SFX™

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User's Guide

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How This Guide is Organized

This User's Guide is organized into three parts, and discusses the functionality of the SFX product line: Basic, Standard, ProAudio, and Show Control. *Part I: Introduction* is relatively brief and is intended to be read before using *SFX*. The first chapter of Part I, *Chapter 1: Introduction,* is an introduction to this guide and *SFX*. *Chapter 2: Getting Started* will explain the basic working concepts of *SFX* and provide you with a short tutorial to get you acquainted with the application. We recommend that you read the first two chapters of this Guide before running *SFX*. Then, launch *SFX* and work along with the *Example Workspace* section (page 25) in *Chapter 2*.

Part II of this guide is a reference section that explains each of the major components of *SFX*, devoting to each an entire chapter. The chapters in this section are intended to introduce you to more of the features of *SFX*. *Part III: Miscellaneous* covers more advanced topics.

Requirements

- Pentium III 500 MHz processor or better.
- 256 MB of RAM
- Windows 98/ME/2000/XP
- Video resolution of at least 800 x 600 (1024 x 768 preferable)
- CD-ROM drive
- Microsoft DirectX software (included with *SFX*)
- Sound Card(s) with DirectX support
- Parallel port

The Windows DirectX technology must be installed for *SFX* to work properly. *SFX* is compatible with any sound cards that have true DirectX sound drivers. DirectX is shipped with *SFX* or can be downloaded from Microsoft's WWW home page at:

> http://www.microsoft.com/DirectX

Some ActiveX technology is required as well, and will be installed with *SFX*.

Product Line

SFX is a line of products, each with different features and characteristics. The *SFX* product line is composed of **Basic**, **Standard**, **ProAudio**, and **Show Control**. This guide will contain all possible features and functionality for the entire product line. Some features listed below may not be in the SFX edition you own. To determine the version of SFX you own, select from the main menu Help | About. The Help dialog box will list the exact product(s) you have.

The **Basic** edition allows a maximum of two open Cues files and two open Effects files per workspace. It gives you two stereo output channels per Cues view to assign your sound effects to, and only allows you two simultaneous sound cues per stereo output channels. The only sound effect in the Basic edition is the Wave file. Autofollow, Wait, Fade, Stop, and Memo are also included.

The **Standard** edition does not limit the number of opened Cues files and Effects files per workspace. It gives you four stereo output channels per Cues view, and limits you to four simultaneous sound cues per stereo output. Sound effect types included in the Standard edition are the Wave file, MIDI sequence, and CD track. In addition to the other effect types listed in the Basic edition, Standard also includes MIDI Command, Trigger, and restart. The Array view is included with Standard, as well as Keyboard and MIDI triggering.

The **ProAudio** edition is similar to the Standard edition, except it allows eight stereo outputs and places no limitation on the number of simultaneous sound cues.

The **Show Control** edition is the Standard edition, but includes the MIDI Show Control effect type and the MCI effect type. Also, MIDI Time Code is included. Various show control plug-ins are also part of the Show Control Edition.

Product Overview

SFX is a theatrical, sound playback and show control software application, and is designed to aid the sound designer and the sound technician in creating, maintaining, and executing sound effects or music for a live entertainment environment. With all the features and ease of use, *SFX* not only replaces traditional sound playback equipment, but it also provides you with possibilities that were not previously practical or even possible. For instance, one of *SFX*'s key features is its ability to play multiple sound effects through one or more sound cards by using the DirectX technology. *SFX* is also capable of show control through MIDI Commands, MIDI Show Control, and MIDI Time Code.

SFX can playback a number of effects. The sound effects that *SFX* can playback are Wave files, MIDI sequences, and audio tracks from a CD-ROM. Along with sound effects, *SFX* is capable of playing other effects such as MIDI Commands to external MIDI devices and MIDI Show Control commands. Sound effects can be linked into sequences through Waits, Autofollows, and Trigger cues, or cues can be executed through MIDI Time Code.

A robust interface allows you to place and size windows wherever you like on the desktop, choosing to include or not include whatever windows or features you want or don't want. Fonts, backgrounds, and colors are customizable as well. Drag-and-drop is also included providing you with the convenience of simply dragging sound effect files from your desktop right onto *SFX* and into your cue list. In addition, multiple cue lists can be opened on the desktop simultaneously.

Each cue list has a number of other windows, or "views" associated with it. Each view has a particular task or function. For example, the Go Button view triggers cues and the Notes view displays user-entered information about each cue.

By default, *SFX* displays a *Cues file* in a *Cues view*. The Cues view is really just a *Cue List*, with each cue listed one after another. Alternatively, you may display this list in a different way through the *Array view*. The Array view is still a Cue List, but each cue is displayed within a large button in the Array. The buttons are contained in a list that you can scroll through. To play a cue in the Array (through the Instant Play feature) you click on the button with the cue in it. The Array view works well in an environment that is more spontaneous than a specifically scripted show. The Cues view and the Array view are synchronized together, so selections made in one view are reflected in the other view.

What's New in Version 5

SFX version 5 has made many dramatic improvements over version 4.x. *SFX* 5 is now a true 32-bit application for Win95 and WinNT, and uses the Microsoft DirectX technology for sound playback. Unlike previous versions, you are now able to send multiple sound effects to a single sound card. *SFX* 5 still allows you to send your effects to multiple sound cards, and especially thanks to the Win95/WinNT operating systems, it is easier for you to plug multiple sound cards in your computer. With the greater power to playback multiple effects, *SFX* 5 has a completely new method of assigning effects to different outputs. See *Chapter 2 Getting Started: Patch, Groups, and Volumes* page 16 for more information.

The *SFX* 5 interface has been completely overhauled. Information contained in the windows, or *views*, on the screen are organized in definite columns and have been color coded to aid reading. One change made to the Cues view is the addition of an optional Cue Status column that will display each cue's execution state right in the cue list. In addition, you are no longer restricted to only one Effects view or Cues view: you can open up multiple files of each! You can have one, two, three, or however many cue lists on your desktop at one time, all triggered by separate Go buttons!

SFX 5 has also been introduced to drag-and-drop. Now you can click on one or more effects in the Effects view and drag them over to the Cues view.   You can also select sound effect files from Windows Explorer and drag them into a Effects view or Cues view. Drag-and-drop makes populating your Effects view quickly and easily – or, you can skip putting effects into your Effects view and drop them directly into your

Cues view. Along with drag-and-drop, *SFX* contains an *Effects Toolbar* that is a small control panel with all of *SFX*'s possible cue types in it. To use the Effects Toolbar, you click on the cue type you want in it, and then drag to the location in a Effects view or Cues view you want to place that cue.

Incorporated into *SFX* 5 is Stage Research's other product lines of *Time Code*, *KeyPlay*, and *Sound Array*. With *SFX Show Control* you can generate or chase MIDI Time Code and, like the previous version of *SFX*, you can assign time code triggers to each of your cues. As well as time code triggers, you can assign keyboard and MIDI note triggers to individual cues or entire cue lists. *Sound Array*, which was an alternate playback interface to *SFX*, has been included in version 5 (*Standard* edition and up). Normally, you display your cue list in the Cues view. With *SFX* 5, you can choose to view your cue list as a Cues view, an Array view, or both. The Array view is a sizable view containing buttons. Each cue is assigned a button, and by clicking that button, the cue will immediately execute. The Array view is great for spontaneous playback of effects.

SFX 5 has included other miscellaneous features as well as updated features from the previous version. Some other new features include support for MIDI Show Control 1.0 (*Show Control* edition) and a completely redone MIDI command effect method.

Digital Sound

SFX is a digital sound playback application that plays the following sound effects files: Wave files (.wav), MIDI sequences (.mid), and audio tracks from an audio CD in the CD-ROM. Sound effects are played through one or more sound cards in the computer.

Editing

SFX is strictly a sound playback application and does not allow you to do any digital editing on the effects. Many excellent software products exist out there already for this purpose.

Playback

SFX is designed to chiefly playback sound effects. These sound effects are recorded on the hard disk or on a CD in the CD-ROM. *SFX* can also play special cues such as MIDI commands, MCI commands, and MIDI Show Control messages.

Sound Cards

SFX will support any sound card that is supported by Windows' DirectX technology. Such sound cards will have *DirectX drivers* available. A driver is a software program that interfaces the operating system with the hardware of the sound card.

Product Support

Product Support for Stage Research products is available to registered users. Please consult this documentation and the README file first if you have any questions. If you do not find answers here, Stage Research maintains a World Wide Web site on the Internet as well as a Customer Service and Technical Support number.

- World Wide Web: http://www.StageResearch.com
- e-mail: Info@StageResearch.com
- Customer Service, Technical Service, and other Inquires: 1-888-267-0859 or 1-440-717-7510
- Mail address: PO Box 470417, Cleveland OH   44147

Conventions

SFX follows the Microsoft Windows convention, and you should be familiar with using it before attempting to use *SFX*. This guide assumes you are have a basic knowledge of the Windows environment.

This guide will also make references to sequences of menu item separated by the "|" (pipe) character. Menu item or buttons will be represented in all capitals. For example, "Select FILE | SAVE AS…" specifies the File menu and the Save As… item under that menu.

2   Getting Started

Installation

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Installation

Connect the hardware key to your first parallel port. If you do not connect the key to the parallel port, SFX will run in "Demonstration" mode.

Install *SFX* from the CD-ROM. During installation, the setup program will install Microsoft DirectX. DirectX can also be obtained directly from Microsoft's Web page at http://www.Microsoft.com/DirectX. If you do not install *SFX* in the recommended location, you may have problems with the Example workspace (see *Example Workspace* page 25).

Setting up the Default Folders

During installation, the setup program will create folders on your hard drive to contain files created by *SFX*. Two folders are created off of the *SFX* home directory: the Documents folder and the Autosave folder. The Documents folder is the location where *SFX* will save your files to by default. Keeping all of your *SFX* files in one separate and exclusive folder will make it easy for you to backup those files periodically. The Autosave directory is the location where *SFX* stores automatically backed-up documents. While working on your shows in *SFX*, you may have *SFX* automatically create backups of your work every few minutes. This folder is the location where those files will be stored. When *SFX* launches, it will check this directory for any special, autosaved files, and if it finds any, it will automatically recover them for you.

To display the default folder locations:

1. Select from the main menu TOOLS | OPTIONS and the "Options" dialog box will appear.
2. Click on the FOLDERS tab.
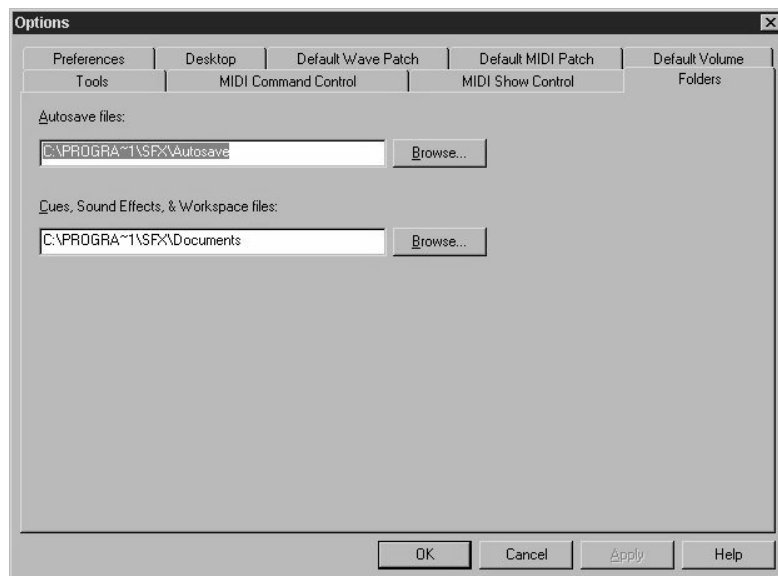
Patch, Groups, and Volumes

Because *SFX* has the ability to play multiple sound effects through one or more sound cards, you must specify where you want your output patched. There are two devices that need patching: Wave playback devices and MIDI playback devices.

*SFX* gives you two to eight *Groups,* depending on the exact SFX product you own (e.g. Basic, Standard, ProAudio, or Show Control). Each Group is a stereo pair that can be patched to a sound card. In turn, your cues can be assigned to one or more of these Groups. You can have more than one Group patched to a sound card. The diagram at right shows a two sound card system. In this instance, three Groups are patched to the sound cards: The first two Groups to the first sound card, and the third Group to the remaining sound card. Next, the effects are assigned to the Groups with some effects even being assigned to more than one Group.
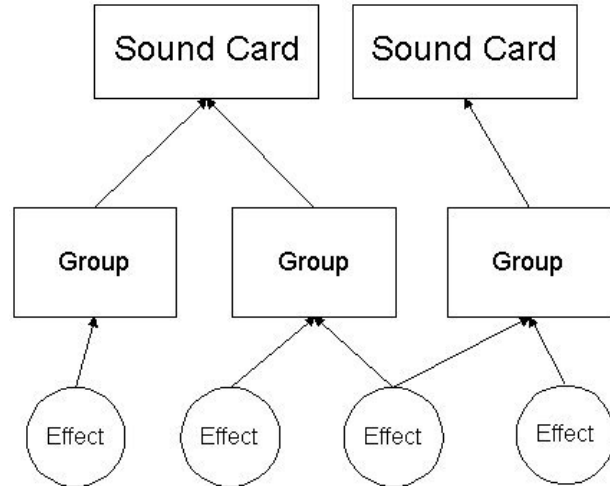
Patching provides you with a layer between the sound effects files and the sound cards. Instead of specifying the sound card directly in the sound effect, you assign the effect to a *Group* that in turn is patched to the sound card. Your effects only "see" Group numbers, and if you move a show from one computer system to another, that Group assignments remain intact regardless of what type of sound cards are available.

You can play more than one sound effect to the same Group at the same time.

The following diagram displays a two sound card system. Notice how both Groups 2 and 3 have been patched to the same sound card. Also notice that each sound effect is assigned to a Group, and that the last sound effect is assigned to both Group 1 and Group 3. This effect will play through both sound cards.
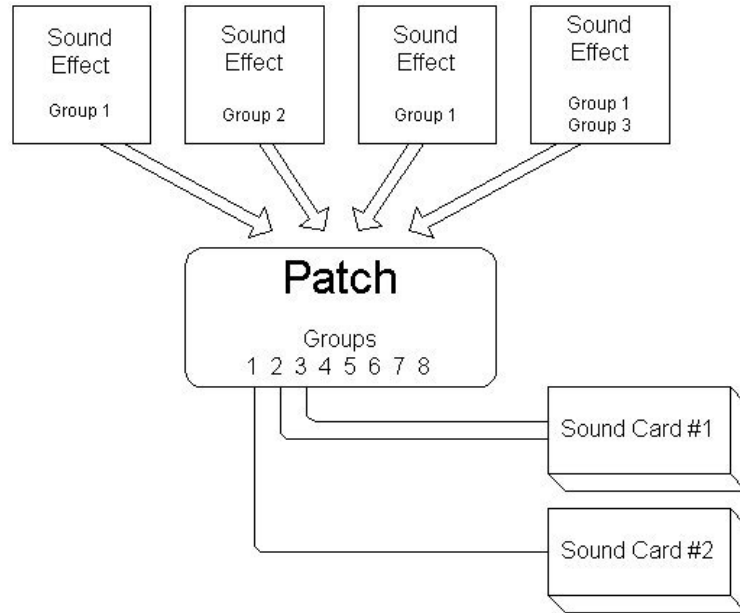
You can visualize the patching and assignments like a mixing console. The Sound Cards are the final outputs, the Patch is the submasters or Groups, and each effect is a separate channel:

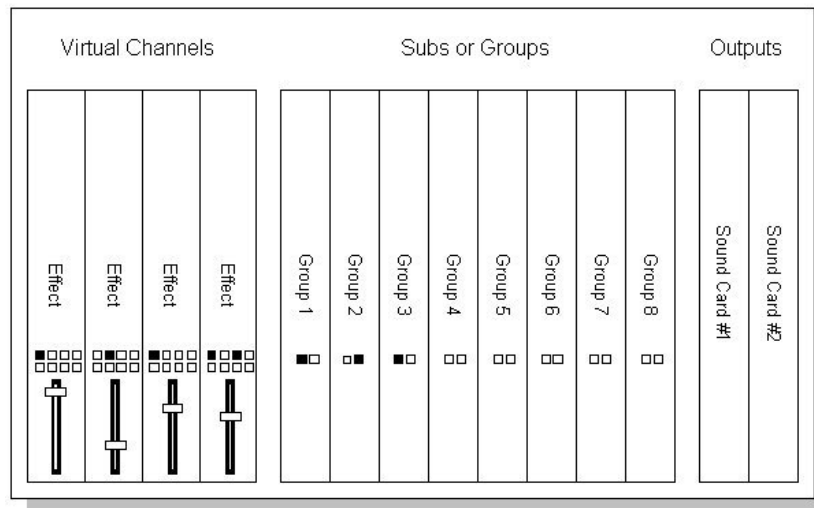
The above diagram illustrates the same information as the previous diagram, but it displays it as if it were a mixing console. Looking from right to left notice the "Outputs" section: Sound Card #1 and Sound Card #2. The section to the left of the outputs is the "Subs or Groups." Each Group can be patched to one output or no output. Group 1 is patched to Sound Card #1, Group 2 to Sound Card #2, and Group 3 to Sound Card #1. Finally, the "Virtual Channels" are illustrated as one effect per channel. Here, you can see what effects are assigned to play through what Groups. Also controllable through the effects is the volume, and each assignment contains its own volume fader. So, an effect assigned to Group 1 and Group 3 can have different volume levels for each Group.

You can set up a Group as "preemptive" meaning that only one sound effect will play on that Group, and when another effect begins to play, it will halt the first.

Setting up the Default Patch and Default Volumes

Each Cue List contains its own independent Patch. When a new Cue List is created, it initializes a patch by creating a new patch and copying the settings from the Default Patch. **Changing the Patch in the Default Patch will have no effect on Effects files or Cues files that are already created.**

During installation, the setup program will automatically setup the Default Patch. The Default Patch and Default Volumes are used by the Cues files as templates when Cues files are initially created.

To see the Default Patch and Default Volumes:
1. Select from the main menu TOOLS | OPTIONS and the "Options" dialog box will appear.
2. Select the DEFAULT WAVE PATCH tab or DEFAULT MIDI PATCH tab, or DEFAULT VOLUME tab.
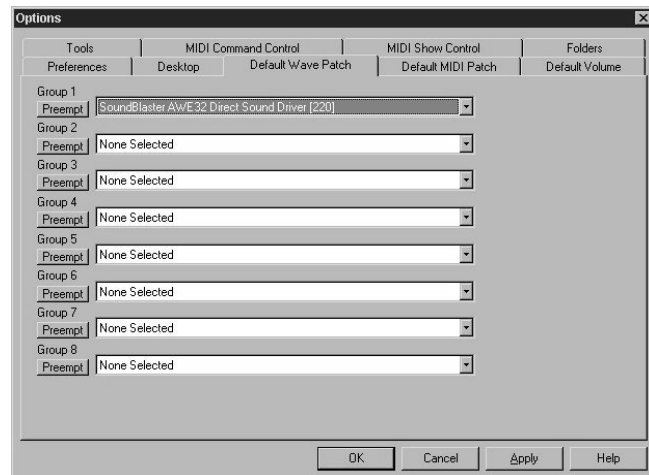
This DEFAULT WAVE PATCH tab displays the Groups' patching to the output sound cards. It shows which Groups are patched to which sound card drivers. Click on the DEFAULT MIDI PATCH tab to see which Groups are patched to which MIDI instrument drivers. The Group numbers for MIDI and Wave refer to the same Groups (i.e. there is not a separate set of eight Groups for each Wave and MIDI). Click the DEFAULT VOLUME tab to see the volume levels that new cues will be initially set to when they are created.

There are two tiers to the Default Patch and Volumes. The Default Patch and Volumes found under the "Options" dialog box are not real-time patches, but are templates used by Cues files when they are created. For example, when you create a Cues list, *SFX* copies the Default Patch and Volumes into the new Cues list. Then, any changes you want to make to the patch, must be done to that Cue List's Patch (see *Patch* page 38 and page 48).
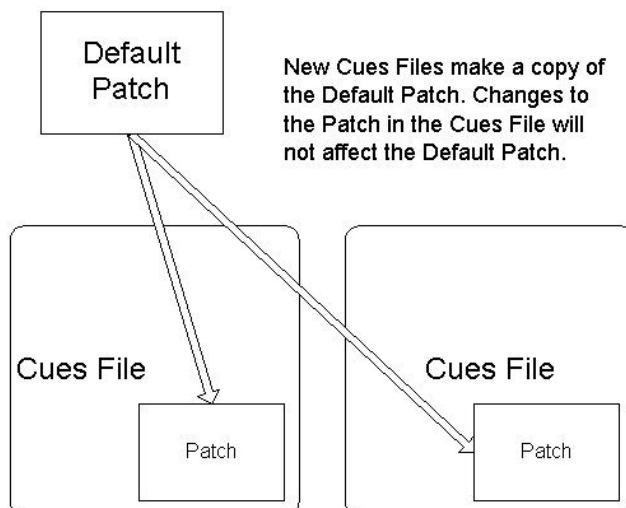
The figure to the left illustrates that each Cues File (or Cue List) contains its own patch. This patch was initially created from the Default Patch, and changes to it will only affect the Cues File that it is associated with. To see that Patch setting for an individual Cue List, see Chapter 4 Patch.

The Default Patch exists for you so that you can configure it once, and then not have to worry about patching each time you create a Cue List.

Effects File

SFX utilizes two types of files. The first file
type is the *Effects file*. Effects files contain
links to effects on your computer and, instead of
using filenames for the effect names -- which
tend to be cryptically named -- you can assign
the effects any names you want. Effects listed
in the Effects view do not have to be strictly
sound effect files, but can be other effect types
such as MIDI commands, etc. Since this view
acts as a librarian of your effects, you don't
directly playback the effects from this file; it's
only there to help you organize your effects.
You can play a sample of the effects in this view, though, to get an idea of what it sounds like before you
add it to a Cues List. You may want to create an Effects file for each type of effect. For instance, you can
have a Effects file that contains links to different types of doorbell effects, and you might also have a
Effects file that contains links to environmental sounds.

When you create actual Cue Lists, you can draw upon the effects that are located in this file.

Cues File

The second type of file used by *SFX* is the *Cues file*. Cues files are your Cue Lists and contain the sound
effects and other effects that will be played back during a performance. They also contain Notes and other
extra information that will be displayed during playback. Effects in the Cues files are obtained from one or
more Effects files, directly from drag-and-drop from the Windows Explorer, or from drag-and-drop from
the Effects Tool Box.

Workspace

A *workspace* is a set of Effects and Cues files, the locations of their windows on the desktop, and individual
settings relating to those files and windows.

You will probably have a separate workspace for each show you work on. When you want to create a new show, you first create a new workspace. Then, you create or open any number of Effects and Cues files in that workspace. When you close the workspace, *SFX* will save what files you had opened, where on the screen they were, and any extra settings belonging to that particular workspace (e.g. trigger settings, etc.).

If you are working on multiple shows, you probably will have multiple workspaces, with each workspace customized to fit the needs of that particular show.
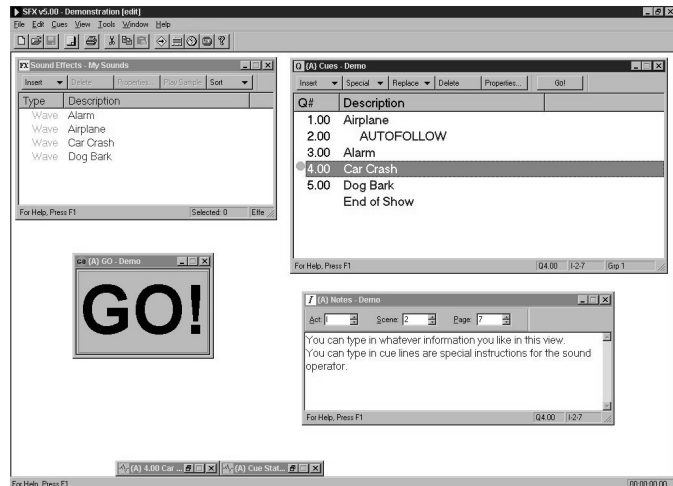
Desktops

Each workspace contains two desktops, called the Edit Desktop and the Play Desktop. The desktops provide you with two areas to display your views. Also, when you are in the Play Desktop, you will not be able to make any modification to the files that are opened there. You can move and size the windows (if they're not *locked,* see page 27), but you can not make any changes to the effects or cues. The Play Desktop adds a layer of security to your show, protecting it from being modified. In the Edit Desktop, you may change your Cue Lists and other information, and even run your show. The Edit Desktop can be password protected so that you can ensure that your show will not be changed by anyone but yourself.

You can configure the windows opened on your desktop differently for each of the two desktops. For example, in the Edit Desktop you might have a Effects file displayed on the left side of the desktop so that you may add sound effects to your Cues file. But, in the Play Desktop, you may have that same Effects file minimized so that it is out of the way. If you close a window completely in one of the desktops, though, it will also disappear from the other desktop as well.
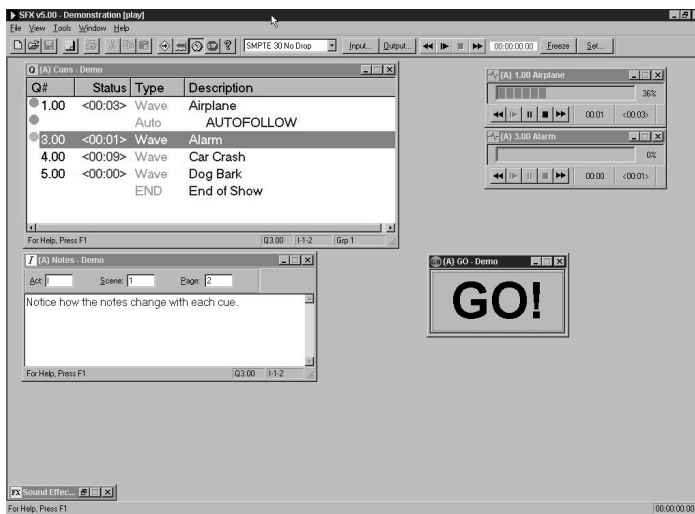
Typically, when you are creating your show and running through rehearsals, you may choose to use the Edit Desktop. In this desktop, you can add and edit cues, or make quick changes to your show such as volume changes or entering in Notes about the cues. Then, when you move into actual performances, you should switch to the Play Desktop to prohibit inadvertent or purposeful changes to your show. Also, in the Play Desktop, certain features and toolbars associated with creating a modifying a show disappear to give you a cleaner desktop. You will also gain a slight performance boost in the Play desktop.

To switch desktops:
      1.   Select from the main menu VIEW | SWITCH DESKTOP.

Views

A *view* is another name for "window" and implies that it is a visual element to access your data. When you open up a Effects file in *SFX*, for example, you will see it displayed on your desktop in a view. This view, called the Effects view, is a window with a list of effects and controls in it. Opening a Cues File will open up many views, with each view showing you some different aspect of your data.

View	Purpose
Effects	Displays the file links in a Effects file
Cues	Displays the effects in a Cues file to be played back during a performance
Array	Same as Cues, but displays the Cues file as an array of buttons (available in the Standard edition and above)
Go Button	Plays the currently selected cue
Notes	Displays the user-entered information about the currently selected cue
Cue Status	Displays the playing state of a cue

Menu and the Active View

The menu is displayed at the top of the screen immediately under the caption bar. **The menu is dynamic and will change depending on which view is active**. You can determine which view is active by looking at the views' caption bars. The bar that is highlighted is the view that is active. To activate a view, click anywhere on the view (such as the view's caption bar).

When you activate a view, the menu will change to accommodate the special features for that particular view. **It is important to remember that if you want to access certain features that affect a certain view, you must activate that view to make those features available**. For example, if you want to renumber cues in your Cue List, you must activate the view that holds the Cue List in order to renumber it. Or, if you want to save one of your Effects views, you need to click on that view and then select from the menu, FILE | SAVE.

Some features do not affect any particular view and are available regardless of what view is active. There are also some features that are available to more than one view, but work differently. For instance, EDIT | CUT is available to the Cues view and the Notes view. Selecting CUT while the Cues view is active will remove the currently selected effect. If the Notes view was selected, the currently selected text in that view would be deleted.

Toolbar

The *toolbar* is the bar of buttons found directly beneath the menu. The toolbar stays the same regardless of what view is active. Functions found in the toolbar can also be found in the menu.
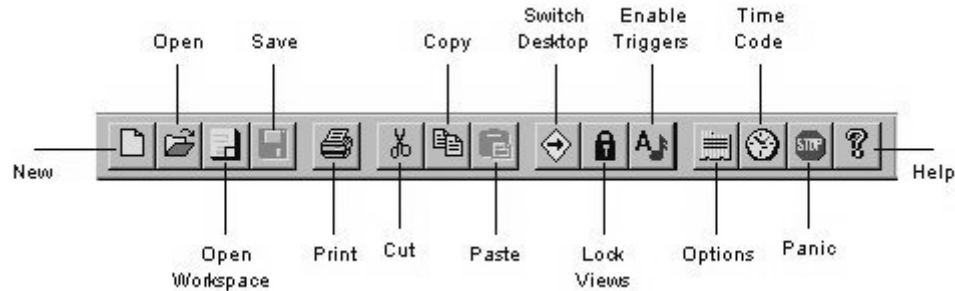
To show/hide the Toolbar:
1. Select from the main menu VIEW | TOOLBAR and the toolbar will hide if it is visible or show if it was hidden.

Effects Tool Box

The Effects Tool Box is a floating control panel on the desktop that you can use to easily add effects (see below *Effect Types*) to the Effects views and the Cues views. Note: not all effect types may be present in your edition of SFX. The following figure depicts the Show Control and ProAudio edition of SFX.

To add an effect from the Tool Box to a Effects view or Cues view:
1. Click and hold down on the button of the effect in the Effects Tool Box.
2. Drag the mouse to the location in the Effects view or Cues view you want to add this effect and release the mouse button.
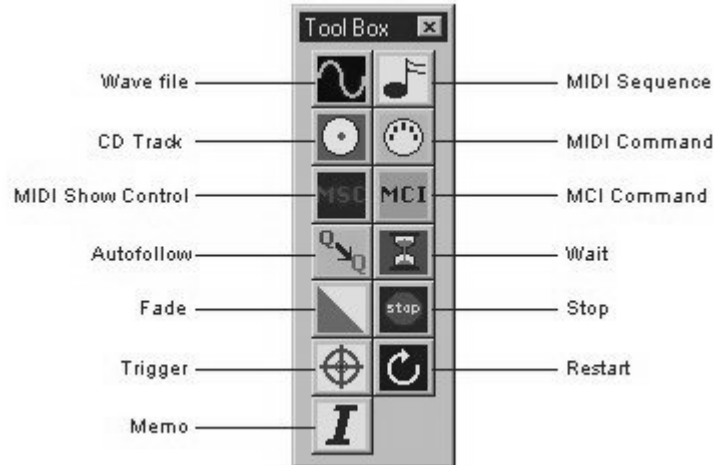
To show/hide the Effects Toolbar:
1. Select from the main menu VIEW | EFFECTS TOOLBAR and the Effects Toolbar will hide if it is visible or show if it was hidden.

Effect Types

SFX contains various type of sound effects and other effects depending on the edition of SFX you own. Along with sound effects like Wave files and MIDI files there are also other "effects" that perform other functions other than sound effect playback. For instance, the Memo cue is simply an empty effect that displays a line of text in the Cues view. For more detailed descriptions of the following effect types, please see the chapter entitled *Effect Types* (page 68).

Effect Type	Edition Available
Wave file	All
MIDI Sequence	Standard, ProAudio, Show Control
CD Track	Standard, ProAudio, Show Control
MIDI Command	Standard, ProAudio, Show Control
MIDI Show Control	Show Control
MCI Command	Show Control
Autofollow	All
Wait	All
Fade	All
Stop	All
Trigger	Standard, ProAudio, Show Control
Restart	Standard, ProAudio, Show Control
Memo	All

Wave file - a wave file is the Windows standard audio file. Wave files end with the extension .wav.

MIDI Sequence - a serious of MIDI notes that are played through a MIDI synthesizer, such as a synthesizer chip on a sound card.

CD Track - an audio track(s) from an audio compact disc placed in the computer's CD-ROM.

MIDI Command - a MIDI message that is played to an external MIDI device to trigger it in some manner.

MIDI Show Control - a standardized MIDI message used to communicate with other entertainment equipment.

MCI Command - (Media Control Interface) a high-level command interface to multimedia devices and resources such as .avi files, video discs, etc.

Wait - a type of delay cue that links two cues together. When the cue preceding the Wait is played, the Wait delays an user-defined number of seconds before triggering the following cue.

Autofollow - a type of delay cue that links two cues together. An Autofollow waits for the previous cue to complete before triggering the following cue.

Restart - a cue that will delay a user-defined number of seconds before selecting another cue and executing it. This cue is typically used to make a cue list circular.

Trigger - a cue that triggers another cue, or cue list, in the same or another cue list to cue, play, pause, stop, go-to-cue, or go.

Fade - a cue that modifies the volume of a targeted cue. These cues change volume logarithmically over the user-defined time to ensure smooth fading.

Stop - a cue that halts playback of one or more targeted cues.

Memo - a cue that does not do anything but provide a line of text in the Cues view. You can type any information you want in here.

Example Workspace

After becoming familiar with the previous topics, you will be ready to walk-through the demonstration show. The remaining topics in this chapter will introduce you to *SFX*. Once you have a basic understanding of this application, you can read the following chapters of this document to familiarize yourself with *SFX*'s more advanced features.

If you've installed *SFX* to a location other than the default folder of C:\Program Files*SFX*\, you may have problems running the "Test Show.sfx" show. See *Locating Files* (page 37 and page 47) for further information.
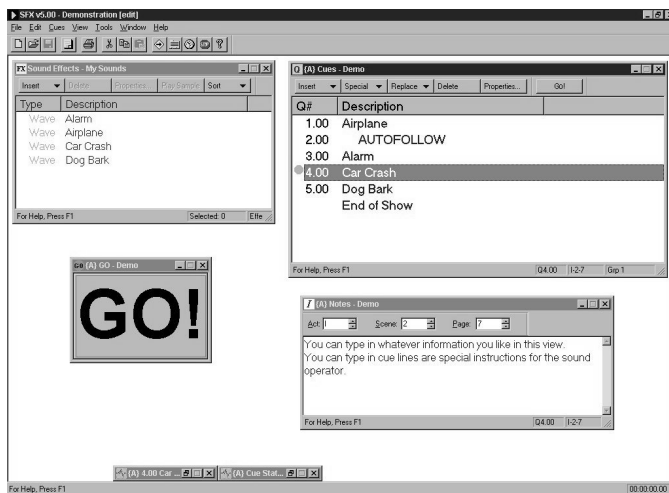
The first time you launch *SFX*, it will automatically open up the Example workspace. This workspace contains one Effects file and one Cues file. Initially, you will be in the Edit Desktop. To determine which desktop you are in, look at the main *SFX* window caption bar. It should have the name of *SFX*, the current workspace name, and a word in brackets. The word will either be "[play]" or "[edit]." If it is "[play]" select from the main menu VIEW | SWITCH DESKTOP to return to the Edit Desktop.

Different Views

The Effects files and the Cues files are represented on-screen by one or more views each.

The Effects file is represented on-screen by the Effects view, and for the Example workspace is titled "Effects - My Sound Effects."   "My sound Effects" is the name of the file.

The Cues file is represented by a number of views. The main view is the Cues view and for the Example workspace is titled, "Cues - Test Show". Similar to the Effects view, "Test
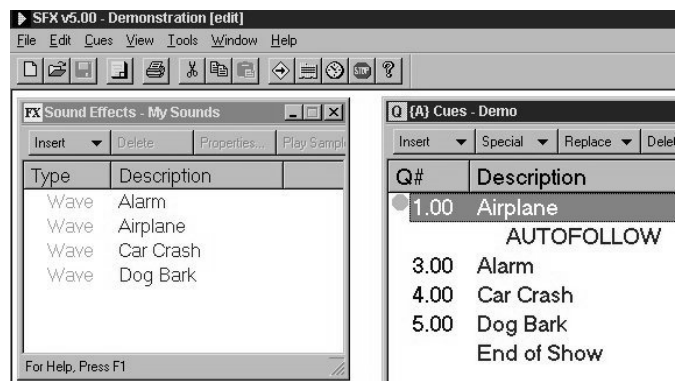
Show" is the name of the Cues file. Along with the Cues view are the Notes view, the Go button view and a couple of Cue Status views. Each of the other views display a different aspect of the Cues file.

Notice the Notes view. The Notes view displays user-entered text about the currently selected cue. Click on any cue in the Cues view and you will see the text in the Notes view change. Try clicking to other cues to see their notes. Some cues may not have any notes associated with them.

Click on the first cue in the Cues view. Notice the yellow circle before the cue number. This dot tells you the current state of the cue. Yellow means the cue is "cued" and ready to be played. Click on the Go button. Notice that there are two Go buttons on the screen. There is a large Go Button view and there is a smaller Go button in a toolbar contained within the Cues view. Both perform the same function. When you click the Go button, the dot will change from yellow to green, the cue will begin playing, and the selection bar will drop down to the next cue. When the cue has finished playing the green dot will disappear. Click on Go again to play the newly selected cue.

To halt playback, click on the PANIC button in the Toolbar (see *Toolbar* page 23).
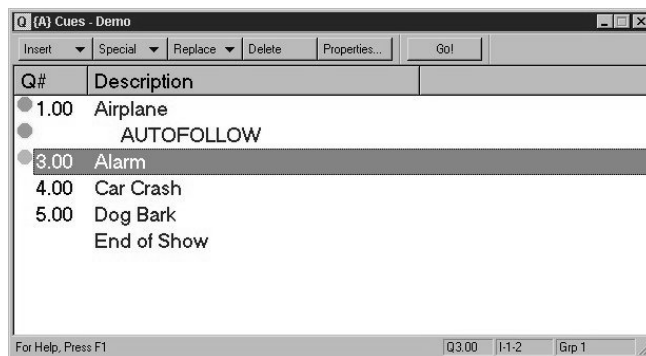
Along with the Wave files in the Cues view, you may notice other cues like Wait and Autofollow. Wait and Autofollow cues are used to sequence cues together. For example, click on a cue directly before an Autofollow cue. Next, click on one of the Go buttons. Notice how the selection bar first jumps down to the Autofollow and then jumps on to the following cue. When the first cue finishes, the autofollow will automatically send a Go command to the following cue without you having to click Go a second time.

Wait is similar to Autofollow except it starts to execute as soon as the preceding cue begins to play; it doesn't wait for the cue to finish.

As cues are executing, you can watch their status in a column in the Cues view:

To see the Status column:
1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES | STATUS COLUMN

The default format for the Status column is Time Remaining.

To change the format for the Status Column:
1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES | STATUS FORMAT and a popup menu will appear
3. Select either TIME REMAINING, TIME ELAPSED, or PERCENTAGE COMPLETED.

Click on the first cue again and click on the Go button. In the Cues view you can watch the seconds tick down in the Status column for that cue.

Now click on a cue preceding a Wait cue. When you click the Go button, you will notice that both the cue and the following Wait begin executing at the same time. After the Wait reaches zero, it will automatically playing the following cue. Using Waits and Autofollows you can add reliable automation to your effect playback. For example:

Q1.00	<5:23>	Steady Rain
	<0:08>	Wait 8.000
Q2.00	<0:04>	Thunder - Loud
		Autofollow
Q3.00	<0:08>	Thunder - Low rumble
		Autofollow
	<0:23>	Wait 23.000
Q4.00	<0:08>	Thunder - Loud

When you click Go for the first cue it will start to play over five minutes of rain. Eight seconds after the Go, "Thunder - Load" will be triggered. When that finishes, "Thunder - Low Rumble" will be played. Next notice the Autofollow/Wait sequence immediately after Q3.00. This means that as soon as Q3.00 has completed, the Wait 23.00 will begin to execute, and when 23 seconds are up, Q4.00 will be triggered. All this will happen with only one click on the Go button.

Play Desktop

You should still be in the Edit Desktop. The name of the desktop is listed in brackets in *SFX*'s main caption bar. In this desktop you are able to modify your shows by changing the Effects and Cues lists as well as the properties of the effects listed there. But before we begin making changes, you should be aware of the other desktop, the Play Desktop. The Play Desktop is essentially identical to the Edit Desktop except that it will not allow you to make changes to your files. Typically, you would use the Play Desktop when you are in production, where you would want to make sure that none of your files get purposefully or accidentally modified. Also, you can place your windows differently on each desktop, so, for example, the Cues view in the Edit Desktop can be a different size and place on the Play Desktop.

To switch to the other desktop:
    1.   Select from the main menu VIEW | SWITCH DESKTOP.

In each desktop you also have the option of "locking" the views so that they can not be moved, sized, or closed. You may want to do this in the Play desktop for a performance to avoid any accidental view closing or movements.

To lock the views:
    1.   Select from the main menu VIEWS | LOCK VIEWS.
    -- or --
    1.   Click the Lock Views toolbar button.

When the views are locked, you will see a message in the caption bar and a check mark will appear before the LOCK views menu item.

Go back to the Edit Desktop for the next topic.

Inserting Cues

Before inserting cues into the Cues view, make sure you are in the Edit Desktop (See *Desktops* page 21). There are a number of ways to insert Cues into a Cues view (See *Inserting* page 41), but we will only focus on one here.

To insert a cue:
1. Click on the location in the Cues view where you want the cue. When the cue is inserted it will be inserted before the cue that is selected.
2. Select the effect or effects in the Effects view that you wish to insert.
3. Click on the INSERT button in the Cues view toolbar. A menu will be displayed listing all of the Effects views with each of their selected effects.
4. Click on the menu item with the effect you wish to insert.
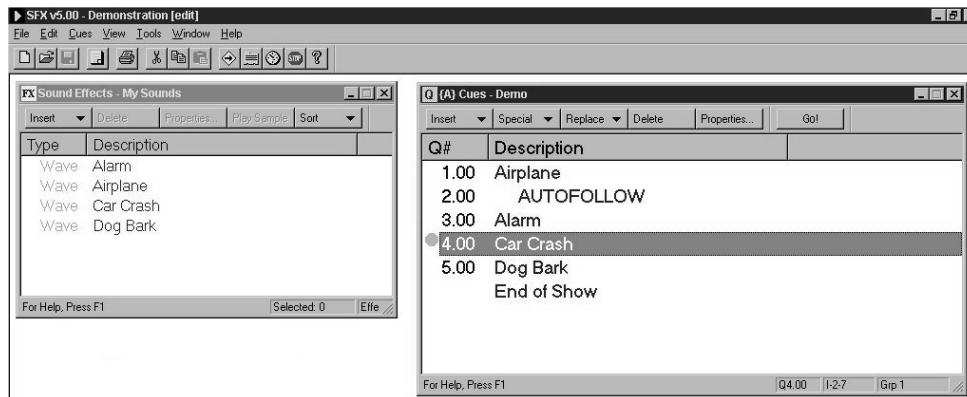
There are other ways to insert cues. For example, you can drag effects from the Effects view and drop them into the Cues view.

In the Effects view you may use the mouse in conjunction with the CTRL and ALT keys to select more than one effect for insertion. You may only select one cue at a time in the Cues view, though.

After you have inserted an effect, it will be selected. You can type in text in the Notes window or you may click the PROPERTIES button in the Cues view to change the cue's description or other attributes. The cue's description can be no longer than 256 characters.

You can also insert cues by using the Effects Tool Box (see page 23).

Inserting Effects

Now that you've learned how to get effects from the Sound Effect view to the Cues view, you will need to know how to get effects into the Effects view. Like the Cues view, there are a number of ways to add

effects to the Effects View (See *Inserting* page 34). One way is to click on the INSERT button in the Effects toolbar and select from the drop-down menu the effect type you want to add.

You can also insert effects by using the Effects Tool Box (see page 23).

Conclusion

By completing the previous topics you now should have a basic understanding of how *SFX* works. At this point, you should experiment with adding effects and building shows in the Cues view. Parts II and III are designed to be used as a reference, so when you get stuck on something you can look it up in those pages. You may also want to visit the Stage Research Web page at http://www.StageResearch.com. On the Web page you can find a Show Case section that features examples of actual shows that have used SFX.

Part II   Reference

3   Working with Effects

Effects view

    Inserting

        INSERT Button

        Drag-and-drop: Effects Tool Box

        Drag-and-drop: Explorer, Folder

    Deleting

    Properties

    Playing Sample

    Sorting

Fonts and Size

Columns

Loading Version 4.0 Files

Integrity Check

Locating Files

Patch

Printing

Effects View

The Effects view is the window that displays the information from a Effects file (*.sou file). You use these views to organize your sound effects (or other effects) and give your effects descriptive names, instead of just cryptic file names. The Effects view is not intended to have effects played back from it; that's what the Cues view is for. Think of the Effects view as a "librarian" of your effects. When you are creating a Cue List (through a Cues View) you can draw upon the effects found in the Effects views.

The Effects view can be sized and placed anywhere on the desktop. Multiple Effects views can be opened on the desktop at the same time (the Basic edition limits you to only two at one time). Immediately below the caption bar of this view is a toolbar. The buttons in the toolbar are also available as items in the menu when this view is made active by clicking on the view's caption bar.
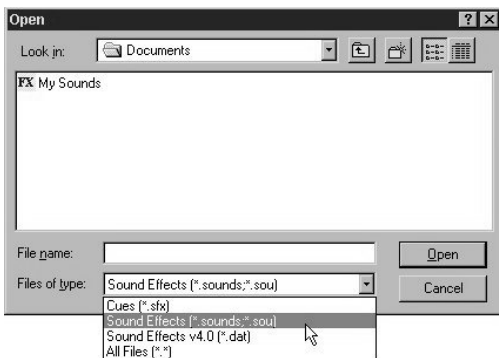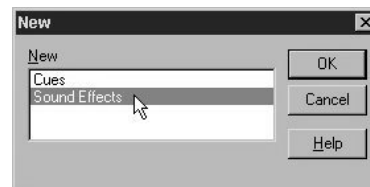
When this view is active, the menu will appear like this:

The Effects view is disabled in the Play Desktop, and you may not make any modification to it there.

To create a new Effects file:
1. From the main menu select FILE | NEW and a "New" dialog box will appear.
2. Click on "Effects."
3. Click on OK.

To open an existing Effects file:
1. From the main menu select FILE | OPEN an "Open" dialog box will appear.
2. In the "File Types" combo box select "Effects (*.sou)".
3. Select the Effects file.
4. Click "Open".

Inserting

You have a number of ways to insert effects into the Effects view:

*   Click on the INSERT button in the view's toolbar
*   With the view active, select from the menu EFFECTS | INSERT
*   Drag-and-drop effects from the Effects Tool Box
*   Drag-and-drop or paste effects from other Effects views or Cues views
*   Drag-and-drop effects from Explorer or open folders

INSERT Button
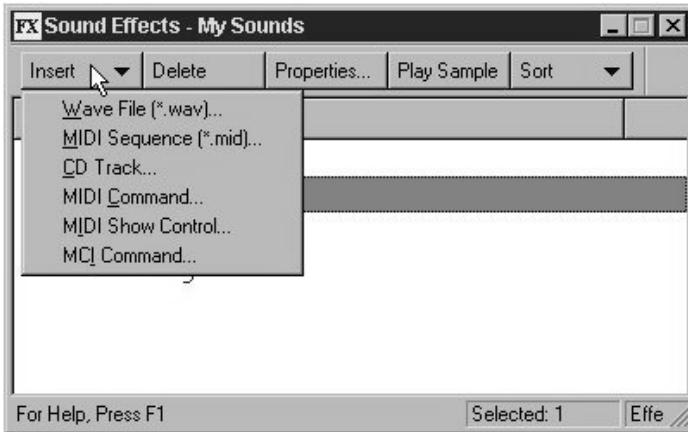
Click on the INSERT button in the Effects view's toolbar. A menu will be displayed under the button of the type of effects that you may insert into the list. Click on the type of effect you want to add, and follow the instructions in the following dialogs.

If you do not supply a Description for the files you add, *SFX* will provide you with a default description.

Drag-and-drop: Effects Tool Box

The Effects Tool Box (see *Effects Tool Box* page 23) is the control panel floating on the desktop. The Tool Box contains the effect types that you can use in *SFX*. Some effect types (such as Autofollows and Waits) have no meaning in the Effects view and therefore will not be added to the list.

To add an effect from the Tool Box to a Effects view:
1. Click and hold down on the button of the effect in the Effects Tool Box.
2. Drag the mouse to the location in the Effects view you want to add this effect and release the mouse button.

Drag-and-drop: Explorer, Folder

You may insert more then one sound effect at a time through drag-and-drop. To do so, open Windows Explorer and open the folder containing your sound effect files. Use the mouse to select multiple files (by using the CTRL or SHIFT keys will clicking the left mouse button). Once you have one or more files selected, use the mouse to click and hold down on one of the selected files, drag the mouse pointer into the Effects view's list, and then release the mouse button. Effects added this way have default Description names of their file names, but you may change the description by clicking on the PROPERTIES toolbar button.

You can also drag-and-drop from other Effects views or Cues views by using the procedure discussed above. If you want to drag an effect (copy) in the same view, you must hold down the SHIFT key. You can move an effect by holding down the ALT key during the drag and drop operation.

Deleting

To delete one or more effects in a Effects window, select those effects and click on the DELETE button in the Effects view's toolbar. You can also select from the menu EDIT | CUT or EDIT | DELETE when the Effects view is active.

Properties

The properties of an effect can include the effect's name, the file name, the cue number, volume, group assignments, triggers, and others.

To access an effect's properties:
1. Click on the effect you wish to the properties of.
2. Click on the PROPERTIES button and the "Effect Property" dialog box will be displayed.
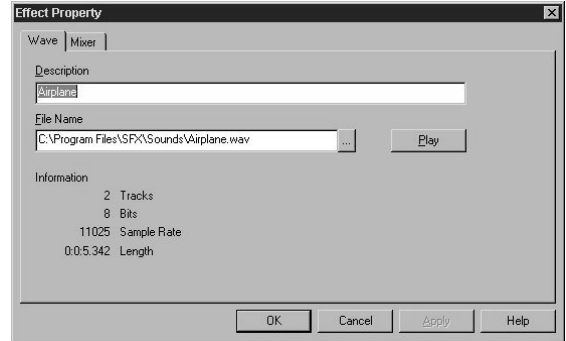
Playing Sample

To play an effect, click on the PLAY SAMPLE button in the Effects view's toolbar. While the effect is playing, the button will change to STOP SAMPLE, and by clicking on it, SFX will halt playback.

Sorting

You can sort the effects in the Effects view in two ways: by Description and by Type. Sorting is done alphabetically by examining either the Description field or the Type field.

To sort the effects in the Effects view:
1. Click on the SORT button in the Effects view and a popup menu will appear.
2. Select either DESCRIPTION or TYPE from the menu and the effects will be sorted.

Font and Size
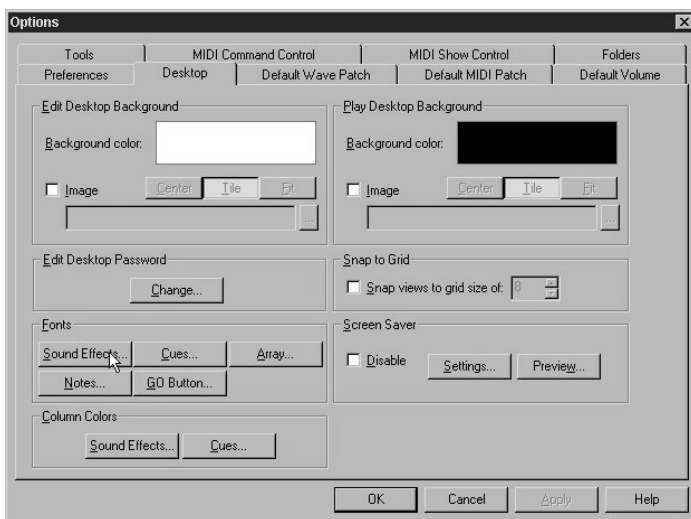
You may change the font and size of the text in the Effects view:
1. Select from the main menu TOOLS | OPTIONS and an "Options" dialog box will appear.
2. Click on the DESKTOP tab.
3. In the section titled "Fonts" click on the EFFECTS button and a "Font" dialog will appear.
4. Make a font selection.
5. Click OK in the "Fonts" dialog.
6. Click OK in the "Options" dialog.

Columns

The Effects view displays two columns of information. The first column lists the effect's type, and the second column shows its description.

To change the color of the columns:
1.   Select from the main menu TOOLS | OPTIONS and an "Options" dialog box will appear.
2.   Click on the DESKTOP tab.
3.   In the section titled "Column Colors" click on the EFFECTS button.
4.   A "Effects Column Colors" dialog box will appear.
5.   Use the combo boxes to make your color selections.

Loading Version 4.0 Files

To load a *SFX* Sound Effect v4.0 file, select from the menu FILE | OPEN and in the "Files of type:" combo box select "Sound Effects v4.0 (*.dat)". Find the file(s) you want to open and click on OPEN. *SFX* will automatically convert the file into the current version. When you save the file, it will save as the **current** version and not as 4.0.

Integrity Check

An *integrity check* will examine the Effects file to make sure that all the effects listed there are still valid. The chief reason an integrity check will fail is if there are effects listed in the Effects view that are no longer on the hard drive, or have been moved to another area on the hard drive.

To do an integrity check:
1.   Make the Effects view active by clicking on it.
2.   Select from the main menu EFFECTS | CHECK EFFECT INTEGRITY.

You will be notified the results of the integrity check. If the integrity check does not pass, a message stating the problem will appear and the offending effects will have black X's placed before their types in the Effects view. You should then check the Properties of the effects that have not passed to determine the exact nature of failure.

Locating Files

If you've moved files on your hard drive and would like to automatically update them in your Effects view, you can have *SFX* automatically update your Effects file.

To locate missing files:
1.   Make the Effects view active by clicking on it.
2.   Select from the main menu EFFECTS | LOCATE FILES.

SFX will then examine each effect and its location on the hard disk.   If it encounters effects that it can not locate, it will prompt you to search for those files.

You have two options when locating files:
- Display all matches and prompt you to select the correct match for each effect, or
- Automatically select the first match found for each effect.

Patch

The patch for a Effects file affects the output of Play Sample for this view.

To change the patch of a Effects list:
1. Make the Effects view active by clicking on it.
2. Select from the main menu EFFECTS | PATCH and a "Patch" dialog box will appear.
3. Click on the WAVE PATCH or MIDI PATCH tab.
4. Use the combo boxes to select output devices for all, some, or none of the "Groups".
5. If you want only one sound effect to play on a Group, punch-in the **PREEMPT** button by clicking on it. When a cue begins to play on a preempted Group that already has a cue playing, the currently playing cue will be halted so that the new cue can begin to play.
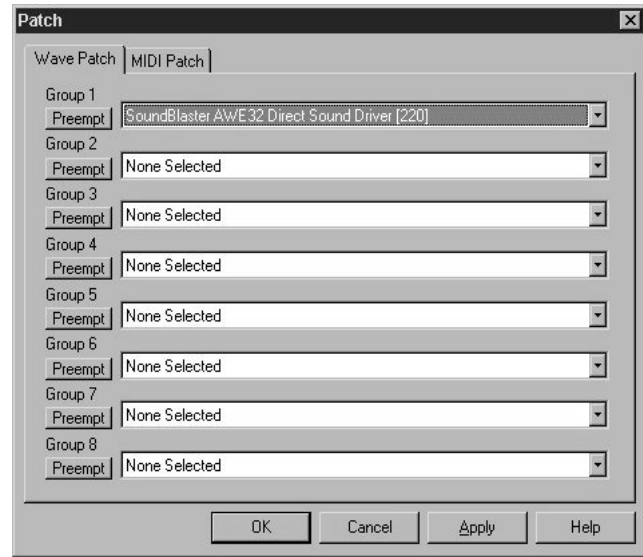
Changes made in this patch dialog will only affect the associated Effect List. To change the patch of other Effects Lists, you must make them active and repeat the above directions. Changes to the Patch here do NOT affect the Default Patch, and, likewise, changes to the Default Patch do not affect the patch in already created Effects Lists.

Printing

To print a Effects file, make the Effects view active and select from the menu FILE | PRINT. You can further select which properties of the effects to print. To change which properties will appear on the printout, click on the OPTIONS button in the PRINT dialog.

4   Working with Cues

Cues View

Inserting

> INSERT Button

> Drag-and-drop: Effects Tool Box

> Drag-and-drop: Explore, Folder

Inserting Special Effects

Replace

Deleting

Seek Cue To Time

Properties

Playing Cues

Panic

Font and Size

Columns

Loading Version 4.0 Files

Integrity Check

Locating Files

Sort

Renumbering Cues

Clear All Time Code

Learn Time Code

Patch

Show Control & Triggers

Printing

Cues View

The Cues view is the view that displays the information from a Cues file (*.sfx file). The Cues view is associated with other views that display other aspects of the Cues file. These other views are the Go Button view, the Notes view, the Cue Status view, and the Array View. Closing this view will close the Cues file and all associated Cues file views.

The Cues view can be sized and placed anywhere on the desktop. Multiple Cues views can be opened on the desktop at the same time (the Basic edition limits you to two views at one time). Immediately below the caption bar of this view is two toolbars. The buttons in the first toolbar are also available as items in the menu. The Cues view's toolbar is disabled in the Play Desktop.
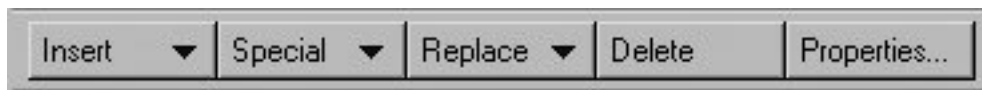

When this view is active, the menu will appear like this:

The second Cues view toolbar is the Go Toolbar, and contains only one button: a Go Button. Clicking on this button, like the Go Button view, will cause the selected cue to play. This Go Button is similar to the GO Button view. This toolbar is remains active in both desktops.
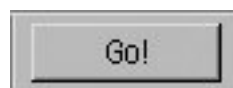
SFX supports multiple Cues file. Each opened Cues file is assigned a letter to differentiate it from the other opened files. This letter is displayed in curly brackets in the caption bar of all the associated views. All views belonging to the same file will have the same Cue List letter. Therefore, the view titled "{B} Go" is associated with the view titled "{B} Notes", while the view titled "{A} Go" is associated with a set of views all designated with the letter "{A}".
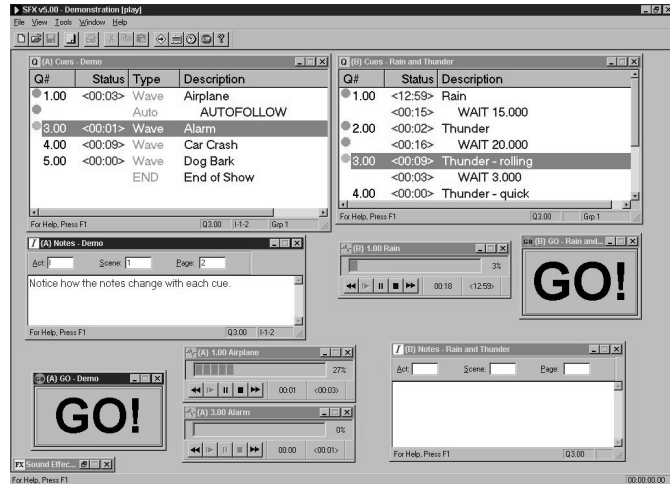
To create a new Cues file:
1. From the main menu select FILE | NEW and a "New" dialog box will appear.
2. Click on "Cues."
3. Click on OK.
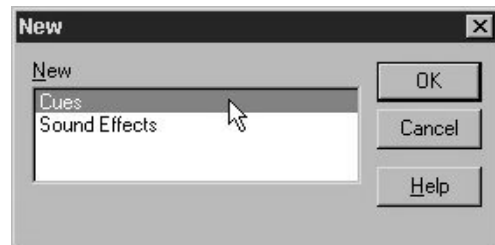
To open an existing Cues file:
1. From the main menu select FILE | OPEN an "Open" dialog box will appear.
2. In the "File Types" combo box select "Cues (*.sfx)".
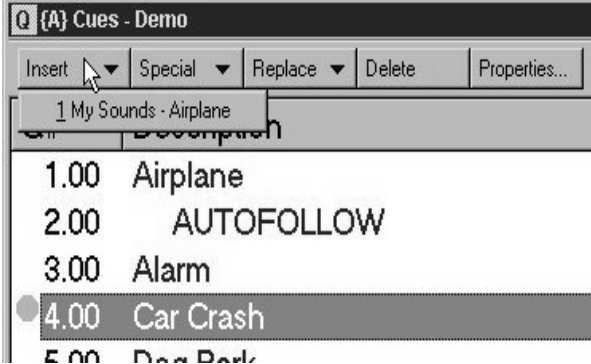3. Select the Cues file.
4. Click "Open".

Inserting

You have a number of ways to insert cues into the Cues view:

- Click on the INSERT button in the view's toolbar
- With the view active, select from the menu CUES | INSERT
- Drag-and-drop effects from the Effects Tool Box.
- Drag-and-drop or paste effects from other Cues views or Effects views
- Drag-and-drop effects from Explorer or open folders

To insert **CD Tracks**, **MIDI Commands**, or **MIDI Show Control** effects, you must first create these effects in a Effects view and then, using one of the above methods, insert them into a Cues view. Or, you can also insert those effects directly from the Effects Tool Box (see below).

INSERT Button

Q {A} Cues - Demo

Insert ▾ | Special ▾ | Replace ▾ | Delete | Properties...

1 My Sounds - Airplane

	Description
1.00	Airplane
2.00	AUTOFOLLOW
3.00	Alarm
● 4.00	Car Crash
5.00	Dog Bark

To insert an effect by using the INSERT button:

1. In the Cues View, select the cue you wish to have follow your new cue.
2. In the Effects view(s), select the effect(s) to insert.
3. Click on the INSERT button in the Cues view and a popup menu will appear listing all Effects views and the effects selected within each one.
4. Select the menu item corresponding to the effect you wish to insert.

Drag-and-drop: Effects Tool Box

The Effects Tool Box (See *Effects Tool Box* page 23) is the control panel floating on the desktop. The Tool Box contains the effect types that you can use in *SFX*.

To add an effect from the Tool Box to a Cues view:

1. Click and hold down on the button of the effect in the Effects Tool Box.
2. Drag the mouse to the location in the Cues view you want to add this effect and release the mouse button.

Drag-and-drop: Explorer, Folder

You may insert more then one cue at a time through drag-and-drop. To do so, open Windows Explorer and open the folder containing your sound effect files. Use the mouse to select multiple files (by using the CTRL or SHIFT keys will clicking the left mouse button). Once you have one or more effects selected, use the mouse to click and hold down on one of the selected effects, drag the mouse pointer into the Cues view's list, and then release the mouse button. *SFX* will use the file names as their descriptions, but you may change them to whatever you desire through the PROPERTIES button.

You can also drag-and-drop from other Cues views or Effects views by using the procedure discussed above. If you want to drag an effect (copy) in the same view, you must hold down the SHIFT key. You can move an effect by holding down the ALT key during the drag and drop operation.
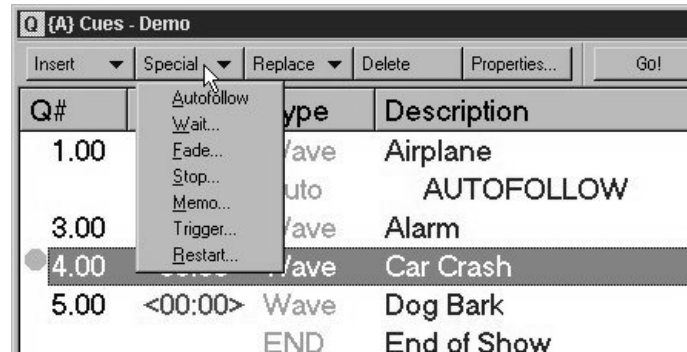
Inserting Special Effects

Along with sound effects that you can add from the Effects window or directly from Windows Explorer, you can add certain *special effects* to enhance playback of your show. Following is a list of effects and their usage.

Special Cue	Action
Autofollow	When the preceding cue completes, send a GO to the following cue.
Wait	Wait *n* seconds after the previous cue begins playing before sending a GO to the following cue.

Restart	Select a user-defined cue and wait *n* seconds before sending a GO.
	Available in the Standard and above editions.
Trigger	Trigger a cue in this or another cue list. Trigger can be play, pause, stop, go to, etc.. Available in the Standard and above editions.
Fade	Fade the volume (up or down) of a user-defined cue over *n* seconds.
Stop	Stop playback of a user-defined cue or cues.
Memo	An empty cue used only to display text.

If you want to add MIDI Show Control, MIDI Command, and MCI Command effects, you must create them in a Effects view and then insert them in the Cues view just like you were adding a Wave file, or you can drag-and-drop them from the Effects Tool Box. MIDI Show Control and MCI is part of the Show Control edition, while MIDI commands are part of Standard.

Note that you may not put some special effects in some sequences. For example, you may not put two Autofollows in a row, or you may not start a show with an Autofollow or a Wait.

To insert a special cue, click on the INSERT SPECIAL button in the Cues view toolbar, or drag-and-drop it from the Effects Tool Box.

Replace

To replace a cue:
1. In the Cues View, select the cue you wish to replace.
1. In the Effects view(s), select the effect(s) to insert.
2. Click on the REPLACE button in the Cues view and popup menu will appear listing each of the Effects views and the effects selected within each one.
3. Select the menu item corresponding to the effect you wish to insert and a dialog box will prompt you to continue.
4. Click YES if you want to replace the cue.

Deleting

To delete a cue in a Cues window, select the cue and click on the DELETE button in the Cues view's toolbar. You can also select from the menu EDIT | CUT or EDIT | DELETE from the menu when the Cues view is active.

Seek Cue To Time

To seek to a specific location in the currently selected effect, use the Seek Cue to Time feature by selecting from the main menu CUES | SEEK CUE TO TIME, and a Seek Cue To Time dialog box will appear.   You may seek by using minutes:seconds, milliseconds, or SMPTE time code.

Properties

The properties of a cue can include the cue's name, the file name, the file name, the cue number, volume, group assignments, triggers, and others.

To access a cue's properties:
1. Click on the cue you wish to the properties of.
2. Click on the PROPERTIES button and the "Effect Property" dialog box will be displayed.
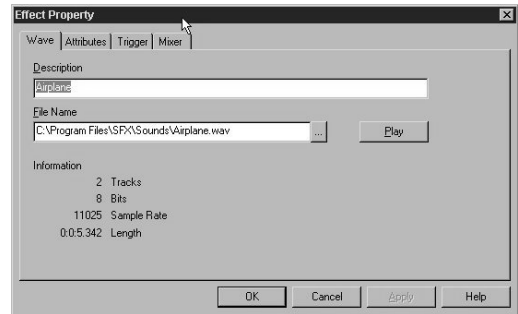
Playing Cues

There are a number of ways to play a cue:
- Go Button view,
- Right mouse button,
- Time Code,
- Trigger cue,
- Keyboard trigger,
- MIDI Command trigger, and
- MIDI Show Control

Go Button View
Clicking on the associated GO Button view will cause the currently selected cue to play, and the selection bar to automatically drop down to the next effect.

Right mouse button
You may enable the right mouse button to act as GO for the {A} Cues view (See *Options - Preferences* page 59).

Time Code
Each cue may be triggered by a Time Code value.

Trigger cue
A special cue added to this or another Cue List that will play a specific cue or notify the list to GO.

Keyboard trigger
Each cue may be triggered by it's own individual keystroke, or by a keystroke that notifies a specific list to GO.

MIDI Command trigger
Each cue may be triggered by it's own individual MIDI note, or by a MIDI note that notifies a specific list to GO.
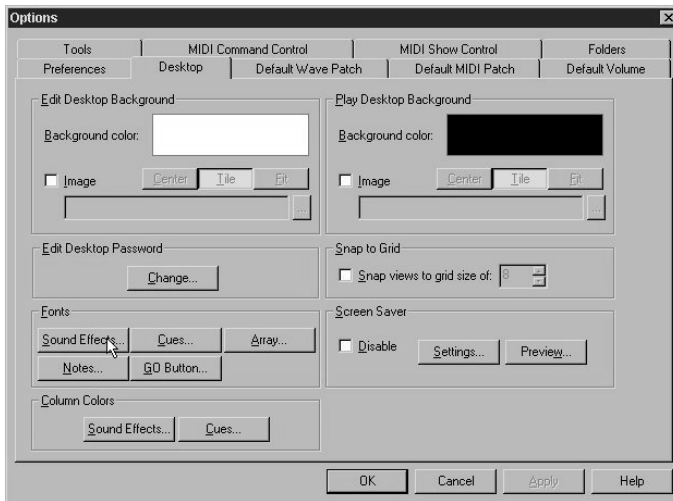
MIDI Show Control
A special MIDI command that notifies a list or cue to play.

Panic

To halt cues from playing, click on the PANIC button in the toolbar (see page 23).

Font and Size

You may change the font and size of the text in the Cues view:

1. Select from the main menu TOOLS | OPTIONS and an "Options" dialog box will appear.
2. Click on the DESKTOP tab.
3. In the section titled "Fonts" click on the CUES button and a "Font" dialog will appear.
4. Make a font selection.
5. Click OK in the "Fonts" dialog.
6. Click OK in the "Options" dialog.

Columns

The Cues View can display up to six columns of information:

Column	Description
State	A colored circle representing the current state of the cue (see below).
Q#	Cue Number
Status*	Time Elapsed, Time Remaining, or Percentage Completed
Type*	What type of effect.
Time Code*	The time code value the cue will be executed.
Description	The cue's description.
	*Columns with a * can be toggled on or off.*

To change which columns are displayed:
1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES. Notice the menu items titled: STATUS COLUMN, TYPE COLUMN and TIME CODE COLUMN. A check mark before the menu item indicates that that column is displayed.
3. To toggle the state of a column, click on its menu item.

The **State Column** displays a small colored circle to indicate its current state. The meanings of the colors are:

Color	Meaning
Yellow -	Cued
Green -	Playing
Red -	Paused
Blue -	Seeking
Black X -	Error

That **Status Column** displays the current execution status of the cue in either Time Remaining, Time Elapsed, or Percentage Completed.

To change how the Status Column displays time:
1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES | STATUS FORMAT and a popup menu will appear with the following three menu items: TIME REMAINING, TIME ELAPSED, and PERCENTAGE COMPLETED.
3. Choose one of the three menu items.
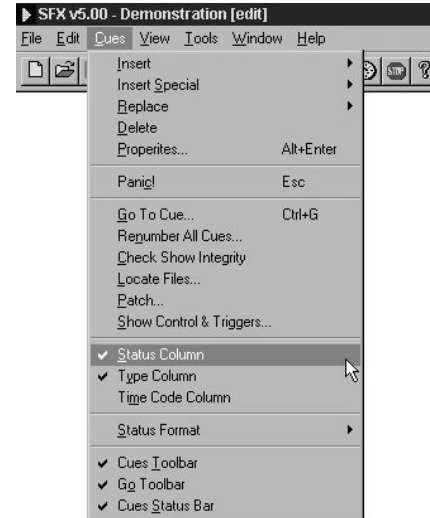
Loading Version 4.0 Files

To load a *SFX* Cues v4.0 file, follow the same method as loading a current version *SFX* file. When you save the automatically converted v4.0 file, *SFX* will save it as the **current** version. Note: some file types, such as the .CMD files, will not be imported into *SFX* v5. Volume changes and patches may not import, either, so you may have to do some restructuring of your cues files.

Integrity Check

An *integrity check* will examine the Cues file to make sure that all the cues listed there are still valid. The chief reason an integrity check will fail is if there are cues listed in the Cues view that are no longer on the hard drive, or have been moved to another area on the hard drive.

To do an integrity check:
1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES | CHECK EFFECT INTEGRITY.

You will be notified the results of the integrity check. If the integrity check does not pass, a message stating the problem will appear and the offending cues will have black X's placed before their Cue Numbers. You should then check the Properties of the cues that have not passed to determine the exact nature of failure.

Locating Files

If you've moved files on your hard drive and would like to automatically update them in your Cues view, you can have *SFX* automatically update your Cues file.

To locate missing files:
1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES | LOCATE FILES.

SFX will then examine each effect and its location on the hard disk.   If it encounters effects that it can not locate, it will prompt you to search for those files.

You have two options when locating files:
- Display all matches and prompt you to select the correct match for each effect, or
- Automatically select the first match found for each effect.

Sort

In a different manner then the Effects view, you can sort the cue in your Cues view. You can either sort the effects by Cue Number or by Time Code.

To sort the cues in the Cues view:
1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES | SORT and a popup menu will appear.
3. Select either CUE NUMBER or TIME CODE from the menu and the Cues view will be sorted.

If a cue does not have a cue number or a time code value when sorted by that field, that cue will be sorted along with the cue preceding it.

Renumbering Cues

As you add cues to the end of a Cue List, they are automatically numbered. You have a choice between numbering cues by Letter or by Number.

To renumber the entire list:
1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES | RENUMBER ALL CUES and a "Renumber Cues" dialog box will appear.
3. Select either "Letter" or "Number" and click OK. Your Cue List will then be completely renumbered.
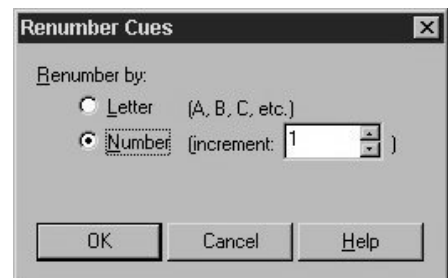
Clear All Time Code

In the Show Control version of SFX, the Clear All Time Code option is made available to you. By selecting this option, SFX will clear the Use Time Code flag in all of the cues in the currently active Cues view. The

time code values themselves are not erased, and you may reactivate a cue by selecting that cue and clicking on the Properties button.

Learn Time Code

In the Show Control version of SFX, the Learn Time Code option is made available to you. Selecting this option o automatically time stamp your cues as you play them manually. While this item is checked, and time code is playing, each time you GO on a cue, that cue will be automatically stamped with the current time code.

Patch

The patch for a Cues file affects the output of the cues in the corresponding Cues view, and does not affect the patch in any other Effects or Cues view.

To change the patch of a Cues view:
1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES | PATCH and a "Patch" dialog box will appear.
3. Click on the WAVE PATCH or MIDI PATCH tab.
4. Use the combo boxes to select output devices for all, some, or none of the "Groups".
5. If you want only one sound effect to play on a Group, punch-in the **PREEMPT** button by clicking on it. When a cue begins to play on a preempted Group that already has a cue playing, the currently playing cue will be halted so that the new cue can begin to play.
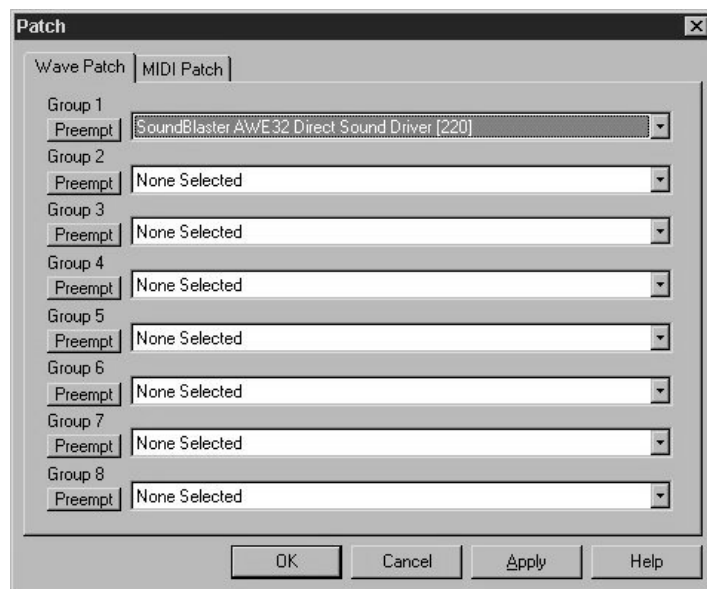
Changes made in this patch dialog will only affect the associated Cue List. To change the patch of other cue lists, you must make them active and repeat the above directions. Changes to this Patch will not affect the Default Patch, and, likewise, changes to the Default Patch do not affect the patch in already created cues lists.

To assign cues to output to these Groups:
1. Select the cue you want to assign to a group(s).
2. Click on the PROPERTIES button and the "Effect Property" dialog box will appear.
3. Select the MIXER tab.
4. Select the group or groups you wish to output to, and adjust the volume levels.
5. Click on OK.

Show Control & Triggers

The Standard edition and the Show Control edition include various show control features. You can have a cue list be triggered by external MIDI Show Control, external MIDI Commands, and Keyboard triggers.
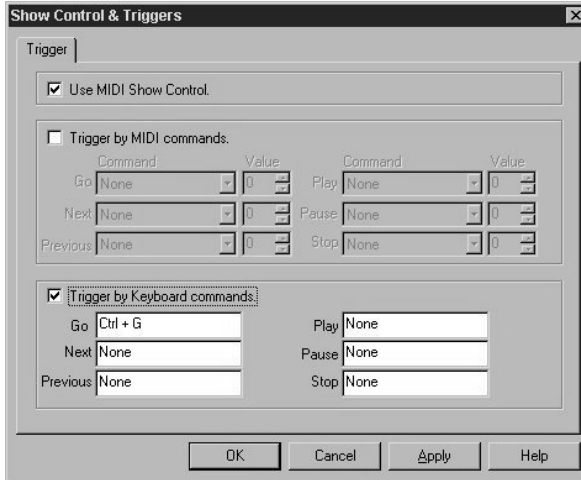
To change the MIDI Show Control settings, or the Keyboard and MIDI Command triggers for a Cue List:

1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES | SHOW CONTROL & TRIGGERS and a "Show Control & Triggers" dialog box will appear.

Settings in this dialog only affect the active Cue List, and if you have multiple Cue Lists, you must set their options separately.

Note: Before receiving MIDI Show Control and MIDI command messages, you must first tell *SFX* where these MIDI messages originate. See *MIDI Command Messages* page 77 and *MIDI Show Control* page 85.

When the "Enable MIDI Show Control" checkbox is checked, this Cue List will accept MSC messages.

The MIDI Command Triggers are MIDI notes from external sources that affect this Cue List as a whole.

The Keyboard Triggers work similarly to the MIDI Command Triggers.

Printing

To print a Cues file, make the Cues view active and select from the menu FILE | PRINT. You can further select which properties of the cues to print. To change which properties will appear on the printout, click on the OPTIONS button in the PRINT dialog.
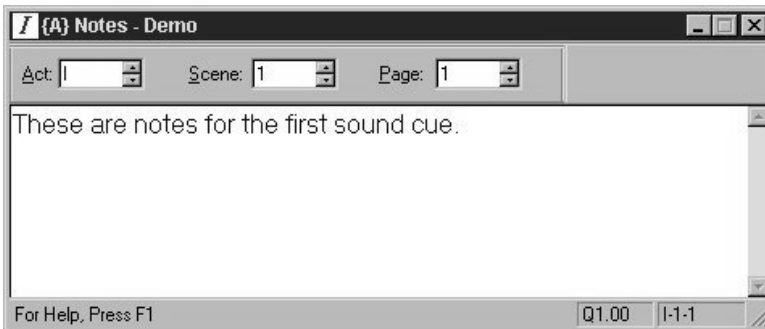
5   Working with Notes

Notes View

Entering Notes

Script Information Toolbar

Notes View

The Notes view is a window associated with Cues files. The Notes view contains an area where you may enter in text information about the currently selected cue. When you select a different cue, the Notes view will display the information for just that cue. Contained within the Notes view, is a dockable Script Information toolbar that you can fill in with the Act, Scene, and Page number for the selected cue. You do not have to have a Notes view, and you can close it by clicking on the Close button in the Notes view's caption bar. If you do not have a Notes view on your desktop, you can create one by making the Cues view active and selecting from the menu VIEW | NOTES. You may only have one Notes view per Cues file.
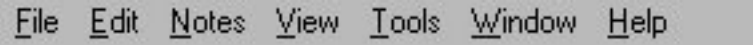
Entering Notes

To enter information about a cue into the Notes view, first select the cue in the Cues view, and then click on the text region in the Notes view. You may only change this information in the Edit Desktop. Information you type is automatically saved with the cue. You are limited to 10,000 characters per each cue. If you find that you are unable to edit this region, you may be in the Play Desktop (see page 27).

Script Information Toolbar

The Script Information toolbar is a dockable window containing places for you to list the Act, Scene, and Page number for the cue. This toolbar is not editable in the Play Desktop.

To toggle the Script Information Toolbar on and off, make the Notes view active and select from the menu NOTES | SCRIPT INFO TOOLBAR.

File   Edit   Notes   View   Tools   Window   Help
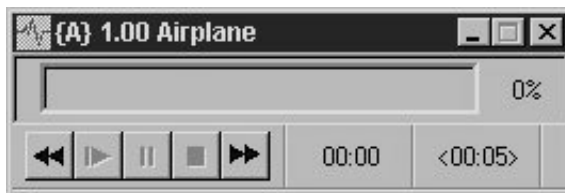
6   Working with Cue Status

Cue Status View

Adding a Cue Status View

Removing a Cue Status View

Button Toolbar

Status Displays

Cue Status View

The Cue Status view is associated with Cues files. You may have up to sixteen Cue Status views per Cues file. The Cues Status views display cue execution information and provide you with a way to Pause, Stop, or Seek an effect. As cues are cued and played, they will be assigned to an available Cue Status view (if any are available). When a cue completes, it will free its Cue Status view so that another cue may use it.

Adding a Cue Status View

To add another Cue Status view, make the Cues view active and select from the menu VIEW | CUE STATUS | NEW CUE STATUS.

Removing a Cue Status View

To remove a Cue Status view, make that view active and click on the Close button in the upper-right corner of the Cues Status's caption bar.

Button Toolbar

The Button toolbar is the small window contained in the Cue Status view with buttons to control playback of the assigned cue. The button functions are Seek Reverse, Resume, Pause, Stop, and Seek Forward.

Status Displays

The Cue Status views display three different time values: Percentage Completed (along with a progress bar), Time Elapsed, and Time Remaining.

7   Working with Array

Array View

Instant Play

Seek Buttons

GO Button

Auto Advance

Status

Integrity Check

Locating Files

Renumbering Cues

Patch

Show Control & Triggers

Printing

Array View

The Array view is very similar to the Cues view, but is an alternate way to display the Cue List. The Array view is available in the Standard and above editions of SFX.

To display the Array view:
1. Make the Cues view active by clicking on it.
2. Select from the menu VIEW | ARRAY or VIEW | BOTH to have the Cues view and the Array view both visible on your desktop.

Like other views, the Array view is movable and sizable.

The Array view is a tall window containing a list populated with buttons. Each button corresponds to a single cue, and to see other buttons, use the scroll bar to scroll up and down. To play a cue, select the button and click on the GO button at that bottom of the screen. The color schemes of the buttons match schemes used by the Cues view:

Color	Meaning
Yellow -	Cued
Green -	Playing
Red -	Paused
Blue -	Seeking
Black -	Error

The button with the thick border is the cue that is currently selected.

The Array view is synchronized with its corresponding Cues view, so changes made in one view are reflected in the other. There is a key difference when playing cues in an Array view though: **When playing a cue in the Array view, the selection will not drop down until the Cue has *completed*.** This is different than the Cues view, which selects the next cue immediately.

Instant Play

With Instant Play, you can setup Array to play a cue when its button is selected, instead of waiting until the GO button is clicked.

To enable Instant Play:
1. Make the Array view active by clicking on it.
2. Select from the menu ARRAY | INSTANT PLAY to toggle Instant Play on/off.

When Instant Play is enabled, the GO Button displayed at the bottom of the window, will change to a white box with the lettering, "Instant Play."
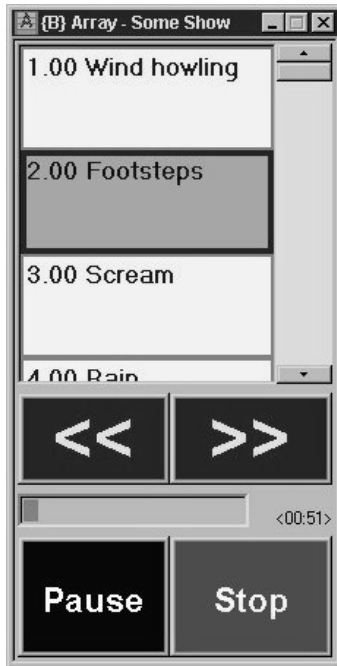
Cues that are played in this manner will not advance automatically to the next cue.

Seek Buttons

You have the option of displaying Seek Reverse and Seek Forward button in the Array view.

To enable the seek buttons:

1. Make the Array view active by clicking on it.
2. Select from the main menu ARRAY | SEEK BUTTONS.

When the Seek Buttons are enabled, they will be displayed above the GO Button (if the GO Button is enabled, see below) at the bottom of the view.

To Seek through a cue, select that cue and click and hold the appropriate seek button. You can change how quickly seeking occurs.

To change the seek rate:
1. From the main menu select TOOLS | OPTIONS and the "Options" dialog box will appear.
2. Select the PREFERENCES tab.
3. Adjust the "Seek Speed" slider.

GO Button

You have the option of displaying the GO button in the Array view.

To enable the GO Button:
1. Make the Array view active by clicking on it.
2. Select from the main menu ARRAY | GO BUTTON.

When the GO Button is active it will be displayed at the very bottom of the Array view.

Auto Advance

With Auto Advance, when a selected cue ends, Array will automatically select the following cue.

To toggle the Auto Advance feature:
1. Make the Array view active by clicking on it.
2. Select from the main menu ARRAY | AUTO ADVANCE.

When Auto Advance is on, a check mark will appear before the above menu item. NOTE: When Instant Play is enabled, Auto Advance will be ignored.

Status

Below the list of buttons is a progress bar indicating the completion percentage of the currently selected cue. To the right of the progress bar is a space filled with a number either indicating Completion Percentage, Time Elapsed, or Time Remaining.

To change how the Status displays time:
1.   Make the Array view active by clicking on it.
2.   Select from the main menu ARRAY | STATUS FORMAT and a popup menu will appear with the following three menu items: TIME REMAINING, TIME ELAPSED, and PERCENTAGE COMPLETED.
3.   Choose one of the three menu items.
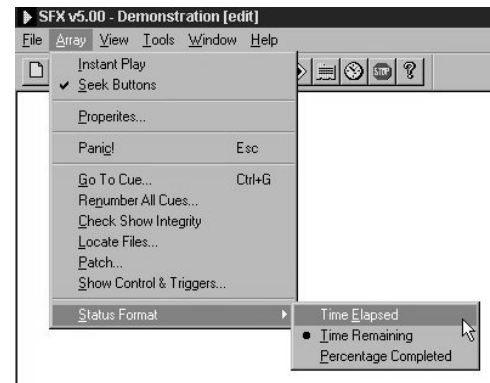
Integrity Check

See *Integrity Check* (page 46).

Locating Files

See *Locating Files* (page 37).

Patch

See *Patch* (page 48).

Show Control & Triggers

See *Show Control & Triggers* (page 48).

Printing

See *Printing* (page 49).

8   Options

Options

Preferences

Desktop

Default Wave Patch

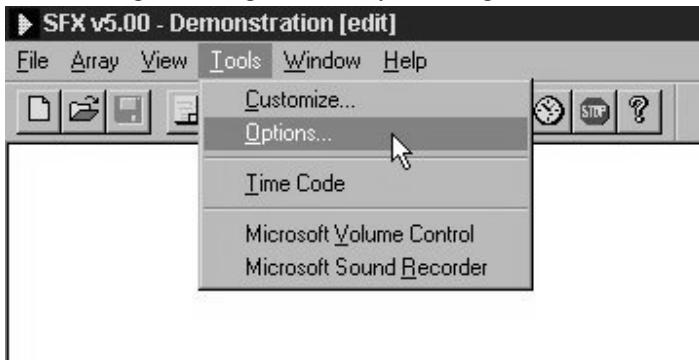Default MIDI Patch

Default Volume

Tools

MIDI Command Control

MIDI Show Control

Folders

Optimization

Options

The "Options" dialog box contains different settings that control how *SFX* operates. You can customize these settings to configure *SFX* to your liking. Some of the following tabs may not be available depending on the edition of SFX you own.

To activate the "Options" dialog box:

1. Select from the main menu TOOLS | OPTIONS and the "Options" dialog box will appear.
2. Select the appropriate tab for the settings you wish to change (see below).

Preferences

Perform Integrity Check on file open

If this item is checked *SFX* will perform an integrity check on Effects files and Cues file when they are opened. During the integrity check, *SFX* will confirm that each cue and/or effect is valid. *SFX* will make sure that sound effects files do indeed exist on the hard drive. If the integrity check fails, *SFX* will notify you and it will mark the failed cues with black 'x's.

Automatically backup files every n minutes

When this option is enabled, *SFX* will make routine recovery files of your active files and save them to the Autosave directory (See *Folders* page 65). If you lose power or have some other catastrophe, *SFX* will recover the files for you the next time you launch it.

Load last used workspace

If this option is enabled *SFX* will automatically open the last used workspace when you launch *SFX*.

Right mouse button is GO! for Cues view

You may designate the right mouse button as a GO button for the specified Cue List: the Cue List containing the {*letter*} in its caption bar.

Flash Notes caption when new notes appear

If checked, *SFX* will flash the Notes view when the text within that view changes which occurs when cues are selected. You can set the view to flash to alert the operator that important information has just been displayed, and that it requires his or her attention.

Seek Speed

How quickly seek forward and reverse happen.
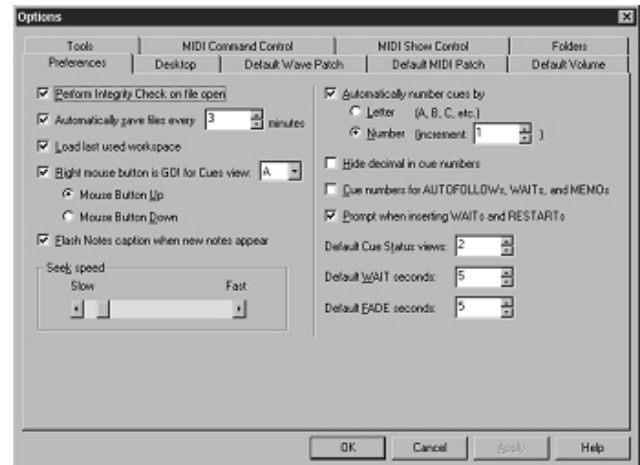
Automatically number cues by

When inserting cues into the Cues View, you can have *SFX* automatically provide those cues with cue numbers or letters. If this item is checked, cues added to the end of the list will have a number/letter provided for them, but cues inserted in-between existing cues will be ignored. If you specify to number by Number, you must also specify an increment value.

To renumber your cues you may either select an individual cue and change its Properties (See Properties page 44), or you may renumber the entire cue list (See *Renumbering Cues* page 47).

Hide decimal in cue numbers

If this option is checked, cue numbers will only be displayed with the letter or number to the left of the decimal point. For example, cue numbers will appear as 1, 2, A, etc. Without this option checked, the cue numbers will displayed as 1.00, 2.50, A.00, etc.

Cue numbers for Autofollows, Waits, and Memos

If this option is checked, Autofollows, Waits, and Memos, will display cue numbers. If not checked, the cue numbers for those cues will be blank.

Prompt when inserting Waits and Restarts

If this option is checked, *SFX* will display the Property dialog for Waits and Restarts when you insert them into the Cue List. Otherwise, *SFX* will add the cues using their default values.

Default Cue Status views

The number of Cue Status views to create when you New or Open a Cues file. You can set the default to be 0 through 16 views.
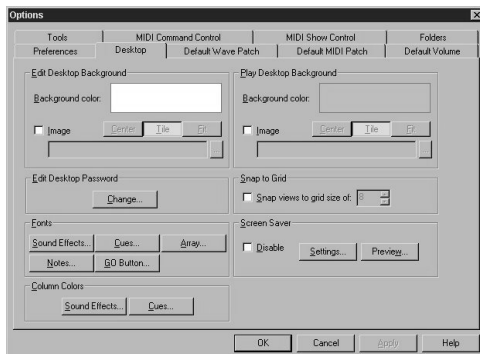
Default Wait seconds

The number of seconds to set the Delay Time of a Wait if the user does not specify one.

Default Fade seconds

The number of seconds to set the Delay Time of a Fade if the user does not specify one.

Desktop

Desktop Background

You can specify the background colors for the Edit and Play desktop. Making the backgrounds different colors will help you to easily identify which desktop you are in.

Background color

The button displays the current color for the corresponding desktop. To change the color, click on the button.

Image

Along with a colored background, you can also specify a Bitmap (*.bmp) image to display on the desktop. If you select an image, you can specify Center, Tile, or Fit for that image. *Center* will center the image vertically and horizontally on the desktop, *Tile* will place use

your image to cover the desktop as if it were laying floor tiles, and *Fit* will stretch your image to cover the entire desktop.

Edit Desktop Password

You can assign a password to the Edit Desktop so that nobody but persons knowing the password can make changes to the Cues files. To remove a password, enter the Old Password, leave the New Password blank, and click on OK.

Snap to Grid

You can setup an invisible grid on your desktop that will help you in aligning your views. When moving views on the desktop they will snap to the nearest grid intersection. You may want to use this option if you like your views precisely lined up.

Fonts

Each of the views (except the Cues Status view) has fonts that can be user defined. You may change the typeface as well as the size. This way you can select fonts and sizes that are more readable to you.

Screen Saver

If this option is checked, the Windows screen saver will not appear when *SFX* is running.

Column colors

The Effects view and the Cues view contain separate columns of information. You may change the color of the text in each of these separate columns.

Default Wave Patch
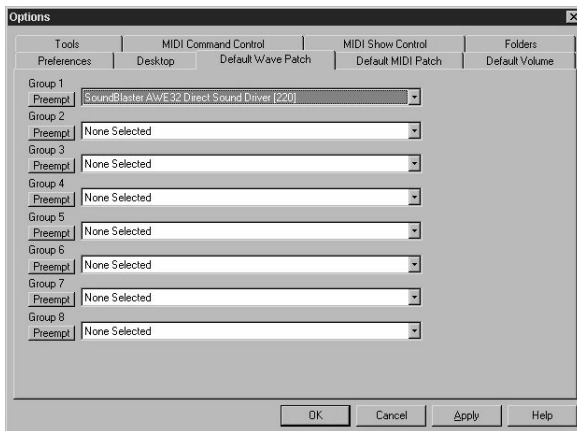
Group, Preempt, Device

Each Cues file and Effects file has its separate Patch. When a new Cues file or Effects file is created, *SFX* copies the Default Patch. Any changes to the Default Patch after a file has been created will not affect that file's patch. To make changes to a file's patch you must select that file's patch (See Patch page 38 and page 48). **The Default Patch is used only as a template for newly created Effects and Cues files.**

Default MIDI Patch

Group, Preempt, Device
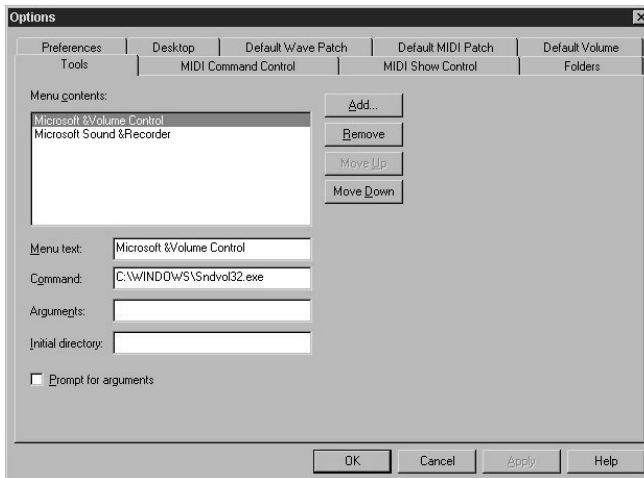
See *Default Wave Patch* above.

Default Volume

Group, *Assign , Gang, Slider*

The Default Volume is used a template for newly created Effects. When an effect is inserted into a Effects list, it's volume and Group assignments are copied from this page. **Changes to this page will not affect volumes and assignments of already created effects.**
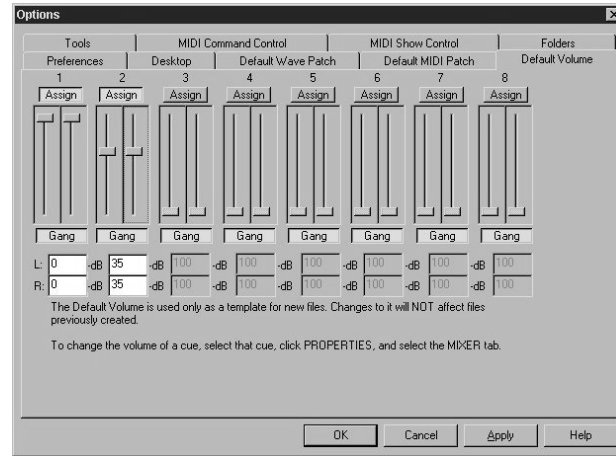
Tools

Tools are user-defined links to other applications that are listed in the main menu's TOOLS menu. When you click on a tool from the menu, *SFX* will launch that application for you.

Menu contents

The applications that will be displayed in the TOOLS menu. To modify the settings for a tool, click on the name of the tool. You may then change any of the below settings.

Add

Prompts you to Browse for the application you wish to add as a tool.

Remove

Deletes the currently selected tool in the Menu contents window.

Move Up

Swaps the currently selected tool with the tool above it.

Move Down

Swaps the currently selected tool with the tool below it.

Menu Text

The text that will be displayed in the menu. Use the ampersand character ("&") before another character to designate it as a quick-key choice. For instance, "&Wave Editor" will be displayed in the menu as "Wave Editor".

Command

The path and file name of the application to launch.

Arguments

This field is optional. Any values that you may add to the command line of the application such as file names, etc. go here.
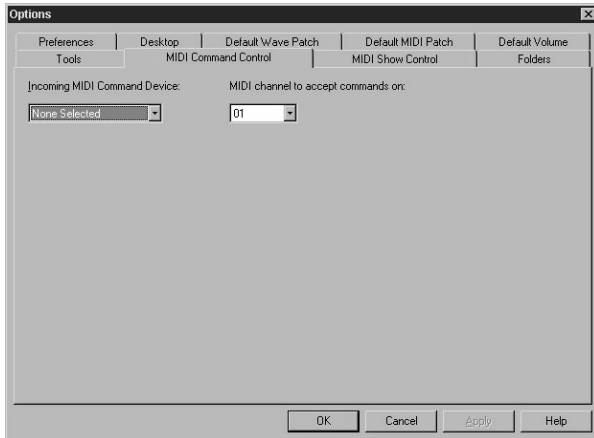
Initial Directory

This field is optional. The directory that the tool will launch from.

Prompt for arguments

If checked, *SFX* will prompt you for the Command Line arguments before it launches the corresponding tool.

MIDI Command Control

Incoming MIDI Command Device

The MIDI input device that will receive the MIDI note messages. The settings in this page will also affect MIDI capture settings for MIDI command effects.

MIDI channel to accept commands on

The channel *SFX* will respond to.

MIDI Show Control

Command Formats

SFX will monitor MSC messages direct at the following formats: 10h - Sound, 17h - Audio Effects Devices, and 7Fh - All Types. You may not change these formats.

Device IDs

You can assign *SFX* one or more Device IDs. Device ID 7Fh is always assigned.

Incoming Show Control
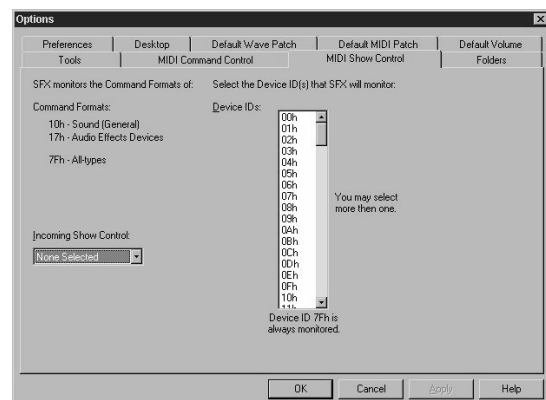
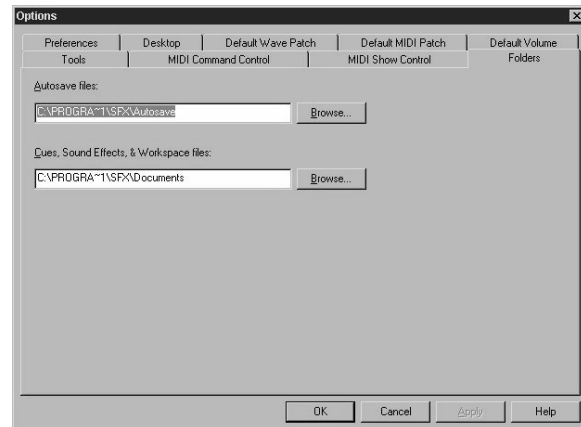The MIDI input device that will receive the MIDI Show Control messages.

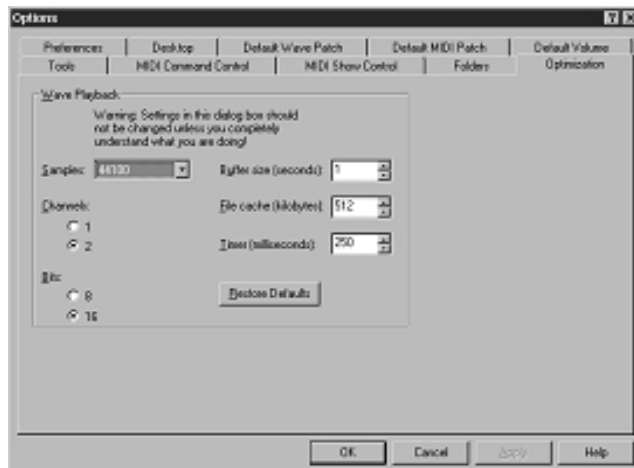# Folders

Autosave files

The folder where *SFX* will place the autosaved files.

Cues, Effects, & Workspace files

The folder where *SFX* will default to when saving or opening Cues, Effects, and Workspace files.

Optimization

Samples

The default sampling rate SFX will playback Wave files.

Channels

The default number of channels SFX will playback Wave files.

Bits

The default number of bits SFX will playback Wave files.

Buffer size (seconds)

The number of seconds SFX will allocate for audio playback buffers.

File cache (kilobytes)

The size of the file reading cache.

Timer (milliseconds)

The interval where SFX services it's audio playback buffers.

Restore Defaults

Restore these Optimization settings to the original default values.

Part III   Miscellaneous

9   Effect Types

Effect Types

Effect Properties

      Attributes

      Trigger

      Mixer

Wave

MIDI Sequence

MIDI Command

CD Track

MIDI Show Control (MSC)

Media Control Interface (MCI)

Autofollow

Wait

Fade

Stop

Trigger

Restart

Memo

PlugIns

Effect Types

The basic elements of SFX are its different effect types. An effect type is simply a cue that SFX can playback. Examples include Wave files, MIDI sequences, Autofollows, etc. For information about inserting effects see page 34, and for inserting cues see page 41. Described below in detail are the effect types included with SFX. Please note that your version of SFX may not contain all of the following effect types.

Please see the Stage Research Web site (http://www.StageResearch.com) for examples of how these effect types can be used.

Effect Properties

Each effect (cue) has properties that you can change, such as Cue Number or Description. Some properties are unique to a specific effect type (such as track number for a CD effect), while some are common to all cues (such as Cue Number).

To access a cue's properties:
1. Click on the cue you wish to the properties of in the Cues view.
2. Click on the PROPERTIES button and the "Effect Property" dialog box will be displayed.

The Effect Properties dialog box contains one or more tabs that you may select that will give you attributes to view or change. Below is a list of common tabs found in most if not all of the effect types:

Attributes

The Attributes tab is common with all effect types, and contains the description and the cue number for the cue. A default description is created for you if you do not explicitly specify one when the cue is created.

Trigger

The Trigger tab is available to most effect types where triggering of that cue would make sense. For instance, the Autofollow is not triggerable.

An individual cue can be triggered by MIDI Time Code, a MIDI Command, and/or through a keystroke.

For additional information about triggers, see the chapters dealing with Keyboard and MIDI triggers.
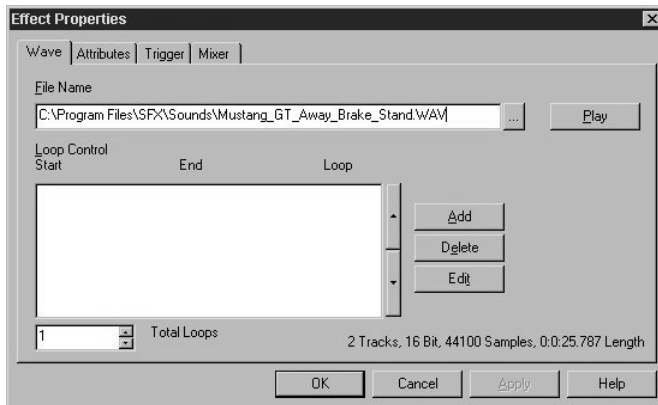
Mixer

The Mixer tab is only available to effect types that require sound or MIDI output (such as Waves, MIDI Sequences, MIDI Commands, etc.).

In the Mixer tab you can assign your cue to one or more Groups (see *Patch* page 48) and adjust the volume for each of those groups.

The Mixer for Wave effects is different then the MIDI effects.
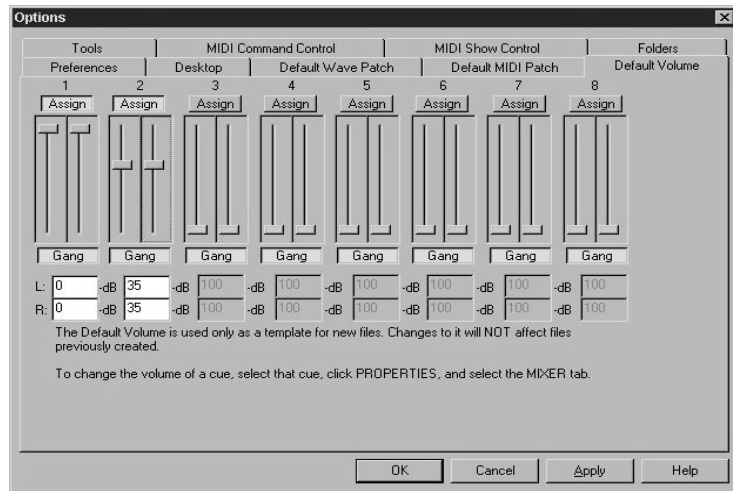
Wave

The Wave effect plays a Wave file (.wav). You supply the file name and the description of the Wave file when you create it. In the ProAudio version of SFX, you have the ability to loop sections of the wave file. Also, you may loop the entire sequence any number of times.

To loop an effect infinitely, specify "999" in the Total Loops edit box.

Use the Mixer tab (see above) to assign outputs for the effect.

MIDI Sequence

The MIDI Sequence effect plays .mid files, which are typically song files. Use the Mixer tab (see above) to assign the sequence to an output.   Typically, the output of a MIDI Sequence is the sound card's MIDI synthesizer.

MIDI Command

The MIDI Command effect type is generally used to transmit one or more individual MIDI notes to external MIDI gear. For instance, you may use MIDI commands to change scenes on a MIDI light console or a MIDI mixer.

In the MIDI Command Effect Properties dialog, you can "capture" the MIDI information from another external, MIDI device. The MIDI input port and channel are listed at the bottom of the Properties dialog box, and to change them, see Options:MIDI Command Control page 64.
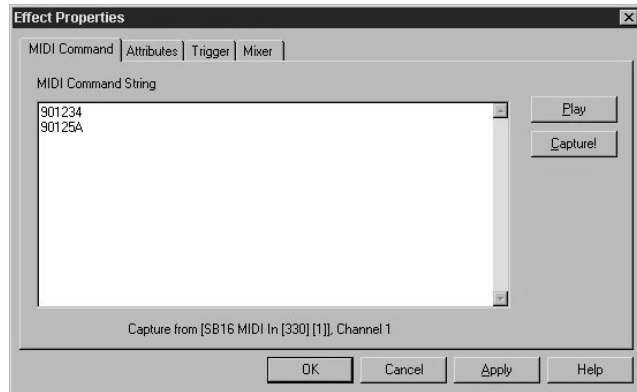
CD Track
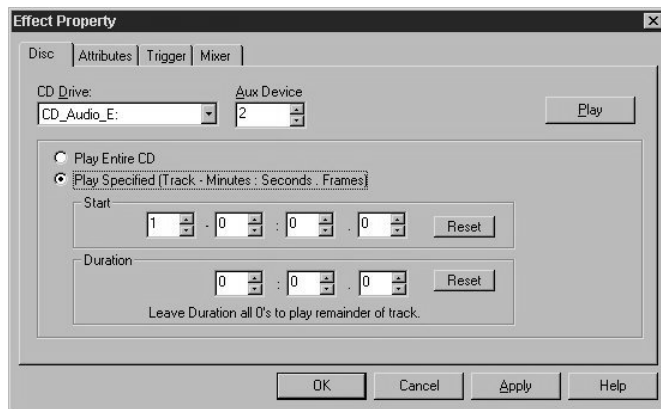
The CD Track effect gives you the ability to playback whole audio CDs, single tracks, or portions of tracks from an audio CD located in your CD-ROM drive.

If you have more than one CD-ROM drive, you can select the drive to play from in the "CD Drive" combo box. The "Aux Device" property deals with what auxiliary device your computer views your CD-ROM drive as. If you have problem hearing the audio of your CD, or have problems fading your CD Track cues, try changing the Aux Device number.

You can specify the track number to play, along with a beginning start time and/or an end time. If you leave the Duration time to all zeros, the cue will play from the start time to the end of track.

MIDI Show Control (MSC)

For detailed information about the MIDI Show Control effect type and how to use MSC, please see the entire chapter devoted to it on page 85.

Media Control Interface (MCI)

The MCI command effect takes specific information about the device to be controlled. Please see the manufacture's documentation for the MCI command format expected.

Autofollow

The Autofollow effect is a cue that links two cues together, so that when the previous cue finishes, the following cue is automatically executed. You would use an Autofollow cue if you wanted to link two or more cues together without having to hit multiple GOs.

Wait

The Wait effect is similar to the Autofollow effect, except for two important cases: a Wait is not contingent on the previous cue completing, and with a Wait, you must supply a time value. Also, a Wait cue begins automatically executing at the same time as the *previous* cue. Because of this, you can overlap the playing of cues. For example, in the following graphic, clicking GO on Q1 will put in action the Airplane cue **and** a Wait of 3 seconds, after which Q2 will be automatically executed.

Fade

The Fade effect modifies the volume of a targeted cue, and can adjust the volume in either a greater or lesser level giving you the ability to Fade up or down any sound effect cue (Wave, MIDI Sequence, or CD Track).

With a Fade, you must select the effect to Fade, input the seconds the Fade will occur over, and whether the Fade should occur as Linear or Logarithmic.

Use the Mixer tab (see above Mixer) to set the final volume level.
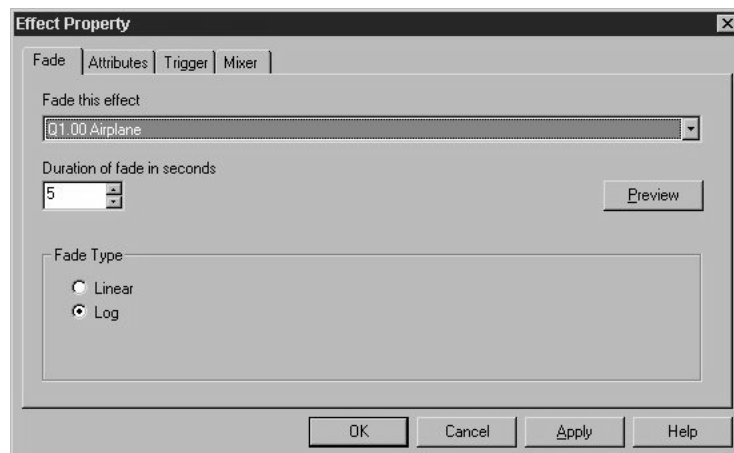
It is suggested that if you use a Fade to fade a cue out, and will not be bringing the volume back up, that you follow the Fade cue with an Autofollow and a Stop (see Stop below) to halt playing of the silent cue. This will save CPU resources!

Fading over multiple groups: If you want to Fade from one Group to another, the targeted effect must be playing on all channels that will be involved with the Fade. For example, if you want to Fade an effect from

Group 1 to Group 2, the original effect must by assigned to both Group 1 and Group 2, and the volume of Group 2 should be set to no volume (-100 dB).

Stop
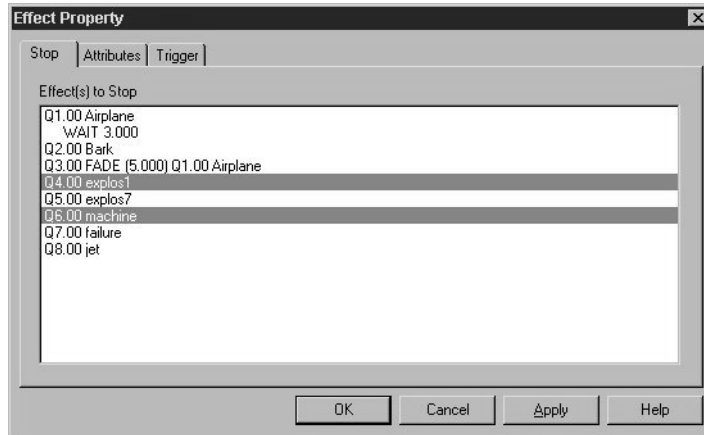
The Stop effect is used to halt playback of one *or more* targeted cues. Notice the graphic on the left, that two cues have been selected to be stopped.

Trigger

The Trigger effect is a multifaceted effect type that is composed of many different trigger commands. Trigger cues are used to activate other cues, cue lists, or the time code clock. The graphic at right displays the Properties dialog box for the Trigger effect.

The available Commands of a Trigger effect are: *Cue Effect, Play Effect, Pause Effect, Stop Effect, Go To Effect, Cue List, Go List, Pause List, Stop List, Panic List, Panic All, Set Clock, Start Clock, Stop Clock.*
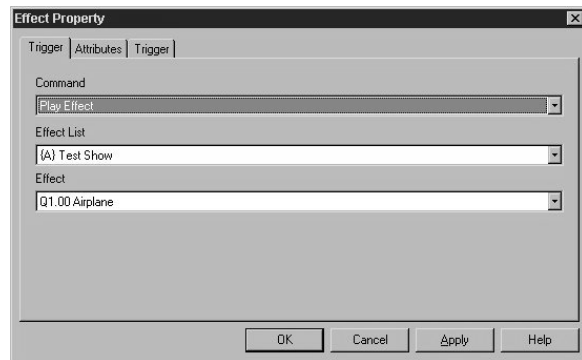
For example, You can use the Trigger effect to start playback of a cue in the current Cues view, or of another Cues view. You can also use it to send Go commands to another Cues view. Trigger cues can be used to manage the SFX's MIDI Time Code clock, too. The many different commands allow you to do varying things to any of your Cues views.

Restart

The Restart effect will Go To a selected cue and, after waiting a user defined number of seconds, execute it. You would mainly use a Restart cue in a Cue list that automatically plays over and over again.
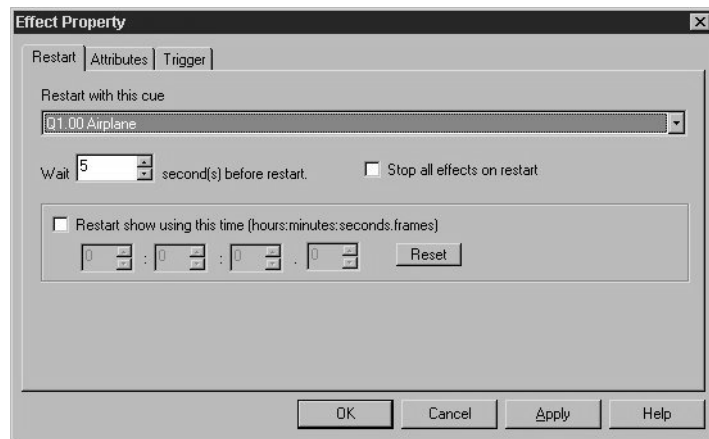
Memo

The Memo effect is nothing more than a one-line description that you can add to your Cue list. You may want to use Memo cues to provide visual breaks between cues, or to start off cue sequences with descriptive names. For example, you may precede a sequence with a Memo cue of " Thunderstorm" followed by a Wait 0.0, and then numerous other linked cues..

Plug-Ins

SFX supports future plug-in effects. Please see our Web page for available plug-ins.
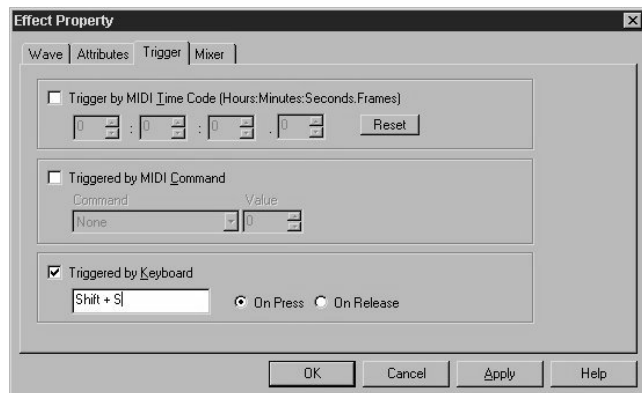
10   Keyboard Triggers

Keyboard Triggers

Keyboard Triggers

In the Standard and above editions of SFX, you can assign keystrokes in *SFX* that will trigger some of its functions such as GO, STOP, PANIC, etc, or you can assign keystroke combinations to play specific cues. Note: some key combinations are already assigned to menu function in *SFX*. You should avoid them when choosing your own key combinations.

To assign a keystroke to an individual cue:
1. Select the cue in the Cues view.
2. Click on the PROPERTIES button in the Cues view and a "Properties" dialog box will appear.
3. If the cue is a triggerable cue, select the TRIGGER tab.
4. Check the "Triggered by Keyboard" check box.
5. Click in the edit box.
6. Click any keystroke combination on the keyboard and you will see the keys you've pressed in the edit box.
7. Select "On Press" or "On Release." On Press will play the cue when you press the keys while On Release will wait until you've pressed and then released the keys.

To assign a keystroke to a cue list:

1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES | SHOW CONTROL & TRIGGERS and a "Show Control & Triggers" dialog box will appear.
3. Check the "Trigger by Keyboard commands" checkbox.
4. Click the edit box of the command you wish to add a keyboard trigger.
5. Type the trigger and you will see it appear in the box.
6. Repeat steps 4 and 5 for each command you wish to add keyboard triggers to.
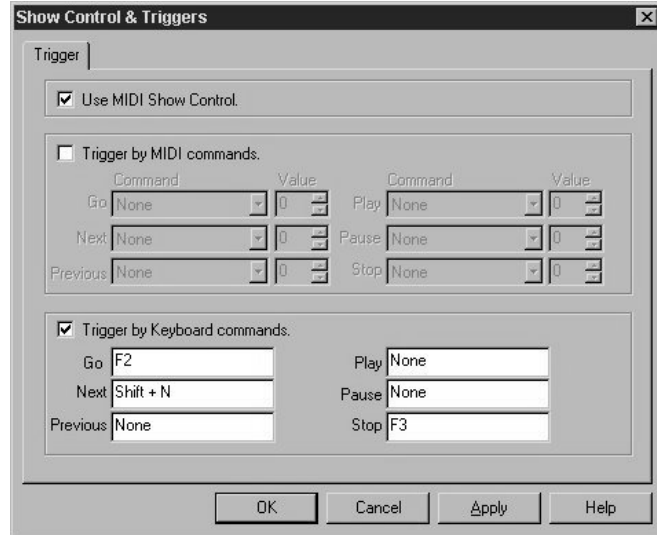
To temporarily disable triggers:
1. Select from the main menu VIEW | ENABLE TRIGGERS. When this option is checked, triggers are enabled.
-- or --
1. Click on the ENABLE TRIGGERS toolbar button.

11   MIDI Command Messages

MIDI Command Messages

MIDI Command Effects

Triggering *SFX* with MIDI

MIDI Command Message

In the Standard and above edition of *SFX*, you can send and receive MIDI command messages. MIDI command messages are really just MIDI notes such as Note On, Note Off, Control Change, etc.. Each MIDI note contains a number of data bytes that define the exact function of the MIDI note.
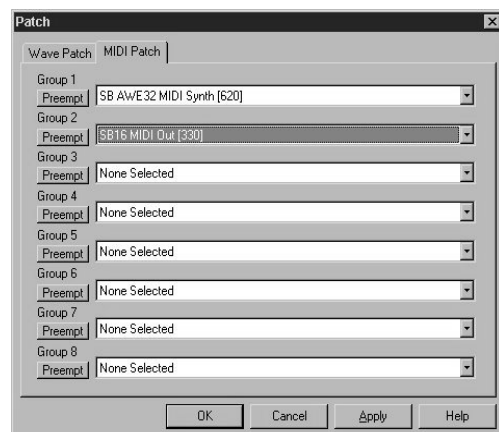
MIDI Command Effects

To create a MIDI command effect to send MIDI commands to external devices (use one of the two following methods):

1.   Click and hold on the MIDI Command effect in the Effect Tool Box and drag it into the Cues view. Release the mouse button over the cue you wish to insert before. An "Effect Property" dialog box will appear.
2.   Create the MIDI Command message in this dialog.
3.   Patch the effect. See below.

------------------------ **or** -----------------------------

1.   Make the Effects view active by clicking on it.
2.   Click on the INSERT button in the Effects view and a popup menu will appear.

3. Select the MIDI COMMAND menu item and an "Effect Property" dialog will appear.
4. In the "MIDI Command String" edit box, type in the hexadecimal MIDI commands, or click the CAPTURE button to record MIDI messages from the MIDI input devices assigned in the "MIDI Command Control" options box (see page 64).
5. Patch the effect. See below.

Before patching the effect to a Group, you must have a Group that is patched to a MIDI output device:

1. Make the Effects view (or the Cues view if the MIDI command is there) active by clicking on it.
2. Select from the main menu EFFECTS (or CUES) | PATCH and a "Patch" dialog box will appear..
3. Select the MIDI PATCH tab.
4. Assign one of the Groups a MIDI device that is outputting externally (i.e. don't select a MIDI synthesizer on the sound card).

Finally, to assign the effect to a Group:

See *Patch* page 38 to patch a Effects effect or page 48 to patch a Cues view cue.

Triggering *SFX* with MIDI

To receive MIDI messages from external devices to trigger *SFX* you first must select a MIDI input device and channel. If you have not assigned a MIDI input device and channel in *SFX*, please do the following:

**To select a MIDI input device and channel:**

1. Select from the main menu TOOLS | OPTIONS and the "Options" dialog box will appear.
2. Select the MIDI COMMAND CONTROL tab.
3. In the "Incoming MIDI Command Device" combo box, select the appropriate MIDI input device.
4. In the "MIDI channel…" combo box, select the channel that the MIDI commands will be received on.
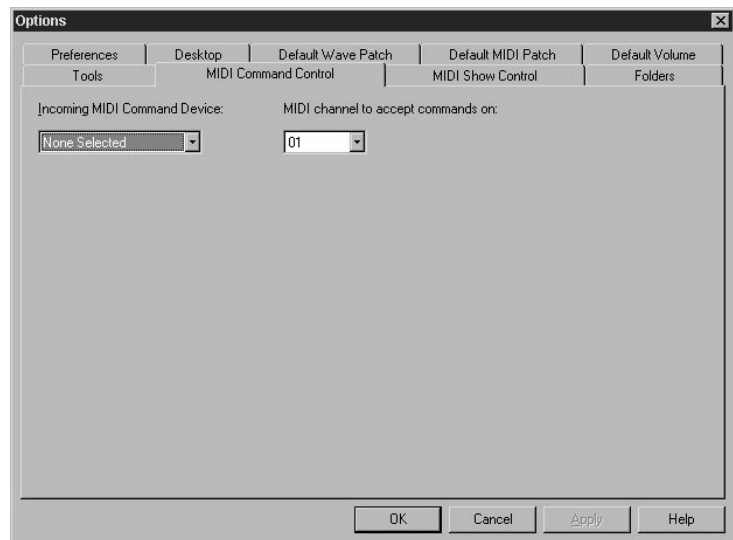
There are two ways you can have *SFX* triggered by MIDI commands. You can have the MIDI commands target the Cue Lists or you can have the MIDI commands target individual cues – or both.

To assign a MIDI command to an individual cue:

1. Select the cue in the Cues view.
2. Click on the PROPERTIES button in the Cues view and a "Properties" dialog box will appear.
3. If the cue is a triggerable cue, select the TRIGGER tab.
4. Check the "Triggered by MIDI Command" check box.
5. Select the MIDI note in the "Command' combo box and type in a value in the "Value" edit box.
6. Click on OK.
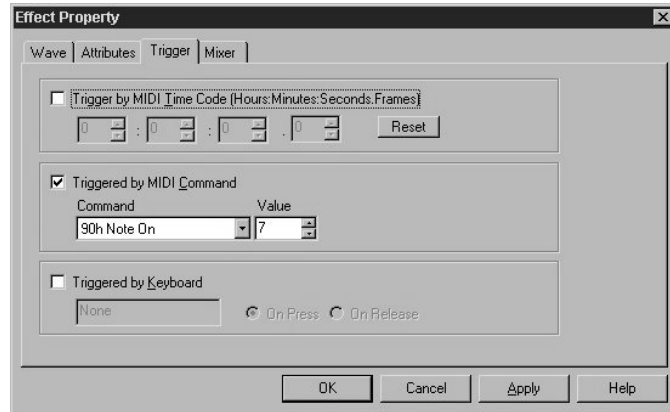
To assign MIDI commands to trigger a cue list:

1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES | SHOW CONTROL & TRIGGERS and a "Show Control & Triggers" dialog box will appear.
3. Check the "Trigger by MIDI commands" checkbox.
4. Select the MIDI note in the combo box of the command you wish to add a trigger. Also, type in a value.
5. Repeat step 4 for each command you wish to add keyboard triggers to.
6. Click OK.
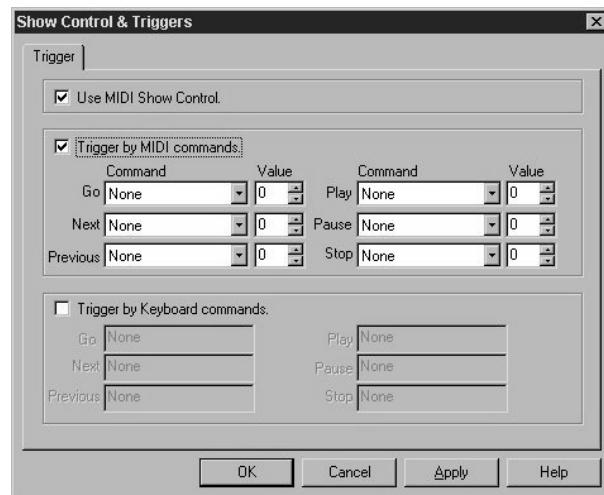
To temporarily disable triggers:

1. Select from the main menu VIEW | ENABLE TRIGGERS. When this option is checked, triggers are enabled.
   -- or --
1. Click on the ENABLE TRIGGERS toolbar button.

12   MIDI Time Code

MIDI Time Code

Format

Input

Output

Learn

Freeze

Set

MIDI Time Code

SFX Show Control version contains MIDI Time Code features. MIDI Time Code is a protocol that divides time between hours, minutes, seconds, and frames. Time code is commonly used to synchronize separate devices. *SFX* can generate or chase MIDI time code.


To access *SFX*'s MIDI Time Code:
   1.   Select from the main menu VIEW |
        TIME CODE and the Time Code
        toolbar will be displayed under the
        menu.

To display the Time Code values for each cue in the Cues view:

1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES to display the Cues view menu.
3. Click the TIME CODE COLUMN menu item to toggle it. If there is a check before the menu item, the Time Code column is already displayed.
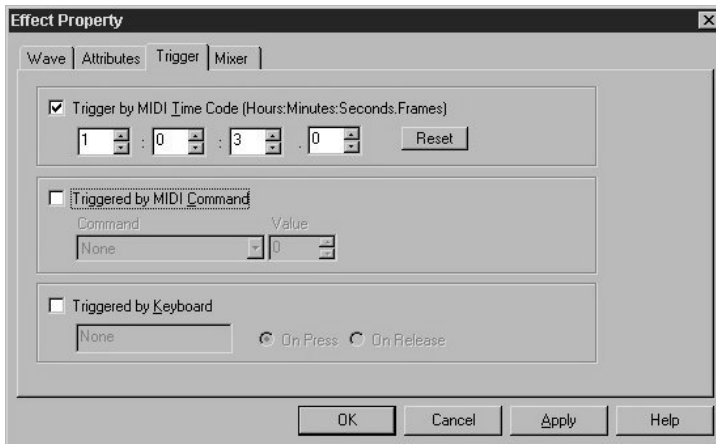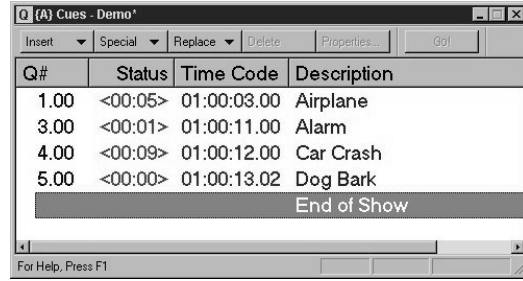
To assign a cue time code:

1. Use the LEARN button (described below).

-- or --

1. Select the cue in the Cues view.
2. Click on the PROPERTIES button and the "Effect Property" dialog box will appear.
3. If the effect is triggerable, click on the TRIGGER tab.
4. Check the "Trigger by MIDI Time Code…"

check box.

5. Assign time code values in the "Hours", "Minutes", "Seconds", and "Frames" edit boxes.
6. Click OK.

Format

Time code is generated in a number of different formats. The formats typically differ by the number of frames. *SFX* supports frame rates of 24 fps, 25 fps, 30 fps, 30-drop fps, and the computer clock. To change the format of the time code, drop-down the combo box in the time code dialog bar and select a time code format.

Input

To chase MIDI time code from an external source, click on the OUTPUT button and select the MIDI device from which the time code is to be received from.

Output

To output MIDI time code to an external source, click on the OUTPUT and select the MIDI device to send time code.

Freeze

While time code is running you can click on the freeze button to stop the display from changing. While in "freeze" time code is still running, but the display in the time code dialog bar is not changing. This is especially helpful if you are trying to determine the time code of an event while it is playing.

Learn

To automatically time stamp your cues as you play them manually, see page 48.

Set

To manually set the time code to a value, click on the SET button. A dialog box will prompt you to insert the time code value
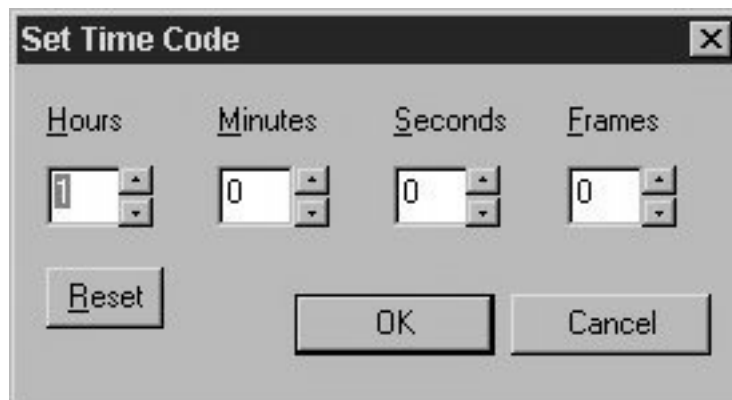
13   MIDI Show Control

MIDI Show Control

SFX as a Controller

Controlling *SFX*

Commands

MIDI Show Control

MIDI Show Control is included with the Show Control edition of SFX. MIDI Show Control (MSC) is an industry standardized MIDI messaging protocol used by various manufactures. MSC is used to interface various pieces of entertainment equipment and machinery together with the purpose of centrally controlling them.

SFX can serve both as a controlling device and a controlled device. A controlling device sends MSC messages to other devices, while a controlled device only receives messages. You can use *SFX* to control other MSC pieces of equipment, or you can have MSC capable gear control *SFX*.

SFX as a Controller

To create a MIDI Show Control effect to send MSC messages to external devices (follow one of these two methods):

1. Click and hold on the MSC effect in the Effect Tool Box and drag it into the Cues view. Release the mouse button over the cue you wish to insert before. An "Effect Property" dialog box will appear.
2. Create the MSC message in this dialog.
3. Patch the effect. See below.
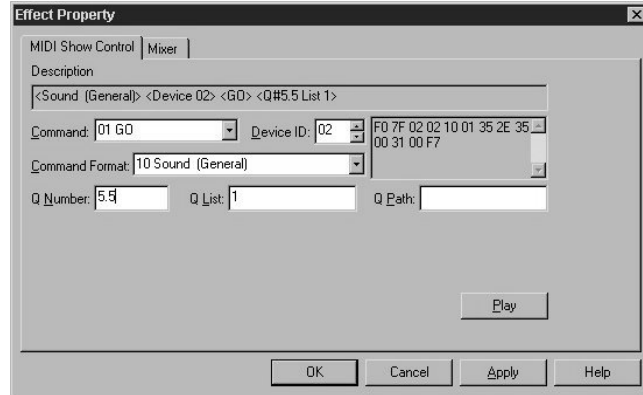
--------------------- **or** --------------------------

1. Make the Effects view active by clicking on it.
2. Click on the INSERT button in the Effects view and a popup menu will appear.
3. Select the MIDI SHOW CONTROL menu item and an "Effect Property" dialog will appear.
4. Create the MSC message in this dialog.
5. Patch the effect. See below.

Before patching the effect to a Group, you must have a Group that is patched to a MIDI output device:

1. Make the Effects view (or the Cues view if the MSC command is there) active by clicking on it.
2. Select from the main menu EFFECTS (or CUES) | PATCH and a "Patch" dialog box will appear..
3. Select the MIDI PATCH tab.
4. Assign one of the Groups a MIDI device that is outputting externally (i.e. don't select a MIDI synthesizer on the sound card).

Finally, to assign the effect or cue to a Group:

See *Patch* page 38 to patch a Effects effect or page 48 to patch a Cues view cue.

Controlling *SFX*

All MIDI Show Control devices fall into one or more "command" categories (e.g. Lighting, Sound, etc.) which are assigned a hexadecimal number between 00h and 7Fh. A MSC message is directed at one or all of these categories. *SFX* recognizes messages addressed to the command formats of **10h General Sound**, **17h Audio Effects Devices**, and **7Fh All Types**. These categories are hard-coded in *SFX* and can not be changed. Within these categories, each individual device is assigned a unique ID(s) number to further differentiate it from other devices.

In order for *SFX* to recognize MSC messages, you must assign *SFX* with a device ID or IDs. You can assign *SFX* with more than one device ID. You might do this if you want to send messages to a Group of devices. In addition, *SFX* will always recognize the ID of 7Fh (All Types).

To accept MSC message and assign device IDs:

1. Select from the main menu TOOLS | OPTIONS and the "Options" dialog will appear.
2. Select the MIDI SHOW CONTROL tab.

3. In the "Incoming Show Control" combo box, select the appropriate MIDI input device where the MSC commands will originate from.
4. Select one or more device IDs in the "Device IDs" list box.

Each cue list can be individually enabled to recognize MSC messages.

To enable a cue list to recognize MSC messages:
1. Make the Cues view active by clicking on it.
2. Select from the main menu CUES | SHOW CONTROL & TRIGGERS and the "Show Control & Triggers" dialog box will appear.
3. Check the "Use MIDI Show Control" checkbox.
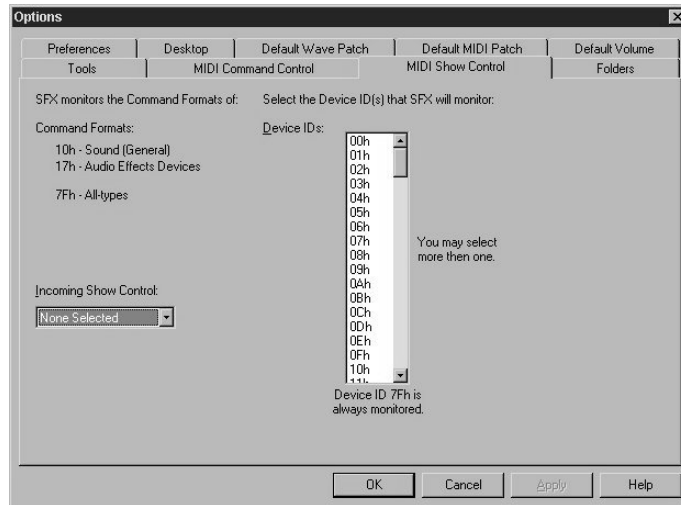
MSC messages are actually MIDI System Exclusive messages with the following format:

```
F0 7F <device_ID> 02 <command_format> <command> <data> F7
```

<device_ID> is a number specifying the intended receiver of the message. Device IDs range from 00h - 7Fh with 7Fh being the All Call ID and is representative of all devices.

<command_format> is a number specifying the type of equipment or machinery addressed. Command Formats range from 00h - 7Fh with 7Fh being All Types and addressing all command format. Many command formats are already specified by the MSC standard. For example, the command formats that address *SFX* are 10h General Sound, 17h Audio Effects Devices, and 7Fh All Types.

<command> is the action for the MSC message. Typical commands are GO, RESET, ALL_OFF, etc.

<data> is specific information that will vary with each command. Data can include time code numbers and cue numbers as well as other information. You must refer to each command to determine the exact format of the data.

Example:
```
F0 7F 09 02 01 01 34 33 2E 35 00 31 32 2E 31 00 35 F7
```

This MSC messages tells Lighting, Device ID #09h to GO on cue number 43.5 in list 12.1 path 5.

SFX provides you with a GUI when creating MSC commands (see above *SFX* as a Controller page 85).

Commands

SFX understands a subset of the entire MIDI Show Control 1.0 standard and the details of those commands are listed below.

The format for each command is:

```
[command] [hex value]
```

[data] - what the command expects. Some fields maybe optional and will be marked so. The format for the data can be:

> `<cue number>`- the number of a cue (e.g. 14.5)
> `<cue list>`   - the number of the Cue List where {A} is 1, {B} is 2, {C} is 3, and so on.
> `<time code>` - time code value
> All other fields will be ignored.

`[description]` - a description of the command and how it will react with the `<data>`.
[*example*] - shows you a example message with explanation

SFX understands the following MSC messages:

> GO
> STOP
> RESUME
> TIMED_GO
> LOAD
> ALL_OFF
> RESTORE
> RESET
> STANDBY_+
> STANDBY_-
> START_CLOCK
> STOP_CLOCK
> ZERO_CLOCK
> SET_CLOCK

SFX MSC Command List

GO (01h)

> `<cue number>` (optional)
> `<cue list>` (optional)

- If `<cue number>` and `<cue list>` are specified, *SFX* will play the cue in the `<cue list>` with the cue number of `<cue number>`.
- If `<cue list>` only is specified, *SFX* will play the next cue in that cue list.
- If `<cue number>` only is specified, *SFX* will play all cues, in all lists, with the cue number of `<cue number>`.
- If nothing is specified, *SFX* will play the next cue in {A} list and all cues in the other lists with the same cue number as the cue in {A}.

Examples:
> Audio Effects Devices, Device 02, GO Q#3.5 List 2:
> `F0 7F 02 02 17 01 33 2E 35 00 32 00 F7`
>
> All-types, Device 7F, GO (all cue lists using the next cue number in {A}):
> `F0 7F 7F 02 7F 01 00 00 F7`

STOP (02h)

<cue number> (optional)
<cue list> (optional)

- If <cue number> and <cue list> are specified, *SFX* will pause the cue in the <cue list> with the cue number of <cue number>.
- If <cue list> only is specified, *SFX* will pause all cues in <cue list>.
- If <cue number> only is specified, *SFX* will pause all cues, in all lists, with the cue number of <cue number>.
- If nothing is specified, *SFX* will pause all cues in all lists.

Example:

> Audio Effects Devices, Device 0E, STOP Q#3 (in all lists):
> F0 7F 0E 02 17 02 33 00 00 F7

RESUME (03h)

<cue number> (optional)
<cue list> (optional)

- If <cue number> and <cue list> are specified, *SFX* will resume playing the paused cue in the <cue list> with the cue number of <cue number>.
- If <cue list> only is specified, *SFX* will resume playing all paused cues in <cue list>.
- If <cue number> only is specified, *SFX* will resume all paused cues, in all lists, with the cue number of <cue number>.
- If nothing is specified, *SFX* will resume all paused cues in all lists.

Example:

> Sound (General), Device 05, RESUME, (all cues in) List 1:
> F0 7F 05 02 10 03 00 31 00 F7

TIMED_GO (04h)

<cue number> (optional)
<cue list> (optional)
<time code> (ignored)

See above GO (00). The <time code> is ignored.

Example:

> Audio Effects Devices, Device 0D, TIMED_GO Q#5 (in all lists):
> F0 7F 0D 02 17 04 00 00 00 00 00 35 00 00 F7

LOAD (05h)

<cue number>
<cue list> (optional)

- If <cue number> and <cue list> are specified, *SFX* will cue the cue in the <cue list> with the cue number of <cue number>.

- If <cue number> only is specified, *SFX* will cue all cues, in all lists, with the cue number of <cue number>.

Example:
> Sound (General), Device 08, LOAD Q#10.75, List 2:
> F0 7F 08 02 10 05 31 30 2E 37 35 00 32 00 F7

ALL_OFF (08h)

Pauses all cues in all lists.

Example:
> Audio Effects Devices, Device 02, ALL_OFF:
> F0 7F 02 02 17 08 F7

RESTORE (09h)

Resumes all paused cues in all lists.

Example:
> Audio Effects Devices, Device 4B, RESTORE:
> F0 7F 4B 02 17 09 F7

RESET (0Ah)

Halts playback of all cues in all lists and sets the current selection to the first cue in all lists.

Example:
> Audio Effects Devices, Device 60, RESET:
> F0 7F 60 02 17 0A F7

STANDBY_+ (11h)

<cue list> (optional)

- If <cue list> is specified, selects and cues the next cue in <cue list>.
- If nothing is specified, selects and cues the next cue in {A} cues it, and selects and cues in the other lists all cues with the same cue number as the cue in {A}.

Example:
> Sound (General), Device 06, STANDBY_+ (next cue in) List 1:
> F0 7F 06 02 10 11 31 F7

STANDBY_- (12h)

<cue list> (optional)

- If <cue list> is specified, selects and cues the previous cue in <cue list>.
- If nothing is specified, selects and cues the previous cue in {A} cues it, and selects and cues in the other lists all cues with the same cue number as the cue in {A}.

Example:
      Sound (General), Device 23, STANDBY_- (cues in all lists with the cue number of the next cue in the {A} cues list):
```
F0 7F 23 02 10 12 F7
```

START_CLOCK (15h)

<cue list> (optional) (ignored)

Starts MIDI Time Code.

Example:
      Audio Effects Devices, Device 65, START_CLOCK:
```
F0 7F 65 02 17 15 F7
```

STOP_CLOCK (16h)

<cue list> (optional) (ignored)

Halts MIDI Time Code.

Example:
      Sound (General), Device 7B, STOP_CLOCK:
```
F0 7F 7B 02 10 16 F7
```

ZERO_CLOCK (17h)

<cue list> (ignored)

Sets the MIDI Time Code clock to 00:00:00.00.

Example:
      Sound (General), Device 03, ZERO_CLOCK:
```
F0 7F 03 02 10 17 F7
```

SET_CLOCK (18h)

<cue list> (ignored)
<time code>

Sets the MIDI Time Code clock to <time code>.

Example:
      Audio Effects Devices, Device 51, SET_CLOCK to 01:00:00.00.00:
```
F0 7F 51 02 17 18 01 00 00 00 00 F7
```

14   Command Interface

Command Interface

Commands

Command Interface

The Command Interface is a special tool that gives you an alternate method of controlling SFX. With the Command Interface dialog box, you can type in SFX commands, such as GO or SET DESCRIPTION "Door Slam". You can also change volumes, cue numbers, select cues, etc..

To enable the Command Interface:
1.   Select from the main menu, Tools | Command Interface, and the Command Interface dialog box will appear.
2.   Move and size the Command Interface anywhere on your desktop.

Commands

Commands are not case sensitive. Each command can have zero or more parameters following it.

       `<cue number>`- the number of a cue preceded by the letter Q(e.g. Q14.5).
       `<cue list>`   - the letter of the Cue List where {A} is A, {B} is B, {C} is C, and so on.
       <title>   - the title of the Cue/Effect list as displayed in the caption bar (e.g. "My Cues").
       WORKSPACE - a word in all capitals with no brackets is literal.

Parameters shown in square brackets [] are optional.

SFX Command Interface commands fall into a three categories:

1. **Administrative Commands** - commands that handle opening and closing files and workspaces as well as other environment tasks.
2. **Control Commands** - commands that handle selecting, playing, and other manipulation of cues.
3. **Property Commands** - commands that change the properties of cues such as cue number, description, and volume.

Administrative Commands

The Administrative Commands are:

> CLOSE
> COLUMN
> EXIT
> HELP
> LEARN
> LIST
> NEW
> OPEN
> OPTIONS
> PRINT
> QUIT
> SAVE
> SAVEALL
> SAVEAS
> SWITCH
> TIMECODE

CLOSE

Parameters:
[WORKSPACE or <cue list> or <title> or <>]

Closes a workspace or Effects/Cues file.
- If WORKSPACE is specified, the workspace will be closed
- <cue list> or <title> will close the matching file
- If nothing is specified, the active file will be closed.

Examples:
> CLOSE
> CLOSE WORKSPACE
> CLOSE A
> CLOSE "My Cues"

COLUMN

Parameters:
TIMECODE or TYPE or STATUS [ELAPSE or PERCENT or REMAIN]

[ON | OFF]
[<cue list>]

Displays or hides a column (TIMECODE, TYPE, or STATUS) in a Cues view.
- If TIMECODE or TYPE or STATUS only is specified, that column will be toggled shown or hidden.
- If ON or OFF is specified, the column will be shown for ON and hidden for OFF.
- With STATUS you can also then specify the format: ELAPSE or PERCENT or REMAIN which will change the STATUS column to that format.
- If you do not include a <cue list>, SFX will assume the active Cues view.

Examples:

To show the Time Code column:	COLUMN TIMECODE ON
To toggle the Status column:	COLUMN STATUS
To display Time Remaining in the Status column:	COLUMN STATUS REMAIN
To toggle Time Code column in the {B} Cues view:	COLUMN TIMECODE B

EXIT

Exits SFX.

HELP

Launches SFX Help.

LEARN

Parameters:
 [<cue list>]

Toggles the Learn Time Code feature (see page 48) of the specified cue list.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
> LEARN
> LEARN B

LIST

Parameters:
<cue list> or <title>

Makes the specified Effects/Cues view active.

Examples:
> LIST "My Cues"
> LIST B

NEW

Parameters:
[CUES or EFFECTS or WORKSPACE or <>]

Creates a new Cues file, or Effects file, or Workspace.

♦ If nothing is specified, SFX will prompt you to create a new Cues or Effects file.

Examples:
     NEW
     NEW EFFECTS

OPEN

Parameters:
[WORKSPACE] [<filename>]

Opens a Workspace or Cues/Effects file.
♦ If nothing is specified, SFX will prompt you to open a Cues/Effects file.
♦ If WORKSPACE only is specified, SFX will prompt you to open a workspace.
♦ If WORKSPACE and <filename> is specified, SFX will open the workspace with the file of <filename>.

Examples:
     OPEN
     OPEN WORKSPACE
     OPEN "My Cues"
     OPEN WORKSPACE "Main Show"

OPTIONS

Displays the Options dialog box.

PRINT

Parameters:
<cue list> or <title> or <>

Prints the Cues or Effects file.

Examples:
     PRINT
     PRINT "My Cues"
     PRINT C

QUIT

Exits SFX. (Same as EXIT).

SAVE

Parameters:
[WORKSPACE or <cue list> or <title> or <>]

Saves a workspace or Effects/Cues file.
• If WORKSPACE is specified, the workspace will be saved.
• <cue list> or <title> will save the matching file

- If nothing is specified, the active file will be save.

Examples:
> SAVE
> SAVE WORKSPACE
> SAVE C
> SAVE "My Cues"

SAVEALL

Saves all Cues and Effects files.

SAVEAS

Parameters:
[WORKSPACE or <cue list> or <title> or <>]

Saves a workspace or Effects/Cues file as a different name. Prompts you for the name to save the file as.
- If WORKSPACE is specified, the workspace will be saved.
- <cue list> or <title> will save the matching file
- If nothing is specified, the active file will be save.

Examples:
> SAVEAS
> SAVEAS WORKSPACE
> SAVEAS A
> SAVEAS "My Cues"

SWITCH

Parameters:
[EDIT or PLAY]

Switches the desktop.
- If nothing is specified, the desktop will be switched to the other desktop.

Examples:
> SWITCH
> SWITCH EDIT
> SWITCH PLAY

TIMECODE

Parameters:
[<timecode> or <timecode format> or PLAY or STOP or RESET or ON or OFF or SLAVE ON or SLAVE OFF INPUT # or OUTPUT #]

Manipulates the SFX MIDI Time Code tool bar (see page 81).
- If nothing is specified the SFX Time Code tool bar will be toggled shown or hidden.
- <timecode> is in the form of hr:mn:sc.fm (e.g.) 1:00:00.00 or in the form of a relative value: +2:01:02.00
- <timecode format> can be 24, 25, 30, 30D, or CLOCK
- SLAVE ON/OFF toggles the Slave To Time check box located in the Options dialog box

- INPUT # is the number of the MIDI entry to select from the Input list
- OUTPUT # is the number of the MIDI entry to select from the Output list

Examples:
To show the Time Code tool bar:	TIMECODE ON
To set a time code value:	TIMECODE 1:58:00.00
To set the time code format to EBU25:	TIMECODE 25
To start the time code clock:	TIMECODE PLAY

Control Commands

The Control Commands are:

> COPY
> DELETE
> GO
> GOTO
> NEXT
> PANIC
> PAUSE
> PLAY
> PREVIOUS
> PROPERTIES
> STOP
> TRIGGER

COPY

Parameters:
<cue#> TO <cue#> [<cue list>]

Copies one cue to another location.
- <cue#> in the form of a letter or number with a preceding "Q" (e.g. Q5.5).
- The cue will be copied to the location where the destination <cue#> would be. For instance, copying a cue to Q4.5 would place it after Q4.0.
- If no <cue list> is specified, the active Cues view is used.

Examples:
> COPY Q1 TO Q5.4
> COPY QA to QC.5 B

DELETE

Parameters:
[<cue#>] [<cue list>]

Deletes the cue specified.
- If no <cue#> is specified, the selected cue is deleted.
- If no <cue list> is specified, the active Cues view is used.

Examples:
  DELETE
  DELETE Q4.5
  DELETE Q4.5 C

GO

Parameters:
[<cue#>] [<cue list>]

Sends a GO to the specified cue.
- If a <cue#> is specified, the <cue#> is selected and then sent a GO command.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
  GO
  GO Q5.75
  GO Q4.5 A

GOTO

Parameters:
[<cue#>] [<cue list>]

Select the specified cue.
- If no <cue#> is specified, the first cue is selected.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
  GOTO Q10.3
  GOTO Q5.75 C

NEXT

Parameters:
 [<cue list>]

Select the next cue in the specified cue list.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
  NEXT
  NEXT D

PANIC

Parameters:
 [<cue list>]

Panics the specified cue list.
- If no <cue list> is specified all lists are sent a panic.

Examples:

PANIC
PANIC D

PAUSE

Parameters:
[<cue#>] [<cue list>]

Pauses the specified playing cue.
- If no <cue#> is specified, the current cue is paused.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
PAUSE
PAUSE Q6.0
PAUSE Q7.5 E

PLAY

Parameters:
[<cue#>] [<cue list>]

Plays the specified playing cue. Will also resume a paused cue.
- If no <cue#> is specified, the current cue is played.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
PLAY
PLAY Q6.0
PLAY Q7.5 E

PREVIOUS

Parameters:
 [<cue list>]

Select the previous cue in the specified cue list.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
PREVIOUS
PREVIOUS A

PROPERTIES

Parameters:
[WORKSPACE] or [<cue#>] [<cue list>]

Displays the properties of the workspace or the specified cue.
- If WORKSPACE is specified, the properties of the workspace will be displayed.
- If nothing is specified, the properties of the selected effect in the active view will be displayed.

Examples:
PROPERTIES

PROPERTIES WORKSPACE
PROPERTIES Q4.5

STOP

Parameters:
[<cue#>] [<cue list>]

Stops the specified playing cue.
- If no <cue#> is specified, the current cue is stopped.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
STOP
STOP Q6.0
STOP Q7.5 E

TRIGGER

Parameters:
{<trigger> [<cue list>]) or ON or OFF

If the parameters are ON or OFF, the MIDI/Keyboard Triggers will be enabled or disabled, respectively. See Keyboard Triggers on page 75 and MIDI Triggers on page 78.

If the parameters are <trigger>, assigns a GO trigger to the specified cue list.
- <trigger> is in the form of a key such as [Ctrl+][Alt+][Shift+](<ASCII>|F1-F12|<controlkey>) or a MIDI Note in the form of <hex>,<hex>[,<hex>]. For example, CTRL+T, SHIFT+F7, or 90,45,125.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
TRIGGER F5 A
TRIGGER ON
TRIGGER OFF

Property Commands

The Property Commands are:

SET ASSIGN
SET CUE#
SET DESCRIPTION
SET TIME
SET TIMECODE
SET TRIGGER
SET UNASSIGN
SET VOLUME

SET ASSIGN

Parameters:

<group>
[<cue#>] [<cue list>]

Assigns the specified cue to a group or groups.
- <group> is in the form of one or more digits separated by commas (e.g. 1 or 2,3,4).
- If no <cue#> is specified, the current cue is assumed.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
>   SET ASSIGN 3
>   SET ASSIGN 3,6,9
>   SET ASSIGN 4,5 Q5.5

SET CUE#

Parameters:
<cue#>
[<cue#>] [<cue list>]

Sets the specified cue to the cue number.
- The <cue#> is in the form of a letter or number preceded by the letter Q (e.g. Q5.4).
- If no <cue#> is specified, the current cue is assumed.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
>   SET CUE# Q6.9
>   SET CUE# Q7 Q8.5 A

SET DESCRIPTION

Parameters:
<description>
[<cue#>] [<cue list>]

Sets the specified cue to the description.
- The description is the text found between to double quotes (e.g. "Door Slam").
- If no <cue#> is specified, the current cue is assumed.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
>   SET DESCRIPTION "Glass Breaking"
>   SET DESCRIPTION "Preshow Music" Q25

SET TIME

Parameters:
<time>
[<cue#>] [<cue list>]

Sets the specified cue's delay or wait time to <time>. This is only valid for cues that have time values such as Waits and Fades.
- The <time> can be absolute or relative (e.g. 4.5 or +1 or -0.5).
- If no <cue#> is specified, the current cue is assumed.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
>   SET TIME 4.5
>   SET TIME -2 Q5 A
>   SET TIME +1.5 B

SET TIMECODE

Parameters:
<timecode>
[<cue#>] [<cue list>]

Sets the specified cue to the timecode.
- The <timecode> can be absolute or relative (e.g. 3:40:23.12 or +0:0:20.0).
- If no <cue#> is specified, the current cue is assumed.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
>   SET TIMECODE 1:01:02.03
>   SET TIMECODE -0:30:0.0 Q22.4

SET TRIGGER

Parameters:
<trigger>
[<cue#>] [<cue list>]

Sets the specified cue's trigger to <trigger>.
- <trigger> is in the form of a key such as [Ctrl+][Alt+][Shift+](<ASCII>|F1-F12|<controlkey>) or a MIDI Note in the form of <hex>,<hex>[,<hex>]. For example, CTRL+T, SHIFT+F7, or 90,45,125.
- If no <cue#> is specified, the current cue is assumed.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
>   SET TRIGGER F9
>   SET TRIGGER 81,45 Q18 A

SET UNASSIGN

Parameters:
<group>
[<cue#>] [<cue list>]

Unassigns the group(s) from the specified cue.
- <group> is in the form of one or more digits separated by commas (e.g. 1 or 2,3,4).
- If no <cue#> is specified, the current cue is assumed.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:
>   SET UNASSIGN 3
>   SET UNASSIGN 3,6,9
>   SET UNASSIGN 4,5 Q5.5

SET VOLUME

Parameters:
<volume>
[<cue#>] [<cue list>]

Set the volume of the specified cue.
- <volume> is in the form of a group=volume[group=volume] and can be absolute or relative (see below examples).
- If no <cue#> is specified, the current cue is assumed.
- If no <cue list> is specified, the active Cues view is assumed.

Examples:

SET VOLUME 3=30	Sets Group 3's volume to -30 dB for both channels
SET VOLUME 0	Sets Group 1's volume to -0 dB for both channels (full volume).
SET VOLUME 2=15,20,6=25	Sets Group 2's volume to -15 dB, Group 3's volume to -20 dB, and Group 6's volume to -25 db. If you do not specify the group number, SFX will assume its the next group.
SET VOLUME 10:0	Sets Group 1's volume to -10 dB left channel and -0 dB right channel.
SET VOLUME 4=+10:+5	Raises Group 4's volume by 10 dB on the left channel and 5 dB on the right channel.

15   Command Line Parameters

Command Line Parameters

Command Line Parameters

Command line parameters are information passed to *SFX* when it is launched. You can specify, on the command line, which workspace *SFX* should load, and which cues list it should immediately start executing. To access the command line, right click on the *SFX* icon and select PROPERTIES and then click on the SHORTCUT tab. You should append the command line arguments here.
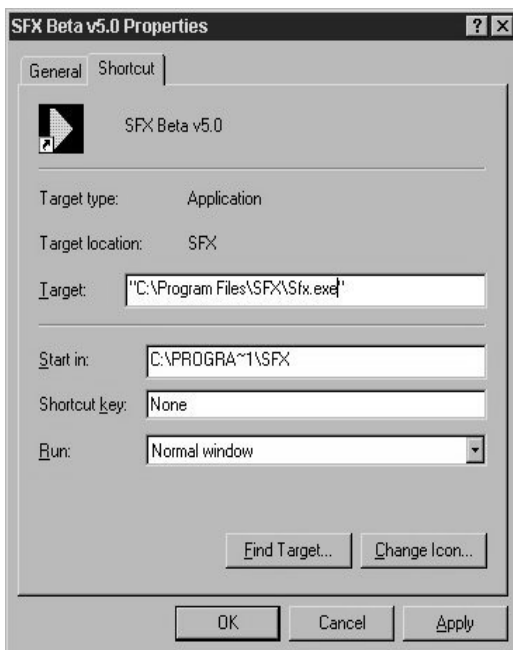

```
[[-e] [<WorkspacePath>] [-g<CuesTitle>]* [-
h<hrs>] [-m<min>] [-s<sec>] [-f<frms>] [-
play] [- <25|24|30|30d|clock>]
```

-e :: editor mode (see below)

WorkspacePath :: full path name of workspace to load

-g<CuesTitle> :: send GO to cues window with title of <CuesTitle>

-h<hrs> :: number of hours to initially set time code to

-m<min> :: number of minutes to initially set time code to

-s<sec> :: number of seconds to initially set time code to

-f<frms> :: number of frames to initially set time code to

-play :: start playing time code

-t<format> :: time code format = 24 | 25 | 30 | 30d | clock

Editor Mode

Editor Mode allows you to run SFX without a hardware key, but you will not hear any output. Editor Mode is useful when you want to do offline editing of your Cues and Effects files. For instance, you may want to use the Editor Mode when you are modifying a show on a computer other than the playback computer. In this mode, SFX is not concerned with the location of your sound files. If a sound file is not found, SFX will "fake" playing it. This is helpful when you are modifying a show on a different computer that does not contain any of the sound files of the playback system.

If you run Editor Mode with a hardware key installed, all output will be routed through the first sound card.

Examples

SFX.exe "c:\Program Files*SFX*\Documents\Alpha"
        - launches *SFX* and loads the Alpha.worksfx workspace

SFX.exe "c:\Program Files*SFX*\Documents\Beta" -gBackground -g"Main Show"
        - launches *SFX*, loads Beta workspace and sends a GO command to both the Cues
        files Background.sfx and Main Show.sfx

SFX.exe "C:\Program Files*SFX*\Documents\Gamma" -h1 -m15 -t30d -play
        -launches *SFX*, loads the workspace Gamma, sets time code to 01:15:00:00, 30 Drop,
        and begins running time code

16   Troubleshooting

Troubleshooting

Troubleshooting

This chapter contains information on how to solve various problems you may encounter. If you do not find an answer here, see *Product Support* page 12.

SFX does not recognize hardware key. -- or - SFX reads "SFX Demo v5.x - " in the top caption bar instead of "SFX V5.x - ".
SFX will not launch. Missing dsound.dll, urlmon.dll, or other component.
SFX has "Demonstration" in the top caption bar.
Putting CD in drive causes it to automatically play.
CD does not Fade or Play.
Black 'x' in front of cue.
Cue is not audible.
CD cue is not audible.
Views will not move or close.
Can't find a feature in the main menu.
Can't Fade across Groups.
Can't add effects or cues.
Can't change Properties.
Can't drag-and-drop effects or files.
MIDI Commands do not trigger external device.
Can't do a MIDI capture.
MIDI Show Control cues do not trigger external device.
MIDI messages are not triggering SFX.
Keyboard triggers are not triggering SFX.
MIDI Show Control messages are not triggering SFX.

SFX does not recognize hardware key. -- or -- SFX reads "SFX Demo v5.x - " in the top caption bar instead of "SFX V5.x - ".

- The hardware key is not connected:
    1. Exit SFX.
    2. Connect the hardware key to the parallel port of your computer.
    3. Launch SFX again. If SFX still says "Demonstration" try connecting the hardware key to another parallel port and repeat the above steps.

- The communication settings in the BIOS are not set up to properly read the card. Reboot your computer and enter the BIOS settings. Change the "Parallel Port Mode" in the BIOS from "Bi-directional - EPP" to "SPP," "ECP," or "Normal." The BIOS port should also be set to 378h.

You will have to reboot your computer. You may have to try greater numbers if the above settings do not work.

SFX will not launch. Missing dsound.dll, urlmon.dll, or other component.

SFX requires DirectX to operate. The missing components are files from DirectX. The *SFX* setup program will install DirectX when it installs *SFX*. You can also obtain the DirectX redistributables from Microsoft's web site at http://www.Microsoft.com/DirectX. If *SFX* is missing urlmon.dll, you must install ActiveX. Again, this is installed by *SFX*.

SFX has "Demonstration" in the top caption bar.

The hardware key is not connected:
1. Exit SFX.
2. Connect the hardware key to the parallel port of your computer.
3. Launch SFX again.

If SFX still says "Demonstration" try connecting the hardware key to another parallel port and repeat the above steps, or click on START in the Taskbar, Programs | SFX Sound Playback | Test Hardware Key.

Putting CD in drive causes it to automatically play.

To disable the autoplay feature on your CD-ROM:
1. Select START | SETTINGS | CONTROL PANEL and the Control Panel dialog box will appear.
2. Select from the Control Panel menu VIEW | OPTIONS and the OPTIONS dialog box will appear.
3. Select the FILE TYPES tab.
4. Select from the "Registered file types" list box "AudioCD."
5. Click the EDIT button and the "Edit File Type" dialog box will appear.
6. In the "Actions" list box, click on "Play" and the click on the REMOVE button.

CD does not Fade or Play.

If the CD fails to Fade or Play, you must change the Aux device number in the CD Effects Properties dialog box:
1. Select the CD cue.
2. Click the Properties button in the Cues view to display the Effect Properties dialog box.
3. Change the Aux device number to 1 and click on OK.
4. Confirm that the Fade cue changes the volume of the CD. If not, repeat step 4, but with the next larger number (i.e. 2, 3, 4, etc.).

You may also want to change your Fade type to linear for your Fade effect to create a smoother volume change.

Black 'x' in front of cue.

The possible problems and solutions are:
- *SFX* can not find the cue:
    1. Select the cue.
    2. Click on the PROPERTIES button and the "Effect Property" dialog box will appear.
    3. Verify that the "File Name" is correct and represents a file actually on your computer. If one or more files have been moved, you can have *SFX* automatically locate them on your hard drive and update your Cues or Effects files (see *Locating Files* page 37 and page 47).

- The cue is not assigned to a Group (see *Patch, Groups, and Volumes* page 16):
  1. Select the cue.
  2. Click on the PROPERTIES button and the "Effect Property" dialog box will appear.
  3. Click on the MIXER tab.
  4. The effect should have at least one of the Group buttons punched in. If not, select a Group and click OK.
  5. Also, verify that the Group is patched to a sound card. Make the Cues view (or Effects view) active by clicking on it.
  6. Select from the main menu CUES (or EFFECTS) | PATCH and the "Patch" dialog box will appear.
  7. The Group(s) you assigned your cue to should list a sound card output. If it does not select one.

- Error with the cue's file:
  The file may be corrupt. Try playing the file in another application.

Cue is not audible.
The possible problems and solutions are:
- Volume is zero:
  1. Select the cue.
  2. Click on the PROPERTIES button and the "Effect Property" dialog box will appear.
  3. Click on the MIXER tab.
  4. The volume slider may be at zero.

- The cue is not assigned to a Group (see *Patch, Groups, and Volumes* page 16):
  1. Select the cue.
  2. Click on the PROPERTIES button and the "Effect Property" dialog box will appear.
  3. Click on the MIXER tab.
  4. The effect should have at least one of the Group buttons punched in. If not, select a Group and click OK.
  5. Also, verify that the Group is patched to a sound card. Make the Cues view (or Effects view) active by clicking on it.
  6. Select from the main menu CUES (or EFFECTS) | PATCH and the "Patch" dialog box will appear. The Group(s) you assigned your cue to should list a sound card output. If it does not, select one.

CD cue is not audible.
See "Cue is not audible." If that does not solve your problem, you must make sure that the CD is connected to your sound card. Most sound cards provide a special cable that connects the sound card to an output on the CD. You may have to open your PC to verify this.

Views will not move or close.
The desktop is locked (see *Play Desktop* page 27). To unlock the desktop, select from the main menu VIEWS | LOCK VIEWS.

Can't find a feature in the main menu.
The appropriate view is not selected (see *Menu and the Active View* page 22). *SFX*'s main menu changes depending on that view that is currently active. For example, when you click on the Cues view, the menu will change to include a menu item titled CUES.

Can't Fade across Groups. Can't Fade from on Group to another.

The cue is not assigned to the Groups in question. For instance, if you want to Fade a cue from Group 1 to Group 2, you must assign the cue to *both* groups initially. Just set Group 2's volume to 0.
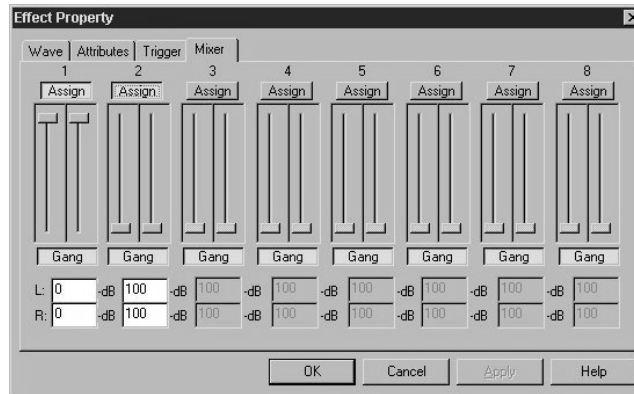
Can't add effects or cues.

The possible problems and solutions are:

- If *SFX*'s caption bar has the word "[play]" in it, then you are in the Play Desktop (see *Play Desktop* page 27):
  1. Select from the main menu VIEWS | SWITCH DESKTOP and the caption will change to "[edit]".

- You may not put certain special effects next to each other; such as two Autofollows two Waits, or a Wait followed by an Autofollow.

Can't change Properties.

See "Can't add effect or cues" above.

Can't drag-and-drop effects or files.

See "Can't add effect or cues" above.

Can't do a MIDI capture.

To do a MIDI capture you must tell *SFX* what MIDI instrument and channel to capture messages from. See *MIDI Command Control* page 64.

To select a MIDI input device and channel:
1. Select from the main menu TOOLS | OPTIONS and the "Options" dialog box will appear.
2. Select the MIDI COMMAND CONTROL tab.
3. In the "Incoming MIDI Command Device" combo box, select the appropriate MIDI input device.
4. In the "MIDI channel…" combo box, select the channel that the MIDI commands will be received on.

MIDI Commands do not trigger external device.

The possible problems and solutions are:

- The MIDI Command is not assigned to a Group (see *Patch, Groups, and Volumes* page 16):
  1. Select the cue.
  2. Click on the PROPERTIES button and the "Effect Property" dialog box will appear.
  3. Click on the MIXER tab.
  4. The effect should have the Group button punched in corresponding to a MIDI output device (see *MIDI Command Effects* page 77).

5. Also, verify that the Group is patched to a MIDI output device: Make the Cues view (or Effects view) active by clicking on it.
6. Select from the main menu CUES (or EFFECTS) | PATCH and the "Patch" dialog box will appear.
7. The Group(s) you assigned your cue to should list a MIDI output device. If it does not, select one. Do not select the MIDI synthesize on the sound card; you must select the device that corresponds with the output jack on your sound card.

- The MIDI Command is sending on the wrong MIDI channel. When you send MIDI notes (Note On, Note Off, Control Change, etc.) the low-byte represents the channel. For example, following is a list of Note On values you would use to send to each of the sixteen channels:

Channel	Note On value
1	80
2	81
3	82
4	83
5	84
6	84
7	86
8	87
9	88
10	89
11	8A
12	8B
13	8C
14	8D
15	8E
16	8F

MIDI Show Control cues do not trigger external device.
The possible problems and solutions are:
- The MSC message is not assigned to a Group (see *Patch, Groups, and Volumes* page 16):
    1. Select the cue.
    2. Click on the PROPERTIES button and the "Effect Property" dialog box will appear.
    3. Click on the MIXER tab.
    4. The effect should have the Group button punched in corresponding to a MIDI output device (see *MIDI Show Control* page 85).
    5. Also, verify that the Group is patched to a MIDI output device: Make the Cues view (or Effects view) active by clicking on it.
    6. Select from the main menu CUES (or EFFECTS) | PATCH and the "Patch" dialog box will appear.
    7. The Group(s) you assigned your cue to should list a MIDI output device. If it does not, select one. Do not select the MIDI synthesize on the sound card; you must select the device that corresponds with the output jack on your sound card.

MIDI messages are not triggering SFX.
The possible problems and solutions are:
- The Enable Keyboard/MIDI triggers setting is off:
    1. There should be a check mark next to the main menu item VIEW | ENABLE TRIGGERS.
- The MIDI input device and channel are not selected, or are incorrectly selected (see *Triggering SFX with MIDI* page 78):

1. Select from the main menu TOOLS | OPTIONS and the "Options" dialog box will appear.
2. Select the MIDI COMMAND CONTROL tab.
3. In the "Incoming MIDI Command Device" combo box, select the appropriate MIDI input device.
4. In the "MIDI channel…" combo box, select the channel that the MIDI commands will be received on.

Keyboard triggers are not triggering SFX.

The possible problems and solutions are:

- The Enable Keyboard/MIDI triggers setting is off:
    1. There should be a check mark next to the main menu item VIEW | ENABLE TRIGGERS.

MIDI Show Control messages are not triggering SFX.

The possible problems and solutions are:

- The MSC input device is not selected, or is incorrectly selected (see *Controlling SFX* page 86):
    1. Select from the main menu TOOLS | OPTIONS and the "Options" dialog will appear.
    2. Select the MIDI SHOW CONTROL tab.
    3. In the "Incoming Show Control" combo box, select the appropriate MIDI input device where the MSC commands will originate. Select one or more device IDs in the "Device IDs" list box.

- The cues list's has MSC disabled:
    1. Make the Cues view active by clicking on it.
    2. Select from the main menu CUES | SHOW CONTROL & TRIGGERS and the "Show Control & Triggers" dialog box will appear.
    3. Check the "Use MIDI Show Control" checkbox.

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