Archetype: Mateus Asato

Version 1.0.0 for Windows® and macOS®

User Manual

2023

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01

Introduction

In the world of guitar virtuosos, Mateus Asato stands as a beacon of creativity. With his distinct blend of technical prowess, soulful expression, and an unmistakable sense of style, Mateus has transcended the boundaries of what it means to be a modern guitar player. His music flows effortlessly through genres leaving audiences around the globe spellbound by his artistry.

It was inevitable that when the time came to create Archetype: Mateus Asato we knew we had to match the exceptional nature of the man himself.

Collaborating with Mateus was an adventure in creativity and inspiration. Describing himself as part of the "sound-seekers community", his desire for a tool that could match the intricacies of his playing led us to create a plugin containing an unrivaled collection of boutique gear with the precision and innovation that only our state-of-the-art technology can offer.

We invite you to embark on a musical journey that mirrors the boundless artistry of Mateus himself. This plugin is a tribute to his talent, a celebration of his unique style, and an invitation to explore new horizons in your own music. We hope that using it will inspire you as much as creating it has inspired us.

We proudly present to you, **Archetype: Mateus Asato**.

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)

• Audio interface

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

• 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.

400MB - 1GB 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.

The Quad Cortex can be used as USB audio interface.

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 11**
- **Pro Tools 2023**
- **Logic Pro X**
- **Cubase 10**
- **Reaper 6**
- **Presonus Studio One 5**
- **Reason 12**
- **FL Studio 21**
- **Cakewalk by Bandlab 2022**

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 check the "Hidden Items" checkbox 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**".
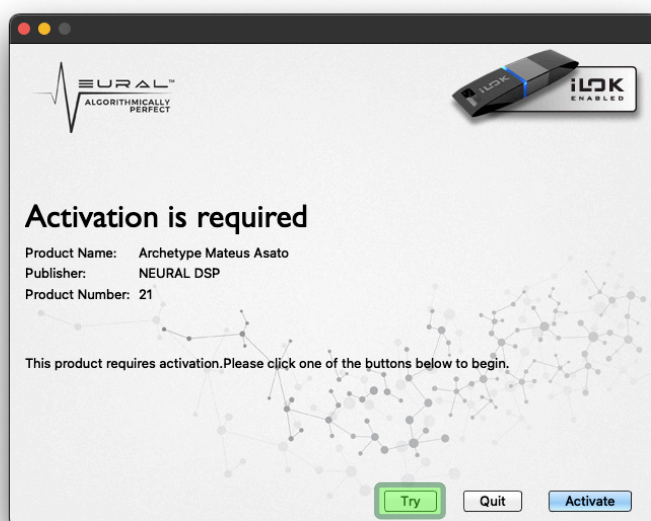

If you get the popup message "*Attempted to start the trial too many times. Please purchase a license to run the product*", open iLok License Manager, log in with your iLok account, right-click on your trial license and select "Activate".
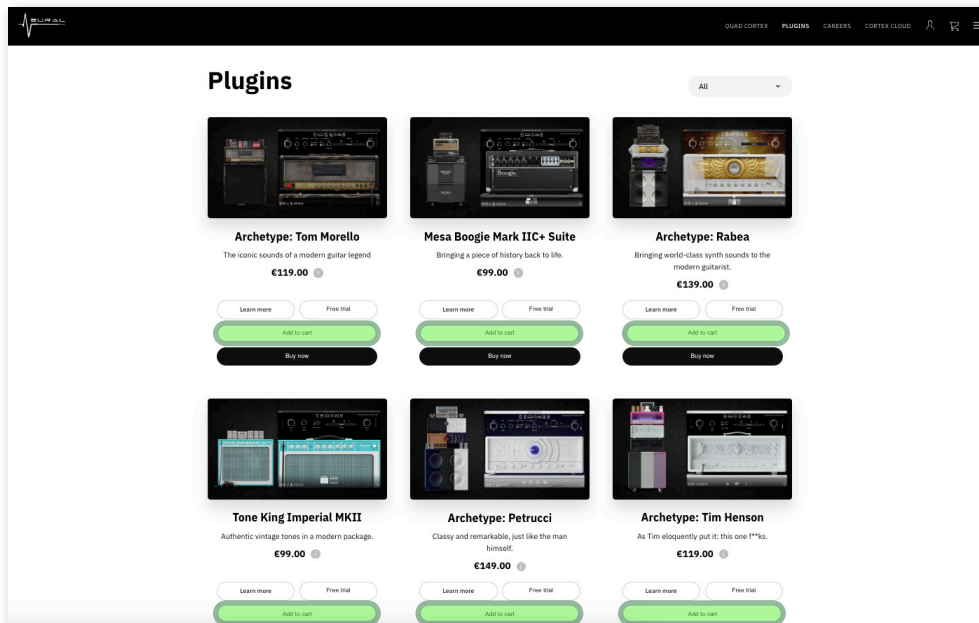
You will be asked to login to your iLok account. After logging in, the 14-day trial will be added to your iLok account automatically.
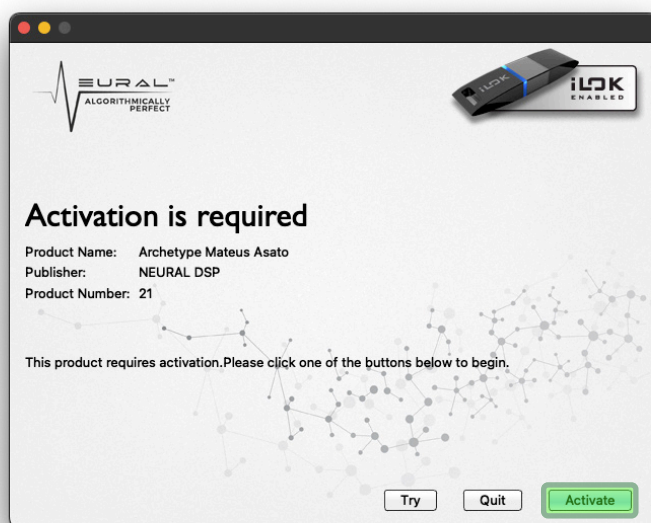
• Perpetual License

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.

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.

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**".

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 tranferred to other devices. This process can be repeated indefinitely.

Skip the Activation Code entry screen, login to your iLok account when prompted and activate the license on your machine.

Your Perpetual License then will be activated.

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.

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.

SETTINGS

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.

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: Mateus Asato.

• Pre FX Section

- "COMP" - Compressor Pedal
- "OD1" - Overdrive Pedal
- "OD2" - Overdrive Pedal
- "MOD" - Modulation Pedal

• Amp Section

- Amp 1
- Amp 2
- Amp 3

• Cab Section

- 3 cabinets
- 10 factory microphones per cabinet
- Dual IR slots

• EQ Section

- 9-Band EQ (x3)

• Post FX Section

- "ECHO" - Delay Rack Unit
- "REVERB" - Reverb Rack Unit

• Global Features

- Input Gate
- Transpose
- Doubler
- Preset Manager
- Tuner
- Metronome
- MIDI Support

Pre FX Section

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

- **"COMP" - Compressor Pedal**

- **COMP** Knob: Controls the amount of input gain going to the fixed threshold. The higher the value, the more reduction is applied to the signal.
- **EQ** Knob: "Tilt" style EQ control. Turn it clockwise to gradually increase high frequencies and decrease low frequencies simultaneously. Turn it counterclockwise to increase low frequencies and decrease high frequencies simultaneously.
- **VOLUME** Knob: Adjusts the output level of the pedal.
- **MIX** Knob: Controls the amount of compression that is added to the signal.
- **BYPASS** Stomp Switch: Click to activate/deactivate the pedal.

- **"OD1" - Pedal**

- **VOLUME** Knob: Adjusts the output level of the pedal.
- **GAIN** Knob: Adjusts the amount of gain applied to the signal.
- **TONE** Knob: High-frequency shaping control.
- **MID BOOST** Knob: Increase to boost the mid frequencies.
- **BYPASS** Stomp Switch: Click to activate/deactivate the pedal.

- **"OD2" - Pedal**

- **VOLUME** Knob: Adjusts the output level of the pedal.
- **GAIN** Knob: Adjusts the amount of gain applied to the signal.
- **CUT** Knob: Low-pass filter control. Increase to reduce the amount of high frequencies.
- **BYPASS** Stomp Switch: Click to activate/deactivate the pedal.

- **"MOD" - Modulation Pedal**

- **SPEED** Knob: Controls the speed of the modulation effect.
- **INTENSITY** Knob: Determines how extreme the modulation is.
- **MODE** Switch: Toggles between Tremolo, Chorus, and Vibrato modes.
- **BYPASS** Stomp Switch: Click to activate/deactivate the pedal.

The "COMP" ratio is 3:1.

The EQ knob's default position (50%) value is flat, meaning the compressed signal is unafected by the EQ.
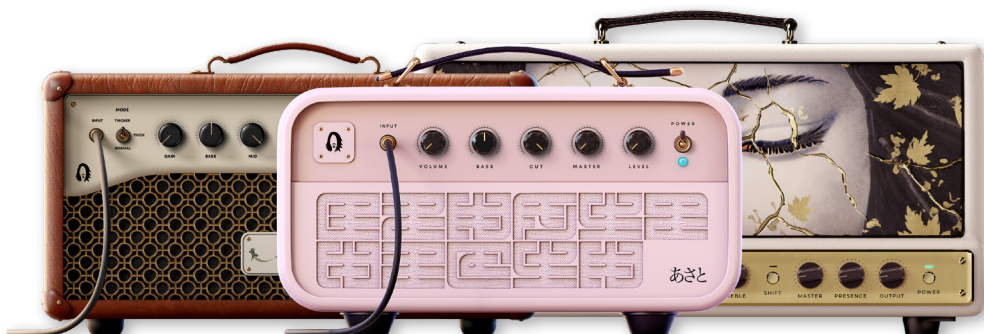

Increase the VOLUME knob to compensate for the volume-loss caused by the compression.

The Modulation SPEED ranges from 0.69Hz to 7.19Hz.

Amp Section

This section includes the amplifier models.

• Amp 1

- **VOLUME** Knob: Input gain control.
- **BASS** Knob: Controls the amount of bass frequencies.
- **CUT** Knob: Subtle Low-pass filter control. Increase to reduce the amount of high frequencies.
- **MASTER** Knob: Poweramp's gain control.
- **LEVEL** Knob: Controls the overall volume of the amplifier.
- **POWER** Switch: Click to bypass/enable the Amp section.

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

• Amp 2

- **MODE** Switch: Changes the voicing of the amplifier by shifting the frequencies enhanced by the TREBLE knob. Click or drag to toggle between NORMAL, THICK, and THICKER modes.
- **GAIN** Knob: Input gain control.
- **BASS, MID & TREBLE** Knobs: Amplifier's tonestack. 3-Band equalizer.
- **PRESENCE** Knob: Sets the amount of high frequencies attenuation applied at the end of the preamp stage.
- **MASTER** Knob: Poweramp's gain control.
- **OUTPUT** Knob: Controls the overall volume of the amplifier.
- **POWER** Switch: Click to bypass/enable the Amp section.

Amp Selector

Switch the amps by clicking the amp icons at the bottom of the plugin window. Clicking on the amp icons will also switch the Graphic EQs.

• Amp 3

- **BRIGHT** Button: Click to enable/disable the brightness circuit.
- **GAIN** Knob: Input gain control.
- **BASS, MIDDLE & TREBLE** Knobs: Amplifier's tonestack. 3-Band equalizer.
- **SHIFT** Button: Click to change the cutoff frequency of the MIDDLE knob.
- **MASTER** Knob: Poweramp's gain control.
- **PRESENCE** Knob: Sets the amount of shelving boost applied to the high frequencies.
- **OUTPUT** Knob: Controls the overall volume of the amplifier.
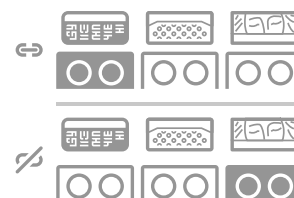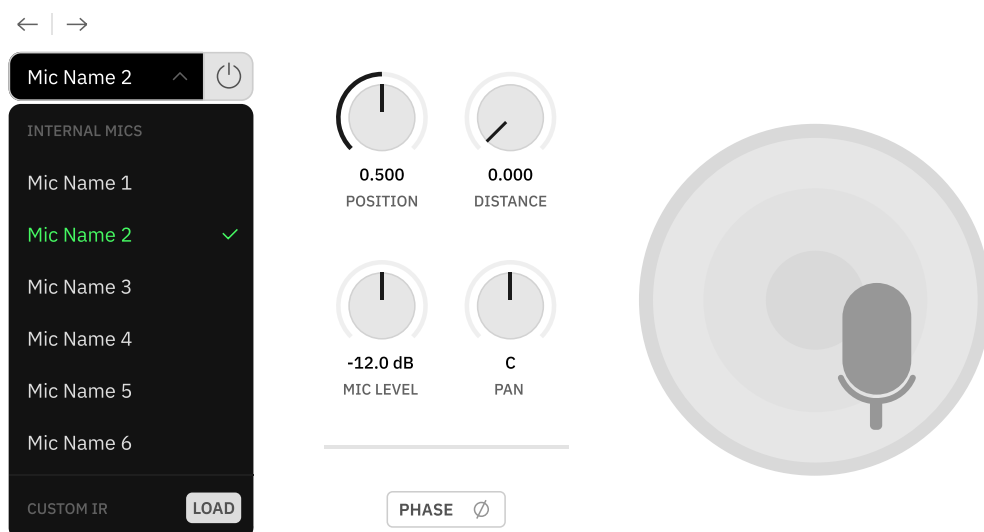- **POWER** Button: Click to bypass/enable the Amp section.

Amp/Cab Link

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

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.

← | →

| Mic Name 2 | ^ | ⏻ |

INTERNAL MICS

Mic Name 1

Mic Name 2 ✓

Mic Name 3

Mic Name 4

Mic Name 5

Mic Name 6

CUSTOM IR   LOAD

0.500
POSITION

0.000
DISTANCE

-12.0 dB
MIC LEVEL

C
PAN

PHASE ∅

Microphones' postion 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.

• IR Loader Controls

- **IR Combo Box**: Dropdown menu for selecting factory microphones, speakers, or loading your own Impulse Response files.
- **LEFT & RIGHT Navigation Arrows**: Click to cycle through factory microphones and custom IRs.
- **BYPASS Button**: Click to bypass the selected 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.
- **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.

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

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 9-Band 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.

- **9-Band Graphic EQs**

- FREQUENCY Sliders: Each slider adjusts the gain of a specific range of frequencies (Bands). Click-and-drag the sliders 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.
- BYPASS Button: Click to bypass/enable the equalizer.

Post FX Section

This section consists of two time-based Rack Units, which can be used either separately or combined.

- **"ECHO" - Delay Rack Unit**

- **MODE SELECTOR Knob**: Changes and combines three playback heads to produce the delay effect. Drag to change its current mode:

- **MODE 1**: Activates only the third playback head. The delay will produce a single-repetition pattern.
- **MODE 2**: Activates the first and third playback heads. The delay will produce a dual-repetition pattern.
- **MODE 3**: Activates the second and third playback heads. The delay will produce a syncopated dual-repetition pattern.
- **MODE 4**: Activates all playback heads. The delay will produce a three-repetition pattern.

- **TIME Knob**: Sets the delay time in either milliseconds or musical subdivisions depending on the SYNC switch's position.
- **FEEDBACK Knob**: Sets the amount of delay repetitions. The higher the value, the more repeats.
- **TAPE MOD Knob**: Adds pitch modulation to the delay signal.
- **TAPE DRIVE Knob**: Drive control for the delay signal.
- **BASS & TREBLE Knobs**: Controls the amount of bass and high frequencies of the repeats, respectively.
- **WIDTH Knob**: Stereo panning control for the repeats. Increase to expand the perceived width, bouncing the delay repeats from left to right.
- **SYNC Switch**: Determines whether the delay repetitions follow the delay time (MS/NOTE) or the BPM value (TAP/DAW):

- **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.

The Delay TIME ranges from 16ms to 2500ms when unsynced and from 1/64T to 1/1D when synced to DAW or TAP.

The "ECHO" Delay Rack Unit is based on a Tape Delay device. Its sound gradually degrades as the delay continues.

Click the DELAY TIME value (FREE) and TEMPO value (DAW & TAP) to enter custom values with the keyboard.

Click-and-drag them up and down to increase or decrease their values.

- **TAP** Button: Controls the delay time by clicking. The delay time value is set as the interval between the last two clicks on the stomp switch (Disabled in FREE and DAW modes).
- **VU** Meter: Measures the level of the signal before being affected by the tape drive stage.
- **LCD** Display: Displays the current delay settings.
- **POWER** Button: Click to activate/deactivate the Delay Rack Unit.

- **"REVERB" - Reverb Rack Unit**

- **MODE** Switch: Toggles between HALL and PLATE modes.
- **PRE-DELAY** Slider: Determines the time between the direct signal and the reverb's first reflection (1-200 MS).
- **DECAY** Slider: Determines the length of the reverb decay envelope (1-60 seconds).
- **HPF** Slider: High pass filter. Increase to remove low frequencies from the reverb signal.
- **LPF** Slider: Low pass filter. Increase to remove high frequencies from the reverb signal.
- **MIX** Slider: Controls the amount of reverb effect that is added to the original input signal.
- **LCD** Display: Displays the current reverb settings.
- **POWER** Button: Click to activate/deactivate the Reverb Rack Unit.

The Reverb's HIGH PASS Filter ranges from 20 Hz to 500 Hz.

The Reverb's LOW PASS Filter ranges from 800 Hz to 5.0 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.
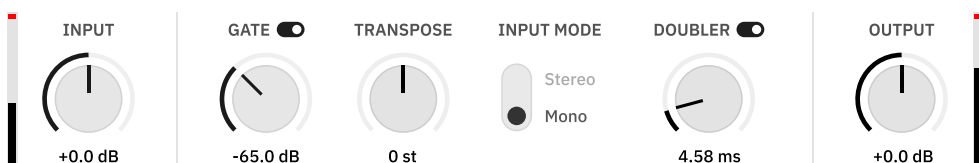
Right-click or double-click on any section to bypass it.

Click on any section to open it.

Global Audio Controls

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

INPUT	GATE	TRANSPOSE	INPUT MODE	DOUBLER	OUTPUT
+0.0 dB	-65.0 dB	0 st	Stereo / Mono	4.58 ms	+0.0 dB

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.

- **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.

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.

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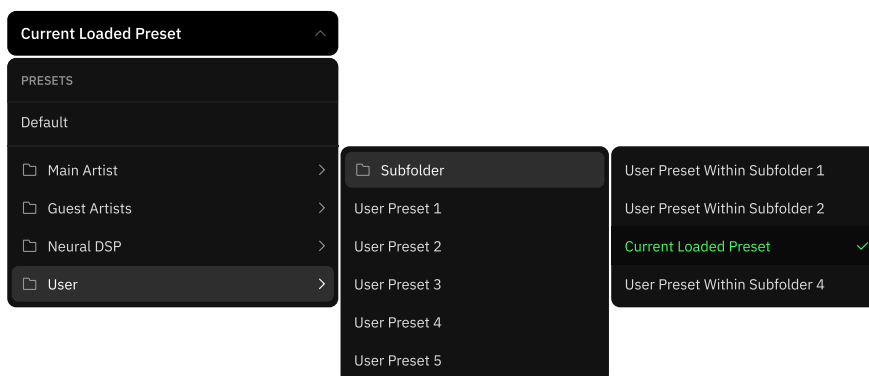
Presets you make can be organized into folders and subfolders, making it easier to find and manage them.

← | →   DELETE   SAVE   SAVE AS...   ⋮

| Preset Name | ⌄ |
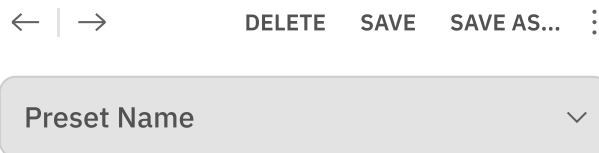
- **PRESET Combo Box**: Preset browser. Click to open a dropdown list of all the Presets available.
- **LEFT & RIGHT Navigation Arrows**: Click to cycle through the Presets.
- **DELETE Button**: Click to delete the active Preset (Factory Presets cannot be deleted).
- **SAVE Button**: Click to update 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 | RESET | LOCATE FILE   ✕

- **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.

Current Loaded Preset	^
PRESETS	
Default	
📁 Main Artist	>
📁 Guest Artists	>
📁 Neural DSP	>
📁 User	>

| 📁 Subfolder | | User Preset Within Subfolder 1 |
User Preset 1		User Preset Within Subfolder 2
User Preset 2		Current Loaded Preset ✓
User Preset 3		User Preset Within Subfolder 4
User Preset 4	
User Preset 5	

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 parameter values but the ones mentioned above.

← | →   DELETE   SAVE   SAVE AS...   ⋮

| * Dirty State Preset Name | ⌄ |
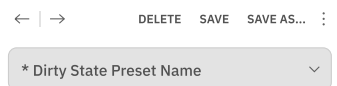
An asterisk appears to the left of the Preset name whenever an active Preset has unsaved changes.

You can choose to install presets when installing the plugin. Click LOCATE FILE in the Preset Manager 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 | MIDI | TAP 120BPM⌄ | METRONOME ▶ | SETTINGS | DEVELOPED BY NEURAL DSP ⌐⌐

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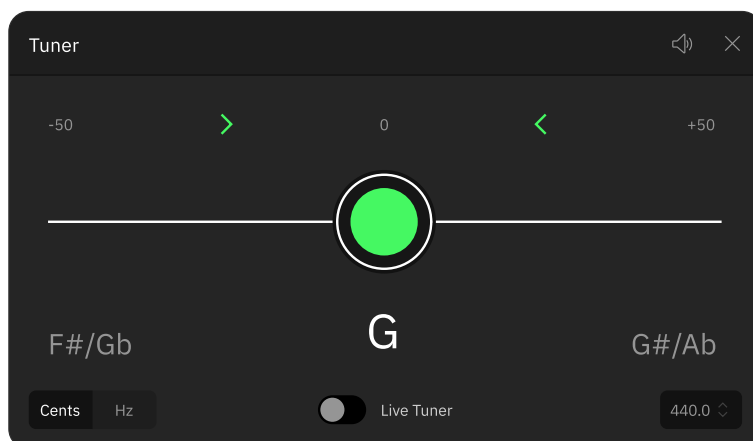
Right-click anywhere on the plugin interface to access the WINDOW SIZE menu.

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.

```
Tuner                                    🔊  ✕

   -50        >        0        <       +50


  _____⬤_____

  F#/Gb                G              G#/Ab

  [Cents  Hz]        ◯ Live Tuner       440.0 ⌄
```

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.

- **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.
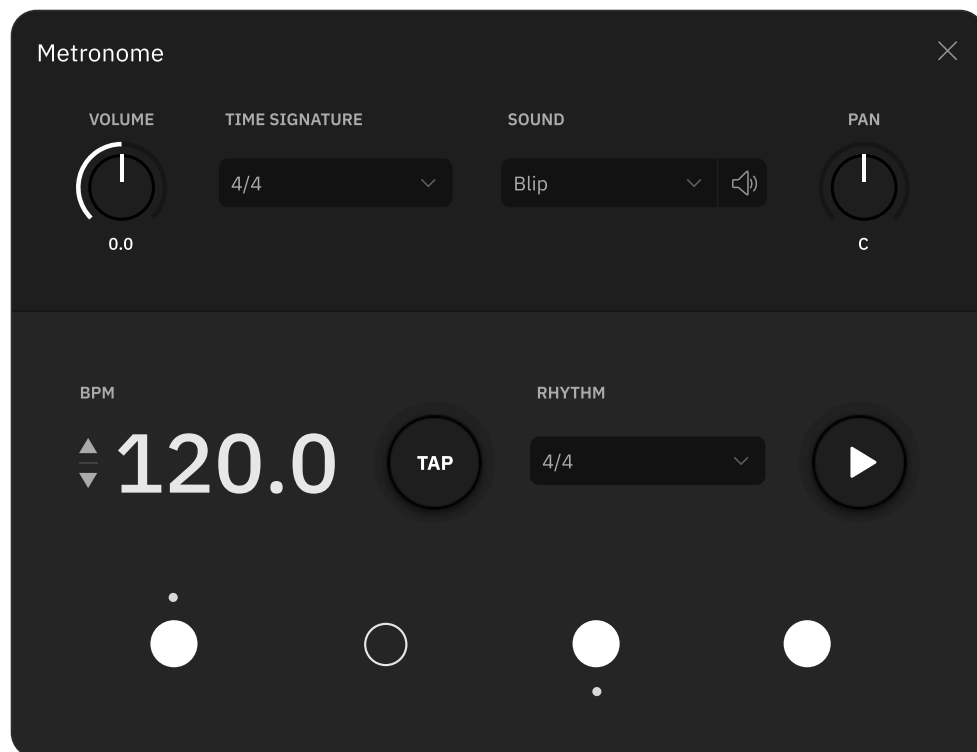- **FREQUENCY Selector**: Adjusts the reference pitch (400-480Hz).

E ⠂ ⠂ ◉ ⠂ ⠂

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.

Metronome

VOLUME   TIME SIGNATURE   SOUND   PAN

0.0

4/4   Blip   C

BPM   RHYTHM

120.0   TAP   4/4

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. Chaging presets does not stop the metronome playback either.

- **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. Selecting a sound will change the sound of the 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.

The TAP Button also affects the standalone app's global tempo.
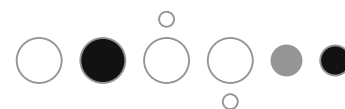
Click on the beats to cycle through different accents. Right-click on the beats to open their accent context menu.

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.

• 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.
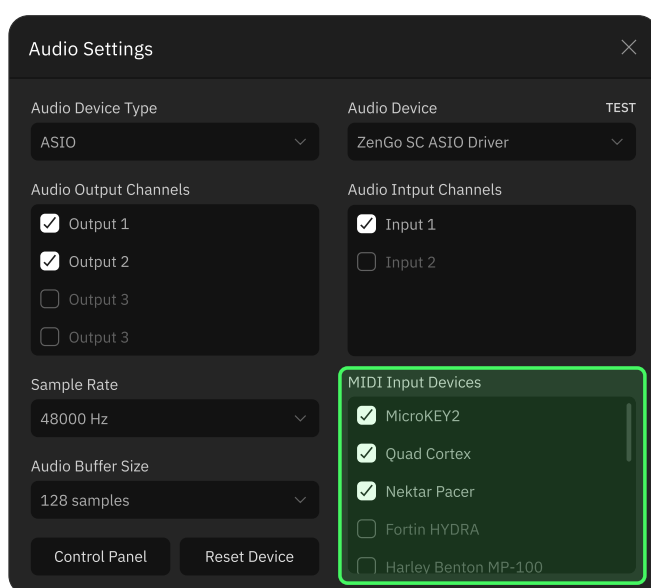
USB MIDI devices

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:

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.

- **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.

SETTINGS

Audio Settings   ✕

| Audio Device Type | Audio Device   TEST |
| ASIO | ZenGo SC ASIO Driver |

Audio Output Channels	Audio Intput Channels
✓ Output 1	✓ Input 1
✓ Output 2	☐ Input 2
☐ Output 3	
☐ Output 3	

Sample Rate	MIDI Input Devices
48000 Hz	✓ MicroKEY2
Audio Buffer Size	✓ Quad Cortex
128 samples	✓ Nektar Pacer
Control Panel Reset Device	☐ Fortin HYDRA
	☐ Harley Benton MP-100

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.

• **"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.

Non-USB MIDI devices usually have 5-Pin DIN or 3-Pin TRS connectors.
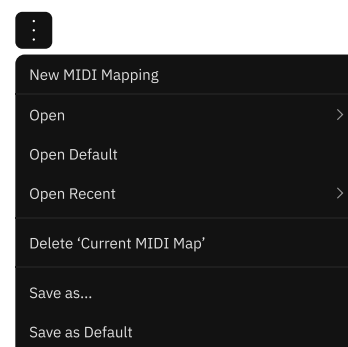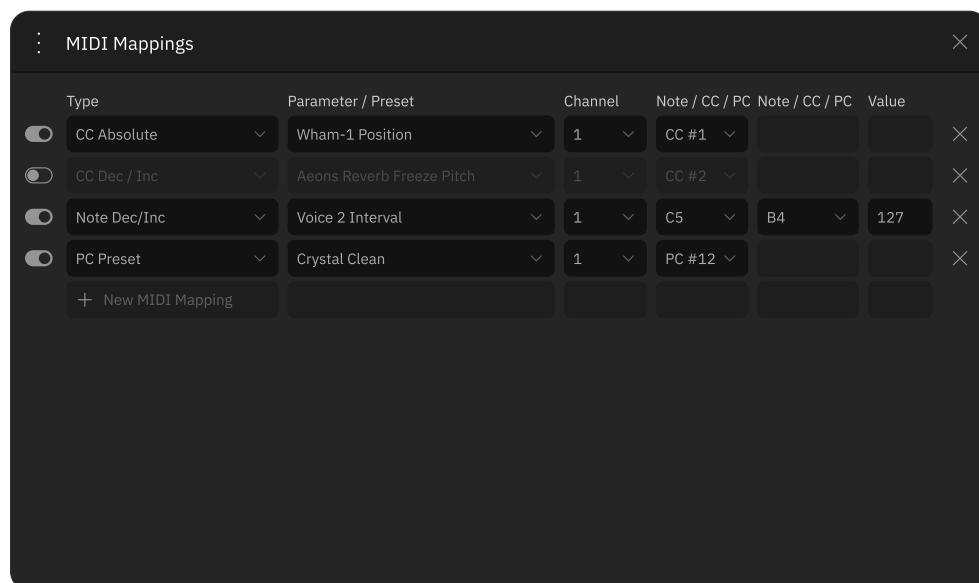
Making your Mac a Bluetooth MIDI host

- 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

- **"MIDI Mappings" window**

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

	Type	Parameter / Preset	Channel	Note / CC / PC	Note / CC / PC	Value	
	CC Absolute	Wham-1 Position	1	CC #1			×
	CC Dec / Inc	Aeons Reverb Freeze Pitch	1	CC #2			×
	Note Dec/Inc	Voice 2 Interval	1	C5	B4	127	×
	PC Preset	Crystal Clean	1	PC #12			×
+ New MIDI Mapping							

New MIDI Mapping
Open   >
Open Default
Open Recent   >
Delete 'Current MIDI Map'
Save as...
Save as Default

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

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**.

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

- **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 paramater (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 paramater (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.

"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.

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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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