

# Cadenza Help Index

[Commands](#)

[Windows](#)

[New for Version 2.0](#)

[Keyboard](#)

# Commands

File Menu

Edit Menu

Track Menu

Goto Menu

Options Menu

Conductor Menu

Window Menu

# Windows

Track Sheet

Song Editor

Tempo Map

Event List

Note Editor

Staff

Velocity

Pitch Bend

Aftertouch

Controllers

Faders

## New for Version 2.0

### Staff Editor

This is a new window that lets you display and edit notes in staff notation format.

### Track Sheet

Lines have been added to improve the general appearance of the Track Sheet and make it easier to read.

The Status and Mode columns in the Track Sheet no longer use dialog boxes when a single track is selected. Pressing the ENTER key or double-clicking on the field will change the setting directly. If multiple tracks are selected, a dialog box will be displayed so you can choose a setting for all the selected tracks in one step. Since clicking on a track which is already selected has no effect, you can now double-click on any track within a group of selected tracks instead of using the ENTER key. To de-select a group of selected tracks, click on a track that is not selected or use the up or down arrow keys.

The Track Sheet has been changed to use the control key to select non-adjacent tracks. The shift key is used to extend the current selection range. This change was made to be consistent with other Windows applications.

A popup menu will be displayed when clicking on the Track Sheet with the right mouse button. This menu lets you select a new Window to create. It is essentially a short key to the Window\New Window command.

Starting with version 2.02 the bank select function is no longer just compatible with instruments using the new MIDI standard. The Bank Select and Instrument dialogs accessed via the Track Sheet have a Drop Down List Box added for selecting the equipment. The term 'equipment' was used to avoid confusion with the usage of the term 'instrument'. The equipment definitions are stored in a file called BANKSEL.MAC. You can add your own equipment definitions to the file if you know the MIDI messages used to perform bank selection. The format of the definition file is documented in a file called BANKSEL.TXT.

Also starting with version 2.02, the operation of the Instrument dialog box has been improved. When selecting instruments from the list box which have unused parameters such as channel, that parameter will not interfere with the setting in the Track Sheet. For example, the General MIDI instruments do not specify a channel or bank. Before you display the dialog box, you can set the channel and bank in the selected track then display the dialog box and pick your General MIDI instrument. Plus as you select instruments for the list box, the patch change will be sent to your equipment immediately so you can try out the different sounds before you make your final selection.

The default equipment used to initialize the tracks is set using the Options\User Setup command.

### Song Editor

Track names and bookmarks are now displayed in the Song Editor. A button was also added to make it more convenient to edit the bookmarks.

The Song Editor has been changed to use the control key to select non-adjacent tracks. The shift key is used to extend the current selection range. This change was made to be consistent with other Windows

applications.

## Event List

Event List highlight color has changed to light gray. The event color is displayed now even when the events are highlighted. Lines have been added to improve the general appearance of the event list and make it easier to read. The Event List also updates during playback.

Clicking the right mouse button in the Event List window displays a pop-up menu. The following items are in the menu:

Insert Event: Inserts an event. Works the same as type the `INSERT` key.

Delete Event: Deletes the current event.

Edit Event: Displays a dialog box for editing the current event.

Change Track: Displays a dialog box to let you select a different track to view.

Filter: Displays a dialog box which allows you to select which event types and channels will be displayed. If you need to limit which kinds of events are displayed, use this filter. The page up and page down key and the scroll bar now page a screen at a time instead of a measure at a time.

## Note Editor

Tool box settings for Note Editor and Staff Editor are saved to disk each time the window is a closed. This means the buttons in a newly opened window will be in the same state as they were when the same window was previously used.

While step recording, you can use the spacebar to insert an empty note position into the song. It actually steps the song position by the duration of the selected note tool from the Note Editor's toolbox.

## Faders Window

The Faders Window will now let you use the spacebar to start and stop playback. You can also use the tab key to switch between the Controllers list and the Ports list.

## Printing

Printing of the staff window is performed using the File\Print command. Printer selection and setup is done using the File\Print command.

## Swing Quantize

Edit\Swing command.

## Multi-Track Recording

Options\Multi-Track command.

## Key Signature

Options\Key command.

## Separate Tracks by Channel

Track\Separate command.

## Strip Events from a Track

Track\Strip Events command.

## Goto End of Song

Goto\End of Song command.

## Setting all Notes to the Same Pitch

The Edit\Transpose Pitch command now has a option for setting all notes to the same pitch. This is real useful for setting the pitch for drums. It works best when there is only a single pitch in the selected track. You can use the event filter to limit the affected notes to a single pitch if there are several different pitches in the same track. In this case, the event filter would be set for the pitch you want to change and the tranpose value would be the new pitch.

To use this transpose command to set the pitch, select the middle radio button in the Transpose dialog and enter the new pitch in the field just below the button. Remember, if you don't know the pitch name, you can play the note on the MIDI keyboard and the note name will be entered automatically. You must have the text cursor in the edit field for this to work.

## Graphic Windows

Graphic windows now have better grid lines. Each measure now has light lines at every eighth note position.

## MIDI Files

System Exclusive data in MIDI files can now be read, plus system exclusive data in your song will also be saved in MIDI files that you create with Cadenza..

## Edit\Paste

(improvement)

The size of the block in the clipboard is now retained when pasting the clipboard back into the song.

## Context Sensitive Help

There are two new ways of getting help. The menu help is used by highlighting a command and pressing F1. Hold down F1 until the menu disappears. Window help is available by pressing F1 while the desired window is active.

## Options\MIDI

The name of the Options\MIDI command has been changed to Options\MIDI Control Panel.

## Options\User Setup

Used to set program defaults.

# File Menu

The file menu contains commands for loading and saving disk files.

New

Open

Save

Save As

Save Setup

Print

Print Setup

Read Setup

Exit

## New

The New command erases the current sequence from memory (RAM). If the current sequence has not been saved since the last change, a message will appear before it erases the sequence. The message will let you decide if you wish to continue and abandon your work, save the sequence to disk, or cancel the New command.



## Open

The Open command lets you open previously saved sequences into the sequencer. The Song Selector dialog box will pop up to let you choose from a list of files.

If the current sequence has not been saved since the last change, a message will appear before it erases the sequence. The message will let you decide if you wish to continue and abandon your work, save the sequence to disk, or cancel the Open command.

The Song Selector dialog box is exactly like the File Selector dialog box except for one additional feature. The Song Selector dialog box also has an option to let you select either a Cadenza song file or a standard MIDI file. The list will display files that match the type you select.

## Save

The Save command saves the current song to disk. The first time you save a song, the Song Selector dialog box will pop up so you can name your song. If your song has already been named, choosing the save command will immediately save your latest work to disk, and allow you to continue to work on your sequence.

## Save As

The Save as command allows you to give a new song a name, or save the current song under a different name than currently used. This is useful when you want to keep several versions of the same song. It is also useful for making backup files of your song (just save them under a different filename, or to a different disk or directory).

The Song Selector dialog box (see [Open\\_commandcmd\\_open](#)) will pop up so that you can enter the name. You may instead want to use one of the names from the list. In this case, you will overwrite the existing file.

# Print

Within Cadenza, you can print the contents of the current staff window. The staff window must be the top window for the Print command to be available. You can specify a song title and author's name to appear at the top of the first page. You also have the option of printing the track name and instrument in the upper left corner.

A "printing" dialog box will be displayed while the drawing is being sent to the Print Manager. You can cancel the printing at any time while the box is still displayed. When Cadenza is finished sending the document to Print Manager, the box is removed. Program Manager will now begin the actual printing. You can now proceed with using Cadenza. If you wish to cancel the printing now, you must use Program Manager to cancel the print job.

## To print a track

1. Make the Staff window you want to print the active window.
2. Choose File/Print

Cadenza displays the name of the printer and the port to which it is connected in the Print dialog box. You can change the printer for the current job by using Printer/Setup.

3. If desired, enter a song title and author.
4. Select whether or not you want the track name and instrument.
5. Specify Current Page, All Pages or Number of Pages.
6. Choose OK to print.

See Also:

[Printer Setup](#)

# Printer Setup

Cadenza allows you to select a printer for the current print job. You can select a printer that is different from the one Windows recognizes as the default printer.

## **To select a printer**

1. Choose File/Printer Setup.
2. Select the desired printer.
3. Choose Setup to specify printer setup options.

The options you specify affect all files sent to this printer, not just the current job. Although you can change the printer for one document, you cannot change the printer setup for only one job. If you modify the printer setup for the current job but need to use the original setup for the next job, you must choose File/Printer Setup and change the settings after printing the current job. For information about printer setup options, refer to the Microsoft Windows User's Guide.

4. Choose OK to return to the Printer Setup dialog box.
5. Choose OK to resume normal operation.

See Also:

[Print](#)

## Save Setup

This saves the control settings as the default setup. Each time the sequencer is started or the New command is used, the sequencer will be restored to this configuration. The settings that are saved are, Tempo, Key Signature, Metronome, Lead-in, MIDI control options, MIDI Echo, Overdub. Many different setups may be saved. The setups are written to disk so they may be recalled later. All setup file names have an extension of CFG. To make these your default settings when Cadenza first starts up, save them in the file called CADENZA.CFG.

## Read Setup

This reads in a new setup from a previously saved setup file. Each time the NEW command is used, the sequencer will be restored to this configuration. The initial default settings of Cadenza are determined by the setup in the CADENZA.CFG file. After Cadenza is started, you may load any other setup file you like.

## Exit

The Exit command closes Cadenza. If the current sequence has not been saved since the last change, a message will appear before Cadenza closes. The message will let you decide if you wish to continue and abandon your work, save the sequence to disk, or cancel the Exit command.



## Edit Menu

Undo

Cut

Copy

Paste

Clear

Delete

Event Filter

Quantize

Swing

Humanize

Slide

Length

Rechannel

Retrograde

Transpose Pitch

Remap

Comments

Blocks

Mark to Start

Mark to End

Mark All

## Undo

Undo will reverse the last edit to a track. The Undo command is only enabled when there is something to undo. Once you do a regional edit operation, Undo becomes active. After it is used, Undo becomes disabled until the next regional edit.

## Cut

Works just like COPY except that the copied material is removed from the tracks. This command is used with the PASTE command to move a region from one part of the song to another.

## Copy

This command copies all block marked events into the clipboard. The command can be used with the Paste command to copy a region from one part of a song to another.

## Paste

Events copied to the clipboard by the Copy or Cut commands may be pasted elsewhere in your song using this command. The PASTE dialog box lets you enter the song position where the material will be placed and how many times the paste is to be repeated. Each paste iteration begins at the measure immediately following the end of the previous iteration.

The merge option lets the clipboard data go directly over the existing song. If the option is off then the material is inserted. Enough measures will be inserted to make room for the new material.

## Clear

Erases block marked events. This command works like the Cut command, except the events removed are not saved in the clipboard

## Delete

Erases block marked events. The space previously occupied by these events is also removed. In other words, the gap is removed. The size of the gap is exactly the same size as the marked block.

## Event Filter

The Event Filter is used to specify which events will be affected by the regional editing commands.



## Quantize

This command lets you correct slight timing errors in a song. Select the events to quantize, then select the QUANTIZE function.

## Swing

This command will swing a region. The amount of swing is determined by specifying a percentage. The higher the percentage, the greater the swing.

### **To swing a region**

1. Choose the Edit/Swing command.
2. Specify a percentage value.
3. Select the beat value.
4. Choose OK to perform the operation.

## Humanize

Humanize allows you to make a performance which has been stepped in or one that has been over quantized sound more natural or human. It adds randomness to the timing and duration of each note. The Humanize Dialog lets you set the amount of deviation added to each note's velocity, song position and duration.

## Slide

This command shifts the block marked events in time. Enter the amount of shift in the dialog box. The time is in duration format (measures:beats:ticks).

## Length

The Length command can be used to shorten or lengthen block marked events. This can be used to get staccato effects. It expands and compresses the time and duration of the block marked events. Enter the percentage of change into the dialog box. The event time and note duration can have different values. To double the length of a region, use 200 in both entries. To create staccato from legato, set time to 100 and duration to 50. This forces notes to have a duration of 50% of their original duration.

## Rechannel

When notes are recorded, they are assigned the channel that they were received on. This command allows a new choice of channel for the block marked events.

## Retrograde

Retrograde reverses the order of the notes in a block marked region. The first note in the region becomes the last note of the region and so on. Its note position will be such that the beginning of the note is the same distance from the end of the region as it used to be from the beginning of the region.

Typically, you would set the region from the beginning of the first note to the beginning of the last note to be effected.

## Transpose Pitch

This command changes the pitch of the block marked notes. Three methods for transposing are provided. You have a choice of transposing by halfsteps, transposing by range or setting all selected notes to the same pitch.



## ReMap

Use this command to convert a group of controller events from its current type to another. For example, Aftertouch could be converted to Modulation Wheel data.

## Comments

The Comments command lets you enter notes about the current song into a notepad. After you are done editing, close the editor using the Close command in the window's system menu. You may also double-click on the system menu box. The notes are saved on disk with the song. When the song is reloaded, the comments command can be used to display the notes. The comments are saved in a separate file from the rest of the song. The file will have the same name as the song except the extension will be .TXT.

## Blocks

This command provides you with a way to view and edit the list of marked regions. The dialog box displays a list of the regions. The pushbuttons let edit, delete, or add regions.

To add a block, click on the Add button, then enter the region boundaries in the next dialog box. The new region will appear in the listbox.

To edit a region. select the region in the listbox, then click on the Edit button. Enter the new boundaries in the dialog box.

To delete a region, select the region from the listbox, then click on the Delete button.

## Mark to Start

Creates a block marked region from the current song position to the beginning of the song.

## Mark to End

Creates a block marked region from the current song position to the end of the song.

## Mark All

Block marks the entire song. Actually it removes all block marking. This has the same effect as marking the whole song.

## Track Menu

Links

Copy

Merge

Strip Events

Separate Channels

Select

Status

Save Mute Map

Load Mute Map

Erase

Kill

## Links

The Links command lets you link tracks together. To link your tracks, select an empty track and place it into Link mode (instead of Linear mode). Use the Track Sheet to select the mode. Select the Link command from the track menu. The Links dialog box is used to specify the order that the tracks are played. To add track numbers to the list, enter the track number in to edit box and click on the Add button. If you wish to insert a track number, click on the track in the list where you want the new track inserted. Enter the track number in the edit box then click on the Add button. The new track will be inserted in front of the track you selected from the list. To remove a track from the list, select the track from the list and click on the Delete button.

When you are done editing the list, click on the OK button to save your work. If you wish to abandon the changes, click on the Cancel button.



## Copy

When you select Copy, the track selected on the Track Sheet display is duplicated and copied to the destination track, along with any other values that belong to that selected track.

## Merge

The Merge command combines two tracks together. The track selected on the track menu is merge into the destination track. The destination track is specified in the dialog box. The channel information is preserved for all events. Assuming that the events of the two tracks had different channels, you could use CUT and PASTE to un-merge the track. To extract events with a certain channel number, set the channel range in the event filter then cut the events from the track.

## Strip Events

This function lets you remove a single event type from a entry track or tracks. If you wish, you may specify a channel. If channel is set to "All", then all events of the selected type will be removed.

## Separate Channels

This function is used to separate a track into multiple tracks by channel. A dialog box is displayed to let you select a starting track number for the new tracks that will be created. The new tracks will be named with the channel number of the events in that track.

## Select

The Select command is another way of selecting a track, instead of using the mouse or cursor keys.

## Status

Status determines what mode the track is in when the PLAY button is clicked. The Status dialog box allows the setting of Play or Mute mode on the selected track.

## Save Mute Map

Saves the track status settings for all tracks into a 'mute map' file. The file may be read at a later time to restore the settings using the Load Mute Map command.

## Load Mute Map

Loads a previously saved mute map from a 'mute map' file. The file may be selected from the File Selector box.

Related Topic:

[Save Mute Map](#)



## Erase

The Erase command clears all MIDI events (notes, aftertouch, velocity and controllers) from the selected track. The track options are saved (Name, Chan, etc.). Use this command with care, as erasing a track is permanent.

## Kill

This command completely removes the selected track, its options and events. The parameters for that track are reset to the default settings. As with Erase use this with care, killing a track is permanent.

## Goto Menu

Time

Position

Start

End of Song

Previous Measure

Next Measure

Bookmark

## Time

This command lets you set a new song position anywhere, Even beyond the end of the song at an exact time. The song position is specified in SMPTE/MTC time format.

## Position

Goto Position is like Goto Time, but it uses the format of measures:beats:ticks instead of SMPTE/MTC time.

## Start

Use the this command to set the song position to the start of the song. The difference between this and Rewind is that it will ignore the Transport Option's start time. Goto Start always goes to position 1:1:0.

## End of Song

This command will position you to the beginning of the first measure past the end of the song.

## Previous Measure

This command sets the song position to the previous measure.



## Next Measure

Use this to set the song position to the next measure.

## Bookmark

This command provides you with a way maintain bookmarks. The dialog box displays a list of the bookmarks you have created. The pushbuttons let go to, edit, delete, or add bookmarks.

To add a bookmark, click on the Add button, then enter the name of the bookmark an its position in the next dialog box. The new bookmark will appear in the listbox.

To edit a bookmark. select the bookmark in the listbox, then click on the Edit button. Enter the new boundaries in the dialog box.

To delete a bookmark, select the bookmark from the listbox, then click on the Delete button.

To go to a bookmark, select the bookmark from the listbox, then click on the Goto button.

# Options Menu

MIDI

Controls

Metronome

Channel Filter

Midi Echo

OverDub

SMPTE Display

Multi-track Record

Key Signature

Record Tempo

Disable Playback

User Setup

## MIDI Control Panel

This runs the Big Noise MIDI control panel program. From this program you can setup the MIDI metronome, real-time event filter, and other items. For complete information on this program see the MIDI Control Panel documentation.

## Metronome

This command controls the use of the metronome feature. How the metronome actually works is determined by the MIDI Control Panel program (see MIDI command). The MIDI Control Panel command lets you select either a MIDI metronome or use the PC 's speaker. If using the MIDI metronome, the MIDI Control Panel program allows you to select the note number and velocity for the beats. A separate note number and velocity can be specified for the down-beat. The options for the Metronome command are:

### **Accent:**

When enabled, the down-beat is accented. When using the MIDI metronome, the accent is determined by settings in the MIDI Control Panel program.

### **Playback:**

Enables the metronome during playback.

### **Record:**

Enables the metronome while recording.

The Metronome dialog box is also used to control the lead-in. Lead-in (also called count in) is a break just before playback where the sequencer plays the metronome to allow to here the rhythm. The lead-in options are:

### **Beats:**

This is the number of beats the metronome will tick before playback begins.

### **Record:**

Enables the lead-in for recording.

### **Playback:**

Enables the lead-in for playback.

## Channel Filter

The channel filter is used when recording to limit the recorded events to those on specific channels. In order for events from a specific channel to be recorded, the check box next to the channel number must be checked.

# Controls

The controls command lets you set several of the control parameters from one dialog box. Each parameter has its own little box. The parameters are:

## Pre-Playback Options

This function allows you to enable certain types of MIDI messages to be transmitted from the sequencer. The options are:

### Chase Controllers:

If enabled, *Cadenza* sends all control and program changes from the beginning of the song to the current position.

### Zero Continuous Controllers:

The most commonly used controllers such pitch bend, volume, mod. wheel and pan are set to there normal state. ei, pitch bend and pan are centered, volume is set to max and mod. wheel is set to zero.

### Send Program Changes:

Program changes specified in the Track Sheet's Patch column are sent prior to playback if this option is on.

### Send Volume:

Volume settings specified in the Track Sheet's Vol. column are sent prior to playback if this option is on.

### Send Pan:

Pan settings specified in the Track Sheet's Pan column are sent prior to playback if this option is on.

## Transport Options

This command lets you automate the transport buttons. The features below are enabled when the corresponding checkbox is checked. The controls are:

### Start Time:

If enabled, *Cadenza* will set its position to that specified here whenever a rewind is done.

### Stop Time:

If enabled. *Cadenza* will automatically stop during playback when it reaches this song position.

### Auto Rewind:

When enabled, *Cadenza* will rewind immediately after it does a stop.

### Punch In/Out

Sets the punch in and punch out positions. Enable must be on for this to work. Punch in/out allows you to fix a piece of a track by re-recording the bad spot. To use it, enable punch in/out, and set the "In Time" just before the bad spot and the "Out Time" just after it. Start recording. When you come to the bad spot,

replay the piece. The region inside the in and out times will be replaced with the stuff you just played. Everything you have played outside the region will not be recorded. When you stop the recording, you can accept or reject the new recording. If you reject the recording, the original events will still be there.



## MIDI Echo

Cadenza has the ability to transmit everything that comes into the MIDI In port back out the MIDI Out port. This command will turn that feature on or off. This is used mostly when using keyboard controllers instead of synthesizers. This setup would require connecting the keyboard to the MIDI In port of the interface and the MIDI Out would go to your sound generators (synth modules, drum machines, etc).

## Overdub

Allows you to record over an existing track without losing the old material. The new material is layered onto the old. This command is toggled on and off by selecting it from the menu. The check mark indicates that this command is on. With this command off, the old material on the current track is erased each time you record over it (but only if you keep the new recording).

## Key Signature

Lets you select a key signature to be used by the staff and event list windows. Choices are the major and natural minor keys.

## SMPTE Display

The command is used to set the SMPTE display options. The options let you select the frame rate which is represented by the SMPTE time in the status bar while using internal sync. The Absolute and Relative options determine how the time is displayed while syncing to SMPTE or MIDI Time Code. The Absolute option displays the actually SMPTE frame addresses being read from the tape. The Relative option subtracts the SMPTE offset from the actual frame address. The time displayed becomes the time from the offset point.

## Multi-track Record

Selecting this commands toggles the Muti-track recording mode on and off. When off, recording works as usual. When on, the events will be stored into successive tracks based on their MIDI channel. The track name fields in the Track Sheet will be filled with the channel. For example, if a track contains events from channel five then the track will be named "Channel 5".

## Record Tempo

When checked, enables the recording of tempo changes while *Cadenza* is recording. This means if you make any tempo changes while recording, they will be recorded on the conductor track.

## Disable Playback

This commands prevents *Cadenza* from playing back. This used when you wish to play another sequencer (which uses the MIDI Director) without hearing the song in *Cadenza*. Otherwise, both sequencers will play at the same time.

## User Setup

This command displays a dialog box for setting the following user options.

### **Save Settings on Exit**

With this option turned on, the sequencer settings will be saved to a file called cadenza.cfg. This is the file Cadenza reads during startup to set the initial values of such things as tempo, meter and MIDI options.

### **Save Layout on Exit**

With this option on, Cadenza saves the window layout on exit to a file named CADENZA.LAY. When Cadenza is run the next time, it reads that file to restore the window layout to that which existed when you previously exited Cadenza.

### **Auto-Save Song**

This option causes Cadenza to automatically save the current song at specified intervals. If you are experimenting with a song and don't want the changes saved, you need to have this option off.

### **Auto-Save Time**

This value is the number of minutes between saves when Auto-Save is enabled. The maximum time is 60 minutes.

### **Default Equipment**

This dropdown listbox lets you select the default equipment. This determines the method that will be used for bank selection. When a File\New command is done, all tracks will be configured for that equipment.

See [Track Sheet](#)



# Conductor Menu

Tempo

Meter Map

Tap Tempo

Kill Tempo Map

## Tempo

Lets you set the tempo. A tempo window (not tempo Map window) will popup. This window may remain on the screen as long as you like without keeping you from doing other things. When you no longer want the Tempo window on the screen, select its Close button.

Tempo changes can be recorded on to the conductor track in real time. The Record Tempo command in the Options menu is used to enable this feature. Use the Tempo Map window to edit the tempo changes that are made inside the song (Past the beginning.).

## Meter Map

Meter Map lets you specify the meter starting at specified measures. The dialog box lets you insert new entries, delete entries, and edit existing entries. The selection box displays the current entries in the map. It shows the measure and meter change for each entry. Push-buttons let you edit the map. You can select the buttons with the mouse or by typing the underlined letter on the button.

## Tap Tempo

Tap Tempo frees you from having to record along with a metronome. After recording a song, without the metronome, record a track containing one note for each beat. Use the Tap Tempo command to create a tempo map which matches these beats. Cadenza will adjust event times for all events to match the new tempo map. The playback will be un-effected, but the notes will line up with Cadenza's bars and beats. This makes it easier to edit your song. You can even quantize. If you like, you may clear the tempo map. This however, may stiffen your music. The Tap Tempo command will prompt you for the track containing the beats and the beat value represented by the notes in your 'beat track'. 1 is a whole note, 2 is half etc. After the command is finished, erase the beat track.

## Kill Tempo Map

This command erases all of the tempo changes in the current song.

## Window Menu

This menu contains commands for creating and managing windows. At the bottom of the menu is a list of the currently opened windows. The window names are actually part of the menu. You may select these menu entries to display any of the listed windows.

Zoom In

Zoom Out

Follow track

New Window

Tile

Cascade

Save Layout

Restore Layout

Arrange Icons

Close All

## Zoom In

This command causes the graphic event windows to display a smaller portion of the song. There are three zoom levels. The zoom levels actually determine how many measures will be displayed. The different levels display 1, 3, or 9 measures.

Related Topic: [Zoom Out](#)

## Zoom Out

This command causes the graphic event windows to display a larger portion of the song. There are three zoom levels. The zoom levels actually determine how many measures will be displayed. The different levels display 1, 3, or 9 measures.

Related Topic: [Zoom In](#)



## Follow Track

The Follow Track command is used to lock the event windows to the currently selected track. The current track is selected from the Track Sheet, Song Editor or Track/Select command.

## New Window

This command is used to open a new window. Selecting this command causes a second menu to be displayed which lets you pick the type of window you want to open.

This command will open a Note Editor, Event List, Velocity window, Aftertouch window, Pitch Bend window, Controllers window, or Faders window.

For the event windows, the track for which the window is created, is determined by selecting a track with the Track Sheet or Song Editor before using The New Window command. The Track\Select command may also be used to select the track.

Each of these windows is described in detail in the first half of this manual.

## Tile

This command arranges all of the currently displayed windows in a tiled fashion.

## Cascade

This command arranges the windows in a cascade fashion. It is similar to a how a hand of playing cards would appear.

## Save Layout

The save command lets you save the window configuration in a file so that it can be restored later by using the Restore command.

## Restore Layout

The Restore command reads a window configuration file created by the Window\Save command. The window arrangement will be restored exactly like the arrangement that was saved. The specific data that was being displayed by each window is not guaranteed to be correct. Only the window arrangement itself is remembered.

## Arrange Icons

This command arranges the icons at the bottom of the workspace so that they line up nicely.

## Close All

This closes all of the displayed windows. The Track Sheet, Song Editor, and Tempo windows are not actually closed. Instead, they are minimized.



## Track Sheet

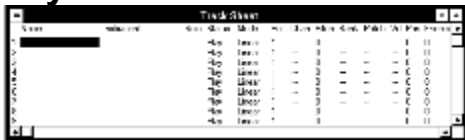
The Track Sheet allows you to set track related parameters and select tracks. To open the Track Sheet, double-click on the Track Sheet icon or select Track Sheet under the Window menu.

Multiple or single tracks can be selected for changing a single parameter at once. Selecting multiple tracks also allows you to do edit operations on the selected tracks without having to edit each track one at a time. To select multiple tracks with the keyboard, hold down the CONTROL key while using the up or down arrow keys. To select multiple tracks with the mouse, click on a track and drag the mouse up or down. To select non-adjacent tracks, hold down the SHIFT key and click on the desired tracks.

To select parameters with the keyboard, use the right and left arrow keys. To select them with the mouse, click inside the column for the parameter. The selected track and parameter are highlighted by displaying them as black with white text. Usually, when selecting a parameter with the mouse, you will want to select the track(s) and parameter in one operation. If you have selected several tracks and want to edit a different parameter without re-selecting the tracks, use the right and left arrow keys or click on one of the selected tracks in the desired parameter column.

When multiple tracks are selected, you will need to click on a non-selected track to deselect the currently selected tracks. This makes it possible to double click on the group of selected tracks to set a parameter for each of the selected tracks in one operation. This is equivalent to pressing the ENTER key.

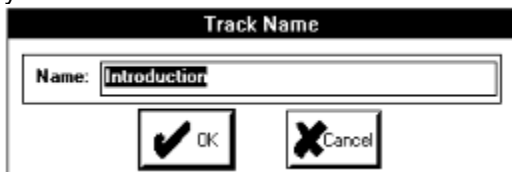
## Layout



The Track Sheet will display up to sixty four tracks. The actual number of tracks it will display depends on the size of its window. Normally the Track Sheet will display a portion of the tracks. The window scrolls to allow you to view different portions of the sixty four tracks. Scrolling can be done using the positioning keys (ARROWS, PGUP, PGDN etc.) or the scroll bar.

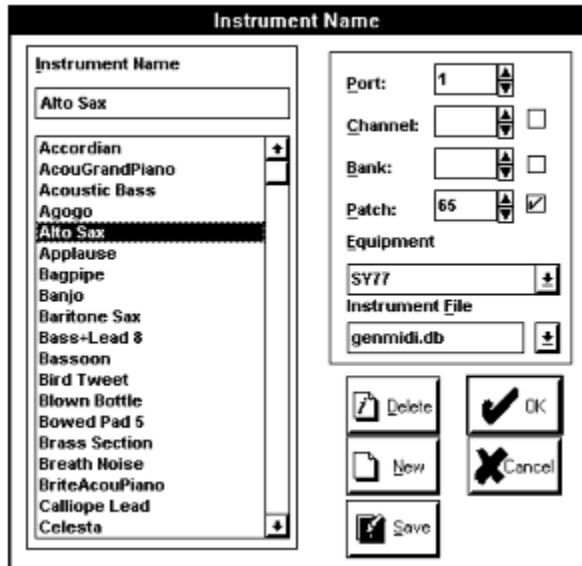
## Name

This may be used for labeling tracks. Its main purpose is to help you identify tracks. To edit the name, select the field and press the ENTER key or double click on the field. A dialog box will be displayed to let you enter the name.



## Instrument

The instrument field is a powerful feature of the Track Sheet. This field allows you to create setups for different instruments and give them a name. The setup for each instrument includes the port, channel, patch, bank numbers and method of bank selection used to select a specific patch on a specific synthesizer.



Multiple instrument sets can be defined and saved in separate instrument files. Cadenza for Windows comes with two instrument files one is called instrmnt.db. It actually does not contain any instruments. The other is called genmidi.db. It contains the 128 General MIDI patches.

When Cadenza for Windows is run for the first time, The instrmnt.db instrument file will be selected. At first there will be no instruments defined. You will need to define your own to match your equipment. To create an instrument, double-click in the instrument column in the track of your choice. The Instrument dialog box will be displayed. Type in the name of the instrument in the box labeled Instrument Name. In the boxes to the right, enter the values for the port, channel, bank, patch and equipment. Some of the values are optional. To disable any of the values, turn off the check box next to the value. For instance, your instrument may not require a bank selection. Click on the check box next to Bank to turn it off if it isn't already. When you are done setting all values, click on the OK button. The track settings will be adjusted to match the settings for the instrument you just created.

An alternative to the method above is to set the track parameters in the track sheet before bringing up the Instrument dialog box. The values in the dialog box will be the same as the track settings. All you still need to do is fill in the Instrument Name field and select the OK button. This is actually the preferred method.

After you have created a set of instruments, you will want to use one of them. Double-click on the track in the Instrument column to display the Instrument dialog box. The listbox contains a list of all the instruments you have created. Select one from the listbox and click on the OK button. If your list of instruments is long, you can enter the name in the edit box. The list box will display the instrument names which begin with the letters you have typed in. In many cases, you can type two or three letters and the instrument you are looking for will appear in the list box. When the name does appear in the listbox, click on it. This will copy the name to the edit box. The full name must appear in the edit box in order for it to be considered selected. The dropdown listbox labeled 'Equipment' is used specify what method Cadenza uses to do the bank selection. The equipment definitions are stored in a file called BANKSEL.MAC. You can add your own equipment definitions to the file if you know the MIDI messages used to perform bank selection. The format of the definition file is documented in a file called BANKSEL.TXT.

To delete an instrument, bring up the Instrument dialog box, select the instrument from the listbox and click on the Delete button.

To create new instrument files, click the New button and enter the new file name in the Instrument File

box. You can now begin creating a new list. When you click on the OK button, the file will be saved. You can select a different instrument file by dropping down the Instrument File drop-down-list-box and pick the file.

These instrument files will be saved in your Cadenza for Windows directory. It might be wise to backup these files too when you backup your song files.

When selecting instruments from the list box which have unused parameters such as channel, that parameter will not interfere with the setting in the Track Sheet. For example, the General MIDI instruments do not specify a channel or bank. Before you display the dialog box, you can set the channel and bank in the selected track then display the dialog box and pick your General MIDI instrument. Plus as you select instruments for the list box, the patch change will be sent to your equipment immediately so you can try out the different sounds before you make your final selection.

## Solo

Solo lets a single track play alone. When the solo parameter for a track is on, all other tracks will be muted. To set solo with the keyboard, select the field, and press the PLUS key on the numeric keypad to turn it on. The MINUS key turns it off. You may also toggle the setting with the ENTER key. With the mouse, you can toggle the setting by double-clicking on the field.

## Status

This parameter mutes and un-mutes tracks. It has two possible values, Mute and Play. You can set the value directly with the keyboard by selecting the field and typing THE PLUS or MINUS key on the numeric keypad. Typing the ENTER key or double-clicking on the selected tracks will also toggle the value.

## Events (Not actually a parameter)

This value indicates the number of MIDI events stored in each track. Remember that each note has two events (note on and note off).

## Chan

This is the channel override parameter. It will force events in the track to play on a fixed channel regardless of the channel assigned to them. Channels range from 1 to 16. The channel override may also be turned off. To set the channel from the keyboard, use the arrow keys to select the track and channel field. The PLUS and MINUS on the numeric keypad can be used to increment and decrement the value. When the channel override is off, it will display a dash. Incrementing once will set the channel to one. Decrementing from one will turn the override off again. A dash will again be displayed. To set multiple tracks at once, select the tracks and then select the channel column using the arrow keys. Press the ENTER key to display the dialog box below. In the dialog box, the Channel box can be set from 1 to 16. To turn off the channel override, turn off the Enable checkbox. To display the dialog box with the mouse, double-click on the channel field in the desired track.



## Pitch

This is the amount of pitch transposition to apply to notes in the track during playback. Use this to

transpose all events from a particular track. It does not modify the actual data. The range of transposition is -127 to +127 half steps. To set the transposition from the keyboard, use the arrow keys to select the track and Pitch field. The PLUS and MINUS on the numeric keypad can be used to increment and decrement the value. To set multiple tracks at once, select the tracks and then select the Pitch column using the arrow keys. Press the ENTER key to display the dialog box below. Enter the transposition amount into the dialog box. To display the dialog box with the mouse, double-click on the Pitch field in the desired track.



### Mode

Use this to turn on track looping or to designate the track as a link track. In the default position of Linear, the track just plays from the beginning to the end. In the Loop setting, the track will loop as long as one other track is still playing. To learn what a link track is, see the Link command in the Track Menu. To set the mode, select the desired track(s) and press the PLUS, MINUS or ENTER keys on the numeric keypad. You may also double-click on the column to change the mode.

### Bank

This allows you to send an option bank select message to the channel specified in the Chan parameter. Numbers range from 0 to 127. If the channel override for this track is disabled, the bank select message will not be sent. Editing of this field is done in the same manner as the Chan field. The dialog box also contains an Equipment dropdown listbox. This is used to select the method that Cadenza uses to perform the bank selection. For more details, see the paragraph above on 'Instrument'.

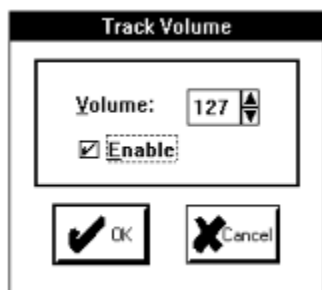
### Patch

This allows you to send an optional program change message to the channel specified in the Chan parameter. Numbers range from 0 to 127. If the channel override for this track is disabled, the program change message will not be sent. Editing of this field is done in the same manner as the Chan field.



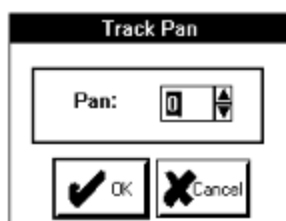
### Vol

This allows you to send an optional volume message (control change 7) to the channel specified in the Chan parameter. Numbers range from 0 to 127. If the channel override for this track is disabled, the volume message will not be sent. Editing of this field is done in the same manner as the Chan field.



## Pan

This allows you to send an optional pan message (control change 10) to the channel specified in the Chan parameter. Numbers range from -64 to +64. Zero is center. If the channel override for this track is disabled, the volume message will not be sent. Editing of this field is done in the same manner as the Chan field except it does not have a disable setting.



## Keys

- Up Arrow:       Selects the previous track.
- Down Arrow:    Selects the next track.
- Right Arrow:    Selects the next field to the right.
- Left Arrow:     Selects the previous field.
- PgUp:            Scrolls the screen up one page toward track one.
- PgDn:            Scrolls the screen down one page toward track 64.
- Home:            Displays the first page of the track sheet.
- End:             Displays the last page of the track sheet.
- Enter:           Edits the field. Usually a dialog box will appear for you to fill in.
- + (plus)         Increments numeric parameters. Also toggles Mode, and Status. It can also turn Solo on.
- (minus)        Decrements numeric parameters. Also toggles Mode, and Status. It can also turn Solo off.

## Mouse

- Left Button:     Selects tracks and parameters. Dragging the mouse up or down selects multiple tracks. Holding the CONTROL key while clicking lets you select non-adjacent track. Holding the SHIFT while clicking will extend the previous selection.
- Right Button:    Displays a pop-up menu which lets you select a new window to open.
- Double Click:   Edits the field and track pointed to by the cursor.

## Vertical Scroll Bar

- Up Arrow:        Scrolls the track sheet up one line.
- Down Arrow:     Scrolls the track sheet down one line.
- Thumb:           Scrolls a new track. Track number is determined by position of thumb.

Below thumb: Scrolls the screen up one page toward track one.

Above thumb: Scrolls the screen down one page toward track 64.

## **Horizontal Scroll Bar**

The horizontal scroll bar will only appear when the window has been sized too small for all parameters to be viewed. When it appears, you can use it to scroll the track sheet sideways to reveal areas that are not currently visible.

**Track Bank**

Bank: 2 

Enable

Equipment

Midi Spec 

 OK  Cancel

# Song Editor

The Song Editor lets you view and edit the structure of a song. It makes it easy for you to see which measures have notes in them and which do not. Sections of a song can be block marked by simply dragging the mouse over the region you want to edit. By using bookmarks (see Goto/Bookmarks command) you can easily identify the sections of the song. To open the Song Editor, double-click on the Song Editor icon or select Song Editor under the Window menu.

## Layout



The Song Editor uses rectangles to represent measures. White measures are empty. Gray measures are filled. Block marking causes marked measures to change color. Marked empty measures are filled with a sparse dot pattern. Marked measures with notes are black.

Each row represents a track and each column represents a measure. The track numbers and names appear along the left edge and the measures are numbered along the top. Every fifth measure is numbered. The area just above the measure numbers is for displaying bookmarks. A button label "Edit Bookmarks" is used to display the Edit Bookmarks dialog box.

You can quickly pop-up the Bookmarks dialog box by clicking in the area where the bookmarks are displayed.

## Keys

- Up Arrow: Selects the previous track.
- Down Arrow: Selects the next track.
- Right Arrow: Steps one measure.
- Left Arrow: Backsteps one measure.
- PgUp: Scrolls the screen up one page toward track one.
- PgDn: Scrolls the screen down one page toward track 64.
- Home: Displays the first page of the song editor.
- End: Displays the last page of the song editor.
- Insert: Inserts empty measures into the marked region.
- Delete: Deletes the marked measures.

## Mouse

- Left Button: Used to mark a block. After the button is released, the song position will be set to the last measure marked. This makes it convenient to go to a measure in a song.
- Right Button: Displays a pop-up menu which lets you select a new window to open.

## Vertical Scroll Bar

- Up Arrow: Scrolls the song editor up one line.
- Down Arrow: Scrolls the song editor down one line.
- Thumb: Scrolls a new track. Track number is determined by position of the thumb.



Below thumb: Scrolls the screen down one page toward track 64.

Above thumb: Scrolls the screen up one page toward track one.

## **Horizontal Scroll Bar**

Right Arrow: Scrolls one measure forward.

Left Arrow: Scrolls one measure back.

Thumb: Locates to a new song position. Song position is determined by position of the thumb.

Right of Thumb: Scrolls back one screen full.

Left of thumb: Scrolls forward one screen full.



## Tempo Map

The Tempo Map lets you insert tempo changes in your song. They may be gradual or immediate. To open the Tempo Map, double-click on the Tempo Map icon or select Tempo Map under the Window menu.

A toolbox has been provided for editing. These tools let you select the mouse mode (pick or draw) plus several editing functions. To display the toolbox, click anywhere in the Tempo Map window with the right mouse button. After you select a button the tool box will go away.

Block marking in the Tempo Map is done using the pick tool. Once the pick tool is selected, just click the mouse on the start of the block and drag it to the end of the block. Unlike the other windows, the Tempo Map only supports one block marked region. If multiple regions have been marked, using another window, the Tempo Map will use the block closest to the beginning of the song. The commands in the Edit Menu have no effect on the conductor track. Even though the Tempo Map allows you to mark a region, it is only affected by the toolbox buttons.

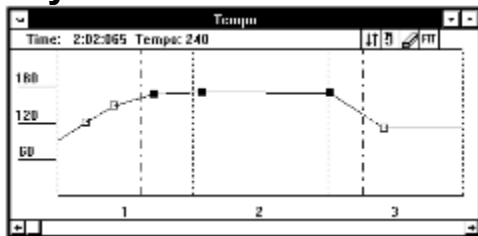
To insert tempo changes, use the pencil tool. When the pencil tool is selected, the cursor will change into a pencil. Click the mouse at the location you want the tempo to change. The tempo will change gradually from the previous tempo change.

To edit tempo changes, use the pencil tool. Click on the tempo change and drag the rectangle to its new location. When you position the cursor a tempo change, it will turn into a crosshair.

To delete tempo changes, use the pick tool. Block the area you want deleted and click on the erase (eraser) tool button.

One important thing to be aware of, is that the MIDI Director only handles one tempo map at a time during playback. Each time a copy of *Cadenza for Windows* (or other sequencer) is loaded, the previous copy which owned the tempo map gives it up to the newly loaded program. In other words, the last copy of *Cadenza for Windows* that was loaded determines the tempo. However, when you click on the play button in one of the copies of *Cadenza for Windows*, that copy gets the tempo map. So the tempo is determined by the *Cadenza for Windows* that you started the playback from. If you are using external sync, you will want to make sure that the correct program is controlling the tempo.

### Layout



### Graph

The Tempo Map is a line graph. Tempo changes are displayed as rectangles. Normally the rectangles will be white with a black border. If a tempo change occurs in the block marked region, it will be solid black. A moving vertical line (cursor) will indicate the current song position. Measure boundaries are marked with vertical dotted lines. The light gray lines between the measures indicate eight note positions.

### Rulers

The ruler on the left indicates the value of the tempo. The range is 1 to 300. The ruler at the bottom of the graph numerates the measures.

### Status Bar

At the top of the graph is the cursor position (displayed as Time and Tempo). The cursor position displays the time (song position) and pitch bend value to which the mouse cursor is pointing. This helps you determine where to place the mouse when you are picking points.

## Keys

PgUp:	Scrolls up one screen full.
PgDn:	Scrolls down one screen full.
Home:	Steps to the beginning of the song.
+ (numeric keypad)	Zoom in one level.
- (numeric keypad)	Zoom out one level.

## Mouse

Left Button: Clicking on a tempo change selects it. To mark a block, click away from any tempo changes and drag the mouse.

Right Button: Edits and inserts tempo changes.

## Horizontal Scroll Bar

Left Arrow: Steps the song back one bar.

Right Arrow: Steps the song forward one bar.

Thumb: Moves to a new song position.

Right of Thumb: Scrolls back one screen full.

Left of Thumb: Scrolls forward one screen full.

## Tools



### Pick

This selects the pick mode for the cursor. This tool is used mainly for block marking. The pick tool and the pencil (below) are self exclusive.

### Pencil

This selects the pencil cursor mode. This tool is used mainly for editing and inserting. The pencil and the pick tool (above) are self exclusive.

### Shift

Shifts the tempo within the marked region. A dialog box will be presented for you to enter the amount you want the tempo shifted. You may enter the amount or you may use the mouse to indicate the amount of shift you want. To use the mouse, click on a point on the screen that represents the reference tempo, then drag the mouse up or down. A rectangle will be drawn to show you the original tempo and the new tempo. The amount of shift will be displayed in the dialog box. After you release the mouse button, the rectangle will go away and the graph will be redrawn with the tempo shifted.

### Limit

Limits the tempo within the marked region. A dialog box will be presented for you to enter the upper and lower limits. You may enter the amount or you may use the mouse to indicate the limits. To use the mouse, click on a point on the screen that represents a limit, then drag the mouse up or down. A rectangle will be drawn to show you the limits. The limits will be displayed in the dialog box. After you release the mouse button, the rectangle will go away and the graph will be redrawn with the tempo limited.

### Erase

Erases all tempo changes within the marked region.

### Fit

Adjusts the tempo so that the marked region will take the specified time to play. A dialog box will be displayed to let you enter the time in minutes and seconds.





## Event List

The Event List window displays a list of events in a track. Each row in the list shows the event's time, channel, event name and data. The main purpose of this window is to let you edit single events. Events may also be inserted or deleted.

Each Event List window displays events from a single track. You should select the track you want to view using the Track Sheet or Song Editor before creating the window. To open the window, use the New Window command in the Window menu and select Event List. You may view several tracks by creating a window for each track.

Events are displayed from top to bottom in the order they are played. The keyboard or scroll bar can be used to scroll the list. As you scroll through the list, a cursor points to the current event. The song position counter (in the status bar) will be set to the time of the event. This is where *Cadenza for Windows* will begin playing when you start the sequence.

The current event is identified with a mark at the left of the events. To edit the current event, press the ENTER key and enter the new parameters for the event. The dialog box used for this varies with each type of event. For the most part, they are very similar. Each has an edit box for the channel, time, and data. Note name and velocities may be edited by playing the MIDI keyboard. Only the selected field will be affected by the MIDI keyboard. System exclusive events have a different type of editor. Editing of system exclusive events is covered in the *Using Cadenza* chapter in the *Editing System Exclusive Data* section of the manual.

To delete the current event, press the DEL (delete) key.

To insert an event, scroll to the position where you want to insert the event (optional), and press the INS (insert) key. A menu of event types will pop up. Select the event type you want. A dialog box will be displayed for you to enter the values for the new event.

Clicking the right mouse button in the Event List window displays a pop-up menu. The following items are in the menu:

Insert Event: Inserts an event. Works the same as the INSERT key. See Keys below.

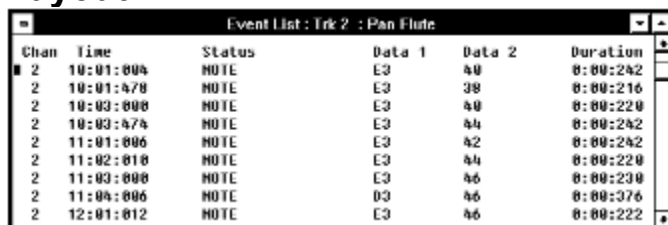
Delete Event: Deletes the current event.

Edit Event: Displays a dialog box for editing the current event.

Change Track: Displays a dialog box to let you select a different track to view.

Filter: Displays a dialog box which allows you to select which event types and channels will be displayed.

### Layout



Chan	Time	Status	Data 1	Data 2	Duration
2	10:01:004	NOTE	E3	40	0:00:242
2	10:01:478	NOTE	E3	38	0:00:216
2	10:03:008	NOTE	E3	40	0:00:220
2	10:03:474	NOTE	E3	44	0:00:242
2	11:01:006	NOTE	E3	42	0:00:242
2	11:02:010	NOTE	E3	44	0:00:220
2	11:03:008	NOTE	E3	46	0:00:230
2	11:04:006	NOTE	D3	46	0:00:376
2	12:01:012	NOTE	E3	46	0:00:222

The columns in the Event List are:

Time: Shows the exact time the event will play back. The time information is displayed in measure:beat:tick format.

Chan: Indicates the channel on which the event is going to be transmitted. This will be the same as the channel it was recorded on unless it has been overridden by the Channel Override parameter on the Track Sheet.

Status: Tells whether the event is a note, control change, program change, etc.

Data 1: (not labeled) This is the first data byte of the MIDI message. For notes, it is the note

number, for program change, it is the program number. Knowledge of MIDI messages will be helpful to understand the meaning of this item.

Data 2: (not labeled) This is the second data byte of the MIDI message. For notes, it specifies velocity. For some events, it means nothing and will not be displayed. Knowledge of MIDI messages will be helpful to understand the meaning of this item.

Duration: Notes have one extra parameter that displays the duration.

## Text Colors

Unless events are block marked, each event type has a unique color. Block marked events will always be light gray background. The colors for the different event types are:

Notes:	Black	
Program Change:	Green	
Control Change:		Red
Channel Aftertouch:	Blue	
Pitch Bend:	Magenta	
Key Aftertouch:	Cyan	

## Keys

Up Arrow: Steps to the previous event.

Down Arrow: Steps to the next event.

Home: Steps to the first event in the track.

End: Steps to the last event in the track.

PgUp: Steps to the previous page.

PgDn: Steps to the next page.

Enter: Edits the current event.

Insert: Inserts an event at the current song position. The first dialog box is used to select the type of event. The second dialog box is for the event data. The dialog also lets you set the song position of the inserted event.

Delete: Deletes the current event.

## Mouse

Left Button: Selects an event.

Right Button: Displays the pop-up menu.

Double-click: Edits an event.

## Vertical Scroll Bar

Up Arrow: Steps to the previous event.

Down Arrow: Steps to the next event.

Thumb: Sets the Song Position.

Above Thumb: Steps to previous page.

Below Thumb: Steps to next page.

## Horizontal Scroll Bar

The horizontal scroll bar will only appear when the window has been sized too small for all parameters to be viewed. When it appears, you can use it to scroll the Event List sideways to reveal areas that are not



visible.



## Note Editor

The Note Editor is used for editing notes. It displays notes in a style often called "piano roll notation". When you look at a piano roll, you see rectangular holes. The position of the holes determines the pitch of the notes and the timing. The length of the holes determines the duration of the notes. In the Note Editor, notes are represented as rectangles. A note's duration determines the length of the rectangle. Its pitch determines its vertical position. Its song position (event time) determines its horizontal position. The rectangles will normally be gray, unless they are block marked. Then they are black. This makes it easy to see which notes have been block marked. The current note is displayed as a white rectangle with a black border.

Each Note Editor window displays note events from a single track. You should select the track you want to view using the Track Sheet or Song Editor before creating the window. To open the window, use the New Window command in the Window menu and select Note Editor. If you decide to view a different track, you can click on the track (Trk) tool button and enter the desired track. You may view several tracks by creating a window for each track. Use the New Window command for each window you want to create.

Notes are displayed from left to right in the order they are played. The keyboard or scroll bar can be used to scroll the window.

As you step right or left using the arrow keys, the current note will be sounded. This note will also be displayed as white instead of gray or black. Stepping from note to note also changes the song position to that of the current note.

To edit the current note, press the ENTER key and enter the new parameters for the note into the dialog box.

The note editor can be zoomed in and out to display 1, 3, or 9 measures. The Zoom In and Zoom Out commands can be used, or you can use the PLUS(+) and MINUS (-) keys on the numeric keypad. To delete the current note, press the DEL (delete) key.

A toolbox has been provided for editing. These tools let you select the mouse mode (pick or draw) plus several editing functions. To display the toolbox, click anywhere in the Note Editor with the right mouse button. After you select a button the tool box will go away. Each time the Note Editor window is closed, the state of the buttons and the settings such as channel and velocity are save to disk. When a new Note Editor is opened, the tools will be restored to the previous setting.

The following assumes that the pencil tool is selected:

To insert a note, select the pencil tool. Before you insert a note you should select the note value (duration) from the tool box. Point to where the note is to be inserted and click the mouse. The mouse must not be pointing to an existing note.

When pointing the mouse cursor at notes, the cursor will change shape. If you point to the end of the note, the cursor will become a horizontal double ended arrow <-->. Anywhere else on the note, it will be a crosshair. If the cursor is a hand, you can click and drag the note to any position in the window. If the cursor is the <--> shape, you can click and drag the mouse to edit the duration of the note.

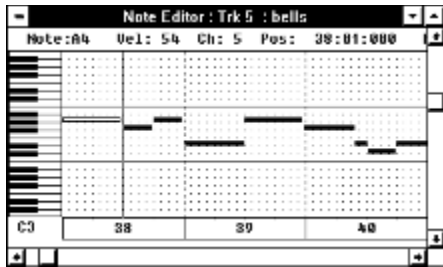
The following assumes that the pick tool is selected:

Block marking in the Note Editor is done by clicking and dragging with the mouse. Click anywhere except on a note and drag the mouse to mark the block. To add a block, hold down a CONTROL key while dragging the mouse.

You may select notes with the mouse by clicking on them with the left mouse button. About the only uses for doing this is to change the song position, selecting a note for deleting or hear the note.

The remaining tools will be described below.

## Layout



## Keyboard

Along the left side of the display is a piano keyboard that will help you find the pitch of a particular note in the window.

## Octave

Just below the keyboard, is the number of the octave displayed at the bottom of the window. This number will change as you scroll the window up or down or change the size of the window.

## Grid

The dots create a grid that helps you locate the notes. Horizontally, they line up notes with keys on the keyboard. Vertically, they help determine the song position of the notes. Each column of dots line up with a beat or fraction of a beat. Sometimes, each beat may be divided into 2 or 4 columns.

Solid horizontal lines mark the octaves. Each octave begins with a C note. Solid vertical lines mark the beginning of a new measure.

## Measure Ruler

The ruler at the bottom of the window identifies each measure. The measure number is displayed in the center of the measure in the ruler. The ruler also has marks at each beat.

## Status Bar

At the top of the Note Editor, is a bar that displays note information. The status bar shows pitch, velocity, channel, and song position. As the mouse cursor is moved around the Note Editor, the cursor's position is displayed. The status bar will be very useful when editing existing notes and inserting new notes.

## Keys

Right Arrow: Steps to the next note.

Left Arrow: Steps to the previous note.

Up Arrow: Scrolls the screen down one octave.

Down Arrow: Scrolls the screen up one octave.

PgUp: Scrolls the screen down one screen full of octaves.

PgDn: Scrolls the screen up one screen full of octaves.

Control + PgDn Scroll the screen one forward one screen full.

Control + PgUp: Scrolls the screen backward one screen full.

Delete: Deletes the current note.

Home: Steps to the beginning of the song.

End: Steps to the end of the track.

Enter: Edits the current note.

+ (numeric keypad) Zoom in one level.

- (numeric keypad) Zoom out one level.

Space Bar In step mode, this key will insert rests. Or in reality, step the song position by the duration of the selected note tool.

## Mouse

**Left Button / pencil tool:** Used to drag a note. The cursor must be located over a note. If the cursor shape is a crosshair, the mouse will drag the note's position (song position and pitch). When the cursor is located at the right end of the note's rectangle, the cursor will be a <--> shape indicating that the mouse will drag the note's duration.

**Left Button / pick tool:** Selects notes and blocks. If you click on a note, that note will become the current event, If you click the mouse off a note, the mouse will mark a block. The point where the mouse was clicked marks a block boundary, Drag the mouse and release the button at the other block boundary.

**Double-click:** Double-clicking on a note pops up the Note dialog box. You may edit the note by entering new values in the box.

## Vertical Scroll Bar

**Up Arrow:** Scrolls down one octave.

**Down Arrow:** Scrolls up one octave.

**Thumb:** Scrolls to an new octave,

**Above Thumb:** Scrolls down one screen full.

**Below Thumb:** Scrolls up one screen full.

## Horizontal Scroll Bar

**Left Arrow:** Steps the song back one bar.

**Right Arrow:** Steps the song forward one bar.

**Thumb:** Moves to a new song position.

**Right of Thumb:** Scrolls back one screen full.

**Left of Thumb:** Scrolls forward one screen full.

## Tools



### Pick

This selects the pick mode for the cursor. This tool is used mainly for block marking. The pick tool and the pencil (below) are self exclusive.

### Pencil

The selects the pencil cursor mode. This tool is used mainly for editing and inserting. The pencil and the pick tool (above) are self exclusive.

### Quantize enable/disable:

When selected, notes edited with the mouse will "snap" to the nearest 32nd note position. When it is off, notes will be placed exactly where you put them. How accurately you can place notes will depend on the size of the Note Editor window and the resolution of your video display. Zooming in and out will also affect accuracy. The most accuracy is achieved by zooming in to one measure.

### Note Symbols:

These tools let you select what length of note gets inserted when inserting notes. These range from a whole note to a 64th note.

### Dot:

The Dot modifies the length of the notes being inserted. This option is used to create dotted notes. In

other words, it increases the note length by fifty percent.

### Triplet

This is used for inserting triplets. To insert three eighth notes in the time of two. Select the eighth note tool button and the triplet tool button. Now each note you insert will be one triplet eighth note.

### Velocity: VEL.

This tool button lets you specify the velocity of the notes being inserted.

### Track: Trk.

This tool button lets you select the track to be displayed by this window.

### Channel: Ch.

This tool button lets you specify the channel assigned to notes being inserted.

### Step:

This tool turns on the Step Record mode. When this is on, any notes played on the MIDI keyboard will be inserted into the track being displayed by this Note Editor. The value (spacing) of the note is determined by selecting one of the note tools (above). The duration of the note is determined by the note value button you have selected. The duration can be modified by selecting the triplet tool, the dot tool, the legato tool or the staccato tool. Rests can be inserted by pressing the space bar. The value of the rest is the same as the note duration selected with the tool buttons. Step Record only works when the Note Editor is the active window. If two or more Note Editors are being displayed simultaneously, only the active Note Editor will step record.

### Legato:

The legato tool causes notes that are step recorded to have their full length minus one tick. For example, a quarter note will be 479 ticks long.

### Staccato:

The Staccato tool causes notes that are step recorded to be recorded with half the full length. The song position will still step the full note value (duration).

### Lock:

This tool keeps the toolbox from going away after clicking on one of the tool buttons. This makes it easier to select your note values while inserting notes or step recording.



## Staff Window

The Staff Window is used for displaying and editing notes using staff notation. The way the music appears is determined automatically. Stem direction, beaming, ties, rests and etc. are determined by Cadenza to provide a reasonable display of your music. This is not a substitute for a full blown notation program. There is no means for changing the way the music is drawn.

Each Staff Window displays note events from a single track. You should select the track you want to view using the Track Sheet or Song Editor before creating the window. To open the window, use the New Window command in the Window menu and select Staff. If you decide to view a different track, you can click on the track (Trk) tool button and select the desired track. You may view several tracks by creating a window for each track.

A toolbox has been provided for editing and setting options. These tools let you select the mouse mode (pick, draw or erase) plus several editing functions. The cursor shape changes to correspond with the current mode. For instance, in the draw mode, the cursor is shaped like a pencil. To display the toolbox, click anywhere in the Staff Window with the right mouse button. After you select a button the tool box will go away. Each time you close the Staff window, the state of the buttons and the settings such as channel and velocity are saved to disk. When a new Staff Window is opened, the tools will be restored to the previous setting.

Printing of the window is provided by the File\Print command. This feature will let you print the current window. A full page with five grand staves will be printed regardless of the number of staves displayed in the window. All other options which determine the way the music is displayed will determine how the window is printed. Refer to the Tool buttons below. One note of warning. If you are using a fine resolution and the staff does not fit in the window, it may not fit on the paper either. If this is the case, try setting the printer to landscape mode using the File\Printer Setup command. If this still is not enough, you will need to use a coarser resolution. If this is not acceptable, then the window simply cannot be properly printed.

### Selecting Notes

You may select notes with the mouse when the Pick tool is selected or you can move from note to note using the right and left arrow keys. When a note is selected, it will be sounded. This note will also be displayed as red instead of black. Selecting a note also changes the song position to that of the selected note.

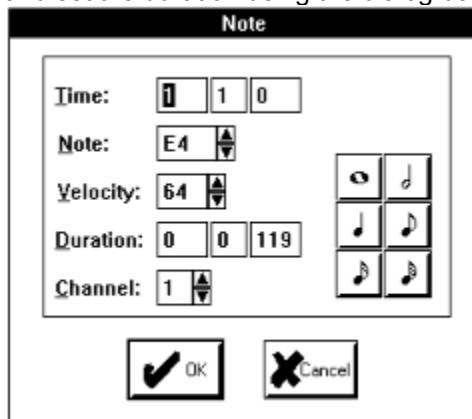
To edit the current note (the red one), press the ENTER key and enter the new parameters for the note into the dialog box.

To edit notes, select the pencil tool. Before you insert a note you should select the note value (duration) from the tool box. Point to where the note is to be inserted and click the mouse. The mouse must not be pointing to an existing note. To move a note, point to the desired note then click and drag it to its new location. Copying a note is exactly the same as moving except you must hold down the control key. Make sure you are holding the control key down before you click on the note.

A constrain tool has been supplied to make it easier to edit notes without changing its song position. The constrain tool is the one with the vertical arrows pointing in opposite directions. Lets say you need to add a note that is to be played at the same time as an existing note. With the constrain tool selected, hold down the control key and copy the existing note to the position for the new note. These notes will be identical except for pitch. If you wish to change the duration, click on the note with the right mouse button



and set the duration using the dialog box.



The Note dialog box lets you edit all parameters of the note event. The pushbuttons on the right let you set the note duration to the note value displayed on the button. The Note and Velocity values can be edited via the MIDI keyboard. Just move the text cursor (caret) to one of these edit boxes and play the desired note or velocity on the MIDI keyboard. Once you are finished editing the note, click on the OK button.

## Layout

### Status Bar

At the top of the Staff Window is a bar that displays note information. The left side of the status bar shows the pitch, velocity, channel, and song position of the current note. The right side shows the cursor's position in terms of pitch and song position. The status bar will be very useful when editing existing notes and inserting new notes. There are two buttons on the right edge of the status bar. These are used to page the staff window. The button with the down pointing arrow scrolls toward the end of the song. The other scrolls toward the beginning.

### Main Window

The main area of the window displays a variable number of measures in staff notation. The number of measures per staff depends on the screen resolution, window size and time signature. Each measure is numbered just below the start of the measure. The number of staves displayed is determined by the "Number of Staves" option (see Opt. Tool). In the event the displayed staves do not fit in the window, scroll bars will be displayed so you can scroll the desired portion of the staves into view. This is most likely to happen when using higher note resolutions such as 1/32 and 1/64 (see Res. Tool). These may require more space than is available. If you don't require such a high resolution, you are better off selecting something larger such as 1/8 or 1/16.

## Keys

- Right Arrow: Selects the next note.
- Left Arrow: Selects the previous note.
- PgUp: Scrolls the screen up.
- PgDn: Scrolls the screen down one screen full .
- Delete: Deletes the current note.
- Home: Steps to the beginning of the song.
- End: Steps to the end of the track.
- Enter: Edits the current note.

## Mouse

- Left Button / pencil tool: Used to drag a note. The cursor must be located over a note. If the cursor shape is a hand, the mouse will drag the note's position (song position and pitch).
- Left Button / pick tool: Selects notes. If you click on a note, that note will become the current event.
- Left Button/eraser tool: Deletes notes when you click on them.
- Right Button: Displays the tool box. If you click on a note, the Note dialog box will be displayed. You may edit the note by entering new values in the box.

## Vertical Scroll Bar

Scrolls the window vertically

## Horizontal Scroll Bar

Scrolls the windows horizontally

## Tools



### Pick



This selects the pick mode for the cursor. This tool is used mainly for selecting notes. The pick tool, pencil (below), and eraser are self exclusive.

### Pencil



For inserting, moving and editing notes. To insert notes, click on the staff where you want the note to be. To move a note, click and drag the note to its new position. You can copy a note by holding the control key and clicking on the source note and dragging it to the position where you want the new note. To edit a note using the dialog box, click on the note with the right mouse button. The pencil tool, pick tool, and eraser (below) are self exclusive.

### Eraser



This tool is used for deleting notes. The cursor shape will be a pencil eraser. When the cursor is on a note, the eraser part of the pencil will turn black. To delete a note, just click on it while this tool is selected. The pencil tool, pick tool, and eraser are self exclusive.

### Res. Button



Lets you select the note resolution of the display. The resolution determines the smallest note value that can be displayed. The automatic resolution tells Cadenza to determine a suitable resolution automatically. Normally you will probably want to select a specific resolution. Automatic mode is mainly provided for

viewing unfamiliar material.

## Opt. button

Opt.

Lets you select display options. Options are:

### **Enable beaming**

Determines whether notes are beamed or not.

### **Limit note value to resolution**

When on, notes smaller than the resolution will be drawn to the note value of the resolution. For example, If the resolution is set to Eighth, then any note smaller than an eighth note will be drawn as an eighth note.

### **Number of Staves**

This determines how many staves are displayed. The choices are 2, 4, 6 and 8. The staves are actually displayed in pairs to create grand staves. To display two grand staves, choose the 4 setting.

### **Displayed Channel**

This option controls which event channels are displayed. You have a choice of selecting a single channel or all channels.

## Constrain



With this button selected, all copies and moves, via dragging, will result in the time being unchanged.

## Snap

Snap

This button determines if all mouse operations snap to the nearest note position (based on resolution) or if the position is continuously variable. Snapping is the same thing as quantizing.

## Note Symbols:



These tools let you select what length of note gets inserted when inserting notes. These range from a whole note to a 64th note.

## Dot:



The Dot modifies the length of the notes being inserted. This option is used to create dotted notes. In other words, it increases the note length by fifty percent.

## Velocity:

VEL.

This tool button lets you specify the velocity of the notes being inserted.

## Track:

Trk

This tool button lets you select the track to be displayed by this window.

## Channel:

Ch.

This tool button lets you specify the channel assigned to notes being inserted.

## Lock:



This tool keeps the toolbox from going away after clicking on one of the tool buttons. This makes it easier to select your note values while inserting notes.



## Velocity Window

The Velocity View is used to display the velocity values for each note, and allows the use of the mouse to edit those values. You can view 1, 3, or 9 measures. Each Velocity window displays note events from a single track. You should select the track you want to view using the Track Sheet or Song Editor before creating the window. To open the window, use the New Window command in the Window menu and select Velocity. If you decide to view a different track, you can click on the track (Trk) tool button and enter the desired track. You may view several tracks by creating a window for each track.

Notes are displayed from left to right in the order they are played. The keyboard or scroll bar can be used to scroll the window.

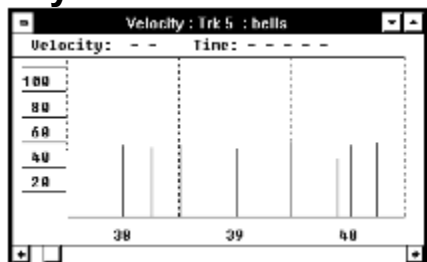
As you step right or left using the arrow keys, the current note will be sounded. A cursor will indicate the current note. The cursor is a vertical line that goes from the bottom of the graph to the top. Stepping from note to note also changes the song position to that of the current note.

Block marking in the Velocity window is done using the pick tool. Once the pick tool is selected, just click the mouse on the start of the block and drag it to the end of the block. To add a block, hold down a CONTROL key while dragging the mouse.

To edit the current note, press the ENTER key and enter the new parameters for the note.

To delete the current note, press the DEL (delete) key.

### Layout



### Graph

The Velocity window is a 2D bar graph. Each line represents a note. The value of the velocity is determined by the height of each line. The dotted vertical lines in the graph show the beginning of each measure. The light gray lines between the measures indicate eight note positions. A moving vertical line (cursor) will indicate where the current song position is.

### Rulers

The ruler on the left indicates the value of the velocity. The range is 1 - 127. The ruler at the bottom of the graph numbers the measures.

### Status Bar

At the top of the graph is the cursor position (displayed as Cursor and Value). The cursor position displays the time (song position) and velocity value that the mouse cursor is pointing to. This helps you determine where to place the mouse when you are picking points.

### Keys

- Right Arrow: Steps to the next note.
- Left Arrow: Steps to the previous note.
- PgUp: Scrolls back one screen full.
- PgDn: Scrolls forward one screen full.
- Home: Steps to the beginning of the song.
- End: Steps to the end of the track.

Enter: Edits the current note.  
Delete: Deletes the current note.  
+ (numeric keypad) Zoom in one level.  
- (numeric keypad) Zoom out one level.

## Horizontal Scroll Bar

Left Arrow: Steps the song back one bar.  
Right Arrow: Steps the song forward one bar.  
Thumb: Moves to a new song position.  
Right of Thumb: Scrolls back one screen full.  
Left of Thumb: Scrolls forward one screen full.



## Tools

### Pick

This selects the pick mode for the cursor. This tool is used mainly for block marking. The pick tool and the pencil (below) are self exclusive.

### Pencil

The selects the pencil cursor mode. This tool is used mainly for editing and inserting. The pencil and the pick tool (above) are self exclusive.

### Shift:

Shifts the velocity of block marked notes. A dialog box will be presented for you to enter the amount you want the velocity shifted. You may enter the amount or you may use the mouse to indicate the amount you want the velocity shifted. To use the mouse, click on a point that represents the reference velocity, then drag the mouse up or down. A rectangle will be drawn to show you the original velocity and the new velocity. The amount of shift will be displayed in the dialog box. After you release the mouse button, the rectangle will go away and the graph will be redrawn with the velocity shifted.

### Limit:

Limits the velocity of block marked notes. A dialog box will be presented to let you enter the upper and lower limits. You may type the limits in or you may use the mouse to indicate the limits. To use the mouse, click on a point that represents a limit, then drag the mouse up or down. A rectangle will be drawn to show you the limits. The limits will be displayed in the dialog box as you drag the mouse. After you release the mouse button, the rectangle will go away and the graph will be redrawn with the velocity limited.

### Invert:

Invert makes low velocities high, and high velocities low. A velocity of 1 is changed to 127. A velocity of 127 is changed to 1. Only block marked notes are affected.

### Scale:

Scales the velocity of block marked notes. A dialog box will be presented for you to enter a percentage. You may enter the amount or you may use the mouse to indicate an amount. To use the mouse, click on a point that represents a reference, then drag the mouse up or down. A rectangle will be drawn to show you the scale. The percentage will be displayed in the dialog box. After you release the mouse button, the rectangle will go away and the graph will be redrawn with the velocity scaled.

When using the mouse, the first point can be important. If you click on a level of 100 and drag the mouse

down to 50, everything will be scaled by fifty percent. The rectangle will show you the basepoint and the current point. The ratio between the two determines the scale. The scale will be displayed in the dialog box as you drag the mouse.

**Track:**  $T_r k$

This tool button lets you select which track is displayed by this window.





## Pitch Bend Window

The Pitch Bend View lets you insert or edit pitch bend events by simply drawing the envelope with a mouse. You can select any single track and view 1, 3, or 9 measures. Each Pitch Bend window displays pitch bend events from a single track. You should select the track you want to view using the Track Sheet or Song Editor before creating the window. To open the window, use the New Window command in the Window menu and select Pitch Bend. If you decide to view a different track, you can click on the track (Trk) tool button and enter the desired track. You may view several tracks by creating a window for each track.

As you step right or left using the arrow keys, the cursor will indicate the current event. The cursor is a vertical line that goes from the bottom of the graph to the top. Stepping from event to event also changes the song position to that of the current event.

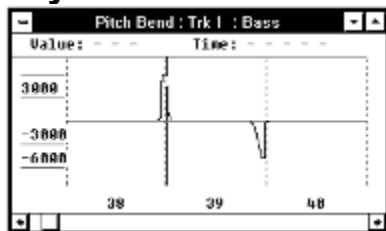
Block marking in the Pitch Bend window is done using the pick tool. Once the pick tool is selected, just click the mouse on the start of the block and drag it to the end of the block. To add a block, hold down a CONTROL key while dragging the mouse.

To edit pitch bend data with the mouse, select the pencil tool. You can then draw the pitch bend values in with the mouse. The existing events will be replaced with the ones you draw in.

To edit the current event, press the ENTER key and enter the new parameters for the event.

To delete the current event, press the DEL (delete) key.

### Layout



### Graph

The Pitch Bend window is a 2D line graph of Pitch Bend values. The dotted vertical lines in the graph show the beginning of each measure. The light gray lines between the measures indicate eight note positions. Each measure is numbered below in the ruler. A moving vertical line (cursor) will indicate where the current song position is.

### Rulers

The ruler on the left indicates the value of the pitch bend. The range is -8192 to 8191. The ruler at the bottom of the graph numbers the measures.

### Status Bar

At the top of the graph is the cursor position (displayed as Time and Value). The cursor position displays the time (song position) and pitch bend value to which the mouse cursor is pointing. This helps you determine where to place the mouse when you are editing.

### Keys

- Right Arrow: Steps to the next event.
- Left Arrow: Steps to the previous event.
- PgUp: Scrolls back one screen full.
- PgDn: Scrolls forward one screen full.
- Home: Steps to the beginning of the song.
- End: Steps to the end of the track.

Enter: Edits the current event.  
Delete: Deletes the current event.  
+ (numeric keypad) Zoom in one level.  
- (numeric keypad) Zoom out one level.

## Horizontal Scroll Bar

Left Arrow: Steps the song back one bar.  
Right Arrow: Steps the song forward one bar.  
Thumb: Moves to a new song position.  
Right of Thumb: Scrolls back one screen full.  
Left of Thumb: Scrolls forward one screen full.

## Mouse

Left Button / pick tool: Click and drag to mark a block. Holding down the CONTROL key simultaneously adds a block.  
Left Button / pencil tool: Draws (edits) Pitch Bend graph.

## Tools



### Pick

This selects the pick mode for the cursor. This tool is used mainly for block marking. The pick tool and the pencil (below) are self exclusive.

### Pencil

Selects the pencil cursor mode. This tool is used mainly for editing and inserting. The pencil and the pick tool (above) are self exclusive.

### Limit:

Limits the block marked pitch bend events. A dialog box will be presented for you to enter the upper and lower limits. You may enter the amount or you may use the mouse to indicate the limits. To use the mouse, click on a point on the screen that represents a limit, then drag the mouse up or down. A rectangle will be drawn to show you the limits. The limits will be displayed in the dialog box as you drag the mouse. After you release the mouse button, the rectangle will go away and the graph will be redrawn with the pitch bend limited.

### Invert:

Invert makes negative pitch bend positive, and positive pitch bend negative. Only block marked pitch bend events are affected.

### Scale:

Scales the block marked pitch bend events. A dialog box will be presented for you to enter a percentage. You may enter the amount or you may use the mouse to indicate an amount. To use the mouse, click on a point that represents a reference, then drag the mouse up or down. A rectangle will be drawn to show you the scale. The scale will be displayed in the dialog box as you drag the mouse. After you release the mouse button, the rectangle will go away and the graph will be redrawn with the pitch bend scaled.

When using the mouse, the first point can be important. If you click on a level of 100 and drag the mouse down to 50, everything will be scaled by fifty percent. The rectangle will show you the basepoint and the current point. The ratio between the two determines the scale. The scale will be displayed in the dialog box.

#### Channel:

This tool button lets you select the channel number of the events to view and edit. Only those events that match this channel will be displayed. When editing or inserting events, the new events will have this channel assigned to them.

#### Track:

This tool button lets you select which track is displayed by this window.

#### Smooth:

The Smooth tool adds events to make for finer increments in the pitch bend value changes. This tool is useful when too many events have been thinned out.

#### Thin:

The Thin tool is used for removing excess events. The purpose is to decrease the number of events that must be processed, so that timing is maintained accurately during playback. Even though MIDI is fast, if you record a lot of data over many tracks, controller data can start to 'clog up' the data stream upon playback. Since the MIDI transmission rate is fixed, it doesn't matter what sequencer or what computer you use, you can still get a 'bottleneck' of data going out the MIDI port. To help lessen this bottleneck, *Cadenza for Windows* offers the thinning tool. If you use thinning wisely, it shouldn't affect the playback perceptibly, except to tighten up timing. This is because most keyboards send far more controller data than is needed to produce the effect desired. The thinning function removes one event for every four events. Repeat the function over to remove more events.

#### Erase:

The Erase tool erases events that are block marked.



# Aftertouch Window

The Aftertouch View lets you insert or edit aftertouch events by simply drawing the envelope with a mouse. You can select any single track and view 1, 3, or 9 measures. Each Aftertouch window displays aftertouch events from a single track. You should select the track you want to view using the Track Sheet or Song Editor before creating the window. To open the window, use the New Window command in the Window menu and select Aftertouch. If you decide to view a different track, you can click on the track (Trk) tool button and enter the desired track. You may view several tracks by creating a window for each track.

As you step right or left using the arrow keys, the cursor will indicate the current event. The cursor is a vertical line that goes from the bottom of the graph to the top. Stepping from event to event also changes the song position to that of the current event.

Block marking in the Aftertouch window is done using the pick tool. Once the pick tool is selected, just click the mouse on the start of the block and drag it to the end of the block. To add a block, hold down a CONTROL key while dragging the mouse.

To edit aftertouch data with the mouse, select the pencil tool. You can then draw the aftertouch values in with the mouse. The existing events will be replaced with the ones you draw in.

To edit the current event, press the ENTER key and enter the new parameters for the event.

To delete the current event, press the DEL (delete) key.

## Layout

### Graph

The Aftertouch window is a 2D line graph of aftertouch values. The dotted vertical lines in the graph show the beginning of each measure. The light gray lines between the measures indicate eight note positions. Each measure is numbered below in the ruler. A moving vertical line (cursor) will indicate the current song position.

### Rulers

The ruler on the left indicates the value of the aftertouch. The range is 1 - 127. The ruler at the bottom of the graph numbers the measures.

### Status Bar

At the top of the graph is the cursor position (displayed as Cursor and Value). The cursor position displays the time (song position) and aftertouch value to which the mouse cursor is pointing. This helps you determine where to place the mouse when you are picking points.

### Keys

Right Arrow:	Steps to the next event.
Left Arrow:	Steps to the previous event.
PgUp:	Scrolls back one screen full.
PgDn:	Scrolls forward one screen full.
Home:	Steps to the beginning of the song.
End:	Steps to the end of the track.
Enter:	Edits the current event.
Delete:	Deletes the current event.
+ (numeric keypad)	Zoom in one level.
- (numeric keypad)	Zoom out one level.

## Horizontal Scroll Bar

Left Arrow: Steps the song back one bar.  
Right Arrow: Steps the song forward one bar.  
Thumb: Moves to a new song position.  
Right of Thumb: Scrolls back one screen full.  
Left of Thumb: Scrolls forward one screen full.

## Mouse

Left Button / pick tool: Click and drag to mark a block. Holding down the CONTROL key at the same time adds a block.  
Left Button / pencil tool: Draws (edits) Aftertouch graph.

## Tools



### Pick

This selects the pick mode for the cursor. This tool is mostly used for block marking. The pick tool and the pencil (below) are self exclusive.

### Pencil

This selects the pencil cursor mode. This tool is used mainly for editing and inserting. The pencil and the pick tool (above) are self exclusive.

### Limit:

Limits block marked aftertouch events. A dialog box will be presented for you to enter the upper and lower limits. You may type in the limits, or you may use the mouse to indicate the limits. To use the mouse, click on a point that represents a limit, then drag the mouse up or down. A rectangle will be drawn to show you the limits. The limits will be displayed in the dialog box as you drag the mouse. After you release the mouse button, the rectangle will go away and the graph will be redrawn with the aftertouch limited.

### Invert:

Invert makes low aftertouch high, and high aftertouch low. An aftertouch of 0 is changed to 127. An aftertouch of 127 is changed to 0. Only block marked events are affected.

### Scale:

Scales block marked aftertouch events. A dialog box will be presented for you to enter a percentage. You may enter the amount or you may use the mouse to indicate an amount. To use the mouse, click on a point that represents a reference, then drag the mouse up or down. A rectangle will be drawn to show you the scale. The percentage will be displayed in the dialog box as you drag the mouse. After you release the mouse button, the rectangle will go away and the graph will be redrawn with the aftertouch scaled.

When using the mouse, the first point can be important. If you click on a level of 100 and drag the mouse down to 50, everything will be scaled by fifty percent. The rectangle will show the basepoint and the current point. The ratio between the two determine the scale. The percentage will be displayed in the dialog box.

### Shift:

The Shift tool lets you increase or decrease the values of aftertouch. A dialog box will be presented for you to enter the amount of shift. You may enter the amount or you may use the mouse to indicate an amount. To use the mouse, click on a point that represents a reference, then drag the mouse up or down.

A rectangle will be drawn to show you the amount of shift. The amount will be displayed in the dialog box. After you release the mouse button, the rectangle will go away and the graph will be redrawn with the values shifted.

#### Channel:

This tool button lets you select the channel number of the events to view and edit. Only those events that match this channel will be displayed. When editing or inserting events, the new events will have this channel assigned to them.

#### Track:

This tool button lets you select which track is displayed by this window.

#### Smooth:

The Smooth tool adds events to make for finer increments in the aftertouch value changes. This tool is useful when too many events have been thinned out.

#### Thin:

The Thin tool is used for removing excess events. The purpose is to decrease the number of events that must be processed, so that timing is maintained accurately during playback. Even though MIDI is fast, if you record a lot of data over many tracks, controller data can start to 'clog up' the data stream upon playback. Since the MIDI transmission rate is fixed, it doesn't matter what sequencer or what computer you use, you can still get a 'bottleneck' of data going out the MIDI port. To help lessen this bottleneck, *Cadenza for Windows* offers the thinning tool. If you use thinning wisely, it shouldn't affect the playback perceptibly, except to tighten up timing. This is because most keyboards send far more controller data than is needed to produce the effect desired. The thinning function removes one event for every four events. Repeat the function over to remove more events.

#### Erase:

The Erase tool erases events that are block marked.





# Controllers Window

The Controllers View lets you insert or edit control change events by simply drawing the envelope with a mouse. You can select any single track and view 1, 3, or 9 measures. Each Controllers window displays control change events from a single track. You should select the track you want to view using the Track Sheet or Song Editor before creating the window. To open the window, use the New Window command in the Window menu and select Controllers. If you decide to view a different track, you can click on the track (Trk) tool button and enter the desired track. You may view several tracks by creating a window for each track.

As you step right or left using the arrow keys, the cursor will indicate the current event. The cursor is a vertical line that goes from the bottom of the graph to the top. Stepping from event to event also changes the song position to that of the current event.

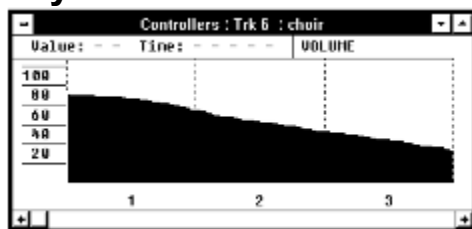
Block marking in the Controllers window is done using the pick tool. Once the pick tool is selected, just click the mouse on the start of the block and drag it to the end of the block. To add a block, hold down a CONTROL key while dragging the mouse.

To edit controller data with the mouse, select the pencil tool. You can then draw the aftertouch values in with the mouse. The existing events will be replaced with the ones you draw.

To edit the current event, press the ENTER key and enter the new parameters for the event.

To delete the current event, press the DEL (delete) key.

## Layout



## Graph

The Controllers window is a 2D line graph of control change values. The dotted vertical lines in the graph show the beginning of each measure. The light gray lines between the measures indicate eight note positions. Each measure is numbered below in the ruler. A moving vertical line (cursor) will indicate where the current song position.

## Rulers

The ruler on the left indicates the value of the controller. The range is 1 - 127. The ruler at the bottom of the graph numbers the measures.

## Status Bar

At the top of the graph is the cursor position (displayed as Time and Value). The cursor position displays the time (song position) and controller value to which the mouse cursor is pointing. This helps you determine where to place the mouse when you are picking points. In the center of the status bar is the name of the selected controller. You may click on the name to select a different controller. A dialog box with a list of controllers will be presented.

## Keys

Right Arrow: Steps to the next event.

Left Arrow: Steps to the previous event.

PgUp: Scrolls back one screen full.

PgDn: Scrolls forward one screen full.

Home: Steps to the beginning of the song.  
 End: Steps to the end of the track.  
 Enter: Edits the current event.  
 Delete: Deletes the current event.  
 + (numeric keypad) Zoom in one level.  
 - (numeric keypad) Zoom out one level.

## Horizontal Scroll Bar

Left Arrow: Steps the song back one bar.  
 Right Arrow: Steps the song forward one bar.  
 Thumb: Moves to a new song position.  
 Right of Thumb: Scrolls back one screen full.  
 Left of Thumb: Scrolls forward one screen full.

## Mouse

pick tool: Click and drag to mark a block. Holding down the CONTROL key at the same time adds a block.  
 pencil tool: Draws (edits) Controllers graph.

## Tools



### Pick

This selects the pick mode for the cursor. This tool is used mainly for block marking. The pick tool and the pencil (below) are self exclusive.

### Pencil

This selects the pencil cursor mode. This tool is used mainly for editing and inserting. The pencil and the pick tool (above) are self exclusive.

### Limit:

Limits block marked control change events. A dialog box will be presented for you to enter the upper and lower limits. You may type in the limits or you may use the mouse to indicate the limits. To use the mouse, click on a point that represents a limit, then drag the mouse up or down. A rectangle will be drawn to show you the limits. The limits will be displayed in the dialog box as you drag the mouse. After you release the mouse button, the rectangle will go away and the graph will be redrawn with the events limited.

### Invert:

Invert makes low values high, and high values low. A value of 0 is changed to 127. A value of 127 is changed to 0. Only block marked events are affected.

### Scale:

Scales the value of block marked control change events. A dialog box will be presented for you to enter the percentage. You may enter the amount or you may use the mouse to indicate an amount. To use the

mouse, click on a point that represents a reference, then drag the mouse up or down. A rectangle will be drawn to show you the scale. The percentage will be displayed in the dialog box. After you release the mouse button, the rectangle will go away and the graph will be redrawn with the values scaled.

When using the mouse, the first point can be important. If you clicked on a level of 100 and dragged the mouse down to 50, everything would be scaled by fifty percent. The rectangle will show you the basepoint and the current point. The ratio between the two determine the scale. The scale will be displayed in the dialog box.

#### Shift:

The Shift tool lets you increase or decrease the values of a controller. A dialog box will be presented for you to enter the amount of shift. You may enter the amount or you may use the mouse to indicate an amount. To use the mouse, click on a point that represents a reference, then drag the mouse up or down. A rectangle will be drawn to show you the amount of shift. The amount will be displayed in the dialog box. After you release the mouse button, the rectangle will go away and the graph will be redrawn with the values shifted.

#### Channel:

This tool button lets you select the channel number of the events to view and edit. Only those events that match this channel will be displayed. When editing or inserting events, the new events will have this channel assigned to them.

#### Track:

This tool button lets you select which track is displayed by this window.

#### Smooth:

The Smooth tool adds events to make for finer increments in the controller value changes. This tool is useful when too many events have been thinned out.

#### Thin:

The Thin tool is used for removing excess events. The purpose is to decrease the number of events that must be processed, so that timing is maintained accurately during playback. Even though MIDI is fast, if you record a lot of data over many tracks, controller data can start to 'clog up' the data stream upon playback. Since the MIDI transmission rate is fixed, it doesn't matter what sequencer or what computer you use, you can still get a 'bottleneck' of data going out the MIDI port. To help lessen this bottleneck, *Cadenza for Windows* offers the thinning tool. If you use thinning wisely, it shouldn't affect the playback perceptibly, except to tighten up timing. This is because most keyboards send far more controller data than is needed to produce the effect desired. The thinning function removes one event for every four events. Repeat the function over to remove more events.

#### Erase:

The Erase tool erases events that are block marked.



## Faders

The faders allow you to set controller settings for all sixteen channels. To open the window, use the New Window command in the Window menu and select Faders. The drop down list box in the upper left corner of the window can be used to select which one of the 120 controllers you want the faders to manipulate. The drop down listbox on the right is used to select the output port used by this window.

The fader controls are a set of scroll bars. You can adjust the controller level for a channel by simply moving a scroll bar slider (thumb). There are sixteen faders in the Faders window. Each has a channel number above it. The settings range from 0 to 127. When you make changes to the scroll bars, control change messages are sent to the instrument receiving the corresponding channel. If you are recording, these changes are also recorded.

If you wish to control more than one type of controller, you may open more fader windows. Each one can be assigned to a different controller.

To use this window, you will need to use the mouse. Keyboard support is limited to using the TAB key to switch between the two drop down list boxes, F1 for help and space-bar to start and stop playback. When the controllers list box is active, you can type the first letter of the controller name to select a controller or scroll through the list with the up and down arrow keys. The ports list box works the same way.

# Windows Keys

Choose from the following list to review the keys used in Windows:

Cursor Movement Keys

Dialog Box Keys

Editing Keys

Menu Keys

System Keys

Text Selection Keys

Window Keys

# Cursor Movement Keys

**Key(s)**

DIRECTION key

End or Ctrl+Right Arrow

Home or CTRL+Left Arrow

PAGE UP or PAGE DOWN

**Function**

Moves the cursor left, right, up, or down in a field.

Moves to the end of a field.

Moves to the beginning of a field.

Moves up or down in a field, one screen at a time.



## Dialog Box Keys

<b>Key(s)</b>	<b>Function</b>
TAB	Moves from field to field (left to right and top to bottom).
SHIFT+TAB	Moves from field to field in reverse order.
ALT+letter	Moves to the option or group whose underlined letter matches the one you type.
DIRECTION key	Moves from option to option within a group of options.
ENTER	Executes a command button. Or, chooses the selected item in a list box and executes the command.
ESC	Closes a dialog box without completing the command. (Same as Cancel)
ALT+DOWN ARROW	Opens a drop-down list box.
ALT+UP or DOWN ARROW	Selects item in a drop-down list box.
SPACEBAR	Cancels a selection in a list box. Selects or clears a check box.
CTRL+SLASH	Selects all the items in a list box.
CTRL+BACKSLASH	Cancels all selections except the current selection.
SHIFT+ DIRECTION key	Extends selection in a text box.
SHIFT+ HOME	Extends selection to first character in a text box.
SHIFT+ END	Extends selection to last character in a text box

## **Editing Keys**

### **Key(s)**

### **Function**

Backspace

Deletes the character to the left of the cursor. Or, deletes selected text.

Delete

Deletes the character to the right of the cursor. Or, deletes selected text.

**Menu Keys****Key(s)**

Alt

Letter key  
one you type.

Alt+letter key

LEFT or RIGHT ARROW

UP or DOWN ARROW

Enter

**Function**

Selects the first menu on the menu bar.

Chooses the menu, or menu item, whose underlined letter matches the

Pulls down the menu whose underlined letter matches the one you type.

Moves among menus.

Moves among menu items.

Chooses the selected menu item.

## **System Keys**

The following keys can be used from any window, regardless of the application you are using.

<b>Key(s)</b>	<b>Function</b>
Ctrl+Esc	Switches to the Task List.
Alt+Esc programs.	Switches to the next application window or minimized icon, including full-screen
Alt+TAB as icons.	Switches to the next application window, restoring applications that are running
Alt+PrtSc	Copies the entire screen to Clipboard.
Ctrl+F4	Closes the active window.

## Text Selection Keys

Key(s)	Function
SHIFT+LEFT or RIGHT ARROW	Selects text one character at a time to the left or right.
SHIFT+DOWN or UP	Selects one line of text up or down.
SHIFT+END	Selects text to the end of the line.
SHIFT+HOME	Selects text to the beginning of the line.
SHIFT+PAGE DOWN next window is already selected.	Selects text down one window. Or, cancels the selection if the
SHIFT+PAGE UP previous window is already selected.	Selects text up one window. Or, cancels the selection if the
CTRL+SHIFT+LEFT or RIGHT ARROW	Selects text to the next or previous word.
CTRL+SHIFT+UP or DOWN ARROW ARROW) of the paragraph.	Selects text to the beginning (UP ARROW) or end (DOWN
CTRL+SHIFT+END	Selects text to the end of the document.
CTRL+SHIFT+HOME	Selects text to the beginning of the document.

## Window Keys

### Key(s)

ALT+SPACEBAR

ALT+Hyphen

Alt+F4

Alt+Esc  
programs.

Alt+TAB  
as icons.

Alt+ENTER  
full screen.

DIRECTION key

### Function

Opens the Control menu for an application window.

Opens the Control menu for a document window.

Closes a window.

Switches to the next application window or minimized icon, including full-screen programs.

Switches to the next application window, restoring applications that are running as icons.

Switches a non-Windows application between running in a window and running full screen.

Moves a window when you have chosen Move from the Control menu. Or, changes the size of a window when you have chosen Size from the Control menu.



## Current Track

The current track is the track that you have selected using either the track sheet, song editor, or Select command. This is the track that is affected by regional editing commands. It is also the track that will be the destination of anything you record.



## Clipboard

A temporary storage area for cut and copied text or other data. You can paste the Clipboard contents into a Windows application that understands the format for the data in the Clipboard.

Cadenza for Windows does not use Window's clipboard, therefore you cannot copy events from Cadenza to another application.

## PPQN

Beats are divided into units called Parts per Quarter Note (PPQN). If the PPQN is 480, then one part (or tick) is  $1/480$  of a quarter note.

