

If you are new to using Audition GS then read the next few topics before you start:

	<u>Introduction</u>
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	Using the Keyboard and Mouse
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Getting started

Audition Notation

Audition has four main windows - the containing window or Frame window, the Song Editor window, the MIDI Analyzer window, and the Tool window. Each Editor window has a Tool window linked to it. The next few topics describe the layout of these windows:

Frame Window

Editor Window

Tool Window

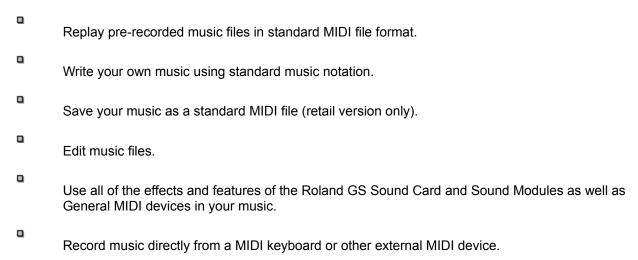
MIDI Analyzer Window

As you work with Audition, various dialog boxes will appear. Each dialog box has a help button that will explain it's function and use.

Introduction

Audition GS is a sixteen track notation based sequencer that allows you to record, replay and edit music and musical effects using your Personal Computer and a General MIDI or GS Sound Card or Sound Module.

With Audition you can do the following:



What is General MIDI? General MIDI is an industry-wide set of specifications for sound sources that allow music data to be created regardless of manufacturer or specific models. General MIDI defines the minimum number of voices that should be recognized, which sounds correspond to which Program Change numbers, and the layout of rhythm sounds on the keyboard.

What is Roland's GS Format? This is a Roland specification which defines the manner in which multi-timbral sound sources respond to MIDI messages. The GS Format includes specifications of sounds, functions available for Tone editing, effects (chorus and reverb), and additional standardized parameters. Any sound source that carries the GS format logo is compatible with any GS Music Data.

Using the Keyboard and Mouse

The tables below show the keys pressed and the action taken dependant on which window ($\underline{\text{Note window}}$ or $\underline{\text{Control window}}$) contains the edit cursor.

Generic Windows keys:

Key	Action
F1 Shift + F5 Shift + F4 Ctrl + F10 Alt + BackSpace Shift + Del Ctrl + Ins Shift + Ins	Help Index Cascade Windows Tile Windows Select Menu (then use arrow keys) Undo last change Cut selected data to clipboard Copy selected data to clipboard Paste data from clipboard
Del	Delete selected data

Play/Record keys:

Key	Action
Space Bar	Play/Stop toggle
Pause	Pause/Play toggle
F2	Record
F3	Step Record

Cursor movement keys:

Key	Note Window	Control Window
Tab	Move cursor to Control window	Move cursor to Note window
Home	Cursor to start of Track window	Cursor to start of Track window
End	Cursor to end of Track window	Cursor to end of Track window
Ctrl + Home	Cursor to start of Track (rewind)	Cursor to start of Track (rewind)
Ctrl + End	Cursor to end of Track (forward)	Cursor to end of Track (forward)
[Arrow Keys]	Move cursor	Move cursor
Shift + [Arrow Keys]	Move cursor and select area	Move cursor and select area
Shift + Page Up	Scroll window up	Scroll window up
Shift + Page Down	Scroll window down	Scroll window down

Track window positioning keys:

Key	Action
Ctrl + [Left Arrow]	Track page left
Ctrl + [Right Arrow]	Track page right
Page Up	Scroll tracks up
Page Down	Scroll tracks down
Ctrl + Page Up	Scroll to top of tracks
Ctrl + Page Down	Scroll to bottom of tracks
F4	Show <u>Track - Goto</u> dialog
F5	Move track that has focus to top of Editor window
F6	Move to next track
Shift + F6	Move cursor to previous track

Edit functions:

Key	Note Window	Control Window
Enter	Drop Note	Open Control Edit dialog
Shift + Enter	Open Note Metrics dialog	No action
Ctrl + Enter	Tie selected note or open Percussion	No action
	Parameters dialog	
Ctrl + I	Invert selected note	No action
Ctrl + R	Set note to default appearance (Revert)	No action

Note type keys:

Key	Action
F7	Semibreve note type
F8	Minim note type
F9	Crotchet note type
F10	Quaver note type
F11	Semiguaver note type
F12	Demisemiquaver note type
Shift + F9	Crotchet display resolution (1/4)
Shift + F10	Quaver display resolution (1/8)
Shift + F11	Semiquaver display resolution (1/16)
Shift + F12	Demisemiquaver display resolution (1/32)
Alt + 1	ppp velocity (quiet)
Alt + 2	pp velocity
Alt + 3	p velocity
Alt + 4	mp velocity
Alt + 5	mf velocity
Alt + 6	f velocity
Alt + 7	ff velocity
Alt + 8	fff velocity (loud)
Ctrl + D	Dotted note type
Ctrl + S	Sharp note type
Ctrl + F	Flat note type
Ctrl + N	Natural note type
Ctrl + T	Triplet note type

You can use the mouse or other pointing device to perform the following actions:

Mouse action	Note Window	Control Window
Left button down	Move cursor to Note window and set focus to track	Move cursor to <u>Control window</u> and set focus to track
Right button down	Hide <u>Tool Window</u>	Hide Tool Window
Left button double click	Open Note Metrics dialog	Open Control Edit dialog
Shift + left button double click	Open <u>Percussion Parameters</u> dialog (Percussion window only)	Open Control Edit dialog
Left button down + drag	Select notes for clipboard action	Select control data
In Note Edit Mode Left button up	Drop note at selected position	Move cursor to control window and set focus to track
Shift + left button down	Move cursor to selected position	Not applicable
Shift + left button down + drag	Select notes for clipboard action	Not applicable

The mouse can also be used to size the $\underline{\text{Track Windows}}$ by selecting and dragging the size bar or double clicking the left button on the track title to size the window to it's maximum size, or double clicking the

right button on the track title to size the window to it's minimum size.

What type of PC do I need to run Audition?

You need an IBM compatible PC with a VGA, SVGA, 8514/a or XGA display adapter. Audition will run on a 286 machine, but a 386 with a clock speed of 20 MHz or greater, or any 486 / Pentium is better.

You need at least 2 MB of memory, preferably 4 MB.

You need 1.5 MB of disk space to load Audition, plus disk space for any MIDI files that you might create. These are typically 15 KB in size for a 3 minute piece of music, dependant upon the tempo of the piece and the complexity of the control and note information.

You also need a General MIDI compatible sound card or a Roland GS Sound Card such as the SCC-1. Alternatively you can connect any external synthesizer or sound module through a MIDI - PC interface card that is compatible with the Microsoft Multimedia drivers.

Audition also supports the LAPC-1 (MT-32) but you will not be able to program the tone of the instruments or alter the reverberation, chorus and master volume settings. With Roland General MIDI devices such as the SC-7, all of the Audition GS features will function except for the *Tone* settings.

Step Record

Step Record mode lets you add MIDI note data one step at a time from a MIDI keyboard or other external MIDI device. To select this mode, either select **Step Record** from the **Song** menu bar option or click on



button followed by the



button from the **Tool window**.

Now select the track and position where you want the note data to be inserted. If you press a key on the MIDI keyboard you will see the note appear on the stave lines in the corresponding position (if adding percussion notes, these will appear in the appropriate percussion cell of the <u>Percussion window</u>).

The note type that is added to the note window is shown in the information window at the top of the <u>Editor window</u>. This can be changed by selecting the various note options from the Tool window or selecting the appropriate <u>accelerator keys</u> from the <u>keyboard</u>.

To enter chords, hold down all the keys that make up the chord and these will appear at the selected position. After all the keys are released, the track cursor will advance to the next position dependant on the selected <u>Display Resolution</u>.

Audition GS Support

Full support for Audition GS is available on CompuServe: 100137,560.

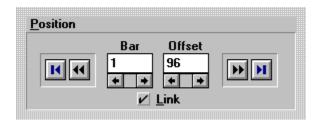
All sales and technical enquires should be directed to:

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Tel: 0527 404690

Track Position

This control is included in most of the *Control* dialogs and makes navigatation around the track very easy. The **Bar** value shows the current bar position while the **Offset** shows the offset from the start of the bar in <u>MIDI clocks</u>.



Link - links the track position to the Editor window so that the specified position is always in view.

- moves to previous control event of the same type.
- moves to next control event of the same type.
- moves to start of the track.
- moves to end of the track.

GS Reset (GS Only) [System - GS Reset]

The GS reset menu option makes Audition send a GS reset command to your sound card or sound module. This is a system exclusive message that makes all notes turn off and resets all control parameters back to their defaults settings. This reset message will function with all GS compatible hardware (including the Roland SC-7 and ATW-10).

Below is a list of all default control settings after the reset command is issued:

Program Change 1 (Piano) Drumset 1 (Standard) Volume 100 Pan Center Reverb Send 40 0 Chorus Key Shift 0 2 Pitch Bend Sensitivity Portamento off Hold off Master Volume 127 Master Pan Center Key Shift

Note: for other non-GS sound cards, pressing the



will make all notes turn off

Audition Notation

The following topics describe the features of Audition's music notation:

- Inserting Notes into the Note and Percussion Window
- Deleting Notes from the Note Window
- Changing the Note Appearance
- Changing the Note Offset and Velocity
- Standard MIDI Files

Inserting Notes into the Note and Percussion Windows

Audition follows certain rules for inserting and displaying notes in the Note window. Audition will not insert notes if they overlap with other notes of the same pitch. For instance, if you try to insert a note that is one quarter note from a semibreve of the same pitch then the note is not inserted.

When inserting notes using the mouse the note is dropped at the position where the left mouse button is released. This means that if you decide that you do not want to insert a note, just move the mouse pointer to the Clef part of the Note window or the Drum Name part of the Percussion window (or any part of the Control window) and release the mouse button. You will notice that while the left mouse button is down, the note at the pointer position is played.

While in *Note Insert* mode (selected by pressing or



button) if you want to select notes with the mouse then press and hold down the [Shift] key. This temporarily takes Audition out of Note Insert mode or Percussion Insert mode (the cursor will not change). This feature is useful in that you do not have to select a different Tool window mode to enable clipboard selection.

Audition will retain the appearance of the note that is inserted providing the note size does not take it beyond the end of the bar. If it does, then the note type is adjusted accordingly.

Deleting Notes from the Note Window

When deleting notes from the <u>Note window</u>, just click on the note to be deleted (the note body) and press the [Delete] key. If you want to delete several notes then hold down the left mouse button and drag the mouse pointer across the notes to be deleted and press the [Delete] key.

While in *Note Insert* mode (selected by pressing or

button) if you want to select notes with the mouse then press and hold down the [Shift] key. This temporarily takes Audition out of <u>Note Insert mode</u> or <u>Percussion Insert mode</u> (the cursor will not change). This feature is useful in that you do not have to select a different <u>Tool window</u> mode to enable clipboard selection.

Tied notes are deleted by selecting the first note in the tie sequence. Selecting any other note in the tie sequence will have no effect.

Changing the Appearance of a Note

Notes in the <u>Note window</u> can have their appearance altered without affecting the sound of the note. This can be useful if you have recorded some live music that contains a number of staccato notes. Each bar will probably contain a large number of rests which will make the notation difficult to read. You can change the appearance of these notes in two ways:

- 1. Select the **Minimize Rests** option from the **Metrics** menu. This will affect the display of all bars in all Edit windows.
- 2. With the <u>Tool window</u> in <u>Note Insert mode</u>, select the notes to be changed and click on the note type that you want the notes to be changed to. Whatever note type you select, this is what you will see provided the note size does not take it beyond the end of the bar. The note appearance is permanently altered and will be saved in the MIDI file. If you want to change the note back to its true appearance then re-select the note and select **Metrics Revert** (or press [Ctrl] + [R]).

Notes may also be inverted (tail of note switches from up to down and *vice versa*). Select the note to be inverted and select **Metrics - Invert Note** (or press [Ctrl] + [I]). Alternatively you can set the Note window

into *Note Invert* mode by pressing [Shift] and clicking on the button on the Tool window. The mouse cursor will change to

Each note that you now click on will become inverted.

To invert a *Tied* note you must click on the first note of the tie sequence. All the notes in the tie sequence will change.

Changing the Note Offset and Velocity

Audition lets you change the offset and velocity of a note after it has been added to the <u>Note window</u> or <u>Percussion window</u>. Select the notes that are to be changed and then select either the <u>Note Velocity</u> or <u>Note Offset/Slur</u> buttons on the <u>Tool window</u>. Now press the [Shift] key and click on the appropriate offset or velocity button that corresponds to the required value for the note or notes (it does not matter if the Tool button is already in the down position). The screen will refresh to indicate the notes have been changed to the specified offset or velocity value.

Standard MIDI Files

MIDI files that have **not** been created using Audition do not contain any information with regard to the note type and note orientation. Audition has to interpret the note data from the standard *MIDI Note On* and *Note Off.* It does this by calculating the duration of each note on/off sequence and then deciding the best note to fit into the bars of the <u>Note window</u>. Audition will always correct the note types so that all notes within a bar add up correctly. Notes tied that traverse bar boundaries are treated separately.

Getting Started

Audition follows all of the standard Windows screen layout, keyboard and mouse conventions. Audition has lots of features and to get the most out of Audition you need to be familiar with working under Microsoft Windows. If you are not familiar with Windows, then run the on-line "Windows Tutorial" by selecting **Help - Windows Tutorial** from the Program Manager application.

The Windows documentation will instruct you on how to configure the Multimedia drivers for your particular MIDI hardware.

The following sections will take you through:

- Loading a MIDI song file from disk
- Playing the song through your sound card
- Creating a short song sequence and saving it to disk
- Real-time Recording from your MIDI Keyboard

Loading a MIDI Song File

There are three ways to load a MIDI song file into the Audition editor:

- Load MIDI song file from the "File Open" dialog.
- Auto load a MIDI song file when Audition starts up.
- Drag/drop a file from the Windows File Manager application.

- 1. Open the File Open dialog from the menu bar.
- **2.** Select required drive, directory and MIDI file from the lists (Audition will only load standard MIDI files).
- **3.** Press the **OK** button; the file will load and an <u>Editor window</u> will be created with the title of the MIDI song file displayed at the top.

Note: You can add Audition MIDI file icons to the program group using the Window File Manager. See the **Associating Files** section of the File Manager help.

- 1. Select File New from the Program Manager menu, press OK.
- 2. Fill in the edit fields as follows:

Description: name of MIDI song. **Command Line:** "c:\audition\audition.exe" (if this is where Audition was installed).

- **3.** Add to end of command line the name and location of the MIDI song file.
- **4.** Press **OK**. A new Audition icon will appear in the selected program group with the name of the MIDI song underneath.

- 1. Start up Audition.
- 2. Select the MIDI Song file or files (".MID") from the "Windows File Manager".
- 3. Click and hold down the left mouse button on the selected file or files.
- **4.** Drag the files over to the Audition window and release the mouse button.
- **5.** Audition will open the selected MIDI song file(s), each one in a different Editor window.

Playing a MIDI Song File

To play a MIDI song file, select the Editor window so that it has the focus.

From the **Tool window**:

Press the button on the tool window to reveal the <u>Play/Record</u> buttons.

Press the button. The MIDI song will begin playing. To stop the MIDI song playing, press the button.

From the Keyboard:

Press the spacebar to start the MIDI song file playing. Press the spacebar again to stop the MIDI song file.

or

Select **Song - Play** from the menu ([Alt] + [S] + [P]) to start the MIDI song file playing. Select **Song - Stop** from the menu ([Alt] + [S] + [S]) to stop the MIDI song file playing.

Creating a short song sequence and saving it to disk

This section will take you through writing a short song sequence to get you accustomed to Audition's numerous edit features.

Let's start by adding some notes to the <u>Note window</u>. Press the <u>u</u> button on the <u>Tool window</u>. This will put Audition into note drag/drop mode. The crotchet note will already be selected by default, so now move the mouse cursor to track 1, bar 1 and add 4 notes to the bar by clicking on the required positions. If you place a note in the wrong position then just press [Alt] + [Backspace] (undo) to erase it, and try again. As you move the mouse cursor you will notice a vertical graduated line follows the mouse which is there as a guide for positioning notes that are off the stave lines.

Let's now duplicate these notes. Select **Edit - Bar - Duplicate** from the menu. Set *Start* and *End* bar values to 1 and *Destination Start* to 2. Set the *Repeat* value to 4, and press the **OK** button. The bar will be duplicated four times from bar 2 to bar 5.

Now let's play these notes. Press the ■ button on the Tool window. This selects the Play / Record button set. Press the

button. The notes will be played through your sound card or sound module. When the last bar has been played, Audition will automatically stop. You can also stop the notes playing by pressing the button.

Let's change the instrument that's playing on track 1. Double click at the beginning of track 1 on the **Instrument** strip in the <u>Control window</u> or use the arrow keys to position the cursor and press the [Enter] key on the <u>keyboard</u>. This will open the <u>Control - Instrument</u> dialog. Select instrument 49, "Strings", from the list and press the **Set** button followed by the **Close** button. Now press the



button on the Tool window to hear what the selected instrument sounds like.

Now let's change the tempo of the music. Double click on the Tempo strip in the <u>Conductor track</u>. This will open the <u>Control - Profile</u> dialog which lets you set multiple values for the selected control in one go. Here, we will just set one value. Set the *Start* to 200, press the **Lin** button (linear) which adds the value to the "Control View" window in the centre. Now press the **Set** button followed by the **Close** button. The tempo will have been changed to 200. Now play the notes again, they will play much faster than before.

Let's now delete the tempo change to put it back to it's default of 120 beats per minute. Click and hold down the left mouse button on the start of the tempo control strip and drag the mouse across the tempo value. The value will become inverted. Press the [Del] key. The value will be deleted from the conductor track. Play the notes again. The tempo will have reverted back to its original value.

Now copy the notes in track 1 to track 2. Click and hold down the left mouse button in the note window and drag the mouse so that all of the notes are covered by the inverse rectangle that appears (you need only enclose the note bodies). Select **Edit - Copy** from the menu. Now click on the note window in track 2 so that the cursor is at the beginning of bar 1. Select **Edit - Paste**, the notes will appear in the note window. The notes that you copied are held within the Windows Clipboard until you execute another **Cut** or **Copy** action, so you can duplicate the same notes again and again in different tracks, in the same track at different positions, or even in another editor window. Play the notes. You will hear the notes being played by the "Strings" instrument in track 1 and "Piano" (the default instrument) in track 2.

Let's now transpose the notes in track 2 by one octave. Select the notes in track 2 as you did

when you copied them from track 1. Select **Edit - Transpose** and set the *Shift* value to -12. Press **OK**, the notes will move down the stave by one octave. Play the notes to hear the effect.

Let's save the music to disk. Select **File - Save** from the menu and type "First" in the "File Name" field. Press **OK** and Audition will save the MIDI data as "FIRST.MID" on the disk.

Real-time recording using your MIDI Keyboard

Press the button on the Tool window to reveal the Play/Record button set.

Move the Editor cursor to track 1, bar 1 using the mouse or <u>keyboard</u> cursor keys and press the ■ button. The <u>Status window</u> at the top should change to show "Record" and the <u>Record</u> dialog will be displayed.

Set the Record dialog parameters as follows:

Track 1 MIDI Channel 1

Overdub Bar Start: 3, End: 10, Count: 8

Lead-in Bar Start: 1, Count: 2

This will record from bar 3 to 10 with a lead-in of two bars. Note: make sure your MIDI keyboard is transmitting on MIDI channel 1.

Now press the **Key-on** button, Audition will now wait for you to press a key on the MIDI keyboard. If you press the **Start** button instead of the **Key-on** button, Audition will start the recording session immediately.

Press a key on your MIDI keyboard and the metronome will start. The record cursor will automatically move to show you the position in the MIDI song. When bar 3 is reached, start playing. The metronome at this point will start adding accents at the start of each bar to keep you in time.

At the end of bar 10, Audition will stop automatically and show the <u>Record - Quantization</u> dialog. Press the **Replay** button to here what you have just recorded. You can press the <u>Button</u> button at any time during replay which will go back to the Record - Quantization dialog.

Now lets <u>quantize</u> the notes. Select "Semiquaver" from the *Note Start* list and press **Replay** again. This will tidy up any mistakes in the timing of your playing (if any).

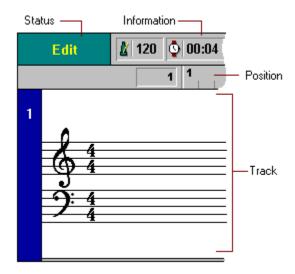
If you like what you hear, press **Save** and the recording will be saved to track 1. If you are not happy with how the recording sounds, try a different quantization level or press **Retry** to start the recording session again with the same parameters as before.

Frame Window

The Frame window holds all the <u>Editor windows</u> and the <u>MIDI Analyzer window</u>. You can open several Editor windows, by selecting **File - Open...** from the menu, which allows you to copy and paste between different MIDI songs very easily. The technical term given to this type of arrangement is "Multiple Document Interface" (MDI).

As you select the different types of window, the menu bar will change to reflect the selections that you can make for that window. You can also cascade, tile the Editor windows or arrange the icons of these windows by selecting the appropriate option from the **Window** menu popup.

Editor Window



The Editor window consists of four different window areas; the <u>Status window</u>, the <u>Information window</u>, the <u>Track Position window</u>, and the <u>Track windows</u>, of which there are seventeen (one conductor track and sixteen note edit tracks). The window can be scrolled horizontally and vertically. Horizontal scrolling affects the song position of all tracks in the window. Vertical scrolling repositions the Track windows relative to each other.

The title area of each Editor window displays the name of the MIDI file currently loaded into that edit window. "Unnamed" implies the MIDI song data has just been created and has not been saved to disk.

Status Window

The Status window, as the name implies, shows the current status of the <u>Editor window</u>. It can be set to the following states:

Edit - window is in edit mode. Data can be inserted, deleted, and copied using the <u>mouse or keyboard</u>. An edit cursor is drawn through all tracks to indicate the focus of the current edit action. The vertical position of the edit cursor is marked with the symbol.

Play - the MIDI song is currently being played through the sound card. In this mode the cursor changes to the Play cursor which automatically moves to indicate the current position of the song as it plays. The cursor moves by one division dependant on the current <u>Display Resolution</u> selected. (**Note**: *on slower machines you are advised to select Crotchet (1/4 note) resolution whilst playing or recording as this decreases the amount of processing Audition has to do to keep track of the current song position).*

Record - this indicates that the Editor window is in "Real-time Record" mode. The cursor is automatically moved to show the current position in the song as the recording session continues, so you can watch and listen to other tracks whilst you play.

Pause - the Editor window is currently paused. This can happen in two modes, Play mode and Record mode. In Play mode, the MIDI song is paused and Audition is waiting for you to press the **Pause** or **Stop** button to continue. In Record mode, Audition is waiting for a key to be pressed on the MIDI keyboard before commencing the <u>Recording</u> Session.

Replay - this mode is entered after a recording session has stopped and you have selected the **Replay** option from the <u>Record - Quantization</u> dialog.

Step Record - this mode allows you to enter notes from a MIDI keyboard one step at a time. To set the Editor window into Step Record mode press the Step Record button followed by the Record button

• on the <u>Tool window</u>, or select **Song - Step Record** from the menu.

Information Window

This window displays different data dependant upon the current Editor Status.

In all modes the tempo, current cursor time and length of song are displayed and are represented as follows:



Tempo in beats per minute.



Current cursor position in minutes and seconds.



Song length in minutes and seconds.

In Edit and Step Record modes the MIDI channel assigned to the currently selected track is

represented by the MIDI channel icon . In addition to this the currently selected note metrics are represented by the following set of icons:



In *Record* mode the record start / end and duration bar values are displayed:



Record start bar number.



Record end bar number.



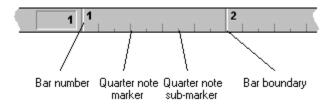
Record bar count.

The Information window also displays quick help on the <u>Tool window</u> which is accessed by placing the mouse cursor over the Tool window button that is to be queried and pressing the right mouse button.

During multiple track edit actions, the Information window also displays progress information.

Track Position Window

The Track Position window shows you the current position in the MIDI song file. The recessed number on the left of the window displays the bar number of the left most bar in the tracks. The graduated section of the window shows the bar boundaries and numbers together with quarter note markers and smaller sub-markers for notes smaller than a quarter note as shown below:

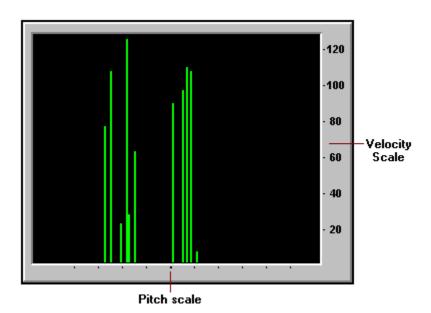


When scrolling the song horizontally, the track position moves according to the position in the MIDI song. If the thumb of the horizontal scroll bar is dragged, the Track Position window is updated with the current position but the Track windows are not. This allows you to quickly scroll to a particular bar in the MIDI song file.

MIDI Analyzer Window

The MIDI Analyzer window lets you view the MIDI data as it is transmitted to the sound card or sound module. The left hand side of the window contains the **Note View** window which shows the MIDI note pitch values and there velocity as each note is played. After the "note off" event is transmitted, the note line decays exponentially.

To open the MIDI Analyzer window, select View - MIDI Analyzer from the menu.



The right hand side of the window displays MIDI data that is relevant to the sixteen MIDI channels.



The MIDI section displays the MIDI channel numbers and an "LED" to indicate whether the channel has a currently active note event.

The Instrument section displays the current instrument that is selected into the MIDI channel. In the case of MIDI channel 10 (the percussion channel) the name of the drum set is displayed.

The Control section (in the above picture **Volume**) displays the current setting for the selected control.

The **View** menu options allow you to enable/disable the MIDI channels from displaying data in the MIDI Analyzer (this does not mute the sound). Disabled channels are indicated by the MIDI channel number being grayed. You can also change the control type displayed by selecting **View** - **Control Change**.

As you set the focus in the different <u>Editor windows</u> the title of the MIDI Analyzer window will change to reflect the currently active window.

Tool Window

The Tool window consists of three columns of buttons. The first column controls the action of the second and third columns.

The tool window is in six separate groups which control the following selections/actions:

Play/Record

Display Resolution

Note Insert Mode

mf No

Note Velocity

بل

Note Slur/Offset

Percussion Insert Mode

To hide the Tool window, click the right mouse button anywhere within the <u>Editor window</u> or select **View - Show Tool Window** from the menu.

Play/Record [Tool Window]

The Play/Record buttons enable you to playback/record MIDI data from/to the selected <u>Editor window.</u> Various options can be selected which are detailed below.

- Play. Starts the MIDI file playing from the current cursor position. The current MIDI status for all control parameters is determined and programmed prior to the "Play" command being issued.
- Record. Starts the Record session by displaying the <u>Record</u> dialog that allows the start/end bar positions, lead-in and record filter characteristics to be set before the record session commences.
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Pause. Pauses the MIDI song momentarily. Pressing this button again results in the MIDI song being restarted from the position where is was last paused. This is useful for getting an instantaneous play response, as pressing the play button alone introduces a small delay whilst Audition determines and programmes the current state of each track.

- Stop. Stops the MIDI song playing and broadcasts an "all notes off" message.
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Rewind. Moves the Play/Record cursor to the start of the MIDI song.

••

Forward. Moves the Play/Record cursor to the end of the MIDI song.



Track Enable. Displays the <u>Track - Enable</u> dialog which allows each track to be enabled/disabled.



Track Solo. Makes all tracks silent except the one which currently has the focus.



Loop. Plays the MIDI song continuously.

Step Record. Switches the record to <u>Step Record.</u> To activate, press this button followed by the **Record** button.

Display Resolution [Tool Window]

The display resolution buttons let you set the resolution of the <u>Editor window</u>. This affects the position where notes may be inserted using the mouse or keyboard and the number of bars that may be seen at any one time. The resolution can be set to the following values:



Crotchet - set resolution to 1/4 note.



Quaver - set resolution to 1/8 note.



Semiquaver - set resolution to 1/16 note.



Demisemiquaver - set resolution to 1/32 note.

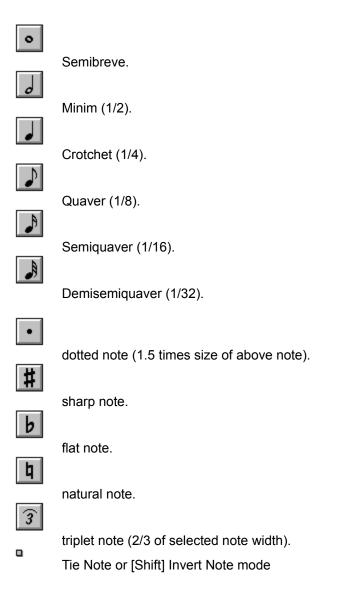
To view as many bars as possible, click on the Crotchet button. To view the highest resolution click on the Demisemiquaver button.

The different resolutions can also be selected from the **View** menu bar option or directly from the <u>keyboard</u>.

Note Insert Mode [Tool Window]

These buttons allow you to select the note type for use with <u>mouse or keyboard</u> and <u>Step Record</u> editing.

The buttons set the following note types:



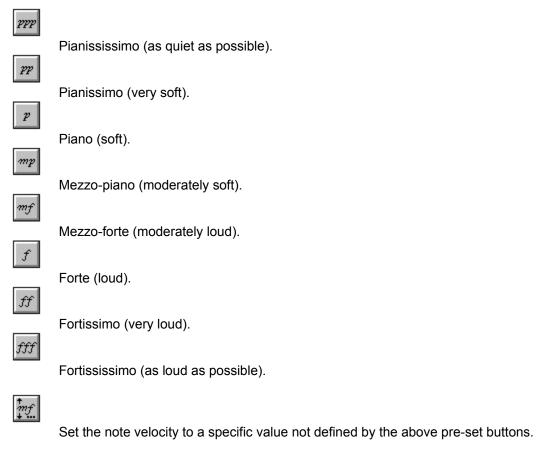
To tie notes of the same pitch together, click the tie button. This places the <u>Note window</u> into *Tie* mode and changes the cursor to the tie note cursor. Click on the earliest note that is to be tied together and continue until all the following notes of the same pitch have been tied together into one continuous note.(hint).

To invert notes, press [Shift] and click on the tie / invert button. This places the Note window into *Invert* mode and changes the cursor to • the invert note cursor. Now click on the note that you want inverting. The note will be drawn inverse to it's current orientation.

If the [Shift] key is down when one of the above *Note Type* buttons are pressed then this will change the note type of any notes that are currently selected (see <u>Changing the Note Appearance</u>).

Note Velocity [Tool Window]

These buttons set the <u>velocity</u> of the note inserted into the <u>Note window</u>. There are eight pre-set values:



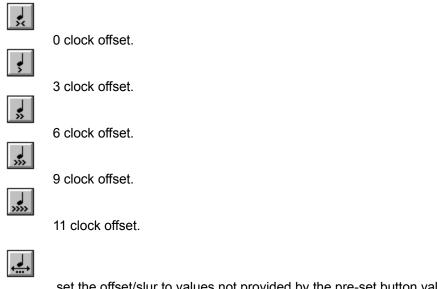
If the [Shift] key is down when one of the above buttons are pressed then this will change the velocity of any notes that are currently selected (see <u>Changing the Note Offset and Velocity</u>).

Note Offset / Slur [Tool Window]

The *Slur* buttons allow you to set the slur of the inserted note. There are six pre-set values ranging from 18% to 100% of the <u>True Note Width</u>.

j	
	18% slur.
! T	33% slur.
٠	50% slur.
	66% slur (default).
	84% slur.
€	100% slur.

The *Offset* buttons allow you to set the offset of the note from the inserted position. The offset range is from 0 to 11 <u>MIDI Clocks</u> and can be set to the following pre-set values:



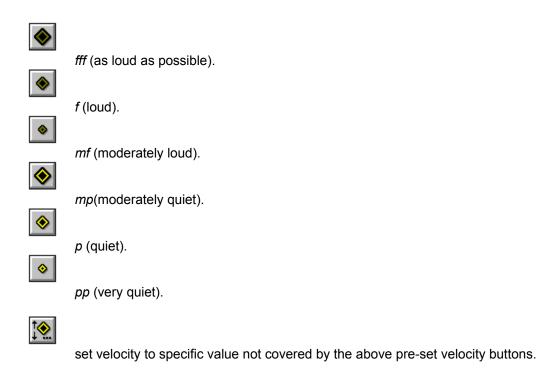
set the offset/slur to values not provided by the pre-set button values above.

If the [Shift] key is down when one of the above *Offset* buttons are pressed then this will change the offset of any notes that are currently selected (see <u>Changing the Note Offset and Velocity</u>).

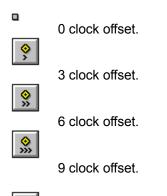
Percussion Insert Mode [Tool Window]

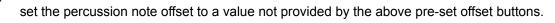
These buttons allow you to set the <u>velocity</u> and offset of the inserted percussion note.

There are six pre-set Percussion Velocity values:



There are four pre-set *Percussion Offset* buttons:



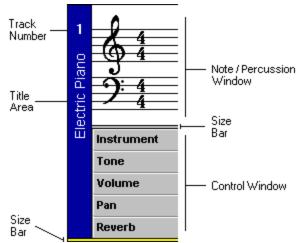


If the [Shift] key is down when one of the above buttons are pressed then this will change the velocity or offset of any percussion notes that are currently selected (see <u>Changing the Note Offset and Velocity</u>).

Track Window

The Track window is divided into three sections, the Title Area, <u>Note window</u> or <u>Percussion window</u> and <u>Control window</u>.

You can set the title of a specific track by selecting <u>Track - Title</u> dialog from the menu. The title appears on the left section of the Track window and is written vertically under the track number. The title is saved in the MIDI file.



Each track can be sized by clicking on the size bar, below the Track window, and dragging it to the required position. The note/percussion and control windows can be sized by clicking on the size bar that exists between the two windows. This alters the overall ratio of the windows that are contained inside the track window. Each track has a maximum size determined by the number of control events on display and the range of the note window. These values are set from the Track-Layout dialog.

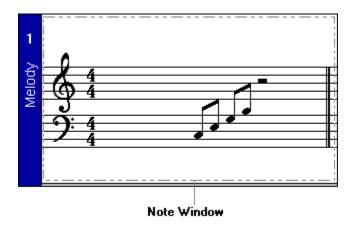
Each track can be set to its maximum size by double-clicking on the track title area with the left mouse button or selecting **Track - Maximum** from the menu. Similarly the track can be set to its minimum size by double-clicking the right mouse button or selecting **Track - Minimum** from the menu (See also <u>Keyboard</u>).

To move a Track window to the top of the <u>Editor window</u> area, select **Track - Move to Top**, or press the [F5] <u>accelerator</u> key.

When a track is active and has the keyboard focus, the title section has the same background color as the active application title. This is important in that any clipboard and keyboard actions will be focused on the currently active track.

Each track can be assigned to a specific MIDI channel by selecting the <u>Track - MIDI Assignment</u> dialog. The currently selected MIDI channel for the track is shown in the <u>Information window</u>.

Note Window



This window is where the notes for a track are displayed and edited. Each window contains G and F stave lines, although this can be altered by using the <u>Track - Layout</u> dialog.

The left hand side of the window contains the G and F clefs and the current time signature and key signature for the track. This section of the window is always visible and does not scroll with the rest of the track notes.

The notes on the stave lines are shown on an invisible grid which is evenly divided into Crotchet (1/4), Quaver (1/8), Semiquaver (1/16) or Demisemiquaver (1/32) dependant on the <u>Display</u> Resolution set for the <u>Editor window</u>.

The Note window can be set to different note scales using the **Track - Layout** dialog. The default is Piano but it can also be set to Bass, Flute, Strings, Guitar or full MIDI scale.

The window can be sized by clicking on the size bar at the bottom of the window and dragging it to the required position. If the window is not displayed at its full size then when the Track window has the focus, a scroll bar will appear on the right side of the Note window to allow you to scroll the window vertically.

To add note events to the stave lines either select the appropriate note type, velocity, slur and offset, from the Tool window or **Metrics** menu option, and click on the stave or press [Enter] to position the note. Note types may also be selected by pressing the appropriate <u>accelerator</u> keys as outlined in the <u>keyboard</u> help.

Notes may also be added/deleted or modified by double-clicking on the note position or pressing [Shift] + [Enter] to display the <u>Note Metrics</u> dialog.

The note window can also be configured as a Percussion window by using the Track - Layout dialog

Percussion Window

	35 Kick Drum 2		
4	36 MONDO Kick	●●●●●	●●● ●●
	37 Side Stick		
등	38 Gated Snare		
ercussion	39 Hand Clap		
3	40 Snare Drum 2	€€€00	€€€€00
	41 Room Low Tom 2		
Ф	42 Closed Hi-hat		
	43 Room Low Tom 1		
	44 Pedal Hi-hat		

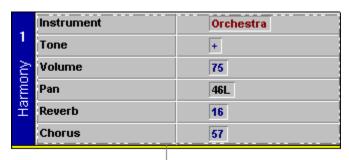
Percussion Window

This window displays the name of each percussion instrument, that is part of the General MIDI / GS percussion set, on the left hand side of the window. If the percussion set is changed during playback of the song, or whilst scrolling the window, the affected percussion instrument names are changed and displayed in a different color.

To add percussion events to the track, click on the required percussion button in the <u>Tool window</u> (the cursor will change to reflect the choice) and click on the position or press [Enter] where the percussion event is required. Alternatively, double click or press [Shift] + [Enter] where the event is required, to show the <u>Percussion Metrics</u> dialog. This will allow you to add/delete or modify an event at the selected position.

To modify the sound of a particular percussion instrument (GS only), press [Shift] followed by double-clicking the mouse at the position where the percussion sound is to be changed, or press [Cntrl] + [Enter]. This will show the Percussion Parameters dialog. The percussion parameter changes are represented by the Symbol.

Control Window



Control Window

The Control window is where you edit MIDI control parameters. The default control values displayed are *Instrument* (*Drumset* for <u>Percussion window</u>), *Tone, Volume, Pan, Reverb* and *Chorus*. The type of controls on display can be changed using the <u>Track - Layout</u> dialog.

The Conductor track contains a special set of controls, *Master Volume, Tempo, Time Signature* and *Key Signature* which affect all tracks.

To change any of the control parameters, double click on the required control strip, or press the [Enter] key, at the required position. This will show the appropriate dialog for that control which will allow you to edit the parameters.

Numeric control parameters are displayed like this parameters in a short space of time then the values are displayed with a joining line like this

, which indicates there are more values than can be displayed with the current <u>Display Resolution</u>. The *Pan* control values have a letter appended to the value, "L" for left, "C" for centre and "R" for right.

The *Instrument* control displays the name of the currently selected instrument. GS instrument variants (banks) are shown in a different color to the main "Capital" instrument.

The *Tone* control allows you to vary certain characteristic's of the selected instrument. These changes remain in effect until another tone change occurs. Tone changes are represented like



Note: changing an instrument value does not reset the tone change that is in effect.

Other controls have simple on/off values such as *Soft*, *Sostenuto* and *Hold*, whilst the Mode control can be set to *Poly* or *Mono* which sets the track to Polyphonic or Mono mode.

Portamento and Pitch Bend have additional on/off control settings which are enabled/disabled using the <u>Control On/Off</u> dialog. To access the dialog for these controls you must hold down the [Shift] key and double-click on the control strip, or from the keyboard press [Shift] + [Enter].

The following is a list of all the MIDI Control parameters that can be altered and their associated edit dialogs.

Track Controls:

Instrument

Control Instrument

Drumset Control Instrument Control Tone Tone Volume Control Profile **Expression** Control Profile Pan Control Profile Modulation Control Profile Reverb Control Profile Control Profile Chorus

Pitch Bend Control Profile and Control On/Off
Portamento Control Profile and Control On/Off

SostenutoControl On/OffSoftControl On/OffHoldControl On/OffModeControl Mode

Conductor Controls:

Master VolumeControl ProfileTempoControl Profile

Time Signature Control Time Signature Key Signature Control Key Signature

Saving MIDI Files [File - Save, File - Save As...]

This dialog lets you save MIDI song data to any location on your hard or floppy disk drive.

File Name - lets you set the file name that you want the MIDI song saved as. You can select an existing MIDI file to copy into from the list below this edit field if you wish. If you type a name without the extension, then Audition will automatically add ".MID" to the end.

List Files of Type - lets you specify what type of files are listed in the list box above. Choose from MIDI files [*.MID] or all file types [*.*].

Directories - lets you select the directory where you want the file saved.

Drives - lets you set the drive where you want the file saved.



save the MIDI song to disk.



close the dialog without saving and continue editing.

Loading MIDI Files [File - Open...]

This dialog lets you select a MIDI song file to load into an Editor window.

File Name - lets you set the MIDI song file name that you want loaded into the Editor.

List Files of Type - lets you specify what type of files are listed in the list box above. Choose from MIDI files [*.MID] or all file types [*.*].

Directories - lets you select the directory where the MIDI file is located.

Drives - lets you set the drive where the MIDI file is located.

load the MIDI song file.



close the dialog without loading the MIDI song file

File Options [File - Options...]

This dialog lets you set various options that affect the file load and save process.

Minimize rests on load - this option is no longer implemented.

Save pure MIDI files - this option makes Audition remove all notation information that describes the type of notes that have been inserted into the song when saving a file. This should only be used if you are experiencing problems loading Audition's MIDI files into other sequencers.

- save the file load / save options.
- close the dialog without making any changes.

MIDI Analyzer - Filter Channel [View - Filter Channel...]

This dialog lets you filter which MIDI channel is displayed in the $\underline{\text{MIDI Analyzer}}$ window.

MIDI Channel - lets you select MIDI channels 1 - 16.

Enable All - checks all 16 MIDI channels.

Disable All - unchecks all 16 MIDI channels.

- set the MIDI channel filter.
- close the window without making any changes.

MIDI Analyzer - Control Change [View - Control Change...]

This dialog lets you set which *MIDI Control Change* parameter is displayed on the <u>MIDI Analyzer</u> window.

Type - selects the Control Change type to be viewed

- set the MIDI Control Change on the Analyzer window.
- close the window without making any changes.

Record [Song - Record...]

This dialog lets you set-up the parameters for the real-time recording session.

Track - sets the <u>track</u> that is to be recorded. The default track is the one that currently has the focus.

MIDI Channel - sets the MIDI channel from which the recorded data is to be received. The default is the MIDI channel assigned to the track that has the focus.

Lead-in Bar - sets the start bar or count of bars before the record start point that is used for a lead-in to the record session. During the lead-in, all other tracks will play (unless disabled) so that you can here the point where you should start recording.

Overdub Bar - sets the start and end bars of the record session. Any note data that currently exists within the bar range of the track is overwritten.

Exclude MIDI Group - sets the type of MIDI data that you want excluded from the record session. You can set any combination of <u>Control Change</u>, <u>Program Change</u>, Channel Pressure, Pitch Bend or Key Pressure. If a data group is excluded, then the data associated with that group will not be overwritten.

Metronome - sets the record metronome characteristics. Check the *On* button to enable the metronome. Check the *Accent* button to switch on the metronome accents.



start the record session immediately. This is normally used if you have a lead-in set.



waits for you to press a key on your MIDI keyboard or some other external MIDI device.



opens the <u>Record - Metronome</u> dialog which allows you to set up the metronome sound.

cancels the recording session and closes the dialog.

Record - Metronome [Record dialog]

This dialog is opened by selecting the *Metronome* button on the <u>Record dialog</u>. It lets you set the sound of the metronome beat and accent, as well as the volume and the MIDI channel that the metronome data is sent to.

Accent - select the sound of the metronome accent from the combo list.

Beat - select the sound of the metronome beat from the combo list.

MIDI Channel - select the MIDI channel that the metronome is played through (default is channel 10).

Volume - set the volume of the metronome.

set the metronome sound. Note: Audition saves the set-up for the metronome sound, so you only have to do this once.



this button plays the metronome beat and accent so that you can check the above parameters have been set correctly.

close the dialog without making any changes.

Record - Quantization

This dialog window appears after a real-time recording session has ended. The dialog lets you:

- Replay the MIDI note and control data that you have just recorded (Replay button).
- Retry the record session with the same record parameters (Retry button).
- Save the recorded data in the specified track (Save button).
- Quantize the data.

To quantize the recorded data, select the quantization level for the note start positions. This can range from Crotchet (1/4 note) to Semidemisemiquaver (1/64 note) or none.

The note duration may also be quantized. This allows you to modify the notes played so that they are of all the same type, from Semibreve (whole note) to Demisemiquaver (1/32 note), including half notes.



enable/disable specific tracks prior to replaying the recorded data or retrying the record.



assign tracks to different MIDI channels prior to replaying the recorded data or retrying the record.



saves the recorded data in the track.



replay the live recording that you have just made. If you have selected a quantization level then you will also hear the affect it has had on your recording.



retry the recording using the same bar start/end values.

exit without saving the recorded information.

If at any time during replay you want to stop the song playing, press the space bar on the keyboard. This will bring you back to the **Record - Quantization** dialog.

Song Title [General - Song Title...]

This dialog lets you set the song title and copyright information that appears when the MIDI file is being loaded by Audition.

To set the song title, type the text in the *Title* section of the window (max. 80 characters). To set the copyright, type the text in the *Copyright* section of the window (max. 80 characters).

- save the changes to the title and copyright.
- discard changes and close dialog.

Master [General - Master...]

This dialog allows you to set the master volume, key shift and pan for all the tracks. In addition you can mute any of the GS parts. *Note: key-shift and pan will only function with GS sound cards*.

To change the master volume, click on the slider thumb and drag it to the required position or type the value into the edit control above. The master volume can be varied from 0 - 100. The master volume slider will only affect internal sound cards if the correct driver has been installed.

To change the master key shift, click on the slider thumb and drag it to the required position or type the value into the edit control above. The key shift can be varied plus/minus two octaves. The key shift affects all tracks except the percussion channel 10.

To change the master pan, click on the slider thumb and drag it to the required position or type the value into the edit control above. The master pan offsets the different track pan settings by the set amount.

The mute channel allows you to disable the GS part associated with a particular MIDI channel. This is useful if you are driving more than one type of sound device through the MIDI output port and you don't want that part of the GS sound card or sound module to play. The channel marked "**P"** is the default GS and General MIDI percussion channel.

save the changes.



set all controls back to their power-on defaults.

Master Reverberation (GS only) [General - Reverb...]

This dialog lets you modify the reverberation effect for all tracks.

Macro - select 1 of the 8 pre-defined reverberation characteristics (default is Hall 2).

Parameters - fine tune the reverberation characteristics:

Char changes the reverb character.

Pre-LPF changes the reverb pre-low pass filter.

Level changes the reverb level.
Time changes the reverb time.
Delay changes the reverb delay.

Send changes the amount of reverb sent to the Chorus unit.

save the changes.



set all controls back to their power-on defaults.

Master Chorus (GS Only) [General - Chorus...]

This dialog lets you modify the chorus effect for all tracks.

Macro - select 1 of the 8 pre-defined chorus characteristics (default is Chorus 3).

Parameters - fine tune the chorus characteristics:

Pre-LPF changes the chorus pre low pass filter.

Level changes the chorus level.

Feedback changes the amount of chorus feedback..

Delay changes the time delay through the chorus unit.

Rate changes the chorus rate.
Depth changes the chorus depth.

Send changes the amount of chorus sent to the reverb unit.

save the changes.

set all controls back to their power-on defaults.

Track Title [Track - Title...]

This dialog lets you set the titles of each of the <u>Track windows</u>. The text is displayed vertically in the track title area of the track window. Typically the track title is the name of the main instrument in the track.

Track - select the <u>Track</u> that is to have its title changed. Once selected the existing title (if any) is displayed in the "Title" area of the dialog so that it can be edited.

Title - edit the track title.

You can modify all the track titles in one go from this dialog by selecting a new track from the "Track" control. As you change the title text you will see this reflected in the track list when you move the keyboard focus from the *Title* edit field.

- save the changes.
- discard changes and close dialog.

Track Layout [Track - Layout...]

This dialog lets you modify the appearance of the <u>Track windows</u>.

Track - select the <u>Track</u> that is to have its appearance modified. Check the *All tracks* button to set all tracks to the same appearance.

Window - specify what type of windows are contained within the Track window. **Stave** shows the Stave window only, **Control** shows the Control window only, and **Both** shows both windows. The Stave window can be set to display either notation data or percussion data by checking the **Note** or **Percussion** buttons.

Stave - change the note range of the Stave window, and the clef type. The default range is piano, but it can be set to any of the following:

Guitar	E2 (40)	D6 (86)
Bass	E1 (28)	G3 (55)
Strings	C1 (24)	C7 (96)
Brass	C2 (36)	C7 (96)
Trumpet	A#3 (58)	A#6 (94)
Flute	C4 (60)	C7 (96)
Sax	C#2 (37)	D#6 (87)
MIDI	0	127

You can select G clef, F Clef or both stave lines to be displayed.

Split - lets you specify the stave split point for the track. If you want to separate the notes in a track into G and F clef areas, then enable the *Split* option and set the appropriate note value where the split point is to occur (the default is middle C [60]).

Control - select which controls you want displayed in the Control window.

You can modify several tracks simultaneously by selecting the track and changing the settings repeatedly.

- save the changes.
- discard changes and close dialog.

Enabling and Disabling Tracks [Track - Enable...]

This dialog allows you to enable/disable tracks from playing. The track number and track title appears next to the associated check button.

To enable a track, check the associated button.

To disable a track, uncheck the associated button.

- save the changes.
- enables all tracks.



disables all tracks.

MIDI Channel Assignments [Track - Assignment...]

This dialog allows you to assign a MIDI channel to a specific track. You can assign the same MIDI channel to more than one track. For example: tracks 1, 2 and 3 could be assigned to MIDI channel 10 (percussion part) which would allow you to record the bass drum on track 1, snare drum on track 2 and cymbals on track 3 in separate recording sessions. When replayed, these tracks will be played through the same MIDI channel.

The track number and title appears next to the combo list which displays the currently assigned MIDI channel for the track. Select the required MIDI channel from the combo list.

- save the changes.
- discard changes and close dialog.

Track Goto [Track - Goto...]

This dialog allows you to move quickly to a specific part of the song.

Track - select the $\underline{\text{track}}$ which you want positioned at the top of the $\underline{\underline{\text{Editor}}}$ window.

Bar - select the bar number where you would like the song positioned.

Goto - selects which of the above are used to re-position the Editor window. *Track* re-positions using specified track. *Bar* re-positions using specified bar.

- move to the specified position in the song..
- leave position unchanged.

Note Metrics

This dialog is opened by double clicking on the <u>Note window</u> (or pressing [Shift] + [Enter]) at the required note position. It lets you add, delete or modify the characteristics of the selected note. The dialog title includes the name of the <u>Editor window</u> and the track that will be affected by the changes.

The Bar and Offset values show the currently selected position. Offset is in MIDI clocks.

Pitch - select the required pitch of the note to be added to the stave. The actual note is displayed underneath (C6, A#3 etc.), and changes as you alter the pitch value. **Note:** Changing this value does not alter the pitch of the currently selected note. To change the pitch of an existing note you must first delete the selected note by pressing the **Delete** button and then set the new pitch for the note and press the **Set** button. All other note characteristics will be retained (velocity, offset and duration).

Velocity - set the velocity of the note. The actual velocity (in music notation) is shown underneath (*fff*, *mp* etc.) and changes as you alter the velocity value.

Offset - set the offset of the note from the selected position. The offset can be set from 0 to 11 MIDI clocks.

Duration - specify the duration of the note in MIDI clocks. If you press the **Preset...** button this will show the <u>Note Duration</u> dialog which gives you a choice of notes, and the slur that is to be applied to the note.



sets the new note at the specified position, or if a note exists at the specified location, modifies the note. This button does not close the dialog.



deletes the note at the specified position. The button is disabled if a note does not exist at the specified location.



closes the window and discards any changes not actioned by pressing the **Set** or **Delete** buttons.

Note Duration

This dialog is opened from the *Note Metrics* dialog. It lets you select preset note durations for use with the *Note Metrics* dialog.

Type - selects the note type used for the duration. The **Dotted** check button adds half the note duration to the selected note.

Slur - specify the slur to apply to the note. For instance, a slur of 66% on a crotchet note is 2/3 rd's of 96 <u>MIDI clocks</u> which is 64.

- set the selected note duration.
- exit without making changes.

Percussion Metrics

This dialog is opened by double clicking on the <u>Percussion window</u> (or pressing [Shift] + [Enter]) at the required percussion note position. It lets you add, delete or modify the characteristics of the selected percussion note. The dialog title includes the name of the <u>Editor window</u> and the track that will be affected by the changes.

The Bar and Offset values show the currently selected position. Offset is in MIDI clocks.

Percussion - select the percussion instrument to be added, deleted or modified at selected position in the track.

Sound - when checked, plays the percussion instrument as the "Percussion" combo list is selected.

Offset - set the offset of the percussion event from the selected position. The offset can be set from 0 to 11 MIDI clocks.

Velocity - set the velocity of the percussion event. The actual velocity (in music notation) is shown underneath (*fff*, *mp* etc.) and changes as you alter the velocity value.

- sets the new percussion event at the specified position, or if an event exists at the specified location, modifies it. This button does not close the dialog.
- deletes the percussion event at the specified position. The button is disabled if an event does not exist at the specified location.



closes the window and discards any changes not actioned by pressing the **Set** or **Delete** buttons.

Percussion Parameters (GS Only)

This dialog is opened by pressing [Shift] and double clicking on the <u>Percussion window</u> (or pressing [Shift] + [Control] + [Enter]) at the required position. It lets you change the characteristics of the specified percussion instrument. The dialog title includes the name of the <u>Editor window</u> and the track that will be affected by the changes. When the dialog is first opened, the controls reflect the current state of the percussion parameters for that percussion instrument.

Percussion parameter values are represented on the <u>Percussion window</u> by the symbol:

<u>Position</u> - set the track position where the data is to be edited.

Name - set the name of the percussion instrument that is to have its characteristics changed. The **Sound** check button enables/disables the percussion instrument sound as each instrument is selected from the instrument list.

Parameters - sets the following percussion parameters:

Pitch - sets the pitch of the percussion instrument in semitones. A positive value raises the pitch, a negative value lowers it.

TVA - sets the Time Variant Amplifier level, that is, the rate of change in volume with respect to time.

Pan - sets the position of the instrument from far left to far right in the stereo image.

Reverb - sets the reverb level in proportion to the overall reverb level set for the track.

Chorus - sets the chorus level in proportion to the overall chorus level set for the track.

Random Pan - randomly sets the stereo position of the instrument. Each time the percussion instrument sounds the position is changed.

- writes the percussion parameters to the selected track.
- deletes the selected percussion parameters from the track. If there are no percussion parameters at the specified position, then this button is disabled.
- plays the percussion instrument with the currently selected parameters.
- closes the dialog and discards any changes that were not committed by the **Set** or **Delete** buttons.

Note: Percussion parameters that are currently in effect are cancelled when a new drumset is selected.

Note Velocity

This dialog is opened from the $\underline{\text{Tool Window}}$ by clicking on the \blacksquare button. It lets you set the $\underline{\text{velocity}}$ of the note to be inserted or the note or notes that are currently selected.

- set the selected velocity.
- discard changes and close dialog.

Note Offset/Slur [Metrics - Offset/Slur...]

This dialog lets you set the slur and offset values of the note to be inserted or the note or notes that are currently selected.

Offset - sets the offset from the specified position in MIDI clocks.

Slur - sets the <u>slur</u> of the note from 1% to 100% of the true note duration. Slur is disabled if this is a percussion event.

- set the selected slur/offset.
- discard changes and close dialog.

System Configuration [System - Configuration...]

This dialog lets you set-up the Windows Multimedia drivers for your hardware.

MIDI In - selects the driver through which any *Live* or *Step* recorded music is received.

MIDI Out - selects the driver through which the MIDI song is played. Selecting the Microsoft MIDI Mapper allows the song to be played through several sound cards or sound modules simultaneously (see your Windows documentation for more information).

The **System Real Time** button instructs Audition to send System Real Time messages when playing or recording (MIDI Start/Stop and MIDI Clock). This lets you transfer Audition songs to an external sequencer. Switch off this option if you are not using an external sequencer as it causes a significant amount of MIDI information to be sent to the MIDI output port which can reduce System performance.

The *Thru* button when checked allows any MIDI information from the MIDI in port to be transmitted through to the MIDI out port.

Mode - sets the mode that Audition operates in. Chose the correct mode for your hardware. Note: the Sound Canvas (SC-55, SC-155 or SCC-1) can emulate the LAPC-1/MT-32 so you can also choose this mode if the MIDI song you are playing was written for the LAPC-1 or MT-32.

- saves the selected mode and hardware set-up. These values are permanently stored so that the next time you run Audition your hardware will retain the required settings.
- closes the dialog and discards any changes.

Bar Cut [Edit - Bar Cut...]

This dialog lets you cut (erase) the specified MIDI data from the selected track(s) and copy it into the *Windows clipboard* so that it can be pasted into another track or MIDI song file. The dialog controls have the following functions:

Track - selects the <u>track</u> from which the MIDI data is to be cut. The default is the track that had the focus when the dialog was opened. If you want to cut the same bars from all tracks, then check the *All tracks* button.

Type - selects the type of MIDI data to cut. *Stave* cuts the stave data only, *Control* cuts the control data and *All* cuts all the data.

Bar - sets the *Start*, *End* and *Count* bar numbers to be cut from the track. The *All bars* button sets the start/end to the whole track(s).

- cut the selected track(s) to the clipboard.
- close the dialog without making any changes.

Bar Copy [Edit - Bar Copy...]

This dialog lets you copy the specified MIDI data from the selected track(s) into the "Windows clipboard" so that it can be pasted into another track or MIDI song file. The dialog controls have the following functions:

Track - selects the <u>track</u> from which the MIDI data is to be copied. The default is the track that had the focus when the dialog was opened. If you want to copy the same bars from all tracks, then check the *All tracks* button.

Type - selects the type of MIDI data to copy. *Stave* copies the stave data only, *Control* copies the control data and *All* copies all the data.

Bar - sets the *Start*, *End* and *Count* bar numbers to be copied from the track. The *All bars* button sets the start/end to the whole track(s).

- copy selected track(s) to the clipboard.
- close the dialog without making any changes.

Bar Delete [Edit - Bar Delete...]

This dialog lets you delete the specified MIDI data from the selected track(s), and does not affect the contents of the "Windows clipboard". The dialog controls have the following functions:

Track - selects the <u>track</u> from which the MIDI data is to be deleted. The default is the track that had the focus when the dialog was opened. If you want to delete the same bars from all tracks, then check the *All tracks* button.

Type - selects the type of MIDI data to delete. *Stave* deletes the stave data only, *Control* deletes the control data and *All* deletes all the data.

Bar - sets the *Start*, *End* and *Count* bar numbers to be deleted from the track. The *All bars* button sets the start/end to the whole track(s).

- delete the selected track(s).
- close the dialog without making any changes.

Bar Duplicate [Edit - Bar Duplicate...]

This dialog lets you duplicate the selected bars of the specified track(s). The dialog controls have the following functions:

Track - selects the <u>track</u> from which the MIDI data is to be duplicated. The default is the track that had the focus when the dialog was opened. If you want to duplicate the same bars in all tracks, then check the *All tracks* button.

Type - selects the type of MIDI data to duplicate. *Stave* duplicates the stave data only, *Control* duplicates the control data and *All* duplicates all the data.

Source - sets the *Start*, *End* and *Count* bar numbers to be duplicated from the track.

Destination - sets the position where the duplication is to "Start", and the number of times the duplication is to be repeated ("Repeat" count). Each subsequent duplication starts from the end of the last. Example: if bar 2 is duplicated twice from bar 3 onwards, then bars 3 and 4 will be contain the same data as bar 2. Any data that was in bars 3 and 4 will be displaced by the duplication length and will not be overwritten.

- duplicate the selected track(s).
- close the dialog without making any changes.

Bar Insert [Edit - Bar Insert...]

This dialog lets you insert a bar(s) into the specified track(s) and displace any existing data that is present to the right of the start bar position (think of it as inserting a time delay).

Track - selects the <u>track</u> where the bar time is to be inserted. The default is the track that had the focus when the dialog was opened. If you want to insert the bars into all tracks, then check the *All tracks* button.

Bar - sets the *Start*, *End* and *Count* bar numbers where the bar(s) are to be inserted.

- insert the selected bars(s).
- close the dialog without making any changes.

Bar Remove [Edit - Bar Remove...]

This dialog lets you remove a bar(s) from the specified track(s) and displace any existing data that is present to the right of the start bar position (Think of it as erasing time from the track(s)).

Track - selects the <u>track</u> where the bar time is to be removed. The default is the track that had the focus when the dialog was opened. If you want to remove the same bars from all tracks, then check the *All tracks* button.

Bar - sets the *Start*, *End* and *Count* bar numbers which are to be removed. If you want to remove all the bars from the track then press the *All bars* button.

- remove the selected bar(s).
- close the dialog without making any changes.

Bar Transpose [Edit - Bar Transpose...]

This dialog lets you <u>Transpose</u> the specified MIDI note data in the selected track(s). The dialog controls have the following functions:

Track - selects the <u>track</u> where the MIDI note data is to be transposed. The default is the track that had the focus when the dialog was opened. If you want to transpose the same bars in all tracks, then check the *All tracks* button.

Shift - selects the amount the MIDI note data is to be transposed. A positive value raises the pitch, a negative value lowers the pitch. *If transposing a note on a percussion track then this will move the percussion note to a different percussion sound.*

Bar - sets the *Start*, *End* and *Count* bar numbers to be transposed. The *All* bars button sets the Start/End to the whole track(s).

- transpose selected bar(s).
- close the dialog without making any changes.

Transpose [Edit - Transpose...]

This dialog lets you <u>Transpose</u> the selected MIDI note data. The dialog controls have the following functions:

Shift - selects the amount the MIDI note data is to be transposed. A positive value raises the pitch, a negative value lowers the pitch. *If transposing a note on a percussion track then this will move the percussion note to a different percussion sound.*

- transpose the selected MIDI note data.
- close the dialog without making any changes.

Quantize [Edit - Quantize...]

This dialog lets you $\underline{\text{Quantize}}$ the selected MIDI note data. The dialog controls have the following functions:

Level - selects the quantization level to be performed on the note data.

- quantize the selected MIDI note data.
- close the dialog without making any changes.

Bar Quantize [Edit - Bar Quantize...]

This dialog lets you $\underline{\text{Quantize}}$ the specified MIDI note data in the selected track. The dialog controls have the following functions:

Level - selects the quantization level to be performed on the note data.

Bar - sets the *Start*, *End* and *Count* bar numbers to be quantized. The *All* bars button sets the start/end to the whole track.

- quantize the selected bar(s).
- close the dialog without making any changes.

Control - Mode

This dialog lets you change the mode of the specified track from *Polyphonic* to *Mono*. The dialog title includes the name of the <u>Editor window</u> and the track that will be affected by the changes.

Position - sets the track position where the data is to be edited.

Mode - sets the mode to *Polyphonic* (several notes can play at the same time) or *Mono* (only one note can play at the same time).

- sets the mode value at the selected position.
- deletes the mode value at the selected position. The delete button is disabled if no mode event exists at the specified position.
- closes the dialog window and discards any changes not actioned by the **Set** and **Delete** buttons.

Control - On/Off

This dialog is used to switch on / off *Portamento, Sostenuto, Soft* or *Hold*. The dialog title includes the name of the <u>Editor window</u> and the track that will be affected by the changes. To open the dialog for *Portamento,* press and hold down the [Shift] key while double clicking on the *Portamento* control strip (or you can press [Shift] + [Enter] from the keyboard).

State - sets the state of the selected control to on or off.

- sets the on/off value at the selected position.
- deletes the on/off value at the selected position. The delete button is disabled if no on/off event exists at the specified position.
- closes the dialog window and discards any changes not actioned by the **Set** and **Delete** buttons.

Control - Tone (GS only)

This dialog lets you change the characteristics of the currently selected instrument. All values are relative to the current instruments pre-set characteristics. The dialog title includes the name of the <u>Editor window</u> and the track that will be affected by the changes.

Position - sets the track position where the data is to be edited.

Vibrate - sets the various vibrate values:

TVF - sets the various Time Variant Filter values.

<u>TVF & TVA Envelope</u> - sets the various Time Variant Filter and Time Variant Amplifier Envelopes.

- write the changes to the track at the specified position.
- deletes the currently selected tone change. The button is disabled if there is no tone change at the selected position.
- Sets all the tone parameters back to zero, the default.
- plays a middle C note so that you can here the effect of the tone changes before committing them. You can also sample the tone changes If you have a keyboard connected to your MIDI input port.

{bnclosu.bmp}closes the dialog and discards any changes not actioned by the **Set** and **Delete** buttons.

Note: tone changes remain in effect throughout the whole track, even if a new instrument is selected. To cancel the tone changes, you must set a **default** tone change to revert back to the sound of the original instrument.

Rate - sets the rate at which the sound vibrates. A positive value makes the instrument sound vibrate more quickly, a negative value more slowly.

Depth - sets the depth of the vibration. A positive value increase the vibration depth, a negative value decreases it.

Delay - sets the time delay before the instrument sound starts to vibrate.

Cutoff - sets the cutoff frequency point of the filter. A positive value increases the cutoff frequency, a negative value decreases it.

Resonance - sets the amount of resonance that the instrument sound has.

Attack - alters the attack of the instrument sound. A positive value reduces the attack envelope (makes the instrument sound fade in), a negative value increases the attack (makes the instrument sound instantaneously).

Decay - sets the rate at which the instrument sound decays after the initial attack envelope.

Release - sets the time for the instrument sound to fade after a note has finished playing.

Control - Time Signature

This dialog lets you set the *Time Signature* for all the tracks. The dialog title includes the name of the <u>Editor window</u> that will be affected by the changes.

Bar - sets the bar start/end range that will be affected by the time signature change. The *Link* check button causes the <u>Track window</u> to scroll as the bar start position is changed so that the bar start position is always visible.

Beat - sets the time signature beat count and beat type. You cannot set a time signature that is less than one quarter note.

- writes the time signature to the <u>Conductor track</u>. After the time signature is written, Audition must recalculate the note ties in all the tracks as this action may have moved the bar boundaries.
- closes the dialog and discards any changes not actioned by the **Set** button.

Control - Key Signature

This dialog lets you set the *Key Signature* for all the tracks. The dialog title includes the name of the <u>Editor window</u> that will be affected by the changes.

Bar - sets the bar position where the key signature is to be placed. The *Link* check button causes the track window to scroll as the bar start position is changed so that the bar start position is always visible.

Key - sets the key signature value. Set the number of sharps or flats that are present in the required key signature and whether the key is major or minor. The selected key signature is shown at the bottom of the group of controls.

- write the time signature to the <u>Conductor track</u>.
- deletes the key signature at the selected position. The button is disabled if there is no key signature event at the selected position.
- closes the dialog and discards any changes not actioned by the **Set** button.

Control - Instrument

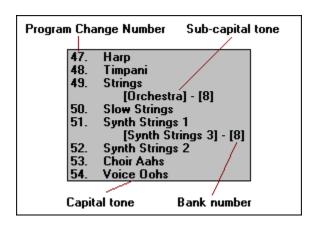
This dialog lets you select the *Instrument* (Program Change) that is to be played in the track. The dialog title includes the name of the <u>Editor window</u> and the track that will be affected by the changes.

Position - sets the track position where the data is to be edited.

<u>Instruments</u> - selects the instrument that you want to play in the track. If in **GS mode** (see <u>System - Configuration</u> dialog) the buttons at the bottom of the list let you select the instrument group. If the track is set as a percussion track then the drumset names are displayed.

- writes the instrument program change and bank number into the track.
- deletes the selected instrument at the specified position. The button is disabled if no instrument exists at the current position.
- closes the dialog, discarding any changes not actioned by the **Set** and **Delete** buttons.

If GS mode is selected, then all the capital and sub-capital instruments are shown as illustrated in the diagram below.



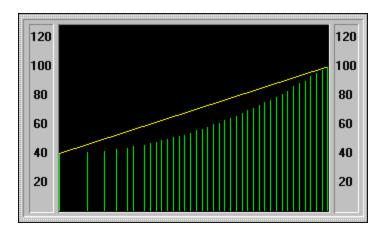
As you select the different instruments from the list, the actual sound will be played through the sound card or sound module.

If General MIDI mode has been selected, then non of the sub-capital tones will be displayed as these are an extension to the General MIDI specification.

Control - Profile

This dialog lets you set the *Profile* of the following MIDI controls: *Volume, Expression, Pan, Modulation, Reverb, Chorus, Pitch Bend, Portamento, Master Volume* and *Tempo*. The profile can be set to linear, exponential or logarithmic attack/decay which will allow for smooth natural increases/decreases in the control values as well as abrupt changes.

The current profile of the control is shown in the centre area of the dialog for the selected bar range as shown below, the *Control View* window. The picture shows an exponential profile starting at 40, ending at 100, with 40 steps.



To the left and right of the *Control View* window are the scale areas which are used for dragging the yellow *Control Level* line to the required start / end position. This line may also be positioned by setting the *Start* and *End* values.

Below the *Control View* window are the bar start and end position controls that let you position the start and end position of the *Control View* window. The edit control marked *Steps* in the centre is where you select the number of control changes you require to make up the control profile. The default is 1, which will give you a single control change value when you press the *Lin* followed by the *Set* button.

Menu options - the menu lets you set the profile into *Auto Track* mode and *Show Scale* mode. The *Auto Track* mode refreshes the control level line and *Steps* counter every time you change the bar start/end values. The *Show Scale* mode draws a vertical line for each bar boundary on the "Control View" window.

Event - these buttons let you step to the next or previous events on the appropriate side of the *Control View* window.



calculates a linear profile between the selected points using the specified number of steps.



calculates an exponential profile between the selected points using the specified number of steps.



calculates a logarithmic profile between the selected points using the specified number of steps.

- writes the data contained in the Control View window into the specified track.
- deletes the control events between the specified start/end bar values. The button is disabled if there are no events within the specified bar range.
- closes the dialog and discards the changes not actioned by the **Set** and **Delete** buttons.

Control - Pitch Bend Sensitivity

This dialog lets you set the *Sensitivity* of the *Pitch Wheel*. It is opened by pressing and holding down the [Shift] key and double clicking on the *Pitch Bend* control strip (or you can press [Shift] + [Enter] from the keyboard). The dialog title includes the name of the <u>Editor window</u> that will be affected by the changes

Position - sets the track position where the data is to be edited.

<u>Sensitivity</u> - sets the sensitivity of the pitch wheel data in semitones.

- writes the *Pitch Bend Sensitivity* value to the track.
- deletes the selected pitch bend sensitivity value. The button is disabled if there is no *Sensitivity* value at the selected point.
- closes the dialog and discards any changes not actioned by the **Set** and **Delete** buttons.

The default sensitivity is two semitones which means the pitch of the note can be bent by plus/minus two semitones. The sensitivity range is from 0 to 24 semitones (two octaves). Setting a value of zero disables pitch bend.

Accelerator keys allow you to quickly access menu options. (e.g. [Shift] + [F12] sets the display resolution to Demisemiquaver (1/32) and is equivalent to selecting **View - Demisemiquaver** (see <u>Keyboard and Mouse</u>).

A track can be considered to be a section of a piece of music played by one instrument. Often there is just one instrument on a track, played through one channel of the sound card (e.g. piano). However you can change an instrument as often as you want at any point in a track. You can also play two tracks through one MIDI channel of the sound card providing both tracks are set to the same instrument.

The track selection list displays the track number followed by the assigned MIDI channel number, and the track title. Example: **2:5 Bass Line** means track 2, assigned to MIDI channel 5, title "Bass Line".

To make a very long note, start by placing the end of the note first, followed by the start of the note. No click the Tie Cursor on the earliest of the notes.	ЭW

The velocity determines how loud or quiet the note is played.

This is the actual space a note occupies on the music stave. For instance, a crotchet note occupies 1/4 of the bar if the time signature is 4/4. If the note has a 66% slur, then the note will play for 2/3 rds of the true note width, followed by a gap of 1/3 rd.

The timing of MIDI notes and data is measured in MIDI clocks. Audition uses 96 MIDI clocks for a quarter note. The smallest note that can be displayed is a Demisemiquaver (1/32) which is 12 MIDI clocks.

Displaces the note data by the specified amount. For instance, if a note is transposed by +12, this will increase it's pitch by one octave. A transposition of -24 will decrease the notes pitch by two octaves. If transposing percussion notes, this will shift them to a different percussion sound (e.g. transposing "Low Tom 1" by +7 will move the notes to "High Tom 1").

The MIDI input port, on your sound card or sound module, is used to connect keyboards and other external MIDI input devices. The MIDI output port is used for connecting other sound modules so that you can extend the sound capabilities of your system. For instance, if you wanted to use the sounds of another manufacturers drum machine, then you would connect this to your sound card or sound modules MIDI output port, and mute the channel of the GS sound card that the drum machine is assigned to.

The Control Change group includes Bank Select, Modulation, Portamento Time, Data Entry, Volume, Pan Pot, Expression, Hold1, Portamento, Sostenuto, Soft, Legato Control, Reverb, Chorus, NRPN (Non Registered Parameter Number), and RPN (Registered Parameter Number).

A Program Change event changes the instrument on a MIDI channel.

The Conductor Track appears at the top of the Editor window, above track 1, and is marked with a $\bf C$ in the track title area. The Conductor always you to set parameters that affect all tracks, namely Master Volume (GS only), Tempo, Time Signature and Key Signature.

This aligns the notes on the specified note boundaries. This is useful as it can eliminate timing errors in your playing. However, too much quantization can make the music sound mechanical, which may not be desired, so it is best to use Demisemiquaver (1/32) or Semidemisemiquaver (1/64) quantization levels to give a more humanized sound.