Evo In

FLUX:: Immersive

2023-02-06

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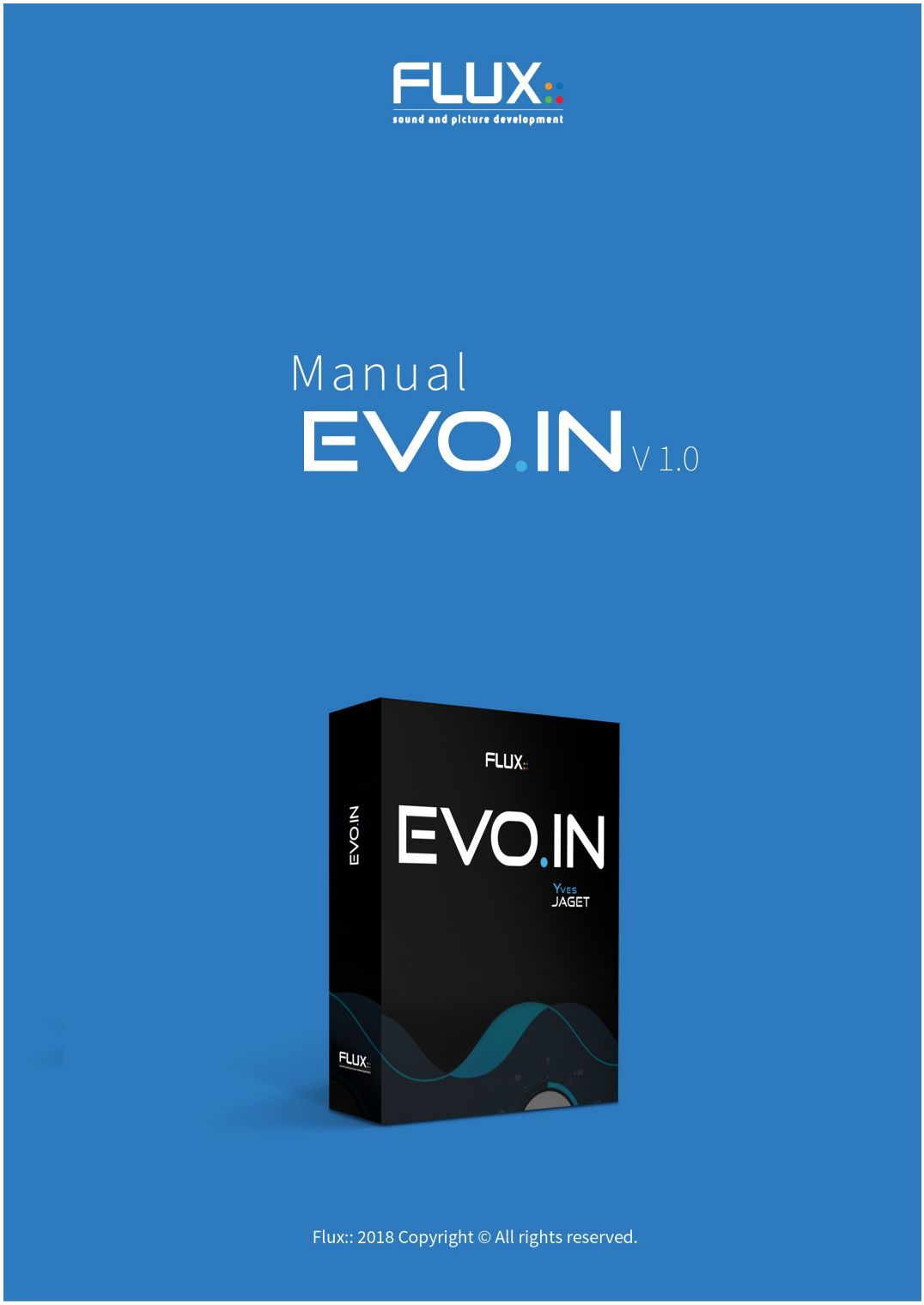
1 Introduction



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Product Page | Shop Page

EVO In - Stay In Phase – Maintain The Vitality

Unique, Precise, Arbitrary and Linear Phase Rotation, Phase Group to enable and disable Phase for all of the included tracks at the same time. Electrical polarity inverter. Soft saturation to attain roundness and warmth, restoring and maintaining the vitality of the sound!

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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 In user interface.

Value Range : Light/Dark

Default Value : Light

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3 Module Settings

3.1 Drive

In EVO In a signal Drive is available for restoring and maintaining the vitality of the sound.

The EVO IN Drive adds a soft saturation to attain roundness and warmth, restoring and maintaining the vitality of the sound, by generating harmonics important for the constancy of the sound without any audible distortion, on all types of sounds and instruments.

Value Range : 0% / 100%

Default Value : 0%

3.2 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 In 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.

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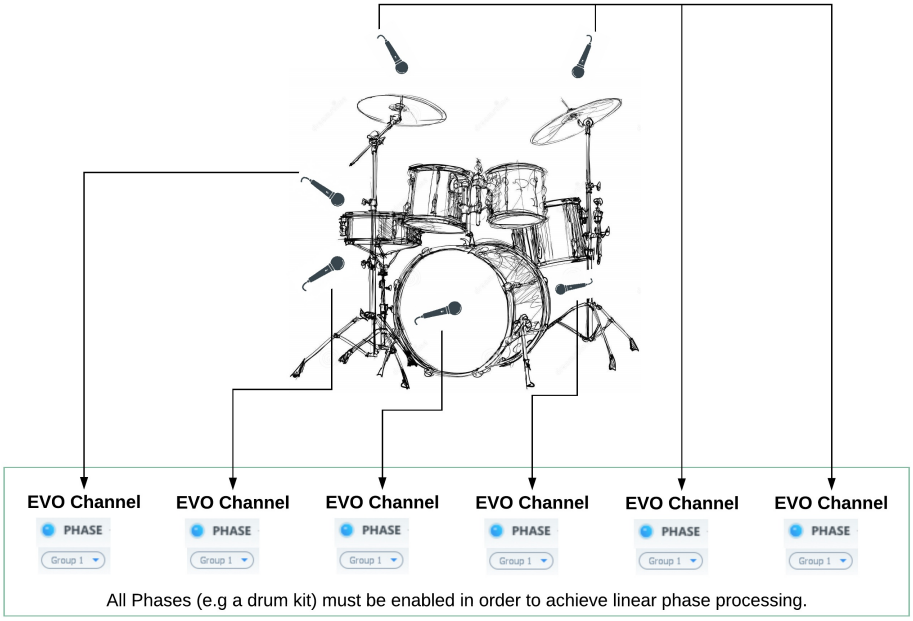

The phase must be enabled for all the drum tracks. Then set the same group number for all these tracks. It allows to enable and disable the phase for all the drums in one click (simply switch on/off for the phase in one of the tracks).

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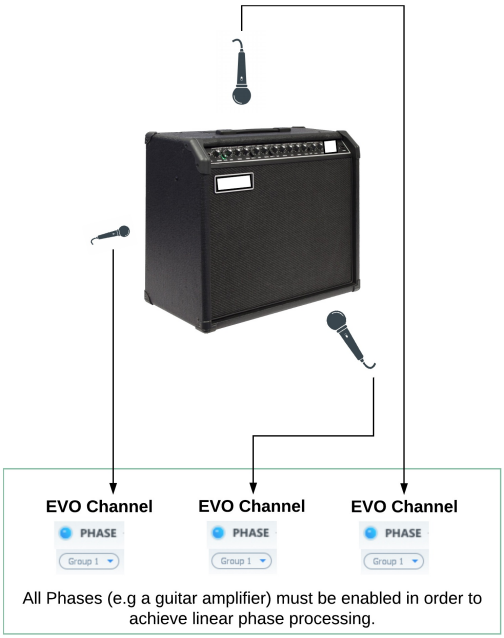

3.2.1 Phase Switch

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

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3.2.2 Phase Group

Add an EVO In instance to a Phase Group. You can add an instance of EVO In 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

3.2.3 Phase Correction

Set the shift value used to correct the phase.

Value Range : -180° / 180°

Default Value : 0°

3.2.4 Polarity Invert

When enabled, polarity inversion is applied to the signal.

Value Range : Enabled / Disabled

Default Value : Disabled

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4 Plugin Settings

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

4.1 Main Setup

4.1.1 UI Refresh Rate

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

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4.2 I/O

4.2.1 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.

4.2.2 Config

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

4.2.3 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.

4.3 Processing

4.3.1 Report Latency

Enables/Disables the latency reporting to the host.

4.4 Automation

4.4.1 Multithread

Enables/Disables Multithread Automation.

4.5 OSC

OSC is available in EVO In.

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4.5.1 Enable

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

4.6 Version Information

Plug-in version and build-number information.

4.7 User Manual / Credits

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

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5 Specifications

5.1 Availability

EVO In is available in:

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

* In Pro Tools 11 and later

5.2 Processing

EVO In provides :

- Up to 16 channels Input/Output in VST/VST3/AU/AAX.
- Up to 8 channels in WPAPI for Waves Soundgrid.
- 64-bits internal floating point processing.
- Sampling rate up to 384 kHz.

5.3 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.

5.4 Software License Requirements

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

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5.5 Compatibility

All major native formats are supported

5.5.1 Windows – 10, in 64 bits only.

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

5.5.2 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*

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6 Credits

6.1 Software development

6.1.1 Project Manager and Designer:

Gaël Martinet

6.1.2 Application Development:

Gaël Martinet, Alexis Gentil, Bastien Prevosto, Anthony Belard, Maxence Grandidier, Siegfried Hand and Antoine Lorence.

6.1.3 FLUX:: DSP Design and Development:

Gaël Martinet, Maxence Grandidier and Lorcan Mc Donagh

6.1.4 Graphic design:

Nicolas Philippot

6.1.5 FLUX:: Framework development:

Gaël Martinet, Florie-Anne Lafaye, Alexis Gentil, Lorcan Mc Donagh, Bastien Prevosto, Anthony Belard, Siegfried Hand and Antoine Lorence

Additional contributions: Vincent Carlier, Jean-Loup Pecquais, Nicolas Erard, Jean Cruypenynck, Pablo Arias, Samuel Tracol

6.1.6 FLUX:: Framework graphic engine:

Emmanuel Julien (GS lib) and Gaël Martinet

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6.1.7 And

thanks to all fantastic testers…

6.1.8 FLUX:: Special Thanks to:

Alain, Yves, Bruno and Claude for helping to shape our minds over the years.

6.2 FLUX::

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6.3 Additional libs

- GS lib Emmanuel Julien, Gael Martinet (Copyright 2013 Emmanuel Julien)
- ThorVG, Copyright (c) 2020 - 2023 notice for the ThorVG Project (see AUTHORS)
- r8brain free - Copyright (c) 2013-2023 Aleksey Vaneev
- LibJpeg - Copyright (c) 1991-2016, Thomas G. Lane, Guido Vollbeding
- libpng :
  - Copyright (c) 1995-2023 The PNG Reference Library Authors.
  - Copyright (c) 2018-2023 Cosmin Truta.
  - Copyright (c) 2000-2002, 2004, 2006-2018 Glenn Randers-Pehrson.
  - Copyright (c) 1996-1997 Andreas Dilger.
  - Copyright (c) 1995-1996 Guy Eric Schalnat, Group 42, Inc.
- Freetype 2 - Copyright (c) 2006-2023 by David Turner, Robert Wilhelm, and Werner Lemberg.
- Zlib - Copyright (c) 1995-2022 Jean-loup Gailly and Mark Adler
- bzip2 - Copyright (c) 1996-2010 Julian Seward jseward@bzip.org
- Boost - BSL-1.0
- ni-media - Copyright (c) 2022 Native Instruments
- pfft:
  - Copyright (c) 2004 the University Corporation for Atmospheric Research ("UCAR")
  - Copyright (c) 2013 Julien Pommier (pommier@modartt.com)
  - Copyright (c) 2019 Hayati Ayguen (h_ayguen@web.de)
  - Copyright (c) 2020 Dario Mambro (dario.mambro@gmail.com)
- pybind11 - Copyright (c) 2016 Wenzel Jakob wenzel.jakob@epfl.ch
- rtaudio - Copyright (c) 2001-2021 Gary P. Scavone

- rtmidi - Copyright (c) 2003-2021 Gary P. Scavone
- concurrentqueue - Copyright (c) 2013-2016, Cameron Desrochers.
- readerwriterqueue - Copyright (c) 2013-2021, Cameron Desrochers.
- assimp - Copyright (c) 2006-2021, assimp team
- enet - Copyright (c) 2002-2020 Lee Salzman
- fmt - Copyright (c) 2012 - present, Victor Zverovich and {fmt} contributors
- functions (Erik Rigtorp) - Copyright (c) 2015 Erik Rigtorp erik@rigtorp.se
- inplace_function - BSL-1.0
- gtest - Copyright 2008, Google Inc.
- jsoncpp - Copyright (c) 2007-2010 Baptiste Lepilleur and The JsonCpp Authors
- libcurl - Copyright (c) 1996 - 2023, Daniel Stenberg, daniel@haxx.se, and many contributors
- magic_enum - Copyright (c) 2019 - 2023 Daniil Goncharov
- nanobench - Copyright (c) 2019-2023 Martin Leitner-Ankerl
- nlohmann_json - Copyright (c) 2013-2022 Niels Lohmann
- openddl - Copyright (c) 1999-2022 Eric Lengyel
- openvr - Copyright (c) 2015, Valve Corporation
- poly2tri - Copyright (c) 2009-2018, Poly2Tri Contributors
- pugixml - Copyright (c) 2006-2022 Arseny Kapoulkine
- rapidjson - Copyright (c) 2015 THL A29 Limited, a Tencent company, and Milo Yip.
- shared_recursive_mutex - Copyright (c) 2019 konanM
- sentry-native - Copyright (c) 2019 Sentry (https://sentry.io) and individual contributors.
- sqlite3 - Public Domain License
- sqlite_orm - Copyright (c) 2012-2023 Eugene Zakharov and others
- stb - Copyright (c) 2017 Sean Barrett
- utfcpp - Copyright 2006 Nemanja Trifunovic
- unqlite - Copyright (c) 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019 Symisc Systems, S.U.A.R.L [M.I.A.G + Mrad Chems Eddine chm@symisc.net].

6.4 Open source libraries

6.4.1 RTTrPM SDK (Blacktraxx)

Copyright (c) 2019 CAST Group of Companies Inc

6.4.2 ThorVG (replaces crossed-out libraries above) - MIT

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6.4.3 r8brain free - MIT

https://github.com/avaneev/r8brain-free-src/blob/master/LICENSE

6.4.4 ooura fft from lmdsp - MIT (or MIT-like)

https://www.kurims.kyoto-u.ac.jp/~ooura/fft.html Copyright Takuya OOURA, 1996-2001

6.4.5 LibJpeg - Custom (BSD-like)

https://jpegclub.org/reference/ Copyright (C) 1991-2016, Thomas G. Lane, Guido Vollbeding

6.4.6 libpng - PNG Reference Library License version 2

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https://github.com/freetype/freetype/blob/master/LICENSE.TXT Copyright (C) 2006-2023 by David Turner, Robert Wilhelm, and Werner Lemberg

6.4.8 Zlib - zlib

https://zlib.net/zlib_license.html Copyright (C) 1995-2022 Jean-loup Gailly and Mark Adler

6.4.9 bzip2 - Modified zlib

Copyright (C) 1996-2010 Julian Seward jseward@bzip.org

6.4.10 Boost - BSL-1.0

https://github.com/boostorg/boost/blob/master/LICENSE_1_0.txt

6.4.11 mimalloc - MIT

https://github.com/microsoft/mimalloc/blob/master/LICENSE

6.4.12 ni-media - MIT

https://github.com/NativeInstruments/ni-media/blob/master/LICENSE

6.4.13 pfft

https://github.com/marton78/pffft/blob/master/LICENSE.txt

6.4.14 pybind11

https://github.com/pybind/pybind11/blob/master/LICENSE

6.4.15 rtaudio

https://github.com/thestk/rtaudio/blob/master/LICENSE

6.4.16 rtmidi

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6.4.19 assimp

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6.4.21 fmt

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6.4.22 functions (Erik Rigtorp) - MIT

https://github.com/rigtorp/Function/blob/master/LICENSE

6.4.23 inplace_function - BSL-1.0

6.4.24 gtest - ” BSD 3-Clause ““New”” or ““Revised”“ ”

https://github.com/google/googletest/blob/main/LICENSE

6.4.25 jsoncpp - MIT

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6.4.27 magic_enum - MIT

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6.4.29 nlohmann_json - MIT

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6.4.33 pugixml - MIT

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6.4.34 rapidjson - MIT

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6.4.35 shared_recursive_mutex - MIT

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6.4.36 sentry-native - MIT

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6.4.37 sqlite3 - Public Domain

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6.4.38 sqlite_orm - MIT

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6.4.39 stb - MIT

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6.4.40 utfcpp - BSL-1.0

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6.4.42 argh (Andrey Mikhaylenko) - LGPLv3

https://pypi.org/project/argh/

6.4.43 chardet (Mark Pilgrim, Daniel Blanchard) - LGPL v2.1

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6.4.44 charset_normalizer - MIT

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6.4.45 docopt (Vladimir Keleshev) - MIT

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6.4.46 dotenv - “BSD 3-Clause”“New”” or ““Revised””“ ”

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A Release Notes

A.1 Build 23.07.50310 - All plugins

A.1.1 New features

- Support Pro Tools new track formats

A.1.2 Bugs fixes

- All plugins - Nuendo - VST3 - crash when stereo plugins are instantiated on multichannel tracks (StereoTools, …)
- All plugins - Pace protected plugins fail to scan on Da Vinci Resolve mac
- All plugins - Popups wrong metrics when changing screen
- All plugins - Presets not imported
- All plugins - VST3 - Nuendo - WIN (UHD360) - Wrong window size init
- All plugins - VST3 - WIN (UHD630) - REAPER - GUI refresh issue when in single window mode
- All plugins - GUI issue with AMD graphics on windows - flickering issue
- All plugins - AU - Plugins parameters are reset when bouncing in Reaper
- All plugins - VST2 - no multichannel with the plugins 23.X in Reaper
- All plugins - VST - Resizing the GUI does not update the floating window size in Nuendo on Windows with UHD630 graphics
- Bittersweet - VST3 - crashes on Pyramix on instantiation
- StereoTool / EVO Channel - VST3 - No goniometer / analyzer in Wavelab
- Elixir - Not available as 32 channels in Reaper
- EVO series - AAX - Dark Mode wrong GUI init
- EVO series - remove unused and duplicated presets
- EVO Channel - VST3 - spectrum smoothing slider crashes Studio one
- EVO Channel / EVO Eq - VST3 - Analyzer not working in Ableton Live
- EVO Channel / EVO Eq - scale eq control always reload on auto mode
- EVO Eq - weird release on meter
- EVO In - GUI refresh issue when toggling night/day mode
- EVO Touch - Zero Crossing Threshold label missing in the geek panel

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- EVO Touch - frequency band selector does not always recall the good settings on session reload
- EVO Touch/ EVO Channel - Frequency range slider is hard to handle
- Pure Serie - VST3 - Attack value max 80ms
- Pure Comp - Crash when loading “Bass guitar” preset
- Pure Limiter - VST3 - advanced mode does not turn on advanced settings
- StereoTool - VST3 - vector scope not working in Ableton Live on Windows
- StereoTool - Not working in Final Cut Pro
- TRAX - Crash using oversampling with sessions set at 2FS or higher
- TRAX Tr - not usable in Protools anymore (build 50123)

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 23.1.0.50251 - All plugins

A.2.1 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.2.2 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

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- 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.2.3 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

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A.3 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.4 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

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A.5 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.5.1 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

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A.6 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.6.1 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

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A.7 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

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