SoundCloud 14 x 10 Dual Usb Bus Powered Audio Interface Owner's Manual

SOUNDCLOUD

14 x 10 DUAL-USB BUS-POWERED AUDIO INTERFACE
ZEN QUADRO
SYNERGY CORE

Version 1.3 – 20.12.2024

Contents

BEFORE YOU BEGIN

Congratulations on your purchase! We would like to turn your attention to the following:

Zen Quadro Synergy Core unites next-gen technology with traditional console-grade circuitry.
Antelope Audio's signature sound quality comes from professional AD/DA conversion, Discrete ultra-linear preamps, and 64-bit AFC™ clocking. Empowered with the same core technologies driving high-end interfaces like the Orion Studio and the Galaxy 64 Synergy Core, home engineers and artists can raise their productions to a new level without getting up from their desk.
The interface is bundled with 37 analog-modeled effects to emulate a studio stocked with the rarest analog gear. The Synergy Core platform grants immersive control of iconic equalizers, dynamic processors, guitar amps, reverb, and more. In addition, over 50 optional expansions are available through Antelope Audio's Software Store.

The PC/Mac Control Panel application is the ultimate "mediator" between the Zen Quadro Synergy Core and your preferred DAW. To take complete advantage of the unit's capabilities,you are meant to handle tasks like gain adjustments, signal routing, effects processing, basicmixing and metering from its intuitive, single-window environment. The resulting audio is routed into your DAW for recording in any format of your choice.
Thus, we encourage you to familiarize yourself with the 'Control Panel Application' chapter before you begin working. Several 'Quick Start' examples are provided as well. This way, you can overcome common stumbling blocks for users new to Antelope Audio products.
Should you ever find yourself struggling, do not hesitate to contact our **Customer Support** team over the phone,

live chat and our ticket system. You can also visit **Antelope Audio on You Tube** or the **Knowledge Base** as a trustful source of information.

We hope you will enjoy working with the Zen Quadro Synergy Core.
Best wishes,
Team Antelope

SYSTEM REQUIREMENTS

Mac

- Apple Mac 2016 or newer with USB or Thunderbolt 3/4 ports
- Minimum: macOS Mojave 10.14.6. Recommended: macOS 12 Monterey
- Available storage space (Minimum 4 GB)
- Memory (RAM): 4 GB minimum (8 GB or more recommended)

Windows:

- PC computer with USB2.0/3.0/3.1 or Thunderbolt 3/4 ports
- Windows 10/11 (64-bit) with latest Microsoft Updates
- Available storage space (Minimum 4 GB)
- Memory (RAM): 4 GB minimum (8 GB or more recommended)
- CPU: Intel Core i5™ or AMD Ryzen (Higher recommended)

iOS:

- Recommended: iOS 14 or newer
- iPhone/iPad with Lightning ports require a Camera kit adapter (not included)
- The secondary USB 2 port on Zen Quadro SC must be used

Android:

- Zen Quadro SC secondary USB 2 port is UAC2 (USB Audio Class 2) and it is generally compatible with mobile devices supporting UAC2 audio devices with USB-C ports.
- Dfferent operating system versions and smartphone manufacturer variations can cause issues, therefore we cannot guarantee full compatibility.
- The secondary USB 2 port on Zen Quadro SC must be used

Additional Information:

- Stable Internet connection is required to download and update your Antelope Audio Software

ONLINE ACTIVATION INSTRUCTIONS

Please note that the mandatory device activation procedure requires an active Internet connection on your computer. Activating an Antelope Audio device offline is not possible.

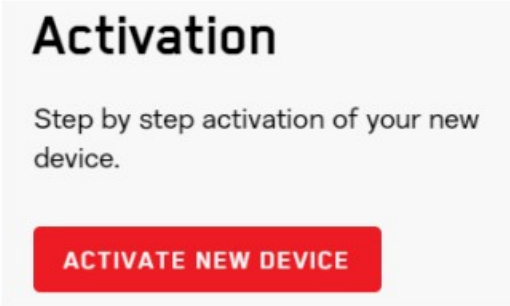
Your Zen Quadro Synergy Core must be activated online to work. This chapter contains the necessary instructions:

1. Connect the Zen Quadro Synergy Core primary USB 1 port to a Windows or macOS computer using a USB type-C cable.

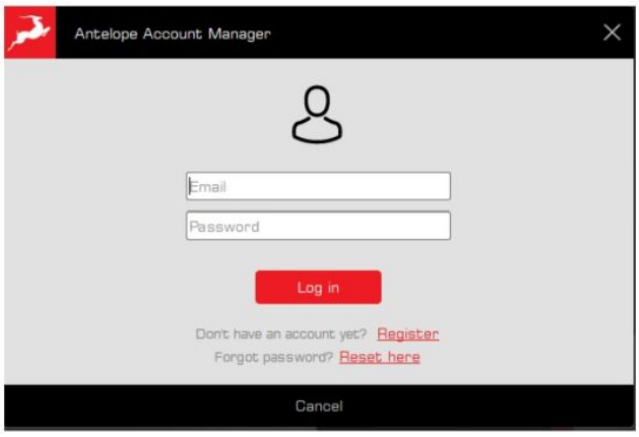
   Important:

   Zen Quadro Synergy Core is a USB-C bus-powered interface and therefore it requires steady power from the computer ports. It is recommended to use ports such as USB 3, USB 3.1/USB-C that are located on the motherboard. Even though USB 2.0 ports may still be used, some may not deliver enough power. In such a case, the secondary USB-C port can be used. Using external USB hubs is not recommended.

2. Open your internet browser and navigate to **https://en.antelopeaudio.com/login/**
3. Login to the Antelope Audio user area with your e-mail and password. If you don't have an account, visit **https://en.antelopeaudio.com/sign-up/** to create one.
4. Click on the 'Activate New Device' button.



5. Click on 'Zen Quadro Synergy Core' from the device list.
6. Download and install the Antelope Launcher application for Windows or macOS.
7. Open the Antelope Launcher application, enter the e-mail and password you used to login into the Antelope Audio user area and click 'Login'.

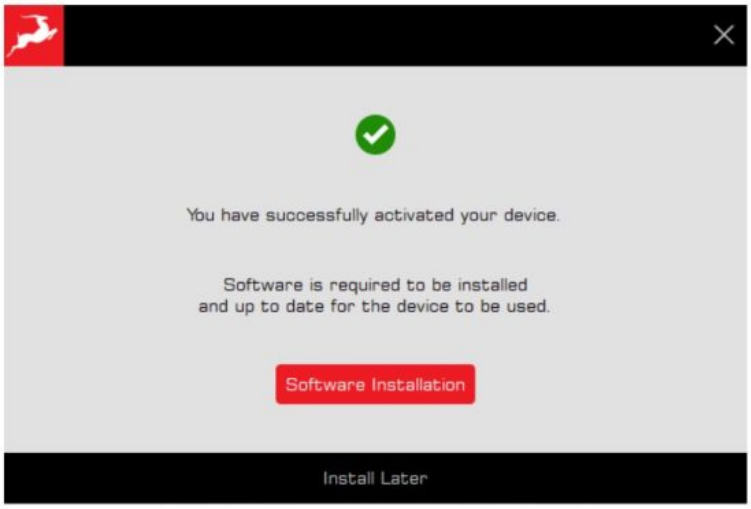


The device will be automatically recognized by the Antelope Launcher, and you can safely proceed to the next step.

8. Click on ‘Activate.

   Note: During the activation process, you can also pair any standard and promotional software bundles available in your account with your device.

9. Install Software bundle



After successful activation of your device, click on “Software Installation” This step is necessary to install the latest firmware and control panel for your device.

* On Windows – this step will also install the latest driver for your device.

The secondary USB 2 port is using the same USB driver, so there is no need to install additional drivers to use it.

The device will restart after a successful installation. Click ‘Done’ and the activation is finished.

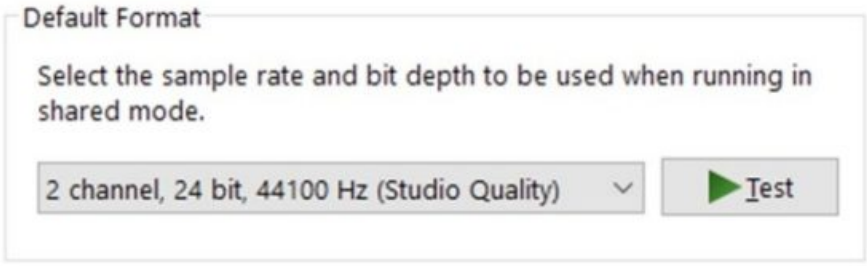
SETTING UP

Configuring for Windows 10

To optimize Zen Quadro Synergy Core for Windows 10/11 audio playback and recording:

1. Enter the ‘Sounds’ options window from the Control Panel; or right-click the speaker icon in the system tray and choose ‘Open Sound settings’.
2. Make sure the Zen Quadro Synergy Core is chosen under ‘Output’ and ‘Input’:
   - Under ‘Output’, the interface should be listed as ‘ Zen Quadro SC USB Audio Driver Playback 1/2’. There will be 4 pairs of playback devices available.
   - Under ‘Input’, the device should be listed as ‘ Zen Quadro SC USB Audio Driver Recording 1/2’. There will be 4 pairs of recording devices available.
3. Click ‘Device Properties’ under ‘Output’. Then, click ‘Additional Device Properties’.
4. Enter the ‘Supported Formats’ tab and place checkmarks next to all the available sample rates.

5. Enter the ‘Enhancements’ tab and disable all enhancements.
6. Enter the ‘Advanced’ tab and choose any of the available “2 channel, 24-bit” modes from the drop-down menu. Click ‘OK’ to close the window.



7. Back in Sound settings, click ‘Device Properties’ under ‘Input’. Then, click ‘Additional Device Properties’. Enter the ‘Enhancements’ tab and disable all enhancements. Click ‘OK’ to close the window.

Tips

- If you are experiencing interruptions or failure when using your DAW and trying to playback audio from your OS at the same time, make sure that the device sample rate matches the one of your DAW session.
- In some cases, disabling the ‘Exclusive mode’ functionality from the ‘Advanced’ tabs might help when running multiple playback applications at the same time.
- Disabling the 32kHz sample rate isn’t mandatory, but it might help in general.

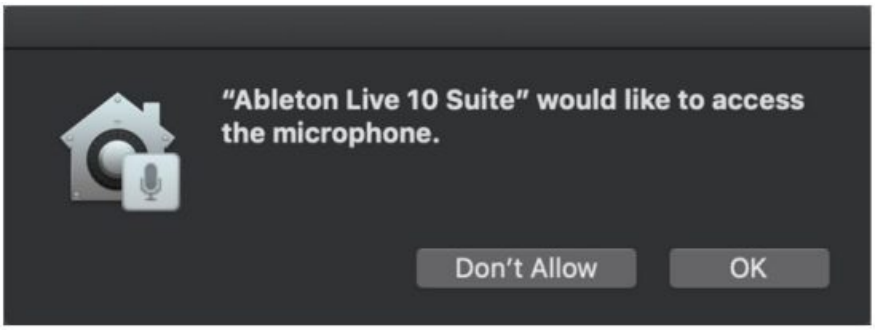
Further Reading

- Antelope Audio Knowledge Base – Windows 10 Optimization

Configuring for macOS (10.14 and later)

The security settings in macOS (10.14 and later) may result in no input signal reaching your DAW, despite having everything set up correctly.
These steps apply when you are using the Zen Quadro Synergy Core in a DAW for the first time:

1. Launch your DAW and choose Zen Quadro Synergy Core as the input device. The following dialog box will appear (if using Ableton Live 10 Suite, for example):



2. Click 'OK' and your DAW should function normally.

   However, if the events above did not occur for some reason, or you are using multiple DAWs, you must do a manual tweak for each in 'Security & Privacy' settings:

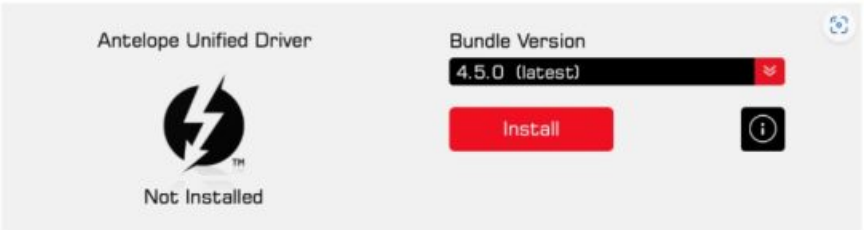
   1. Click the 'App l e' symbol and choose 'System Preferences'. Head to the 'Security & Privacy' settings menu.
   2. Click the 'Privacy' tab. In the column on the left, choose 'Microphone'. Make sure there's a checkmark next to any DAW you want to use.

   Note: You may have to click the padlock symbol in the bottom left corner and enter your password to make changes.

Install the Unified Driver for macOS

Zen Quadro SC is a Class Compliant device and can run straight out of the box without a driver installation. However, we recommend installing the Antelope Unified Driver following the steps below to ensure optimal performance and stability.

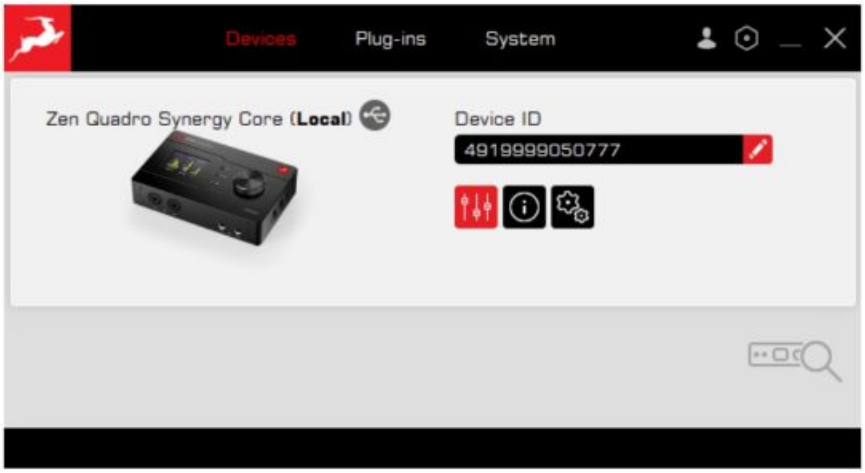
Navigate to the SYSTEM tab in the Antelope Launcher and click Install on the latest available Bundle version for the Antelope Unified Driver:



To allow the Unified Driver on macOS 10.15 Catalina, 11 Big Sur or 12 Monterey, visit **this article**.
To allo w the Unified Driver on macOS Ventura and Sonoma, visit **this article**.
To allowing the Unified Driver on Apple Silicon computers, visit **this article**.

ANTELOPE LAUNCHER

The Antelope Launcher is a streamlined hub for managing your Antelope Audio products. To learn more on how to operate within it, please check the **Antelope Launcher User Manual**



HARDWARE PANELS EXPLAINED

Top Panel

1.

Display

The display provides the following information:

• Gain/Volume metering for up to three inputs and outputs e.g. Analog inputs (inputs 1 – 2), S/PDIF inputs (channels 1 – 2) and HP1 output (L/R channels).

• Current clock source – Internal, S/PDIF, ADAT.

• Lock indicator – lights up when the unit is ‘locked’ to a digital audio and clock source.

• Current device sample rate e.g. 32kHz – 192kHz.

• USB 2 state indicator – this section is colored RED, and it shows the state of the device, connected to the secondary USB 2 port. There are 3 options:

1. USB off – no device is detected on the USB 2 port.

2.USB on – device is connected to the USB 2 port.

3.Sample rate – audio is playing from the device, and this is the sample rate it is using.

Zen Quadro SC can playback and record on both USB ports while using different sample rates.

Note: The display is not touch-sensitive.

2. Function Keys – Gain, HP/MON, Antelope button.

   ‘Gain’ button – the ‘Gain’ button features the following functionality:

   • Press (and keep pressing) ‘Gain’ to cycle through input gain adjustments for the interface’s analog inputs. For inputs A1, A2, A3 and A4, press the rotary knob to switch between Mic and Line mode, press and hold the rotary control to activate or deactivate 48V phantom power. For inputs A1 and A2, press the rotary control to switch between Mic, Line and Hi-Z mode. Turn the rotary control to adjust input gain. Press the ‘Antelope button’ to exit.

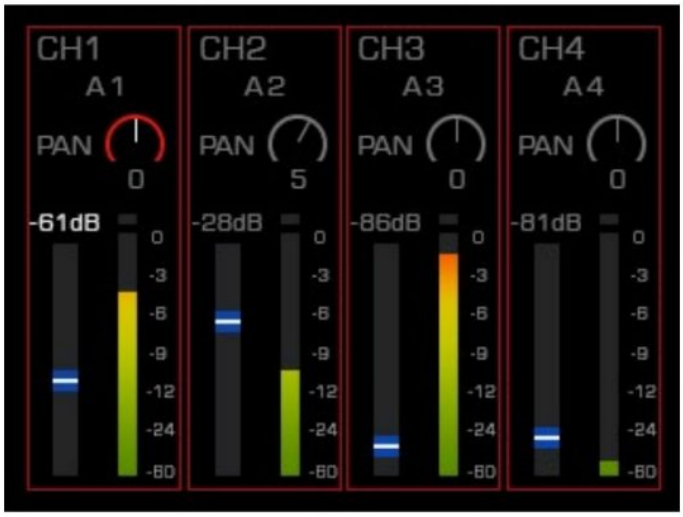
   • Press and hold ‘Gain’ to enter the Control Menu.

Control Menu

Turn the rotary control to navigate the menu and select an entry. Press the rotary control to enter the sub-menu you have chosen. Turn the rotary control to browse the available options and make adjustments. Press the rotary control to confirm.

The Control Menu has the following entries:

- Clock Source – choose the clock source (Internal, S/PDIF, ADAT).
- Sample Rate – choose the device sample rate (32kHz – 192kHz). Make sure your choice always matches the DAW and operating system sample rates.
- MON/HP1; HP2 ; LINE OUT- customize and mix the signals going out of the Monitor and Headphone outputs. There are 3 independent mixers for Monitor out + Headphones 1; Headphones 2 and Line outs. Navigate through 8 channels, route signals, control volume and panning of each channel.



MON/HP mixer menu

  – Choose the channel you want to manage (CH 1-8) by scrolling with the rotary knob and push to select.

  – Push the Gain button to SOLO the selected channel.

  – Push the HP/MON to MUTE the selected channel

  – Choose between Routing, PAN or Volume control by scrolling with the rotary knob and push to select.

  – Scroll to the volume level adjustment and double press the volume knob quickly to link the volume level control of a pair of channels.

  – Adjust the setting with the Rotary knob and push to confirm the change.

  – Use the Antelope button to go one step back.

  – There are 3 mixer menus for the Monitor/Headphone 1, Headphone 2 and Line output, each one with independent controls.

- Routing – Route signals you want to record to your DAW (USB-1 Rec) using the primary USB 1 port, your mobile device/computer (USB-2 Rec), using the secondary USB 2 port or to the S/PDIF outputs:

– Chose the channel you want to record signal into.

– Choose the source of the signal you want to record.

Routing menu

- Brightness – Adjust the brightness of the display, between 0 and 100%.
- STANDBY – the rotary control to enter standby. Press again to wake the device.

Press the ‘Antelope button’ to exit the Control Menu.
‘HP/MON’ button – the ‘HP/MON button’ features the following functionality:

- Press (and keep pressing) ‘HP/MON’ to cycle through volume adjustments for the Headphone (HP1, HP2), Monitor, and Line outputs. Turn the rotary control to adjust volume. Press the rotary control to mute and un-mute. Press the ‘Antelope button’ to exit.
- Press and hold the ‘HP/MON’ button to enter the System Menu.

System Menu
Turn the rotary control to navigate the menu. Press the rotary control to enter the submenu for the entry. Turn the rotary control to browse the available choices and make adjustments.
Press the rotary control to confirm.
The System Menu has the following entries:

- Peak Meters – choose what peak meters layout to visualize on the main display. A1-A4 & S/PDIF In & HP1 is the default. It shows the peak meters for the four analog inputs, the S/PDIF input and the Monitor & Headphone 1 output signal.
  There are several other options: USB PLAYBACK. USB RECORD, DIGITAL IPNUTS, ANALOG & DIGITAL OUTS.
- Monitor Trim – choose an audio signal trim value for the monitor outputs (14dBu 20dBu). By default, this option is set to 20dBu. Trim can be used to compensate for the perceived volume differences between two ormore sets of speakers so that they produce the same perceived volume level.
- DC Coupled IN – turn on or off the DC-coupling of the analog inputs.
- DC Coupled OUT – turn on or off the DC-coupling of the analog outputs.
- Load Presets – recall one of the 5 presets you have saved.
- Save Presets – save a preset on the memory of the device. Create your setup from the software control panel on your computer or from the device itself, then save it here on the memory of the Zen Quadro SC. The presets are saved even after the device is turned off. You can recall the presets without the device being connected to

the computer.

- Scr Save Time – choose how long it takes for the display's screensaver to appear when the unit is idle. The choices range between 'Off' (screensaver disabled) and up to 120 minutes. We recommend choosing the shortest duration of time you are comfortable with to prevent display burn-in.
- Scr Save Style – choose the screensaver style (Star or Black).
- Device Info – display the device's serial number, hardware revision and firmware version. This information is useful if contacting Customer Support.
- Factory Reset – press the rotary control to restore the unit to its factory default settings. This is useful for troubleshooting and is also a quick way to erase presets.

Press the 'Antelope button' to exit the Control Menu.
'Antelope button' – when inside a menu, press the button to exit the menu.

3. Rotary Control

Large, stepped encoder for precise adjustment of gain, volume, and other values. Also used for menu navigation.

- When not inside a menu, turn the encoder to adjust Line output volume.
- When not inside a menu, press the encoder to mute or un-mute the Line outputs.

Front Panel

The Zen Quadro Synergy Core front panel is home to a pair of switchable Mic/Line/Hi-Z instrument inputs (labeled 'A1' and 'A2') and a pair of stereo headphone outputs (labeled 'HP1' and 'HP2').
The headphone outputs have dedicated volume controls accessed from the 'HP/MON' button on the unit's top panel, and from the Windows/macOS Control Panel application.
Always use the following connections:

- Connect microphones with 3-pin XLR microphone cables. As a general precaution, make sure 48V phantom power is switched off before connecting dynamic and ribbon microphones.
- Connect line-level audio sources (such as synthesizers and keyboards) with 1/4-inch TS (unbalanced, mono) or TRS (balanced, mono and stereo) audio cables.
- Connect high-impedance electric musical instruments (such as electric guitars and basses) with 1/4-inch TS (unbalanced, mono) instrument cables.

Rear Panel

The Zen Quadro Synergy Core rear panel is laid out as follows (from left to right):

Analog inputs A3 and A4
Dual microphone/line level/ mono inputs on combined 3-pin XLR and 1/4-inch TS/TRS connectors. Use the interface's top display controls or the Windows/macOS Control Panel application to choose the mode of operation (Mic/Line/Hi-Z) and to activate or deactivate 48V phantom power for condenser microphones.
Important! Always use the following connections:

- Connect microphones with 3-pin XLR microphone cables. As a general precaution, make sure 48V phantom power is switched off before connecting dynamic and ribbon microphones. (to turn on 48V hold CMD/Ctrl + click the 48V button)
- Connect line-level audio sources (such as synthesizers and keyboards) with 1/4-inch TS (unbalanced, mono) or TRS (balanced, mono and stereo) audio cables.

*The analog input path goes through the preamp and using XLR connection for line level signals will cause unwanted boost. Note that choosing 'Line' from the 'PREAMPS' tab in the Windows/macOS Control Panel application does not bypass the preamp.
If your line-level equipment is limited to XLR connections, you can still use balanced XLR (microphone) cables by attaching standard 3-pin XLR to 1/4-inch TRS adapters to them.
3-pin XLR to 1/4-inch TRS audio/microphone cables are also readily available. Make sure to correctly identify the type of XLR connector (male or female – usually male) used for your equipment's line outputs to obtain the right adapter or cable.

Monitor outputs
Stereo monitor outputs (L/R) on 1/4-inch TRS jacks.

Line outputs
Line outputs 1 and 2 on 1/4-inch TRS jacks.

S/PDIF digital audio input and output
2 channels of incoming and outgoing stereo digital audio over coaxial RCA cables (2 channels up to 192kHz). For use with compatible equipment.

ADAT Input
Provides 8 digital audio inputs over ADAT using a TOSLINK connector. For use with compatible equipment. Standard ADAT Lightpipe audio limits apply according to the sample rate:

- 44.1/48 kHz – 8 inputs
- 88.2/96 kHz – 4 inputs
- 176.4/192 kHz – 2 inputs

Kensington lock
Anti-theft systems are used to physically lock the unit inside kiosks, stores, demonstration rooms and so on.

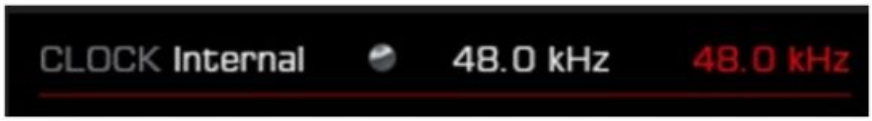
USB 1
This is the primary USB-C port which connects to your Windows/macOS computer for audio recording, playback, and communication with the Antelope Audio applications (Antelope Launcher and Control Panel).
When connected to a computer, the port supplies bus power to the interface. The connection is compatible with USB Type-A ports as well – use a standard USB Type-C to USB Type-A adapter (provided in the box) or cable.
This USB port provides 16 x 16 channels for playback and recording on up to 192kHz/24-bit.

USB 2
This is the secondary USB-C port which can be connected to a Windows/macOS computer or a mobile device like a smartphone/tablet with USB-C port or an Apple device with Lightning port (Camera kit adapter has to be used).

- If the primary USB 1 port is connected to a computer, the USB 2 port can provide power supply to the mobile device (Reverse charging) and support audio stream simultaneously.
- The use of the USB 2 port with a mobile device only requires your mobile device to deliver enough. In case the Zen Quadro SC cannot boot up, you can plug an additional power supply (5V, 1.5A) to the USB 1 port.

NOTES

- The Zen Quadro SC will sync automatically to the sample rate coming from the USB 2 port, if only this port is used. If both USB ports are used for playback and recording, Zen Quadro SC will sync to the primary USB 1 sample rate.
  In case the sample rate from USB 1 is different from USB 2, the audio stream from the USB 2 port will automatically get converted internally to match the main sample rate from USB 1 port.



- To use the Secondary USB 2 port with a mobile device ONLY requires your mobile device to deliver enough power. In case the Zen Quadro cannot boot up, you can plug an additional power supply to the primary USB 1 port.
- To use with an Apple device with Lightning port, you need to use an Apple Camera kit adapter which allows the mobile device to work as a Host and the Zen Quadro SC as a device. A standard Lightning to USB-C cable is

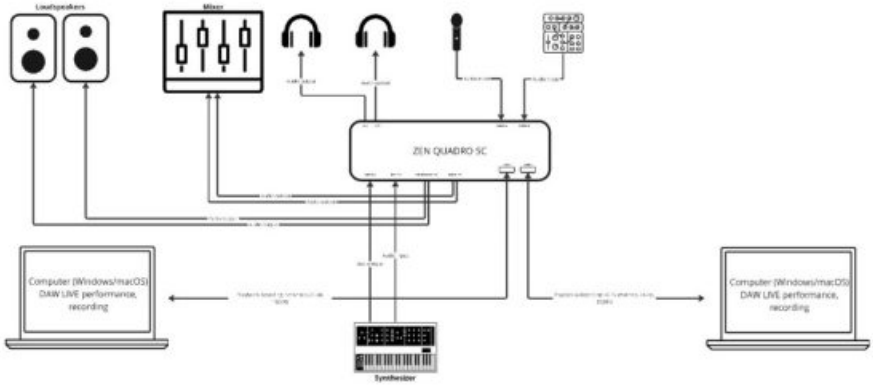
not compatible.

- For the Reverse charging functionality to work, a 5V with at least 1.5A should be supplied to the primary USB 1 port. We recommend using USB3.1/3.2 or Thunderbolt 3/4 ports for optimal performance.

DUAL USB-OTG USE CASES

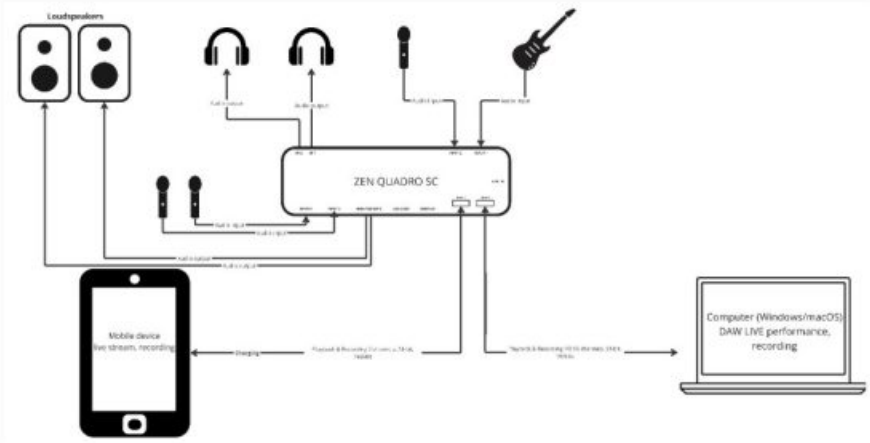
The two USB-C ports on the Zen Quadro Synergy Core unlock a variety of connectivity combinations to experiment with. The main options are the following:

Two computers



Connect two computers simultaneously to play and mix audio signals together, using the same outputs. Connect your headphones, speakers and DJ mixer to have full control over the sound. Add analog synths and microphones and mix them inside the Zen Quadro SC virtual mixers. You can control the routing, pan, volume, mute and solo on each channel from the device display. Use two DAWs on two computers simultaneously to record the same tracks for redundancy. Make sure the sample rates on both systems match!

Computer and a mobile device

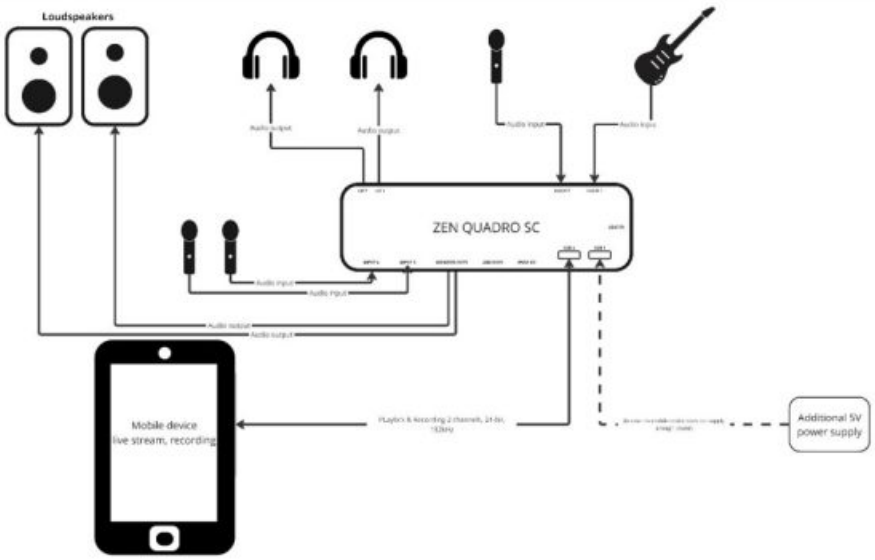


Stream through your mobile device while taking full advantage of adding a separate computer into the audio stream. Mix computer audio (play music, trigger samples, run your DAW project) with the analog inputs of the Zen Quadro SC, apply real-time effects and send them together to the mobile device int your stream or recording. To use the secondary USB 2 port with Apple Lightning port devices, a Camera kit adapter has to be used.

SINGLE USB USE CASES

The Zen Quadro SC can work as a regular audio interface by using either of the ports. The primary USB 1 port can work with Windows/macOS computers only. The secondary USB 2 port can work with mobile devices or computers.

Mobile device only

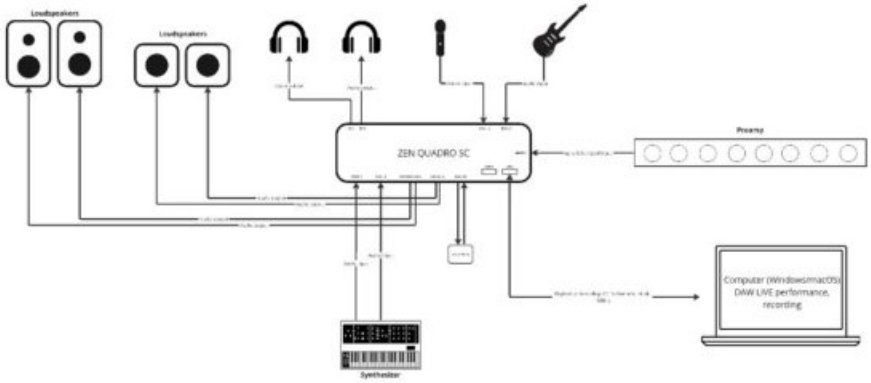


Connect to a smartphone or tablet, providing enough power to the Zen Quadro SC, to playback, recording or stream anywhere you go. Plug in your microphone and headphones to stream on social media. Your mobile device will detect the Zen Quadro SC automatically and it will start sending and receiving audio. Have easy access to main settings like routing, volume and mixers via the large color display without the need of a computer.
You can playback and record 2 channels on up to 24-bit, 192kHz.

NOTES!

To use with an Apple mobile device with Lightning port, you need to use an Apple Camera kit adapter.
if the mobile device cannot deliver enough power for the Zen Quadro SC, you can connect an additional standard 5V power supply to the primary USB 1 port.

Computer only



Record, produce and mix into your DAW, using the full range of digital and analog I/O.
Connect up to two pairs of speakers and two pairs of headphones for reference and monitoring. Record variety of microphone, instrument, and line level signals. Expand your inputs via ADAT and S/PDIF to record a whole band with up to 14 inputs simultaneously.
You can playback and record 16 channels on up to 24-bit, 192kHz.

CONTROL PANEL APPLICATION

Welcome to the Zen Quadro Synergy Core Windows/macOS Control Panel application! More than just an alternative to the physical top panel controls, it provides straightforward and comprehensive access to each aspect of the interface's functionality. This includes settings, signal routing, audio mixing, effects chains, monitoring, metering, and presets. We encourage you to get comfortable with the application to make the most of your new audio interface.

Quick Start

Let's begin with some quick examples of essential tasks being accomplished in the Control Panel.

Note: These examples do not convey the "correct" or "only" way of accomplishing the following tasks. They merely illustrate some fundamental logic and offer solutions to the initial stumbling blocks most often encountered by novice users.

Monitor incoming microphone audio via headphones.

Say you want to monitor incoming microphone audio from input A1 via Headphone output 1 (HP1). Connect your equipment and open the Control Panel. Do the following:

1. In the 'PREAMPS' section, head to the leftmost preamp and click on the signal type selector drop-down menu. Choose 'Mic' and don't forget to activate 48V phantom power if your microphone requires it.
2. Click the input selector above the 'AFX' area and choose PREAMPS > PREAMP 1 from the menu.
3. Adjust input gain and headphone output level until you hear the microphone audio in your headphones.

Apply Synergy Core FX to incoming audio

Click the 'AFX' area below the input selector to open the Synergy Core FX rack window. Click the 'ADD NEW EFFECT' button and make your choices. Close the window when you are done.

Play guitar through the virtual amps and cabinets, listening from studio monitors.

1. Connect your guitar to input A1 and your monitors to the i nte rface's monitor outputs.
2. Open the Control Panel and head to the leftmost area in the 'PREAMPS' row. Choose 'Hi-Z' from the signal type selector drop-down menu.
3. Click the input selector above the 'AFX' area and choose PREAMPS > PREAMP 1 from the menu.
4. Click the 'AFX' area below the input selector to open the Synergy Core FX Rack. Click 'ADD NEW EFFECT' and make your guitar amp and cabinet choices from the menu. If you don't know where to start, the 'Modern (US)' amp and 'Modern 4 x 12' cabinet combination make for a great modern rock/metal rig.

Sing with microphone emulations and monitor live with headphones

1. Connect your headphones to input HP1 on the front panel.
2. Connect your Antelope Audio Edge or Verge modeling microphone to inputs A1 and/or A2 on the rear panel. In this example, we are using the Edge Solo, which is connected to input A1.
3. Open the Control Panel and head to the leftmost preamp from the PREAMPS row. Click the input selector above the 'AFX' area and choose PREAMPS > PREAMP 1 from the menu.
4. Click on the  mic emulations button to open the mic emulations window. Choose Edge Solo with the dial and select an emulation from the drop-down menu.
5. Adjust microphone gain with the gain knobs. You should be hearing mic audio in your headphones at this point.

Record in your DAW
First, make sure the interface is chosen as your main input and output device in your DAW.
Next, open the Control Panel and click on USB 1 I/O'. Note the following:

- Inputs 1 – 16 in your DAW correspond to the 8 channels labeled 'Record 1 – 16' in the 'TO USB 1' row. Use the input selectors to choose your audio sources and add Synergy Core FX from the 'AFX' area. Then create new tracks in your DAW and assign the inputs with the matching numbers to them, e.g. 'Record 1' = 'Input 1'.
- Likewise, Outputs 1 – 16 in your DAW correspond to the channels labeled 'PLAY 1 – 8' in the 'FROM USB 1' row. These channels can be chosen as audio inputs from the input selectors. Assign Output 1 – 16 to any audio track you want to take outside your DAW. In the Control Panel, simply click and choose USB 1 PLAY' 1 – 16.

Mouse & Keyboard Shortcuts
The following features are accessible via mouse & keyboard shortcuts in the Control Panel application:

- Return to default value (all knobs and faders): double-click the knob or fader.
- Change text labels for the 2 input channels in the 'PREAMPS' section: double-click the text label and enter text.
- Adjust parameter values in 1dB increments (all knobs and faders): Hold Ctrl (Windows) / Command (macOS) and drag.
- Click active clipping indicators on peak meters to clear them.
- Click and drag the edges of the Zen Q Synergy Core Control Panel application window to resize it.

Main View
From top to bottom, the Control Panel application is organized as follows:

Function strip 1
Contains the following:

On/Standby button
Click to put the Zen Quadro Synergy Core in standby mode. Click again to power on.

Settings button
Click to open the Settings Window with the following options:

Settings Window

Monitor Out Trim	Click to choose an audio signal trim value for the monitor outputs (14 dBu – 20dBu). By default, this option is set to 20dBu. Trim can be us ed to compensate for the perceived volume differences between two or more sets of speakers so that they produce the same perceived v olume level.
Line Out Trim	Click to choose an audio signal trim value for the line outputs (14dBu – 20dBu). By default, this option is set to 20dBu.
Panning Law	Click to specify Panning Law compensation between 0dB (none) to -4.5dB. When a mono input feeds a stereo bus, the panning law deter mines how you perceive the sound level as the audio sweeps from o ne side of the stereo field to the other. If panning audio left and right causes a noticeable difference in perceived volume level, adjust Pan ning Law compensation to calibrate the interface's outputs to your lis tening equipment.
DC-COUPLED INPUTS/OUTPUTS	Turn on or off the DC-coupling of the analog inputs and outputs (mon itor outs/line outs)
Mute	Click to mute or un-mute Oscillator 1.
Oscillator 1	Click to choose Oscillator 1 frequency (440Hz or 1kHz). Oscillator 1 generates a test signal which is fed to the monitor outputs for trouble shooting and calibration.
Level	Click to choose the output level for Oscillator 1 and Oscillator 2 (-18d BFS – 0dBFS).
Oscillator 2	Click to choose Oscillator 2 frequency (440Hz or 1kHz). Oscillator 2 generates a test signal which is fed to the monitor outputs for trouble shooting and calibration.
Mute	Click to mute or un-mute Oscillator 2.
ASIO Settings	For Windows users – click to launch the Zen Quadro Synergy Core U SB ASIO Control Panel. The 'Buffer Settings' tab lets you choose yo ur preferred ASIO Buffer Size for an optimal balance between digital audio latency and computer performance.

Minimize button
Click to minimize the Zen Quadro Synergy Core Control Panel application.

Maximize button
Click to maximize the Zen Quadro Synergy Core Control Panel application window. Click the button again, or the adjacent Resize button, to return to default size.

Resize button
When you maximize or manually resize the Zen Quadro Synergy Core Control Panel application window, clicking this button will return it to its default size.

Close button
Click to close the Zen Quadro Synergy Core Control Panel application. A windows will appear asking whether you want to save the current settings on a file or not. All device settings are kept inside the Zen Quadro SC even after the device is turned on and when you reopen the control panel, all settings will be the same, so you can safely select “Don’t save”. If you want to have a session file with the current settings, choose “Save”.

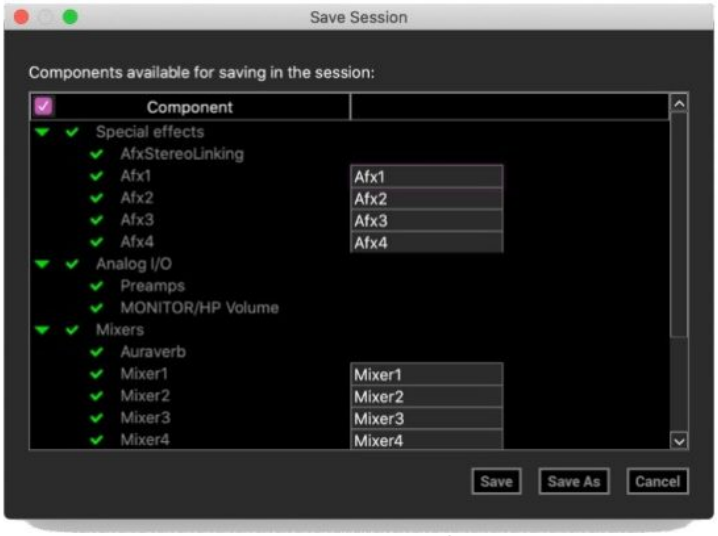
Function strip 2
Contains the following:

Clock Source selector
Click to choose the clock source (Internal, S/PDIF, ADAT) from the drop-down menu. The playing audio through your computer or mobile device through the USB-C ports, the clock source should be set to INTERNAL.

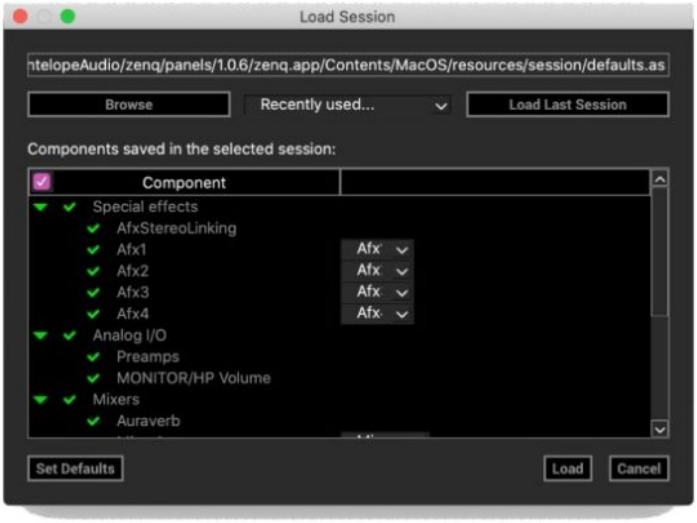
Sample Rate selector
Click to choose the device sample rate (32kHz – 192kHz) from the drop-down menu. Make sure your choice always matches the DAW and operating system sample rates, Tipically, the Zen Quadro SC will automatically follow the sample rate which is used by the computer without the need of manually changing it.

Lock indicator
Lights up when the unit is ‘locked’ to a digital audio and clock source.

Session controls
Sessions are ‘snapshots’ of Control Panel configurations. Think of them as Control Panel presets that you can save, load, and share with other computers and Zen Q Synergy Core users.
The field to the left of the ‘Save’ button shows the currently loaded Session file. Click the ‘Save’ and ‘Load’ buttons to save and load Session files (*.as).
In the Save Session window, you can choose the exact components you want stored and export Session files (*.as) from the ‘Save As’ button. When your Session is already saved in *.as file format, click the ‘Save’ button to save any changes you have made to it.



In the Load Session window, you can browse your computer for Session files (*.as) and choose which components to load. You can also choose from a drop-down list of recently loaded Sessions or load the last used Session. Clicking the ‘Set Defaults’ button restores the component selection to its default setting. Clicking the ‘Set Defaults’ button followed by the ‘Load’ button will return the Control Panel application to its default state.



Preamps strip

Contains the following controls for the Zen Quadro Synergy Core’s analog audio inputs:

Signal type selector
Click to choose the signal type you are recording from the drop-down menu:

- Mic – choose this when recording a microphone.
- Line – choose this when recording line-level musical instruments and equipment, such as synthesizers, keyboards, samplers, mixer outputs, external preamps, effects processors and so on.
- Hi-Z (available on CH1 and CH2) – choose this when recording electric stringed instruments, such as electric guitars and basses with active or passive magnetic pickups, or electro-acoustic instruments with piezo pickups.

Link button
Click to link the controls for inputs A1 – A2 and A3 – A4. When linked, any change made to the controls for one input will be automatically reflected by the other. Click again to de-link.

Gain control
Click and drag to adjust input gain. The available gain range is defined by the signal type:

- Mic: 0dB to 75dB
- Line: -6dB to 20dB
- Hi-Z: 0dB to 45dB

As a rule of thumb, adjust gain until you get the input signal to consistently peak around -12dB on the peak meter. If you manage that and there's an excessive amount of noise (such as hiss and hum), decrease gain until you obtain a comfortable signal-to-noise ratio (the signal is not too weak, and the noise is much quieter or inaudible). You can also try using a noise gate.
If none of these approaches produce satisfactory results, the problem could be in your signal chain or equipment. For example, some low-sensitivity dynamic microphones are naturally noisy when amplified; magnetic pickups on electric stringed instruments are prone to electromagnetic interference (EMI), which causes hum and buzz; electronic components in analog equipment may deteriorate over time; low-quality and worn-out cables degrade signals, and so on. Inspect your equipment, and practice proper gain-staging (make sure the output from one unit in the signal chain to the input of the next is not too weak or too strong).

Peak meter
Visualizes the input signal strength. Peak meters are also present on the Zen Q Synergy Core's display. When the peak meter is going into the red, it means the signal is too strong and will be degraded by audible distortion and clipping. Occasional dips into the yellow are acceptable.

48V Button
Hold Ctrl (Windows) / Command (Mac) and click to activate 48V phantom power for condenser microphones. Click again to de-activate. As a general precaution, make sure to deactivate 48V phantom power before connecting dynamic and ribbon microphones.

Phase flip button
Click to reverse (flip) the input signal's phase. Click again to return to normal. It's good practice to check how your input signal sounds with and without phase flip before record

Mic emulations button
Shown in ‘Mic’ mode. Click to open the Edge & Verge mic emulations window. Mic emulations are explained in the ‘Edge & Verge Mic Emulations’ chapter.
Text label
Click and type text to change the channel’s label.

Function strip 3
Contains the following:

Control Panel View selector
Click to choose between four Control Panel views – ‘Monitors & Headphones’, ‘SPDIF Outs’, ‘USB 1 I/O’ and ‘USB 2 I/O’. The four views are explained in the Control Panel Views subchapter below.
Understanding them is crucial to operating the Zen Quadro Synergy Core.

AuraVerb button
Click to open the AuraVerb effect window. AuraVerb is explained in the AuraVerb subchapter

Mixers default – compact switch
Click to expand the mixer in ‘Monitors & Headphones’ view from ‘default’ view where there is more detailed information for each channel or ‘compact view’ where you can see all 16 channels on the screen at once.

Control Panel Views
The four Control Panel views – ‘Monitors & Headphones’, SPDIF Outs’, USB 1 I/O and USB 2 I/O’ – contain input selectors, Synergy Core FX chains, mixer controls, volume controls, and peak meters for the Zen Quadro Synergy Core’s analog and digital audio outputs.
The majority of your Control Panel application activity is going t o happen here. Thus, we encourage you to read this sub-chapter thoroughly.

Monitors & Headphones view
The ‘Monitors & Headphones’ view contains three separate 16-channel virtual mixers. The first is routed to the Zen Quadro Synergy Core’s Monitor and Headphone 1 (HP1) outputs and is accessed from the ‘Monitor/HP1’ tab on the bottom left.
The second mixer is routed to the secondary headphone output (HP2) and is accessed from the ‘Headphones 2’ tab. The third mixer is routed to the Line outputs 1 and 2 on the interface’s rear panel and is accessed from the ‘Line Out’ tab.
Important! The three mixers share their audio inputs and applied Synergy Core FX, but the pan controls, volume faders, and Solo/Mute/Link controls are individual for each.

From top to bottom, the ‘Monitors & Headphones’ view is organized as follows:

Input selectors
Each mixer channel has its own audio input selector found above it. The inputs are colorqcoded.
Click on an input selector to make your choice. The following inputs are available:

PREAMP 1 – 4	Analog inputs A1 – A4
EMU MIC 1 – 4	Analog inputs A1 – A4 with Antelope Audio Edge & Verge Mic Emulations applied. This way, you can monitor and record ‘dry’ microphone audio fro m PREAMP 1 – 4 and ‘mic emulation’ microphone audio from EMU MIC 1 – 4 on different mixer and DAW channels.
USB 1 PLAY 1 – 16	Those are the computer playback channels from the USB 1 port. Assign a n audio track to Output 1 – 16 in your DAW and choose the USB 1 PLAY i nput with the same number from the input selector. This way, you can rout e DAW audio to the interface’s outputs and treat it with Synergy Core FX. By default, the audio output from your computer is USB 1 PLAY 1 and 2.
USB 2 PLAY 1 – 2	Those are the mobile device/computer playback channels from the USB 2 port.
S/PDIF IN 1 – 2	Two channels of incoming S/PDIF stereo digital audio.
ADAT IN 1 – 8	Up to 8 channels of incoming ADAT digital audio.
MUTE	No audio input.
OSCILLATOR 1 – 2	Test signals from oscillators 1 and 2.

AFX strip
Mixer channels 1 to 6 let you apply Synergy Core FX to the input signal. Click inside the AFX areas above channels 1 to 6 to open the FX Rack (explained below). Click the ‘BP’ button inside the area to bypass all FX applied to that channel. On each channel you can apply up to 8 effect instances, depending on how intense in terms of processing each of them is.

Synergy Core FX Rack
Click to open the Synergy Core FX Rack. It looks like this and it offers the following functionality:

- Use the ‘SAVE’ and ‘LOAD’ buttons to store and recall FX Chains.
- Click the ‘BP ALL’ button to bypass all FX in the rack. Click again to re-activate.
- Hold Ctrl (Windows) or Command (Mac) and click the ‘DEL ALL’ button to clear the FX Rack.
- Click the drop-down menu below the audio input label to choose factory presets.
- Click the ‘ADD NEW EFFECT’ button to add Synergy Core FX. Their graphics and parameters appear to the

right.

- On the left, you can click and drag the FX to change their order in the effects chain. A ‘BP’ button is available next to each effect to bypass it.
- Hold Ctrl (Windows) or Command (Mac) and drag to adjust the effects parameters in smaller increments.
- Hold Shift and use the mouse scroll wheel to scroll up and down through the FX rack.

The Zen Quadro Synergy Core comes with 37 Synergy Core FX included. Additional effects can be purchased from the Antelope Audio **online software store**. A user manual for the Antelope Audio Synergy Core FX library is available **here**.

Mixer

This section contains pan controls, volume faders, and Solo/Mute/Link buttons for each channel of the three 16-channel virtual mixers titled ‘Monitor/HP1’, ‘Headphone 2’, and ‘Line Out’. 8 channels are visible by default and you can scroll to see navigate between all 16 channels. Click between ‘compact’ and ‘default’ mode in Function strip 3 to flip between 8channel and 16-channel views.

Output volume and metering

This section contains the following:

- Mixer options “MONITOR/HP1”, “HEADPHONES 2” and “LINE OUT” which allow you to browse through each mixer.
- Output volume knob with Dim and Mute buttons for the Zen Quadro Synergy Core’s monitor output.
- Output volume knob with Dim and Mute buttons for the Zen Quadro Synergy Core’s Headphone 1 output, labeled ‘HP1’ on the interface’s front panel.
- Peak meters for the ‘Monitor/HP1’ virtual mixer’s 2-channel stereo output.

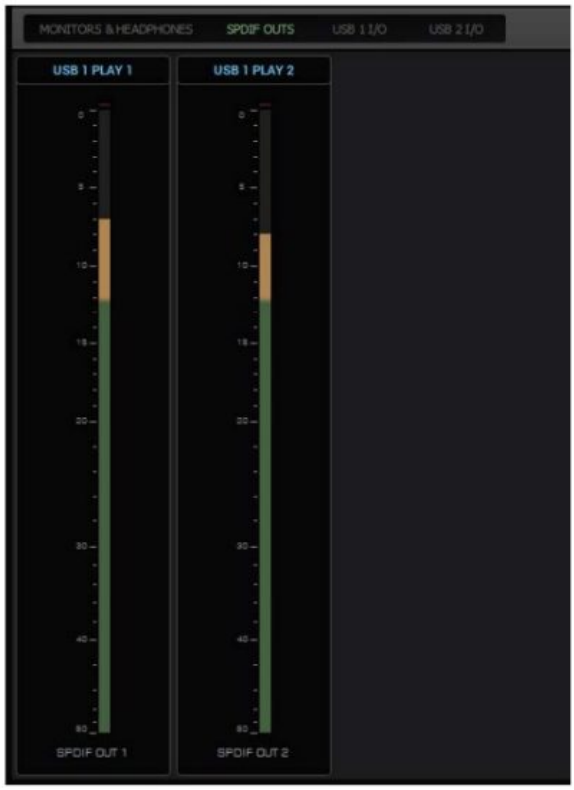
When operating the second virtual mixer titled ‘Headphone 2’, the section looks like this and contains the following:

- Output volume knob with Dim and Mute buttons for the Zen Quadro Synergy Core’s Headphone 2 output, labeled ‘HP2’ on the interface’s front panel.
- Peak meters for the ‘Headphones 2’ virtual mixer’s 2-channel stereo output.

When operating the third virtual mixer titled ‘Line Out’, the section looks like this and contains the following:

- Output volume knob with Dim and Mute buttons for the Zen Quadro Synergy Core's Line outputs 1 and 2 on the interface's rear panel.
- Peak meters for the 'Line Out' virtual mixer's 2-channel stereo output.

SPDIF OUTS view



Contains the following:

- Input selectors for digital output channels 'S/PDIF 1' and 'S/PDIF 2'. Click to choose the audio source signal you want to send to the Zen Quadro Synergy Core's S/PDIF digital audio outputs.
- Peak meters visualizing the output signal strength. Note the lack of output volume controls. That's because volume control is not a feature of digital audio transmission protocols like AES/EBU, S/PDIF and ADAT. Thus, if the digital output signal is too weak or too strong, you have to make volume/gain adjustments at the input stage.

USB 1 I/O view

USB 1 I/O' view provides an overview of audio going in to and out of your computer audio, connected to the primary USB 1 port, most often related to your DAW I/O.
You can change the signal going to Record channels 1-16 from the dropdown menu on each channel. This signal will correspond to the signal going into your DAW inputs 1-16.

The inputs and Synergy Core FX assigned to Channels 1 – 6 of the virtual mixers in 'Monitors & Headphones' view are routed to Inputs 1 – 6 in your DAW.
When you open your DAW, create a new track, and assign it to record audio from 'Input 1′,you will get the audio from mixer Channel 1.
Channel 1 of which mixer mirrors the signal which is going to each of the three virtual mixerstheir audio inputs and Synergy Core FX chains.
We are only taking the signal source and Synergy Core FX into your DAW – not the virtual mixer outputs. This means audio is routed to your DAW before it reaches any of the virtual mixers' pan and volume controls, so they don't get in the way of recording and mixing in your DAW.
While working inside your DAW, you presumably want to hear its Master bus output instead of the virtual mixers' output through your monitoring equipment. Your DAW's Master bus output, as well as your system audio output, are always routed to USB 1 PLAY' outputs 1 and 2.
Use the channel Selectors to assign 'USB 1 PLAY' channels 1 and 2 to a pair of mixer channels in 'Monitors & Headphones' view and mute the rest of the channels from the 'Monitor/HP1' mixer controls. Audio from the muted channels will only be heard through your DAW's Master bus, which is now routed to your monitoring equipment.
The rest of the 'USB PLAY ' 3 – 16 channels receive audio from DAW Outputs 3 – 16. Thus, if you want to send an audio track from your DAW to any of the interface's analog and digital outputs, and/or into the Synergy Core FX processing – assign this track to Output 3 – 16 in your DAW, switch to the Control Panel application, and assign the 'USB 1 PLAY channel with the matching number anywhere you want.
Note that the channel Selectors and AFX areas from 'Monitors & Headphones' view are mirrored in 'USB 1 I/O' view. This way, you can clearly see which audio input you are recording from each channel, what Synergy Core FX are being applied to it (if any) and make changes without having to switch between views.
Loopback Function – The channel Selectors in 'USB 1 I/O' view have two additional choices: 'LOOPBACK HP1/MON' 1 – 2 and 'LOOPBACK HP2' 1 – 2. These choices let you return the 2channel stereo outputs from two of the three virtual mixers in 'Monitors & Headphones' view into your DAW or streaming application. This feature can be useful in many scenarios where you need a ready mix to be recorded/broadcasted, by allowing you to set levels and use effects on any signals, be it from the interface's inputs or computer playback and then sum them all down to stereo. Streaming, VoIP/Video calls, real-time effects printing, live music performances across multiple

software applications are just a few scenarios where the loopback function can be utilized.

USB 2 I/O view

USB 2 I/O' view provides an overview of audio going in and out of the device connected to the secondary USB 2 port.
This can be a mobile device* with a USB-C port or a Windows/macOS computer.
The Record 1 and Record 2 peak meters will show the signal level of what you are sending to the mobile device.
The Play 1 and Play 2 peak meters will show the signal level of the playback from the mobile device/computer.
You can change the signal going to Record channels 1-2 from the dropdown menu on each channel. This signal will correspond to the signal going into your mobile device/computer inputs 1-2.

***NOTE**
Not all mobile devices with USB-C ports are compatible with Zen Quadro Synergy Core. This mostly depends on the power delivery the mobile device can provide. Some smartphones do not have sufficient power delivery or are limited, thus the Zen Quadro SC may not be able to boot up properly.
Should any questions arise, do not hesitate to contact our **Customer Support** team over phone, live chat and our ticket system. You can also visit **Antelope Audio on YouTube** and explore our video tutorials or join the **Antelope Audio Users** Facebook group and ask for advice. The **Knowledge Base** is also a great resource.

AuraVerb
AuraVerb provides richness and color using a special new approach and a unique algorithm.
The reverb features eight different controls, including a 'Color' parameter to create everything between darkened textures to bright, sizzling presence. In addition, there are 24 presets done by award-winning audio engineer and

producer Brian Vibberts.

AuraVerb is a Send effect designed for live performance and monitoring. Turn the ‘Send’ knob on a mixer channel (pictured above) to hear the reverb applied to it.

Drag the faders in the ‘Returns’ area to hear AuraVerb from the monitor and/or headphone outputs.

Parameters

The following parameters are available in AuraVerb:

Color

The Color control lets you adjust the overall tone of the reverb. At 0, the space created is darker, like a lushly carpeted area. At 100, the reverb is at its brightest, which can add some ‘sizzle’ to a lead vocal, for example.

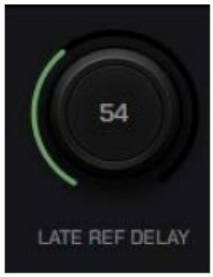
PreDelay

Common for most reverbs, the pre-delay lets you create a bit of space between the source and the onset of reverb. This happens by controlling the amount of delay time that precedes the initial sound from the reverb. This parameter is used to place the reverberated signal later in time with respect to the unprocessed signal.

Natural settings for this are based on the size of the environment and range from 0 to 32 milliseconds. Fine adjustment of this parameter with respect to the tempo of the song or dramatic timing of the piece can help set the feel of the reverb within the mix.

Early Reflection Gain

This is the linear gain value for all early reflections. These reflections are perceptually grouped with the direct sound when set at lower levels and can nicely thicken a track when increased.



Late Reflection Delay
Among other things, AuraVerb calculates reflected energy from the side walls and ceiling of the virtual space. Late Reflection Delay controls the delay of these bursts of reflections, either creating echoes or supporting the spatial impression of the simulated acoustic space.

Richness
Richness controls the complexity of the reverb envelopment and dampening nuances. At 0, there is less dampening and a brighter decay. This sound is light or airy, but by increasing the Richness, you can add a sense of spaciousness to the sound and smoothly increase reverb time for lower frequencies.

Reverb Time
Reverb Time controls the length of decay, while Room Size increases the virtual space dimensions. The perceived decay time will also be affected by Richness and Color on sources with a lot of high frequency content. Generally, as the size of the space increases, the Reverb Time will also increase.
Setting Reverb Time to 50% gives a natural sounding tail for all room sizes. Interesting big spaces or subtle ambience reverbs can be created by setting Reverb Time unusually high or low with respect to the Room Size parameter.

Room Size
Room Size increases the virtual space dimensions.

Reverb Level
This is the output level control of the reverb. Since inputs for AuraVerb are assigned to Send knobs on Mixer 1's channels, we recommend balancing the channel volume levels from the Send controls and using Reverb Level to adjust the amount of reverb in the Master bus.

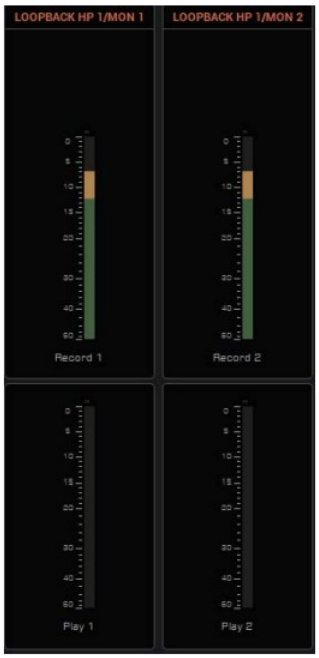
REVERB FX ON/OFF Switch
Use it to enable and disable AuraVerb.

Preset Manager
The Preset Manager lets you save and load presets. Use the drop-down menu to choose a preset. Click the 'S' button to save a preset. Click the 'L' button to load a preset.

LOOPBACK FUNCTION FOR STREAMING

This chapter explains how to configure the Zen Quadro Synergy Core for use with a streaming application. The basic workflow is like this:

1. Use the Control Panel application to create the audio mix you want to send to your streaming application. This mix can be the 'Monitor/HP1' mix, the 'Headphone 2' mix, or both. The mixes can include both input audio (such as audio from a microphone) and operating system/computer audio (playback, DAW output, sound effects, and so on).
2. If you want to stream on a computer, head to the USB 1 I/O' view in the Control Panel application. Use the Input Selectors to route 'LOOPBACK MON/HP1 MIX' 1 – 2 and/or 'LOOPBACK HP2 MIX' 1 – 2 to the virtual inputs of your choice. For example, route 'LOOPBACK MON/HP1 MIX' 1 to 'Record 7', and 'LOOPBACK MON/HP1 MIX' 2 to 'Record 8':



3. Configure your streaming application to receive audio from Inputs 7 and 8. This way, the application will receive the stereo output from the Monitor/HP1 mixer in the Control Panel application.
   Two stream from your mobile device via the secondary USB-C port, head to the USB 2 I/O' view in the Control Panel application. Use the Input Selectors to route 'LOOPBACK MON/HP1 MIX' 1 – 2 and/or 'LOOPBACK HP2 MIX' 1 – 2 to Record 1 and Record 2.

EDGE & VERGE MIC EMULATIONS

The Zen Quadro Synergy Core features integrated real-time microphone emulations if you own one of the Antelope modeling microphones. It is possible to monitor and record with mic emulations on. It is also possible to record ‘dry’ audio and mic emulation audio on separate tracks for more production flexibility.
Note that the Edge & Verge mic emulations are intended for use with the Antelope Audio Edge & Verge modeling microphones only. We cannot guarantee optimal (or even usable) results with other microphones, modeling or not.

Getting Started

Connect your headphones to input HP1 on the front panel. Connect your Antelope Audio Edge or Verge modeling microphone to inputs A1 and/or A2 on the rear panel. In our example, we are using the Edge Solo, which is connected to input A1.

1. Open the Control Panel and head to the leftmost preamp from the PREAMPS row. Click on the input selector above the ‘AFX’ area and choose PREAMPS > PREAMP 1 from the menu.
2. Choose ‘Mic’ from the signal type drop-down menu and activate 48V phantom power.
3. Click on the  mic emulations button to open the mic emulations window.

4. Adjust microphone gain with the gain knobs. You should be hearing mic audio in your headphones at this point.

Using Mic Emulations

In the ‘Mic Emulations’ window, choose from the dropdown menu to access the emulations available for your modeling microphone:

Following is a guide to using the mic emulations for each Antelope Audio modeling microphone.

Edge Note

To access the Mic emulations within your Antelope interface, you need to click on the “Mic” icon below the Preamp gain knob:

Edge Note Mic Emulations window
The following functionality is available:

- Choose mic emulations from the drop-down menu on the right.
- Click and turn the “PHase Invert” dial to flip the microphone’s polarity.
- CLick and drag the “48V” switch to activate or turn off the phantom power.

Recording and Monitoring Edge Note
Edge Note is a single-membrane, small-diaphragm condenser microphone. This means the microphone will occupy one physical mic preamp input, one block in the Input Selector PREAMP channel and one block in the MIC EMU channel.
Edge Note mic emulations works on a single input audio channel. Recording and monitoring both “dry” and “mic emulation” audio means dealing with two mono tracks simultaneously.

- Route the “PREAMP” channel for Edge Note to your Desired outputs to monitor “dry” audio. Route to ‘USB 1 I/O’ or ‘USB 2 I/O’ to record from the corresponding input in your DAW.
- Route the “EMU MIC” channel for Edge Note (same number as the “PREAMP” input”) to your desired outputs to monitor “mic emulation” audio. Route to ‘USB 1 I/O’ or ‘USB 2 I/O’ to record from the corresponding input in your DAW or mobile device.
- Route “PREAMP” and “EMU MIC” channels to your desired outputs and ‘USB 1 I/O’ or ‘USB 2 I/O’ inputs to monitor and record both “dry” and “mic emulation” audio.

Edge Solo

Edge Solo Mic Emulations Window
The following functionality is available:

- Choose mic emulations from the drop-down menu on the right.
- Click and turn the ‘Phase Invert’ dial to flip the microphone’s polarity.
- Click and drag the ‘48’V switch to activate or turn off phantom power.

Recording and Monitoring Edge Solo
Edge Solo is a single-membrane condenser microphone. This means the microphone will occupy one physical mic preamp input and one virtual ‘MIC EMU’ output.
Edge Solo mic emulations work on a single input audio channel. Recording and monitoring both ‘dry’ and ‘mic emulation’ audio means dealing with two mono tracks.

- Route the “PREAMP” channel for Edge Note to your Desired outputs to monitor “dry” audio. Route to ‘USB 1 I/O’ or ‘USB 2 I/O’ to record from the corresponding input in your DAW.
- Route the “EMU MIC” channel for Edge Note (same number as the “PREAMP” input”) to your desired outputs to monitor “mic emulation” audio. Route to ‘USB 1 I/O’ or ‘USB 2 I/O’ to record from the corresponding input in your DAW or mobile device.
- Route “PREAMP” and “EMU MIC” channels to your desired outputs and ‘USB 1 I/O’ or ‘USB 2 I/O’ inputs to monitor and record both “dry” and “mic emulation” audio.
- For more information about Edge Solo, visit its **product page**.

For more information about Edge Solo, visit its **product page**.

Edge Duo
Note to owners of the legacy ‘Edge’ modeling microphone: ‘Edge’ and ‘Edge Duo’ have nearly identical hardware, so feel free to use the ‘Edge Duo’ emulations with your legacy ‘Edge’ mic.
Edge Duo Mic Emulations Window

The following functionality is available:

- Choose mic emulations from the drop-down menu in the middle.
- Click and turn the ‘Phase Invert’ dial to flip the signal polarity.
- Click and drag the ‘48V’ switch to activate or turn off phantom power.
- Click and turn the ‘Channel Swap’ dial to swap the Edge Duo inputs.
- Click and turn the ‘Pattern’ knob to adjust the polar pattern. Note that some mic models have fixed or limited polar pattern adjustment.

Recording and Monitoring Edge Duo

Edge Duo is a dual-membrane condenser microphone – it has one capsule with dual membranes and connects with a Y-XLR cable (included), one XLR connector for each membrane. The Left (white) connector is the front membrane, the Right (red) is for the rear membrane.
The microphone occupies two physical mic preamp inputs and two ‘EMU MIC’ virtual outputs.
Note: You can use Edge Duo as a single-membrane condenser mic by disconnecting one of the XLR connectors. In this case, the mic emulations will be visible, but they won’t function correctly – you cannot swap inputs and you cannot adjust polar pattern.

- Route the “PREAMP” channels for Edge Duo to your Desired outputs to monitor “dry” audio. Route to ‘USB 1 I/O’ or ‘USB 2 I/O’ to record from the corresponding input in your DAW.
- Route the “EMU MIC” channels for Edge Duo (same number as the “PREAMP” channels) to your desired outputs to monitor “mic emulation” audio. Route to ‘USB 1 I/O’ or ‘USB 2 I/O’ to record from the corresponding input in your DAW or mobile device.
- Route “PREAMP” and “EMU MIC” channels to your desired outputs and ‘USB 1 I/O’ or ‘USB 2 I/O’ inputs to monitor and record both “dry” and “mic emulation” audio.

For more information about Edge Duo, visit its **product page**.
Verge
Verge is a small-diaphragm condenser microphone that’s as simple to use as the Edge Solo.
Its dimensions and ability to handle high sound pressure levels make it a better fit for positioning in tight spaces and recording very loud sources, such as drum kits.

Verge Mic Emulations Window
The following functionality is available:

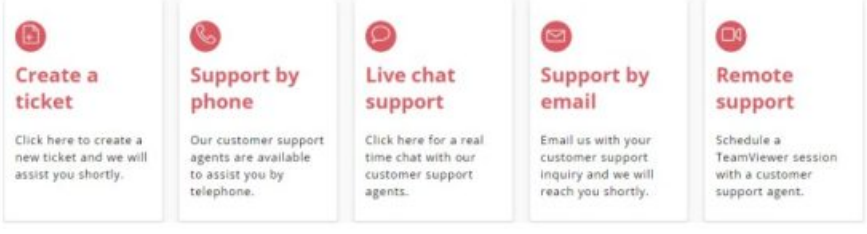
- Choose mic emulations from the drop-down menu on the right.
- Click and turn the ‘Phase Invert’ dial to flip the signal polarity.
- Click and drag the ‘48’V switch to activate or turn off phantom power.

Recording and Monitoring Verge

- Route the “PREAMP” channel for Verge to your Desired outputs to monitor “dry” audio. Route to ‘USB 1 I/O’ or ‘USB 2 I/O’ to record from the corresponding input in your DAW.
- Route the “EMU MIC” channel for Verge (same number as the “PREAMP” input”) to your desired outputs to monitor “mic emulation” audio. Route to ‘USB 1 I/O’ or ‘USB 2 I/O’ to record from the corresponding input in your DAW or mobile device.
- Route “PREAMP” and “EMU MIC” channels to your desired outputs and ‘USB 1 I/O’ or ‘USB 2 I/O’ inputs to monitor and record both “dry” and “mic emulation” audio.
- For more information about Verge, visit its **product page**.

CUSTOMER SUPPORT INFORMATION

Antelope Audio Customer Support can be reached by the following means:
Online
Visit **support.antelopeaudio.com**
Phone
We are there for you around the clock, 21 hours/day, Monday to Friday.
North America +1-**916-238-1643** 01:00 a.m. – 10:00 p.m. (EST)
International +44 19 2593 3423 06:00 a.m. – 03:00 a.m. (GMT)
Live Chat
Live Chat is available during the following hours Monday to Friday International 06:00 a.m. – 06:00 p.m. (GMT)
Note: If you’re trying to reach us outside working hours, we advise you to file a ticket in our customer support system or leave a voice message.



https://support.antelopeaudio.com/en/support/home

Additional Resources

- The **Antelope Audio YouTube channel** is home to various tutorial videos and endorser content which you may find helpful and inspiring.
- The **Knowledge Base** in our Customer Support section is good source of troubleshooting information, answers to commonly asked questions and Antelope know-how.

MY ANTELOPE AUDIO PRODUCT ISN'T WORKING

WHAT SHOULD I DO?
If you can't find a solution on your own, please get in touch with the Technical support department so we check if you are having a hardware-related issue.
If this is the case, we'll guide you through the repair process. If the product should be returned, a RMA number will be issued so we can begin the procedure.
What's an RMA number?
Issuing a RMA (Return Merchandise Authorization) number is required for any factory service or repair procedure. Please, don't attempt to send us your device without receiving a RMA number first, as the device will be returned and not serviced.
How do I get an RMA number?
The Antelope Audio Customer Support team is in charge of issuing RMA numbers. Visit **support.antelopeaudio.com** and get in touch.
After your RMA has been issued, you will receive an email with instructions on how to proceed.
RMA shipping information
Alongside the product you are returning please, include a letter containing your full name, shipping address, RMA number issued by our technical support team and a note with a short information about the technical issue.
Please use the original box if possible, because a worn out one will surely not protect your product sufficiently on its way to the Antelope Audio HQ. Additional cushioning materials in multiple layers between the unit and the box walls to prevent from shock, vibration and various tears and scratches.
Please remove any labels or old shipment markings it may have and ensure you add your shipping address inside the box in case the original shipment label becomes illegible during transportation.
The shipping costs are covered by the owner of the product. Antelope Audio will not cover any local customs charges.
We recommend using a courier service of your choice (e.g. DHL, UPS, FedEx). The package should be insured for its real value, marked as fragile and a tracking number should be provided. We do not recommend using standard mail delivery services.
Please, don't forget to add the RMA number, issued by the Antelope Audio technical support, on all shipping paperwork.
Antelope Audio cannot be held responsible for undelivered packages – lost or damaged on the way to the Antelope Audio HQ. For damage claims, please contact your shipping service provider of choice.
Antelope Audio cannot cover any repair costs for product damages due to poor packaging.

LIMITED WARRANTY POLICY

This is a non-transferable voluntary Limited Product Warranty provided to end-customers who have purchased Antelope Audio-branded hardware product (hereinafter referred to as "Product") from an authorized Antelope Audio re-seller.
For customers covered by consumer protection laws or regulations in their country of purchase or, if different, their country of residence, the benefits conferred by Antelope Audio's Limited Warranty are in addition to, and not instead of, rights and remedies convened by such consumer protection laws and regulations and it does not exclude, limit or suspend buyer's rights arising from consumer law. Consumers have the right to choose whether to claim service under the Antelope Audio Limited Warranty or under their consumer law rights.
All claims made under the Antelope Audio Limited Warranty will be governed by the terms set out in this warranty document.

Warranty Coverage

Antelope Audio warrants that the Product will be free from defects in material and workmanship for the period of 1 (one) year commencing on the date of purchase of Product by end-customer from authorized Antelope Audio's re-seller.

Except where explicitly prohibited by applicable local law, this warranty is limited to the original purchaser and is non-transferable. This warranty provides you with specific legal rights, and you may have additional rights that vary under local laws.

In general, this warranty means your Antelope Audio hardware product will operate in accordance with published technical specifications, as specified by its data-sheet, and in the operating environment for which it was intended for the length of the warranty period.

This version of the warranty applies to products purchased on or after January1,2018. For prior versions of the Antelope Audio limited warranty, please contact customer service.

Limited Factory Refurbished (B-stock) Warranty

Antelope Audio warrants products sold as "B-stock, Factory Refurbished or Open Box" to be free from defects in materials (unless otherwise stated in product description) and workmanship. Only products purchased from an authorized dealer or directly from Antelope Audio are covered by this Warranty.

The Limited Factory Refurbished (B-stock) Warranty is valid for the period of 6 (six) months, commencing on the date of purchase of Product, if local regulations do not require otherwise.

All warranty terms contained hereunder apply also to the B-stock Warranty, unless otherwise specified.

Remedies

Antelope Audio's entire liability and your exclusive remedy for any Antelope Audio Product that is not operating in accordance with its published technical specifications is at Antelope Audio's discretion:

1. to repair the Product at Antelope Audio's expense using new or equivalent-to new refurbished parts in good working condition; or
2. to replace the Product at Antelope Audio's expense with a product with equivalent functionality formed from new and/or equivalent-to new refurbished parts in good working condition, or
3. to refund the price paid. Should Antelope Audio decide to refund the price paid, it may deduct from the paid Product's price any damages caused to the Product; where, within fourteen (14) days of the expiration of the warranty period,(i) Antelope Audio has received written notice of any nonconformity;(ii) after Antelope Audio's written authorization, customer has returned the nonconforming product to the designated place; and (iii)Antelope Audio has determined that the Product is nonconforming and that such non conformity is not the result of any of the exclusions designated below.

These warranty obligations are conditioned upon the hardware being returned to the original place of purchase, or another place as directed by Antelope Audio, with the original sales receipt attached. You will be required to pay shipping and handling charges for returning the product. You may be required to pay any other applicable tariffs, duties, taxes, or other fees with regard to returning the products.

Any repaired or replacement Product will be warranted for the remainder of the original warranty period.

Obsolete or Discontinued Products

An obsolete or discontinued product will be repaired or replaced with the same product if available. If Antelope Audio is unable to replace your obsolete or discontinued product with the same product, Antelope Audio will replace the obsolete or discontinued product, in its sole discretion, with a product having similar function and capacity.

Exclusions

This warranty does not cover problems or damage resulting from, but not limited to, any of the following: (i)Wear and tear associated with normal use; (ii)Any modification, abuse, accident, disassembly, misapplication, misuse, negligence, acts of God, accident; (iii)Unauthorized repair or attempted repair by anyone other than Antelope Audio or someone authorized by Antelope Audio to do warranty work; any unauthorized repairs will void this warranty(iv)Any improper operation, maintenance or installation, including any use not in accordance with any

supplied product instructions; (v)Connection to any improper voltage supply; (vi)Use of consumables or spare parts not supplied by Antelope Audio, except where such restriction is prohibited by applicable local law; (vii)Any other cause which does not relate to a Product defect in materials or workmanship.
The warranty does not apply to any Products which have been subject to misuse, neglect, accident or modification or which have been soldered or altered such that they are not capable of being tested under normal test conditions.
This warranty does not cover (i) any counterfeit products, i.e. Products that Antelope Audio, at its sole discretion, determines were not manufactured by Antelope Audio or any of its authorized manufacturing partners; (ii) Products purchased from a person or entity which is not an authorized dealer or re-seller of Antelope Audio; (iii)Product sold “as is” or “with all faults”, to the extend permitted by local law.
This warranty is not valid in case any manufacturer label(s), serial numbers, date stamp(s) or warranty sticker(s) has been altered or removed from the Product.

Limitation of Liability

ANTELOPE AUDIO SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, REVENUE, OR DATA (WHETHER DIRECT OR INDIRECT) OR COMMERCIAL LOSS FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON YOUR PRODUCT EVEN IF Antelope Audio HAS BEEN ADVISED PREVIOUSLY OF THE POSSIBILITY OF SUCH DAMAGES.
Some local laws do not allow the exclusion or limitation of special, indirect, incidental or consequential damages, so this limitation or exclusion may not apply in your jurisdiction.
ANTELOPE AUDIO WILL NOT ASSUME OR AUTHORIZE ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH ITS PRODUCTS.

Data Recovery

In the event of data loss using Antelope Audio storage devices, Antelope Audio is not responsible for backing up or recovering any data that you may have lost.

No Other Warranties

No Antelope Audio employee, dealer, re-seller, or other agent is authorized to make any modification, extension, or addition to this warranty.

How to Make a Warranty Claim

Valid warranty claims should be processed through your point of purchase. Please also verify the return policy directly with the retailer where you purchased your product. Any warranty claims that cannot reprocessed through your original point of purchase should be addressed directly to Antelope Audio. Our customer service contact information can be found on the web or in the documentation included with your Product.

Returning Your Product

In the event that you need to return your Antelope Audio products for repair or replacement, Antelope Audio will provide you with a Return Merchandise Authorization Number (RMA#) as well as return instructions. Do not return your product without prior approval from Antelope Audio. Any product returned without a valid unique RMA# will be refused and returned to the sender at the sender’s expense. To avoid problems at the time of receipt, clearly write your RMA# on the outside of the package and include a copy of your RMA confirmation-mail within the package.
In certain situations, for in-warranty units, we may (entirely at our opinion) offer you a temporary replacement unit, provided that we have such on stock in your state. To request a temporary replacement unit, a valid credit card must be provided to secure the new replacement unit for shipping prior to Antelope Audio receiving the defective one.
Request a Return Material Authorization Number (RMA#)
Please follow these steps to obtain an RMA number:
(I) For end user customers, submit a claim online at: **support.antelopeaudio.com**. For business to business (B2B) / Direct customers of Antelope Audio please email us at **techsupport@antelopeaudio.com**
(ii) A valid proof of purchase is required for RMA processing (i.e. receipt, invoice, etc). Antelope Audio will provide you with the RMA number within 2 working days as of the claim submission date.

RMA Return Addresses

We have multiple RMA receiving locations worldwide. Your RMA confirmation will specify the specific return address you must use when sending your RMA package. Any packages received at an unauthorized location may be refused and returned to the sender at the sender’s expense.

Products Lost or Damaged During Transit

The original packaging material should be used to pack the product for return; if the original packaging is not available, you should use such materials that provide the same or greater protection to the product. All packages that arrive with any external damage or appear inadequately packed will be refused and returned to the sender at the sender’s expense. We are not responsible for damage incurred during shipping to our RMA receiving locations

or for lost or stolen products.

Company information
Antelope Audio is the trade name, under which the company Elektrosfera ltd., registered under the legislation of the Republic of Bulgaria with UIN: 131052590, is doing business and is worldwide known. Elsewhere in this document where the trade name Antelope Audio is used shall refer to Elektrosfera ltd., with address of management: Tsarigradsko Shose Blvd., 7th km, Building of BIC IZOT, floor 6, Mladost region, Sofia, Bulgaria.
If any term hereunder is held to be illegal or unenforceable, it shall be severed from this warranty and the legality or enforce ability of the remaining terms shall not be affected.

SAFETY NOTES

To reduce the risk of electrical shocks, fire, and related hazards:

- Do not remove screws, cover, or cabinet. There are no user serviceable parts inside.
  Refer servicing to qualified service personnel.
- Do not expose this device to rain, moisture or spillover of liquid of any kind.
- Should any form of liquid or a foreign object enter the device, do not use it. Switch off the device and then unplug it from the power source. Do not operate the device again until the foreign object is removed, or the liquid has completely dried and its residues fully cleaned up. If in doubt, please consult the manufacturer.
- Do not handle the power cables with wet hands!
- Avoid placing things on the cabinet or using the device in a narrow and poorly ventilated place which could affect its operation or the operation of other closely located components.
- If anything goes wrong, turn off the device first and then unplug the power. Do not attempt to repair the device yourself. Consult authorized service personnel or your dealer instead.
- Do not install near any heat sources such as radiators, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not use harsh chemicals to clean your unit. Clean only with specialized cleaners for electronics equipment.
- Connect all your devices before powering your unit.
- Never operate the unit without this earth connection.
- Power supply cable should be routed so that it is not likely to be walked on or squeezed by items placed upon or against it.
- Both occasional and continued exposure to high sound pressure levels can cause permanent ear damage via headphones and monitors.
- The device is designed to operate in a temperate environment, with a correct Operating Temperature of 0-50° C, 32-122° F.

TECHNICAL SPECIFICATIONS

Analog Inputs
2 × Mic / Line Inputs / Hi-Z Inputs
2 x Mic inputs / Line Inputs
48V phantom power and independent preamp gain for each input

Analog Outputs
1 × Stereo Monitor Out on TRS 1/4 Jacks, +20 dBu max, signal balanced, DC-coupled
1 × Stereo Line Out on TRS 1/4 Jacks, +20 dBu max, signal balanced, DC-coupled
2 × Stereo Headphone Outputs

Mic Preamp
Dynamic Range: 122 dB (A-weighted)
THD: -116 dB
Max input level: +20 dBu
Max Gain: 75 dB

D/A Monitor Converter
Dynamic Range: 130 dB (A-Weighed)
THD + N: -115 dB
Max output level: +20 dBu

D/A Line Out Converter
Dynamic Range: 130 dB (A-Weighed)
THD + N: -115 dB

Headphone outputs
Dynamic Range: 118 dB (A-Weighed)
Output impedance: 10 Ω

A/D Converter
Dynamic Range: 122 dB
THD + N: -116 dB

Digital Inputs
1 × S/PDIF (2 channels up to 192kHz)
1 x ADAT IN (up to 8 channels @ 44.1/48.0 kHz, supports up to 192kHz)

Digital Outputs
1 × S/PDIF (2 channels up to 192kHz)
Interface I/O
1 x USB 2.0 Type-C connector

- 16 channels of playback and recording, 24-bit / 192kHz
- Compatible with Windows and macOS

1 x USB 2.0 Type-C connector

- 2 channels of playback and recording, 24-bit / 192kHz
- Supports reverse charging for mobile devices
- Compatible with Windows, macOS, Android* and iOS* (USB-C) devices

*Compatibility depends on the mobile device's power delivery and specifications
Clocking System
4th Generation Acoustically Focused Clocking (AFC™)
64-bit DDS
Sample Rates (kHz)
44.1, 48, 88.2, 96, 176.4, 192
OTHER
Operating Temperature
0-50°C, 32-122°F

Weight (Approx)

0.9 kg/ 1.98 lbs
Dimensions – Device (Approx)
Width: 210 mm / 8.2”
Height: 58 mm / 2.3”
Depth: 136 mm /5.3”

Documents / Resources

	SoundCloud 14 x 10 Dual Usb Bus Powered Audio Interface [pdf] Owner's Manual 14 x 10 Dual Usb Bus Powered Audio Interface, 14 x 10, Dual Usb Bus Powered Audio Interface, Bus Powered Audio Interface, Audio Interface, Interface

References

- Support | Antelope Audio Customer Support
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- Support | Antelope Audio Customer Support
- User Manual