Evo EQ

FLUX:: Immersive

2/6/23

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1 Introduction

Product Page | Shop Page

EVO EQ - The canvas for painting the colors

One of the cornerstones in a Channel Strip is a well-built, efficient and complete Equalizer. The equalizer in the EVO Channel and EVO EQ is a straightforward comprehensive 4-band parametric equalizer with an additional low/high shelf and a 6-24 dB low/high cut filter.

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.

The spectrum analyzer originates from the FLUX:: Analyzer and has been optimized for the EVO Channel and EVO EQ. It gives you an accurate direct view of what's going on in the different frequency domains of your material.



2 General Settings

2.1 Bypass

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

Value Range : Enabled/Disabled

Default Value : Disabled

2.2 Skin

The look of the EVO Eq user interface.

 $Value\ Range:\ Light/Dark$

Default Value : Light

3 Module Settings

3.1 Analyser

3.1.1 Analyser Switch

The spectrum analyzer origins 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 correspond 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

3.1.2 Analyser Slider

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

Value Range: No Value

3.2 Input

3.2.1 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

3.2.2 Drive

In EVO EQ a signal Drive is available direct 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%

3.3 Equalization module

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

The EVO EQ is a straightforward comprehensive 4-band equalizer with additional $6-24~\mathrm{dB}$ 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 a 64 bit dynamic range, 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.



3.3.1 Low-Cut Switch

Enables the low cut filter.

Value Range: Enabled / Disabled

Default Value : Enabled

3.3.2 Low-Cut Cutoff Frequency

Cutoff frequency of the low cut filter.

Value Range: 20Hz to sampling rate / 2

Default Value: 20Hz

3.3.3 Low-Cut Slope

Slope of the low cut filter.

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

Default Value : 6dB/oct

3.3.4 Low Shelf Switch

Enables the low shelf.

Value Range: Enabled / Disabled

Default Value : Enabled

3.3.5 Low Shelf Cutoff

Cutoff frequency of the low shelf.

Value Range: 20Hz / 22050Hz

Default Value : 100Hz

3.3.6 Low Shelf Gain

Target gain for frequencies below the cutoff frequency.

Value Range : -24.0 dB / +24.0 dB

Default Value: 0.0dB

3.3.7 High-Cut Switch

Enables the high cut filter.

Value Range: Enabled / Disabled

Default Value : Enabled

3.3.8 High-Cut Cutoff Frequency

Cutoff frequency of the high cut filter.

Value Range: 20Hz to sampling rate / 2

Default Value : Sampling rate / 2

3.3.9 High-Cut Slope

Slope of the high cut filter.

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

Default Value : 6dB/oct

3.3.10 High Shelf Switch

Enables the high shelf.

Value Range : Enabled / Disabled

Default Value: Enabled

3.3.11 High Shelf Cutoff

Cutoff frequency of the high shelf.

Value Range: 20Hz to sampling rate / 2

Default Value: 5000Hz

3.3.12 High Shelf Gain

Target gain for frequencies above the cutoff frequency.

Value Range : -24.0 dB / +24.0 dB

Default Value: 0.0dB

3.3.13 Parametric Equalization Switches

Enables the corresponding parametric equalizer.

Value Range: Enabled / Disabled

Default Value : Enabled

3.3.14 Parametric Equalization Gain

Gain stage of parametric equalization.

Value Range : -24.0 dB / +24.0 dB

Default Value: 0.0dB

3.3.15 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

 $\bullet\,$ Mid-Low parametric equalizer : 500Hz

• Mid-High parametric equalizer : 1300Hz

• High parametric equalizer : 2500Hz

3.3.16 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

3.3.17 Equalization Output Gain

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

Value Range : -12.0dB / +12.0dB

Default Value : 0.0dB

3.4 Output

3.4.1 Output Gain

The output gain control trims the level of the signal at the output of EVO Eq. 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

4 Shortcuts

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

Shortcut	Description
Mouse Click + Alt	Reset to default value
Mouse Move + Ctrl	Q change only
Mouse Move + Shift	Gain change only
$Mouse\ Move\ +\ Ctrl\ +\ Shift$	Frequency change only
Wheel $+$ Ctrl	Q change only
Wheel + Shift	Gain change only

5 Plugin Settings

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



5.1 Main Setup

5.1.1 UI Refresh Rate

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

5.2 I/O

5.2.1 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.

5.2.2 Config

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

5.2.3 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.

5.3 Processing

5.3.1 Report Latency

Enables/Disables the latency reporting to the host.

5.4 Automation

5.4.1 Multithread

Enables/Disables Multithread Automation.

5.5 OSC

OSC is available in EVO Eq.

5.5.1 Enable

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

5.6 Version Information

Plug-in version and build-number information.

5.7 User Manual / Credits

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

6 Preset Management

EVO Eq, 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.



6.1 Preset Sections

EVO Eq 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.

6.2 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.

6.3 Copy A / Copy B

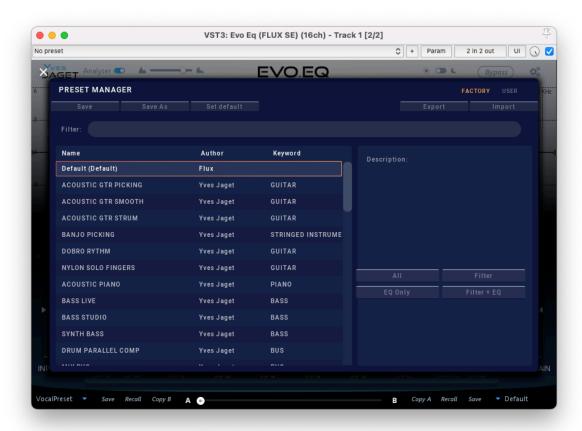
The current parameters of a section are copied to the other one. The section A or B is re-initialized with the current values and the morphing slider is parked at 100% of the corresponding section.

6.4 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.

7 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.

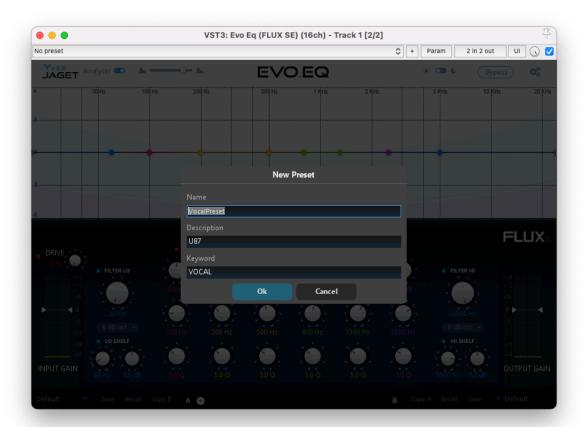


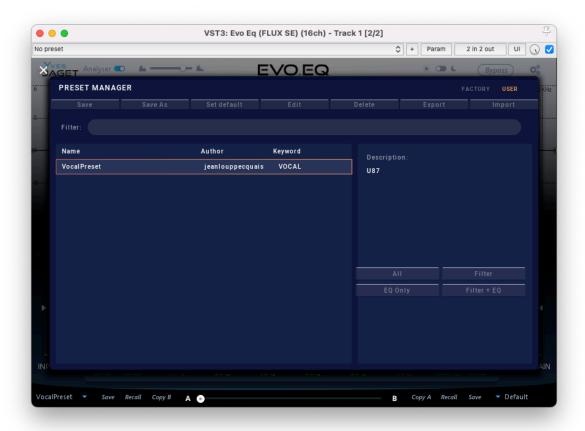
In the preset manager, any preset can be loaded into a preset slot by double clicking on the name of the desired preset in the actual preset list, the preset will then be loaded into the preset slot corresponding to the position of the morphing slider.

- 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.





8 Specifications

8.1 Availability

EVO EQ is available in:

AU / VST / VST3 / AAX Native* / AAX AudioSuite* / Waves WPAPI

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

8.2 Processing

EVO EQ 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.

8.3 Hardware Requirements

A graphic card fully supporting OpenGL 2.0 is required.

- macOS: 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.

8.4 Software License Requirements

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

8.5 Compatibility

All major native formats are supported

8.5.1 Windows -11, in 64 bits only.

- VST (2.4)
- VST3 (3.1)
- AAX Native*
- AAX AudioSuite*
- Waves WPAPI

8.5.2 macOS (Intel and ARM)

All versions from Sierra (10.12) to latest. (Compatible with previous versions but not supported)

- VST (2.4)
- VST3 (3.1)
- AU
- AAX Native*
- AAX AudioSuite*
- Waves WPAPI

^{*} AAX Native & AAX AudioSuite in Pro Tools 11 and later

A Release Notes

A.1 Build 23.1.0.50251 - All plugins

A.1.1 New features

- New plugins Evo Compressor, Evo Touch and Evo EQ.
- VST3 support
- ARM support for AAX, AU and VST3
- Plugins are now resizable
- Elixir now supports 32 channels
- Alchemist, BitterSweet, Epure, Pure Compressor, Pure DCompressor, Pure Expander, Pure DExpander, PureLimiter, Solera, Syrah now support 16 channels

A.1.2 Bugs fixes

- All plugins Preset Manager Update user preset do not work
- All plugins Preset manager Crash or freeze when saving a preset
- All plugins UI may be black on Intel UHD 630 graphical cards
- All plugins AU/VST3 Preset manager Default preset is not applied to parameters at plugin instantiation
- All plugins AAX Crash with OSC when changing fx slot in Pro Tools
- All plugins AU Logic Pro Automation of boolean/integer parameters broken
- All plugins AU Plugins crash in Da Vinci Resolve
- All plugins DaVinci Resolve VST UI is truncated
- All plugins Streamlabs Plugins do not work
- All plugins Licensing issue in DaVinci Resolve and GarageBand
- Alchemist The range parameter works only for the 1st band
- BitterSweet Not possible to tweak the Output gain after unlinking it

- BitterSweet Output gain not reloaded properly when the link is disabled
- BSPro some modes are not accessible due to GUI issue
- Epure macOS Bad graphic scale initialization at 2&4FS
- Evo Channel Meter reference is not saved
- Syrah Crash when selecting preset "Static fast compression"
- TRAX Tr When the link is activated, the Formant slider does not have the expected audio effect
- TRAX Tr ProTools Issue in AudioStudio when the modulation is enabled
- VerbSession/VerbSession Studio Session and BSPro StudioSession Pyramix VST crash when instantiated
- Verb/Verb Studio Session Crash when reloading session having 2 instances

A.1.3 Known issues

- All plugins VST GUI issue in Izotope Ozone and RX
- All plugins AAX Preset manager Default preset is not applied to parameters at plugin instantiation
- Elixir Latency not properly compensated after changing stage parameters value in VST and AudioUnit
- TRAX tr Learn function returning wrong values
- VerbV3 HOA 3rd order not working properly

A.2 Build 21.12.0.50123 - All plugins except TRAX and StudioSession

Bug fixes

- All plugins AudioUnit GUI issue with Hdpi displays on macOS Monterey
- All plugins VST Plugin scan freeze in Wavelab 11 on Mac M1 machines
- All plugins VST Crash in Adobe Audition on macOS
- All plugins VST macOS Fix crashes with Ableton live
- Elixir Automation is not read for toggle parameters.
- Elixir Crash when clicking on the settings button on Session version

- Elixir Several fixes on the UI
- Elixir Windows AAX Refresh issue with two instances in ProTools
- HEar Bypass is working in AAX
- HEar AAX Crash when doing offline bounce on macOS
- HEar AAX Crash when editing the matrix on macOS
- HEar AAX Stereo Change on Matrix are not applied until we change the preset
- HEar AudioUnit Ableton crashes when inserting a second instance

A.3 Build 21.11.0.50107 (HEar, IRCAM Verb)

NOTE: CURRENTLY NOT COMPLIANT WITH ABLETON LIVE MACOS

Improvement

• HEar - 5.1.4 & 5.0.4 now available

Bug fixes

- HEar Fix meters refresh issue
- HEar No verb on some presets
- HEar Protools crashes when doing offline bounce on macOS

A.4 FLUX:: Immersive - Plugins (including IRCAM Tools) 21.09

This release includes updates for all FLUX::Immersive plugin processing products with the exception of EVO Channel, Epure, IRCAM Trax, Studio Session.

NOTE: CURRENTLY NOT COMPLIANT WITH ABLETON LIVE MACOS

Major optimizations

- Apple computers Big Sur (new M1 chips) AU validation
- Important updates to the Ircam Verb + Session
- Overall better handling of multichannel track setups such for Atmos. (Ircam Hear, Verb and more)
- Automatic detection of track format / channel order for DAWs when possible.

A.4.1 Build 21.9.0.50083

Bug fixes

- Apple computers Big Sur (new M1 chips) AU validation failing
- Empty GUI when close/reopen plugin Windows 10 UHD630 graphics
- AudioUnit in Reaper do not process audio when offline bounce
- Default preset not loaded correctly on instantiation of Verb + Verb Session
- Evo. Channel on Retina Input and Output Sliders badly scaled
- Incompatible AudioUnit issue in Apple Final Cut Pro
- Plugins: Recall Preset Flags (e.g. "All but setup") recall always everything
- Preset Manager UI issue with small plugins when a preset has been created
- Ircam Verb Session reload in VST with audio interruption
- VST Plugins Session not correctly reloaded if it integrate an IO configuration change
- Verb session Dry/wet not applied in offline render
- Verb v3 Atmos crash on AAX
- Verb: AU validation failed on Apple M1
- Verb: LFE not disabled by default on ProTools
- Verb: Recall Preset may be not correct with double click inside the preset manager
- Verb: disabled channel is not re-injected according to dry/wet parameter (100 % wet means muted)
- Verb: init issue with Nuendo
- AAX Some plugins Crash on Mac / No GUI on Windows
- Overall reliability / stability fixes.
- Plugin size not correct
- Potential plugins crash when opening UI

A.5 FLUX:: Immersive - Plugins (including IRCAM Tools) 20.12

This major release includes updates for all **FLUX::Immersive** products with the exception of IRCAM Spat V3 legacy product. Please refer to Spat V3 - Spat Revolution crossgrade options.

Major optimizations

- HiDPI / Retina support + display enhancements and fixes
- Page Table unification for Avid Control, S1, S3, S4, S6 and S6L.
- OSC Control for plugins.
- IRCAM Verb support for Dolby Atmos, Multichannel support up to 16 channels
- **IRCAM Hear** Multichannel stability improvement, Now up to 10 channels. (Dolby Atmos 7.1.2)
- IRCAM Tools Audio I/O Matrix and Multichannel enhancement

- Most plugins support of 8 channel.
- 16 channel support for Bittersweet Pro, Evo In and Evo Channel

A.5.1 Build 20.12.0.49880

Bug fixes

Core:

- BSPro Latency report issue (AAX)
- IRCAM TRAX Tr Latency report issue
- IRCAM Verb Wrong initialization value for Reverb density
- IRCAM Verb -Dry signal still goes out in disabled channels when wet is 100%
- All Pure Dynamics PI + Alchemist Wrong Thresholds initialization values
- AAX "monolithic" are broken like Hear, TRAX etc...
- Almost all AAX plugins don't reload parameters from 47856 version session.
- Pure Limiter Diff feature bypassed the input gain.
- Pure Limiter Inverted sidechain filters.
- Any plugin except Evo Channel Research Presets resets when click on a preset.
- Evo channel Wrong values when reloading touch section.

UI:

• Current preset name disappear on re-opening GUI or session

A.6 Known Issues

- Wavelab "Sample rate not supported" when a plugin is inserted on a clip, track or output section.
- TRAX Tr Learn frequencies display wrong values (AAX only).
- Hear Internal config labels change when modify LFE input config from routing matrix.
- When using OSC on a plugin in Pro Tools, a chrash will occur if you change/move FX insert slots