SFX 6.1 Users Guide

© Stage Research, Inc.
PO BOX 670557
Northfield, OH 44067
Phone 888-267-0859 • Fax 888-668-0751
www.StageResearch.com
info@stageresearch.com

Authors: Richard Ingraham; Carlton Guc; Brad Rembielak
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Table of Contents

Installation.................................................................................................................. 2
  Standalone Mode........................................................................................................ 2
  Network Mode........................................................................................................... 2
    Key Server Installation.......................................................................................... 2
    Workstation Installation....................................................................................... 2

Introduction ................................................................................................................... 3
  New Concepts............................................................................................................ 3
  New File Structure.................................................................................................... 3
  Patching of Input and Output Devices...................................................................... 5
  Audio Patch................................................................................................................ 7
  MIDI Patch.................................................................................................................. 10
  Serial Patch................................................................................................................ 12
  TelNet Patch.............................................................................................................. 13

Windows .......................................................................................................................... 14
  Transport Window...................................................................................................... 14
  Cue List Window........................................................................................................ 15
  Active Matrix Window.............................................................................................. 16
  New Color Schemes.................................................................................................... 17

Getting Started – A Tutorial .......................................................................................... 20

The SFX GUI.................................................................................................................... 34
  Themes....................................................................................................................... 36
  Layouts....................................................................................................................... 37

The Cue List.................................................................................................................... 38
  Adding Effects.......................................................................................................... 38
  Cue List Menu.......................................................................................................... 39
    Cues Menu............................................................................................................. 39
    View Menu............................................................................................................ 39
  Cue List...................................................................................................................... 40
  Cue List Transport...................................................................................................... 44
Installation

Standalone Mode

To install SFX 6, download the SFX6_Setup.exe from the Download Center from the Stage Research website, or insert the installation CD. Execute the Setup program and follow the prompts. After installing SFX, insert the USB key and execute SFX from the desktop icon or Program Files | Stage Research | SFX 6.

Network Mode

SFX 6.0 in network mode will search for and connect to a network key server. Follow these steps to setup your server and each work station.

Key Server Installation

1) Install SFX on the main server and note the IP address of this computer. The IP address will be used by the workstations to quickly connect and validate a license.
2) Place the Black/Green key on the SFX Server and run SFX from the desktop or from the Start | Programs | Stage Research | SFX 6 folder to verify that SFX will find the key.

Workstation Installation

1) Install SFX on the workstations. SFX can be installed on more workstations that you have a license for, however the key will limit the number of SFX’s that can run at one time.
2) Run SFX from Start | Programs | Stage Research | SFX 6 -> SFX6 Network Key Mode. Note: Running SFX from the desktop is the standalone version, delete the desktop icon and copy the SFX6 Network Key Mode to the desktop. (Right Click -> Create Shortcut on Desktop).
3) The first time SFX runs it’ll search for the network key and depending on your network, this might take a couple minutes. If a key is not found, SFX will start in Demo mode, in either case, once SFX starts up, navigate to File | System Properties.
4) System Properties, find the button that says “Settings…” under Network Key Settings and press it.
5) Enter the IP address of the SFX Key Server and press OK.
6) Exit SFX and restart the SFX6 Network Key Mode and if the IP address is correct and accessible, SFX will start up quicker, find the key and run in the appropriate mode.
Introduction

New Concepts

The purpose of this section of the User’s Guide is to give a general overview of the many new concepts, features, and functionality of SFX 6. If you simply cannot wait to dive in and start playing with SFX 6 skip ahead. However, we suggest you read through this chapter. In fact we suggest you read this chapter now, even if you cannot wait to get started. Or at least come back and read it later. Please?

New File Structure

First we should take a look at the new file structure of SFX 6. In SFX 5.6 each cue list was a separate file on your hard drive and then a separate workspace file would essentially contain all the cue lists you needed for a single show. In SFX 6 we have combined all of those separate files into a single file that will contain your entire show. We are calling these files Productions. Production files in SFX 6 will use the .sfx file extension.

Most of your show’s settings will now be contained in just a single file. We now save as few settings as possible, on the SFX system itself. This allows for easier movement of a Production from one SFX system to another, than it has been in previous versions of SFX. In general the settings that are saved specific to a machine are related to default locations of where the SFX files are stored on that system, and settings in connection with the backing up of files. As you will see most settings are saved with the Production file itself.
Although all of your Production’s data is contained in a single file, it will be possible to export and import entire cue lists from one production to another. In addition the redesigned Toolbox has some new slick features that will allow the end user to customize the Toolbox to suit the needs of the end user.
Patching of Input and Output Devices

One of the biggest new features in SFX 6 is the entirely new audio engine. In fact all the engines (audio, MIDI, RS232, and TelNet) have all been completely rewritten with many new improvements.

The new audio engine uses ASIO drivers to communicate with your sound card. ASIO has been the most popular standard for professional level audio applications for a number of years, and SFX now has the power to make use of this industry standard. In order for SFX’s audio engine to perform at its peak, you’ll want to use a sound card that provides ASIO support. Fortunately most decent sound cards already have ASIO support.

There are some universal ASIO drivers available that will emulate the ASIO drivers for many of the consumer grade audio sound cards that do not include ASIO support. You can download those drivers at: www.asio4all.com. Please note however that these are emulated drivers and they will likely add some latency to SFX’s playback. Stage Research is not involved with the development of these universal ASIO drivers, so if you use them, we will not be able to provide support for the universal ASIO drivers.

Let’s take a brief look at the new audio patch.

SFX 6’s audio engine provides a full output matrix to the sound card outputs. So rather than routing your audio playback directly to the outputs of your sound card, all audio is routed to one or more busses. These busses then feed the audio output matrix, which is directly connected to the outputs of your sound card. The number of busses is user selectable, so you can assign the exact number you need for each production.

A screenshot showing the buss levels for a simple .wav file playback cue:
Here is a diagram comparing SFX 5.6’s Audio Routing to SFX 6:

**Old SFX 5.6**

Wave Playback Cue

- Group 1
  - Sound Card Out 1/2 → Front Speakers L/R
- Group 2
  - Sound Card Out 3/4 → Rear Speakers L/R

**SFX 6.0**

Wave Playback Cue

- Output Matrix
  - Each Bus has a crosspoint volume control to every physical sound card output
  - The number of Busses into the Output Matrix is user definable with no limit on the number of busses
  - The number of busses and the routing of each of those busses to the physical outputs is defined per production

- Out 1 → Effects Speaker 2
- Out 2 → Sound Card Out 6 → Effects Speaker 1
- Out 3 → Sound Card Out 5
- Out 4 → Sound Card Out 3/4 → Rear Speakers L/R
- Out 5 → Sound Card Out 1/2 → Front Speakers L/R
**Audio Patch**

SFX will automatically set up a 1 to 1 routing scheme in the Audio Output Matrix for you. So if you selected 6 Outputs, it will automatically create 6 Busses, and route Buss 1 to Output 1 and Buss 2 to Output 2, etc.…

You can view the Output Matrix on the Audio Patch link under the Engines Tab of the Production Properties dialog box.
Please keep in mind that the Output Matrix is a very powerful new feature in SFX 6, and you can route any buss to any output you like. So here is a more typical example of how the Output Matrix might be used:

In this above example I have added two Busses and renamed them to something that is more user friendly. I have also used the Output Matrix to make programming the cues in a show easier. By routing the Busses (Music L and Music R) to multiple outputs, I can send a playback cue to all those outputs by simply routing to one pair of busses.
Quick Tip: You can create as many Audio Patches as you like for your Production. This is very handy if you are moving from one venue to another. Each Patch can have its own unique name and you can recall them whenever you like. But do note that each Audio Patch is a snapshot of static settings. You cannot change the routing of the Output Matrix on a cue by cue basis. You can adjust it by hand at any point in time while audio is playing within the Active Matrix Window. Here is an example of a Production that has multiple Audio Patches set up:

Click in this column to choose which audio patch you wish to use.
**MIDI Patch**

SFX 6 allows for MIDI data to be sent and received on multiple MIDI port simultaneously. In order for SFX to access any MIDI ports, you must set those ports up in the MIDI patch. You can access the MIDI patch by going to Production Properties under the File Menu. In the Production Properties Dialog box, select MIDI Patch, under the Engines tab.

Here you will set which MIDI ports SFX will send and receive MIDI data on. At the top of the MIDI patch dialog box you’ll see two large tabs; MIDI Outputs and MIDI Inputs. The Output tab is a list of all MIDI ports that are in use by the current SFX Production. These are the ports that SFX will send data to. The Input tab displays all the MIDI input ports that SFX will receive MIDI data from in the currently loaded Production.
To make a new port available for use in your productions click on the Create New Patch button at the bottom of the Device list of the MIDI Patch dialog box. You'll see a new entry in the list showing all patched MIDI ports. In that entry you can choose to set the port to active, give the port a friendly name (rather than the name given to the port by the Windows Operating System), and in the last column you can choose which MID port you want to use, from the ones available in the drop down list.

Once you have all the MIDI ports you wish to use patched you can then click OK and return to SFX 6's main window.
**Serial Patch**

Screenshot of the Serial Patch:
TelNet Patch

Screenshot of the TelNet Patch:

Please note that RS232 and TelNet support are only available in SFX Deluxe.
Windows

SFX 6 was a completely redesigned user interface. The new interface is designed to allow the user to do all the basic functions needed to program and operate a production with as few mouse clicks as possible. We have also eliminated the need for many of the pop up dialog boxes we had in previous versions of SFX. All the information in SFX 6 is displayed in three windows, The Transport Window, The Cue List Window, and The Active Matrix Window.

Transport Window

The function of the transport window is to display what cues are in stand-by, and which cues are currently running in SFX.

The top pane of the Transport Window displays which cue is standing by in each cue list. If you have only one cue list, there will only be one cue displayed in the upper pane. If you have two cue lists, there will be two cues in the upper pane, etc...

The lower pane of the Transport Window displays all the cues that are currently playing in SFX. The Transport Window allows you to pause, stop, and shuttle forward and backward in cues that are playing within SFX.
Cue List Window

The new Cue List Window allows the SFX user to keep all of their cue lists contained in a single window via the use of tabs. Rather than having each cue list appear in a separate window, in SFX 6, you can keep them all in one place, and simply select which cue list you want to work on.

The new Cue List Window displays: Cue Number or Letter, Cue Description, Elapsed Time on any running cues, Remaining Time on any running cues, and Time Code trigger points (SFX Deluxe Only)

The Cue List Window also displays the levels for all audio playback cues and volume change cues.
Active Matrix Window

The new Active Matrix window will display the volume levels of all currently playing audio cues in SFX. This allows you to see the current volume levels for all audio tracks that are currently playing in SFX. It also allows you to change those levels at any time, while the audio is playing, and it even allows you to save volume changes made in the Active Matrix window to existing cues or to create entirely new volume change commands.

In addition the Active Matrix window gives the user easy access to the Audio Output Matrix, so you can make changes to the Output Matrix while audio is streaming.
New Color Schemes

You’ll notice that in the Cue List Window, SFX 6 now has the ability to separate the Stand-By cue from the Selected Cue. This allows you to make changes to a cue, while not changing which cue is currently in Stand-by.

The Green Bar shows which cue is in Stand-by for each cue list.

The Orange Bar shows which cue is selected for editing.
Entering Volume Levels

SFX 6 has some new standard keyboard and mouse wheel shortcuts for changing and entering volume levels. These standards are maintained throughout the entire application, so you can use them any place where you enter volume levels from within SFX.

The mouse scroll wheel acts a physical slider for any volume control that is selected and active. Simply using the scroll wheel allows you to change a volume level in 1 db steps. If you hold down CTRL and use your scroll wheel at the same time the volume changes in 3 db steps. This allows you to have a coarse level adjustment for quickly making drastic volume changes or making very fine level adjustments.

You can also enter levels by simply typing in a number on your computer keyboard. SFX will always assume you want a negative value, although SFX does allow for 5 db of signal boost at each volume control point. So for example if you select a volume control point and simply type 10 and hit enter, SFX will change that level to -10 db. If you type 20 and enter, it will change it to -20 db. Type in +3 and enter and it will set the level to +3db.

SFX also allows you to make relative changes to the volume levels by typing in ++ (plus sign twice) and hitting enter. This will bump the level up in all selected volume control points by 3 db. You can drop the level 3 db in a similar fashion by typing in -- (minus sign twice) and hitting enter. For an even greater amount of control you can type ++ or -- and then enter a number and hit enter. This will bump the level up or down by the numerical value you type in. For example if I type ++10 and hit enter, all the selected volume change points will be brought up 10 db from whatever their current value is. This is very handy when you might want to bump up or down several volume points at one time, but all those volume points are not set at equal values. You can select multiple volume control points and then bring them up or down proportional to their existing balance. This is a very powerful new tool within SFX for changing volumes.

In addition the Home key will automatically set any selected volume control points to -0db. The End key will set any selected volume control points to -160db. The Page Up and Page Down keys will allow you to make adjustments to any selected volume control points in 10db increments. So pressing Page Up will increase any selected volume control points by 10 db, while pressing Page Down will decrease them by 10db.
**Entering Time Values**

Similar to the way we created new standard tools for entering volume levels we have also changed the way you enter time values in SFX 6. Anywhere within SFX that you enter time values you will use the same method. So if you are entering time values in a Wait command or the Fade Time in a Volume Change command or Entering Time Code Values, they are all entered in the same manner.

When you enter a time value SFX will always assume you are entering values in seconds if you simply type in a number and hit enter. So to enter a value of 5 seconds you type in 5 and hit Enter. If you enter a number and hit space and enter another number SFX will assume you are entering a value of minutes and seconds. So to enter a value of 5 minutes and 5 seconds you would type 5 5 and hit enter. If you enter a number, space, number, space, number, then SFX will assume hours, minutes and seconds. So typing 5 5 5, would enter a value of 5 hours, 5 minutes, and 5 seconds. To enter fractions of a second, simply put a period after the seconds and type in another number. So typing 5.5 and hitting enter would give you 5.5 seconds or 5 and ½ seconds. Or typing in 5 10.5 and hitting enter would give you 5 minutes and 10.5 seconds.

If you prefer to enter your time values of larger than one minute in just seconds that will also work. For example typing in a time value of 120 and hitting enter will give you a value of 2 minutes.

In addition to this method you can also use your mouse wheel to increase or decrease a time value. To use your scroll wheel to chance a time value, simply select the cell that contains a time value that you would like to change. If you scroll up with your mouse wheel, the time value will increase in one second increments. If you scroll down, the time value will decrease in one second increments. You can increase or decrease a time value in 3 second steps by holding down the shift key as you move your scroll wheel.

You may also increment or decrement time values by typing in ++ or – on your keyboard and then enter a value of time to add to or subtract from the current value. This works in a similar fashion as entering volume levels. If I type in ++10, SFX will increase the time value by 10 seconds. If I type in --20, SFX will decrease the time value by 20 seconds.

As you will see we have worked very hard to try and keep the user interface as consistent as possible throughout the entire application.
Getting Started – A Tutorial

In this chapter we will walk you through the process of creating a new production step by step. Although this example is of a very simple and basic production, it will demonstrate all the basic steps and get you well under way to programming your own productions.

**STEP 1: OPENING SFX**

When you open SFX you’ll initially get our new splash screen while SFX finishes being loaded. Once SFX is open you will be presented with our new Start Up dialog box. This is a handy little tool to allow the end user to quickly get to work. It has links to create a new Production, open recently used Productions or to continue without opening any Productions. It also has a check box that allows you to choose if this dialog box will be displayed every time you open SFX 6.
To create a new Production click on the “Create a New Production” link that was presented in step 1. You will be presented with the New Production Dialog box, asking you to give your New Production a file name, and you can also enter other details about your production that you wish to store within the file.

Notice that SFX 6 will automatically fill in the default folder path for where new production files are stored. If you wish to save your production to a different folder, click on the dots at the end of the file name and it will open a standard save file dialog box allowing you to choose where you would like to save the file.

Once you are done entering any additional Production information, click OK and you are ready to move onto the next step.
The next step will be to set your audio patch. SFX will automatically take you to the Audio Patch set-up dialog box when you create a new production and you will be presented with the Sound Card Configuration Dialog Box. From within this dialog box you can give your Audio Patch a descriptive name, select the audio engine to use, and select the number of audio outputs you want to use. Once you have done that you can click OK, and SFX will initiate communications with your audio hardware.

Here is an example:

Click OK, and you will now be ready to start programming a new show.

SFX will automatically set up a 1 to 1 routing scheme in the Audio Output Matrix for you. So if you selected 6 Outputs, it will automatically create 6 Busses, and route Buss 1 to Output 1 and Buss 2 to Output 2, etc....
By default when you create a new Production SFX will create a single new Cue List for you. However you may wish to create more cue lists, depending on the needs of your show. When you are done setting up your audio patch, click the OK button in the Production Properties dialog box to return to SFX’s main window.

To add a new Cue List at any time, you can either use your computer’s keyboard (CTRL + N) or the file menu to create a new cue list.

![SFX Window with menu options]

You will then see a new blank cue list in SFX’s main window.
To add new wave file playback commands to your newly created cue list, simply open an instance of Windows Explorer, locate the audio file you wish to use (note that SFX 6 can play back Microsoft .wav, .wav extendable, .wma, and .mp3 audio files) and simply drag and drop them into the cue list.

After you drag and drop:

If you select multiple audio files at one time, SFX will add each file as a new playback cue in the cue list.
SFX 6 now allows you up to 32 audio tracks within a single audio playback cue. This could be a single multi-track .wav extendable audio file, or you can simply add multiple mono or stereo audio files to a single playback cue, up to 32 total audio tracks. To add more audio tracks to a single playback cue, simply right click on the playback cue in the cue list. This will display the track list and initial audio levels for the playback cue. You can drag multiple audio files from a Window’s Explorer window into the track list, and SFX will simply add them to that cue, until you have reached the maximum track count of 32. (Note: maximum track count in SFX 6 Standard is 16)

After you drag and drop:
In addition to the drag and drop method shown above you can also add audio file playback commands to your cue list by dragging and dropping the Sound icon from your Toolbox into a Cue List.

SFX will automatically open a standard Windows file dialog box. Locate the audio file you wish to add to your Cue List and click Open. You will now see that your audio file has been added as a new Cue to your Cue List.
If you right click on any sound playback command in your Cue List you’ll see a small plus symbol icon at the top of the “TRK” column. You can use that symbol to add additional audio files to the cue. Click on that icon and SFX will open a standard Windows file dialog box that will allow you to add more audio files to your sound playback cue, until you reach the limit of 32 audio tracks. (Note: 16 audio track limit in SFX 6 Standard)

Click on the Plus icon to add additional audio files to your cue
If you right click on a playback or volume change cue, you will be presented with the audio mixer for that cue. You will see a list of the audio tracks for that cue. Each track will also display the mixer levels to each of the mix busses.

So now you should set some initial volume levels for the audio playback cues you just added in the last step. You can route the audio files to any of the busses you like and at any level you like. You'll notice that each track of each audio file you added can be routed to any buss as well. There is no longer a left channel to the odd number busses and right channel to the even number busses limitation as we had in SFX 5.6. To set the levels in your playback cues, use the various methods outlined in Chapter 1-4.

Once you have set your initial volume levels we are ready to start playing back audio. Obviously you may want to consider being a bit on the conservative side, and keep your levels fairly low until you are more certain how loud the audio will be through your sound system.

Quick Tip: All volume control points in SFX have a level range from -160 db to +5 db.
STEP 7: PLAYING AUDIO

You can begin playing back audio in a number of ways in SFX 6. At the bottom of the cue list window you will see a standard tape deck style transport control. These controls allow you to move the Stand-by cursor (the green bar), and Play, Pause or Stop the Cue List.

You can also begin playing the standby cue for any cue list from the Transport Window. Simply press the Play button next to any Cue that is in the upper pane of the Transport Window and it will have the same effect as the Play button in the Cue List’s Transport.

Lastly SFX’s GO Button will automatically send a GO command to the active cue list. If you are using SFX Deluxe you can change that assignment to perform many functions programmed by the end user.
The Wait and Autofollow commands have remained largely unchanged from previous versions of SFX. If you place a wait command between two cues, when the first of the two cues is executed, SFX will automatically execute the second cue after the amount of time specified in the Wait command has expired. When an Autofollow command is added between two cues, when the first cue is executed SFX will wait for it to fully complete and then start the next cue automatically. Both of these tools are used to create stacks or sequences of cues. To add a Wait or Autofollow command to any cue of your Cue Lists, simply click on the Wait or Autofollow icon in the Toolbox and drag and drop it into the location you wish to add it inside the Cue List.

Before Drag and Drop:

A thin black bar will appear in your cue list, showing where the command will be inserted when you release your mouse button:

After Drag and Drop:
While the Autofollow has no time value, you can assign the delay time of any Wait command. To set this delay time simply double click in the remaining time value cell of the wait command you wish to change the time on, and you enter the time value as described in Chapter 1-5.

<table>
<thead>
<tr>
<th>Q#</th>
<th>Elapsed</th>
<th>Remaining</th>
<th>Timecode</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>00:00:00.0</td>
<td>00:05:25.5</td>
<td>1:Jim Sutherland_Flick It Up</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>00:00:00.0</td>
<td>00:00:10.0</td>
<td>1:Jim Sutherland_Flick It Up and Go</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q#</th>
<th>Elapsed</th>
<th>Remaining</th>
<th>Timecode</th>
<th>Title</th>
</tr>
</thead>
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<td>1</td>
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<td>1:Jim Sutherland_Flick It Up</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>00:00:00.0</td>
<td>00:00:10.0</td>
<td>1:Jim Sutherland_Flick It Up and Go</td>
<td></td>
</tr>
</tbody>
</table>
To add a Volume Change from the Toolbox simply select one or more playback cues in your Cue List Window. (as described in Chapter 2-6) You can then click on the Volume Icon in the Toolbox window and drag and drop it anywhere within your cue list, as long as it is after all of the playback cues that you just got done selecting. When you right click on the Volume Change Cue to view it’s mixer settings you will now see that it points to all the playback cues you had selected before you did the drag and drop action.

Cue #3 is selected:

After dragging and dropping a Volume Change effect it is pointing to Cue #3:

When you open a Volume Change effect’s mixer you’ll also see a column labeled Stop. When the box is checked in that column SFX will automatically Stop the playback of those audio files once the Volume Change is complete.

Check this box to Stop Cue upon Volume Change Completion
Obviously you will also want to be able to enter a time value for a Volume Change effect. To enter a time value simply double click in the remaining column of the Volume Change effect and enter a new time value using the standard method of entering time values in SFX 6.

<table>
<thead>
<tr>
<th>Q#</th>
<th>Volume Change Effect</th>
<th>Elapsed</th>
<th>Remaining</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>00:00:00.0</td>
<td>00:02:16.5</td>
<td>daydream_edit 1</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>00:00:00.0</td>
<td>00:00:30.9</td>
<td>ClockTickMedium</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>00:00:00.0</td>
<td>00:00:08.2</td>
<td>Thunder2</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>00:00:00.0</td>
<td>00:00:00.0</td>
<td>Volume: Q 3</td>
</tr>
</tbody>
</table>

After a time value is entered:
The SFX GUI

The SFX GUI has been entirely revamped to present as much information to the designer and operator as possible with as few mouse clicks. This interface uses dock-able windows and MDI Tabbed documents.

Image: SFX Interface
Windows can be moved or docked in numerous ways and has a specialized docking interface to visually show where windows will be placed.

For example, click on the “GO” title bar and drag it out of the lower left location. Note that when you drag it around the screen different drop locations appear. You can drop the GO button on any of these drop locations to make it part of that new window or drop it anywhere else to unassociated it with a window.

Some windows have Push Pins to keep the docked window open or to allow it to “slide” off the main interface. Click the Push Pin to turn this feature on and off. When the window “slides” off, the title will stay visible and can be opened by moving your mouse over the title.

A quick way to unassociated a docked window is to double click on the Title. Double click on an unassociated docked window will associate it with its’ last parent window.

Users with large format monitors or multiple monitor support may find it useful to place the main interface containing the cue lists on the primary monitor and drag support windows (Transport, Active Matrix) on the secondary monitor.
**Themes**

SFX supports a library of different looks called Themes that are accessible from the File | Production Properties | Layout configuration dialog.

The development tools used in creating SFX come with a large number of default themes. In addition, two new themes were created called SFXBlackOut and SFXWhiteOut.

Image: SFX Black Out Theme (White on Black)

Image: SFX White Out Theme (Black on White)
**Layouts**

Layouts are useful depending on what part of the design, tech or run of the show you are using SFX in. During design you may want to have a layout that shows primarily the Cue List and Toolbox, while during tech you may want to focus on the Active Matrix and during the run you might just want to have a GO button and the Cue List. In the Production Properties – Layout configuration dialog, multiple layouts can be created and assigned specific attributes. Each layout will remember the location of every window, color(s) and cue list font and are assignable to ShortCut keys. Layouts are also Production specific and will travel from computer to computer stored in the Production.

![Image: Layout, Operator View. No menus, full screen, locked.](image-url)
The Cue List

The SFX Production can contain one or more Cue Lists for your show. Each cue list has its own timecode clock (Deluxe), cues and transport and can be controlled directly from the GO Button, Transport Window, external triggers or other Cue Lists.

Adding Effects

As in the tutorial, there are numerous ways to add effects into the cue list. Drag from Windows Explorer, Drag from an Effect Library, Drag from the Toolbox. In addition, Cut & Paste will duplicate effects and effects can be moved in the cue list by clicking on the effects, start to drag, then press the Control Key (Move Effect) or the Shift Key (Copy Effect).

Undo and Redo functionality is also available with an unlimited number of Undo/Redo steps.

Each Cue List has a menu (may be merged with Main menu), the cue list grid, a transport and the timecode clock (Deluxe). Additionally, an optional Notes Window can be enabled for each individual Cue List from the View menu.
Cue List Menu

When a production is loaded the cue list will have a menu unless it is merged with the main menu.

There are two top level menu items in the Cue List: Cues and View

**Cues Menu**

<table>
<thead>
<tr>
<th>Title</th>
<th>Hot Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play</td>
<td></td>
<td>Play the current selected cue in the list or if the list is in paused mode, start up playback of all paused cues</td>
</tr>
<tr>
<td>Pause</td>
<td></td>
<td>Pause any cue that is playing in the list</td>
</tr>
<tr>
<td>Stop</td>
<td></td>
<td>Stop any cue that is playing in the list</td>
</tr>
<tr>
<td>Standby</td>
<td>F11</td>
<td>Load selected cue into memory and select as the cue in standby (Green Bar)</td>
</tr>
<tr>
<td>Release</td>
<td>CTRL+F11</td>
<td>Release selected cue from memory</td>
</tr>
<tr>
<td>Goto Cue…</td>
<td>CTRL+G</td>
<td>Displays a dialog box asking for the cue to jump to and put into standby</td>
</tr>
<tr>
<td>Goto First Cue</td>
<td></td>
<td>Selects and places the first cue in the list into standby</td>
</tr>
<tr>
<td>Goto Last Cue</td>
<td></td>
<td>Places the last cue in the list into standby</td>
</tr>
<tr>
<td>Goto Previous Cue</td>
<td></td>
<td>Selects the cue prior and places it into standby</td>
</tr>
<tr>
<td>Goto Next cue</td>
<td></td>
<td>Selects the next cue and places it into standby</td>
</tr>
<tr>
<td>Seek Cue to Time...</td>
<td>CTRL+T</td>
<td>Display a dialog box prompting for the time to seek the current standby cue to in time</td>
</tr>
<tr>
<td>Renumber Cues</td>
<td>CTRL+L</td>
<td>Displays a dialog box prompting for renumbering of cues. Cues can be renumbered from the first cue or from a specific cue</td>
</tr>
<tr>
<td>Learn Timecode</td>
<td></td>
<td>Place list in learn timecode mode so when the timecode clock is running, each GO on a cue will stamp the time it was started for later playback using the timecode clock</td>
</tr>
<tr>
<td>Cue Properties...</td>
<td>F5</td>
<td>Toggle the properties window of the selected cue</td>
</tr>
<tr>
<td>Cue List Properties...</td>
<td></td>
<td>Display the Production Properties – Cue List form to access properties for this cue list</td>
</tr>
</tbody>
</table>

**View Menu**

<table>
<thead>
<tr>
<th>Title</th>
<th>Hot Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport Bar</td>
<td></td>
<td>Toggle the transport bar for this cue list</td>
</tr>
<tr>
<td>Notes</td>
<td></td>
<td>Toggle the dock-able notes window for this cue list</td>
</tr>
</tbody>
</table>
**Cue List**

At the bottom of the Cue List Window each Cue List in the Production will have its’ own Tab with the Name for that Cue List. The Cue List’s ID will be displayed in brackets as such: {A} If there is only one Cue List then only one Tab will be shown. If there are two Cue Lists, 2 Tabs will be shown, etc. To change which Cue List is currently visible simply click on the Tab of the Cue List you wish to view or work on.

1 – Cue Sequence Collapse/Expand:

This control will allow you to collapse or expand a sequence of cues that are linked via Wait Commands or Autofollows. When the sequence is expanded this icon will show a minus sign (-), when collapsed this icon will show a plus sign (+). Click on this icon to toggle back and forth between collapsed and expanded views.

2 – Cue Status Symbol:

This circle icon indicates the current cue status. When the Cue is in standby this circle will show a yellow dot. When the Cue is currently running it will show a Green Dot. If the Cue has been paused a Red Dot will appear. A Clear or White Circle indicates that this cue is currently idle.

3 - Cues Menu and Views Menu:

These are drop down menus for the Cue List window.
4 – Cue Number Column:
This column displays the cue numbers for each cue. SFX can automatically number the cues for you, or the user may enter any number or letters they wish. To enter a new number, simply double click in the corresponding Cue # cell, type a number or letter combination and hit the Enter key.

5 – Cue Type Icon Column:
This column will display an icon that matches the type of cue. This allows the user to tell what type of command each cue is within the cue list, even if the cue description has been changed by the user. The icons displayed in this column will match the icons contained in the Toolbox Window. As shown below.

6 – Cue Properties Icon Column:
This column informs the user as to which Cues in a Cue List contain additional Cue Properties that are not displayed by default within the Cue List Window. If this icon: is displayed in the Cue Properties Column, then that cue contains additional properties, if this column is blank the cue does not contain additional properties. The additional properties will vary by the Cue Type. To view the additional properties of a cue either double click on the Cue Properties icon for the cue you wish to work on, or you can also use a right mouse click anywhere on the row that contains the cue to open and close the additional properties for the selected cue.
7 – Cue Triggers Icon Column:

This column informs the user if any Keystroke or MIDI Triggers have been assigned to each cue. Any Cue within a Cue List may have either a computer Keystroke or MIDI Command assigned to trigger it to GO. (except Wait or Autofollow commands) If this icon: 📊 is displayed in the Cue Triggers Column then no Keystroke or MIDI Triggers have been assigned to that Cue. If this icon: 📊 is displayed in the Cue Triggers Column then there is either a Keystroke or MIDI command assigned to trigger that cue. It is also possible to assign both a computer Keystroke and MIDI Command trigger to a single Cue. If this column contains no icon: 📊 then it is not possible to assign a Keystroke or MIDI Command to Trigger that Cue Type.

To assign a new Keystroke or MIDI Command Trigger to a Cue, double click the icon in this column and you will see the Cue Trigger Dialog Box.

You may also capture a MIDI Command from any available MIDI Input that is available in the current Production’s MIDI Patch. (see Chapter 3-1 MIDI Patching) To do this, select a MIDI Port under the Global MIDI Capture Device Drop Down box. Then click on the Record icon next to the drop down, send the MIDI Command from the device you wish to use to Trigger SFX and then click on the Stop icon. SFX will now display the MIDI data you captured in the MIDI Command Trigger section of this dialog box.

8 – Time Elapsed Column:

While a cue is running SFX will show the elapsed time of each cue in this column. If a sequence of cues that are linked via Wait or Autofollow Commands is collapsed (see #1 in this Chapter) then SFX will display the elapsed time of the entire cue sequence rather than the first cue in the sequence that is still visible.

9 - Time Remaining Column:

While a cue is running SFX will show the remaining time until that cue is complete in this column. As in the Elapsed Column, if a sequence of linked cues is collapsed then SFX will display the remaining time of the entire sequence of cues rather than one cue that is visible. This column is also used to enter time values for Wait and Volume Change Commands. To enter the time value for a Wait or Volume Change command simply double click in the Time Remaining Column of the command you wish to modify, enter the time value (see Chapter 1-5) and hit the enter key. Your new time value will then be displayed in this column.
10 – Cue Title Column:

This column contains the Title for each cue within your Cue List. The user may enter any standard text they would like to give the cue a useful name. SFX will fill in this column with generic information automatically. The user can change the default Title by double clicking in the cell of the cue they wish to modify, entering the new text and pressing the enter key. If a sequence of linked cues is collapsed, then SFX will display the Title of the 1st Cue in the sequence.

11 – Enable/Disable Triggers Icon:

This icon allows the user to Enable or Disable all Keystroke and MIDI Triggers as well as the large GO button window. When Triggers are disabled the only way to execute any cues is via the Cue List Transport Bar. (see #13 in this Chapter) Most users will want to keep the Triggers Enabled during standard operations.

S T A N D B Y  A N D  S E L E C T E D  C U E

Remember that the selected cue and the standby cue do not necessarily have to be the same cue. You can be in Standby for Cue 5, but have Cue 1 selected. You change which cue you have selected by clicking in any of the columns except the very first column in your cue list. (the column that has the round circle in it) To move the standby cursor, simply click in the round circle (the first column) of the cue you wish to jump to.

Click Here to Put a Cue in Standby

Click In Any Other Column To Change the Selected Cue

This feature will allow SFX to run a show in order while the designer is selecting cues to edit.
**Cue List Transport**

This series of buttons allows for standard transport style control of the currently selected Cue List.

1. Puts the first cue in current cue list into Standby and makes it the selected cue
2. Puts the previous cue into Standby from where the Standby bar is currently located
3. Acts like a GO button, except when a Cue List has been Paused, if the Cue List is Paused clicking on the button will Resume all Cues from where they were Paused at
4. Pauses all currently running Cues within the Cue List
5. Stops or Panics all currently running Cues within the selected Cue List. Note it will not Stop Cues that are running in other Cue Lists which are not visible
6. Puts the next cue into Standby from where the Standby Bar is currently located
7. Puts the Last Cue (which is always “End of Show”) in the Selected Cue List into Standby and makes it the selected cue.

**Cue List Timecode**

*Timecode functions are only available in SFX 6 Deluxe.*

**General Notes about Timecode:**

- Each Cue List in SFX has its own dedicated Time Clock.
- The clock can be locked to SFX's own internal timing, to an external Timecode source, or to the Time of Day clock on the computer that is running SFX.
- Each Cue List's clock can be set to synchronize from a separate source.
- Each Cue List's clock can be started, stopped and reset separately.
- Each Cue List's clock can be sent to other hardware or software as MTC (MIDI Time Code) on separate MIDI ports.
- The time clock can be set to run at the following rates: SMPTE (24, 30 drop, or 30 nondrop fps), milliseconds, or Computer Time of Day
Set a Timecode Trigger to a Cue

1. Make sure that the Timecode column is displayed in your Cue List window. If it is hidden, right click on any column header in your Cue List window and select "Show Column". Then select "Timecode".

2. To assign a Timecode Trigger point to a Cue, double click the Timecode column for the Cue you wish to modify.

3. Enter a Time value and hit enter.

In the above example, Q#1 would start when the Timecode clock reaches 10 seconds and Q#2 would start when the Timecode clock reached 20 seconds.
Start/Stop the Timecode Clock

You can start and stop the Timecode Clock by hand or by creating a Cue that will Start or Stop the clock.

1. Click on the "Start" button that is located in the lower right hand corner of your Cue List window on the Transport Bar.

2. If the Timecode Clock is locked to SFX's own internal clock, the Timecode Clock will immediately begin to run.

If the Timecode Clock is locked to an external source, the background of the Timecode Clock will be green. When the Start Button is clicked SFX will await incoming Timecode and lock to it.

3. When the clock is running the "Start" button will turn into a "Stop" button. Click the Stop Button to Stop the Timecode Clock.

If the Timecode Clock is locked to an external source, when you click the "Stop" button, SFX will no longer lock to the incoming Timecode.
1. Drag a Command Cue from the Toolbox window into your the Cue List that you wish to place the Start Clock cue into.

2. Right Click on the new Command Cue in the Cue List window to open the Cue Properties dialog box.

3. In the "Command" drop down box select "Start Clock"

4. In the "Cue List" drop down box select the which Cue List's clock you wish to start.

5. Click the "x" icon in the lower left hand corner of the dialog box to close the dialog box and return to SFX's main screen.

When the "GO" is taken on the new Command Cue SFX will start the clock of the specified Cue List.

To Stop the clock, simply follow the same procedures as above except choose "Stop Clock" in Step #3.
**Reset or Set the Clock to a specific time**

You can reset or set the Timecode Clock to a specific time by hand or by creating a Cue that will Start or Stop the clock.

**TO SET THE CLOCK BY HAND**

1. Double click in the Timecode Display that is the lower right hand corner of the Cue List's Clock you wish to set.
2. Enter a new Timecode value and hit Enter.

To Reset the Clock to 00:00:00:00, simply enter a Timecode value of 0 and hit enter.

**TO SET THE CLOCK FROM A CUE IN SFX**

1. Drag a Command Cue from the Toolbox window into your Cue List that you wish to place the Start Clock cue into.
2. Right Click on the new Command Cue in the Cue List window to open the Cue Properties dialog box.
3. In the "Command" drop down box select "Set Clock"
4. In the "Cue List" drop down box select the which Cue List's clock you wish to set.
5. In the "Time" box, enter the Timecode value you wish to set the Clock to.
6. Click the "x" icon in the lower left hand corner of the dialog box to close the dialog box and return to SFX's main screen.
When the "GO" is taken on the new Command Cue SFX will set the clock of the specified Cue List to the Timecode value specified. If the Clock is running when this Cue is executed, SFX will first Stop the Clock and then set it to the specified Timecode value.

**Set Timecode Format**

The timecode format in SFX can be set to: SMPTE (24, 30 drop, or 30 nondrop fps), milliseconds, or Computer Time of Day

1. Go to the "Cues" Menu and select "Cue List Properties" or go to the "File Menu", select "Production Properties" and in the Cue List tab, select the Cue List in which you wish to set the Timecode Format.
2. Under the "Timecode" section within the Cue List Properties dialog, you will see a drop down box labeled "Format" on the right hand side.
3. Click in the drop to select the Timecode format you wish to use for the selected Cue List. (each Cue List can have it's own format)

SMPTE24 is 24 fps SMPTE Timecode
SMPTE25 is 25 fps SMPTE Timecode
SMPTE30DropFram is 30 fps DropFrame SMPTE Timecode
SMPTE30 is 30 fps SMPTE Timecode
SMPTE1000 is real time showing millisecond resolution
Computer is using the Time of Day clock on the Windows PC that is running SFX.

SFX will display what the current Timecode Format is in the main Cue List window. Just to the left of the Timecode display.
Send MTC (MIDI Timecode)

1. Select the Cue List you wish to send MTC from in your Cue List window.
2. Go to the "Cues" menu and select "Cue List Properties"
3. Towards the bottom of the Cue List Properties dialog you'll see a Timecode section.
4. In the MIDI Output drop down box, select which MIDI output device to send MTC

Note: You must have at least one MIDI output device set up in the MIDI Patch.

5. Click OK.

Whenever you start that Cue List's clock, SFX will also now send MIDI Timecode to the selected MIDI device.

Lock to incoming MTC (MIDI Timecode)

1. Select the Cue List you wish to lock to incoming MTC in your Cue List window.
2. Go to the "Cues" menu and select "Cue List Properties"
3. Towards the bottom of the Cue List Properties dialog you'll see a Timecode section.
4. In the MIDI Input drop down box, select which MIDI input device you wish to receive MTC from

Note: You must have at least one MIDI input device set up in the MIDI Patch.

5. Click OK.

When you start the clock for this Cue List, SFX will wait to receive incoming Timecode data and lock to it.
The Toolbox

The toolbox contains templates of Common Effects, Extended Effects, and may also contain user defined effects. To add an effect to a Cue List, click and drag the effect from the toolbox to the desired Cue List or Effect Library.

**Common Effects**
- Autofollow – links two cue parts together where the first part must complete before the next part is fired automatically
- Command – fires commands to control SFX, trigger other effects, control the clocks or shut down SFX and the computer
- Memo – a text note
- MIDI – MIDI data to send to a MIDI port
- MIDI Sequence – a MIDI file to play
- Sound – a WAV, MP3, or WMA file to play
- Stop – a cue that targets other cues to stop them
- Volume – targets a cue and performs a volume change over time
- Wait – links two cue parts together and waits a specified amount of time before the next part is fired automatically

**Extended Effects (SFX Deluxe)**
- MIDI Show Control – MSC command to send out a MIDI port
- Script – a SFX Script to execute
- Serial – a data packet to send out a serial port
- Telnet – a data packet to send out a TCP/IP port

Common Effects and Extended Effects cannot be edited; however additional tabs can be created for user defined effects. To access these functions, right click on any header.
Right click will display a context menu with the following menu items.

- Add Tab – create a new user defined tab
- Rename Tab – rename a tab that was created by the user
- Delete Tab – remove a tab that was created by the user
- Import Tab… -- import a tab that was exported
- Export Tab… -- export a tab to be imported into another toolbox
- Edit Item… -- display the editor for the specific selected item
- Rename Item – rename the selected item
- Delete Item – remove item from the user defined tab
- Reset Toolbox – completely rebuild toolbox back to the defaults

Let’s create a special tab that sends MIDI Commands to external equipment.

1) Create your Production and a Cue List as described earlier in this Guide.
2) For now, let’s drag in a MIDI Command Effect into the Cue List and fill in some basic data.

3) An effect is now created in your Cue List

4) Right Click on the Common Effects header in the Toolbox and click on Add Tab.  Note that a user defined Tab is created.  You can right click on the new header and click Rename Tab to create a name that you recognize.
5) Drag and Drop the effect FROM your Cue List TO your header of the new Tab that was created.  Release and note that this MIDI Command is now part of your Toolbox.
6) To edit the MIDI Command, right click on the MIDI Command in the Toolbox and click Edit Item…  The same editor will appear that are used in the creation of this MIDI Command.  Edit and click OK to save your update.

Note:  Editing Toolbox items will not change any Cue in the Cue List.  It is best practice to create your Toolbox Tabs and Export them to backup your data.  Feel free to create Tabs for specific equipment and send them to other users to share.

Also, Sound, MIDI Sequence, Volume and Stop Effects cannot be added to the toolbox.  The Effect Library is used to store these types of effects.
The Common Effects

Autofollow
Links two effects together so that when the first part of the effect completes it will automatically fire the next part. No additional GO is required and effectively the cue parts all work as one cue effect.

Wait
Similar to the Autofollow as it links two effect parts together; however the time may be adjusted so that the 2nd part of the cue is fired after a specific wait time. Wait times may be edited using the standard SFX time editor described earlier in this Guide.

Memo
Just a text note usually used as an indicator of some importance, ie. Act II Starts Here. Can also be used as a place holder for future cue effects.

Sound
The primary function of SFX is to play sound. The Sound toolbox item may be drag/dropped from here to then prompt the user to locate the sound file, or Windows Explorer may be used directly to drag/drop audio files. WAV, WMA and MP3 files are supported.

MIDI
MIDI Commands to send out any MIDI Device created in the MIDI patch. After this effect is added to the cue list, clicking on the Properties icon, or right clicking on the MIDI cue will display the MIDI editor.

In this window you can create new individual MIDI commands, edit existing MIDI commands, chose which MIDI Outputs you wish to send this MIDI data to (from the active MIDI ports set in the MIDI patch), and even record a MIDI sequence.
To add a new MIDI command simply click the text “Click here to add a new row”. Once you do that you can create a new MIDI command, set which type of MIDI command you wish to send, assign it a MIDI channel, and assign the variables of the MIDI command. You can also set a time code value in the first column, labeled “MTC Time”. If you enter a time value in there, SFX will delay that particular MIDI command by the time value assigned. This allows you to build simple MIDI sequences.

In the example below, you can see there are two MIDI commands. The first command is sending MIDI CC #10 at a value of 105 on MIDI Channel 1. The second command is sending Program Change 15 on MIDI Channel 1, but it is delayed by 10 seconds.

At the bottom of the MIDI Editor Window you can chose which MIDI port you wish to send this MIDI data out of. The Play button will play (or send) the MIDI command(s) you have listed above using the specified time values. While a sequence is playing you may press the Stop button to cancel the MIDI data streaming. While a sequence of MIDI data is currently being Played the Play button will be grayed out.

Once you are done working on any changes or edits to the MIDI commands you would like SFX to send simply click on the Close button (the X icon in the upper right hand corner of the MIDI Editor dialog box) and you will be returned to SFX 6’s main window.

SFX 6 can also record an incoming MIDI data stream. This functionality can be very useful for recording fader moves on a digital mixing console or for any time where you need to capture a MIDI data stream with timing information. To record MIDI data you will have to have at least one MIDI Input device set up and active in your Production’s MIDI Patch.

To begin recording a MIDI Sequence simply drag and drop a new blank MIDI Command into any Cue List. Right click on the new MIDI Command to open the MIDI Editor dialog box. In the drop down box at the bottom of the MIDI Editor window choose which MIDI Input you would like to record data from. Once you have done that you simply click the Record button that is just to the right of the drop down box, and any incoming MIDI data will be captured with timing information. Once you have received all the MIDI data simply click the Stop button and SFX 6 will display all the captured MIDI data in the table.
Of course, once you have captured (recorded) incoming MIDI data, you can use the MIDI Editor to make changes to any of the messages, to add additional messages, or delete extra messages.
Similar to the Sound Effect, MIDI Sequence will play a .MID file to a specified MIDI device. Multiple MIDI streams may be associated together into one effect and routed to the same or different MIDI devices.

<table>
<thead>
<tr>
<th>Cue Selection</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cue List 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cue List 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Create a single effect that will stop prior effects from playing. Typically you would first select all the effects in the Cue List that you want to Stop, then drag this effect into it. SFX will assume that it should create an effect that stops the cues that you have selected. If you do not select any effects, than you will be prompted to select the effects to stop. At any time, you may click on the +/- symbol in the header of the Stop effect to add/remove effects to stop.

The +/- button to add/remove Stop Tracks.

When no effects are selected, SFX will prompt for effects to stop or when the +/- icon is pressed.

Create a single effect that will modify the volume of the target effect. Similar to the stop effect where SFX will assume that it should create an effect that targets the selected effects when created, or the user will select the appropriate cues by using the +/- icon. Note that one Volume Effect may point to one or more cue effects. That is, you can create one volume change effect that points to two Sound Effects. This is very useful when you are creating cross fades between numerous effects.
Drag in the Command Effect, then right click to access the Command Effect Editor. Numerous functions are available including the ability to cue, start, pause, stop play back of cues in the same or different Cue List; Start, Set, Rest the timecode clock; and Reboot the computer. The Command Effect is a graphical interface to the SFX Scripting language.

**The Extended Effects (SFX Deluxe)**

Drag in the MSC Command and right click to access the MSC Editor.

Using the MSC Editor the SYSEX MIDI Data is created automatically for the designer. Select the MIDI Output device and the MSC options to build the command.

SFX Scripting language is a very powerful VBScript like language that can control every aspect of SFX or the computer that SFX is running on. The Script Effect is a script language command that is executed on GO. Refer to the SFX Script Language Guide for more information on creating scripts.

The serial command is straight ASCII text or HEX data to send to a serial port. ASCII data is typed as is, i.e.: Hello World will send the string Hello World to the assigned serial port. In addition, HEX data may be encoded in the string by using the ! character. For example: Hello World!0A!0D will send the Hello World string and follow it with a CR/LF (0x0A/0x0D).

Exactly like the Serial command except a TCP/IP port is used to send data.
The Effect Library

Similar to the Cue List, the Effect Library is a library of effects that can contain any effect that a cue list can contain. A Production must be loaded as the Effect Library will use the same engine patches as the Production for playback of effects.

The Effect Library is designed so similar to the Production format, that you could actually open a Production in the Effect Library. Effect Libraries and Production even have the same file extension, so manage your Effect Libraries in a folder structure that meets your design process.

To create your first Effect Library, first create your Production and assign your patch as described earlier in this Guide. The Effect Library window will be blank with a menu option called Library. Select Library | New Effects Library from the menu.
You will be prompted to create the Effect Library file:

Enter a filename, or browse to where the filename should be created by clicking on the ...., Enter the Author, Description and Notes as you wish and press OK.

The Effect Library will be created and the Effect Library Window will look something like:
The two menus will populate with

![Menu Screenshot]

and will function very similar to how the Cue List functions.

**Library Menu**

New Effect Library – create a new Effect Library.
Open Effect Library – open an existing Effect Library (or Production as an Effect Library)
Save Effect Library – enabled when the library is dirty.
Save Effect Library As… -- save this Effect Library as a new name.
Close Effect Library – closes the opened library.

Add Effect List – adds a new list to the effect library. Lists are useful to maintain a number of different style effects. For example, one list may contain all your “Dog Bark” effects, while another list might contain your “Storm” effects.
Delete Effect List – removes the active Effect List from the library.
Import Effect List… – imports a previously exported Effect List or Cue List.
Export Effect List… -- export the currently selected Effect List.

**Cues Menu**

Same function as the Cue List | Cues menu

The Effect Library functions very similar to the Cue List and will allow for the same drag and drop functions from Windows Explorer or from other Cue Lists (Effect Lists). Complex Effects may be stored in the Effects Library for later drag and drop into cue lists. The primary difference is that when cues are played, the standby (green bar) does not drop down to the next cue.
Assuming you created the “Killer Storm” that contains numerous effect parts and may look like:

<table>
<thead>
<tr>
<th>#</th>
<th>Title</th>
<th>Start Time</th>
<th>End Time</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>storm_01</td>
<td>00:02:03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>[5] Wait</td>
<td>00:00:05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>wind_heavy</td>
<td>00:02:50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>[5] Wait</td>
<td>00:00:00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>THUNDER</td>
<td>00:00:06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>[4] Autofollow</td>
<td>00:00:06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>wind_soft</td>
<td>00:01:50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>[5] Wait</td>
<td>00:00:25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>[1] cow</td>
<td>00:00:01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>[4] Autofollow</td>
<td>00:00:01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>[1] Thunder2</td>
<td>00:00:08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>~~ END ~~</td>
<td>00:00:08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Collapse the cue by clicking on the – in the Standby Column.

Then drag the entire cue to the Effect Library.

From now on, you have the entire Cue (and cue parts) located in the Effect Library that can be drag/dropped into any other cue list.

**Production Relationship**

When the production is saved, the last Effects Library reference is also saved so the next time you open a Production, SFX will automatically open the related Effect Library.
The Transport Window

The Transport Window allows complete control of your cue timings. You can use it to quickly and easily scroll forward or backward in cues. You can pause, stop or restart Playback Cues, Volume Change, MIDI Sequences, etc.

The most innovative aspect of our Transport Window is that SFX will now treat a series of cues or commands that are linked with Waits or Autofollows as a Single Cue. So rather than each and every command showing up as a separate entry in the Transport Window, a large stack of sequenced commands will appear as a single cue in your Transport Window.

As an example, below is a stack of cues that are all linked together via Wait commands. Notice that in the Transport Window that stack of cues appears as a single line, while the sequence is running.
The upper pane of the Transport Window will display all the cues that are Standby for all your cue lists. If you only have a single cue list, you'll only see one cue displayed in the upper pane. If you have two Cue Lists, you'll see two cues in the upper pane, etc.

An Example of a Production with 3 Cue Lists:

Click here to go to the Previous Cue in List

Click here to go to Next Cue in List

Click Here to Play/GO Standby Cue
3 Cue Lists with Cue Sequences Running:

At any time while a cue sequence is running you can use the transport controls:
At any time while a cue sequence is running or paused, you can easily scroll forward or backward in time. To do this simply hover the mouse cursor over the time display for any cue sequence that is running. You will then see a blue square super-imposed over the top of the time display. While the blue square is displayed you can seek forward or backward in time by using the scroll wheel on your mouse. CTRL-Scroll to move by 3 second steps. (Alternately, you can also simply click on the blue square and drag it forward or backward in time or double click on the Duration to edit the time directly).

You’ll notice that as you scroll forward or backward in time, any cues that are linked in a sequence with Wait or Autofollow commands will all seek forward or backward together and essentially act as if they were a single cue. This concept of treating large cue stacks as a single sequence can be very handy for when you wish to jump around in time within a cue sequence, such as during technical rehearsals.

You’ll also notice that if you cue up to a cue that is in the middle of a large stack of linked cues all the previous cues will seek forward in time relative to the cue in the middle of the sequence that you selected, as such:
When you have more than a single cue list in your Production it can be very helpful to be able to see which Cue List contains the items displayed in the Transport Window. By default the List Column is hidden in the Transport Window. If you wish to view that column simply right click on any of the column headers in the Transport Window, select Show Column and then select List. SFX will then display the “List” column and you will be able to tell which list contains all the cues that are displayed in your Transport Window. Alternately you can choose to show all columns or hide any of the columns that you do not wish to view in the same manner.

<table>
<thead>
<tr>
<th>List</th>
<th>Q#</th>
<th>Title</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>daydream</td>
<td>00:06:00</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>guitarson</td>
<td>00:00:00</td>
</tr>
</tbody>
</table>

Transport Window with List Column Shown:
The Active Matrix

This is one of the biggest new features in SFX with regards to setting audio playback levels. This window will show you the volume levels of all audio files that are currently in standby or playing or optionally every track in your production. So at any point in time you can look at this window and see a track’s current level. If the levels are currently changing you will see those level changes happening in real time. This tool is really designed to make it as simple as possible to not only keep track of volume levels, but to set new levels and update current cues or create new volume change cues.

Once you have started playback, you’ll see your playback tracks displayed as such in the Active Matrix Window:
There are a number of ways you can adjust the levels while a track is playing. You can select a single cell (or crosspoint) and adjust that volume point with the mouse wheel (or any of the multiple ways to adjust volume levels explained earlier). You can select multiple cells by holding down CTRL and clicking in multiple cells.

In addition to clicking on the “Title” in the Track Name column, use SHIFT LEFT Click on “Title” to select all active crosspoints for this one cue part or use SHIFT RIGHT Click on “Title” to select all active crosspoints for this entire cue including any parts that are linked with Autofollows or Waits.
In addition to selecting which cells you wish to adjust individually, there are also some helpful features available in the toolbar of the Active Matrix Window.

The Auto Select Volume icon will allow you to toggle that feature on and off. The Auto Select Volume function allows you to select any of the crosspoints in the Active Matrix simply by hovering your mouse cursor over one of the cells. As you move the mouse cursor around the Active Matrix window you will see that whichever cell currently under the mouse cursor is selected. To change volume levels with this function turned on you simply move your mouse around the window and use the scroll wheel to adjust the various volume crosspoints. This is a fast and easy tool for when you want to make adjustments on many crosspoints, but only need to adjust a single crosspoint at a time.

The Select Only Playing Channels function will automatically select any volume crosspoints that are active, but only on playback tracks that are currently playing. You will notice that volume levels for playback cues will appear in the Active Matrix window as soon as they go into Stand-by. Using the Select Only Playing Channels function allows you to select all volume crosspoints that are active in the Active Matrix Window, except for those playback cues that are in Standby. The tool is a very handy way to be able to adjust all the levels of any track(s) that are currently playing, but at the same time to not select levels for those cues that are simply sitting in Stand-by.

The Select All Active Channels function is identical to the Select Only Playing Channels function except that it does not ignore playback channels that are in Stand-by. So any active volume crosspoint in the Active Matrix will be selected when you use this function.

The Invert Selection function will select all the volume crosspoints in the Active Matrix that are not currently selected, and deselect all currently selected crosspoints. This function allows you to quickly toggle back and forth between selected and unselected crosspoint cells within the Active Matrix.

With the use of these above tools, it should allow the end user to select the volume crosspoints they wish to adjust reasonably quickly and with as few mouse clicks and keystrokes as possible.
Although SFX 6 allows you to treat every buss as an individual mono device, many of us still often work in stereo pairs within a theatre. For example it's fairly typical to have a Main Left and Right set up. Or a pair of speakers upstage configured as a stereo pair. To aid in making it easier to adjust the volume crosspoints of more than a single buss at one time, SFX 6 allows you to Buss Groups. Once a Buss has been assigned to a Group, it will allow you to easily select all the active crosspoints on any busses that are in the same group. Any number of busses can be added to a single group. To assign a buss to a group, simply right click the name of the Buss at the top of the column in the Active Matrix Window. You will notice that as you right click on the column heading or Buss name, the background for that heading will change colors. Busses that are assigned to the same color are then grouped together, and you will even see that grouping within the Cue List volume crosspoints display as well as in the Active Matrix. In the example below I have created 3 separate Buss groups.

![Active Matrix Window](image)

- **Button to turn Grouping On/Off**
- **Right Click any column heading to Group a Buss**
- **Buss 1 and 2 are grouped**
- **Buss 3 and 4 are grouped**
- **Buss 5, 6 and 7 are grouped**
Now that you know how to adjust volume levels in the Active Matrix, you’ll probably want to start recording those volume changes within cues in a Cue List. The Active Matrix Window has three separate functions available in it’s toolbar for just this purpose.

The first of these icons is the Update Related Cues button. This allows you to update the levels of all the currently playing tracks within the last cue that effected or adjusted those levels. In other words, if Cue #1, is a playback cue, and I execute Cue #1, adjust the levels in the Active Matrix Window, and then hit the update levels icon in the Active Matrix window, SFX will then update the volume levels in Cue #1. On the other hand if I execute Cue #1, and then execute Cue #2 (which lets say for this example is a volume change cue that points to Cue #1), then change the volume levels in the Active Matrix Window, followed by clicking on the update levels icon, SFX will then write those volume levels into Cue #2. So the easy way to think about it is that SFX will update the last cue to “touch” those volume levels of any cue that is actively playing.

To assist the end user in keeping track of which cue was the last cue that adjusted any volume levels, you’ll notice in the Active Matrix Window’s track list that each track that is being played will have an icon and Q number followed by the name of the audio file. The icon and Cue number correspond with the last cue to adjust the level of that track. So when you click the update levels icon it will update all the levels of the cues that are displayed in the track list of the Active Matrix Window.

Example:

A track name of: “Q2-2 Bike Pedals”, would refer to Q#2 Track #2 Bike Pedals. If I changed the levels on that track in the Active Matrix Window and then clicked Update Levels, it would update the levels in Q#2.

The next icon in the toolbar is the Create New Volume Change Button. This button allows you to take a snapshot of ALL the current levels in the Active Matrix and record those as a new volume change cue in the appropriate cue list. It will place the volume change cue wherever the selected cue bar is currently at in your cue list.

The last icon is the Create New Volume Change With Selected Tracks button. This button allows you to select only the tracks that you want in your new Volume Change Cue, and record those as a new Cue in the appropriate cue list.
When you are adjusting volume levels and especially with short sound cues, you might want to display not only Cued and Playing tracks, but all tracks whether they are playing or not. This will come in handy when a very short effect was played and you need to adjust its’ volume w/o hunting through the cue list.

When you are working with multiple Cue Lists it can be handy to see which Cue List contains each audio file displayed in the Active Matrix. Keep in mind that the Active Matrix Window will always display all audio files that are in standby or actively playing from every Cue List in your Production. With some complex shows the Active Matrix can grow quite large.
The last thing you should know about the Active Matrix Window is that it also allows you to make adjustments to the Output Matrix in real time while audio is streaming. This is useful so you can quickly and easily adjust your Output Matrix, while not leaving SFX’s main window. To view the Output Matrix, simply click on the Speaker Icon in the Active Matrix Window’s Toolbar.

From within this view not only can you change the levels within the Audio Output Matrix, but you can change the names of the busses, or even add new busses and delete current busses.
The Production Properties

Refer to the Reference Guide for Production Properties.
The System Properties

Refer to the Reference Guide for System Properties.