# **Epure**

FLUX:: Immersive

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## 1 Epure

#### Product Page | Shop Page



Epure is a state-of-the-art five-band equalizer designed to provide the absolute finest audio quality within the domain of digital audio processing. Built with our proprietary State-Space technology, 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, makes

Epure a powerful go-to processor for your day-to-day session work, as well as an efficient sharp-edged surgical precision tool for the most demanding equalizing and filtering tasks conceivable.

In addition to the supreme audio quality, the logical and comprehensive user interface includes a variety of instant shortcut functions provided to enhance and simplify the user workflow, allowing for instant and precise operation.

#### 1.1 Bypass (1)

When pressed the inputs are routed direct to the outputs.

Default Value: Off

#### 1.2 Graphic Display (2)

Graphical editing provided by grabbing the curves on the graphical display.

#### 1.3 Band Activation (3)

Toggles the activation of the processing for the actual band.

Default Value: On

#### 1.4 Filter Type (4)

All mentioned filter types are available on all of the five bands.

Default Value: Peak

Additional Filter Types:

- 12 dB per octave high pass filter (Low Cut)
- Low shelving (Low Shlv)
- Parametric (Peak)
- High shelving (High Shlv)
- 12 dB per octave low pass filter (High Cut)

#### 1.5 Band Gain (5)

Adjusts the gain for the selected band.

Unit: dB

Value Range: -24 / +

Step: 0.

Default Value: 0 dB

#### 1.6 Band Frequency (6)

Adjusts the center frequency for the band.

Unit: Hz

Value Range: 5 / 22k

Default Value: 50 / 200 / 500 / 2000

Step: Variable

#### 1.7 Band Q-Factor (7)

Adjusts the frequency range affected by Gain and Frequency on the band when the Parametric filter type is used.

With a lower Q-Factor, a wider range of frequencies are affected, with a higher Q-Factor, a narrower range of frequencies are affected. The narrowest Q-Factor is 1/7 octave of 100 in displayed value and the widest is 6.67 octave. The effective Q-Factor depends on the amount of gain applied; the displayed value corresponds to the maximum gain variation (24 dB).

Example: With 6 dB gain the max Q-Factor is not 100 as displayed, but instead 10 in a regular expression to the actual Q-Factor.

Value Range: 1 / 100

Step: 0.

Default Value: 10

#### 1.8 Preset Manager (8)

Opens a new window accessing the built-in preset manager.

#### 1.9 Save (9)

Saves the current parameter settings as a preset.

#### 1.10 Recall (10)

Populates all the parameters in the actual parameter section with the values from the selected preset.

#### 1.11 Copy A / Copy B (11)

Populates all the parameters in the actual parameter section with the values from the other section. This also moves the Morphing Slider to the actual parameter section.

#### 1.12 Morphing Slider (12)

The Morphing Slider 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.

## 2 Special Functions

#### 2.1 Master Gain (13)

Adjusts the gain for the currently selected channel group. All channel groups features an individual Master Gain control. If only one channel group is used, this control acts as the Master Gain control for all of the channels.

For more information about channels and channel groups, see Setup (17)

Unit: dB

Value Range: -24 / +

Step: 0.

Default Value: 0 dB

#### 2.2 X2 - Quick Gain Multiplier (14)

Multiplies the band section gain values by two.

If the morphing slider is set in-between the parameter sections when the Quick Gain Multiplier is clicked, depending on its current position, the morphing slider will move to one of the parameter sections and the values of that section will be re-initialized with the current values of the actual section.

## 2.3 X1/2- Quick Gain Divider (15)

Divides the band section gain values by two.

If the morphing slider is set in-between the parameter sections when the Quick Gain Divider is clicked, depending on its current position, the morphing slider will move to one of the parameter sections and the values of that section will be re-initialized with the current values of the actual section.

## 2.4 Invert - Quick Gain Inverter (16)

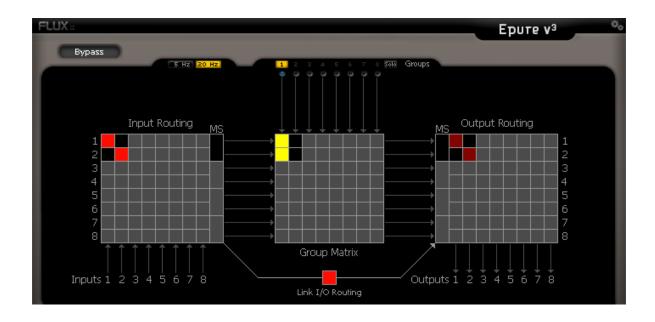
Inverts the band section gain values.

If the morphing slider is set in-between the parameter sections when the Quick Gain Inverter is clicked, depending on its current position, the morphing slider will move to one of the parameter sections and the values of that section will be re-initialized with the current values of the actual section.

## 2.5 Master Section - Multiply, Divide, Invert (14, 15, 16)

Using the Multiply, Divide or Invert controls in the master section will affect the gain parameter for all band sections in the selected channel group. A master section action can be combined with a specific band section action.

# 3 Setup - Input Routing - MS Encode Decode - Groups



### 3.1 Setup (17)

Input Routing, MS Encoder/Decoder, Internal Channels and Groups setup.

Any of Epure's input channels can be routed to up to 8 internal EQ-channels using a sophisticated routing system offering individual processing of up to 8 different equalization curves. The built in routing system provides up to 4 M/S encoders and 4 M/S decoders (each of them in pairs of 2 channels).

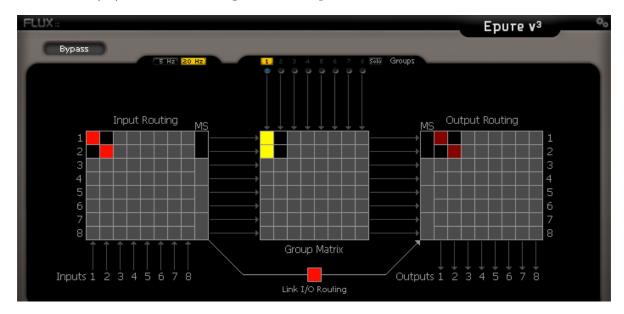
Epure Studio Session supports Mono/Stereo input only which can be routed to up to 2 different equalization curves and provides up to  $2~\mathrm{M/S}$  encoders/decoders.

The built in MS encoders/decoders use odd EQ-channels for Mid and even EQ-channels for Side. Stereo or M/S encoded material as well as multichannel surround material can be processed individually, or combined in configurable explicit groups, within one single instance of Epure.

With the Link I/O Routing engaged, every input is automatically routed to the corresponding output, when the input routing settings are consistent. Please note that the Routing Matrix allows for routing of one input channel to several EQ-channels, as well as for routing of several EQ-channels to one output. > Please note that this is an inconsistent routing action that may in turn cause the Link I/O Routing to behave > inconsistently.

With each Group representing one explicit EQ curve, the Group Matrix can be used to gather a number of internal EQ channels in a specific group for the combined processing of several input channels (Front/Surround, etc.). > Note that when audio channels are grouped, the settings of the first audio channel (Channel 5 in group 2 in the above example) are applied to all channels in the group (Channels 5 & 6 in the example).

Please note that morphing between two parameter settings using the Morphing Slider (12) affects the settings of the Setup section as well.



## 3.2 Groups (18)

Select EQ-channel Group.

Any action on the EQ parameter settings is applied to the currently selected Group of internal EQ-channels.

Only Group 1, gathering every available channel by default, is created when the first instance of the Epure Plug-in is inserted.

By right clicking on the graphical display the settings of any of the groups can be instantly copied to the currently selected group. The behaviour of the vertical scale can also be selected as followed: Auto, 6 dB, 12 dB and 24 dB.

3.3 Lowest Frequency to display (19)

Select the lowest displayed frequency. When 20 Hz is engaged, Epure displays the frequency range from 20 Hz to 1/2 sampling rate.

3.4 Solo (20)

Monitors the content of the selected group. The monitoring is done after the master gain section and the MS decoder.

3.5 Automation (21)

When the Automation button is disabled all of the plug-in parameter values are recorded when writing automation.

When reading automation, if it's disabled, all the plug-in parameters are controlled by the host automation except for the Morphing Slider (12), which is then ignored. When it's engaged all parameters are recorded when writing automation, including the Morphing Slider, though when reading automation ONLY the morphing slider value is read and applied.

The Automation button must be engaged if the Morphing Slider is to be mapped on a control surface.

Default Value: Off

3.6 Settings (22)

Pressing the cogwheels opens a settings window providing information about the plug-in version/build, a direct access button to the user manual, as well as setup for latency report and OSC (Open Sound Control). OSC is available in Epure only, and is not supported in Epure Studio Session.

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## 4 Specifications

#### 4.1 Processing Specifications - Epure

- Up to 16 channels Input/Output.
- 64-bits internal floating point processing.
- Sampling rate up to 384 kHz DXD (Pyramix and Ovation MassCore/Native).
- Sampling rate up to 192 kHz for Native (AU/VST/VST3/AAX/AAX AudioSuite).

## 4.2 Processing Specifications - Epure Studio Session

- Mono/Stereo Input/Output.
- 64-bits internal floating point processing.
- Sampling rate up to 96 kHz.

#### 4.3 Licence Requirements

In order to use Epure or Epure Studio Session, an iLok.com user account is required (the iLok USB Smart Key is not required)

# 5 Compatibility

#### 5.1 Epure

#### 5.1.1 Windows - 10, 64 bits.

- VST (2.4) in 64 bit
- VST (3.1) in 64 bit
- AAX Native/DSP/AudioSuite, all in 64 bit\*
- Waves WPAPI Native/Soundgrid in 64 bit
- VS3\*\* Pyramix 10 and more in 64 bit and Ovation 6 and more
- AVID VENUE Systems

#### 5.1.2 macOS (Intel and ARM) - 10.12 (Sierra) and more, 11 and 12.

- VST (2.4) in 64 bit
- VST (3.1) in 64 bit
- AU in 64 bit
- AAX Native/DSP/AudioSuite, all in 64 bit\*
- Waves WPAPI Native/Soundgrid in 64 bit
- AVID VENUE Systems

 $<sup>^{**}</sup>$  VS3 for Pyramix & Ovation Native/MassCore sold only through Merging Technologies and authorized dealers.