Studio 1824 and 1810

High-definition USB 2.0 Audio Interfaces

Owner's Manual

МУЗЦЕНТР
МУЗЫКАЛЬНОЕ ОБОРУДОВАНИЕ
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PreSonus® www.presonus.com

English

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1 Overview

1.1 Introduction

Thank you for purchasing a PreSonus High-definition Studio-series Audio Interface. Loaded with high-headroom, Class A XMAX™ microphone preamplifiers; a 192 kHz / 24-bit recording and playback engine; onboard DSP mixing features; and more, Studio-series interfaces break new boundaries for music production and recording. Whether your studio is in your bedroom or in a professional facility, the Studio-series interfaces deliver high-quality audio and performance wherever music gets made.

PreSonus Audio Electronics is committed to constant product improvement, and we highly value our customers and their creative endeavors. We appreciate the support you have shown us by purchasing your Studio-series interface and are confident that you will enjoy it for years to come!

About this manual: We suggest that you use this manual to familiarize yourself with the features, applications, and correct connection procedures for your Studio-series interface before trying to connect it to your computer. Doing so will help you to avoid problems during installation and setup.

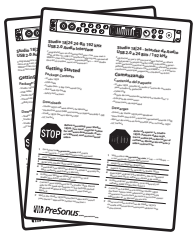
Throughout this manual, you will find ***Power User Tips*** that can quickly make you a Studio-series expert. This manual covers the features and functions of both the Studio 1824 and the Studio 1810. Where differences occur, the Studio 1824 features will be called out first, followed by the Studio 1810.

Want more tips and tricks? Please visit www.presonus.com/learn/technical-articles.

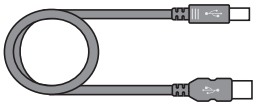
1.2 What is in the Box

You Studio-series package contains the following:

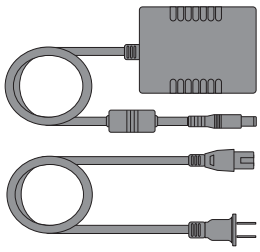
PreSonus Studio 1824 or Studio 1810 High-definition Audio Interface



Quick Start Guide



6' (1.8m) USB cable



External power supply

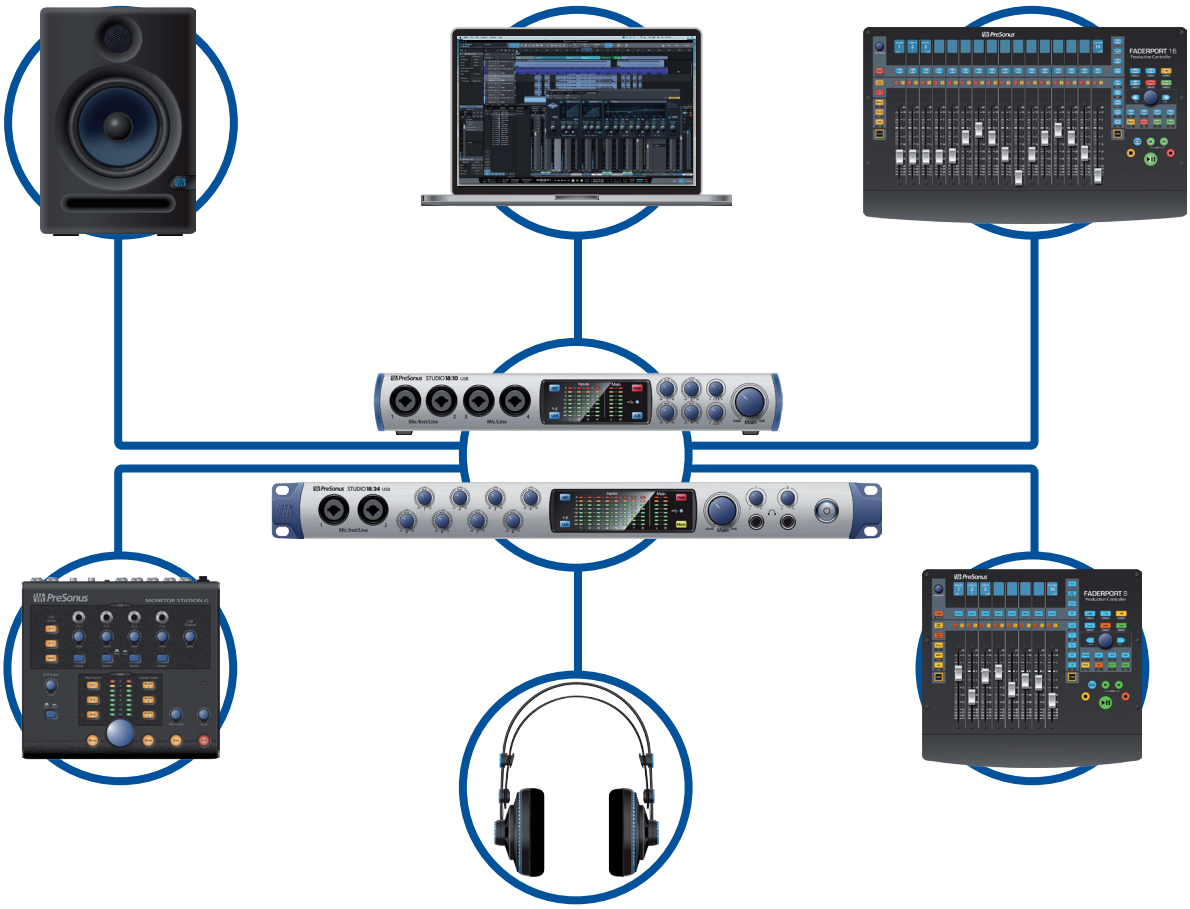
PreSonus Health Safety and Compliance Guide

Power User Tip: *All companion software and drivers for your PreSonus Studio-series interface are available for download from your My PreSonus user account. Simply visit My.PreSonus.com and register your Studio-series interface to receive downloads and licenses.*

1.3 Companion PreSonus Products

Thanks for choosing PreSonus! As a solutions company, we believe the best way to take care of our customers (that's you) is to ensure that you have the best possible experience from the beginning of your signal chain to the end. To achieve this goal, we've prioritized seamless integration throughout every design phase of these products from day one. The result is systems that communicate with each other as intended—straight out of the box—without excessive configuration hassles.

We're here for you. Find out more at www.presonus.com.



2 Hookup

2.1 Front Panel Connections and Controls

Microphone/Instruments/Line Inputs. Your Studio-series interface is equipped with PreSonus XMAX microphone preamplifiers for use with all types of microphones. The XMAX has a Class A input buffer, followed by a dual-servo gain stage. This arrangement results in ultra-low noise and wide gain control, allowing you to boost signals without increasing background noise.

Each microphone preamp is attached to the XLR input of the combo jack. This convenient connector accepts either a ¼-inch phone plug or an XLR plug.

The ¼-inch TRS connectors on channels 1 and 2 can be switched for either instrument- or line-level signals. The ¼-inch inputs on the remaining combo connections are line-level inputs only.

Input Source. Channels 1 and 2 offer an input source selection button that lets you switch between instrument- and line-level on the ¼-inch inputs for these two channels. Press this button to disengage the instrument preamp when connecting line-level devices. When the button is illuminated, the input will accept a line-level source, such as a synthesizer or guitar amp modeler. Press this button to engage the instrument preamp when connecting guitars or a passive bass.

Power User Tip: *Active instruments are those that have an internal preamp or a line-level output. Active instruments should be plugged into a line input rather than into an instrument input. Plugging a line-level source into the instrument inputs not only risks damage to these inputs but also results in a very loud and often distorted audio signal.*

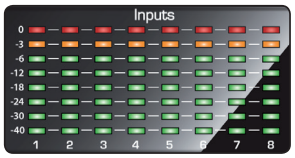
Please note: *As with any audio input device, plugging in a microphone or an instrument, or turning phantom power on or off, will create a momentary spike in the audio output of your Studio-series interface. Because of this, we highly recommend that you turn down the channel trim before changing connections or turning phantom power on or off. This simple step will add years to the life of your audio equipment.*

Input Gain Control. These knobs provide 80 dB of variable gain (-15 to +65 dB) on the microphone and instrument inputs and 40 dB of variable gain (-20 to +20 dB) on the line inputs.

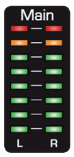
48 Volt Phantom Power. Studio-series interfaces provide 48V phantom power for the microphone inputs. Pressing the 48V button switches phantom power on and off for all microphone inputs; the button will illuminate in blue when this function is switched on.

WARNING: Phantom power is only required for condenser microphones and can severely damage some dynamic mics, especially ribbon mics. Please consult the documentation that came with your microphone before using phantom power.

XLR connector wiring for phantom power:
Pin 1 = GND **Pin 2** = +48V **Pin 3** = +48V



Input Meters. These LED meters show the input level of the analog inputs on your Studio-series interface. The red Clip LED will illuminate when your input signal reaches -0.5 dBFS. At this level, the signal will begin to overload the analog-to-digital converters and exhibit signs of clipping. Use the gain controls to keep the signal below this level.



Output Meters. These meters display the signal level received from the first two driver returns (Main Left/Right). These meters have the same range as the input meters (-50 dBFS to -0.5 dBFS) and are after the main output level control.

Mute. Press the Mute button to Mute the Main Output signal. The button will illuminate Red when Mute is active.

Sync LED. This light indicates if your Studio-series interface is in sync with your computer. When no sync is available, this light will flash red/blue. For Studio 1810, this light will also indicate if your external S/PDIF sync source is available. This light will also flash if the sample rate you have set on your Studio-series device does not match the sample rate you have set on your external clock source device.

Mono (Studio 1824 only). Press this button to sum the Main stereo output signal to mono.

Power User Tip: Studio 1824 users can utilize the Mono feature to verify mono compatibility and to check for phase cancellation in your stereo mixes.

Cue A/B (Studio 1810 only). This button allows you to switch the source that you listen to through the Headphone 1 output. When the button is not illuminated, playback streams 1 and 2 will be routed to the headphone output. Press the button to route playback streams 3 and 4 to the Headphone 1 output instead.

Headphone Level. Your Studio-series interface provides two high-power headphone outputs, each with its own level control. Studio 1824 users will find both the headphone outputs and level controls on the front panel. Studio 1810 users will find the level controls on the front panel and the outputs themselves on the rear. On both units, Headphone 1 shares a stereo playback stream with the main outputs and Headphone 2 shares its streams with outputs 3 and 4. For Studio 1810 users, Headphone 1 can be switched between the two sets of streams via the A/B button.

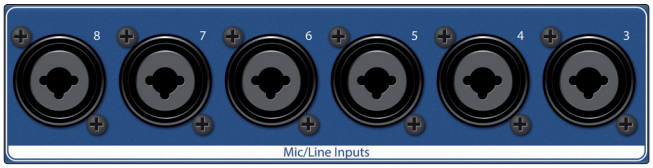
Main. The main knob controls the output level for the main left/right outputs on the back of your Studio-series interface and has a range of -80 dB to 0 dB. This control provides attenuation only.

Power Button and Sync light (Studio 1824 only). The lighted ring around the power button of your Studio 1824 is a clock source indicator. It lets you know if your unit is receiving word clock correctly.

- **Blue.** When this light is blue, your Studio 1824 is either the master clock of your system or is receiving word clock from a designate external source via the ADAT or S/PDIF input.
- **Flashing Red and Blue.** When this light flashes between blue and red, your Studio 1824 is detecting a clock source.
- **Red.** If this light is red, your Studio 1824 cannot detect a clock source.

Power User Tip: Word clock is the timing signal with which digital devices sync frame rates. Proper word clock sync prevents digital devices from having pops, clicks, and distortion in the audio signal due to mismatched digital audio transmission. In general, you will use your Studio 1824 as the master clock in your studio, and it provides high-quality word clock for this purpose. However, in the event you would like to use another device as the master clock, you can set the input source for clocking in UC Surface ***(see Section 4.1 for details)****.*

2.2 Back Panel Connections



Mic / Line Inputs (Studio 1824 only). The combo connections on the rear panel of the Studio 1824 can be used for both microphones and line-level devices. Use the XLR connections for microphones and D.I. boxes and the 1/4-inch TRS inputs for line-level signals up to +18 dBFS. The trim control on the front panel provides gain for both input types.

Line Inputs (Studio 1810 only). Use these ¼-inch TRS inputs with line-level devices. These inputs are scaled to accept line-level signals up to +18 dBFS.

Power User Tip: *These inputs are direct-to-ADC. As such, no gain control available. Typical examples of line-level connections are synthesizer outputs, signal processors, and stand-alone mic preamps and channel strips. Use the output level control on your line level device to adjust its level.*

Line Outputs. These balanced ¼-inch TRS line outputs can be used to route audio to external devices, such as headphone amps, signal processors, and additional monitors. Studio 1824: The first two outputs share their playback streams with both the main outputs and Headphone 1. Outputs 3 and 4 share their playback streams with Headphone 2 for both the Studio 1824 and the Studio 1810. All other outputs have their own independent playback streams.

Power User Tip: *Every line output is DC coupled to provide control voltage to external analog equipment. This feature can be used with any plug-in that supports it.*

Main Outputs. These are the main outputs for your Studio-series interface. The output level of the Main Outputs is controlled by the Main Level control on the front of the unit. Playback streams 1 and 2 are routed to the Main Outputs in addition to Outputs 1 and 2 (Studio 1824 only) and Headphone 1.

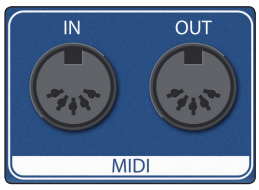
S/PDIF Input and Output. The S/PDIF connections allow two channels of audio to be transmitted and received at rates up to 24 bit, 96 kHz. The S/PDIF I/O also allows your Studio-series interface to send and receive word clock to external digital devices.

Power User Tip: *In UC Surface, you will need to set "S/PDIF" as the Clock Source and the sample rate to correspond to the external device when using an external S/PDIF device as your master clock.* ***See Section 4.1 for details.***

ADAT – S/MUX Input (Studio 1810 and Studio 1824) and Output (Studio 1824 only). These are the ADAT – Dual S/MUX connections for your external digital devices. When recording or playing back at 44.1 or 48 kHz, each ADAT I/O will provide eight of the sixteen available channels consecutively from left to right. When recording or playing back at 88.2 or 96 kHz, each connection will provide four of the available eight channels. These inputs and outputs do not function at 176.4 or 192 kHz:

	ADAT Input (Studio 1810 and 1824)	ADAT Output (Studio 1824 only)
44.1 / 48 kHz	Channels 11-18	Channels 11-18
88.2 / 96 kHz	Channels 11-14	Channels 11-14

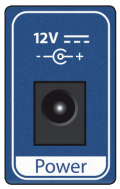
BNC Output (Studio 1824 only). This connection allows the Studio 1824 to transmit word clock to other digital audio devices so that it can function as the master clock for your studio environment (recommended).



MIDI Input and Output. MIDI stands for "Musical Instrument Digital Interface." MIDI inputs and outputs allow connection to, and communication with, external MIDI equipment. One function of these ports is MIDI sequencing, but the MIDI protocol can be used for much more than instruments and sequencing.

Power User Tip: *MIDI is not audio but is frequently used to trigger or control an audio source (such as a plug-in or synthesizer). It's important to ensure that your MIDI data is correctly sent and received by the appropriate hardware or software devices. If the devices generate audio, you may also need to return the audio to a Studio-series interface input channel. Please consult the User Manuals of your MIDI devices for help with MIDI setup and usage.*

USB 2.0 port. Use this port to connect your Studio-series interface to your computer. The Studio-series interfaces are compatible with both USB 2.0 and USB 3.0 connections. Do not connect your Studio-series interface to a USB 1.1 or lower connection on your computer.

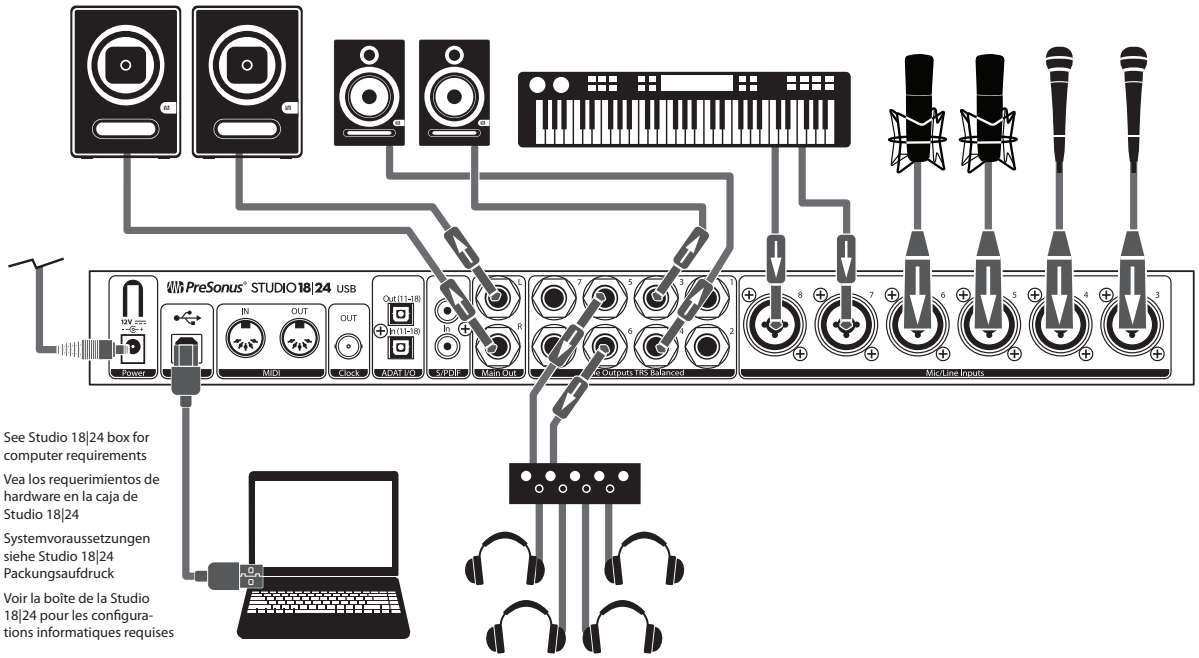


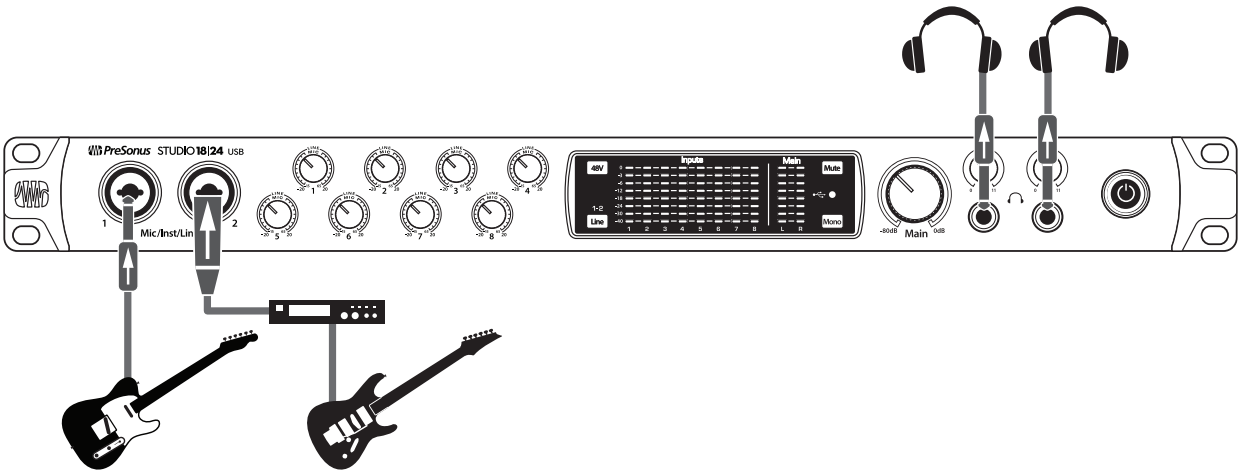
Power Connection. This is where you connect the Studio-series interface's external power supply.

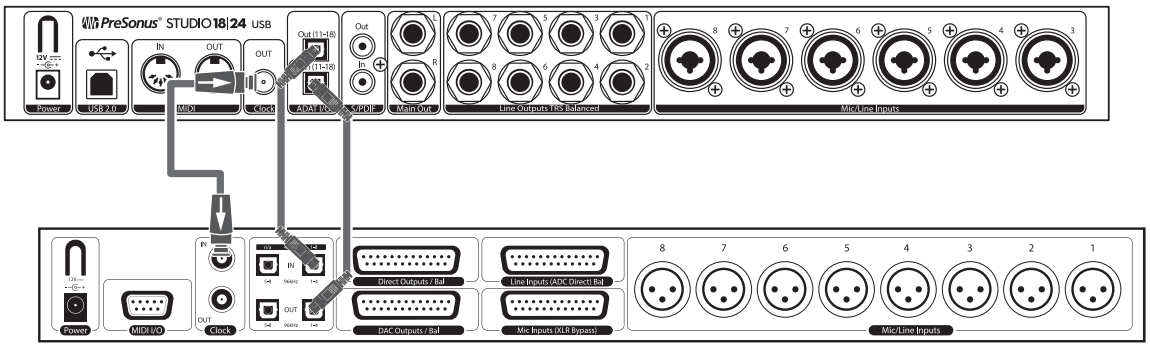
Power Switch (Studio 1810). This is the on / off switch for your Studio 1810.

2.3 Connection Diagram

2.3.1 Studio 1824







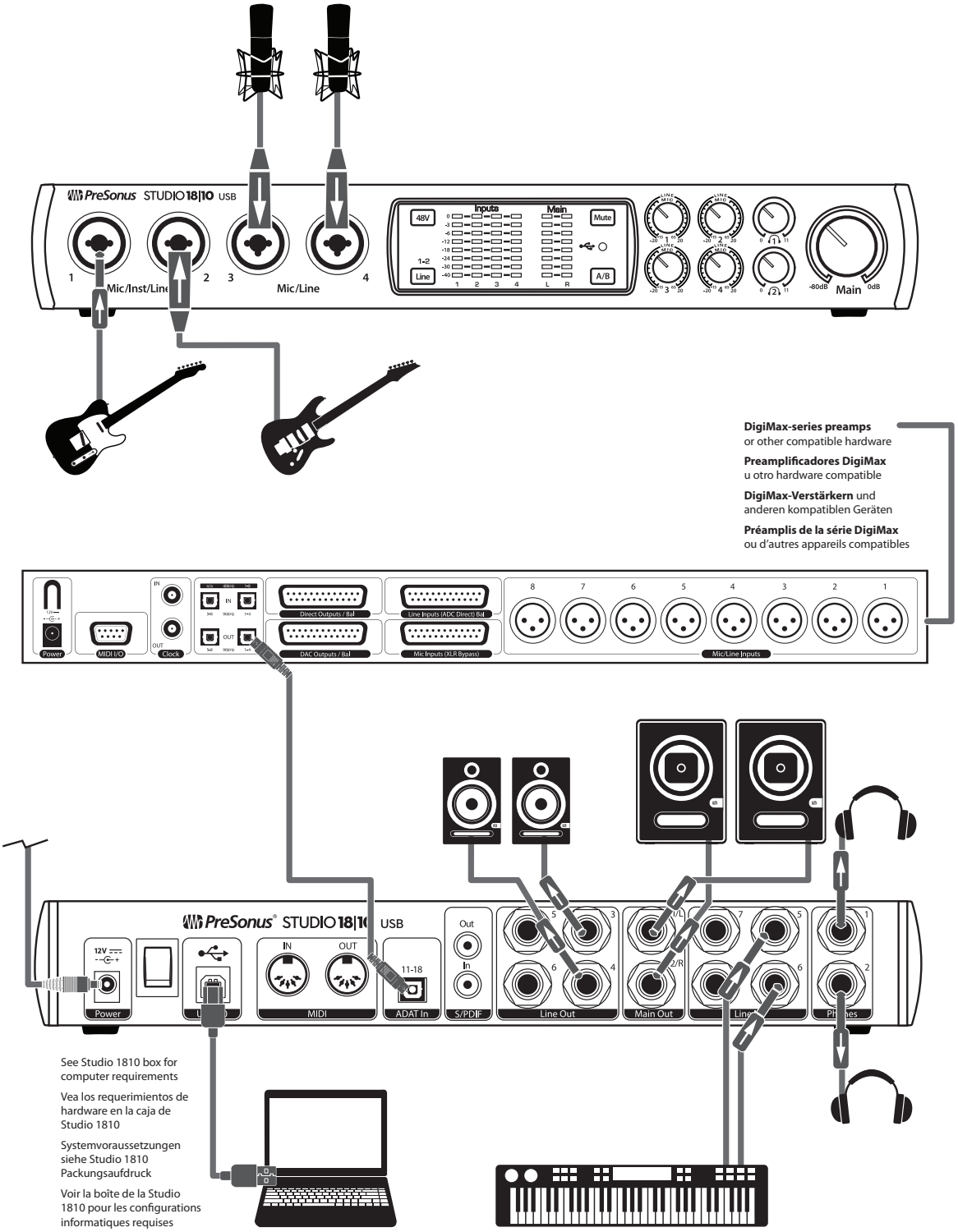
DigiMax-series preamps
or other compatible hardware

Preamplificadores DigiMax
u otro hardware compatible

DigiMax-Verstärkern und
anderen kompatiblen Geräten

Préamplis de la série DigiMax
ou d'autres appareils compatibles

2.3.2 Studio 1810



3 Connecting to a Computer

Your Studio-series interface is a powerful USB 2.0 audio interface that is loaded with professional audio tools and flexible monitoring controls. Before connecting to a computer, please visit www.presonus.com to verify the latest system requirements for your interface.

Note: *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.*

All PreSonus interfaces utilize the Universal Control application for firmware updates, device sync, and sample rate (Windows only). Both the Windows ASIO driver and UC Surface are included in the Universal Control installer for macOS and Windows. You can download the installer from your My PreSonus user account. To begin, you must first visit My.PreSonus.com and create or log into your user account and register your Studio-series. Once registered, all software downloads will be available from within your My PreSonus user account.

3.1 Installation for Windows

Connect your Studio-series to an available USB 2.0 or 3.0 port and launch the installer. The Universal Control installer will take you through each step of the installation process. This application will install the ASIO and WDM drivers as well as UC Surface. Please read each message carefully.

It is recommended that you quit all applications before you start the installation.

3.2 Installation for macOS

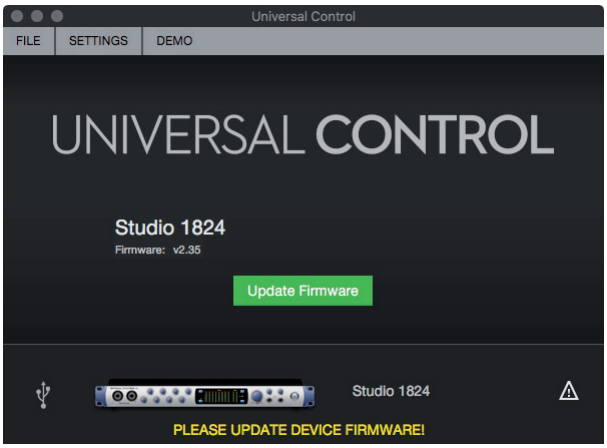
Your Studio-series interfaces are class-compliant Core Audio devices in macOS. No driver installation is necessary. However, to take full advantage of your Studio 1824 and 1810's mixing capabilities, you must install Universal Control to launch UC Surface. Universal Control also installs any necessary firmware updates, so it is highly recommended that you install this application.

The Universal Control installer will take you through each step of the installation process. Please read each message carefully so that you do not connect your Studio-series interface too soon.

Power User Tip: *When the installation is complete, you will find the Universal Control application in your Applications folder. It is recommended that you place this in your Dock for easy access.*

3.3 Firmware Updates

At the time of publication, a firmware update is required to use the Studio-series interfaces with Universal Control. Please review this section and update your unit's firmware before use.



Universal Control is designed to verify that your Studio-series interface has the correct firmware version installed. You will be prompted if your Studio-series interface needs its firmware updated. Click on the Update Firmware button to begin the update.

WARNING: Do not power off or disconnect your Studio-series interface during the firmware update. Once the firmware update is successfully completed, you will be alerted and instructed to reboot your device.

3.4 Using the Studio-series interfaces with Popular Audio Applications

Complete setup instructions for Studio One Artist and a brief tutorial on its features can be found in Section 5 of this manual. However, you can use your Studio-series interfaces with any audio-recording application that supports Core Audio or ASIO. Please consult the documentation that came with your audio application for specific instructions on how to select the Studio-series driver as the audio-device driver for your software.

Below are basic driver-setup instructions for a few popular audio applications.

Ableton Live

1. Launch **Ableton Live**
2. Go to **Options | Preferences | Audio**
3. Choose Driver Type: **Asio | Audio Device: ASIO PreSonus Studio** (**1824** or **1810**)
4. Go to **Input Config: Enable** and select the desired Input channels.
5. Go to **Output Config: Enable** and select the desired Output channels.

Apple Logic

1. Launch **Logic**.
2. Go to **Logic | Preferences | Audio**.
3. Click on the **Devices Tab**.
4. Select **PreSonus Studio** (**1824** or **1810**) from the device menu.
5. You will be asked if you'd like to relaunch Logic. **Click try (re)launch**.
6. Your Studio-series interface features custom I/O labels for faster workflow. 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 Studio-series interface. When you are done, close this window.

Avid ProTools 10+

1. Launch **ProTools.**
2. Go to **Setup | Hardware** and select Studio (1824 or 1810) from the **Peripherals** list. **Click OK**.
3. Go to **Setup | Playback Engine** and select **Studio** (**1824** or **1810**) from the menu at the top of the window. Click **OK**.

Cakewalk Sonar

1. Launch **Sonar**.
2. Go to **Options | Audio**... and click on the **Advanced** tab.
3. Change the Driver Mode to "**ASIO**." *(**Note:** Using WDM, rather than ASIO, for pro-audio applications is not recommended.)*
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 "**PreSonus Studio 1824** or **Studio 1810**."
8. Go to **Options | Audio...** and click on the **General** tab.
9. Set the **Playback Timing Master** to "**PreSonus Studio** (**1824** or **1810**)... **DAW Out 1**."
10. Set the **Recording Timing Master** to "**PreSonus Studio** (**1824** or **1810**)... **Mic/Inst 1**."

Steinberg Cubase

1. Launch **Cubase**.
2. Go to **Devices | Device Setup**.
3. Select "**VST Audio System**" from the **Devices** column in the **Device Setup**.
4. Select **PreSonus Studio** (**1824** or **1810**) from the **ASIO Driver** dropdown list.
5. Click "**Switch**" to begin using the Studio-series driver.
6. Once you have successfully changed the driver, go to **Devices | VST Connections** to enable your input and output buses.

4 UC Surface Monitor Control Software

Included in Universal Control for Studio-series interfaces is UC Surface is a powerful monitor control software that provides everything you need to create high-quality monitor mixes and more with your Studio-series interfaces. These same monitoring functions are completely integrated into the Studio One mixer. UC Surface allows users of other popular DAW applications to access these same functions. UC Surface provides control of both channel and Mix output levels as well as solo and mute.

It is vital to remember that lowering the channel fader in UC Surface will not lower the signal in your host application, so it is possible to clip the recording without clipping the monitor mix. You must set the level for the recording using the preamp controls on the face of your Studio-series interface.

A quick note on playback streams: *The channels labeled "DAW" in UC Surface carry a playback stream from your host application (DAW). Traditionally, if you wanted to route a track in your DAW to a physical output on your interface, you assigned this output in your host application. Because UC Surface provides much more flexible routing, you can now route this same track to one output or every output, by itself or as part of a mix.*

4.1 UC Surface Launch Window

Universal Control is a powerful hardware-management application for all PreSonus interface products. It allows you to view 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 driver settings.

Sample Rate. Changes Sample Rate.

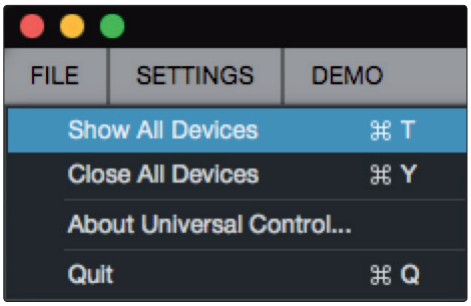
You can set the sample rate to 44.1, 48, 88.2, 96, 176.4, or 192 kHz. A higher sample rate will increase the fidelity of the recording, but will increase the file size and the amount of system resources necessary to process the audio.

Clock Source. Sets the Digital Clock Source.

From this menu, you can set the Clock Source for your Studio-series interfaces: Internal, External S/PDIF, or External ADAT (1824 only).

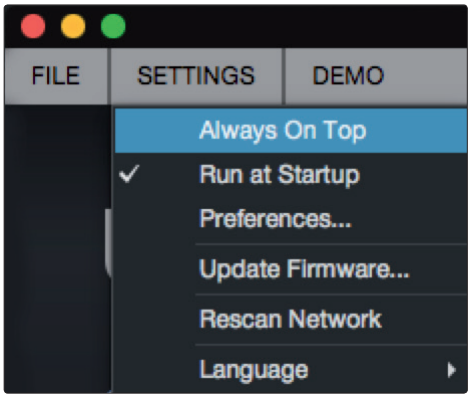
Block Size (Windows only). Sets the Buffer Size.

From this menu, you can set the Buffer Size for your Studio-series interface from 16 to 4096 samples. Lowering the buffer size will reduce the overall 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.



File Menu. Manages devices connected to Universal Control.

- **Show All Devices.** Launches all control windows for all supported devices connected to your computer.
- **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.



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 or FireWire) for all supported PreSonus products.
- **Language.** Sets the language (English, French, German, Korean, Simplified Chinese, or Spanish).

4.1.1 Loopback Recording (Windows only)

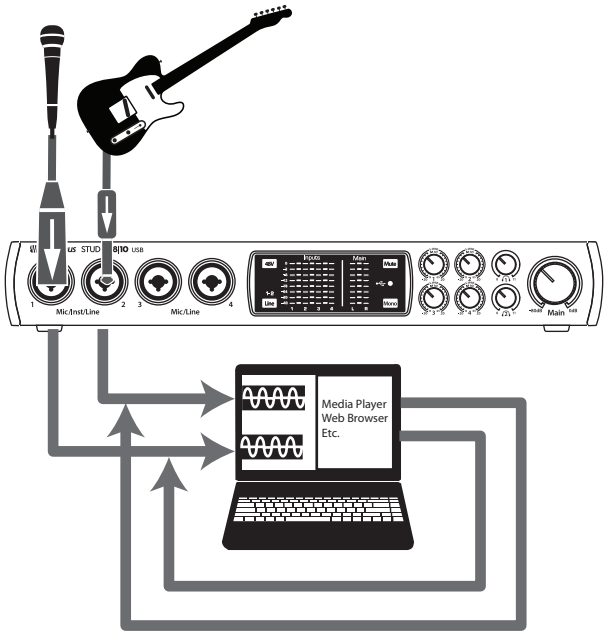
The windows drivers for the Studio-series interfaces provide two virtual streams that allow you to record the output of on audio application in another application. Loopback can be useful in a variety of situations:

- Recording the audio from a video game or YouTube video for a podcast or livestream.
- Recording a vocal in real time over a karaoke track played from a web browser or media player.

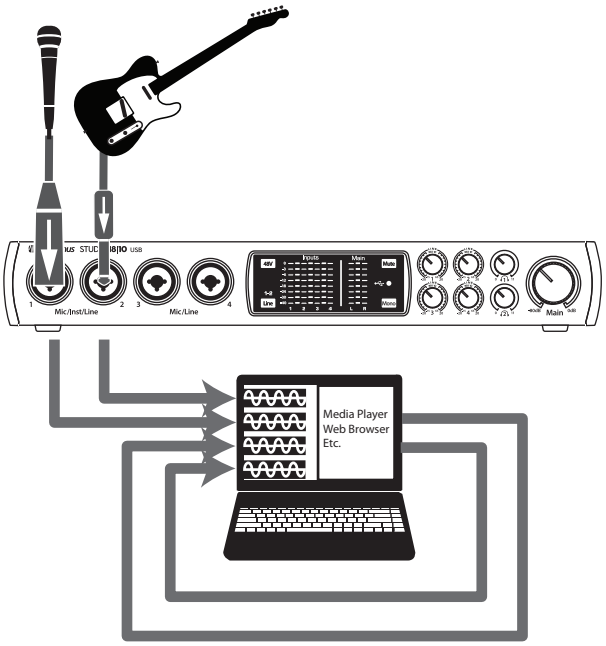
Power User Tip: *Because the Studio-series interfaces are class compliant Core Audio devices, these virtual streams are not available in macOS. However, there are several third-party applications that provide this functionality in macOS.*

From Universal Control, you can enable or disable Loopback and pick the streams on which the loopback audio will be recorded.

When Loopback is enabled and "Merge Loopback with 1/2" is selected, the audio from another application will be recorded with the audio source connected to analog inputs 1 and 2 on your Studio-series interfaces.

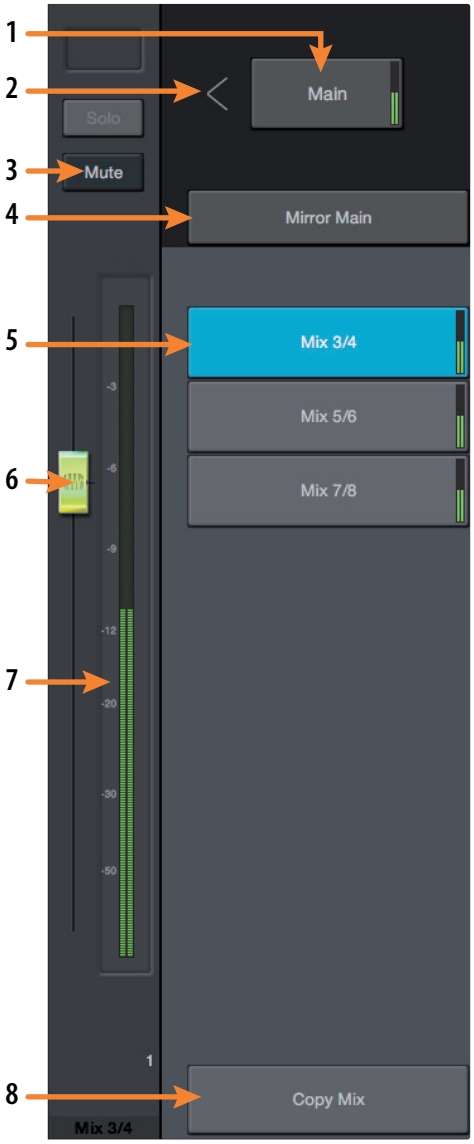


When Loopback is enabled and "Dedicated Loopback Inputs" is selected, the audio from another application will be recorded on the last pair of driver inputs (19/20).



Power User Tip: *When using either option, you will need to select Outputs 1 and 2 in the audio application you want to record. Make sure to select Outputs 3 and 4 in the audio application in which your recording to avoid a feedback loop.*

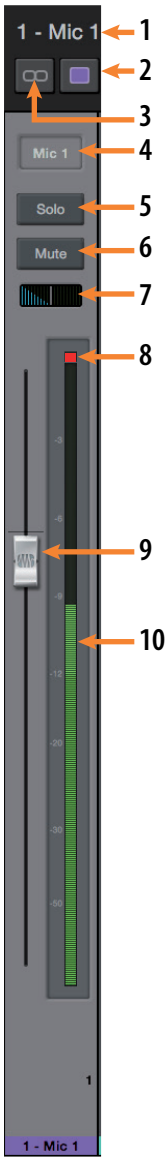
4.2 UC Surface Controls



UC Surface allows you to create four separate mixes of your input channels and every DAW return. These low-latency mixes give you the ability to monitor your inputs with minimal latency.

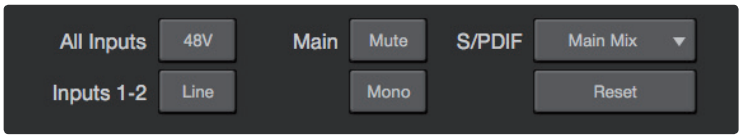
1. **Main Mix Select.** Use this button to view the Mix for the Main Left/Right Outputs. This mix is also routed to Outputs 1/2 and Headphone Output 1 simultaneously.
2. **Mix Output Fader Position.** Use this arrow to toggle between placing your Mix Output Fader to left or to the right of the Mix Controls.
3. **Mute.** Use this button to mute the currently selected Mix.
4. **Mirror Main.** When this button is enabled, the currently selected mix will mirror the Main mix.
5. **Mix Selection Buttons.** Click to view the corresponding mix.
6. **Mix Output Fader.** This fader controls the overall output level of the currently selected Mix.
7. **Mix Meter.** These meters display the pre-fader output level of the currently selected Mix.
8. **Copy Mix.** Copying the current mix allows you to quickly set up multiple mixes. Press the Copy Mix button and then click on the desired Mix Select button followed by the Paste Mix button to paste it.

4.2.1 Channel Controls



1. **Selected Channel Name.** Double-click on the name to customize it. This field follows the currently selected channel.
2. **Channel Color.** UC Surface allows you color-code your channels, click here to select a custom color. This field follows the currently selected channel.
3. **Link.** Channels can be stereo linked in odd-even pairs. This control follows the currently selected channel.
4. **Channel Select.** Click to select a channel.
5. **Solo Button.** Turns Soloing On and Off.
6. **Mute Button.** Turns Muting On and Off.
7. **Pan Controls.** The pan control sets the channel's relative position in the left/right stereo mix. When a pair of channels is stereo linked, the pan control sets the spread of the channels in the left/right stereo mix.
8. **Input Clip.** This indicates that your input has exceeded 0 dB FS. Click to clear.
9. **Channel Fader.** Controls the Overall Level of the Channel. By default, all fader levels will be down on launch to avoid unwanted noise.
10. **Level Meter.** Displays the Pre-fader Level of Each Channel.

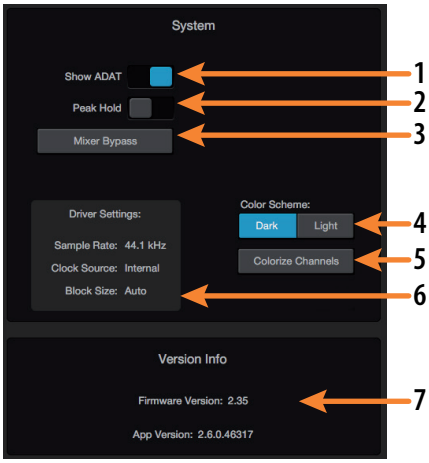
4.2.2 Device Controls



At the top of the UC Surface window are remote controls for the front panel options on your Studio-series interface. Additionally, you will find the option to select which monitor mix is being routed to your S/PDIF outputs. Clicking the Reset button will restore the UC Surface mix settings to factory default.

4.3 The Settings Page

The Settings page allows you to configure your Studio-series. To open the configuration settings page, click on the Settings button in the upper right-hand corner of the screen.



1. **Show ADAT.** This gives you the option to show your ADAT inputs in your UC Surface Mixer. If you are not connecting external devices to your ADAT input, you can turn this off to reduce the size of your monitor mixes and display just the inputs you are using.

2. **Peak Hold.** Disables peak hold metering. By default, peak metering is active. To change to peak hold metering, turn this control On.

3. **Mixer Bypass.** Bypasses UC Surface mixer and routing. While Mixer Bypass is active, your Studio-series interface will function as a simple I/O device for your DAW. When the mixer is bypassed, you must route audio to the desired output using its dedicated playback stream both for system playback (if desired) and DAW playback.

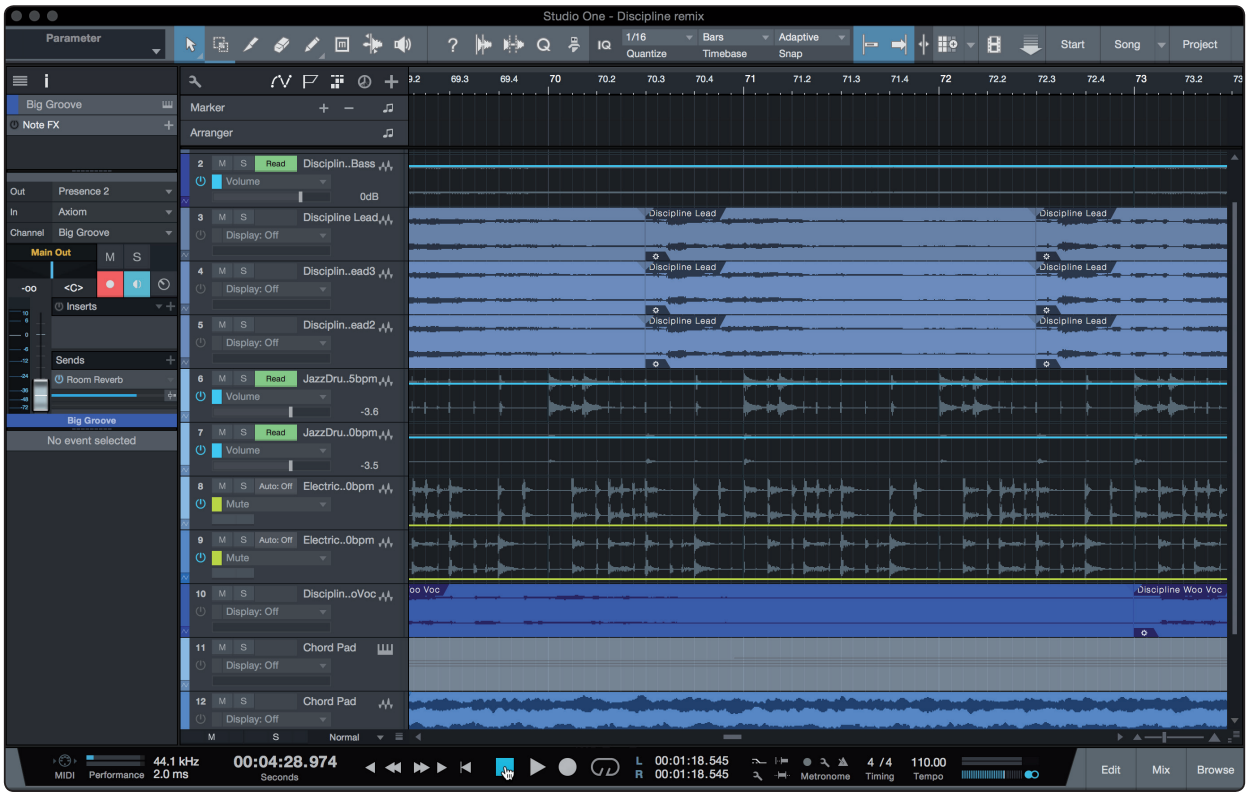
4. **Color Scheme.** This allows you to adjust the overall lightness or darkness of the UC Surface Mixer.

5. **Colorize Channels.** You can select a custom color for just the channel name or chose to color the entire channel strip.

6. **Driver Settings.** Displays the current driver settings for your Studio-series interface. To change these settings, open the Launch window.

7. **Version Info.** Displays the current firmware and UC Surface version.

5 Studio One Artist Quick Start



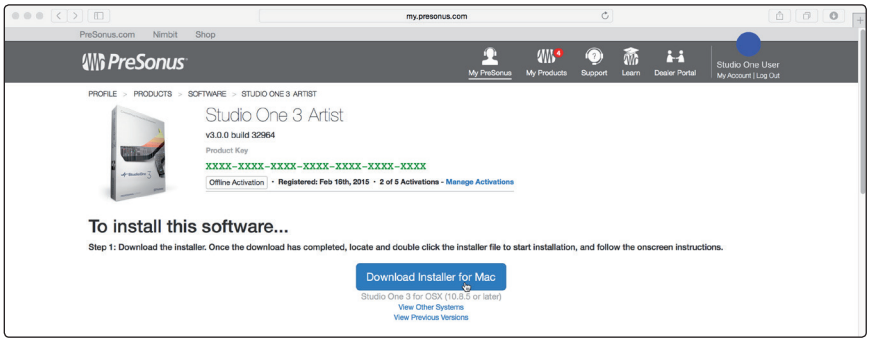
All PreSonus professional recording products come with Studio One Artist recording and production software. Whether you are about to record your first album or your fiftieth, Studio One Artist provides you with all of the tools necessary to capture and mix a great performance. PreSonus audio interfaces also have access to advanced functions in Studio One's exclusive Z-Mix feature for PreSonus interfaces.

Power User Tip: *As a valued PreSonus customer, you are also eligible for a discount upgrade to Studio One Professional. For more details on the Studio One upgrade program for PreSonus customers, please visit http://studioone.presonus.com/.*

5.1 Installation and Authorization

Once you have installed the drivers for your audio interface and connected it to your computer, you can use the included PreSonus Studio One Artist music-production software to begin recording, mixing, and producing your music. To install Studio One Artist, log into your My PreSonus account and register your interface. Your Product Key for Studio One Artist will automatically be registered to your My PreSonus account with your hardware registration.

Downloading and running the Studio One Installer



To install Studio One Artist, download the Studio One Artist installer from your My PreSonus account onto the computer you will be using it.

- **Windows Users:** Launch the Studio One Artist installer and follow the onscreen instructions.
- **Mac Users:** Drag the Studio One Artist application into the Applications folder on your Macintosh hard drive.

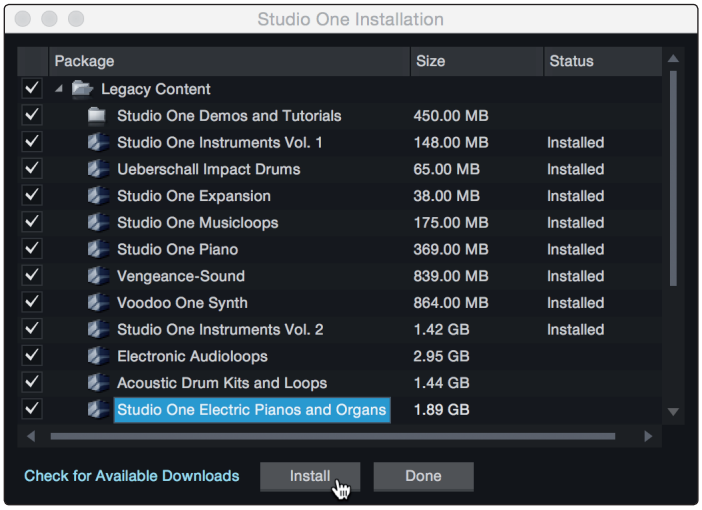
Authorizing Studio One

When Studio One is launched for the first time your computer, it will communicate with your My PreSonus account and verify your registration. To ensure a seamless authorization process, make sure to download your installer onto the computer you will be using it and that your computer is connected to the Internet when you launch the application for the first time.

Installing Bundled Content for Studio One Artist

Studio One Artist comes bundled with an array of demo and tutorial material, instruments, loops, and samples. The Studio One Artist bundle includes all that you need to begin producing music.

The first time you launch Studio One Artist, you will be prompted to install its companion content. Select the content you wish to add and click "Install." The content will automatically begin to download and install from your My PreSonus user account.



Power User Tip: *You may be prompted to enter your My PreSonus user account information. Clicking "Remember Credentials" will allow you to have immediate access to any content you purchase from the PreSonus Marketplace.*

5.2 Setting Up Studio One

Studio One Artist was designed to work with PreSonus interfaces and provides unique interoperability and simplified set-up. When Studio One Artist is launched, you will be greeted by to the Start page. On this page, you will find document-management and device-configuration controls, as well as a customizable artist profile, a news feed, and links to demos and tutorials from PreSonus. If you have an Internet connection on your computer, these links will be updated as new tutorials become available on the PreSonus Web site.

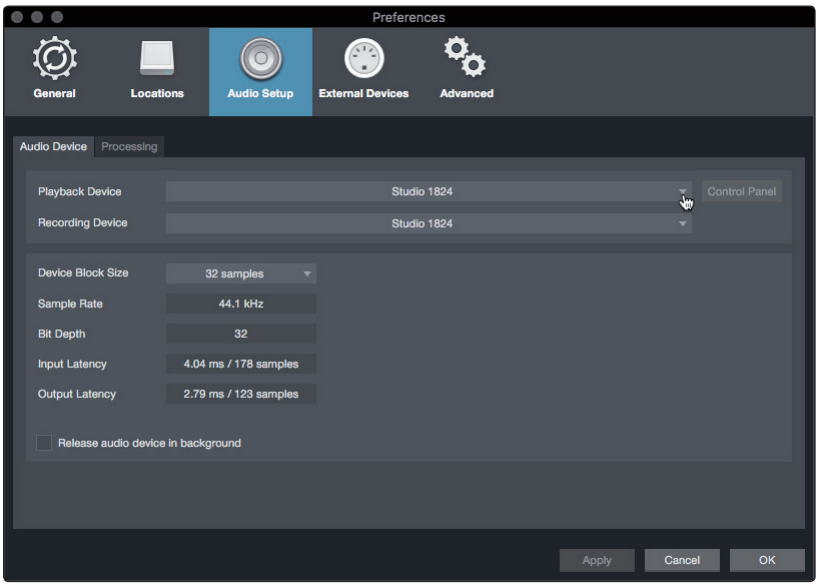
Complete information on all aspects of Studio One Artist is available in the Reference Manual PDF located within Studio One. The information in this tutorial covers only the basic aspects of Studio One Artist and is intended to get you set up and recording as quickly as possible.

5.2.1 Configuring Audio Devices

1. In the middle of the Start page, you will see the Setup area. Studio One Artist automatically scans your system for all available drivers and select a driver. By default, it will choose a PreSonus driver if one is available.

Power User Tip: *If your device has zero-latency monitoring functionality from within Studio One, you will see the Z-mix icon. If you do not see this icon, make sure that you have launched Universal Control. PreSonus audio interfaces require their DSP mixing control panels to be running in the background for Z-mix functionality.*

2. If you do not see your device listed on the Start page when you launch Studio One, click on the **Configure Audio Devices** link in the Setup area to open the **Options** window.



In the Options window, click on the Audio Setup tab and select your device driver from the pull-down.

5.2.2 Configuring MIDI Devices

From the External Devices window in Studio One Artist, you can configure your MIDI keyboard controller, sound modules, and control surfaces. This section will guide you through setting up your MIDI keyboard controller and sound modules. Please consult the Reference Manual located within Studio One for complete setup instructions for other MIDI devices.

If you are using a third-party MIDI interface or USB MIDI-controller keyboard, you must install any required drivers for these devices before beginning this section. Please consult the documentation that came with your MIDI hardware for complete installation instructions.

If you do not have any MIDI devices, please skip to Section 5.3.

Setting Up an External MIDI Keyboard Controller from the Start Page

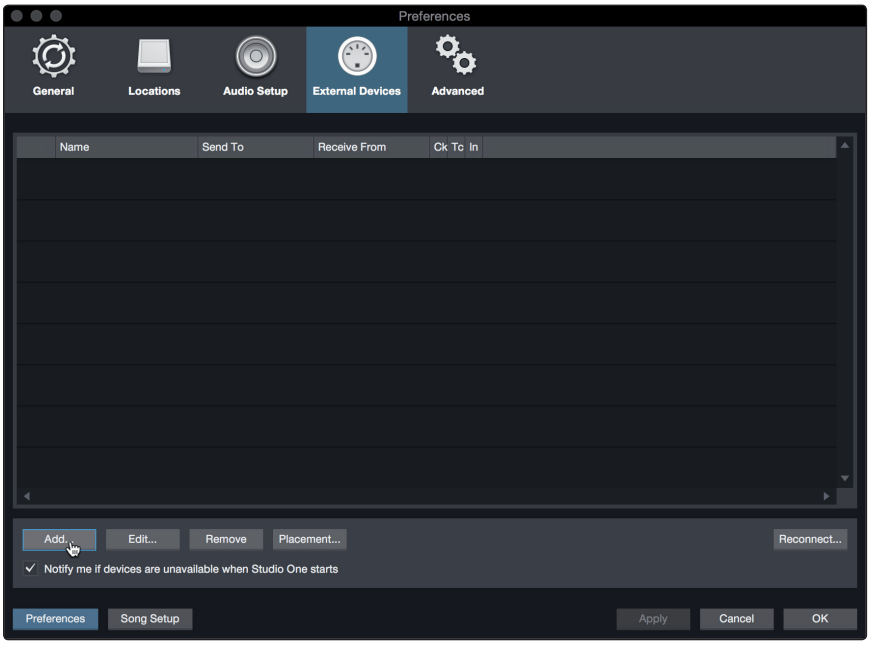
A MIDI keyboard controller is a hardware device that is generally used for playing and controlling other MIDI devices, virtual instruments, and software parameters. In Studio One Artist, these devices are referred to as 'Keyboards,' and they must be configured before they are available for use. In some cases, your MIDI keyboard controller is also used as a tone generator. Studio One Artist views the controller and tone-generation functions as two different devices; a MIDI keyboard controller and a sound module. The MIDI controls (keyboard, knobs, faders, etc.) will be set up as a **Keyboard**. The sound modules will be set up as an **Instrument**.

You can set up your external MIDI devices from the Setup area on the Start page. Before setting up a new Song for recording, take a moment to configure external devices.

Make sure you have connected the MIDI Out of your external MIDI controller to a MIDI In on your PreSonus audio interface (if available) or other MIDI interface. If you are using a USB MIDI controller, connect it to your computer and power it on.

1. Click on the **Configure External Devices** link in the Setup area on the Start page to launch the External Devices window.

2. Click the **Add** Button. This will launch the **Add Device** window.



3. From the menu on the left, select your MIDI controller from the list of manufacturers and models. If you do not see your MIDI controller listed, select **New Keyboard**. At this point, you can customize the name of your keyboard by entering the manufacturer and device names.

4. You must specify which MIDI channels will be used to communicate with this keyboard. For most purposes, you should select all MIDI channels. If you are unsure of which MIDI channels to choose, select all 16.

5. Studio One allows you to filter out specific control functions your MIDI controller provides. If you would like Studio One to ignore Aftertouch, Pitch Bend, Program Change, or All CC messages, enable filtering for any or all of these messages.

6. In the 'Receive From' drop-down menu, select the MIDI-interface input from which Studio One Artist will receive MIDI data (i.e., the MIDI port to which your keyboard is connected).

   Power User Tip: *In the 'Send To' drop-down menu, select the MIDI interface output from which your Studio One Artist will send MIDI data to your keyboard. If your keyboard controller doesn't need to receive MIDI data from Studio One, you can leave this unselected.*

7. If this is the only keyboard that you will use to control your external synthesizers and virtual instruments, you should check the box next to **Default Instrument Input**. This will automatically assign your keyboard to control all MIDI devices in Studio One Artist.

8. Click **OK**

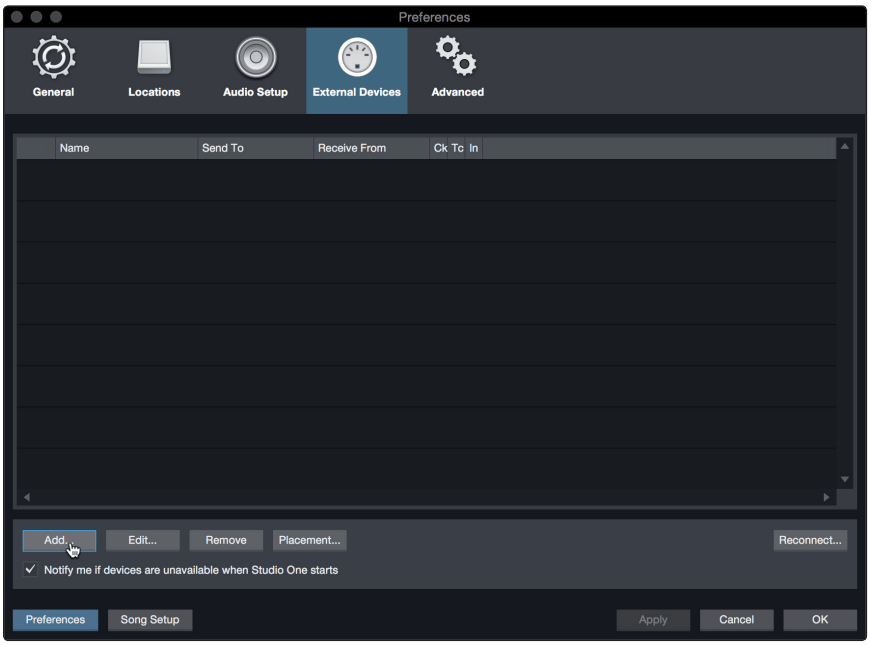
   If you have a sound module that you'd like to connect, leave the External Devices window open and proceed to the next part of this section.
   If not, you can close the window and skip to the next section.

Setting up an External MIDI Sound Module from the Start Page

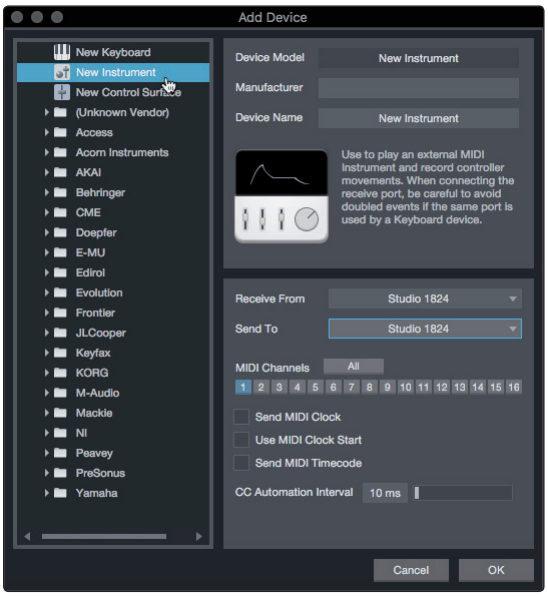
MIDI instrument controllers (keyboards, MIDI guitars, etc.) send musical information in the form of MIDI data to tone modules and virtual instruments, which respond by generating sound, as instructed. Tone modules can be standalone sound devices or can be integrated into a MIDI instrument, such as a keyboard synthesizer. Studio One Artist refers to all tone generators as **Instruments**. Once you have set up your MIDI keyboard controller, take a moment to configure your sound module.

Make sure you have connected the MIDI in of your external sound module to the MIDI Out of your PreSonus audio interface (if available) or another MIDI interface.

1. In the External Devices window, click the **Add** button



2. Select your device the menu on the left. If your device is not listed, select **New Instrument**. At this point you can customize the name of your keyboard by entering the manufacturer and device names.



3. Specify which MIDI channels will be used to communicate with this sound module. For most purposes, you should select all MIDI channels. If you are unsure of which MIDI channels to select, we suggest you select all 16.

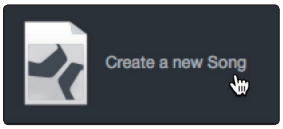
4. In the **Send To** menu, select the MIDI interface output from which Studio One Artist will send MIDI data to your sound module. Click **OK** and close the External Devices window. You are now ready to start recording in Studio One Artist.

The rest of this Quick Start Guide will go over how to set up a Song and will discuss some general workflow tips for navigating through the Studio One Artist environment.

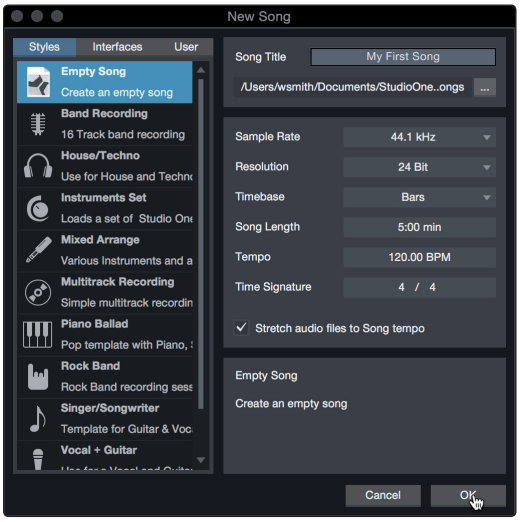
5.3 Creating a New Song

Now that you've configured your Audio and MIDI devices, let's create a new **Song**. We'll start by setting up your default audio I/O.

1. From the Start page, select **Create a New Song**.



2. In the **New Song** window, name your **Song** and choose the directory in which you'd like it saved. You'll notice a list of templates on the left. These templates provide quick set-ups for a variety of devices and recording situations. The section will describe creating a Song from an empty session.

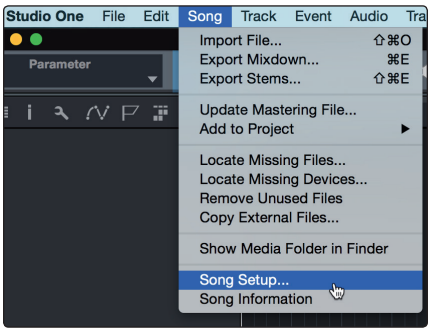


3. Select **Empty Song** from the Templates list. At this point, you should give your Song a name and select your preferred sample rate and bit depth for recording and playback. You can also set the length of your Song and the type of time format you would like the timeline to follow (Notation Bars, Seconds, Samples, or Frames). Click the **OK** button when you are finished.

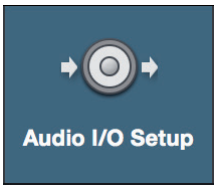
   Power User Tip: *If you plan on importing loops into your song, make sure that the Stretch Audio Files to Song Tempo option is selected. This will automatically import loops at the correct BPM.*

5.3.1 Configuring Your I/O

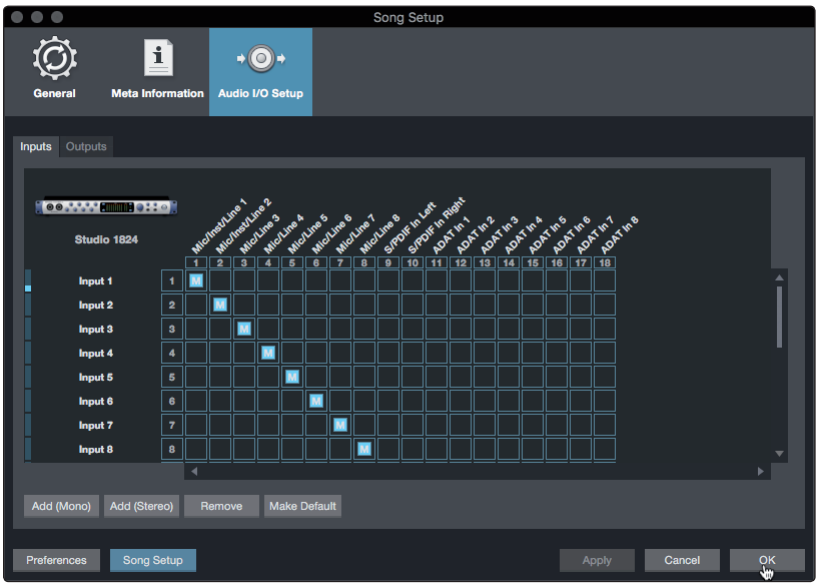
1. Click on **Song | Song Setup** to set your sample rate, resolution, and configure your Audio I/O.



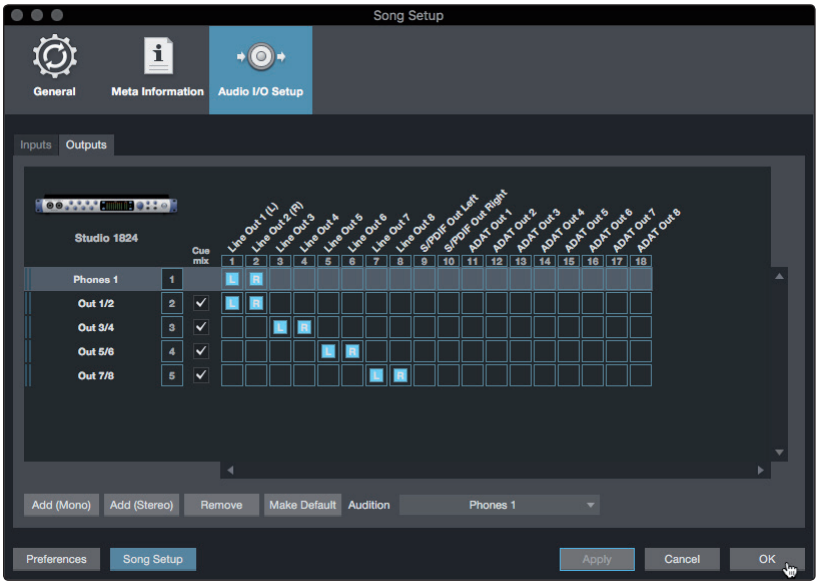
2. Click on the **Audio I/O Setup** tab.



3. From the **Inputs** tab, you can enable any or all of the inputs on your PreSonus audio interface you'd like available to you. We recommend that you create a mono input for each of the inputs on your interface. If you plan on recording in stereo, you should also create a few stereo inputs.



4. Click on the **Outputs** tabs to enable any or all of the outputs on your PreSonus audio interface. In the lower right corner, you will see the Audition select menu. This allows you to choose the output from which you will audition audio files prior to importing them into Studio One Artist. In general, you will want this to be the main output bus.



Power User Tip: *If you would like this I/O configuration to be the same every time you open Studio One, click the Make Default button.*

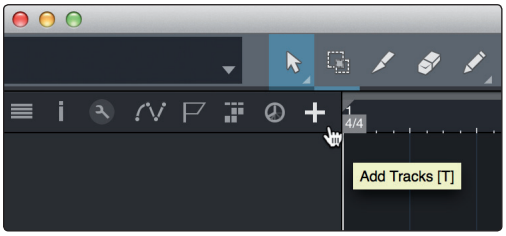
Setting Up Z-Mix

PreSonus Studio-series interfaces provide zero-latency monitoring through Studio One. To enable zero-latency monitoring, you must enable the outputs for the mixes to be Cue Mix outputs. From the Outputs tab, click on the Cue Mix box next to any output you'd like to use to send a zero-latency monitor mix.

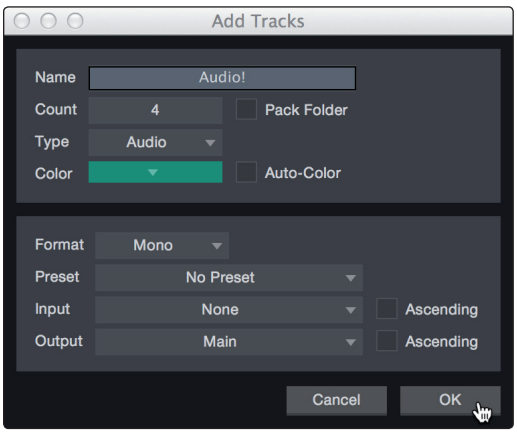
For more information on Z-Mix, see Section 5.4.

5.3.2 Creating Audio & MIDI Tracks

1. In the upper left corner of the Arrange window, you will notice several buttons. The button furthest to the right is the **Add Tracks** button. Click on this button to open the Add Tracks window.



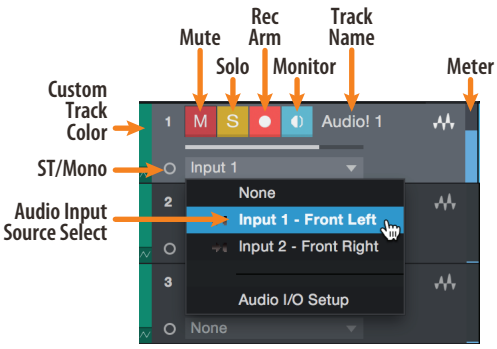
2. In the **Add Tracks** window, you can customize the track name and color, add a preset rack of effects and set the physical source for the input and output of your audio tracks from this window. Most importantly, can select the number and type of tracks you'd like to create:



- **Audio.** Use this track type to record and playback audio files.
- **Instrument.** Use this track to record and playback MIDI data to control external MIDI devices or Virtual Instrument plugins.
- **Automation.** This track type lets you create automated parameter controls for your session.
- **Folder.** This track helps you to manage your session as well as to quickly edit multiple tracks at once

__Power User Tip:__ If you would like to add an audio track for each of the available inputs, simply go to Track | Add Tracks for All Inputs.

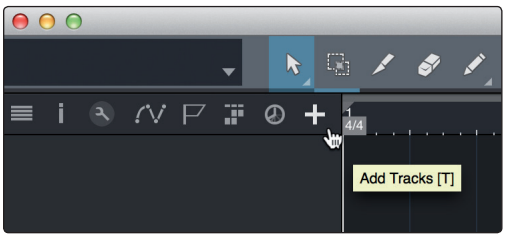
Anatomy of an Audio Track



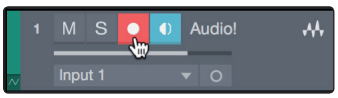
__Note:__ MIDI Tracks are nearly identical to Audio Tracks. The Input Source list for MIDI tracks lists available external MIDI devices as well as any Virtual Instruments that have been added to the Song.

5.3.3 Recording an Audio Track

1. To begin recording, create an audio track from the Add Tracks window and set its input to Input 1 on your PreSonus Audio Interface and connect a microphone to the same input.



2. Select **Record Enable** on the track. Turn up the Input 1 level on your audio interface while speaking/singing into the microphone. You should see the input meter in Studio One Artist react to the input. Adjust the gain so the input level is near its maximum without clipping (distorting).



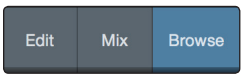
You are now ready to start recording. For complete instructions, please consult the Studio One Reference manual located in Help | Studio One Reference Manual.

5.3.4 Adding Virtual Instruments and Plug-in Effects to Your Song

You can add plug-ins and instruments to your Song by dragging-and-dropping them from the Browser. You can also drag an effect or group of effects from one channel to another, drag in customized effects chains, and instantly load your favorite virtual-instrument preset without ever scrolling through a menu.

Opening the Browser

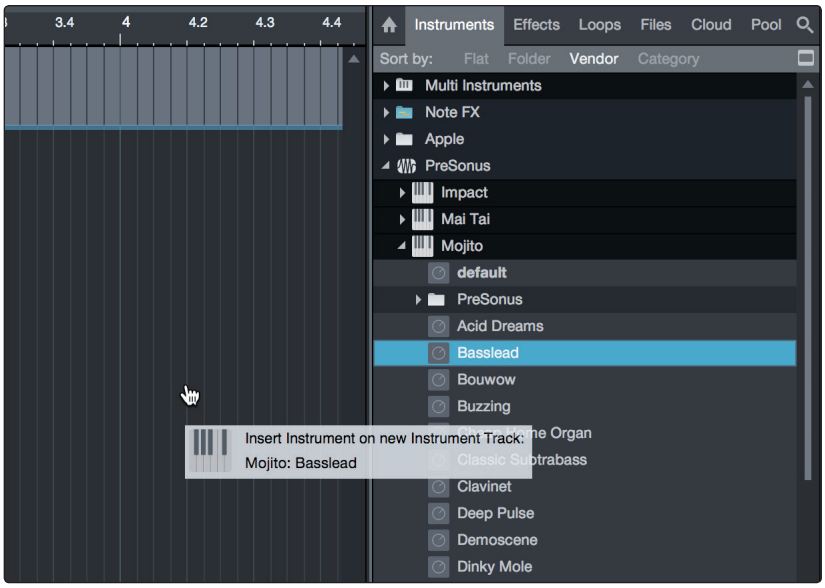
In the lower right corner of the Arrange window are three buttons:



- The **Edit** button opens and closes the audio and MIDI editors.
- The **Mix** button opens and closes the Mixer window
- The **Browse** button opens the Browser window, which displays all of the available virtual instruments, plug-in effects, audio files, and MIDI files, as well as the pool of audio files loaded into the current session.

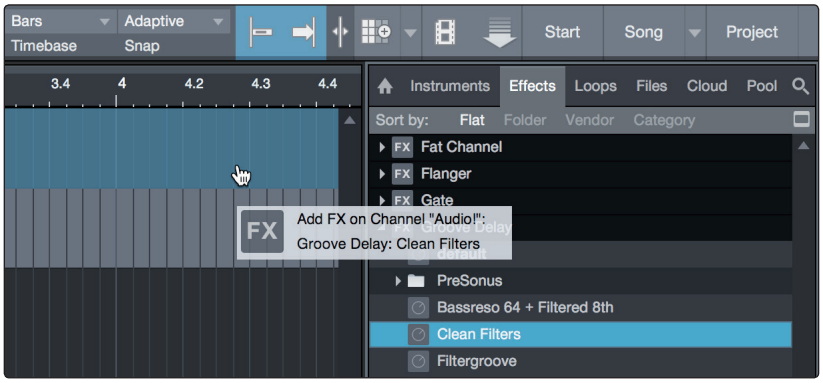
Drag-and-Drop Virtual Instruments

To add a virtual instrument to your session, open the Browser and click on the Instrument button. Select the instrument or one of its patches from the instrument browser and drag it into the Arrange view. Studio One Artist will automatically create a new track and load the instrument as the input.



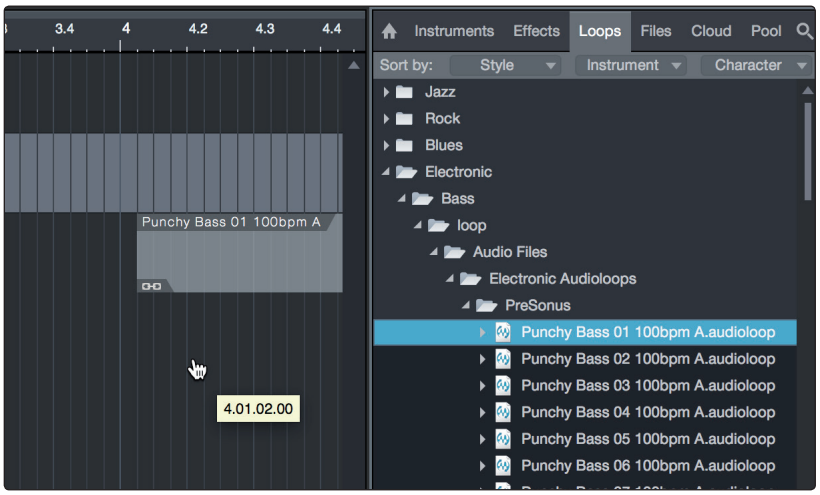
Drag-and-Drop Effects

To add a plug-in effect to a track, click the **Effects** button in the Browser and select the plug-in or one of its presets in the effects browser. Drag-and-drop the selection over the track to which you would like to add the effect.



Drag-and-Drop Audio and MIDI Files

Audio and MIDI files can be quickly located, auditioned, and imported into your Song by dragging them from the file browser into the Arrange view. If you drag the file to an empty space, a new track will be created with that file placed at the position to which you dragged it. If you drag the file to an existing track, the file will be placed as a new part of the track.



5.4 Monitor Mixing with Z-Mix

PreSonus interface customers can set up zero-latency monitor mixes using Studio One's unique Z-Mix feature. This feature takes over the monitor mix control software for the Studio-series interfaces and provides level and pan control from within Studio One. Simply designate a pair or pairs of outputs as a "Cue Mix," and you'll find the Z-Mix controls in your Studio One mixer.

As previously mentioned, Universal Control must be operating in the background for Z-Mix functions to be available for your Studio-series interfaces.

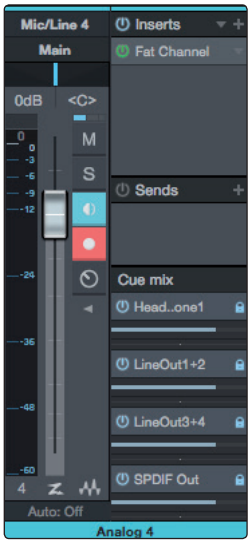
You can create a cue mix and send it to any output on your Studio-series interface. You simply need to create an output bus and enable Cue Mix.

Power User Tip: *It is possible to designate the main output in as a cue mix. This is helpful if you often record yourself and require quick access to zero-latency monitoring for live inputs. When the main output is designated as a Z-Mix, a Zero Latency button will appear on any audio channel with an assigned audio input in the Console, below the Mute, Solo, Record, and Monitor buttons.*

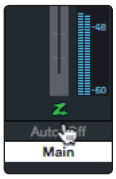
5.4.1 Z-Mix Functions

Once you have created a Cue Mix output, you will notice a special Send object in the channels of the Console. This Send object is called a Z-Mix object.

In the Small Console view, Z-Mix objects appear in the far left column of the extended channel.



In the Large Console view, Z-Mix objects appear below the Send device rack on each channel.



To enable zero-latency hardware monitoring, click on the "Z" in the output channel strip.

1. **Activate Button.** To completely remove any channel from a Z-Mix, simply deactivate the Z-Mix object for that channel. In most instances, you will leave this enabled.

2. **Horizontal Level Fader.** This is the channel's Z-Mix Volume control. By default this level will be identical to the level set on the channel's fader. Once you move the Z-Mix level fader, the volume of that channel in the Z-Mix will be independent of the main mix or any other Cue Mix in the session.

3. **Pan Control.** This sets the pan position for the channel in the Z-Mix outputs. Like volume, panning is identical to the main mix by default.

4. **Lock to Channel Button.** By default, the Lock to Channel button is enabled, and level and pan values are locked to the Channel level and pan controls for the Main Mix. This means that each Z-Mix will be identical to the Main Mix in the Console. Changing the level or panning in the Main Mix will change the level or panning in the Z-Mix. However, changing the level or panning in the Z-Mix object will unlock both settings, allowing independent control of level and panning for each channel in each Z-Mix. Thus, the level and panning for channels in a Z-Mix can be completely different from the related level and pan in the Main Mix. At any time, you can lock the Z-Mix level and pan back to the channel settings by clicking on the Lock to Channel button.

6 Technical Information

6.1 Specifications

General

Sample Rates	44.1, 48, 88.2, 96, 176.4, 192 kHz
Converter Resolution	24-bit
Converter Dynamic Range A/D	114 dB
Converter Dynamic Range D/A	114 dB

Microphone Inputs

Maximum Level	+16 dBu, min gain
Gain Range	80 dB
Frequency Response	20 Hz - 20 kHz (unity gain)
Dynamic Range	110 dB (A-wtd, min gain)
THD + N	0.005% (1 kHz, 0dBu, unity gain)
EIN	-128 dBu (A-wtd, 20 kHz BW, Rs=150Ω, max gain)
Input Impedance	1400Ω
Phantom Power	48V (>10 mA per channel)

Line Inputs

Maximum Level	+21 dBu (balanced, min gain)
Gain Range	40 dB
Frequency Response	20 Hz-20 kHz (unity gain)
Dynamic Range	112 dB (A-wtd, min gain)
THD + N	0.005% (1 kHz, +18 dBu, min gain)
Input Impedance	10 kΩ

Instrument Inputs

Maximum Level	+15 dBu (unbalanced, min gain)
Gain Range	80 dB
Frequency Response	20 Hz - 20 kHz (min gain)
Dynamic Range	112 dB (A-wtd, min gain)
THD + N	0.020% (1 kHz, +10 dBu, min gain)
Input Impedance	1M Ω

Main Outputs

Type	¼"TRS female, DC Coupled
Maximum Level	+18 dBu, balanced
Frequency Response	20Hz - 20kHz (unity gain)
Dynamic Range	108 dB (A-wtd, unity gain)
THD + N	0.004% (1 kHz, -1 dBFS, unity gain)

Line Outputs

Type	¼"TRS female, DC coupled
Maximum Level	+18 dBu, balanced
Frequency Response	20 Hz - 20 kHz
Dynamic Range	108 dB (A-wtd, -60 dBFS)
THD + N	0.004% (1 kHz, -1 dBFS, unity gain)

Headphone Outputs

Maximum Power	150 mW/channel (60Ω load)
Frequency Response	20 Hz - 20 kHz (unity gain)
Dynamic Range	103 dB (A-weighted, 1 kHz, unity gain)
THD + N	0.250% (1 kHz, 150 mW, unity gain)
Impedance Working Range	32Ω to 600Ω

Physical

Height	1.75" (44 mm)
Width	1824: 19" (483 mm), 1810: 12.5" (317 mm)
Depth	5.5" (140 mm)
Weight	1824: 4.8 lbs (2.2 kg), 1810: 3.2 lbs. (1.45 kg)

7 Warranty

7.1 Warranty Information

PreSonus' warranty obligations for this hardware product are limited to the terms set forth below:

How Consumer Law Relates To This Warranty:

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE (OR BY COUNTRY OR PROVINCE). OTHER THAN AS PERMITTED BY LAW, PRESONUS® DOES NOT EXCLUDE, LIMIT OR SUSPEND OTHER RIGHTS YOU MAY HAVE, INCLUDING THOSE THAT MAY ARISE FROM THE NONCONFORMITY OF A SALES CONTRACT. FOR A FULL UNDERSTANDING OF YOUR RIGHTS YOU SHOULD CONSULT THE LAWS OF YOUR COUNTRY PROVINCE OR STATE.

PreSonus Products And EU Statutory Warranty:

When you purchase PreSonus products, European Union consumer law provides statutory warranty rights in addition to the coverage you receive from the PreSonus limited warranty. A summary of the EU Statutory Warranty and the PreSonus Limited Warranty is below:

	EU Consumer Law	PreSonus Limited Warranty
Repair or Replacement Coverage For	Defects present when customer takes delivery	Defects arising after customer takes delivery
Warranty Period	2 years (minimum) from original date of purchase (unless superseded by PreSonus)	1 year from original date of purchase (unless superseded by PreSonus)
Cost of Coverage	Provided at no additional cost	Included at no additional cost
Who to contact to make a claim	The seller	PreSonus technical support for your region

What This Warranty Covers:

PreSonus Audio Electronics, Inc., ("PreSonus") warrants defects in material and workmanship in PreSonus-branded products under normal use. This Limited Warranty applies only to hardware products manufactured by or for PreSonus that can be identified by the PreSonus trademark, trade name, or logo affixed to them.

Exclusions and Limitations:

This warranty does not cover the following:

1. Damage caused by accident, abuse, improper installation, failure to follow instructions in the applicable owner's manual or improper operation, rental, product modification, alteration, or neglect.
2. Damage from improper grounding, faulty wiring (AC and signal), faulty equipment, or connection to a voltage range outside published specifications (see applicable owner's manual).
3. Damage to drivers or diaphragm assemblies found to have burnt voice coils from over/under driving or signal surge from another device.
4. Damage occurring during shipment or improper handling.
5. Damage caused by repair or service performed by persons not authorized by PreSonus.
6. Products on which the serial number has been altered, defaced, or removed.
7. Products purchased from an unauthorized PreSonus dealer (products that have transferable warranties are excluded from this provision, provided the customer and the product are registered with PreSonus).

Who This Warranty Protects:

This Warranty protects only the original retail purchaser of the product (products that have transferable warranties are excluded from this provision provided the customer and the product are registered with PreSonus).

How Long This Warranty Lasts:

The Warranty begins on the original date of purchase from the retail purchaser, and the duration is as follows:

1-Year Limited Warranty		
Product Category	**Model**	**Transferable**
Recording Interfaces	AudioBox® iOne, AudioBox iTwo, AudioBox Stereo, AudioBox Studio, AudioBox USB, AudioBox VSL (1818, 44, 22), FireStudio™ Project, FireStudio Mobile, FireStudio Mobile Studio, Studio 192, Studio 192 Mobile, Studio-series (1824, 1810, 68, 26), Quantum, and Quantum 2	No
Preamplifiers	ADL600, ADL700, BlueTube DP V2, DigiMax D8, DigiMax DP88, Eureka, RC500, Studio Channel, TubePre V2	No
StudioLive® Mixers	Series III (32, 24, 16, 32R, 24R, and 16R) ,16.0.2, 16.4.2AI, 24.4.2AI, 32.4.2AI, AR8, AR12, AR16, AR22, RM16AI, RM32AI	No
Monitoring & Controlling	Eris®, Central Station PLUS, FaderPort™, HP4, HP60, EarMix, Monitor Station, Monitor Station V2, R-Series, Sceptre®, Temblor®	No
Accessories	Covers, Dolly, PRM1 mic, Sub Pole, breakout cables, power supplies, M10 Kit	No
3-Years Limited Warranty		
Product Category	**Model**	**Transferable**
Live Sound	StudioLive AI 328, 312, 315, 18S, ULT10, ULT12, ULT15, ULT18, AIR10, AIR12, AIR15, AIR15S, AIR18S	Yes

What PreSonus Will Do:

PreSonus will repair or replace, at our sole and absolute option, products covered by this warranty at no charge for labor or materials. If the product must be shipped to PreSonus for warranty service, the customer must pay the initial shipping charges. PreSonus will pay the return shipping charges.

How to Get Warranty Service (USA):

1. You must have an active user account with PreSonus, and your hardware must be on file with your account. If you do not have an account, please go to: http://www.presonus.com/registration and complete the registration process.

2. Contact our Technical Support Department at (225) 216-7887 or log a support ticket at: http://support.presonus.com. TO AVOID THE POSSIBILITY OF SENDING IN A PRODUCT THAT DOES NOT HAVE A PROBLEM, ALL SERVICE REQUESTS SHALL BE CONFIRMED BY OUR TECH SUPPORT DEPARTMENT.

3. The return authorization number as well as shipping instructions shall be provided after your service request is reviewed and confirmed.

4. The product should be returned for service in the original product packaging. Products may be shipped in a manufactured "flight"- or "road"-style cases but PreSonus will NOT cover any shipping damage to these cases. Products that are not shipped in the original product package or a manufactured case may not receive a warranty repair, at PreSonus's sole discretion. Depending on the product model and the condition of your original packaging, your product may not be returned to you in the original packaging. The return shipping box may be a generic box that has been fitted for that model tested if the original gift box is not available.

How to Get Warranty Service (outside of USA):

1. You must have an active user account with PreSonus and your hardware must be on file with your account. If you do not have an account, please go to: http://www.presonus.com/registration and complete the registration process.

2. Contact the Technical Support/Service Department for your region at http://www.presonus.com/buy/international_distributors and follow procedures provided by your PreSonus contact.

Limitation of Implied Warranties:

ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE LENGTH OF THIS WARRANTY.

Some states, countries, or provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Exclusion of Damages:

PRESONUS'S LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCT, AT PRESONUS'S SOLE OPTION. IF PRESONUS ELECTS TO REPLACE THE PRODUCT, THE REPLACEMENT MAY BE A RECONDITIONED UNIT. IN NO EVENT WILL PRESONUS BE LIABLE FOR DAMAGES BASED ON INCONVENIENCE, LOSS OF USE, LOST PROFITS, LOST SAVINGS, DAMAGE TO ANY OTHER EQUIPMENT OR OTHER ITEMS AT THE SITE OF USE, AND, TO THE EXTENT PERMITTED BY LAW, DAMAGES FOR PERSONAL INJURY, OR ANY OTHER DAMAGES WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE, EVEN IF PRESONUS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states, countries, or provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

If you have any questions about this warranty or service received, please contact PreSonus (USA) at +1 (225) 216-7887 or one of our authorized international distributors at: http://www.presonus.com/buy/international_distributors.

Product features, design, and specifications are subject to change without notice.

Added bonus: PreSonus' previously Top Secret recipe for…

Redfish Couvillion

Ingredients:

- ¼ C Vegetable oil
- ¼ C flour
- 1 onion diced
- 1 clove garlic minced
- 1 green pepper diced
- 3 celery stalks diced
- 1 14oz can diced tomatoes
- 1 bottle light beer
- 2 bay leaves
- 1 tsp thyme
- 2 lbs Redfish fillets

Cooking Instructions:

1. In a heavy saucepan or large skillet, heat oil on medium high and slowly add flour a tablespoon at a time to create a roux. Continue cooking the roux until it begins to brown, creating a dark blond roux.
2. Add garlic, onions, green pepper, and celery to roux.
3. Sauté vegetables for 3-5 minutes until they start to soften.
4. Add tomatoes, bay leaves, thyme, and redfish. Cook for several minutes.
5. Slowly add beer and bring to a low boil.
6. Reduce heat and simmer uncovered for 30-45 minutes until redfish and vegetables are completely cooked, stirring occasionally. Break up redfish into bite size chunks and stir in. Add pepper or hot sauce to taste. Do not cover.
7. Serve over rice

Serves 6-8

While not one of Southeast Louisiana's more famous dishes, Redfish Couvillion is a favorite way to serve our favorite Gulf fish. Also known as Reds or Red Drum, Redfish is not only fun to catch, it's also delicious!

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Studio 1824 and 1810

High-definition USB 2.0 Audio Interfaces

Owner's Manual

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