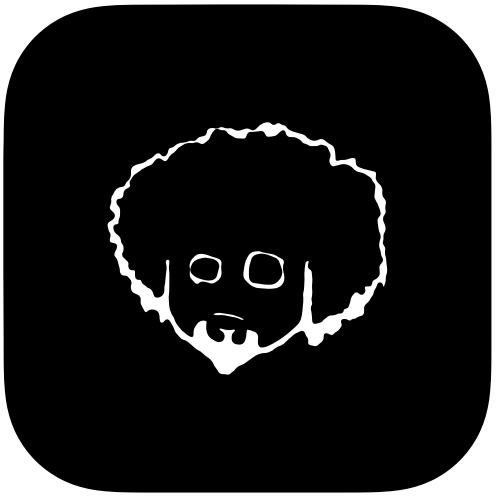


Archetype Rabea X

Version 1.0.0 for Windows® and macOS®

User Manual

2024

Contents

02

Getting Started

New to plugins and have a lot of questions? This is your guide to the basics. Read on to learn what you need to start using your Neural DSP plugin.

Basic Requirements

Getting set up is very simple, but there are a few things you will need before you begin.

• Electric guitar or bass

The instrument you wish to use the plugin with, and an instrument cable.

• Computer

Any Windows® PC or Apple Mac® capable of multitrack audio processing. Make sure your machine meets the minimum required specifications:

macOS® minimum requirements
- Intel Core i3 Processor (i3-4130 / i5-2500 or higher)
- Apple Silicon (M1 or higher)
- 8GB of RAM or more
- macOS® 11 Big Sur (or higher)

Windows® minimum requirements
- Intel Core i3 Processor (i3-4130 / i5-2500 or higher)
- AMD Quad-Core Processor (R5 2200G or higher)
- 8GB of RAM or more
- Windows® 10 (or higher)

400MB - 2GB of free storage space is required per plugin installed.

Our latest plugins require AVX support, a feature added by Intel “Ivy Bridge” and AMD “ Zen” generations.

• Audio interface

An audio interface is a device that connects musical instruments and microphones to a computer via USB, Thunderbolt, or PCIe.

The Quad Cortex can be used as USB audio interface.

• Studio Monitors or Headphones

Once the instrument signal is being processed by the plugin, you need to hear it. Having the sound come out from the computer speakers is not recommended due to quality and latency issues.

• iLok License Manager App

iLok License Manager is a free app that allows you to manage all your plugin licenses in one place and transfer them between different computers.

Internet connection is required to activate your license through iLok License Manager.

Supported DAWs

DAWs, short for “Digital Audio Workstations”, are music production software programs that have a comprehensive set of tools for recording, editing, and mixing digital audio.

All Neural DSP plugins include a **standalone app** version, meaning that you don’t need a DAW to use them. However, if you are planning on recording your playing, you will need to install your plugins to your DAW.

A complete installation setup will automatically install all the different plugin formats:

- **APP**: Standalone app.
- **AU**: Plugin format developed by Apple for use on macOS®.
- **VST2**: Multi-platform format compatible across multiple DAWs on both macOS® and Windows® devices.
- **VST3**: An improved version of the VST2 format that only uses resources during monitoring/playback. It’s also available on both macOS® and Windows® devices.
- **AAX**: Pro Tools native format. It can only be used on Avid Pro Tools.

Most DAWs automatically scan for new plugins upon launch. If you cannot find the plugins in your DAW’s plugin manager, manually rescan the plugin folder to locate the missing files.

Our plugins are compatible with a wide range of DAWs. Below is a list of the DAWs we have tested:

- **Ableton Live 12**
- **Pro Tools 2024**
- **Logic Pro 11**
- **Cubase 13**
- **Reaper 7**
- **Presonus Studio One 6**
- **Reason 12**
- **FL Studio 21**
- **Cakewalk by Bandlab**

Note that even if your DAW is not listed above, it might still work. If you encounter any compatibility issues, don’t hesitate to contact support@neuraldsp.com for further assistance.

Once your plugins are available in your DAW, create a new project, insert a new audio track, arm it for recording, and load the plugin onto the track.

You can also perform a custom installation where you can install only the formats you need.

If you didn’t install the required plugin format for your DAW during the setup, run the installer again and reinstall the missing format.

File Locations

Neural DSP plugins will be installed in default locations for each plugin format unless a different custom location is selected in the process.

• macOS®

By default, the plugin files are installed in the following directories:

- **AU**: Macintosh HD/Library/Audio/Plug-ins/Components
- **VST2**: Macintosh HD/Library/Audio/Plug-ins/VST
- **VST3**: Macintosh HD/Library/Audio/Plug-ins/VST3
- **AAX**: Macintosh HD/Library/Application Support/Avid/Audio/Plug-ins
- **Standalone App**: Macintosh HD/Applications/Neural DSP
- **Preset Files**: Macintosh HD/Library/Audio/Presets/Neural DSP
- **Settings Files**: <User Folder>/Library/Application Support/Neural DSP
- **Manual**: Macintosh HD/Library/Application Support/Neural DSP

There are two “Library” folders on macOS®. The **main Library folder** is located in Macintosh HD/Library.

To access the **User Library folder**, open a Finder window, click on the “Go” menu on top, hold down the Option key and click on “Library”.

• Windows®

By default, the plugin files are installed in the following directories:

- **VST2**: C:\Program Files\VSTPlugins
- **VST3**: C:\Program Files\Common Files\VST3
- **AAX**: C:\Program Files\Common Files\Avid\Audio\Plug-Ins
- **Standalone App**: C:\Program Files\Neural DSP
- **Preset Files**: C:\ProgramData\Neural DSP
- **Settings Files**: C:\Users\<Your profile>\AppData\Roaming\Neural DSP
- **Manual**: C:\Program Files\Neural DSP

By default, the **ProgramData** and **AppData folders** are hidden on Windows®.

While in the File Explorer, click on the “View” tab and unchck the checkbox for “Hidden Items” to make these folders visible.

Uninstalling Neural DSP Software

To uninstall Neural DSP software on macOS®, delete the files manually in their respective folders.

On Windows®, Neural DSP software can be uninstalled either from the Control Panel or by selecting the “Remove” option from the setup installer.

Neural DSP Plugin files are available in 64-bit only.

License Activation

In order to use Neural DSP plugins, you will need an iLok account and the iLok license Manager application installed on your computer. iLok is completely free to use.

• Creating an iLok account

Follow these steps to create an iLok account:

- **Registration form**: Go to iLok's account registration page and fill out the required fields in the registration form. Click on "Create Account" to finalize the registration.
- **Email Verification**: A confirmation email will be sent to the email address provided during registration. Open the confirmation email in your inbox and click on the verification link.

• iLok License Manager

Download iLok License Manager and install it on your computer. After that, open the app and login using your iLok account email address and password.

Download iLok License Manager from here.

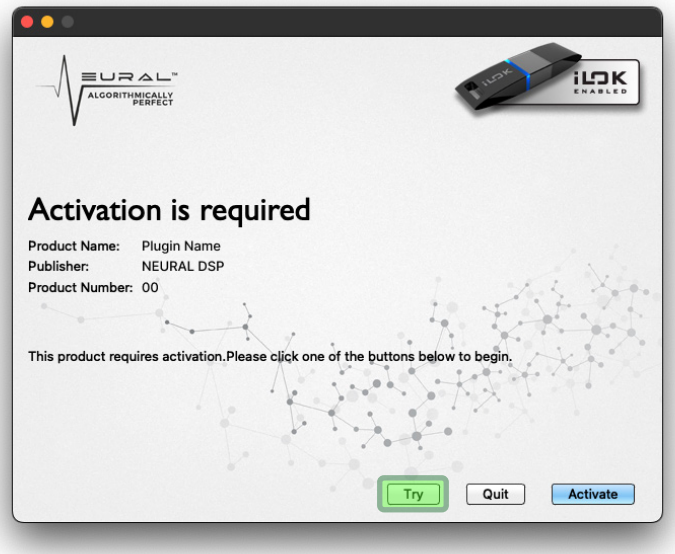
• Neural DSP Plugin Installer

Go to the Neural DSP Downloads page to get the plugin installer. Install the plugin by following the instructions on-screen.

400MB - 1GB of free storage space is required per plugin installed.

• 14-Day Trial

After installing the plugin, open the standalone version or load it on your DAW. When the plugin interface opens, click on "**Try**".



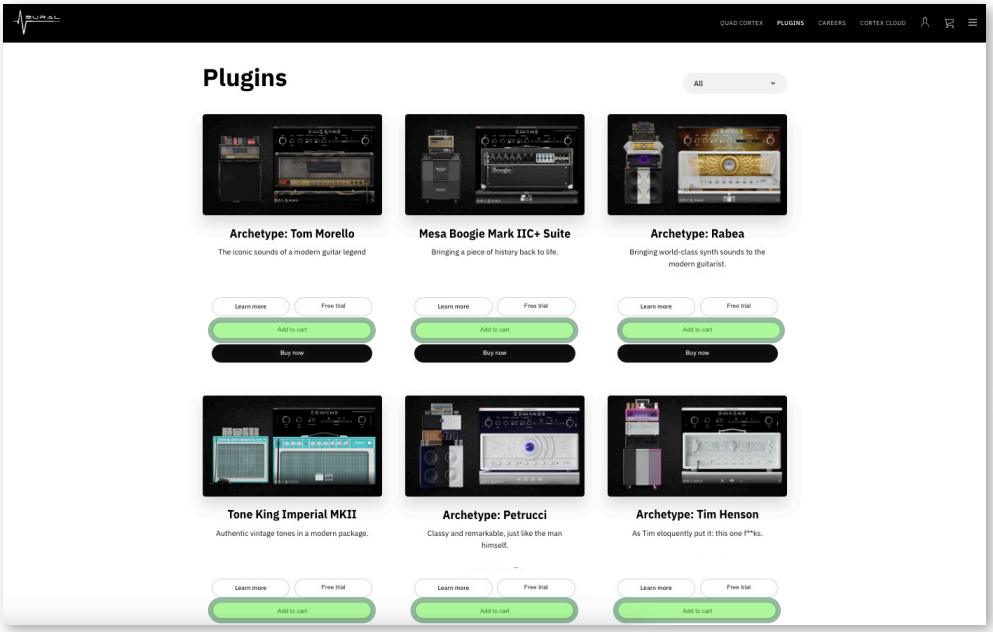
If you get the popup message "*Attempted to start the trial too many times. Please purchase a license to run the product*", open iLok License Manager, log in with your iLok account, right-click on your trial license and select "Activate".

You will be asked to login to your iLok account. After logging in, the 14-day trial will be added to your iLok account automatically.

• Perpetual License

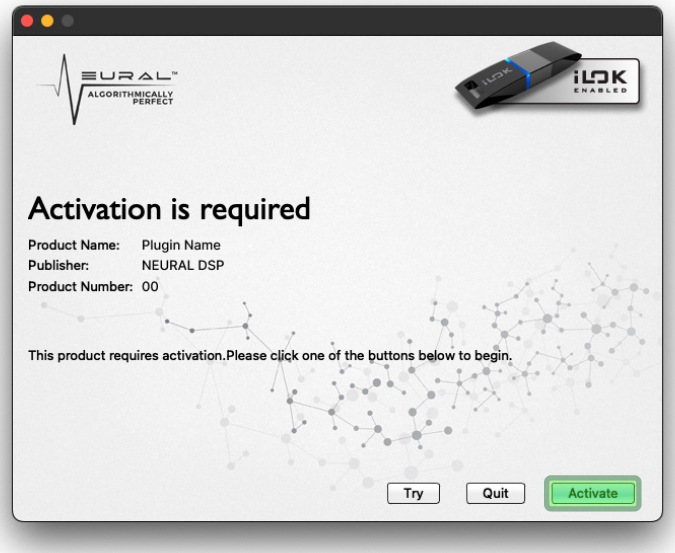
Before purchasing a license, make sure your iLok account is created and linked to your Neural DSP account. Additionally, make sure the iLok License Manager app is up to date.

Purchase a license by visiting the product page of the plugin you want to buy, adding it to your cart, and completing the steps for purchasing.



The purchased license will be deposited to your iLok account after the checkout automatically.

After installing the plugin, open the standalone version or load it on your DAW. When the plugin interface opens, click "**Activate**".



Login to your iLok account when prompted and activate the license on your machine.

Your Perpetual License then will be activated.

Link your iLok account to your Neural DSP account by entering your iLok username in your account settings.

You do not need an iLok USB dongle to use Neural DSP plugins as they can be activated directly onto computers.

A single license can be activated on 3 different computers at the same time as long as the same iLok account is used on all of them.

Licenses can be deactivated from computers that are not in use and transferred to other devices. This process can be repeated indefinitely.

Setting up your plugin

Once you have installed and activated your plugin, it's time to set up and start using it. To get started, launch the standalone app of the plugin and click on **SETTINGS** in the utility bar at the bottom of the plugin interface.

Use the following settings to optimize your plugin's performance and get the best possible tone out of it.

- **Audio Device Type**

All the audio drivers installed on your computer will be displayed here. For most audio recording applications on Windows®, **ASIO** is the preferred driver format to use. **CoreAudio** will be the best option on macOS®.

- **Audio Device**

Choose the audio interface that your instrument is connected to.

- **Audio Input Channels**

Select the interface input(s) you have plugged your instrument(s) into.

- **Audio Output Channels**

Select the interface output(s) that you use for monitoring the audio.

- **Sample Rate**

Set it to 48000 Hz (unless you specifically require a different sample rate).

- **Audio Buffer Size**

Set it to 128 samples or lower. Increase the buffer size to 256 samples or higher if you experience performance issues.

Knobs and Sliders are controlled with the mouse.
Click-and-drag a Knob up to turn it clockwise. Moving the cursor down will turn the Knob counterclockwise. Double-click to recall default values.
To fine-tune values, hold down the "Option" (macOS®) or the "Control" key (Windows®) while dragging the cursor.

Click on switches to toggle their state.
Some switches include LED indicators that light up when a parameter is engaged.

What is latency?

When monitoring plugins in real time, you may experience a slight delay between playing a note on your instrument and hearing the sound through your headphones or studio monitors. This delay is called latency. Decreasing the buffer size reduces the latency, but demands more from your computer's processing power.

How do I change these settings in a DAW audio session?

To set up audio settings for plugins within a DAW, open the audio settings section of your DAW's preference menu. From there, you can select your audio interface, set the I/O channels, adjust the sample rate and buffer size.

Check our Knowledge base if you need more information about the process of setting up and optimizing your plugin for the best possible performance and sound quality.

The SETTINGS tabs is available on the Standalone app only.

03

Plugin Components

Here is a rundown of the sections of Archetype Rabea X.

- **Synth Section**
  - “OVERLORD” - Monophonic Synth Pedal
- **Pre Effects Section**
  - “TWIN BLADE” - Dual Compressor Pedal
  - “CHAOS BED” - Octaver Pedal
  - “COLOSSUS” - Fuzz Pedal
  - “PARAGON” - Overdrive Pedal
- **Amp Section**
  - Clean Amplifier
  - Crunch Amplifier
  - Lead Amplifier
- **Cab Section**
  - Factory Microphones
  - Dual Custom IR slots
  - Room Reverb module
- **EQ Section**
  - Semi-Parametric EQs (4-Band)
  - High-pass and Low-pass filters
- **Post Effects Section**
  - “ATLAS” - Delay Pedal
  - “AEONS” - Reverb Pedal
- **Global Features**
  - Input Gate
  - Transpose
  - Doubler
  - Preset Manager
  - Tuner
  - Metronome
  - MIDI Support

Synth Section

- **“OVERLORD” - Monophonic Synth Pedal**

Header Controls

- **GATE Knob**: Dial up the knob to increase the gate threshold, reducing the level of the Synth signal when it drops below the set threshold value.
- **SENSITIVITY Knob**: Determines how much input signal is needed to activate the oscillators.
- **GLIDE Knob**: Adjusts the smoothness and speed of pitch transitions between notes. The higher the value, the slower the pitch shift.
- **ENV. RETRIGGER Switch**: Click to toggle. When enabled, the oscillators trigger a new envelope each time a new note is played.
- **TUNING Display**: Adjusts the reference pitch of the arpeggiator (390-490Hz).
- **PRE/POST Switch**: Toggles the position of the Synth pedal in the audio chain:
- **PRE**: Places the Synth before the Pre Effects Section.
- **POST**: Places the Synth in parallel to the audio chain, mixing it back in before the Post Effects Section.
- **MIX Knob**: Controls the amount of Synth signal that is added to the direct input signal.
- **OUTPUT Knob**: Adjusts the output level of the Synth pedal.

Monophonic Synth

The “OVERLORD” is a synth device designed to trigger up to two oscillators simultaneously.

It performs best with monophonic sources, as playing multiple notes while the pedal is engaged may cause the oscillators to respond unpredictably.

Arpeggiator Controls

- **ACTIVE Switch**: Click to activate/deactivate the Arpeggiator.
- **NOTE Toggle Switches**: Click to toggle notes in the arpeggio.
- **KEY Dropdown Menu**: Determines the key of the arpeggio.
- **SCALE Selector**: Determines the musical scale (Major/Minor).
- **OCTAVE Selector**: Determines the range of the arpeggio.
- **PATTERN Selector**: Sets the pattern that the arpeggiated notes will follow.
- **RATE Slider**: Adjusts the speed of the arpeggio.
- **SYNC Switch**: Click to sync/unsync the Arpeggiator rate to the host tempo.

The ROOT note is always active.

Amplifier Controls

- **DECAY/ATTACK Knob**: Controls the Synth signal envelope. Turning the knob clockwise increases the attack time for a softer onset, while turning it counterclockwise shortens the decay, reducing sustain.
- **SUSTAIN Knob**: Controls the level at which the signal holds after a note is played. High sustain values hold the signal at a louder level, while lower values result in a softer, subtle sustain.

By default, the envelope is shaped by the instrument signal.

Oscillators Controls

- **ACTIVE Switches**: Click to activate/deactivate the Oscillators.
- **WAVEFORM Selector**: Determines the waveform shape for each Oscillator.
- **SEMITONES Knob**: Transposes the waveform pitch up and down up to 24 semitones.
- **DETUNE Knob**: Detunes the waveform pitch up and down up to 100 cents.
- **LEVEL Knob**: Adjusts the output level of the Oscillator.
- **OSC1 & OSC2 Switches**: Click to toggle the unisons for each Oscillator.
- **UNISONS Field**: Drag up and down to increase or decrease the amount of unisons.
- **WIDTH Knob**: Adjust the panning of the unison voices. Not available in PRE mode.
- **DETUNE Knob**: Detunes the unisons pitch up and down.

Waveforms

From left to right: Sine, Triangle, Sawtooth, Square, Pulse, Noise 1 (White Noise), and Noise 2 (Pink Noise).

Filter Controls

- **ACTIVE Switches**: Click to activate/deactivate the Filter.
- **SLOPE Selector**: Adjusts the aggressiveness of the filter cutoff, which is measured in decibels of gain reduction per octave.
- **CUTOFF Knob**: Determines the frequency at which the filter begins to reduce the signal amplitude.
- **RESONANCE Knob**: Adjusts how much the frequencies around the cutoff point are boosted, creating a peak in the frequency response.
- **ENVELOPE Slider**: Increase to make the envelope modulate the cutoff frequency (1/100). Decrease it to invert the movement of the filter (-1/-100).
- **DECAY/ATTACK Knob**: Controls the filter envelope. Turning the knob clockwise increases the attack time for a softer onset, while turning it counterclockwise shortens the decay, reducing sustain.
- **DRIVE Knob**: Adjusts the amount of saturation of the filter.

Envelope

At value 0, the CUTOFF parameter is fixed to the set frequency.

Pre Effects Section

This section consists of four effects in series which can be used either separately or combined.

• "TWIN BLADE" - Dual Compressor Pedal

- **DRY Knob**: Adjusts the balance between the direct and compressed signals.
- **IN Knob**: Adjusts the input level of the pedal.
- **OUT Knob**: Adjusts the output level of the pedal.
- **ATT/REL 1 & 2 Knobs**: Set the speed of the first and second compression stages, respectively.
- **THRU Knob**: Adjust the amount of signal sent from the first to the second compression stage.
- **BYPASS Stomp Switch**: Click to activate/deactivate the pedal.

ATT/REL Knobs Behavior

Turning them clockwise slows the attack and speeds up the release. Turning them counter-clockwise speeds up the attack and slows the release.

• "CHAOS BED" - Octaver Pedal

- **MODE Switch**: Toggles between 'Vintage' and 'Modern' modes.
- **DIRECT LEVEL Knob**: Adjusts the amount of direct input signal passing through the pedal.
- **OCT UP Knob**: Sets the level of the octave-up signal.
- **OCT DWN Knob**: Sets the level of the octave-down signal.
- **BYPASS Stomp Switch**: Click to activate/deactivate the pedal.

• "COLOSSUS" - Fuzz Pedal

- **FUZZ Knob**: Sets the amount of fuzz effect applied to the signal.
- **LEVEL Knob**: Adjusts the output level of the pedal.
- **MODE Switch**: Toggles between 'Vintage' and 'Modern' modes.
- **BASS & TREBLE Knobs**: Control the amount of low and high frequencies, respectively.
- **BYPASS Stomp Switch**: Click to activate/deactivate the pedal.

• "PARAGON" - Overdrive Pedal

- **DRIVE Knob**: Adjusts the amount of distortion applied to the signal.
- **LEVEL Knob**: Adjusts the output level of the pedal.
- **MODE Switch**: Toggles between 'Vintage' and 'Modern' modes.
- **BASS & TREBLE Knobs**: Control the amount of low and high frequencies, respectively.
- **BYPASS Stomp Switch**: Click to activate/deactivate the pedal.

Amp Section

This section includes the amplifier devices.

- **CLEAN Amplifier**

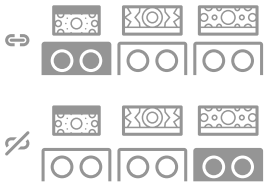
- **MID BOOST Switch**: Toggles the mid-frequency boost.
- **HIGH BOOST Switch**: Toggles the high-frequency boost.
- **VOLUME Knob**: Input gain control.
- **BASS, MIDDLE & TREBLE Knobs**: Amplifier's tonestack. 3-Band equalizer.
- **OUTPUT Knob**: Controls the overall output volume of the amplifier.
- **POWER LED**: Click to bypass/enable the Amp section.

- **CRUNCH Amplifier**

- **MID BOOST Switch**: Toggles the mid-frequency boost.
- **HIGH BOOST Switch**: Toggles the high-frequency boost.
- **GAIN Knob**: Input gain control.
- **BASS, MIDDLE & TREBLE Knobs**: Amplifier's tonestack. 3-Band equalizer.
- **MASTER Knob**: Power amp's gain control.
- **DEPTH Knob**: Adjusts the amount of low frequencies in the power amp stage.
- **OUTPUT Knob**: Controls the overall output volume of the amplifier.
- **TUBE Switch**: Toggles between EL34 and 6L6 power tubes to adjust the aplifier's tonal character.
- **POWER LED**: Click to bypass/enable the Amp section.

Amp Selector

Switch the Amps by clicking the icons at the bottom of the plugin window. This will also switch the EQs.



Amp/Cab Link

By default, amplifiers are linked to their respective cabinets. Click the link icon to link/unlink them, allowing you to experiment with different combinations.

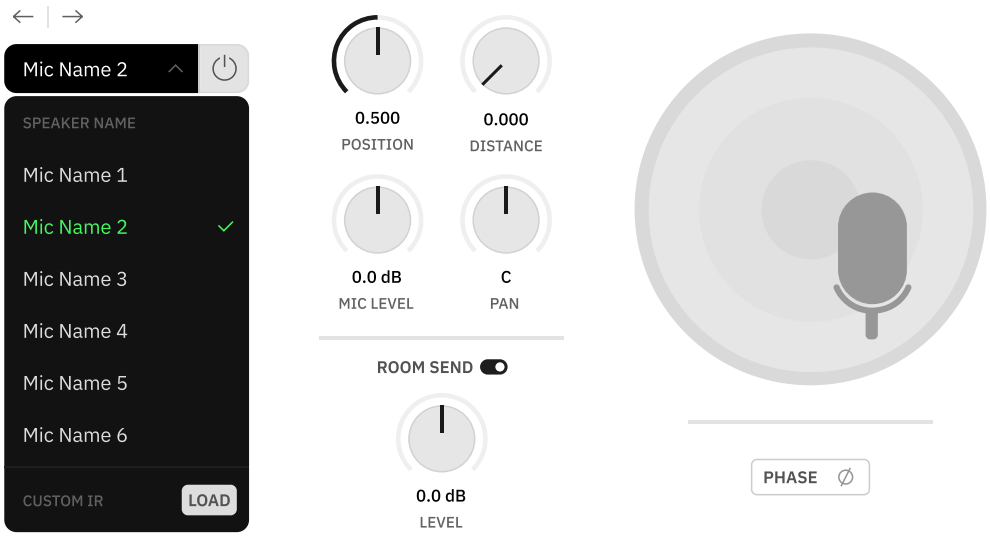
• LEAD Amplifier

- **GAIN Knob**: Input gain control.
- **TIGHT Knob**: High-pass filter. Increase to remove low frequencies.
- **BASS, MIDDLE & TREBLE Knobs**: Amplifier's tonestack. 3-Band equalizer.
- **MASTER Knob**: Power amp's gain control.
- **PRESENCE Knob**: Adjusts the amount of high frequencies in the power amp stage.
- **DEPTH Knob**: Adjusts the amount of low frequencies in the power amp stage.
- **OUTPUT Knob**: Controls the overall output volume of the amplifier.
- **TUBE Switch**: Toggles between EL34 and 6L6 power tubes to adjust the aplifier's tonal character.
- **POWER LED**: Click to bypass/enable the Amp section.

The OUTPUT knobs control the overall volume of the amps without affecting their tone.

Cab Section

A comprehensive cabinet simulation module that features virtual mics which can be positioned around the speakers. Additionally, in this section, you can load your own Impulse Response files.



• IR Loader Controls

- **IR Combo Box**: Dropdown menu for selecting factory microphones, speaker cabinets, or loading your own IR files.
- **LEFT & RIGHT Navigation Arrows**: Click to cycle through factory microphones and custom IRs.
- **BYPASS Button**: Click to bypass/enable the selected microphone or custom IR.
- **POSITION & DISTANCE Knobs**: Control the position and distance of the factory microphones around the speaker cone.
- **MIC LEVEL Knob**: Controls the volume level of the selected IR.
- **PAN Knob**: Controls the output panning of the selected IR.
- **ROOM SEND Switches**: Click to activate/deactivate the room reverb send per microphone.
- **LEVEL Knobs**: Send controls. Determine how much signal is sent to the room reverb module.
- **PHASE Button**: Inverts the phase of the selected IR.

What is an Impulse Response?

An Impulse Response is the measurement of a dynamic system reacting to an input signal. This information can be stored in WAV files which can be used to recreate the sound of spaces, reverberations, and instrument speakers.

How can I load custom IR files on Neural DSP plugins?

Click on the **IR Combo Box** and select **LOAD** next to the “Custom IR” field. After that, use the browser window to search and load your custom IR file. Once the IR is loaded, you can adjust its LEVEL, PAN, and PHASE.

Microphones’ position can also be controlled by dragging the microphones to the desired spot with the mouse. The POSITION and DISTANCE knobs will reflect these changes accordingly.

POSITION and DISTANCE knobs are disabled when loading custom IR files.

The Cab section features a Room Reverb module whose SEND levels can be adjusted independently per microphone.

The path location of the latest custom IR used is remembered by the plugin.
User presets that use custom IRs also save this path data, allowing you to easily recall them later.

EQ Section

This section includes a 4-Band semi-parametric equalizer per amplifier, giving you precise control over different frequency ranges.

EQ Selector

Switch the EQs by clicking the Amp icons at the bottom of the plugin window. These icons will also change the Amps.

• 4-Band Semi-Parametric EQs

- **FREQUENCY Knobs**: Determine the target frequency of their respective bands.
- **LO, LO MID, HI MID & HI Knobs**: Each knob adjusts the gain of a specific range of frequencies (Bands) determined by the FREQUENCY knobs. Click-and-drag the knobs up or down to increase or decrease their volume +/- 12dB.
- **HPF Knob**: Sets the cutoff frequency of the high-pass filter. Increase to remove low frequencies.
- **LPF Knob**: Sets the cutoff frequency of the low-pass filter. Decrease to remove high frequencies.
- **POWER Switch**: Click to bypass/enable the equalizer.

Post Effects Section

This section consists of three time-based effects modules in series, which can be used either separately or combined.

- **“ATLAS” - Delay Pedal**

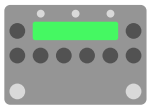
- **MIX Knob**: Controls the amount of delay effect that is added to the original input signal.
- **SYNC Switch**: Toggles between the following three states:

- **FREE**: The delay repeats will follow the internal delay time (MS) set by the TIME knob.
- **DAW/APP**: The delay repeats will sync to the host tempo value (BPM) following the musical subdivisions set by the TIME knob.
- **TAP**: The delay repeats will sync to the TAP value (BPM) following the musical subdivisions set by the TIME knob.

- **PRE/POST Switch**: Toggles the Delay pedal position in the audio chain.

- **PRE**: Places the Delay before the Amp Section. The output of the pedal is summed to mono.
- **POST**: Places the Delay in the Post Effects Section (Default).

- **MODE Switch**: Click to toggle between SINGLE and DUAL modes. The CROSS FEED and TIME R knobs are disabled in SINGLE mode.
- **FEEDBACK Knob**: Sets the amount of delay repetitions. The higher the value, the more repeats.
- **LOW CUT Knob**: Sets the cutoff frequency of the high-pass filter. Increase to remove low frequencies.
- **TIME L/R Knobs**: Set the delay time in either milliseconds or musical subdivisions depending on the SYNC switch’s position.
- **CROSS FEED Knob**: Determines how much delayed signal is sent from one side to another in DUAL mode. For this purpose, the CROSS FEED feature chooses the feedback from the longer of the delay times.
- **ICICLES Knob**: Controls the amount of “Icicles” effect added to the signal.



On the Delay’s LCD screen, click the DELAY TIME value (FREE) and TEMPO value (TAP) to enter custom values with the keyboard.
Additionally, click-and-drag them up and down to increase or decrease their values.

The Delay’s TIME ranges from 100ms to 1100ms when unsynced and from 1/64T to 1/1D when synced to the internal BPM.

Delay’s Icicles Effect

The Icicles effect is produced by adding pitched-up delay layers to the signal.

The Delay’s LOW CUT knob ranges from 20 Hz to 800 Hz.

The Delay’s HIGH CUT knob ranges from 1 kHz to 16 kHz.

- **HIGH CUT Knob**: Sets the cutoff frequency of the low-pass filter. Decrease to remove high frequencies.
- **LCD Display**: Displays the current delay settings.
- **TAP TEMPO Button**: Controls the delay time by clicking. The delay time value is set as the interval between the last two clicks.
- **BYPASS Stomp Switch**: Click to activate/deactivate the pedal.

“AEONS” - Reverb Pedal

- **MIX Knob**: Controls the amount of reverb effect that is added to the direct input signal.
- **DECAY Knob**: Determines the length of the reverb decay envelope.
- **LOW CUT Knob**: Sets the cutoff frequency of the high-pass filter. Increase to remove low frequencies.
- **HIGH CUT Knob**: Sets the cutoff frequency of the low-pass filter. Decrease to remove high frequencies.
- **VOLUME Knob**: Adjusts the level of the Freeze Reverb signal.
- **PITCH Knob**: Adjusts the pitch of the Freeze Reverb signal -/+ 12 semitones.
- **PITCH Display**: Displays the current Freeze pitch value.
- **FREEZE Stomp Switch**: Click to activate/deactivate the Freeze effect.
- **BYPASS Stomp Switch**: Click to activate/deactivate the pedal.

Reverb’s Freeze Effect

When engaged, the Freeze effect captures and sustains the current direct input signal indefinitely.

The sustained signal will continue until the footswitch is pressed again.

The Reverb’s LOW CUT knob ranges from 20 Hz to 800 Hz.

The Reverb’s HIGH CUT knob ranges from 800 Hz to 12 kHz.

04

Global Features

Familiarize yourself with the user interface, which is broken down into different sections accessible by icons at the top and bottom of the plugin interface.

Section Modules

The plugin devices are organized in different sections at the top of the plugin interface.

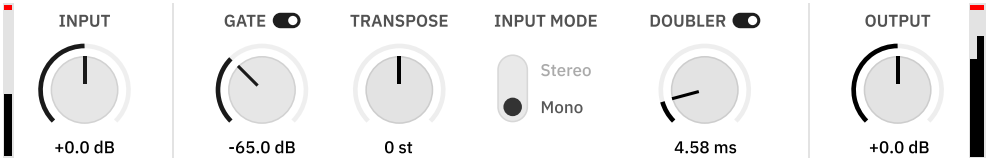
Click over a section to open it.

Right-click or double-click on any section to bypass it.

Red clipping indicators will inform you whenever the I/Os are fed beyond the maximum peak level. The indicators last 10 seconds. Click anywhere on the meters to clear the Red status.

Global Audio Controls

Set of parameters and features that allow you to customize your tone.



- **INPUT Knob**: Adjusts the level of the signal being fed into the plugin.
- **GATE Switch**: Click to activate/deactivate. The noise gate helps to reduce unwanted noise or *hum* in your signal.
- **THRESHOLD Knob**: Dial up the Knob to increase the threshold. The noise gate reduces the level of the audio signal when it drops below the set threshold value.
- **TRANSPOSE Knob**: Transposes the signal up or down in pitch by a constant interval (+/-12 semitones). Use it to easily change the tuning of your instrument. The transpose module is bypassed at its default position (0 st).
- **INPUT MODE Switch**: Click to toggle between MONO and STEREO modes. The plugin is able to process a stereo input signal. The plugin will require double the resources while in STEREO mode.
- **DOUBLER Switch**: Click to activate the doubler effect. It duplicates your signal to simulate a larger stereo image (Disabled in STEREO INPUT MODE).
- **SPREAD Knob**: Sets the time offset between both sides of the stereo image created by the doubler (3 to 20 milliseconds). The higher the value, the wider the stereo image is.
- **OUTPUT Knob**: Adjusts the level of the signal the plugin feeds out.

GATE

Increase the GATE threshold to *tighten up* your signal by creating a more defined and articulated tone, especially when playing high-gain tones.

Please note that if the threshold is set too high, sustained notes may be prematurely cut off, resulting in shorter sustain. The threshold should be set to a level that cuts out the noise you want to eliminate, but doesn't affect the tone or feel of your playing.

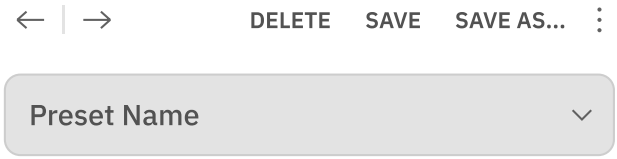
DOUBLER

The DOUBLER module works by creating a copy of the signal just before the Post FX section of the plugin. This duplicated signal is randomly delayed by a few milliseconds, within the range specified by the SPREAD knob, creating a stereo effect.

Preset Manager

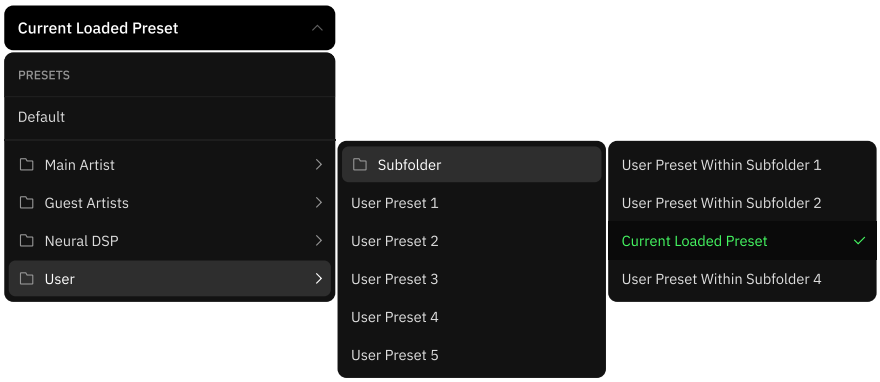
A Preset is a saved configuration of settings and parameters that can be recalled instantly. Neural DSP Factory Presets are an excellent starting point for your tones. After loading a Preset, you can fine-tune the parameters across the different sections of the plugin to create a new tone that suit your needs.

Presets you make can be organized into folders and subfolders, making it easier to find and manage them.



- **PRESET Combo Box**: Preset browser. Click to open a dropdown list of all the Presets available.
- **LEFT & RIGHT Navigation Arrows**: Click to cycle through the Presets.
- **DELETE Button**: Click to delete the active Preset (Factory Presets cannot be deleted).
- **SAVE Button**: Click to update a saved Preset with the latest changes.
- **SAVE AS... Button**: Click to save your current configuration as a new User Preset.
- **CONTEXTUAL Button**: Click to access more features:

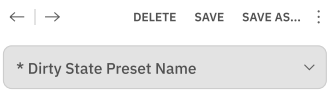
- **IMPORT Button**: Click to import a Preset file from custom locations. Use the browser window to search and load the Preset file.
- **RESET Button**: Click to make all the parameters recall their default values.
- **LOCATE FILE Button**: Click to access the Preset folder.



What is an XML file?

XML, short for Extensible Markup Language, lets you define and store data in a shareable manner. Neural DSP presets are stored as encrypted XML files in your computer.

The INPUT MODE, TUNER, METRONOME, and MIDI Map settings are not part of the Preset data, meaning that loading a Preset will recall all the parameters but the ones mentioned above.



An asterisk appears to the left of the Preset name whenever an active Preset has unsaved changes.

You can choose to install presets when installing the plugin. Click on the magnifying icon at the upper-right corner of the USER tab to access the Neural DSP Preset folder:

macOS®
Macintosh HD/Library/Audio/Presets/Neural DSP

Windows®
C:\ProgramData\Neural DSP

Subfolders created inside the main Preset folder will show up in the Preset Manager the next time you open the plugin.

Utility Bar

Quick access to useful tools and global settings.

- **TUNER Tab**: Click to open the Tuner interface.
- **MIDI Tab**: Click to open the MIDI Mappings window.
- **TAP Button**: Controls the standalone global tempo by clicking. The tempo value is set as the interval between the last two clicks.
- **TEMPO Button**: Displays the current standalone app's global tempo value. Click to enter a custom BPM value with the keyboard. Click-and-drag them up and down to increase or decrease the BPM value respectively.
- **METRONOME Tab**: Click to open the Metronome interface.
- **SETTINGS Tab**: Click to open the audio settings. MIDI devices can be assigned from this menu.
- **DEVELOPED BY NEURAL DSP Tab**: Click to access extra information about the plugin (Version, Store shortcut, etc).
- **WINDOW SIZE Button**: Click to resize the plugin window to three fixed sizes (Small, Medium & Large). The latest window size used is recalled upon opening new instances of the plugin.

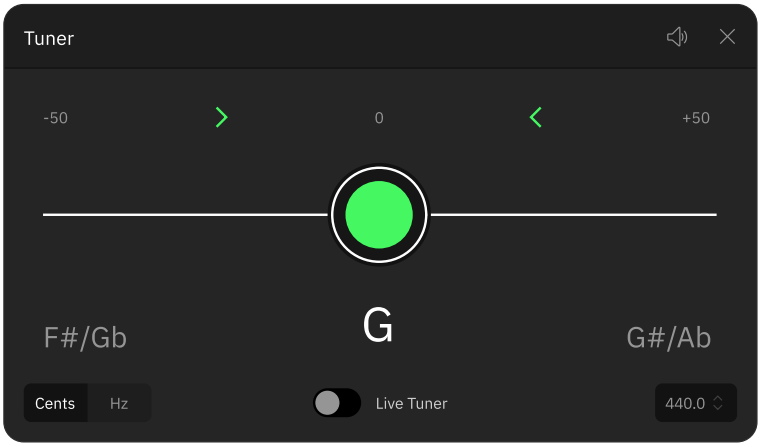
The TAP TEMPO, METRONOME, and SETTINGS features are available on the Standalone app only.

Right-click anywhere on the plugin interface to access the WINDOW SIZE menu.

Drag the edges and corners of the plugin window to continuously resize it.

Tuner

Both standalone and plugin versions feature a built-in chromatic tuner. It works by detecting the pitch of the note that is being played and then displaying it on the screen.



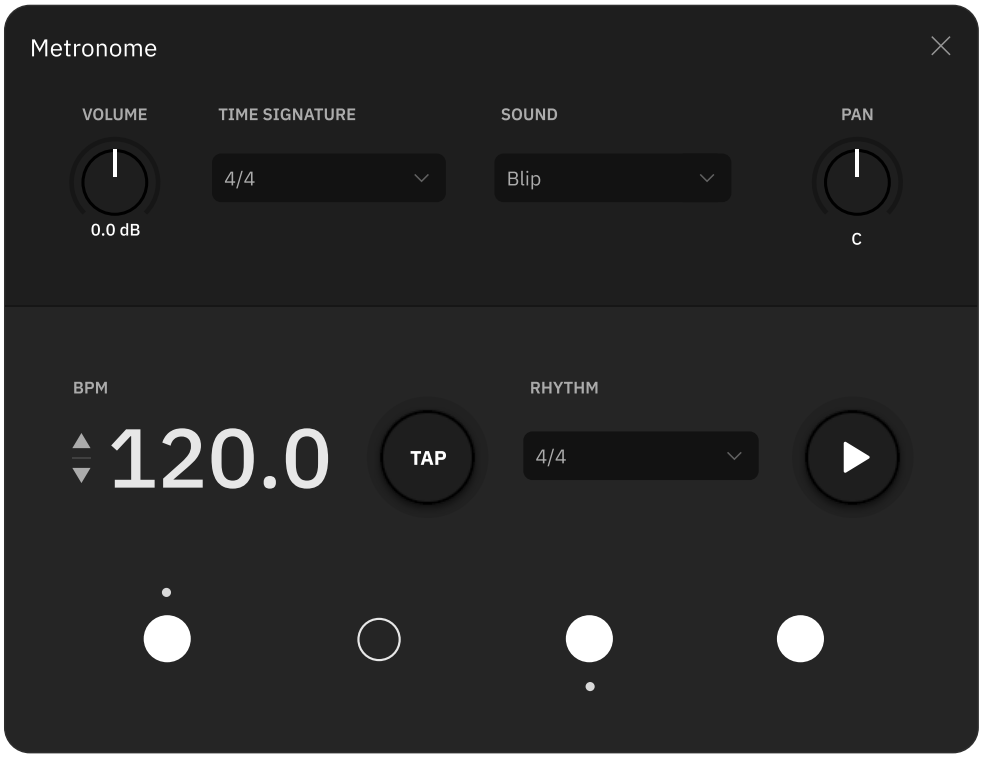
- **TUNING Display**: Displays the note that is being played and its current pitch.
- **MUTE Button**: Click to mute the DI signal monitoring. This setting is recalled upon opening new instances of the plugin.
- **MODE Switch**: Toggles the pitch value between Cents and Hz. This setting is recalled upon opening new instances of the plugin.
- **LIVE TUNER Switch**: Click to enable/disable the Live Tuner in the Utility Bar.
- **FREQUENCY Selector**: Adjusts the reference pitch (420-460Hz).

The indicator light moves with the pitch of the note. If the input is flat, it moves towards the left, and if it's sharp, it moves towards the right. When the pitch is in tune, the indicator will turn green.

CMD/CTRL + Click on the TUNER tab in the Utility Bar to toggle the Live Tuner.

Metronome

The standalone app features a built-in Metronome. It works by producing a steady pulse to help you to practice and play in time.

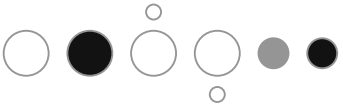


- **VOLUME Knob**: Adjusts the output level of the metronome's playback.
- **TIME SIGNATURE Combo Box**: Click to navigate through the different time signatures, including compound and complex variations. Selecting a time signature will change the order and musical accent of the beats.
- **SOUND Combo Box**: Click to navigate through the sound set. Selecting a sound will change the sound of the beats.
- **PAN Knob**: Adjust the output panning of the metronome's beats.
- **UP & DOWN Arrows**: Click them to change the beat tempo (40 - 240 BPM).
- **BPM Value**: Displays the current beat tempo. Click-and-drag it up and down to increase or decrease the BPM value (40 - 240 BPM).
- **TAP Button**: Controls the metronome tempo by clicking. The BPM value is set as the interval between the last two clicks.
- **RHYTHM Combo Box**: Determines how many pulses can be heard per beat.
- **PLAY/STOP Button**: Click to start/stop the metronome playback. MIDI assignable.
- **BEAT LEDs**: Toggleable beats that can be customized by clicking. They offer visual feedback according to the current tempo, subdivisions, and accents selected.

Click on the play/stop button in the utility bar to control the metronome's playback without opening its interface.

Closing the metronome interface will not stop its playback. Changing presets does not stop the metronome playback either.

The TAP Button also affects the standalone app's global tempo.



Click on the beats to cycle through different accents. Right-click on the beats to open their accent context menu.

MIDI Support

MIDI, short for Musical Instrument Digital Interface, is a protocol that allows communication between computers, musical instruments, and MIDI-compatible software.

Neural DSP plugins can be controlled by external MIDI devices and DAW commands. This allows you to connect MIDI controllers such as footswitches and expression pedals to control parameters and UI components within the plugin.

Any MIDI device capable of sending CC (Control Change), PC (Program Change) or NOTE messages to your computer will be compatible with Neural DSP plugins.

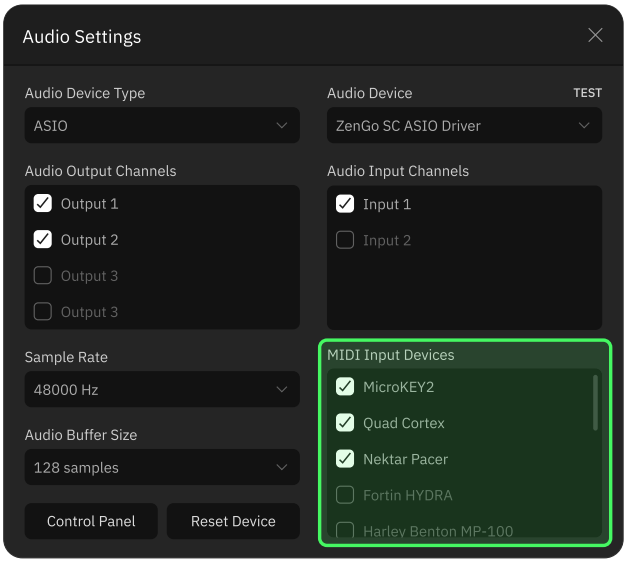
• Connecting a MIDI controller to your computer

There are many types of MIDI devices in the market. They can be connected via USB, MIDI Din or Bluetooth.

USB MIDI devices

USB devices are very straightforward to use since they are plugged into a USB port on your computer. Follow these steps to connect a USB MIDI device to your computer:

- **Step 1**: Connect the USB cable from the MIDI controller to an available USB port on your computer.
- **Step 2**: Although most MIDI controllers are plug-and-play devices, some require driver software to be installed before they can be used. Double-check the user manual for your specific controller to see if this is necessary.
- **Step 3**: Once your MIDI controller is connected to your computer, check that it is recognized by your plugin standalone app. Click on **SETTINGS** in the utility bar and check if the controller appears in the **MIDI Input Devices** menu.



Click on the checkboxes to enable or disable MIDI devices in the standalone app's Audio Settings menu.

- **Step 4 (Optional)**: To use MIDI controllers with a DAW, look for its MIDI settings menu and enable your MIDI controller as a MIDI Input device.

Non-USB MIDI devices

To connect a non-USB MIDI device to your computer, you will need an audio interface with a MIDI input or a separate MIDI interface. Follow these steps to connect a non-USB MIDI device to your computer:

- **Step 1**: Connect the MIDI Out port on your MIDI controller to a MIDI In port on your audio or MIDI interface using a MIDI cable.
- **Step 2**: Once your MIDI controller is connected to your computer, check that it is recognized by your plugin standalone app. Click on **SETTINGS** in the utility bar and check if the controller appears in the **MIDI Input Devices** menu.
- **Step 4 (Optional)**: To use MIDI controllers with a DAW, look for its MIDI settings menu and enable your MIDI controller as a MIDI Input device.

Non-USB MIDI devices usually have 5-Pin DIN or 3-Pin TRS connectors.

• "MIDI Learn" feature

Using the "MIDI Learn" function is the quickest and easiest way to map MIDI messages on your plugin.

To use the "MIDI Learn" function, right-click a parameter that you wish to control and click **Enable MIDI Learn**. Then, press the button or move the pedal/slider on the MIDI controller that you want to use to control that parameter. The plugin will then automatically assign the button or pedal to the chosen parameter. This streamlined process eliminates the need for manually mapping MIDI messages.

Follow these steps to assign MIDI messages via the "MIDI Learn" feature:

- **Step 1**: Ensure that your MIDI controller is properly connected to your computer and recognized by your plugin. On the plugin standalone app, click on **SETTINGS** in the utility bar and check if the controller appears in the **MIDI Input Devices** menu. If you are using the plugin in a DAW, make sure that the MIDI controller is set as the MIDI Input and Output device in your DAW settings.
- **Step 2**: Right-click on any parameter that you want to map to a MIDI message and select "**Enable MIDI Learn**".

When the "MIDI Learn" mode is enabled, **the target parameter will be highlighted in green**.

Click on other parameter to change the target. Right-click a parameter and select "**Disable MIDI Learn**" to deactivate the "MIDI Learn" mode.

Making your Mac® a Bluetooth MIDI host

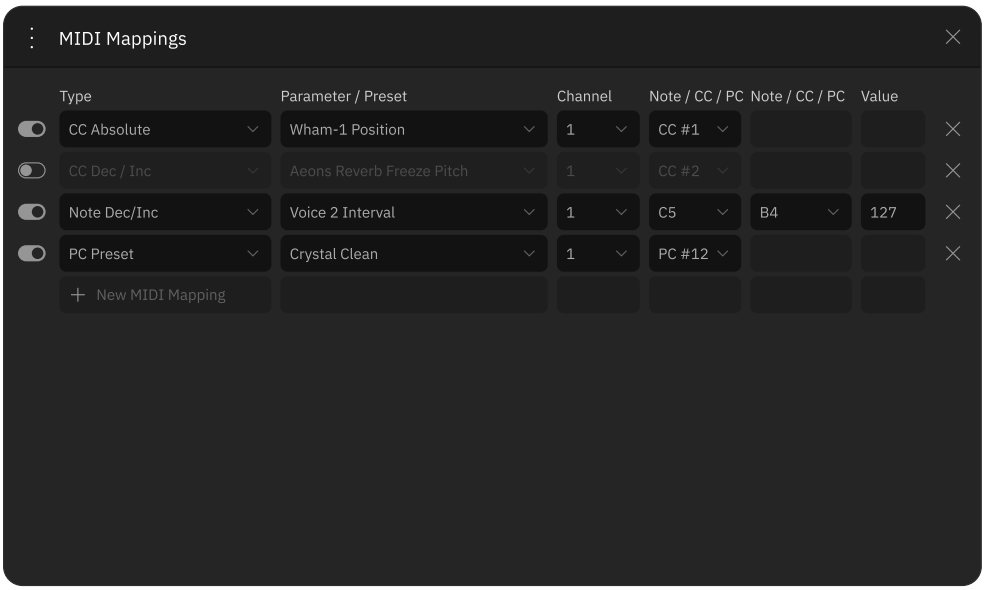
- Open the "Audio MIDI Setup" app.
- Click on Window > Show MIDI Studio.
- In the MIDI Studio window, click on "Open Bluetooth Configuration...".
- Set your Bluetooth MIDI device peripheral in pairing mode.
- Select the peripheral in the list of devices, then click "Connect".

Once your Bluetooth MIDI controller is connected to your computer, check that it is recognized by your plugin standalone app. Click on SETTINGS in the utility bar and check if the controller appears in the MIDI Input Devices menu.

- **Step 3**: With “MIDI Learn” mode enabled, send a MIDI message from your controller by pressing the button or moving the pedal/slider that you want to control the parameter with.
- **Step 4**: All the assigned MIDI messages will be registered in the “MIDI Mappings” window in the utility bar.

“MIDI Mappings” window

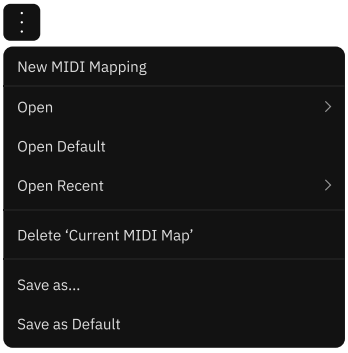
In the “MIDI Mappings” window, you can view and modify all the MIDI messages you have assigned to your plugin.



To add a new MIDI message, click on **“New MIDI Mapping”** located on the left side of the empty row. This will allow you to manually map a MIDI message to a parameter.

You can also save and load MIDI Mapping Preset **XML files**.

- **BYPASS Switch**: Click to bypass the MIDI mapping.
- **TYPE Combo Box**: Click to select the MIDI message type (CC, PC, & NOTE).
- **PARAMETER/PRESET Combo Box**: Click to select the plugin parameter/preset to be controlled by the MIDI message.
- **CHANNEL Combo Box**: Click to select the MIDI channel the MIDI message will use (16 channels per MIDI device).
- **NOTE/CC/PC Combo Box**: Click to select which MIDI NOTE, CC# or PC# is assigned to control the plugin parameter (Increase value when using “Dec/Inc” message).
- **NOTE/CC/PC Combo Box**: Click to select which MIDI NOTE, CC# or PC# is assigned to control the plugin parameter (Increase value when using “Dec/Inc” message).
- **VALUE Field**: Determines which parameter value will be recalled upon the MIDI message is sent.
- **X Button**: Click to delete the MIDI mapping.



Use the MIDI Mappings’ context menu to save, load, and set as default your current MIDI Mappings configuration.

MIDI Mapping Preset files are stored in the following folders:

macOS®
<User Folder>/Library/Application Support/Neural DSP

Windows®
C:\Users\<Your Profile>\AppData\Roaming\Neural DSP

“Absolute” mappings send values 0-127. “Relative” mappings send values <64 for decrement and >64 for increment.

“Fixed-range” knobs are absolute. “Endless” rotary knobs on your controller are relative.

05

Support

Neural DSP Technologies is happy to provide professional technical support via email to all registered users, absolutely free of charge. Before contacting us, we recommend searching our support and knowledge base sections below to see if the answer to your question has already been published.

SUPPORT KNOWLEDGE BASE

If you cannot find a solution for your problem on the pages above, please contact **support@neuraldsp.com** to help you further.

Corporate Contact

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