Mesa Boogie Mark IIC+ Suite

1.0.0 for Windows and macOS

INTRODUCTION

The Mark II series was Mesa Boogie's flagship amplifier between 1978 and 1985. They were, and remain to this day, one of the finest guitar instrument amplifiers that modern technology and traditional craftsmanship can produce. The IIC+'s impact on 80s guitar tone was so significant that it continues to be the most coveted vintage Boogie amp, with fewer than 3000 units ever made.

The IIC++ is an additional mod made for a handful of well-known guitarists of the day. It was never put into production and fewer than 20 of the modifications were performed by Mesa Boogie before the IIC+'s production ended.

Neural DSP partnered with Mesa Boogie to accurately replicate every nuance of these historical amplifiers. In addition, Compressor, Overdrive, and Chorus pedals are provided alongside a Graphic EQ, and Delay and Reverb Pedals. A Cab Simulation block is also included where you can find a pack of carefully-recorded Impulse Responses designed by Neural DSP.

We proudly present you the **Mesa Boogie Mark IIC+ Suite**.

BASIC REQUIREMENTS

To start using Neural DSP plugins you will need:

- A computer capable of multitrack audio processing, Mac or PC.
- An audio interface.
- Supported host software (***DAW***) for recording.
- An iLok User ID and the latest version of the iLok License Manager application.
- A Neural DSP Account.

Important: You don't need an iLok USB dongle to use our products since you can activate them directly into your computer.

SUPPORTED OPERATING SYSTEMS

OS X 10.15 - 13 (64-bit)
Windows 10 - 11 (64-bit)

SUPPORTED HOST SOFTWARES

In order to use Neural DSP software in plugin form, you will need audio software. We officially support the following software to host our plugins (64-bit only):

Pro Tools 2022 (macOS & Windows): AAX Native
Logic Pro X 10.7 or higher - (macOS): AU
Cubase 12 (macOS & Windows): VST2 - VST3
Ableton Live 10 or higher (macOS & Windows): AU, VST2 & VST3
Reaper 6 or higher (macOS & Windows): AU, VST2 & VST3
Studio One 4 or higher (macOS & Windows): AU, VST2 & VST3
FL Studio 20 (macOS & Windows): VST2 & VST3
Reason 11 (macOS & Windows): VST2 & VST3
Cakewalk by Bandlab (Windows): VST2 & VST3

A standalone version (64-bit only) is also included, which does not require any additional software.

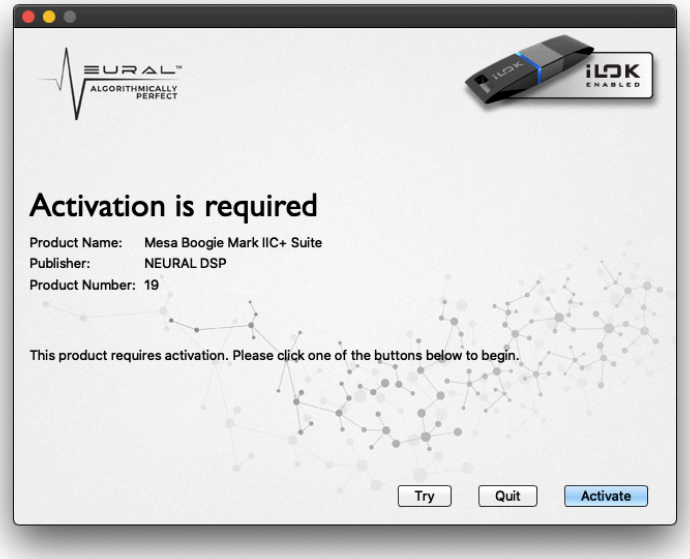
Support is offered for these operating systems and software platforms. Our plugins may work on another DAW of your choice, feel free to download the Demo and try for yourself (*Please check that your host software is compatible with your operating system first*).

For more information, check our FAQ page here:
https://support.neuraldsp.com/help

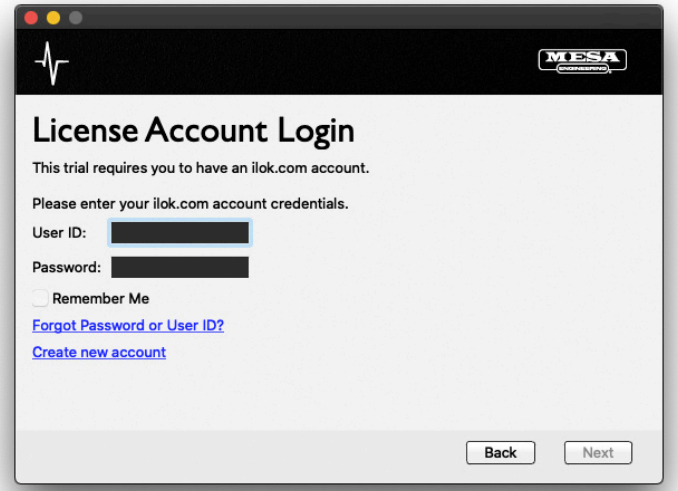
iLOK USER ID AND iLOK LICENSE MANAGER

DEMO PRODUCT ACTIVATION

Right after the setup installation, you will see an activation window. Click on the "**Try**" button. If you don't see that button, close and reopen the plugin/standalone app.



If you don't have an iLok account, you can create one right here:



At this point, the iLok License Manager software will be installed on your computer... and that's it! Notice that your trial expires after 14 days.

FULL PRODUCT ACTIVATION

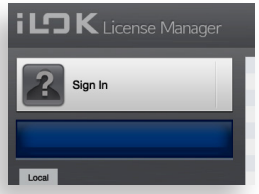
Note that Neural DSP and iLok are different accounts. Full licenses for Neural DSP products are delivered directly to your iLok account. Make sure your **iLok account** is created and **linked** to your Neural DSP account before purchasing.

- Make sure you have the latest **iLok License Manager** app installed and running (https://www.ilok.com/#!license-manager).
- Login with your iLok account. If you don't have an **iLok account**, you can create one right here: https://www.ilok.com/#!registration

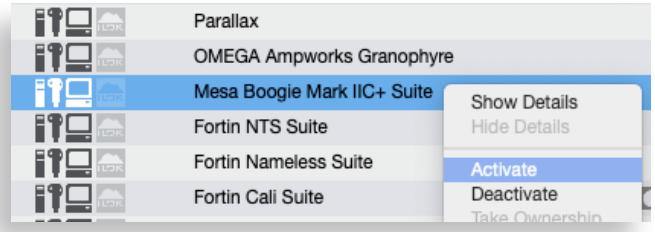
To get a full license for any of our products, go to our website, click on a plugin you want, select "**add to cart**" and complete the steps for purchasing. After the checkout, the license will be deposited directly to your iLok account.

After that, please follow the following steps:

- Make sure you have the latest iLok License Manager application installed and running (https://www.ilok.com/#!license-manager).
- Log in with your iLok account in iLok License Manager.



- After that, go to the "**All Licenses**" tab on top, right-click on the license and select "**Activate**".



- Install the plugin by running the installer (https://neuraldsp.com/downloads/).
- Rescan your plugins within your DAW, then restart your DAW.
- You can run the standalone version as well.

FILE LOCATIONS

Neural DSP plugins will be installed in the appropriate default location for each plugin format (VST, VST3, AAX, AU) unless a different custom location is selected in the process.

MacOS

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: *MacintoshHD / Library / Audio / Presets / Neural DSP / Mesa Boogie Mark IIC+ Suite /*
Manual: *Macintosh HD / Library / Application Support / Neural DSP / Mesa Boogie Mark IIC+ Suite /*

Mesa Boogie Mark IIC+ Suite is available in 64-bit only.

Windows

64-bit VST: *C:/ Program Files / VSTPlugins /*
64-bit VST3: *C:/ Program Files / Common Files / VST3 /*
64-bit AAX: *C:/ Program Files / Common Files / Avid / Audio / Plug-Ins /*
64-bit Standalone: *C:/ Program Files / Neural DSP /*
Preset Files: *C:/ ProgramData / Neural DSP / Mesa Boogie Mark IIC+ Suite*
Manual: *C:/ Program Files / Neural DSP /*

Mesa Boogie Mark IIC+ Suite is available in 64-bit only.

UNINSTALLING NEURAL DSP SOFTWARE

To uninstall the product in macOS, delete the files manually from the respective plugin format folders.

For Windows, you can uninstall the files by running the regular uninstaller at the Control Panel or by running the setup installer file again and clicking on “Remove”.

PLUGIN SECTIONS

THE PLUGIN

- COMPRESSOR Pedal
- OVERDRIVE-1 Pedal
- OVERDRIVE-2 Pedal
- CHORUS Pedal

- MARK IIC+ Amplifier
- MARK IIC++ Amplifier

- Cabsim

- 9-band EQ

- DELAY Pedal
- REVERB Pedal

STOMPBOX SECTION

The Stompbox section consists of four pedals in series, which can be used separately or combined.

COMPRESSOR Pedal

COMP KNOB: The amount of gain reduction and make-up gain is determined by this knob.
LEVEL KNOB: Adjusts the output signal and compensates for an eventual volume-loss caused by the compression.
ATTACK SWITCH: Adjusts the attack speed between Slow (*smoother*) and Fast (*Snappier*).
BYPASS STOMP SWITCH: Click to turn on/off the device.

OVERDRIVE-1 Pedal

DRIVE KNOB: Adjusts the amount of distortion.
LEVEL KNOB: Controls the level of the distorted signal.
TONE KNOB: Controls the amount of high frequency contour.
BYPASS STOMP SWITCH: Click to turn on/off the device.

OVERDRIVE-2 Pedal

DRIVE KNOB: Adjusts the amount of distortion.
LEVEL KNOB: Controls the level of the distorted signal.
TONE KNOB: Controls the amount of high frequency contour.
PEAK SWITCH: Set to "High Peak" (*to the right*) to boost mid-range and high frequencies. Set to "Flat (*to the left*) to flatten the frequency curve.
BYPASS STOMP SWITCH: Click to turn on/off the device.

CHORUS Pedal

RATE KNOB: Controls the speed of the chorus effect. Increase it in order to make it faster.
DEPTH KNOB: Determines how extreme the chorus sound is. Controls the amount of pitch-shifting and delay time created by the chorus effect.
MIX KNOB: Controls the amount of chorus effect that is added to the original dry input signal.
BYPASS STOMP SWITCH: Click to turn on/off the device.

AMP SECTION

MARK IIC+ & IIC++ Amplifiers

FRONT PANEL CONTROLS

VOLUME 1 KNOB: Input gain knob.
- **PULL BRIGHT SWITCH:** High frequency boost. Click to activate/deactivate. The effect of this becomes more subtle as the VOLUME 1 knob is increased.

TREBLE KNOB: High-frequency control.
- **PULL SHIFT SWITCH:** When pulled out, the TREBLE knob frequency center point is shifted. Click to activate/deactivate.

BASS KNOB: Low-frequency control.
- **PULL SHIFT SWITCH:** Boosts low frequencies at the first gain stage. Click to activate/deactivate.

BASS KNOB: Low-frequency control.

MIDDLE KNOB: Mid-range frequency control.

MASTER 1 KNOB: Controls the overall volume of the amplifier without changing the tone.
- **PULL DEEP SWITCH:** Low-frequency boost. It also increases the gain. Click to activate/deactivate.

LEAD DRIVE KNOB: Controls the amount of overdrive sustain and distortion. This knob is deactivated while in RHYTHM channel.
- **PULL LEAD SWITCH:** Channel selector. Click to toggle between RHYTHM and LEAD channels.

LEAD MASTER KNOB: Controls the loudness of the LEAD channel. This knob is deactivated while in RHYTHM channel.
- **PULL BRIGHT SWITCH:** High-frequency boost. This control only has effect on the LEAD channel. Click to activate/deactivate.

5-BAND EQ: 5-band graphic equalizer. Drag-and-move the sliders to boost or cut frequency bands.

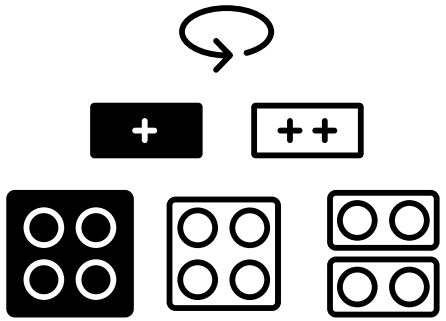
EQ TYPE SWITCH: Graphic EQ bypass control.
- **EQ. AUTO:** Sets the Graphic EQ to only affect the LEAD channel.
- **CENTER POSITION:** Sets the Graphic EQ to affect both the RHYTHM and LEAD channels.
- **EQ. OUT:** Bypasses the Graphic EQ.

STANDBY/POWER SWITCHES (linked): Click to bypass/enable the amplifier section.

REAR PANEL CONTROLS

PRESENCE KNOB: Boosts the upper midrange and treble frequencies.
REVERB KNOB: Spring reverb mix control.
CLASS SWITCH: Determines the operating mode of the power amp (Simul-Class™ / Class A).

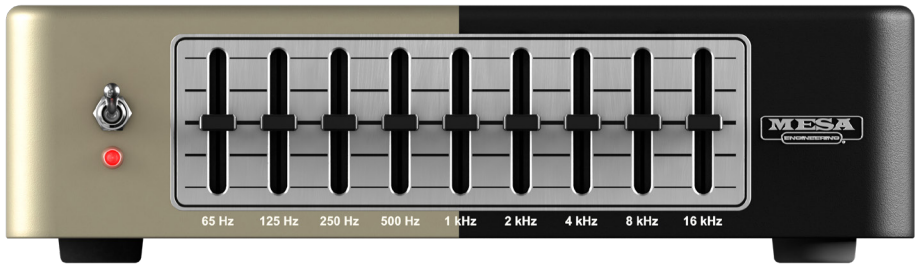
GEAR SELECTOR



In order to create different combinations, **click the icons at the bottom** to switch between amps and cabinets separately.

Click  to flip the amp view and access the rear panel controls.

EQ SECTION



High-fidelity Graphic EQs that allow you to graphically see and individually control nine different frequency bands.

BYPASS SWITCH: Click to activate/bypass the graphic EQ.
EQ BANDS: Bank of nine control sliders used to boost or cut frequency bands.

CAB SECTION

The cabinet section features 10 different microphones with a range of different positions.

Multiple speakers are also available.

IMPULSE LOADER SELECTOR BOX: Drop down menu for selecting factory microphones, speakers, or loading your own IR files. The folder path will be saved, allowing the ability to navigate through your IRs by using the navigation arrows on either side of the menu.

POSITION KNOB: Controls the position of the microphone between the center and the edge of the cone (***Disabled when loading external IR files***).

DISTANCE KNOB: Controls the distance between the microphone and the cone (***Disabled when loading external IR files***).

MIC LEVEL KNOB: Controls the level of the selected impulse.

PAN KNOB: Controls the output panning of the selected impulse.

ON/OFF BUTTON (ROOM): Disables or enables the room microphone.

ROOM LEVEL KNOB: Controls the level of the room microphone.

ON/OFF BUTTON: Disables or enables the respective IR loader Section.

Ø PHASE INVERTER BUTTON: Inverts the phase of the loaded impulse.

DRAG TO POSITION: You can also control the microphone position and distance by clicking the microphone and dragging it to the desired spot. The values will be reflected on the Position and Distance knobs and vice versa.

POST FX SECTION

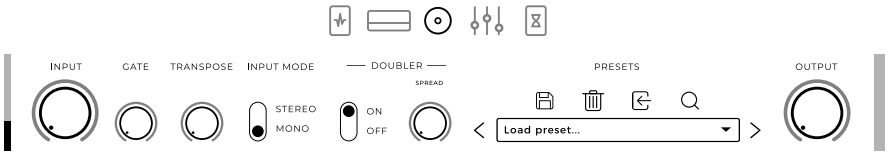
DELAY Pedal

MIX KNOB: Controls the amount of delay effect that is added to the original dry input signal.
FEEDBACK KNOB: Sets the amount of delay returned to the input of the delay line. The higher the settings, the more repeats.
HIGH/LOW PASS FILTER KNOBS: Controls the frequency range of the high-pass filter and the low-pass filter accordingly.
TIME L/R KNOBS: Sets the delay time in either milliseconds or musical subdivisions ranging from **100ms to 1100ms** and **1/64T to 1/1D**.
MODE SWITCH: Toggles between single and dual modes.
TIME TYPE SWITCH: Toggles between milliseconds and musical subdivisions.
PRE/POST SWITCH: Places the delay pedal before the amplifier section or just before the reverb pedal.
SYNC SWITCH: Determines whether the delay time is set according to the plugin/DAW tempo or manually. When the Delay is in Sync Off mode, it can be set by typing the value into the display with the keyboard.
TAP TEMPO STOMP SWITCH: Controls the delay time by clicking. The delay time is set as the interval between the last two clicks on the stomp switch.
ENGAGE STOMP SWITCH: Click to activate/deactivate the pedal.

REVERB Pedal

MIX KNOB: Controls the amount of effect that is added to the original dry input signal.
DECAY KNOB: Sets the duration of the reverb decay envelope.
PRE DELAY KNOB: Sets the amount of time between the original dry sound and the reverb's first reflection.
HIGH/LOW PASS FILTER KNOBS: Controls the frequency range of the high-pass filter and the low-pass filter accordingly.
BYPASS STOMP SWITCH: Click to activate/deactivate the pedal.

GLOBAL FEATURES



INPUT AND OUTPUT GAIN KNOBS: Input will affect how much signal the plugin will feed in. Adjust according to your needs and input signal levels. The output will affect how much signal the plugin will feed out. The meters will show if input or output signals are clipping by holding a gray indicator for three seconds.

GATE KNOB: Attenuates the input signal below the threshold.

INPUT MODE SWITCH: Real-life hardware has the power to process only a mono input signal. With the Stereo switch, you are able to process a stereo input signal. Ideal for running stereo bass tracks or experimenting with any stereo sources.

TRANSPOSE KNOB: Moves the signal up or down in pitch by a constant interval (+12/-12 semitones).

DOUBLER SWITCH: Engages the doubler effect. Disabled in stereo mode.

SPREAD KNOB: Determines how many milliseconds the signal copy is delayed.

PRESETS MENU: This functionality allows the user to save, load, import and export presets. The presets are saved as **XML files**. More info on *page 20*.

COGWHEEL ICON (*STANDALONE ONLY*): Audio settings menu. You can select the audio interface to use, set the input/output channels, modify sample rate, buffer size and MIDI devices.

MIDI PORT ICON: Opens the MIDI Mappings window. To map any external device to control the plugin, please check the MIDI SETUP instructions (***Page 21***).

PITCHFORK ICON: Click to activate the built-in tuner.

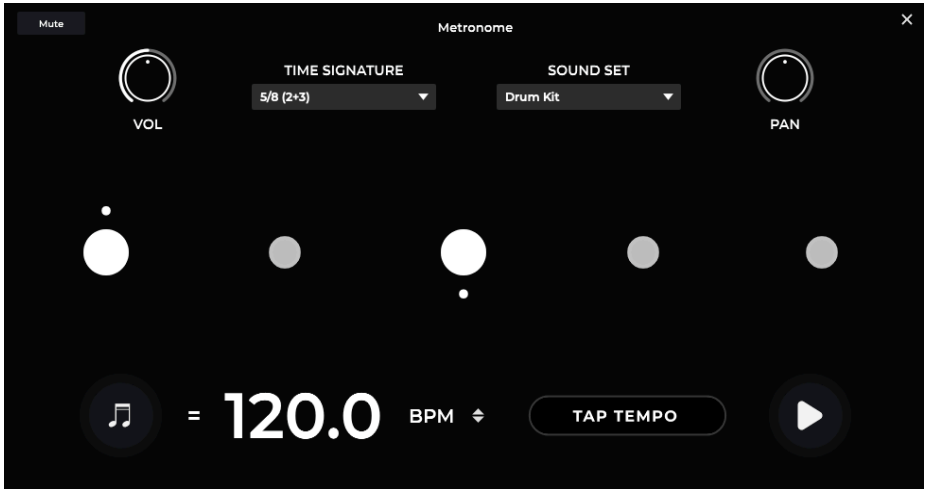
METRONOME ICON (*STANDALONE ONLY*): Opens the metronome interface. Right-click on it to start/stop the metronome playback (***Page 19***).

TAP ICON (*STANDALONE ONLY*): Controls the plugin global tempo by clicking it. The time is set as the interval between the last two clicks.

TEMPO VALUE (*STANDALONE ONLY*): Adjusts the tempo by clicking the arrows. Double-click on it to enter numerical values.

RESIZE BUTTON: Click to resize the plugin Window. You can select between four possible sizes. Large and X-Large sizes are the same when using low resolution screens.

METRONOME



A metronome is a device that produces a steady pulse to help musicians play in time. The pulse is measured in Beats Per Minute (BPM).

When using the standalone app, click on the metronome icon to open its interface. **Right-clicking on it will start/stop the metronome playback**. Closing the interface won't stop the playback.

The last used settings will be remembered after reopening the standalone app.

MUTE BUTTON: Click to mute the beats.

VOL KNOB: Determines the metronome output volume.

PAN KNOB: Controls the output panning of the metronome.

TIME SIGNATURE MENU: This list features 21 different time signatures, including compound and complex variations. Selecting a time signature will change the beat order and the musical accents.

SOUND SET MENU: This list includes 5 different sounds for the metronome.

BEATS: Toggleable beats that can be changed or turned off by clicking. They offer visual feedback according to the current tempo, subdivisions, and accents selected. The white beats include 3 different accents and the grey beats include only one. Right-click on them to reveal a drop-down menu.

BEATS PER PULSE BUTTON: Determines how many beats can be heard per pulse.

BPM VALUE: Determines the beat speed. The tempo ranges from 40 to 240 BPM. Click to enter a custom value with the keyboard.

UP/DOWN ARROWS: Click to change the value by 1.0 BPM. Click-and-hold to change the value by 10.0 BPM.

TAP TEMPO BUTTON: Controls the metronome tempo by clicking it. The tempo is set as the interval between the last two clicks and it's also linked to the plugin global tempo.

START/STOP BUTTON: Controls the metronome playback. MIDI assignable.

PRESETS

This functionality allows the user to save, load, import and export presets. The presets are saved as **XML files**.

SAVE BUTTON: The Diskette Icon on the left allows the user to save the current configuration as a preset.

DELETE BUTTON: The trash bin allows the user to delete the active preset. (***This action cannot be undone***). If you tweak an existing saved preset and you need to recall the saved version, just load another preset and load back the desired preset. Clicking on the name of the modified preset once its loaded will NOT recall its values.

LOAD PRESET: You can load presets from other locations (***XML files)***.

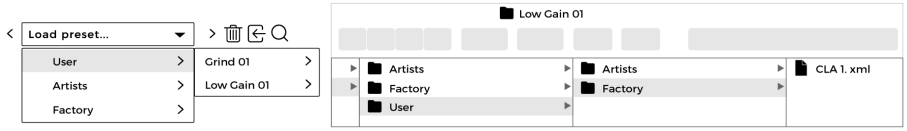
PRESETS FOLDER SHORTCUT: Click the *Magnifying Glass* icon on the Presets toolbar to open the Neural DSP preset folder.

DROPDOWN MENU: The arrow on the right side of the list displays a list of presets included with the product. They are categorised by factory, artists and the ones created by the user.

WHERE ARE MY PRESETS LOCATED?

Windows:
C:/ ProgramData / Neural DSP / Mesa Boogie Mark IIC+ Suite
Mac OSX:
HD / Library / Audio / Presets / Neural DSP / Mesa Boogie Mark IIC+ Suite

CUSTOM FOLDERS



You can create folders to organize your presets under the main directory. The dropdown menu will be updated the next time you open the plugin.

MIDI SETUP

The plugin supports MIDI messages. Please, check the following steps to assign MIDI controls to plugin parameters and different UI components.

Mapping MIDI note event to Buttons:

- Enable MIDI Learn from the right-click menu.
- Click on the component you want to control.
- Press down a MIDI note on the MIDI controller and release it.
- Disable MIDI Learn from the right-click menu.
- Now the mapped MIDI note will toggle the parameter value.

Mapping two MIDI notes to a Slider/Combobox:

- Enable MIDI Learn from the right-click menu.
- Click on the component you want to control.
- Press down the first MIDI note on the MIDI controller.
- Press down the second MIDI note on the MIDI controller.
- Release the first MIDI note.
- Release the second MIDI note.
- Disable MIDI Learn from the right-click menu.
- Now the two mapped MIDI notes can be used to increment/decrement the parameter value.

Mapping MIDI CC event to Buttons:

- Enable MIDI Learn from the right-click menu.
- Click on the component you want to control.
- Press down MIDI CC shortcut on the MIDI controller and release it.
- Disable MIDI Learn from the right-click menu.
- Now mapped MIDI CC events will toggle the parameter value.

Mapping MIDI CC event to a Slider/Combobox:

- Enable MIDI Learn from the right-click menu.
- Click on the component you want to control.
- Move a CC knob on the MIDI controller.
- Disable MIDI Learn from the right-click menu.
- Now the mapped MIDI CC event will control the parameter value.

Mapping two MIDI CC events to a Slider/Combobox:

- Enable MIDI Learn from the right-click menu.
- Click on the component you want to control.
- Press down the first MIDI CC button on the MIDI controller.
- Press down the second MIDI CC button on the MIDI controller.
- Release the first MIDI CC button.
- Release the second MIDI CC button.
- Disable MIDI Learn from the right-click menu.
- Now the two mapped MIDI CC events can be used to increment/decrease the parameter value.

Mapping MIDI Program Change event to Buttons:

- Enable MIDI Learn from the right-click menu.
- Click on the component you want to control.
- Press down the MIDI Program Change shortcut twice on the MIDI controller.
- Disable MIDI Learn from the right-click menu.
- Now the mapped MIDI Program Change event will toggle the parameter value.

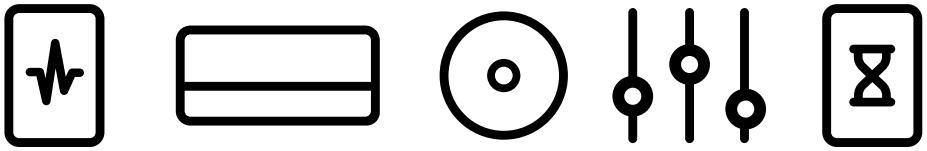
Mapping two MIDI Program Change events to a Slider/Combobox:

- Enable MIDI Learn from the right-click menu.
- Click on the component you want to control.
- Press down the first MIDI Program Change button on the MIDI controller.
- Press down the second MIDI Program Change button on the MIDI controller.
- Disable MIDI Learn from the right-click menu.
- Now the two mapped MIDI Program Change events can be used to increment/decrease the parameter value.

All mentioned MIDI Events will be registered on the **MIDI Mapping** window. You can open it and edit all the parameters by clicking on the **MIDI port icon** on the bottom left corner of the plugin. You can add new MIDI events manually by clicking on the "**+**" button.

GUI BASICS

The plugin has knobs and switches in the **Graphic User Interface** (GUI). These resemble the ones in the physical analog hardware with added control.



To bypass a whole section, right-click or double-click on the upper icons.

KNOBS

Use the mouse to control knobs and switches. To turn a knob clockwise, click on the control with your mouse and move the cursor up. To turn a knob counterclockwise, click on the knob with the mouse and move the cursor down.

RETURNING A KNOB TO ITS DEFAULT VALUE

Double-click on the knobs to recall their default values.

ADJUSTING A KNOB WITH FINE CONTROL

To fine-adjust the knob values, hold down the “command” key (***macOS)*** or the “control” key (***Windows***) while dragging the mouse.

SWITCHES

To interact with buttons or switches, just click on them.

For stomps and certain switches, a LED indicator will light up to signalize whether the parameter is engaged or not.

SUPPORT AND CONTACT INFORMATION

NEURALDSP.COM/SUPPORT

For technical issues or any problems experienced with our software contact us on our website. Here you will find our FAQ (*Frequently Asked Questions*), our troubleshooting info (*your question might have been asked before*) and our contact email **support@neuraldsp.com**. Please be sure to contact this specific email for support purposes. If you contact any other Neural DSP email our reply may be delayed.

SUPPORT INFORMATION

In order to help and assist you, please attach the following information to our support team:

- ***Product serial number and version (e.g Mesa Boogie Mark IIC+ Suite, Ver 1.0.0).***
- ***Version number of your audio system (e.g ProTools 2021.12, Cubase Pro 11, Ableton Live 11).***
- ***Interface/hardware (e.g. Apollo Twin, Apogee Duet 2, etc.).***
- ***Computer and operating system info (e.g. Macbook Pro OSX 13, Windows 10, etc.) .***
- ***A detailed description of the problem.***

CORPORATE CONTACT

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