PATHWAYS
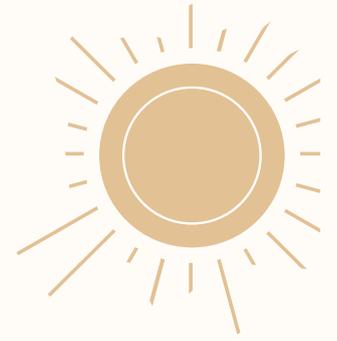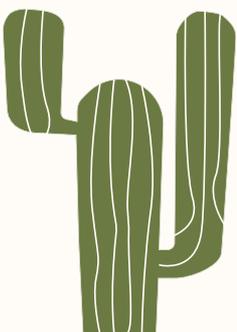
REVERB & TREMOLO

Welcome to Pathways

We're so glad you're here. Inside this compact pedal is a carefully curated collection of classic reverb and tremolo sounds that have shaped countless recordings and performances over the past 80 years. From percussive slap and echo to authentically drippy spring and tank reverbs, to spacious room, plate, and hall environments, Pathways traces the evolution of time-based effects that continue to define how a guitar sits and feels in a mix.

Combined with the motion of meticulously crafted tremolo, we designed Pathways to sound and feel right immediately. Pathways provides motion, depth, and character to your sound that will bring your playing to life. Three iconic types of tremolo (Harmonic, Optical, and Bias) can be used individually or in conjunction with any of the seven types of reverb to give your unique voice the space, movement, and context it deserves.

In this manual you will find tips and tricks to maximize your Pathways experience. Descriptions of every reverb and tremolo engine, along with hardware shortcuts, alternate controls, global hardware options, an overview of the Neuro 3 app experience, and much more can all be found in the following pages. In short, Pathways can take you many places.

Finding your ultimate tone is a journey and we're thrilled to be along for the ride!

The Source Audio Team

Contents

Feature Overview

7 Reverb Types
Pathways features seven selectable reverb and echo styles. From tight rockabilly slapback to spacious echo, plus spring, tank, room, plate, and hall — all easily accessed via the 7-way selector on the pedal.

3 Unique Tremolo Voices
Harmonic, Optical, and Bias tremolo styles provide an array of classic tremolo effects to use by itself or paired with any of Pathways' reverb effects.

SoundCheck™
Hear any Neuro preset without a rig or even the pedal.

Growing Library of Published Presets
For quick and easy access to a world of great tones, try sampling sounds from a vast collection of published presets created by the Source Audio team and the ever-growing Neuro Community.

Reverb Hold & Tremolo Tap Tempo
In addition to the traditional ON/OFF functions on the respective Reverb and Tremolo footswitches, Pathways features a useful "Hold" function on the Reverb engine, and Tap Tempo for easy speed changes on the Tremolo side.

Dual Footswitch Design
Engage or bypass reverb and tremolo effects separately using the two onboard footswitches.

Deep Sound Sculpting Options
Use the Neuro 3 App (iOS, Android, Windows, Mac)'s DAW-inspired editor to create custom Pathways presets that can be burned directly to the pedal, saved to a private cloud-based library, or shared publicly with other members of the Neuro Community.

128 MIDI Accessible Presets
The addition of a third-party MIDI controller provides access to any of the pedal's 128 Preset slots.

Compact Design
The extruded anodized aluminum housing, with its slim profile and small footprint, is built for the rigors of the road.

Full MIDI TRS Support
Connect Pathways to a MIDI Controller via its 3.5mm TRS MIDI In & Thru and access up to 128 preset slots with MIDI Program Change (PC) messages. Control many of the pedal's parameters with MIDI Continuous Controller (CC) messages.

USB-C Port
Class compliant USB-MIDI allows Pathways to work as a plug-and-play device with recording software running on Mac and Windows. The USB-C port offers connectivity to the Neuro Mobile and Desktop App, providing access to deep editing possibilities and pedal firmware updates.

Universal Bypass™
Select between analog buffered and relay-based True Bypass.

External Expression Pedal Control
Make simultaneous, on-the-fly changes of up to three parameters with an external expression pedal.

Connections

Power

To power the unit, connect a 9V DC negative-tipped power supply to the jack labeled DC 9V on the back panel. Pathways needs at least 200mA of current to operate as intended. Please note that your Pathways does not include a power supply.

> ### Warning
> Using an unregulated supply could damage the unit. A power supply with insufficient current levels may also cause noise or other unpredictable behavior. Please be very cautious when choosing a power supply and refer to the power supply requirements in the Specifications section of this guide.

Guitar/Audio Connections

Using standard ¼" mono (TS) cables, connect your guitar, bass, or other instrument to the Input 1 jack and your amp (or the next audio device in the signal chain) to the Output 1 jack. If you have a second amp or stereo effects chain, connect it to Output 2.

When the power and audio connections have been made, Pathways is ready for use.

Input Side Connections

INPUT 1

INPUT 1 is the primary input for guitar, bass, or other instruments. It can also accept line-level inputs and will work in your amp's effect loop. Connect it to your instrument or other audio source using a mono (TS) 1/4" cable. Details about the appropriate signal levels are available in the Specifications section.

INPUT 2

Use the secondary audio input for stereo sources, if you plan on connecting more than one instrument to your Pathways, or if your Pathways is not the first pedal in your stereo signal path.

INPUT 2 as an Audio Input: The tip contact on INPUT 2 acts as a secondary input for guitar, bass, or other instruments. Connect your instrument (or the previous effect in the signal chain) using a mono (TS) ¼" cable. Pathways will automatically configure itself for stereo audio input. Other routing options are available using the Neuro App. For more information about stereo routing, refer to the Stereo Operation section.

MIDI INPUT (3.5mm TRS)

Here is where you'll connect your favorite MIDI controller or upstream MIDI Devices to Pathways. Pathways uses class compliant TRS "Type A" pinout for MIDI connectivity. If your previous device uses a full-sized MIDI DIN cable, you'll likely need a DIN to 3.5mm (1/8 inch) passive adaptor.

Output Side Connections

OUTPUT 1

This is the primary audio output. Connect it to your amplifier, recording interface, or the next device in your effects signal chain using a mono (TS) ¼" cable.

OUTPUT 2

The tip contact on OUTPUT 2 acts as the secondary audio output. It carries an audio signal when the Pathways is configured with a signal routing that uses stereo outputs. Connect it to your amplifier, recording interface, or the next device in your effects signal chain using a mono (TS) ¼" cable. Be sure to continue to use TS cables. Pathways outputs a stereo image using two unbalanced (TS) outputs, not one TRS output.

MIDI THRU (3.5mm TRS)

Here is where you'll connect any downstream MIDI devices to the Pathways. Pathways uses class compliant TRS "Type A" pinout for MIDI connectivity. If your next device uses a full-sized MIDI DIN cable, you'll likely need a 3.5mm (1/8 inch) to DIN passive adaptor.

Back Side Connections

DC 9V (Power)

Connect to a 9 Volt DC power supply. The power supply must be regulated at 9 Volts DC (direct current), able to source at least 200 mA (milliamps) of current, and the plug should have a tip-negative, barrel-positive polarity.

Please note that Pathways does not come stock with a PSU, you will have to source your own power. Please use 9 Volts only. **Pathways is not meant to run on higher** (e.g., 12V or 18V) **voltages**.

USB-C

Connect to your computer (Windows or Mac) or mobile device (Android or iOS) to the Pathways' USB-C port (denoted by the icon) using a standard USB-C cable. Pathways is a class compliant USB device, meaning that it does not require any custom drivers.

CONTROL INPUT

The 3.5 mm CONTROL INPUT port connects to external control devices such as the Source Audio Tap Tempo Switch and Source Audio Dual Expression Pedal. For more information, refer to the Expression Pedal Input section of the User's Guide.

Controls

REVERB FEATURES

REVERB Footswitch

Click the footswitch to engage or bypass the reverb effect. Hold the footswitch while the reverb side is engaged to enter a momentary reverb hold.

Effect Selector Knob

This is a 7-way rotary switch that allows you to select one of our 7 time-based flavors, ranging from vintage-spec Slapback Echo to illustrious Hall Reverb. Intuitively, this knob is set left to right from least to most diffuse.

REVERB LED

The Reverb LED indicates whether the effect is bypassed or engaged.

REV TIME Knob

Adjusts the decay time of the reverb or echo feedback. Turn CCW for tighter, "close" reverb/echo sounds, or clockwise for longer, more spacious & ambient tones.

TONE Knob

Adjusts the amount of treble content in the reverb feedback loop. Turn CCW for a darker reverb, or clockwise to add brightness to your reverb/echo tail.

MIX Knob

Adjusts the wet/dry mix of the reverb effect.

TREMOLO FEATURES

TREM/TAP Footswitch

Click the footswitch to engage the Tremolo effect. Tap steadily 2 or more times to tap in a tempo speed for the tremolo effect. Use the Beat Division switch along with the tap tempo feature to determine the subdivision of the tremolo speed relative to your tapping. Quick hold to disengage the tremolo effect, or tap once and wait two seconds to disengage. To disable Tap Tempo and disengage the tremolo effect immediately with a single tap of the footswitch, "Disable Tap Tempo" in the hardware settings.

TREMOLO LED

This LED indicates whether the tremolo effect is in use. Additionally, the LED uses red/green colors to indicate tempo when a tempo has been tapped using the Tap function on the Tremolo footswitch.

Trem Depth Knob

Adjusts the depth (intensity) of the tremolo (amplitude modulation) effect. Turn CCW for a barely noticeable pulsation, or clockwise for full amplitude modulation, meaning at the lowest peak on the LFO the signal will be muted, and at the highest peak, the signal will be

full volume.

Trem Speed Knob

Adjusts the rate of the tremolo (amplitude modulation) effect. Turn CCW for a slow pulsation, or clockwise for a rapid stutter. Please note that turning this knob will override the tempo set by Tap Tempo, and vice versa (tapping a tempo will override the speed set by the Trem Speed knob).

3-Way Beat Division Switch

Use this 3-way toggle in conjunction with Tap Tempo to change the rate of the tremolo, relative to the speed at which you tapped. From left to right, the Beat Divisions are:

- **Quarter note:** represents the speed at which you tapped.
- **Eighth note:** twice as fast as the speed you tapped.
- **Triplet:** 3x as fast, simulating triplets relative to the speed you tapped.

Tremolo Type Toggle Switch

Adjusts the voicing of the tremolo with three standard options:

- **Harmonic:** LFO separates the low-end from the top-end content and modulates them opposite each other.
- **Optical:** (labeled "OPTO") a choppy sound inspired by vintage photocell-based tremolo effects.
- **Bias:** a skewed sine wave reminiscent of tube-based amplifier tremolos.

BUTTONS

PRESET Button

Push to cycle forward through preset slots. Push + Hold to Save a preset in its current configuration. You will see the Preset LED flash twice to indicate the preset has been saved. The Preset LED will flash once every 2–3 seconds to indicate a preset has been edited and has unsaved changes. See Presets (*page 13*) for more details on selecting, saving, and recalling presets.

CONTROL INPUT Button

This small button located at the top of the pedal is used to enable or disable external control. It also is used to control the ALT parameters/functions on the surface of the pedal. Press the CONTROL INPUT button to access alternate knob controls. When the CONTROL INPUT LED (at the top right corner of the pedal) is blinking, the alternate knob controls are active. See Alt Controls (*page 18*) for more information.

7-Way Time-Based Effect Selector Switch
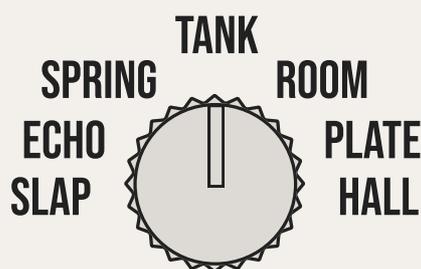
Pathways contains seven discrete time-based effects, arranged by level of diffusion.

Slap and **Echo** are typical short delays, with Slap reminiscent of '50s rockabilly slapback, and Echo with the character and delay range of a very early BBD delay.

Spring and **Tank** come from the True Spring pedal, encapsulating amplifier and outboard spring reverb units respectively.

Room, **Plate**, and **Hall** evoke dense spaces, studio equipment, and 1980s rack gear respectively, rounding off a full palette of evocative time-based tones.

Here is a description of each of the seven engines and a comprehensive breakdown of their engine-specific controls.

SLAP

Sometimes all you need is just a little extra movement, a little extra sense of space. Slap, or "slapback echo" has been used for over half a century in this context on vocals, guitar, and the like. The SLAP engine is pre-tuned to evoke slapback delay, which is traditionally thought of as in the 90–120ms range. REV TIME in this case controls the length of the feedback tail, rather than the space between repeats.

ECHO

Since Pathways' signal architecture is capable of short delays, we included one in the form of ECHO, which contains up to 288ms of delay time; nearly identical to early BBD units of the 1970s.

ECHO and SLAP are the only engines with surficial "delay time" adjustment: Press the ALT button, then turn REV TIME left or right to achieve shorter delay times. ECHO is already tuned to its maximum possible delay time (roughly 288 milliseconds)

SPRING

Without SPRING reverb, there would be no Pathways. The "True Spring" reverb engine on the Ventris was our inspiration for the spin-off True Spring pedal, which was the inspiration for Pathways.

SPRING is a classic, neutral-toned, medium-length spring reverb sound. Enjoy lush, '60s amp tones or get wet 'n' wild in surfy territory.

Some say nothing beats a pure spring reverb sound, and those folks will surely not be disappointed in Pathways' SPRING.

TANK

For pedaling on that low E string using the bridge pickup, we selected our "drippiest" reverb engine to fill the TANK slot. Evoke classic surf rock, bright and reactive reverb tones with TANK, our Fender 6G15-based reverb, first introduced on the True Spring.

TANK captures the unmistakable effect of the tube driven outboard spring tanks of the 60s. The sound of reverb tanks like the classic Fender 6G15 are characterized by their "drippy" attack and animated trail. This original two-spring design produces a bouncing, delay like sound inseparable from the early days of surf rock and spaghetti western soundtracks.

ROOM

ROOM reverb is a dark and dense reverb that evokes the characteristics of playing in a small to medium-sized room.

Similarly to Spring reverb-but in a much subtler way-Room reverb utilizes a short pre-delay and a small amount of diffusion to accurately reproduce the complicated sonic interaction that comes from playing an instrument through a sound source in a room: walls, floor, ceiling, dampening-all of these attributes are considered when developing the ROOM sound.

PLATE

In the 60s and 70s, a large, expansive sheet of metal known as a "Plate" began being used to create lush, resonant, and very diffuse reverb sounds in the studio, for something distinctly different from the primitive (springs and real rooms & spaces) offerings of the times. Pathways' PLATE engine is an all-new, ground-up emulation of all the major sonic characteristics (metallic, smooth/diffuse, dense, resonant) of a typical Plate sound.

HALL

HALL reverb is the longest, most spacious, and most diffuse reverb you'll find on Pathways. Loosely based on a Lexicon Large Hall algorithm, HALL reverb is often thought of as "the sound of the 80s", it was simply the go-to reverb tech used across many genres of music and on many instruments of the time, and can be heard pretty much everywhere.

A Tall Task

The base architecture of the HALL reverb was modeled for the "1701" chipset with long delay memory used on our Ventris Reverb and shared across all devices on that platform. The Pathways platform is built on a different chip altogether: the "1446", which while containing more instruction space, does not contain the hardware for an additional memory chip like the 1701. This means that HALL needed a complete overhaul to be retrofit for the 1446 architecture that Pathways utilizes. It was a stringent undertaking that we feel was worth the ambition.

3-Way Tremolo Selector Switch

To combine with any of the time based effects, Pathways offers three discrete Tremolo types: three different ways of modulating amplitude (output) by waveform, each with their own vibe and character.

HARMONIC

Harmonic tremolo recreates the unique circuit included in some Fender "Brownface" amps made between 1959 and 1963, which alternately modulated the levels of bass and treble frequencies in the audio signal. The result is a very pleasing and complex tremolo that has characteristics reminiscent of a phaser or uni-vibe.

OPTICAL

Optical tremolo (a.k.a. "Photocell Tremolo") is the effect found in many combo amps of the 1960s. This version of tremolo relies upon a neon light bulb and a light dependent resistor called an "optocoupler". An LFO controls the brightness of the neon light, which is picked up by the resistor, and translated to output gain. The non-symmetrical aspects of the light and the optocoupler give the tremolo a distinct choppy character, due to its quick ramp up in volume and more gradual decline.

BIAS

Bias tremolo is an approach to tremolo that involves using an LFO to modulate the bias voltage of the tubes in an amplifier. This essentially pushes the tubes in and out of saturation. The result is a smooth amplitude modulation with a mild overdrive created by the tube saturation.

Presets

User Presets store all editable parameters. This includes the knob positions, parameter settings, routing options, external control, and the full list of Neuro/MIDI accessible parameters. After a preset is recalled, you can always tweak the top-level controls in a performance situation by turning the knob. The knob parameter will then "jump" to the current knob position as it is rotated.

Pathways comes stock with 128 preset slots.

Preset Recall

Presets can be recalled in many ways, ranging from very simple to complicated (like a full MIDI setup). Below are descriptions of the ways Presets can be recalled.

Hardware (PRESET Select Button)

Push the PRESET Select Button to advance forward through preset slots. In Preset Extension Mode, pushing the PRESET Select Button will automatically advance forward to the next bank of presets. To enter Preset Extension Mode, press the ALT button + PRESET button. You will notice the Preset LEDs illuminating to display which banks can currently be selected.

Hardware (Scroll Mode w/ Footswitches)
Press both the REVERB and TREMOLO/TAP Footswitches together for about 500 milliseconds to enter Scroll Mode. There is a 500ms hold time so that Scroll Mode is not always activated each and every time both switches are (accidentally or otherwise) pressed.

In Scroll Mode, use the TREMOLO/TAP and REVERB Switches respectively to advance forward or backward through preset slots. When you've arrived at your desired preset slot, exit Scroll Mode by tapping both footswitches simultaneously.

Neuro 3
Connect your Pathways to your phone or desktop using the supplied USB-C cable (passive adaptors may be needed if your device does not have a USB port). Then, load the Neuro 3 Application.

If this is your first time using Neuro 3, you will be prompted to add the Pathways to your Pedals collection. If you are not prompted with the immediate option to Add Pedal, you may do so manually by pressing the (+) icon in the upper left corner next to the Sound Editor pane.

Click on the Pathways in the left margin. Your preset slots will be displayed on the left side of the screen next to your Pedals collection, to the left of the Preset Editor.

MIDI
Each preset slot's MIDI PC (Program Change) number corresponds to its slot number. Please be aware that some MIDI controllers use a 0–127 numbering system while others use 1–128, so you may have to offset your MIDI PC message by 1 digit, accordingly.

Pathway's presets can also be recalled via MIDI CC (Continuous Control).

Saving a Preset

Using the Hardware

Press & hold the PRESET button to enter Copy Mode. You will see the Preset LED flash rapidly. Continue holding the PRESET button to save your preset to the same location.

You can also save your preset to a different location by letting go of the PRESET button once Pathways is in Copy mode (indicated by the rapidly flashing LED). Press the PRESET button to select a different preset slot for your preset waiting in the wings. Then, hold down the PRESET button to save it in place. You will notice the Preset LED flash twice slowly to indicate a save.

Scroll Mode

It is possible to use Preset Scroll Mode *(page 13)* while copying a preset. Simply release the PRESET button once in Copy mode (rapid LED flashing) and use the left and right footswitches to advance backward or forward respectively through the preset slots.

MIDI

It is possible to save a preset using PC commands. First, you'll need to have made the changes you'd like, then enter Copy Mode on your device. Then, send a MIDI PC message to your desired preset slot destination. Then, press and hold the PRESET button to save that preset to the new PC.

Using Neuro

To access and Save a particular preset in Neuro, click on Pathways in the in the Pedals collection when Pathways is connected to your device via USB. Your pedal's presets will be on the left-hand side of the screen. Hit "Save" in the upper right corner of the Preset Editor window to save your preset. Hit "Save As" to rename before saving.

LED Behaviors & Hardware Shortcuts

Pathways is the second Source Audio pedal after Artifakt to utilize a new hardware platform, the SA28X platform, which features full RGB multicolor LEDs which are very useful for displaying different modes and behaviors. Pathways utilizes a handful of different colors on its LEDs. Here is a guide to tell you all the relevant LED behaviors, as well as a few "shortcuts"; essentially hidden hardware options using a combination of knobs/switches.

LED Color Guide

Different colors mean different things.

⚪ White

Control LED: A white Control LED indicates a factory reset is taking place. Once the reset is successful, the Control LED will no longer be lit.

Preset LEDs: Presets #17–128 are indicated by the preset LEDs turning white.

REVERB & TREMOLO/TAP LEDs: When both these LEDs are illuminated, Pathways is in Preset Scroll mode. Use the REVERB and TREMOLO/TAP footswitches to scroll back and forth through presets. Press both switches to exit Scroll mode.

🟡 Amber

Control LED: A flashing amber Control LED indicates ALT mode is in use. Tap the ALT button to enter ALT mode. The Control LED will flash amber while in ALT mode. If no controls are touched, Pathways will automatically exit ALT mode within a second or two.

A solid amber Control LED indicates External Control has been switched ON.

Preset LEDs: Preset slots #1–4 are indicated by the preset LEDs in amber.

REVERB LED: When the REVERB LED is illuminated with amber, Pathways' Reverb side is engaged. Tap the Reverb footswitch to bypass Pathways' reverb, or Hold it to freeze/sustain the reverb tail.

Both REVERB & TREMOLO/TAP LEDs: If the Reverb LED and the TREMOLO/TAP LED are BOTH amber, the device is in COPY mode, and the color of the LEDs corresponds to which preset bank is currently selected.

🔴 Red

Preset LEDs: Preset slots #5–8 are indicated by the preset LEDs in red.

TREMOLO/TAP LED: The TREMOLO/TAP LED will flash red when the Tap Tempo function for the Tremolo effect is in use. The Red will flash intermittently with Green in time with the tempo you have tapped in on the pedal.

Both REVERB & TREMOLO/TAP LEDs: If the Reverb LED and the TREMOLO/TAP LED are BOTH red, the device is in COPY mode, and the color of the LEDs corresponds to which preset bank is currently selected.

🟢 Green

TREMOLO/TAP LED: The TREMOLO/TAP LED will be solid green when Tremolo is engaged. If a Tempo is tapped in using the Tap Tempo feature, then the Green status indicator will flash alternatively with a Red LED, indicating the tempo.

🔵 Blue

Preset LEDs: Preset slots #9–12 are indicated by the preset LEDs in blue.

Both REVERB & TREMOLO/TAP LEDs: If the Reverb LED and the TREMOLO/TAP LED are BOTH blue, the device is in COPY mode, and the color of the LEDs corresponds to which preset bank is currently selected.

🟣 Purple

Preset LEDs: Preset slots #13–16 are indicated by the preset LEDs in red.

Both REVERB & TREMOLO/TAP LEDs: If the Reverb LED and the TREMOLO/TAP LED are BOTH purple, the device is in COPY mode, and the color of the LEDs corresponds to which preset bank is currently selected.

Hardware Shortcuts

Below are hardware processes that can be done using a combination of two buttons or a button & switch.

Preset Extension Mode = CONTROL INPUT button + PRESET button

1 Press the **CONTROL INPUT button** once to get into ALT Mode.

2 Press the **PRESET button** to view the current extension mode. The 1–4 LEDs light in the respective bank color.

You can cycle through 1–4, 1–8, 1–12, 1–16 modes and pick which one you want. Changing the Extension Mode won't actually change the preset and will revert back to the last presets when ALT mode turns off on its own or you press the ALT button again.

Factory Reset = TREMOLO/TAP Switch + Power Cycle
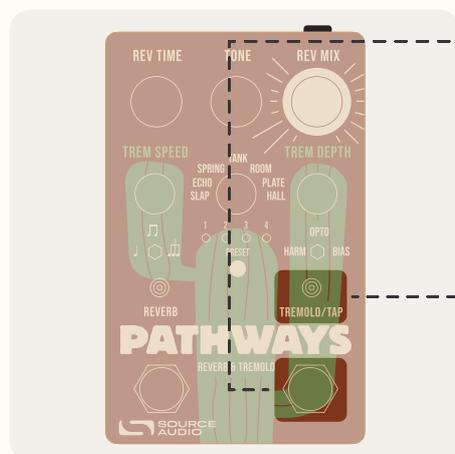
1 Press & hold the **TREMOLO/TAP footswitch** while cycling power on the pedal.

2 You will see the **CONTROL LED** turn solid white, indicating the reset procedure taking place.

Alt Controls

These are alternative controls accessed by first tapping the ALT button to place Pathways into its Alternative Control mode, then using the control as you normally would. ALT Control mode will revert back to normal control mode after a few seconds of inactivity.

Output = CONTROL INPUT button + MIX knob

1 Tap the **CONTROL INPUT button**.

2 Turn the **MIX knob** to adjust the preset Output Volume.

You can use this alternate parameter to adjust levels quickly on-the-fly.

Delay Time (SLAP and ECHO only) = CONTROL INPUT button + REV TIME knob

1 Tap the **CONTROL INPUT button**.

2 Turn the **REV TIME knob** to adjust the Delay Time for both echo-based engines.

Note: neither SLAP nor ECHO have a particularly long delay time like a traditional digital delay, they max out at around 288ms, perfect for a short echo.

Dwell (SPRING and TANK only) = CONTROL INPUT button + TONE knob

1 Tap the **CONTROL INPUT button**.

2 Turn the **TONE knob** to adjust the Dwell parameter for both spring engines.

Dwell controls the intensity at which your input signal drives the virtual spring reverb unit. At higher settings it becomes easier to make the spring reverb "drip".

You may also hear a slight overdriven sound.

Size Time (ROOM, PLATE and HALL only) = CONTROL INPUT button + REV TIME knob

1 Tap the **CONTROL INPUT button**.

2 Turn the **REV TIME knob** to adjust the default Size parameter for the Room, Plate, and Hall reverbs.

Tremolo Boost = CONTROL INPUT button + TREM DEPTH knob

1 Tap the **CONTROL INPUT button**.

2 Turn the **TREM DEPTH knob** to adjust the Tremolo Boost parameter.

The Tremolo Boost parameter is a configurable gain boost only applied to the tremolo section when it is engaged, useful for compensating for any perceived volume loss-a common side-effect of using tremolo.

Stereo Operation & Signal Routing

Pathways is flexible for several different use cases due to its stereo INPUT and OUTPUT jacks. By default, Pathways auto-detects the cables connected to INPUTS and OUTPUTS 1 & 2 and engages the appropriate Routing Mode. Stereo Routing can also be performed manually with the Neuro Editors, select between "Mono In, Stereo Out" or "Stereo In, Stereo Out".

There are four routing modes available when Pathways is in its default Auto Detect mode. See detailed descriptions of each Auto Detect mode in the sections below.

Mono In, Mono Out
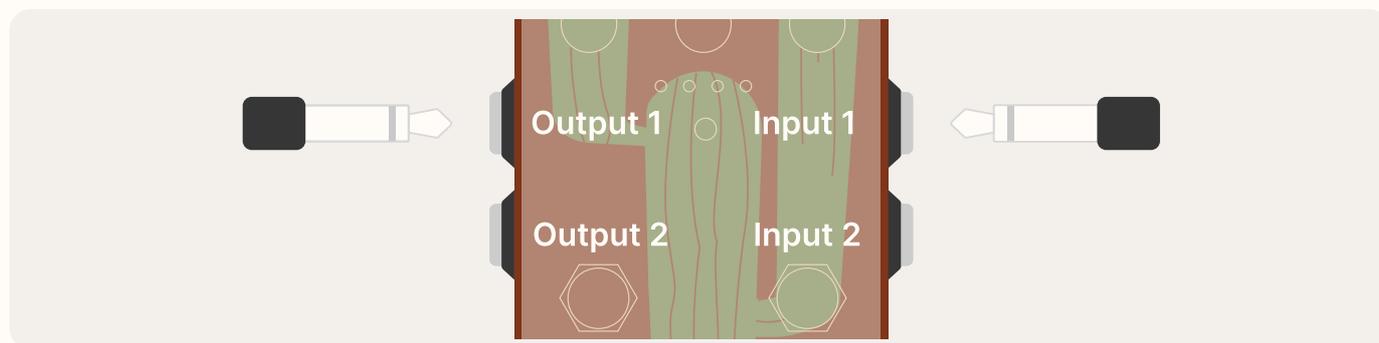
This is the most common use case. Plugging the incoming signal into INPUT 1 with OUTPUT 1 connected to an amp (or the next device in the signal chain) produces a standard mono signal.
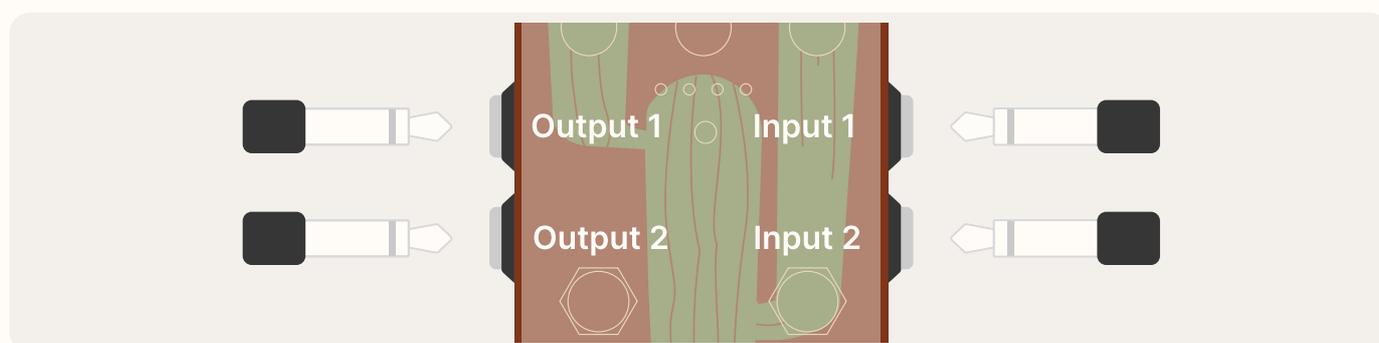
Mono In, Stereo Out
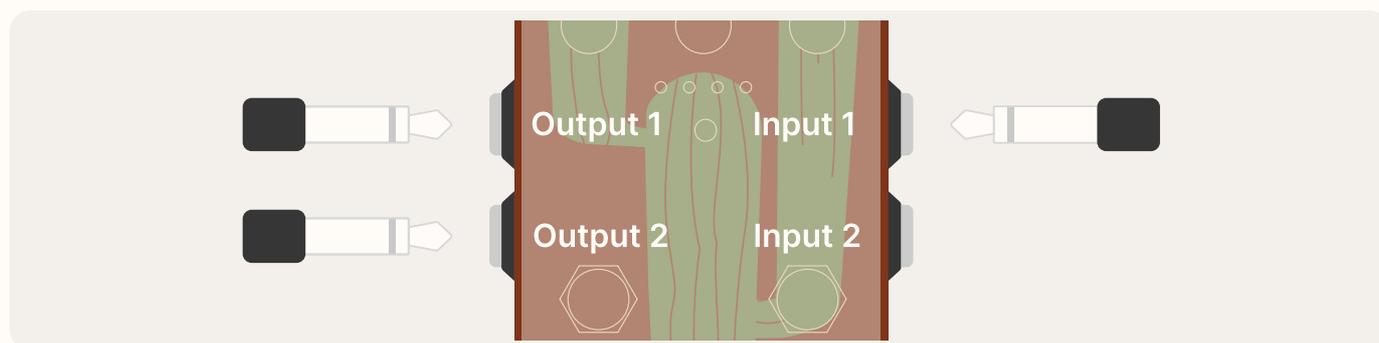
This is a very common use case that allows you to create some nice stereo imaging from a single mono instrument input or use your Pathways as a splitter to send your signal to two separate outputs. When the unit is bypassed in this mode, it will automatically switch to Soft Bypass mode to maintain the bypass signal on the Channel 2 output.

Stereo In, Mono Out
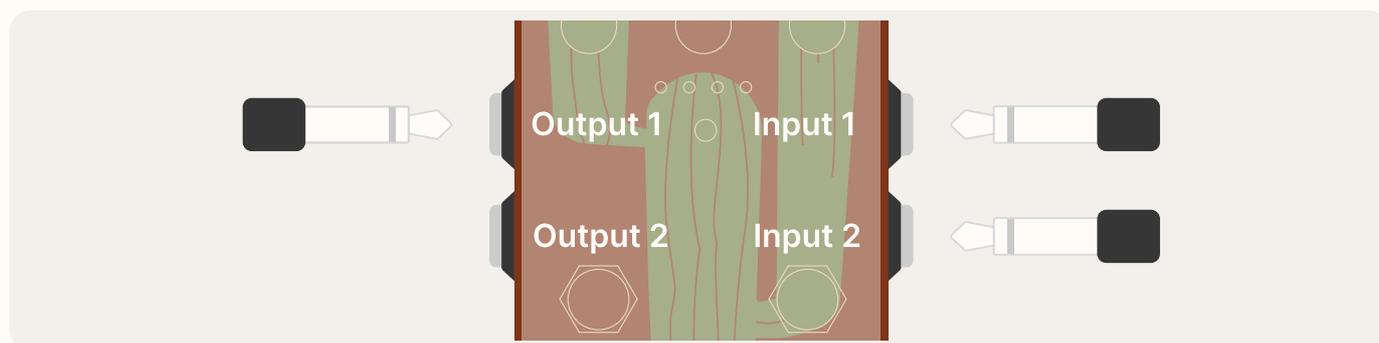
This routing configuration will allow you to connect two mono, unbalanced ¼" TS cables to Inputs 1 & 2. Pathways will sum the stereo input signal and apply tremolo and reverb processing onto both channels. Pathways will then output a single, mono signal from Output 1.

Stereo In, Stereo Out

This mode should be your default selection for Stereo In, Stereo Out applications. Stereo In, Stereo Out allows you to continue your stereo chain of effects.

External Control

There are two main ways Pathways' Control Input port is utilized. Below are the possible uses for the Control Input port. Please note that External Switch Options is a global hardware setting.

Expression

Using the Source Audio Dual Expression pedal, or an expression pedal connected to the Neuro Hub, it is possible to map up to three parameters to be controlled via expression.

Expression Control

Use a Source Audio Dual Expression pedal to control up to three different parameters on Pathways per preset.

Connecting the Expression Pedal

Connect a Source Audio Dual Expression pedal using a 3.5mm TRRS cable from the EXP pedal's Sensor Output to Pathways' CONTROL INPUT port on the pedal's top panel. Press the CONTROL INPUT button to enable External Control.

If you are not getting the desired results from your Expression pedal setup, go to the Hardware Options section of the Neuro software. You'll need to select "Neuro Hub/ Expression" under "Control Input Option", and you may also need to calibrate your Pathways to your expression pedal using Neuro.

Mapping Parameters

The quickest way to map parameters to your expression pedal is by connecting your Pathways to the Neuro App or Neuro Desktop Editor. The Expression Control section is at the bottom of Pathways' Sound Editor. Download the Neuro Desktop Editor and go to Devices > Show Offline Device Editor > Pathways to view the full list of expressible parameters.

MIDI

Pathways can also receive expression signal over MIDI. To do this, you need a MIDI controller that has an expression input and is also compatible with the Pathways (this will be most MIDI controllers). Connect your compatible expression pedal to your MIDI controller, and your MIDI controller to your Pathways. You can also achieve this with the Neuro Hub.

Using a Third-Party Expression Pedal

Pathways' Control Input uses a specific wiring to communicate with both the Dual Expression pedal and the Neuro Hub. To use a third party expression pedal, please refer to the One Series Third Party Expression Pedal Guide.

The Neuro 3 App

Like all pedals in the Source Audio One Series line, Pathways features access to more precise editing parameters, preset sharing, and added functionality via the Neuro Desktop Editor and Mobile App. The Neuro Desktop Editor is available as a free download for Mac or Windows on the Neuro 3 page of the Source Audio website.

Neuro 3

The Neuro 3 App is an excellent tool for creating and organizing highly customized presets for your Pathways. Neuro offers an advanced cataloging system for naming and storing Pathways presets. Neuro is also a tool for installing the latest updates to your Pathways' firmware.

Downloading and Connecting Neuro 3

Neuro 3 is a free download for Windows and Mac and is free on the App Store for iOS and the Google Play store for Android. To download the Neuro 3 for Desktop, go to Neuro 3, where there are downloads for the most up-to-date versions of Neuro for both Windows and Mac.

After the download process, connect your Pathways with a USB Type A male to type C male data cable (Must be data-capable, not solely a charger cable). There is one included in the box with your Pathways.

Connect the cable from the USB-C port on the pedal to the USB port on your computer. Once you've made the connection, Pathways will appear on screen ready for you to add your Collection, indicating that the Pathways is ready to be edited.

If you do not immediately receive the prompt to add the Pathways, you may still be able to add it manually by clicking the (+) icon in the upper left corner next to the Sound Editor pane.

Neuro 3 User Interface

Here is where you'll view, create, save, and share presets you make or download using Neuro 3. The Preset Editor for Pathways contains editable parameters that are not found on the face of the pedal, as well as the ability to create custom mappings for the pedal's analog control surface.

Neuro 3 contains the same controls and features on both Desktop and Mobile, but the Mobile interface differs slightly due to screen size, dimensions, and mobile optimization. Below are screenshots of the Neuro 3 User Interface for Desktop and a brief overview of the software.
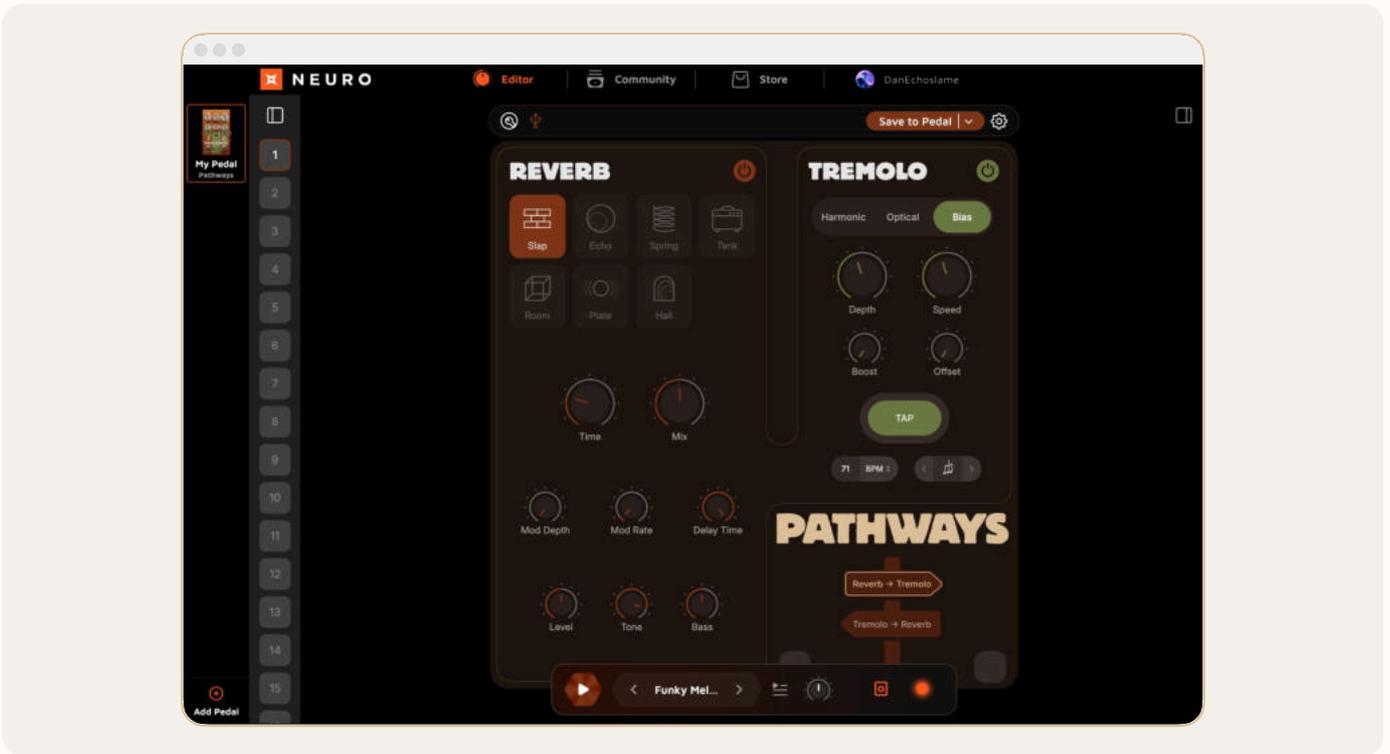
Pedals Collection

Once connected via USB and "Added", Pathways will appear alongside the rest of your Source Audio collection in the left-hand margin. Click on your Pathways to open its Sound Editor.

Right-click on your Pathways for extra options such as Creating/Loading a Backup file, Deleting the entity from your collection, Re-naming the pedal (to avoid confusion with multiple instances of the same type of pedal), or editing its MIDI Map or Hardware Settings.
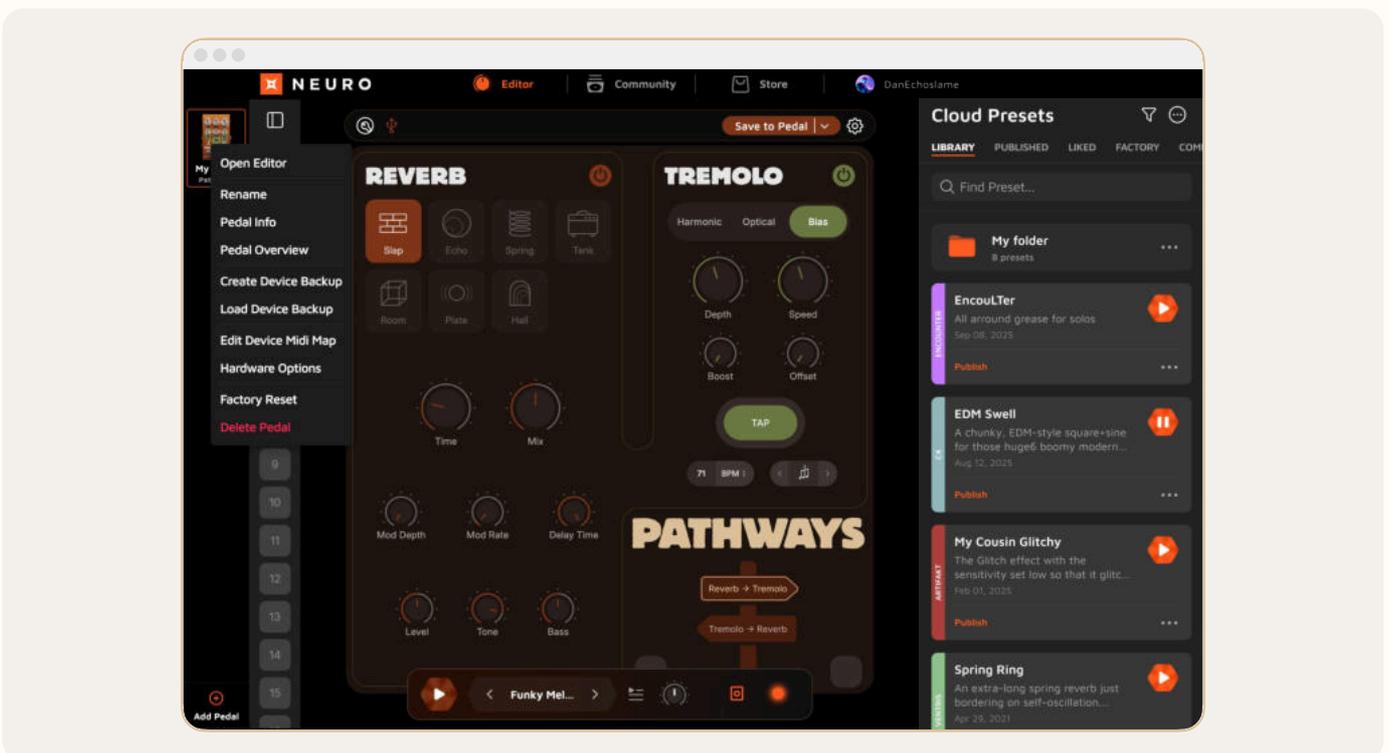
Pedal Presets

To the right of the Pedals Collection is the display window for your pedal's onboard presets. Click on any preset to recall it and view its current state in the Sound Editor window. Drag and drop presets within this column to re-order them. You may also drag presets from any of the Cloud Presets tabs (Library, Published, Liked, Factory, Community) into your Pedal Presets column to burn them to the pedal.

Sound Editor

Center-stage of the Neuro 3 screen is the pedal's Sound Editor, where presets are created, edited, and adjusted.

Sound Editor's functions

Header

Connection Status Indicator

The little orange USB symbol to the right of the Hardware Options (Wrench) icon will illuminate to indicate that Pathways is connected by USB.

Save Button

The orange **Save** button has three different functions.

Clicking just **Save** will lock everything in place on the currently selected preset slot.

Clicking the downward arrow to the right of **Save** will give you two additional options.
Save to Pedal: Manually select a preset slot location to save the current preset.
Save to Library: Save the current preset to your "My Library" tab in Neuro's Cloud Presets section.

Settings (Gear Icon)

Opens a set of global settings such as External Controls, Pedal Info, Firmware, and Factory Reset.

Reverb

Reverb Effect Selector

The seven icons match to the effects on the 7-Way Time-Based Effect Selector. Click on an icon to select your desired echo/reverb effect.

Reverb Controls

Here you'll find a standard array of reverb-related controls, including Time, Mix, Modulation Rate & Depth, and so on. Note that each time-based effect has a slightly different control layout for optimal performance & sound tuning. For example, the SLAP and ECHO engines have a "Delay Time" control so you can set the amount of time between echo repeats. This control becomes "Pre-Delay" for the Spring-based reverbs (SPRING and TANK), and becomes a "Size" control for the three most diffuse reverbs (ROOM, PLATE & HALL).

Tremolo

Tremolo Effect Selector

Select Harmonic, Optical, or Bias tremolo from the three-way Tremolo selector.

Tremolo Controls

Here you'll find a standard array of tremolo-related controls, including Rate (speed) and Depth (amplitude), Boost (to help compensate for perceived volume loss), and Stereo Offset.

Other

Effect Routing

When both effects are engaged, you may set the reverb & tremolo effect order for the given preset. By default, Pathways operates in Reverb before Tremolo mode, but Tremolo into Reverb is also an available routing configuration.

Hardware Options

Click the Wrench icon to access Pathways' Global Hardware Options. Below are brief descriptions of each hardware option.
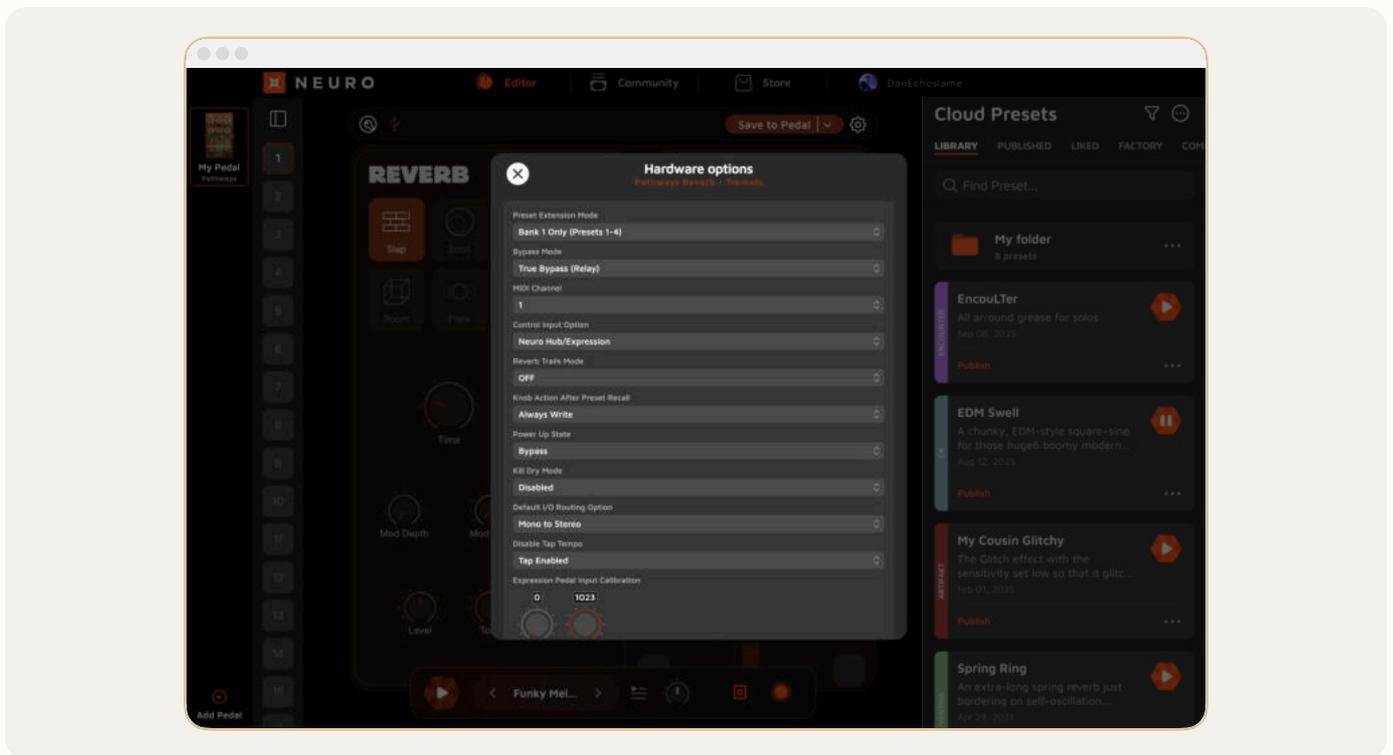
Control Input Option

Sets what type of external device the Control Input "listens" to (Tap Tempo Switch, Expression, Neuro Hub).

Default I/O Routing Option

Set the default I/O Routing Option that loads for each new preset.

Disable Tap Tempo

Disables the integrated Tap Tempo on the Tremolo/TAP switch, relegating it to a standard engage/bypass footswitch for the tremolo side.

Hardware Bypass Mode

Toggle between True (relay) Bypass, and (active analog) Buffered Bypass.

Kill Dry Mode

Good for reamping and W/D or W/D/W setups, Kill Dry Mode removes the dry signal from the pedal entirely.

Knobs Action After Preset Recall

Allows you to select the function of the knobs after a preset is selected. There are three different options:

Always Write — Knob positions will be recalled as exactly how they are set on the pedal

Show Preset Value — This is the default mode. Discover where the knobs are set in each

preset by rotating them. The Control LED will flash when each knob position has been discovered.

Write After Preset Value is Reached — Rotating the knob will initially discover its position within the preset, but once it has been discovered, the Control LED will blink, and the knob will begin writing a new position.

MIDI Channel

Sets the MIDI channel Pathways listens to. Default is Channel 1.

Power-Up State

Set whether the Pathways powers up with reverb and tremolo bypassed, engaged, or a permutation of the two.

Preset Extension Mode

Set whether the top panel (Preset SELECT button) switches between 4 presets, 8 presets, 12 presets, or 16 presets.

Reverb Trails Mode

Enable to allow the reverb/echo tail to fade naturally after bypassing the Reverb side. Disable for a hard cutoff to the reverb tail (no natural decay) when turning Reverb off.

SoundCheck™

New to the Neuro 3 application is SoundCheck™, a way to hear how any preset sounds without a connected rig. SoundCheck™ uses the same DSP that is in the pedal to perfectly replicate the sounds and processing. You can listen to SoundCheck™ through any preset and on any device that is supported by Neuro 3.
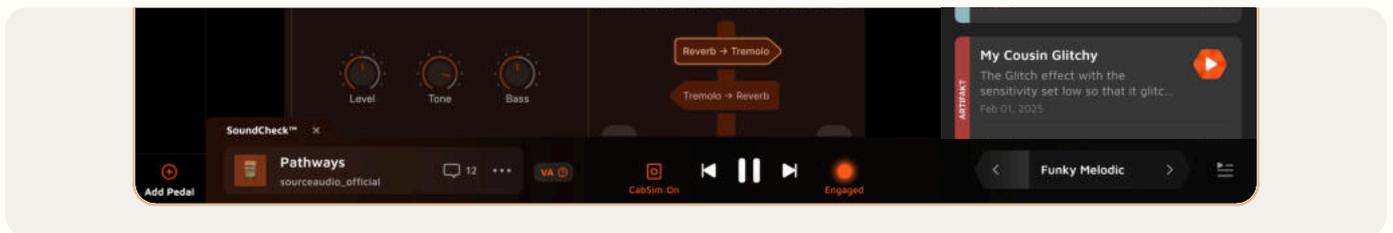
Play

The octagonal "Play" button plays the selected clip through the current preset.

Clip Selector

Not everybody plays the same instrument or style. Select between about 20 pre-recorded clips to pair with the preset.

Input Gain Knob

Allows you to set the level of the clip relative to the preset to avoid clipping and other triggering issues.

CabSim

Toggle a basic amp/cab simulator on/off. CabSim ON will sound more accurate to what the preset sounds like played through an amp, whereas CabSim OFF will produce a more neutral, D.I.-like sound, more akin to reamping.

Engage/Bypass Toggle

You can bypass the preset processing and just hear the dry clip, for A/B testing purposes.

Neuro 3 for Mobile

Like all Source Audio One Series pedals, Pathways is fully supported in the Neuro Mobile app. The Neuro Mobile app is available for iOS and Android devices and allows access to all the preset parameters and hardware options described in the Neuro Desktop editor section above.
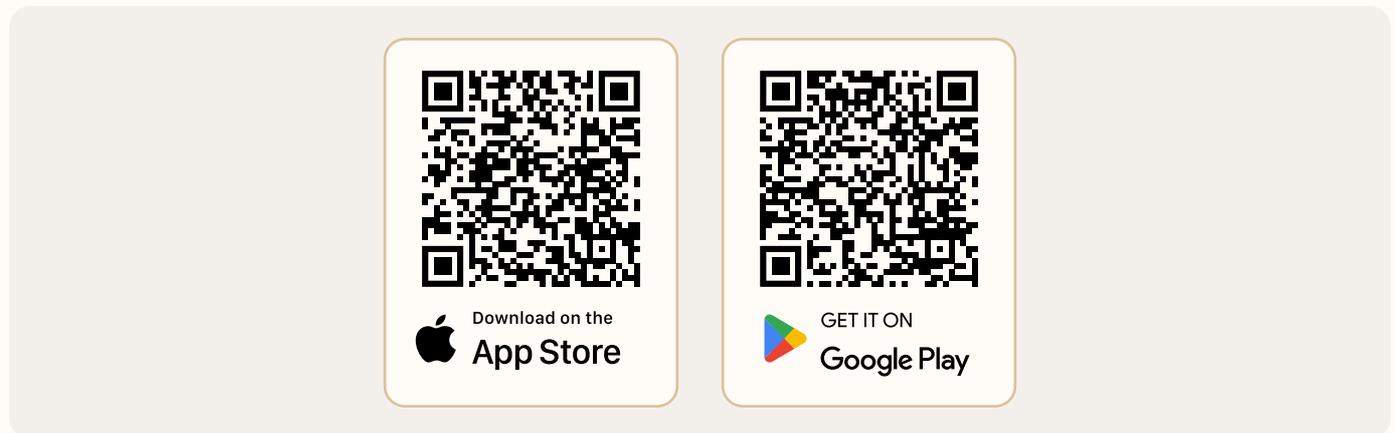
Connecting to the Neuro Mobile App (USB-MIDI)

Pathways is the tenth Source Audio pedal after the Encounter, Artifakt, EQ2, Ultrawave, C4, Atlas, Nemesis, Ventris, and Collider to add two-way communication with the Neuro Mobile app using MIDI over USB. To connect Pathways to the mobile device you will need the proper cable adapters.

Android Devices and iOS devices with USB-C

Connect the included USB-C cable to your Android or iOS device with a USB-C port. For your convenience, we include a USB-A to USB-C adaptor for easy connection to mobile devices with USB-C ports.

iOS Devices with Lightning Connection

Any iOS device with a lightning connector is supported. A "Lightning to USB Camera Adapter" is required.

MIDI

Using a 3.5mm MIDI-TRS connection (Type A), Pathways can be controlled by generic MIDI Continuous Controller (CC) and Program Change (PC) messages. Many of Pathways' parameters (even those that are not assigned to a control knob) are directly accessible via MIDI continuous controller messages.

MIDI Channel

By default, Pathways responds to MIDI Channel 1. Pathways ignores all MIDI messages sent to it that are not on its channel. The input MIDI channel for Pathways can be changed in the Hardware Options menu of the Neuro Editors. Note that the MIDI Input Channel is a global setting that is NOT saved per preset. Note that some manufacturers begin counting MIDI channels at zero (from 0 to 15), while the Source Audio Neuro Editors use the convention of counting from 1 to 16.

## Selecting Presets via Program Change (PC) Messages

The 128 user presets on Pathways can be recalled via program change messages. Presets 1 to 128 are mapped to MIDI Program Change messages 1 to 128.

It is possible to save presets with both sides of Pathways bypassed.

All of the parameters in Pathways can be controlled via MIDI. To view and edit the Pathways' MIDI Map, connect your Pathways to the Neuro 3 Desktop, and in the center Sound Editor pane, click the Gear Icon > Edit Device MIDI Map.

Controlling Pathways with MIDI Continuous Controller (CC) Messages

Pathways responds to MIDI Continuous Controller (CC) messages, shown below. The pedal comes already mapped to a default set of CC numbers. For a complete list of default MIDI mappings and ranges, connect Pathways to the Neuro Desktop Editor via USB, select Pathways as a Device from the left margin, then go to Settings (Gear icon) > Edit Device MIDI Map.
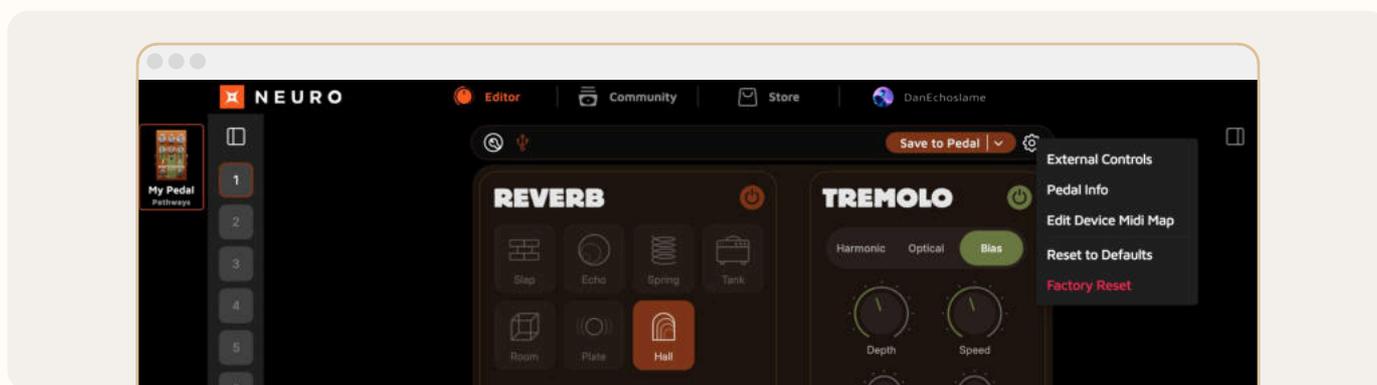
Custom CC Mapping

The default MIDI map provides control over parameters using specific Continuous Controller messages. It is also possible to override the default map and create a custom mapping. Custom MIDI CC mappings are global, meaning they are not unique per preset. The CC mapping will apply in all situations, regardless of which preset is active.

To create a custom MIDI CC mapping, follow these steps:

- Connect your Pathways to the Neuro Desktop Editor
- Select Pathways as a Device in the left margin
- In the top bar next to "Save" and "Info", select Settings (Gear icon) then Edit Device MIDI Map from the dropdown menu
- Pathways' MIDI Map Editor window will open. Simply scroll to the MIDI CC value you wish to remap and click that CC's dropdown menu. A list of parameter choices will unfold
- Select the parameter you wish to re-assign to the chosen CC. The process is complete.
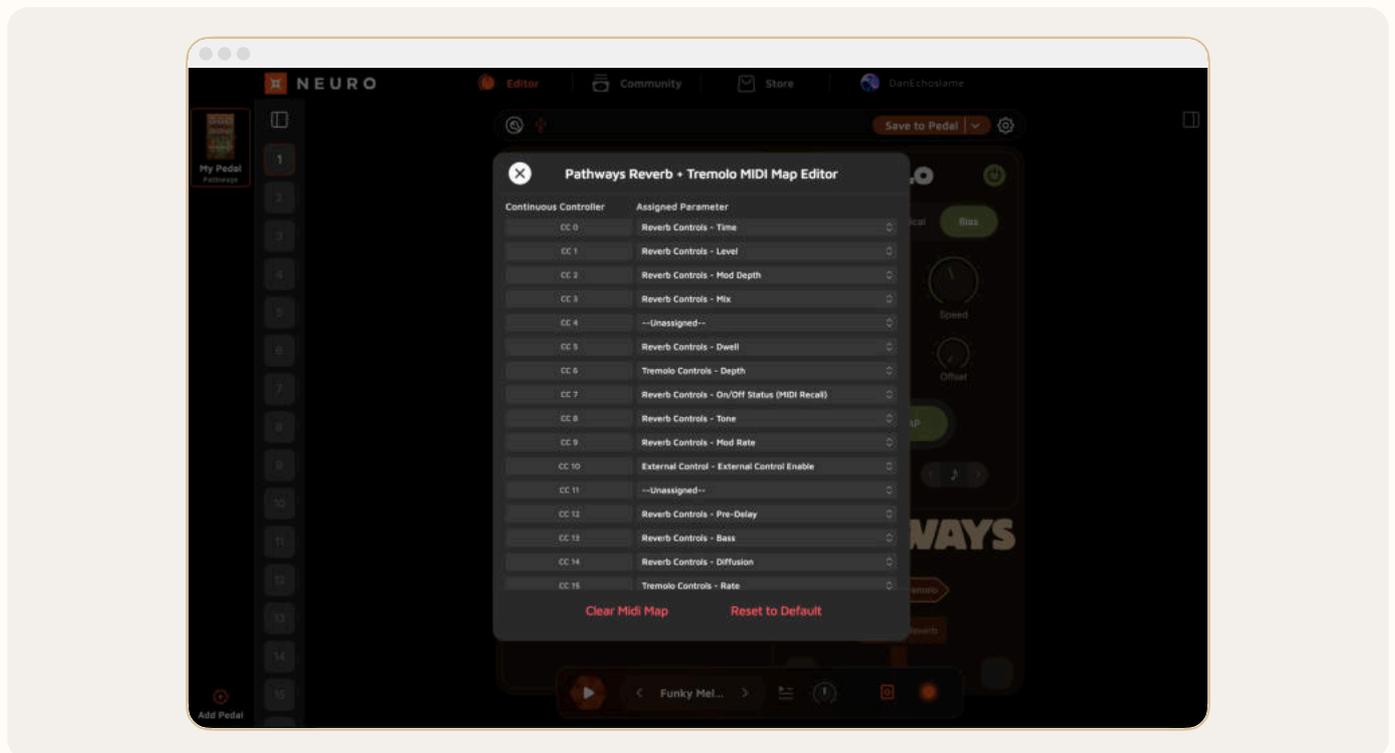
USB

Pathways' USB-C port is plug-and-play ready for Windows and Mac computers. Pathways uses class-compliant drivers, so no special drivers are needed. Just power up Pathways and connect it to the computer using a USB cable. The computer will automatically recognize Pathways, which will be identified as "One Series Pathways Reverb" in the operating system.

The USB connectivity can also be used to connect to your mobile device and use the Neuro Mobile App with your Pathways.

USB connectivity brings many benefits, such as the ability to connect with the Neuro 3 App and for downloading Pathways firmware updates, accessing an advanced set of effect editing parameters, and downloading alternate engines. The USB port also provides MIDI connectivity to a DAW.

USB-MIDI

Pathways will appear as a MIDI device in your computer's operating system, and can communicate with audio production software that utilizes MIDI, such as ProTools, Ableton Live, and Logic Pro. MIDI messages can be sent directly to Pathways from these software environments using the USB connection.

Specifications

Power

Power Requirements	200mA @ 9V DC
Polarity	Center negative

Audio Performance

Maximum Input Level	+6.54 dBV = 8.76 dBu = 2.12 V RMS = 6.0 V p-p
Full Scale Output Level	+6.54 dBV = 8.76 dBu = 2.12 V RMS = 6.0 V p-p
Input Impedance	1 Mega Ohm (1 MΩ)
Output Impedance	600 Ohm (600 Ω)
Audio Path Dynamic Range	110 dB
Audio Conversion	24-bit
Digital Data Path	56-bit
Universal Bypass™	Relay-based true bypass or Analog buffered bypass

Dimensions

Length × Width × Height	11.4×7.0×3.71 cm / 4.5×2.75×1.46 inches
Height, including knobs	5.1 cm / 2 inches
Weight	280 grams / 0.625 pounds

Troubleshooting

Restore Factory Settings

To revert Pathways to its factory settings, clearing all user data, presets, expression mappings, and changes to the MIDI mapping, use either the Neuro Mobile App or Neuro Desktop Editor and choose the Factory Reset option in the Hardware Options menus. It is also possible to perform a factory reset without the Neuro App by following these steps:

- Press and hold the ON/OFF Footswitch.
- Connect the power supply.
- The Control LED will blink rapidly until the reset is complete. You can stop holding the Footswitch once the Control Led starts to blink.

Noise & Hum

Power source: Ensure that the proper power supply is being used.

Near noise source: Move pedal away from power supplies and other equipment.

Other equipment: Remove other effects from signal chain; see if noise persists.

Bad cables: Swap out audio cables.

USB ground loop: When connected to a computer using a USB cable, noise can appear in the audio signal. This usually results from ground loop noise due to the Pathways and computer running on separate power supplies. In the case of laptops, disconnecting the computer's power supply and running it on a battery can often mitigate the noise. External display monitors are often the primary source of noise and powering down monitors can also resolve noise issues.

Ground loop with amp: Make sure your Pathways is running on the same power mains circuit as your guitar amplifier.

Unit Appears Dead / No LEDs Lit

Wrong power supply: Use correct power supply. See the DC 9V (Power) section for more details.

Frequently Asked Questions

What kind of instruments can I connect to Pathways' inputs?

Pathways' audio inputs are high impedance (~ 1 MΩ) and they can accept high impedance signal sources like guitars/basses with passive pickups, as well as low impedance sources like line-level audio circuits, guitars/basses with active pickups, electronic keyboards, or mixer outputs. The input circuit can handle signals ranging up to 6.0 Volts, peak-to-peak.

Can I power Pathways directly over USB, without using the 9 Volt supply?

No. USB provides 5 Volts, but Pathways needs 9 Volts, so it cannot be powered directly from USB. Make sure that you have plugged in the included 9V DC power supply when connecting to the Pathways' USB port.

When connecting Pathways to a recording interface or mixer, should I use a Lo-Z (microphone) or Hi-Z (line / instrument) input?

Pathways' output will be low impedance when the effect is active or in buffered bypass mode, but it will be high impedance when using true bypass mode and a guitar with passive pickups. Therefore, it is recommended that you use a high impedance (Hi-Z) input on your recording interface or mixer to avoid signal loss.

Why doesn't Pathways respond to MIDI messages being sent to it?

By default, Pathways should respond to MIDI continuous controller messages or program changes on channel 1. Pathways' MIDI channel can be configured using the Neuro Editors. Channel numbers in MIDI use zero-based counting, so MIDI channel 1 is described as 0 in hexadecimal, MIDI channel 2 is described as 1 in hexadecimal, and so on, concluding with MIDI channel 16, which is described as F in hexadecimal. A continuous controller message starts with a hexadecimal B and is followed by the channel number (0 through F).

So, the command byte from your MIDI controller should be formatted as shown in the following table:

MIDI Channel (Decimal)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CC Command Byte (Hex)	B0	B1	B2	B3	B4	B5	B6	B7	B8	B9	BA	BB	BC	BD	BE	BF

Each continuous controller command byte is followed by two bytes: the CC number and the value. So, each CC message consists of a total of three bytes. If Pathways is not responding to MIDI, make sure that your MIDI controller is properly configured and sending messages in the format described above.

TRS Adaptor

Pathways utilizes "Type A" convention for its 3.5mm TRS MIDI Input and Throughput. If you are using DIN-TRS adaptors, make sure they are Type A and not Type B.

Other Devices' MIDI OUTs

Some devices, like notably the Eventide H9, have a MIDI Out/Thru port that doesn't "play nice" with downstream pedals. Try rearranging your MIDI effects chain before determining a fault with the pedal.

Can I use Pathways in my amp's effects loop?

Yes. Pathways' audio inputs can handle up to 8.76 dBu or 6.0 Volts peak-to-peak, which allows it to work in most amp effects loops. Be sure to check your amp's documentation to verify that the maximum send level is less than Pathways' maximum input level.

How do I update the firmware?

Firmware updates are available via the Neuro Desktop Editor using the USB port. Power the pedal and connect it to your computer using a mini-USB cable. The Neuro Desktop Editor is available from Source Audio's website: sourceaudio.net/pages/neuro. While the pedal is connected, right-click on the Pathways icon in the left margin, then select "Firmware Update" from the resulting menu.

Mac isn't letting me download the Neuro 3 software?

Mac users may see this warning message when trying to open the Neuro Desktop software: "App can't be opened because it was not downloaded from the Mac App Store". In order to run the Neuro Desktop, please refer to the steps in this Apple support article: https://support.apple.com/en-us/HT202491.

Mac users may also get the warning "App cannot be opened because it cannot be checked for malicious software". If this message pops up after downloading & attempting to open Neuro for the first time, make sure to click "Show in Finder". This will bring you to Neuro's location in your directory. Then, CTRL + Click "Open" from the resulting menu to open the Neuro app. You will get the warning once more, but this time, there will be an "Open" button. Hit Open and you will be good to go.

Rubber Feet

The Pathways comes standard with a flat aluminum bottom, making it easy to apply Velcro and mount to a pedalboard. Additionally, adhesive rubber feet are included in the Pathways box. Applying the rubber feet to the Pathways can help prevent it from sliding on flat surfaces such as a hardwood floor.

Waste Disposal Notes

If possible, dispose of the device at an electronics recycling center. Do not dispose of the device with the household waste.

For full compliance with EN 61000–4-6 standard, input cable must be less than 3 meters in length.

Warranty

Limited Transferrable Warranty

Source Audio, LLC (hereinafter "Source Audio") warrants that your new Source Audio Pathways Reverb & Tremolo, when purchased at an authorized Source Audio dealer in the United States of America ("USA"), shall be free from defects in materials and workmanship under normal use for a period of two (2) years from the date of purchase by the original purchaser. Please contact your dealer for information on warranty and service outside of the USA.

Under this Limited Warranty, Source Audio's sole obligation and the purchaser's sole remedy shall be repair, replacement, or upgrade, at Source Audio's sole discretion, of any product that, if properly used and maintained, proves to be defective upon inspection by Source Audio. Source Audio reserves the right to update any unit returned for repair and to change or improve the design of the product at any time without notice. Source Audio reserves the right to use reconditioned parts and assemblies as warranty replacements for authorized repairs. Any product repaired, replaced, or upgraded pursuant to this Limited Warranty will be warranted for the remainder of the original warranty period.

This Limited Warranty is extended to the original retail purchaser. This Limited Warranty can be transferred to anyone who may subsequently purchase this product provided that such transfer is made within the applicable warranty period and Source Audio is provided with all of the following information: (i) all warranty registration information (as set forth on the registration card) for the new owner, (ii) proof of the transfer, within thirty (30) days of the transfer, and (iii) a photocopy of the original sales receipt. Warranty coverage shall be determined by Source Audio in its sole discretion. This is your sole warranty. Source Audio does not authorize any third party, including any dealer or sales representatives, to assume any liability on behalf of Source Audio or to make any warranty on behalf of Source Audio.

Warranty Information

Source Audio may, at its option, require proof of the original purchase date in the form of a dated copy of the original authorized dealer's invoice or sales receipt. Service and repairs of Source Audio products are to be performed only at the Source Audio factory or a Source Audio authorized service center. Prior to service or repair under this Limited Warranty, the purchaser must request from Source Audio a return authorization, which is available at:

Source Audio LLC
120 Cummings Park, Woburn, MA 01801
(781) 932–8080 or at www.sourceaudio.net

Unauthorized service, repair, or modification will void this Limited Warranty.

Disclaimer and Limitation of Warranty

Do not open the effects pedal under any circumstance. This will void the warranty.

The foregoing limited warranty is the only warranty given by Source Audio and is in lieu of all other warranties. All implied warranties, including warranties of merchantability and fitness for any particular purpose, exceeding the specific provisions of this limited warranty, are hereby disclaimed and excluded from this limited warranty. Upon expiration of the applicable express warranty period, Source Audio shall have no further warranty obligation of any kind, express or implied. Source Audio shall in no event be liable for any special, incidental, or consequential damages suffered by the purchaser or any third party, including without limitation, damages for loss of profits or business or damages resulting from use or performance of the product, whether in contract or in tort. Source Audio shall not be liable for any expenses, claims, or suits arising out of or relating to any of the foregoing. Some states do not allow the exclusion or limitation of implied warranties so some of the above limitations and exclusions may not apply to you. This Limited Warranty gives you specific legal rights, and you may also have other rights, which vary, from state to state. This Limited Warranty only applies to products sold and used in the USA. Source Audio shall not be liable for damages or loss resulting from the negligent or intentional acts of the shipper or its contracted affiliates. You should contact the shipper for proper claims procedures in the event of damage or loss resulting from shipment.

Version History

March 24, 2026: Initial release