

# Parallax User's Guide

Parallax 2.0.0

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# INTRODUCTION

NEURAL DSP // PARALLAX

Neural Parallax is a one-stop solution for modern bass recording and sound design. Designed by **Doug Castro** (creator of *Darkglass Electronics*) and **Francisco Cresp** (co-founder of *Neural DSP*), it not only encompasses over a decade of experience engineering some of the most iconic and devastating bass distortions on the planet, but also includes all of the features and routing that would not be technically feasible in the analog realm.

## Parallax key features:

- Individual multiple tube-gain stages for Mid and Treble.
- Variable High-Pass Filter for total distortion control.
- Individual Level controls for Mid and Treble bands.
- Variable Low Pass Filter for perfect control over the bottom end response.
- Precise Bus compressor algorithm for the Low band.
- 6-band graphic equalizer
- Comprehensive cabsim module, with over 50 IRs across 6 different movable virtual microphones.

In addition to the accurate analog emulation of this product, we added a Cab Simulation block where you can find a pack of carefully recorded impulses specially designed by Neural DSP.

We proudly present to you **PARALLAX**.



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## BASIC REQUIREMENTS

To start using NEURAL DSP Plugins you will need:

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

**Note:** *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 - 11 (**64-bit only**)

Windows 10 (**64-bit only**)

## SUPPORTED HOST SOFTWARES

To use NEURAL DSP software as a plugin, you need an audio software that can load it (**64-bit only**). We officially support the following Software to host our plug-ins:

*Pro Tools 12 - 2020 (Mac & Windows): AAX Native*

*Logic Pro X 10.15 or higher - (Mac): AU*

*Cubase 8 - 10 (Mac & Windows): VST2 - VST3*

*Ableton Live 10 or higher (Mac): AU & VST / (Windows): VST*

*Reaper 6 or later (Mac): AU, VST2 & VST3 / (Windows): VST2 & VST3*

*Presonus Studio One 4 or higher (Mac & Windows): AU, VST2 & VST3*

*FL Studio 20 (Mac & Windows): VST2 & VST3*

*Reason 11 (Mac & Windows): VST2 & VST3*

\*All our products include a standalone version (**64-bit only**).

Support is offered for these operating systems and software platforms. This doesn't mean our plugins will not work in your DAW, just download the Demo and try (**Please check that your host software is compatible with your operating system first**).

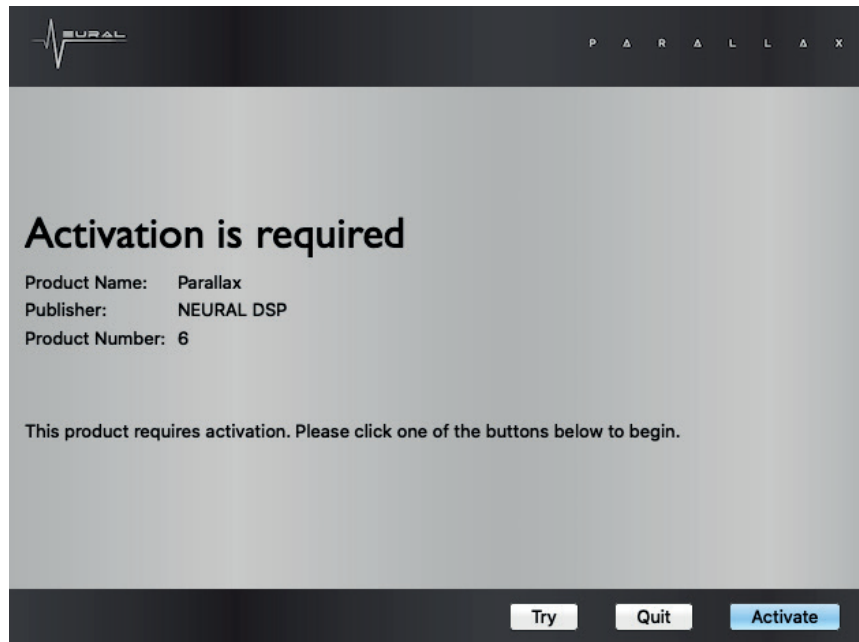
For more information, check our FAQ page here:

<https://support.neuraldsp.com/help>

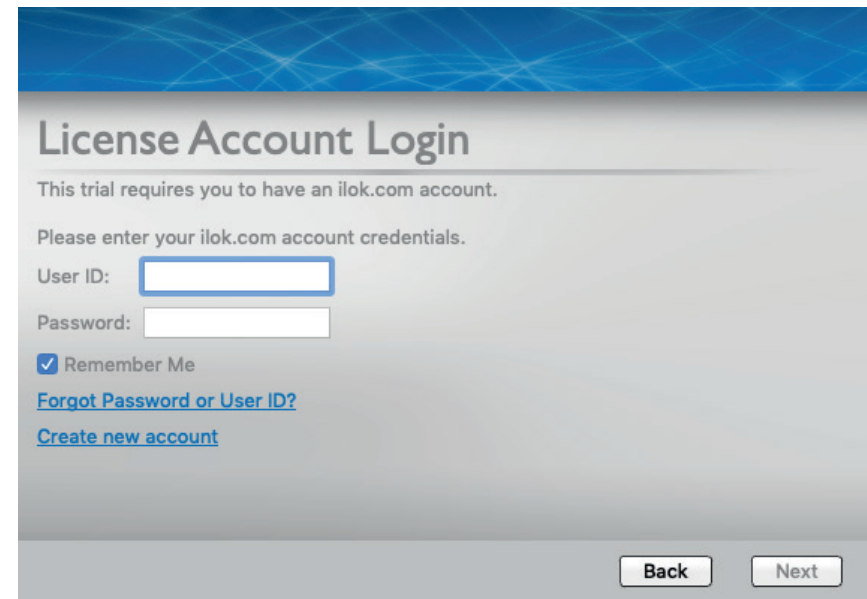
## iLOK USER ID AND iLOK LICENSE MANAGER

### DEMO PRODUCT

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 plug-in/standalone app.



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



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

## FULL PRODUCT

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

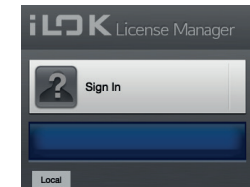
- Please make sure you have the latest **iLok License Manager** application installed and running.  
(<https://www.ilok.com/#!/license-manager>)
- Login with your iLok account. If you don't have an **iLok account**, you can create one right here:  
<https://www.ilok.com/#!/registration>

To get a full license for any of our products, go to our website, click on a plug-in 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.

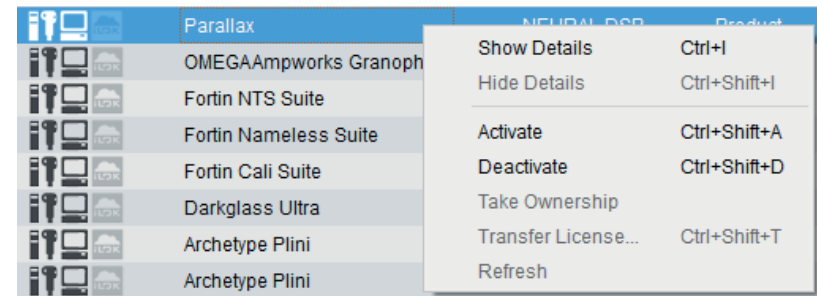
### After that, please follow the following steps:

- 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 Plug-ins within your DAW and restart your DAW.
- You can run the standalone version as well (***If you run it on Windows, you can find the executable in C:/ Program Files / Neural DSP //. If you run it on Mac, you can find the app under the Applications folder.***)

## FILE LOCATIONS

NEURAL DSP Plug-ins will be installed in the appropriate default location for each plug-in format (VST, VST3, AAX, AU) unless a different custom location is selected in the process.

### MacOS

**AudioUnits:** Macintosh HD / Library / Audio / Plug-ins / Components / Parallax

**VST2:** Macintosh HD / Library / Audio / Plug-ins / VST / Parallax

**VST3:** Macintosh HD / Library / Audio / Plug-ins / VST3 / Parallax

**AAX:** Macintosh HD / Library / Application Support / Avid / Audio / Plug-ins / Parallax

**Standalone App:** Macintosh HD / Applications / Parallax

**Preset Files:** MacintoshHD / Library / Audio / Presets / Neural DSP / Parallax

**Manual:** Macintosh HD / Library / Application Support / Neural DSP / Parallax

**Note:** *Parallax 2.0.0 is available in 64-bit only.*

### Windows

**64-bit VST:** C:/ Program Files / VSTPlugins / Parallax

**64-bit VST3:** C:/ Program Files / Common Files / VST3 / Parallax

**64-bit AAX:** C:/ Program Files / Common Files / Avid / Audio / Plug-Ins / Parallax

**64-bit Standalone:** C:/ Program Files / Neural DSP / Parallax

**Preset Files:** C:/ ProgramData / Neural DSP / Parallax

**Manual:** C:/ Program Files / Neural DSP / Parallax

**Note:** *Parallax 2.0.0 is available in 64-bit only.*

## UNINSTALLING NEURAL DSP SOFTWARE

To uninstall, **delete the files manually** from your 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**”.

## THE PLUG-IN

Including:

- *Individual multiple tube gain stages for Mid and Treble.*
- *Variable High Pass Filter for total distortion control.*
- *Individual Level controls for Mid and Treble bands.*
- *Variable Low Pass Filter for perfect control over the bottom end response.*
- *Precise Bus compressor algorithm for the Low band.*
- *6-band graphic equalizer.*
- *Comprehensive cabsim module, with over 50 IRs across 6 different movable virtual microphones.*

## PARALLAX FEATURES CHANNEL STRIP SECTION

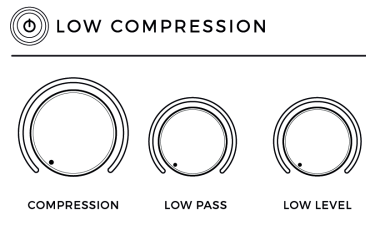


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Parallax is a multi-band distortion for bass. This plugin is meant to bring the user a ready tool, which is based on a studio technique used by audio engineers and producers to craft their bass tone. Bass, mids, and high frequencies are processed separately with distortion and compression to be mixed back together.



## LOW SECTION



*Dialing a high gain sound with presence, definition, and clarity requires removing a certain amount of low-end from the spectrum to be distorted. The low band signal passes straight to the graphic equalizer bypassing the cabsim, and it remains mono while in stereo input mode.*

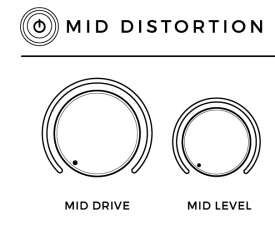
**LOW COMPRESSION BUTTON:** Click to activate. This will turn on/off both the low band and low compression section.

**COMPRESSION KNOB:** Drag and move it to set the amount of gain reduction and make up gain from 0dB to +10dB. **Fixed settings: Attack 3ms - Release 6ms - Ratio 2.0.**

**LOW PASS KNOB:** This filter removes mid and high frequencies and passes the low-frequency signal.

**LOW LEVEL KNOB:** Drag and move it to adjust the output signal and compensate for an eventual volume-loss caused by the compression.

## MID SECTION



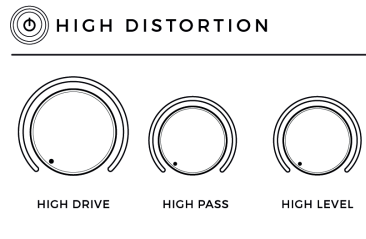
*The Mid Drive has enough dynamic range to go from mild saturation to blistering high gain, all without losing definition and articulation. Multiple tube gain stages were designed for the Mid and Treble bands separately.*

**MID DISTORTION BUTTON:** Click to activate. This will turn on/off the mid saturation processing.

**MID DRIVE KNOB:** The amount of saturation is determined by this knob.

**MID LEVEL KNOB:** Drag and move it to adjust the mid band output level.

## HIGH SECTION



*The high pass Filter frequency control allows dialing the perfect amount of fuzz or tightness to the bass signal. Multiple tube gain stages were designed for the Mid and Treble bands separately.*

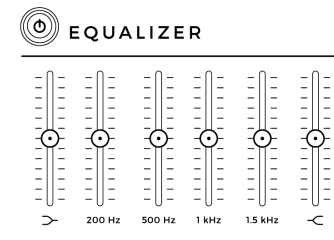
**HIGH DISTORTION BUTTON:** Click to activate. This will turn on/off the high saturation processing.

**HIGH DRIVE KNOB:** The amount of saturation is determined by this knob.

**HIGH PASS KNOB:** This filter removes mid and low frequencies and passes the high-frequency signal.

**HIGH LEVEL KNOB:** Drag and move it to adjust the high band output level.

## EQ SECTION



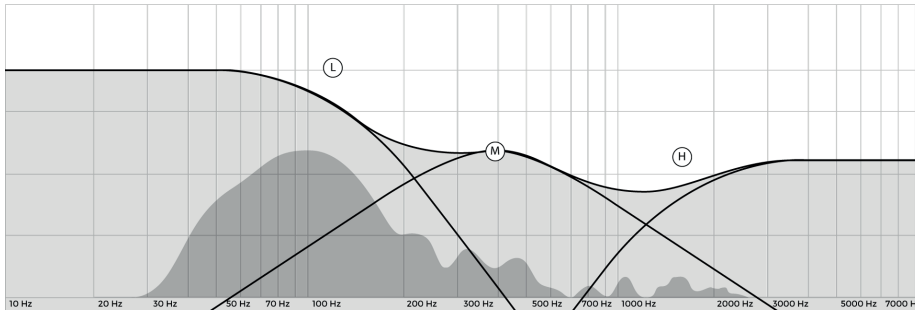
*While the Low, Mid and High sections offer total control of the distortion texture, attack, and overall size, the six band graphic equalizer provides an additional control layer for fine tuning the Parallax's frequency response to perfection.*

**ON/OFF EQUALIZER BUTTON:** Click to activate. This will turn on/off the graphic equalizer.

**EQ BANDS:** Bank of six sliders used to boost or cut frequency bands from -12dB to +12dB.

- Low Shelf: 100Hz
- 250Hz
- 500Hz
- 1.0kHz
- 1.5kHz
- 5.0kHz
- Low Shelf: 5.0kHz

## PARAMETRIC EQ SECTION



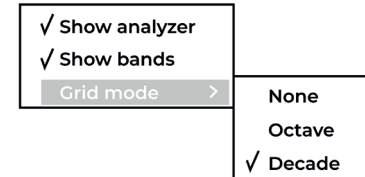
*The high-fidelity parametric equalizer shows graphically the whole signal spectrum. The three frequency bands offer continuous control over filter position and level gain.*

**“L” BAND:** Controls the low pass filter and low level by dragging and moving the “L” circle.

**“M” BAND:** Controls the mid level by dragging and moving the “M” circle.

**“H” BAND:** Control the high pass filter and high level by dragging and moving the “H” circle.

Right-click on the parametric EQ screen to personalize the following items:

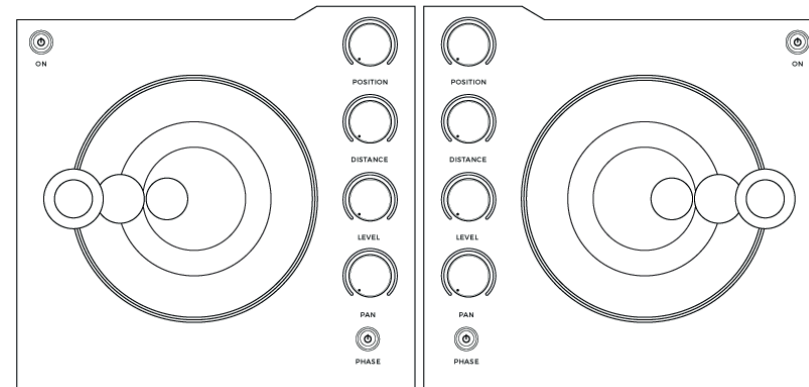


**SHOW ANALYZER:** Turn on/off the signal analyzer.

**SHOW BANDS:** Turn on/off the band shapes.

**GRID MODE:** Change the grid scale (none - octave - decade).

## NEURAL DSP CAB SIMULATION



*We have designed a Cabinet simulation for this plugin. It includes 6 microphones with a range of different positions (The low band signal bypasses the cabsim).*

## GLOBAL FEATURES

NEURAL DSP // PARALLAX

**ON/OFF SWITCH:** Disables or Enables the respective IR loader Section.

**POSITION:** Controls where the Microphone is, meaning from the center of the cone, to the edge of the cone (*Disabled when loading external IR file*).

**DISTANCE:** Controls the Distance of the Mic between close to the cab and far towards the room (*Disabled when loading external IR file*).

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

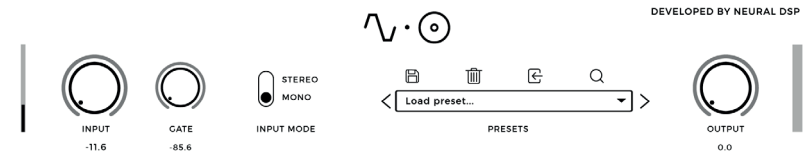
**PAN:** Controls the output panning of the selected impulse.

**Ø PHASE INVERTER SWITCH:** Inverts the phase of the loaded impulse.

**IMPULSELOADERSELECTORBOX:** Dropdown menu for selecting factory Microphones or loading your own IR files. The folder path will be saved, therefore, navigating through them by clicking the navigation arrows is also possible.

**DRAG TO POSITION:** This feature refers to clicking on the microphone circles allows to position the microphone within the cone area. The values will be reflected on the Position and Distance knobs and vice versa.

## PLUGIN GLOBAL FEATURES



**DEVELOPED BY NEURAL DSP:** Click on it to reveal additional info about this product.

**INPUT AND OUTPUT GAIN KNOBS:** Input will affect how much signal the plugin will feed in. This will affect the amount of distortion range of the gain knobs in the head and booster gain knob. Adjust according to your needs and input signal levels. The output will affect how much signal the plugin will feed out to your DAW channel. 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:** Original 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.



**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:** It opens the MIDI Mappings window. To map any external device to control the plugin, please check the MIDI SETUP instructions (*Pag. 14*).

**PITCHFORK ICON (STANDALONE ONLY):** Click on it to activate the built-in tuner.

**RESIZE BUTTON:** Click to resize the plugin Window. You can select between 3 possible sizes. Only two sizes are available when using a low-resolution screen.

## PRESETS



### PRESETS

This functionality allows the user to Save, 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:** Go to the ***Magnifying Glass*** icon on the Presets toolbar to redirect you to your Presets Folder.

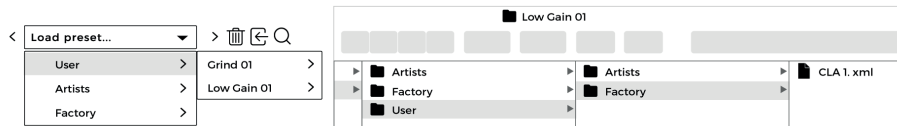
**DROPDOWN MENU:** The arrow on the right side of the list displays a list of presets included by factory, artists and the ones created by the user.

## WHERE ARE MY PRESETS LOCATED?

**Windows:** *C:/ProgramData/Neural DSP/Parallax*

**Mac OSX:** *HD/Library/Audio/Presets/Neural DSP/Parallax*

## 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 Parallax.

## MIDI SETUP

Parallax features MIDI support. Please, check the following steps to assign MIDI controls to plugin parameters/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

Parallax features knobs and switches within the **Graphic User Interface (also known as 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:** To control knobs and switches in Parallax, use the mouse. To turn a knob clockwise, click on the control with your mouse and slide the cursor up. To turn a knob anti-clockwise, click on the knob with the mouse and slide the cursor down.

**RETURNING A KNOB TO ITS DEFAULT VALUE:** To return to the knob’s default values, double-click on them.

**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.



## SUPPORT AND CONTACT INFORMATION

[NEURALDSP.COM/SUPPORT](https://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](mailto:support@neuraldsp.com). Please be sure to contact this email only for support purposes. If you contact some other Neural DSP email, your support will 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 Parallax, Ver 2.0.0)**
- **Version number of your audio system (e.g ProTools 2020.5, Cubase Pro 10, Ableton Live 10.0.1)**
- **Interface/hardware (e.g. Apollo Twin, Apogee Duet 2, etc.)**
- **Computer and operating system info (e.g. Macbook Pro OSX 11, Windows 10, etc.)**
- **A detailed description of the problem**

## Neural DSP 2020

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## CORPORATE CONTACT

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