QuickScore Elite

for Microsoft Windows
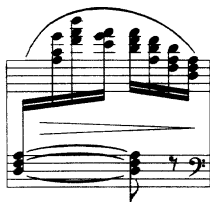
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Getting Started

Introduction

QuickScore Elite is software for composing music — a powerful and integrated scoring and sequencing program together in one package.
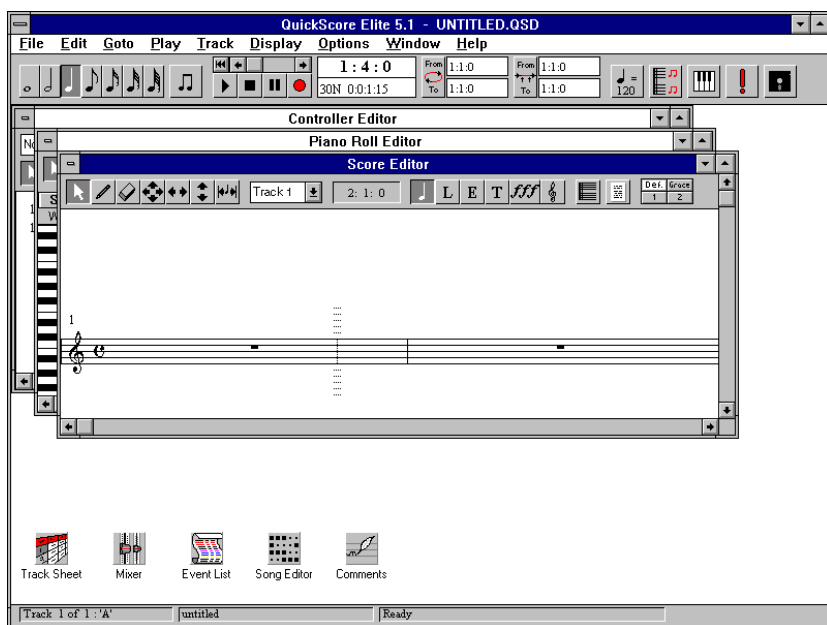
There are eight different ways to view and edit your music, each contained in a separate window.

- The **Score Editor** displays music and allows it to be edited in standard music notation.

- The **Piano Roll Editor** displays music in piano roll format.

- The **Controller Editor** lets you enter and edit continuous data like controllers, tempo, note velocities and pitch bend.

- The **Track Sheet** is for naming, moving, deleting and editing tracks and track parameters.

- The **Mixer** is for mixing tracks in real time, changing parameters like volume, pan or pitch bend.

- The **Event List** allows you to see and edit all the musical events present in your composition.

- The **Song Editor** displays an overview of your music as a string of colored bars filled with notes and other musical data.

- The **Comments Window** allows you to insert your written notes about each composition.

Each window can be moved and resized. All of these windows exist within a frame window that is always visible, showing a control area with tape recorder-style controls, the current song position, loop and punch-in and punch-out times, as well as other settings which affect all of the windows.

QuickScore Elite is compatible with all Windows sound cards and MIDI interfaces. It reads and writes standard MIDI files and it will print high quality music notation on all Windows compatible printers.

About This Manual

This section describes how this manual is organized and explains the style conventions used throughout the manual.

Manual Structure

This manual contains four principal sections:

- **Getting Started** — This section contains an overview of QuickScore Elite, system requirements, installation and registration.

- **Tutorials** — This section provides a systematic way of learning to use QuickScore Elite. You can also use the tutorials to quickly find out how to accomplish common tasks.

- **Reference** — This section gives detailed information on all of QuickScore Elite's windows and menu items.

- **Appendices** — This section gives information on system files, MIDI, technical support, and troubleshooting.

Typographical Conventions

The following two sections explain the typographical conventions used in the manual.

Keyboard Conventions

- **A** bold capital letter indicates a **key** on your keyboard.

    - Example: **P** indicates the **P** key.

- **ALL CAPITAL LETTERS IN BOLD TYPE** indicate special keys on the computer's keyboard.

    - Examples: **HOME**, **ENTER**, **PAGE UP, ALT**, **ESC**, **F12**.

- A *key combination* is when two or more keys are used in combination with each other. This is indicated with a + (plus) between the keys to be used in combination.

    - Example 1: **SHIFT**+**U** means press and hold down the **SHIFT** key while you press the **U** key.

    - Example 2: **CTRL**+**X** means press and hold down the **CTRL** key while you press the **X** key.

    - Example 3: **ALT**+**SHIFT**+**Y** means press and hold down the **ALT** key while you press and hold down the **SHIFT** key while you press the **Y** key.

- **Bold type**, which is enclosed in quotation marks and is immediately preceded by the word "**type**", denotes anything that you must type *exactly as it appears* (Do not type the quotation marks.)

    - Example: Type '**a:install**'.

General Conventions

- Initial Capital Letters denote names of items within the program such as windows, menus, menu items, dialog boxes, and buttons, etc. They also denote names of things outside the program.

    - Examples: Piano Roll Editor, Play Score button, File menu, Windows.

- **Bold type** denote a selection which must be made from a menu, dialog box, etc. **Bold type** is also used to emphasize certain items.

    - Example 1: Click on the **Yes** button.

    - Example 2: Select the **Record Options** menu item.

    - Example 3: Choose the **pencil** tool.

- ALL CAPITAL LETTERS denote the name of a file or directory.

    - Example 1: CANYON.MID denotes the name of a file.

    - Example 2: QSEWIN denotes the name of a directory.

- *Italics* indicate the title of a book or magazine. *Italics* are also used to emphasize certain words.

    - Example 1: *Windows User's Guide*

    - Example 2: Read this *carefully.*

System Requirements

QuickScore Elite requires a 33 MHz 386 or faster Windows compatible computer and a minimum of 4 megabytes of RAM to operate. A 33 MHz 486 or faster machine with 8 megabytes of RAM is recommended. Windows 3.1 or greater is required.

Installation

QuickScore Elite comes on two floppy disks. To install QuickScore Elite, put the first disk into your disk drive, make sure **Windows** is running and select **Run** from the **Windows Program Manager File** menu.

- Type "**a:install**" if your floppy disk is in **drive A**.

- Type "**b:install**" if your floppy disk is in **drive B**.

Press **ENTER**. QuickScore Elite will now install itself onto your machine.

When QuickScore Elite installs itself, you will be asked a number of questions. In most all cases, the answer should be obvious.

When the installer starts, you are given the choice to install QuickScore Elite or not. Make sure **Install QuickScore Elite** is selected and click on the **OK** button.

Answer **Yes** to "**Do you wish to install the QuickScore Demo .QSD files?**" if this is the first time that you are installing QuickScore Elite. If you've already installed these files to the directory in which you are now installing QuickScore Elite, you can answer **No** if you like.

Next you must select the drive onto which you wish to install QuickScore Elite. Normally you will choose one of your fixed drives. Usually this is **drive C**. You need at least 5.0 megabytes free on the drive on which you want to install QuickScore Elite. When you've selected the drive you want, click on **OK.**

Choose the installation directory for QuickScore Elite. This is where QuickScore Elite will put all its files. If you don't like the default QSEWIN, you can type in a different directory.

The installer will next check to see if you have already installed QuickScore Elite to the directory you specified. If it detects a prior installation you will be asked if you want to proceed. Note that the settings for the last

installation of QuickScore Elite (MIDI setup, Metronome settings, etc.) will be conserved if you proceed.

If you go ahead, QuickScore Elite will proceed to install itself in your installation directory.

Next you are advised that QuickScore Elite needs the **Mozart TrueType font**. If you already have this font on your system (probably because you installed a previous version of QuickScore), you can reply **No**. You can also reply **No** if you want to install the font yourself from Windows. The Mozart font is in the file MOZART.TTF in the installation directory. If you want to install the font yourself, see the section on installing fonts in your *Windows User's Guide.*

Finally you are asked if you want to create a program group for QuickScore Elite. Normally you will reply **Yes**. You can reply **No** if you already have a program group for QuickScore Elite that is properly set up.

That's it! QuickScore Elite is now installed on your computer. Before you quit the installation program, take a look at the **readme file** (click on **Yes** when you are asked if you want to look at it) to see if there is anything that is not in the manual that you should know about. You can print this file (it is the file README.DOC in the directory in which you installed QuickScore Elite) by loading it into the Windows Notepad and printing it from there.

Registration

Make sure you fill out and send in your registration card. It is important that you are in our database so that we can provide you with technical assistance when you need it. If you haven't sent in your registration card, we can only give you limited assistance in setting up QuickScore Elite. Sending in your registration card will also help us know who you are so we can send you information about product updates and special offers.

Testing Your MIDI Setup

When you have installed QuickScore Elite, you should test that it will play properly with your setup.

Start QuickScore Elite by double-clicking on the **QuickScore Elite** program icon. Click on the **File** menu and choose **Open**. Double-click on the file **TEST.QSD** to load this file. Press the **SPACE BAR** to play this file.

If you hear music, all is well. If not, check that QuickScore Elite is using the right **MIDI driver**. Click on the **Options** menu and choose **MIDI Setup** Make sure **MIDI out** is set to the correct driver. If the driver you want is not selected, select it by clicking in the drop-down list box and clicking on the driver. Now try playing again.

If you don't hear music, maybe you haven't set up your computer properly to play music. To check, close **QuickScore Elite** and load the **Windows Media Player**. (It is in the **Windows Accessories** group.) Load a MIDI file. (When you go to open a MIDI file, you will see CANYON.MID, which comes with Windows.) Try playing this file with the Media Player by clicking on the **play** button. If you hear sound, you know that your computer is properly hooked up. If you don't, you must first set things up properly before QuickScore Elite can work.

You must have an appropriate **MIDI driver** loaded on your system for your **MIDI interface** or **sound card**. If you have a MIDI interface, make sure all your connections are as they should be. Refer to the discussion of the Control Panel in your *Windows User's Guide* for details on Windows MIDI drivers.

Note: If you choose **MIDI Mapper** in the **MIDI out** list box in the **MIDI Setup** dialog, you must make sure the **MIDI Mapper** is set up correctly. Refer to the discussion of the MIDI Mapper in your *Windows User's Guide* for more details.

Overview

This chapter provides a basic description of QuickScore Elite's components and how you use them.

Windows, Menus and All That

QuickScore Elite runs under Windows 3.1 or greater and follows the conventions of Windows programs. For information beyond what is provided in the next few sections regarding windows, menus, dialogs or any other standard Windows Interface objects, check your *Windows User's Guide.*

Windows

QuickScore Elite has a **main window** (technically called an MDI frame window) and **eight child windows** inside the main window. When QuickScore Elite first starts up, three of these windows are *open*, cascaded on the top of the main window, and the other five windows are *minimized* with an icon representing each along the bottom of the main window.

QuickScore Elite's main window has a **control area** at the top with buttons and controls that affect all the child windows. At the bottom of the main window is a **status area** where information about the current track, the title of your composition and a description of menu operations is shown. Each of QuickScore Elite's child windows, with the exception of the Track Sheet and the Comments Window, also have a control area with controls that affect that particular window.

You can bring up any of the minimized windows by double clicking on its icon. You can make a window into an icon by clicking on the downward pointing triangle at the top right-hand corner of the window (the **minimize** button). You can make the main window fill the full screen by clicking on the upward pointing triangle at the top right-hand corner of the window (the **maximize** button). You can make a child window fill the main window by clicking on its **maximize** button.

Move between QuickScore Elite's windows by clicking on the window you want to move to. You can also move between windows by pressing **CTRL**+**TAB** (Hold down the **CTRL** key and press the **TAB** key).

Most of QuickScore Elite's windows have a **horizontal scroll bar** and a **vertical scroll bar** on the right-hand side. The **horizontal scroll bar** is used to move *back and forth in time*. The **vertical scroll bar** moves the display *up* and *down*. The exception is the Event List, where the vertical scroll bar moves back and forth in time. (There is no horizontal scroll bar in the Event List.)

Menus
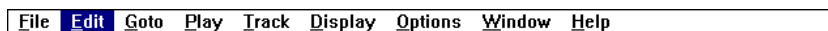
File	**Edit**	Goto	Play	Track	Display	Options	Window	Help

Along the top of QuickScore Elite's main window is the **menu**. You can select an item from the menu by clicking the mouse on the name of the menu you want to select from, and then clicking on the **menu item** you want from the menu that drops down. You can also select a menu by holding down the **ALT** key and pressing the key that is underlined in the menu name. When the menu drops down you can select a menu item by clicking on the letter that is underlined in the menu item name. There are also **menu shortcut keys**. These are written to the right in the menu item. For example, you can press **CTRL**+**N** (Hold down the **CTRL** key and press **N**) to select the **New** menu item under the File menu.

Sometimes clicking on menu items will bring up a **submenu**. You can tell when this will happen if the menu item has a right-facing arrow at its right edge. The submenu appears to the right of the menu when you click on the menu item. You can select items from the submenu just as you selected items from the menu.

If a menu item has three dots after the description, you know that clicking on the menu item will bring up a **dialog**. If there are no dots, selecting the menu item will cause an action to take place right away.

Print Preview in the File menu, all the items below the line in the Options menu, and the three Lock options in the Window menu act as **toggle switches**. When you select these items, a **check** will appear on the left-hand side of the menu item to show that the option is enabled. If you select the item again, the check disappears, indicating that the option is disabled.

One of the window names in the Window menu always has a check before it. This means that this window is currently selected. You can select a new window by clicking on its name in the Window menu.

Palettes

Palettes are groups of icons, one of which is selected. You select from a palette by clicking on the icon in the palette that you want.

There is a **toolbar** palette in some of the editing windows, where you select the tool that you will be using.

The Score Editor has an **object type** palette. When you click on the **symbol** button in the **object type** palette, a **symbol** palette appears from which you can select various symbols.

The Mouse

The **mouse** is your main tool when you use QuickScore Elite. You carry out the following actions with the mouse:

- You **position** the mouse by moving it until the pointer rests on whatever you want to point to on the screen.

- You **click** the mouse by pressing and releasing the mouse button without moving the mouse.

- You **double-click** the mouse by pressing and releasing the mouse button twice in quick succession.

- You **drag** the mouse by pressing down the button, moving the mouse with the button held down and then releasing the button.

- You **control-click** by holding down the **CTRL** key and then clicking the mouse on one or more objects while holding the **CTRL** key down.

When you have finished selecting objects with the mouse, release the **CTRL** key. Control-clicking is used to select a group of non-contiguous objects.

All of these operations can be done with the left or the right mouse button. *If not stated explicitly, assume that the left mouse button is implied.*

Editing Tools

The **Score Editor**, the **Piano Roll Editor** and the **Controller Editor** each have a palette of editing tools to the left in their control areas. To edit, enter, delete or move around objects you need to select the correct tool. The shape of the tool will give you some clue as to its function. Here is a brief rundown of the functions of the most used editing tools:

- Use the **arrow** tool to select objects for editing.

- Use the **pencil** tool to enter objects.

- Use the **eraser** tool to delete objects.

- Use the tools with the arrows on them to move objects around.

Objects

QuickScore Elite lets you enter and edit a wide variety of objects (sometimes called events). In the Score Editor you can enter and edit **notes**, **lyrics**, **expressions**, **text**, **symbols**, and **clefs**. In the Score Editor you choose the type of object you are dealing with by selecting it from the **object type palette** in the control area. In the Piano Roll Editor, you edit notes exclusively. In the Controller Editor, you can enter and edit **continuous controllers**, **pitch bend**, **aftertouch**, **note velocity**, **program changes** and **tempo changes**. In the Event List you can edit all of QuickScore Elite's objects. In the Controller Editor and the Event List you select the type of object you want to edit using the **data type list box** at the far left in the control area.

Entering Objects

You can enter objects in the **Score Editor**, the **Controller Editor** and the **Piano Roll Editor**. Make sure you have the **pencil** tool selected and then click the mouse on the window where you want to enter an object. (Use the object type palette in the Score Editor or the data type list box in the Controller Editor to select the kind of object you will be entering.) In the Score Editor and the Piano Roll Editor you can drag an object around with the mouse as you enter it to make sure of its proper positioning. In the Controller Editor, dragging the mouse while entering objects will enter a group of objects, each set at the position of the mouse as you dragged. The exception is when entering note velocity. You cannot actually enter new note velocities, so dragging across existing velocities will only set them to the height of the mouse.

If you have the **arrow** tool selected you can use the **right mouse button** to enter objects. In the Controller Editor and the Piano Roll Editor, this works the same as when you use the **left mouse button** with the **pencil** tool selected. In the Score Editor, a note or other object is entered at the cursor position at the height of the mouse and the cursor is advanced.

Selecting Objects

You can select objects in the Score Editor, the Controller Editor, the Piano Roll Editor, the Event List and the Song Editor.

- Select a **single** object by **double-clicking** on the object.

- Select a **contiguous group** of objects by **dragging** the mouse from the first object to the last object.

- Select a **non-contiguous group** of objects by **control-clicking** the mouse, clicking on the objects that you want to include in your selection. (You **control-click** by holding down the **CTRL** key and then clicking the mouse on one or more objects while holding the **CTRL** key down. When you have finished selecting objects with the mouse, release the **CTRL** key.)

When you have selected the object or objects you want, a menu will drop down to let you edit them.

Note: Double-clicking only works in the Score Editor, the Controller Editor, the Piano Roll Editor, and the Event List. Control-clicking only works in the Score Editor, the Controller Editor and the Piano Roll Editor.

The Cursor

The **Score Editor**, the **Piano Roll Editor**, the **Controller Editor**, and the **Song Editor** each have a **cursor**. The Event List has an implied cursor which is on the first event in the Event List window.

The **cursor point** is where notes are entered in step time using the mouse or the keyboard. It is the point where objects are pasted when you select **Paste** from the **Edit** menu. It is also the point where recording will start.

The **time** of the cursor is displayed in the **time display** in the middle of the **main control area**. The **track** that the cursor is on is displayed at the bottom of the main window in the **status area** at the left.

You can **move the cursor** by clicking the mouse in an editing window, by moving a horizontal scroll bar to change the display time, by clicking on the time display in the main control area or by changing the track. You can also move the cursor using the keyboard. See page 78, page 99, page 108, page 115, and page 127 for details.

In the Score Editor, the cursor appears as a vertical line across the staff with ledger lines above and below it. In the Piano Roll Editor and the Controller Editor, the cursor appears as a vertical magenta line across the window. In the Song Editor, the cursor appears as a box around the current bar.

You can *lock cursors* and *lock tracks* by setting the **Lock Cursors** and **Lock Tracks** options in the **Window** menu. When you do this, moving to a new time or track in one window will move all the others to the same time or track. This is handy for looking at the same music with the different views provided by different editors.

The Duration Value

The **duration value** is used for the duration of notes entered with the mouse or in step entry. It is also the amount the cursor will move forward or

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backward in the **Score Editor** and the **Piano Roll Editor** when you press the arrow keys or use step entry. If you click somewhere in the Score Editor or the Piano Roll Editor, the mouse will always move to a multiple of the duration value. You can make the mouse move the cursor freely in the Piano Roll Editor by setting the **Snap/Free** button below the toolbar to **Free**.

The **duration value** is chosen from the durations palette at the right-hand side in the main control area. Click on a **duration value** to select it. The **duration value qualifier** is set at the right of the durations palette. This can be set to **duple**, **triple** or **dotted**.

Display Quantization

The **display quantization** affects how notes are displayed in the **Score Editor**. You have to set the display quantization to something as small as or smaller than the smallest duration you are trying to display.

When notes are displayed quantized to a certain value, the start time for the note is displayed as a multiple of the quantization value and the duration of the note is displayed as a multiple of the quantization value. When **display quantization** is set to **64th**, the start times and durations of the notes will be multiples of 64th notes.

The **display quantization** can be set from the Display Bar, Display Track or the Display Score dialog, available from the **Display** menu. If you are displaying non-quantized music, you may have to experiment to find the most appropriate display quantization. If you are displaying quantized music, then you can use a very small **display quantization** value. **Triplet/32nds** is usually a good choice, as triplets and duplets as small as 32nds will be displayed together correctly. If you want to display triplets , make sure you choose a **triplet quantization value**

Step Entry

Step entry can be done in the **Score Editor** or the **Piano Roll Editor**. To enable step entry, click on the **step entry** icon (the little piano) to select it. Now notes you play on your MIDI keyboard will be entered into QuickScore Elite's active window at the cursor point. The duration of the notes entered is the duration value set in the durations palette. After a note is entered using **step entry**, the cursor moves ahead by the duration value. **Step entry** always merges the entered note with the notes already in your track. You can step enter a chord, by playing the chord on your MIDI keyboard. Make sure you play the notes all at the same time and then wait a half second or so to play the next note or chord, so that successive notes or chords do not end up at the same time. (QuickScore Elite needs a gap between notes to distinguish them from imperfectly played chords.)

Playing and Recording

You play and record using the tape recorder-style buttons in the middle of the main control area.

- The black triangle on the left is used to **start play**.

     Play always starts from the beginning of the currently selected window. A shortcut for using the **play** button is pressing the **SPACE BAR**.

- The black square is used to **stop** play or recording.

     Pressing the **SPACE BAR** while the music is playing is equivalent to pressing the **stop** button.

- The button with the two black vertical lines is the **pause** button.

- The red circle is the **record** button.

     Recording always starts from the cursor position in the active window. (This is always shown in the time display in the main control area.) When recording, there will be a **count-in**, set from

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the **Metronome** dialog under the **Options** menu. The metronome can be *on* or *off* and the metronome sound can be controlled using the Metronome dialog. When you record in a track, the recorded data is normally merged with the data currently on the track. This is not the case, however, when **punch-in/punch-out** is selected. In this case, only the music between the punch points are affected, and the old music is replaced by the new music. (The old music is not merged with the new music.)

Tutorials

Starting Out

This tutorial will introduce you to QuickScore Elite and show you how to load files, enter and change notes in the Score Editor and change parameters in the Track Sheet.

Starting QuickScore Elite

Start up **QuickScore Elite** by double-clicking on its **program icon**
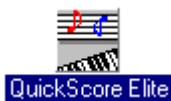
QuickScore Elite will appear on the screen. Inside the main window with its controls are three windows cascaded one on top of the other. The Score Editor is the topmost of these three windows. On the bottom of the main window are five more windows, which appear as icons.
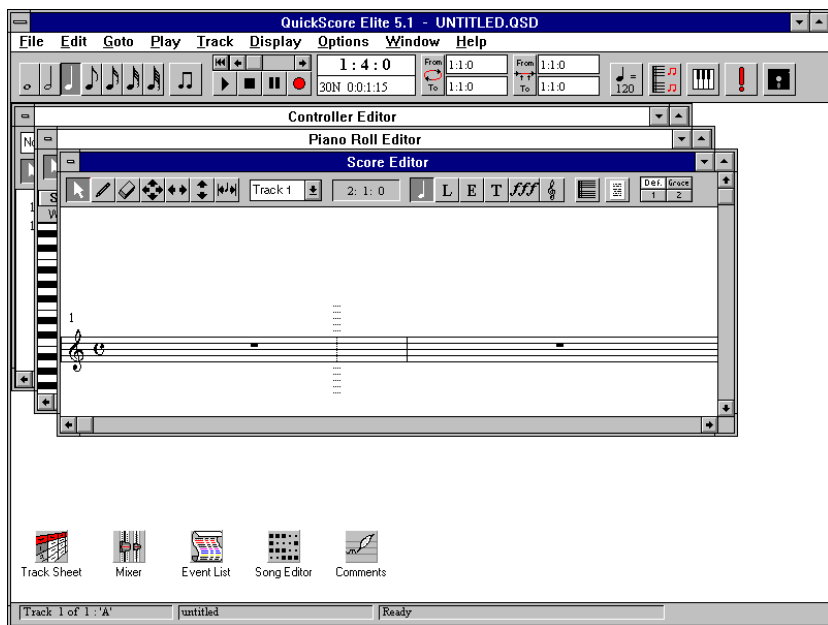
We will be working with the **Score Editor** at first, so let's maximize it. Click on the button in the top right-hand corner of the Score Editor's window with the triangle pointing up (the **maximize** button). Now the Score Editor will fill the screen. The Score Editor lets you enter and edit music in standard music notation.

Entering Notes With the Mouse

Let's start by entering a few notes. Select the **pencil** icon from the Score Editor's **toolbar** by clicking on it.

Now click the mouse once around the **first beat** of the **first bar**. You can tell where the mouse is in time by the **mouse time locator** in the control area of the Score Editor. As you move the mouse, the time will change. When the time reads **1:1:0**, this means the mouse is on the **first bar**, on the **first beat** and on the **0th** (first) **step**. A **quarter note** should appear where you click the mouse. Move the mouse a little further along on the staff. Check that the time reads close to **1:2:0** (close to the **start** of the **second**

beat). It doesn't have to be exact. Click the mouse again and another quarter note will appear close to where you clicked it.

We have been entering quarter notes, but now let's try entering some eighth notes. To do this you need to change the **duration value** in the **durations palette** in the main control area. Click on the **eighth note** to select it instead of the quarter note.

Now move the cursor near the **middle** of the **first bar** so the mouse time locator reads close to **1:3:0** and click in an **eighth note**. Move over half a beat or so so that the mouse time locator reads close to **1:3:48** and put in another note. You should now have two eighth notes in the third beat of bar one.

Moving Music with the TAB Key

If you don't like where a note appears on the screen, you can move it with the **TAB** key. Click the right mouse button on the note to put the cursor on top of it. The **cursor** appears as a vertical line across the staff with ledger lines above and below it. Press the **TAB** key to move the note forward. Hold down the **SHIFT** key and press the **TAB** key again and the note will move back to where it was before. Note that all notes after the cursor will move back and forth by the **duration value** set in the **durations palette** when you press **TAB** and **SHIFT**+**TAB**.

Step Entry

Now let's try to enter some notes from your MIDI keyboard. (If you don't have a MIDI keyboard attached to your computer, you can skip this part.) Select the **step entry** icon (the little piano icon, third from the right, in the main control area) by clicking on it.

Now move the cursor to the **first beat** of the **second bar**. You can do this by clicking the right mouse button at the start of this bar or by moving the

cursor with the left and right arrow keys. Let's enter some sixteenth notes, so click on the **sixteenth note** in the durations palette to set the **duration value** to **sixteenths**. Now play four notes one at a time on your keyboard. The four notes you played will appear as sixteenth notes on the first beat of the second measure. After each note is entered, the cursor moves over by a sixteenth note (the duration value) so you can enter another note.

Now press the **SPACE BAR** to play your piece. You can also play the piece by clicking on the**play** button in the main control area.

Moving Notes Around

Chances are you aren't completely satisfied with your piece just yet. Let's change some of the notes so they sound a little better. To do this select the **NSEW** tool (the one with the four arrows) from the toolbar.

Now click on a note and drag it around (hold the left mouse button down on the note, move the mouse and then release the button). You can drag it up and down to change its pitch or back and forth to move it around in time. Try changing a few notes this way. You can also use the other tools with arrows on them (the **NS** and the **EW** tools) to move notes. The **NS** tool moves notes up and down in pitch and the **EW** tool moves notes back and forth in time.

Saving Your Work

Now let's save your work to a file. Click on the **File** menu and select the **Save** menu item. Let's call this file MYFILE.QSD. Type "**myfile.qsd**" in the file name box and press **OK**. The first time you save a file you are always asked to name the file. Afterwards the file is automatically saved under the name you last saved it. If you don't save your work it will be lost when you quit QuickScore Elite or when you load a new file. Now that you've saved your work you can come back and work on it later.

Loading a New File

Let's load in a file that was already created. Click on the **File** menu and select the **Open** menu item. Select the file BRAND41.QSD.
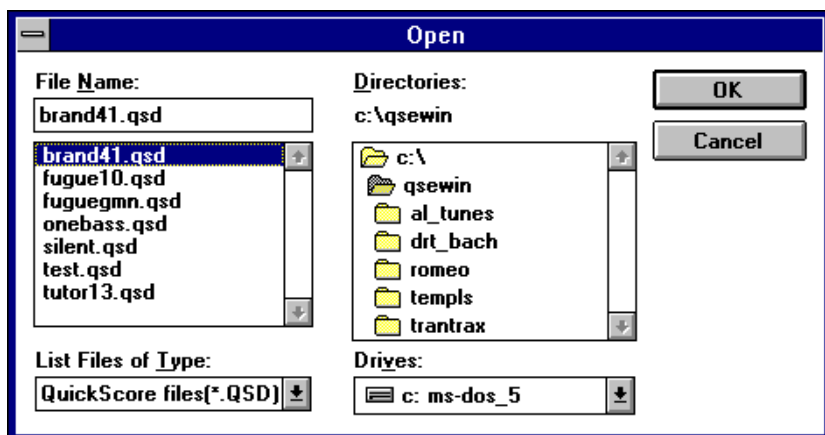
You can select it by clicking on its **name** and then clicking on **OK**, or by double-clicking on its **name**.

Playing

When this file loads, let's play it to hear what it sounds like. (Press the **SPACE BAR** or click on the **play** button.) As the file plays the display will scroll by, letting you see what the music looks like. You can stop playing by pressing the **SPACE BAR** again or by clicking on the **stop** button in the main control area.

While you play, you can look at the music in different windows. Choose a different window if you like by clicking on the **Window** menu and choosing the window you want by clicking on the window's name in the **Window** menu. You can also change windows by pressing **CTRL**+**TAB** (holding down the **CTRL** key and pressing **TAB**) or by unmaximizing the Score Editor window by clicking on the **maximize** button in the top right-hand corner of the window and then clicking on another window. If you want to open a window that appears as an icon at the bottom of QuickScore Elite's main window, double click on it.

The Track Sheet

When you have finished playing, bring up the **Track Sheet** by double clicking on its icon at the bottom of the main window or by selecting it from the **Window** menu. In the Track Sheet, you can change some global settings for your tracks. You can name tracks, mute or solo them when you play, and change the channel and the initial program change and volume.

Track	Name	Play	Solo	Mouse+Faders	Program	Vol
1	MIDI3	○		Channel 1	67 - Baritone Sax	-
2	MIDI4	○		Channel 1	-	-
3	MIDI5	○		Channel 1	-	-
4		○		Channel 1	-	-
New						

Track Sheet

Changing Programs

Let's change the programs to something interesting. Click on the **Program** for **track one** and select something new. Press the **HOME** key to move back to the beginning of the piece and try playing again to see what your new program sounds like.

When QuickScore Elite first starts, the program names are set for **General MIDI instruments**. If you have a General MIDI synth or sound card the sound you get should sound like its General MIDI description. If yours is not a General MIDI instrument, the names *won't* correspond to the sounds in your instrument. You can change the program names by choosing **Patch Lists** from the **Options** menu and selecting a **patch list** for your instrument. If your instrument isn't in here, you can make up a patch list for it. See "Patch Lists" on page 204 and "PATCHES.INI" on page 217 for details.

Setting the Volume

Now let's set the **volume** for all the tracks to a low value Let's try **50**. Press the **HOME** key and the **SPACE BAR** to hear the effect. Try setting the **volume** to **127** (the maximum) and listen to the difference.

Conclusion

Feel free to look at the menus and at the other windows. Browse through some of the files that are included with QuickScore Elite and look at some MIDI files of your own, if you have any. (If you want to open MIDI files , select **MIDI file** in the **List Type** of the **File** drop-down list box at the bottom of the **Open File** dialog box. If you want to open QuickScore Elite's native files, select QSD file in this list box.) After you've opened a file or saved it, its name appears at the bottom of the File menu. You can quickly open this file again by clicking on its name.

When you want to leave QuickScore Elite, selec **Exit** from the **File** menu.

Score Editor Tutorial - Notes and Formatting

In this tutorial, we will enter some music in a file that has already been created, edit the music and then use some of QuickScore Elite's formatting features to change the way the music appears on the page.

To start, load QuickScore Elite and load the file FUGUE10.QSD by clicking on the **File** menu, selecting the **Open** menu item and then double-clicking on **FUGUE10.QSD** in the file window. This piece is *Fugue 10* from the *Well-Tempered Clavier* by J. S. Bach.

Let's start by maximizing the Score Editor. Click on the button in the top right-hand corner of the Score Editor's window with the triangle pointing up (the **maximize** button). Now the Score Editor will fill the screen.

Print Preview Mode

To see the titles for the piece, click on the **page** icon in the Score Editor's control area.

You now see the piece as it would appear when it is printed. This is called **Print Preview mode**. You *can't* edit when you are in **Print Preview mode**. Click on the **100%** icon beside the **page** icon and the whole page will exactly fit the window.
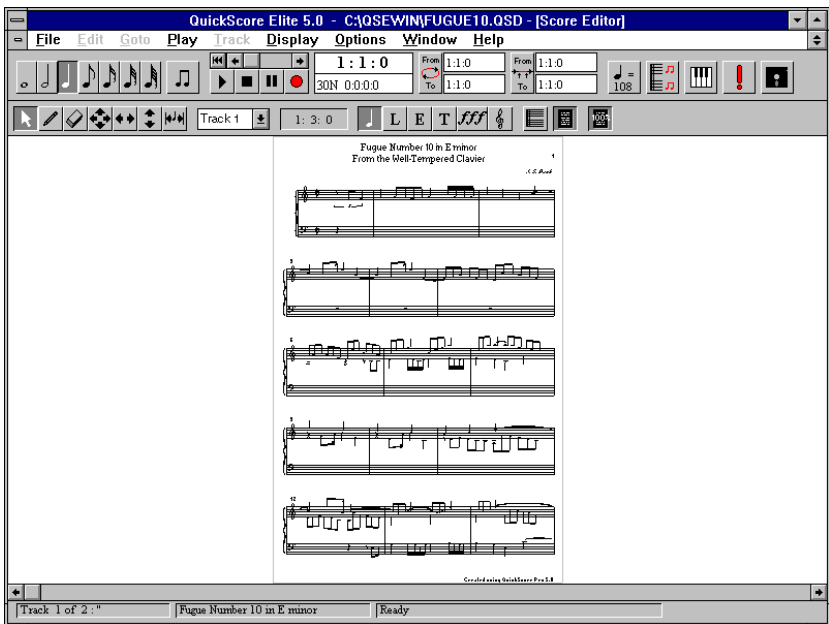
You probably won't be able to see each individual note (the display will be *greeked*) but you can see the complete layout of the page. You can scroll through the piece or play the piece in this mode.

Moving with the Scroll Bar

Let's go back to **Edit mode**. Click on the **page** icon again to do this. Now we are going to move to **bar 79** to do some note entry on this bar. Click on the **scroll box** in the horizontal scroll bar at the bottom of the window and drag it along the scroll bar by keeping the button down and moving the mouse. As the scroll box is dragged, the time display in the main control area will change, reflecting the time of the bar the scroll box is on. When the **time display** reads **79:1:0** release the mouse button. The display now shows **bar 78** and **bar 79**.
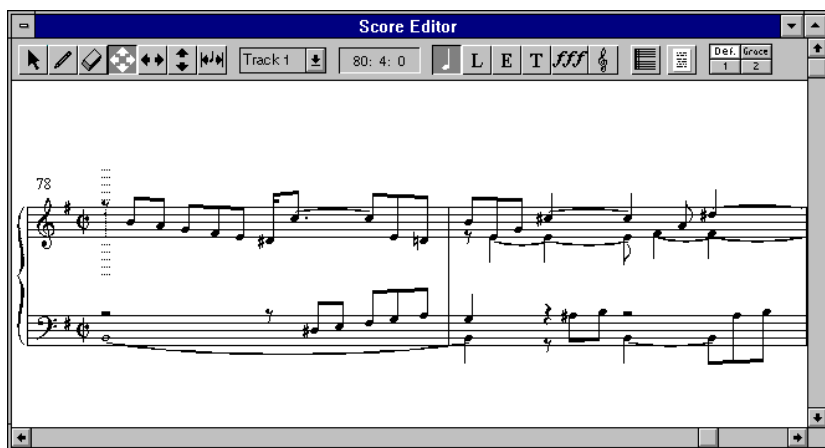
(The bar numbers in the score display are one less than what the time display shows. This is because in the piece the first bar is a pickup bar and bar numbering has been set to start at the second bar.)

Erasing a Block of Music

We are now going to **erase** the music in the **top staff** of **bar 79** and reenter it again to get an idea of entering music with two different voices on the same staff. To **erase** the music, click the mouse on the **top staff** at the **middle bar line**. Hold the mouse button down and drag the mouse to a point after the **last note in the bar**. Release the mouse button. Now the music you dragged over with the mouse should be highlighted in reverse video and an edit menu should drop down.
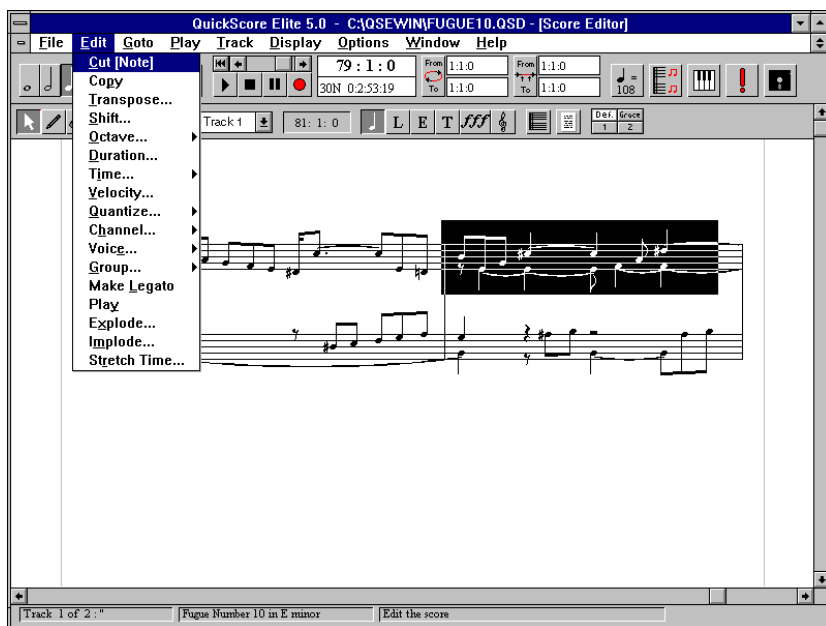
Select **Cut [Note]** from the menu. The highlighted music should disappear.

Using Undo

You can **undo** your last edit by clicking on the **Edit** menu and clicking on **Undo**. Give it a try even if you cut out the bar exactly the way you wanted to. Now select **Undo** again from the **Edit** menu. Your notes should be erased again. The undo feature is extremely useful if you make mistakes or you just want to see what things look like before and after doing an edit. If you didn't properly erase your music, you can click on **Undo** again and try it again.

Entering Music with Different Voices

Now we are going to put the music back in by hand to get an idea of how this is done. We'll start by selecting the voice. The voice palette is to the far right of the Score Editor's control area. It is initially set to **Def.** (meaning the default voice), but you can change it to **voice 1**, **voice 2** or **grace notes**. Notes entered on **voice 1** all have the stems pointing up. Notes entered on **voice 2** all have the stems pointing down. **Grace notes** are all small size notes. We want to enter two separate voices in this bar, one with stems up, the other with stems down, so we will enter them as voice 1 and voice 2. We will enter the top voice first, so choose **1** (for voice 1, with stems up) from the voice palette.

Entering Triplets

Before we start entering notes on voice 1, we want to set the duration value to eighth note triplets because we will be entering triplets. Click on the **eighth note** in the durations palette at the far left in the main control area and then click on the **duration qualifier** button (the button with the two eighth notes on it) to set it to **triplets**. There should be a group of triplet eighth notes shown on the button now.

Step Entry

Finally, select the **step entry** icon (third from the right in the main control area) by clicking on it.

OK, now we are ready to enter the first voice. If you have a MIDI keyboard attached to your computer you can use step entry to enter the notes. Otherwise you can enter them with the mouse. Step entry with the mouse is similar to step entry with the keyboard. Instead of using the keyboard, you click the right mouse button at the height you want the new note entered. The only difference is that you can only enter notes in key with the right

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mouse so you have to change notes that need accidentals afterwards. We'll go over step entry with the mouse first.

Move the cursor so it is exactly at the beginning of bar number 79. Make sure the **time display** in the main control area reads **80:1:0**. (Remember that the time display does not match up with the numbering of the bars in the score display because the piece starts numbering from bar two. The first bar is a pickup bar.) Now let's enter the notes. Move the mouse to the level of the note you want to enter and click the right mouse button. Follow the music shown in the graphic on page 26 to put in **B6**, **E5**, **G5**, and **C6**. Move the cursor with the **RIGHT ARROW** key four spaces and put in **A5** and **D6**. If you are step entering using the keyboard instead of the right mouse button, you can enter **C#6** and **D#6**. Otherwise you will have to change these notes.

Changing a Note's Pitch

To change the **C6** to a **C#**, select the **NS** tool (the one with the up and down arrows) from the toolbar. Click on the **C6** with the left mouse button and keep the button down. Now press the **UP ARROW**. The note will be raised to a **C#**. Release the mouse button. Click on the **D6** with the left mouse button and keep the button down. Now press the **UP ARROW**. The note will be raised to a **D#**. Release the mouse button.

All the notes we entered are still eighth note triplets. We have to put in their real durations. Do this in one shot by selecting all the notes you entered (do this the same way you did to erase the notes earlier) and choosing **Make Legato** from the edit menu that appears. Now all the notes will be extended to the beginning of the next note.

Let's put in the second voice now. Select voice 2 by clicking on the **2** in the voice palette at the far right on the Score Editor's control area. We only have two notes to put in. Move the cursor back to the beginning of the bar and press the **RIGHT ARROW** key once to move over by one triplet eighth note. Now change the **duration value** to a **half note**, because we are going to put in two half notes. Click the right mouse on **E5** and then **F5**. If you are using the keyboard, play these notes on the keyboard instead.

If all went well, you've put the notes back the way they were before you erased them. Click on the **step entry** icon again to disable step entry for the moment. This lets you play your keyboard without the notes ending up in your piece. Of course when you want to step enter music again from the keyboard, select the step entry icon again.

Spacing Barlines and Notes

Now select the **spacing** tool. This is the last tool in the palette.

You use the **spacing** tool to move bar lines around and move notes around on the page without affecting their position in time. If notes are on top of each other or covering up other symbols, you can rearrange them with the spacing tool. Move the mouse so that it is on top of the middle barline. Click the left mouse button and hold it down. You should see the barline selected. If you don't, try again with the mouse a little to the left or the right. When you've *grabbed* the barline move it around with the mouse. Release the mouse button and the music will respace itself with the barline in its new place. Grab a note the same way you grabbed a barline. You can move the note back and forth the same way, although you can't move the note too far away from its original position. Remember that moving notes with the spacing tool won't affect the timing of the notes.

Moving Rests and Ties

Let's move some rests and ties up and down just to see how this works. You do this using the Display Bar dialog. The Display Bar dialog is used for making changes that will only affect one bar. Make sure the cursor is on **bar 79** and select **Bar** from the Display Menu. The title of the dialog should read "**Display Bar 80 Track 1**".
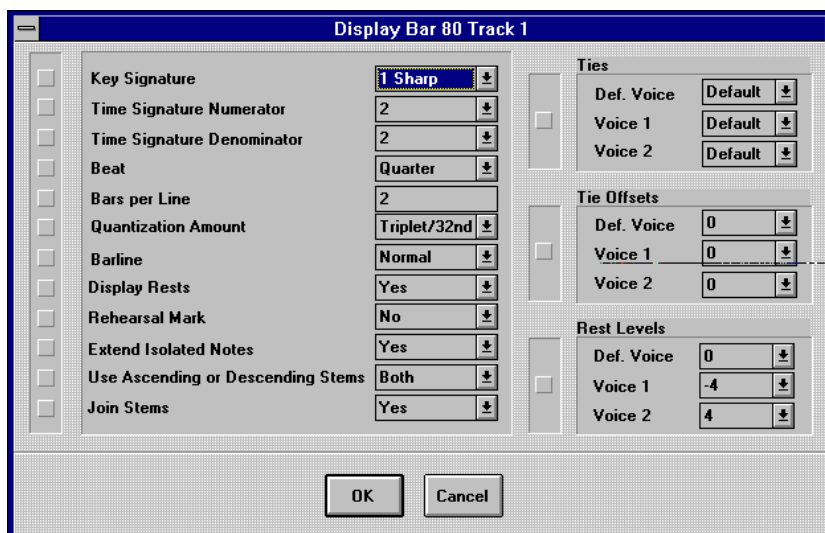
Change the **Rest Levels** settings for **voice 2** from **4** to **6**. Change the **Tie Offsets** for **voice 2** from **0** to **2**. Click on **OK**. Now you should see the eighth note rest at the beginning of the bar shift down two spaces and the ties for the notes in voice 2 also go down two spaces. In this case there is no point doing this, but sometimes rests or ties are on top of other music or symbols and it can be useful to move them. You can play with the levels of rests and ties but when you're finished, put them back the way they were and we'll go on to something else.

Now let's go back to Print Preview mode. Click on the **page** icon to do this. Move back to the beginning of the piece by pressing the **HOME** key

Bar Numbers

Note that the first bar has no number above it and the first bar on the second line is numbered **3**, instead of **4**. This is because the first bar is a *pickup bar*. Let's look at the Bar Numbers dialog to see how this has been set up. Click on the **Display** menu and select **Numbers** and then **Bar** from the submenu that appears to the right of the menu. Note that bar numbers are shown on **every line**, the first numbered bar is the **second bar** and the bar numbers are displayed **above the staff**. You can experiment with changing these settings if you like.

Page Numbers

Let's look at how page numbers have been set up. Click on the **Display** menu and select **Numbers** and then **Page** from the submenu that appear to the right of the menu. Page numbers are **displayed** starting on page **1**, starting at number **1** and they are at the **top right-hand** corner or each page. You can experiment with changing these settings if you like.

Titles

Now let's look at the titles. Click on the **Display** menu and select **Titles** and then **Score** from the submenu that appear to the right of the menu. (We are looking at the titles for the score, not for each individual part.) Note the **title** which appears at the center of the page at the top, the **composer** which appears at the right at the top and the **footer** which has been set at the right of the page. There is nothing defined for the **header** or the **copyright**. You can experiment with the titles if you like.

Indentation

Now let's look at some formatting options. Select **Page** from the **Display menu**. This brings up the Display Page dialog. Note the **indentation** of the **first system** is set to **10** spaces. (One space is about equal to half a character width.) Change this value and watch how the indentation of the first system on the first page changes.

Staff Spacing

Now let's change the staff spacing. Bring up the Staff Spacing dialog by clicking on the **Set Staff Spacing** button. You can move the bottom staff closer to the top staff by clicking the mouse on it and dragging it up and down. When you press **OK**, you will see the effect on your score. When you're finished dragging the staff around, you might want to set the staff spacing back to the default by clicking on the **Default Spacing** button.

Setting Up Braces

Now let's change the braces. Open the Braces dialog by clicking on the **Braces** button in the Display Page dialog. Lets change the bracing style to a bracket. Select track 1 and track 2 by dragging over the **1** and **2** in the **Track** list box. They should be highlighted in blue. Now select the **Bracket** from the **Brace Type** list box. Now you will see the curly brace in the window replaced by a bracket. If you like what you have done, press **OK** and the changes will show up in your score.

Display Quantization

Let's experiment with the display quantization, to show you how this affects the score display. Note that you have duple 16th notes and triplet eighth notes, sometimes both in the same bar. Click on the **Display** menu and choose **Score**. The Display Score dialog is where parameters that affect the whole piece can be changed. If you change something here and you set it to something else before using the Display Bar dialog or the Display Track dialog, the changes that you made before will be wiped out.

Note that the quantization is set to **Triplet/32nds**. This means that triplets and duple values as small as 32nd notes can be displayed at the same time. For fun let's set this to eighth notes and see what the display does. Click on the **Quantization Amount** drop-down list box and select **8th**. Click on **OK**.

That wasn't very nice, was it? Now the smallest resolution of notes you can see is eighths, not what we want at all. Set the quantization back to **Triplet/32nd** so we can get our notes back.

Using Engraver Spacing

There is one more thing that we will look at now in the **Display Score** dialog. This is engraver spacing. Note that **Use Engraver Spacing** is set to **Yes**, right now. Engraver spacing is used by the Score Editor to space music so that it looks good visually. Without engraver spacing, spacing occurs by time, rather than appearance. Crowding of music sometimes occurs, because you always put music occupying the same amount of time into the same amount of space. For example, eight thirty-second notes take up the same amount of space as one quarter note. The thirty-second notes are crowded together and the quarter note is all by itself. When you use engraver spacing, you assign the amount of space notes of each duration take up. For

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example, you can have thirty-second notes taking up only half as much as quarter notes. Your music will generally look better if you use engraver spacing. Change **Use Engraver Spacing** to **No** and see how this affects the appearance of the music. Afterwards, change it back to **Yes**.

Automatically Spacing Music

Finally, we are going to let QuickScore Elite respace our entire piece. Click on the **Display** menu and choose **Space Music**. QuickScore Elite will recalculate the bars per line and the positioning of bar lines automatically, based on the density of the music. Note that the **music spacing** is set to **16**, which is the default. The display of notes shows how many 16th notes would optimally be fitted onto one line. Let's try spacing our piece a little tighter. To do this, change the density of the music to **20** and click on **OK**. Wait a few seconds while QuickScore Elite recalculates everything. Now click on the **100%** icon and go to the end of the piece by pressing the **END** key. Now we have the piece on six pages, but the music doesn't exactly fill the last page. Let's go back to the **Space Music** dialog and change the density of the music to **16** again. Click on the **OK** button and wait a few seconds while QuickScore Elite recalculates everything. Go to the end of the piece by pressing the **END** key. This is page **8** and it is completely filled, which is what we want to see.

Conclusion

This concludes the first score editing tutorial. The next tutorial will show you how to deal with text, lyrics and symbols.

Score Editor Tutorial - Text, Lyrics and Symbols

The second score editing tutorial will show you how to enter and edit lyrics, expressions, text, symbols and clefs.

To start, load QuickScore Elite and load the file SILENT.QSD by clicking on the **File** menu, selecting the **Open** menu item and then double-clicking on **SILENT.QSD** in the file window. This piece is *Silent Night*.

Let's start by maximizing the Score Editor. If you haven't already done so, click on the button in the top right-hand corner of the Score Editor's window with the triangle pointing up (the **maximize** button). Now the Score Editor will fill the screen.

If you just finished the first score editing tutorial, you are probably still in Print Preview mode. We want to be in **Edit mode** so make sure the **page** button in the Score Editor's control area is *not* highlighted.
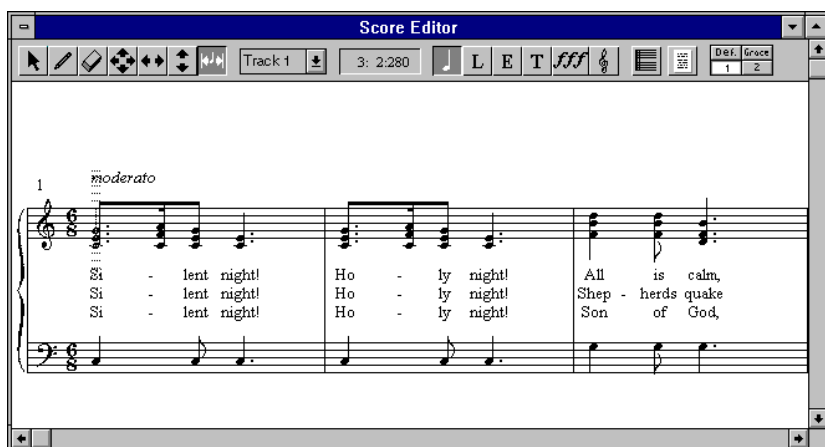
Deleting Lyrics

We'll start this tutorial by **deleting** the second line of text in bar three, "**Shep - herds quake**". We'll first select the **L** in the object type palette in the Score Editor's control area to put us in Lyric mode.
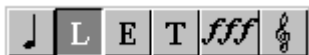
Select the **arrow** tool (the first tool) in the toolbar. Now we'll set the Lyric Filter by clicking on the **Edit** menu and selecting the **Lyric Filter** menu item. Put a **check** on **Use Filter** and then **uncheck Lyric 1**, **Lyric 3** and **Lyric 4**. We only want to edit Lyric2.
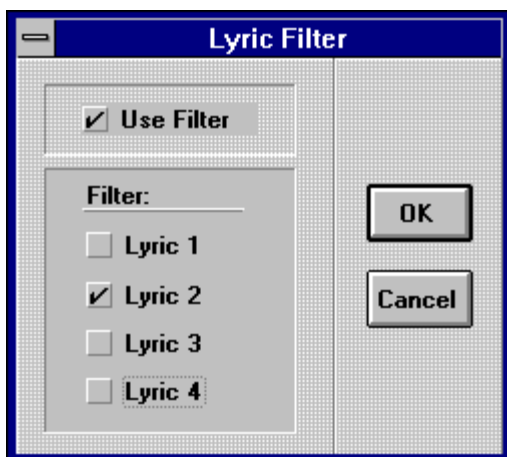
Click on the **OK** button.

Select **all** the **notes** in the **third bar** by dragging over them. Click the mouse on the **top staff** at the **beginning** of the **third bar**. Hold the mouse button down and drag the mouse to a point **after** the **last note** in the **bar**. Release the mouse button. Now the music you dragged over with the mouse should be highlighted in reverse video and an edit menu should drop down.
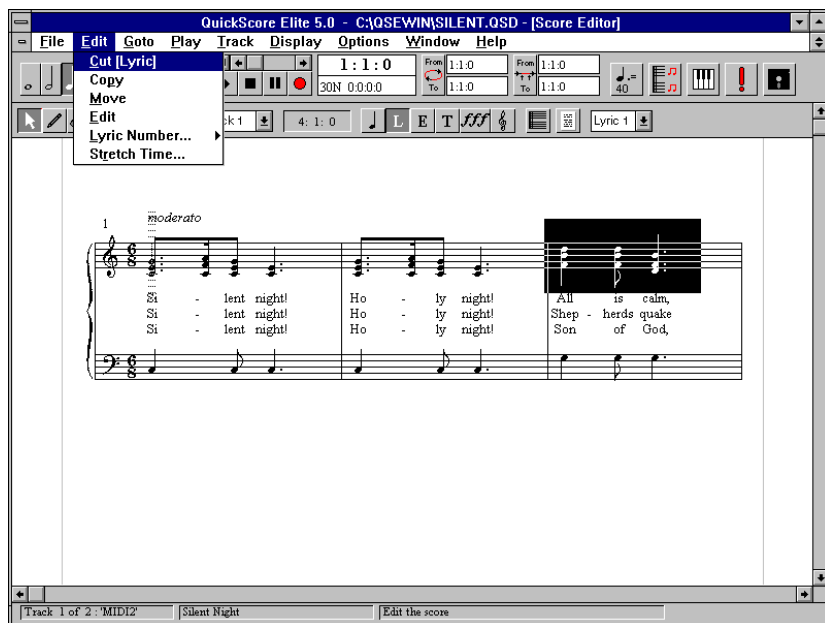
Select **Cut [Lyric]** from the menu. The second lyric line should disappear.

Entering Lyrics

Now let's reenter this line. Select **Lyric 2** from the **Lyric** drop-down list box at the far right of the Score Editor's control area (click on the list box and click on **Lyric 2**).
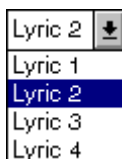
Select the **pencil** tool from the toolbar. Select the **eighth note** from the durations palette in the main control area. Make sure the duration qualifier

(to the right of the durations palette) is *not* showing a **triplet**. If you have a **triplet** for the duration qualifier (left over from the last tutorial), press **T** twice to set this back to a **duple** value. Click on the first note in bar three.

The lyric editing cursor should appear to let you enter the second lyric line for the first note in bar three.
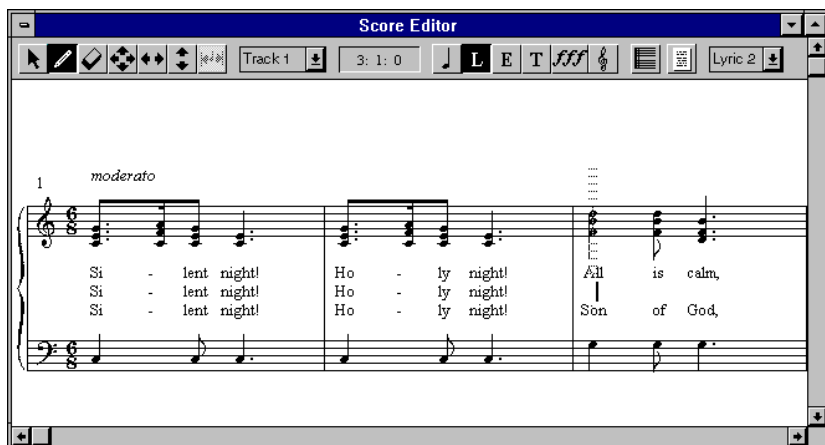
Type "**Shep**". Now we want to move to the next note, but we want to put a **dash** between this lyric and the next. We can move and put in a dash at the same time by typing **CTRL+-** (dash). (Hold down the **CTRL** key and press **-** (dash).) Now we have a dash between the first and second notes in the bar and we are ready to type in the lyric for the second note. Type "**herds**". Now press the **TAB** key to move to the next note without putting in a dash. Type "**quake**". Now select the **arrow** tool from the toolbar to stop entering lyrics.

Spacing Lyrics Vertically

Let's change the vertical spacing for lyrics using the Lyric Positioning dialog. Click on the **Display** menu, select **Page** and click on the **Lyrics** button at the bottom of the dialog. Put a **check mark** in the **Reposition lyrics** box and change the **Lyric 1 position** to **6** and leave the **Spacing** number at **5**. Click on **OK**. The lyrics will move up a couple of rows. (One row is equal to half the distance between two staff lines or two ledger lines.)

Editing Expression Text

Let's edit the "*moderato*" expression text in bar one. Click on the **E** in the object type palette. Now you can edit expressions. Double-click at the beginning of the "*moderato*" text. A box with a red arrow will appear to the left of the text and a menu will drop down from the edit menu. Select **Edit** from the drop down menu and a text editing dialog will appear.

Edit Expression

Enter expression:

moderato

OK   Cancel

Type "**allegro**" and click **OK**. The "*moderato*" expression text is changed to "*allegro*".

Entering Block Text

Now let's put in two blocks of text and set the fonts for each of these blocks. Click on the **T** in the object type palette to select Text mode. Select the **pencil** tool from the toolbar. Click the mouse just below the **second staff** of the **first bar**. A little box with a cursor inside it will appear.

Let's make this box a bit bigger. Move the mouse over the bottom right-hand corner of the box. The mouse pointer will change from a pencil to a double-ended arrow at 45 degrees. Click and drag the end of the box to the right and down. Let go of the mouse. Now the box should be a bit bigger. You can change the shape of the text box in this way any time you want to when you are editing text or entering text.

Now let's enter some text. Click inside the box and type " **Silent Night is a Christmas carol.**".
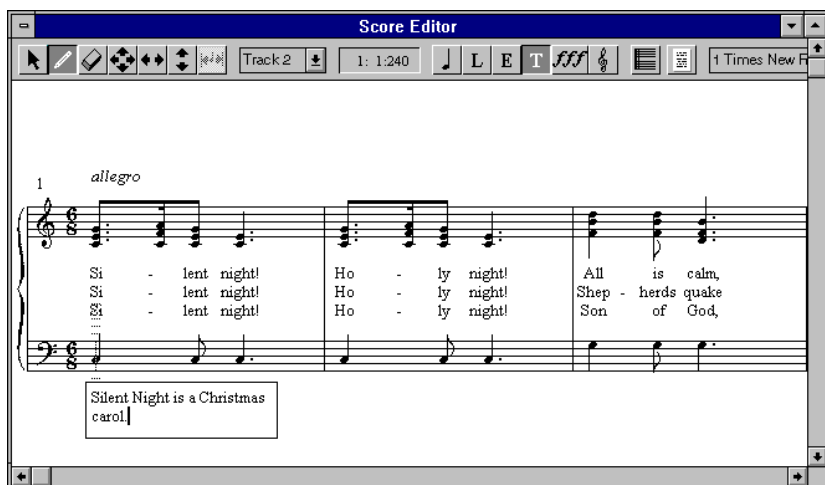
Now let's put in some text with a new text style. Click on the **text type** drop-down list box and select the second text type. (This will probably have the same font as the first text type, but don't worry about that for now.)

```
2 Times New Roman ±
1 Times New Roman 10
2 Times New Roman 10
3 Times New Roman 10
4 Times New Roman 10
5 Times New Roman 10
6 Times New Roman 10
7 Times New Roman 10
8 Times New Roman 10
```

Now enter a box of text just under the **second bar**. Type "**Franz Gruber wrote Silent Night.**" in the box. So far so good.

Changing Text Fonts

Now let's change the fonts for these pieces of text. Click on the **Display** menu and select **Page**. Click on the **Fonts** button at the bottom of the Display Page dialog. We want to change the fonts for Text 1 and Text 2. First we'll do Text 1. Click on the button with the **name** of the **font** for **Text 1**. Choose the **font**, the **font style** and **point size** for the Text 1 font. Make it something interesting. Click on **OK** and do the same thing for Text 2. Press on **OK** to get out of QuickScore Elite's Font dialog and **OK** again to get out of the Display Page dialog. You'll see the new fonts for the two text blocks you entered.

Moving Block Text

Let's move a text block around. Select the **NSEW** tool (the tool with the four arrows on it) in the toolbar. Grab one of the text blocks by clicking the left mouse button in the top left corner of the block and dragging the mouse while holding down the mouse button. When you release the mouse button the text is placed where you moved it.

Entering Symbols

Let's put in a few symbols. Select the **symbol** in the object type palette.

The icon displays the last symbol that was selected. Click on it again and the symbol palettes will drop down. You can select a symbol from ten different symbol palettes. Let's select the upward fermata symbol. Click on **Marks** in the upper left-hand corner of the **Tools** palette and then click on the **upward fermata** in the lower left-hand corner of the **Articulation Marks** palette that appears.

The fermata will replace the previous symbol in the symbol button in the object type palette. Select the **pencil** tool from the toolbar. Click in a couple of fermatas, one **above** the **last note** in the **first bar** and one **above** the **last note** in the **second bar**.

Entering a Slur

Now let's put in a slur. Let's select the slur symbol. Click on the **symbol** in the object type palette, click on **Adjust** and select the **slur** symbol (the one in the lower left-hand corner of the Adjustable palette that appears. The slur will now appear in the symbol button in the object type palette. Let's put the slur over the notes in the **second bar** on the **first staff**. Enter the slur by clicking and dragging it from its starting point to its ending point. Then adjust its shape by dragging around the three little triangles (control points) and finally enter the slur by pressing **ENTER**. If you don't want to enter the slur press **ESC** instead of **ENTER**.

Let's put in a piano dynamic mark. Select the **piano** symbol from the **Dynamics** palette and click above the first staff at the beginning of the third bar. The piano mark should appear.

Entering a Crescendo

Now we'll put in a crescendo going from just after the piano mark to the end of the bar. Select the **crescendo** symbol from the **Adjust** symbol palette. Enter the crescendo symbol by dragging it in as you did for the slur. Reposition it by dragging the control points (the little diamonds) with the mouse. When you have it the way you like, press **ENTER**. If you don't want to put in the crescendo symbol press **ESC** instead of **ENTER**.

Entering a Guitar Chord

Now let's put in a guitar chord at the beginning of bar 5. Click on the horizontal scroll bar once at the right of the scroll box. The display will move forward to bar 4. Bar 5 is the second bar displayed. Select the **guitar chord** symbol from the **Misc**. symbols palette. Click the mouse above the first staff at the first beat in **bar 5**. The Guitar Chords dialog will appear.
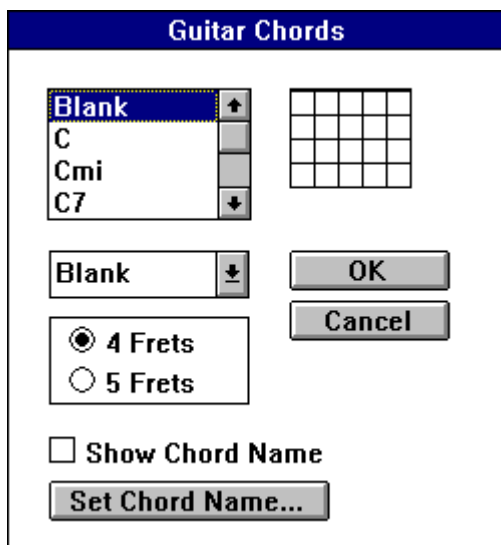
We will put in an **F** guitar chord, so select it from the **chord name** list box. Scroll the box until you see **F** and click on **F**. The **F** chord will be displayed on the grid in the dialog. Put an **X** in the **Show Chord Name** box. Now the name of the chord (**F**) will appear above the grid. You can change the chord name by clicking on the **Set Chord Name** button, but we don't have to do that here. Click on **OK** to enter the chord.

Spacing Guitar Chords Vertically

Our guitar chord is a little low (it overlaps the note below it). Let's change the guitar chord position by using the Guitar Chord Positioning dialog. Click on the **Display** menu, select **Page** and click on the **Guitar Chord Position** button. The entry position will affect all new guitar chords entered. We want to reposition all the chords we entered (just one), so put a **check** in the **Reposition all chords** box. Let's set the entry position to 6 rows above
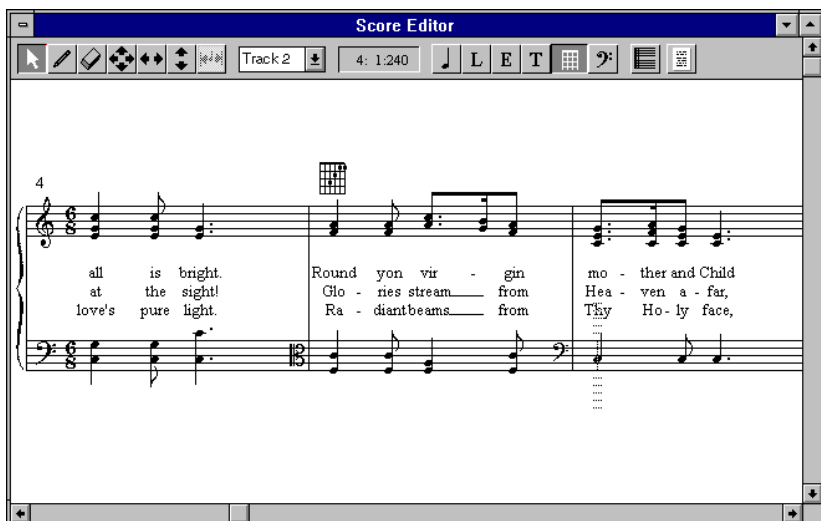
the staff instead of 4. Click on the **4** in the **Rows above staff** list box to open it and select **6**. Now click on **OK**. The guitar chord will be moved up two rows and all future guitar chords you enter will be at this level.

Entering Clefs

Now let's put in a few clef changes. This isn't very useful except as an exercise, but we'll do it anyway. Click on the **clef** in the object type palette to select it and click on it again to display the **clef** palette. Let's choose an **alto clef** (the clef in the fifth position).

Make sure the **pencil** tool is selected in the toolbar and now we'll put in the alto clef. Let's enter it at the beginning of **bar 5** on the **lower staff**. Click at this point with the **pencil** tool and the clef will go in. Now all notes after the clef will be drawn to reflect this clef. Let's make one more clef change. Click on the **clef** symbol in the object type palette and select the **bass clef**. Enter the bass clef at the beginning of **bar 6**. Now only **bar 5** is written in the **alto clef**.

Experiment with the tools available for clefs (the **arrow**, the **pencil**, the **eraser**, and the **EW** tools) to move and edit clefs. You can change the

duration value in the durations palette in the main control area to change where you can enter or move the clefs.

Conclusion

You've seen an overview of most of the things you can do with the Score Editor. For a detailed look at the Score Editor, see " Score Editor" starting on page 80 and "Block Editing Menus" starting on page 140.

Setting Up For Sequencing

In the next group of tutorials we will go over the features of QuickScore Elite's other editing windows and cover recording. You will see that you can do a lot more than create good-looking scores with QuickScore Elite. We will be using another piece by J. S. Bach, the two-part *Invention number 13* from the *Inventions and Sinfonias* The piece is in the file TUTOR13.QSD.

Start by opening the file TUTOR13.QSD. Click on the **File** menu, select **Open** and double-click on **TUTOR13.QSD** in the file list box. We will set up a few things in QuickScore Elite before we get going.

Locking Cursors and Tracks

First let's set the **Lock Cursors** and the **Lock Tracks** options to on. This way, when we move to a certain place in one window, all the other windows will also move to the same place. We can easily flip back and forth between windows to see different views of the same music. Click on the **Window** menu and select **Lock Cursors**, then click on the **Window** menu again and select **Lock Tracks**.

Setting Programs

Press the **SPACE BAR** to hear a few bars of the piece play. If you have a General MIDI instrument, you should hear a piano on track 1 and a cello on track 2. If you don't hear these instruments playing, you should go to the **Track Sheet** and change your programs to something like this.

When QuickScore Elite first starts, the program names are for **General MIDI instruments**. If you have a General MIDI synth or sound card, the sound you get should sound like its General MIDI description. If yours is not a General MIDI instrument, the names won't correspond to the sounds in your instrument. You can change the program names by choosing **Patch Lists** from the **Options** menu and selecting a **patch list** for your instrument. If your instrument isn't in here, you can make up a patch list for it. See "Patch Lists" on page 204 and "PATCHES.INI" on page 217 for details.

It is really not important to properly set up your patch names before you go on, so if you have an instrument without a patch list already in the Patch

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Lists dialog, you can continue with the tutorial. Just make sure your tracks are playing some kind of sound.

Piano Roll Editor Tutorial

This tutorial will acquaint you with the **Piano Roll Editor**. We want to start by opening the file TUTOR13.QSD if it is not already open. Click on the **File** menu, select **Open** and double-click on **TUTOR13.QSD** in the file list box.

Select the **Piano Roll Editor** window. The Piano Roll Editor lets you edit your music in piano roll notation. You see one track of music at a time.

The Piano Roll Editor's **control area** has the following features:

- A **toolbar**.

- A **track** list box for changing from track to track.

- A **channel** list box showing the channel or channels being edited.

- A **mouse time locator** showing the time of the mouse.

- A **mouse pitch locator** showing the pitch of the mouse.

- A button to **show waves** or **hide waves**.

- An indicator letting you know whether you are currently **editing waves** or **editing notes**.

Below the control area is the **piano roll display**. Here you see your music in piano roll notation.

- At the top of the display is the **bar number indicator**.

- To the left is a **vertical piano keyboard** to show you the pitches of your notes.

- **Notes** appear in the note area as horizontal bars. The vertical position of the bar indicates the pitch of the note. The beginning of the bar shows the note's start time and the length of the bar shows the note's duration.

- There is a **cursor** (the vertical purple line), where music is entered using step entry or the right mouse button. This is also the point where music, that has been cut or copied to the clipboard, will be pasted. The cursor moves by clicking the mouse or by using the arrow keys.

You can add wave files to your piece using the Piano Roll Editor's **wave window**. This area is just above the piano roll window. If the wave window is not visible, click on the **Show Waves** button. Wave files appear in this area as straight lines indicating the start time and duration of the wave file. The name of the wave file is written above the line. You move between the wave window and the piano roll window by clicking on one or the other. The **Edit Notes/Edit Waves** indicator at the far right of the control area will display **Edit Notes** if the piano roll window is active or **Edit Waves** if the wave window is active.

As in the Score Editor, there is a horizontal scroll bar at the bottom of the window and a vertical scroll bar at the right-hand side of the window. There are also four **magnifying glass icons** in this window. You use these to *compress* or *expand* the display. Click on the large magnifying glass on the bottom to *zoom in* in *time*, and click on the small magnifying glass on the bottom to *zoom out* in *time*. Click on the magnifying glasses below the vertical scroll bar to *compress* or *expand* the display *vertically*.

If you've been playing with the zoom icons, make sure that you are showing two bars on the display and that the vertical size of notes is more than one or two pixels.

Looping

We want to loop the first two bars in the piece. We do this by selecting the **loop control** in the main control area and setting a **loop start time** and a **loop end time**. Click on the **loop** button (this is the button with the looping

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red line) and then click on the **time display** to the right of the loop button. This will bring up the Loop Times dialog where you can set the loop start and end times. Set the loop **From** time to **1:1:0** and set the loop **To** time to **3:1:0** and then press **OK**.

Press the **HOME** key and then the **SPACE BAR** to hear the first two bars looping. Press the **SPACE BAR** again to stop playing.

Moving Notes Around

Now let's try some editing. First we'll drag some notes around. Let's set the **duration value** to **32nds** so that we can move notes around on 32nd note boundaries. Click on the **32nd note** in the durations palette in the main control area. Select the **EW** tool from the toolbar. Grab a note and move it around by clicking on the note, holding down the left mouse button and dragging the mouse in time to where you want to put the note. Release the left mouse button to enter the note at the point where you dragged it. Notice that the note snaps to the nearest 32nd note boundary.

Using the Snap/Free Button

You can move notes around on single-step boundaries if you change the **Snap/Free** button (below the toolbar) to **Free**. Right now this button reads **Snap**. Click on it and it will change to **Free**. Now try dragging a note around. You can put it anywhere in time you want.

Using Undo

Don't forget, you can undo any changes you make. You can choose **Undo** from the **Edit** menu, or press **U** or **CTRL**+**U**. After you make an edit, you can switch back and forth between the new version and the previous version using **Undo**. Try this a few times, listening to the difference between the two versions before you decide to keep the edit or go back to the previous version.

Changing Note Duration

Now let's change the durations of some notes. You do this with the **duration** tool, the tool with the right-pointing arrow, second from the right on the toolbar. Click on the **duration** tool. Now when you grab a note and drag it, you lengthen it or shorten it instead of moving the note around in time. We'll change the duration of notes in the **second track**, because this is a cello part and we can hear the differences in note durations more easily than in the first track, which is a piano track. Change to the second track by clicking on the **Track** drop-down list box to the right of the toolbar in the Piano Roll Editor's control area and selecting **Track 2**. Grab the first note with the mouse and lengthen it by dragging it to the right. Listen to how it sounds. Undo it if you don't like it. The **Snap/Free** setting and the **duration value** affect the way you can change durations. You can experiment with these settings if you like. Try changing the durations of some other notes and hearing what they sound like by pressing the **SPACE BAR**.

Changing Note Pitch

Now let's change some pitches. Select the **NS** tool (the one with the connected up and down arrows to the left of the duration tool) and grab a note. Drag it up and down to change its pitch. Press the **SPACE BAR** to hear what you've done.

Entering Notes

Let's put in a few notes. Select the **pencil** tool (second from the left in the toolbar) and click where you want to put in a note. The note is drawn with the duration equal to the **duration value** you set in the durations palette in the main control area. You can change this any time you want by clicking on a new note value in the durations palette. Try some more notes. Be aware that the note you enter doesn't get put in until you release the mouse button. You can see exactly where the note will go before you release the button.

Editing a Contiguous Group of Notes

Now let's try some block editing in the Piano Roll Editor. Select the **arrow** tool (the first tool in the toolbar) by clicking on it. Now let's select **all** the **notes** in the **first bar**. The best way to do this is to click the mouse just

before the barline and drag the mouse backwards to the start of the display holding down the left mouse button. (It is easiest to select a note at the left edge of the display by dragging from right to left instead of left to right, because otherwise you would have to start with the mouse exactly at time zero, which is tricky.) The notes you selected will now be highlighted in gray and an edit menu will drop down. Let's select **Octave** and move all the notes down an octave. Select **Down 1 Octave** from the submenu which appears.
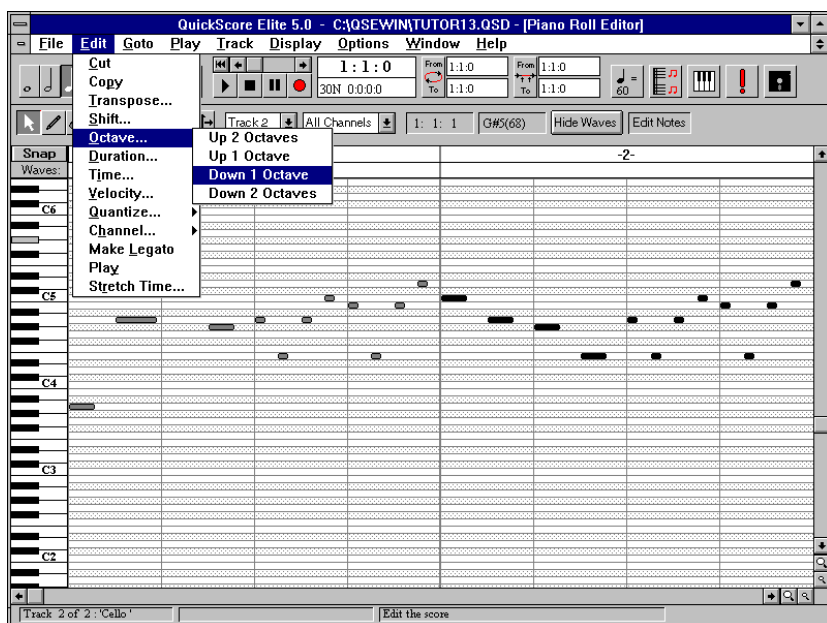
Editing a Non-Contiguous Group of Notes

Now let's try control-clicking to select some non-contiguous notes for editing. Hold down the **CTRL** key and click on the **first note** and the **third note** in the **second bar**. Release the **CTRL** key. The two notes you selected will now be highlighted in gray and an edit menu will drop down. Let's accent these notes by changing their velocities. Select **Velocity** from the edit menu. A dialog box appears. Enter a value of **127** (the maximum) to make these two notes sound loud. Press **OK**.

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Copying and Pasting

Finally, let's select **all** the **notes** in the **first bar** again and copy them. Select the notes the same way you did earlier to change the octave. Instead of choosing Octave to change the octave, select **Copy**. Now that we've put a copy of these notes into the **clipboard**, we can **paste** it somewhere else when we want to. Let's have these echo one beat after they are first played. Put the cursor at the **beginning** of the **second beat** in **bar one**. Click on the **Edit** menu and select **Paste**. The notes you just copied are now pasted starting at the second beat in bar one, creating an echo effect.

Conclusion

If you like what you've done better than J. S. Bach's original, you can save the file using the **Save As** option under the **File** menu. Choose a **name** *other than* TUTOR13.QSD, otherwise you will write over the original file. We need it for the next tutorial. For more details of the Piano Roll Editor, see "Piano Roll Editor" starting on page 101.

Controller Editor Tutorial

This tutorial will acquaint you with the **Controller Editor**. We want to start again, using the file TUTOR13.QSD, so let's load it again if you don't already have it loaded. Click on the **File** menu, select **Open** and double-click on the **TUTOR13.QSD** entry in the file list box.

The **Controller Editor** can be used to edit all kinds of data of a continuous nature, including controllers, pitch bend, aftertouch, note velocity, tempo changes and program changes.

The Controller Editor's **control area** has the following features:

- A **data type** list box.

- A **track** list box for changing from track to track.

- A **channel** list box showing the channel or channels being edited.

- A **step** list box for controlling the spacing between adjacent events.

- A **display note** list box (only for polyphonic aftertouch).

- A **change note** list box (only for polyphonic aftertouch).

- A **toolbar.**

- A **mouse position locator** showing the time and amplitude of the mouse.

- An **event position locator** showing the time and amplitude of the event closest to the mouse.

- A button to **show notes** or **hide notes** in the controller window.

The Controller Editor's **window** has the following features:

- **Time** is displayed on the horizontal axis.

- **Amplitude** is displayed on the vertical axis. The amplitude displayed depends on the kind of data being displayed. For example, pitch bend data has a range from -8192 to +8192 and controllers have a range of 0 to 127.

- **Bar numbers** are shown above the display.

- **Beats** are shown as gray vertical lines.

- **Amplitude levels** are shown as horizontal lines.

- **Controllers** or other data are displayed as vertical blue lines.

- Superimposed on the controller display is a piano roll display of the **notes** in the current track. This can be turned *off* by clicking on the **Hide Notes** button.

When we first select the Controller Editor, **note velocities** are displayed. Each note is shown in piano roll notation and the velocities of the notes are shown as vertical blue lines at the point the notes start. The height of the blue lines represents the amplitude of the velocity.

Changing Note Velocity

Let's change the velocities of the third sixteenth note in the first two beats of bar one. This will accent that note, giving a syncopated effect. Select the **NS** tool from the toolbar. Move the mouse over the **third sixteenth note** in **beat one** so that its velocity is highlighted in red. Now change the velocity by holding the left mouse button down and dragging the mouse across the blue line at the height you want the velocity to be. Let's set the **velocity** to **96**. Release the mouse button.

Now let's move the mouse over to the **third sixteenth note** in the **second beat**. It should be highlighted in red. In the event position locator, the time and amplitude of the highlighted event are shown. Now instead of using the mouse to change the velocity, we will use the **UP ARROW** key. Press the **UP ARROW** key until the **amplitude** of the event is **96**. You can see the amplitude change in the event position locator as well as in the window. Play the notes on the screen by pressing **P** to see what affect the changes in velocity have produced.

Entering Volume Controllers

Now let's put in some **volume controller changes**. Click on the **data type** list box (above the toolbar) and choose **7 Main Volume**. This is continuous controller number seven, which is generally assigned to main volume. Select the **pencil** tool. We'll create a **velocity curve** by clicking the mouse near the left edge of the screen and dragging the mouse to the right edge of the screen while holding the left mouse button down, and then releasing the mouse button. Draw in a curve **starting** with an **amplitude** of around **32**, swelling to around **112** and then fading back to **64**. Press **P** to hear what this sounds like.
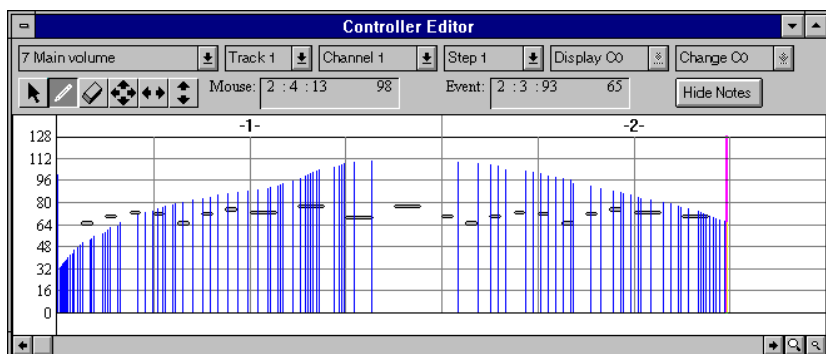
Now let's try another way to enter a volume swell.

Erasing Controllers

You can **erase** the volume curve by selecting **Undo** from the **Edit** menu, but just for the practice, we'll select the **arrow** tool (the first one) from the toolbar and select all the volumes by clicking the left mouse button before the first one, dragging the mouse while holding the mouse button down to a point after the last one and then releasing the mouse button. From the edit menu select **Cut** and your controllers will all disappear.

Interpolating

Now select the **pencil** tool again and enter a **single controller** near the **beginning of the screen** with a value of **32**. Put in another one at the **start**

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of bar 2 with a value of **96**. Put in a third at the **right side of the screen** with a value of **32**.
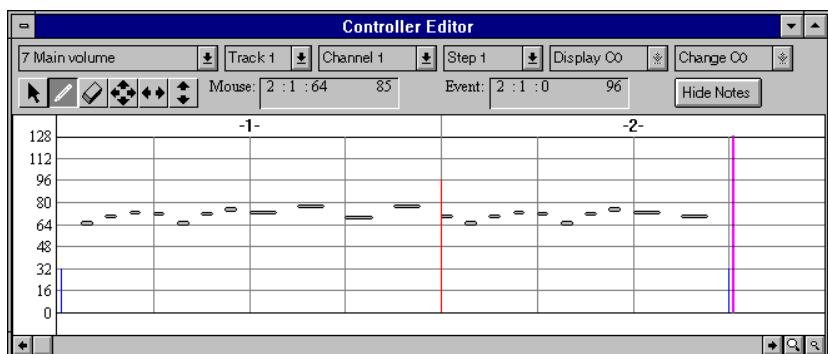
Select the **arrow** tool. Position the arrow a little to the **left of the first controller**. Press and hold down the left mouse button and drag the mouse to the **right of the second controller**. Both controllers should be highlighted in red. Release the mouse button. and an edit menu will drop down. Select **Interpolate** from the edit menu. Now a ramp of controllers will appear, creating an even crescendo between the two volume controllers. Do the same for the highest volume and the last volume you put in at the right edge of the screen. Now you have an even decrescendo back down again matching the one going up.
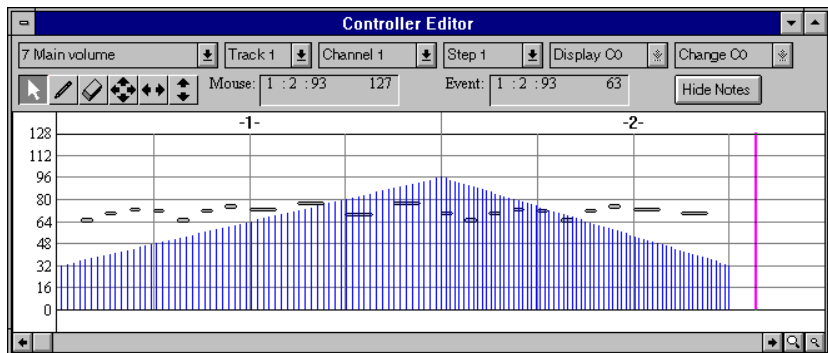
Conclusion

Feel free to fool around as much as you wish with editing controllers. For more details of the Controller Editor, see "Controller Editor" starting on page 109.

Mixer Tutorial

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The **Mixer** lets you enter controllers and other kinds of data by moving
faders up and down as you listen to the music. Make sure you've loaded the
file TUTOR13.QSD. Select **Mixer** from the **Window** menu.
7 Main Volume should be selected in the **data type** list box at the left of
the Mixer window control area. If it isn't, select it by clicking on the box
and selecting **7 Main Volume** from the list box that drops down. If you're
haven't turned off play looping yet, make sure you do it now.
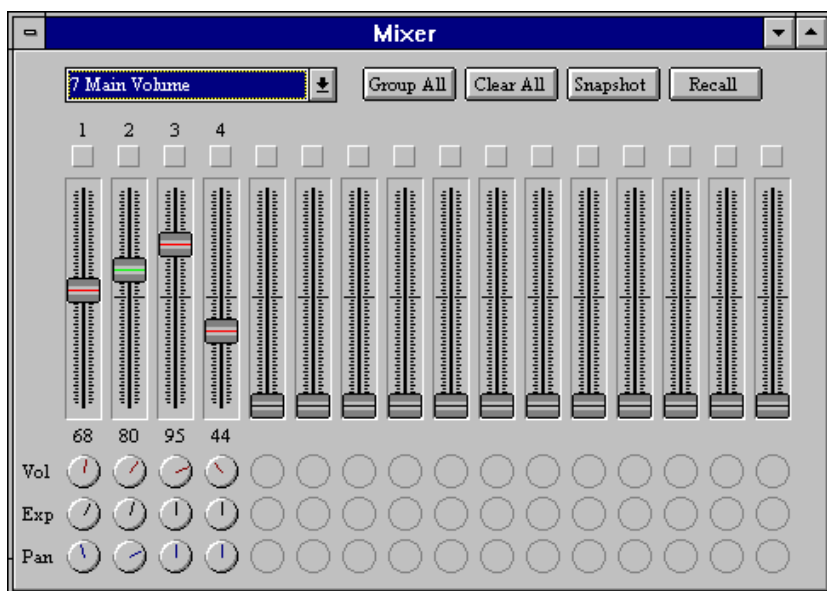
If you've just finished the Controller Editor tutorial, you can see right away
what effect the volume controllers that you added have on the Mixer. Press
the **SPACE BAR** to start playing and watch the faders move. You can
move the faders yourself if you want to. Try grabbing a fader and dragging
it up and down. The volume will increase and decrease as you drag it. The
changes you make now aren't permanent, because you are not recording.

Recording a Fadeout

Now lets use the Mixer to record a **fadeout** at the end of the piece. We'll start fading at **bar 23** and finish at **bar 25**, the end of the piece. For the fadeout, we will group the two faders together so that moving one fader will move both of them. **Group** the **faders** together by **checking both the boxes above the faders**. We will start recording at **bar 22**, one bar before the fade should start. Move to **bar 22** by clicking on the **time display** in the main control area and selecting **22:1:0** in the time field.
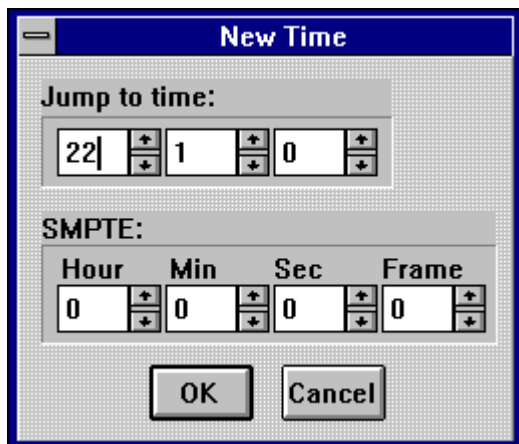
Now let's try recording. Remember to start fading at the start of **bar 23**. Press the **record** button (the button with the red circle) in the tape transport in the main control area. Grab one of the faders and slowly drag it down so that it is down to **zero** at the **end of bar 25**. When you are finished recording, press the **SPACE BAR** or click the **stop** button (the second button in the tape transport). How did your fade go? If you didn't like it, click on **No** to answer the question, "**Keep Mixer Changes?**". If you liked it, click on **Yes**. Don't forget that you can undo recording by selecting **Undo** from the **Edit** menu if you decide you don't like what you've done after hearing it a couple of times.

Song Editorand Event List Tutorial

The **Song Editor** shows an overall view of your music. On the left side of
the window is a list of your tracks and beside each track is a horizontal list
of bars. Each bar is filled in with colored rectangles if there are notes or
other events present in the bar. Different colors denote different kinds of
musical data. You use the Song Editor to cut and paste and insert space on a
global level, i.e. to arrange your music.
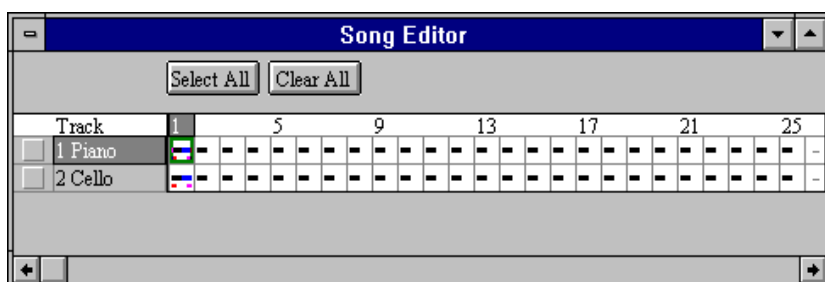
If you haven't already loaded the tutorial file TUTOR13.QSD, load it by
clicking on the **File** menu, selecting **Open** and then double-clicking on the
entry **TUTOR13.QSD** in the file list box. If Lock Cursors and Lock Tracks
are not set in the Window menu, click the **Window** menu and select **Lock
Cursors**, then click the **Window** menu again and select **Lock Tracks**.
Click the **Window** menu a third time and select the **Song Editor**.

Copying and Pasting Bars

The first thing we'll do is make a **copy** of the first two bars in both tracks and **paste** it in at the beginning of the piece. Select the first two bars in both tracks by clicking the mouse in the **first bar** of the **first track** and dragging the mouse while holding the left mouse button down so that it is on the **second bar** in the **second track**. The first two bars in both tracks should be highlighted. Release the mouse.
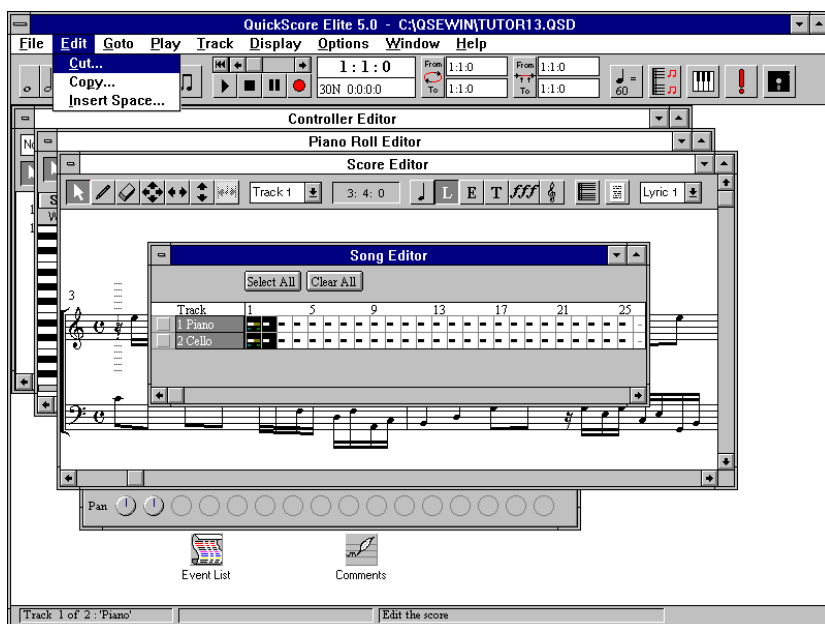
From the edit menu that appears select **Copy**.
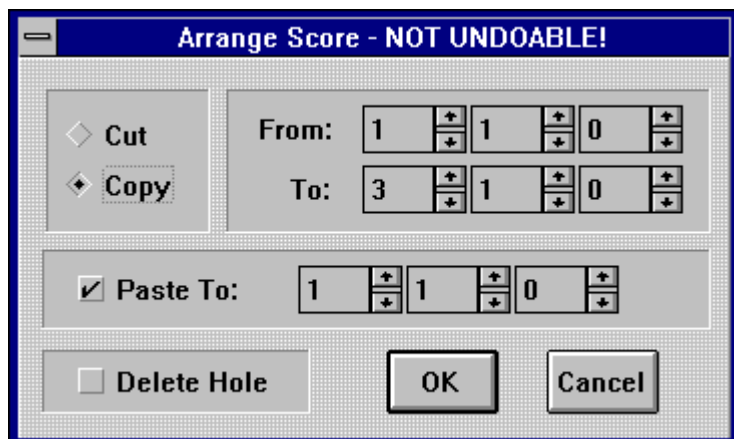
Notice that the **From** time and the **To** time have been filled in with the range that you have selected. Make sure the **Paste To** box has a **check** in it. We want to paste at the beginning, which is the **Paste To** time already set by the dialog. All we have to do is click on **OK**.

Take a look at the first four bars in the Song Editor. The **first bar** and the **third bar** both have different colors in them. What is this stuff? The best way to tell for sure is to go to the **Event List** and take a look. Select the **Event List** from the **Window** menu.

Erasing Events

We are looking at the **first track**. Scroll the display down to the **beginning of bar 3**. There is some stuff here we don't really need because it's already at the **beginning of bar 1**. This is the **treble clef**, the **program change**, and the **volume controller**. Let's get rid of them. Select the three events with the mouse by clicking on the treble clef symbol, keeping the left mouse button down and dragging down until all three events are highlighted and then releasing the button. Select **Cut** from the edit menu that drops down.
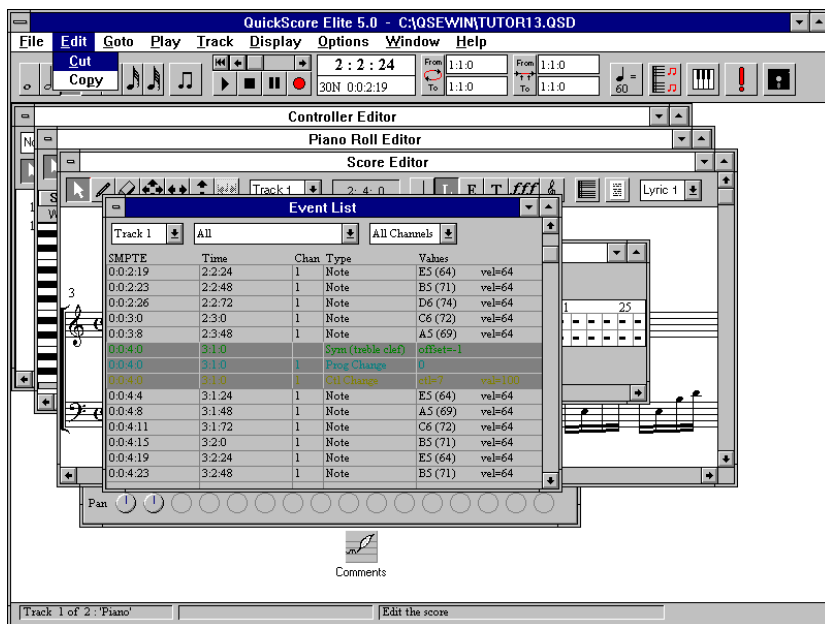
Go to **track 2** by clicking on the **track list** box and selecting **track 2**. Repeat the previous operation. Note that in the **Song Editor**, **bar 3** now only has a black rectangle in both tracks, indicating that only note events exist in this bar.

Changing Events

Let's go back to the **Event List** and change the **volume controller value** at the **beginning of both tracks**. Press **HOME** to go to the beginning of the track and then double-click on the **volume controller event** (the controller event with controller number **7**).
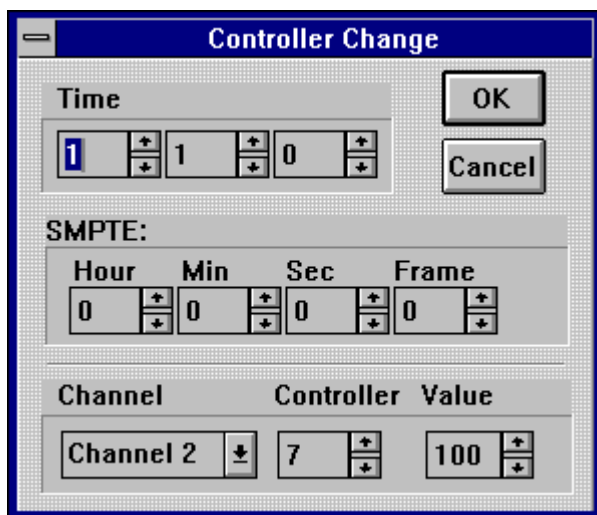
For fun, lets make the **value** of the controller **120**. Click on **OK**, then repeat the operation for **track 1**.

Erasing Bars

Let's go back to the **Song Editor** and **cut out bar 3** and **bar 4**. Select these bars in both tracks the same way you did for **bar 1** and **bar 2**. Select **Cut** from the edit menu that appears. The same dialog comes up as when you selected **Copy**, except that **Cut** is selected in the top left-hand box instead of **Copy**. Let's leave everything the way it is and click on **OK**. Now the music in **bar 3** and **bar 4** is gone, but the bars are still there. We want to *delete the hole*, so let's try again. Select the bars again and now, when the dialog comes up, put a **check** in the **Delete Hole** box. Click on **OK**. The blank bars are gone.

Inserting Bars

The last thing we can do in the Song Editor is to insert blocks of space for entering or pasting new sections of music. Let's try opening up the space we just cut out. Select **bar 3** and **bar 4** again as before. Now select **Insert Space** from the edit menu. We want to insert **2 bars** (the amount we selected) starting at **bar 3** (where we started our range) and this is how the dialog is set up. If we wanted to insert a different amount of space or insert at a different time, we could enter different values in the **Insert At Time** field or the **Amount** field. Click on **OK**. The display in the Song Editor reflects the two inserted blank bars.

Of course you can get rid of the two blank bars you created by selecting them and deleting them, remembering to **check** the **Delete Hole** box.

Recording Tutorial

In this tutorial we are going to do some recording with QuickScore Elite. You'll need a MIDI keyboard attached to your computer in order to complete this tutorial.

We'll start with the file ONEBASS.QSD, so let's load it up. Click on the **File** menu, select **Open** and double-click on **ONEBASS.QSD** in the file list box. ONEBASS.QSD is a file with one bass track.

Setting Up The Metronome

Before we start recording, let's make sure things are set up the way we want them. Let's start with the **metronome**. Click on the **Options** menu and select **Metronome**.
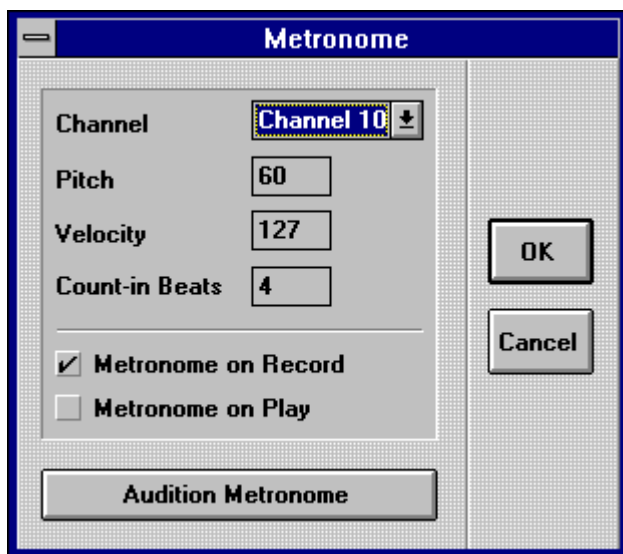
The metronome you are given by default is **MIDI note 60** on **channel 10** with a **velocity** of **127**. The metronome will count four beats before recording starts. Click on the **Audition Metronome** button at the bottom of the dialog box to start the audition. Click on the **Audition Metronome** button again to stop the audition. If you like what you hear, keep it; otherwise change the settings for the metronome (especially if you hear

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nothing) until you get something you like (or at least something you can live with). Click on **OK** when you are satisfied with your metronome.

Setting Up MIDI Thru

Now let's make sure **MIDI thru** is set up the way we want it. Click on the **Options** menu and select **MIDI Thru**.

MIDI Thru			
Channel 1 to	Channel 1 ±	◆ On ◇ Off	
Channel 2 to	Channel 2 ±	◆ On ◇ Off	
Channel 3 to	Channel 3 ±	◆ On ◇ Off	
Channel 4 to	Channel 4 ±	◆ On ◇ Off	
Channel 5 to	Channel 5 ±	◆ On ◇ Off	
Channel 6 to	Channel 6 ±	◆ On ◇ Off	
Channel 7 to	Channel 7 ±	◆ On ◇ Off	OK
Channel 8 to	Channel 8 ±	◆ On ◇ Off	
Channel 9 to	Channel 9 ±	◆ On ◇ Off	
Channel 10 to	Channel 10 ±	◆ On ◇ Off	Cancel
Channel 11 to	Channel 11 ±	◆ On ◇ Off	
Channel 12 to	Channel 12 ±	◆ On ◇ Off	
Channel 13 to	Channel 13 ±	◆ On ◇ Off	
Channel 14 to	Channel 14 ±	◆ On ◇ Off	
Channel 15 to	Channel 15 ±	◆ On ◇ Off	
Channel 16 to	Channel 16 ±	◆ On ◇ Off	

If you are using a single MIDI keyboard that has its own internal sounds for some or all channels, turn **MIDI thru** *off* for all of these channels. If you are using one or more synth modules that are separate from your keyboard, keep **MIDI thru** *on* for all channels. If you are using a keyboard that can only send on one channel, keep **MIDI thru** *on* for that channel and set the output channel for that channel to the one you would like QuickScore Elite to record and play on. If you want to change this output channel to another

at any time you will have to do it here because you can't do it from your keyboard.

Note: If you set local control to *off* on your keyboard (that is, you only have the instrument play sounds that it detects from the **MIDI in** port), you must keep **MIDI thru** *on* for all channels in the **MIDI Thru** dialog.

Creating a New Track

Now let's make a **new track** and set it up for **recording**. Select the **Track Sheet**. Click on **New** at the bottom of the list of track numbers. This creates a new track. Let's call the track **Guitar**. Click on the **name** field for **track 2** and type "**Guitar**". (Erase "**B**", the name that was given to the track by default.) Set the **channel** for the track to **2**. A dialog box appears asking, "**Change all events on track to channel 2?**". Click on **Yes**. This will not affect the channel of events that are recorded from your keyboard, but it will affect events recorded using the faders and notes entered with the mouse. Set the **program** for the track to **27 - Electric Guitar (clean)**. Now set the **channel** that your keyboard will send to **2**. (If you can't do this on your keyboard, you will have to do it using the **MIDI Thru** dialog as described on page 68.)

Recording

Let's record. Press the **HOME** key to make sure you are at the beginning of your piece. Press the **record** button (the button with the red circle) in the tape transport in the main control area.

The count-in will play and then the bass track will start to play. Play some notes along with the bass track. When you have finished, click on the **stop** button. You will be asked, "**Keep this take?**". If you like what you recorded, click on **Yes**, otherwise click on **No**.

You can keep recording more takes, even if you answer **Yes** to the question "**Keep this take?**". Just use **Undo**. (Click on the **Edit** menu and select **Undo**.) Then you can try again.

Let's record one more track. Click on **New** at the bottom of the list of **track numbers** in the **Track Sheet**. As before, this creates a new track. Let's call the track **Piano**. Click on the **name** field for **track 3** and type "**Piano**". (Erase "**C**", the name that was given the track by default.) Set the **channel** for the track to **3**. A dialog box appears asking, "**Change all events on track to channel 3?**". Click on **Yes**. Set the **program** for the track to **3 - Honky-Tonk Piano**. Now set the channel that your keyboard will send to **3**. (If you can't do this on your keyboard, you will have to do it using the **MIDI Thru** dialog as described on page 68.)

Let's record the track. Press the **HOME** key to make sure you are at the beginning of your piece. Press the **record** button. The count-in will play and then the bass track and the guitar track will start to play. Play some notes along with the music. When you have finished, click on the **stop** button. If you like what you recorded, click on **Yes**, otherwise click on **No** when you are asked "**Keep this take?**".

When you record, you don't have to start with a new or an empty track. You can record on any old track. When you record, the new events which are recorded are merged with the events already on the track. You also don't have to start at the beginning of a track. You can set the time (shown in the time display in the main control area) to anything, and start recording from the time you set.

Punch Recording

If you want, you can cut out part of what was already in a track and record something new in its place. You do this by **punch recording**. Click on the **Punch** button in the main control area (the button with the red line and two little black arrows underneath it) and click on the **time display** to the right of the **Punch** button.
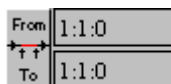
Set the **From** time to **2:1:0** and set the **To** time to **3:1:0**. Now when you record, all events on **bar 2** will be replaced by events recorded from the keyboard. Try it. If you don't like what you did, you can reject the take, or you can undo it after listening to it a few times.

Recording While Tapping the Beat

Recording while tapping the beat is great if we don't want to stick to a rigid tempo as we record. We don't want to hear the metronome or any other music for that matter as we record while tapping the beat, because the metronome and our music will proceed in real time and we will not.

To make things simple, let's start a new file. Click on the **File** menu and select **New**. Answer **No** to the question, "**Do you wish to save?**", and then select **Default** from the list of **score settings** that appears.

Select the **Metronome** dialog by clicking on the **Option** menu item and choosing **Metronome**. We want to make sure the metronome doesn't play when recording so **remove** the **check mark** in the box beside **Metronome on Record** by clicking on it. Click on **OK**.

Now select **Record Options** from the **Options** menu. Click on **Tap Beat** in the top left-hand part of the dialog. Put a **check** in the **Listen to MIDI** box at the bottom of the dialog by clicking on it. Now press the lowest note on your MIDI keyboard. The **Listen to MIDI** button will clear and the **number of the note** you pressed will appear in the **Value** list box. Click on **OK**. Click on the **record** button in the main control area. Now we are ready to record.

There is no hurry about entering notes. Remember to **tap the beat with the left hand** on the lowest note on your keyboard as you **play with the right hand**. When you're finished, press the **SPACE BAR**. Answer **Yes** to the question "**Keep this take?**" if you like what you did.

Remember it *doesn't* make sense to record while tapping the beat with your music playing. If you want to record while tapping the beat into a track with music either on this track or on tracks above or below it, it is best to **mute** the tracks. Do this by selecting the **Track Sheet** and **removing the circles** in the **Play** field for these tracks.

Reference

The following sections describe all of QuickScore Elite's features in detail, starting with the main control area and the status area, going through the editing windows and ending with a description of the menus.

Main Control Area
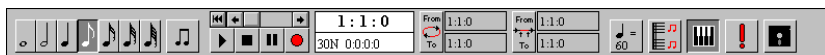
The **main control area** appears just below the menu and has controls that affect all of QuickScore Elite's windows.

Durations Palette

To the far left on the main control area is the **durations palette**. Use this to select the duration of notes that you will be entering with the pencil tool. When you click the mouse in an edit window, the cursor will go to the nearest time that is a multiple of the duration value. This also affects the amount the cursor will move forward or backward when you use the left and right arrow keys. So when you want to enter eighth notes, make sure you have set the duration value to eighths. You can set the duration value by clicking on a note in the palette or by pressing **W** for whole note, **H** for half note, **4** for quarter, **8** for eighth, **1** for 16th, **3** for thirty-second or **6** for sixty-fourth note.

The **duration qualifier** is at the right of the durations palette. The qualifier can be either **duple** (two notes tied together), **triple** (three notes tied together) or **dotted** (a note followed by a dot). For example, if **16th notes** is

selected in the durations palette and the duration qualifier is triple, you can enter 16th note triplets and the cursor will move in increments of 16th note triplets.

Note that you have to set the **display quantization** to something as small or smaller than the smallest duration that you are trying to display. The display quantization is set from the Display Bar, Display Track or Display Score dialogs under the Display menu. If you are displaying non-quantized music, you may have to experiment to see what is the most appropriate display quantization. If you are displaying quantized music, then you can use a very small display quantization value. Triplet/32nds is a good choice, as triplets and duplets as small as 32nds will be displayed together correctly. For more information on display quantization, see "Quantization Amount" on page 177, page 182, and page 187.

Tape Transport

The **tape transport** looks like the transport on a tape recorder and it works that way too.

- The black triangle on the left is used to **start play**.

    Play always starts from the beginning of the currently selected window. A shortcut for using the **play** button is pressing the **SPACE BAR**.

- The black square is used to **stop** play or recording.

    Pressing the **SPACE BAR** while the music is playing is equivalent to pressing the **stop** button.

- The button with the two black vertical lines is the **pause** button.

- The red circle is the **record** button.

    Recording always starts from the cursor position in the active window. (This is always shown in the time display in the main control area.) When recording, there will be a count-in, set from the Metronome dialog under the **Options** menu. The metronome can be *on* or *off* and the metronome sound can be controlled using the Metronome dialog. When you record in a track, the recorded data is normally merged with the data currently on the track. This

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is not the case, however, when **punch-in/punch-out** is selected. In this case, only the music between the punch points are affected, and the old music is replaced by the new music.(The old music is not merged with the new music.)

On the top of the control area of the tape transport is a group of controls to **move around in time**

- Clicking on the button with a line and two left arrows moves to the **beginning of the piece.**

- Clicking on the left arrow in the slider moves the time *one bar* **to the left**.

- Clicking on the right arrow in the slider moves the time *one bar* **to the right**.

- Clicking to the left of the scroll box moves the time *one screen* **to the left**.

- Clicking to the right of the scroll box moves the time *one screen* **to the right**.

- Dragging the scroll box will move **to any place in the piece**. The **time display** in the main control area will change as you move the scroll box. When it is on the bar you want, release the scroll box and the time will change to the start time for this bar.

Time Display

```
 2 : 4 : 27
30N 0:0:3:19
```

The **time display** shows the position of the cursor in the active window. The time is displayed in *bars*, *beats*, and *steps* on the top and in *SMPTE* time on the bottom. The SMPTE time format is selected using the SMPTE dialog under the **Options** menu. You can change the current time by clicking on the **time display** and by setting either the **Bar:Beat:Step time** or by setting the **SMPTE time**. When you do this, the cursor in the active window will move to the new time you set.

Loop Control
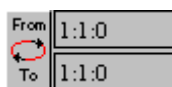
You can have a section of music loop continuously by selecting the **loop control** and setting a **loop start time** and a **loop end time**. Click on the **loop** button and then click on the **time display** to the right of the loop button. This will bring up the Loop Times dialog where you can set the loop start and end times. Looping is useful when you are experimenting with a section of music and you want to try different things. You can enter and edit notes as you are looping, which lets you quickly hear different musical ideas.

Punch-In and Punch-Out Control
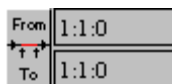
Punch-in and punch-out is used when recording so that you replace the music between the punch points with the new music you have recorded. When **punch-in/punch-out** is selected, the new music replaces the old music between the punch points and is not merged with the old music. Any music outside the punch points is not affected when punch recording. Note that only old musical events with a time greater than or equal to the punch-in time and smaller than the punch-out time are erased. Old musical events at the punch-out time are not erased.

Tempo Button

The **tempo** button shows the tempo at the current time (the time displayed in the time display, indicating the time of the cursor in the active window). It is possible to click on the **tempo** button to change the tempo at the current time. You can also change the tempo using the Controller Editor. This is

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usually better than using the **tempo** button because then you can see all the tempo events before and after the current time.

Play Score Button

The **play score** button tells you whether you will hear all the tracks in your piece or just the current track. Clicking on it will **toggle** it from **Single Track mode** to **Full Score mode**. It is affected by the **score** button in the Score Editor. When you set the **score** button to **full score**, the **play score** button also changes to **full score**. When you set the **score** button to **single track**, the **play score** button also changes to **single track**. However, changing the **play score** button does *not* affect the **score** button in the score window. This way you can easily hear the full score while looking at one track, or hear just one track while looking at the full score.

Step Entry Button

The **step entry** button lets you enable or disable step entry from a MIDI keyboard. When it is highlighted, step entry is enabled. Step entry is a very useful way to enter music. Notes played on the keyboard will be entered at the cursor point in the active window. The duration of the notes entered is the duration value set in the durations palette. After a note is entered using step entry, the cursor moves ahead by the duration value. Step entry always merges the entered note with the notes already in your track. You can step enter a chord, by playing all the notes of the chord at once on your MIDI keyboard. Make sure you play the notes all at the same time and then wait a half second or so to play the next note or chord, so that successive notes or chords do not end up at the same time. (QuickScore Elite needs a gap between notes to distinguish them from imperfectly played chords.)

Panic Button

The **panic** button is used to stop notes from playing if, for some reason, they don't stop by themselves. It sends out MIDI note off commands for all notes on all channels and turns pedal controllers off.

Save Button

The **save** button will save your file to disk. It acts as the **Save As** menu item under the **File** menu, so you have to enter the name of the file to which you want to save your data.

Keys Used in the Main Control Area

Keystroke	Action
P	Play screen.
SPACE BAR	Play/Stop play.
ESC	Stop play.
SHIFT+P	Play without scrolling.
R	Record.
W	Select whole note duration value.
H	Select half note duration value.
4	Select quarter note duration value.
8	Select eighth note duration value.
1	Select 16th note duration value.
3	Select 32nd note duration value.
6	Select 64th note duration value.
T	Select the next duration qualifier.
CTRL+**C**	Move the cursor in all windows to the cursor location in the current window.
CTRL+**T**	Move the track in all windows to the track in the current window.
INSERT	Paste.
CTRL+**V**	Paste.
CTRL+**A**	Edit track.
U	Undo.
CTRL+**U**	Undo.
M	Mute the current track.
S	Solo the current track.

Status Line

Track 1 of 4 : 'Violin'   Fugue in G Minor by J.S. Bach   Ready
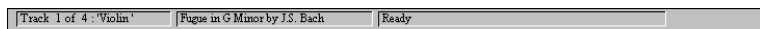
The **status line** is at the bottom of QuickScore Elite's main window. There are three items in the status line:

- The first display in the status line shows you the **name** and **number** of the **current track**. You can double click on the track name to change it.

- The second display in the status line shows the **title** of your piece. Double click on the title name to change it. The dialog that comes up is the Titles dialog which is also available under the Display menu. For more information, see "Titles" on page 188.

- The third display in the status line generally shows you what **action** you will be taking if you choose a menu item. As you move your mouse over the menus, this display will give you an idea what you can do.

Score Editor

The **Score Editor** shows your music in standard music notation.
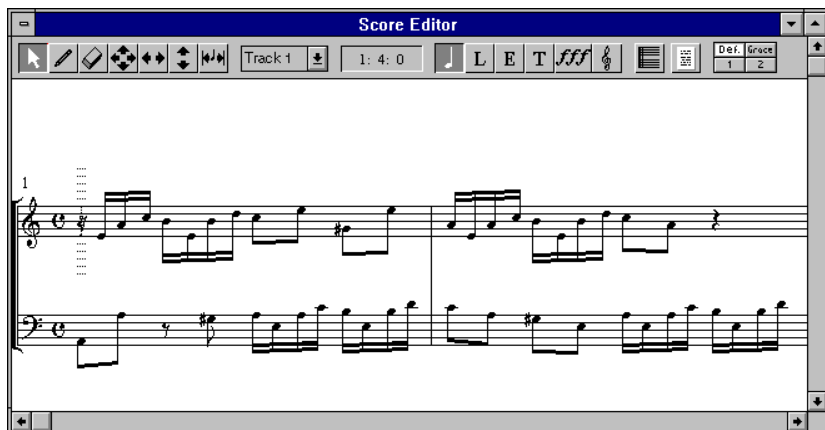
The Score Editor's **control area** has the following features:

- A **toolbar**.
- A **track** list box for changing from track to track.
- A **mouse time locator** showing the time of the mouse.
- A palette of different **objects**.
- A **staff** button.
- A **page** button.
- A **voice** palette.

Below the control area is the **score display**. Here you see your music in **standard music notation**. Usually each staff represents one track, but it is also possible to split a track and show it on a bracketed pair of bass and treble clef staves. There is a **cursor**, where music is entered using step entry or the right mouse button. This is also the point where music that has been cut or copied to the clipboard will be pasted. The cursor moves by clicking the mouse or by using the arrow keys.

Toolbar

The **toolbar** in the Score Editor contains seven tools.

Arrow Tool

The **arrow** tool is generally used for **selecting** notes or other events and then **editing** them by selecting an editing operation from the edit menu. It is also used to select a single note or event (by double clicking on it) and then edit it by selecting an operation from the edit menu.

When the **arrow** is selected, notes or other events can be entered at the cursor point by clicking the right mouse button. This will enter a note or event at the height of the mouse at the cursor point and it will advance the cursor.

The cursor point can be moved by pressing the **left mouse button** or by using the **arrow keys**. The cursor always moves in increments of the selected duration value, set using the durations palette. The durations palette is in the main control area, to the far left. (To change the selected duration, click on the duration you want.)

If you are using any other tool *except* the arrow tool, use the **right mouse button** to position the cursor, because the left mouse button is used for editing.

To **select** a group of notes, you can drag over them using the mouse. Click before the first note you want to edit, hold the mouse button down, and drag past the last note you want to edit. You can drag past the end of the window if you want. The window will scroll if you do this. You can also select a group of notes by pressing **SHIFT+S** (for start) where you want to start your range, moving to the end of your range and then pressing **SHIFT+F** (for finish). If you want to select only a few notes, hold the **CTRL** key down and then click on each note you want to include in your selection. To remove a note from the selection, just click on it again. When you have selected all the notes you want, release the **CTRL** key. Another way to limit the notes you are editing is by using the **Note Filter**, available under the **Edit** menu. Click on **Use Filter** to select it and then create your filter. For example, you can just select notes above middle C (MIDI note 60) by setting the **From Pitch** to **61** instead of **0**.

Pencil Tool

The **pencil** tool is used to **enter** notes or events anywhere on the page. Select the **pencil** tool and click where you want to enter a note. This note will go where you click it, quantized to the value of the selected duration.

Eraser Tool

The **eraser** tool will **erase** notes or events anywhere on the page. Select the **eraser** tool and click on a note you want to erase. The note will disappear.

NSEW Tool

The **NSEW** tool is the one with the four arrows: one pointing *north* (up), one pointing *south* (down), one pointing *east* (right) and one pointing *west* (left). It **moves** a note or event around with complete freedom of movement. Select the **NSEW** tool by clicking on it and then click the left mouse button on a note that you want to move around. Keep the button down and drag the note to where you want to put it and then release the button. The score will redraw with the note in its new position.

EW Tool

The **EW** tool is the one with one arrow pointing *east* (right) and one arrow pointing *west* (left). It **moves** a note or event *forward or backward in time*. Select the **EW** tool by clicking on it and then click the left mouse button on a note you want to move forward or back. Keep the button down and drag the note to where you want to put it and then release the button. The score will redraw with the note at its new time.

NS Tool

The **NS** tool is the one with one arrow pointing *north* (up) and one arrow pointing *south* (down). It **moves** a note or event *up* or *down*. If the event is a note, of course this means that the pitch is being changed. Select the **NS** tool by clicking on it and then click the left mouse button on a note you want to move up or down. Keep the button down and drag the note until it is at the pitch you want, then release the button. The score will redraw with the note at its new pitch. When the note is being dragged it stays in key. This is usually what you want, but sometimes you will want to set a note to a pitch that is not in the key signature. You can move a note chromatically by using the arrow keys while the note is being dragged. For example, to

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change a C natural to a C sharp in the key of C, click on the note and keep the left mouse button down. Then press the **UP ARROW** key once. Now release the left mouse.

Spacing Tool

The **spacing** tool is available *only when you are editing notes*, that is, when the **note** is selected in the **object type palette**. It is used to **move** notes and bar lines forward and backward in space *without effecting their time values*. For example, to move the middle bar line to the left when you have two bars per line, select the **note spacing** tool and click on the bar line. Drag it to the left as far as you want. The music will redraw with the left barline where you dragged it. You can also use it to move notes back and forth. Select the note you want to move and drag it to where you want it. You can only drag notes about three note widths left or right from their original position.

Track SelectorList Box
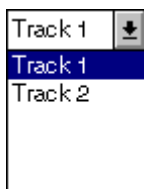
To the right of the tool palette is the **track selector** list box. Use this to change to a new track in the Score Editor. Click on the **track selector** list box and then click on the track that you want from the list of tracks that drops down. If you are in **Single Track mode** (if the score button has a single bracketed staff), you only see one track at a time, so the new track will replace the one you were looking at before. If you are in **Score mode** (if the score button has a double bracketed staff), the cursor will move to the track you select. You can also change tracks in **Score mode** by using the up and down arrow keys. When you change the track, the first box of the status line (at the bottom of the main window) will change, telling you the name and the number of the track you are on.

Mouse Time Locator

The **mouse time locator** shows you the time in *bars*, *beats* and *steps* of the mouse. Notice how this changes as you move the mouse back and forth in the Score Editor.

Object Type Palette
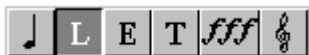
The **object type palette** lets you select the type of object you are entering or editing. There are six different types of objects.

Notes

The button with the **note** is for notes. When the **note** is selected you will see what we call a **voice palette** to the far right of the control area. Each of the four buttons (**Def**, **1**, **2**, or **Grace**) represent a possible voicing for music that is entered. When music is entered with the Def voice (the default), notes are entered with the stems up or down depending on the position of the note on the staff. (Notes on or below the middle line are written with stems up and notes above the middle line are written with stems down.) Notes entered in voice 1 all have their stems pointing up. Rests for voice 1 appear centered on the top staff line. Notes entered in voice 2 all have their stems pointing down. Rests for voice 2 appear centered on the bottom staff line. Grace notes are all drawn at small size and have no rests associated with them.

If you want a single voice to appear in a bar, it is usually best to use the default (**Def**) voice. If you want two voices to appear in a bar, enter the first voice as **voice 1** and then enter the notes for the second voice as **voice 2**. If you want some grace notes, put them wherever you want. If you want them to appear before the first beat of a measure, you can move the grace notes ahead of the first normal-sized note using the **note spacing** tool.

Lyrics

The button with the **L** is for lyrics. When the **L** is selected in the object type palette the voice palette is replaced by a **lyric** drop-down list box This is used to select which lyric number is being edited. (Lyric 1 is the first below

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the staff, lyric 2 is the next and so on.) The lyrics first appear at a set distance below the staff, but this can be changed by moving the lyrics with the NS or the NSEW tool as well as by using the lyric spacing dialog (available from the **Lyrics** button in the Display Page dialog in the Display menu).

To enter lyrics, click on the **L** in the object type palette and then select the **pencil** from the tool palette. Click the mouse on the note for which you want to enter a lyric. The cursor will appear for you to enter your lyric. As you enter the lyric, it will automatically center on the note you have selected. To stop entering a lyric, click on a new note or else press the **ESC** key. A fast way to enter lyrics under successive notes is to use the **TAB** key to move the lyric cursor to the next note. You can move back and forth between lyrics using the **TAB** and the **SHIFT**+**TAB** keys. A single dash can be entered halfway between the current lyric and the next one by pressing **CTRL**+**-** (dash). Two dashes can be entered by pressing **CTRL**+**SHIFT**+**-** (dash). The lyric font can be selected using the Fonts dialog from the Page dialog under the Display menu. The lyric events can be edited, erased and moved using the appropriate tools.

Expression Marks

The button with the **E** is for expression marks. When the **E** is selected in the object type palette, **expression text** can be entered. Select the **pencil** tool and click the mouse where you would like to put an expression. The Enter Expression dialog will appear. You can type in the expression you want or select it from the drop-down list box. By default the expression text is drawn in *Times New Roman 10 point italic*. You can change the expression font by selecting the Fonts dialog from the Page dialog under the display menu. The expression events can be edited, erased and moved using the appropriate tools.

Text

The button with the **T** is for text. When the **T** is selected from the object type palette blocks of text can be entered or edited. A drop-down list box of eight block text fonts appears at the right of the Score Editor's control area. Select the font you want for your text. The block text fonts that are available can be changed by selecting the Fonts dialog from the Display Page dialog under the Display menu. Select the **pencil** tool and click the mouse. Now you have a text box that can be resized by dragging on the lower right corner. You can enter text in the font you've selected at the cursor point.

The text event you've entered can be cut, copied and moved using the appropriate tools, just as with other types of events.

Symbols

The button with the **symbol** (*fff* to start) is for symbols. The symbol button changes when a new selection is made and displays the last symbol that was selected. Click once on the **symbol** button and it becomes selected. At this point you can enter the symbol that is drawn on the button or edit any symbols that are in your score. Click on the **symbol** button again and a double palette of symbols drops down. There are ten symbol palettes to choose from, the last four of which are custom. Click on a **symbol palette name** to display the palette to the right of the names. Click on the **symbol** you want to enter and it will appear on the symbol button in the object type palette. Now this will be the symbol you can enter using the **pencil** tool. The **Sym. 1**, **Sym. 2**, **Sym. 3** and **Sym. 4** palettes can be changed by selecting the Fonts dialog from the Display Page dialog, which you choose from the Display menu. You can use these palettes to enter symbols from alternate music fonts or fonts you have created yourself.

Clefs

The button with the **clef** is for clefs. The clef button changes when a new selection is made and displays the last clef that was selected. Click once on the **clef** button and it becomes selected. At this point you can enter the clef that is drawn on the button or edit any clefs that are in your score. Click on the **clef** button again and a palette of clefs drops down. Select the **clef** you want. Now you can enter that clef using the **pencil** tool. When you enter a clef all the notes following that clef up to the point where you have entered another clef will be displayed using that clef. The last clef is the single-staff percussion clef and it behaves a little different from the other clefs. When it is set, the staff is reduced to a single line and all notes are displayed on the line. When the single staff percussion staff or the regular percussion staff is used, the notes are displayed either as regular note heads, open or closed diamonds, open or closed triangles, X's, with a variety of different percussion accent marks. The mapping of drum note heads and accents to note numbers can be set by set using the Drum Notation dialog available from the Options menu.

Score Button

The **score** button changes the score display from **Single Track mode** (a single staff is shown on the button) to **Score mode** (a bracketed double staff is shown on the button). Click on the **score** button to change from **Single Track mode** to **Score mode**.

Page Button

The **page** button changes the display from **Edit mode** to **Print Preview mode**. When the **page** button is selected, the score is shown in **Print Preview mode**. A **100%** button appears to the right of the **page** button.

Pressing the **100%** button causes *all* of the current page of the score to fit exactly in the Score Editor window.

Entering Symbols

For the most part, symbols are entered like notes; that is, you simply click them in with the **pencil** tool where you want them on the page. The **adjustable symbols**, **chords**, **guitar chords**, and **figured bass** symbols are exceptions to this rule.

Another exception is **dynamic** symbols (all dynamics including **crescendo** and **decrescendo**). You can enter **dynamic** symbols in all tracks at once instead of just in one track at a time. When you hold down the **SHIFT** key when entering a dynamic, the symbol is entered in all tracks. If you *don't* hold the **SHIFT** key down when you enter the symbol, of course the symbol is entered only on the current track.

Note: When you are entering symbols (as well as other objects) in Score mode, always be aware of the current track when you enter the symbol. The

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symbol you enter will go onto this track, even if you put it closer to a staff for a different track. If you make this mistake, you will have a hard time editing the symbol afterwards. Make sure you switch the current track to the one on which you want to enter symbols before you enter symbols on a new staff. You can do this by moving the cursor to the new staff with the arrow keys. The current track is shown at the left in the status line at the bottom of the main window. You can also simplify your life by entering symbols in Single Track mode instead of Score mode.

Adjustable Symbols

The **adjustable symbols** are the ones you see when you click on the **Adjust** palette name. These symbols have adjustable shape and size. These symbols are entered by dragging them in. Choose the **pencil** tool and select the adjustable symbol you want to enter. Now click the left mouse button where you want the left edge of the symbol to go. Keep the mouse button down and drag the mouse to where you want the right or bottom edge of the symbol to go. Now release the mouse button.

As you drag, the symbol will shrink and expand to follow the mouse. Release the mouse when you have positioned the symbol approximately where you want it. There will be three little diamonds at the left, right and center of the symbol. You use these *control points* to further shape and move the symbol. Click on a control point to select it and drag it around to shape or move the symbol. Alternatively you can move a control point around using the arrow keys. You can move between control points by using the **TAB** and the **SHIFT**+**TAB** keys as well as by clicking on them with the mouse. The middle control point is usually used for moving the symbol and the outer control points for shaping the symbol. When you are finished shaping and positioning your symbol, click the right mouse button or press the **ENTER** key to enter it. If you don't want to enter your symbol, press the **ESC** key.

When you are entering the **slur** symbols, you can automatically position the *left slur point* over the closest note by pressing **Z**. You can automatically position the *right slur point* over the closest note by pressing **X**. You can

automatically center the slur by pressing **V**. If the slur is above the notes, the slur end points go over the closest notes when you press **Z** and **X**. If the slur is below the notes, the slur end points go under the closest notes when you press **Z** and **X**.

When you are entering the **8va** and **8vb** symbols, you can control whether or not the 8va or 8vb text is shown and whether or not the finishing vertical line is displayed. The **HOME** key **toggles** whether the **8va** is shown; the **END** key **toggles** whether the **finishing vertical line** is displayed. This is useful when octava markings extend over more than one line.

When you are entering first and second endings you can change or eliminate the ending number. The ending number defaults to **1**. for the first ending and **2**. for the second ending. The numbers can be changed or eliminated by pressing the **+** (plus) and the **-** (minus) keys.

You can put in and change the number for groupings by using the **+** (plus) and the **-** (minus) keys. Pressing **+** (plus) increments the number; pressing **-** (minus) decrements it. When you decrement past 1, the number disappears. You can change or eliminate the amount of space in the middle of the grouping by using **PAGE UP** and **PAGE DOWN**.

PAGE UP and **PAGE DOWN** also work on crescendo and decrescendo symbols to change the angle of the symbol.

Press **F** to flip a number of adjustable symbols. These include the crescendo and decrescendo symbols, the groupings, the endings and the octavas.

Press **L** to horizontally level crescendos, decrescendos and groupings.

It is possible to change the number of tremolo lines in the **tremolo** symbol from one to four by pressing 1, 2, 3 or 4 while entering or editing the tremolo symbol.

Chord Symbol

The symbol at the bottom left of the miscellaneous symbols palette is the **chord** symbol. When you enter a chord symbol, the Chord Name dialog appears for you to build the chord you want.
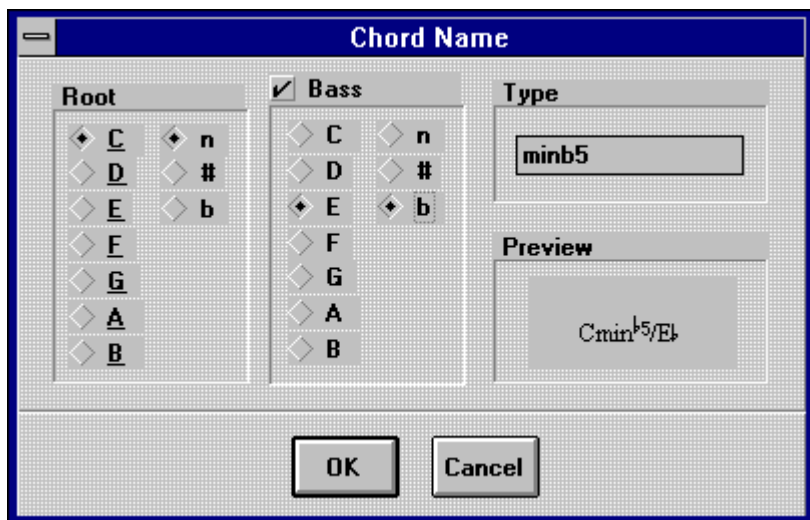
Select the **root** of the chord in the box at the left of the dialog. The root can have a **sharp**, a **flat** or neither after it, depending on whether you select **n**, **#** or **b** beside the name for the root note.

If your bass note isn't the root, you can indicate this. Check the **Bass** box and then choose the note you want for the bass. The bass can have a **sharp**, a **flat** or neither after it, depending on whether you select **n**, **#** or **b** beside the name for the bass note.

Type in the type of chord you want in the **Type** box. If you want to type in a **flat** symbol, type **B**. If you want to type in a **sharp** symbol, type **#**.

The **Preview** box will show you what your chord will look like. Note that numbers and accidentals appear in superscript.

Tempo Symbol

The **tempo** symbol is to the right of the chord symbol at the bottom of the miscellaneous symbols palette. When you enter a tempo symbol, the Tempo Symbol dialog appears. Here you choose the **beat value** you want and the

number for the tempo. The tempo symbol is previewed in the box at the right of the dialog.
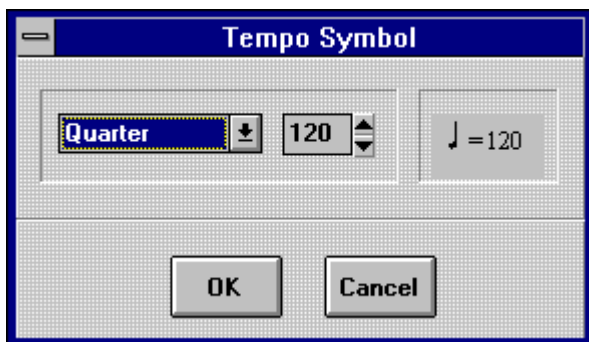
To select the **beat value**, click on the drop-down list box and select a beat value. Drag up and down with the mouse over the list box to scroll it. Click on the beat value you want.

To select the **tempo number**, click on the spin buttons to move the number up and down or click on the number itself and change it by typing in a new number.

Guitar Chord Symbol

The **guitar chord** symbol is to the right of the tempo symbol in the miscellaneous symbols palette. When you enter a guitar chord symbol, the Guitar Chords dialog appears.

You make your guitar chord by selecting a **chord** from the list box at the top left of the dialog. You choose a **starting fret number** from the drop-down list box under the chord list box. You choose whether your guitar chord will have four or five frets by selecting **4 Frets** or **5 Frets** in the box below the fret number drop-down list box. You choose to show or not show the name of the chord above the guitar chord grid by checking or unchecking the **Show Chord Name** box. The name that first appears is the name of the chord that you selected from the chord name list box. You can change this by clicking on the **Set Chord Name** button. This will bring up the Chord Name dialog, which was discussed earlier (see page 90).

You can set the circles on the guitar chord frets yourself by clicking on the **preview grid** wherever you want to put in a circle. You can only have one circle on any vertical line so entering a new circle on a vertical line will erase the old one. Circles entered at the nut will be open. Other circles will be closed. You can **erase** a circle by clicking on it.

Figured Bass Symbol

The **figured bass** symbol is to the right of the guitar chord symbol at the bottom of the miscellaneous symbols palette. When you enter a figured bass symbol, the Figured Bass dialog appears.
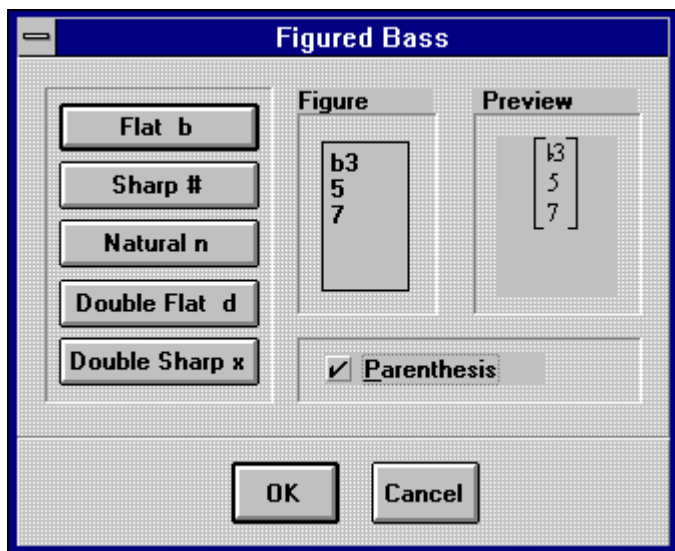
Enter the figure you want by typing in the **Figure** box. Press **ENTER** to get to a new line. You can add accidentals at the cursor position by clicking on one of the **accidental** buttons at the left-hand side of the dialog or by using the key for each accidental (Press **N** for **natural**, **#** for **sharp**, etc.). Check the Parenthesis box if you want your figure to be enclosed in parentheses. The figure will appear in the **Preview** box the way it will be displayed on the page.

Moving Around in the Score Editor

The **horizontal scroll bar** is used to move the display *forward or backward in time*. Click on the **left button** and the display will move *one bar* to the left. Click on the **right button** and the display will move *one bar* to the right. Clicking to the **right of the scroll box** will move the display right *one screen*. Clicking to the **left of the scroll box** will move the display left *one screen*. **Dragging the scroll box** will move to any place in the piece. The **time display** in the main control area will change as you move the scroll box. When it is on the bar or the time you want, release the scroll box and

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the display will go to this bar, with the cursor at the beginning of this bar. You can also move to a specific time by clicking on the time display in the main control area and setting a time to which you want to go.

You can move the **cursor** forward or backward, by the **duration value** set in the durations palette in the main control area, by using the **LEFT ARROW** key and the **RIGHT ARROW** key. You can move the **cursor** forward or backward, by the **score quantization duration** (set in the **Display Score** dialog under the **Display** menu), by using **CTRL**+**LEFT ARROW** and **CTRL**+**RIGHT ARROW.**

The **vertical scroll bar** will scroll the display *up* or *down*.

Notes on Transcription

The Score Editor automatically transcribes the music in your tracks and updates it whenever you make changes or enter new music.

Quantization

The display is generally **quantized**. This means that the **start time** and **duration** of notes and rests will always be a multiple of the **display quantization value**. For example, thirty-second notes and other notes smaller than sixteenths will be displayed as sixteenth notes if the display quantization is set to sixteenths. If you want to display triplets properly you must select a triplet quantization value, such as triplet, triplet/8th, triplet/16th or triplet/32nd. **Display quantization** can be done **globally** using the **Display Score** dialog, on a **track**-**by**-**track** basis using the **Display Track** dialog, or on a **bar**-**by**-**bar** basis using the **Display Bar** dialog. The Display Score, Display Track, and Display Bar dialogs are available from the **Display menu**.

Note Extending

By default, **notes are extended** in duration to the beginning of the **next note** or to the beginning of the **next beat**, whichever is closest. This is done to avoid lots of little rests, which can clutter the display and are normally dispensed with in notational practice. This can be changed so that all notes display at their real duration regardless of their position in the score. Like display quantization, **note extending** can be adjusted on a **bar**-**by**-**bar**, **track**-**by**-**track**, or **global basis**. You change this using the **Display Bar**, **Display Track**, or **Display Score** dialogs.

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Accidentals

Accidentals are generated automatically for notes. If you don't like the way accidentals have been chosen by QuickScore Elite, you can change them by selecting the note or notes whose accidental you want to change, by double-clicking or control-clicking and choosing**Accidental** from the edit menu.

Note Grouping

By default, **notes are grouped together by beat**. For example, in 6/8 time there will be two groups each containing three eighth notes in each bar. You can adjust the way notes are grouped by changing the time signature or changing the beat. You can change the time signature or the beat globally using the Display Score dialog or on a bar-by-bar basis using the Display Bar dialog. You can also group notes by selecting the notes you want to group together and choosing**Group** from the edit menu.

Stem Direction

Notes below the middle staff line are normally drawn with **stems up**; notes on or above the middle staff line are normally drawn with **stems down**. This can be changed by selecting notes and grouping them with stems up or down. It can also be changed by setting the voice of the notes you want to change or by changing the stem direction of all the notes in the bar or track using the **Display Bar** or **Display Track** dialogs.

Voice

By default, notes are displayed on a track as a **single voice**. Notes can be entered or changed to appear on four distinct voices — the **default**, **voice 1**, **voice 2** or **grace notes**. Change notes to a given voice by selecting the notes and choosing **Voice** from the **Edit** menu.

Split Track

You can choose to display a track as two separate staves (you would generally do this if you are displaying a keyboard part or a reduction of more than one distinct parts). Do this by setting the option **Split Track** to **Yes** in the **Display Track** dialog.

Cross-staff Beaming

If you display your track on two separate staves, notes above and including middle C appear on the top staff and notes below middle C appear on the bottom staff. You can choose which notes go on which staff by selecting them and choosing **Staff** from the edit menu. You can set **cross-staff beaming** by selecting **Crossed** from the submenu that appears after you select **Staff** from the edit menu. For more details on cross-staff beaming, see "Staff" on page 145.

Note Size

Notes can be drawn *large* (the default) or *small* (for grace or cue notes, for example). Change the size of notes by selecting the notes, choosing **Group** from the edit menu, and then **Big Notes** or **Small Notes**. For more information on grouping notes, see "Group" on page 145.

Clefs

You can select several different kinds of **clefs** including two kinds of drum clefs. The single-line drum clef (with a line through it in the clef palette) will cause the staff to appear as a single line. You select clefs on a track-by-track basis using the Display Track dialog or you can drop in a clef anywhere in a track by selecting a **clef** in the object type palette and entering that clef with the **pencil** tool. When a **drum clef** is selected, notes are displayed with drum note heads. The mapping of note pitches to drum note heads is governed by the **Drum Notation** dialog available under the **Options** menu.

Drum clefs

It is easiest to enter and edit notes that you want to display with a **drum clef** by switching to a **bass clef**. When you have finished entering or editing notes, switch the clef back to a drum clef. This is because you can map several pitches to the same position on the staff when you display notes using a drum clef. (Using a single-staff drum clef maps all notes to the same staff line.) You can also enter or edit drum notes using the **Piano Roll Editor**.

Rests, Ties, and Tied Notes

Rests, **ties** and **tied notes** are generated automatically. For this reason it is usually futile to try to edit rests and tied notes. The exception is when you have explicitly entered rests or tied notes yourself. (See next paragraph.)

However, the **level of rests** and **ties** can be adjusted so that they don't overwrite notes or other symbols. This is done from the **Display Bar** dialog. You can also choose not to generate rests at all in a given section of your music and put them in yourself. You can do this for a given bar using the Display Bar dialog or, for an entire track, using the Display Track dialog.

If you really must have a tied figure displayed in a manner that you can't seem to get any other way, you can enter the note, the ties, and the tied notes by hand. Use a slur to simulate the tie. You can set the velocity of the tied notes to zero if you like.

Changing How Music is Transcribed

As we have pointed out, you can change how your music is transcribed on a **note**-**by**-**note** basis, a **bar**-**by**-**bar** basis, a **track**-**by**-**track** basis, or **globally**. To change things on a note-by-note basis, select a note or a group of notes and apply a formatting edit to it (**accidental**, **group**, **staff**, or **voice**). For details on applying these edits, see "Note Block Editing Menu" starting on page 141. To make changes on a bar-by-bar basis, use the **Display Bar** dialog. To make changes on a track-by-track basis, use the **Display Track** dialog. To make changes on a global basis, use the **Display Score** dialog. The Display Bar, Display Track and Display Score dialogs are available by clicking on the **Display menu** and selecting the appropriate menu item. There are also a number of display options in the display dialogs that haven't been covered here. For information about display options not covered here as well as more information about display options which were covered here, see "Display Menu" starting on page 167.

Printing

You can print a **full score**, a **single track**, a **group of tracks** or just what appears on **the screen**. The printing options are available from the **File** menu. Choose **Print File** to print your score. If you are printing a single part you can select Single Track mode with the **Score** button (make sure a single staff is displayed on the button) and then choose **Print File**, or you can choose **Print Part**. Print Part lets you select a group of tracks for your

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part. If you want to print just the music that appears on the screen, choose **Print Line**.

If you choose Print File or Print Part you can opt to print the entire piece or you can select a range of pages to print. You can print in **landscape** or **portrait** page orientation by selecting this in the **Print Setup** dialog. The Print Setup dialog is available from the **File** menu or by pressing the **Setup** button in the **Print** dialog.

On some printers you can select the **staff size** for your printout. This is done by changing the **Scaling (%)** box in the **Options** dialog. This changes the *aspect ratio* of the music by stretching in the *y* direction while keeping the *x* direction constant. The Options dialog is available for some printers when you select the **Options** button in the **Print Setup** dialog.

What Else Affects the Score Editor?

Of course, the menus that drop down when you edit notes or other objects in the Score Editor will affect objects and the way they are displayed. See " Edit Menu" starting on page 136 for a detailed discussion of these. Also, options that are selected from the dialogs that come up under the **Display** menu, affect how music is displayed in the Score Editor. Under the **Options** menu, the **Legato Entry** option is important for the Score Editor. When a note is entered with **legato entry** set to *on*, the note that precedes it will lengthen or shorten its duration so that it ends where the new note starts. This is sometimes very useful, because you can enter a lot of music with different rhythmic values without changing the duration value from the main control area. Of course, you have to remember to turn **legato entry** *off* when you want to keep space between notes that you are entering.

Keys Used in the Score Editor

Keystroke	Action
TAB	Insert space equal to the current duration value.
SHIFT+**TAB**	Delete space equal to the current duration value.
DELETE	Delete whatever is at the cursor position.
BACKSPACE	Delete what is one duration value before the cursor and move the cursor back one duration value.
UP ARROW	Move the cursor to the track above when in Score mode.
DOWN ARROW	Move the cursor to the track below when in Score mode.
LEFT ARROW	Move the cursor to the left one duration value.
RIGHT ARROW	Move the cursor to the right one duration value.
CTRL+**LEFT ARROW**	Move the cursor to the left by the quantization amount.
CTRL+**RIGHT ARROW**	Move the cursor to the right by the quantization amount.
CTRL+**PAGE UP**	Move the display one bar ahead.
CTRL+**PAGE DOWN**	Move the display one bar back.
PAGE UP	Scroll the screen up.
PAGE DOWN	Scroll the screen down.
SHIFT+**S**	Set the start block editing mark.
SHIFT+**F**	Set the finish block editing mark.
F11	Move the display back one screen.
F12	Move the display forward one screen.

Keystroke	Action
HOME	Move to the beginning of the piece.
END	Move to the end of the piece.
SHIFT+**LEFT ARROW**	Select tool to the left of the selected tool.
SHIFT+**RIGHT ARROW**	Select tool to the right of the selected tool.
CTRL+**F**	Toggle between Score mode and Single Track mode.

Piano Roll Editor

The **Piano Roll Editor** lets you edit your music in piano roll notation. You see one track of music at a time.

The Piano Roll Editor's **control area** has the following features:

- A **toolbar**.

- A **track** list box for changing from track to track.

- A **channel** list box showing the channel or channels being edited.

- A **mouse time locator** showing the time of the mouse.

- A **mouse pitch locator** showing the pitch of the mouse.

- A button to **show waves** or **hide waves**.

- An indicator letting you know whether you are currently **editing waves** or **editing notes**.

Below the control area is the **piano roll display**. Here you see your music in piano roll notation.

- At the top of the display is the **bar number indicator**.

- To the left is a **vertical piano keyboard** to show you the pitches of your notes.

- **Notes** appear in the note area as horizontal bars. The vertical position of the bar indicates the pitch of the note. The beginning of the bar

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shows the note's start time and the length of the bar shows the note's duration.

- There is a **cursor** (the vertical purple line), where music is entered using step entry or the right mouse button. This is also the point where music, that has been cut or copied to the clipboard, will be pasted. The cursor moves by clicking the mouse or by using the arrow keys.

You can add wave files to your piece using the Piano Roll Editor's **wave window**. This area is just above the piano roll window. If the wave window is not visible, click on the **Show Waves** button. Wave files appear in this area as straight lines indicating the start time and duration of the wave file. The name of the wave file is written above the line. You move between the wave window and the piano roll window by clicking on one or the other. The **Edit Notes/Edit Waves** indicator at the far right of the control area will display **Edit Notes** if the piano roll window is active or **Edit Waves** if the wave window is active.

Toolbar

The toolbar in the Piano Roll Editor contains eight tools.

Arrow Tool

The **arrow tool** is generally used for **selecting** notes and then **editing** them by selecting an editing operation from the edit menu. It is also possible to select a single note (by double clicking on it) and then edit it by selecting an operation from the edit menu. When the **arrow** is selected notes can be entered at the cursor point by clicking the right mouse button. This will enter a note or event at the height of the mouse at the cursor point and advance the cursor.

The cursor point can be moved by pressing the **left mouse button** or by using the **arrow keys**. The cursor always moves in increments of the selected **duration** value, set from the **durations palette**. (The durations palette is in the main control area, to the far left. To change the selected duration, click on the duration you want.)

If you are using any other tool *except* the arrow tool, use the **right mouse button** to position the cursor, because the left mouse button is used for editing.

To select a group of notes you can drag over them using the mouse. Click before the starting point of the first note you want to edit, hold the mouse button down and drag past the starting point of the last note you want to edit. You can drag past the end of the window if you want. The window will scroll if you do this.

While the mouse is being dragged, the **HOME**, **END**, **F11** and **F12** keys can be used to move around in the Piano Roll Editor to more quickly find the end of the range.

If you want to select only a few notes, hold the **CTRL** key down and then click on each note you want to include in your selection. To delete a note from the selection, just click on it again. When you have selected all the notes you want, release the **CTRL** key. Another way to limit the notes you are editing is by using the **Note Filter**, available under the **Edit** menu. Click on **Use Filter** to select it and then create your filter. For example, you can just select notes above middle C (MIDI note 60) by setting the **From Pitch** to **61** instead of **0**.

Pencil Tool

The **pencil** tool is used to **enter** notes. Select the **pencil** tool and click where you want to enter a note. This note will follow the mouse until you release the mouse button. Remember that the duration of the note is set by the durations palette in the main control area. If the **Snap/Free** button (just below the arrow tool in the control area) is set to **Snap**, the start time of the notes you enter are quantized to the value of the selected duration. If it is set to **Free**, the start time of the notes you enter are not quantized and you can enter them at any point in time.

Eraser Tool

The **eraser** tool will **erase** notes. Select the **eraser** tool and click on a note you want to erase. The note will disappear.

NSEW Tool

The **NSEW** tool is the one with the four arrows: one pointing *north* (up), one pointing *south* (down), one pointing *east* (right) and one pointing *west* (left). It **moves** a note around with complete freedom of movement; that is

you can move it back and forth in time or up and down in pitch. Select the
NSEW tool by clicking on it and then click the left mouse button on a n ote
that you want to move around. Keep the button down and drag the note to
where you want to put it and then release the button. The display will
redraw with the note in its new position.

EW Tool

The **EW** tool is the one with one arrow pointing *east* (right) and one arrow
pointing *west* (left). It **moves** a note *forward or backward in time*. Select the
EW tool by clicking on it and then click the left mouse button on a note you
want to move forward or back. Keep the button down and drag the note to
where you want to put it and then release the button. The display will
redraw with the note at its new time.

NS Tool

The **NS** tool is the one with one arrow pointing *north* (up) and one arrow
pointing *south* (down). It **moves** a note *up or down in pitch*. Select the
NS tool by clicking on it and then click the left mouse button on a note you
want to move up or down. Keep the button down and drag the note until it
is at the pitch you want then release the button. The display will redraw
with the note at its new pitch.

Duration Tool

The **duration** tool is the one with the long arrow pointing to the right. It
lets you **change the duration** of a note. Click the left mouse button on the
note whose duration you want to change. Keep the button down and drag
the end of the note until it is where you want it and then release the button.

Multi Tool

The **multi** tool is the one at the far right of the toolbar. It combines the **EW**,
the **NS**, and the **duration** tools. If you click on the *first third* of the note, the
multi tool behaves like the **EW** tool. (You can move the note back and forth
in time) If you click on the *second third* of the note, the **multi** tool behaves
like the **NS** tool. (You can move the note up and down in pitch.) If you click
on the *last third* of the note, the **multi** tool behaves like the **duration** tool.
(You can change the duration of the note.)

Track Selector List Box

To the right of the tool palette is the **track selector** list box. Use this to change to a new track in the Piano Roll Editor. Click on the **track selector** list box and then click on the track that you want from the list of tracks that drops down. When you change the track, the first box of the status line (at the bottom of the main window) will change, telling you the name and the number of the track that you are on.

Channel Selector List Box

To the right of the track selector is the **channel selector** list box. This tells you what channel or channels are being displayed and edited in the Piano Roll Editor. Usually the channel is set to **All Channels**, letting you see and edit notes on all channels. Use the channel selector to change the display of the channel. Click on the **channel selector** list box and then click on the channel that you want from the list of channels that drops down.

Mouse Time Locator

The **mouse time locator** shows you the location of the mouse in time in *bars*, *beats* and *steps*. Notice how this changes as you move the mouse back and forth in the display.

Pitch Locator

The **pitch locator** box tells you the location of the mouse in pitch. The display shows the name of the note and, in brackets, the MIDI note number. Notice how this changes as you move the mouse back and forth in the display.

Hide Waves/Show Waves Button

Click on **Hide Waves** to hide the wave file window. (This will give more room for the piano roll window.) Click on **Show Waves** to show the wave file window.

Edit Notes/Edit Waves Indicator

This indicator shows you whether you are currently editing waves or notes. Click in the **wave** window to edit waves. Click in the **note** window to edit notes.

Snap/Free Button

If the **Snap/Free** button (just below the arrow tool in the control area) is set to **Snap**, the start times of the notes you enter are quantized to the value of the selected duration. If it is set to **Free**, the start times of the notes you enter are not quantized and you can enter them at any point in time. The setting of the **Snap/Free** button affects the same way the moving of notes forward or backward in time and the adjusting of the durations of notes.

Wave Files

Wave files can be entered, cut, copied and moved in the wave window of the **Piano Roll Editor**. Enter wave files by clicking the left mouse button when the **pencil** tool is selected. An **Open File** dialog box will appear to let you choose the wave file you want to select. When you select a file it will show up in the wave window with its name and duration as a thin blue line. You can delete wave files with the **eraser** tool or move them around in time with the **EW** tool. When the **arrow** tool is selected you can select waves to be cut or copied. Later they can be pasted to a new location. The NSEW, NS, duration and multi tools are *not* available for editing waves.

Moving Around in the Piano Roll Editor

The **horizontal scroll bar** is used to move the display *forward or backward in time*. Click on the **left button** and the display will move *one bar* to the left. Click on the **right button** and the display will move *one bar* to the right. Clicking to the **right of the scroll box** will move the display right *one screen*. Clicking to the **left of the scroll box** will move the display left *one screen*. **Dragging the scroll box** will move to any place in the piece. The **time display** in the main control area will change as you move the scroll box. When it is on the bar or time that you want, release the scroll box and the display will go to this bar with the cursor at the beginning of this bar.

You can also move to a specific time by clicking on the **time display** in the main control area and setting a time to which you want to go.

You can move the **cursor** forward or backward, by the **duration value** set in the **durations palette** in the main control area, using the **LEFT ARROW** key and the **RIGHT ARROW** key. You can move the cursor forward or backward, by the **score quantization duration** (set in the **Display Score** dialog under the **Display** menu), by using **CTRL**+**LEFT ARROW** and **CTRL**+**RIGHT ARROW**.

The **vertical scroll bar** will scroll the display *up* or *down*.

Magnifying Glasses

There are four little magnifying glasses in the lower right corner of the Piano Roll Editor. The two magnifying glasses to the right of the horizontal scroll bar control the horizontal (time) scale of the piano roll display. Click the **larger magnifying glass** to *zoom in* (show less bars on the screen). Click the **smaller magnifying glass** to *zoom out* (show more bars on the screen).

The two magnifying glasses below the vertical scroll bar control the vertical (pitch) scale of the piano roll display. Click the **larger magnifying glass** to *zoom in* (show less pitches on the screen). Click the **smaller magnifying glass** to *zoom out* (show more pitches on the screen).
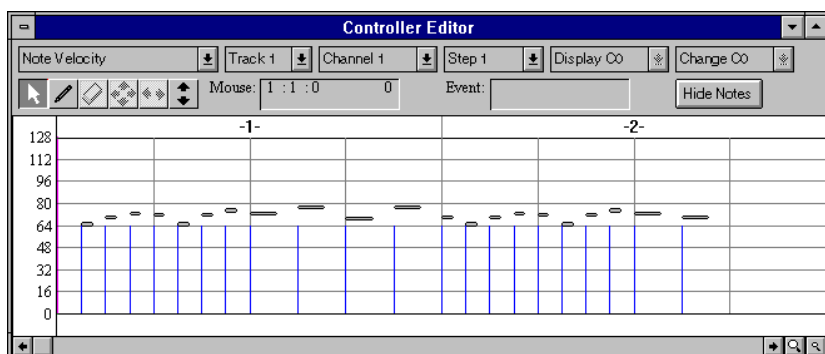
Keys Used in the Piano Roll Editor

Keystroke	Action
UP ARROW	Scroll the screen up by one note.
DOWN ARROW	Scroll the screen down by one note.
LEFT ARROW	Move the cursor to the left one duration value.
RIGHT ARROW	Move the cursor to the right one duration value.
CTRL+**LEFT ARROW**	Move the cursor to the left by the quantization amount.
CTRL+**RIGHT ARROW**	Move the cursor to the right by the quantization amount.
CTRL+**PAGE UP**	Move the display one beat ahead.
CTRL+**PAGE DOWN**	Move the display one beat back.
PAGE UP	Scroll the screen up.
PAGE DOWN	Scroll the screen down.
F11	Move the display back one screen.
F12	Move the display forward one screen.
HOME	Move to the beginning of the piece.
END	Move to the end of the piece.
SHIFT+**LEFT ARROW**	Select tool to the left of the selected tool.
SHIFT+**RIGHT ARROW**	Select tool to the right of the selected tool.

Controller Editor

The **Controller Editor** can be used to edit all kinds of data of a continuous nature, including controllers, pitch bend, aftertouch, note velocity, tempo changes and program changes.

The Controller Editor's **control area** has the following features:

- A **data type** list box.

- A **track** list box for changing from track to track.

- A **channel** list box showing the channel or channels being edited.

- A **step** list box for controlling the spacing between adjacent events.

- A **display note** list box (only for polyphonic aftertouch).

- A **change note** list box (only for polyphonic aftertouch).

- A **toolbar.**

- A **mouse position locator** showing the time and amplitude of the mouse.

- An **event position locator** showing the time and amplitude of the event closest to the mouse.

- A button to **show notes** or **hide notes** in the controller window.

The Controller Editor's **window** has the following features:

- **Time** is displayed on the horizontal axis.

- **Amplitude** is displayed on the vertical axis. The amplitude displayed depends on the kind of data being displayed. For example, pitch bend data has a range from -8192 to +8192 and controllers have a range of 0 to 127.

- **Bar numbers** are shown above the display.

- **Beats** are shown as gray vertical lines.

- **Amplitude levels** are shown as horizontal lines.

- **Controllers** or other data are displayed as vertical blue lines.

- Superimposed on the controller display is a piano roll display of the **notes** in the current track. This can be turned *off* by clicking on the **Hide Notes** button.

Data Type List Box

The **data type** list box lets you select the kind of controller or other data you will be working on in the Controller Editor. Click on the **data type** list box and select a controller or other data type by clicking on it. Scroll up or down with the scroll bar to the right of the list box to find the kind of data you want.

Track Selector List Box

To the right of the data type list box is the **track selector** list box. Use this to change to a new track in the Controller Editor. Click on the **track selector** list box and then click on the track that you want from the list of tracks that drop down. When you change the track, the first box of the status line (at the bottom of the main window) will change, telling you the name and the number of the track that you are on.

Channel Selector List Box

To the right of the track selector is the **channel selector** list box. This tells you what channel or channels are being displayed and edited in the Piano

Roll Editor. Use the channel selector to change the display of the channel. Click on the **channel selector** list box and then click on the channel that you want from the list of channels that drops down.

Step List Box

The **step** list box lets you control the fineness of vertical resolution between controllers. For example, if the step value is 4, data will not be entered with the mouse until the vertical difference between the current point and the previous data point is greater than or equal to 4. A step value of 1 gives you the finest level of control over your data. A value of 10 gives you the coarsest level of control. It is sometimes useful to use a step value other than 1 to avoid clogging your tracks with more controller data than you need. It is a good idea to economize on controllers and use as few as you can to achieve the effect you are after.

Display Note List Box

The **display note** list box is only for *polyphonic aftertouch*. It is disabled unless **Poly Aftertouch** is in the **data type** list box. It lets you set the pitch of the polyphonic aftertouch you want to enter or edit.

Change Note List Box

The **change note** list box is only for *polyphonic aftertouch*. It is disabled unless **Poly Aftertouch** is in the **data type** list box and if **Display All** is in the **display note** list box. When the **change note** list box becomes active, if changes are made to aftertouch data, the new aftertouch data will be assigned to the note in the change note list box.

Toolbar

The toolbar in the Controller Editor has six tools.

Arrow Tool

The **arrow** tool is generally used for **selecting** events and then **editing** them by selecting an editing operation from the edit menu. It is also possible to select a single event (by double clicking on it) and then edit it by selecting an operation from the edit menu. When the **arrow** is selected events can be entered by dragging with the right mouse.

The cursor point can be moved by pressing the **left mouse button** or by using the **arrow keys**. The cursor always moves in increments of one step.

If you are using any other tool *except* the arrow tool, use the **right mouse button** to position the cursor, because the left mouse button is used for editing.

To select a group of events you can drag over them using the mouse. Click before the starting point of the first event that you want to edit, hold the mouse button down and drag past the starting point of the last event that you want to edit. You can drag past the end of the window if you want. The window will scroll if you do this.

While the mouse is being dragged, the **HOME**, **END**, **F11** and **F12** keys can be used to move around in the Controller Editor to more quickly find the end of the range.

If you want to select just certain events in your range, hold the **CTRL** key down and then click on each event you want to include in your selection. To delete an event from the selection, just click on it again. When you have selected all the events you want, release the **CTRL** key.

Pencil Tool

The **pencil** tool is used to **enter** events. Select the **pencil** tool and click where you want to enter a single event. You can also drag the mouse to enter a group of events. When you drag in events, the density of the events is controlled by the step setting in the step list box.

Eraser Tool

The **eraser** tool will **erase** events. Select the **eraser** tool and click on an event you want to erase. The event will disappear. To delete a group of events in one operation, use the **arrow** tool to select the events and then choose **Cut** from the edit menu.

NSEW Tool

The **NSEW** tool is the one with the four arrows: one pointing *north* (up), one pointing *south* (down), one pointing *east* (right) and one pointing *west* (left). It **moves** an event around with complete freedom of movement, that is you can move it back and forth in time or up and down in amplitude. Select the **NSEW** tool by clicking on it and then click the left mouse button on an event you want to move around. Keep the button down and drag the note to where you want to put it and then release the button. The display will redraw with the event in its new position.

When the **NSEW** tool is selected you can position an event with the arrow keys. Move the cursor over the event you want to move until it is highlighted in red. Now you can use the arrow keys to move it or change its amplitude.

EW Tool

The **EW** tool is the one with one arrow pointing *east* (right) and one arrow pointing *west* (left). It **moves** an event *forward or backward in time*. Select the **EW** tool by clicking on it and then click the left mouse button on an event you want to move forward or backward. Keep the button down and drag the event to where you want to put it and then release the button. The display will redraw with the note at its new time.

When the **EW** tool is selected you can position an event with the **LEFT ARROW** key and the **RIGHT ARROW** key. Move the cursor over the event you want to move until it is highlighted in red. Now you can use the **LEFT ARROW** key and the **RIGHT ARROW** key to move it back and forth in time.

NS Tool

The **NS** tool is the one with one arrow pointing *north* (up) and one arrow pointing *south* (down). It **moves** an event *up or down in amplitude*. Select the **NS** tool by clicking on it and then click the left mouse button on an event you want to move up or down. Keep the button down and drag the

event until it is at the pitch that you want and then release the button. The display will redraw with the event at its new amplitude.

When the **NS** tool is selected you can position an event with the **UP ARROW** key and the **DOWN ARROW** key. Move the cursor over the event you want to move until it is highlighted in red. Now you can use the **UP ARROW** key and the **DOWN ARROW** key to change its amplitude.

Mouse Position Locator

Mouse: 1 : 3 : 43   127
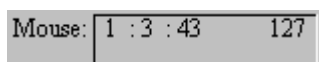
The **mouse position locator** shows the position of the mouse in time and amplitude. If you are editing controllers, the name of the controller represented by the mouse's amplitude is shown as well.

Event Position Locator

Event: 1 : 2 : 69   75
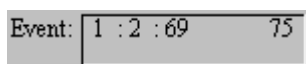
The **event position locator** shows the position in time and the amplitude of the event closest to the mouse. This event is highlighted in red in the controller window. If you are editing controllers, the name of the controller represented by the event's amplitude is shown as well.

Hide Notes/Show Notes Button

Click on **Hide Notes** to get rid of the piano roll display superimposed on the controller window. The button now reads **Show Notes**. Click on it again to put the notes back. The piano roll display is just for reference. It lets you line up your controllers with the notes they belong to.

Keys Used in the Controller Editor

Keystroke	Action
UP ARROW	Add 1 to the selected event (only with NS or NSEW tool selected).
DOWN ARROW	Subtract 1 from the selected event (only with NS or NSEW tool selected).
LEFT ARROW	Move the cursor to the left one step (with all tools except EW and NSEW).
	Move the selected event one step to the left. (only with EW or NSEW tool selected).
RIGHT ARROW	Move the cursor to the right one step (with all tools except EW and NSEW).
	Move the selected event one step to the right. (only with EW or NSEW tool selected).
CTRL+**PAGE UP**	Move the display forward one beat.
CTRL+**PAGE DOWN**	Move the display back one beat.
F11	Move the display back one screen.
F12	Move the display forward one screen.
HOME	Move to the beginning of the piece.
END	Move to the end of the piece.
SHIFT+**LEFT ARROW**	Select tool to the left of the selected tool.
SHIFT+**RIGHT ARROW**	Select tool to the right of the selected tool.

Track Sheet

The **Track Sheet** shows you an overview of your tracks and lets you easily change a lot of the important settings for them.

Track	Name	Play	Solo	Mouse+Faders	Program	Vol
1	MIDI3	◎		Channel 1	67 - Baritone Sax	-
2	MIDI4	◎		Channel 1	-	-
3	MIDI5	◎		Channel 1	-	-
4		◎		Channel 1	-	-
New						

A new track can be **created** by clicking on **New** at the bottom of the list of track numbers. If you already have sixteen tracks (QuickScore Elite's maximum), you can't create any new tracks.

You can **delete** a track by selecting a track by clicking on that track's number and then pressing the **DELETE** key. You will be asked to confirm the deletion of the track before the track is actually deleted.

You can **exchange** tracks by dragging one track number on top of another.

You can **copy** one track to another one by holding down the **CTRL** key and then dragging one track on top of another. If you do this, the second track is replaced by a copy of the first track.

Name

You can change the track names by clicking on the **Name** field and entering a new name. You can edit characters to the left or right of the end of the field by dragging the mouse to the left or right, or by moving the cursor left

or right with the arrow keys. Click outside the field to finish editing the track name.

You can enter **line feeds**, **sharps**, **flats**, **naturals** and **double sharps** in the name field by preceding the character for each with a **backslash**. Enter a line feed by typing "**\r**". Enter a sharp by typing "**\#**", a flat by typing "**\b**" and a natural by typing "**\n**". The name will look funny in the name field but it will appear correctly when it is displayed on the score page in Print Preview mode.

Play

Each track will play if there is a *circle* in the **Play** field. It will be mute if there is no circle. Click on the **Play** field to remove or display the circle.

Solo

Click on a track's **Solo** field to solo that track. A *circle* will appear in that field and now only that track will play when you play or record. Click on the **Solo** field for another track and the new track will become the solo track. Revoke the solo status of a track by clicking on the **circle** in the **Solo** field. The circle disappears and no track has solo status.

Mouse+Faders

The **mouse+faders** field shows you the channel on which events entered with the mouse or with the faders in the Mixer will appear. Click on the **mouse+faders** field and a list box will appear allowing you to change the channel. If you change the channel, you are given the opportunity to set the channel for all data that is already on the track to the new channel. Usually it is good practice to keep all data on a track on the same channel. However, QuickScore Elite does allow you to have data on more than one channel on the same track.

Program

The name of the initial program change for each track is displayed in the **program** field. If there is a little dash in the field, there is no program

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change at the beginning of the track. If you want to choose a new program for your track, click on the **program** field and a drop-down list box will appear. Select the new program you want. This program change will be entered at the beginning of the track with the Mouse+Faders channel.

You can choose your program names so that they correspond to the instrument(s) you have in your setup using the Patch Lists dialog. (See "Patch Lists" on page 204 and "PATCHES.INI" on page 217 for details.)

Volume

This is where the initial volume for your track is displayed. If a dash is displayed in this field, there is no volume controller at the beginning of the track. If you want to change the initial volume for your track, click on the **volume** field and enter a new volume. A new volume controller will be entered at the beginning of the track on the Mouse+Faders channel.

Mixer

You use the **Mixer** to make changes to controllers and other continuous data, such as pitch bend or aftertouch, as you listen to your music. You can use the Mixer while playing or recording. Moving the sliders while recording will record the changes you make and affect playback at the same time. You can also use the Mixer while playing, and in this case it will only change the playback sound; it will not change any data. This is useful to test any changes before you record them.
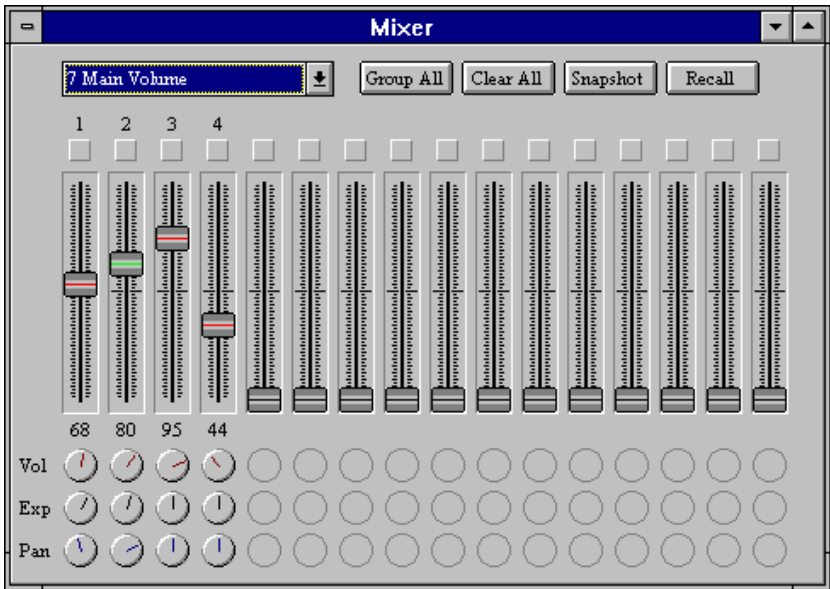
The Mixer has a **control area** with the following features:

- A **data type** list box.

- Two buttons for **grouping** your faders.

- Two buttons for taking and recalling **snapshots** of your faders.

There are **sixteen faders**, one for each possible track. Only the faders for tracks defined in your piece can be moved. Each fader that can be moved has either a red or a green line through its slider button. The line in the middle of the last fader you selected is green, and all the others are red. You *play* the faders by dragging the slider button up and down with the mouse, as you would real faders in a mixing console. As you drag a fader, MIDI

events are sent out and you can hear them affect your music. For example, if **7 Main Volume** is selected in the **data type** list box and you drag **fader number one** from top to bottom as you play, you will send out a number of **main volume control changes** starting at **127** (the top) and ending at **0** (the bottom) on **track one**. This will make the volume on track one fade away to nothing.

Note that when you are **recording**, previously recorded controllers are erased *only as long as you hold down the mouse button on a fader*. While you have the mouse button released, any controllers already in the track will not be affected.

Above each fader is a little **box** that can be **checked** or **unchecked** by clicking the mouse in the box. **Checking faders** is used to **group faders together** for moving. If more than one fader is checked, moving one checked fader will move all checked faders. You can use the **Group All** button to **group all faders** and the **Clear All** button to **ungroup all faders**

Below each fader are three dedicated pan pots, which show **volume**, **expression** and **pan**. You can move these by grabbing them with the mouse and twisting in a circle. (Click the left mouse button where the indicator line meets the edge of the pan pot, hold the button down and drag around the pan pot.)

The fader channel for each track is set in the Track Sheet in the Mouse+Faders channel field.

You can mute the current track (the one with the green line in the middle of the fader's thumb) by pressing **M**. You can solo the current track by pressing **S**. This can be done in all the editing windows, but you will probably find it especially helpful when you're using the Mixer.

Data Type List Box

The **data type** list box lets you select the kind of controller or other data you will be working on in the Mixer. Click on the **data type** list box and select a controller or other data type by clicking on it. Scroll up or down with the scroll bar to the right of the list box to find the kind of data you want.

Group All Button

The **Group All** button groups together all faders. A check is put in each box above each fader and now moving one fader will move all faders.

Clear All Button

The **Clear All** button clears all the group buttons. Now moving a slider will affect only this fader's track.

Snapshot Button

Use the **Snapshot** button to insert single controller values into your tracks. First select the time at which you want to insert your controllers by clicking on the **time display** in the main control area and setting the time you want. Select the **controller type** you want in the **data type** list box, then move the faders to the positions you want. Now click on the **Snapshot** button.

Recall Button

When you take a snapshot, the position of the faders and their groupings is saved. This snapshot can be recalled later with the **Recall** button.

Keys Used in the Mixer

Keystroke	Action
UP ARROW	Increase the value of the fader by one. This only works if the left mouse button is held down on a fader.
DOWN ARROW	Decrease the value of the fader by one. This only works if the left mouse button is held down on a fader.
HOME	Move to the beginning of the piece.
END	Move to the end of the piece.

Event List

The Event List's **control area** consists of the following features:

- A **track selector** list box.

- An **event type filter** list box.

- A **channel** list box.

The **track selector** list box is used to change the track being viewed and edited. The **event type filter** list box allows the selective viewing and editing of different types of event data. The **channel** list box allows you to view and edit data on selected channels.

The body of the Event List is the list of events themselves. For each event, the **SMPTE time** and the **Bars:Beats:Steps time** is displayed on the left. Then the **channel** is displayed (if applicable), then the **event type** and as much information on the contents of the event as possible in the **Values** field.

Each different type of event has a different **color** to more easily distinguish between different events in the list.

Each event can be **edited** individually by double clicking on it and editing values in the subsequent dialog box. The dialog box associated with each

event is different because the information in the event is different, but each dialog contains the **SMPTE time** and **Bars:Beats:Steps time** as well as fields that pertain to the specific event type. For example, note events have fields for channel, note number, velocity and duration while program change events have fields for channel and program number.

Events can be selected for **cutting** and **copying** by clicking on the first event to be selected and dragging the mouse with the left button down until the last event has been selected.

While the mouse is being dragged, the **HOME**, **END**, **F11**, **F12**, **PAGE UP** and **PAGE DOWN** keys can be used to move around in the Event List to more quickly find the end of the range.

When you have finished selecting a range of events a menu of two items will drop down from the edit menu. Now you can **cut** your events or **copy** them to be pasted later.

You can paste events anywhere in the Event List. Set the time at which you want to paste your selection by clicking on the time display in the main control area.

Colors Used in the Event List

Event	Color
Notes	Black
Text	Dark blue
Lyrics	Dark blue
Expressions	Dark blue
Symbols	Pink
Clefs	Pink
Controllers	Light blue
Pitch Wheel	Green
Channel Aftertouch	Reddish purple
Polyphonic Aftertouch	Reddish purple
Program Changes	Red

Tempo Changes	Light purple
Waves	Light purple

Keys Used in the Event List

Keystroke	Action
UP ARROW	Move the display back one event.
DOWN ARROW	Move the display forward one event.
PAGE UP	Move the display back one screen.
PAGE DOWN	Move the display forward one screen.
F11	Move the display back one screen.
F12	Move the display forward one screen.
HOME	Move to the beginning of the piece.
END	Move to the end of the piece.

Song Editor
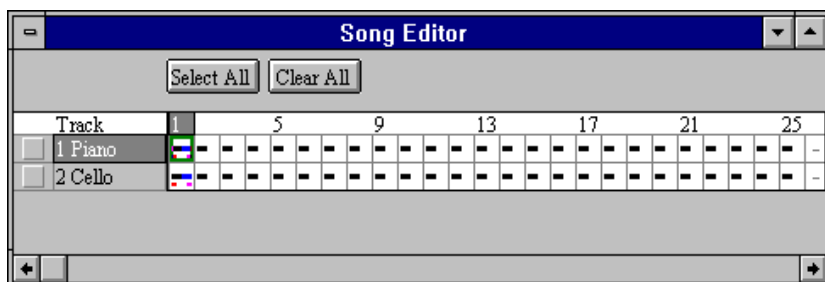
The **Song Editor** shows an overall view of your music. On the left side of the window is a **list of tracks** and beside each track is a horizontal **list of bars**.

Each bar is filled in with colored rectangles if there are notes or other events present in the bar. Different **colors** denote different kinds of musical data.

Editing takes place in the Song Editor by selecting a number of bars in one or more tracks by dragging the mouse.

While the mouse is being dragged, the **HOME**, **END**, **F11**, **F12**, **PAGE UP** and **PAGE DOWN** keys can be used to move around in the Song Editor to more quickly find the end of the range.

Select an edit operation (**Cut**, **Copy**, or **Insert Space**) from the edit menu to complete the operation. Each **track** has a **check box** beside it. If one or more check boxes are checked, then selecting with the mouse will affect only the tracks that are checked. You can check all tracks for editing by clicking on the **Select All** button in the control area of the Song Editor, or uncheck all tracks by clicking on the **Clear All** button. If no bars are checked then you must select the tracks that you want to edit by dragging the mouse over them. In this case the tracks being edited must, of course, be contiguous.

Pressing the **right mouse button** on a **bar** in the **Song Editor** will bring up a **flyaway list** of four of QuickScore Elite's editors: **Score Editor**, **Piano Roll Editor**, **Controller Editor** and **Event List**. Choosing one of these from the list will bring up that editor, with the **cursor** on the **track** and **bar** at which the mouse was pointing when you clicked the right mouse button.

Colors Used in the Song Editor

Event	Color
Notes	Black
Text	Dark blue
Lyrics	Dark blue
Expressions	Dark blue
Symbols	Pink
Clefs	Pink
Controllers	Light blue
Pitch Wheel	Green
Channel Aftertouch	Reddish purple
Polyphonic Aftertouch	Reddish purple
Program Changes	Red
Tempo Changes	Light purple
Waves	Light purple

Keys Used in the Song Editor

Keystroke	Action
UP ARROW	Move the cursor to the track above.
DOWN ARROW	Move the cursor to the track below.
LEFT ARROW	Move the cursor to the left one bar.
RIGHT ARROW	Move the cursor to the right one bar.
PAGE UP	Move the display back one screen.
PAGE DOWN	Move the display forward one screen.
F11	Move the display back one screen.
F12	Move the display forward one screen.
HOME	Move to the beginning of the piece.
END	Move to the end of the piece.

Comments Window
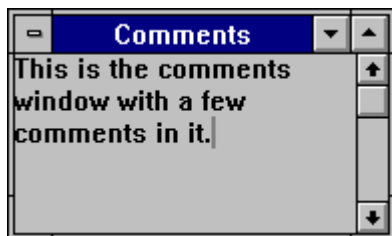
The **Comments Window** is useful for writing notes to yourself or to others about your composition. You can write about three hundred words here. You write and edit here as you would using a simple Windows text editor.

Menus

Along the top of QuickScore Elite's main window is the menu. You can select an item from the menu by clicking the mouse on the name of the menu from which you want to select, and then clicking on the menu item you want from the menu that drops down. You can also select a menu by holding down the **ALT** key and pressing the key that is underlined in the menu name. When the menu drops down you can select a menu item by pressing the key that is underlined in the menu item name. There are also menu shortcut keys. These are written to the right in the menu item. For example, you can press **CTRL**+**N** (Hold down the **CTRL** key and press **N**) to select the **New** menu item under the File menu.

File Menu

|	
<u>N</u>ew...	Ctrl+N
Open...	Ctrl+O
<u>S</u>ave	Ctrl+S
Save <u>A</u>s...	
Expor<u>t</u> Picture...	▶
Print <u>F</u>ile...	Ctrl+P
Print Pa<u>r</u>t...	
Print <u>L</u>ine...	Ctrl+L
Print S<u>e</u>tup...	
<u>P</u>rint Preview	
E<u>x</u>it	Ctrl+X

New

New is for starting work on a new file. If you haven't saved your work when you select **New**, you are first given a chance to do so. Then you are given a choice of the initial layout for your new score. You can choose the default settings, the current settings, or you can use one of several preset templates . The templates are for different instrumental combinations, like String Quartet, Choral Ensemble, or Classical Band. Choose the default score settings to set all the display options under the Display menu to the defaults

(the same as when you first load the program). Choose the current score settings to keep the settings you are currently using. Choose a template to set the display options as well as number of tracks, names of tracks, and patches to those of the template file. You can easily add a template file or modify the existing ones. See "Appendix 1: Template Files" on page 215 for details on doing this.

Open

Select **Open** from the **File** menu to bring up the **Open** dialog.
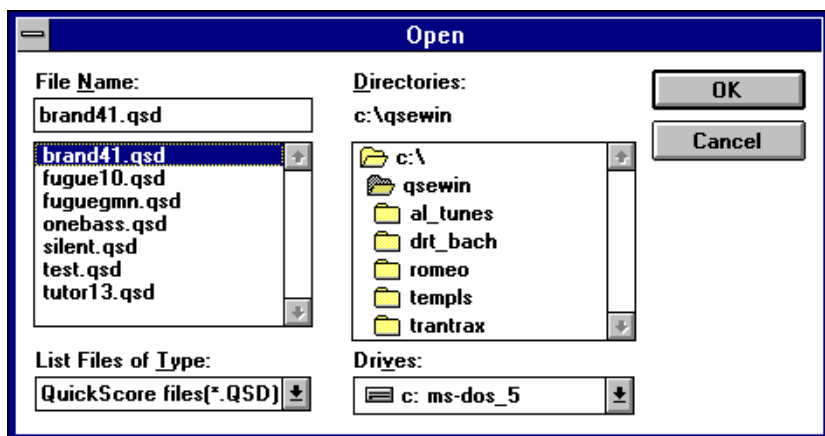
You select the file type to load from the drop-down list box at the bottom of the file dialog. You can open two different types of files.

- **QSD** file.

    QSD files have the file extension .QSD. They are the native files of QuickScore Elite.

- **MIDI** file.

    MIDI files have the file extension .MID. They are generic files that can be loaded and saved by music programs from a variety of vendors.

If the MIDI file you open is a type 0 MIDI file, a dialog appears which allows you to split the tracks into separate tracks for each channel. This way, MIDI data on each channel will appear on a separate track. If you open a type 2 MIDI file, QuickScore Elite only imports the first pattern. For more information regarding MIDI file types, see "About Standard MIDI Files" on page 222.

Before a new file is opened, the previously opened file is discarded from memory. If the old file has changed since it was last saved, you are asked if you want to save it. Choose **Yes**, **No** or **Cancel**. If **Cancel** is chosen, the new file will *not* be opened. Only one file can be open at a time.

For more detailed information on the Open File dialog see your *Windows User's Guide*.

Save

Choose **Save** to save your file. If you have not named your file yet, the **Save As** dialog appears and you will be able to give a name to your new file before you save it.

Save As

Choose **Save As** when you want to save your work to a file with a new name. You can also use this menu option if you haven't already named your file and you want to save it.
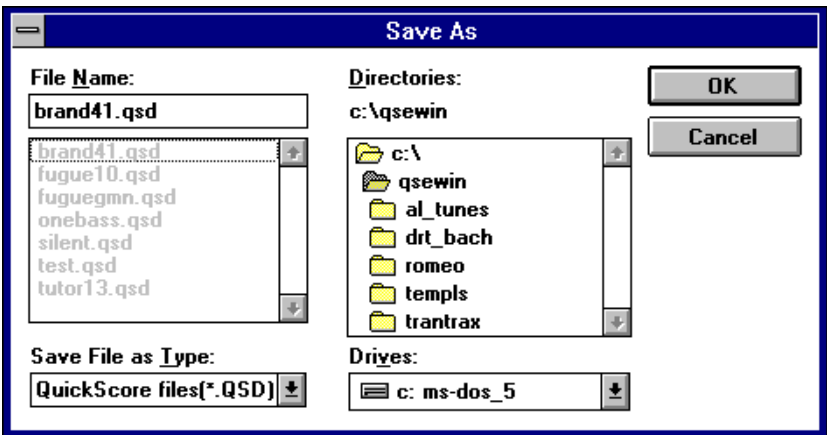
You can save your file as one of three different types:

- **QSD** file.

  QSD files have the file extension .QSD. They are the native files of QuickScore Elite. All your formatting information is conserved if you choose QSD file. You will normally save your files as QSD files.

- **MIDI** file.

  MIDI files have the file extension .MID. They are generic files that can be loaded and saved by music programs from a variety of vendors. If you save your work as a MIDI file your formatting information will be lost.

- **Copyist** file.

  Copyist files have the file extension .CP3. They are files for the *Copyist* music publishing program. Use Copyist if you want to fine tune scores in ways that you may be unable to do using QuickScore Elite.

Choose the new **name** of the file and press **OK**. If the file already exists you will be asked if you want to write over the old file. For more detailed information on the Save As dialog see your *Windows User's Guide*

Export Picture

You can export either a line of music or a page of music. To export a line, make sure you are *not* in Print Preview mode. In this mode, only the system of music that you see in the Score Editor window will be exported. Titles and page numbers will not appear. To export a page, make sure you *are* in Print Preview mode. In this mode, the full page of music appearing in the Score Editor, including page numbering and titles, will be exported.

Select the resolution you want from the submenu. Bear in mind that the quality of the image and the size of the file generated increase with the resolution.
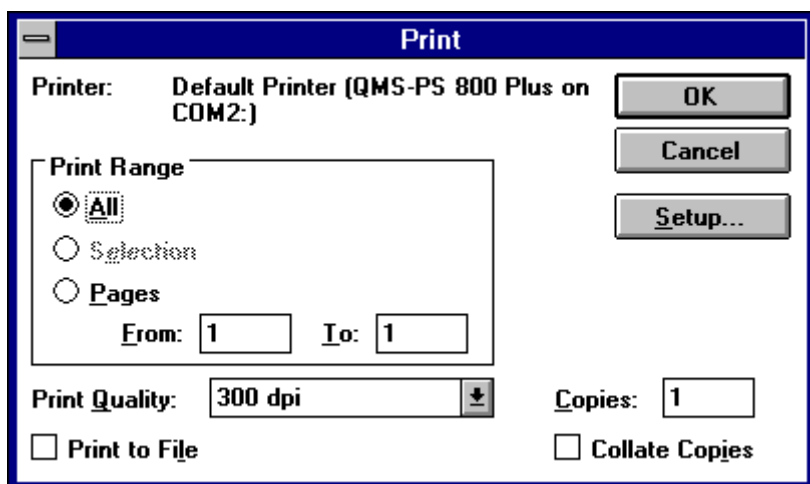
A file selection dialog box appears. In the **Save File as Type** list box select either **BMP** or **TIFF**. Now enter the name of the file to which you wish to save your line or page and click on **OK** or press **Enter**.

You can now import your saved score into another application. To do this, follow the directions specified in the documentation for this application.

Print File

Select **Print File** to print your piece. You will see the standard Windows Print dialog.

```
┌─────────────────────────────────────────────────────────┐
│ ▭                          Print                         │
├─────────────────────────────────────────────────────────┤
│ Printer:    Default Printer (QMS-PS 800 Plus on   ┌─────────┐
│             COM2:)                                 │   OK    │
│ ┌─Print Range───────────────────────────────┐     └─────────┘
│ │ ⊙ All                                      │     ┌─────────┐
│ │ ○ Selection                                │     │ Cancel  │
│ │ ○ Pages                                    │     └─────────┘
│ │      From: [1]      To: [1]                │     ┌─────────┐
│ │                                            │     │ Setup...│
│ └────────────────────────────────────────────┘     └─────────┘
│ Print Quality: [300 dpi        ▼]      Copies: [1]
│ ☐ Print to File                  ☐ Collate Copies
└─────────────────────────────────────────────────────────┘
```

Make sure you have set up your print the way you want it (correct printer, pages, number of copies, etc.) and press **OK** to print. For more detailed information on the Print dialog see your *Windows User's Guide*
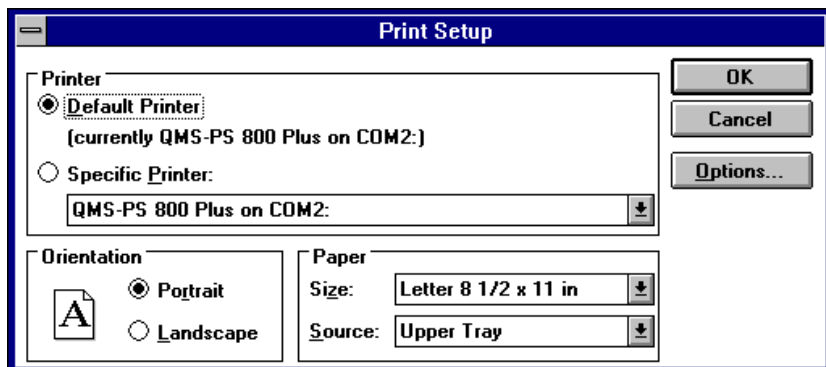
On some printers you can select the staff size for your printout. This is done by changing the **Scaling (%)** box in the Options dialog. This changes the *aspect ratio* of the music by stretching in the *y* direction while keeping the *x* direction constant. The Options dialog is available for some printers when you select the **Setup** button in the Print dialog and then the **Options** button in the Print Setup dialog that appears.

Print Part

Print Part allows you to print a group of tracks. These tracks need not be contiguous. The Parts dialog appears after selecting **Print Part**.
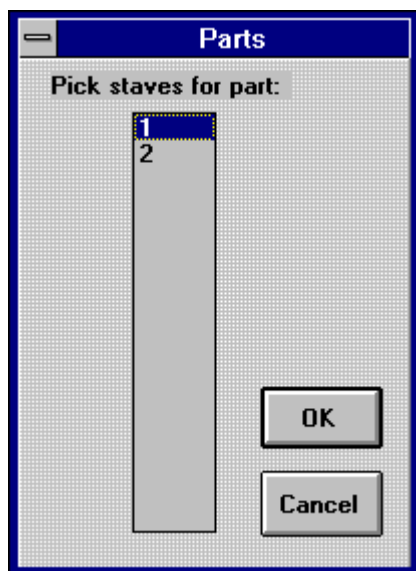
Select the tracks that you want to print by dragging over contiguous tracks and **CTRL** clicking non-contiguous tracks, or to erase selected tracks. Of course if you just want to print one track, just click on that track. When you have selected the tracks you want to print out, click on **OK**. It will take a second or two to set up the tracks selected for printing, and then the Windows Print dialog will appear. Make sure you have set up your print the way you want it (correct printer, pages, number of copies, etc.) and press **OK** to print.

Note: You can print a one-track part by setting the **Score** button in the Score Editor to Single Track mode and then selecting the **Print File** menu item.

Print Line

Use **Print Line** to print just the **line** of music you see in the **Score Editor** when you are in **Edit mode**. This lets you make a quick copy of what's on the screen as you're editing.

Print Setup

Select **Print Setup to** brings up the **Windows Print Setup** dialog.

This allows you to change aspects of your printing which depend on your printer. For more detailed information on the Print Setup dialog, see your *Windows User's Guide*

On some printers you can select the staff size for your printout. This is done by changing the **Scaling (%)** box in the **Options** dialog. This changes the *aspect ratio* of the music by stretching in the *y* direction while keeping the *x* direction constant. The Options dialog is available for some printers when you select the **Options** button in the **Print Setup** dialog.

Print Preview

Selecting **Print Preview** is the same as selecting the **page** button in the **Score Editor**. When **Print Preview** is selected, the Score Editor displays your score as it would look when it is printed. You can see the full page in the Score Editor by selecting the **100%** button.

Exit

Select **Exit** from the **File** menu to exit the program. If the current file has changed since it was last saved, you are asked if you want to save it. Choose **Yes**, **No** or **Cancel**. If you choose **Cancel**, you will not exit from the program.

File 1, 2, 3, 4

If you have already opened or saved one or more files, the **names** of the last files that you looked at are displayed in menu items at the end of the File menu. Selecting any of these **loads the file**. If you work on the same files a lot, this saves you a lot of trouble finding and opening up your files using the Open File dialog.

Edit Menu

When you select an object or a group of objects in the Score Editor, the Piano Roll Editor, the Controller Editor, the Event List, or the Song Editor, an edit menu will drop down. The entries in the edit menu depend on what editor you are using and what kind of object(s) you are editing. These menus are called the **block editing menus** In addition to the block editing menus there is the standard **Edit** menu that is accessed directly from the main menu.

<u>U</u>ndo	Ctrl+U
<u>P</u>aste	Ctrl+V
Block <u>S</u>tart	Shift+S
Block <u>E</u>nd	Shift+F
Select <u>L</u>ast Range	
Note Filter...	

The standard **Edit** menu contains the following entries:

Undo

Undo negates the last editing operation that was performed. You *can* undo an **Undo** operation.

Note: **Undo** only affects operations that affect **real data**, *not* operations that affect the appearance of data. Changes to the way music is displayed, made using the dialogs accessed from the Display menu, are *not* affected by **Undo**.

Paste

Paste takes the data that was saved to the **clipboard** using the last **cut** or **copy** operation and pastes it into the **current track** at the **current time**.

Make sure you position your cursor on the right track and at the right time before you paste your data.

When data is cut or copied, leading rests are eliminated. When you paste, the first event that was saved is placed at the cursor position.

Block Start

Block End

When you are in the **Score Editor**, you can select a range by moving the cursor to where you want your range to start, selecting **Block Start**, then moving the cursor to where you want your range to end and selecting **Block End**. When you select **Block End**, a block editing menu will drop down, allowing you to select an edit operation. The edit menu that drops down will depend on the kind of objects you are editing. (This is set by clicking on an icon in the object type palette.)

Select Last Range

After you finish an edit operation, the highlighted range disappears and you are left with the edit cursor. If you want to select the range you last set (by dragging the mouse or using **Block Start** and **Block End**) without redoing it again, click on **Select Last Range**. The range will become highlighted and an edit menu will drop down for you to perform another edit operation.

Note Filter

If you are in the **Score Editor** and you are in **Note mode** (the **note** in the object type palette is selected), or if you are in the **Piano Roll Editor**, you can select the **note filter**. The **Note Filter** menu item is **checked** when the **note filter** is selected.


The **note filter** lets you pick only notes which satisfy a certain criteria when you are selecting notes. For instance, you can decide to select all the notes in your track on channel 12, or select all the notes higher than middle C.

To activate the note filter, put a **check** in the box to the left of **Use Filter** in the top part of the Note Filter dialog. When the note filter is active you can filter on **pitch**, **velocity**, **channel**, **beat**, **step**, or **voice** or any combination of the above. Check the filter type you want to use and then set the filter the way you want it. For example, if you want to only edit notes above middle C, make sure **Pitch** is **checked** and then put a **61** in the **From** box and **127** in the **Thru** box to the right of Pitch. If you want to edit notes equal to or below middle C, **check** the **Not** box for pitch and you will get the *opposite* of what you selected before, that is notes equal to or below middle C.

Lyric Filter

If you are in the **Score Editor** and you are in **Lyric mode** (the **L** in object type palette is selected), you can select the **lyric filter**. The **Lyric Filter** menu item is **checked** when the **lyric filter** is selected.
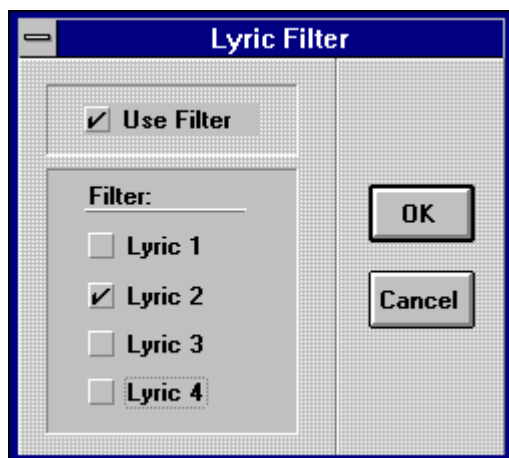
The **lyric filter** lets you selectively edit one or more of your lyric lines. For example, you may have entered four lines of lyrics and you want to delete the second line of lyrics. You can do this by activating the lyric filter and then selecting only the **Lyric 2** lyric. To activate the lyric filter put a **check** in the box to the left of **Use Filter** in the top part of the Lyric Filter dialog. Make sure that only the lyric lines that you want to select are checked. Click on the box to the left of the lyric line you want to check or uncheck.

Text Filter

If you are in the **Score Editor** and you are in **Text** mode (the **T** in object type palette is selected), you can select the **text filter**. The **Text Filter** menu item is **checked** when the **text filter** is selected.
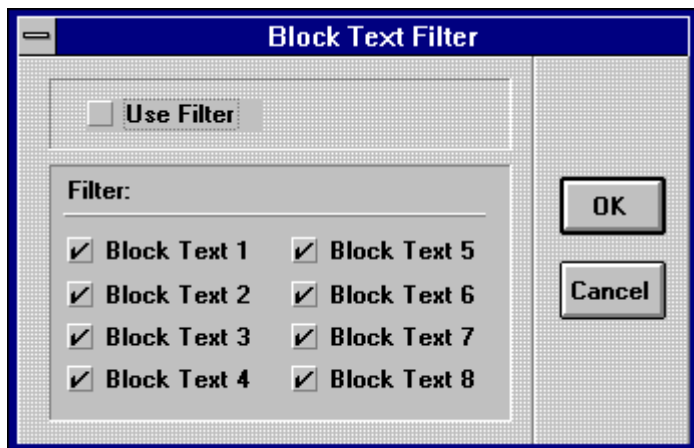
The **text filter** lets you selectively edit block text based on style. For example, you may have entered four different styles of text and you want to delete all the text you entered in the second style. You can do this by activating the text filter and then selecting only **Block Text 2**. To activate the text filter put a **check** in the box to the left of **Use Filter** in the top part of the Block Text Filter dialog. Make sure that only the block text styles you want to select are checked. Click on the box to the left of the block text number you want to check or uncheck. Recall that each block text number is associated with a text style. This text style can be seen by looking in the list box on the far right of the Score Editor's control area. The text styles can be changed by clicking on the **Fonts** button in the Display Score dialog available from the Display menu.

Block Editing Menus

The **block editing menus** drop down when you select an object or a group of objects. You select an individual object by double clicking on it. You select a group of objects by dragging over them with the mouse. You can select non-contiguous items by control-clicking, that is, by holding down the **CTRL** key and then clicking on each object you want to include (click

again on an object that you included by mistake to exclude it). Release the **CTRL** key to finish your selection.

The menu that drops down after you make a selection is context-sensitive. The Piano Roll Editor, the Controller Editor, the Event List and the Song Editor all have different menus. In the Score Editor there are different menus for notes, lyrics, expressions, text, symbols and clefs.

Note: When you are in the Score Editor, make sure that the object type palette is set to the kind of object you are trying to edit. Otherwise the menu you get will not be the one you want. This is important to remember. If you set a range that doesn't contain any of the objects you are trying to edit you will get a minimal menu, containing only the**Stretch Time** menu item.

Note Block Editing Menu

<u>C</u>ut [Note]
Co<u>p</u>y
<u>T</u>ranspose...
<u>S</u>hift...
<u>O</u>ctave...   ▶
<u>D</u>uration...
T<u>i</u>me...   ▶
<u>V</u>elocity...
<u>Q</u>uantize...   ▶
C<u>h</u>annel...   ▶
Voic<u>e</u>...   ▶
<u>G</u>roup...   ▶
Make <u>L</u>egato
Pla<u>y</u>
E<u>x</u>plode...
<u>I</u>mplode...
St<u>r</u>etch Time...

The **Note block editing menu** drops down when editing notes in the Score Editor, that is, when one or more notes are selected and the **note** is selected in the object type palette in the Score Editor's control area. A subset of the note block editing menu also drops down when editing notes in the Piano Roll Editor.

Cut [Note]

Cut will erase the selected notes from the current track and copy them to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Copy

Copy will copy the selected notes from the current track to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Transpose

Select **Transpose** to bring up the Transpose dialog.
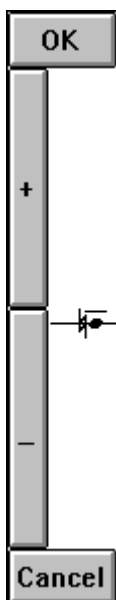
Drag the note up and down in the window that appears or use the + (plus) and **-** (minus) buttons to move the note up or down chromatically. You can also use the up and down arrow keys to move the note up or down chromatically. All notes selected will be transposed up or down by the same amount.

Shift

Select **Shift** to bring up the Shift dialog. This is similar to the Transpose dialog, except that notes are moved up and down in key, not chromatically. Drag the note up and down in the window that appears or use the + (plus)and **-** (minus) buttons to move the note up or down in key. You can also use the up and down arrow keys to move the note up or down in key. All notes selected will be shifted up or down in key by the same amount.

Octave

When you select **Octave**, a submenu appears to the right of the menu, allowing you to move the selected note or notes up or down one or two octaves.

Duration

When you select**Duration**, a dialog appears that allows you to change the duration of the selected note or notes to a certain value. All notes selected are set to the new duration.

Time

When you select **Time**, a submenu appears to the right of the menu, which allows you to stretch or contract the start times and durations for the selected notes. You can multiply or divide the times by three or two. For example, if you multiply the selected notes by two, they will all become twice as long as before and they will be shifted over to fit. When these notes play, they will play at half speed because each note is twice as long. The separation between the notes is doubled as well.

Velocity

When you select **Velocity**, a dialog appears that allows you to change the velocity of the selected note or notes to a certain value. All notes selected will be set to the new velocity.
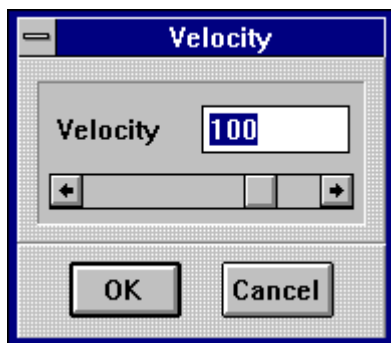
Quantize

Select **Quantize** if you want to physically quantize the selected notes. When notes are quantized to a certain value, the start time for the note is a multiple of the quantization value and the duration of the note is a multiple of the quantization value. Quantizing the selected notes to 64th means that the start time and durations of the notes will be multiples of 64ths.

A submenu will appear to the right of the menu, showing all the quantization options. The checked quantization value is the current display quantization. (This can be changed using the Display menu.)

Channel

Select **Channel** to set all the selected notes to a particular MIDI channel. A submenu will appear to the right of the menu, allowing you to choose any of sixteen channels. The checked channel is the channel of the first note selected.

Voice

Select **Voice** to set all the selected notes to a particular voice. A submenu will appear to the right of the menu, allowing you to set the voice to **default**, **1**, **2**, or **grace notes**. The checked voice is the voice of the first note selected. Notes set to voice 1 all have stems drawn up by default; Notes set

to voice 2 all have stems drawn down by default. Notes set to default will be either up or down, depending on their position on the staff. Grace notes will be drawn at reduced size and will not be accompanied by rests.

Group

Select **Group** to group the selected notes together in a particular way. When you group notes, you can make them all small (select **Small Notes** from the submenu) or normal size (select **Big Notes** from the submenu). After selecting the size, you get another submenu with four items. Choose **Default Group** to reset the grouping to the default, that is, to have the selected notes grouped by beat. (See "Beat" on page 176 for more information.) Select **Stems Up** to have the selected notes grouped together with stems up. Select **Stems Down** to have the selected notes grouped together with stems down. Select **Default Stems** to have the selected notes grouped together with stems up or down depending on what voice they form part of and where the notes appear on the staff. (Voice 1 has stems up by default, voice 2 has stems down by default and the default voice has stems either up or down. See " Use Ascending or Descending Stems" on page 178 for more information.)

Staff

If you select notes in a **split track** (see "Split Track" on page 183), you can select **Staff**. This lets you change the way notes are assigned to the treble or bass staves in a split track.

To put a note on either side of a split track regardless of its pitch, select the note(s) and choose **Staff** from the edit menu. The note is moved to the bass staff by selecting **Bass** and to the treble by selecting **Treble** from the submenu which appear to the right of the menu. Selecting **Default** makes the note go to the treble staff if it is greater than or equal to middle C, and to the bass staff if not.

You can also have **cross-staff beaming** on **split tracks**. This is done by selecting the note(s) in the bass staff you want to have connected to notes in the treble staff, choosing **Staff** from the edit menu and then selecting **Crossed** from the submenu. (Only notes that are beamed together can be crossed.) When you want to do cross-staff beaming, make sure you only select notes on one staff, not both. If you choose notes on both staves, the crossing effect will cancel itself out.

Accidental

QuickScore Elite automatically chooses **accidentals** and displays them. If you don't like the accidentals that have been chosen for you, you can change them by choosing **Accidental**. You can only choose **Accidental** if you have selected a note by double-clicking or a group of notes by control-clicking.

When you choose an accidental that doesn't work for the note you have chosen, the note will be displayed with the accidental that most closely resembles the one you chose. For example, if you choose **Double Sharp** for a note with MIDI number 58 (that can be notated as B flat, C double flat or A sharp), you will get A sharp.

If you choose **Display Accidental**, the accidental for the note will be displayed regardless of its accidental and what notes have appeared before it. If you choose **Hide Accidental**, the note will be displayed without an accidental, even if it normally would have one. This is useful when you are displaying the same note with the same accidental in two different voices at the same time and they have been moved apart so that they do not appear on top of each other.

Note: Changing the accidental for a note doesn't change the pitch of the note; it just changes the way it is displayed. To change the pitch of a note, use the **NS** tool or the **Transpose** or **Shift** edit command.

Make Legato

Selecting **Make Legato** will eliminate space between the end of selected notes and the start of the next note. Also, if there is overlap between a note and the next note, this will be eliminated. You cannot make the last note in a track legato, because it can't be extended to another note.

Play

Selecting **Play** will play the range selected.

Explode
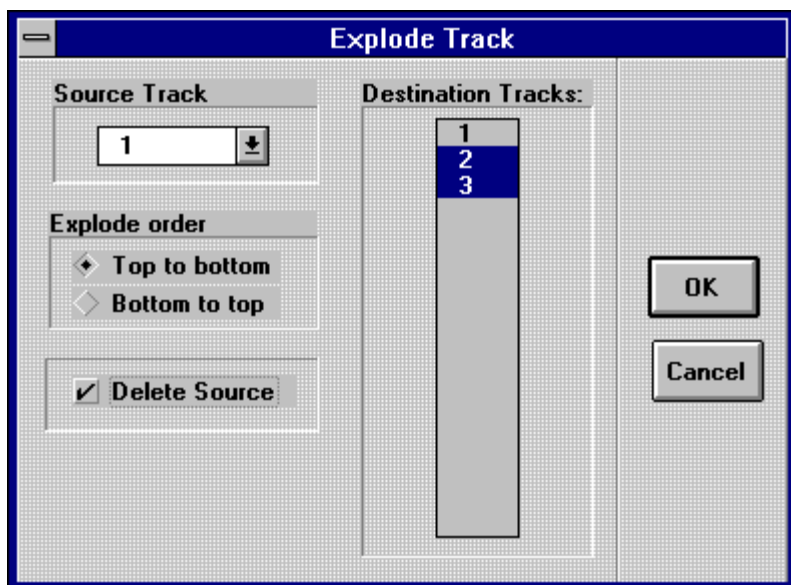
Use the **Explode Track** dialog to extract the individual notes of chords that you have entered on one track and place them onto a number of tracks where they will appear as single notes, one note per track. For example, you can spread a three-note C major chord with the notes C4, E4 and G4 on track 1 onto tracks 1, 2 and 3 so that C4 is on track 1, E4 is on track 2 and G4 is on track 3.

Set the **source track** using the drop-down list box at the top left-hand side of the dialog. Set the **destination tracks** by selecting track numbers in the middle of the dialog. You can set tracks by dragging over the ones you want or by control-clicking, that is, holding down the **CTRL** key and then clicking on the track numbers you want to select. Use this method to select non-contiguous destination tracks.

Set the **explode order** by selecting either **Top to bottom** or **Bottom to top**. If you select **Top to bottom**, the highest note of each source chord found will go onto the first destination track, the second note will go onto the second destination track and so on. If there are more notes in the source chord than destination tracks, the last notes will all end up on the last track. If there are less notes than tracks, the last tracks will not get any notes. If you select **Bottom to top**, the lowest note found will go onto the last destination track, the second lowest note will go on the second to last

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destination track, and so on. Extra notes will all end up on the first track and if there are less notes than tracks, the first tracks will not get any notes.

Check the **Delete Source** box if you want to get rid of the chord(s) you are exploding. Normally you will do this, especially if the source track is also one of the destination tracks (which is perfectly valid). If you don't delete the source, of course you will have duplicates of all your source notes on the destination tracks.

Implode

Imploding music is the opposite of exploding music. The **Implode Tracks** dialog lets you take notes from a number of tracks and put them all together (implode them) on a single track.
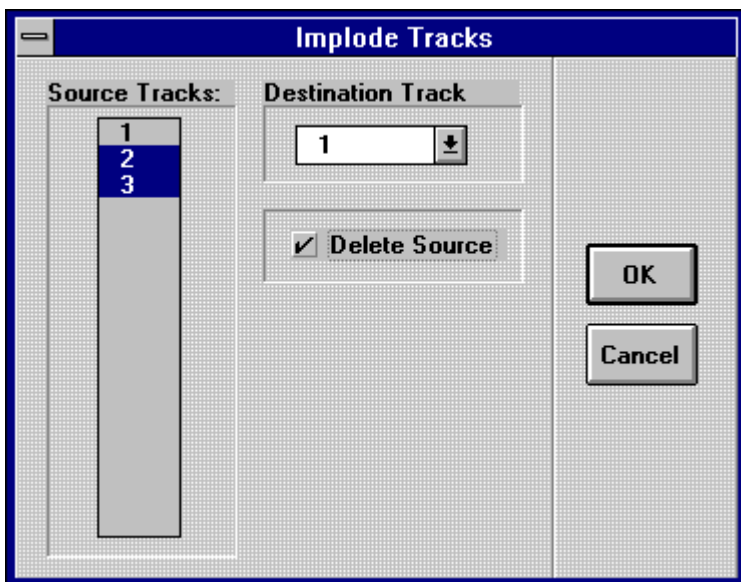
Set the **source tracks** by selecting track numbers at the left-hand side of the dialog. You can set tracks by dragging over the ones you want or by control-clicking, that is, holding down the **CTRL** key and then clicking on the track numbers that you want to select. Use this method to select non-contiguous destination tracks. Set the **destination track** using the Destination Track drop-down list box in the middle of the dialog.

If you want to delete all the selected notes on the source tracks, check the **Delete Source** box. Otherwise leave the **Delete Source** box unchecked.

Stretch Time

The **Stretch Time** dialog allows you to set a section of music to last a set period of time. This is done by altering the tempo(s) present during this section of music to make the music fit.
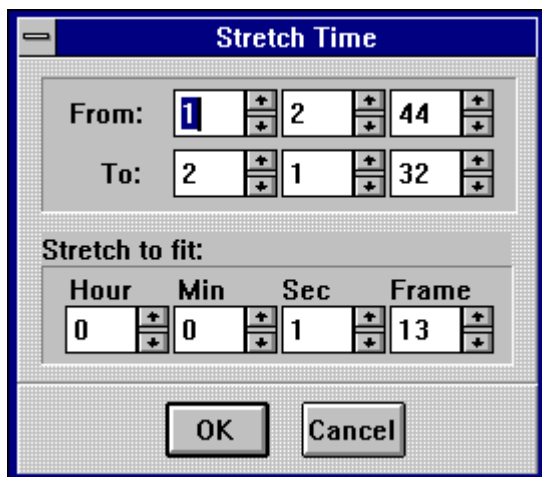
Set the beginning and end points of the section of music you are trying to fit (in Bars:Beats:Steps) and then set the time you want the section of music to last (in SMPTE time format).

Lyric Block Editing Menu

The **Lyric block editing menu** drops down when editing lyrics, that is, when one or more lyrics are selected and the **L** is selected in the object type palette in the Score Editor's control area.

Cut [Lyric]

Cut will erase the selected lyrics from the current track and copy them to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Copy

Copy will copy the selected lyrics from the current track to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Move

Selecting **Move** brings up the Move dialog. Drag the lyric up and down in the window that appears or use the **+** (plus)and **-** (minus) buttons to move the lyric up or down. You can also use the up and down arrow keys to move the lyric up or down. All lyrics selected will be moved up or down by the same amount.

Edit

Choosing **Edit** lets you edit the first lyric selected.

Lyric Number

When you choose **Lyric Number** a submenu will appear to the right of the menu containing the four possible lyric numbers. Set the selected lyrics to the number you want. You can change the lyric number of a given lyric so that when you apply an operation to that lyric number (all lyrics for a given verse normally appear at the same level and have the same lyric number), the lyrics that you changed to that number will also be affected.

Stretch Time

The **Stretch Time** dialog allows you to set a section of music to last a set period of time. This is done by altering the tempo(s) present during this section of music to make the music fit.

Set the beginning and end points of the section of music you are trying to fit (in Bars:Beats:Steps) and then set the time you want the section of music to last (in SMPTE time format).

Expression Block Editing Menu


```
Cut [Expression]
Copy
Move
Edit
Stretch Time...
```

The **Expression block editing menu** drops down when editing expressions, that is, when one or more expressions are selected and the **E** is selected in the object type palette in the Score Editor's control area.

Cut [Expression]

Cut will erase the selected expressions from the current track and copy them to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Copy

Copy will copy the selected expressions from the current track to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Move

Selecting **Move** brings up the Move dialog. Drag the expression up and down in the window that appears or use the **+** (plus) and **-** (minus) buttons to move the expression up or down. You can also use the up and down arrow keys to move the expression up or down. All expressions selected will be moved up or down by the same amount.

Stretch Time

The **Stretch Time** dialog allows you to set a section of music to last a set period of time. This is done by altering the tempo(s) present during this section of music to make the music fit.

Set the beginning and end points of the section of music you are trying to fit (in Bars:Beats:Steps) and then set the time you want the section of music to last (in SMPTE time format).

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Text Block Editing Menu

The **Text block editing menu** drops down when editing text, that is, when text is selected and the **T** is selected in the object type palette in the Score Editor's control area.

Cut [Text]

Cut will erase the selected text from the current track and copy it to the **clipboard**. It can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Copy

Copy will copy the selected text from the current track to the **clipboard**. It can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Move

Select **Move** to bring up the Move dialog. Drag the text up and down in the window that appears or use the + (plus)and - (minus) buttons to move the text up or down. You can also use the up and down arrow keys to move the text up or down. All text selected will be moved up or down by the same amount.

Edit

Choose **Edit** to edit the first text block selected.

Text Number

When you choose **Text Number**, a submenu appears to the right of the menu containing the eight possible text numbers. Set the selected text to the number you want. Normally you would change the text number of a given text block so that it would have the font of the new text number.

Stretch Time

The **Stretch Time** dialog allows you to set a section of music to last a set period of time. This is done by altering the tempo(s) present during this section of music to make the music fit.

Set the beginning and end points of the section of music you are trying to fit (in Bars:Beats:Steps) and then set the time you want the section of music to last (in SMPTE time format).

Symbol Block Editing Menu

The **Symbol block editing menu** drops down when editing symbols, that is, when one or more symbols are selected and a symbol is selected in the object type palette in the Score Editor's control area.

Cut [Symbol]

Cut will erase the selected symbols from the current track and copy them to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Copy

Copy will copy the selected symbols from the current track to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Move

Select **Move** to bring up the Move dialog. Drag the symbol up and down in the window that appears or use the **+** (plus)and **-** (minus) buttons to move the symbol up or down. You can also use the up and down arrow keys to move the symbol up or down. All symbols selected will be moved up or down by the same amount.

Edit

If you double click on an **adjustable symbol** or a **chord**, **guitar chord**, **metronome marking** or **figured bass** symbol, the edit menu contains the option **Edit** instead of **Move**. The adjustable symbols are the ones that appear in the **Adjustable** symbols palette. (Click on the **symbol** button in the object type palette in the Score Editor's control area, then on the **Adjust** symbol palette name and the **Adjustable** symbols palette will appear.) The **chord**, **guitar chord**, **metronome marking,** and **figured bass** symbols are on the bottom of the**Miscellaneous** symbols palette.

When you select**Edit** after you have selected an adjustable symbol, you can edit the adjustable symbol. Three*control points*(shaped like diamonds) appear at the left, in the center and at the right of the symbol you are editing. You can move these control points around on the screen to change the shape and the position of the symbol you are editing. Click on **control point** to select it and then drag it around by holding the left mouse button down and moving the mouse. Alternatively you can move a control point around using the arrow keys. You can move between control points by using the **TAB** and the **SHIFT**+**TAB** keys as well as by clicking on them with the mouse.

When you are finished editing the adjustable symbol, press **ENTER** or click the right mouse button to accept your changes, or press **ESC** to leave the symbol the way it was before you edited it.

When you are editing the **slur** symbols, you can automatically position the *left slur point* over the closest note by pressing **Z**. You can automatically

position the *right slur point* over the closest note by pressing **X**. You can automatically center the slur by pressing **V**. If the slur is above the notes, the slur end points go over the closest notes when you press **Z** and **X**. If the slur is below the notes, the slur end points go under the closest notes when you press **Z** and **X**.

When you are editing the **8va** and **8vb** symbols, you can control whether or not the 8va or 8vb text is shown and whether or not the finishing vertical line is displayed. The **HOME** key **toggles** whether the **8va** is shown; the **END** key **toggles** whether the **finishing vertical line** is displayed. This is useful when octava markings extend over more than one line.

When you are editing first and second endings you can change or eliminate the ending number. The ending number defaults to 1. for the first ending and 2. for the second ending. The numbers can be changed or eliminated by pressing the **+** (plus) and the **-** (minus) keys.

You can put in and change the number for groupings by using the **+** (plus) and **-** (minus) keys. Pressing **+** (plus) increments the number, pressing **-** (minus) decrements it. When you decrement past 1, the number disappears. You can change or eliminate the amount of space in the middle of the grouping by using **PAGE UP** and **PAGE DOWN**.

PAGE UP and **PAGE DOWN** also work on crescendo and decrescendo symbols to change the angle of the symbol.

Press **F** to **flip** a number of adjustable symbols. These include the crescendo and decrescendo symbols, the groupings, the endings and the octavas.

Press **L** to horizontally **level** crescendos, decrescendos and groupings.

If you select **Edit** when you are editing one of the **chord**, **guitar chord**, **metronome marking**, or **figured bass** symbols, a dialog will appear to let you edit the symbol. See "Entering Symbols" starting on page 87 for details on how to use these dialogs.

Stretch Time

The **Stretch Time** dialog allows you to set a section of music to last a set period of time. This is done by altering the tempo(s) present during this section of music to make the music fit.

Set the beginning and end points of the section of music that you are trying to fit (in Bars:Beats:Steps) and then set the time you want the section of music to last (in SMPTE time format).

Clef Block Editing Menu

The **Clef block editing menu** drops down when editing clefs, that is when one or more clefs are selected and a clef is selected in the object type palette in the Score Editor's control area.

Cut [Clef]

Cut will erase the selected clef(s) from the current track and copy them to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Copy

Copy will copy the selected clef(s) from the current track to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Stretch Time

The **Stretch Time** dialog allows you to set a section of music to last a set period of time. This is done by altering the tempo(s) present during this section of music to make the music fit.

Set the beginning and end points of the section of music you are trying to fit (in Bars:Beats:Steps) and then set the time that you want the section of music to last (in SMPTE time format).

Controller Block Editing Menu

```
Cut
Copy
Interpolate
Scale...
Thicken
Thin
Crop...
Stretch Time...
```
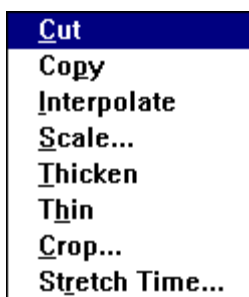
After you have selected one or more data item using the Controller Editor the **Controller block editing menu** will drop down. In the discussion of the controller block editing menu items we talk about controllers, but we could be talking about any of the data which can be edited using the Controller Editor, i.e. pitch wheel, channel or key aftertouch, tempo change, program changes, note velocity or controllers.

Cut

Cut will erase the selected controllers from the current track and copy them to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Copy

Copy will copy the selected controllers from the current track to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Interpolate

Choose **Interpolate** to create a ramp of values between the first and last controller selected. **Interpolate** won't do anything if you choose one or less controller. All the controllers that existed between the first and last selected controllers will be eliminated and replaced by the new controllers. If you are interpolating note velocity, notes between the first and last one aren't replaced. Instead, the velocity values for these notes are set to interpolated values.

Scale
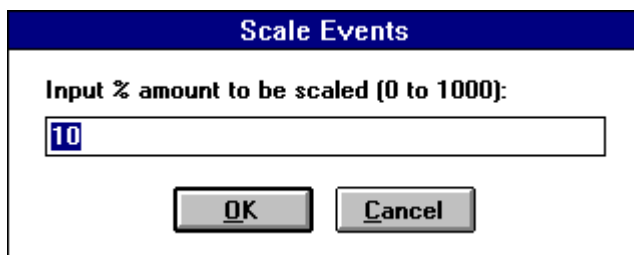
Scale lets you scale your selected controller to a percentage between 0 and 1000. For example, entering a scale factor of 10% will set all your selected controllers to 10% of their current value. Entering a scale factor of 150% will set all your selected controllers to 150% of their current value. When controllers are scaled beyond their normal range they will be set to their maximum possible value. For example, a controller of 100 scaled by 150% will be set to 127, not 150.

Thicken

Select **Thicken** to increase the density of selected controllers by a factor of two. This is done by interpolating a controller item between each pair of selected controllers. For example, if you have selected two controllers, one at time 1:1:0 with a value of 60 and one at time 1:3:0 with a value of 70, a new controller will be entered between the two at time 1:2:0 with a value of 65.

There is a threshold for thickening controllers. If the difference in value between two adjacent controllers is less than 2, no new controller will be put between them.

You *cannot* thicken note velocities.

Thin

Thin produces the *opposite* effect of **Thicken**. When you select **Thin** every second selected controller is eliminated.

You *cannot* thin note velocities.

Crop
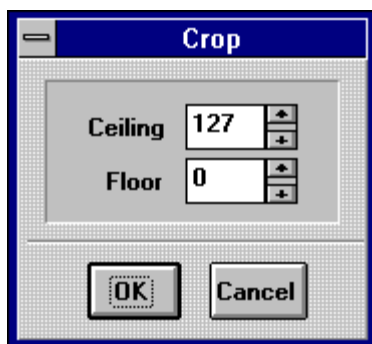
Crop sets bounds for the controllers you have selected. When you select Crop the **Crop** dialog appears, which allows you to set a ceiling and a floor for your controllers. All the controllers above the ceiling are cropped to the value of the ceiling. All the controllers below the floor are set to the value of the floor. If there are redundant controllers (e.g. consecutive controllers with the same value), they are eliminated. If you are editing note velocities, consecutive notes with the same velocity are *not* eliminated.

Stretch Time

The **Stretch Time** dialog allows you to set a section of music to last a set period of time. This is done by altering the tempo(s) present during this section of music to make the music fit.

Set the beginning and end points of the section of music you are trying to fit (in Bars:Beats:Steps) and then set the time you want the section of music to last (in SMPTE time format).

Event List Block Editing Menu

The **Event List block editing menu** drops down after you select one or more events in the Event List.

Cut

Cut will erase the selected events from the current track and copy them to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Copy

Copy will copy the selected events from the current track to the **clipboard**. They can be pasted somewhere else in the music by using **Paste**, available under the standard **Edit** menu.

Song Editor Block Editing Menu
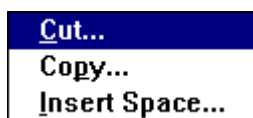
The **Song Editor block editing menu** drops down after you select one or more bars in the Song Editor.

Cut

Copy
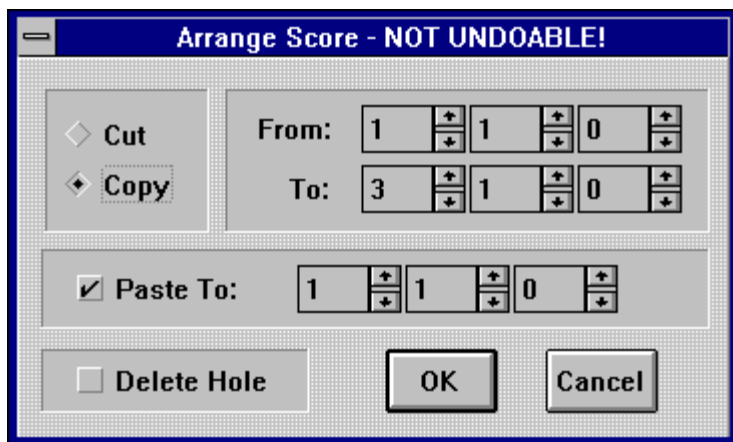
When you choose **Cut** or **Copy** you bring up the Arrange dialog. If you have selected more than one track, the dialog title reads "**Arrange Multiple Tracks — NOT UNDOABLE!**". If you have only selected one track the dialog title reads "**Arrange Track *n***" (where *n* is the number of the track you selected). You use the Arrange dialog to cut or copy whole sections of your music and possibly paste them somewhere else. You can arrange all your tracks, some of your tracks or just one track. (See "Song Editor" on page 125 for details on selecting tracks.)

The top left section the dialog shows that either **Cut** or **Copy** is selected, depending on your selection from the menu. You can change your mind and choose to copy instead of cut or vice versa, by clicking on **Copy** or **Cut**.

Cut will delete all the music you select and **Copy** will make a copy of it without deleting it. All the objects you select are affected by the Arrange dialog.

The bars you have selected will be shown in the **From** and **To** times. If you want to adjust the starting and ending times for your range, you can do that here. The **From** and **To** times do *not* have to be on bar boundaries.

If you select **Copy**, the **Paste To** box will automatically become **checked**. Otherwise you must check it yourself in order to paste the data that you cut to a new location. (You cannot paste it later because Arrange does *not* copy anything to the clipboard.)

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If you **check** the **Delete Hole** box, the empty space created when you cut out your selected data will be eliminated. This means all the data after the selection will move back in time to fill the hole.

Remember that Arrange does *not* copy anything to the clipboard, so if you select **Copy** and uncheck **Paste To** nothing will be accomplished.

When you paste using the Arrange dialog, leading rests are conserved. This is unlike pasting using the Edit menu. When you paste using the Edit menu, leading rests are not conserved.

Insert Space
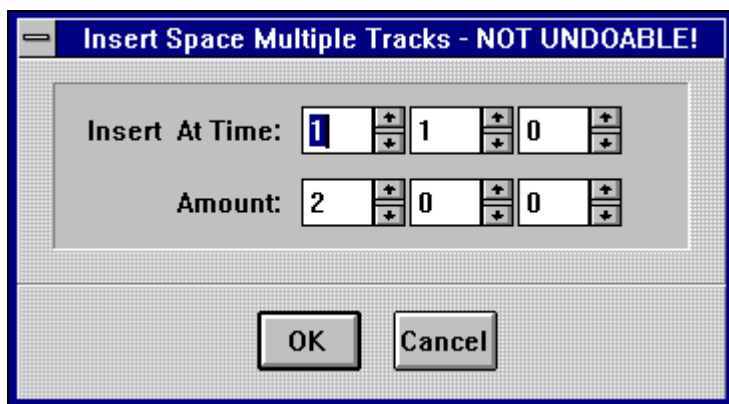
The **Insert Space** allows you to insert space in a single track or in multiple tracks. The **Insert At Time** field is filled in initially with the time of the first bar that you selected. You can change this if you like. The **Amount** field is filled in initially with the number of bars that you selected. You can change this as well if you like. When you click on **OK** the amount of space you specify will be inserted in all the tracks that you have selected.

Goto Menu

```
Time...
Find Event...
Find Next          F3

1   0:0:0:0   1:1:0
2   0:0:0:0   1:1:0
3   0:0:0:0   1:1:0
4   0:0:0:0   1:1:0

Set Marker 1              ▶
Set Marker 2              ▶
Set Marker 3              ▶
Set Marker 4              ▶
```

The **Goto menu** is full of ways to move to different places in your piece.

Time

```
┌──────────────────────────────┐
│ ─      New Time              │
├──────────────────────────────┤
│ Jump to time:                │
│ ┌───┬─┐┌───┬─┐┌───┬─┐        │
│ │ 1 │±││ 1 │±││ 0 │±│        │
│ └───┴─┘└───┴─┘└───┴─┘        │
│                              │
│ SMPTE:                       │
│ Hour    Min    Sec    Frame  │
│ ┌──┬─┐┌──┬─┐┌──┬─┐┌──┬─┐     │
│ │0 │±││0 │±││0 │±││0 │±│     │
│ └──┴─┘└──┴─┘└──┴─┘└──┴─┘     │
│                              │
│      ┌─────┐ ┌───────┐       │
│      │ OK  │ │Cancel │       │
│      └─────┘ └───────┘       │
└──────────────────────────────┘
```
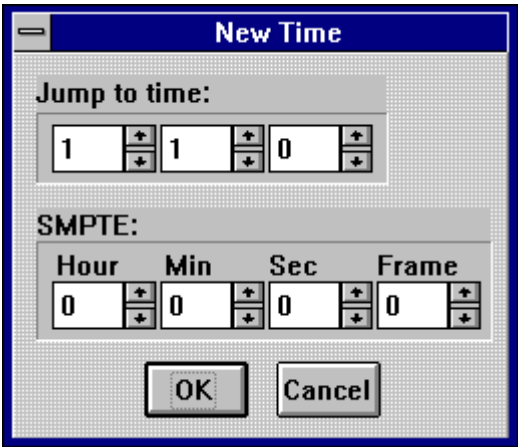
Selecting **Time** brings up the New Time dialog. This is the same as the dialog that you get if you click on the time display in the main control area. Selecting a time and pressing **OK** will take you to the time you asked for.

Find Event
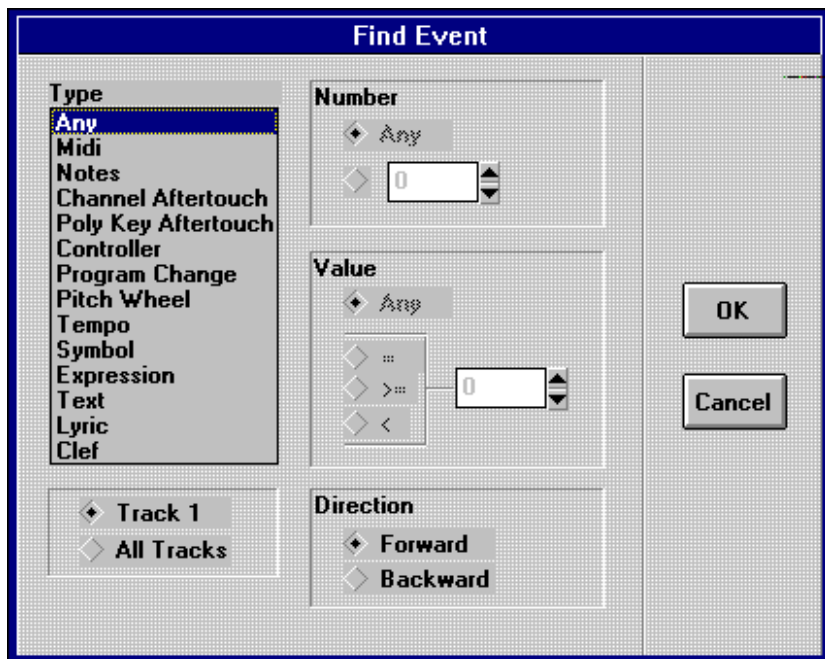
Select **Find Event** to go to the first occurrence of an event of a specific type. In the Find Event dialog, first choose the **event type** you want to look for. For some kinds of events, such as controllers, you can choose the number and either a range of values or a specific value for that event. Sometimes you can just choose a number, sometimes just a value or range of values and sometimes neither a number or a value. What you are allowed to choose will depend on the kind of event you are searching for. Next choose if you want to look in **all tracks** or just the **current track** for your event. Finally choose the **direction** in which you want to search. Press**OK** to look for your event.

Find Next

Select **Find Next** (or press **F3**) and the previous **Find Event** will be repeated from the current time. The first corresponding event after the current time will be found.

Marker 1, 2, 3, 4

Selecting any of these markers will **set the time** and **move the active window** to the time of the marker. The markers are shown in SMPTE and then in Bars:Beats:Steps format. If a little lock is in front of the marker, the marker is locked to SMPTE. In this case, if the tempo changes anywhere in the piece, the SMPTE time will stay the same and the Bars:Beats:Steps time will change. If the marker is not there (SMPTE lock is not on), and the tempo changes somewhere, the Bars:Beats:Steps time will stay the same but the SMPTE change will change.

Set Marker 1, 2, 3, 4

Selecting any of these will **set** the **numbered marker** to the **current time**. Therefore to set a marker to a particular time, set the **time display** in the main control area to the time you want (one way is to click on it, set the time and then press **OK**) and then select the marker. If you want to lock the marker to SMPTE, select **Set and Lock to SMPTE** from the submenu. Otherwise select **Set** from the submenu.

Play Menu

<u>P</u>lay	SPACE
Play <u>W</u>ithout Scrolling	SHIFT+P
Play <u>S</u>creen	P

Play

Selecting **Play** is the same as pressing the **play** button in the tape transport in the main control area. It will start your song playing from the beginning of the active window.

Play Without Scrolling

Selecting **Play Without Scrolling** acts the same as selecting **Play**, except that none of the windows scroll along with the playback. On a slower machine and with a very dense score, this can limit the demands made on the machine during playback.

Play Screen

Selecting **Play Screen** will play the screen of the active window. This is useful when you just want to hear the music you are looking at on the screen.

Track Menu

<u>E</u>dit...	Ctrl+A
Instrument <u>R</u>ange...	
<u>C</u>opy...	
<u>D</u>elete...	
<u>I</u>nsert	
<u>N</u>ew	

Edit

Select **Edit** to select all the notes in the current track and bring up the edit menu. Depending on which editor is active (and what object type is selected if you are in the Score Editor) you will get a different menu of editing options to choose from.

Instrument Range

Check Instrument Range

Track 1

Instrument
Piccolo ±

Range
◆ Full
◇ Practical

[Check]   [Cancel]
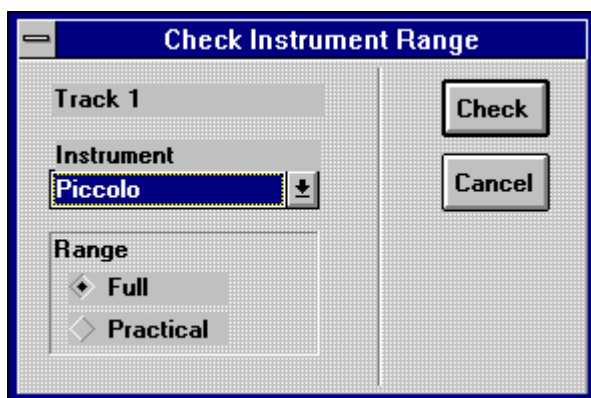
Select **Instrument Range** to bring up the Check Instrument Range dialog. Use this feature when you want to proof your track for notes out of the range

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of the instrument for which you are writing. You choose the **instrument** you are writing for from the drop-down list box. The **full** or the **practical range** or the instrument can be checked. Pressing **Check** will check from the beginning of the piece or the last out of range note found (if a previous check has been done).**Cancel** stops the checking function.

When a note is found that is out of range, the cursor moves to that note and you are warned that a note has been found that is out of range.

The ranges of instruments can be changed or new instruments and their ranges can be added by editing RANGES.INI in the installation directory. See "RANGES.INI" on page 217 for details.

Delete

Select **Delete** if you want to delete the current track. You will be asked to confirm that you want to go ahead and delete the track.

Insert

Select **Insert** to insert a new track in front of the current track.

New

Select **New** to add a new track after the last track in your song.

Display Menu

| Page... |
| Bar... |
| Track... |
| Score... |
| Titles... ▶ |
| Numbers... ▶ |
| Space Music... |
| Bars of Rest... |
| Score Paper... |

The **Display menu** allows you to make changes to the way music is displayed in the Score Editor and printed out.

Page

Selecting the **Page** menu item from the **Display** menu brings up the **Display Page** dialog. You use the Display Page dialog to control a number of global formatting options. Here you set system indentation, vertical staff positioning, vertical lyric and guitar chord positioning, brace and barline styles and fonts for all your text items.
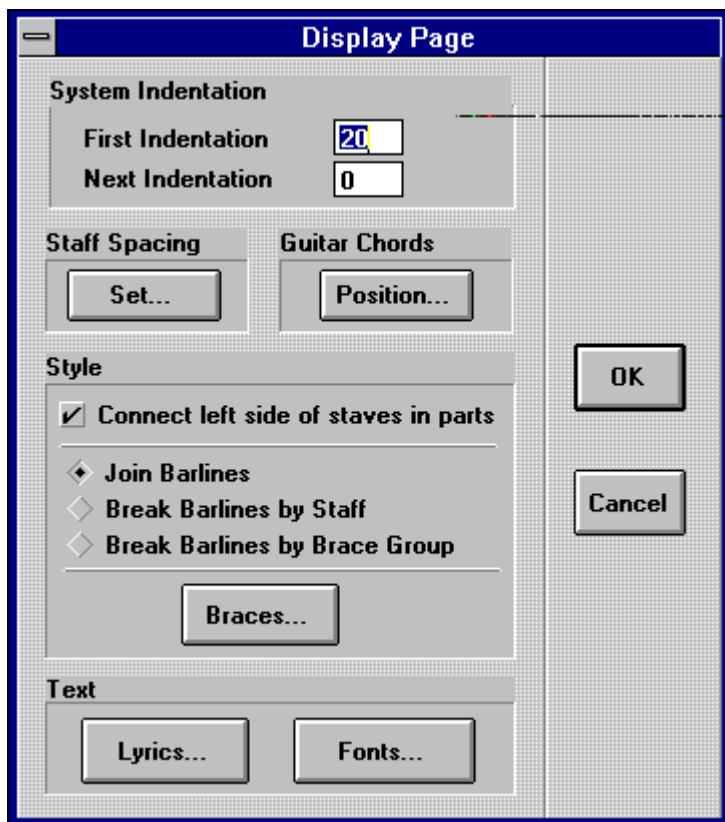
System Indentation

The **system indentation** allows you to indent your systems. The **first indentation** refers to the first system on the first page in your piece. The **next indentation** refers to all the remaining systems in your piece. The numbers you enter here correspond to the width of about half a character. (160 spaces cover the whole page.) The defaults are 20 for the first indentation and 0 for the next indentation.

Staff Spacing

Click on the **Set** button for **Staff Spacing** to bring up the Staff Spacing dialog.
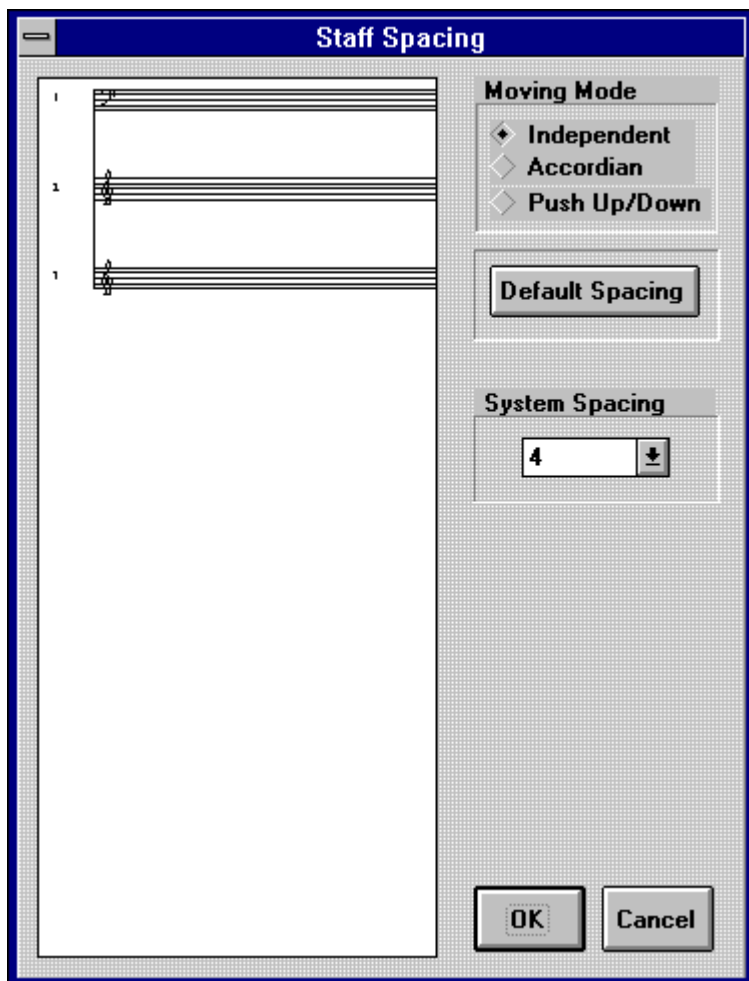
You can move the staves that appear on the window on the left side of the Staff Spacing dialog by dragging them up or down. You can move the staves three different ways, depending on the moving mode you select. If you choose **Independent**, moving a staff up or down does not affect any of the other staves. If you choose **Accordion**, the top staff and the bottom staff are anchored and the staff you move pulls the staves above and below it in an accordion effect. Choosing **Push Up/Down** moves the staves below the

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one being moved, along with the one being moved, as you move it up or down. If you click on the **Default Spacing** button the staff spacing will revert to the default. Of course, if you have only one track in your piece, you won't be able to affect the spacing between staves.

You can affect the spacing between systems by setting a new value in the **System Spacing** list box. By default, the spacing between systems is set at 4, which is about equivalent to the space between three ledger lines. This means that systems are spaced apart by this amount in addition to the default spacing between staves in the same system.

Guitar Chords

Click on the **Guitar Chords Position** button to change the automatic positioning of guitar chords.
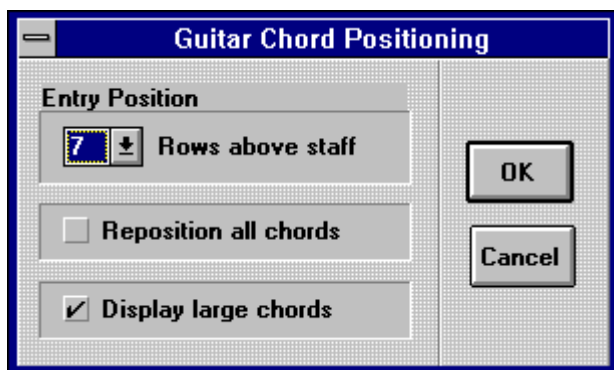
When you enter guitar chords they are entered at a set number of rows above the staff. (There are two rows between ledger lines, one for the space and one for the line) You can change the entry position of guitar chords by changing the value in the **Entry Position** list box. Check the **Reposition all chords** option to reset to the entry position all chords that have already been entered. Guitar chords can be displayed in either large or small format. If **Display large chords** is checked (the default), all chords will be displayed in large format. If Display large chords is not checked, all chords will be displayed in small format.

Style

You can control the appearance of barlines and braces in the Style section of the Display Page dialog. Check **Connect left side of staves in parts** if you want the far left of each staff to be closed with a bar line when you are

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printing parts. If this option is not checked, the far left of each staff will be open when printing parts. Many editors prefer this style for orchestral parts.

You have three choices of barline styles. If you choose **Join Barlines**, all barlines will extend from the top of the first staff in a system to the bottom of the last staff in the system. If you choose **Break Barlines by Staff**, all staves in a system will have barlines, but there will be no barline connections between staves in the same system. If you choose **Break Barlines by Brace Group**, barlines in a system will extend across staves that are grouped together by a brace or bracket. There will be no barline connection between staves in the same system not joined by a brace or bracket.

Braces

Click on the **Braces** button to select the Braces dialog.
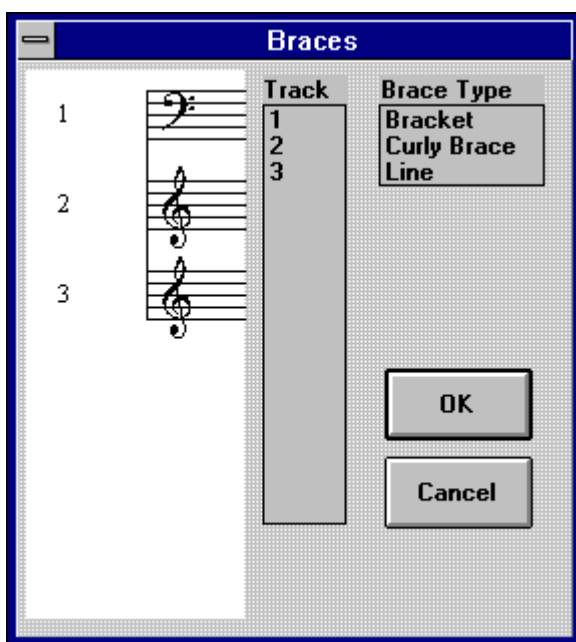
Now you can set up the brace and bracket style that you want for your piece. Select the tracks you want to connect with a given brace type (either a bracket, a curly brace or a line) by dragging over the numbers for these tracks in the **Track** box with the mouse. The tracks you have selected will be highlighted. Now choose a brace type by clicking on **Bracket**, **Curly Brace,** or **Line** in the **Brace Type** box. The tracks you selected will now be

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connected together in the brace display window. You can continue connecting tracks with different types of braces until you are happy with the brace and bracket style for your piece.

Text

The two buttons in the Text section of the Display Page dialog affect the display of text.

Click on the **Lyrics** button if you want to change the vertical positioning of lyrics.

Change the value in the **Lyric 1** list box to change the number of rows the first lyric appears below the staff. (Remember two rows equals the distance between two staff or ledger lines.) Change the vertical spacing between lyrics by changing the value in the **Spacing** list box. If you check **Reposition Lyrics**, all lyrics already entered will be repositioned to the position and spacing you have set. Otherwise only newly entered lyrics will be affected.

Click on the **Fonts** button to change the fonts for the text and symbols that you are using in QuickScore Elite.

Fonts				
Title	Times New Roman 16pt.	Text 6	Times New Roman 10pt.	
Track name	Times New Roman 10pt.	Text 7	Times New Roman 10pt.	
Numbers	Times New Roman 10pt.	Text 8	Times New Roman 10pt.	
Composer	Times New Roman 10pt.	Lyric 1	Times New Roman 10pt.	
Headers	Times New Roman 10pt.	Lyric 2	Times New Roman 10pt.	
Footers	Times New Roman 10pt.	Lyric 3	Times New Roman 10pt.	OK
Copyright	Times New Roman 10pt.	Lyric 4	Times New Roman 10pt.	
Text 1	Times New Roman 10pt.	Expression	Times New Roman 10pt.	Cancel
Text 2	Times New Roman 10pt.	Symbols 1	Times New Roman 10pt.	
Text 3	Times New Roman 10pt.	Symbols 2	Times New Roman 10pt.	
Text 4	Times New Roman 10pt.	Symbols 3	Times New Roman 10pt.	
Text 5	Times New Roman 10pt.	Symbols 4	Times New Roman 10pt.	

There are many different types of text fonts used in QuickScore Elite and they all show up here. The name of each type of text is to the left and the font for that type of text is displayed on the button to the right. Sometimes the button can't show all attributes for the font. Click on the button if you want to see all the attributes for the font or change the font. This brings up the Windows Font dialog, which allows you to select any font in your system, at any size that is available and with a wide variety of styles.
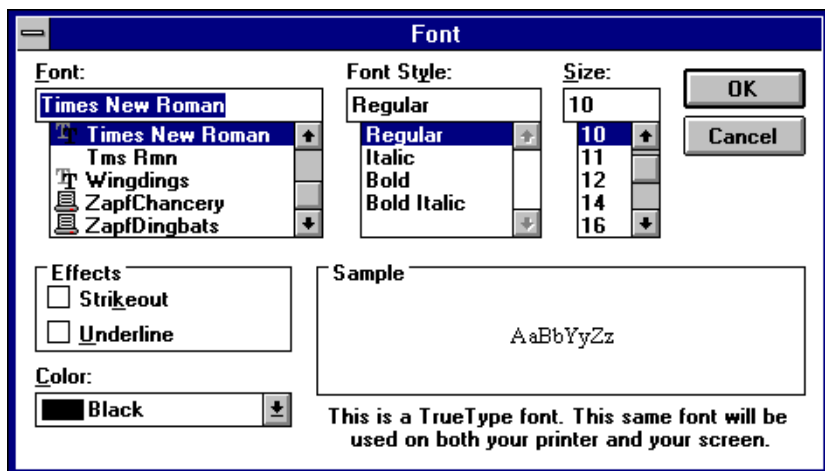
For more information on the Windows Font dialog see your *Windows User's Guide.*

Bar

Selecting the **Bar** menu item from the **Display** menu brings up the **Display Bar** dialog.
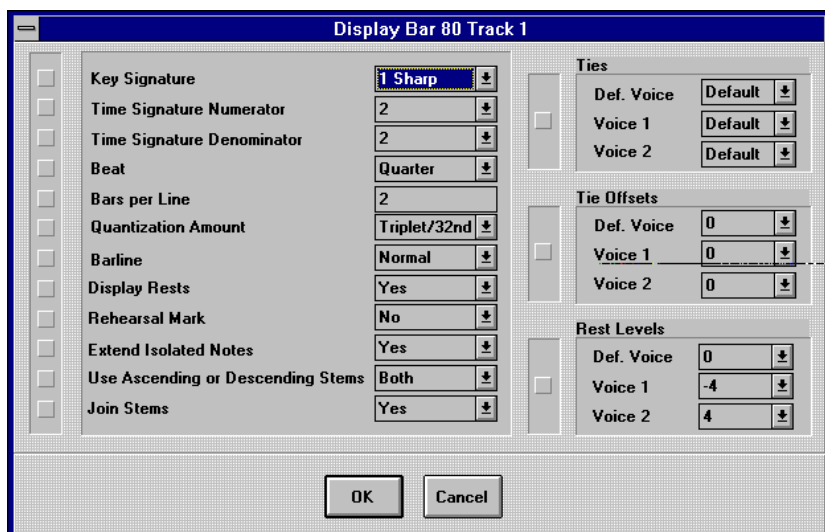
Select the **Display Bar** dialog when you want to make a change to the way a **single bar** in your score is displayed. Some of the parameters in this

dialog affect all tracks, and some just the current track. Some of the parameters only affect the current bar, and some also affect all bars after the current bar until a change to the parameter is found in a later bar.

Key Signature, **Time Signature**, **Beat**, **Barline**, and **Rehearsal Mark** all *affect all tracks*. All other parameters affect only the current track.

Key Signature, **Time Signature**, **Beat** and **Bars per Line** *affect the current bar and all bars afterwards* until a change to the parameter is found in a later bar. All other parameters only affect the current bar.

The **bar number** and **track number** are written on the **title** of the Display Bar dialog. You can change the **bar number** and/or the **track number** by double clicking on the **title** and selecting a new bar or track in the **Jump to** dialog that appears. This can be useful if you are in **Print Preview mode** in the **Score Editor** and you want to change a few things on different bars or tracks. (When the Display Bar dialog comes up in Print Preview mode, the parameters you first see are for the first bar displayed on the current page.)

You can change parameters by clicking on the drop-down list box to the right of the parameter name and selecting an item from the list that drops down. When you change a parameter, the **check box** beside the parameter becomes **checked**. Only parameters that are checked will be changed in your score when you press **OK**. You can **uncheck** a parameter that you don't want to change, if it is checked for any reason, by clicking on the **check**.

There are a number of parameters that can be set for the entire score, for each individual track, or for each individual bar. For example, you can set the quantization for your full score, each individual track, or each individual bar. It is easiest to set parameters like quantization for your full score first, and then make changes on a case by case basis using the Display Track or Display Bar dialogs. Remember that changing a setting in the Display Score dialog will wipe out any settings made in the Display Track or the Display Bar dialogs. So set your parameters first in the Display Score dialog, then in the Display Track dialog, and finally in the Display Bar dialog.

Key Signature

Select a new **key signature** *starting at the current bar* by choosing the number of **sharps** or **flats** you want in the key signature. The **key signature** affects **all tracks**. The **key signature** that you set in the **Display Bar** dialog will be in effect **from the current bar** until the key signature is set in a subsequent bar.

Time Signature Numerator

Select a new **time signature numerator** *starting at the current bar*. The time signature numerator affects **all tracks**. The **time signature numerator** that you set in the **Display Bar** dialog will be in effect **from the current bar** until the time signature numerator is set in a subsequent bar.

Time Signature Denominator

Select a new **time signature denominator** *starting at the current bar*. The time signature denominator affects **all tracks**. The **time signature denominator** that you set in the **Display Bar** dialog will be in effect **from the current bar** until the time signature denominator is set in a subsequent bar.

Beat

Choosing the **beat** affects the way music is grouped. Unless you explicitly group notes together (see "Group" on page 145), the **notes are grouped together by beat**. For example, suppose you have six eighth notes in a 6/8 bar. If you choose **quarter** as the beat, the notes in the bar will be grouped into three groups of two eighth notes each. If you choose **dotted eighth** as the beat, the notes in the bar will be grouped into two groups of three eighth notes each.

The **beat** affects **all tracks**. The **beat** that you set in the **Display Bar** Dialog will be in effect **from the current bar** until the beat set in a subsequent bar. You can set the beat for the **entire piece** using the **Display Score** dialog.

Note: **Some combinations of beat and time signature are *not* allowed**. The rule is the bar must be able to be broken into an integral number of beats. If you try to select a beat value that doesn't work with a given time signature, QuickScore Elite will not let you exit the Display Score dialog until you have selected a compatible beat value.

Bars per Line

Changing the **bars per line** setting will change the number of bars per line displayed **after the current bar**. If you have a track number displayed in the title, the bars per line setting will only affect that particular track. In other words, you will only see the bars per line change when you display the track in Single Track mode or when you print out the track as a single part. To change the bars per line for the full score, double click on the **title bar** and set the value in the track drop-down list box to **Score**. Then change the

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bars per line. This way you can have your music spaced differently for each part and for the full score.

To automatically set the **bars per line** for your **entire piece**, use the **Space Music** dialog (see "Space Music" on page 193). This works a lot faster than setting all the bars per line for your piece by hand. After you have set your bars per line with the **Space Music** dialog, you can make small changes using this option in the **Display Bar** dialog.

Quantization Amount

When QuickScore Elite displays music, it usually quantizes it first. The **quantization amount** is the smallest resolution used to display music. For example, if you have a group of eight, even thirty-second notes in a beat and your quantization amount is set to sixteenths, your thirty-second notes will show up as four groups of two sixteenth notes, looking as if you played each group of two sixteenth notes at the same time.

It is important to know the smallest duration that you are trying to display in a measure Make sure you set the **quantization amount** to a value equal or smaller than this amount. If you have triplets in your bar, they won't be displayed correctly unless you set the quantization value to either Triplet, Triplet/8th, Triplet/16th, Triplet/32nd, or None. The **quantization amount** set in the **Display Bar** dialog only affects the **current track** and the **current bar**.

You can set the quantization for each individual bar, each individual track, or for your full score. It is easiest to set quantization (as well as other parameters) for your full score (using the Display Score dialog) to what looks like a reasonable value. Then, if there are individual problems, try to correct them on a case by case basis using the Display Track or Display Bar dialogs. Remember that changing a setting in the Display Score dialog will wipe out any settings made in the Display Track or the Display Bar dialogs. So make your settings **first** in the **Display Score** dialog, **then** in the **Display Track** dialog, and **finally** in the **Display Bar** dialog.

Barline

This is where you set the type of **barline** that appears to the **left of the current bar**. If you are setting the barline for the first bar in your piece, you can only set the barline to a **normal** (thin line) barline or to a **left repeat**. For any other bar, you can set a wide variety of barlines.

Display Rests

Normally, rests are automatically displayed but you may decide not to display rests for a given bar and put them in yourself (using graphic rest symbols from the notes palette in the Score Editor). This can happen if you can find no way to display the rests in the bar without obscuring music or other symbols in the bar. Try changing the rest levels for rests in the bar (this option is in the next column in the Display Bar dialog) before you get rid of rests entirely and try to put them in yourself. **Display Rests** only affects the **current bar**.

Rehearsal Mark

Checking the **Rehearsal Mark** option puts in a rehearsal mark at the **current bar**. The rehearsal mark appears above the first track in Score mode and above each track in Single Track mode. The rehearsal mark is a letter enclosed in a box. The letters start with **A**, and after **Z**, if there are more, continue with **AA**, **BB**, etc. The letters for rehearsal marks are calculated automatically, so if you get rid of one or enter a new one between two old ones, all rehearsal mark letters are adjusted.

Extend Isolated Notes

When **Extend Isolated Notes** is set to **Yes**, short notes will extend to the next note (of the same voice) as long as that note is less than a quarter note beyond the start of the note. This is useful to get rid of lots of little rests if there are small gaps between notes. These rests can make the notation very difficult to read. **Extend Isolated Notes** is *on* by default. Setting **Extend Isolated Notes** in the **Display Bar** dialog only affects the **current bar**. You can also set **Extend Isolated Notes** in the **Display Score** and the **Display Track** dialogs.

Use Ascending or Descending Stems

Setting this option will set the **stem direction** of all notes in the **current bar** which uses the **default voice**. You can set the stem direction to **Ascending**, **Descending**, or **Both**. If **Both** is selected, all notes above the middle staff line will have stems pointing down and all notes on or below the middle staff line will have stems pointing up. You can also set **Use Ascending or Descending Stems** in the **Display Score** and the **Display Track** dialogs. In addition, you can change the direction of note stems on a note by note basis by selecting a note or group of notes and applying a **Group** edit to it. (See "Group" on page 145 for more details.)

Join Stems

This option is *on* by default. If **Join Stems** is *off*, all stems in the **current bar** will be drawn separately. Otherwise they are drawn together. You can also set **Join Stems** in the **Display Score** and the **Display Track** dialogs. In addition, you can join notes together on a note by note basis by selecting a note or group of notes and applying a **Group** edit to it. (See "Group" on page 145 for more details.)

Ties

Normally **ties** go in the opposite direction of note stems. Sometimes this creates a problem because ties cover up notes or other symbols. You can set the direction of ties (above or below notes) in the **Display Bar** dialog if you are having problems. You can set the direction for ties in the **default**, **first voice**, or **second voice** individually. Setting **Ties** only affects ties in the **current bar**.

Tie Offsets

If changing the direction of ties does not solve your problems of ties overlapping notes or other symbols, you can change the vertical distance of the tie from the notes it is linking together. Remember that the offset is measured in rows and there are two rows between each staff line or ledger line. Setting **Tie Offsets** only affects ties in the **current bar**.

Rest Levels

If you are having trouble with rests that overlap notes or other symbols you can move the rests in the bar up or down to get them out of the way. **Rest levels** are measured in rows from the top of the staff. There are two rows between each staff line or ledger line. Setting **Rest Levels** only affect rests in the **current bar**.

Track

Selecting the **Track** menu item from the **Display** menu brings up the **Display Track** dialog.
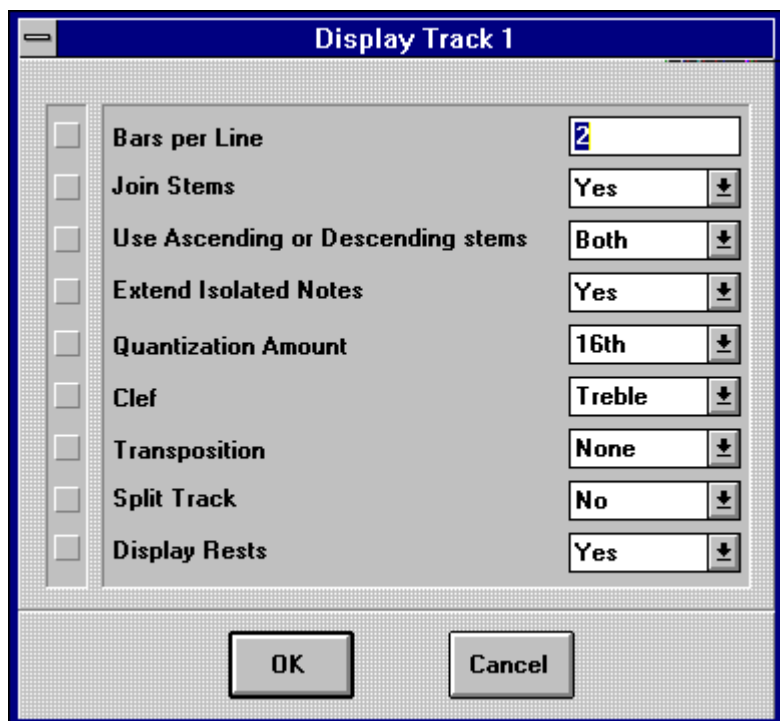
The **Display Track** dialog is useful to change parameters that affect the way a track is displayed. Each of the parameters that you set here **affect all bars in the current track**.

The **number** of the **track** affected is shown in the **title** of the dialog. You can change the **track number** by double clicking on the **title** and selecting a new track in the **Jump to** dialog that appears.

You can change parameters by clicking on the drop-down list box to the right of the parameter name and selecting an item from the list that drops down. When you change a parameter, the **check box** beside the parameter becomes **checked**. Only parameters that are checked will be changed in your score when you press **OK**. You can **uncheck** a parameter you don't want to change, if it is checked for any reason, by clicking on the **check**.

There are a number of parameters that can be set for the entire score, for each individual track, or for each individual bar. For example, you can set the quantization for your full score, each individual track, or each individual bar. It is easiest to set parameters like quantization for your full score first and then make changes on a case by case basis using the Display Track or Display Bar dialogs. Remember that changing a setting in the Display Score dialog will wipe out any settings made in the Display Track or the Display Bar dialogs. So set your parameters first in the Display Score dialog, then in the Display Track dialog, and finally in the Display Bar dialog.

Bars Per Line

Changing the **bars per line** setting will change the number of bars per line displayed for the **current track**. Note that you will only see the bars per line that you set for the current track when you display the track in Single Track mode or when you print out the track as a single part. To change the bars per line for the full score, change the bars per line using the Display Score dialog. This way you can have your music spaced differently for each part and for the full score.

To automatically set the **bars per line** for your **entire piece**, use the **Space Music** dialog (see "Space Music" on page 193). This will automatically justify the spacing based on the density of your music. Doing things this way works a lot faster than setting all the bars per line for your piece by hand. After you have set your bars per line with the **Space Music** dialog, you can make small changes using the Display Bar dialog.

Join Stems

This option is *on* by default. If **Join Stems** is *off*, all stems in the **current track** will be drawn separately. Otherwise they are drawn together. You can also set **Join Stems** in the **Display Score** and the **Display Bar** dialogs or you can join notes together on a note by note basis by selecting a note or group of notes and applying a **Group** edit to it. (See "Group" on page 145 for more details.)

Use Ascending or Descending Stems

Setting this option will set the **stem direction** of all notes in the **current track** which use the default voice. You can set the stem direction to **Ascending**, **Descending**, or **Both**. If **Both** is selected, all notes above the middle staff line will have stems pointing down and all notes on or below the middle staff line will have stems pointing up. You can also set **Use Ascending or Descending Stems** in the **Display Score** and the **Display**

Bar dialogs or you can change the direction of note stems on a note by note basis by selecting a note or group of notes and applying a **Group** edit to it. (See "Group" on page 145 for more details.)

Extend Isolated Notes

When **Extend Isolated Notes** is set to **Yes**, short notes will extend to the next note (of the same voice) as long as that note is less than a quarter note beyond the start of the note. This is useful to get rid of lots of little rests if there are small gaps between notes. These rests can make the notation very difficult to read. **Extend Isolated Notes** is *on* by default. Setting **Extend Isolated Notes** in the **Display Track** dialog only affects the **current track**. You can also set **Extend Isolated Notes** in the **Display Score** and the **Display Bar** dialogs.

Quantization Amount

When QuickScore Elite displays music it usually quantizes it first. The **quantization amount** is the smallest resolution used to display music. For example, if you have a group of eight, even thirty-second notes in a beat and your quantization amount is set to sixteenths, your thirty-second notes will show up as four groups of two sixteenth notes, looking as if you played each group of two sixteenth notes at the same time.

It is important to know the smallest duration you are trying to display in a measure. Make sure you set the **quantization amount** to a value equal or smaller than this amount. If you have triplets in your track, they won't be displayed correctly unless you set the quantization value to either Triplet, Triplet/8th, Triplet/16th, Triplet/32nd, or None. The **quantization amount** set in the **Display Track** dialog only affects the **current track**.

You can set the quantization for each individual bar, each individual track, or for your full score. It is easiest to set quantization (as well as other parameters) for your full score (using the Display Score dialog) to what looks like a reasonable value. Then, if there are individual problems, try to correct them on a case by case basis using the Display Track or Display Bar dialogs. Remember that changing a setting in the Display Score dialog will wipe out any settings made in the Display Track or the Display Bar dialogs. So make your settings **first** in the **Display Score** dialog, **then** in the **Display Track** dialog, and **finally** in the **Display Bar** dialog.

Clef

Setting the **clef** in the **Display Track** dialog sets the clef for the entire **current track**, wiping out any clefs you may have put into the track earlier.

You can also put clefs into your track using the clef palette in the Score Editor.

Transposition

The **Transposition** option affects the display of notes in the **current track**. The actual pitch of the notes does not change. Use this feature if you are writing for transposing instruments, such as clarinets or French horns.

Split Track

Split Track causes the track to be displayed on two staves. The top staff has a treble clef and the bottom staff has a bass clef. This is useful for displaying keyboard parts.

Display Rests

Display Rests is *on* by default, but if you don't want to display any rests in the **current track**, set it to *off*. This can be useful if you want to print out a blank track without any music or rests in it and then later draw in the notes in the blank track by hand.

Score

Selecting the **Score** menu item from the **Display** menu brings up the **Display Score** dialog.

Display Score		
Tempo	120	
Steps per Quarter	96	
Beat	Quarter	
Bars per Line	2	
Staves per Page	10	
Include Bar Lines	Yes	**OK**
Join Stems	Yes	
Use Ascending or Descending Stems	Both	
Extend Isolated Notes	Yes	
Quantization Amount	16th	
Time Signature Numerator	4	**Cancel**
Time Signature Denominator	4	
Key Signature	None	
Show Tempo Changes	No	
Use Engraver Spacing	No	
Octavas Affect Notes	Yes	
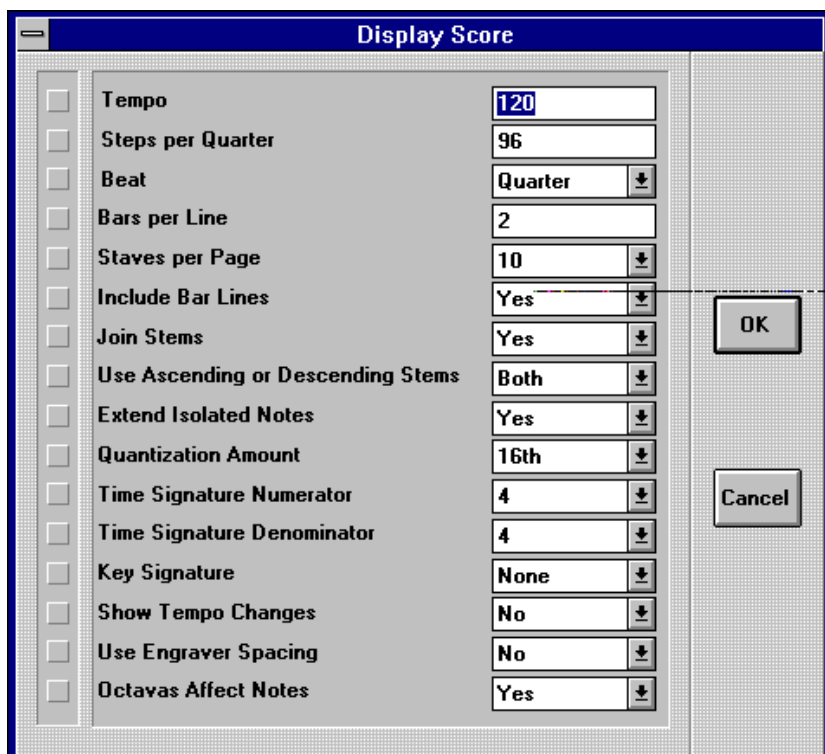
The **Display Score** dialog allows you to change a number of parameters that **affect the display of your entire score**

There are a number of parameters that can be set for the entire score, for each individual track or for each individual bar. For example, you can set the quantization for your full score, each individual track, or each individual bar. It is easiest to set parameters like quantization for your full score first and then make changes on a case by case basis using the Display Track or Display Bar dialogs. Remember that changing a setting in the Display Score dialog will wipe out any settings made in the Display Track or the Display Bar dialogs. So set your parameters first in the Display Score dialog, then in the Display Track, dialog and finally in the Display Bar dialog.

Tempo

Set the **tempo** in the **Display Score** Dialog to set the tempo for your **entire piece**. But be careful, because any tempo changes you have put in anywhere in your piece (using the **Tempo** button, the **Mixer**, or the **Controller Editor**) will be wiped out.

Steps per Quarter

The **steps per quarter** is the number of steps or clock ticks in a quarter note. This is set by default to **96** and normally does not need to be changed. If you read in a MIDI file, the steps per quarter will be taken from the MIDI file. The **time display** for the cursor and for individual events is always in *bars*, *beats* and *steps*. Changing the **steps per quarter** after you have entered music in a piece will affect the display and playback of the music you have already entered, so do this with extreme caution.

Beat

Choosing the **beat** affects the way music is grouped. Unless you explicitly group notes together (see "Group" on page 145), the **notes are grouped together by beat**. For example, suppose you have six eighth notes in a 6/8 bar. If you choose quarter as the beat, notes will be grouped into three groups of two eighth notes each. If you choose dotted eighth as the beat, the notes in the bar will be grouped into two groups of three eighth notes each.

The beat affects **all tracks**. The beat that you set in the **Display Score** Dialog will **wipe out** any earlier changes you made to the beat using the **Display Bar** dialog. The beat is set for the **entire piece** in the **Display Score** Dialog . You can set the beat on a **bar by bar** basis using the **Display Bar** dialog.

Note: **Some combinations of beat and time signature are *not* allowed**. The rule is the bar must be able to be broken into an integral number of beats. If you try to select a beat value that doesn't work with a given time signature, QuickScore Elite will not let you exit the Display Score dialog until you have selected a compatible beat value.

Bars per Line

Changing the **bars per line** setting will change the number of bars per line displayed for the **entire piece**. Any bars per line settings you made earlier using the **Display Track**, **Display Bar** or **Space Music** dialogs will be **wiped out**.

Staves per Page

Select **Staves per Page** to set the number of staves which appear on each page.

Include Bar Lines

You can choose not to **include bar lines** for your piece if you want. **Include Bar Lines** is set to **Yes** by default.

Join Stems

This option is *on* by default. If **Join Stems** is *off*, all stems **in the piece** will be drawn separately. Otherwise they are drawn together. You can also set **Join Stems** in the **Display Bar** and the **Display Track** dialogs or you can join notes together on a note by note basis by selecting a note or group of notes and applying a **Group** edit to it. (See "Group" on page 145 for more details.) Setting the **Join Stems** option in the **Display Score** dialog will **wipe out** any changes you made earlier to this parameter using the **Display Track** or **Display Bar** dialogs.

Use Ascending or Descending Stems

Setting this option will set the **stem direction** of all notes **in the piece** which use the **default voice**. You can set the stem direction to **Ascending**, **Descending**, or **Both**. If **Both** is selected, all notes above the middle staff line will have stems pointing down and all notes on or below the middle staff line will have stems pointing up. You can also set **Use Ascending** or **Descending Stems** in the **Display Track** and the **Display Bar** dialogs or you can change the direction of note stems on a note by note basis by selecting a note or group of notes and applying a **Group** edit to it (See "Group" on page 145 for more details.) Setting this parameter in the **Display Score** dialog will **wipe out** any changes you made earlier to this parameter using the **Display Track** or **Display Bar** dialogs.

Extend Isolated Notes

When **Extend Isolated Notes** is set to **Yes**, short notes will extend to the next note (of the same voice) as long as that note is less than a quarter note beyond the start of the note. This is useful to get rid of lots of little rests if there are small gaps between notes. These rests can make the notation very difficult to read. **Extend Isolated Notes** is *on* by default. You can also set **Extend Isolated Notes** in the **Display Track** and the **Display Bar** dialogs. Setting this parameter in the **Display Score** dialog will **wipe out** any

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changes you made earlier to this parameter using the **Display Track** or **Display Bar** dialogs.

Quantization Amount

When QuickScore Elite displays music it usually quantizes it first. The **quantization amount** is the smallest resolution used to display music. For example, if you have a group of eight even thirty-second notes in a beat and your quantization amount is set to sixteenths, your thirty-second notes will show up as four groups of two sixteenth notes, looking as if you played each group of two sixteenth notes at the same time.

It is important to know the smallest duration you are trying to display in a measure. Make sure you set the **quantization amount** to a value equal or smaller than this amount. If you have triplets in your bar, they won't be displayed correctly unless you set the quantization value to either Triplet, Triplet/8th, Triplet/16th, Triplet/32nd, or None. The **quantization amount** set in the **Display Score** dialog affects the **entire piece** and **wipes out** any changes you made earlier to this parameter using the **Display Track** or **Display Bar** dialogs.

You can set the quantization for each individual bar, each individual track, or for your full score. It is easiest to set quantization (as well as other parameters) for your full score (using the Display Score dialog) to what looks like a reasonable value. Then, if there are individual problems, try to correct them on a case by case basis using the Display Track or Display Bar dialogs. Remember that changing a setting in the Display Score dialog will wipe out any settings made in the Display Track or the Display Bar dialogs. So make your settings **first** in the **Display Score** dialog, **then** in the **Display Track** dialog, and **finally** in the **Display Bar** dialog.

Time Signature Numerator

Setting the **time signature numerator** in the **Display Score Dialog** affects your **entire piece** and **wipes out** any changes that you made earlier to this parameter using the **Display Bar** dialog.

Time Signature Denominator

Setting the **time signature denominator** in the **Display Score Dialog** affects your entire piece and **wipes out** any changes you made earlier to this parameter using the **Display Bar** dialog.

Key Signature

Select a new **key signature** by choosing the number of **sharps** or **flats** you want in the key signature. The key signature affects your **entire piece** and **wipes out** any changes you made earlier to this parameter using the **Display Bar** dialog.

Show Tempo Changes

You can choose to **show tempo change events** in the **Score Editor** by setting this option to **Yes**. If you do, each tempo change event will be shown as a string of the form, "**Tempo = t**" (where t is the tempo value), above the first track displayed in the printed score.

Use Engraver Spacing

Engraver spacing is used by the **Score Editor** to space music so that it **looks good visually**. Without engraver spacing, spacing occurs by time, rather than appearance. Crowding of music sometimes occurs, because you always put music occupying the same amount of time in the same amount of space. For example, eight thirty-second notes take up the same amount of space as one quarter note. The thirty-second notes are crowded together and the quarter note is all by itself. When you use engraver spacing, you assign the amount of space notes of each duration take up. For example, you can have thirty-second notes taking up only half as much as quarter notes if you want to. Your music will generally look better if you use engraver spacing. See "Engraver Spacing" on page 206 for more details.

Octavas Affect Notes

The **octava markings** are adjustable symbols found in the **adjustable** symbols palette. You enter octavas by dragging them in with the **pencil** tool over the notes you want them to affect.
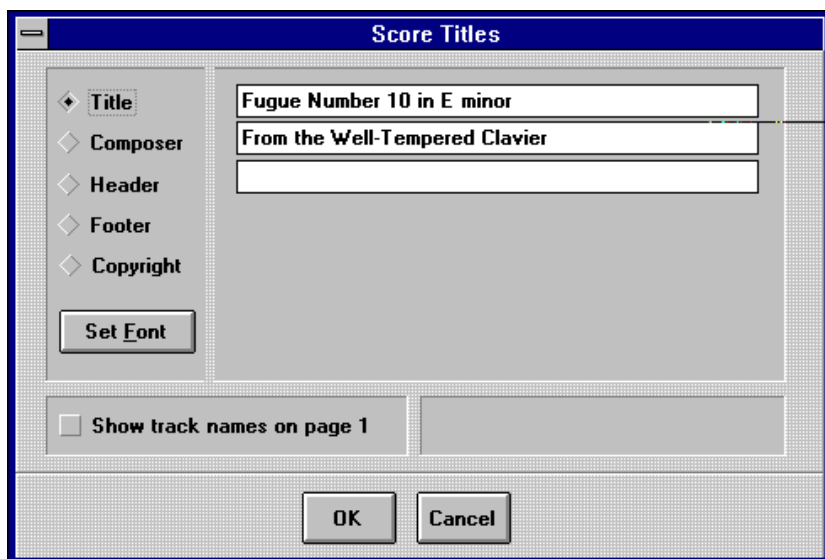
Set this option to make **octava markings affect** the **notes** *above* or *below* them. This option is set to **NO** by default. If you set this option to **Yes**, you can enter the notes at their real pitch and then lower them or raise them on the display using an octava marking.

Titles

Selecting the **Titles** menu item from the **Display** menu brings up a submenu with two items. Selecting **Score** from the submenu brings up the **Score Titles** dialog. Selecting **Track** from the submenu brings up the **Track**

Titles dialog. Both dialogs are almost the same. Select **Score** to set titles for the **entire score**. Select **Track** to set titles for each **part** or **track**.

The titles for each part can be different than the titles for the entire score. This is so you can use a title, headers, or footers for your score that are different from the ones you use for your tracks. For example, you may want to use the track name in the footer when you are printing parts, and the title of your piece in the footer when you are printing the full score. You can copy all track titles from the score titles if you want to save time putting them in by hand.

You can set the **title**, the **composer**, the **header**, the **footer**, and the **copyright** using the **Score Titles** dialog and the **Track Titles** dialog. You can decide to **show** or **hide** the **track names** on the **first page** of your parts and score.

If you want to set the **font** for a particular title, click on the **Set Font** button. You can also set the **font** for your titles by selecting the **Fonts** button in the **Display Page** dialog under the **Display** menu.

Select the **title** you want to set by clicking on the **diamond** beside the **title**. The text for that title will be displayed and the possible options for the title will appear below the text.

Title

The **title** is always centered on the first page of the printed score or part. You can imbed the track name into the title for the track titles by clicking on the **Track %T** button or by typing "**%T**" in the title text.

Composer

The **composer** appears to the right on the first page of the printed score or part.

Header

The **header** appears at the **top** of your page. It will appear on each page of your score starting at a page you specify in the **Starting page** field. The header can be **centered**, **left justified**, or **right justified**. You can imbed the **page number** by clicking on the **Page %P** button or by typing "**%P**" in the header text. You can imbed the **track number** (for track titles) by clicking on the **Track %T** button or by typing "**%T**" in the header text. You can imbed the **date** by clicking on the **Date %D** button or by typing "**%D**" in the header text.

Footer

The **footer** appears at the **bottom** of your page. It will appear on each page of your score starting at a page you specify in the **Starting page** field. The footer can be **centered**, **left justified**, or **right justified**. You can imbed the **page number** by clicking on the **Page %P** button or by typing "**%P**" in the footer text. You can imbed the **track number** (for track titles) by clicking on the **Track %T** button or by typing "**%T**" in the footer text. You can imbed the **date** by clicking on the **Date %D** button or by typing "**%D**" in the footer text.

Copyright

The **copyright** appears on the **bottom** of the **first page** of the printed score or part. The copyright can be **centered**, **left justified**, or **right justified**. You can imbed the copyright symbol in the copyright text by clicking on the **Copyright** button.

Numbers

Selecting the **Numbers** menu item from the **Display** menu brings up a submenu with two items, **Page** and **Bar**.

Page

Selecting the **Page** menu item from the **Numbers** submenu from the **Display** menu brings up the **Page Numbers** dialog. Here you can change the way page numbers are displayed in your score.

These page numbers are independent of the page numbers embedded in the headers and footers using the **%P** command. If you want to use page numbers in your headers or footers, you should make sure the box to the right of **Show page numbers** is unchecked in this dialog.
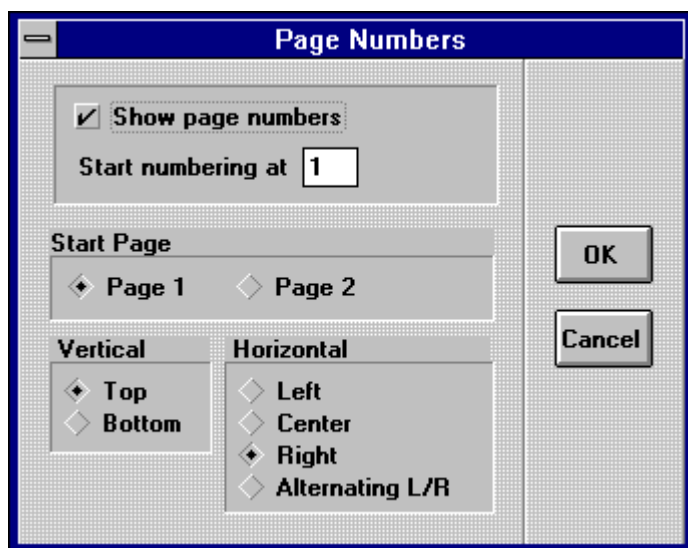
Check the **box** to the left of **Show page numbers** if you want page numbers to appear when you print your score. Type in the **number** at which you want page numbering to **start** in the box to the right of **Start numbering at**. For example, if you want to insert your piece into a larger document which already has fifteen pages, start numbering at sixteen.

You can choose to have a page number on your first page or wait until page two to start showing page numbers. Select this by checking **Page 1** or **Page 2** in the **Start Page** section of the **Page Numbers** dialog.

Select the **position** of your page numbers on the page by choosing **Top** or **Bottom** in the **Vertical** section and then either **Left**, **Center**, **Right**, or **Alternating Left/Right** in the **Horizontal** section.

Bar

Selecting the **Bar** menu item from the **Numbers** submenu from the **Display** menu brings up the **Bar Numbers** dialog. Here you can change the way bar numbers are displayed in your score.
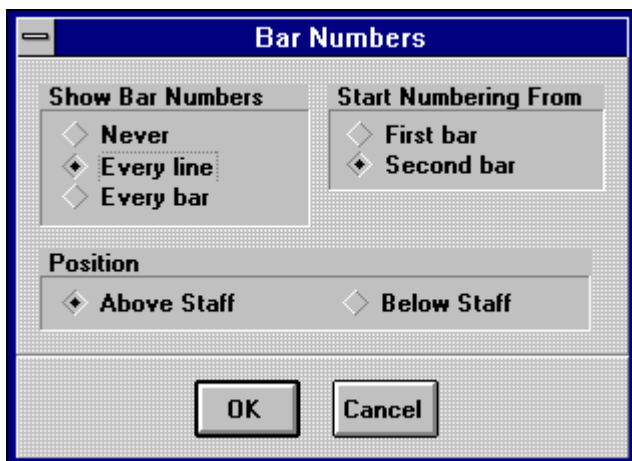
Choose to never display bar numbers, display them every line or every bar by selecting **Never**, **Every line**, or **Every bar** in the **Show Bar Numbers** section of the dialog. You can start numbering from the first bar or the second bar (do this if your first bar is a pickup bar) by selecting **First bar** or **Second bar** in the **Start Numbering From** section. Finally, you can position the bar numbers above or below the staff by selecting **Above Staff** or **Below Staff** in the **Position** section.

Space Music
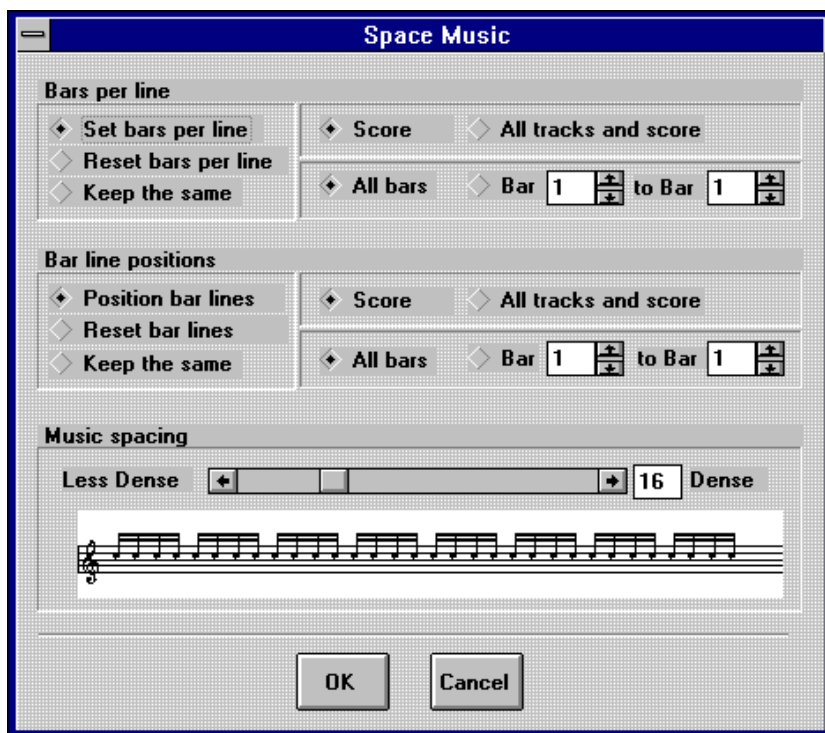
QuickScore Elite will automatically space your music for you, choosing the bars per line and the positioning of bar lines throughout your entire piece or in just a section of your piece when you use the **Space Music** dialog. The bars per line and the positioning of bar lines are calculated automatically based on the changing density of your music.

There are three sections in this dialog, the **Bars per line** section, the **Bar line positions** section and the **Music spacing** section.

Bars per line

In the **Bars per line** section, you can set the bars per line, reset the bars per line (get rid of all bars per line changes) or not change any bars per line settings you have already set. (Choose this option if have already set your bars per line the way you want them and you just want to change the bar line positions at this time.) Do this by choosing **Set bars per line**, **Reset bars per line**, or **Keep the same** in the left side of this section.

In the upper right of the section, choose the track(s) where you want to calculate your bars per line. If you are in Score mode you can choose the full score or all the tracks and the full score. If you are in Single Track mode you can choose the current track or all the tracks and the full score. To choose the **current track** (the score display in the Score Editor must be in Single Track mode), select **Track *n*** (where *n* is the current track number). To choose the **full score** (the Score display in the Score Editor must be in Score mode), select **Score.** You can select **All tracks and score** when the Score Display in the Score Editor is in either Single Track mode or Score mode.

You can choose to affect all the bars in your piece or a range or bars by clicking on **All bars** or **Bar** in the lower right part of this section. If you select **Bar**, make sure you **set the range of bars** you want to affect by typing in the appropriate bar numbers or by setting them using the spin controls to the right of the numbers.

Bar line positions

In the **Bar line positions** section, you can position bar lines, reset bar lines (get rid of all bar line settings) or not change any bar line settings you have already set. (Choose this option if have already set your barlines the way you want them and you just want to change the bar line positions at this time.) Do this by choosing **Position bar lines**, **Reset bar lines**, or **Keep the same** in the left side of this section.

In the upper right of the section, choose the track(s) where you want to position your bar lines. If you are in Score mode you can choose the full score or all the tracks and the full score. If you are in Single Track mode you can choose the current track or all the tracks and the full score. To choose the **current track** (the score display in the Score Editor must be in Single Track mode), select **Track *n*** (where *n* is the current track number). To choose the **full score** (the Score display in the Score Editor must be in Score mode), select **Score.** You can select **All tracks and score** when the Score Display in the Score Editor in either Single Track mode or Score mode.

You can choose to affect all bars or a range or bars by clicking on **All bars** or **Bar** in the lower right part of this section. If you select **Bar**, make sure you **set the range of bars** you want to affect by typing in the appropriate bar numbers or by setting them using the spin controls to the right of the numbers.

Music spacing

In the **Music spacing** section, you choose how dense you want each line of music to be. This will affect the **bars per line** settings. The denser you set the music spacing, the more bars you will tend to have on each line. For example, a setting of 16 will put 32 sixteenths on average on each line. Choose the **density** setting by moving the scroll box to the left or right in the horizontal scroll bar, or set a number in the box to the right of the scroll bar.

When you click on the **OK** button, QuickScore Elite will set the bars per line and bar line positions using the density you have selected for the tracks and bars you have chosen.

Bars of Rest
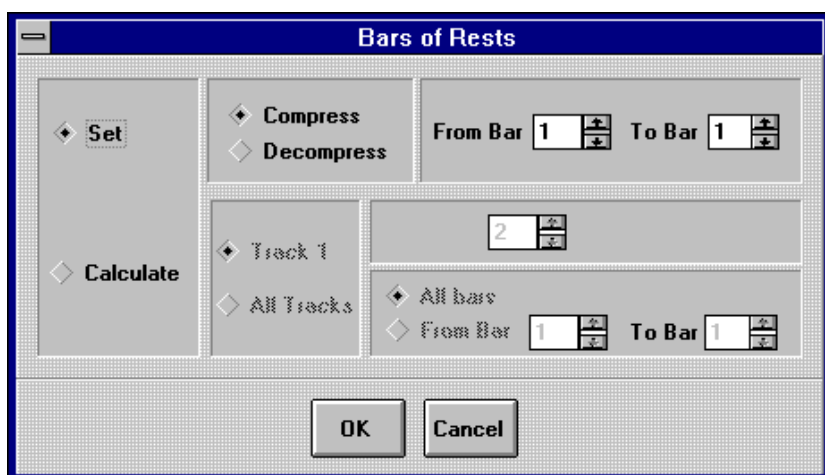
The **Bars of Rest** dialog lets you explicitly consolidate a number of bars of rest, or have QuickScore Elite automatically find and consolidate the bars of rest for all or part of your piece. Consolidated bars of rest are displayed with a bars of rest sign with the number of resting bars above it. Select **Set** or **Calculate** on the left side of the dialog to either consolidate bars of rest explicitly or have QuickScore Elite do it.

If you choose **Set**, the two boxes on the top left part of the dialog will be enabled for input. Choose **Compress** to compress a number of resting bars into a single bar with a bars of rest sign. Choose **Decompress** to take a single bar with a bars of rest sign and expand it into its component resting

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bars. Next, select the bars you want to explicitly compress or decompress by typing in the bar numbers or setting them with the spin controls.

If you choose **Calculate**, the three boxes on the bottom left part of the dialog will be enabled for input. You can choose the current track or all your tracks by selecting **Track *n*** (where *n* is the current track number) or **All Tracks**. You can choose to affect all bars or a range or bars by clicking on **All bars** or **From Bar** in the lower right part of this section. If you select **From Bar**, make sure you **set the range of bars** you want to affect by typing in the appropriate bar numbers or by setting them using the spin controls to the right of the numbers. Choose the minimum number of empty bars that will be consolidated into a single bar containing a bars of rest sign by typing in a number or setting it with the spin controls in the **Compress *n* bars of rest or more** section of the dialog. Now every time QuickScore Elite finds a number of empty bars that is equal to or greater than the number you set, these empty bars will be consolidated into a single bar. If a number of empty bars is encountered that is smaller than this number, they will not be consolidated.

Score Paper
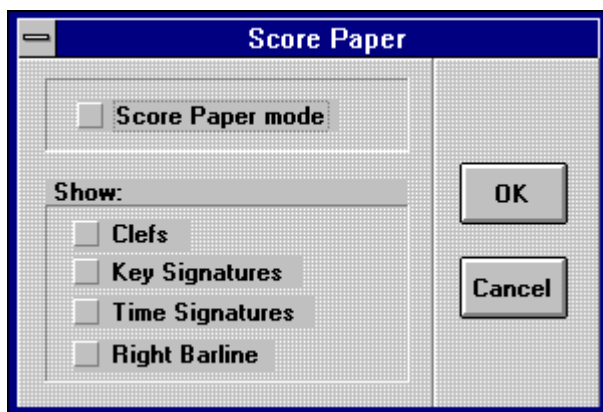
The **Score Paper** dialog lets you create score paper. Score paper is drawn without rests or bar lines. You can set up various aspects of the format for your score paper (braces, indentation, etc.) by loading a template or using the **Display Page** dialog.

Select **Score Paper mode** by putting a **check** in the **Score Paper mode** section. Then check **Clefs**, **Key Signatures**, **Time Signatures**, and/or **Right Barline** if you want any of these to show up on your score paper. You

can preview your score paper by selecting **Print Preview mode** and then print out as many pages as you want.

Options Menu

```
MIDI Setup...
Metronome...
Record Options...
File Input & Record Filter...
MIDI Thru...
Patch Lists...
Step/Mouse Entry Velocities...
SMPTE...
Engraver Spacing...
Drum Notation...
Scroll Children...

  Save Settings on Exit
√ Chase Controllers
√ MIDI Enabled
  External Clock
  Send MIDI Clock
√ Scroll While Playing
  Legato Entry
√ Cache Patches
```

MIDI Setup

Select the **MIDI Setup** menu item to change the **MIDI in** and **MIDI out** port that QuickScore Elite will be using.
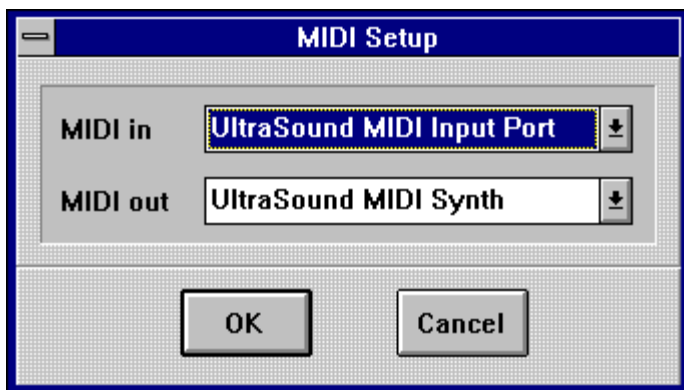
Select a **MIDI input driver** from the **MIDI in** list box. The MIDI input drivers listed are the ones that are installed in your system. Select a **MIDI output driver** from the **MIDI out** list box. The MIDI output drivers listed are the ones that are installed in your system. For more information about installing MIDI drivers, see your *Windows User's Guide*

Metronome
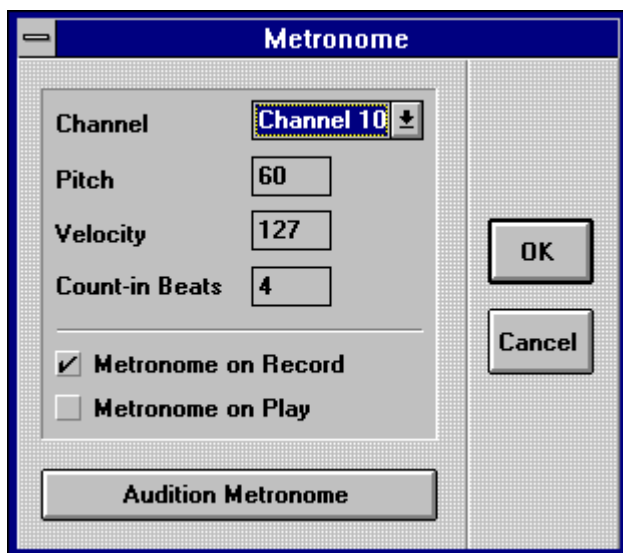
Select the **Metronome** menu item when you want to change the settings for the audible metronome. The metronome can be used when you are playing or when you are recording. Normally it is used when you recording.

The Metronome dialog appears when you select **Metronome** from the **Options** Menu. The **Channel**, **Pitch**, and **Velocity** fields and **Audition Metronome** button refer to the note you will be using for the metronome. Select a note you like (usually a drum sound with a well-defined attack is good) and make sure it is as loud as you like it. The downbeat of each bar will be louder than the other beats and the velocity number you are setting refers to this note. The other beats are a little softer. Click on **Audition Metronome** to hear the note you have selected. Click on **Audition Metronome** again to silence it. The **Count-in Beats** field is used when you are recording. This is the number of beats you will hear before recording starts. Usually you will want to set this to a multiple of the number of beats in your bar.

Check the **Metronome on Record** option if you want to hear the metronome when you are recording. Normally this option is checked. Keep this option unchecked if you don't want to hear the metronome when you are recording. Click on the check box to check or uncheck the **Metronome on Record** option.

Check the **Metronome on Play** option if you want to hear the metronome when you are playing. Normally this option is not checked. Keep this option unchecked if you don't want to hear the metronome when you are playing. Click on the check box to check or uncheck the **Metronome on Play** option.

Once you have set the metronome the way you like, you should never have to set it again as long as you use QuickScore Elite. Your metronome settings are saved in the file QSD.INI. For more information, see "QSD.INI" on page 216.

Record Options

Record Options

Real Time	
◇ Tap Beat	**OK** **Cancel**

Tap Beat MIDI Input

Controller   **Value**

Note On ±   36 ±

☐ **Listen to MIDI**

Select **Record Options** to set up the source of the beat you will be using when recording. Normally you will record in **real time**, that is, the metronome beats at the tempo specified in your song. But you can also **tap the beat** yourself by playing a note on your keyboard, or have it come from some other MIDI source, such as a foot switch which might send out pedal on and pedal off messages.

If you want to tap the beat yourself, select **Tap Beat** in the upper left hand box in the **Record Options** dialog. Then select the **MIDI note** or **controller** you want to use to trigger the beat. If you aren't sure of the actual MIDI numbers to plug in, click on **Listen to MIDI** and then press the key on your keyboard you will use to tap the beat, or tap on your pedal until a MIDI event is registered. When QuickScore Elite hears a note or controller, the **Listen to MIDI** button will uncheck itself and the note or controller will be displayed for you.

File Input and Record Filters

```
┌─────────────────────────────────────────────────────────┐
│ ─ │                    Filters                            │
├─────────────────────────────────────────────────────────┤
│ Check the data types to be accepted:                      │
│                                                            │
│ ┌─Midi File──────────────┐  ┌─Record───────────────────┐ │
│ │  ✓ Notes               │  │  ✓ Notes                 │ │
│ │  ✓ Key Aftertouch      │  │  ✓ Key Aftertouch        │ │
│ │  ✓ Controller          │  │  ✓ Controller            │ │
│ │  ✓ Program Changes     │  │  ✓ Program Changes       │ │
│ │  ✓ Channel Aftertouch  │  │  ✓ Channel Aftertouch    │ │
│ │  ✓ Pitch Wheel         │  │  ✓ Pitch Wheel           │ │
│ └────────────────────────┘  └──────────────────────────┘ │
│                                                            │
│              ┌────────┐    ┌──────────┐                   │
│              │   OK   │    │  Cancel  │                   │
│              └────────┘    └──────────┘                   │
└─────────────────────────────────────────────────────────┘
```
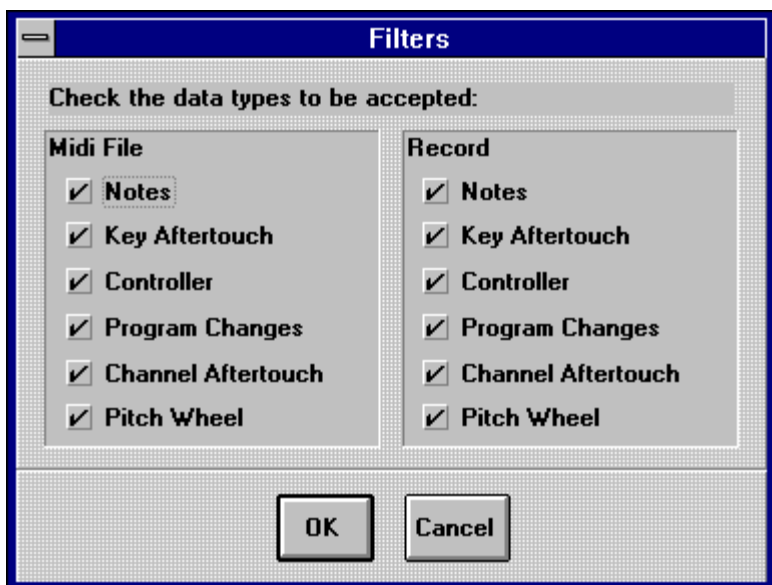
You can select the kind of MIDI events that you want to record or read from MIDI files using the **Filters** dialog, available by selecting **File Input and Record Filters** from the **Options** Menu. This is useful if you know there is some kind of data you don't want to put in your composition. For example, you can make sure that you don't receive any aftertouch messages, even if your keyboard always sends them, or you know they are in a MIDI file that you are reading.

Simply uncheck any MIDI data items that you do not want to read from MIDI files or that you don't want to record.

MIDI Thru
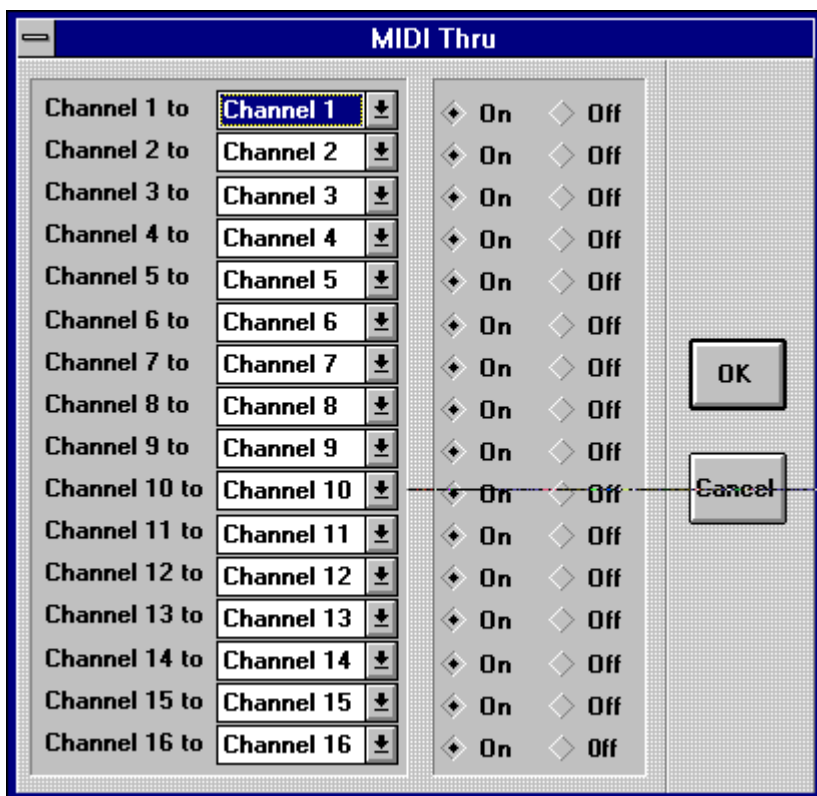
Select **MIDI Thru** if you want to change the routing of MIDI channels received from your **MIDI input driver**. This can be useful if you have an inexpensive or older controller that cannot send data on more than one channel. For example, if your controller only sends data on channel 1 and you want to hear or record your drums that are on channel 10 on your drum machine, reroute Channel 1 to Channel 10 by setting **Channel 10** in the list box of **Channel 1.**

Modern synths and keyboards are pretty flexible, but if you can't set up your channels any other way you can use QuickScore Elite's **MIDI thru** feature to help you out.

Patch Lists
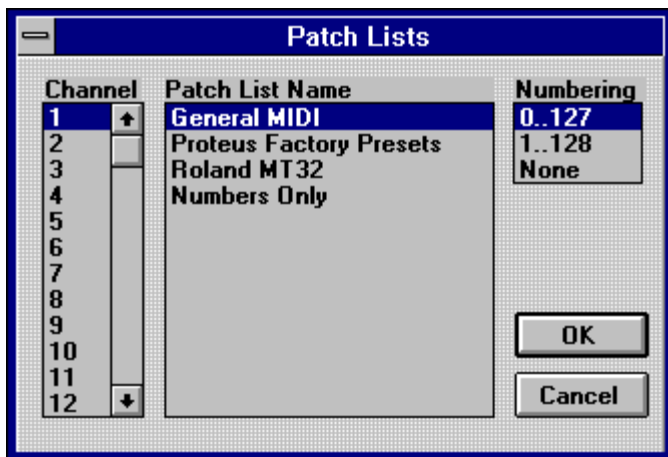
This is where you set up the **patch names** and **patch numbering** for your instrument(s). The patch names and patch numbers are displayed in the **Track Sheet** and the **Controller Editor** when you are editing program changes. Using **patch names** instead of **program change numbers** makes keeping track of your sounds a lot easier. (**Patches** are another name for **programs changes**)

For each instrument in your **MIDI setup**, select all the channels this instrument uses in the **Channel** list box. You can select channels here by dragging over several channels and by control-clicking on individual channels.

For example, if you want to select channels 1, 2, 3, 4, 7, and 9, you can click on channel 1, keep the mouse down and move it to channel 4, highlighting channels 1, 2, 3, and 4 and then pressing and holding down the **CTRL** key and clicking on channel 7 and channel 9, highlighting these as well. If you want to select all the channels, drag from channel 1 to channel 16, highlighting all of them.

When you have selected the channels you want, select a **patch list name** from the list of patch list names. Now select a **numbering scheme** for your patches from the **Numbering** list box.

QuickScore Elite comes with several predefined patch lists. You can add your own patch lists or you can modify the patch lists that are already there, by making changes to the file PATCHES.INI in the directory where you installed QuickScore Elite. For details on making changes to your patch lists, see "PATCHES.INI" on page 217.

Step/Mouse Entry Velocities
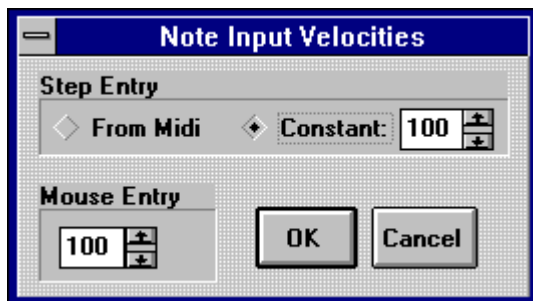
Selecting **Step/Mouse Entry Velocities** from the **Options** menu brings up the **Note Input Velocities** dialog. Select this item when you want to change the **velocity of notes** (usually this translates to dynamic level) entered using **step entry** or the **mouse**. You have the choice of setting the step entry velocity to a constant or keeping the velocity that you used when you entered your notes from the keyboard.

Change the **mouse entry velocity** by editing the **Mouse Entry** number field or by using the up and down arrows in the spin box to the right of the number.

Take the **step entry velocity** from MIDI by selecting the **From Midi** option in the **Step Entry** box. Select a constant step entry velocity by selecting **Constant** in the **Step Entry** box and then change the step entry velocity by editing the **Constant** number field or by using the up and down arrows in the spin box to the right of the number.

SMPTE
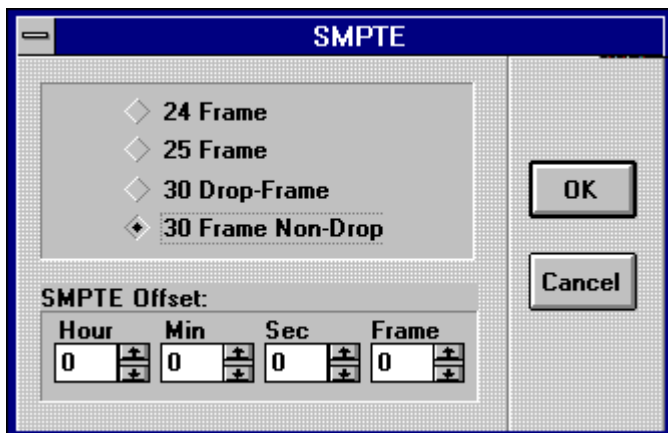
Select **SMPTE** to change the SMPTE format you will be using and to change the **SMPTE offset** of the beginning of your piece (Bars:Beats:Steps time of 0:0:0).

Engraver Spacing
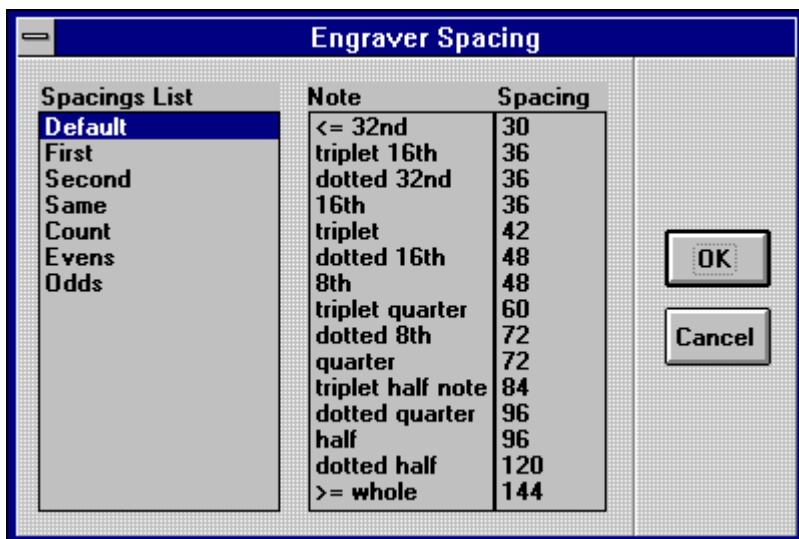
Engraver spacing is used by the **Score Editor** to space music so that it **looks good visually**. Without engraver spacing, spacing occurs by time,

rather than appearance. Crowding of music sometimes occurs, because you always put music occupying the same amount of time in the same amount of space. For example, eight thirty-second notes take up the same amount of space as one quarter note. The thirty-second notes are crowded together and the quarter note is all by itself. When you use engraver spacing, you assign the amount of space notes of each duration take up. For example, you can have thirty-second notes taking up only half as much as quarter notes if you want to.

You set up the way music will be spaced using **spacing tables**. Each spacing table has fifteen entries, one for each note of a certain duration. The amount of space allotted to each note is relative. For example, if you look at the default spacing list, the spacing for a **16th note** is **42**, which is half of the spacing for a **quarter note**, which is **84**.

Select the **Engraver Spacing** dialog to change the **spacing table** you are using. When you select a spacing table from the list of spacings, its values are displayed to the right of the dialog. Note that you have to select **Use Engraver Spacing** on the **Display Score** dialog (available by selecting **Score** from the **Display** menu).

You can **add** or **change** the available **spacing tables** by editing the file ALLOT.INI in the directory where QuickScore Elite is installed. For details on adding to or changing spacing tables, see "ALLOT.INI" on page 218.

Drum Notation
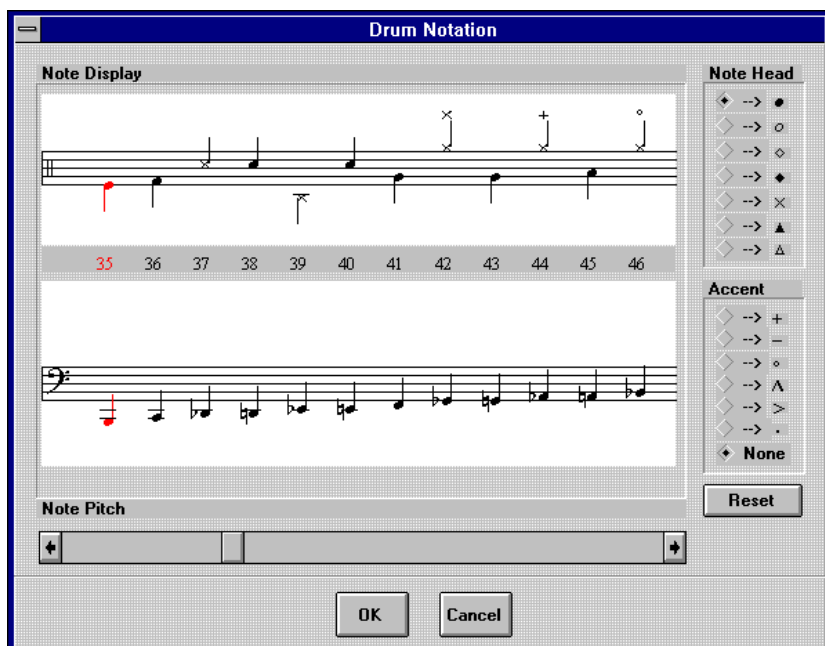
The **Drum Notation** dialog is used to set up the display of your **drum tracks** in the **Score Editor**. Your drum tracks are the ones which have a **single-line** or **five-line drum clef**. The top of the Drum Notation dialog shows the drum notes as they will appear when they are displayed. Below this are the **MIDI note numbers** for the drum notes. Below the note numbers is another display of the drum notes in music notation, so that you can more easily see what **pitch** your drum notes correspond to.

You can change the display of any drum note you want. Select the note you want to change by clicking on the **note** or on its **MIDI note number**. The note will be highlighted in red. If the note you want to change is to the left or right of the screen, move the **slider** on the bottom of the dialog until the note appears and then select it. Now move the note to the line or space you want it to be displayed in the **Note Display** window by dragging it with the mouse. Select the **note head** you want by clicking on the **diamond** beside the **note head** you want in the **Note Head** area of the dialog. Select the **accent** you want by clicking on the **diamond** beside the **accent** you want in the **Accent** area of the dialog. You can reset the drum display to the defaults by clicking on the **Reset** button.

Note: If you have a single-line drum staff, all drum notes are drawn on the line, so the position you set in the Drum Notation dialog is not important.

Once you set your drum notation, you will not have to set it again unless you want to. Drum notation parameters are stored in the file DRUMS.INI in the directory where QuickScore Elite is installed.

Scroll Children
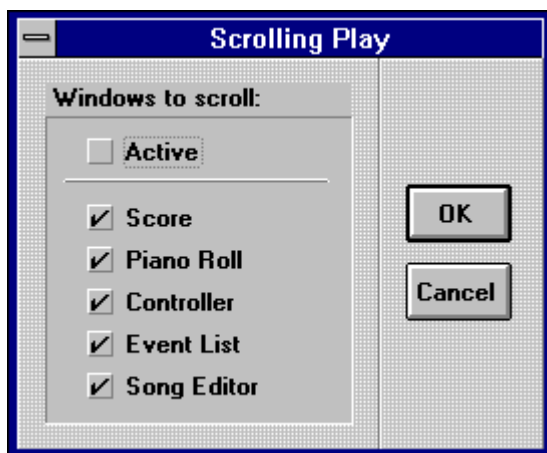
Select **Scroll Children** when you want to have only certain windows scroll as you play. You can improve display performance when playing by limiting the windows that scroll. Select **Active** to have only the active window scroll, or select any group of the scrolling windows. Put a **check** next to the **window name** if you want the window **to scroll** or have the **window name unchecked** if you want that window *not* **to scroll**.

The remaining entries in the **Options** menu are options that are turned either *on* or *off*. Options are *on* if there is a **check mark** beside them and *off* if there is *no* **check mark**. To change the status of an option, just select it. If the option was previously checked now it will be unchecked. If it was previously unchecked, now it will be checked.

Save Settings on Exit

If checked, all the settings you changed while you were working, including the position of your windows, will be saved for you and will be the same the next time you load QuickScore Elite. If *not* checked, your settings will be

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the same as the last time you set them and checked **Save Settings on Exit** before leaving QuickScore Elite.

Chase Controllers

If **Chase Controllers** is checked, controllers, pitch bend, aftertouch, and program changes will be chased every time you play. This means that if there were any of these events in your piece before the time you started to play, the last one of each of them will be sent out before you start playing. This way your music will sound the way you expect even if you start in the middle. You can turn this *off* if you don't want this to happen or if you think chasing controllers is taking too much time. **Chase Controllers** is *on* by default.

MIDI Enabled

You can turn **MIDI** *on* or *off* easily using this menu option. Sometimes this is useful if you are using a MIDI driver that does not support more than one simultaneous user and you are using another MIDI program (like the Media Player for example) with QuickScore Elite. It is also possible to turn off MIDI from the **MIDI setup** dialog, but it is faster to do it here. MIDI is enabled by default.

External Clock

You can switch from the **internal clock** to an **external clock**. The external clocking signal can be either **MIDI time code** or **MIDI clock**. QuickScore Elite will automatically sense which external clocking signal is being sent. Normally if you are synching to a VCR or tape deck you will be sent MIDI time code, but if you are being driven by another sequencer you will be sent MIDI clock. **External Clock** is *off* by default because you are normally being driven by an internal clock.

Send MIDI Clock

If you are linked to another sequencer and you want to drive it (you are the master), set this option to *on*. You will then send **MIDI clock** and the other device can follow you. This option is *off* by default.

When **Send MIDI Clock** is checked and you start playing, QuickScore Elite first sends a **song position pointer** message to let the slave device chase to the correct time. A dialog appears, forcing you to click on **OK** before

anything else is sent out. This is to make sure that the device receiving MIDI clock has chased to the correct time before it must start playing.

Scroll While Playing

Normally you will want to scroll your windows when you play so you can see what is going on. You can turn this *off* if your computer is too slow or your music is too dense for this to happen efficiently. Also look at the **Scroll Children** item in the **Options** menu for another way to limit the scrolling of windows while you are playing.

Legato Entry

When **Legato Entry** is checked, entering a note in the Score Editor will cause the note that precedes it to lengthen or shorten its duration so that it ends where the new note starts. This is sometimes very useful, because you can enter a lot of music with different rhythmic values without changing the duration value from the main control area. Of course you have to remember to turn **Legato Entry** *off* when you want to avoid filling up space between notes you are entering.

Cache Patches

Some sound cards work best if you tell them what patches they need to use before you start to play. This is because they only hold a few of their patches in their internal memory at any time. The rest of the patches are on disk and have to be loaded before they can be used. Sound cards from *Advanced Gravis* and *IBM* work this way. Check **Cache Patches** if you have a card like this that uses *patch caching*.

Window Menu
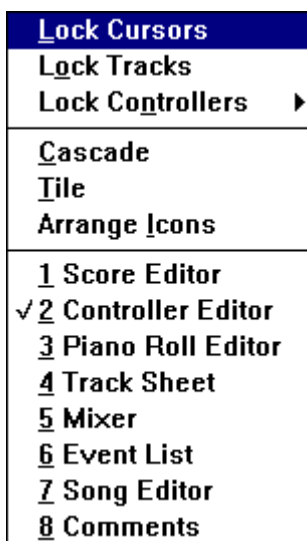
Lock Cursors

When **Lock Cursors** is set, all windows move their cursors whenever the cursor in the active window is moved. It is often useful to lock cursors and lock tracks to make sure that what you are looking at in all editors is the same. On the other hand, setting these options can slow things down when looking at very dense scores, especially on older machines.

Lock Tracks

When **Lock Tracks** is set, all windows change tracks whenever the track is changed in the active window. It is often useful to lock cursors and lock tracks to make sure that what you are looking at in all editors is the same. On the other hand, setting these options can slow things down when looking at very dense scores, especially on older machines.

Lock Controllers

When **Lock Controllers** is set, any changes in the controller being viewed in the **Controller Editor** or mixed in the **Mixer** will cause the other to display or mix that controller as well. If **Lock [Include Event List]** is

selected from the submenu, the **Event List** also participates in these changes to the controller being viewed.

Cascade

Select **Cascade** to neatly cascade your open windows one after the other.

Tile

Select **Tile** to cause your open windows to be displayed on the main window so that they do not overlap and so that each takes up an equal amount of space. When the windows are tiled there is still enough space to show your iconized windows at the bottom of the main window.

Arrange Icons

Select **Arrange Icons** to arrange your iconized windows neatly in a row at the bottom of the main window. You might use this if the icons are spread out and you can't find the one you want.

QuickScore Elite Windows

The remaining menu items in the **Window** menu are the eight windows available in QuickScore Elite. These are:

- **Score Editor**.
- **Controller Editor**.
- **Piano Roll Editor**.
- **Track Sheet**.
- **Mixer**.
- **Event List**.
- **Song Editor**.
- **Comments Window**

Selecting the **name** of a window makes it the **active window**. When you drop down the **Window** menu, the currently **active window** has a **check** beside it.

Help Menu

Contents

Selecting **Contents** (or pressing **F1**) lets you get help on any aspect of QuickScore Elite. Navigate through **Help** by clicking on **green text** or by using the **Help** buttons and menus. For more information on using **Help**, see your *Windows User's Guide*

About

Selecting **About** brings up QuickScore Elite's **About** box, with credits for the program and the **version number** of your copy of QuickScore Elite. This is important to know if you are calling technical support about QuickScore Elite.

Appendices

Appendix1: Template Files

When you enter a new file, a **template** can be selected that will set up the **initial format** for your piece. QuickScore Elite comes with a number of standard templates.

To make a new template, you must create a file and set it up the way you want your initial format to appear. In the **Comments Window** of the template file, write a **description** of the **template**. You then save the file in the TEMPLS directory. The TEMPLS directory is a subdirectory of QuickScore Elite's program directory.

The first line of the description that you wrote in the **Comments Window** will appear in the **Templates** dialog when you choose **Use Template** after selecting **New** from the **File** menu. You select the description in the **Templates** dialog to load the template file.

You can modify existing template files. There is no limit to the number of template files you can have.

Appendix2: System Files

This appendix describes the various **system files** that QuickScore Elite uses and explains how you can change them. The system files are in QuickScore Elite's program directory. Make sure you make a copy of any system file before you make changes to it.

QSD.INI

The **initial settings** for **QuickScore Elite** are stored in the file **QSD.INI**. You should not change this file yourself, as QuickScore Elite will manage this file itself.

DRUMS.INI

The **settings** for **drums** set in the Drum Notation dialog are stored in the file **DRUMS.INI**. You should not change this file yourself, as QuickScore Elite will manage this file itself.

PATCHES.INI

Patch lists are stored in a file called **PATCHES.INI**. Patch lists can be added or modified as follows:

- Add your instrument to the **[List of Lists]** section. An equal sign must immediately follow the name. Example:

    MT32=

- Then create a section with your instrument name in it. Example:

    [MT32]

- Add all **128 patch names** that you want to use for your instrument in your section, as in the **[General MIDI]** section of the PATCHES.INI file.

At the end of the PATCHES.INI file are two sections that you should *not* change. These are the **[Channels]** section and the **[Channel Patch Numbering]** section.

Note: The file format of PATCHES.INI is compatible with that of the PATCHES.INI files used by *Cakewalk for Windows*

RANGES.INI

RANGES.INI contains the names and ranges for the instruments that you have defined for range checking. You can add to or modify this file if you like.

This file has three sections:

- The first section is **[Instrument Count].**

    There is only one entry here, the number of instruments you have defined for range checking. The number of entries in the next two sections must have exactly the number of entries you have entered here. This section looks like this:

        [Instrument Count]
        Count=2

- The second section is **[Instruments]**

    Each entry consists of a number followed by an equal sign and a text string that is the name of the instrument. Make sure the

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number of entries here is the same as the number in the [Instrument Count] field. This section looks like this:

> [Instruments]
> 1=Piccolo
> 2=Flute

- The third and last section is **[Ranges]**.

    Each entry here consists of a number followed by an equal sign and four numbers. The first two numbers represent the lower and upper full range of the instrument in MIDI notes. The next two numbers represent the lower and upper practical range of the instrument in MIDI notes. This section looks like this:

    > [Ranges]
    > 1=74 108 79 93 ; Piccolo
    > 2=60 110 62 106 ; Flute

    Any text after the four range numbers is ignored. It is a good idea to write down what instrument each range belongs to.

ALLOT.INI

Changing new **engraver spacing tables** is done by editing a file called **ALLOT.INI**. The file consists of a list of **spacing names** and then a list of **spacing** (one for each name). Each **engraver spacing table** has **15 entries**, each with a **note value**. The number for each note value is a relative number, showing how much horizontal space a note of that duration should have relative to a note of another duration. For example, if a quarter note = 16 and an eighth note = 12, an eighth note is given 12/16 or 3/4 the space of a quarter note.

To add a new engraver spacing table:

- Add your **table name** to the **[ListOfAllotments]** section. An equal sign must immediately follow the name. Example:

    MyName=

- Create a section with your **table name** in it. Example:

    [MyName]

- Add all **15 allotment entries** in your section. (You can copy the allotment entries from the [Default] section of the ALLOT.INI file and substitute your own note values.) Example:

    32nd=25
    Triplet 16th=30
    Dotted 32nd=30
    16th=30
    Triplet 8th=35
    Dotted 16th=40
    8th=40
    Triplet Quarter=50
    Dotted 8th=60
    Quarter=60
    Triplet Half=70
    Dotted Quarter=80
    Half=80
    Dotted Half=100
    Whole=120

Appendix3: MIDI Basics

Why MIDI Was Invented

Computers just love to work with numbers, and since music and mathematics are intimately related (consider tempos, rhythmic divisions such as quarter notes, vibrato rates, the frequency of middle C, etc.), it's probably not surprising that most current electronic musical instruments contain an internal computer to do the number crunching.

In 1983, the MIDI (Musical Instrument Digital Interface) specification was introduced to better exploit the computers inside these new musical instruments and primarily to allow equipment from various manufacturers to work together. MIDI expresses musical events (notes played, vibrato, dynamics, etc.) as a *common language* consisting of standardized digital data. This data can be understood by MIDI compatible computers and computer-based musical instruments.

Before electronics, music was expressed exclusively as written symbols. By translating musical parameters into digital data, MIDI can express not only the types of musical events written into sheet music, but other parameters as well (such as the amount of pitch bend or degree of vibrato).

MIDI Hardware

MIDI compatible devices usually include both MIDI in and MIDI out jacks. These terminate in 5-pin *DIN* connectors. The MIDI out jack transmits MIDI data to another MIDI device. As you play a MIDI controller such as a keyboard, data corresponding to what you play comes out the MIDI out jack. For example, if you play middle C, the MIDI out jack transmits a piece of data that says *middle C is down*. If you let go of the middle C key, the MIDI out transmits a message that says *middle C has been released*. If the keyboard responds to dynamics, the note data will include dynamics information as well. Moving the modulation wheels and pedals attached to many synthesizers will also generate data that is unique to the wheel or pedal being used.

The MIDI in jack receives MIDI data from another device. In addition to the type of performance data described above, rhythmically oriented MIDI

devices (e.g., drum machines) can often transmit and/or receive additional MIDI timing messages that keep other rhythmically-oriented units in a system synchronized with each other.

An optional MIDI thru jack provides a duplicate of the signal at the MIDI in jack. This is handy if you want to send data to more than one device.

For example, suppose a MIDI keyboard's MIDI out feeds the MIDI in of a second tone module (called MIDI Device 1). Patching Device 1's MIDI thru to Device 2's MIDI in sends the keyboard signal *through* to MIDI Device 2. Thus, playing on the master keyboard can trigger both MIDI device 1 and MIDI device 2.

About Sequencing

Sequencing, the computerized equivalent of tape recording, is a very common and popular MIDI application. Only a few computers have a built-in MIDI connection. Other computers, such as your PC, can hook up to a device called a MIDI interface. This converts the MIDI data into a format the computer can understand and allows the computer to control MIDI instruments.

Sequencing takes advantage of the fact that MIDI data can correlate exactly to a performance on a MIDI instrument. Suppose we feed this performance data to a computer's MIDI in jack, and load a program that instructs the computer to remember the order in which the data appears at the MIDI in jack. The computer acts like a recorder, but instead of recording audio, it stores the digital data that represents the notes you played, and the exact order in which you played them.

If you play a chord, each note in the chord results in a discrete piece of data. These pieces of data, like all MIDI data, are sent one after the other (serially). Fortunately, this happens at a very high rate so that notes played at the same time appear to occur simultaneously, even if a few milliseconds elapse between the first and last notes of the chord.

Once stored in memory, connecting the computer's MIDI out to the instrument's MIDI in recreates the performance. The principle is the same as a player piano, but instead of having keys triggered by holes in a roll of paper, electronic sounds within the instrument are triggered by data contained in the computer's memory. This underscores the importance of the MIDI standard specification. If the computer says *play middle C*, the sound generator will play middle C, regardless of the manufacturer.

Like a word processor, once the data is in the computer, it can be edited. Notes, phrases, or measures can be erased, altered, transposed, and much more. You can edit as little as the dynamics of one note, or as much as all of the notes in an entire tune.

Each of MIDI's 16 available channels can carry a unique set of MIDI data. Since all of this data travels over one cable, each piece of data includes its appropriate channel ID so that the MIDI receivers can *tune in* to a particular channel and accept only that data.

A keyboard transmitting over channel 2 will stamp its data as belonging to channel 2. This is particularly useful when sequencing, since each recorded track can be assigned to a unique MIDI channel, and the associated piece of gear can tune into a particular track. For example, if track 1 (set to MIDI channel 1) carries bass and track 2 (set to MIDI channel 2) carries drum data, you would set a bass sound generator to tune in to channel 1 and a drum generator to tune in to channel2.

MIDI Messages

There are two main types of MIDI messages. Channel messages, which are channel specific, consist of Voice and Mode messages. System messages, which do not have a channel number, and are received by all units in a system, include Common, Real Time, and Exclusive.

The information about various types of MIDI messages and the data structures associated with it is somewhat complex. For more information about this topic, we refer you to the various books and magazines. See "More Information about MIDI" on page 224 and "Magazines" on page 225.

About Standard MIDI Files

The MIDI specification allows for sequence files to be stored in a consistent format, thus allowing those files generated by one sequencer to be used by another. For example, you could use a music composition program like Band-in-a-Box to generate a sequence, then import it into QuickScore Elite for editing and printing.

There are different types of MIDI files; the most common are type 0, where all information is contained in a single multi-channel track; and type 1, which puts each channel of MIDI data on its own track. Type 2 contains multiple patterns which are arranged as a song. QuickScore Elite imports

all three types. However, it only imports the first pattern of a type 2 MIDI file . When music is imported from a type 0 file, the program will give you the option to put each channel on a separate track. QuickScore Elite exports only type 1 MIDI files.

There are many MIDI files available commercially and in the public domain on various bulletin boards like CompuServe or GEnie.

General MIDI

General MIDI is a set of rules within the MIDI specification that has been developed with the hobbyist and casual user in mind. It establishes a classification of instruments, appropriately enough known as *General MIDI instruments*, which subscribe to a minimum set of operating standards and which also standardize the way their sounds are organized. For example, all General MIDI instruments provide an acoustic piano sound in patch #0 and a fretless bass sound in patch #36, etc. In addition, these instruments standardize their drum key map organization and always use MIDI channel 10 for the reception of drum sounds. There are many MIDI sequence files available commercially and in the public domain which have been created specifically for these kinds of instruments. Most sound cards follow the General MIDI standard (at least loosely) and there are also a number of high quality but inexpensive General MIDI instruments on the market.

Windows and MIDI

The introduction of Microsoft Windows Multimedia Extensions (included in Windows 3.1 and higher versions) provides a good deal of built-in MIDI support. For one thing, it allows you to play MIDI files created in QuickScore Elite through the Windows Multimedia Player. For another, it provides a basic interface into which various manufacturers can plug in software modules called drivers. These small applications are what allow your computer to interface with various peripheral hardware devices such as sound cards and MIDI interfaces (not to mention printers and hard disks). This means that virtually all Windows programs, including QuickScore Elite, can access virtually any hardware device (sound card, MIDI interface, etc.) supported by Windows. For this to work successfully, however, you must make sure that the drivers you require for your particular system are correctly installed, using the Drivers applet in the Windows Control Panel.

For more information, refer to your hardware owners manual as well as to your Windows documentation.

Windows 3.1 and higher versions also provides another important MIDI addition, the MIDI Mapper. This applet (also found in the Windows Control Panel) allows you to create various setups that enable your system to be optimized for your particular sound card or other MIDI devices. The MIDI Setup option in QuickScore Elite's Options menu allows the MIDI Mapper to be used as a MIDI output device, thus enabling you to tap into its power and flexibility. For more information on using the MIDI Mapper, refer to your Windows documentation.

More Information about MIDI

The preceding does not substitute for reading a good book about MIDI. For further information, refer to the following:

Taking The Mystery Out Of MIDI by Howard Massey; National Association of Music Merchants. A 28 page booklet that acts as a MIDI primer. Endorsed by the MIDI Manufacturers Association and International MIDI Association, this publication is available free of charge from your local music retailer.

MIDI For Musicians and *The Electronic Musician's Dictionary* by Craig Anderton; AMSCO Publications. The former was written specifically for musicians with no background in MIDI, and the latter defines 1,000 terms related to musical electronics. Highly recommended!

Music Through MIDI by Michael Boom; Microsoft Press. An excellent text for those just getting started with MIDI, synthesis, and other related topics.

The Murphy's Law MIDI Book by Jeff Burger; Alexander Publishing. Emphasizes applications and problem solving.

Using MIDI by Helen Casabona and David Fredrick; Alfred Publishing. A general guide to MIDI with an emphasis on applications.

Understanding MIDI and *Understanding MIDI 2* by various authors; Amordian Press. A collection of MIDI oriented articles from Musician Magazine.

These are available from many music and book stores as well as from Mix Bookshelf. Call them at 1-800-233-9604 for more information.

Magazines

The following magazines often publish articles that relate to MIDI, as well as related subjects such as synthesizers, etc.

Electronic Musician (6400 Hollis #12, Emeryville, CA 94608)

IMA Bulletin (5316 W. 57th Street, Los Angeles, CA 90056)

Keyboard Magazine (20085 Stevens Creek Blvd., Cupertino, CA 95014)

Roland User's Group Magazine (c/o RolandCorp US, 7200 Dominion Circle, Los Angeles, CA 90040)

Appendix4: General MIDI Programs

The following chart lists the sounds associated with MIDI program change numbers 1 to 128.

Many manufacturers of electronic musical instruments and sound cards use this list to assign program numbers to their sounds. This is done to create uniformity in the selection of sounds. Regardless of the sound card you're using, you can be reasonably confident that you'll hear a piano sound, for example, if you assign Program 1 to a track in your score. Additionally, if you save scores as MIDI files to be played by sequencers on other instruments, your program assignments will remain reasonably consistent regardless of the instruments on which the MIDI files are played. This assumes, of course, that the manufacturers of those instruments adhere to the General MIDI program change list. Most newer instruments will conform to this list.

#	Name	#	Name
1	Piano 1	15	Tubular Bell
2	Piano 2	16	Santur
3	Piano 3	17	Organ 1
4	Honky-Tonk	18	Organ 2
5	Electric Piano 1	19	Organ 3
6	Electric Piano 2	20	Church Organ 1
7	Harpsichord	21	Reed Organ
8	Clavinet	22	Accordion
9	Celeste	23	Harmonica
10	Glockenspiel	24	Bandneon
11	Music Box	25	Nylon-String Guitar
12	Vibraphone	26	Steel-String Guitar
13	Marimba	27	Jazz Guitar
14	Xylophone	28	Clean Guitar

#	Name		#	Name
29	Muted Guitar		55	SynVox
30	Overdriven Guitar		56	Orchestra Hit
31	Distorted Guitar		57	Trumpet
32	Guitar Harmonics		58	Trombone
33	Acoustic Bass		59	Tuba
34	Fingered Bass		60	Muted Trumpet
35	Picked Bass		61	French Horn
36	Fretless Bass		62	Brass
37	Slap Bass 1		63	Synth Brass 1
38	Slap Bass 2		64	Synth Brass 2
39	Synth Bass 1		65	Soprano Sax
49	Synth Bass 2		66	Alto Sax
41	Violin		67	Tenor Sax
42	Viola		68	Baritone Sax
43	Cello		69	Oboe
44	Contrabass		70	English Horn
45	Tremolo Strings		71	Bassoon
46	Pizzicato Strings		72	Clarinet
47	Harp		73	Piccolo
48	Timpani		74	Flute
49	Strings		75	Recorder
50	Slow Strings		76	Pan Flute
51	Synth Strings 1		77	Bottle Blow
52	Synth Strings 2		78	Shakuhachi
53	Choral Ahs		79	Whistle
54	Choral Oohs		80	Ocarina

#	Name		#	Name
81	Square Wave		105	Sitar
82	Sawtooth Wave		106	Banjo
83	Synth Calliope		107	Shamisen
84	Chiffy Lead		108	Koto
85	Charang		109	Kalimba
86	Solo Vox		110	Bagpipe
87	Saw Wave Fifths		111	Kokyu
88	Bass & Lead		112	Shanai
89	Fantasia		113	Tinkle Bell
90	Warm Pad		114	Agogo
91	Polysynth		115	Steel Drums
92	Space Voice		116	Woodblock
93	Bowed Glass		117	Taiko
94	Metal Pad		118	Mellow Tom
95	Halo Pad		119	Synth Drum
96	Sweep Pad		120	Reverse Cymbal
97	Ice Rain		121	Guitar Fret Noise
98	Soundtrack		122	Flanged Keyclick
99	Crystal		123	Seashore
100	Atmosphere		124	Bird
101	Brightness		125	Telephone
102	Goblin		126	Helicopter
103	Echo Drops		127	Applause
104	Star Theme		128	Gun Shot

Appendix5: General MIDI Percussion

The following chart indicates the note numbers normally associated with specific percussion sounds. Many manufacturers adhere to this convention, so you can be reasonably certain that your percussion tracks will play as expected regardless of the sound device which plays them.

Note	#	Sound	Note	#	Sound
B1	35	Kick Drum 2	F#3	54	Tambourine
C2	36	Kick Drum 1	G3	55	Splash Cymbal
C#2	37	Snare (Side Stick)	G#3	56	Cowbell
D2	38	Snare Drum 1	A3	57	Crash Cymbal 2
D#2	39	Hand Clap	A#3	58	Vibra-Slap
E2	40	Snare Drum 2	B3	59	Ride Cymbal 2
F2	41	Low Tom 2	C4	60	High Bongo
F#2	42	Closed Hi-Hat	C#4	61	Low Bongo
G2	43	Low Tom 1	D4	62	Mute High Conga
G#2	44	Pedal Hi-Hat	D#4	63	Open High Conga
A2	45	Mid Tom 2	E4	64	Low Conga
A#2	46	Open Hi-Hat	F4	65	High Timbale
B2	47	Mid Tom 1	F#4	66	Low Timbale
C3	48	High Tom 2	G4	67	High Agogo
C#3	49	Crash Cymbal 1	G#4	68	Low Agogo
D3	50	High Tom 1	A4	69	Cabasa
D#3	51	Ride Cymbal 1	A#4	70	Maracas
E3	52	Chinese Cymbal	B4	71	Short High Whistle
F3	53	Ride Bell	C5	72	Long Low Whistle

Note	#	Sound
C#5	73	Short Guiro
D5	74	Long Guiro
D#5	75	Claves
E5	76	High Wood Block
F5	77	Low Wood Block
F#5	78	Mute Cuica
G5	79	Open Cuica
G#5	80	Mute Triangle
A5	81	Open Triangle

Appendix6: Service and Support

Warranty

This program and the associated documentation are Copyright 1995 by Sion Software Ltd. This program is licensed to be used on a single machine. It may not be copied without explicit written permission. If the program is transferred to another party, all backup copies must be transferred at the same time, or destroyed. This notice of copyright must be transferred if you transfer the program, and your license to use the program is terminated on transfer.

The diskette on which the program is furnished is warranted for a period of ninety (90) days from the date of delivery. The program is not guaranteed to meet your requirements, and operation of the program is not guaranteed to be interruption or error free. In no event will Sion Software or its employees be liable for any damages, including any lost savings, lost profits, or other incidental or consequential damages arising out of the use of or inability to use this program, even if we have been advised of the possibility of damages. Sion Software shall not be responsible for any damages claimed by any other party, resulting from the use or attempted use of this program. All warranties implied are with Sion Software, not your local dealer. If problems arise, please callSion Software directly.

The various products mentioned in this manual are registered or pending trademarks of their respective manufacturers.

Upgrades And Replacements

Sion Software reserves the right to make improvements to the program without notice, and to make what Sion Software considers to be reasonable charges for updates and upgrades.

There is a $19.95 charge for the replacement of program disks that become defective more than 90days after the date of purchase.

When returning the disks for replacement or updates, please send them by UPS, Federal Express, Express Mail, or some other service that will allow you to trace the shipment. We're sorry, but we cannot be responsible for packages sent via regular US mail.

Service And Support

Extensive efforts have been made to ensure that the information contained in this manual is accurate and that the program is error free. This is, however, an imperfect world. Should you discover any bugs, errors, or portions of the manual that are not clear, kindly send your comments to Sion Software so that they may be considered for inclusion in future revisions of QuickScore Elite.

Please take the time to fill in the registration card that's in the package. There are at least two good reasons for becoming a registered owner:

1. As a registered owner, you will be notified automatically of any updates to QuickScore Elite.

2. As a registered owner, you will be entitled to free technical support for QuickScore Elite.

What To Do If Problems Arise

If you have problems with QuickScore Elite that you are unable to resolve after a careful reading of the manual, Sion Software maintains both customer service and technical support lines. We are happy to help you with questions regarding QuickScore Elite, but due to the extraordinary variety of music related products available today and the number of possible system configurations, we cannot answer questions regarding hardware or software from other manufacturers. This includes questions on the basic operation of the IBM PC or other computers or musical instruments.

Customer Service

Customer Service is for owners who need replacement disks, upgrade or update information, or who wish to purchase software. The telephone line for customer service is the main number for Sion Software: (604) 222-2454. Customer service personnel are unable to help you with technical questions. If you have questions concerning technical matters, please phone the technical support line.

Technical Support

Technical support is for owners who are having difficulties with the installation or operation of QuickScore Elite. When calling Sion Software for technical support, there are a number of things that you can do to help us help you (which can also save you money on your phone bill!). Here is a checklist of things to have ready before calling:

1. Your diskette registration number.

2. Your manual.

3. Your computer turned on and QuickScore Elite running.

4. Any information that can help us solve the problem, especially information about how to repeat your problem. If you cannot duplicate a problem, it is very difficult for a technician to figure out what is wrong!

5. Information on your computer's make, model, disk configuration, memory installed, sound source, monitor type, MIDI interface type if installed, and so on.

6. Paper and pencil for taking notes.

When you call us, we'll walk you through the program and ask you questions about what happens. It is very important that you have the above materials at hand when calling. If you don't have this ready, we will ask you to call back later with the required information.

After you have completed the checklist, call us at **(604) 222-2455** between 10 AM and 2 PM Pacific Time, Monday through Friday. We'll do everything we can to get you on the road to making music with QuickScore Elite.

You may also email technical support questions to: **sionsoft@infoserve.net** or take a look at our web site at: **http://www.infoserve.net/quickscore** for answers to your questions .

Appendix7: Troubleshooting

In this section, we'll describe a few common problems that may occur during the use of QuickScore Elite. If you're having difficulties, review this section for possible solutions. If you don't find an answer here, please feel free to call Sion Software technical support for assistance.

No Sound When Playing a QuickScore Elite Score

This can result from any number of causes. First, make sure you have selected the appropriate MIDI output driver in the **MIDI Setup** dialog, available from the **Options** menu. Also make sure that the **MIDI Enabled** option is checked in the **Options** menu.

If the MIDI output driver you have selected in the MIDI Setup dialog does not produce sound, try selecting the **Midi Mapper**. If QuickScore Elite now plays, the output driver you first selected or the hardware it controls is not set up correctly. If you can not get sound with the Midi Mapper, close QuickScore Elite and open the **Media Player** (available in the accessories folder under the Windows Program Manager). Select Open from the File menu and open a MIDI file (try canyon.mid which comes with Windows.) Click on the Play button to play the file. If you hear no sound, you do not have a MIDI driver or its hardware correctly set up yet.

In the Windows Drivers applet (in the Control Panel), make sure the proper drivers for your equipment are installed. Make sure that any special parameters that may be required when the driver is loaded are set. For example, if the default settings for your sound device's I/O address, IRQ number, or DMA channel have been changed, the driver may not load properly.

Next, make sure all your **connections** are in place. If you're using an internal sound card, make sure that it's installed properly. It may not be seated firmly in its card slot, and the audio connection may not be in place.

If you're using a MIDI interface and an external sound source, check the **audio connections**. Make sure the audio output from the sound source is connected to the input of your sound system, whether it's a home stereo or a professional PA system. If you're using a mixing board or amplifier, check whether everything is turned on and whether the levels are at an audible setting. Make sure your audio cables are functioning properly by connecting

them to a sound source you know is working, and verify that the sound source itself is functioning properly.

If you're using a MIDI interface and an external sound source, check your **MIDI connections**. You should have MIDI cables connected from the MIDI out port of your MIDI interface to the MIDI in port of your sound source. Check the MIDI cables with another MIDI controller and sound source to make sure they're not defective.

No Sounds with Patch Caching Sound Cards

If you are using a sound card that uses **patch caching** such as the *Gravis Ultrasound*, you may not get any sounds when you first enter notes into QuickScore Elite. The easiest way to remedy this is to make sure **Patch Caching** is checked in the **Options** menu and that you have selected a program for each of your tracks in the **Program** section in the **Track Sheet**.

Keyboard Commands Do Not Work Properly

You probably have **Caps Lock** *on*. This will interfere with some of the keyboard commands. Turning **Caps Lock** *off* will probably take care of the problem.

Musical Symbols Appear as Text on the Screen

This will happen if the **Mozart** font is *not* properly installed. To remedy this, you must install the **Mozart** font. From the **Windows Program Manager**, double click on the **Control Panel** icon, and then on the **Fonts** icon. Click on the **Add** button. Go to the **\WINDOWS\SYSTEM** directory in the **Directories** list box and find the **Mozart** font in the **List of Fonts** list box. Click on the **Mozart** font and then click on **OK**. You will have to **reboot Windows** before you can use the **Mozart** font in QuickScore Elite. For more information about installing fonts see your *Windows User's Guide.*

Triplets and Other Durations Don't Display Properly

If your **display quantization** is *not* set to a triplet value, triplets won't be properly displayed. Similarly, if your display quantization is set to a value greater than the durations you are trying to display, these smaller durations won't be displayed properly. You can set the display quantization from the

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Display Bar, Display Track or Display Score dialogs. See "Quantization Amount" on page 177, page 182, and page 187 for more information.

Eighth Notes Display as Quarter Notes and/or Rests do not Appear

This will occur when the **Extend Isolated Notes** display option is set to **Yes**. When this is the case, all notes will extend in duration to the beginning of the next note, or to the beginning of the next beat, whichever is first. This makes notes appear longer than they actually are and eliminates rests. Generally this leads to a more attractive score. This is the default. To make notes display exactly as written, set **Extend Isolated Notes** to **No** in the Display Score, Display Track or Display Bar dialog.

When Selecting Objects No Menu Appears or Only the Stretch Time Dialog Appears

This can occur in the Score Editor if you are trying to select one type of object and the object type palette is set to something else. To fix this, make sure you select the proper object in the object type palette. It can also happen in the Score Editor or other editors if there are *no* objects included in your selection.

Incorrect Objects are Entered

This can occur in the Score Editor if you are trying to enter one type of object and the object type palette is set to something else. For example, if you try to enter text and symbols are entered instead, you have the wrong object selected in the object type palette. To fix this, make sure you select the proper object in the object type palette.

Lyrics Don't Align With Notes

If you are getting unexpected results trying to align lyrics with notes, it may be because your notes are not quantized. Lyrics are not quantized when they are displayed, so they won't line up with unquantized notes that are displayed quantized on the screen. To remedy this, make sure the notes you are trying to match with lyrics are physically quantized to the same value as the display quantization.

Notes or other Objects Don't Erase In the Score Editor

First make sure that the correct object palette is selected. Try to select the object by double clicking on it. If this does not work, try selecting the object by dragging a box around it with the mouse. If the object is still not selected, the object may have been entered on a different track from the one you are editing. To check this, select single track mode and see if the object still appears. If the object has disappeared, it means it is on a different track. Look at your other tracks in single track mode until you see the object you want to erase. (It will appear either above or below the staff, so that in full score mode it appears on a different track.) Now select the object and erase it.

Fader Motions are Jerky in the Mixer

When you are using the Mixer, it is a good idea to disable scrolling the display while playing. Otherwise the fader motions may become jerky while the windows are being redrawn. To disable scrolling, you can set the Options menu item Scroll While Playing to off.

Appendix8: Tips

The following tips may save a lot of time or even a technical support call.

How to Make Sure Triplets Display Correctly

Make sure you set the display quantization to a triplet value. You can set the display quantization from the Display Bar, Display Track or Display Score dialogs. If your display quantization is not set to a triplet value, triplets won't be properly displayed. Similarly, if your display quantization is set to a value greater than the durations you are trying to display, these smaller durations won't be displayed properly.

How to Make Sure Notes Display With Their Entered Durations

To make notes display exactly as entered, set Extend Isolated Notes to No in the Display Score, Display Track or Display Bar dialog. If you set the Extend Isolated Notes display option to Yes, all notes will extend in duration to the beginning of the next note, or to the beginning of the next beat, whichever is first. This makes notes appear longer than they actually are and eliminates rests. Generally this leads to a more attractive, less cluttered score. This is the default. You must also make sure your display quantization is set to a value equal or smaller than the durations you are trying to display. Otherwise, durations smaller than the display quantization won't be displayed properly.

How to Change a Note's Pitch by One or More Semitones

There are two ways to change the pitch of a note by semitones using the Score Editor. The first is to select the note (by double-clicking, control-clicking or dragging the mouse - see The Mouse on page 10) and then choosing Transpose from the Edit menu. The second is to choose the NS tool, select the note to be transposed by clicking and holding down the mouse over the note, and then, instead of dragging the note up and down with the mouse, which moves the note in key, press the **Up** or **Down** arrow keys. Do not try to transpose a note by selecting the note and choosing Accidental from the Edit menu - this will only change the enharmonic

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spelling of the selected note. You can also change the pitch of a note by semitones using the NS tool in the Piano Roll Editor.

How to Change the Enharmonic Spelling of a Note

Select the note (by double-clicking, control-clicking or dragging the mouse - see The Mouse on page 10) and then choosing Accidental from the Edit menu. Select the accidental you wish for the note. For example, if you want to change a B flat to an A sharp, choose Sharp. If you want to change an E flat to an F double flat, choose Double Flat.

How to Display Quarter Note Triplets

To display quarter note triplets, you must first set the display quantization to a triplet value. By default, quarter note triplets display the first triplet as a quarter note, the second triplet as an eighth note tied over the beat to another eighth note and the third triplet as a quarter note.

To display as three quarter notes, set the beat for the measure containing the quarter note triplet to a half note. This will ensure that notes are placed in the measure in half-note groupings. To do this, put the cursor in the bar containing the quarter note triplet, choose Display Bar from the Display menu and then change the Beat option to Half. To change the grouping back to quarter notes (or whatever value you were using) in the next measure, you must move the cursor to the next bar and from the Display Bar dialog change the Beat option to Quarter (or the value you were previously using).

If you don't want to change the beat value, you can do the following: Set the Display Rests option to Off in the Display Bar dialog. Enter the first and second triplet quarter note at the beginning of the first beat and enter the third triplet quarter note in its regular place. Now select the spacing tool and drag the second quarter note triplet over until it is equidistant from the first and the third triplet.

If your bars per line setting is set to two or less, you will not be able to drag the second triplet far enough over. You will have to adjust the bar line or other notes in your bar with the spacing tool or else set the bars per line for that line to a value greater than two.

If you have any rests in the bar you will have to enter them from the symbols palette, since you have disabled the display of rests for that bar.

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How to Adjust Ties and Rests

Rests, ties and tied notes are generated automatically by QuickScore Elite. For this reason it is usually futile to try to edit rests and tied notes. The exception is when you have explicitly entered rests or tied notes yourself.

The level of rests and ties can be adjusted so that they don't overwrite notes or other symbols. This is done from the Display Bar dialog. You can also choose not to generate rests at all in a given section of your music and put them in yourself. You can do this for a given bar using the Display Bar dialog or, for an entire track, using the Display Track dialog. Now you can enter the rests yourself as symbols using the Notes palette.

If you really must have a tied figure displayed in a manner that you can't seem to get any other way, you can enter the note, the ties, and the tied notes by hand. Use a slur to simulate the tie. You can set the velocity of the tied notes to zero if you like.

For more information on how QuickScore Elite transcribes music, see Notes on Transcription on page 94.

How to Display Independent Voices in a Bar on the Same Staff

Select voice 1 from the voice palette at the far right of the Score Editor control area and enter the notes for the top voice as you would normally. All the stems for these notes are up. Rests appear by default at the top of the staff, not in the middle, as they do when notes are entered with the default voice. Now select voice 2 from the voice palette and enter the notes for the bottom voice. For this voice, rests appear by default at the bottom of the staff.

You can change the level of the display of rests for a particular voice in a bar by changing the Rest Level option for that voice from the Display Bar dialog, available by selecting Bar from the Display menu.

How to Display Grace Notes

The best way to enter grace notes is to select Grace from the voice palette at the far right of the Score Editor and then enter the grace notes where you like. This way the timing of the grace notes will not interfere with the timing of the rest of the notes in the measure. Grace notes entered this way do not generate any rests.

If you want to enter grace notes before the first note of the measure, you can enter the grace notes at the beginning of the measure, and then with the spacing tool move the non-grace notes on the first beat over a bit so they are not obscured by the grace note.

How to Display Cue Notes

Cue notes should be entered on a voice separate from the voice of the notes for the main instrument. For example, if the main voice is the default voice, you should choose voice 1 or voice 2 for the cue notes. Cue notes should be small notes, so when you have entered the cue notes, select them and set the size for the notes by choosing Group, then Small Notes and then Default Group.

How to Force the Direction of Stems

If you want all the notes in a track to go up or down, you can set Use Ascending or Descending Stems to the direction you want from the Display Track dialog.

If you want to enter two voices, one with stems up and one with stems down, proceed as explained in the section above on displaying independent voices in a bar on the same staff.

If you want only a selected group of notes to have stems a certain direction, select these notes, and set the stem direction by choosing Group, then either Big Notes or Small Notes and then the stem direction you want. Doing this will also group together the notes that you have selected, so make sure that you select the notes in beam groupings that you want. If you want to set the beam groupings back to the default (grouped by beat) select Default Group.

How to Effectively Space Music

There are three basic ways to space music, which can be used in combination with each other.

The first is to use engraver spacing. Select Engraver Spacing from the Display Score dialog. When engraver spacing is used, notes are spaced by their appearance, not by their durations. With engraver spacing, a whole note will take up much less space than four groups of thirty-second notes. Engraver spacing does not affect the placement of bar lines or the number of bars in a line.

The next is to adjust the placement of bar lines and the number of bars in each line.

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The simplest way to adjust the placement of bar lines and the number of bars in each line is to let QuickScore Elite do the job. Choose the Space Music dialog from the Display menu, set the density you want (the number of 16th notes that would appear on a line at the density you have selected will be shown) and click on OK. The placement of bar lines and the number of bars in each line will be adjusted based on the density of music in each bar and each line. You can choose to only space bar lines or bars per line, and you can select a range of bars instead of your whole piece, but it is worth having QuickScore do everything, at least the first time.

The adjustment of bar lines can be done by hand using the spacing tool (on the far right in the tool bar). The number of bars in a line can be changed line by line by putting the cursor in the first bar of the line and selecting the Display Bar dialog and setting the Bars per Line value. You can also set the number of bars per line globally by setting it in the Display Score dialog.

Finally, you can move individual notes around without affecting their timing using the spacing tool. Use this technique to adjust the few notes that still aren't in the right place. (The second method of drawing quarter note triplets described earlier is an example of using the spacing tool to adjust note spacing.)

How to Create a Pickup Measure

The first thing to do is to get rid of the rests in the pickup measure. With the cursor in the first measure, set Display Rests to No in the Display Bar dialog. You will have to do this for each track you have. (Move the cursor to the first measure in each track and set Display Rests to No in the Display Bar dialog.)

Now set the bar numbers to start numbering at the second bar. Select the Bar Numbers dialog by selecting Numbers from the Display Menu and Bar from the submenu that appears.

Enter the pickup notes you need in your pickup bar. If you need to enter rests in the pickup bar, use the rest symbols in the Notes and Rests palette to do so. Remember pickup measures usually don't have rests.

To minimize the physical size of the pickup bar, drag the first barline to the left using the spacing tool.

How to Effectively Enter Lyrics

Lyrics can be entered all at the same time once you have entered your notes. Select the Lyric object in the objects palette and the Pen tool from the

toolbar. Click on the first note and enter the syllable for that note. Now press the **TAB** key to move the cursor to the next note. Continue typing and going from note to note using the **TAB** key (and **SHIFT**+**TAB** key to go backwards). If you want to enter a single hyphen between two syllables, enter **CTRL**+**-**(dash) instead of **TAB**. If you want to enter a double hyphen between two syllables, enter **CTRL**+**SHIFT**+-(dash). You do not have to click on each note individually to enter its lyric syllable.

You can enter four levels of lyrics. To select the lyric level you want, select the lyric number from the lyric list box at the right of the Score Editor control area.

To adjust the level of lyrics, select the Lyric Positioning dialog by clicking on the Lyrics button in the Display Page dialog, available under the Display menu.

Importing EPS files from QuickScore Elite into other Windows programs

It is possible to import from QuickScore Elite into other Windows programs using Encapsulated PostScript (EPS) files. To create an EPS file using QuickScore Elite, you must use the Windows PostScript printer driver. When you print, select Printer, then Options and select Encapsulated Postscript File. Write the name of the EPS file you will create.

The EPS file you create can be imported into any program that imports EPS files. Microsoft Word for Windows is an example of such a program. To print these files you need a PostScript printer and the Mozart TrueType font installed in Windows. (If you have installed QuickScore Elite on your system, this will be the case.)

Glossary

aftertouch

Aftertouch is a MIDI message that tells you how hard a key is being held down (or, if we are talking about a non-keyboard controller, how much pressure is applied to a note) after it has been initially played.

block text

In QuickScore Elite, block text is distinguished from lyrics and expressions. Blocks of text can be any size and font.

channel

MIDI messages can be sent and received over sixteen channels. This allows you to have several instruments hooked up together, or instruments with more than one voice, each playing notes sent on separate channels. For example, a sequencer like QuickScore Elite can send notes on channel 1 to a drum machine, notes on channel 2 to a guitar synthesizer and notes on channel 3 to an electronic piano, which are all hooked together on the same MIDI network.

clipboard

The clipboard is where Windows stores temporary data. This data can be of just about any type and can be used by any Windows program that recognizes it. When QuickScore Elite cuts notes or other events, they are copied to the clipboard. You could exchange data between two copies of QuickScore Elite running at the same time using the clipboard.

control area

The control area refers to the gray area at the top of a window which contains palettes, buttons and controls. The main window, the Score Editor, the Piano Roll Editor, the Controller Editor, the Mixer, the Event List and the Song Editor all have control areas.

Control Panel

The Windows Control Panel lets you change the way you have set up your Windows system. You can set up fonts, printers, MIDI drivers, the MIDI Mapper and other things that affect your system. The settings you choose in the control panel affect all Windows programs, including QuickScore Elite.

control points

Control points are used when you enter or edit adjustable symbols such as slurs or crescendos. Control points for slurs are shaped like little triangles. Control points for other symbols are shaped like little diamonds. There is one control point on the left edge of the symbol, one in the middle and one at the right edge. You click on a control point to select it. You can drag a control point around on the screen, which will cause the symbol to adjust its shape.

controller

Controllers are MIDI messages that control some aspect of the sound made by the receiving instrument. There are 127 controller messages. Two of the common controllers are volume and pan.

A controller also refers to any device that sends MIDI commands, such as a keyboard, a breath controller or a MIDI guitar.

count-in

When you record you use a count-in. The count-in is a number of beats, which is typically three or four. You set the count-in beat count in the Metronome dialog under the Options menu.

cursor

There are cursors in the Score Editor, the Piano Roll Editor, the Controller Editor and the Song Editor. In the Score Editor the cursor is a vertical line over a staff with ledger lines above and below it. In the Piano Roll and the Controller Editors the cursor appears as a vertical magenta line across the display. In the Song Editor, the cursor appears as a box around the current bar. The time of the cursor is displayed in the Time Display, in the middle of the main control area. Step entry with the mouse or the keyboard takes place at the cursor point, as well as pasting of data that has previously been cut or copied.

duration value

The duration value is the duration of notes that are entered with the mouse or in step time from the keyboard. It is also the amount the cursor will move forward when you press the arrow keys. When you position the cursor with the mouse in the Score Editor, it will always move to a multiple of the step value. This is the same for the Piano Roll Editor, except when the Snap/Free button is set to Free. In this case, the cursor will move to the exact point the mouse is clicked.

You set the duration value using the durations palette and the duration value qualifier button in the main control area.

engraver spacing

Engraver spacing is used to space music so that it looks good visually. When you use engraver spacing, you assign the amount of space notes of each duration take up. For example, you can have thirty-second notes taking up only half as much as quarter notes if you want to. Your music will generally look better if you use engraver spacing.

Without engraver spacing, spacing occurs by time, rather than by appearance. Crowding of music sometimes occurs, because you always put music occupying the same amount of time in the same amount of space. For example, eight thirty-second notes take up the same amount of space as one quarter note. The thirty-second notes are crowded together and the quarter note is all by itself.

event

An event is a single piece of data used by QuickScore Elite. An event is also called an object. An event can be a note, a lyric, an expression, a piece of text, a symbol, a clef, a MIDI event (like a controller or pitch bend), or a tempo change.

expression

An expression is a type of text used in QuickScore Elite to denote the expression or the nature of the music. Typical expressions are allegro, a tempo, agitato, or cantabile.

fader

Faders are used in mixing boards to change the value of certain parameters (such as volume or pan). They are sliding switches which move up and down. In QuickScore Elite you grab a fader with the mouse and drag it up and down to do exactly the same thing you would on a real mixing board.

General MIDI

General MIDI provides a standard list of MIDI instruments and drum sounds. For example, a General MIDI instrument always provides a piano sound for patch 0 and a fretless bass for patch 36. All General MIDI instruments use MIDI channel 10 for drum sounds. The mapping of pitches to drum sounds on channel 10 is standardized. See "Appendix 4: General MIDI Programs" on page 226 and Appendix 5: General MIDI Percussion on page 229.

icon

An icon is a button with a picture on it representing an object or an action.

loop

When you play in QuickScore Elite, you can have the music loop. You set up the loop using the Loop control in the main control area. You can edit while you loop. This allows you to make a lot of experimental changes and immediately hear what they sound like.

lyric

Lyrics are words set to music. In QuickScore Elite, lyrics are attached to notes. When you enter lyrics, the text is centered under the note.

Media Player

The Media Player is an application that comes with Windows. It allows you to play wave and MIDI files. It is useful for testing your MIDI setup. Normally if the Media Player can play a MIDI file, QuickScore Elite should be able to as well.

metronome

In QuickScore Elite, you are provided with an audible metronome which sounds once a beat at the current tempo. It can be set up to sound when you record or play.

MIDI

MIDI is a protocol for transferring musical data between synthesizers and computers. See "Appendix 3: MIDI Basics" starting on page 220 for a discussion of MIDI.

MIDI clock

MIDI clock is a MIDI message sent twenty-four times per quarter note. It is used to synchronize two MIDI devices. It can also be used to synchronize a sequencer to tape, but it is usually easier to use MIDI time code for this purpose instead.

MIDI file

MIDI files are files in a standard format containing MIDI data, usually songs. They can be read and written by most sequencers, including QuickScore Elite. There are three types of MIDI files, type 0, type 1 and type 2. Type 0 MIDI files contain data in a single track. Type 1 MIDI files contain data in multiple tracks. Type 2 MIDI files contain data in multiple tracks and are broken up into multiple sections (or patterns). Type 2 MIDI files are uncommon. MIDI files have the extension .MID.

QuickScore Elite reads type 0 and type 1 MIDI files and writes type 1 MIDI files. It can also read the first pattern of a type2 MIDI file.

MIDI in

Each MIDI device including your computer has a MIDI in and a MIDI out port. MIDI in is where MIDI data comes into the device. In QuickScore Elite, the MIDI in is used for recording.

MIDI interface

Your computer needs a MIDI interface to be connected to other MIDI devices. A common MIDI interface is the *Roland MPU-401*. A MIDI interface will have at least a MIDI in and a MIDI out port.

MIDI Mapper

The MIDI Mapper is a Windows application that comes with Windows. It lets you specify MIDI settings for your system. You can select the MIDI Mapper as your MIDI output device instead of a regular driver in the MIDI Setup dialog in QuickScore Elite.

MIDI out

Each MIDI device including your computer has a MIDI in and a MIDI out port. MIDI out is where MIDI data leaves the device. In QuickScore Elite, the MIDI out is used for playing.

MIDI time code

MIDI time code is used to synchronize a sequencer to tape. MIDI time code (or MTC) messages are sent four times per SMPTE frame, that is from 96 to 120 times a second, depending on the SMPTE format. The SMPTE format is encoded in the message. This allows synchronization which is independent of tempo, which distinguishes it from MIDI clock.

object

An object is a single piece of data used by QuickScore Elite. An object is also called an event. An object can be a note, a lyric, an expression, a piece of text, a symbol, a clef, a MIDI event (like a controller or pitch bend), or a tempo change.

palette

A palette is a group of icons, one of which is usually selected. You click on an icon to select it. QuickScore Elite's toolbars are palettes, as is the durations palette and the object type palette.

patch

A patch (also called a program) is the sound stored in an instrument. You choose a patch by sending the instrument a program change command.

patch list

A patch list is a list of the names of all the patches contained in an instrument. There are 127 patches in a patch list.

piano roll notation

Piano roll notation emulates the piano rolls used in player pianos. Time is represented horizontally and pitch is represented vertically. At the top of the display are the bar numbers. To the left is a vertical piano keyboard showing the pitches of the notes in the display. Notes appear in the note area as horizontal bars. The vertical position of the bar indicates the pitch of the note. The beginning of the bar shows the note's start time and the length of the bar shows the note's duration.

print preview

In the Score Editor you can view your music in normal (or Edit mode) or Print Preview mode. Print Preview mode lets you see your music as it will be printed out. You can see the whole page in your window in Print Preview mode by clicking on the 100% button. You can't edit in Print Preview mode.

program change

Program changes are MIDI commands that tell the receiving instrument to change its internal sound to the one specified by the program change number associated with the program change command.

punch-in and punch-out

Punch recording is used to record over a certain section of music without disturbing the music before and after the section. The punch-in point is the point where the section starts and the punch-out point is the point where the section ends.

quantization

Quantization is used to make sure notes start and end on exact boundaries. For example, if a quantization setting of sixteenth notes is used, all notes will start and end on 16th note boundaries. In QuickScore Elite, notes can be physically quantized or the display of the notes can be quantized without affecting the real timing of the notes.

QSD file

QSD files are the native files of QuickScore Elite. They are more elaborate than MIDI files, because they contain a good deal of formatting information as well as all the types of objects QuickScore Elite supports. QSD files have the extension .QSD.

sequencer

A sequencer is a device that controls (or sequences) the MIDI data that is sent to a MIDI setup. There are hardware and software sequencers. QuickScore Elite performs the function of a sequencer.

SMPTE

SMPTE is a time-based synchronization protocol developed by the Society of Motion Picture and Television Engineers. It is the most widely used protocol for synchronization of video and audio devices. SMPTE devices can be linked to MIDI devices using special hardware, which typically converts SMPTE to MIDI time code.

sound card

Sound cards are the most cost-effective way to provide a computer system with MIDI sound. A sound card plugs into your computer and lets you play MIDI and often wave audio.

step entry

Step entry allows you to enter notes or chords of a given duration from your keyboard. You set the duration value in the durations palette and then enter the notes from the keyboard. The notes are entered at the cursor point. Every time a note or chord is entered, the cursor advances by the duration value, setting up to enter a new note or chord after the last one.

symbol

Symbols in QuickScore Elite include dynamics, articulation marks, slurs, guitar chords, figured bass and a great variety of other musical symbols.

tape transport

QuickScore Elite's tape transport is where the play, record, pause and stop button are. It is in the middle of the main transport.

time display

The time display in QuickScore Elite shows the time of the cursor in the current window. The time is displayed in Bars:Beats:Steps format on the top and in SMPTE format below that. The time display appears in the middle of the main control area.

toolbar

A toolbar is a palette of tools. You select tools to perform different operations upon objects. In QuickScore Elite the Score Editor, the Piano Roll Editor and the Controller Editor have toolbars, located at the far left on their control areas.

track

In QuickScore Elite, events or objects are organized into tracks. In the Score Editor, each track is shown as either a single staff or as two staves bound together with a curly brace, the top staff having a treble clef and the bottom staff having a bass clef.

TrueType font

TrueType fonts are Windows fonts that can be resized and appear on the screen exactly as they appear when printed. The Mozart font used by QuickScore Elite is a TrueType font.

velocity

MIDI note messages all contain a velocity. This generally refers to the velocity with which a key is depressed, which translates into a dynamic level, but this is not explicitly defined. Some MIDI instruments allow you to assign velocity to different attributes of the note.

wave file

Wave files contain audio data. These can be sound effects or even musical compositions. Wave files provide a fairly exact representation of sounds, depending on their resolution and the hardware they are played on, but they are a lot bigger than MIDI files. Wave files have the extension .WAV.

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