

# Manual EVO.CHANNEL V1.0



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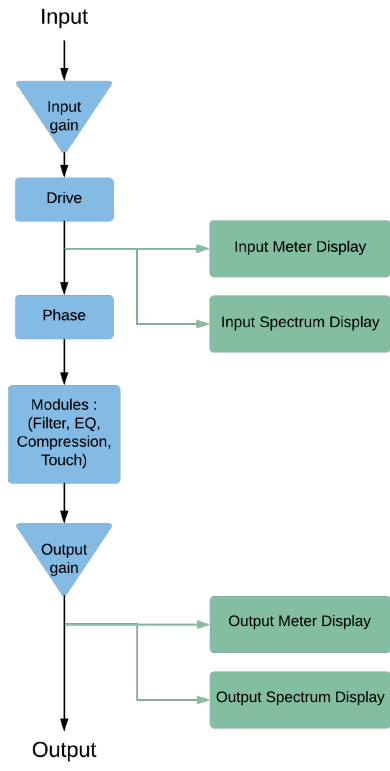
# Introduction

## EVO Channel - The Ultimate Channel Strip Redefined

The philosophy of the analog Channel Strip, the essential element of all analog consoles, is about being efficient, fast, and making things sound great already from the start. EVO Channel is designed to be as efficient, fast and hands-on, adding the advantages of creative digital innovation in terms of workflow and sound, providing everything you need to stay in control of your sound!



EVO Channel architecture :



# General Settings

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## Bypass

Global bypass, when pressed, the signal is routed directly from the inputs to the outputs.

**Value Range** : Enabled/Disabled

**Default Value** : Disabled

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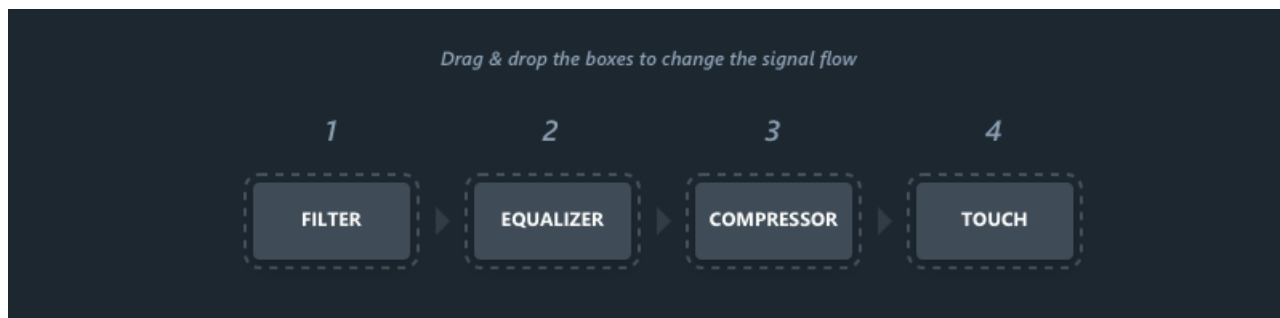
## Skin

The look of the EVO Channel user interface.

**Value Range** : Light/Dark

**Default Value** : Light

## Flow



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Flow allow you to change the order of the modules in EVO Channel. Simply drag and drop a module to set your perfect signal flow.

# Module Settings

## Analyser

### Analyser Switch

The spectrum analyzer originates from the Flux: Pure Analyzer and has been optimized for the EVO Channel. It gives you an accurate direct view of what's going on in the different frequency domains of your audio. When switched on, the spectrum analysis is activated and displayed in the equalization view panel. The grey waveform corresponds to your input signal (post gain/drive), the same as the input meter. The black one is the output signal (post output gain), the same as the output meter.

**Value Range** : Enabled/Disabled

**Default Value** : Enabled

### Analyser Slider

Controls the amount of frequency detail of the curve. Move the slider to the left to get a more smoothed curve, and to the right to get more details.

**Value Range** : No Value

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## Input

### Input Gain

The input gain control trims the level of the signal at the input of EVO Channel. The meter shows both RMS signal (VU-Meter, blue) and peak signal (peak meter, green), from -24 to +18 dB range, referenced at -18dB.

**Value Range** : -24.0 dB / +18.0 dB

**Colors** : - Blue : RMS Value - Green : Peak Value

**Default Value** : 0.0 dB

### Drive

In EVO Channel a signal Drive is available directly at the input Gain for restoring and maintaining the vitality of the sound.

The drive module has been specially designed to add a soft saturation and warmth to your audio tracks.

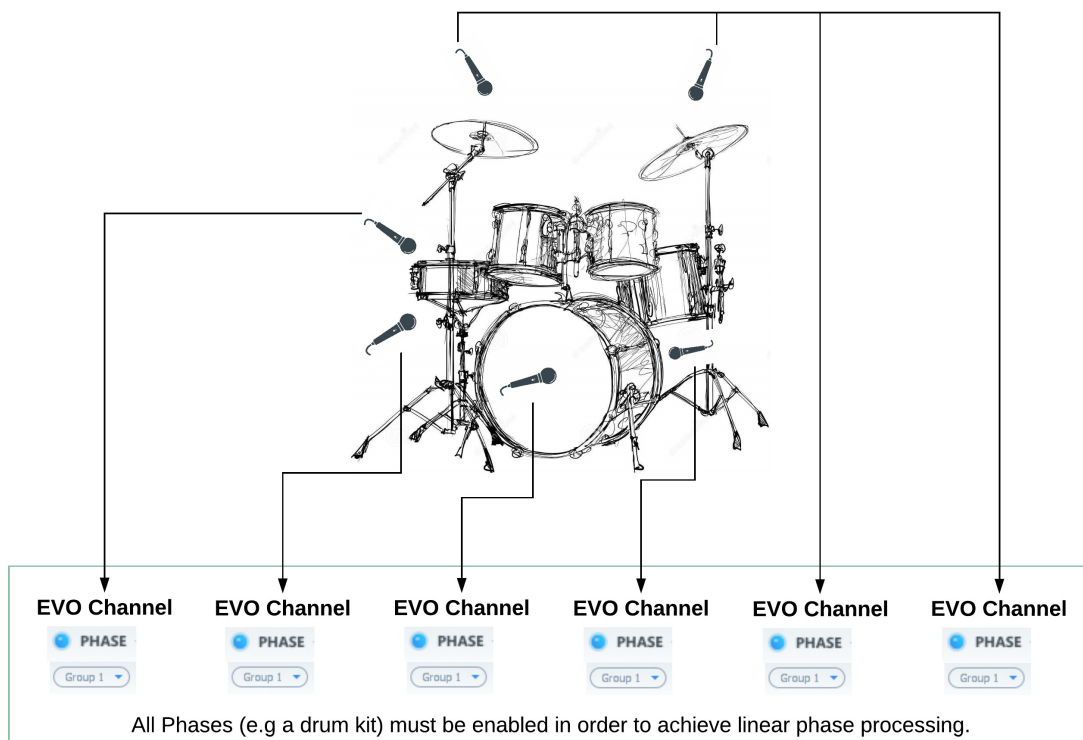
**Value Range** : 0% / 100%

Default Value : 0%

## Phase

One of the most crucial parameters to take into account; Phase, or “The art of using multiple microphones on one and the same sound source”, a classic example is when setting up the sound for a drumkit.

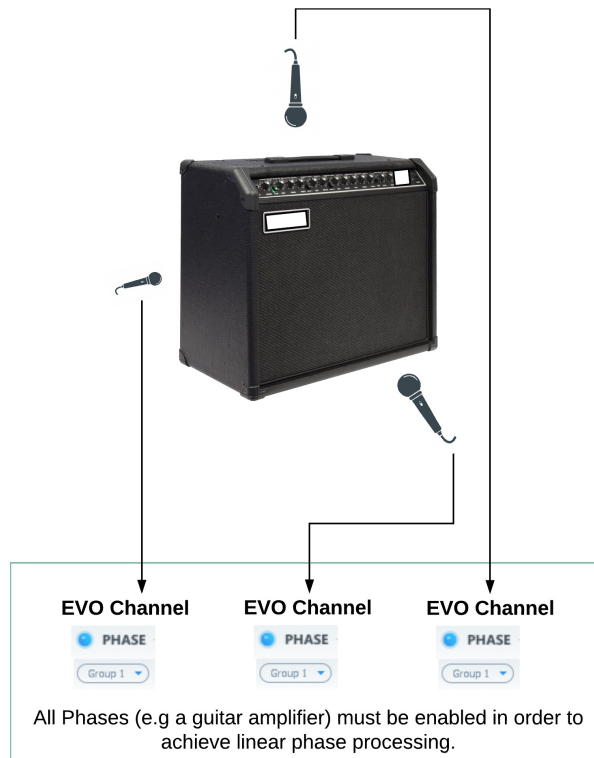
Controlling the Phase of microphones is universal and relevant both for studio and live use. In EVO Channel an Arbitrary and Linear Phase Rotation throughout the spectrum is provided, to accomplish the same natural thing as when physically moving a microphone, of course without adding any latency.



The phase must be enabled for all the drum tracks. Then set the same group number for all these tracks. It allows to enable and disable the phase for all the drums in one click (simply switch on/off for the phase in one of the tracks).

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## Phase Switch

The Phase is the result of Flux:: proprietary research, this unique algorithm allows linear phase correction with zero latency.

Activate the phase module on all of the tracks that were recorded at the same time and in the same room (multi-microphones tracking or live recording in exemple), and then use the slider on the different tracks until you get full control over the phase and everything sounds correct.

When enabled, the phase correction is turned on.

**Value Range** : Enabled/Disabled

**Default Value** : Disabled

## Phase Group

Add an EVO Channel instance to a Phase Group. You can add an instance of EVO Channel to a group, all the members of the same group can then have their Phase enabled or disabled at one and the same time. To do so, add the instance to a group by selecting the group number for the desired group. Now when you then turn the phase switch on or off in any of the instances in the group, this will affect all instances that are members of the same group.

**Value Range** : None/Group number

**Number of groups** : 8 groups

**Default Value** : Disabled

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## Phase Correction

Set the shift value used to correct the phase.

**Value Range** : -180° / 180°

**Default Value** : 0°

## Polarity Invert

When enabled, polarity inversion is applied to the signal.

**Value Range** : Enabled / Disabled

**Default Value** : Disabled

## Equalization module

One of the corner stones in a Channel Strip is a well-built, efficient and complete Equalizer.

The EVO Channel EQ is a straightforward comprehensive 4-band equalizer with additional 6-24 dB Hi/Lo filters.

The graphical interactive EQ curve is layered on top of the built in Spectrum Analyzer for hands-on editing with direct connection to the visual response.

Built with our proprietary State-Space technology, like in Epure, the EQ section has been carefully tuned to preserve the optimal signal to noise ratio independent of the parameter settings preventing the signal from deteriorating when the gain is reduced. It's an efficient sharp-edged surgical precision tool for the most demanding equalizing and filtering tasks conceivable.

Equalization module is divided in two parts :

- A filtering part composed of a low cut, a low shelf, a high cut and a high shelf filter.
- A parametric equalization stage made of four parametric EQs.



## Low-Cut Switch

Enables the low cut filter.

**Value Range** : Enabled / Disabled

**Default Value** : Enabled

## Low-Cut Cutoff Frequency

Cutoff frequency of the low cut filter.

**Value Range** : 20Hz to sampling rate / 2

**Default Value** : 20Hz

## Low-Cut Slope

Slope of the low cut filter.

**Value Range** : 6dB/oct - 24dB/oct

**Default Value** : 6dB/oct

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## Low Shelf Switch

Enables the low shelf.

**Value Range** : Enabled / Disabled

**Default Value** : Enabled

## Low Shelf Cutoff

Cutoff frequency of the low shelf.

**Value Range** : 20Hz / 22050Hz

**Default Value** : 100Hz

## Low Shelf Gain

Target gain for frequencies below the cutoff frequency.

**Value Range** : -24.0dB / +24.0dB

**Default Value** : 0.0dB

## High-Cut Switch

Enables the high cut filter.

**Value Range** : Enabled / Disabled

**Default Value** : Enabled

## High-Cut Cutoff Frequency

Cutoff frequency of the high cut filter.

**Value Range** : 20Hz to sampling rate / 2

**Default Value** : Sampling rate / 2

## High-Cut Slope

Slope of the high cut filter.

**Value Range** : 6dB/oct - 24dB/oct

**Default Value** : 6dB/oct

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## High Shelf Switch

Enables the high shelf.

**Value Range** : Enabled / Disabled

**Default Value** : Enabled

## High Shelf Cutoff

Cutoff frequency of the high shelf.

**Value Range** : 20Hz to sampling rate / 2

**Default Value** : 5000Hz

## High Shelf Gain

Target gain for frequencies above the cutoff frequency.

**Value Range** : -24.0dB / +24.0dB

**Default Value** : 0.0dB

## Parametric Equalization Switches

Enables the corresponding parametric equalizer.

**Value Range** : Enabled / Disabled

**Default Value** : Enabled

## Parametric Equalization Gain

Gain stage of parametric equalization.

**Value Range** : -24.0dB / +24.0dB

**Default Value** : 0.0dB

## Parametric Equalization Center Frequency

Center frequency of parametric equalization.

**Value Range** : 20Hz to sampling rate / 2

**Default Value** : Default value depends of the equalizer used.

- Low parametric equalizer : 200Hz
- Mid-Low parametric equalizer : 500Hz
- Mid-High parametric equalizer : 1300Hz
- High parametric equalizer : 2500Hz

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## Parametric Equalization Q

Q value of parametric equalization. Defines the width of the EQ band.

**Value Range** : 1.0 Q / 100.0 Q

**Default Value** : 5.0 Q

## Equalization Output Gain

A stage of gain at the output of the equalization module.

**Value Range** : -12.0dB / +12.0dB

**Default Value** : 0.0dB

## Compressor

In addition to controlling the signal dynamics, the compressor is often used for shaping the attitude of a sound. To use a compressor in a creative and artistic fashion it's important that it's easy to use and has the ability to create an interesting sound.

The EVO Channel's compressor module is based on the Pure Compressor's dynamics engine, and the same range of compression types are available in EVO Channel through the different modes available (each mode corresponds to a fine tuning of Pure Compressor). As some modes use a LID compression (Level Independent Detection) in parallel, a gain reduction may be processed even if the audio level is below the threshold.



## Mode

The compressor module gives you up to 9 modes of compression.

### Available modes :

- Start
- Kick/Drum
- Overhead
- Drum Bus
- Bass
- Acoustic
- Piano
- Vocal
- Mix

**Default Value** : Start

## Threshold

Threshold value of the compressor.

**Value Range** : -42.0dB / +18.0dB

**Default Value** : Depends on the Mode.

## Ratio

Compression ratio parameter.

**Value Range** : 1.0:1 / 10.0:1

**Default Value** : Depends on the Mode.

## Attack

Attack value of the compressor.

**Value Range** : 0.1ms / 1000.0ms

**Default Value** : Depends on the Mode.

## Release

Release value of the compressor.

**Value Range** : 1ms / 10000ms

**Default Value** : Depends on the Mode.

## Auto Adapt.

When enabled, the compressor adapts its release time to the input signal depending on the audio signal, but won't exceed the release time value.

**Value Range** : Enabled / Disabled

**Default Value** : Enabled

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## Gain Reduction Display

Displays the gain reduction performed by the compressor.

**Value Range** : 0dB / -24dB

## Compressor Output Gain

Gain stage at the output of the compressor module.

**Value Range** : 0.0dB / 24.0dB

**Default Value** : 0.0dB

## Wet

Wet parameter defines how much of the compressed signal is mixed with the original signal, for parallel compression.

**Value Range** : 0% / 100%

**Default Value** : 100%

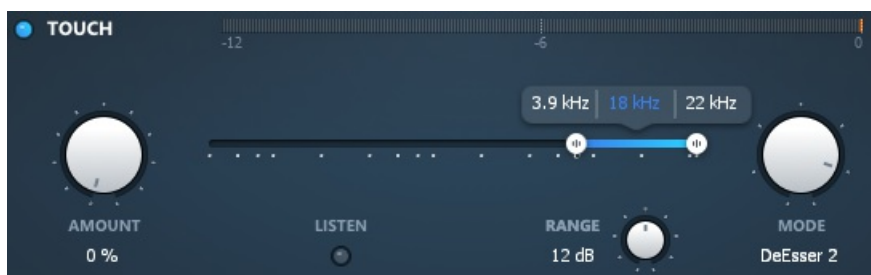
## Touch

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Different types of material require different tools, whether it's a vocal cut, drums, guitar, piano or something else, it requires the accurate specific treatment for the material.

The Touch module in EVO Channel is a polymorphic section offering a variety of different processors designed to adapt to the requirements of the material, with seven different processing modes including a DeEsser, Expander and a Transient and Sustain Designer.

With the adjustable signal flow in EVO Channel the Touch module can be inserted where it's best doing its job, like having the DeEsser or Expander first in the flow, or the Transient designer after the compressor.



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## Mode

Mode parameter defines the processor used by the touch module. Seven different modes are provided.

**Available modes** :

- Transient Boost
- Transient Kill
- Sustain Boost
- Sustain Kill



- DeEsser 1
- DeEsser 2
- Expander

**Default Value** : DeEsser 2

## Amount

The amount of signal processed by the Touch module.

**Value Range** : 0% / 100%

**Default Value** : 0%

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## Release/Range

There is a release parameter for the following modes :

- Transient Boost
- Transient Kill
- Sustain Boost
- Sustain Kill
- Expander

**Value Range** : 1ms / 1000ms

**Default Value** : 20ms

The two deesser modes offers a range parameter, to limit the maximum gain reduction.

**Value Range** : 0dB / 24dB

**Default Value** : 12dB

## Frequency Range

The Touch module works on a defined frequency range.

**Value Range** :

- Minimal bound : 20Hz
- Maximal bound : Sampling Rate / 2

**Default Value** :

- Inferior bound : 3.9kHz
- Superior bound : up to Sampling Rate / 2
- Range width : Depends on the sampling rate.

## Listen

When enabled, you can monitor the actual signal setup with the frequency range.

**Value Range** : Enabled / Disabled

**Default Value** : Disabled

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## Output

### Output Gain

The output gain control trims the level of the signal at the output of EVO Channel. The meter shows both RMS signal (VU-Meter, blue) and peak signal (peak meter, green), from -24 to +18 dB range, referenced at -18dB.

**Value Range** : -24.0 dB / +18.0 dB

**Colors** :

- Blue : RMS Value
- Green : Peak Value

**Default Value** : 0.0 dB

# Shortcuts

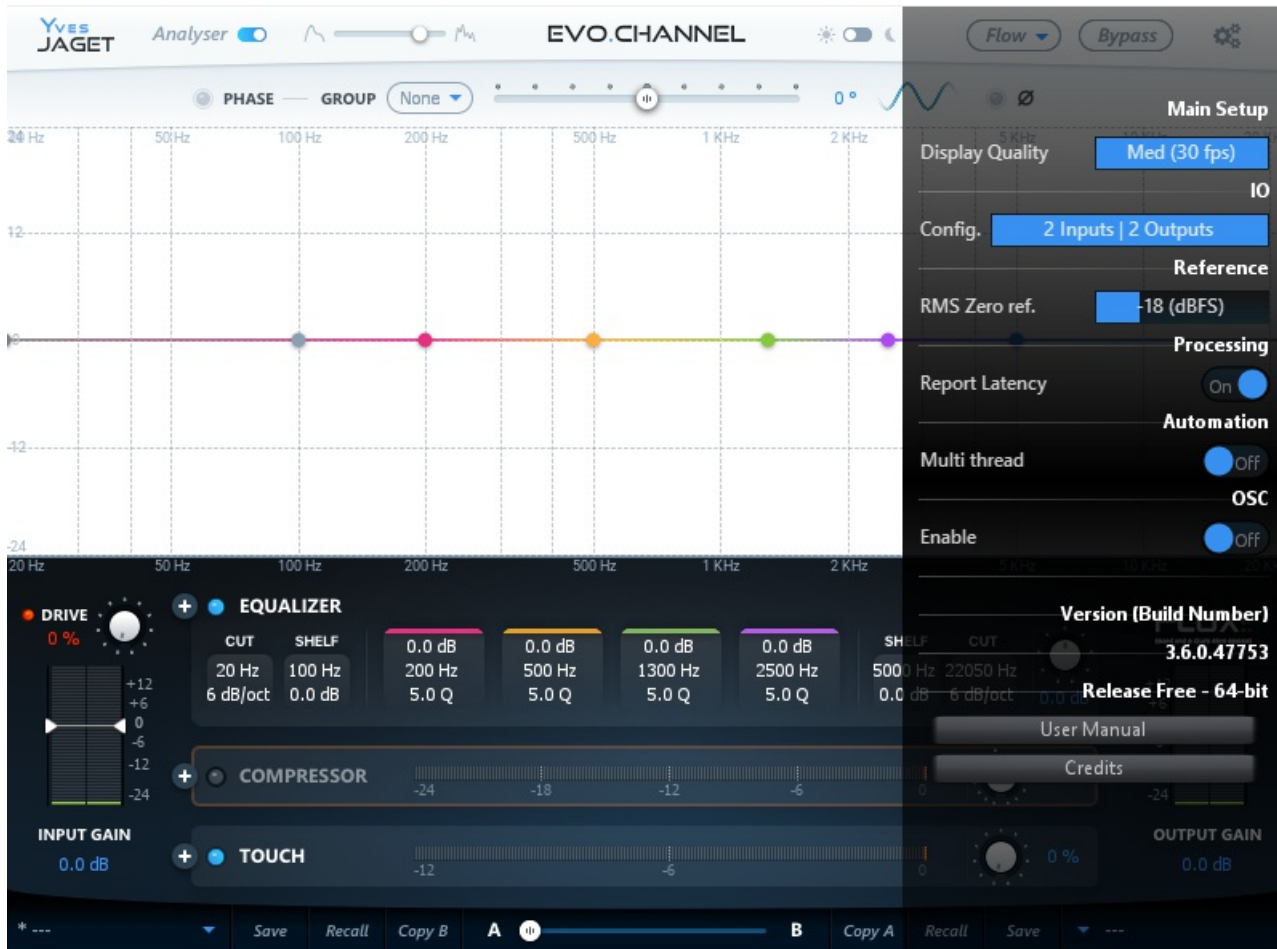
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Shortcuts have been added to further enhance the user interaction and improve the workflow.

<b>Where</b>	<b>Shortcut</b>	<b>Description</b>
EQ Display	Mouse Click + Alt	Reset to default value
EQ Display	Mouse Move + Ctrl	Q change only
EQ Display	Mouse Move + Shift	Gain change only
EQ Display	Mouse Move + Ctrl + Shift	Frequency change only
EQ Display	Wheel + Ctrl	Q change only
EQ Display	Wheel + Shift	Gain change only
Compressor Mode	Mouse Click + Alt + Shift	Reset all compressor parameters to the default value of the Mode

# Plugin Settings

Clicking the cogwheel symbol opens a window with a range of general settings and a direct access button to the user manual.



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## Main Setup

### UI Refresh Rate

Max refresh rate of the plug-in's UI.

### I/O

### Input / Output

I/O Config and Layout is not always available, though it is always displayed, it can only be edited in some configurations and formats.

### Config

Current I/O configuration, is only available in certain VST hosts; typically hosts with limited capabilities for handling multichannel configurations.

## **Layout**

Available I/O routings based on current I/O configuration. Layout is available for editing if more than two input channels are available. If the Layout is changed from the default value, an asterisk \* is displayed next to the Layout information in the Input section.

## Processing

### **Report Latency**

Enables/Disables the latency reporting to the host.

## Automation

### **Multithread**

Enables/Disables Multithread Automation.

## OSC

OSC is available in EVO Channel.

### **Enable**

Enables/Disables OSC control and mapping of the plug-in's parameters.

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## Version Information

Plug-in version and build-number information.

## User Manual / Credits

Quick link to the User Manual. Plug-in creation credits.

# Preset Management

EVO Channel, as well as all other Flux: plug-ins, provides two preset slots referred to as slot A and slot B, which provide access to two sets of parameter settings simultaneously. In addition to just recall the settings for each of the slots individually and alternate between their settings, a morphing slider is provided offering the possibility to morph between the slots and their corresponding settings. When clicking on one of the preset slots, the built in preset manager appears.



## Preset Sections

EVO Channel provides two preset sections referred to as section A and section B, offering simultaneous access to two full sets of parameter settings. Clicking the A section (bottom left) or the B section (bottom right), or clicking the arrow in the Current Selected Preset display, opens a new window accessing the built-in preset manager.

## Save

Save replaces the selected preset by a new one under the same name featuring the current settings. If you want to keep an existing preset without your new modifications, just select an empty place into the preset list, enter a new name for this modified preset featuring the current settings and press Save. Recall

Once a preset is selected from the preset list it must be explicitly loaded into section A or the section B by using the recall button. A preset is effective only after it has been recalled.

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## Copy A / Copy B

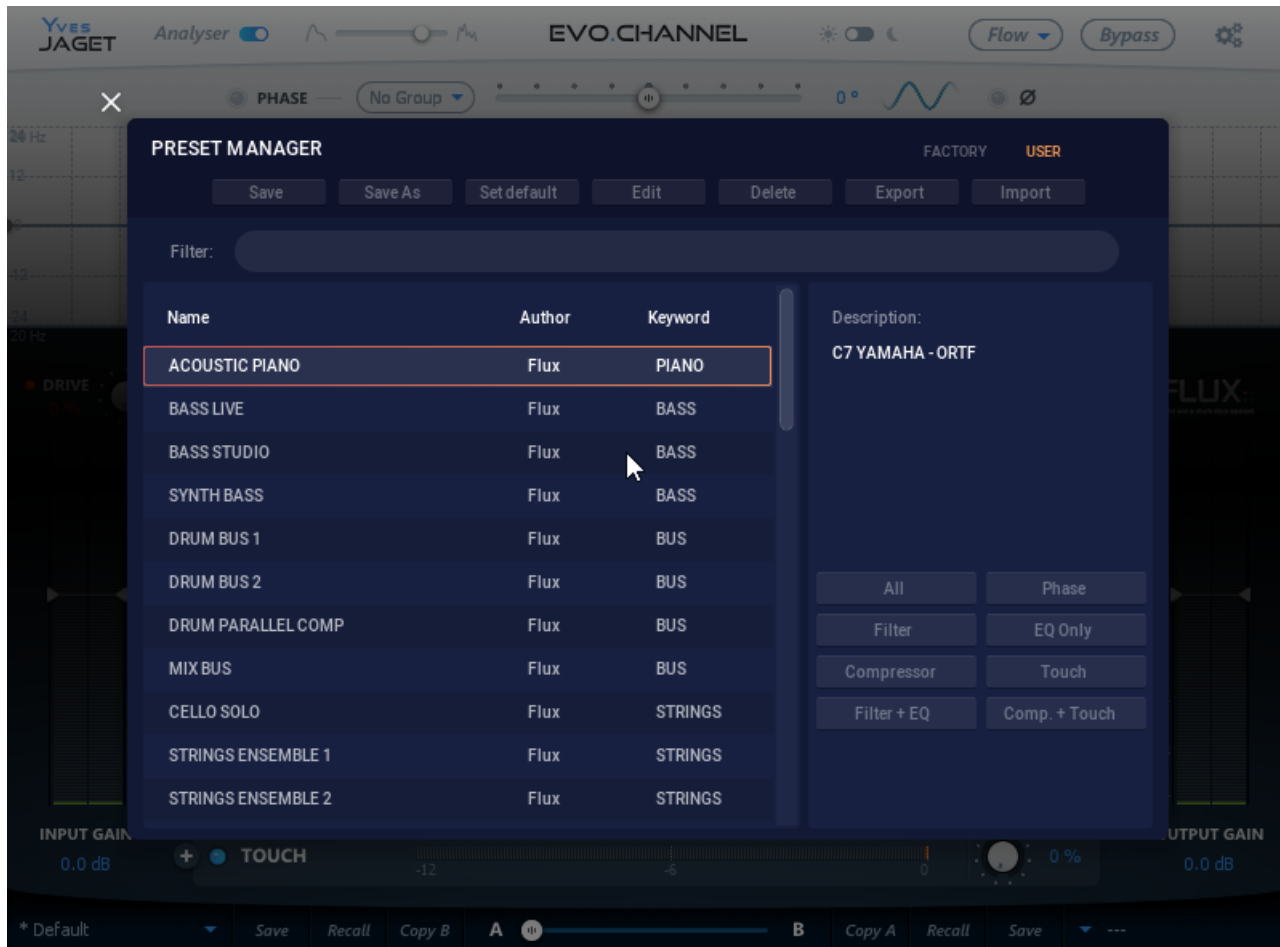
The current parameters of a section are copied to the other one. The section A or B is re-initialized with the current values and the morphing slider is parked at 100% of the corresponding section.

## Morphing Slider

Morphs the parameter values of both parameter sections, it has no unity or specific value display; it provides morphing of the current values from both of the parameter sections (A & B). A double-click on one side of the slider area toggles between the two parameter sections. The actual result of the morphed parameter settings can be saved as a new preset.

# Preset Manager

The preset manager contains two preset banks, the Factory bank contains factory presets, this bank is not available for saving of presets but any of the presets can be loaded into a preset slot and then saved into, the User bank, where all user presets are saved.

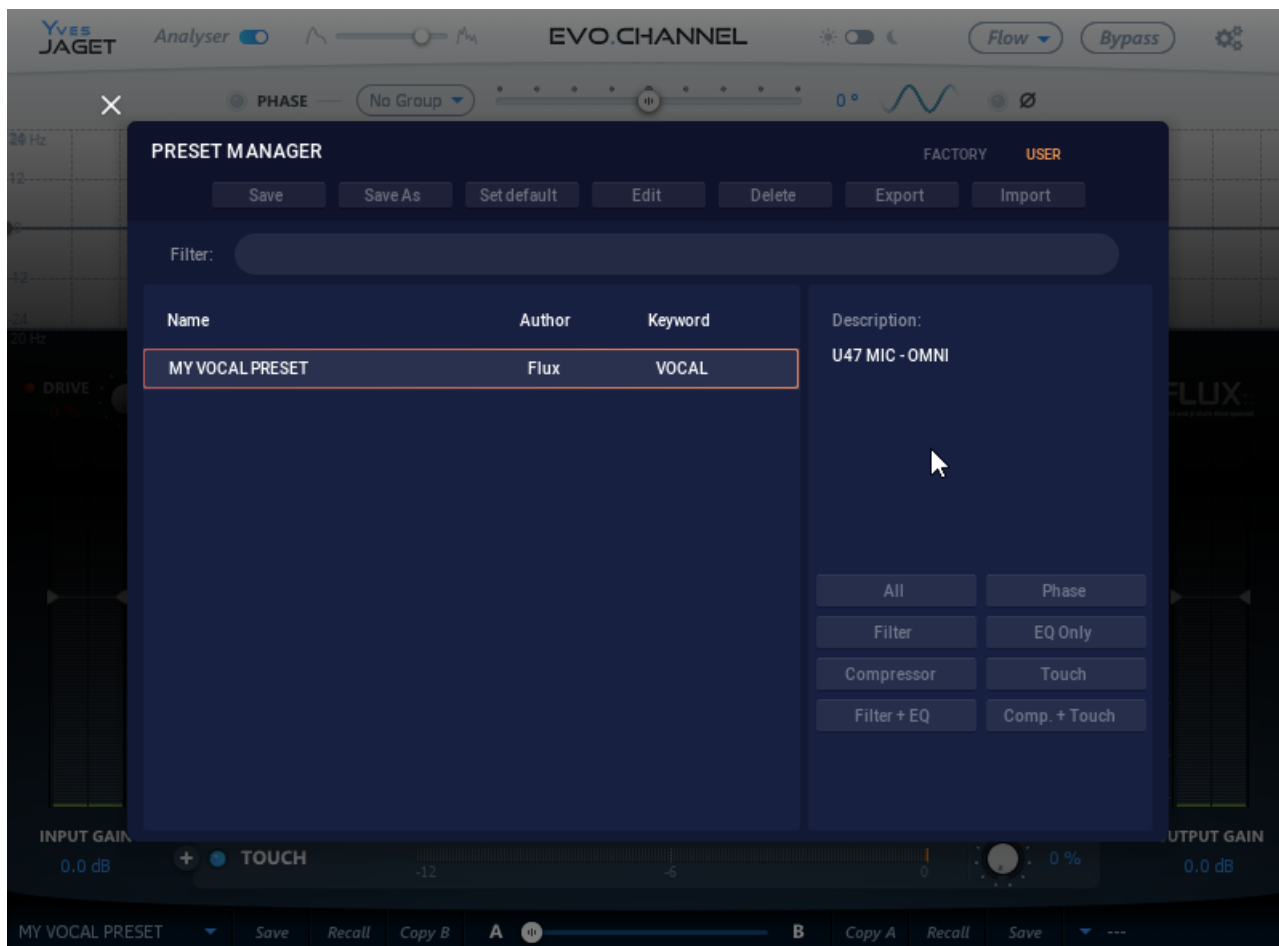
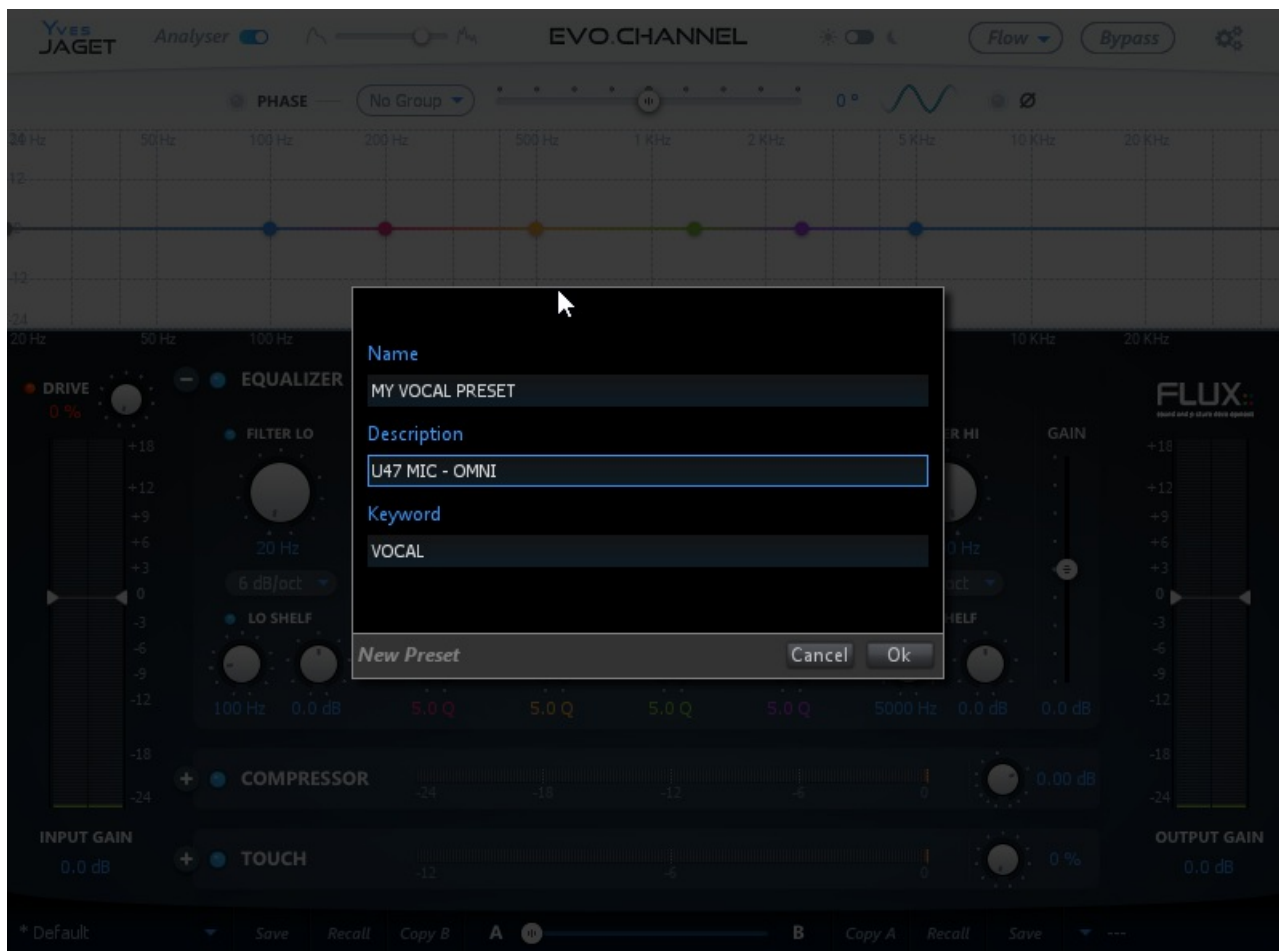


In the preset manager, any preset can be loaded into a preset slot by double clicking on the name of the desired preset in the actual preset list, the preset will then be loaded into the preset slot corresponding to the position of the morphing slider.

- Additional controls in the preset manager
- Recall A loads the selected preset into the corresponding slot.
- Recall B loads the selected preset into the corresponding slot.
- Update, saves the current settings into the selected preset. (Available in User Bank only)
- New, saves the current settings into a new preset. (Available in User Bank only)
- Duplicate creates a copy of the selected preset and saves it to the list.
- Edit allows for changes to the preset meta properties. (Available in User Bank only)
- Delete, removes the selected preset. (Available in User Bank only)
- Export, creates a file reflecting the content of the current preset bank.
- Import, allows for import of a preset bank file by adding the imported banks content to the content in the current preset bank.

When saving or editing a preset, an option to protect the preset is presented. The preset protection, if engaged, only allows the original preset author to uncheck and edit the preset. This means that you can protect your presets in a multi-user configuration. Protected presets can only be modified using the session used for their

creation. If used in another user session they can only be imported or deleted.





# Specifications

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## Availability

EVO Channel is available in:

AU / VST / AAX Native\*/ AAX AudioSuite\* / Waves WPAPI

*\* AAX Native & AAX AudioSuite in Pro Tools 11 and later*

## Processing

EVO Channel provides :

- Up to 16 channels Input/Output in VST/AU/AAX.
- Up to 8 channels in WPAPI for Waves Soundgrid.
- 64-bits internal floating point processing.
- Sampling rate up to 384 kHz.

## Hardware Requirements

A graphic card fully supporting OpenGL 2.0 is required.

- **Mac OS X** : OpenGL 2.0 required – Mac Pro 1.1 & Mac Pro 2.1 are not supported.
- **Windows** : If your computer has an ATi or NVidia graphics card, please assure the latest graphic drivers from the ATi or NVidia website are installed.

## Software License Requirements

In order to use the software an iLok.com user account is required (the iLok USB Smart Key is not required).

## Compatibility

All major native formats are supported

Windows – 7 SP1, 8.1 and 10, all in 64 bits only.

- VST (2.4)
- AAX Native\*
- AAX AudioSuite\*
- Waves WPAPI

Mac OS X (Intel) – All versions from Yosemite 10.10.5 to latest. (Compatible with previous versions but not supported)

- VST (2.4)
- AU
- AAX Native\*
- AAX AudioSuite\*
- Waves WPAPI

\* *AAX Native & AAX AudioSuite in Pro Tools 11 and later*

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