



# RELAYER

## Software User Manual

Software Version 1.5  
EN 170515

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# Table of Contents

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Introduction .....	4
System Requirements.....	5
<b>User Interface</b>	
Menu Bar .....	6
Globals and Mix Controls .....	7
Editor Globals.....	8
Time Editor .....	9
Gain Editor.....	10
Pan Editor .....	11
FX1 / FX2 Editor.....	12
Feedback .....	13
Links.....	14
Credits and Thanks .....	15

# Introduction

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## Relayer Precision Creative Delay

An advanced creative engine housed in an intuitive and easy to use interface, Relayer represents a new benchmark for digital delay effects. Relayer was designed from the ground-up to provide an efficient and inspiring workflow that enables users to dial in everything from basic delays to radical rhythmic multi-effects with speed, precision and natural musicality.

Relayer was designed with a unique set of features that make it remarkably versatile, producing everything from simple delay effects to pure sonic decimation. Despite its diverse capabilities, Relayer is extremely easy to understand and use. A single UI screen elegantly presents global and modulated parameters and a dynamic patch visualizer, giving you clear, time-based graphical representation of your current settings. You'll find Relayer incredibly easy to master and it's dynamic feedback will help you achieve even the most complex sounds effortlessly.

At Relayer's core is a variable multi-tap engine, providing up to 32 delay lines. Delay times are initially set with a typical free or host-synced time parameter and then modulated by swing and warp controls, allowing for quick and easy bouncing ball-style effects. By clicking through the central tabs, Relayer reveals a number of per-tap modulation editors for an unprecedented level of control and flexibility. Explore and experiment with each section as you need it, exercising precise control over time, gain, pan and 2 variable multi-effect units. Freely draw sequences for each parameter or use the built-in presets and listen as your sound modulates over time, then tweak and transform to taste.

Relayer functions exceptionally well in both studio and live settings. A playable Input Gate allows you to feed the delay with signal momentarily, perfect for adding dub-outs, builds or deconstructions to your performances or applying delay to specific lyrics with ease and precision. Master low and high-cut filters along with discrete wet and dry controls provide many creative mixing options, and even at high repeat values Relayer provides rock-solid and CPU efficient performance making it a reliable force in the most demanding environments.

In addition to the two multi-effect units, Relayer includes a unique Color section that can process your sound through a wide range of custom, high-quality IRs. Choose from a variety of dedicated instrument amps, discrete effect amplifiers or lo-fi devices like hand-held radios, laptop speakers or telephones to immediately change the character of your sound. The effect can range from adding a subtle layer of dirt to a complete and dramatic alteration of the perceived sound source.

Both an efficient utility and powerful creative mangler, Relayer is a versatile and inspiring musical effect. Its unique combination of features, incredible sound quality and easy to master interface help to make it an indispensable tool, both live and in the studio.

Relayer is compatible with current versions of all major DAWs on both Mac and Windows platforms (VST, AU and AAX). A single license includes 3 activations that can be used on any combination of individual computer systems or iLok keys.

### New in v1.5

- Diffusion parameter
- Ducker parameter
- Mix parameter in Redux FX
- Phasor in FX with Frequency, Order, Feedback, Spread and Depth parameters
- Additional presets including Studio Essentials by MixbusTV
- Additional IRs in the Color section

## System Requirements

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### Compatibility

Audio Units, VST or AAX

#### Tested and Certified in :

Digital Performer 8+, Pro Tools 11+, Logic X+, Cubase 7+, Nuendo 6+, Ableton Live 8+, Studio One 2+, Garage Band 6+, Maschine 1+, Tracktion 4+, Vienna Ensemble Pro 5+, Reaper 4+, MainStage 3, MuLab 5.5+, FL Studio, Bitwig 1+, Reason 9.5+

### Minimum System Requirements

- ▶ Mac OS X 10.9 or higher (64bit only)
- ▶ Mac Intel or ARM (Apple Silicon) Processor, 4 GB RAM



### Compatibility

VST or AAX

#### Tested and Certified in :

Digital Performer 8+, Pro Tools 11+, Cubase 7+, Nuendo 6+, Ableton Live 8+, Studio One 2+, Maschine 1+, Tracktion 4+, Vienna Ensemble Pro 5+, Reaper 4+, Sonar X3+, MuLab 5.5+, FL Studio, Bitwig 1+, Reason 9.5+

### Minimum System Requirements

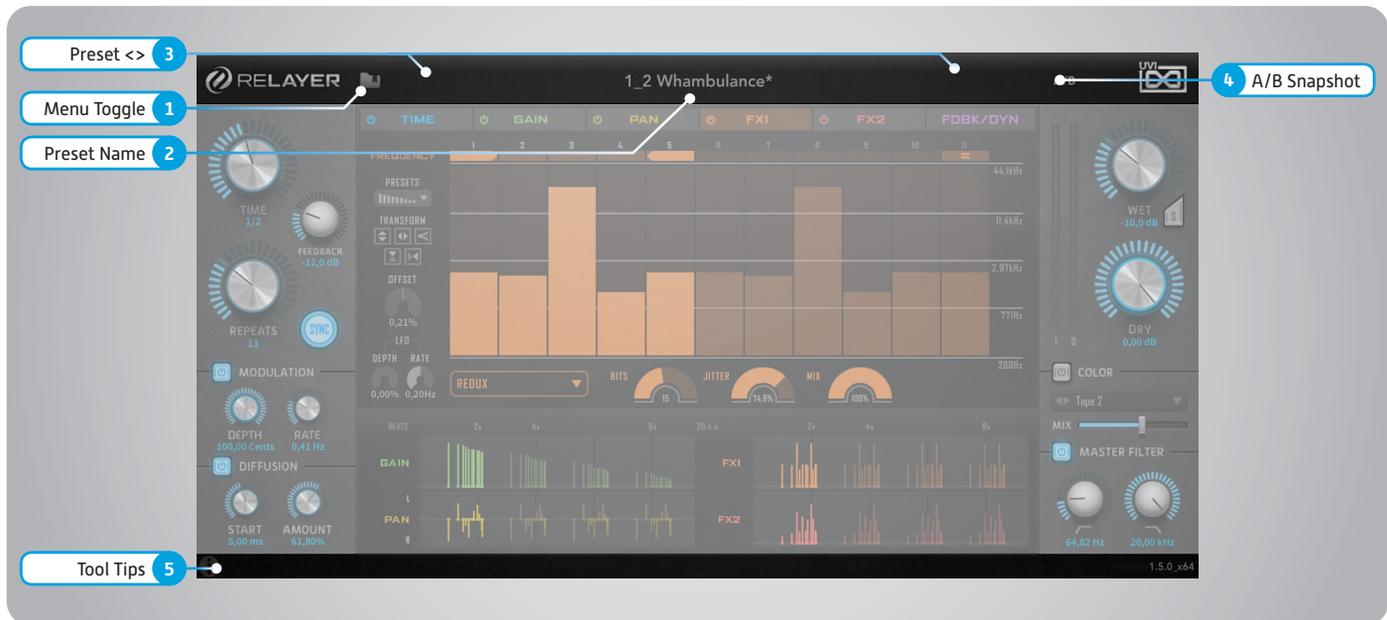
- ▶ Windows 8 or higher (64bit only)
- ▶ Intel Core Duo2+, 4 GB RAM

## Flexible Authorization With iLok



All UVI licenses allow up to 3 concurrent activations on any combination of computer hard drives or iLok USB keys, easily managed through the iLok License Manager (iLok account required).

## Interface: Menu Bar



### 1 ► Menu Toggle

Toggle the drop-down menu on/off

- » Load and Save Relayer presets
- » Factory Presets
- » User Presets

### 2 ► Preset Name

### 3 ► Next / Previous Preset

Quickly move through the presets

- » Buttons appear when you move the cursor over the menu bar

### 4 ► A/B Snapshot

Use to store two different plugin states for A/B comparison

- » Initial Click: Stores current state to memory A
- » Following Clicks: Stores current state in bank A [resp B] and loads the previous state from bank B [resp A]

### 5 ► Tool Tips

Display instructions for any parameter by hovering over it with your mouse

## Interface: Globals and Mix Controls



### 1 ▶ Time

Set the time between consecutive taps in MS [beat ratio when **SYNC** is active]

### 2 ▶ Repeats

Set the number of active taps

### 3 ▶ Sync

Syncs **TIME** parameter to host tempo

### 4 ▶ Feedback

Set amount of processed signal fed back into the delay

### 5 ▶ Modulation

- » **On/Off**
- » **Depth [in cents]**  
Set the modulation amount in cents
- » **Rate [multiplier]**  
Controls the rate of modulation

### 6 ▶ Diffusion

- » **On/Off**
- » **Start**  
Set the input diffusion time in ms
- » **Amount**  
Set the diffusion amount

### 7 ▶ I/O Meters

### 8 ▶ Wet Signal

Amount of effected signal passed to Relayer's output

### 9 ▶ Solo [Wet Signal]

Mutes dry signal output

### 10 ▶ Dry Signal

Amount of unaffected input signal passed directly to Relayer's output

### 11 ▶ Color

Processes output signal with a user selectable IR

- » **On/Off**
- » **Impulse Response Menu**  
Select the IR model
- » **Mix Amount**  
Amount of dry/wet signal output

### 12 ▶ Master Filter

- » **On/Off**
- » **High-Pass Filter Frequency**  
Adjust filter frequency [12 dB/octave]
- » **Low-Pass Filter Frequency**  
Adjust filter frequency [12 dB/octave]

### 13 ▶ Visualizer

Dynamic real-time visualization shows time between taps (including swing, warp and time modulation effects) and per-tap modulation values of Gain, Pan, FX1 and FX2

# Interface: Editor Globals



## 1 ► Power / Tabs

- » **Power Buttons**  
Click to turn the respective modulation sequencers on/off
- » **Tabs**  
Click to change the current editor between Time, Gain, Pan, FX1, FX2 and Feedback

## 2 ► Target Param

Display name of the modulation's target parameter [current step and value displayed below when editing]

## 3 ► Preset Menu

Erases current modulation sequence and applies a user selectable preset shape [sequence is mapped within the current Mod Range]

## 4 ► Transforms

- » **Vertical Offset**  
Click-drag to move step values up/down
- » **Horizontal Offset**  
Click-drag to move steps left/right
- » **Horizontal Flip**  
Click to flip modulation sequence
- » **Scale**  
Click-drag to scale modulation sequence  
+ Ctrl = fine control
- » **Skew**  
Click-drag to skew modulation sequence from left-to-right  
+ Ctrl = fine control  
+ Shift = skew from right-to-left

Note: hit ESCAPE during click-drag edits to reset transform

## 5 ► Mod Range

Modify first and last step index to create shorter looping sequences

## 6 ► Flatten Loop

If a custom Mod Range is set, makes looped steps editable

## 7 ► Mod Editor

Click-drag to draw custom modulation sequences

## 8 ► Param Range [y-axis labels]

## Interface: Time Editor



### TIME

Use the Warp and Swing controls to create global shifts in tap time distribution for weighted rhythms or bouncing ball effects, or adjust inter-tap time multipliers with the modulation sequencer for completely customizable delay patterns.

Changes to time can be seen in real-time via the Visualizer.

#### 1 ▶ Snap

Modulation sequencer snap modes:

- » **Straight**
- » **Triplet**
- » **Dotted**
- » **All**
- » **Free [none]**

#### 2 ▶ Swing

Inter-tap swing amount  
(+/-200%)

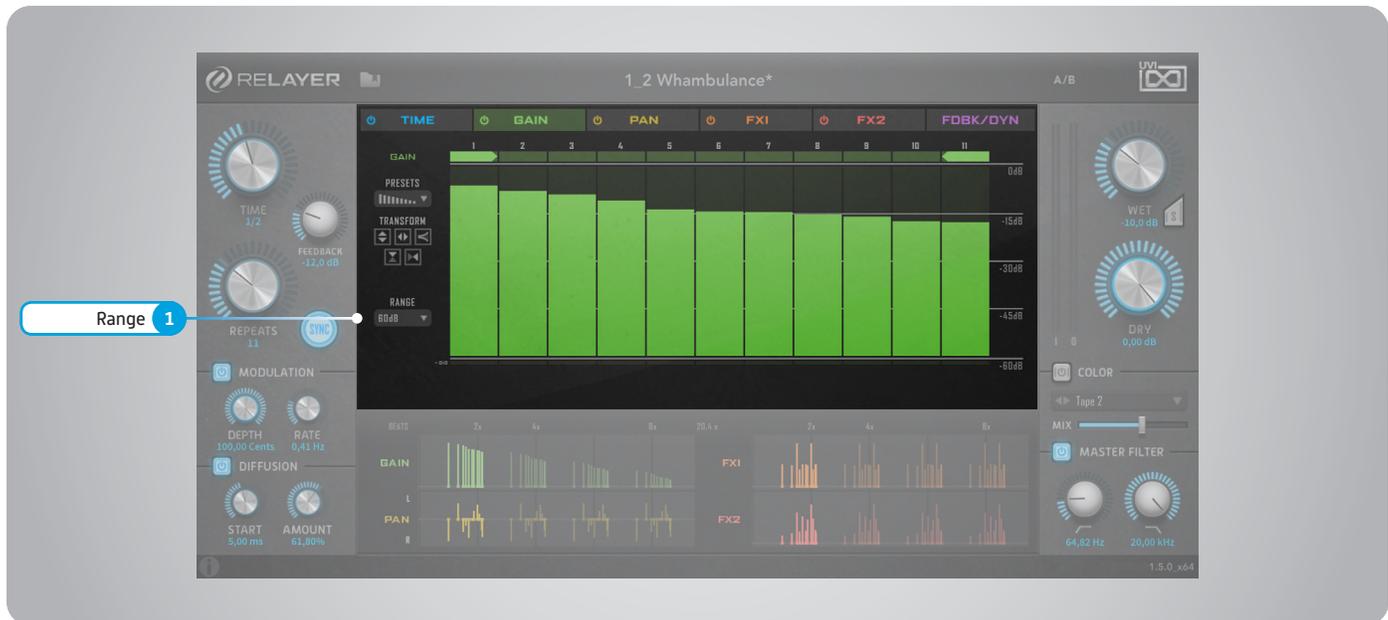
#### 3 ▶ Swing Scale

Adjust the swing time base  
(x.25, x.5, x1, x2)

#### 4 ▶ Warp

Warp delay times from linear distribution to logarithmic in or logarithmic out

## Interface: Gain Editor



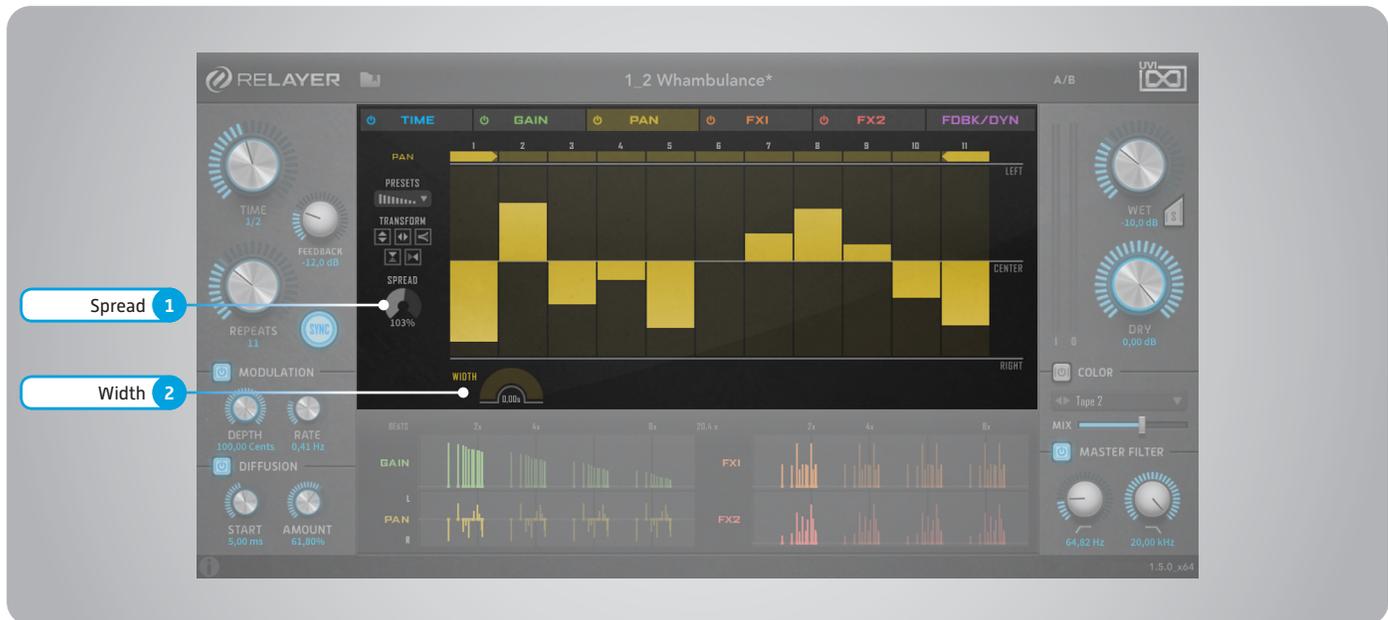
### GAIN

Use the Gain modulation sequencer to change the level of each delayed signal. Gain range can be customized to suit the need for subtle or extreme gain changes.

### 1 ► Range

Set the modulation sequencers range at either -24 dB or -60 dB

## Interface: Pan Editor



### PAN

Use the Gain modulation sequencer to change the level of each delayed signal. Gain range can be customized to suit the need for subtle or extreme gain changes. Spread and Width controls can be edited to independently change the distance between left and right points and the overall width of the stereo field.

Spread makes an excellent automation target for gradually adding stereo effects to your delay.

#### 1 ► Spread

Globally increase or decrease the distance between far left and right modulation points by 0-200%

#### 2 ► Width

Add a delay to the weaker of the two channels (up to 10ms) to create the perception of a wider stereo field

## Interface: FX1 / FX2 Editor



### FX1 / FX2

FX1 and FX2 each allow modulation of a user-selectable effect. Choose between a biquad filter, comb filter, vowel filter, wahwah effect, a bit and sample frequency reducer and a waveshaper.

Each effect has a unique modulation target for its step sequencer. For the Biquad and Comb filters it's cutoff frequency, the Vowel filter allows modulation between user-selectable vowel shapes, WahWah effects strength, Redux targets the sample frequency (down to 200Hz) WaveShaper targets the drive amount, and Phasor targets the frequency of the multistage all-pass filter.

### 1 ► Offset

Shift graph values up/down [+/-100%]

### 2 ► LFO

Apply a sine wave LFO to the graph values

### 3 ► Effects:

#### Biquad Filter

TRGT: CUTOFF FREQ [20Hz - 20kHz]

- » **Mode** [HP, LP, BP, Notch]
- » **Q** [0-100%]

#### Comb Filter

TRGT: CUTOFF FREQ [20Hz - 20kHz]

- » **Mode** [+/-]
- » **Q** [0-100%]

#### Vowel Filter

TRGT: MORPH [Vowel A - B]

- » **Mode** [LP2, BP2, HP2]
- » **Formant** [+/-1]
- » **Vowel A** [A, E, I, O, U]
- » **Vowel B** [A, E, I, O, U]

### WahWah

TRGT: WAH AMOUNT [0-100%]

- » **Model:** Default, Cry, Cry B, Cry C, Vox, Vox M, Bass
- » **Drive** [0-100%]
- » **Master** [-inf to 20dB]

### Redux

TRGT: SAMPLE FREQ [200Hz - DAW's SR]

- » **Bits** [1-32]
- » **Jitter** [0-100%]
- » **Mix** [0-100%]

### WaveShaper

TRGT: DRIVE AMOUNT [0-100%]

- » **Mode** [Tanh, Fold, Sine]
- » **Mix** [0-100%]
- » **In** [+/-40dB]
- » **Out** [+/-40dB]

### Phasor

TRGT: FREQ [20Hz - 20kHz]

- » **Order** [0-12]
- » **Feedback** [±99%]
- » **Spread** [±12st]
- » **Depth** [0-100%]

# Interface: Feedback / Dynamics Tab



## 1 ► FEEDBACK

The Feedback section allows you to process the Feedback signal before it's reinjected to the delay via the Feedback Knob on the main panel. Additionally you can select precisely which tap you want the Feedback signal to reinject at (as either an explicit tap number or Last).

- » **Feedback Tap**  
Tap used for the feedback loop. Explicit tap number or LAST
- » **Drive type**  
Set the drive type for the feedback loop (Analog, Tape and Tube)
- » **High Pass**  
Set the cut off frequency of the low cut filter (20Hz - 20kHz)
- » **Low Pass**  
Set the cut off frequency of the high cut filter (20Hz - 20kHz)
- » **Drive**  
Set the drive amount (0 - 100%)

## 2 ► INPUT GATE

Input gate mutes input signal to produce a spot effect. It is ideal for specific drum hits or vocal phrases and so on.

- » **Arm**  
Enable or disable the input gate
- » **Engage**  
Press to let input signal enter the delay

## 3 ► Ducker

Ducker will compress the wet and dry signals for more intelligible delayed tracks or to create classic sidechain pumping effects

- » **On/Off**
- » **Reduction Level Meter**
- » **Threshold**  
Set the trigger level of the ducker activation (-100 - 0dB)
- » **Amount**  
Set the reduction amount of the ducking effect (0 - 50dB)
- » **Attack**  
Set the attack time of the gate (1 - 100ms)
- » **Hold**  
Set the hold time of the gate (1 - 1000ms)
- » **Decay**  
Set the decay time of the gate (10 - 1000ms)

## Links

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### UVI

- Home . . . . . [uvi.net/](http://uvi.net/) 
- UVI Portal . . . . . [uvi.net/uvi-portal](http://uvi.net/uvi-portal) 
- Effect Installation Guide. . . . . [installing\\_uvi\\_effects\\_en.pdf](#) 
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- FAQ . . . . . [ilok.com/supportfaq](http://ilok.com/supportfaq) 



# RELAYER

## Credits and Thanks

### Produced by UVI

#### DSP

Louis Couka  
Remy Muller

#### Software

Olivier Tristan  
Remy Muller  
Louis Couka

#### GUI, Design

Nathaniel Reeves

#### Preset Design

Alain Etchart  
Damien Vallet  
Simon Stockhausen  
David G (MixBus TV)

#### Documents

Nathaniel Reeves  
Kai Tomita  
Garrett DeMartinis



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