Using Your StudioLive™ Mixer as an Audio Interface with Universal Control and WDM Support

Reference Manual
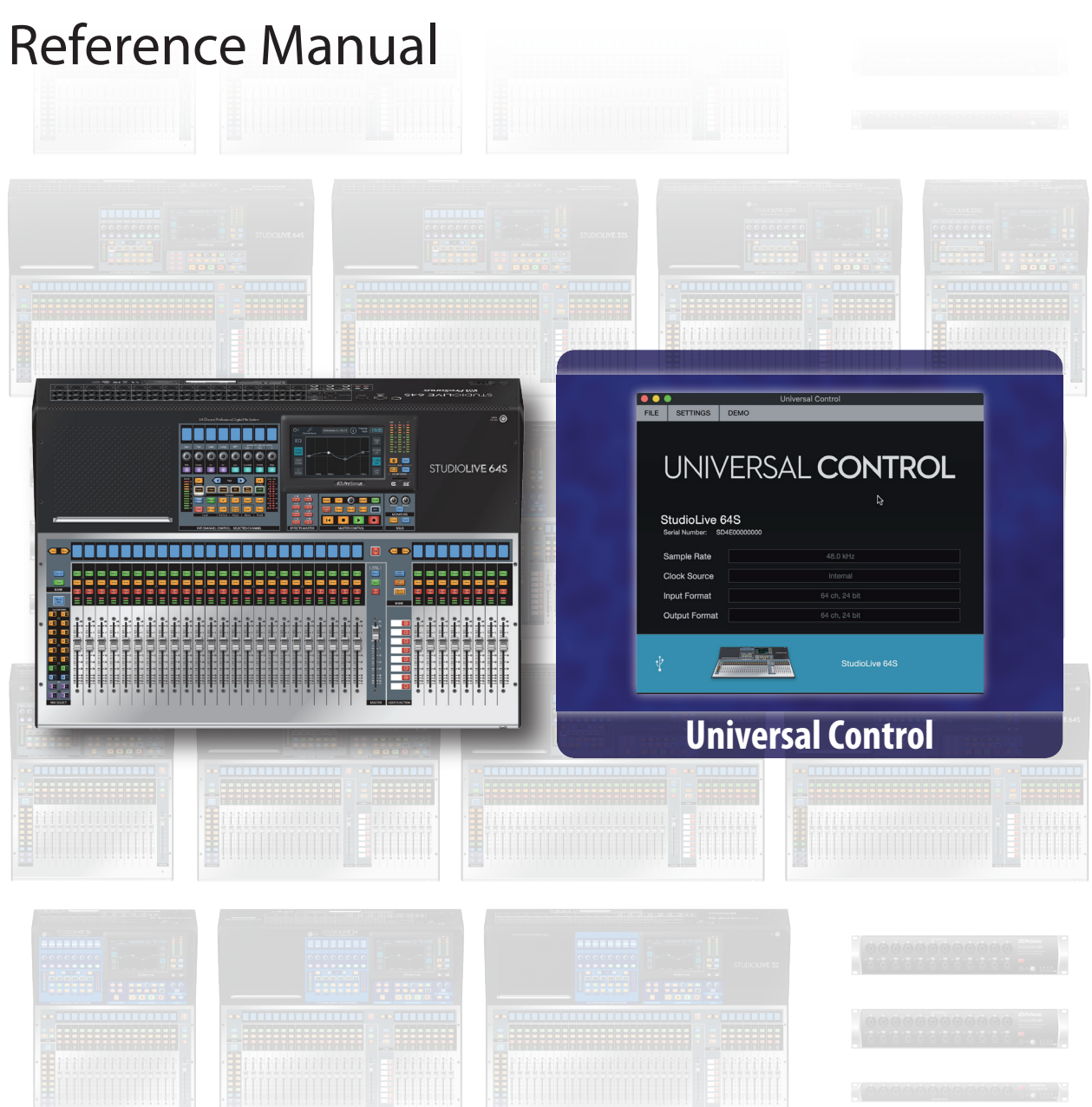

Universal Control

PreSonus®

www.presonus.com

Table of Contents

1   Overview

1.1   Introduction

Universal Control

StudioLive™ Series III mixers are more than just powerful digital mixers, they are flexible multi-channel recording interfaces as well. While they offer many advanced, integrated features with Studio One, StudioLive mixers are the perfect companion to any DAW recording environment. Whether you're recording live or in the studio, or mixing in- or out-of-the-box, your StudioLive will turn your studio into a professional recording and mixing environment.

The built-in USB audio interface on the Studiolive Series III mixers can be used in three different ways depending on your ideal use case and workflow; **Mixer Mode (Default)**, **Interface Mode**, and **Advanced WDM Support**.

- **Mixer Mode (Default)** is the way your mixer will work out of the box. In this default mode the USB interface can send channels or mixes to your computer via USB and the USB returns from your computer can come back to any available channel on your mixer. This configuration is ideal for most live sound applications.

- **Interface Mode** is a one-touch configuration that quickly sets up your StudioLive like a traditional USB interface—rather than as a mixer with a USB interface connected to its channels. In this mode the USB returns from your computer can be sent to any available channel, just as in mixer mode, and the analog line outputs of the mixer are also sourced from the USB returns instead of an internal FlexMix (individual FlexMixes can be turned back on as needed while in Interface Mode). We hope you'll find this way of working with your StudioLive to provide a more streamlined, focused, and satisfying recording experience that lets you focus on music without getting bogged down in cluttered menu dives.

- **Advanced WDM Support:** Whether in Mixer Mode or Interface Mode, the Windows WDM driver support provides even more flexibility when using the mixer with applications that use the built-in Windows WDM driver such as Skype, web browsers, and Spotify. Robust routing support for the Windows Driver Model allows your StudioLive to wrangle more advanced signal routing to and from multiple applications running under Microsoft Windows—great for sending a mix to or recording the audio from a Skype call, or for sending game audio to a mix for a live stream, etc. The possibilities are endless—and are covered in Section 5.

1.2   Required Software and Firmware Updates

Before using Interface Mode or Enhanced WDM Support, you'll need to update two things:

- PreSonus Universal Control 3.4 or later on your Mac or PC.

- Your StudioLive Series III mixer's firmware (version 2.4 or later.)

Please see Section 2 of this manual for more information on installing these updates.

1.3   About This Manual

We suggest that you use this manual to familiarize yourself with the features and correct connection procedures for your StudioLive before trying to connect it to your computer. This will help you avoid problems during installation and setup.

Throughout this manual you will find Power User Tips. These tips provide useful hints on how to best use the StudioLive's audio interface and take advantage of unique workflow functions and features.

1.4   Technical Support

Many technical issues can arise when using a standard computer as a digital audio workstation (DAW). PreSonus can only provide support for issues that directly relate to the StudioLive mixer, UC Surface, QMix-UC, Capture, and Studio One.

PreSonus does not provide support for computer hardware, iOS hardware, Android devices, wireless networks, operating systems, and non-PreSonus hardware and software, and it may be necessary to contact the manufacturer of these products for technical support.

Please check our Web site (www.presonus.com) regularly for software information and updates, firmware updates, and support documentation for frequently asked questions.

Online technical support is available at http://support.presonus.com, as well as from your http://my.presonus.com.

Advanced troubleshooting guides can be found at http://answers.presonus.com/.

2   Universal Control
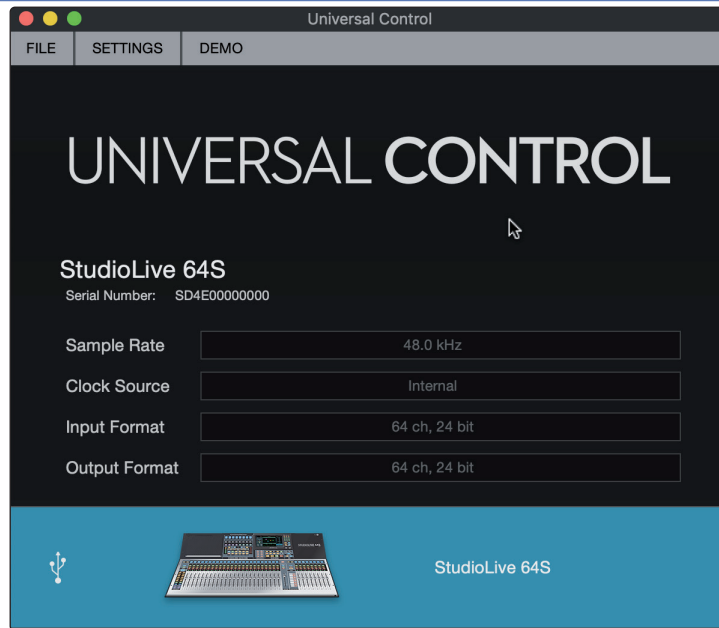
Universal Control is a single application that can communicate with any PreSonus audio interface product. Universal Control acts as the driver control panel, firmware updater app, and host application for UC Surface.

StudioLive Series III mixers are class compliant devices and do not require a driver installation on macOS®. UC Surface is also included in Universal Control installer.

PreSonus has designed the Universal Control installer to be as simple and easy to follow as possible, and it will take you through each step of the installation process. Please read each message carefully to ensure Universal Control and UC Surface are properly installed. In particular, be careful not to connect your StudioLive to the computer until prompted.

Please visit www.presonus.com *for the latest system requirements and an updated list of compatible hardware. It is recommended that you check your recording software's system requirements.*

*Power User Tip: As part of our commitment to the quality of our products, PreSonus continually updates its product drivers and software. The latest version of Universal Control and all companion software accessory applications can be downloaded directly from your **My PreSonus** account as soon as you register your StudioLive mixer. My PreSonus is also your portal to support, the PreSonus Shop, and more. Download the My PreSonus app for iOS or Android on your mobile device and get updates about your product as soon as they are available, or visit on your desktop computer at* my.presonus.com.

2.1   About Universal Control

Universal Control is a powerful hardware management application for all PreSonus® interface products. It allows you to manage any PreSonus interface product connected to your computer or your computer's network.

When Universal Control is launched, you will see the Launch Window. From this window, you can manage all the Core Audio and ASIO driver settings.
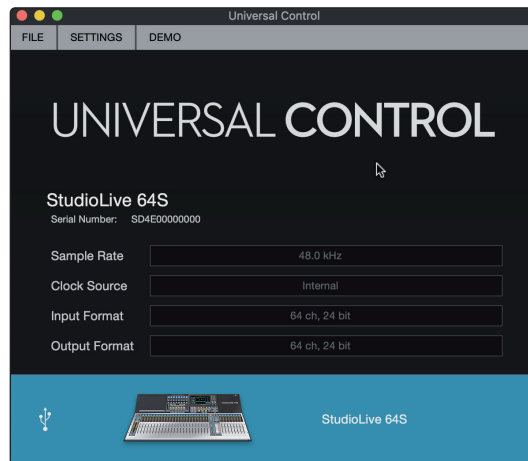
Sample Rate. Displays current sample rate. Go to your StudioLive's Settings in Universal Control to change this setting.

StudioLive Series III. The sample rate can be set to 44.1 or 48 kHz.

A higher sample rate will increase the fidelity of the recording but will increase the file size and the amount of system resources necessary to process the audio.

**Block Size.** Sets the buffer size (Windows® only).

From this menu, you can set the buffer size from 64 to 8,192 samples (Windows). Lowering the buffer size will lower latency; however, this will also increase performance demands on your computer. In general, you will want to set the buffer size as low as your system can safely support. If you begin to hear pops, clicks, or distortion in your audio path, try raising the buffer size.

A Note for StudioLive Series III users on Windows: When adjusting the block size, the Safe mode will automatically change to provide the best performance.
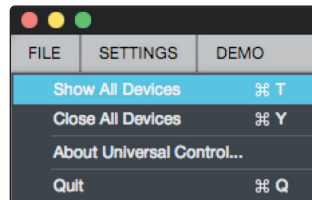
File Menu. Manages devices connected to Universal Control.

- **Show All Devices.** Launches all control windows for all supported devices connected to your computer's network or host transport (USB or FireWire).

- **Close All Devices.** Closes all open control windows.

- **About Universal Control.** Displays version and build date information.

- **Quit.** Quits the Universal Control application and all hardware control windows.

4
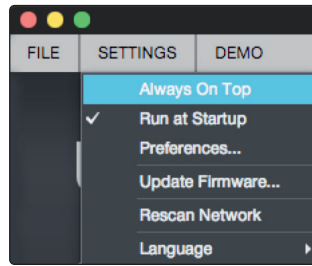
Settings Menu. Provide customization options to personalize your Universal Control experience.

- **Always on Top.** Keeps the Universal Control Launch window on top whether it is the currently active application or not.

- **Run at Startup.** Launches Universal Control automatically when your computer boots.

- **Preferences.** Sets language and appearance options (see below).

- **Rescan Network.** Scans the network and local transport bus (USB) for all supported PreSonus products.

- **Language.** Sets the language (English, French, German, Korean, Simplified Chinese, or Spanish).
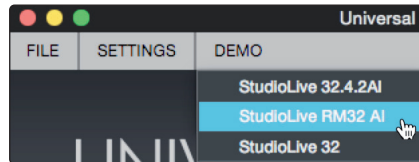
Demo. Allows you to launch a virtual connection to a StudioLive 32, 32.4.2AI, or RM32AI.

Preferences. Sets language and appearance options.

- **General.** Sets the language preference for Universal Control and UC Surface.

- **Appearance.** Allows you to adjust the overall brightness of UC Surface. Choose between Dark or Light.
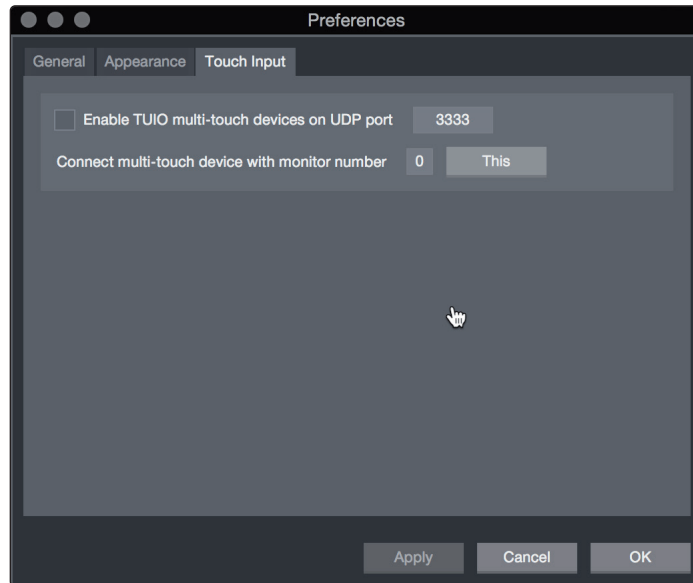

Dark   **Light**

- **Touch Input.** Provides options to connect TUIO devices on macOS. See *Section 2.1.1* for example setup instructions.

2.1.1   TUIO Setup (macOS)

TUIO allows multi-touch displays to connect to macOS. If you would like to use a multi-touch display with your Apple computer, check the box next to "Enable TUIO."

Once enabled, you must set the UDP port to match the value set by your multi-touch display's driver. By default, the UDP port is set to 3333. This is the most common value and it is unlikely that you will need to change this value.
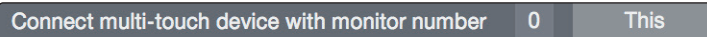
If you are using a multi-touch display with one or more displays, you must identify which one will be sending multi-touch control to Universal Control. To set this, simply drag the Universal Control Preferences dialog to your multi-touch display and click or tap the "This" button. This will set the monitor value to the correct number.

2.2   Installation for Windows

Before beginning the Universal Control installation setup, please quit all applications, including antivirus software, and disconnect the StudioLive from your computer.
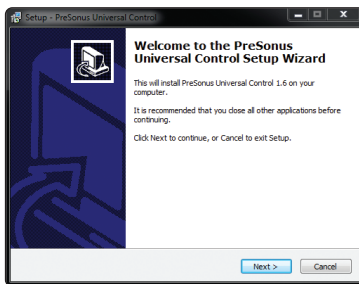
Follow the onscreen instructions to complete the installation. When the installer has finished, it will prompt you to reboot your computer.
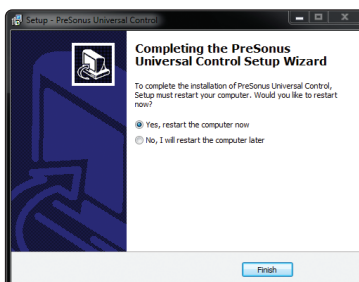
Click "Finish" to automatically restart your PC. Once your computer has rebooted, connect the StudioLive. When the Found New Hardware wizard launches, follow the "Recommended" steps.

Your StudioLive is now synced to your computer and ready to use!

2.2.1   Using the StudioLive for System Sound

You can configure your StudioLive mixer as the audio interface for computer system audio (for YouTube playback, Skype, etc.) from the System Preferences menu.

1. Open the Windows Control Panel.
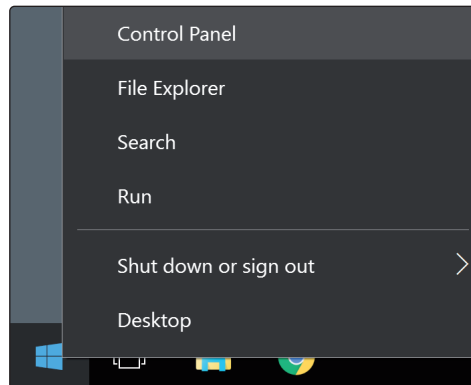
2. Click or Tap on Hardware and Sound.
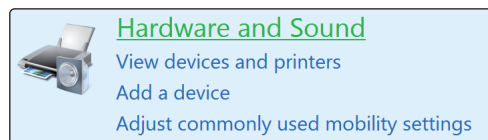
3. Click or Tap on the Manage Audio Devices link under Sound.
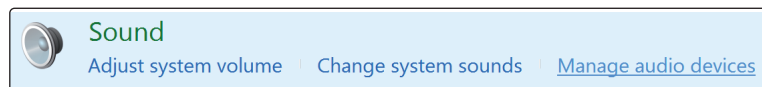
4. Right-click on your StudioLive mixer and set it as the Default Device for your computer.
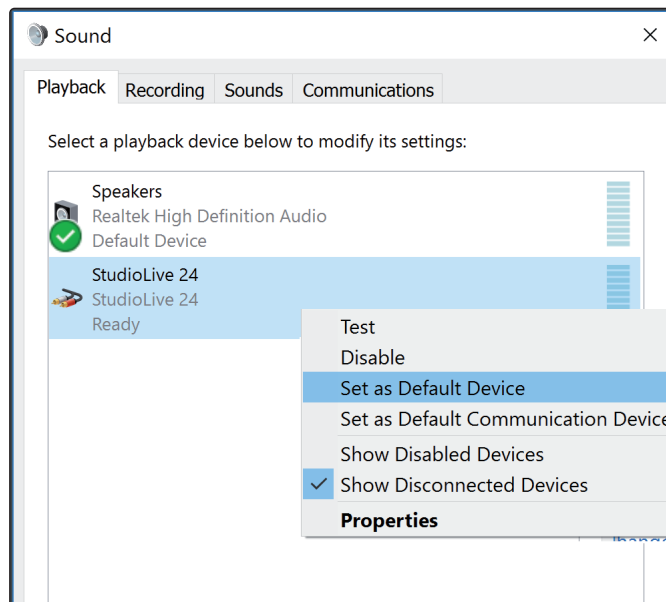
2.3   Installation for macOS

The UC Surface installer will take you through each step of the installation process. Please read each message carefully, and be especially careful that you do not connect your StudioLive too soon.
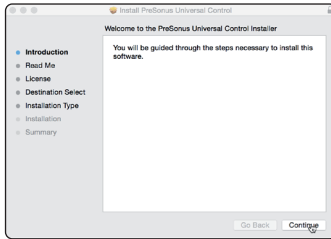
1. After launching the installer, you will be directed to the Welcome screen. Click "Continue" and follow the onscreen instructions.
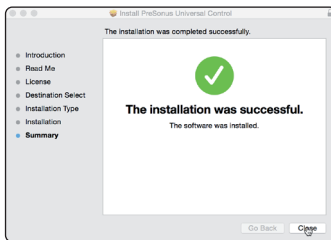
2. When the installation is completed, you will be prompted to reboot your computer. After your Mac has restarted, connect your StudioLive with the appropriate transport cable and power it on.

3. Once the installation is completed, you will find the UC Surface program in your Applications folder. It is recommended that you place this in your Dock.

You are now ready to use your StudioLive with your computer!

2.3.1   Using the StudioLive for System Sound

You can configure your StudioLive mixer as the audio interface for computer system audio (for iTunes playback, Skype, etc.) from the System Preferences menu.

1. Open System Preferences.
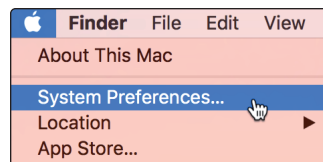
2. Open your System Sound Preferences.

3. Select your StudioLive mixer from the Outputs list. If you would like to use your StudioLive mixer for System input as well, select it from the Inputs tab as well.
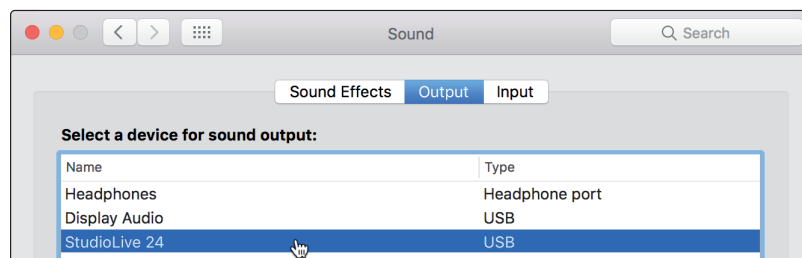
By default, your System sound will come back to Digital Returns 1 and 2. If you would like to change this, you can do so from Audio MIDI Setup.
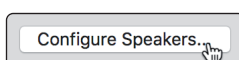
To change the output, click on the Configure Speakers button and select the output pair you would prefer to use.

8

3   Using the StudioLive with Popular Audio Applications

The section describes the basic driver-setup instructions for several popular audio applications. Complete setup instructions for PreSonus Studio One Artist and a brief tutorial on its features are located in the ***Studio One Integration Reference Manual for StudioLive Mixers***. If your audio application is not listed in this section, please consult your application's user documentation for information on selecting an audio device driver.

Power User Tip: If your StudioLive will not connect to the computer, verify that the USB cable is properly connected to the StudioLive and to your computer and disconnect all unnecessary peripheral devices on the same transport bus.

The speed of your processor, amount of RAM, and capacity, size, and speed of your hard drives will greatly affect the overall performance of your recording system. A faster processor and more RAM can reduce signal latency (delay) and improve overall performance.

3.1   Steinberg Cubase 4+

1. Launch Cubase.

2. Go to Devices | Device Setup.

3. Select "VST Audio System" from the Devices column in the Device Setup.

4. Select StudioLive [Series III model] from the ASIO Driver dropdown list.

5. Click "Switch" to begin using the StudioLive Driver.

6. Once you have successfully changed the driver, go to Devices | VST Connections to enable your input and output buses.

3.2   Ableton Live 5+

1. Launch Ableton Live.

2. Go to Options | Preferences | Audio.

3. Choose Driver Type: ASIO | Audio Device: StudioLive [Series III model].

4. Go to Input Config: Enable and select the desired Input channels.

5. Go to Output Config: Enable and select the desired Output channels.

6. You may now select the StudioLive's inputs and outputs for each track created in Live.

3.3   Apple Logic Pro/Express 7+

1. Launch Logic Pro/Express.

2. Go to Logic | Preferences | Audio.

3. Click on the Devices Tab.

4. Select StudioLive [Series III model] from the device menu.

5. You will be asked if you'd like to relaunch Logic. Click "try (re)launch."

6. Your StudioLive features custom I/O labels for faster work flow. To enable these labels for use in Logic, go to Options | Audio | I/O Labels.

7. The second column in the pop-up window will be named "Provided by Driver." Activate each of these labels for your StudioLive. When you are done, close this window.

8. You are now ready to use your StudioLive.

3.4   Avid Pro Tools 9+

1. Launch Pro Tools.

2. Got to Setup | Hardware and select StudioLive [Series III model] from the Peripherals list. Click OK.

3. Go to Setup | Playback Engine and select your StudioLive Series III model from the menu at the top of the window. Click OK.

3.5   Cakewalk Sonar 6+

1. Launch Sonar.

2. Go to Options | Audio... and click on the Advanced tab.

3. Change the Driver Mode to "ASIO."

4. Click the "OK" button.

5. Restart Sonar.

6. Go to Options | Audio... and click on the Drivers tab.

7. Highlight all input and output drivers beginning with "StudioLive [Series III model]".

8. Go to Options | Audio... and click on the General tab.

9. Set the Playback Timing Master to "StudioLive [Series III model]...Channel 1".

10. Set the Recording Timing Master to "StudioLive [Series III model]...Channel 1".

4   Using the StudioLive as an Audio Interface

The StudioLive mixers feature a built-in audio interface that can be used with any application that supports Core Audio or ASIO and can also be used as a WDM device for a Windows computer.

Any input and bus with a Select button, and, on some models the Solo bus, tape input, and talkback mic, can be recorded.

Playback streams from your computer are returned to your mixer and can be patched into any channel or bus with a Digital Return button.

This section will help to provide a better idea of how audio flows from your mixer to your computer and back.

4.1   Digital Sends and Returns

When using the StudioLive as an audio interface, it is important to understand the terms "digital send" and "digital return." Because the audio interface in the StudioLive is completely integrated with the other functions of the mixer, the digital USB I/O is designed to work as an independent bus. You can route (send) signals from other buses to the digital transport bus, and its output (return) signal is routed to designated mixer channels or buses, depending on the currently selected mode; mixer or interface.

- The StudioLive 64S, StudioLive 32S, StudioLive 32SX, StudioLive 32SC, StudioLive 32, StudioLive 24, StudioLive 16, StudioLive 32R, and StudioLive 24R have 64 available sends and 64 available returns.

- The StudioLive 16R has 24 available sends and 24 returns.

4.1.1   Channel Digital Sends

Digital Sends from input channels are sent pre-fader, however these sends can be pre- or post-Fat Channel EQ and dynamics.

To record the EQ and dynamics processing on any channel, simply enable the Post button in the Digital Out section. It will illuminate, indicating that the Fat Channel signal path is being routed to the Digital Send. If this mode is not enabled, the signal sent will be post-trim.

Figure 1: UC Surface

StudioLive buses are also equipped with Digital Sends. These sends are always post-Fat Channel and pre-fader. StudioLive Series III mixers support the free routing of any channel or bus to any USB send.

4.1.2   Digital Returns

Each StudioLive input defaults to receive its respective USB return. The DAW Outputs in your recording application route these playback streams to their respective channels on the StudioLive (that is, the software's Output 1 goes to StudioLive Channel 1 USB return, and so on, by default. This can be changed in the digital patching menu of your StudioLive). Once you route a track in your recording application to play through one of these outputs, it will always be accessible on its channel by simply pressing the USB source button.

Power User Tip: It is important to think of your digital returns and your analog inputs in the same way. When a digital return is engaged, it replaces the analog input in the mix. You can process it in the Fat Channel, include in it Aux mixes, and send it to an FX mix. It is also important to note that the analog input is still available to be recorded, or processed with a plug-in, in your DAW host application even if the digital return is engaged.
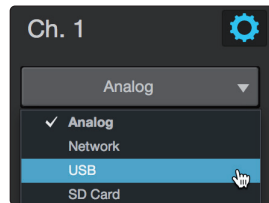

Figure 1: StudioLive Series III

Figure 2: UC Surface

StudioLive Series III mixers support the free routing of any Digital Return to any channel via the Digital Patching menu.

4.1.3   Main Digital Return

To provide the most flexible mixing environment, PreSonus has provided a stereo Main Digital Return to free the channels returns to be patched directly to their corresponding channels on your StudioLive mixer. In this way, you can monitor the main output from your recording application without using two channels on your StudioLive, leaving the other channels available to be routed to the Fat Channel or for inserting a plug-in on a live instrument.

- These digital returns are selectable as the tape return source on the StudioLive series III.

- These digital returns are available as dedicated channels in each mix on StudioLive rack mixers.

4.2   Using Plug-In Effects as Inserts

Digital Transport streaming on your StudioLive is continuously bidirectional. This means that the StudioLive is always sending signals from the analog inputs to the direct Digital Sends on all input channels. At the same time, the StudioLive is receiving signals back from the digital returns. Because the digital returns can come back to their respective StudioLive channels, you can quickly insert a plug-in from your recording application into any channel strip and monitor it in real time.

In this example, we will insert the Beat Delay plug-in from PreSonus Studio One onto Channel 4 of the StudioLive.

1. To begin, create a mono audio track in Studio One.
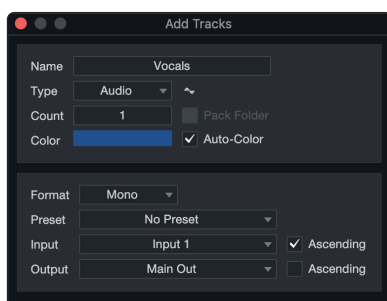
2.   Assign its input to Channel 4 and its output to Output 4.

(Several DAW applications, including Apple Logic, do not offer mono output buses. If this is the case, you must route the output stream to, for example, Channels 3-4 and pan the channel all the way to the right so that it will only be sent to Output 4. *Please consult your software's user manual for specific instructions.*)
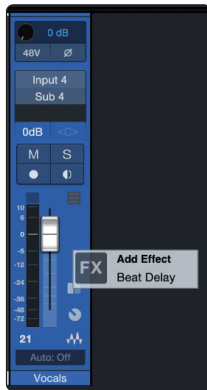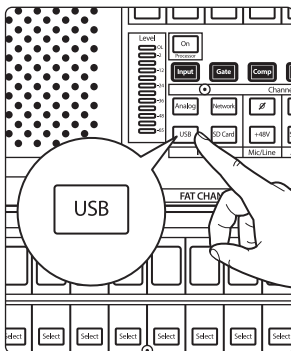
3.   Once you have the routing set up in Studio One, drag-and-drop the Beat Delay plug-in onto your track and record-enable it. Software monitoring will be enabled automatically.

4.   Enable the USB Return on Channel 4 of your StudioLive. You can now monitor the analog signal from Channel 4 on your StudioLive with your inserted effect (in this case, Beat Delay).

Note: Be sure to check the Digital Send source of the Channel in question when using plug-in effects as Inserts. The Channel can be sourced from analog (the local mic/line input) or digital (USB, AVB, or SD Card input). When using NSB stage boxes, be sure to send the digital source so the AVB input can be recorded. If using as a USB plug-in like this example, you should set it to analog to avoid a USB send/return feedback loop.

Power User Tip: When using plug-ins as inserts, it is very important that you set as low a buffer size on your computer as possible without creating performance issues. For most new computers, this won't be an issue. A buffer size of 128 or less will provide low enough latency for most plug-in types; however, dynamics and EQ plug-ins and performance plug-ins such as amp-modelers may require lower latency settings. *See Section 4.1 for more information on buffer size settings.*

Please note: setting the buffer size too low on older or slower computers, or on a computer that has not been properly optimized, may result in poor performance. Always be sure to test the limits of your system before attempting CPU-intensive tasks in mission-critical situations.

4.3   How Interface Mode Affects your StudioLive's Default Routing

Interface Mode is designed to allow the inputs and outputs of your StudioLive mixer to be used like a traditional USB interface, instead of as a mixer with a USB interface that draws from the mixer's channels and buses. In this configuration, the StudioLive's USB Returns bypass the mix engine, and instead run directly to the physical, analog outputs on the mixer.

Interface Mode Off

Computer DAW

Inputs   Outputs

USB Sends   USB Returns

Channels   Mixes

StudioLive Mixer

Inputs   Mix Outputs   Main Output

Interface Mode On

Computer DAW

Inputs   Outputs

USB Sends   USB Returns

Channels   Main Mix

StudioLive Mixer

Inputs   Main Output   Mix Outputs

Note how the USB Returns are routed directly to physical Mix Outputs and AVB Sends, bypassing the local FlexMixes.

It's for this reason that Interface Mode makes for a streamlined, DAW-based approach to common tasks like:

• Re-amping guitars and synths

• External hardware processing with Studio One's Pipeline

• Creating and routing cue mixes from your DAW rather than from the mixer

While this streamlined configuration does not work with a mixer that is in Stage Box or Monitor Mixer Mode, you will still be able to utilize your PreSonus AVB Ecosystem products with Interface Mode. You can still create personal monitor mixes via EarMix16M, etc. More on that in Section 4.7!

Power User Tip: Interface Mode will affect the USB routing and the analog output routing/sources. It won't make any changes to the operation of your AVB routing. Kindly note that Interface Mode can not be used on a mixer that is in Stage Box or Monitor Mixer Mode. It will only work for StudioLive mixers in Stand-alone Mode.

4.4   Setting up Interface Mode

Interface Mode can be initialized (and exited) from either your StudioLive Series III touchscreen or via UC Surface. It's a simple off/on toggle switch.

1. Press the Home button.

2. On the Console LCD screen, tap the System icon.
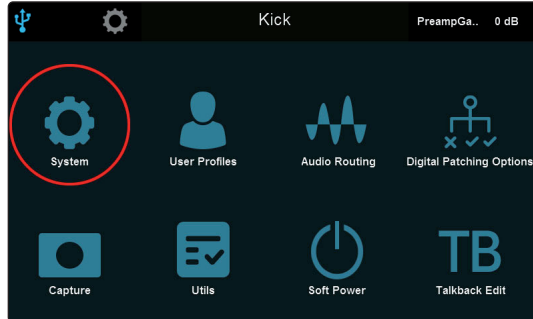
3. From the System menu, tap the Interface Mode toggle button.
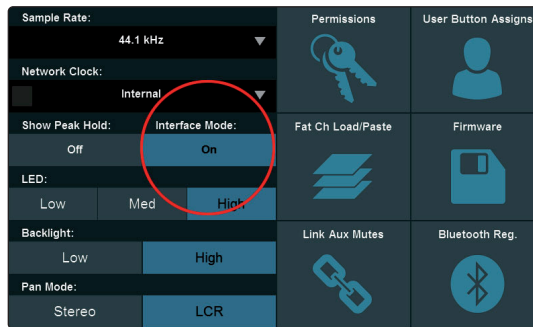
You'll receive a warning about disabling FlexMixes. Tap OK to continue. Your FlexMixes will still be there if and when you choose to turn off Interface Mode, or turn an individual mix back on *(see Section 4.5 for details on changing individual mix settings)*.

Alternatively, you can activate Interface Mode in UC Surface.

1. Click the gear icon in UC Surface to access the settings menu.

2. Click the Interface Mode button.

15

You'll receive a warning about disabling FlexMixes. Tap OK to continue. Your FlexMixes will still be there if and when you choose to turn off Interface Mode or turn an individual mix back on *(see Section 4.6 for details on changing individual mix settings)*.
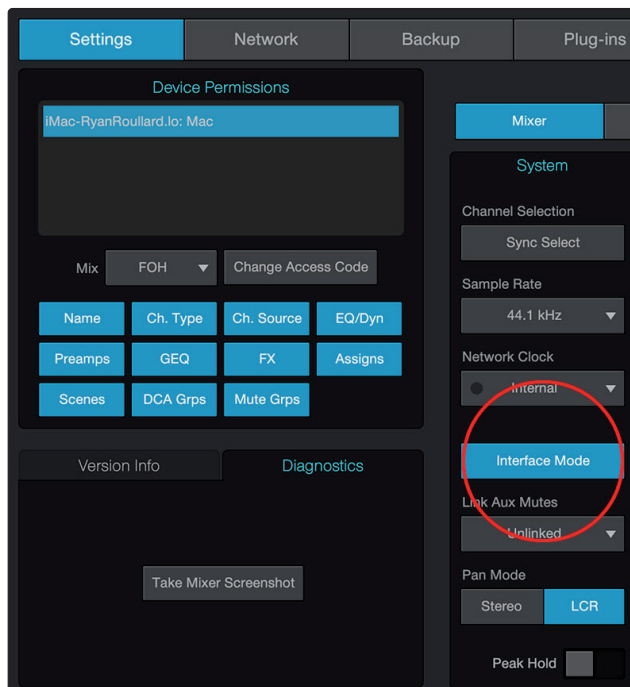
4.5   Changing an Output Between Interface and Local Mix

In an effort to offer a more streamlined user experience for Interface Mode, access to mix buses with physical outputs is deliberately restricted when Interface Mode is activated. This is because those mixes are being bypassed so the USB returns can be sent directly to the physical mix outputs on the back of the mixer. That said, selecting a mix will allow you to view the mix master settings, where you can change the setting for the selected bus between interface and local mix. In this mode, access to the mix sends, mix master Fat Channel, and mix master GEQ is also restricted.

In Interface Mode, you can change any available mix between interface and local mix. On StudioLive console mixers, this option is available using the Input source buttons for Analog and USB.

Simply press the desired Aux/Sub/Matrix button to select the desired Mix via the left-hand Mix Select section, and then press the desired Analog or USB button in the Fat Channel Control section to assign.
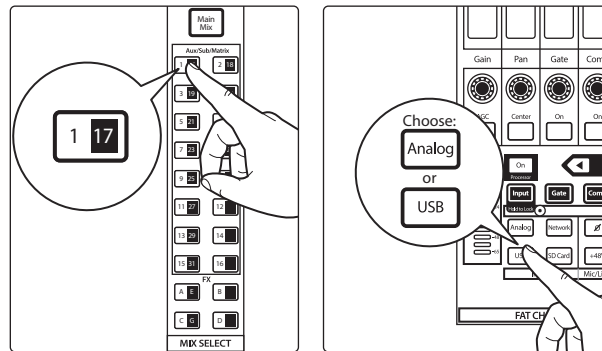
When set to Analog, the associated mix bus will operate just as it does in the standard mixer mode, including the routing of the local mix to the analog outputs.

When set to USB, the associated mix bus is disabled—and the output routing will be sourced from your DAW's USB Return.

In UC Surface, this option is available in the channel settings area of the mix master channel for each mix.
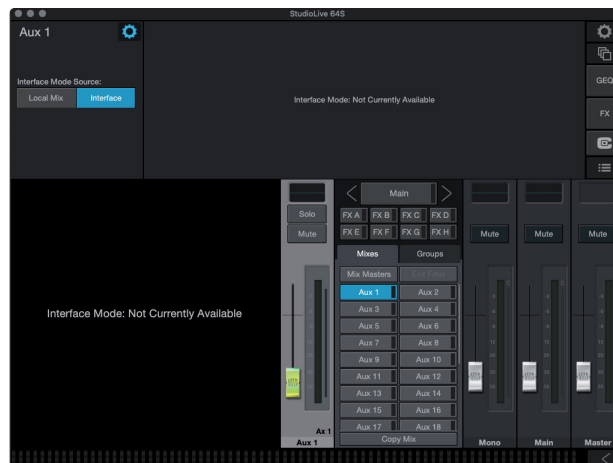
Note: Linked mixes operate together, and will change together.

4.6   Interface Mode Routing Charts

With your StudioLive set to Interface Mode, the following USB routings will be configured by default. Note that these configurations will vary depending on which StudioLive model you use; we've included them all in the charts below.

Power User Tip: In Interface Mode, USB Returns are routed directly to Mix outputs, and AVB Sends bypass the local FlexMixes.

StudioLive 32SX, StudioLive 32S, StudioLive 32, StudioLive 24, StudioLive 32R, and StudioLive 24R

Mixer	USB Send	USB Return	Mixer
Channels 1-32	1-32	1-32	Channels 1-32
Main Left/Right	39/40	39-54	Mix Outputs 1-16
None	41-64	55-64	None
Stereo Aux Inputs 1 & 2	33-36	33-36	Stereo Aux Inputs 1 & 2
Tape Input	37-38	37/38	Tape Input

StudioLive 32SC and StudioLive 16

Mixer	USB Send	USB Return	Mixer
Channels 1-32	1-32	1-32	Channels 1-32
Main Left/Right	39/40	39-54	Mix Outputs 1-10
None	41-64	55-64	None
Stereo Aux Inputs 1 & 2	33-36	33-36	Stereo Aux Inputs 1 & 2
Tape Input	37-38	37/38	Tape Input

StudioLive 64S

Mixer	USB Send	USB Return	Mixer
Channels 1-32	1-62	1-32	Channels 1-32
Main Left/Right	63/64	33-36	Stereo Aux Inputs 1 & 2
		37/38	Tape Input
		39-54	Mix Outputs 1-16
		55-64	Channels 55-64

StudioLive 16R

Mixer	USB Send	USB Return	Mixer
Channels 1-16	1-16	1-16	Channels 1-16
Main Mix Left/Right	17/18	17/18	Digital Input
Mixes 1-6	19-24	19-24	Mixes 1-6

StudioLive 16R owners get increased USB I/O! When running the previous release firmware, the StudioLive 16R formerly supported 18x18 USB sends and returns. As of firmware update 2.4, the StudioLive 16R has had its USB I/O updated to support 24x24!

4.7   Interface Mode Routing Examples

4.7.1   Interface Mode Routing example 1: Cue mixes

When a StudioLive is set to Interface Mode, the following USB routing will be configured.

USB Returns are routed directly to physical Mix Outputs and AVB Sends, bypassing the local FlexMixes.

With this configuration, you can send multiple cue mixes out from your DAW to the StudioLive's physical outputs to create multiple cue mixes. These cue mixes can be then sent to headphone amplifiers for musicians to monitor their performances on.
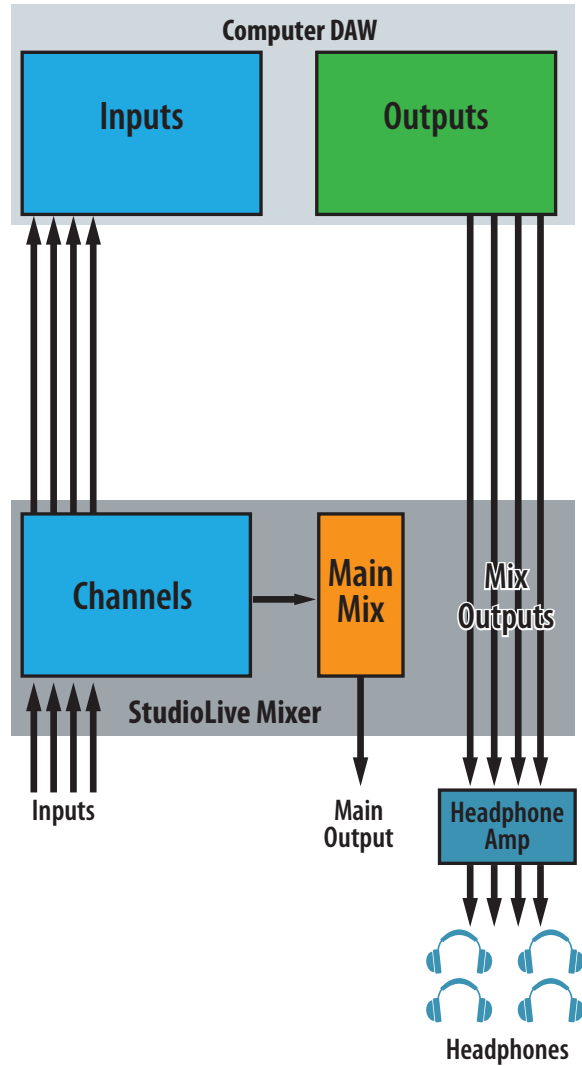
4.7.2 Interface Mode Routing example 2: Re-amping a guitar signal

When a StudioLive is set to Interface Mode, the following USB routing will be configured.

USB Returns are routed directly to physical Mix Outputs and AVB Sends, bypassing the local FlexMixes.

With this configuration, you can send a signal from your DAW, like a dry guitar signal, out through a reamp box to a real amplifier. You can then mic the amplifier and bring the re-amped performance back into your DAW via another physical input. While the DAW plays the track, adjust the amp tone until you're satisfied with it. Once you are, re-record the whole track with your new amp sound.
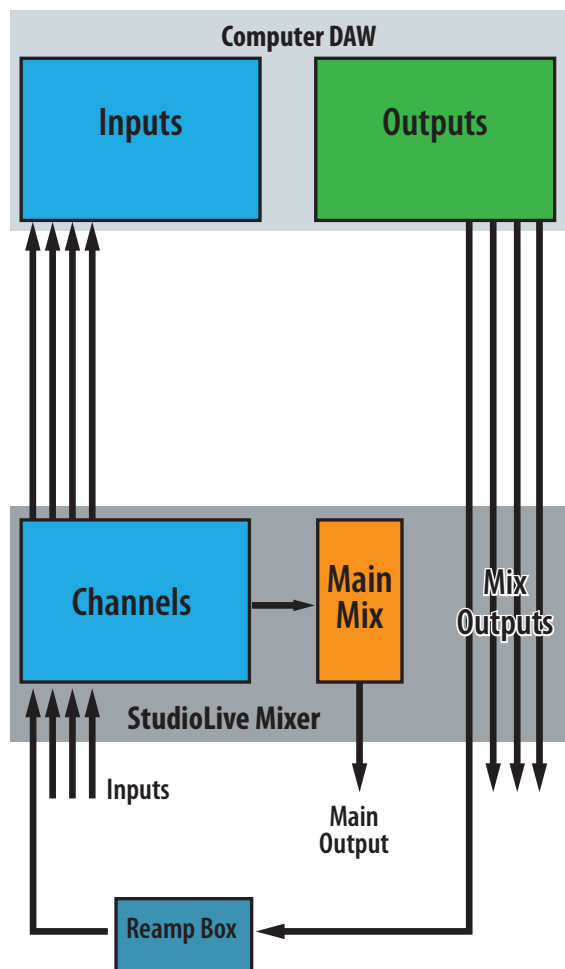
4.7.3   Interface Mode Routing example 3: Adding AVB devices

If you're running AVB Ecosystem products like the EarMix 16M, you can tap into the StudioLive's Mix Outputs via the Digital Patching menu to customize AVB sends! The most popular use case for this will likely be for the creation of personal monitor mixes on EarMix 16Ms.
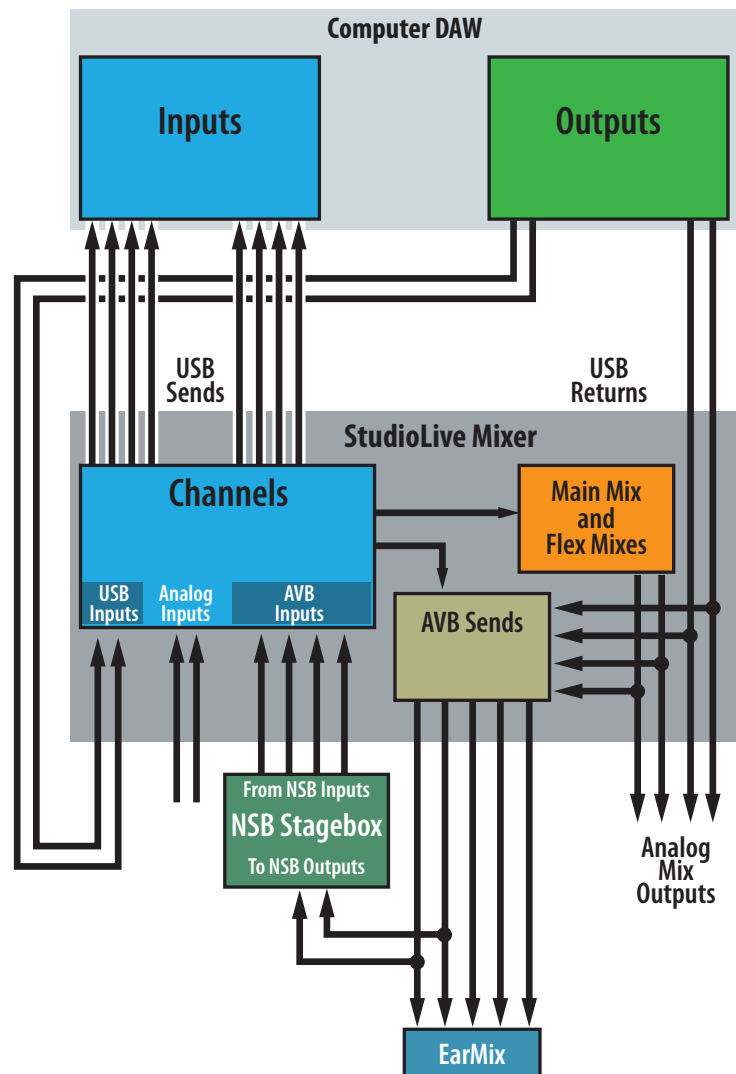
5.   Enhanced WDM Support

5.1   Introduction

As demands for live streaming and home multimedia production become more sophisticated, we've added Enhanced WDM Support for StudioLive Series III mixers. This fulfills the growing customer need for StudioLives to support more channels via WDM (Windows Driver Model). This will allow Windows users to leverage 8x6 channels of I/O for routing audio to and from multiple applications simultaneously.

For example—thanks to Enhanced WDM Support—you can use your StudioLive to mix audio from multiple Windows applications and devices simultaneously. Audio from multiple physical microphone inputs; game audio (stereo); a Skype call; and a Zoom call could all be routed to OBS (Open Broadcasting Software) for a live streaming application.

Power User Tip: macOS users can enjoy similar functionality by leveraging their OS "Aggregate Device" functionality.

5.2   Example Setup Use Case for WDM

Here's an example of the type of complex routing that Enhanced WDM Support allows you to make while running your StudioLive on a PC running Microsoft Windows.

This setup allows you to bring together an analog microphone input, Windows playback audio, Discord, and OBS (Open Broadcaster Software) for an ideal live streaming setup.

- On your StudioLive, set Interface Mode to OFF
- In Universal Control, find WDM Setup from the Settings drop-down menu and make the following configurations:
  - SL WDM 1/2 Input (Analog Mic in) = Set as Default Input for Windows Sound
  - SL WDM 5/6 Input (FlexMix ½ Bus) = Set as Discord Input
  - SL WDM 7/8 Input = Set as OBS Input
  - SL WDM 1/2 Output = Windows Playback

A mic connected to Analog Input 1 feeds WDM 1/2, which Windows OS can use for general purpose mic duty. WDM 5/6 is fed from FlexMix ½, which has both the microphone and OS playback combined. This allows music and voice input into Discord simultaneously. The WDM 7/8 Input is used for OBS. The Main Mix is essentially a broadcast mix.

5.3   Reference

Find your mixer in the list below at-a-glance reference of channel names as they'll be listed in WDM.

StudioLive 32, StudioLive 24, StudioLive 16, StudioLive 32R, StudioLive 24R, StudioLive 32S, StudioLive 32SX, StudioLive 32SC

WDM Playback Device (Out):

6x channel Device with channel names:

- (Tape/Digital Input Left) default routing and name: "StudioLive WDM 1"
- (Tape/Digital Input Right) default routing and name: "StudioLive WDM 2"
- (Aux In 1 Left) default routing and name: "StudioLive WDM 3"
- (Aux In 1 Right) default routing and name: "StudioLive WDM 4"
- (Aux In 2 Left) default routing and name: "StudioLive WDM 5"
- (Aux In 2 Right) default routing and name: "StudioLive WDM 6"

WDM Recording Device (In):

8x channel Device with channel names:

- (Ch 1) default routing and name: "StudioLive WDM 1"

- (Ch 2) default routing and name: "StudioLive WDM 2"

- (Ch 3) default routing and name: "StudioLive WDM 3"

- (Ch 4) default routing and name: "StudioLive WDM 4"

- (Mix 1) default routing and name: "StudioLive WDM 5"

- (Mix 2) default routing and name: "StudioLive WDM 6"

- (Main Left) default routing and name: "StudioLive WDM 7"

- (Main Right) default routing and name: "StudioLive WDM 8"

StudioLive 16R

WDM Playback Device (Out):

6x channel Device with channel names:

- (Digital Return Left) default routing and name: "StudioLive WDM 1"

- (Digital Return Right) default routing and name: "StudioLive WDM 2"

- (Ch 13) default routing and name: "StudioLive WDM 3"

- (Ch 14) default routing and name: "StudioLive WDM 4"

- (Ch 15) default routing and name: "StudioLive WDM 5"

- (Ch 16) default routing and name: "StudioLive WDM 6"

WDM Recording Device (In):

8x channel Device with channel names:

- (Ch 1) default routing and name: "StudioLive WDM 1"

- (Ch 2) default routing and name: "StudioLive WDM 2"

- (Ch 3) default routing and name: "StudioLive WDM 3"

- (Ch 4) default routing and name: "StudioLive WDM 4"

- (Ch 5) default routing and name: "StudioLive WDM 5"

- (Ch 6) default routing and name: "StudioLive WDM 6"

- (Main Left) default routing and name: "StudioLive WDM 7"

- (Main Right) default routing and name: "StudioLive WDM 8"

StudioLive 64S

WDM Playback Device (Out):

6x channel Device with channel names:

- (Tape Input Left) default routing and name: "StudioLive WDM 1"

- (Tape Input Right) default routing and name: "StudioLive WDM 2"

- (Ch 33) default routing and name: "StudioLive WDM 3"

- (Ch 34) default routing and name: "StudioLive WDM 4"

- (Ch 35) default routing and name: "StudioLive WDM 5"

- (Ch 36) default routing and name: "StudioLive WDM 6"

WDM Recording Device (In):

8x channel Device with channel names:

- (Ch 1) default routing and name: "StudioLive WDM 1"

- (Ch 2) default routing and name: "StudioLive WDM 2"

- (Ch 3) default routing and name: "StudioLive WDM 3"

- (Ch 4) default routing and name: "StudioLive WDM 4"

- (Ch 61) default routing and name: "StudioLive WDM5"

- (Ch 62) default routing and name: "StudioLive WDM6"

- (Main Left) default routing and name: "StudioLive WDM 7"

- (Main Right) default routing and name: "StudioLive WDM 8"

Added bonus: PreSonus' previously Top Secret recipe for…

Jambalaya

Ingredients:

- 5 lbs link andouille sausage
- 3 lbs boneless chicken
- 2 lbs ground beef
- 3 lbs onions (yellow or purple)
- 2 stalks of celery
- 1 lb bell peppers (green or red)
- 1 batch green onions
- 3 lbs rice
- Tony Chachere's Cajun Seasoning
- 1 bottle chicken stock concentrate (or 3 cubes chicken bullion)
- 1 can Rotel tomatoes with chilies, diced (regular hot)
- Tabasco sauce

Cooking Instructions:

1. In a 16 qt. pot or larger, slice link sausage and pan-fry until brown.
2. Add ground beef and brown.
3. Do not remove from pot Add diced onions, celery, and bell peppers,
   1 can Rotel Original diced tomatoes with chilies, 3 oz concentrate chicken stock,
   ½ teaspoon of Cajun seasoning, 1 teaspoon of Tabasco hot sauce
   (or more…maybe lots more).
4. Cook until onions are translucent.
5. Add chicken and cook until it turns white.
6. Add diced green onions, 1 tsp. salt, ½ gallon water and bring to a boil.
7. Add rice and bring to a boil. Cook on high for 8 minutes, covered, stirring every 2 minutes
8. Cook covered on low for 10 minutes, stirring only once.
9. Turn off and let sit for 30 minutes.
10. Serve and enjoy!

Serves 20

Using Your StudioLive™ Mixer as an Audio Interface with Universal Control and WDM Support

Reference Manual

Universal Control