

Eris[®]-series E3.5/E3.5 BT/E4.5/ E4.5 BT

High-Definition Media Reference Monitors

Owner's Manual

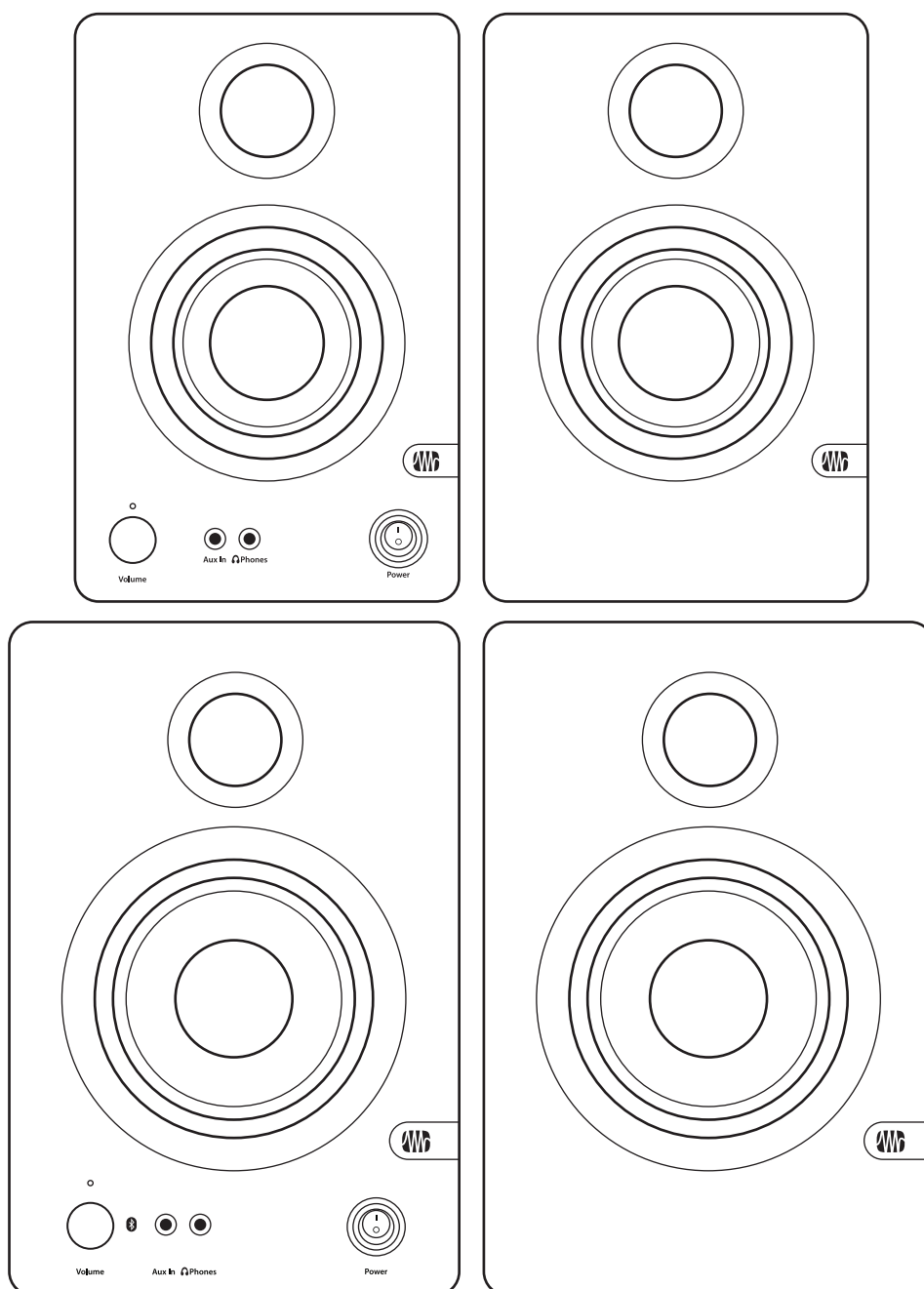


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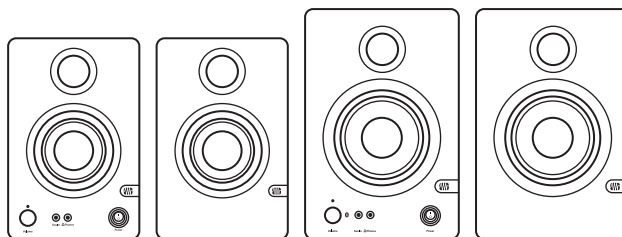
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1 Overview

1.1 Introduction



Thank you for purchasing a pair of PreSonus® Eris® high-definition media reference monitors. Ideal for gaming, home content creation, or just listening to your favorite album, Eris media reference monitors deliver studio-quality sound, with a smooth and accurate frequency response.

PreSonus Audio Electronics is committed to constant product improvement, and we highly value your suggestions. We believe the best way to achieve our goal of constant product improvement is by listening to the real experts: our valued customers. We appreciate the support you have shown us through the purchase of this product and are confident that you will enjoy your Eris!

About this manual: We suggest that you use this manual to familiarize yourself with the features, applications, and correct connection procedures for your Eris media reference monitors before trying to connect it to your other audio equipment. This will help you avoid problems during installation and setup.

This manual describes the functionality for all four Eris media reference models. Please note that Bluetooth connectivity is only available on the Eris E3.5BT and Eris E4.5BT.

Throughout this manual, you will find **Power User Tips** that can quickly make you an Eris expert and help you get the most out of your investment.

1.2 Product Registration

PreSonus is committed to delivering the best experience for our customers. My PreSonus is a one-stop portal for all our registered customers' needs. From your my PreSonus account, you can view all your PreSonus hardware and software registrations; contact support; track orders and more.

To register your Eris media reference monitors



Go to **My.PreSonus.com** and follow the onscreen instructions.

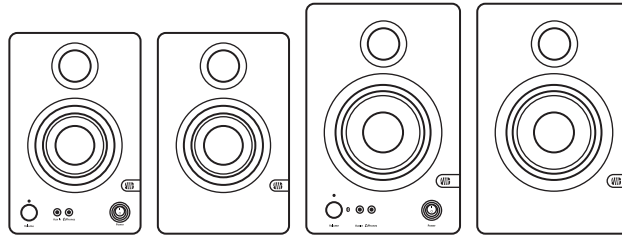
OR

Download the **MyPreSonus app** from the Apple App Store or Google Play.



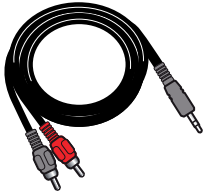
1.3 What's in the Box

Your Eris media reference monitors' package contains the following:

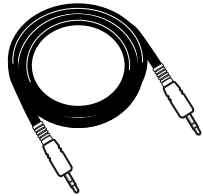


(1 pair) PreSonus Eris Media Reference Monitors (1 active, 1 passive)

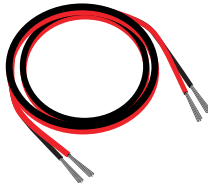
(1) 1.5M 1/8" TRS to 2x RCA cable



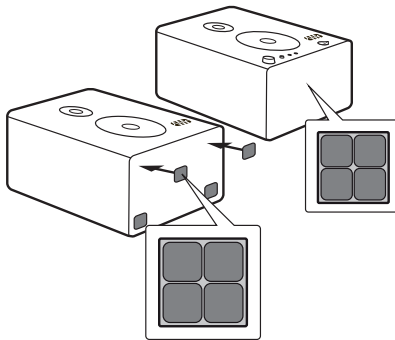
(1) 1.5M 1/8" TRS stereo cable



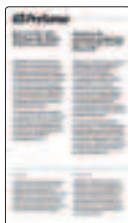
(1) 2M bare-wire speaker cable



(8) Foam feet: 4 to be placed on the bottom of each speaker to improve isolation



(1) Quick Start Guide



(1) IEC Power Cable

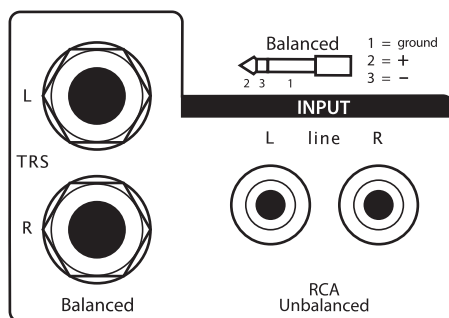


2 Connections and Controls

Each Eris media reference monitor pair consists of one active speaker and one passive speaker. Nearly every connection is located exclusively on the active speaker. This speaker provides signal and power for the passive speaker. The exceptions are the bare-wire connectors, which send power and signal from the active speaker to the passive speaker.

2.1 Rear Panel

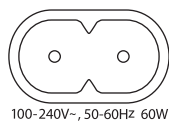
2.1.1 Inputs



Line-level Inputs. The Eris active speaker provides a choice of two pairs of inputs on the rear-panel: left and right balanced 1/4" TRS and left and right unbalanced RCA. These inputs accept a line-level signal from an audio source and feed that signal to each monitor's power amplifier. These inputs are provided to enable flexible connectivity, not for connecting multiple sources to your speakers simultaneously. A third 1/8" stereo input is available on the front panel, *please see Section 2.2 for more information.*

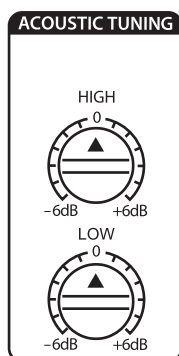
Power User Tip: The left inputs (balanced or unbalanced) send signal to the amplifier that powers the active speaker; and the right inputs send signal to the amplifier that powers the passive speaker. PreSonus recommends that the active speaker be placed on the left side of your mixing space and the passive speaker be placed on the right. However, if you prefer to have the controls located on your active monitor placed on the right side of your workspace, be sure to reverse the inputs from your audio source to maintain the correct stereo image.

2.1.2 Power



IEC Power Connection. The Eris active speaker accepts a standard IEC C7 power cord. The power switch is located on the front panel of the active speaker.

2.1.3 Acoustic Tuning Controls



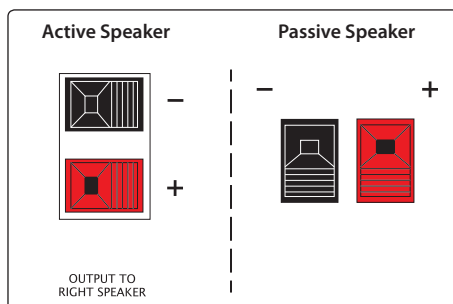
High. Boosts or cuts all frequencies above 10 kHz by ± 6 dB.

Power User Tip: The High control is a high-shelf EQ and attenuates or boosts frequencies above 10 kHz. This EQ is much like the treble control on a home or car stereo: It raises or lowers the gain on all frequencies above the specified cutoff frequency. Shelving EQs can make big changes to the sound very quickly by adding or removing an entire range of frequencies.

Low. Boosts or cuts frequencies around 100 Hz by ± 6 dB.

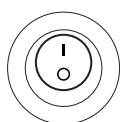
Power User Tip: The Low control is a low-shelf EQ and attenuates or boosts frequencies below 100 Hz. This function is the equivalent to the Bass control on a home or car stereo: It raises or lowers the gain on all frequencies below the specified cutoff frequency. Shelving EQs can make big changes to sound very quickly by adding or removing an entire range of frequencies.

2.1.4 Speaker Connections



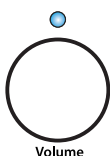
Bare-wire connectors. This connection is used to send power and send signal to the passive Eris speaker. Be sure to connect the positive and negative connections on your active Eris speaker to the positive and negative connections, respectively, on the passive Eris speaker (i.e. connect positive to positive and negative to negative).

2.2 Active Speaker Front Panel



Power

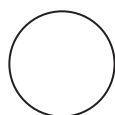
Power Switch. This is the On/Off switch.



Volume

Power / Bluetooth Status LED. The LED above the volume control indicates power status for all Eris speaker models. For Eris E3.5 BT and E4.5 BT reference monitors, this LED also displays the Bluetooth status as follows:

- **Solid Blue.** Eris speaker is powered on.
- **Flashing Blue (Eris E3.5 BT and E4.5 BT only).** Eris speaker is in pairing mode.
- **Solid White (Eris E3.5 BT and E4.5 BT only).** Eris speaker is paired to a Bluetooth device.



Volume

Volume. Sets the volume level of the input signal before it is amplified. This is also the volume control for the front-panel headphone amp.



Aux In

Aux In. This stereo 1/8" jack can be used to patch in a media player for a quick reference check.

Power User Tip: This input will sum with the inputs on the back panel.



Phones

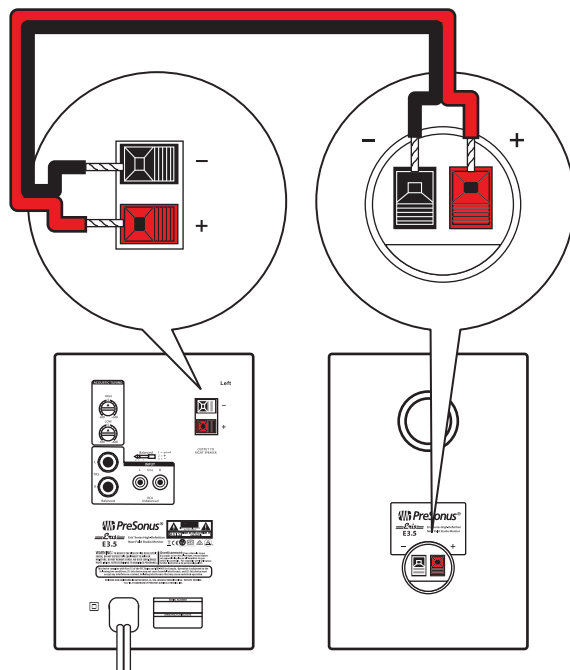
Headphone Out. This headphone output is controlled by the Level knob.



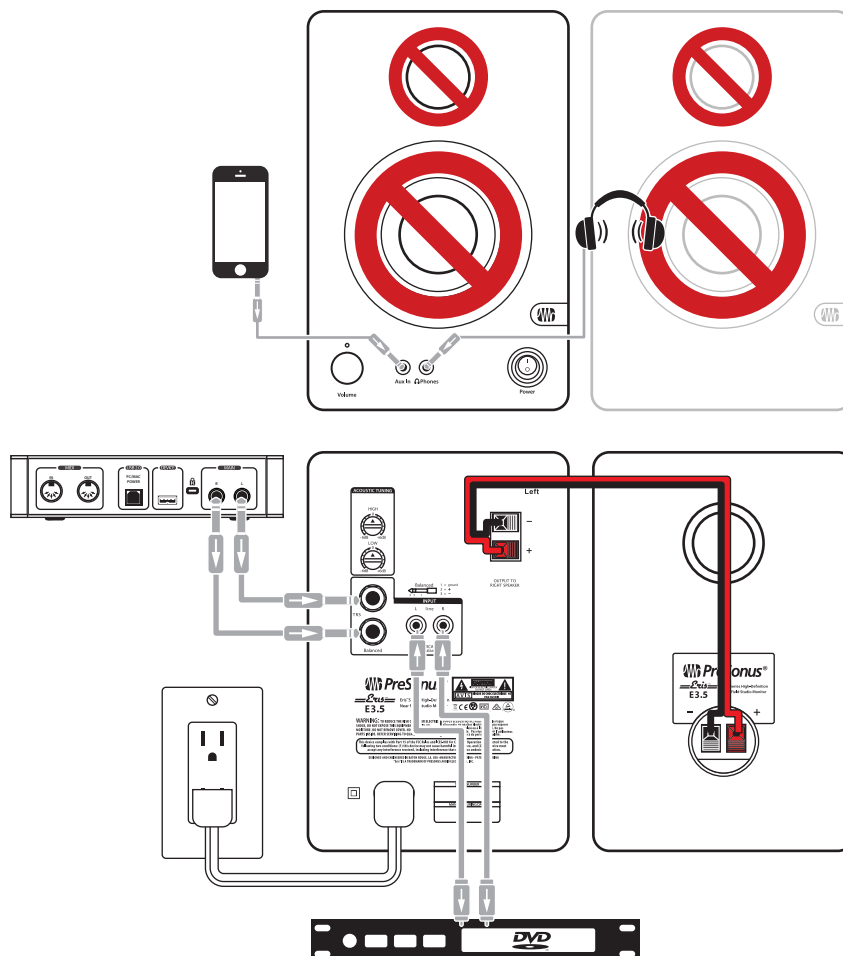
Power User Tip: When the headphone output is connected, audio will be muted to your Eris speakers. So, you can listen as loud as you like without disturbing the neighbors.

3 Hookup Diagrams

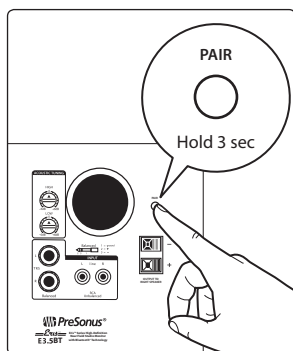
3.1 Basic Setup



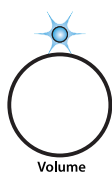
3.2 Audio Connections



3.3 Bluetooth Pairing (Eris E3.5 BT and Eris E4.5 BT only)



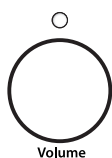
Your Eris E3.5 BT or E4.5 BT can be paired with any Bluetooth device for audio playback. To pair your pair your speakers, first press and hold the pair button on the rear of the active Eris speaker for three seconds.



The Power/Bluetooth LED on the front of the active speaker will flash, indicating pairing is active.



On your Bluetooth device, select "Eris E3.5 BT" or "Eris E4.5 BT".



Once your Eris speakers are paired, the Power/Bluetooth LED will illuminate white.

Power User Tip: You can pair an additional device by repeating these steps. Your Eris speakers can store two Bluetooth device pairings, although audio can only be streamed from one Bluetooth device at a time. Whenever you power on your Eris speakers, your stored Bluetooth devices will automatically pair if within range.

4 Resources

4.1 Technical Specifications

	Eris E3.5 / E3.5 BT	Eris E4.5 / E4.5 BT
Inputs	1- Stereo 1/8" TRS 2- Balanced 1/4" TRS 2- Unbalanced RCA Stereo Bluetooth 5.0 (Eris E3.5 BT and E4.5 BT only)	

Performance

Frequency Response	80 Hz to 20 kHz	70 Hz to 20 kHz
Crossover Frequency	2.8 kHz	
Amplifier Power	50W (25W / speaker)	
Peak SPL (@ 1 meter)	100 dB	
LF Driver	3.5"	4.5"
HF Driver	1" Silk Dome	
Input Impedance	10 kΩ	

User Controls

Volume Range	A-Type Taper	
MF Control	Variable (-6 to +6 dB, center 100 Hz)	
HF Control	Variable (-6 to +6 dB, center 10 kHz)	
Protection	RF interference Output-current limiting Over-temperature Turn-on/off transient Subsonic filter External mains fuse	
Power	100-120V ~50/60 Hz or 220-240V ~50/60 Hz	
Cabinet	Vinyl-laminated, medium-density fiberboard	

Physical

Width	5.6" (141 mm)	6.4" (163 mm)
Depth	6.4" (162 mm)	7" (180 mm)
Height	8.3" (210 mm)	9.5" (241 mm)
Weight (per pair)	6.4 lb (2.9 kg)	13 lb. (5.9 kg)

4.2 Troubleshooting

No power. First ensure that your active Eris speaker is plugged in. If it's connected to a power conditioner, verify that the power conditioner is turned on and functioning.

No audio. If your active Eris speaker appears to power on but you hear no sound when playing audio from your audio source (the lights are on but nobody's home), first make sure that the cable connecting your audio source to the active speaker is working correctly. Also, verify that the volume control is set to provide enough amplitude for the signal. If only the passive Eris speaker is not passing audio, check your speaker-wire connections and verify that the bare wire is fully inserted into each connection.

Hum. Usually, hum is caused by a ground loop. Verify that all audio equipment is connected to the same power source.

Sound is thin. If the sound of the speakers seems thin and brittle, check that your speaker wires are connected correctly (i.e., the positive/red connection on the active Eris speaker is connected to the positive/red connection on the passive Eris speaker and the negative/black connection on each is connected to the negative/black connection on the other).

Added bonus: PreSonus' previously Top Secret recipe for . . .

Chicken and Andouille Gumbo

Ingredients:

- 1 C All-Purpose flour
- ¾ C Vegetable Oil
- 1 large onion (diced)
- 1 small onion (quartered)
- 6 celery stalks (diced)
- 1 large green bell pepper (diced)
- 3 cloves garlic (2 minced, 1 whole)
- 1 lb link Andouille sausage
- 4 Chicken leg quarters
- 4 qt water
- 4 bay leaves
- 1 tsp thyme
- 1 tsp Old Bay seasoning
- 1-2 C frozen okra, sliced
- ¼ C fresh parsley, minced
- 6-8 eggs (optional)

Cooking Instructions:

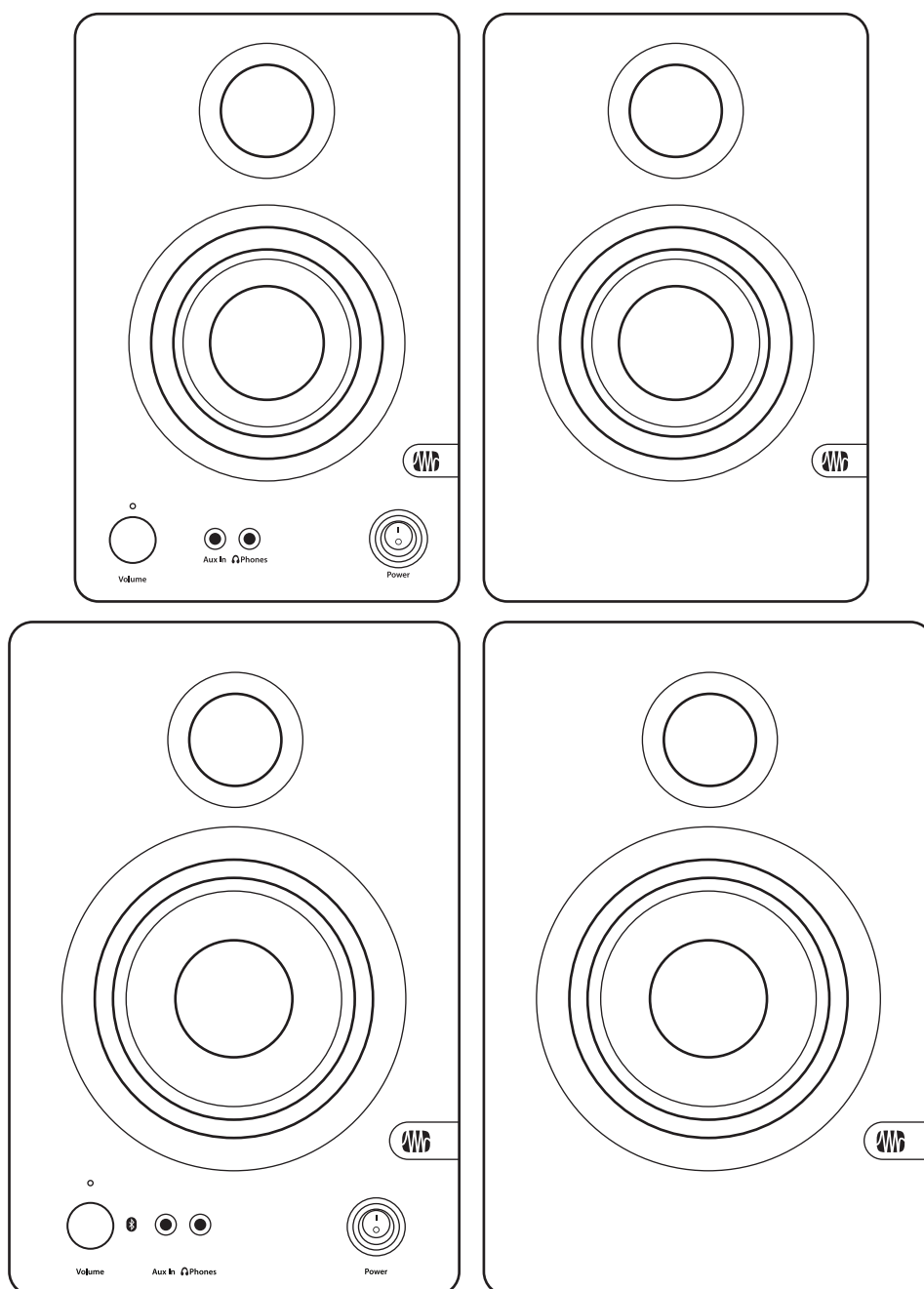
1. In a large pot, combine whole chicken leg quarters, water, quartered onion, Old Bay, 2 bay leaves and 1 whole clove garlic. Cover and bring to a low boil. Simmer stock until chicken is falling off the bone. Remove the chicken and set aside. Discard the onion, bay leaves, and garlic, reserving the liquid.
2. In a heavy saucepan, heat 1 Tbsp of the oil on medium high heat and brown the andouille until it is cooked through. Set aside sausage for later.
3. In the same saucepan, add and heat remaining oil. Slowly add flour 1-2 Tbsp at a time, stirring continuously. Continue cooking and stirring the roux until it is a dark brown (it should look like melted dark chocolate). Be careful to not to get the oil too hot or the flour will burn and you'll have to start over.
4. Once roux has reached the correct color, add diced onion, celery, green pepper, and minced garlic. Cook until vegetables are very tender. Do not cover.
5. Slowly add 1 quart of chicken broth and bring to a low boil, stirring constantly.
6. Transfer roux mixture to a soup pot and bring to low boil. Do not cover, the roux will settle on the bottom of the pot and burn.
7. Add remaining chicken broth, bay leaves, and thyme. Simmer for 30 minutes.
8. While gumbo is simmering, debone and shred chicken and slice the andouille.
9. Add chicken and andouille to gumbo and return to a simmer. Simmer for 30-45 minutes.
10. Stir in frozen okra and parsley and bring to a rolling boil.
11. **Optional:** Crack one egg into a teacup and quickly pour into the boiling gumbo. Repeat with the other eggs being careful not to cluster them too closely. After all the eggs have risen back to the surface, reduce heat and simmer.
12. Correct seasoning with salt and pepper (red, white and/or black) if necessary.
13. Serve over rice with potato salad.

Serves 12

Eris[®]-series E3.5/E3.5 BT/E4.5/ E4.5 BT

High-Definition Media Reference Monitors

Owner's Manual



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Louisiana 70809 USA • 1-225-216-7887
www.presonus.com

Part# 70-52000143-A

AudioBox USB® 96

USB Audio Interface

Owner's Manual



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1 Overview

1.1 Introduction



Thank you for purchasing the PreSonus AudioBox USB®96. PreSonus Audio Electronics has designed the AudioBox USB96 utilizing high-grade components to ensure optimum performance that will last a lifetime. Loaded with 2 high-headroom, Class A microphone preamplifiers; professional 24-bit 96 kHz converters; a built-in 2x2 USB 2.0 recording and playback engine; MIDI I/O; and more, AudioBox USB96 breaks new boundaries for music performance and production. All you need is a computer with a USB connection, a few microphones and cables, powered speakers, and your instruments, and you are ready to record in the studio or in front of a live audience!

We encourage you to contact us with questions or comments regarding this product. PreSonus Audio Electronics is committed to constant product improvement, and we value your suggestions highly. We believe the best way to achieve our goal of constant product improvement is by listening to the real experts: our valued customers. We appreciate the support you have shown us through the purchase of this product and are confident that you will enjoy your AudioBox USB96!

About This Manual: We suggest that you use this manual to familiarize yourself with the features, applications, and correct connection procedures for your AudioBox USB96 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** that can quickly make you an AudioBox USB96 expert. In addition to the Power User Tips, you will find an assortment of audio tutorials at the back of this manual. These tutorials cover everything from microphone placement to equalizer and compression-setting suggestions.

1.2 Summary of AudioBox USB Hardware Features

- 24-bit/96 kHz sampling rate
- 2 Class A microphone preamplifiers
- 2 Instrument inputs
- MIDI I/O
- 2x2 USB 2.0 audio interface
- Headphone output
- Analog monitor mixing with playback/input mix control
- Rugged steel chassis
- Studio One™ Artist
- Compatible with all major audio applications
- macOS®- and Windows®-compatible

1.3 Summary of Studio One Artist Software Features

All PreSonus audio interfaces include PreSonus Studio One Artist recording software, which comes with more than 4 GB of plug-ins, loops, and samples, giving you everything you need for music recording and production.

The Quick Start Guide in Section 4 of this manual will help you configure your AudioBox USB96 interface and provide you with a brief overview of Studio One's features.

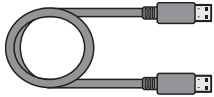
- Unlimited track count, inserts, and sends
- 20 high-quality, Native Effects™ plug-ins; amp modeling (Ampire XT), delay (Analog Delay, Beat Delay), distortion (RedLightDist™), dynamics processing (Channel Strip, Compressor, Gate, Expander, Fat Channel, Limiter, Tricomp™), equalizer (Channel Strip, Fat Channel, Pro EQ), modulation (Autofilter, Chorus, Flage, Phaser, X-Trem), reverb (Mixverb™, Room Reverb), and utility (Binaural Pan, Mixtool, Phase Meter, Spectrum Meter, Tuner)
- More than 4 GB of loops, samples, and instruments, featuring: Presence™ XT virtual sample player, Impact virtual drum machine, SampleOne™ virtual sampler, Mai Tai virtual polyphonic analog modeling synth, Mojito virtual analog-modeled subtractive synthesizer
- Innovative and intuitive MIDI mapping
- Powerful drag-and-drop functionality for faster workflow
- Available for macOS and Windows

1.4 What is in the Box

Along with this Quick Start Guide, your package contains the following:



- AudioBox USB96
- 6' (1.8m) USB cable



- AudioBox USB96 Quick Start Guide



- Studio One Key Commands Guide



- PreSonus Health Safety and Compliance Guide



Power User Tip: All companion software and drivers for your PreSonus AudioBox USB96 are available for download from your My PreSonus user account. Simply visit <http://my.presonus.com> and register your interface to receive downloads and licenses.

2 Hook-up

2.1 Front-Panel Connections and Controls



Microphone/Instrument Inputs. Both channels of the AudioBox USB96 have Mic/Instrument combo jacks. This convenient connector accepts either a 1/4-inch phone plug or an XLR plug.

Microphone Inputs. The XLR inputs on channels 1 and 2 are equipped with two custom PreSonus microphone preamplifiers. These preamps work great with all types of microphones including dynamic, ribbon, and condenser microphones.

Power User Tip: Dynamic microphones and ribbon microphones (which are a special type of dynamic mic) are generally lower-output devices that, with few exceptions, require no external power source. Sending phantom power to a ribbon mic that doesn't require it can cause severe damage to the mic – usually beyond repair. Condenser microphones are generally more sensitive than dynamic and ribbon microphones and typically require external +48V phantom power. Always review your microphone's documentation and follow its recommended operating practices.

Instrument Inputs. The 1/4-inch TS connectors on channels 1 and 2 are for use with instruments (guitar, bass, etc.).

Power User Tip: Active instruments are those that have an internal preamp or a line-level output. Active instruments should be plugged into a D.I. box, which should then be connected to the mic input rather than directly to an instrument input. Plugging a line-level source into the instrument inputs on the front of the AudioBox USB96 not only risks damage to these inputs but can also result 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 AudioBox USB96. Because of this, we highly recommend that you turn down the main output level and channel trims before changing connections or turning phantom power on or off. This simple step will add years to life of your audio equipment.

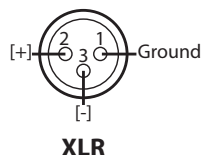


48-volt Phantom Power. The AudioBox USB96 provides 48V phantom power for both microphone inputs. Press the 48V button to enable phantom power for both microphone inputs.



WARNING: Phantom power is only required for condenser microphones and can severely damage some dynamic mics, especially ribbon mics. Please consult your microphone's documentation before enabling phantom power on your AudioBox USB96.

XLR connector wiring for phantom power:



XLR

Pin 1 = GND Pin 2 = Signal+ Pin 3 = Signal–

Input Gain/Trim Control. These knobs provide the following gain structure:

- Microphone: 60 dB of variable gain (0 to +60 dB)
- Instrument: 40 dB of variable gain (–10 dB to +30 dB)



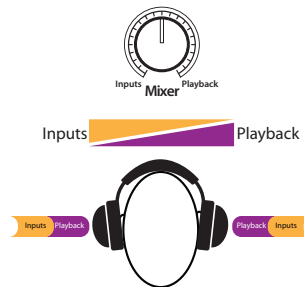


Clip Indicator. All channels feature clip LEDs next to the trim controls. The red clip indicator LED will illuminate when the channel's input signal reaches 0 dBFS. At this level, your mic preamp/line trim signal will exhibit signs of clipping (distortion).

Power User Tip: *Never run your input levels higher than the channel inputs can handle. If you overdrive the analog-to-digital converters, it will cause digital distortion (digital clipping), which sounds terrible and cannot be undone.*



Mixer. The Mixer knob allows you to blend your input signals with the playback streams from your computer so that you can monitor your input signals without any latency (delay). If the knob is positioned at 12 o'clock, the input signal and the playback stream will be equally balanced. Turning the knob to the left will increase the level of the input signal relative to the playback stream; turning to the right will increase the level of the playback stream relative to the input signal as illustrated below:



Power User Tip: *When monitoring your inputs through Studio One or another DAW, it is important that you turn the Mixer knob all the way to the Playback position. Monitoring both the input signal and the playback stream will create a doubling effect that will make monitoring difficult.*



Phones. The Phones knob controls the volume of the headphone output on the rear of the unit. The headphone amplifier is quite powerful, and the volume goes to 11, so use the maximum setting with extreme caution.



Main. The Main knob controls the output level for the Main Outputs on the back of the AudioBox USB96, with a range of -80 dB to 10 dB.



Power LED. This LED will illuminate red when the AudioBox USB96 is properly powered and synced to a USB connection.

2.2 Rear-Panel Connections



1/4-inch Phones (headphone) Jack. This is where you connect headphones to your AudioBox USB96.



Main Out. These are the main outputs for the AudioBox USB96. The output level of the Main Outs is controlled by the Main volume knob on the front of the unit.

Power User Tip: *You must connect speakers or headphones directly to your AudioBox USB96 in order to monitor playback from your computer.*



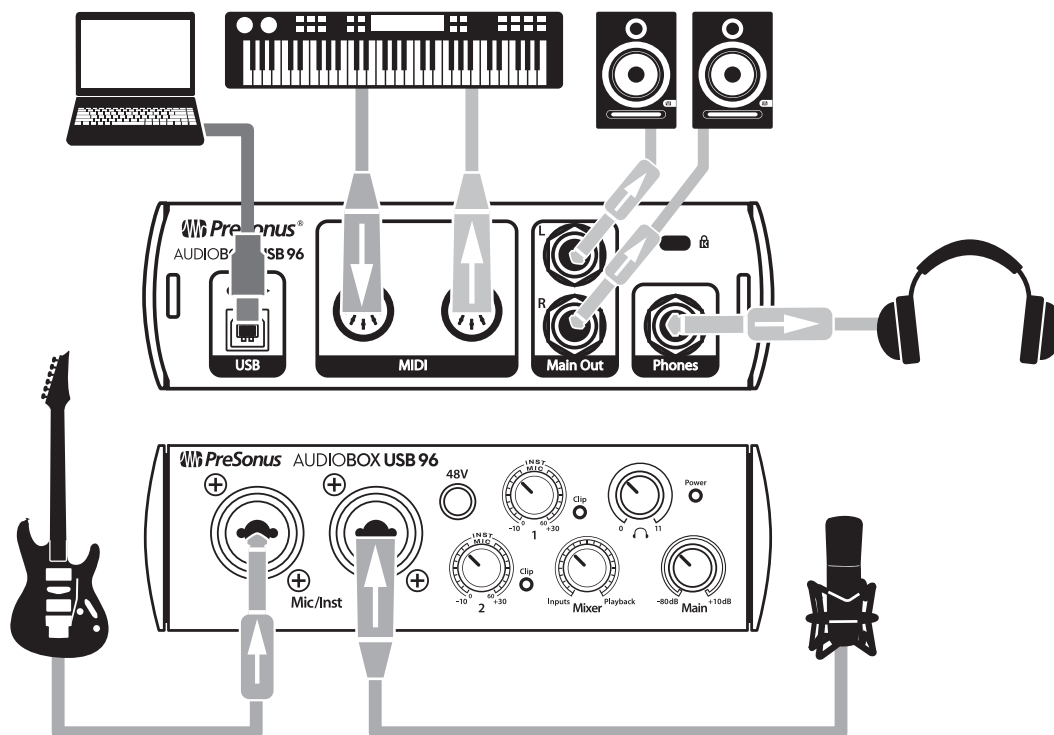
MIDI I/O. MIDI stands for “Musical Instrument Digital Interface.” MIDI inputs and outputs allow connection to, and communication with, external MIDI equipment. One function of these ports is MIDI sequencing but the MIDI protocol can be used for much more than instruments and sequencing.

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 an AudioBox USB96 input channel. Please consult the User Manuals of your MIDI devices for help with MIDI setup and usage.



USB Port. This is where you connect the USB cable from your AudioBox USB96 to your computer. The AudioBox USB96 is bus-powered via this connection and does not require an external power supply. Your AudioBox USB is compatible with both USB 2.0 and 3.0 ports.

2.3 Connection Diagram



3 Connecting to a Computer

Your AudioBox USB96 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/products/AudioBoxUSB96/techspecs to verify the latest system requirements.

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.

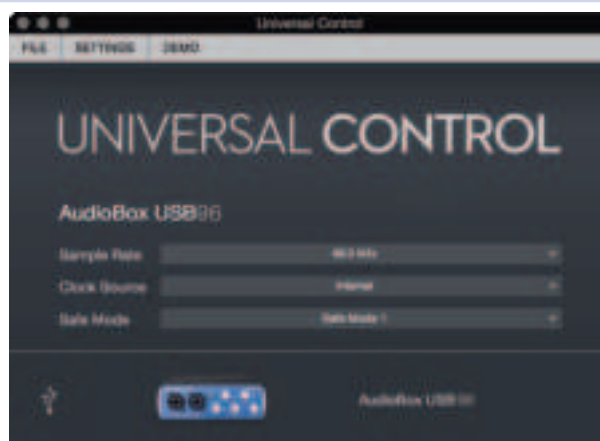
The Universal Control installer for Windows is available for download from your My PreSonus user account. This installation includes the ASIO and WDM drivers for the AudioBox USB96. To begin, you must first visit <http://my.presonus.com>, create or log into your user account, and register your AudioBox USB96. Once registered, all software downloads will be available from within your My PreSonus user account. Please review the Quick Start Guide that came with your AudioBox USB96 for complete instructions.

3.1 Installation for Windows

Download and launch the Universal Control installer on the computer to which you'd like to connect your AudioBox USB96. The installer application will instruct you through each step of the installation process as it installs both the ASIO and WDM drivers as well as Universal Control. Please read each message carefully so that you do not connect your AudioBox USB96 too soon.

Power User Tip: It is recommended that you temporarily disable or turn off any anti-virus programs you have running to prevent installation issues.

3.1.1 Universal Control (Windows)



Sample Rate. Changes the sample rate.

You can set the sample rate to 44.1, 48, 88.2, or 96 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.

Safe Mode. Adjusts the Input Buffer Size.

These modes allow you to adjust the input buffer size to optimize performance for your computer. When adjusting the safe mode, the block size will be adjusted automatically to provide the best performance.

Block Size. Sets the buffer size.

From this menu, you can set the buffer size from 64 to 8192 samples. 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.

***Note:** When adjusting the block size, the Safe Mode will automatically change to provide the best performance.*

3.2 Installation for Mac OS X

Your AudioBox USB96 is a class-compliant Core Audio device in macOS. No driver installation is necessary. Simply connect it to your computer.

3.3 Using the AudioBox USB96 with Popular Audio Applications

Complete setup instructions for Studio One Artist and a brief tutorial on its features can be found in Section 4 of this manual. However, you can use your AudioBox USB96 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 AudioBox USB96 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 AudioBox USB96.
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. On the Core Audio tab, check Enabled.
5. Select PreSonus AudioBox USB96 from the device menu.
6. You will be asked if you'd like to relaunch Logic. Click try (re)launch.
7. Your AudioBox USB96 features custom I/O labels for faster workflow. To enable these labels for use in Logic, go to Options | Audio | I/O Labels.
8. The second column in the pop-up window will be named Provided by Driver. Activate each of these labels for your AudioBox USB96. When you are done, close this window.

Avid Pro Tools 10+

1. Launch Pro Tools.
2. Go to Setup | Hardware and select AudioBox USB96 from the Peripherals list. Click OK.
3. Go to Setup | Playback Engine and select AudioBox USB96 from the menu at the top of the window. Click OK.

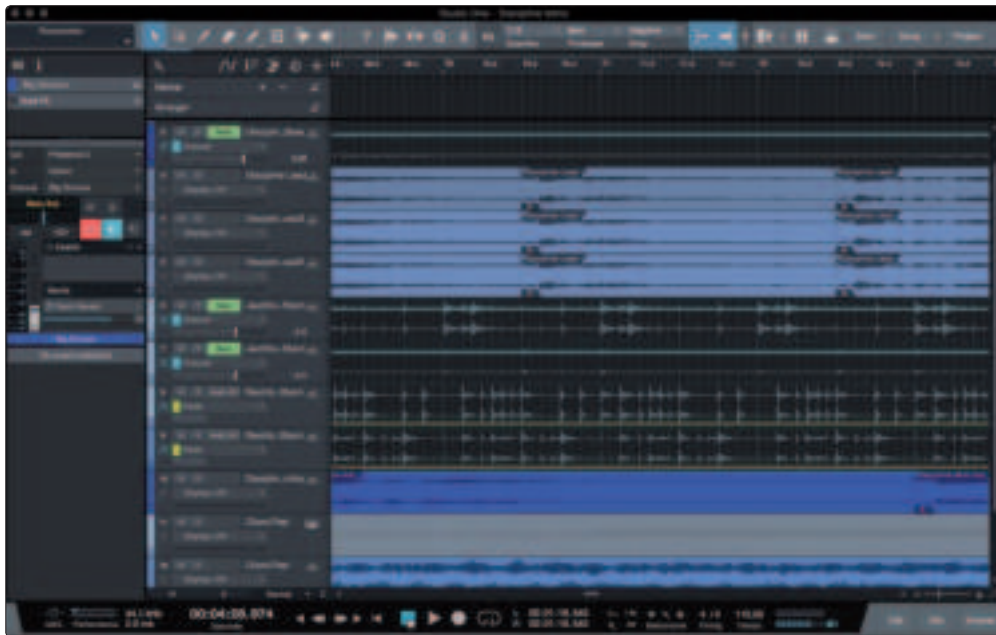
Cakewalk Sonar

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 AudioBox USB96."
8. Go to Options | Audio... and click on the General tab.
9. Set the Playback Timing Master to "PreSonus AudioBox USB96... DAW Out 1."
10. Set the Recording Timing Master to "PreSonus AudioBox USB96... Mic/Inst 1."

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 AudioBox USB96 from the ASIO Driver dropdown list.
5. Click "Switch" to begin using the AudioBox USB96 driver.
6. Once you have successfully changed the driver, go to Devices | VST Connections to enable your input and output buses.

4 Studio One Artist Quick Start



All registered AudioBox USB96 users receive 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.

Power User Tip: As a valued PreSonus customer, you are eligible for a discount upgrade to Studio One Professional. For more details on the Studio One upgrade program for PreSonus customers, please visit <https://shop.presonus.com/products/software/studio-one-prods>.

4.1 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 AudioBox USB96. Your product key for Studio One Artist will automatically be registered to your My PreSonus account, along 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 to the computer on which you will use it.

Windows: Launch the Studio One Artist installer and follow the onscreen instructions.

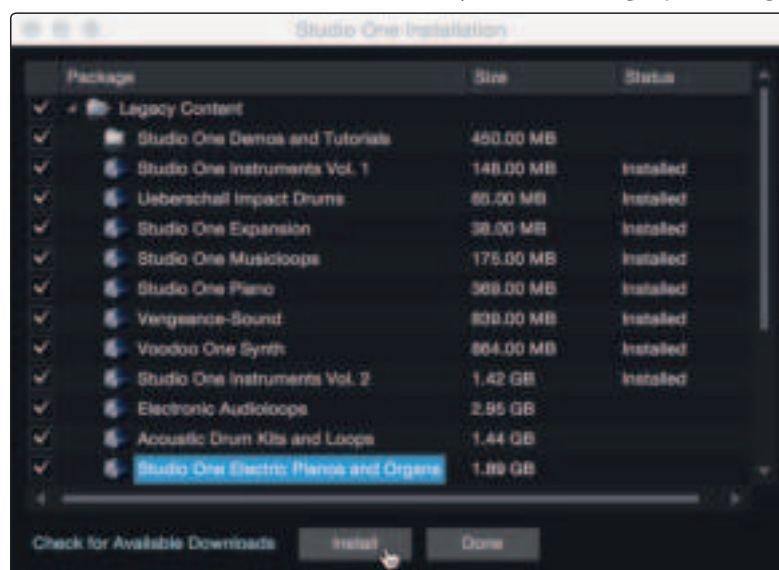
Mac: Drag the Studio One Artist application into the Applications folder on your Mac hard drive.

Authorizing Studio One

When Studio One is launched for the first time on your computer, you'll need to enter your My PreSonus account information. Once entered, Studio One will scan your account for available Studio One Product Keys. Select your Product Key and click Activate. Your computer will need to be connected to the Internet for authorization and activation.

Installing Bundled Content for Studio One Artist

Studio One Artist comes bundled with demos, 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.

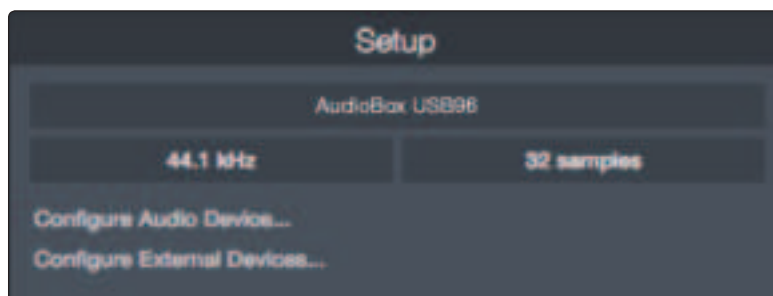
4.2 Setting Up Studio One

Studio One Artist was designed to work with PreSonus interfaces and provides unique interoperability and simplified setup. When Studio One Artist is launched, by default you will be taken 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 your computer is connected to the Internet, these links will be updated as new tutorials become available on the PreSonus Web site.

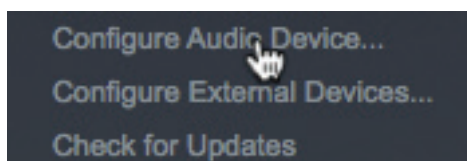
Complete information on all aspects of Studio One Artist is available in the Reference Manual PDF located in the Studio One Help menu. The information in this tutorial covers only the basic aspects of Studio One Artist and is intended to get you set up and recording as quickly as possible.

4.2.1 Configuring Audio Devices

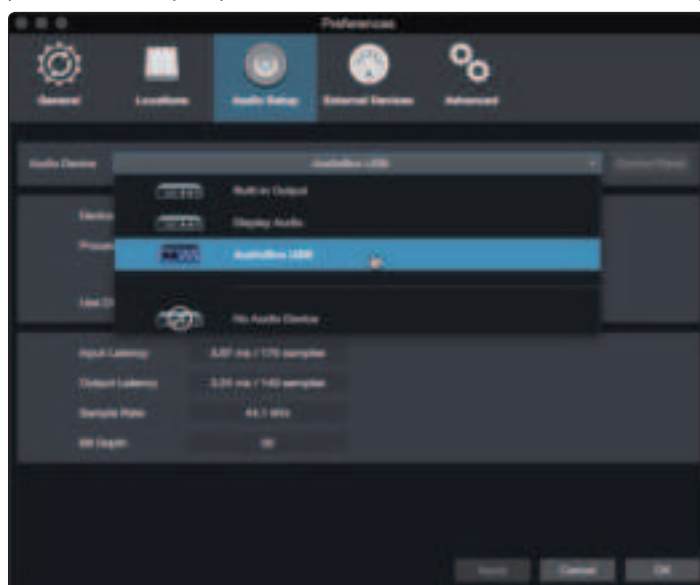
In the middle of the Start page, you will see the Setup area. Studio One Artist automatically scans your system for all available drivers and selects a driver. By default, it will choose a PreSonus driver if one is available.



Click on the Configure Audio Interface link to select your audio interface driver.



Select the AudioBox USB96 from the Audio Device pull-down menu. From this page, you can also adjust your device buffer block size. Click OK when you are finished.



4.2.2 Configuring MIDI Devices

From the External Devices window in Studio One Artist, you can configure MIDI keyboard controllers, sound modules, and control surfaces. This section will guide you through setting up your MIDI keyboard controllers 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.

Setting up a MIDI Keyboard controller

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 in 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 AudioBox USB96 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. 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 (that is, 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

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 AudioBox USB96 or other MIDI interface.

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



2. Select your device in 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.



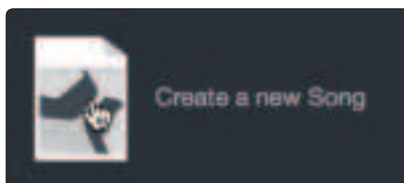
3. Specify which MIDI channels will be used to communicate with this sound module. For most purposes, you should select all MIDI channels. If you are unsure of which MIDI channels to select, we suggest you select all 16.
4. In the Send To menu, select the MIDI interface output from which Studio One Artist 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.

4.3 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 setups for a variety of devices and recording situations. The section will describe creating a Song from an empty session.

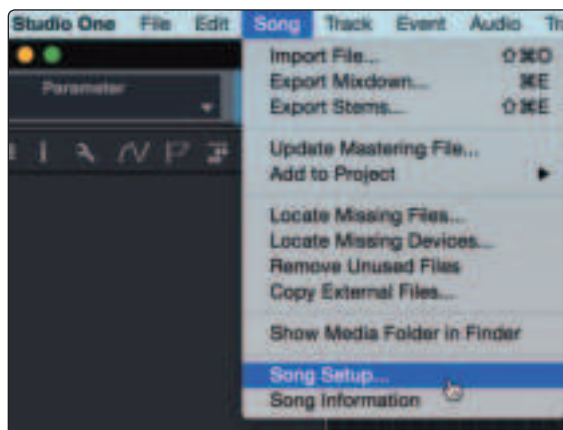


3. Select "Empty Song" from the Templates list. At this point, you should give your Song a name and select your preferred sample rate and bit depth for recording and playback. You can also set the length of your Song and the type of time format you would like the timeline to follow (notation bars, seconds,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

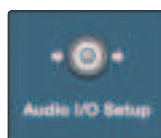
Power User Tip: If you plan to import loops into your Song, make sure that the *Stretch Audio Files to Song Tempo* option is selected. This will automatically import loops at the correct tempo.

4.3.1 Configuring Your Audio I/O

1. Click on Song | Song Setup to set your sample rate and 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 audio interface that you'd like to have available. 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.



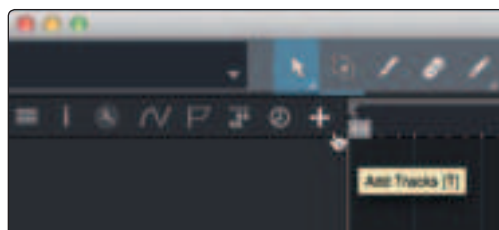
- Click on the Outputs tabs to enable any or all of the outputs on your audio interface. In the lower right corner, you will see the Audition Select menu. This allows you to choose the output from which you will audition audio files prior to importing them into Studio One Artist. In general, you will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



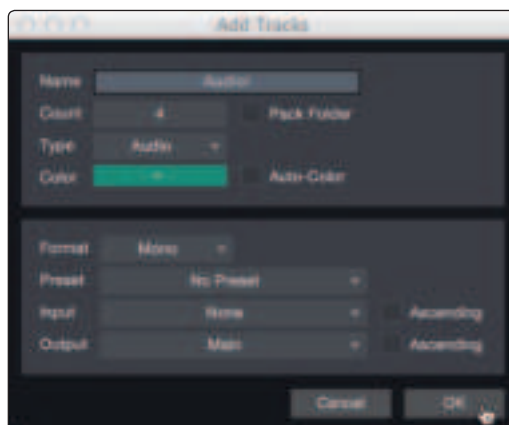
Power User Tip: If you would like this I/O configuration to be the same every time you open Studio One, click the Make Default button.

4.3.2 Creating Audio and Instrument Tracks

- 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.



- 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. Most important, you can select the number and type of tracks you'd like to create.



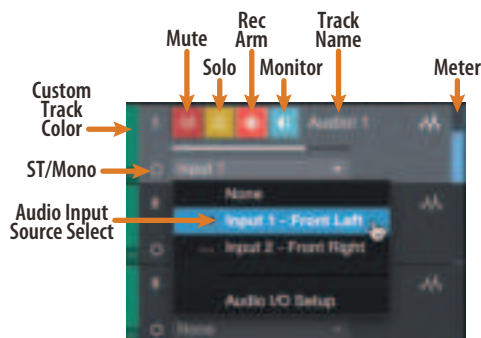
Audio. Use this track type to record and playback audio files.

Instrument. Use this track to record and playback MIDI data to control external MIDI devices or virtual instrument plug-ins.

Automation. This track type lets you create automate any plugin or channel parameter in your session.

Folder. This track helps you to manage your session as well as to quickly edit multiple tracks at once.

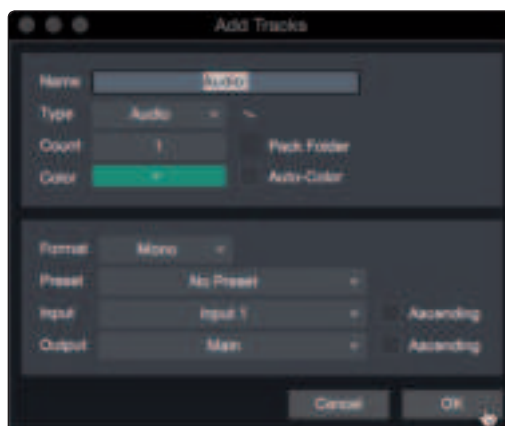
Power User Tip: If you would like to add an audio track for each of the available inputs, go to *Track | Add Tracks for All Inputs*.



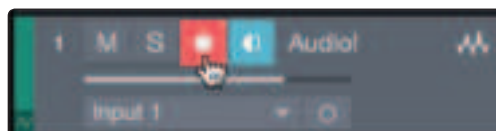
Note: Instrument tracks are nearly identical to audio tracks. The Input Source list for Instrument tracks lists available external MIDI devices as well as any virtual instruments that have been added to the Song.

4.3.3 Recording an Audio Track

1. To begin recording, create an audio track from the Add Tracks window, set its input to Input 1 on your 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).



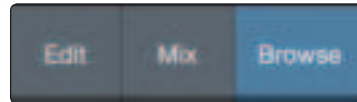
You are now ready to start recording. For complete instructions, please consult the Studio One Reference manual located in *Help | Studio One Reference Manual*.

4.3.4 Adding Virtual Instruments and Effects

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:



Edit. The Edit button opens and closes the audio and MIDI editors.

Mix. The Mix button opens and closes the Mixer window.

Browse. The Browse button opens the browser, 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.

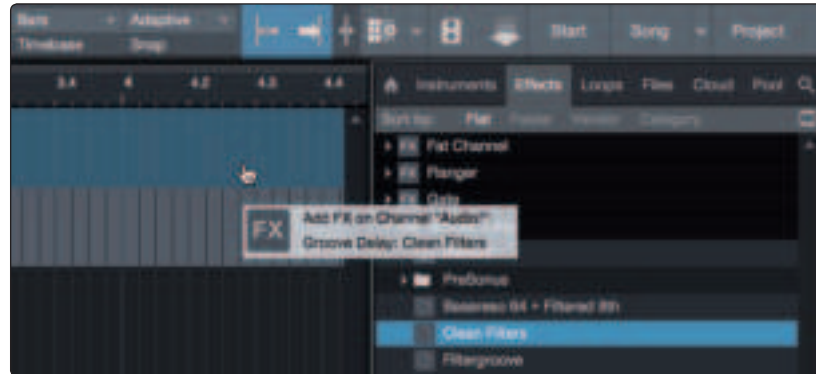
Drag-and-Drop Virtual Instruments

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.



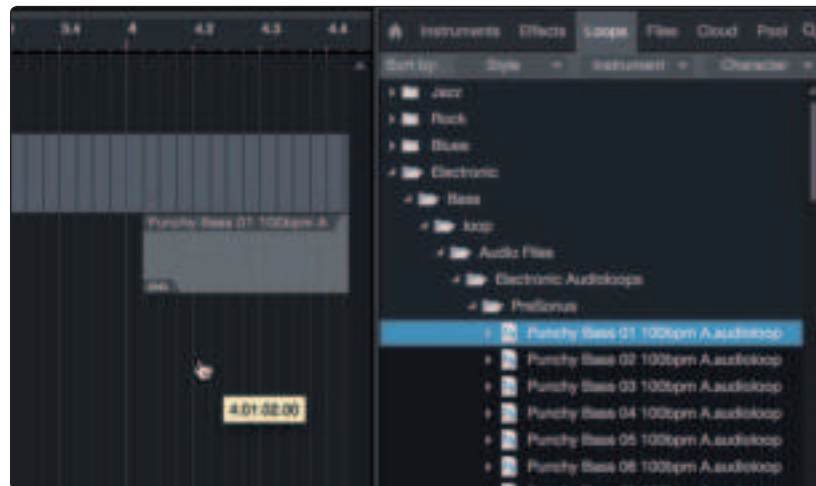
Drag-and-Drop Effects

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 Technical Information

5.1 Specifications

Microphone Preamp

Type	XLR Female, Balanced
Frequency Response (± 3.0 dB)	20 Hz to 20 kHz
Input Impedance (Balanced)	1200 Ω
THD+N (unwtd, 1 kHz @ +4 dBu Output, Unity Gain)	< 0.008%
S/N Ratio (Unity Gain, Ref. = +4 dBu, 20 Hz to 22 kHz)	> 95 dB
Common Mode Rejection Ratio (1 kHz, 55 dB Gain)	> 45 dB
Gain Control Range (± 1 dB)	0 dB to 35 dB
Max Input Level (Unity Gain, 1 kHz @ 0.5% THD+N)	-3 dBu
Phantom Power (± 2 VDC)	+48 VDC (Global)

Instrument Input

Type	¼" TS Female, Unbalanced
Input Impedance	0.5 M Ω

Line Outputs

Type	¼" TRS Female, Balanced
Output Impedance	51 Ω

Headphone Output

Type	¼" TRS Active Stereo
Maximum Output	60 mW/Ch @ 60 Ω Load
Frequency Response (± 1.0 dB)	20 Hz - 30 kHz

MIDI I/O

Type	Dual 5-pin Female DIN
------	-----------------------

Digital Audio

ADC Dynamic Range (A-wtd, 48 kHz Sample Rate)	105 dB
DAC Dynamic Range (A-wtd, 48 kHz Sample Rate)	105 dB
Bit Depth	24
Reference Level for 0 dBFS	+4 dBu
Internal Sample Frequency Selections (kHz)	44.1, 48, 88.2, and 96
Power	USB 2.0 Bus-powered

Physical

Dimensions	1/3U (steel chassis)
Height	5.5" (139.7 mm)
Depth	1.75" (44.45 mm)
Width	5.5" (139.7 mm)
Weight	5 lbs (2.27 kg)

6 Warranty Information

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

6.1 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

A 1-Year Limited Warranty begins on the original date of purchase from the retail purchaser.

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 <https://my.presonus.com> 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' 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: <https://my.presonus.com> and complete the registration process.
2. Contact the Technical Support/Service Department for your region at 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 contact one of our authorized international distributors at 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...

Red Beans and Rice

Ingredients:

- 1 lb dried Red Kidney Beans
- 1 large onion (diced)
- 3 celery stalks (diced)
- 1 large green bell pepper (diced)
- 6-8 C vegetable stock
- 1 Tbs. Old Bay seasoning
- ½ fresh parsley
- 2 tsp. kosher salt
- 2 Tbs. olive oil
- 1 smoked ham hock (optional)

Cooking instructions:

1. Rinse red beans in cold water.
2. In a pressure cooker, heat olive oil on medium high. Sauté onion, celery, bell pepper, beans, and ham hock (if using) until onions are translucent.
3. Stir in Old Bay, parsley, and salt.
4. Add vegetable stock until beans and vegetables are covered.
5. Close pressure cooker and bring to full pressure on high heat.
6. Reduce heat to low while maintaining full pressure. Cook for 40 minutes.
7. Allow pressure to drop naturally (20-30 minutes).
8. Remove lid and crush with a potato masher until creamy.
9. Correct seasoning with salt and pepper if necessary.
10. Serve over rice with hot sauce and grilled Andouille sausage (optional).

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