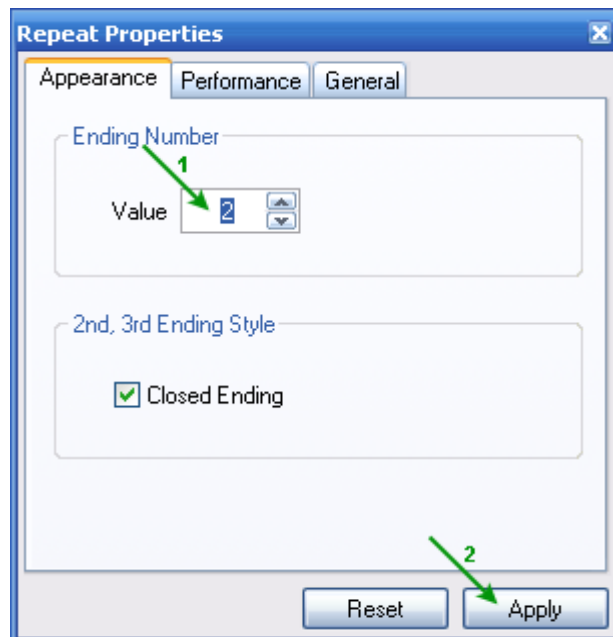
To change the Ending number, click on the Select button to enter Select Mode.



Double-click on the number 1 within the Ending marker to select it. (The Repeat Properties Window will open.)



In the Repeat Properties Window change the Ending Value to 2.



When the number 2 appears in the Value window, click Apply.

The Ending marker has now been changed to the number 2 and the software will play the Endings appropriately.



Have fun! And remember, if you have multiple Endings and the composition is not playing back the Endings appropriately, verify that there is a Right Repeat bar on the last beat of each Ending. This notifies the program to go back and begin at the Left Repeat bar or other Repeat indicator

-0-

## Glossary



### A

accelerando  
accent mark  
accidental  
adagietto  
adagio  
adagissimo  
Aftertouch  
allegretto  
allegriissimo  
allegro  
alto clef  
andante  
andantino  
arpeggio  
articulation  
asterisk \*  
a tempo  
attack

### B

bar  
barline  
bass clef  
beam  
beat

beat value

brace

bracket

## C

Channel

Channel Aftertouch

chord

chord progression

clef

clipboard

coda

common time

complete meter

compound note

controller

counter

crescendo

cut time

## D

Da Capo

Dal Segno

decrescendo

default

degree

diatonic

diminuendo

dot

double barline

double flat

double sharp

driver

duplet

duration

dynamic marks

## E

enharmonic

expression

## F

fermata

Fine

fine barline

flag

flat

forte

fortissimo

forzato

## G

General MIDI

glissando

grace note

grand staff

## H

hairpins

half step

## I

interval

inversion

I RQ or I nterrupt

## J-K

Key Aftertouch

key signature

## L

larghetto

larghissimo

largo

lead-in measure

leading tone

legato

ledger line

lentissimo

lento

loop record

## M

major

marker

measure

meter

metronome

mezzo forte

mezzo piano

middle C

MIDI

MIDI device

MIDI Event

MIDI file



MIDI instrument

MIDI Thru

MIDI volume

minor

mode

moderato

Modulation Wheel

mordent

multi-voicing

## N-O

natural sign

notation

note

note value

octave

ornament

overdub

## P

Patch

pedal mark

phrase

pianissimo

piano

pitch

Pitch Bend

pizzicato

polyphony/polyphonic

port

prestissimo

presto

Program Change

## Q

quantize

## R

real-time recording

repeat

rest

RIFF MIDI file

rhythm

rhythmic unit

ritardando

root

ruler

## S

scale

score

second

segno

semitone

sequencer

sforzando

sforzato

sharp

single barline

slur

sound source

staccato

step record

system

System Common Message

System Exclusive Message

System Realtime Message

## T-U

tempo

tempo slider

template

tenor clef

third

tick

tie

time signature

tool tips

track

transpose

treble clef

tremolo

triad

trill

triplet

tuplet

turn

## V

velocity

vivace

vivacissimo

vivo

voice

**W-Z**

wave file

whole step

-0-

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