

SAC Latest Release Info

Introduction

Welcome to SAC. This environment offers an exciting new vision from Bob Lentini. The interface is built around the idea of a complete Live Virtual Front-Of-House Console and 24 Complete Virtual Monitor Consoles, all wrapped up in one program to offer an entirely new way of manipulating live audio in the virtual world.

Please take some time to explore the built-in HelpFile and also download the .pdf version of the manual, available at www.SoftwareAudioConsole.com. The navigation capabilities are powerful and complex and will require some getting used to. Reading, exploring and practicing inside the environment will greatly enhance your experience of the interface. We feel the rewards gained for the time invested, will be great. Have fun!

Version History Follows:

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Version 1.2

Enhancements

- * XY Pan routines are properly integrated into the new engine.
- * Touching any control that is part of an active Scene fade will now disengage and override that control.
- * Selected Group and Sub Group Latch functions will now also operate from a midi controller surface.
- * The Full Mixer view may now be sized down to 1 module. This makes it useful in a large Zoom Mixer workspace as a module section jump toolbar.
- * Only Remotes with FOH or MON status can now start and stop the live engine.
- * Remotes will now display the host slipped buffer counts when asked.

Bug Fixes

- * Fixed code to improve speed of meter resets on remote machines by sending only specific mixer view resets that the remotes are viewing.
- * Fixed code, that could cause a crash, to correctly disengage and override any control in a scene fade that is also part of a currently active scene fade when the new scene

recall is started.

- * Midi Controllers on host and remote machines will no longer interact unless both systems are viewing the same mixer at the time controls are moved.
- * Fixed code to allow Midi Control Surfaces with section jump functions to correctly jump to the next or previous section even if the mixer channels are re-ordered.

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Version 1.1

Enhancements

- * Moved the [SAW-Link] menu option to the front of the main menu for more consistent placement between SAC and SAWStudio.
- * SACRemote no longer needs plugins installed on the remote machine. It will read the list of plugins from the host. You can Add, Remove, Clr and Move plugins from the remote computers, but remote display and control of plugins is not currently active, but coming in a future update. You can currently only use the FX bypass switches on any of the mixers.

Bug Fixes

- * Fixed code to correctly save FX Source Input settings with mix sessions.
- * Fixed code to properly display Input and Return Source settings when recalling a scene.
- * Fixed code to correct for network bogdowns during remote hookup on certain Windows setups which would depend on network protocols installed.
- * Code modified to fix possible crash issues with ASIO drivers and more than 72 channels of soundcard devices when opening the Audio or Sync Devices Setup window.
- * Fixed the increment/decrement fader arrow clicks to properly increment in the Wide Mixer View Output Channels.
- * Fixed code to clear remote computer meters when SAWStudio playback is stopped when using the SAC/SAWStudio Link.
- * Fixed code to handle mixer FX Patch bar displays with scene recalls that contain active FX switch changes correctly, even if plugins have been removed.

- * Fixed code to eliminate the delay on large sessions when starting the engine with active Host/Master/Remote TCP/IP connections.
- * Fixed code to not flash remote meters as host mixer displays are changed.
- * Fixed code to correctly display host devices in remotes for input and output device selections.

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Version 1.0

Enhancements

- * This is the first official release version.
- * The Remote functions have been extracted to a separate SAC-Remote program. This program is free to all and available as a download on the SAC site. This program can be freely distributed and installed on desktop or laptop computers to be used as FOH, MON or Personal Monitor remote control stations for a Host/Master SAC system. The SAC-Remote version has no audio engine or hosting abilities and requires connection to a SAC Host/Master system to be functional, although all other interface functions remain the same and it is also a perfect way to learn the basic SAC interface and create session templates and scenes while run in stand-alone mode to be later imported into the main SAC sessions.
- * The Channel Mute switch has been enhanced with the use of the Ctrl-Key. When you click on the Channel Mute switch while pressing the Ctrl-Key, the FOH and all Monitor mixers will be affected. This can be very useful for muting output channels or returns across all mixers at the same time. Temporary grouped channels will also respond to this feature.
- * A new option has been added to the Options Menu called *TCP/IP Computer User-Rights List*. This option allows you to set user rights for the host/master computer as well as all remote connected computers. You can assign each computer by name and lock it's user rights to FOH, MON, or any one of the Personal Monitor Mixers. These settings automatically save in their own .ini file each time they are altered. If a remote computer has NO ACCESS as its setting, all windows will be disabled. The computer will see signal meters but will have no control of the mixers and other windows. All remote computers start out with NO ACCESS status until the Host/Master computer sets the user rights in the *TCP/IP Computer User-Rights List* option.
- * Solo Bus Mode has been enhanced to now offer two independent solo buses, one for FOH and one for Monitors. This allows a FOH and Monitor engineer access to the

same host system with independent routing of solo selections. Any connected computer that has FOH User Rights will solo out to the FOH Solo Bus Device, while MON User Rights computers will solo out to the MON Solo Bus Device. There is now a new option in the Mixer Menu *Solo Mode* options to select a separate FOH Solo Bus Device and a separate MON Solo Bus Device.

- * Remote computers with Personal Monitor User Rights now use a new enhanced solo mode that acts similar to Solo In Place mode. Engaging solo on a remote personal monitor computer will highlight the soloed channel in place by dropping the other chans 12 db. This allows the performer to stay in time with the rest of the performance while still hearing the soloed channel clearly above the rest.
- * The TCP/IP Remote functions have been enhanced and optimized for performance by compressing the amount of data being sent across the network.
- * The Monitor Mixers have been enhanced to now offer 8 master output channels just like the FOH Mixer.
- * The Recall Chan settings from memory now ignores all device in and out assignments so you can now recall channel control settings from other channels without affecting input source and output device destinations.
- * A new feature has been added to the Output Sub Faders (9 – 24). If not assigned to a master out as a normal sub group bus fader, the sub faders can act as a group fader latch, similar in function to a VCA sub. Any input or return chan assigned to the group bus will be controlled as a group by the sub fader. Pressing the Alt-Key while moving the group latch fader will temporarily disengage it from the group, and using the left-right-click feature to set the fader to its default value will also temporarily disengage it from the group. This concept allows you to set an offset limit by riding the group fader near the bottom or top of its range. The Mute and Solo switch will also operate on the group.
- * The Scene operation has been enhanced to include a data filter that allows you to set which controls and switches are active within a scene and which mixers will be affected. You can also set a fade time for the scene in milliseconds and also select whether switches react first or last when a fade is active. Fades require the engine to be live since they use the sample-clock for timing. The display will also show you the channel list of the scene's active channels. You can see and adjust these options by Right-Clicking on a scene in the Scene View window. Once in the dialog you can click OK or use the Enter key to exit and save the changes or click Cancel or use the ESC key to exit and cancel any changes.
- * Scene operations are now fully operational from remote computers and can maintain separation between FOH, MON and PER MON user rights.

- * The Scenes View window has now removed the sorting status allowing you full control of the arrangement and grouping of your scenes. You can move scenes up or down in the listbox by using the Ctrl-UpArrow or Ctrl-DnArrow keys.
- * The Scenes View window now also adds the SpaceBar key to recall a scene and the Enter key to display the Scene Properties dialog. The Delete key is also active to delete a scene. Using the Alt key when recalling a scene overrides any built-in fade time. Using the Ctrl key when recalling a scene will select the partial channels as a temp group.
- * The Scenes View window *Options* icon has been activated with two new options. The *Auto Advance After Recall* option automatically advances to the next scene entry after a scene recall operation... perfect for stepping through a series of scenes in a show lineup. The *Import Scene To Current Session* option will copy a scene file from another folder into the current session Scenes folder and add the scene into the current session scene list.
- * When a system is active as a Host/Master, you may now Left-Click on the Host/Master icon on the main titlebar to display a list of connected remote computers and their user-rights.
- * Channel Label entry is now functional from remote computers.
- * The meter code has been adjusted for a smoother response at all buffer sizes and slightly extended peakhold displays.
- * Redesigned the Pre FX Patch signal flow option to insert the Pre FX Patch at the top of the module before the Monitor Src Split and SACLink Record Src Split. In this manner, a VST Synth can be treated as source data for the monitor consoles as well as for SAWStudio SACLink recording.
- * Two new Input Source options have been added to the popup input source device menu on the mixer. The first option is called *FX Source* and is used to force the chan active with the source data expected to feed from an FX Plugin, like a VST Synth or Tone Generator. This option is added in place of the automatic VST detection method which could fail on many plugs that do not register as such correctly. The second option is called *Off* and is used as a quick way to disconnect the chan without having to open a stereo or mono device menu to select Off there.
- * A new Main Menu option next to the Info Menu called [*SAW -Link*] is now available to switch to SAWStudio when the SAWStudio-SAC Link is active.

Bug Fixes

- * Code modified to fix issues when importing SAWStudioLite data into SAC using the SACLink feature. This fix makes adjustments for the lesser channel count in Lite and

corrects mis-aligned Input, Return and Output data.

- * Fixed code to maintain a clean shutdown when a TCP/IP connection is active when you exit the program.
- * Fixed TCP/IP initialization code to eliminate lockups that could occur while making a new remote connection while the engine is live. You are now free to connect or disconnect remote computers while the engine is live.
- * Fixed Output Chan assignment readouts to correctly display master or group assignments on all mixer views.
- * When creating a new scene, the code now checks the Scenes folder in the session folder and warns of duplicate scene files that may be used by other session spinoffs. If it finds a duplicate file, you have the option to adjust the scene name or cancel.
- * Meter response changes can now be done while the engine is live.
- * Deactivating meters while the engine is live will now properly clear the meters.
- * Fixed code that would cause a crash with ASIO drivers when the total audio devices exceeded 24 (48 channels).

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Version Pre-Release 0.3

Enhancements

- * Added a new menu option to the popup Current Mixer menu (Right-Click in the Current Mixer Zone in the Main Top Client Area). The option is called *Duplicate Chan Order From*. This option allows you to duplicate the mixer channel order from the FOH or other Monitor Mixers.
- * New options have been added to the Mixer Menu called *Meter Tap Point Src*, *Pre-Fdr*, and *Pst-Fdr*. These options allow you to set the tap point within the channel signal flow for the meter data. Selecting the Src option displays the meter data at the source position at the top of the module, after the attenuator, phase and mono sections. Selecting the Pre-Fdr option displays the meter data just before the mute switch and fader. Selecting the Pst-Fdr option displays the meter data at the end of the channel signal chain. These options can be saved with the preferences.
- * Added the hooks to SAWStudio Lite and Full (Version 4.2). The *SAC Link* option is activated from within the SAWStudio app and once a connection link between SAWStudio and SAC has been established, you can now pass data in both directions

for recording and playback with SAWStudio using internal shared memory buffers that completely bypass the Windows soundcard drivers. SAWStudio will automatically disconnect from the drivers and use the internal shared buffers to communicate with the outside world through the SAC engine.

The menu options are selected from within SAWStudio and show up as follows:

The *Activate SAC Link* option on the SAWStudio Options menu will establish the internal connection between the two programs. SAC and SAWStudio must both be running at the time, and when the connection is established, a SAC<->LINK icon will appear in the left corner of the SAWStudio main titlebar.

The *SAC Link Options* option expands out to include these following choices:

The *Export Mix Data To SAC* option allows you to instantly transfer the main MT track and channel mix data directly to the SAC FOH console. This will also automatically preset each SAC console channel input source to point to the associated SAWStudio MT track. This option allows you to playback the SAWStudio MT tracks in a 1 to 1 configuration through the SAC console. You can then use the SAC Monitor mixers to setup separate performer mixes. SAWStudio will not play audio through its own driver devices while the *SAC Link* is active. You do not have to make any preference changes in SAWStudio... the buffer settings will be internally set to relax the SAWStudio cpu load and rely on SAC to handle the low latency performance. The internal link will adjust for SAWStudio playback buffer size changing and latency causing plugins and deliver a fixed data stream to SAC with no changes needed to your edl session in SAWStudio.

The *Import Mix Data From SAC* option allows you to instantly transfer the SAC FOH console setup directly into SAWStudio, including automatically creating a record template with all channel input assignments preset, ready for a live recording of the current SAC session. All that is needed after this option is activated is to Ctrl-Click the first track's record button in the SAWStudio MT to open all record meters for all active SAC channels, already pre-assigned. Once again, SAWStudio completely bypasses the soundcard drivers and gathers its audio data directly from the SAC engine. This allows SAWStudio to perform the MT record operation with very little added cpu load on the system, and also relaxes the buffer settings to essentially coast along quietly in the background while SAC handles the low latency monitoring load.

The *Input Chan Play Tap At SRC* option selects the SAWStudio tap for sending its track data to SAC. This option sends the data from the SRC position at the top of the chan module just after the Mono section. Using this option means you are essentially sending the playback data directly from the wav files on each track with no added processing from the SAWStudio virtual console.

The *Input Chan Play Tap At PRE-PATCH* option selects the SAWStudio tap for

sending its track data to SAC. This option sends the data from just after the PRE-PATCH position within the chan module. This option would allow VST Synths data to be passed onto SAC and the Pre-Patch position routing options within SAWStudio will still apply, so some signal processing from SAWStudio may be part of the signal chain before the data reaches SAC.

The *Input Chan Play Tap At PST-FDR* option selects the SAWStudio tap for sending its track data to SAC. This option sends the data from the bottom of the chan module, which includes all chan processing and automation. Very useful for show playback of pre-recorded tracks.

Once the *SAC Link* is initiated, the SAC input source options will expand to allow individual SAWStudio Mixer Chan selections instead of just the hardware device selections. You will see all SAWStudio label references for each channel in the list. You may select any Input Chan from SAWStudio or any Output Chan. Selecting an Output Chan allows you to maintain a complete mix in the SAWStudio environment and only use one stereo input chan in SAC to playback the entire 72 tracks from SAWStudio. Any Input Chan selection is subject to the above mentioned Tap points set in SAWStudio.

Likewise in SAWStudio, the record meter Input Zone will display the SAC channel list with the SAC labels. You may record from any SAC channel which will automatically adjust the record meter to mono or stereo based on the SAC source assignment. An added bonus here is that you now have the ability to record extra channels in your current SAWStudio version than is possible with SAWStudio alone. For instance... SAWStudio Lite allows up to 24 record meters which are normally connected to the 12 possible stereo hardware devices. Normally that translates to 12 stereo tracks or 24 mono tracks or any combination in between. But with SAC's ability to handle 36 stereo devices, you would now have the ability to pass on up to 72 signals in any combination of mono/stereo to the 24 record meters. Therefore, you can now record up to 24 stereo tracks (48 channels worth of data) in Lite as long as you have that many channels of hardware devices connected to SAC.

Bug Fixes

- * Fixed code to properly display and jump to the correct channel using the mixer popup jump menu when channels are re-ordered.
- * Fixed crash that could occur when opening a mix session that has an input device assignment that is not available in the current preferences.
- * Fixed crash that could occur due to meter routines overstepping their variable bounds when using multiple Monitor Mixers under certain input and output assignment conditions.

- * Closing a mix session now correctly clears all monitor settings and labels as well.
- * Fixed the ASIO menu text display to properly display the 16 bit integer format.
- * Fixed code to correct for meter timing drift on certain computers where the motherboard clock and soundcard driver clocks may exhibit pronounced timing differences.

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Version Pre-Release 0.2a

Enhancements

Bug Fixes

- * Fixed code to correct for issues with the M-Audio ASIO drivers and the new engine design. May also affect other ASIO drivers that may respond in the same manner.

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Version Pre-Release 0.2

Enhancements

- * Heavily re-designed the ASIO engine for higher performance and the ability to detect and correct for latency drift. This new design should completely correct for any slipped buffers that might occur, regardless of the cause of the slip. This should eliminate any possible latency drift once the engine is started.
- * Removed the ASIO Skip First Buffer menu option since it is no longer needed with the new ASIO engine re-design.
- * Heavily re-designed the MME engine for higher performance and the ability to detect and correct for latency drift. This new design should completely correct for any slipped buffers that might occur, regardless of the cause of the slip. This should eliminate any possible latency drift once the engine is started. Due to the extra complexity and kludge of the MME design protocol, you may find better stability in single CPU mode when using the MME driver model, although you may have better performance in dual cpu mode because the low level driver threads can be split off to the other processor keeping them separate from the mixer buffer processing threads.
- * A new enhancement now allows you to check for slipped buffers by Left-Clicking in the Mixer Load Percentage readout display. A small message window will display the current count of input and output slipped buffers since the engine has been started.

This slippage will have been automatically re-synced so there is no overall latency drift. If your system is running completely stable under load, these values should remain zero.

- * Re-designed the engine code to now dynamically make use of all cpu's in the system and maintain stability. Also re-designed the *Force Single CPU* option in the *Options Menu* to force the process itself to CPU 0 (first CPU), essentially the same as setting the process affinity in the task manager. This setting can be saved with the preferences to force SAC to CPU 0 every time it starts, if desired. When using buffer sizes of 64 samples or less, you may find higher stability and performance in single CPU mode on many multi-CPU systems. The processor and thread switching overhead can interfere in many cases with the extremely fast loop times required to maintain these low latency settings and actually start causing slipped buffers. Also note that drivers may still be spawning multiple threads to multiple CPU's even with this setting active, and therefore total stability in a dual cpu system involves potentially hundreds or thousands of interwoven code segments throughout the entire system to be working in perfect sync. You may find much more stability by actually forcing the boot to only seeing a single CPU by using the boot.ini /ONECPU flag. Details are in my Windows XP Tweaks document on my website.
- * Enhanced the Monitor mixer source assignments to allow taps from the FOH mixer or from the Monitor 1 mixer. This allows the Monitor 1 mixer to be used as a completely separate master monitor mixer with all other monitor mix taps coming from it. Monitor mixer 1 still taps from the FOH mixer, but the rest of the Monitor mixers can use the FOH taps or new taps labeled with the letter M at the end to tap from Monitor mixer 1. This allows complete separation of the Monitor mixers and FOH for use with two mixing engineers. FOH can use its own EQ and DYN and Monitor mixer 1 can act as a master Monitor mixer with a src split tap and its own EQ and DYN. The rest of the Monitor mixers can then tap from Monitor mixer 1 as a master, instead of FOH.
- * Extended the Full Mixer Fader Jump zone to stretch from the bottom of the mute switch to the top of the meter, increasing the zone size making it easier to click and snap the Zoom Mixer display to the fader position.
- * Removed the *Ctrl-Solo* switch option to be used for a new feature. You can still disengage all active solos by Left-Clicking the main Solo Light in the Main Window Top Client area.
- * The Solo Light switch, in the main window top client area, has been enhanced to include a new feature. Left-Clicking on the solo light will now solo the current Mixer's Master Out Channel 1. You can then adjust the mix while monitoring the master mix output without having to jump to the output chan to solo. Left-Clicking the solo light switch again, will disengage the special mode and all active solos. The original Hot Channel Solo Mode function has been replaced by this new function, but

can still be activated by Alt-Left-Clicking the Solo Light.

- * The minimize routine has been modified to allow you to minimize the SAC program while the engine is live with much less chance of an audio glitch or slipped buffer on most systems.
- * Added a new Midi Control Template for the Behringer BCF2000 unit. There is a sysex preset dump included in the SAC Configuration folder that must be sent down to the BCF2000 unit first and assigned to a preset. You can dump this file with any midi sysex dump utility program like Midi-Ox, or something similar.

The BCF2000 template gives you control of the 8 faders, in high resolution mode, as well as mutes, solos and pans. The top 2 buttons in the bottom right corner of the unit can be used to bank switch up or down, and the bottom 2 buttons of that group can be used to jump forward to the next console section (I, R, O).

Bug Fixes

- * Fixed code to eliminate a random short blip sound when restarting the engine.
- * Fixed code to properly initialize disabled channels when first opening a session file that has disabled channels in it.
- * Fixed code to eliminate screen drawing problems that could cause screen corruption and display lockouts on multi CPU systems.
- * Fixed code to allow the Hot Chan Solo Mode to chase mixers, so you can now switch to another mixer while the Hot Chan Solo Mode is engaged.
- * Fixed code to allow Monitor Mixers to detect a VSTi Synth patched on a FOH channel without having to assign the FOH channel to an input source. Realize that a Monitor tap point of Pre or Pst Fdr is required to pickup a VSTi Synth patched in a FOH Pre Patch point, unless the Pre Patch point is re-routed to before the Eq and Dynamics, in which case a Pst Eq or Pst Dyn tap can also be used.

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Version Pre-Release 0.1d

Enhancements

- * Changed code to keep active Return channels processing blank buffers when there is no active data being sent so that patched plugins would keep any decaying data trails

active.

- * Added code to force an instant resync of the engine pointers by stopping and immediately re-starting the engine. This is done by Shift-Left-Clicking the Live Light. If the engine slips buffers and starts losing sync and adding latency, use this function. I am working on a way to do this with no audio dropout... we'll see what happens.

Bug Fixes

- * Fixed code to refresh the Midi Controller bank when switching between mixers.
- * Fixed code to properly display the Dyn GR Meters on a remote station.
- * Fixed code to properly display the Aux Master Meters on a remote station.
- * Fixed code to stop crashes when adjusting the Compressor or Gate Threshold control on a remote station.
- * Fixed code to properly display channel meters for the proper mixer selected on a remote station.
- * Fixed code to properly reset live engine when engaging the Channel Disable switch from a remote station.
- * Fixed code to correct for Monitor Return channel buffer pointer sync loss when using a FOH Return tap.
- * Fixed code to properly rescan live engine pointer lists for all mixers when assignments are changed from any mixer and on any remote station.

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Version Pre-Release 0.1c

Enhancements

- * Enhanced VST Synth plugin windows to allow access to the midi options menu while the engine is live.

Bug Fixes

- * Fixed code to properly handle the midi controllers and recompiled all new midi controller templates.
- * Fixed code to chase the current physical channel when switching mixers.

- * Fixed code to chase the current physical chan when opening the Wide Mixer View from the View menu.
- * Fixed code to block VST plugins from toggling the engine with a right-click on the options icon.
- * Fixed code to block engine toggle options in the Exploded Mixer View.
- * Fixed code to clear all solos on all mixers when left-clicking the solo light.

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Version Pre-Release 0.1b

Enhancements

- * Added a new menu option to the popup Current Mixer menu (Right-Click in the Current Mixer Zone in the Main Top Client Area). The option is called *Solo Master Out*. This option gives you direct access to the current FOH or Monitor mixer Master Out solos, making it easy to solo a master mix while making adjustments.
- * Added some default F-Key sets for some of the more popular screen resolutions.

Bug Fixes

- * More work done on channel re-ordering in the Full Mixer and Zoom Mixer view. The popup Channel Selection Menu should now display and jump correctly to the proper channel no matter how the channels are re-ordered. The popup menu displays input channels in their re-ordered condition, but Return and Output Channels will still be linearly displayed.
- * Fixed Monitor Mixer Return Channels that use the Pre or Pst Fdr tap point from FOH to remain independent of each other.
- * Fixed code to properly initialize VST Synth plugins into the engine loop with no channel input source assign needed. The VST Synth becomes the signal source for the channel.
- * Fixed Name dialog for creating new scenes from displaying offscreen when close to the screen edge.
- * Fixed menu checkmark for proper notice of the Max Screen Resolution Override option.
- * Fixed code to fill screen resolution with default window if the software can not find

an F-Key File of the exact Screen Resolution size.

- * The Tab and Shift-Tab keys now correctly jump to the next and previous sections no matter how the channels are re-ordered.
- * Fixed code that displays Channel groups by inverting the channel numbers. This will now correctly display when changing mixers. Also fixed the Right-Click group clearing function... it now correctly clears all channel selections on all mixers. Selected channels link only on the current mixer, not across all mixers.

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Version Pre-Release 0.1a

Enhancements

- * The Attenuator control has been enhanced to include +20db of gain as well as the attenuation.
- * A new group of options have been added to the Current Mixer zone in the top Main Client Area. *Right-Clicking* in the Current Mixer zone will display a popup menu of options for duplicating sections of mixers to other mixers. The options are *Duplicate Fdrs/Pans From*, *Duplicate Src-Ins From*, *Duplicate Eq From*, and *Duplicate Dynamics From*. Each of these options will display another popup menu of choices for which mixer to duplicate from. To use the features, change to the mixer you wish to create a new mix on, and then select what you want to duplicate and then select the source mixer to duplicate from. This makes it easy to quickly setup a new Monitor mix by duplicating the faders and pans from the FOH or from any other Monitor mix, as well as duplicating input source settings and eq and dynamics.
- * Scenes have been enhanced to allow for partial scenes which will overlay only selected channels on selected mixers and not disturb other mixers and channels when recalled. To create a partial scene, first select only the channels on whichever mixers you want to be altered when the scene is recalled, and then create the new scene or update an existing one. This is a very powerful new concept that can make recalling scenes in any order much more useful, because other current settings that have been altered since the scene was created will not be changed if those elements are not part of the partial scene as saved.

Bug Fixes

- * Fixed VST .ini File Links. VST Plugs will now correctly load using the .ini File links.
- * Fixed ASIO Driver code to correct for the use of odd size buffers (non powers of 2). This should also allow the use of 32 sample buffers if the driver permits it.

- * Trapped Asio Driver Setup menu option when the engine is Live.
- * The Wide Mixer Lock now correctly holds its channel even thru F-Key View changes.
- * Fixed the Tab and Ctrl-Arrow key jumps to the next/prev mixer section to properly end up on the first I, R, or O chan regardless of mixer view screen size.
- * Fixed the current Dwave Driver code to work with the Soundscape Mixtreme Dwave compatible driver.
- * Fixed Channel Store / Recall functions to work correctly across mixers and selected channels.
- * Fixed Solo In Place code from creating a loud buzz sound when activating the engine with no active routing just after a program start when Solo In Place is saved as the default Solo Mode.
- * Fixed Dynamics GR Meter code to work properly and independent of each Monitor Mixer.
- * Fixed Channel re-ordering to work correctly from the Full Mixer or Zoom Mixer view.

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Version Pre-Release 0.1

Enhancements

First of the Pre-Release versions.

Quick Operation Info:

Setup your audio devices in the Audio Device Setup option of the Options Menu.

- * To start the Live Mode engine Right-Click on the Live Lite at the top left corner of the Main window.
- * Loading Mix Sessions or Mix Templates will force the engine off and flash the Live Lite when ready. You must then start the engine manually.
- * You can save sessions, mix templates and scenes while the engine is live.
- * The Tab key can be used in any mixer view to jump to the next mixer section (Inputs,

Returns, Outputs) and will loop around to the start again. Shift-Tab jumps in reverse.

- * You may use the PgUp and PgDn keys to jump up the Zoom Mixer module sections.
- * You may use the Up and Dn Arrow keys to adjust the Fader $\pm .5\text{db}$ on the current Hot Channel. Pressing the Shift-Key also adjusts in $\pm 1\text{db}$ increments. Pressing the Control-Key also adjusts in $\pm .25\text{db}$ increments.

Bug Fixes

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