

HOLYVERB REVERB / DELAY EFFECT [RACK EXTENSION] MANUAL

2019

FX device by Turn2on Software



HOLYVERB is a modern effect processor for any kind of incoming audio signal that includes various combinations of modulation and signal change effects. Basically, a signal can be **pitch-shifted** up to ±2 octaves and then the device can add frequency changes via **frequency-shifts**.

The Reverb and Delay sections can be routed in Pre/ Post positions. The **Reverb** includes a classical reverberation, but also includes an additional Reverb Increase block based on 3 reverb modes from the legendary EHX (TM) Holy Grail guitar FX pedal. You can apply basic reverb and mix it with this Increase mode which includes a Spring, Hall, or Flerb setting.

The **Delay** can be synced to the tempo grid or set to run free with lengths in seconds. Feedback settings include Ping-Pong pan, L/R Crossfade and Stereo modes. Feedback at 100% is useful as a loop setting.

The Device includes a Tone parameter to control **Tone** of the Delay, but you can also activate a Filter mode (LP/HP) for this control as a Pre/Rev/Del/Post to add flexibility to effects routing. A built-in Limiter section helps to control the signal output.

The **HOLYVERB** Rack Extension includes a **Modulation matrix** on the back panel with 6 slots for both main and hidden parameters. You can use any kind of Midi CC source for modulation of PB, MW and other parameters to utilize HOLYVERB as a live performance device. For example, you can play any instrument that is connected to HOLYVERB while controlling parameters such as PB, MW or expression at the same time via the modulation matrix. This is a very useful feature for use in live performance.

The **HOLYVERB** Rack Extension is a modern multi-FX effects device with advanced features and flexible possibilities. It allows for a lot of variations for modifying your audio signal, resulting in a unique sound from any kind of source signal.



Re Rack Extension

FUNDAMENTAL SHIFTS

How about applying Frequency and Pitch shifting of your audio signal before sending it into a Reverb-Delay effect? This feature helps to modify the basic signal before you work with the Delay or Reverb.

FX processing in HOLYVERB starts with the **PITCH Shifter**.

The Pitch of the audio signal can be shifted up to ± 2 octaves (± 24 semi) with Coarse control and ± 1 octave (± 12 semi) with Fine control. Your sound can be de-tuned, or changed up or down in up to 2 octaves. With global BLEND control, you can mix the original signal with the pitch-shifted signal.

The Pitch-shifted signal is then routed to the **FREQUENCY Shifter**.

The Freq shifter shifts all frequency content by the same amount, thus altering the frequency

relationships. For example, if the 100 Hz tone goes up to 200 Hz, the 200Hz tone goes up to 300 Hz

REVERB WORLD

Main section of device is REVERB section that include some functional blocks.

MAIN REVERB SECTION: Controls the Level of Reverb and the Size of reverb, with additional section for Cut-filtering of High and Low freqs, Cut and High Damping.

INCREASE REVERB SECTION: Select one of 3 modes of reverberation (Spring, Hall and Flerb) from the original EHX (TM) Holy Grail guitar FX pedal. The Amount control helps to additionally increase the basic reverberation-processed signal. If you select NONE, setting the amount to 100% moves the signal to silence and setting it to 0% disables the Increase section.

DECAY REVERB SECTION: The Decay control modulates a resonance decay time to the signal. You can hear an additional length of signal that can be resonated at long lengths.

DELAY WORLD

The second Main section of the device is the **DELAY** section that includes some functional elements. Control the **Level** of Delay and the **Length** of Delay with **Sync** selection (Delay length in Seconds or Tempo-Synced beats). **Feedback** control with Loop at 100% position. Selectable **Delay Modes**: Ping-Pong Pan, Crossfade L/R and Stereo mode. **Delay Balance** control changes the L/R channel positions of the selected Delay Mode.

MORE ELEMENTS

With the **Routing scheme** selector you can set Pre/Post positions for Reverb and Delay.

The **Tone** Knob controls damping of the delay-processed signal.

The **Filter Type** selector allows you to choose where the Tone control is applied in the signal chain. The Filter selection works in LP/BP modes with routing as Off/Pre/Reverb/Delay/Post.

Input - controls the level of the unprocessed signal, Gain - controls the level of the processed signal (up to +12dB).

Limiter - safety limiter to keep levels within a fixed 0 dBFS. Helps to limit the signal from clipping, saturation. **Blend** - works as a Dry/Wet control for unprocessed / processed signals.

Matrix modulation - includes 6 slots with assignable controllers from MIDI CC source to main and hidden elements of the device.

HOLYVERB



FRONT PANEL

Bypass On Off	SHIFT PARAMS				
FREQ 🖉	0,05 Hz 🛔	0 %			
PITCH 1	0,0 semi	0,00 semi			

PITCH & FREQ Shifters

PITCH / FREQ Shifter			
Pitch Shifter	Pitch Shifter effect On/Off		
Pitch Coarse	Set Octave changes of incoming signal in range of ±2 octaves (-24 semi+24 semi). Mid position (0 semi) leaves signal untouched		
Pitch FineSet Octave changes in range of 1 octave (0+12 semi)			
Freq Shifter	Frequency Shifter effect On/Off		
Frequency Frequency shift in Hertz (not pitch shifting!).			
Amount	Linear scaling of shift amount with gradation Up/Down or L/R channels.		



REVERB

Reverb Parameters			
Mix	Set mix between processed and unprocessed signal of reverb section. 0% disable basic reverb effect, but does not affect Increase mode.		
Size	Length of reverb tail		
Increase Mode	3 reverb model types (each with 7 sub-modes) from the EHX (TM) HolyGrail FX pedal. (None, Spring reverb, Hall reverb, Flerb reverb). Selected mode can additionaly increase basic reverb (mix, size controls). The Basic Reverb and Increase Mode work independently.		
Increase Amount	The amount of the Increase reverb model. If selected model - None, and Amt = 100%, processing signal goes to silence. If Amt = 0%, the Increase section is inactive.		
High / Low Cut	Highpass and Lowpass filters cutoff frequencies. Work only with basic reverb section and excludes the Increase section.		
Low / Oil damping	Progressive loss of high frequencies in the basic tail. Work with only the Basic reverb section, exclude Increase section.		
Decay On/Off	Decay effect On/Off		
Decay Length	Resonance decay time with resonance activity create additional length to the signal		

HOLYVERB





1/8 D				
Delay Parameters				
Mix	Sets the mix between the processed and unprocessed signal of the delay section. 0% disables the Delay effect.			
Length	Delay Time parameter (can be synced)			
Sync	Set the Length time parameter to Seconds or Sync to quaternote beats grid			
Feedback	Creates feedback from the delay output to the input for multiple repeats			
Mode	Switches feedback routing for L/R channels between Ping-Pong Pan, L/R Crossfade and Stereo mode.			
Balance	Negative/Positive values reduce the L/R channel delay. Help to sound differently with various feedback modes			
0,21 sec				
Limiter				
Clip Limiter	Limiter on/off. CPU safety hard clipping limiter			
Release	Recovery time			
TONE Imput cain Impu cain Impuc				
Bypass / Patch Browser / Blend				
Bypass / On / O	ass / On / Off Standard switch with 3 modes: Bypass effect, On Effect, Off Effect			
Patch Browser	Open, Browse and Save patches			
Blend	d Blend Dry/Wet function of incoming and processed signals			

Soft BypassBypass with fading of effect activity (without glitches)RoutingSet Pre/Post positions for Reverb and DelayTone (Filter)The Tone knob controls damping of the delay-processed signal. The Filter type selector
allows you to choose where the Tone control is applied in the signal chain. The Filter
selection works in LP/BP modes with routing as: Off / Pre / Reverb / Delay / Post

Input	Controls the level of the unporcessed signal
Gain	Controls the level of the processed signal (up to +12dB).

BACK SIDE PANEL





AUDIO INPUT / OUTPUT

Mono/Stereo connections for Input and Output audio signals



CV INPUTS

Use these CV inputs to control the main parameters of the Frequency, Pitch, Reverb, Delay, Main and Limiter sections

1	P.B.	* 0,00	PITCH COARSE	4	P.B.	*1 00,00	REV SIZE
2	STATIC	0,00	SHIFT FREQ		M.W.		DEL FEEDBK
3	STATIC		SHIFT AMOUNT		M.W.		DEL BALANCE
	SRC	AMT	DEST		SRC	AMT	DEST

MODULATION MATRIX

The Matrix includes 6 slots with Modulation Source, Destination and Amount for Main and Hidden device parameters

SLOT	MIDI CC Source	DESTINATION
1 / PITCH SHIFT	STATIC LEVEL P.B. M.W. AFTERTOUCH BREATH SUSTAIN EXPRESSION	Coarse, Fine, Random, Pan
2/ FREQ SHIFT		Frequency, Amount, Feedback
3/ FREQ SHIFT		Frequency, Amount, Feedback
4/ REVERB		Mix, Size, * Reflection, Decay Time, * Decay Keytrack
5/ DELAY		Length, Feedback, Balance, Tone (Filter)
6/ DELAY		Length, Feedback, Balance, Tone (Filter)

CONNECTIONS:



Device is a True-Stereo effect. For Mono input, the device produces stereo output (Spreading). For Stereo input, the device sums the Left and Right channels before applying the effect. The output is in Stereo.





HOLYVERB Reverb / Delay effect



Developed to use with Reason

Reason Studios



Turn2on

Rack Extension Developer

contacts: <u>https://turn2on.com/</u> <u>supp.turn2on@gmail.com</u>

Thanks to all beta-testers. Special thanks for help to Philip Meadows

All product names, trademarks and registered trademarks are the property of their respective owners. All company, product and service names used are for identification purposes only. Use of these names, trademarks and brands does not imply endorsement.