

# **Bittersweet**

FLUX:: Immersive

2026-02-13

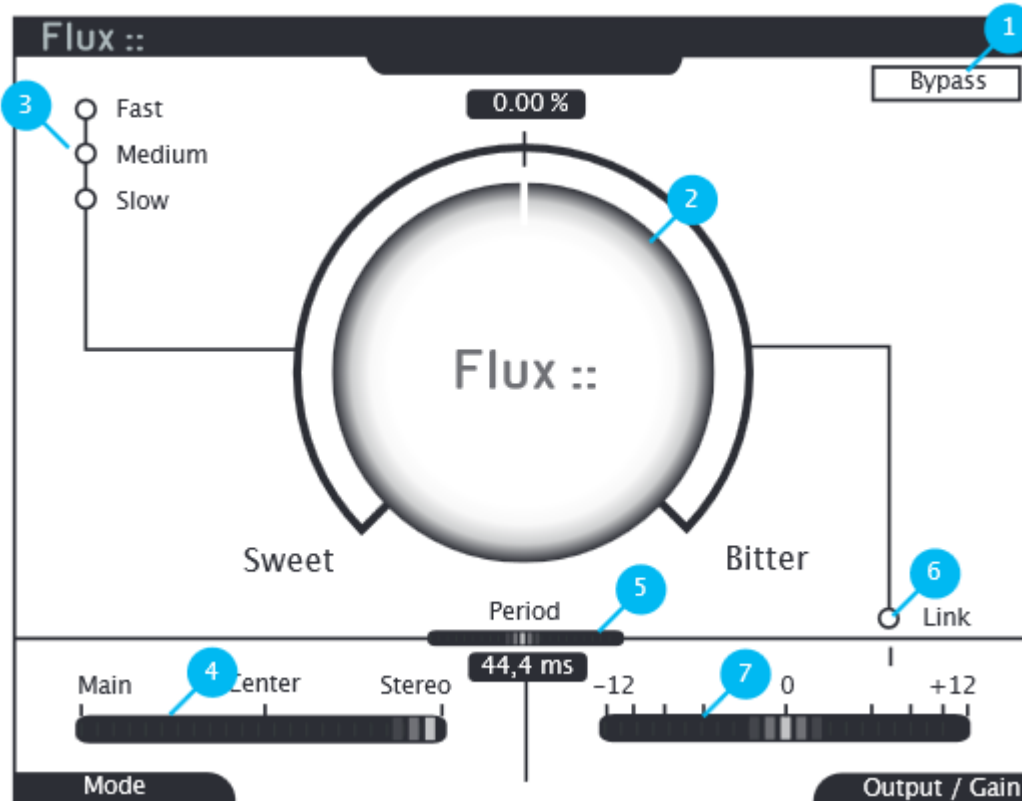
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# 1 BitterSweet

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## 1.1 Specifications

- Mono/Stereo Input/Output.
- 64-bits internal floating-point processing.
- Sampling rate up to 96 kHz.
- Available on AAX / AAX DSP / AU / VST / VST3 on macOS
- Available on AAX / AAX DSP / VST / VST3 on Windows
- Available on AAX Venue

## **1.2 Bypass (1)**

## **1.3 Transient Amount (2)**

On the Sweet side, transients are reduced. It usually decreases percussive instruments in the mix.

On the Bitter side, transients are magnified. It usually increases the percussive instruments in the mix.

## **1.4 Transient Integration (3)**

This selector allows to choose between 3 modes to process transients.

## **1.5 Operation Modes (4)**

Main processes using regular stereo signal scheme and it is the only available mode for multi-channels operations.

Center engages internal MS encoder and processes only the Mid channel. After processing the sound is decoded back to stereo.

This setting is very efficient for snare and kick drums.

Stereo engages internal MS encoder and processes only the Side channel. After processing the sound is decoded back to stereo.

This setting is very efficient for panned rhythmic instruments.

## **1.6 Period (5)**

This control sets the range of the time window used to detect transients that will be processed.

## **1.7 Link to Output Gain (6)**

When engaged, the output gain is compensated depending of the transient amount to produce an almost unity gain.

## 1.8 Output Gain (7)

It can't be set when the Link to Output Gain button is engaged.

## 2 Credits

### Software development

#### Project Manager and Designer:

Gaël Martinet

#### Application Development:

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

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#### Graphic design:

Nicolas Philippot

#### FLUX:: Framework development:

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#### FLUX:: Framework graphic engine:

Emmanuel Julien (GS lib) and Gaël Martinet

## And

thanks to all fantastic testers...

## FLUX:: Special Thanks to:

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

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# A Release Notes

## A.1 Build 24.07.0.50393 - All plugins

### A.1.1 New Features

- VST3 automation state on UI

### A.1.2 Improvements

- EVO EQ - Dark mode update

### A.1.3 Bugs

- All plugins - VST3 - GUI freeze when reloading a session in Studio One
- All plugins - VST3 - Wrong parameters frequencies when reloading session at 44.1KHz
- All plugins - crash when loading a StudioOne session
- All plugins AAX - Crash protocols when using the protocols plugin preset manager on Windows
- EVO Channel/Touch and BS Pro - Presets have to be loaded twice to apply the filter values from the Touch section properly
- Elixir - Latency not properly compensated after changing stage parameters value in VST and AudioUnit
- Elixir - VST - May crash or bypass the audio when reloading a previous session in Nuendo
- Evo Channel - GUI issues on Geek panel
- Evo Channel/Evo EQ - Bad init on the lowpass filter cut off frequency
- HEar - Failed to load HRTF message in Logic until audio playback
- Verb and VerbSession - VST3 - Freeze during Steinberg TestHost on Windows

### A.1.4 Known Issues

#### Important

- All plugins - AU - Crash in Logic 10.5 on MacOS Mojave

- All plugins - AU - Sidechain not available
- All plugins - VST versions - GUI issue in Izotope Ozone and Davinci Resolve
- Elixir - VST3 - Elixir is not available as 32 channels (24 max) in Reaper
- HEar - AU - Crashes Ableton
- HEar - Do not work properly with Ambisonic streams
- Trax - Ran out of CPU error and playback issue in Protools
- Verb - AAX - Moving any temporal parameter mute audio and generate noisy artefacts
- Verb - HOA 3rd order not working properly

### Host Specific

- All plugins - VST2 - GUI cropped in TwistedWave
- All plugins - VST3 - Do not process the audio in TwistedWave
- EVO EQ - AAX-DSP - Not listed in DSP plugins list
- EVO Series - AAX DSP - No metering
- Evo Channel/Evo EQ - AudioUnit - LPF cut off frequency badly initialized when samplerate is 2FS or more
- StereoTool - AAX DSP - No metering

## A.2 Build 24.06.0.50386 - All plugins

### A.2.1 Improvements

- All plugins - Preset manager filter options updated
- All plugins - Preset recall button improved
- All plugins - Preset save button improved

### A.2.2 Bugs

- AAX - Preset manager - Default preset is not applied to parameters at plugin instantiation
- All plugins - AAX bad GUI recall with user scale x2 and display scale x2
- All plugins - AU - auval real time safety checks
- All plugins - All parameters are reset when reloading a session when using presets
- All plugins - GUI issue on Windows
- All plugins - GUI issue with Retina in FLStudio
- All plugins - Mouse wheel not working anymore on knobs
- All plugins - Parameters are reset when deactivating/reactivating the plugin in Protools
- All plugins - Parameters are reset when loading a session if a preset is used
- All plugins - Preset manager font issues
- All plugins - VST3 - Keys not working in Pyramix

- All plugins - VST3 - Meters not working in Adobe premiere Pro, Adobe audition, Isotope RX10 and Waves Studio Rack
- All plugins - VST3 - preset name back reset to default when loading a session
- All plugins - VST3 - Can't edit values using keyboard on Windows
- All plugins - mouse wheel + shift key increase controls value when scroll down
- All plugins - AAX - Crash protocols when using the protocols plugin preset manager on Windows
- All plugins - VST3 - crash plugin scan when OSC enabled in prefs
- EVO Channel - Dark mode display issue when closing/opening the plugin
- EVO Channel - custom preset does not load some parameters
- EVO In - Phase shift amount automation line display issue in Logic
- EVO Series - Display issues on some parameters values
- EVO Series - Missing controls text
- EVO Series - Save button from preset manager not working
- EVO Series - save/recall/copy A & B preset buttons from main window not working
- EVO Series - wrong RMS reference value initialisation
- Elixir 1-Stage - GUI broken
- EvoEq - very low noise generated when offline rendering (32bit FP)
- HEar - AudioUnit - Crashes validation in Logic
- Preset Manager - Refresh missing - Preset name still displayed as current preset after being deleted.
- Solera - VST3 on Windows - DExp tab selected as default
- StereoTool - Correlation phase meter is wrong when quality setting set at 60fps
- StudioSession Plugins - May fail to scan in logic
- StudioSession Plugins - loads without the limitations
- Trax - VST3 - Learn feature not working
- VST3 - Some plugins are blacklisted in Cubase 13 on Windows
- VST3 - Conformity report
- VST3 - Display quality (15/30/60Hz) always reverts to initialized value
- VST3 - Verb & VerbSession - Crash in VST3 test host unit test
- VST3 - presets slots values are not correctly recalled when a session is saved after using morphing
- Verb - AAX - Matrix not reloaded on atmos 9.1.4 tracks
- Verb - Does not load the saved multichannel layout
- Verb - Multichannel layout not automatically set in Logic
- Verb - When in High Density, the dry signal is output
- Verb Session - AAX - GUI issue in HiDPI on Windows

### **A.2.3 Known Issues**

#### **Important**

- All plugins - AU - Crash in Logic 10.5 on MacOS Mojave
- All plugins - VST2 - GUI cropped in TwistedWave
- All plugins - VST3 - Do not process the audio in TwistedWave
- All plugins VST versions- GUI issue in Izotope Ozone and Davinci Resolve
- Elixir - Latency not properly compensated after changing stage parameters value in VST and AudioUnit
- Elixir - Reaper - VST3 - Elixir is not available as 32 channels (24 max)
- Evo Channel/Evo EQ - All formats -Bad init on the lowpass filter cut off frequency
- HEar - AU - Crashes Ableton
- HEar - Do not work properly with Ambisonic streams
- HEar - Failed to load HRTF message in Logic until audio playback
- Trax - Ran out of CPU error and playback issue in Protools
- Verb - AAX - Moving any temporal parameter mute audio and generate noisy artefacts
- Verb - HOA 3rd order not working properly

## **A.3 Build 23.07.50310 - All plugins**

### **A.3.1 New features**

- Support Pro Tools new track formats

### **A.3.2 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
- 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.3.3 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.4 Build 23.1.0.50251 - All plugins**

### **A.4.1 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.4.2 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.4.3 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.5 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.6 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.7 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.7.1 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.8 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.8.1 Build 20.12.0.49880

#### Bug fixes

Core:

- BPro - 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.9 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