

# *Happy Nerd*ing



# FX AID PRO

# MANUAL

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The FX Aid Pro is an 14HP euro module based on the spin chip. The user can load 200 sound effects in any order from a growing list of high quality effects.

Each FX program has 3 clearly labeled parameters as seen on the display each with a knob and CV input, 10 user presets are configurable with 3 user defined LFOs. FX Sample rate and Dry/Wet balance are voltage controllable.

## DELAYS

Delay AUX  
Delay AUX Sync  
Delay Comb  
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Delay Crushed  
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Delay Freq Shift  
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Delay Freq Shift\_clk  
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Delay Karplus-Strong

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Delay Mono\_muted

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Delay Ping-Pong Dual  
Delay Ping-Pong Sync  
Delay Ping-Pong\_clk  
Delay Ping-Pong\_muted

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Delay Pitch Shift  
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Delay into Chorus\_clk  
Delay into Dual Shimmer  
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Delay into Input Shimmer  
Delay into Reverb  
Delay into Shimmer

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## FREEZE

Freeze Prime Time  
Freeze Speed  
Freeze Tone

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## DRUMS & GENERATORS

808 Bass Drum  
808 Clap  
808 Claves  
808 CowBell  
808 Cymbal  
808 HiHat  
808 Maracas  
808 Rimshot  
808 Snare  
808 Tom/Conga  
909 Bass Drum  
909 Clap

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909 Rimshot  
909 Snare  
909 Tom  
XOX Bass Drum  
XOX Clap  
XOX HiHat  
XOX Snare  
Generator  
Noise Station  
Tuner

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## ENVELOPES

AD  
AD Delay  
AD VCF 1pole  
AD VCF 2pole  
AD VCF 4pole  
AR

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AR Delay  
AR VCF 1pole  
AR VCF 2pole  
AR VCF 4pole

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## CHORUS

Chorus 2x  
Chorus 4x  
Chorus Dimension-D  
Chorus Ensemble  
Chorus Random  
Chorus Shallow Water

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Chorus into Reverb

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## FLANGER/PHASER

Flanger  
Flanger Barberpole  
Flanger Diffuse  
Phaser 12  
Phaser 12 Diffuse

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Phaser 6 Barberpole  
Phaser 6 Stereo  
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Phaser Switched

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## FREQ. SHIFTERS

Freq Shifter  
Freq Shifter Barberpole  
Freq Shifter Dual  
Freq Shifter Up-Dn

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## PITCH SHIFTERS

Pitch Shifter  
Pitch Shifter Barberpole  
Pitch Shifter Dual  
Pitch Shifter Dual Serial  
Pitch Shifter Dual Serial\_step  
Pitch Shifter Dual\_step

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Pitch Shifter Grain  
Pitch Shifter Stereo

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## REVERBS

Reverb Black Cloud  
Reverb Black Hole  
Reverb Black Hole into Phaser  
Reverb Bloom  
Reverb Chorale  
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**Page 20**

Reverb Shimmer Combo  
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Reverb Shimmer Dual Delayed  
Reverb Shimmer Dual Slow  
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Reverb Crushed  
Reverb Depth  
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Reverb Freeverb  
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Reverb Shimmer Input Dual  
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Reverb Shimmer Variable  
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Reverb Gate Time  
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Reverb Grayhole light  
Reverb Hall Chorus  
Reverb Hall Chorus 2  
Reverb Hall Medium

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Reverb Spring  
Reverb Spring Dual  
Reverb Swell Dry  
Reverb Swell Wet  
Reverb Transmitter  
Reverb Transmitter Warp

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Reverb Infinite  
Reverb Infinite Dark  
Reverb Lo-Fi  
Reverb MI Clouds  
Reverb Metallic  
Reverb Parking

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Reverb Phaser 6  
Reverb Phaser 6v2  
Reverb Phaser 8  
Reverb Phaser Shimmer  
Reverb Plate Classic  
Reverb Plate narrow

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Reverb Plate stereo  
Reverb Reverse  
Reverb Room classic  
Reverb Room stereo  
Reverb Saturated  
Reverb Shimmer

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## DYNAMICS

Tremolo into Reverb  
**Page 19**

Bit Crusher  
Clipper  
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Compressor Peak  
Compressor RMS  
Compressor Sidechain  
Crusher  
Distortion Clipper  
Distortion OverDrive  
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Generation Lost  
In-NOut  
In-Out  
Limiter  
Limiter 3-Band  
Lo-Junky  
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Lo-Junky NG  
Noise Gate  
Panner  
Panner Auto  
Radio  
Ring Modulator  
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Sample & Hold  
Sample Rate Reducer  
Shallow Water  
Sub Fatter  
Vinyl  
Vinyl Retro  
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Wave Folder  
xFader  
**Page 39**

## FILTERS

Filter 3-band EQ  
Filter BP 2 pole  
Filter BP 4 pole  
Filter BP Width

**Page 33**

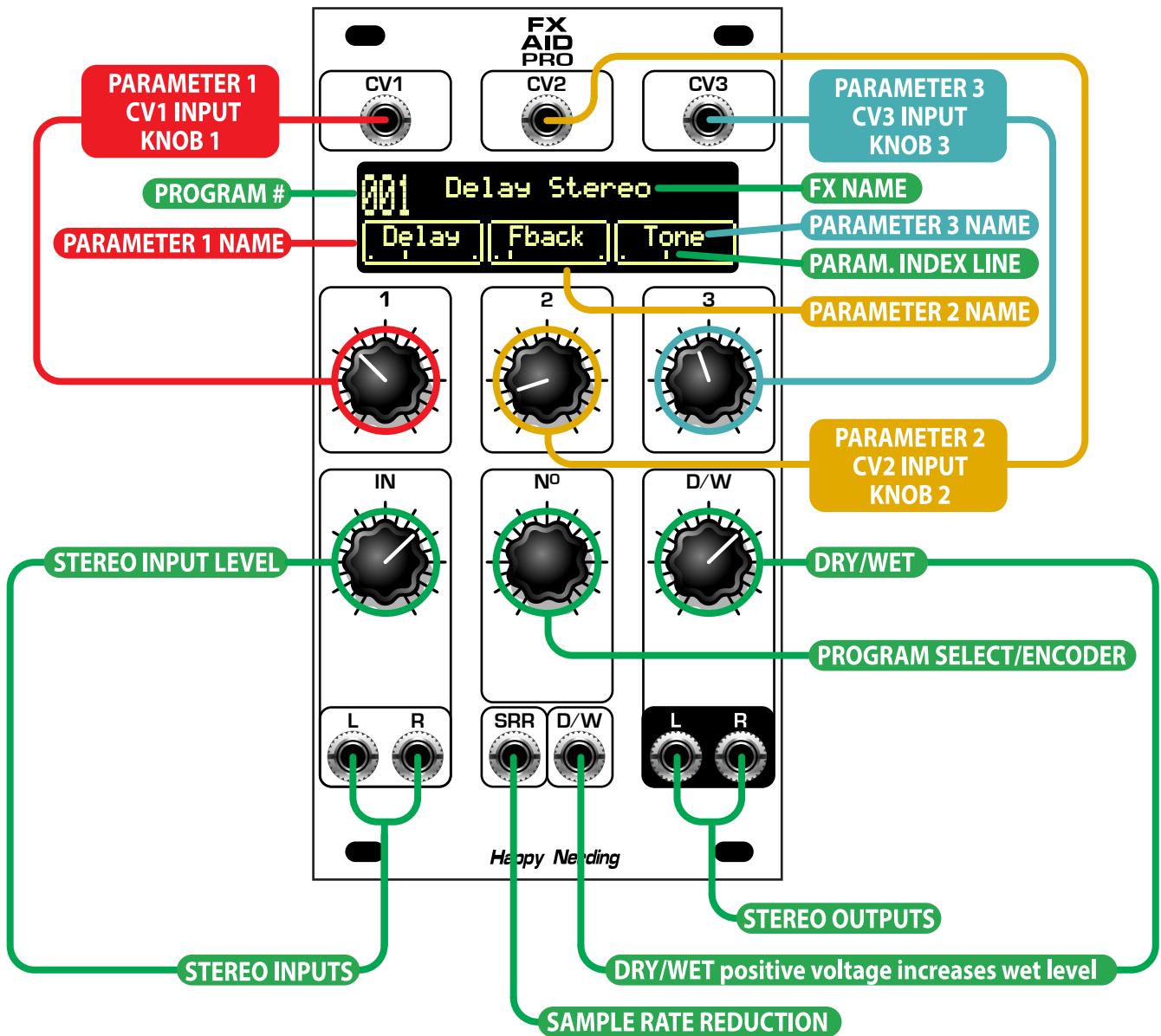
Filter LP Moog  
Filter Vowel

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Filter DJ  
Filter HP 2 pole  
Filter HP 4 pole  
Filter HP+LP  
Filter LP 2 pole  
Filter LP 4 pole

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## FRONT PANEL



**CV IN** CV control of parameter (-5v to +5v)

**ENCODER** Selection of effect, Mode settings, Sample Rate Reduction Modes

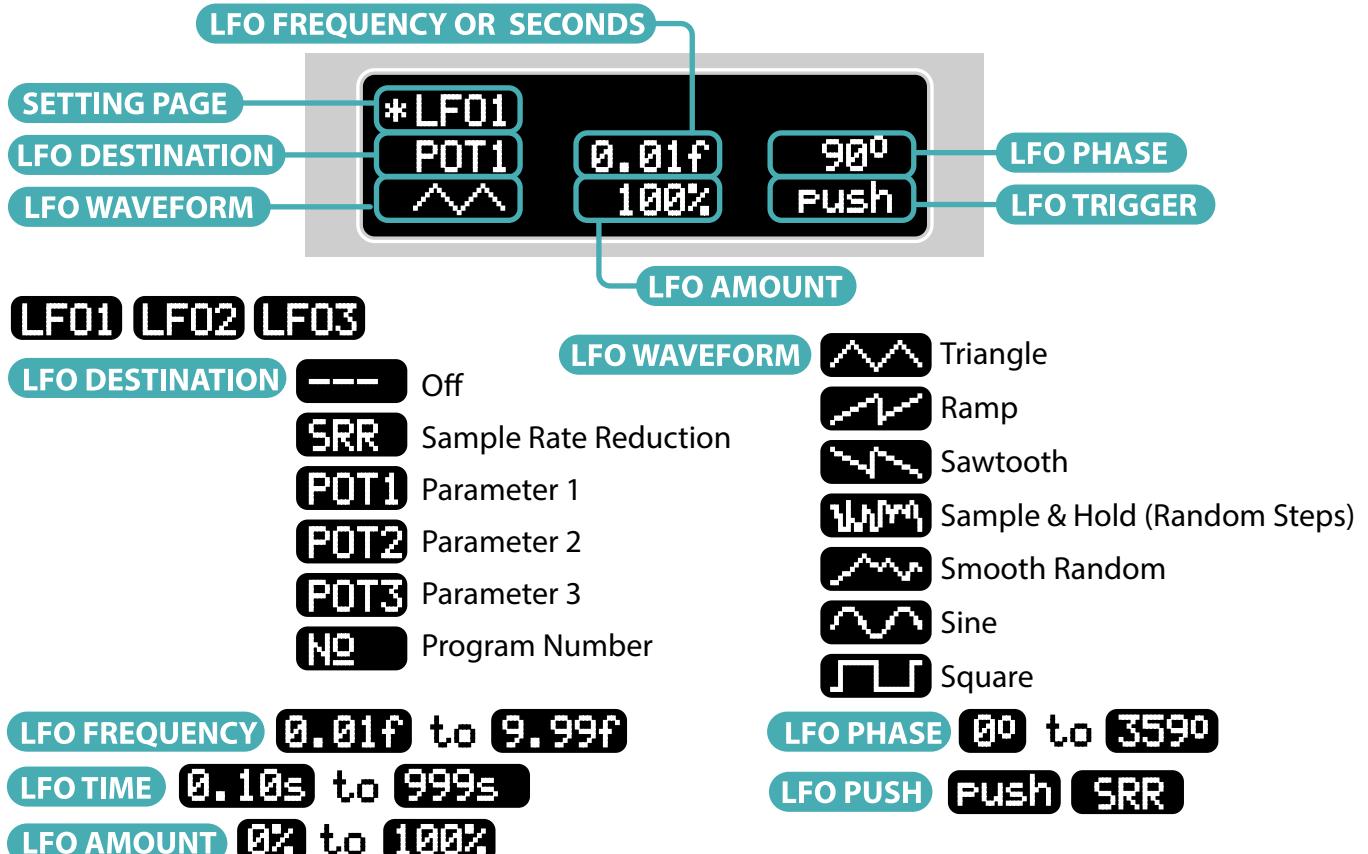
**DRY/WET** VC of VCAs that balance between Dry signal and Wet effect (-5v to +5v).

**SRR** CV input for Sample Rate Reduction (-5v to +5v), Pot 1, Pot 2, Pot 3, Effect, LFO restart, Load Firmware and Oscilloscope input

## SETTINGS

Double click the encoder button enter settings mode.

- ✿ Click once to bring up the selection asterisk and turn the encoder knob to move the asterisk next to the parameter you want to change, click the encoder again and the asterisk will blink indicating you can turn the encoder to select a new value. Clicking the encoder again will put the non-blinking asterisk back into selection mode.



**LFO RETRIGGER** Press the encoder at the push section to retrig the LFO

**LFO RETRIGGER SRR IN** Hold down the encoder at the push section until "push" changes to "SRR" to restart the LFO's by triggering the SRR input, you can still push the encoder knob to retrig the LFO.

### FX SELECTION MODE

**Instant selection** Turning the encoder know will instantly load a new program

**Click to select** Turning the encoder know will show the new program number click the encoder to load the currently selected program

**SRR IN ROUTING** Sample rate reduction input selection, scroll asterisk to select route.

**SRR POT1 POT2 POT3 Effect Disabled**

**SCREENSAVER** Display will turn off by the time selected, turning the encoder will wake it up

**Disabled 1 min 10 min 30 min 60 min**

**INCREMENT+-** Invert the parameter control behavior

**+** Fx Aid Pro behavior

**-** Pre-Fx Aid Pro behavior

## 10 USER PRESETS

Double click the encoder button enter settings mode, scroll to the PRESET RECALL section, and click. Select from 10 user presets locations and click to load preset.

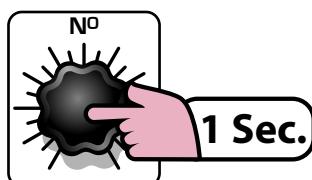
To save a preset (with internal LFO's settings) Double click the encoder button enter settings mode, scroll to the PRESET SAVE section, and select Preset location, and click to save.



## SRR MODES



Long press on the encoder knob enter SRR mode, then short click to select from 3 Sample Rate Reduction modes. long press again to exit SRR modes. Default clock is 32.8 kHz.



SEM1 -39 Semi to 12 Semi  
OCT -4.0 Oct to 1.0 Oct  
SEM1 2000 Hz to 65536 Hz

## ONLINE EDITOR

Go to <https://fxaid.app/pro>

### FX AID EDITOR PRO

CLEAR  
Clear all  
200 presets

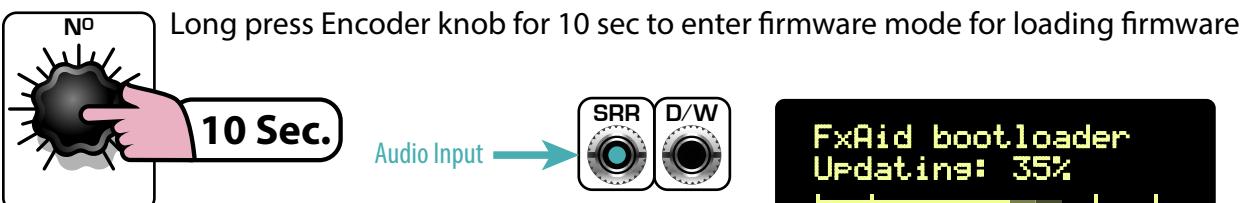
DOWNLOAD  
Download Mac  
or PC editor

GET FIRMWARE  
Get firmware  
wave file

FX AID  
Toggle between  
FX AID & FX Aid  
Pro Editor

BANK  
Open Bank  
Save Bank  
Print Bank  
 Help

## LOAD FIRMWARE



Playback firmware wave file into the SRR input the bar should hover around the middle of the display

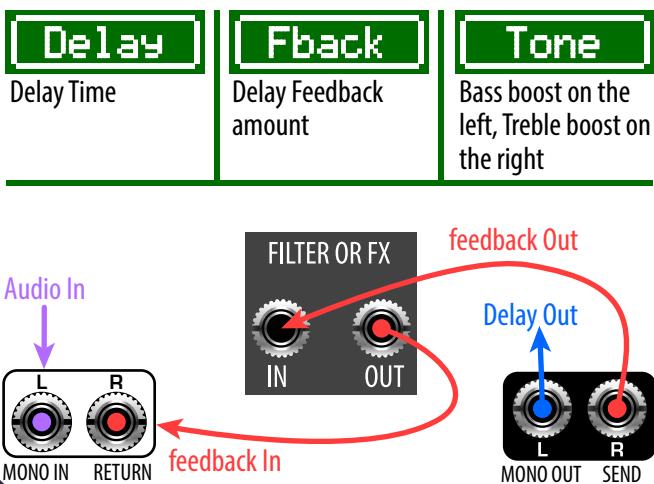
## OSCILLOSCOPE



Double click the encoder button enter settings mode select OSCOPE, Put CV or audio into SRR input, the encoder knob adjusts scanning rate from 1 to 1000. Double click again to exit.

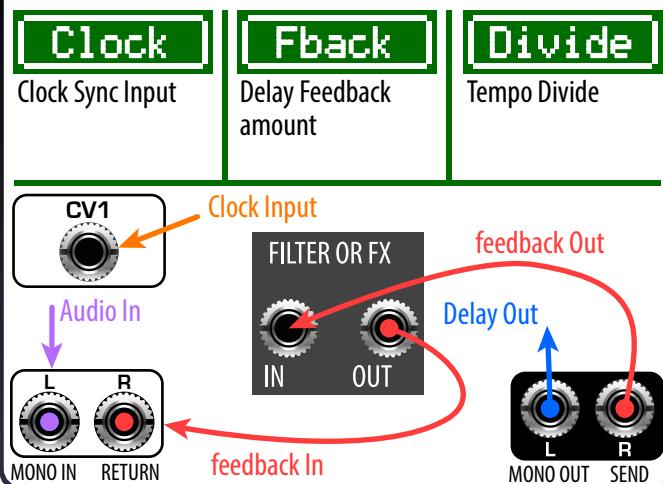
## Delay AUX

A delay for external processing of the feedback path through the right input and output.



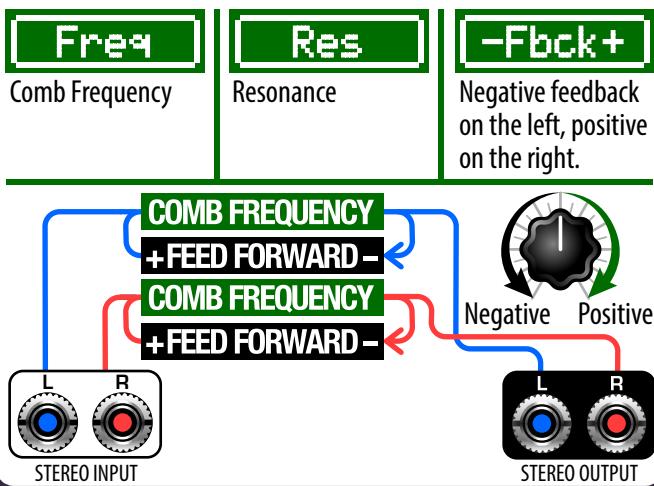
## Delay AUX Sync

A synced delay for external processing of the feedback path through the right input and output.



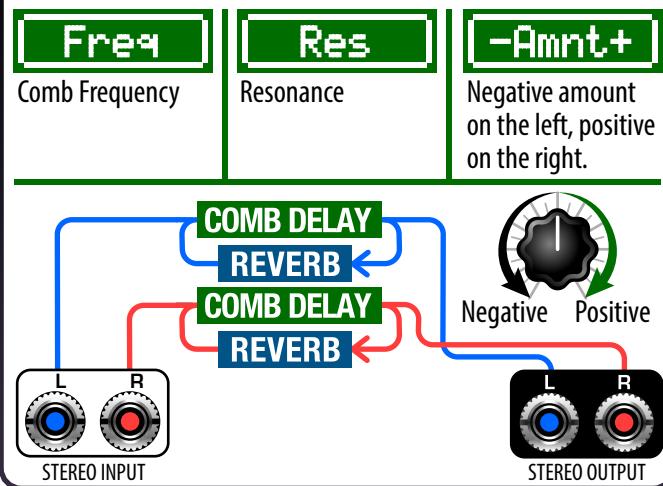
## Delay Comb

Feedforward or feedback comb



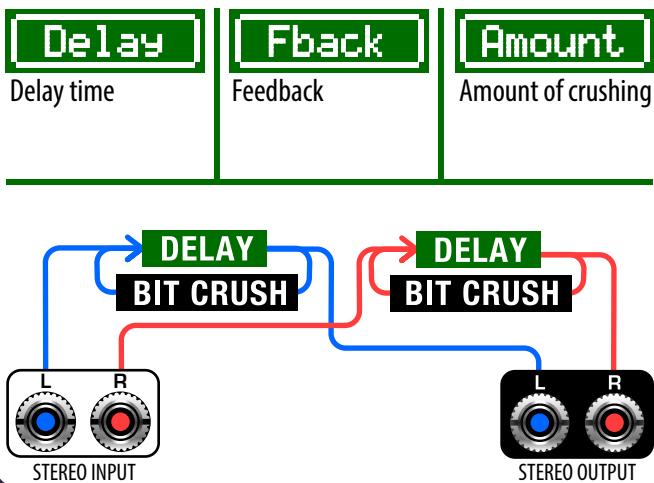
## Delay Comb into Reverb

Comb delay with reverb that is outside of the feedback loop



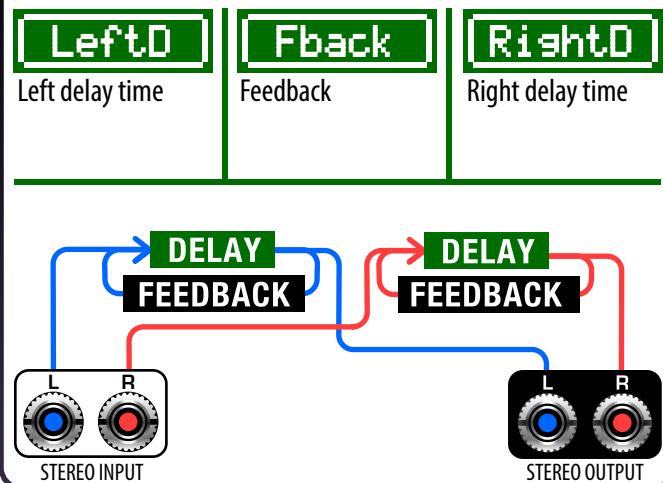
## Delay Crushed

Sample rate reducer is inside the delay loop, each time the delay repeats the echo becomes more and more crushed



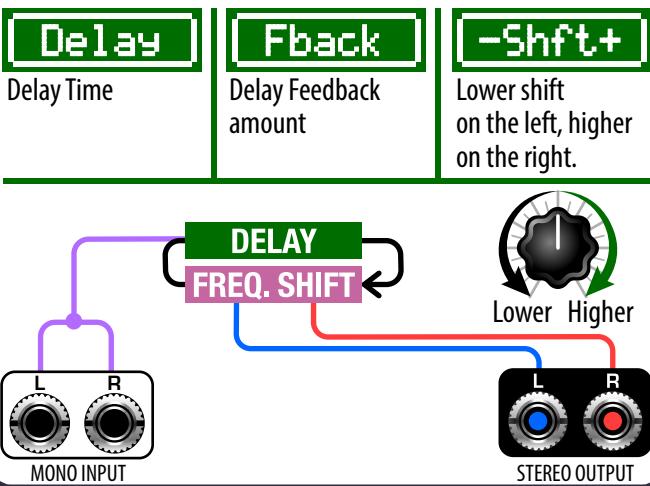
## Delay Dual

Separate left and right delays



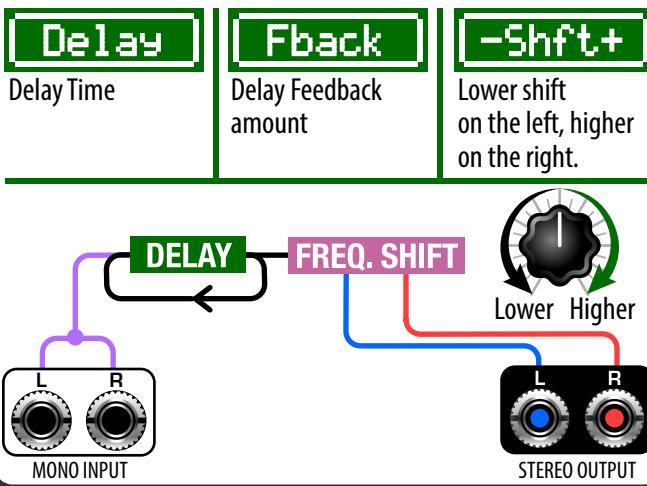
## Delay Freq Shift

Freq Shift is inside feedback loop, with each echo the audio becomes more and more processed by the frequency shifter



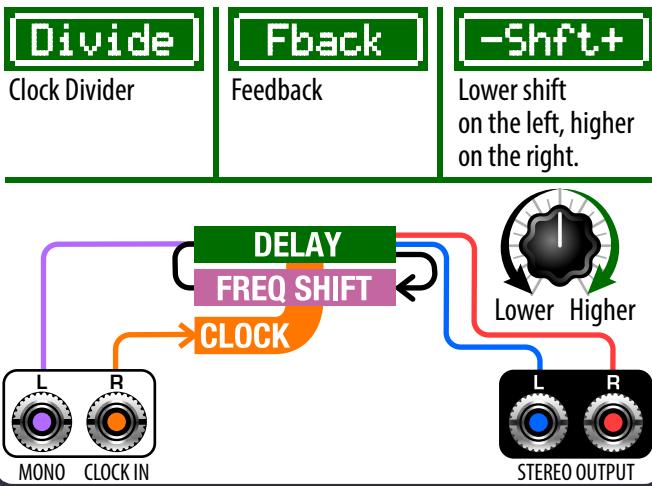
## Delay Freq Shift after FB

The frequency shifter is after feedback loop, the echoes are frequency shifted only once



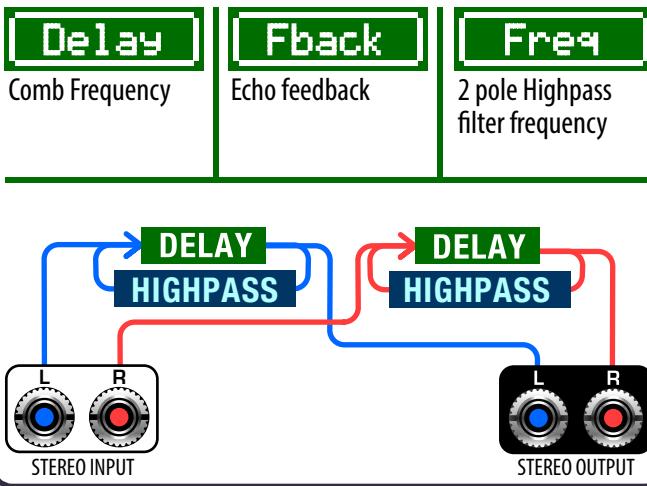
## Delay Freq Shift\_clk

Insert Clock or Square wave into the right input, make sure the Dry/Wet mix is 100% wet or you will hear the clock.



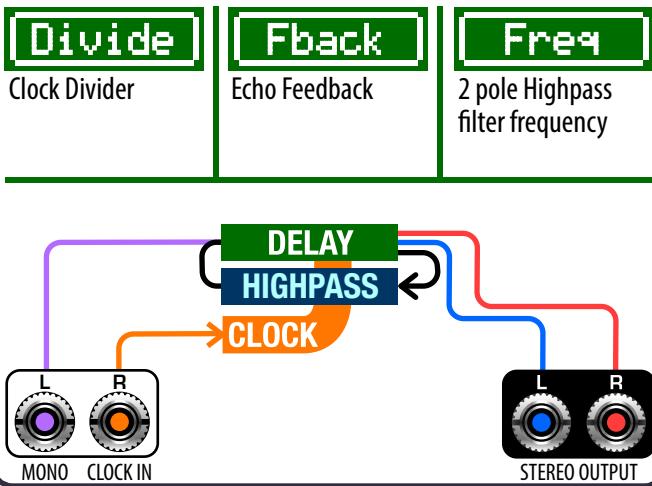
## Delay HP

Resonating 2 pole HP filter is inside feedback loop



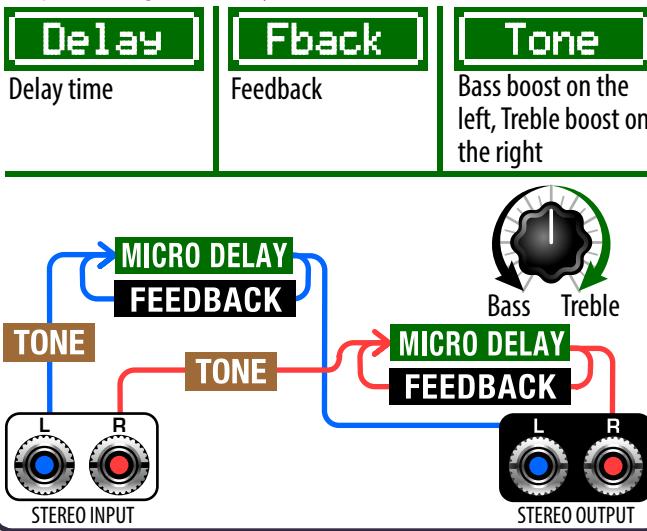
## Delay HP\_clk

HP filter is inside feedback loop, Delay time is clocked with right input, mono audio goes into left input, make it 100% wet.



## Delay Karplus-Strong

Karplus-Strong micro delay



## Delay LP

Resonating 4pole LP filter is inside a delay feedback loop

**Delay**

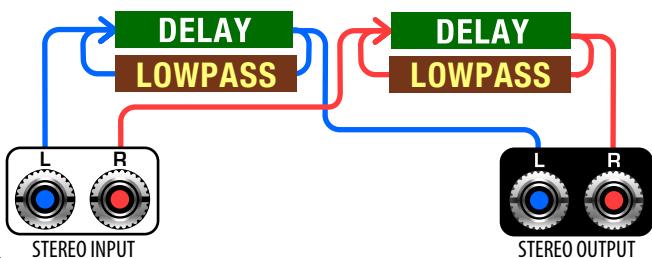
Delay Time

**Fback**

Echo Feedback

**Freq**

4 pole Lowpass  
filter frequency



## Delay LP\_clk

Resonating 4pole LP filter is inside a clocked delay feedback loop.  
Set the Dry/Wet mix at 100% Wet or you will hear the clock.

**Divide**

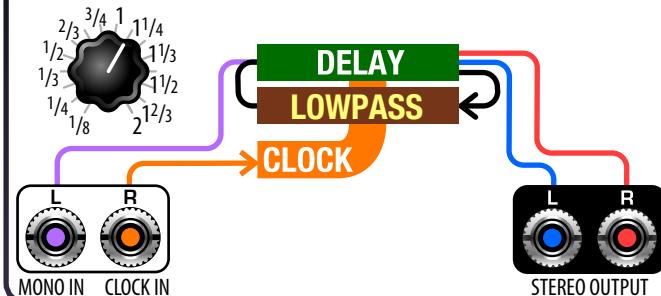
Clock Divider

**Fback**

Echo Feedback

**Freq**

4 pole Lowpass  
filter frequency



## Delay Magneto

4 delay heads with even spacing into a chorus

**Delay**

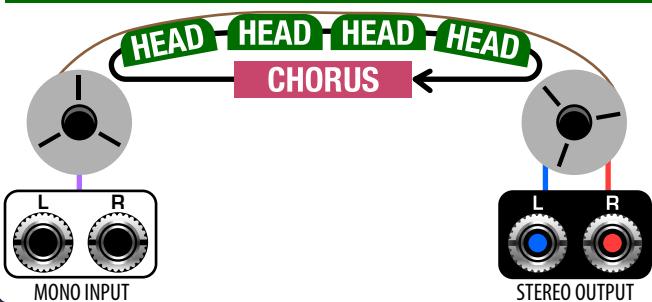
Delay Time

**Fback**

Echo Feedback

**Chorus**

Chorus rate &  
amount?



## Delay Mono

Right out is 1/8 earlier

**Delay**

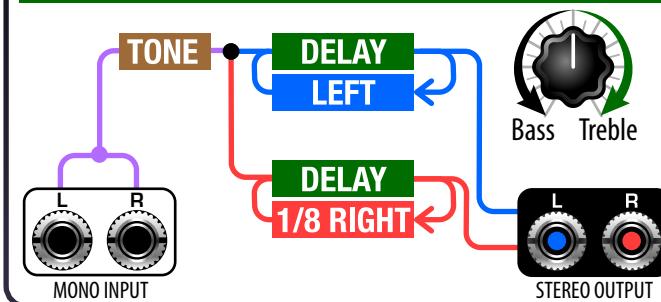
Delay time

**Fback**

Echo Feedback

**Tone**

Tone Balance, Bass  
on the left Treble  
on the right



## Delay Mono\_clk

Right out is 1/8 earlier, Set the Dry/Wet mix at 100% Wet or you  
will hear the clock.

**Divide**

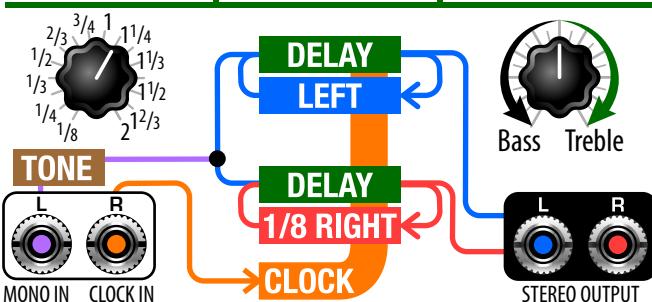
Clock Divider

**Fback**

Echo Feedback

**Tone**

Tone Balance, Bass  
on the left Treble  
on the right



**Delay**

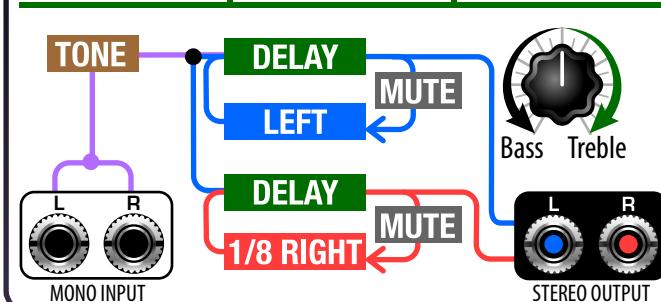
Delay time

**Fback**

Feedback

**Tone**

Tone Balance, Bass  
on the left Treble  
on the right



## Delay Ping-Pong

Delay Right is first, then Left and back & forth

**Delay**

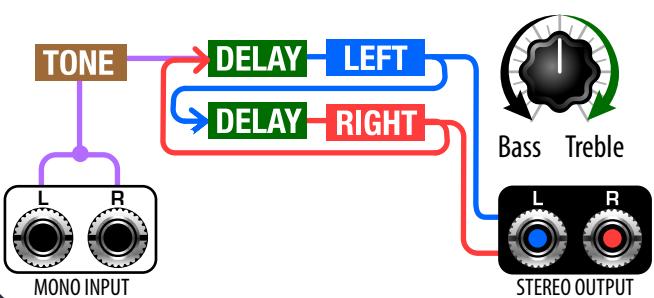
Delay Time

**Fback**

Delay Feedback amount

**Tone**

Tone Balance, Bass on the left Treble on the right



## Delay Ping-Pong Chorus

A chorused delay where Right is first, Left is second and back & forth

**Delay**

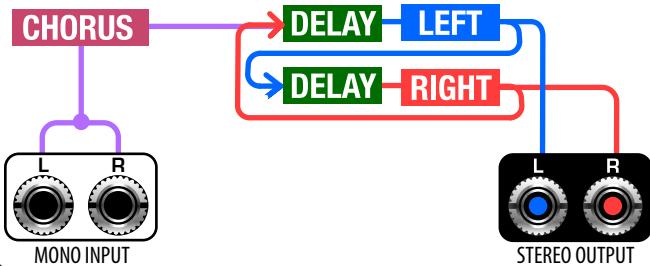
Delay Time

**Fback**

Echo Feedback

**Chorus**

Speed & amount?



## Delay Ping-Pong Dual

Separate Ping & Pong delays for left and right audio inputs

**LeftD**

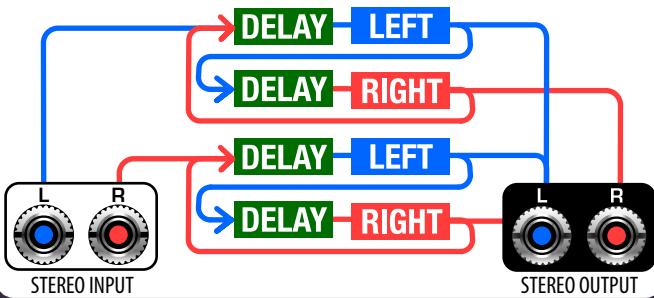
Left Delay Time

**Fback**

Echo Feedback

**RightD**

Right Delay Time



## Delay Ping-Pong Sync

Synced Delay Right is first, then Left and back & forth

**Clock**

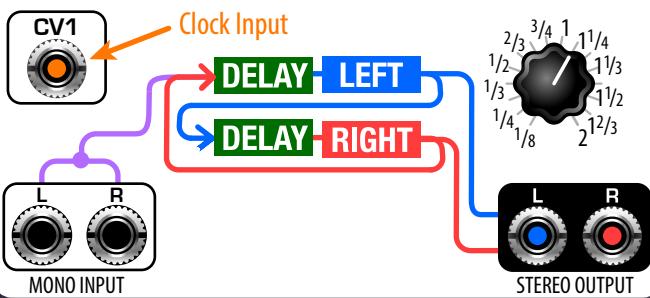
Clock input

**Fback**

Echo Feedback

**Divide**

Clock Divider



## Delay Ping-Pong\_clk

Mono audio goes into left input, Set the Dry/Wet mix at 100% Wet or you will hear the clock.

**Divide**

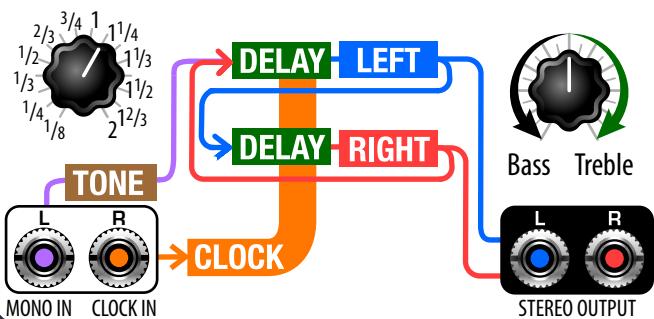
Clock Divider

**Fback**

Echo Feedback

**Tone**

Bass on the left Treble on the right



## Delay Ping-Pong\_Muted

Ping Pong Delay change mutates the output, pitch & tempo changing tails are eliminated

**Delay**

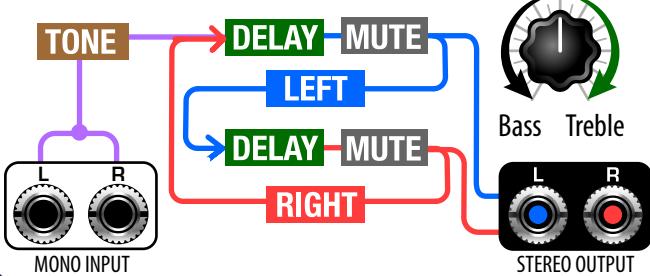
Delay time

**Fback**

Feedback

**Tone**

Tone Balance, Bass on the left Treble on the right



## Delay Pitch Shift

Pitch Shift is inside feedback loop, with each echo the audio becomes more and more processed by the pitch shifter

**Delay**

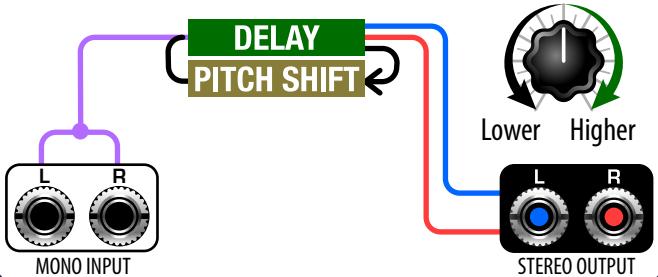
Delay Time

**Fback**

Delay Feedback amount

**-Shft+**

Pitch shift down  
on the left, up  
on the right.



## Delay Pitch Shift after FB

The Pitch shifter is after feedback loop, the echoes are pitch shifted only once

**Delay**

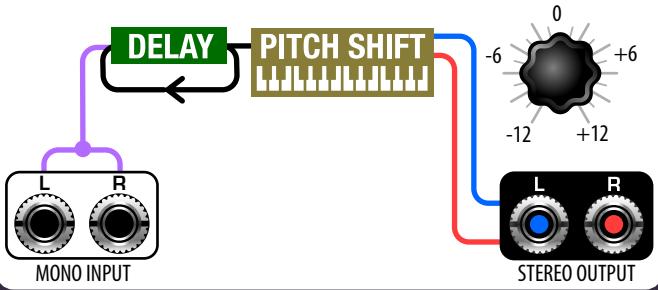
Delay Time

**Fback**

Delay Feedback amount

**-Shft+**

Pitch shift down  
on the left, up  
on the right.



## Delay Pitch Shift after FB\_st

The Pitch shifter is after feedback loop, the echoes are pitch shifted in semi-tone steps only once

**Delay**

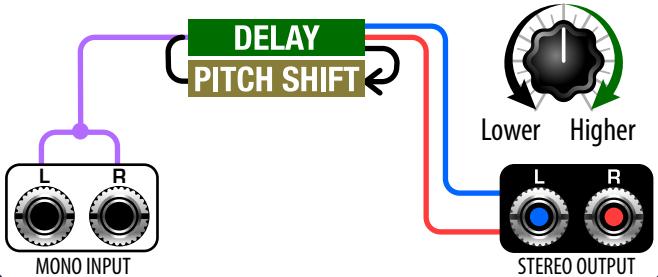
Delay Time

**Fback**

Delay Feedback amount

**-Shft+**

Pitch shift down  
on the left, up  
on the right.



## Delay Pitch Shift\_clk

Pitch Shift is inside clocked delay feedback loop, Set the Dry/Wet mix at 100% Wet or you will hear the clock.

**Divide**

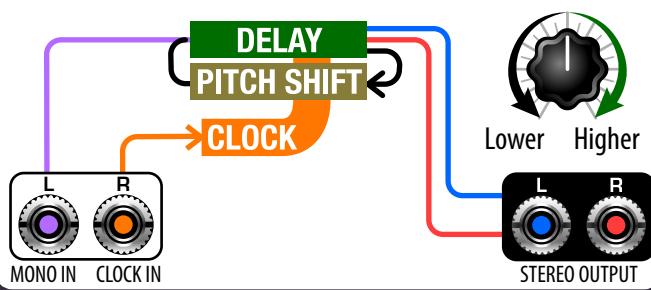
Clock Divider

**Fback**

Echo Feedback

**-Shft+**

Pitch shift down  
on the left, up  
on the right.



## Delay Pitch Shift\_step

The Pitch shifter is inside the feedback loop, the echoes are pitch shifted in semi-tone steps each time the delay repeats

**Delay**

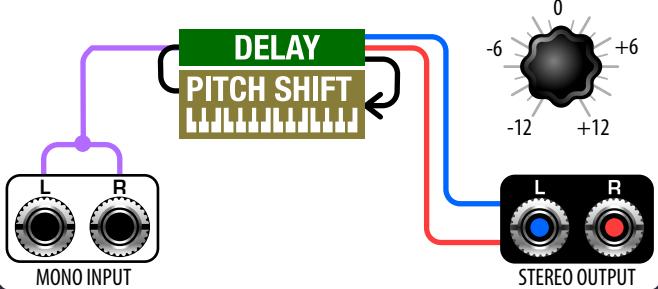
Delay Time

**Fback**

Feedback Echo

**-Shft+**

Pitch shift down  
on the left, up  
on the right.



## Delay Pitch Shift\_step\_clk

The Pitch shifter is inside the clocked delay feedback loop, Set the Dry/Wet mix at 100% Wet or you will hear the clock.

**Divide**

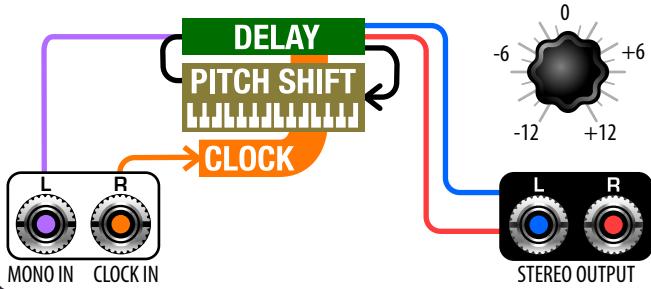
Clock Divider

**Fback**

Feedback Echo

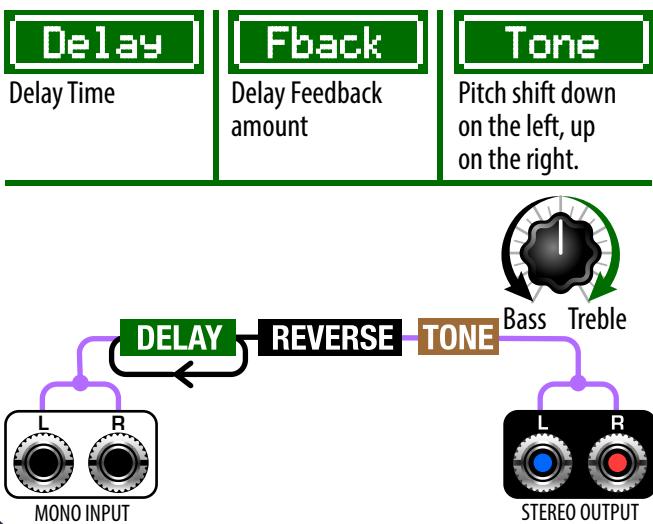
**-Shft+**

Pitch shift down  
on the left, up  
on the right.



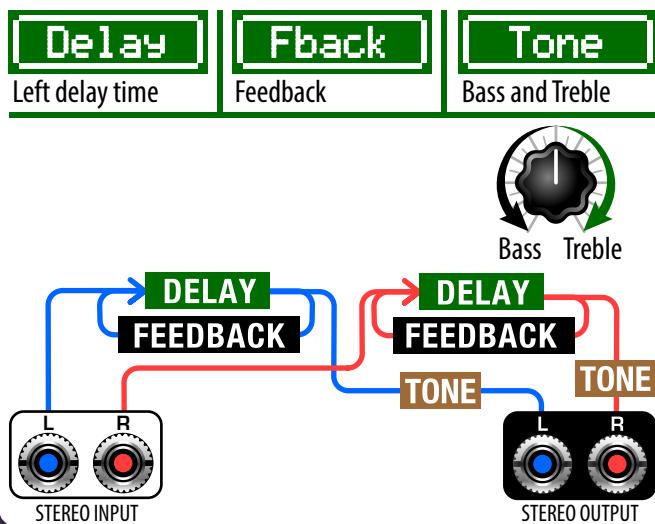
## Delay Reverse

Delayed and reversed



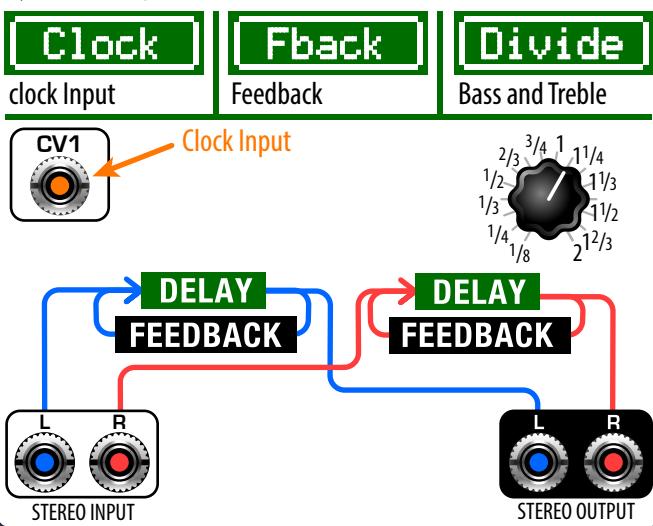
## Delay Stereo

Total delay time – 0.5 sec



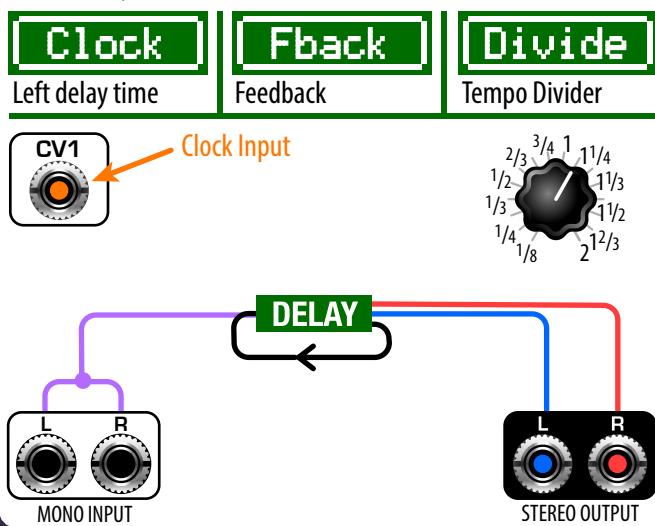
## Delay Stereo Sync

Syncable to squares



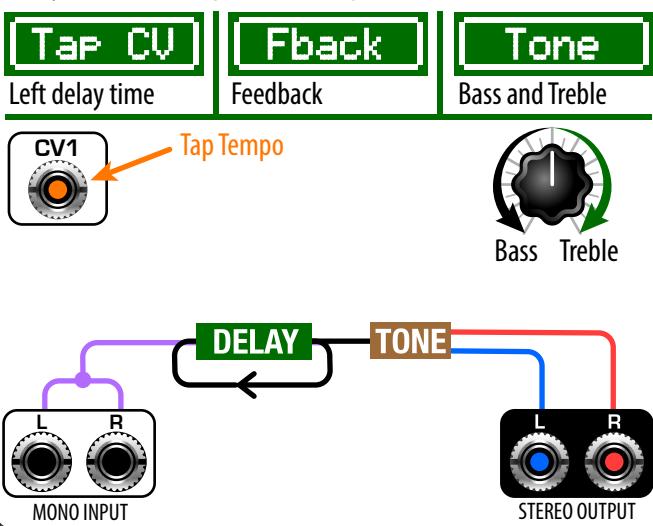
## Delay Sync

Stereo delay



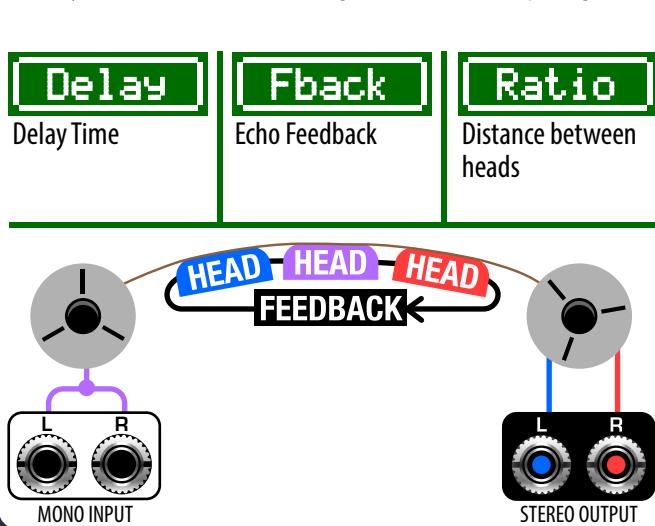
## Delay Tap Tempo

Delay Time follows squares at CV input



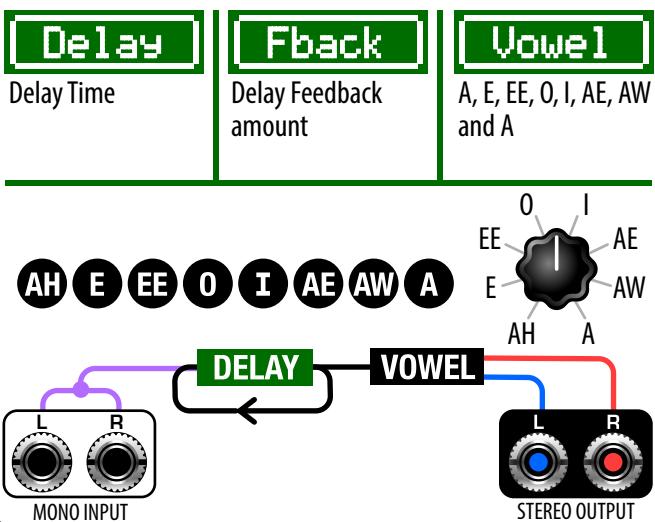
## Delay Tape

3 delay heads (Left, Center and Right) with variable spacing



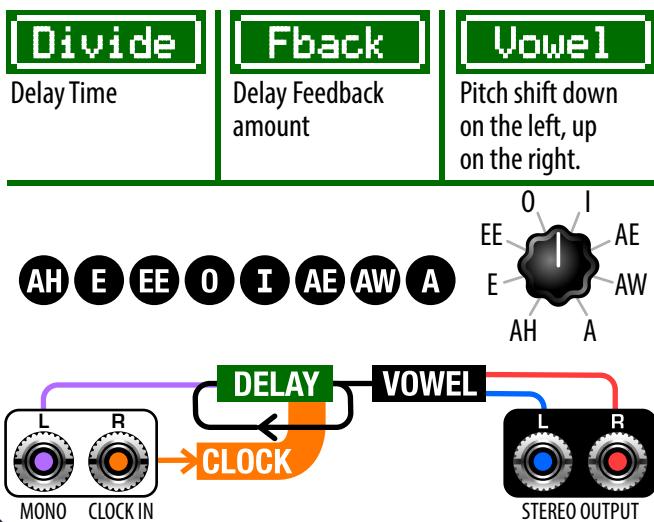
## Delay Vowel

Delayed through a vowel filter



## Delay Vowel\_clk

Set the Dry/Wet mix at 100% Wet or you will hear the clock.



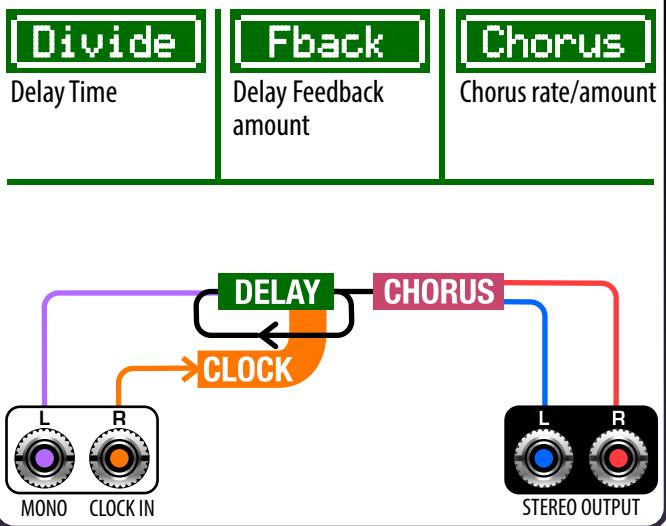
## Delay into Chorus

Delay into chorus



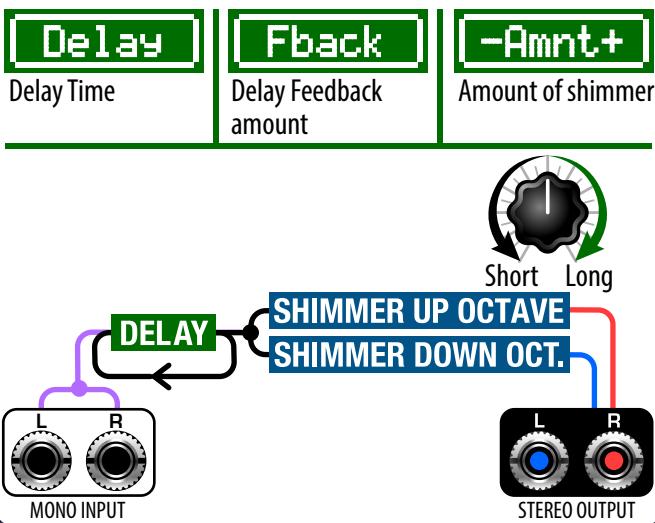
## Delay into Chorus\_clk

Clocked delay into chorus Set the Dry/Wet mix at 100% Wet.



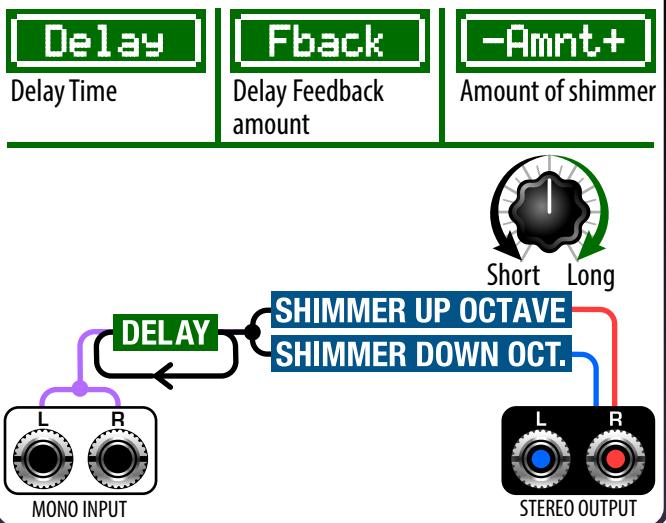
## Delay into Dual Shimmer

Delay into up and down octave shimmer reverb



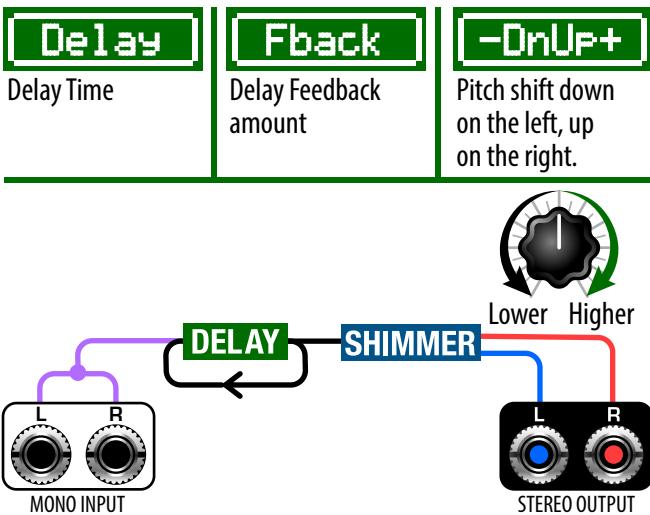
## Delay into Input Dual Shimmer

Delay into up and down octave shimmer reverb



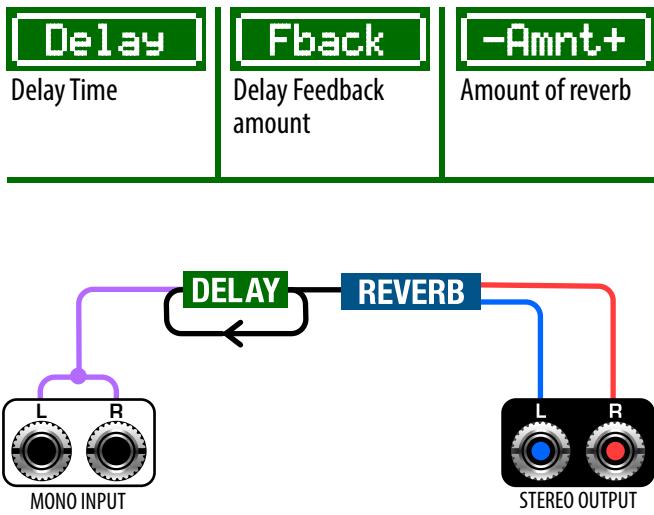
## Delay into Input Shimmer

Delayed and reversed



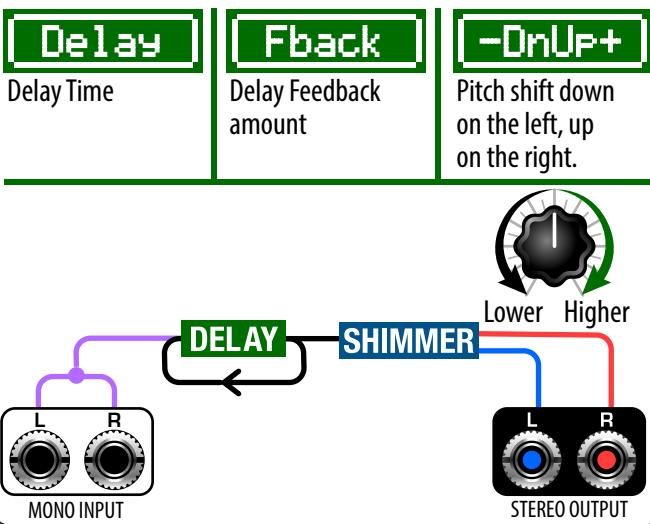
## Delay into Reverb

Delayed and reversed



## Delay into Shimmer

Delayed and reversed



## 808 Bass Drum ()

808 Bass Drum, Left & Right have different outputs, mix 100% wet

Tune

Attack

Decay

Pitch

Head beater amount

Decay of tone

LEFT TRIG IN → KICK 1 → L.OUT

TUNE ↴ ATTACK ↴ DECAY KICK 2 → R.OUT

## 808 Clap ⌘

808 Clap, Left input is trig in, mix 100% wet or trig will be heard

Tune

Attack

Decay

Pitch

High Snap

Clap Decay

L R  
Trig In →

LEFT TRIG IN → CLAPS →  
TUNE ↴ ATTACK ↴ DECAY

## 808 Claves ✕

808 Claves, Left & Right have different outputs

Tune

Attack

Decay

Pitch

Punch

Decay of claves

LEFT TRIG IN → CLAVES 1 → L.OUT

TUNE ↴ ATTACK ↴ DECAY CLAVES 2 → R.OUT

## 808 Cow Bell 🔔

808 Cow Bell, Left & Right have different outputs

Tune

Attack

Decay

Pitch

Stick element

Decay of bell

LEFT TRIG IN → COWBELL 1 → L.OUT

TUNE ↴ ATTACK ↴ DECAY COWBELL 2 → R.OUT

## 808 Cymbal 💂

808 Cymbal, Left is trigger in, mix 100% wet or trig will be heard

Tune

Attack

Decay

Pitch

Stick Percussion

Decay of cymbal

L R  
Trig In →

LEFT TRIG IN → CYMBAL →  
TUNE ↴ ATTACK ↴ DECAY

## 808 HiHat 💡

808 HiHat, Left is trigger in, mix 100% wet or trig will be heard

Tune

Attack

Decay

Pitch

Stick Percussion

HiHat Close/Open

L R  
Trig In →

LEFT TRIG IN → HI-HAT →  
TUNE ↴ ATTACK ↴ DECAY

## 808 Maracas 🎾

808 Maracas, , Left is trigger in, mix 100% wet or trig will be heard

Tune

Attack

Decay

Pitch

Snap Emphasis

Decay of Maracas

L R  
Trig In →

LEFT TRIG IN → MARACAS →  
TUNE ↴ ATTACK ↴ DECAY

## 808 Rim Shot 🥁

808 Rim Shot, Left & Right have different outputs

Tune

Attack

Decay

Pitch

Rim sound

decay of shell

L R  
Trig In →

LEFT TRIG IN → RIMSHOT 1 → L.OUT  
TUNE ↴ ATTACK ↴ DECAY RIMSHOT 2 → R.OUT

## 808 Snare 🥁

808 Snare, , Left is trigger in, mix 100% wet or trig will be heard

Tune

Attack

Decay

Pitch

Snappy

Decay Tone

L R  
Trig In →

LEFT TRIG IN → SNARE →  
TUNE ↴ ATTACK ↴ DECAY

## 909 Tom/Conga 🥁

808 Tom/Conga, Left input is trigger in, mix 100% wet

Tune

Attack

Decay

Pitch

Slap/Stick sound

Tone Decay

L R  
Trig In →

LEFT TRIG IN → TOM →  
TUNE ↴ ATTACK ↴ DECAY

## 909 Bass Drum ()

808 Bass Drum, Left & Right have different outputs

Tune

Attack

Decay

Pitch

Head snap

Decay of shell

LEFT TRIG IN → KICK → L.OUT

TUNE ↴ ATTACK ↴ DECAY KICK DISTORT → R.OUT

## 909 Clap ⌘

808 Clap, , Left is trigger in, mix 100% wet or trig will be heard

Tune

Attack

Decay

Pitch

Percussion Attack

Decay of Claps

L R  
Trig In →

LEFT TRIG IN → CLAPS →  
TUNE ↴ ATTACK ↴ DECAY

## 909 Rim Shot

909 Rim Shot, Left & Right have different sounds

Tune

Attack

Decay

Pitch

Rim sound

decay of shell

**LEFT TRIG IN → RIMSHOT 1 → L.OUT**

**TUNE ↴ ATTACK ↴ DECAY RIMSHOT 2 → R OUT**

## 909 Snare

909 Snare, Left & Right have different sounds

Tune

Attack

Decay

Pitch

Stick Attack

Decay of shell

**LEFT TRIG IN → SNARE → L.OUT**

**TUNE ↴ ATTACK ↴ DECAY LF PUNCH → R OUT**

## 909 Tom

909 Tom, , Left is trigger in, mix 100% wet or trig will be heard

Tune

Attack

Decay

Pitch

Stick sound

decay of tom

**LEFT TRIG IN → TOM → L.OUT**

**TUNE ↴ ATTACK ↴ DECAY PUNCH → R OUT**

## XOX Bass Drum

XOX Bass Drum, Left & Right have different sounds

Tune

Attack

Decay

Pitch

Head beater

Decay of shell



**LEFT TRIG IN → KICK →**  
**TUNE ↴ ATTACK ↴ DECAY**

## XOX Clap

XOX Clap, Left input is trigger in, stereo out, mix 100% wet

Tune

Attack

Decay

Pitch

Slap Attack

Decay of claps



**LEFT TRIG IN → CLAP →**  
**TUNE ↴ ATTACK ↴ DECAY**

## XOX HiHat

XOX HiHat, Left input is trigger in, stereo out, mix 100% wet

Tune

Attack

Decay

Pitch

Stick Attack

Close/Open decay



**LEFT TRIG IN → HI HAT →**  
**TUNE ↴ ATTACK ↴ DECAY**

## XOX Snare

XOX Snare, Left input is trigger in, stereo out, mix 100% wet

Tune

Attack

Decay

Pitch

Stick mix

Decay of snares



**LEFT TRIG IN → SNARE →**  
**TUNE ↴ ATTACK ↴ DECAY**

## Noise Station

Tunable noise source, no input – stereo out

Tune

Shape

Tone

Pitch

Shape of noise

Tone Balance



## Generator

Left out: sine-square. Right out: triangle-sawtooth.

Course

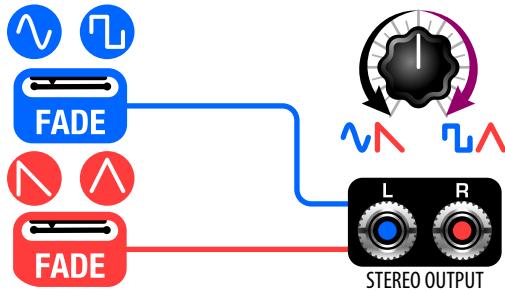
Fine

xFade

Course Tune

Fine Tune

Crossfade from Sine to Square or Saw to Triangle wave



## Tuner

Generates fixed 880 Hz, 440 Hz, 220 Hz. Left output - saw, right – tri

880 Hz

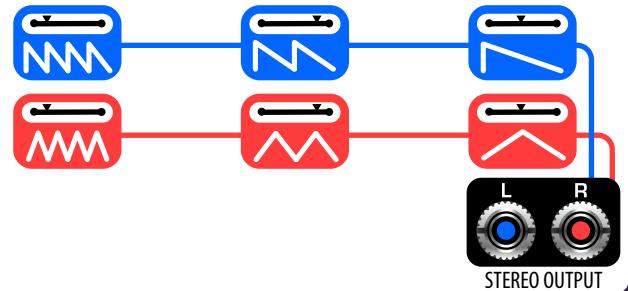
440 Hz

220 Hz

Volume of 880 Hz

Volume of 440 Hz

Volume of 220 Hz



## Chorus 2x

2 voice chorus, mono or stereo inputs

**Rate**

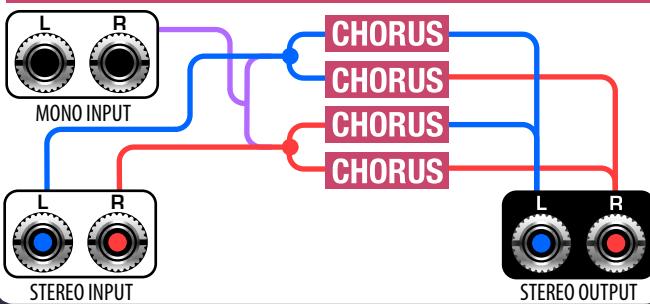
Modulator rate

**Range**

Modulator Depth

**Width**

Width amount



## Chorus 4x

4 voice chorus, mono or stereo inputs

**Rate**

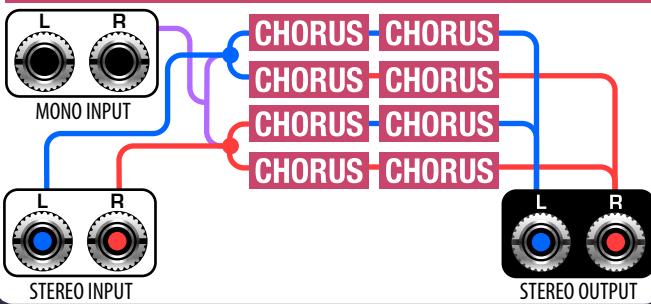
Modulator rate

**Range**

Modulator Depth

**Width**

Width amount



## Chorus Dimension-D

2 voice chorus, mono or stereo inputs

**Rate**

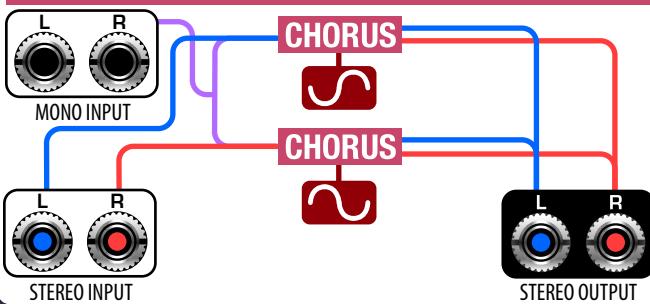
Modulator rate

**Range**

Modulator Depth

**-Fback +**

Negative or Positive feedback



## Chorus Ensemble

4 voice chorus, mono or stereo inputs

**Spread**

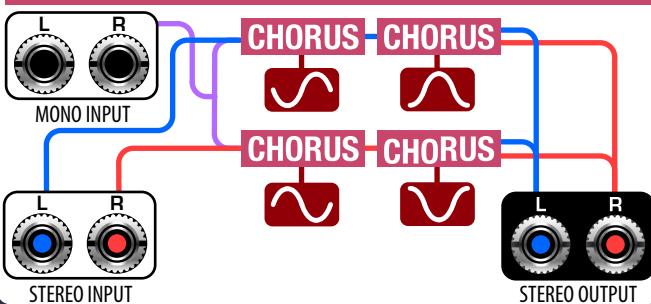
Chorus Spread

**Width**

Modulator Width

**-Fback +**

Negative or Positive feedback



## Chorus Random

2 voice chorus, mono or stereo inputs

**Rate**

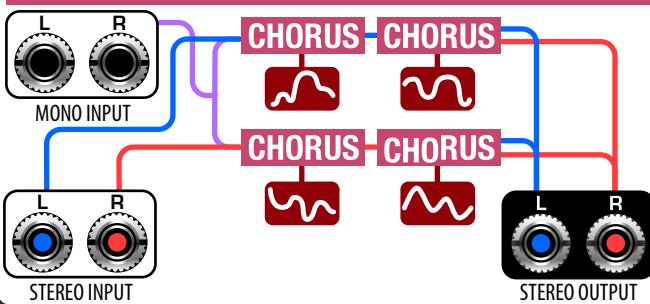
Modulator rate

**Range**

Modulator Depth

**-Fback +**

Negative or Positive feedback



## Chorus Shallow Water

Random smooth chorus & filter effect

**Rate**

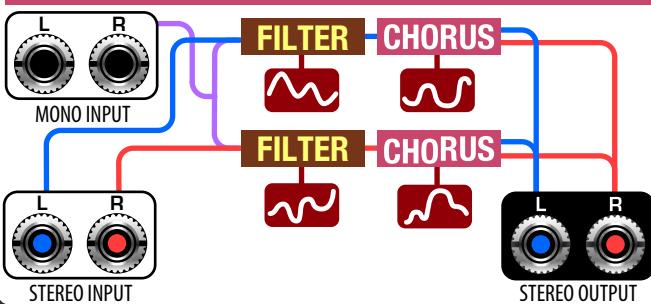
Modulator rate

**Range**

Modulator Range

**Damp**

Lowpass damping



## Chorus into Reverb

8 voice chorus into reverb

**Spread**

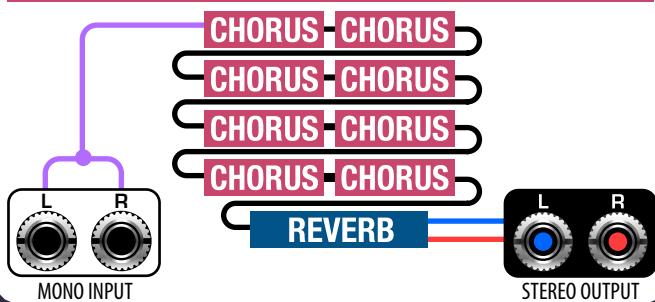
Chorus Spread

**Width**

Modulator Width

**-Amnt +**

Reverb amount



## Flanger

Flanger with negative or positive feedback, to modulate flanger with a CV or internal LFO, set rate to 0 and modulate the Range.

**Rate**

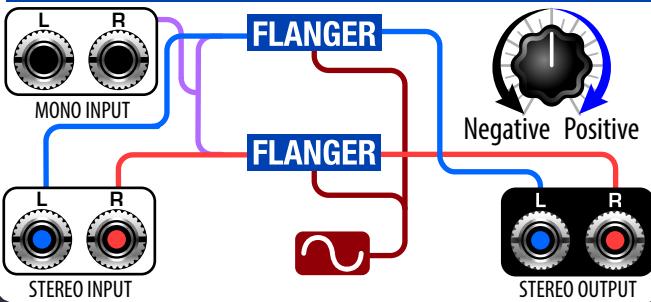
Modulator rate

**Range**

Flanger Range

**-Fback +**

Width amount



## Flanger Barberpole

Up or Down movement

**-Rate +**

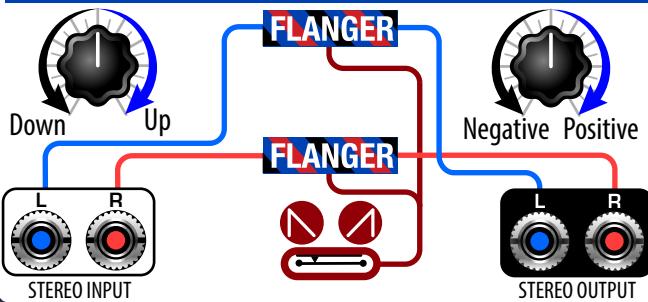
Left is downward  
Right is upward

**Range**

Flanger Range

**-Fback +**

Negative or  
Positive feedback



## Flanger Diffuse

Flanger into a diffuser, to modulate flanger with a CV or internal LFO, set rate to 0 and modulate the Range.

**Rate**

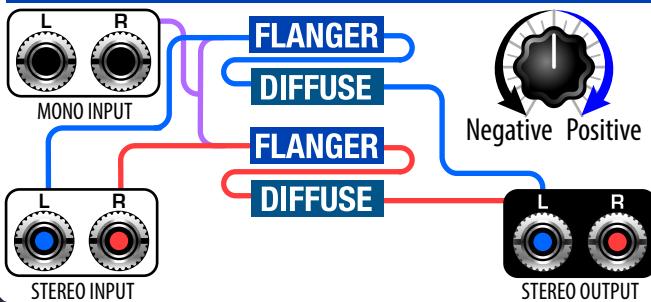
Modulator rate

**Range**

Flanger Range

**-Fback +**

Negative or  
Positive feedback



## Phaser 12

12 pole Phaser. To modulate Phaser with a CV or internal LFO, set rate to 0 and modulate the Range.

**Rate**

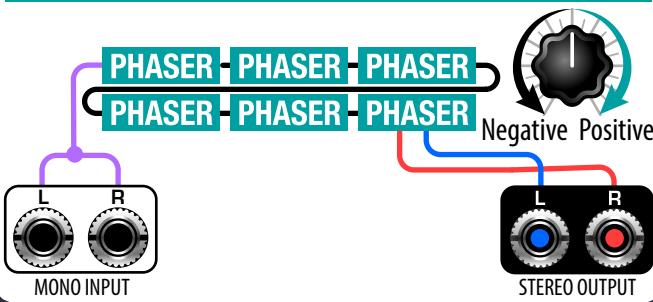
Modulator rate

**Range**

Phaser Range

**-Fbck +**

Negative or  
Positive feedback



## Phaser 12 Diffuse

12 pole phaser into a diffuser. To modulate Phaser with a CV or internal LFO, set rate to 0 and modulate the Range.

**Rate**

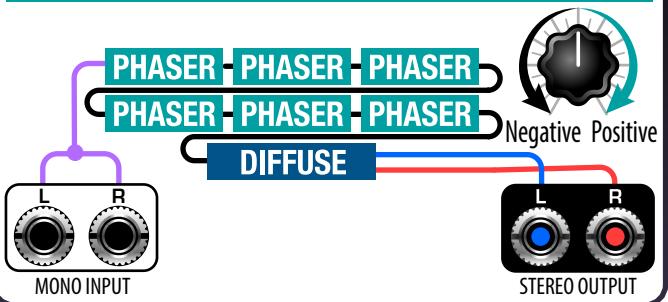
Modulator rate

**Range**

Phaser Range

**-Fbck +**

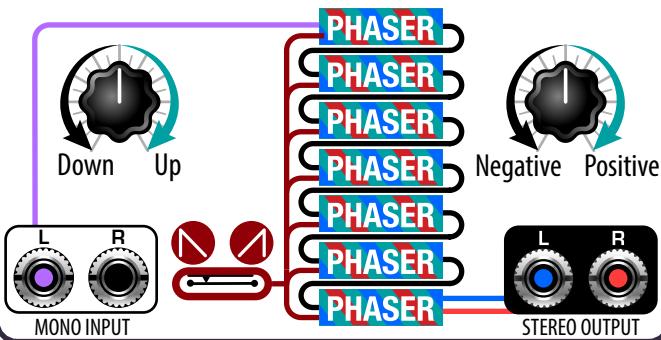
Negative or  
Positive feedback



## Phaser 6 Barberpole

8 voice chorus into reverb. To modulate Phaser with a CV or internal LFO, set rate to 0 and modulate the Range.

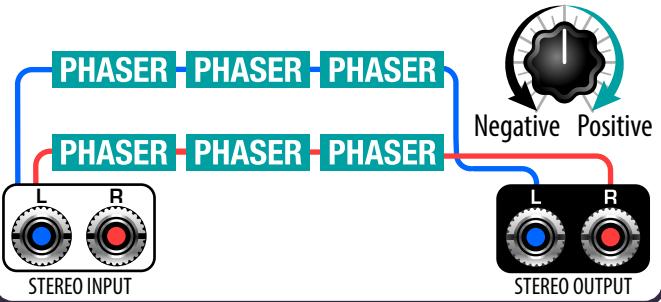
-Rate+	Range	-Fback+
Up or Down Rate	Phaser Range	chorus amount



## Phaser 6 Stereo

6 stages 3 pole Phasers in stereo. To modulate Phaser with a CV or internal LFO, set rate to 0 and modulate the Range.

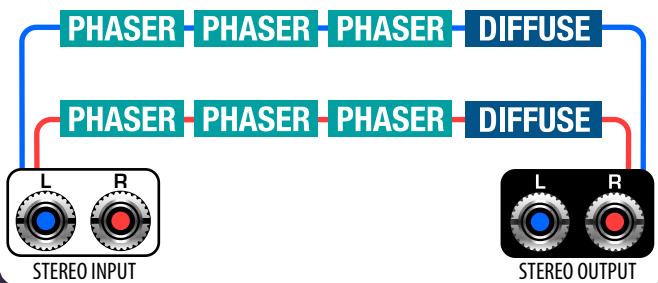
Rate	Range	-Fback+
Modulator rate	Phaser Range	Width amount



## Phaser 6 Stereo Diffuse

6 stages 3 pole Phasers in stereo into diffuser. To modulate Phaser with a CV or internal LFO, set rate to 0 and modulate the Range.

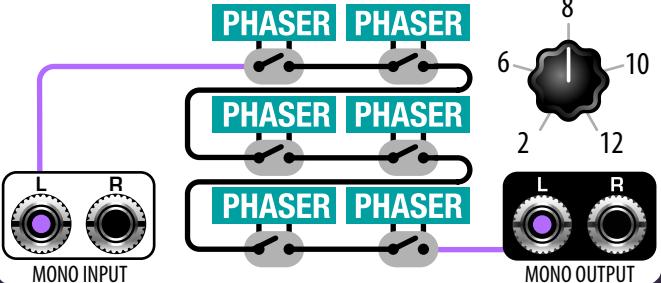
Rate	Range	Fback
Modulator Rate	Phaser Range	Feedback



## Phaser Switched

Phaser that can be switched into up to 12 stages. To modulate Phaser with a CV or internal LFO, set rate to 0 and change Range.

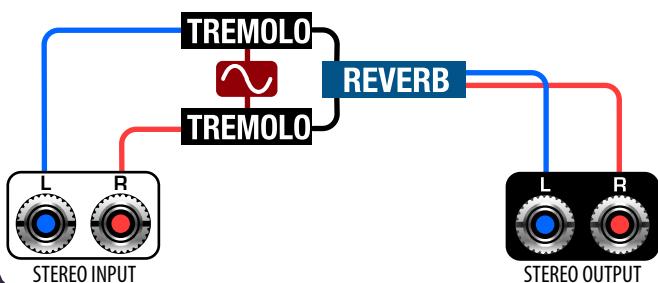
Rate	Range	Stages
Modulator rate	Phaser Range	Number of Stages 2, 6, 8, 10, 12



## Tremolo into Reverb

Tremolo into Reverb

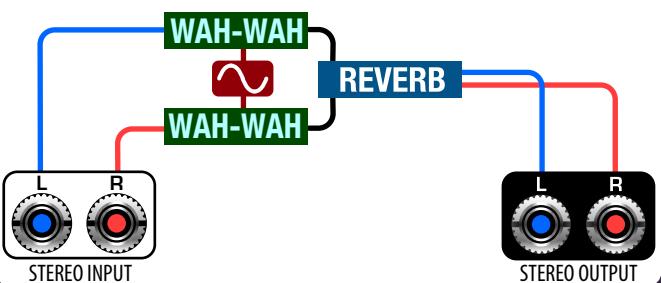
Rate	Range	-Amnt+
Tremolo rate	Tremolo Range	Amount



## Wah-Wah

Wah-Wah with LFO control

Rate	Range	Res
Modulator rate	Wah Wah Depth	Wah Wah Resonance



## Reverb Black Cloud

Mix of Blackhole and Cloud

### Decay

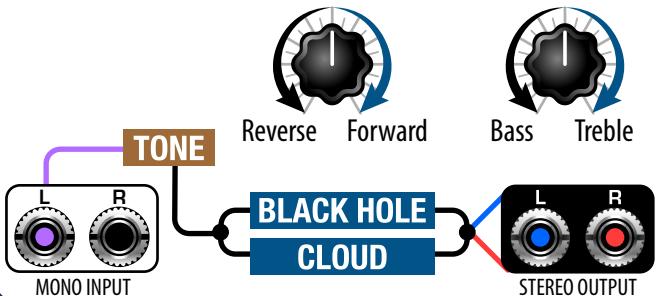
Reverb Decay Time

### Gravity

The right side is decay shapes the left is reversed

### Tone

Bass boost on the left, Treble boost on the right



## Reverb Black Hole

Eventide's Black Hole

### Decay

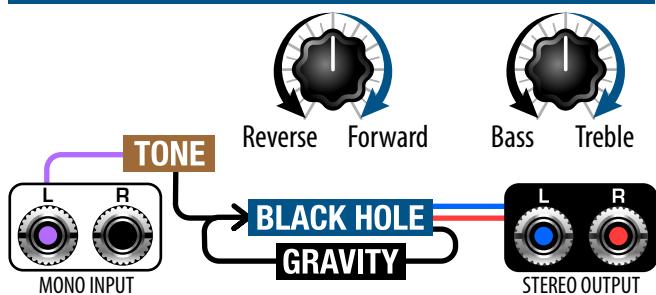
Reverb Decay Time

### Gravity

The right side is decay shapes the left is reversed

### Tone

Bass boost on the left, Treble boost on the right



## Reverb Black Hole into Phaser

Reverb into 6 stages 3 pole Phaser

### Decay

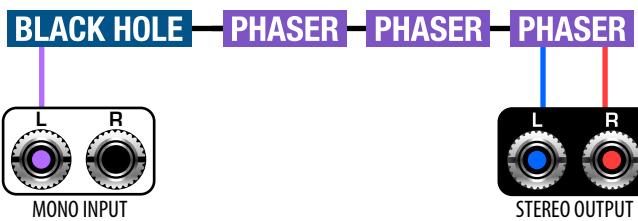
Reverb Decay Time

### Rate

Phaser Modulation Rate

### Range

Phaser Range



## Reverb Bloom

Big Sky inspired blooming reverb

### Decay

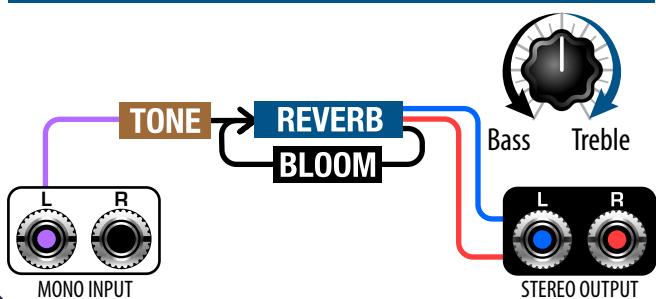
Reverb Decay Time

### Bloom

Bloom amount

### Tone

Bass boost on the left, Treble boost on the right



## Reverb Chorale

Reverb through a vocal vowel filter

### Decay

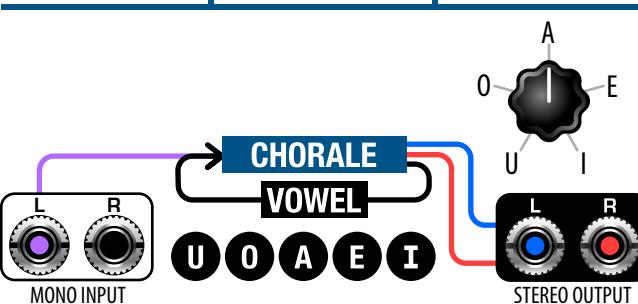
Reverb Decay Time

### Res

Vowel Resonance

### Vowel

U - O - A - E - I



## Reverb Cloud

Big sky inspired cloud reverb

### Decay

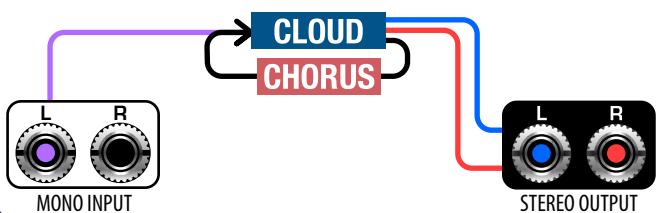
Reverb decay time

### Chorus

Chorus rate/amount

### Diffus

Reverb diffusion



## Reverb Crushed

Reverb crushed with sample rate reduction

### Decay

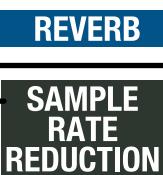
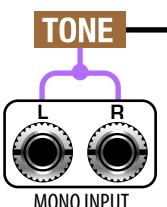
Reverb Decay Time

### Amount

Amount of sample rate reduction

### Tone

Bass boost on the left, Treble boost on the right



## Reverb EMT250

High constant density, a classic reverb, an emulation of one of the first digital reverbs

### Decay

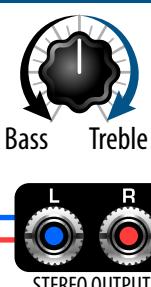
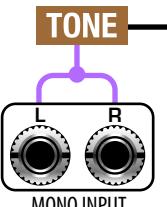
Reverb Decay Time

### PreDel

Pre delay of reverb

### Tone

Bass boost on the left, Treble boost on the right



## Reverb Freeverb

High constant density based on freeverb

### Decay

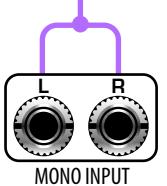
Reverb Decay Time

### Width

Width of stereo reverb

### Damp

lowpass damping of reverb tail



## Reverb Depth

Reverb with variable depth control

### Decay

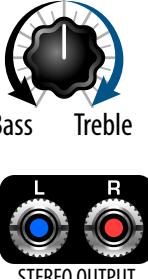
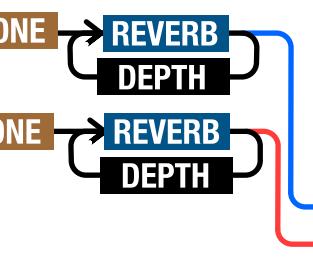
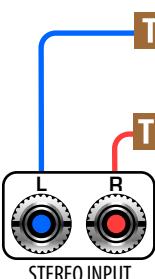
Reverb Decay Time

### Depth

Reverb Depth

### Tone

Bass boost on the left, Treble boost on the right



## Reverb Freeze

Dual Pass Freezing Reverb

### Dec/Fr

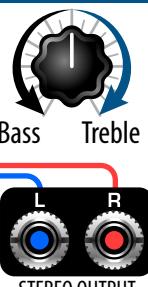
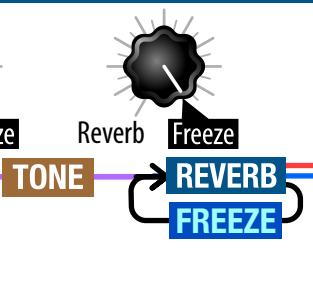
Decay time / Freeze 100% turned up produces freeze

### Rev/Fr

Reverb / Freeze 100% turned up produces freeze

### Tone

Bass boost on the left, Treble boost on the right



## Reverb Gate

Adjustable Reverb/Signal ratio

### Decay

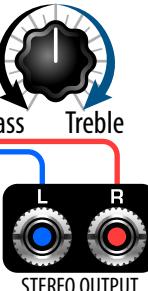
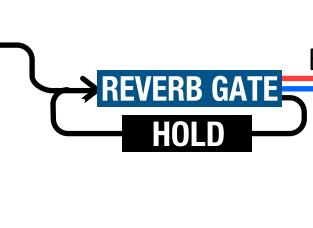
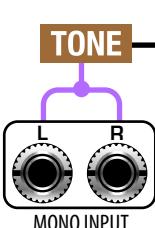
Reverb decay time

### Hold

Hold time

### Tone

Bass boost on the left, Treble boost on the right



## Reverb Gate Time

Adjustable Reverb/Signal ratio

**Time**

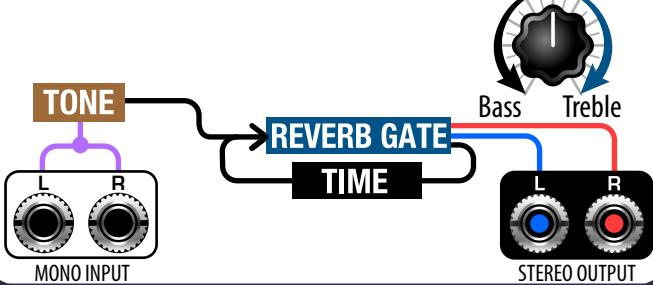
Gate Time

**Chorus**

Amount of Chorus

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Grayhole heavy

Needs to be heard

**Decay**

Reverb Decay Time

**-OnUp+**

Pitch shifting

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Grayhole light

Needs to be heard

**Decay**

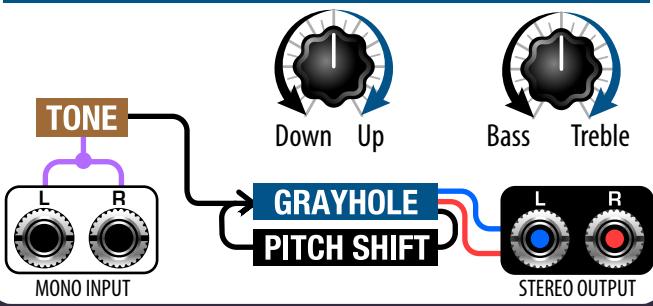
Reverb Decay Time

**-OnUp+**

Pitch shifting

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Hall Chorus

Big chorused Hall

**Decay**

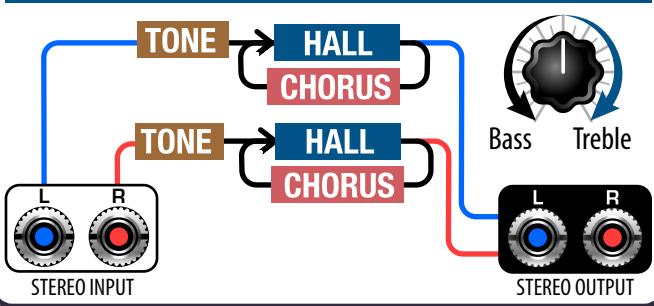
Reverb Decay Time

**Chorus**

Chorus rate/amount

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Hall Chorus 2

Big chorused Hall

**Decay**

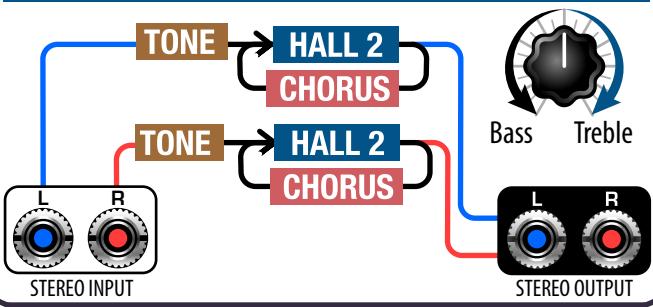
Reverb Decay Time

**Chorus**

Chorus rate/amount

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Hall Medium

Medium size Hall

**Decay**

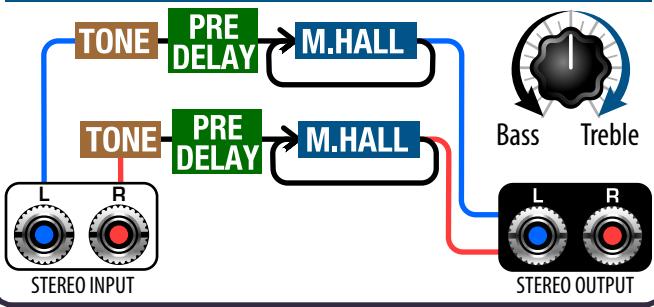
Reverb Decay Time

**PreDel**

Pre delay of reverb

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Infinite

Almost infinite Decay

**Decay**

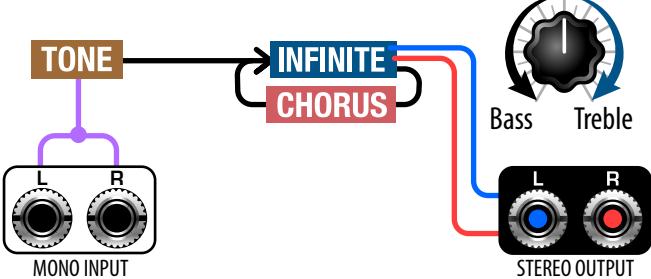
Reverb decay time

**Chorus**

Chorus rate/amount

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Infinite Dark

Almost infinite Decay

**Decay**

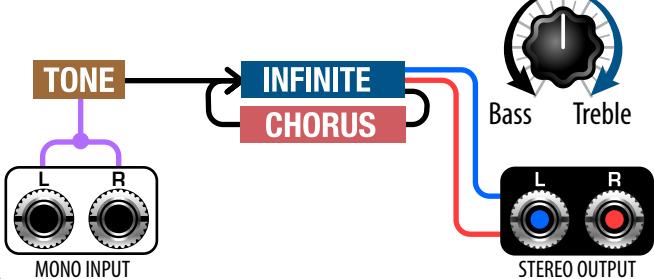
Reverb Decay Time

**Chorus**

Chorus rate/amount

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Lo-Fi

Ventriloquist "Lo-Fi" inspired

**Decay**

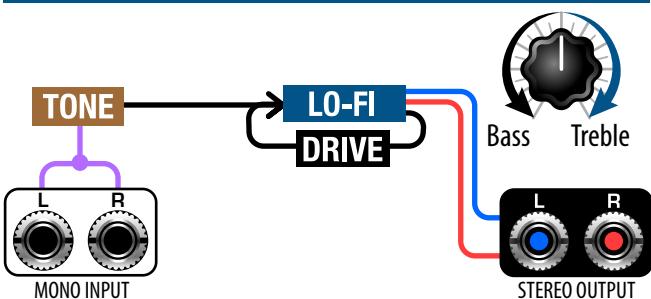
Reverb Decay Time

**Drive**

Reverb Saturation

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb MI Clouds

Reverb as found inside MI Clouds

**Decay**

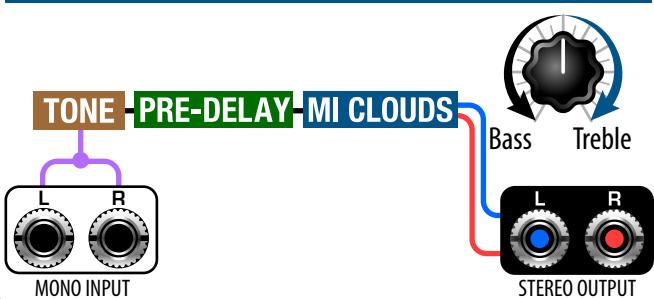
Reverb Decay Time

**PreDel**

Pre Delay Reverb

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Metallic

Variable size ringing reverb,

**Decay**

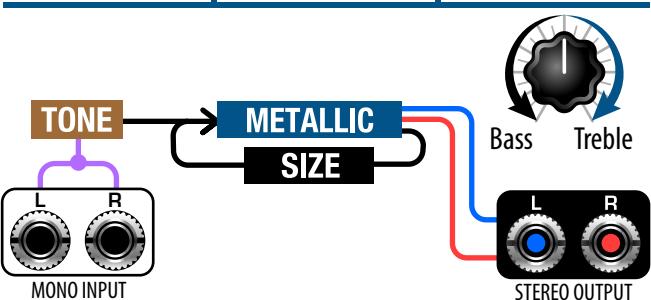
Reverb Decay Time

**Size**

Reverb Size

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Parking

Distinguishable wall reflections

**Decay**

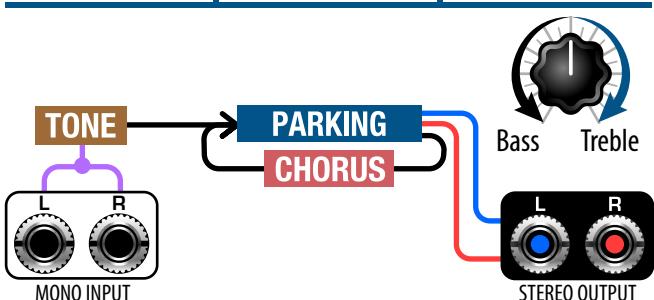
Reverb Decay Time

**Chorus**

Chorus rate/amount

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Phaser 6

6 stages 3 pole Phaser into Reverb

**Decay**

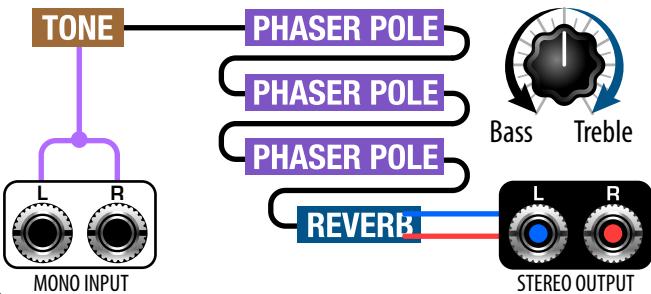
Reverb decay time

**Rate**

Phaser rate

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Phaser 6v2

3 pole Phaser into Reverb

**Decay**

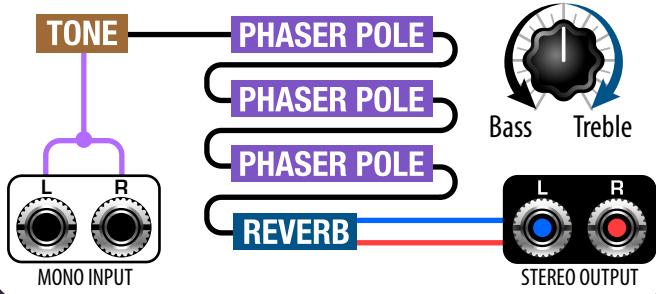
Reverb Decay Time

**Rate**

Chorus rate/amount

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Phaser 8

4 pole Phaser into Reverb

**Decay**

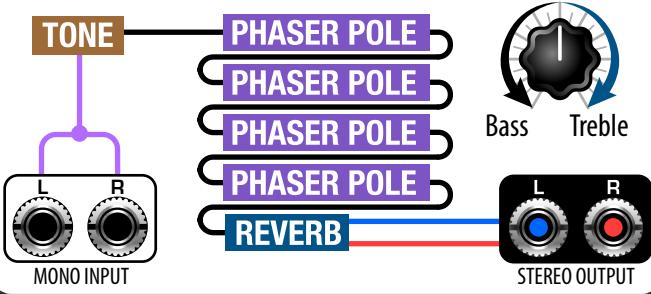
Reverb Decay Time

**Rate**

Chorus rate/amount

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Phaser Shimmer

3 pole Phaser into Shimmer Reverb

**Decay**

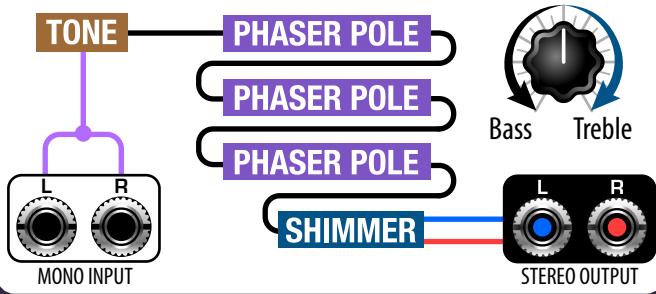
Reverb Decay Time

**Rate**

Chorus rate/amount

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Plate Classic

Popular Classic Plate Reverb version

**Decay**

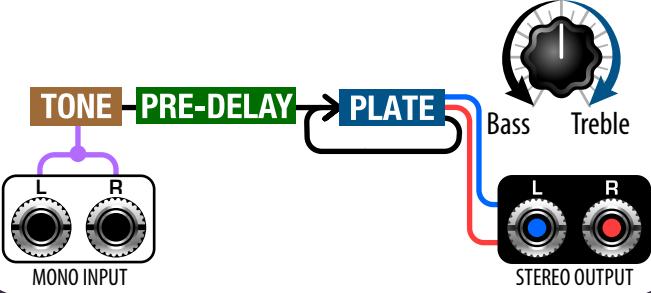
Reverb Decay Time

**PreDel**

Pre-Delay of reverb

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Plate narrow

Plate Reverb Highpass filters narrow the stereo width

**Decay**

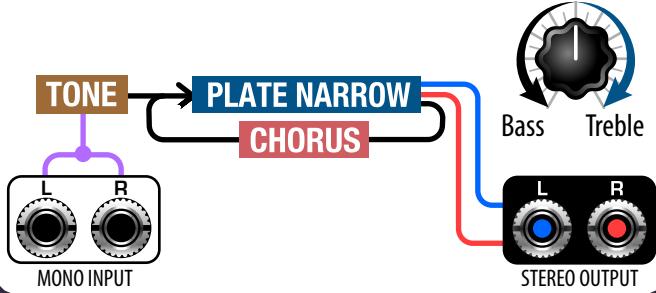
Reverb Decay Time

**Chorus**

Chorus rate/amount

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Plate Stereo

Stereo Plate Reverb

**Decay**

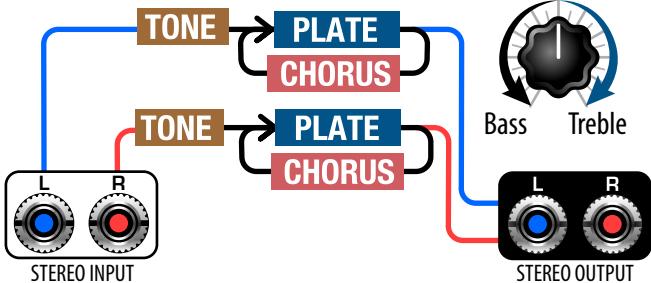
Reverb decay time

**Chorus**

Chorus rate/amount

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Reverse

3 pole Phaser into Reverb

**Decay**

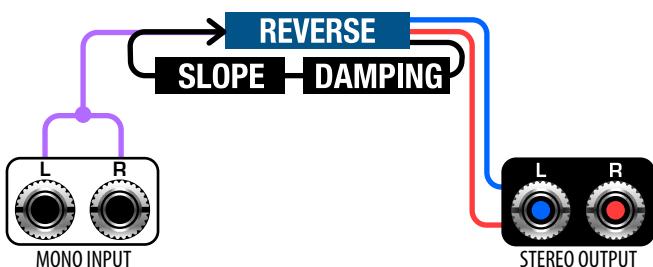
Reverb Decay Time

**Slope**

shape of reverse effect

**Damp**

Lowpass filtering of reverb decay



## Reverb Room Classic

Realistic room reverb

**Decay**

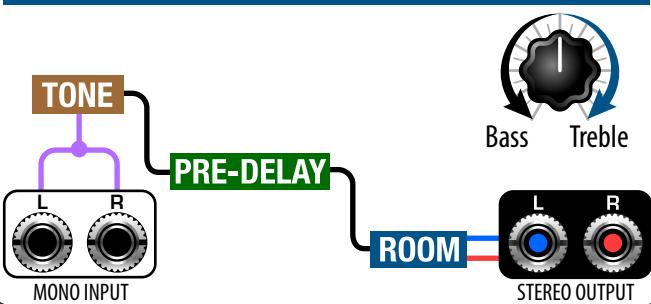
Reverb Decay Time

**PreDel**

Pre-delay of reverb

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Room Stereo

Stereo Room version

**Decay**

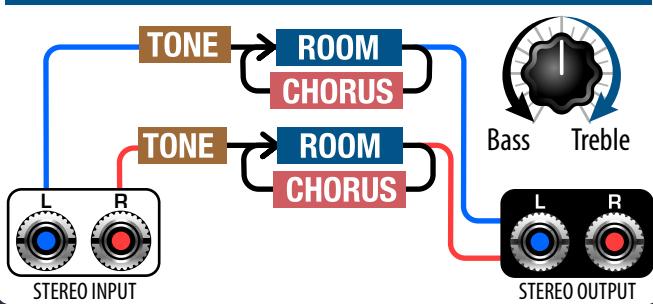
Reverb Decay Time

**Chorus**

Chorus rate/amount

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Saturated

No overload / clipping

**Decay**

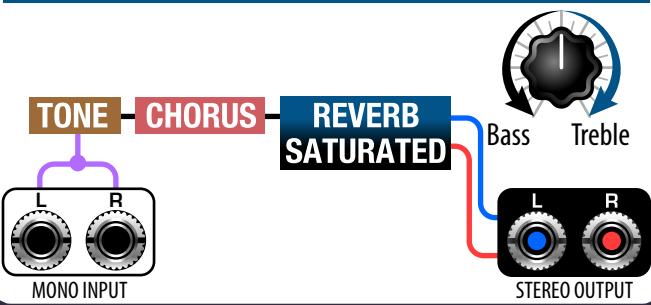
Reverb Decay Time

**Chorus**

Chorus rate/amount

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Shimmer

A special reverb that pitch shifts the reverb tails up or down

**Decay**

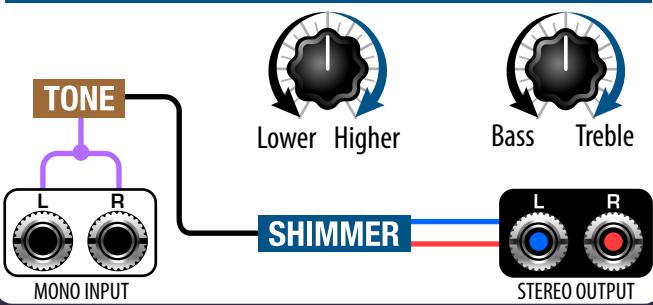
Reverb Decay Time

**-OnUp+**

Pitch shift reverb tails down on the left, up on the right

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Shimmer Combo

Both input and reverb regeneration have separate pitch shifters

**Decay**

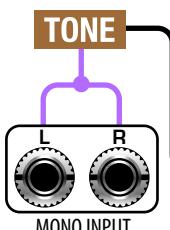
Reverb decay time

**inOnUp**

Pitch shift input down on the left, up on the right

**reOnUp**

Pitch shift reverb tails down on the left, up on the right



## Reverb Shimmer Dual Delayed

Variable Shimmer Delay

**Decay**

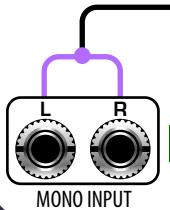
Reverb Decay Time

**Delay**

Pre-delay of reverb

**-OnUp+**

Pitch shift reverb tails down on the left, up on the right



## Reverb Shimmer Dual

Up & Down octave

**Decay**

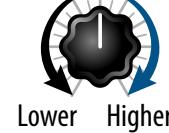
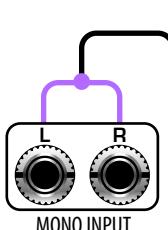
Reverb Decay Time

**Amount**

Up and Down reverb balance?

**-OnUp+**

Pitch shift reverb tails down on the left, up on the right



## Reverb Shimmer Infinite

Infinite Up or Down Shimmers

**Decay**

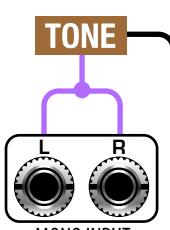
Reverb Decay Time  
100% freezes reverb

**-OnUp+**

Pitch shift reverb tails down on the left, up on the right

**Tone**

Bass boost on the left, Treble boost on the right



## Reverb Shimmer Input

Input Up or Down octave

**Decay**

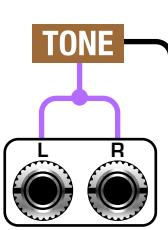
Reverb Decay Time

**-OnUp+**

Pitch shift reverb tails down on the left, up on the right

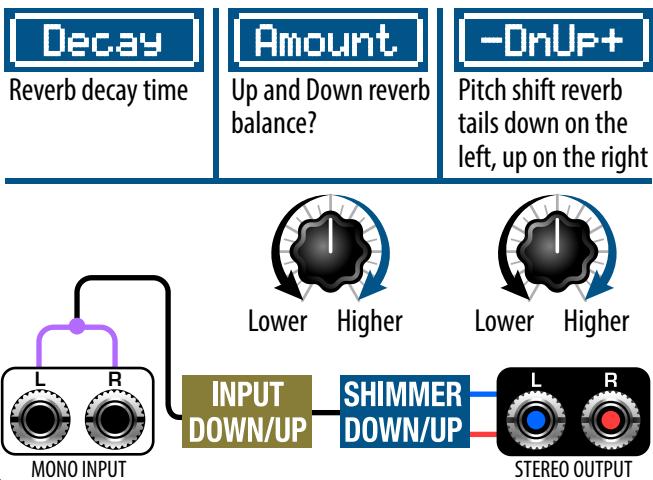
**Tone**

Bass boost on the left, Treble boost on the right



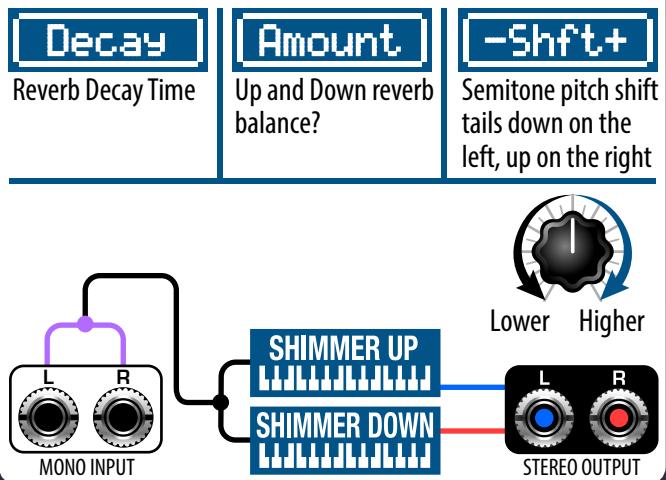
## Reverb Shimmer Input Dual

Up & Down octave



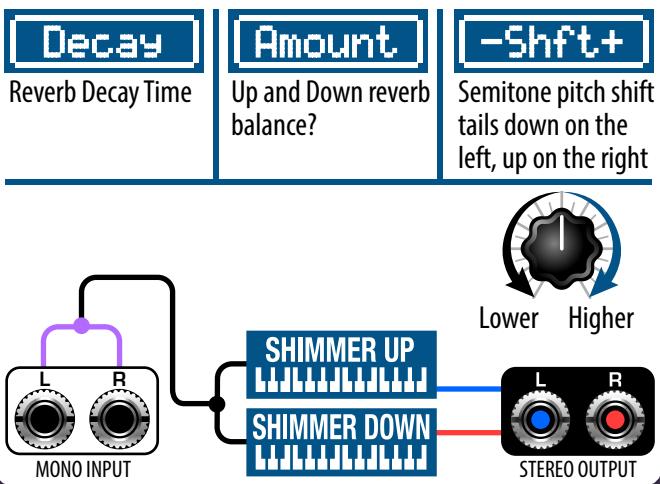
## Reverb Shimmer Input Variable

1 semitone Pitch increments



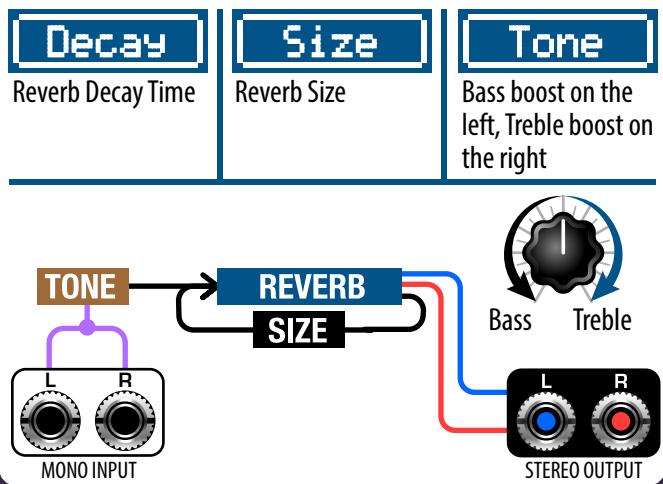
## Reverb Shimmer Variable

Variable Shimmer with 1 semitone Pitch increments



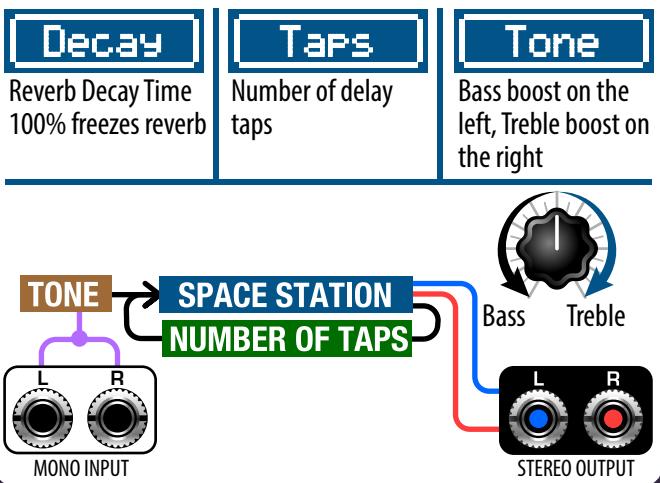
## Reverb Size Bis

Variable Size big space



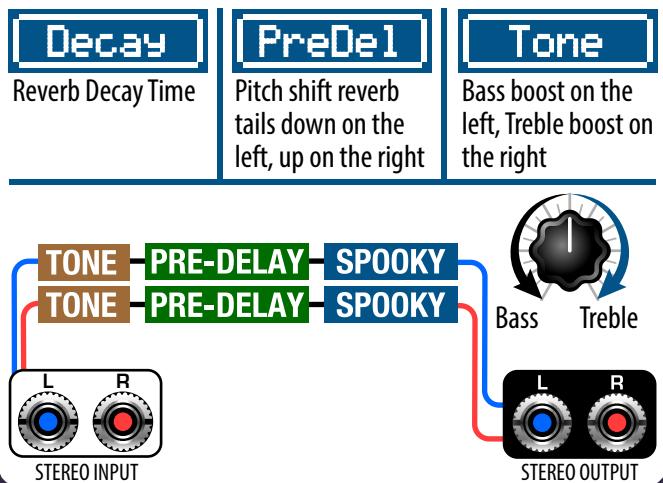
## Reverb Space Station

Ursa Major inspired



## Reverb Spooky

Empress Ghost Reverb type



## Reverb Spring

Variable Resonance Spring

**Decay**

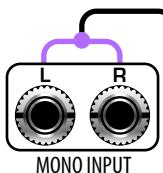
Reverb decay time

**-Rest+**

Negative resonance  
on left, Positive on  
right, none in center

**Damp**

Lowpass filtering  
of reverb decay



**SPRING  
RESONANCE**



## Reverb Swell Dry

Big Sky inspired

**Decay**

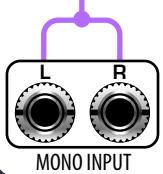
Reverb Decay Time

**RiseT**

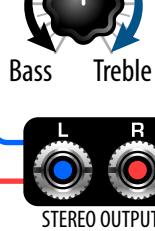
Rise Time of reverb

**Tone**

Bass boost on the  
left, Treble boost on  
the right



**SWELL  
RISE TIME**



## Reverb Transmitter

Earthquaker's Transmisser inspired

**Decay**

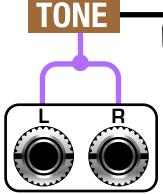
Reverb Decay Time  
100% freezes reverb

**Chorus**

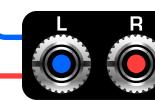
Chorus rate/amount

**Freq**

Frequency



**REVERB  
TRANSMIT**



## Reverb Spring Dual

Variable Resonance Dual Spring

**Decay**

Reverb Decay Time

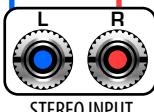
**-Res+**

Negative resonance  
on left, Positive on  
right, none in center

**Damp**

Lowpass filtering  
of reverb decay

**SPRING  
RESONANCE**



**SPRING  
RESONANCE**



## Reverb Swell Wet

Big Sky inspired

**Decay**

Reverb Decay Time

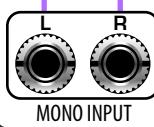
**RiseT**

Rise Time of reverb

**Tone**

Bass boost on the  
left, Treble boost on  
the right

**TONE**



**SWELL  
RISE TIME**



## Reverb Transmitter Warp

Earthquaker's Transmisser inspired

**Decay**

Reverb Decay Time

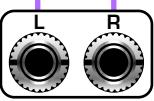
**Warp**

Warp rate/amount

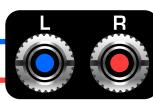
**Freq**

Frequency

**TONE**



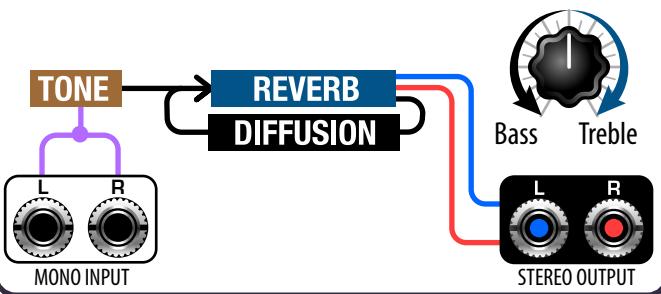
**REVERB  
TRANSWARP**



## Reverb Vocal

Constant<>Rising Density good reverb for vocals

Decay	Diffus	Tone
Reverb decay time	Reverb Diffusion	Pitch shift reverb tails down on the left, up on the right



## AD

Attack-Decay controlled amplifier with Level.  
Right input expects Trigger. Make it 100% WET

**Level**

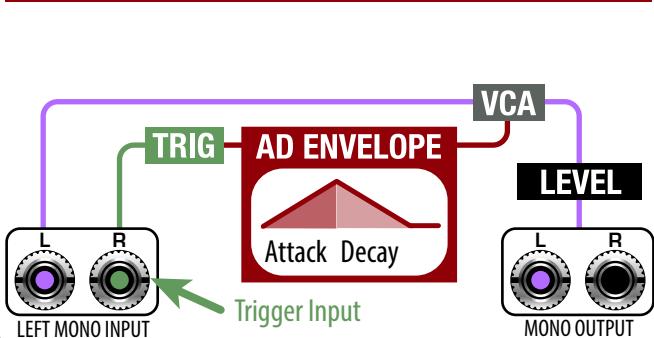
Volume level of VCA

**Attack**

Attack speed, fade in time

**Decay**

Decay Speed, fade out time



## AD Delay

Attack-Decay controlled amplifier with Delay.  
Right input expects Trigger. Make it 100% WET

**Delay**

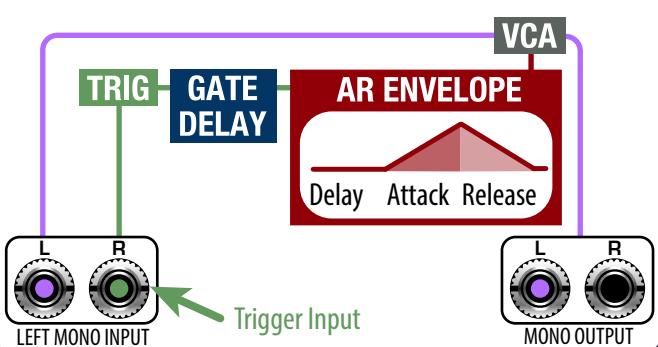
Gate delay of AD

**Attack**

Fade in time

**Decay**

Fade out time



## AD VCF 1 Pole

Attack-Decay controlled 1 pole lowpass filter.  
Right input expects Trigger. Make it 100% WET

**Freq**

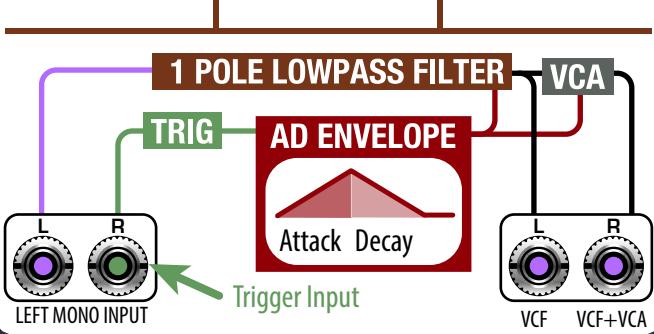
Frequency of 1 pole lowpass filter

**Attack**

Attack speed, fade in time

**Decay**

Decay Speed, fade out time



## AD VCF 2 Pole

Attack-Decay controlled 2 pole lowpass filter.  
Right input expects Trigger. Make it 100% WET

**Freq**

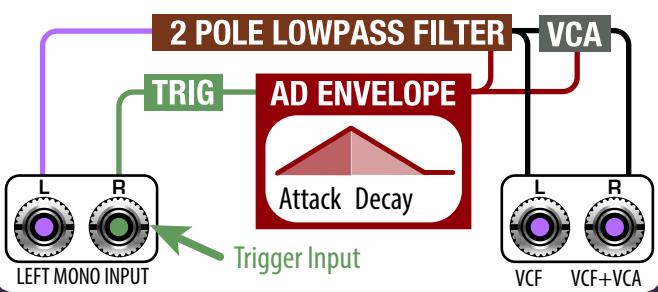
Frequency of 2 pole lowpass filter

**Attack**

Attack speed, fade in time

**Decay**

Decay Speed, fade out time



## AD VCF 4 Pole

Attack-Decay controlled 4 pole lowpass filter.  
Right input expects Trigger. Make it 100% WET

**Freq**

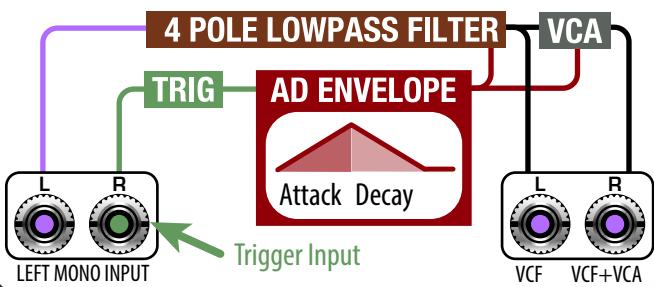
Frequency of 4 pole lowpass filter

**Attack**

Attack speed, fade in time

**Decay**

Decay Speed, fade out time



## AR

Attack-Release controlled amplifier with Level.  
Right input expects Trigger. Make it 100% WET

**Level**

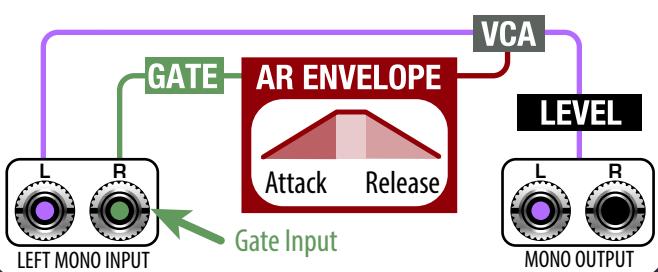
Volume level of VCA

**Attack**

Attack speed, fade in time while trigger is on

**Release**

Release Speed, fade out time after trigger is off



## AR Delay

Attack-Decay controlled amplifier with Delay.  
Right input expects Trigger. Make it 100% WET

**Delay**

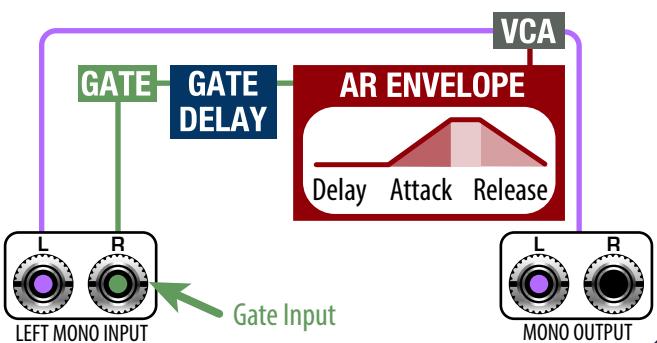
Gate delay of AR

**Attack**

Fade in time

**Releas**

Fade out time



## AR VCF 1 Pole

Attack-Decay controlled 1 pole lowpass filter.  
Right input expects Trigger. Make it 100% WET

**Freq**

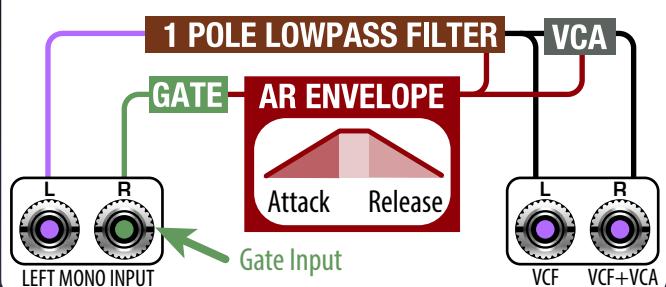
Frequency of 1 pole  
lowpass filter

**Attack**

Attack speed, fade  
in time while trigger  
is on

**Releas**

Release Speed, fade  
out time after trigger  
is off



## AR VCF 2 Pole

Attack-Decay controlled 2 pole lowpass filter.  
Right input expects Trigger. Make it 100% WET

**Freq**

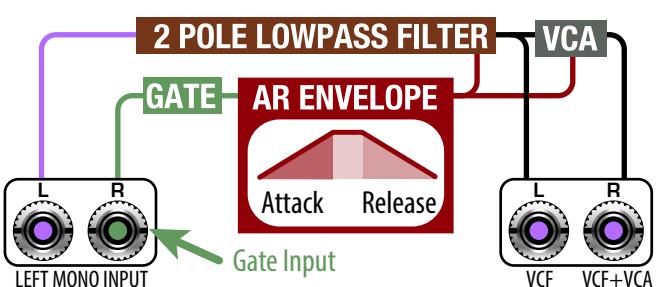
Frequency of 2 pole  
lowpass filter

**Attack**

Attack speed, fade  
in time while trigger  
is on

**Releas**

Release Speed, fade  
out time after trigger  
is off



## AR VCF 4 Pole

Attack-Decay controlled 4 pole lowpass filter.  
Right input expects Trigger. Make it 100% WET

**Freq**

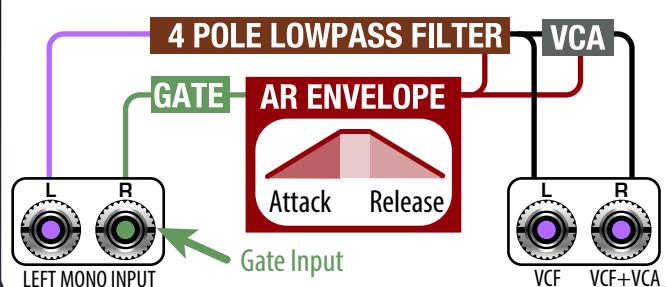
Frequency of 4 pole  
lowpass filter

**Attack**

Attack speed, fade  
in time while trigger  
is on

**Releas**

Release Speed, fade  
out time after trigger  
is off



## Bit Crusher

Simulates 16-bit, 12-bit, 8-bit reducing down to  
2-bit devices it can create extreme distortion

**Amount**

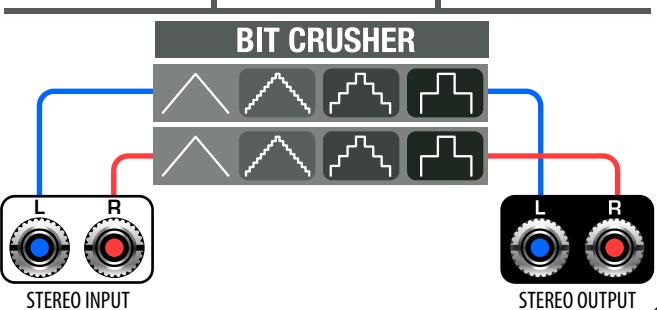
Amount of bits

**PreFX**

Volume of clean  
signal

**PostFX**

Volume of post Bit  
Crush effect



## Clipper

Adjustable ratio and knee Clipper

**Thresh**

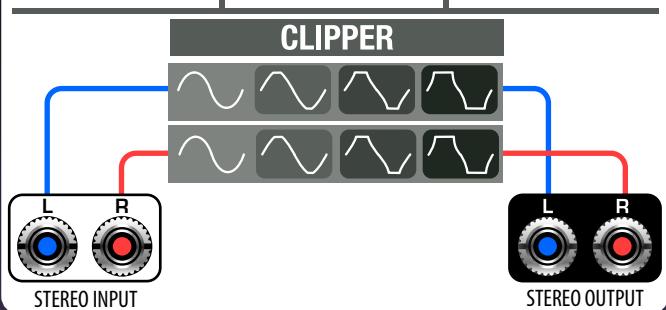
Threshold of volume  
clipping

**Ratio**

Ratio amount of  
clipping

**Knee**

shape of clipping



## Compressor Peak

Peak Type Compressing (Drums)

**Thresh**

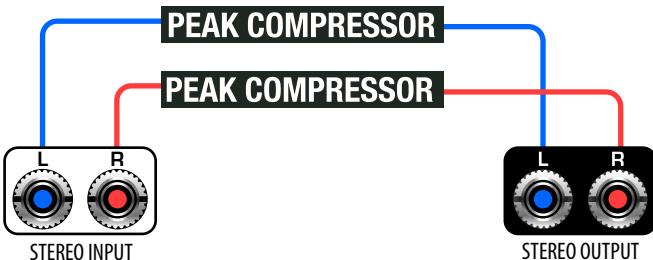
Threshold level

**Ratio**

Compressor ratio

**Time**

Envelope time



## Compressor RMS

RMS Type Compressing (Sustained Sounds)

**Thresh**

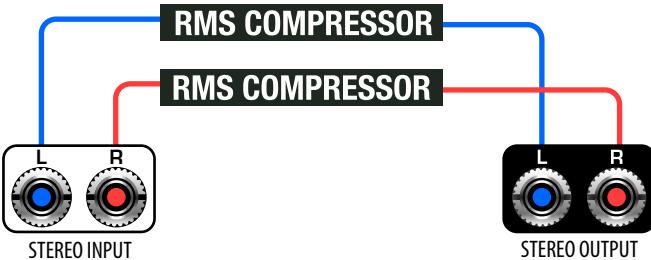
Threshold level

**Ratio**

Compressor ratio

**Time**

Envelope time



## Compressor Sidechain

Left input for audio signal to be compressed,  
Right input for key (trigger)

**Thresh**

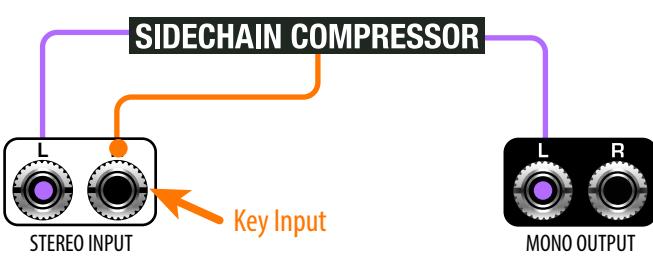
Threshold level

**Ratio**

Compressor ratio

**Time**

Envelope time



## Crusher

Sample rate reduction, Bit reduction and tone

**SRR**

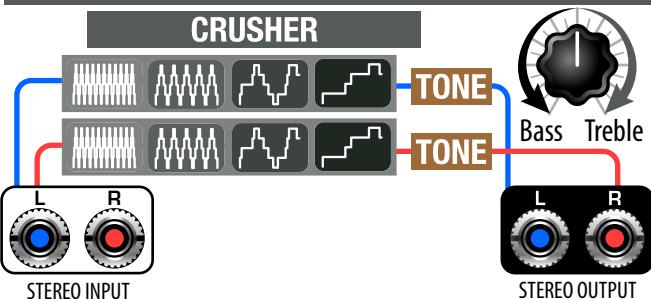
Sample rate  
reduction

**BitR**

Bit reduction

**Tone**

Tone Balance, Bass  
on the left Treble  
on the right



## Distortion Clipper

Sample rate

**Drive**

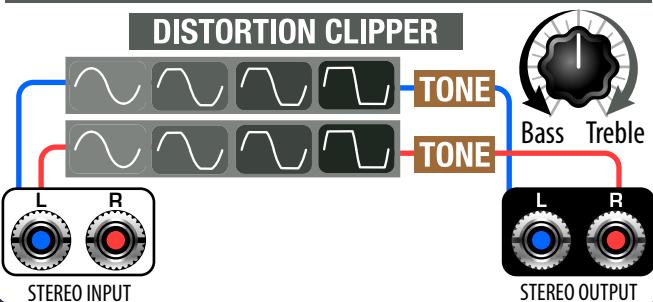
Amount of distortion

**preFX**

Volume of clean  
signal

**PostFX**

Volume of post  
clipping effect



## Distortion Overdrive

**Drive**

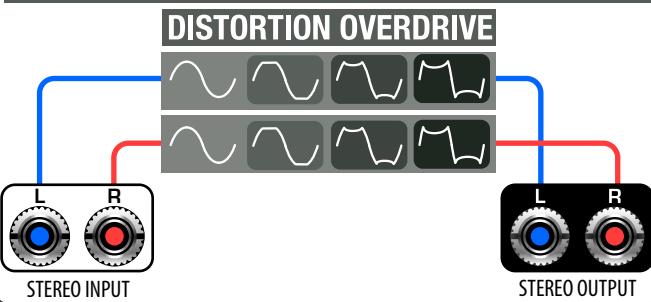
Amount of distortion

**preFX**

Volume of clean  
signal

**PostFX**

Volume of post  
distortion effect



## Exciter

Adds high frequency harmonics improving clarity

**Freq**

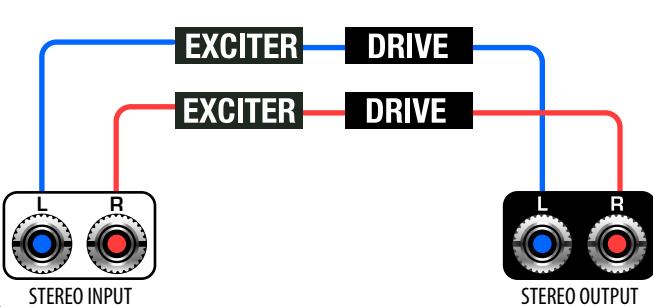
Enhance Frequency

**Drive**

Subtle saturation

**Amount**

Amount of excitement



## Expander

Downward Expander, the opposite of compression

**Thresh**

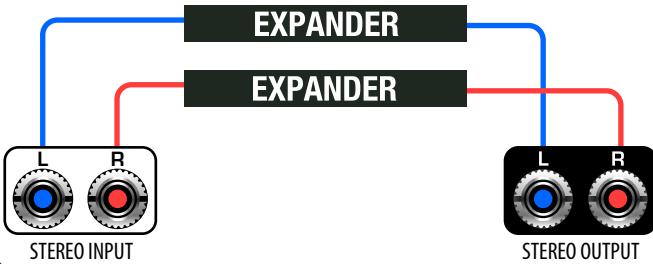
Threshold level

**Ratio**

Expansion ratio

**Time**

Envelope time



## Filter 3-Band EQ

High Shelf - Mid Boost/Cut - Low Shelf

**High**

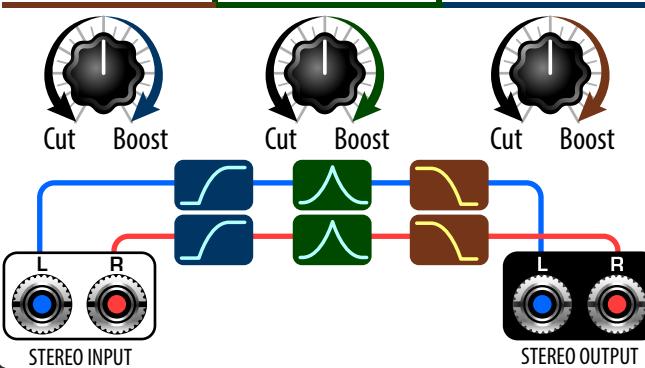
High Shelf level

**Mid**

Mid Freq Cut / Boost

**Low**

Low Shelf level



## Filter BP 2pole

Classic 2 pole Stereo Band Pass filter

**Freq**

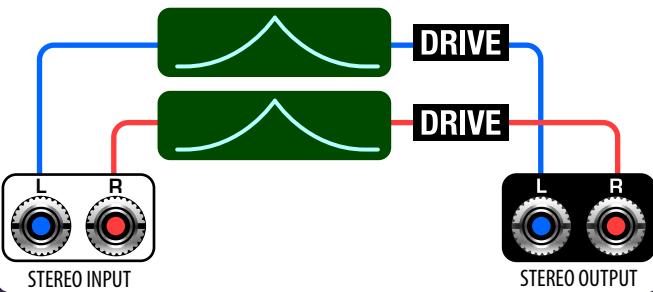
Frequency of Bandpass filter

**Res**

Resonance of Bandpass filter

**Drive**

Bandpass Filter Drive



## Filter BP 4pole

Classic 4 pole Stereo Band Pass filter

**Freq**

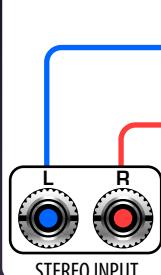
Frequency of Bandpass filter

**Res**

Resonance of Bandpass filter

**Drive**

Bandpass filter drive



## Filter BP Width

Variable width Band Pass Filter useful as a stereo parametric EQ

**Freq**

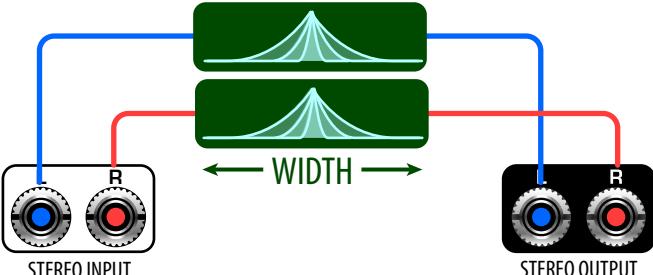
Frequency of Bandpass filter

**Res**

Resonance of Bandpass filter

**Width**

Narrow width on the left to wide on the right



## Filter DJ

Lowpass on left, Center is off, Highpass on right

### Freq

Left is lowpass, center is thru, right is high

### Res

Resonance of filter

### Drive

Amount of drive

No Filter



Low High

LP X HP

LP X HP

DRIVE

DRIVE

STEREO INPUT

STEREO OUTPUT

## Filter HP 2pole

## Filter HP 2pole

Classic 2 pole resonating Stereo High Pass filter with drive

### Freq

Frequency of Highpass filter

### Res

Resonance of filter

### Drive

Amount of drive

2 POLE HIGHPASS

DRIVE

2 POLE HIGHPASS

DRIVE

STEREO INPUT

STEREO OUTPUT

## Filter HP 4pole

Classic 4 pole resonating Stereo High Pass Filter with drive

### Freq

Frequency of Highpass filter

### Res

Resonance of filter

### Drive

Amount of drive

4 POLE HIGHPASS

DRIVE

4 POLE HIGHPASS

DRIVE

STEREO INPUT

STEREO OUTPUT

## Filter HP+LP

Parallel High Pass filter into Low Pass filter in stereo

### HP Fr

Frequency of Highpass filter

### Res

Resonance of both filters

### LP Fr

Frequency of Lowpass filter

HIGHPASS

LOWPASS

HIGHPASS

LOWPASS

STEREO INPUT

STEREO OUTPUT

## Filter LP 2pole

Classic 2 pole resonating Stereo Low Pass filter with drive

### Freq

Frequency of Lowpass filter

### Res

Resonance of Lowpass filter

### Drive

Amount of drive

2 POLE LOWPASS

DRIVE

2 POLE LOWPASS

DRIVE

STEREO INPUT

STEREO OUTPUT

## Filter LP 4pole

Classic 4 pole resonating Stereo Low Pass filter with drive

### Freq

Frequency of Lowpass filter

### Res

Resonance of Lowpass filter

### Drive

Amount of drive

4 POLE LOWPASS

DRIVE

4 POLE LOWPASS

DRIVE

STEREO INPUT

STEREO OUTPUT

## Filter LP Moog

4 pole self oscillating Stereo Low Pass filter with drive

**Freq**

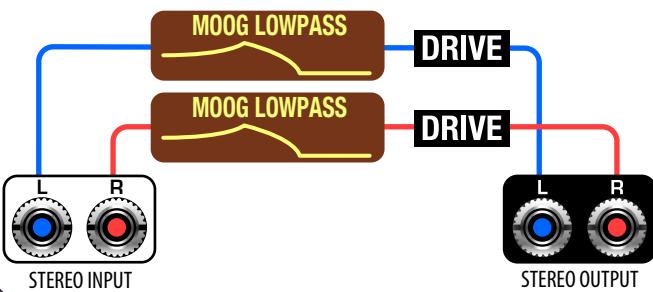
Frequency of Moog Lowpass filter

**Res**

Resonance of Moog Lowpass filter

**Drive**

Amount of drive



## Filter Vowel

Stereo vowel filter with shifting formants

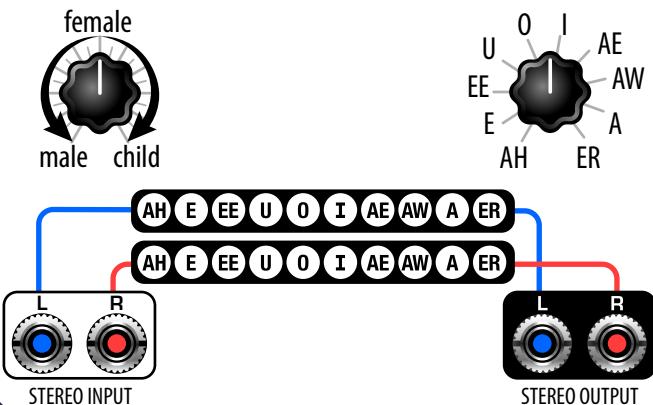
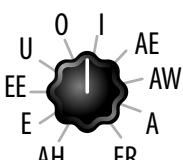
**-Shft+**

Gender/Age shifter

**Res**

Resonance of filter

**Vowel**



## Freeze Speed

Freeze looping with a bidirectional Speed, apply positive 3.5 voltage to SRR input to get more time or Hold the encoder knob until you see the SRR settings, click the knob to the octave setting and turn down to -3.5 octave, hold down encoder knob to exit.

**Gate**

Gate Freeze On/Off

**Time**

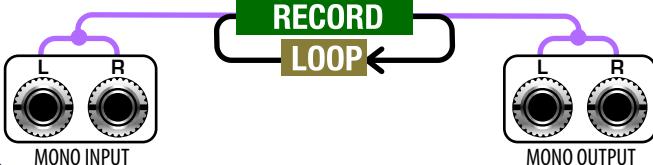
Time of freeze

**Speed**

Backward/Forward



Backward Forward



## Filter Notch

Resonating Stereo Notch filter with drive

**Freq**

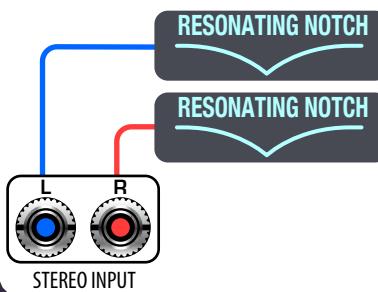
Frequency of Notch rejecting bandwidth

**Res**

Resonance of Notch filter

**Drive**

Amount of drive



## Freeze Prime Time

Freeze Loop, apply positive 3.5 voltage to SRR input to get more time or Hold the encoder knob until you see the SRR settings, click the knob to the octave setting and turn down to -3.5 octave, hold down encoder knob to exit.

**Gate**

Gate Freeze On/Off

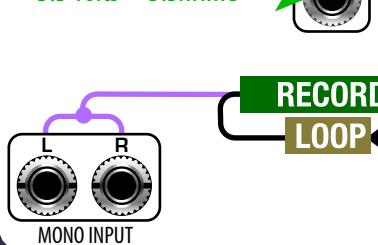
**Time**

Time of freeze

**Mult**

Tempo Multiplier

3.5 volts = 3.5xTime



**RECORD  
LOOP**



## Freeze Tone

Freeze looping with a Tone control, apply positive 3.5 voltage to SRR input to get more time or Hold the encoder knob until you see the SRR settings, click the knob to the octave setting and turn down to -3.5 octave, hold down encoder knob to exit.

**Gate**

Gate Freeze On/Off

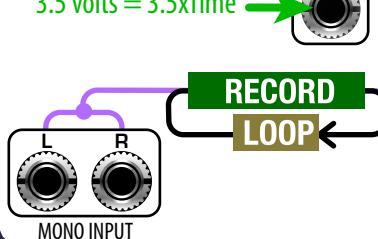
**Time**

Time of freeze

**Tone**

Bass/Treble

3.5 volts = 3.5xTime



**RECORD  
LOOP**



## Generation Lost

Generation Loss inspired, emulation of old abused VCR tape machine

**Wear**

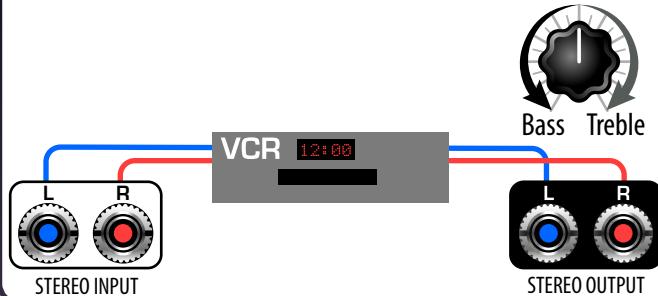
Tape Wear

**Wow**

Tape Motor fluctuation

**Tone**

Tone Balance, Bass on the left Treble on the right



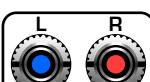
## In-NOut

Dry/Wet VCA, No Output

**None**

**None**

**None**



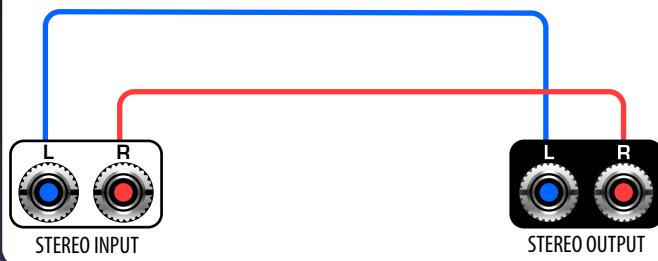
## In-Out

Copies input to the output with no FX at all

**None**

**None**

**None**



## Limiter

Variable knee Limiter

**Thresh**

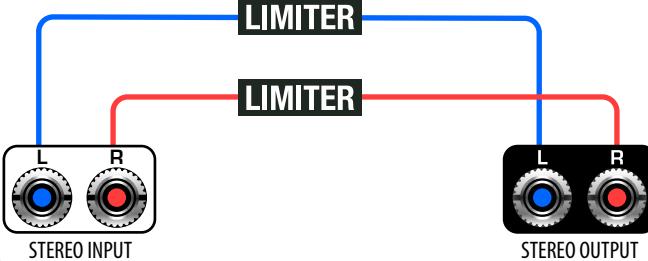
Threshold of limiting

**Knee**

Limiter knee shape

**Time**

Envelope time



## Limiter 3-Band

Three frequency bands Limiter

**High**

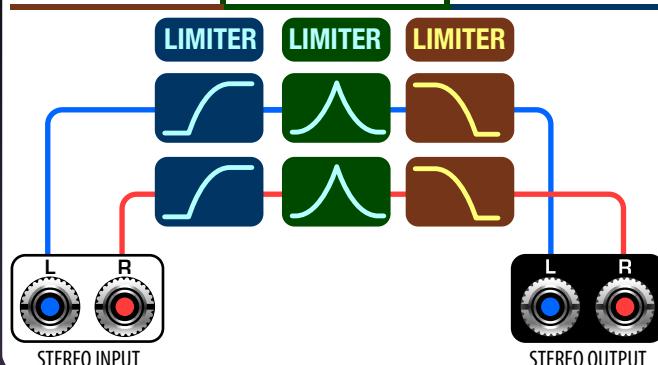
Limit Highs

**Mid**

Limit Mids

**Low**

Limit Lows



## Lo-Junk

Instant Lo-Fi Junky inspired Warping tape hiss

**Speed**

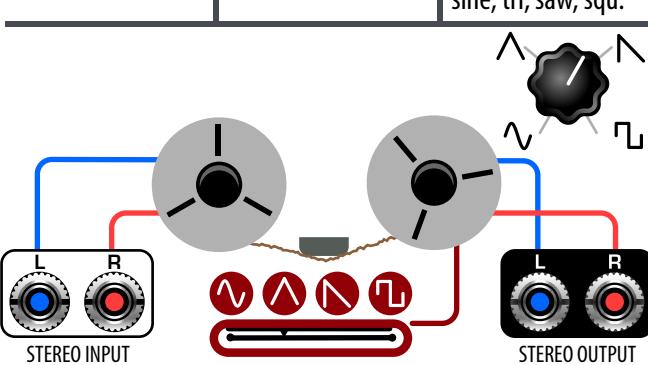
Tape speed

**Depth**

Depth of pitch modulation

**xFade**

Shape of modulation  
Crossfades from sine, tri, saw, squ.



## Lo-Junk yNG

Instant Lo-Fi Junky inspired, noise gated

### Speed

Speed of pitch modulation

### Depth

Depth of pitch modulation

### xFade

Crossfades from sine, tri, saw, squ.

Dual Panner

### L Pan

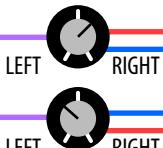
Panning of left mono input

### R Pan

Panning of right mono input

### L<>R

Panning Width



DUAL MONO INPUTS

STEREO OUTPUT

## Radio

Transforms the incoming audio and generates noise

### Tune

Tune between L or R inputs

### Noise

Amount of radio noise

### Tone

Tone Balance, Bass on the left Treble on the right



L-in • R-in

DUAL MONO INPUTS

STEREO OUTPUT

## Noise Gate

Adjustable ratio noise Gate

### Thresh

Threshold of gate

### Ratio

Ratio of gate

### Time

Envelope time

### NOISE GATE

### NOISE GATE

STEREO INPUT

STEREO OUTPUT

## Panner Auto

LFO Panning

### Rate

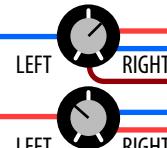
Panning Rate

### Range

Panning Amount

### Shape

Shape of panning crossfades from sine, tri, saw, squ.



## Ring Modulator

Stereo RM with internal VCO

### Coarse

Coarse modulator frequency

### Fine

Fine tune of modulator frequency

### xFade

Crossfades from sine, tri, saw, squ.

### RING MODULATOR

### RING MODULATOR

STEREO INPUT

STEREO OUTPUT

## Sample & Hold

Samples input and holds the voltage in time with clock and outputs pitched waveforms

**Rate**

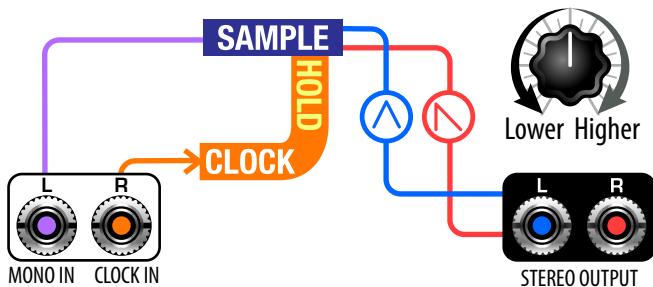
Rate of Sampling

**Range**

Range of pitches

**-Shift+**

Pitch shift Down/Up



## Sample Rate Reducer

Simulates a reduction in sample rate, 4k = toy 8k = MS-DOS , 22k = retro sampler, 44.1= CD

**Amount**

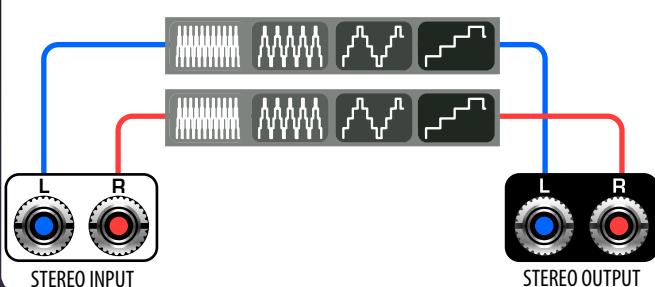
Sampling Rate

**PreFX**

Volume of un-effected signal

**PostFX**

Volume of reduction



## Shallow Water

Shallow Water inspired

**Rate**

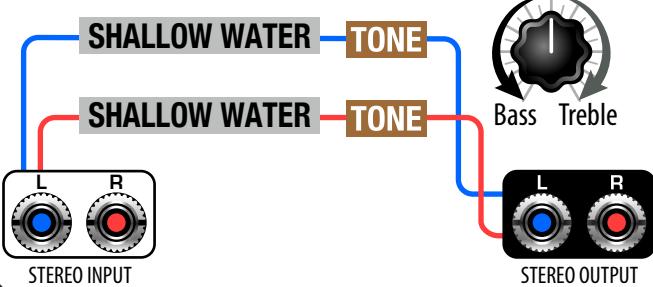
Rate of water

**Range**

Range of undertow

**Tone**

Tone Balance, Bass on the left Treble on the right



## Sub Fatter

Produces Bright/Dark Sub Octaves from input, works very well with monophonic sources

**-0+**

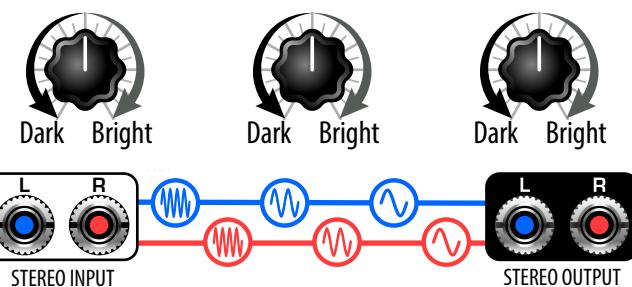
Dark signal on left, Bright on right, None at center

**-1+**

One octave below Dark signal on left, Bright on right

**-2+**

Two octaves below Dark signal on left, Bright on right



## Tape Start

Simulation of tape machine starting up, starts slow and speeds up

**Gate**

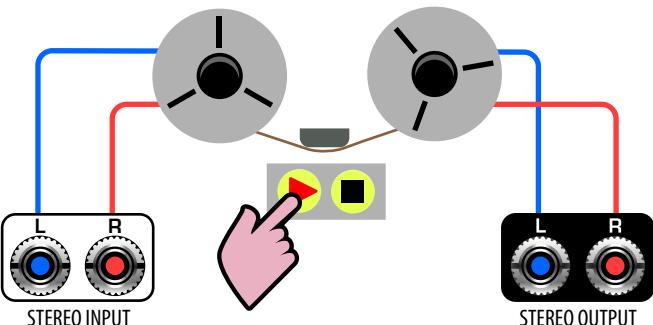
Gate on starts tape

**Time**

Time it takes to start up

**Drive**

Drive amount



## Tape Stop

Simulation of tape machine stopping, slows down to complete stop

**Gate**

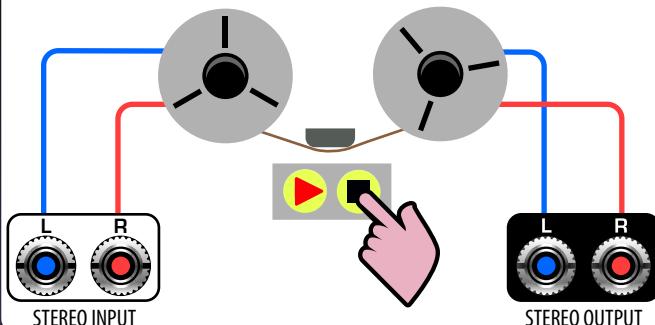
Gate on stops tape

**Time**

Time it takes to slow down to full stop

**Drive**

Drive amount



## Vinyl

Resonating Stereo Notch filter with drive

### Wear

Number of times played, scratches & dust on vinyl

### Noise

Increase amount of turntable noise

### Tone

Tone Balance, Bass on the left Treble on the right



## Vinyl Retro

Resonating Stereo Notch filter with drive

### Wear

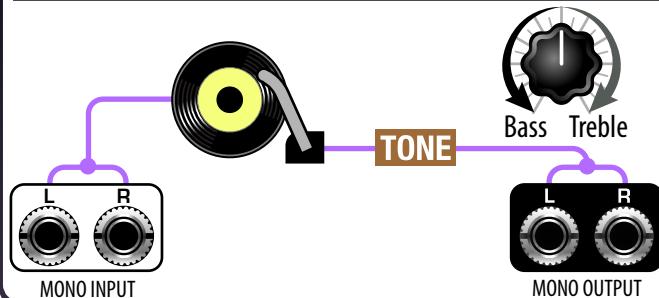
Number of times played, scratches & dust on vinyl

### Noise

Increase amount of turntable noise

### Tone

Tone Balance, Bass on the left Treble on the right



## Wave Folder

Instead of wave clipping the wave folds back on itself creating high frequency harmonics

### Amount

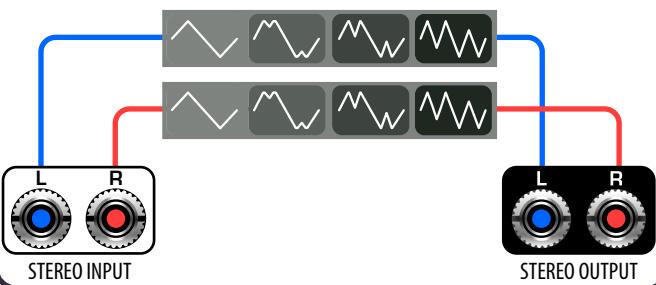
Amount of folds

### -Symm+

Subtracting/Adding static voltage changes symmetry

### Width

Amount of width



## xFader

L<>R blend with mix Law and Tone

### L<>R

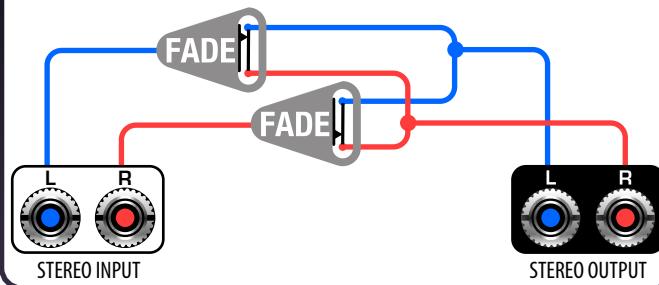
Left and right cross fading

### Law

Crossfades between linear and perception balanced crossfading

### Tone

Tone Balance, Bass on the left Treble on the right



## Freq Shifter

Instead of shifting pitch, harmonics are shifted

### -Rate+

Rate of Frequency Shifting Up or down

### -Fbck +

Bipolar Feedback

### Delay

Delay Time

### MONO INPUT

### Negative Positive

### FREQ SHIFT - DELAY

## Freq Shifter Barberpole

Instead of shifting pitch, harmonics are shifted upwards or downwards in a barerpole fashion

### -Rate+

Downward on the left, upward on the right, none in center

### Ranse

Range of frequency shifter

### Fback

Feedback of Freq shift

### MONO INPUT

### Downward Upward

### FREQ. SHIFT

### STEREO OUTPUT

## Freq Shifter Dual

Dual Up or Down Frequency shifting with separate controls for Freq Shift 1 and 2

-1+

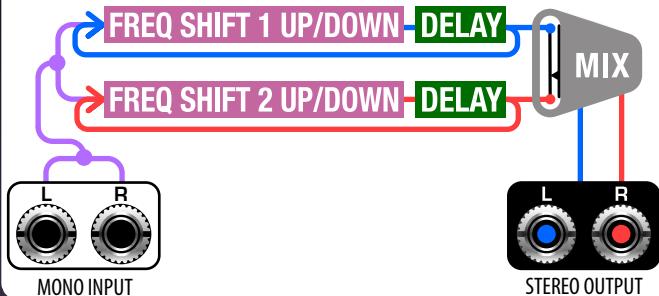
Freq Shift 1 Down  
on the left, up on  
the right

-2+

Freq Shift 2 Down  
on the left, up on  
the right

1<>2

Balance of Freq shift  
1 and Freq Shift 2



## Freq Shifter Up-Down

Frequency shifting in opposite directions

-Shft+

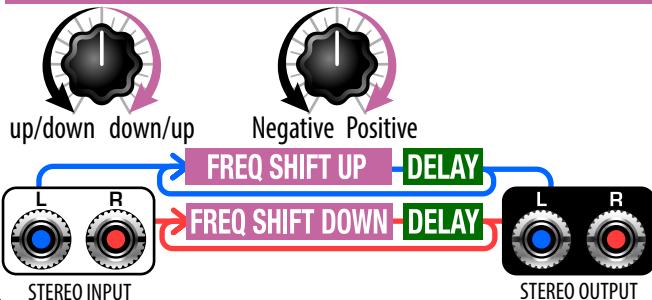
Rate of Frequency  
Shifting Up or down

-Fbck +

Bipolar Feedback

Delay

Delay Time



## Pitch Shifter

Smooth Pitch adjustment

+Shft

Pitch shift

+Fbck

Feedback

Tone

Tone Balance, Bass  
on the left Treble  
on the right



## Pitch Shifter Barberpole

Up or Down movement

-Rate+

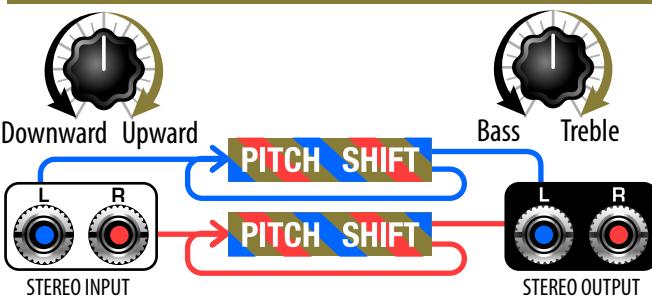
Downward on the  
left, upward on the  
right, none in center

Range

Range of pitch  
shifting

-Fbck +

Tone Balance, Bass  
on the left Treble  
on the right



## Pitch Shifter Dual

Smooth Pitch adjustment

-1+

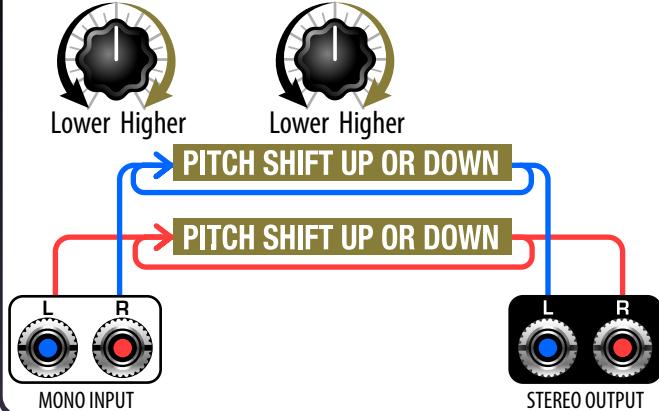
Pitch Shift 1

-2+

Pitch Shift 2

Fback

Feedback



## Pitch Shifter Dual Serial

Smooth Pitch adjustment

-1+

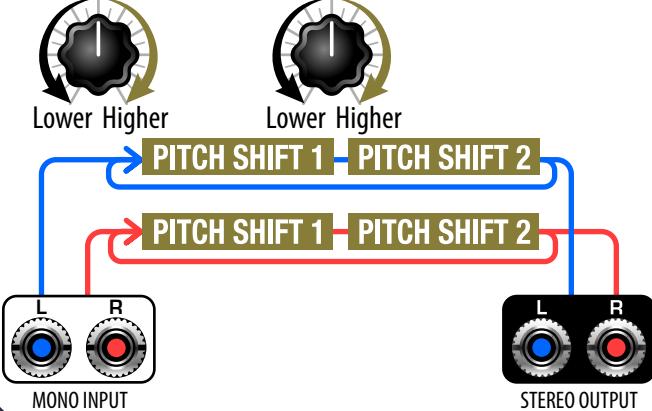
Pitch Shift 1

-2+

Pitch Shift 2

Fback

Feedback



### Pitch Shifter Dual\_Serial\_step

1 semitone Pitch increments

-1+

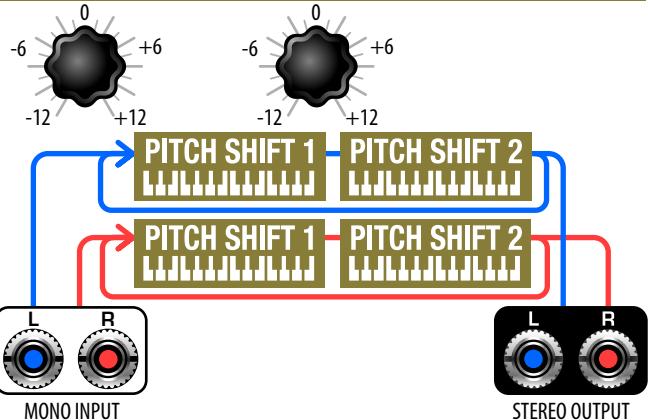
-2+

Fback

Semi tone shift 1

Semi tone shift 2

Feedback



### Pitch Shifter Dual\_step

1 semitone Pitch increments

-1+

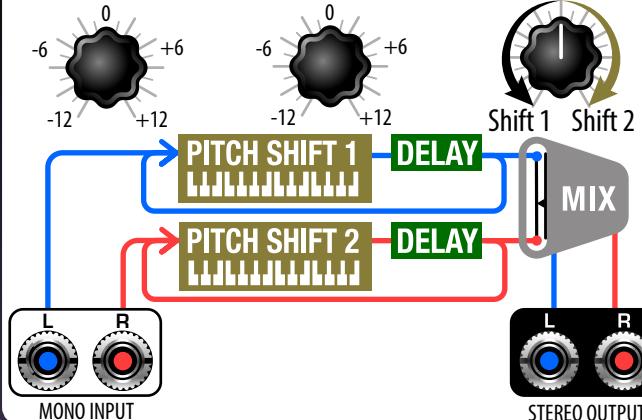
-1+

1<>2

Semi tone shift 1

Semi tone shift 2

Balance of 1 and 2



### Pitch Shifter Grain

Smooth plus or minus 2 octave Pitch adjustment

-Shft+

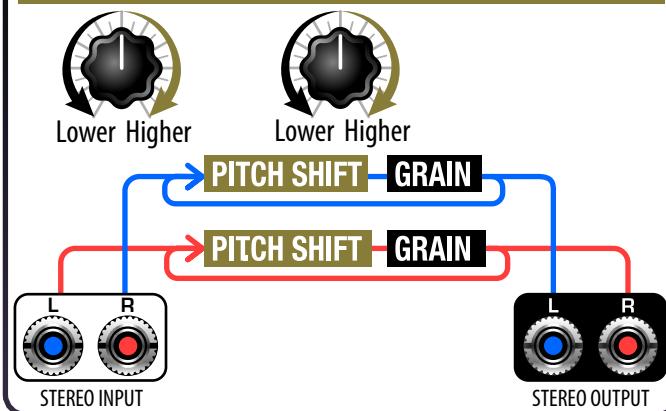
Fback

Grain

Pitch Shift 1

Pitch Shift 2

Grain amount



### Pitch Shifter Stereo

Smooth Pitch adjustment

-Shft+

-Fback+

Tone

Pitch Shift

Bipolar Feedback

Tone Balance

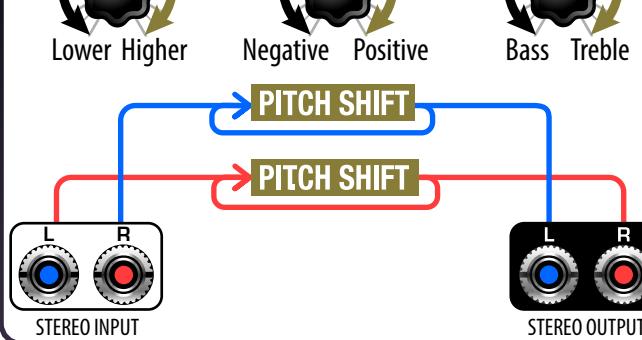
Lower Higher

Negative

Positive

Bass

Treble



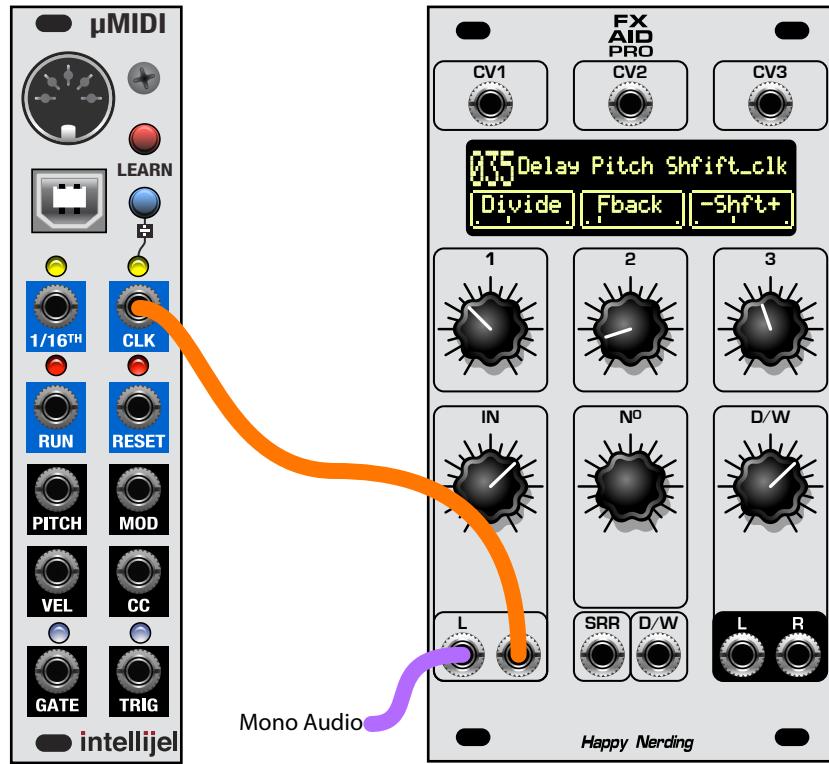
## How to Clk (clock)

Allows syncopation of effects with mono inputs. A clock signal or square wave LFO will sync the effect to the tempo. The divide parameter allows for multiple different timings of the synced beat.

Make sure Wet/Dry output is 100% wet or you will hear the clock signal.

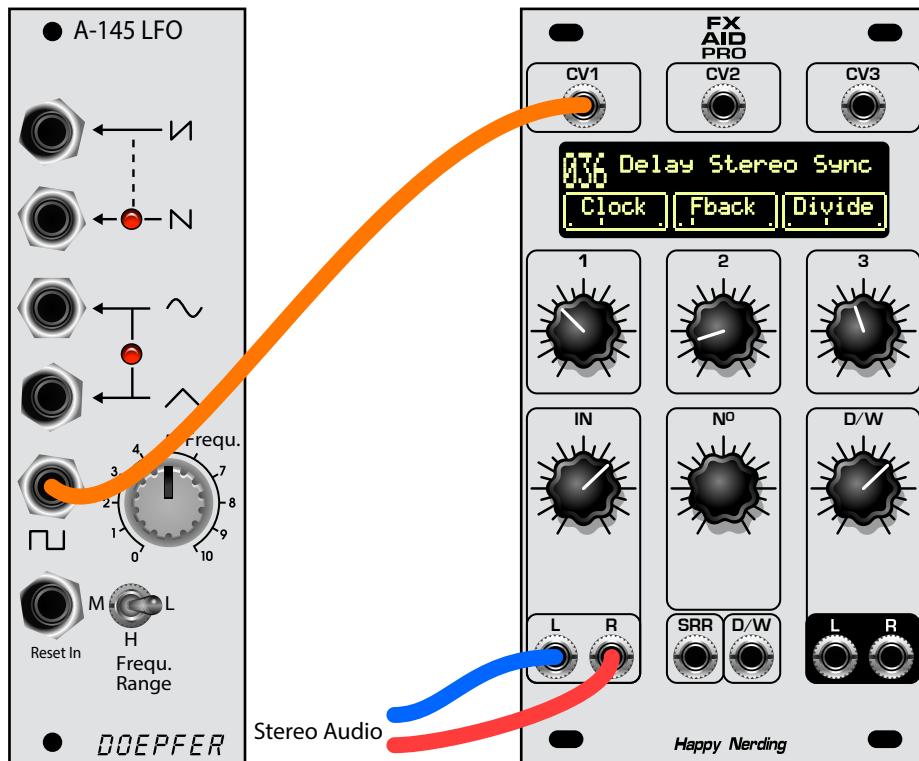
Using a Midi to CV converter module you can sync the FX Aid Pro to your DAW or computer.

Other clock sources can be from sequencers or drum machines



## How to Sync

Allows syncopation of effects with stereo inputs. A clock signal or square wave LFO will sync the effect to the tempo. The divide parameter allows for multiple different timings of the synced beat.



## How to Stutter Freeze

For short audio looping stutter effects to get more time slow down the sample rate by Holding the encoder knob until you see the SRR settings, click the knob to the octave setting and turn down to -3.5 octave, hold down encoder knob to exit. . The slower the sample rate the more time you will get at the cost of lower sound quality.

Many glitch and pitch stutter effects can be achieved by modulating the parameters with the internal LFO's.

Better results can be achieved by inputting an external clocked source into the gate parameter input. Try different rates to the LFO's to fine tune the effect.

<b>*LF01</b>		
POT1	2.00f	0°
□□	100%	PUSH

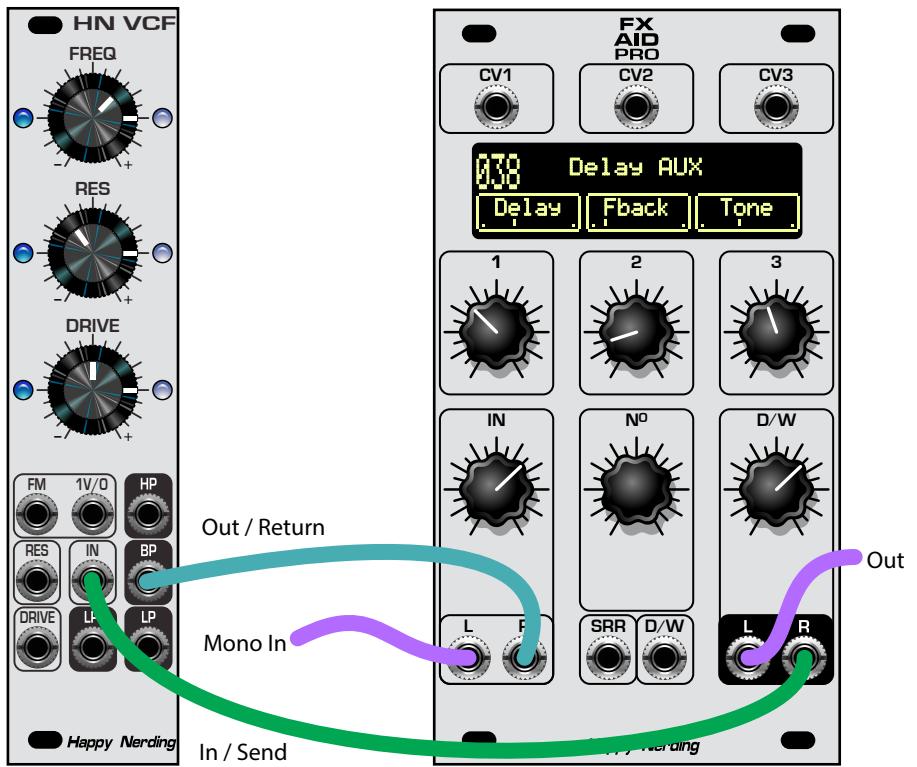
<b>*LF02</b>		
POT3	0.50f	0°
VVVV	20%	PUSH



## How to Delay Aux

This special delay has its own send and return, this allows you to insert an external effect into the delay line feedback, so that each echo goes through the external effect and is processed more and more each time the echo repeats.

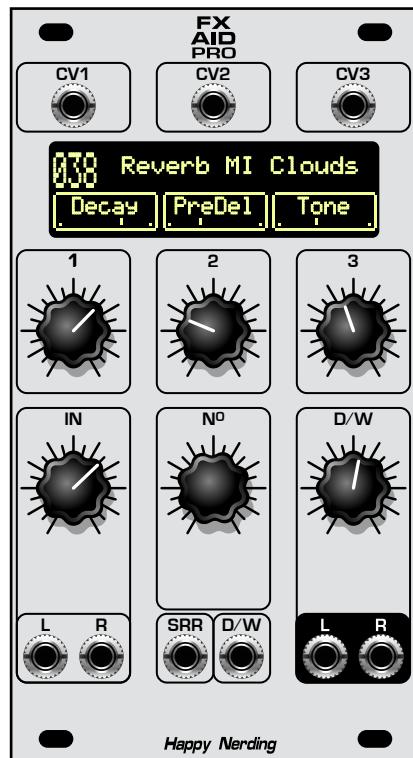
You can use a filter, phaser, distortion or any effect you can think of.



## How to chorus pre-delay

```
*LF01
POT2    1.77f   0°
^~^    2%    Push
```

Using an internal LFO you can add chorus to any reverb with a PreDelay parameter, the LFO slowly modulates the predelay with a sine wave to create a chorus effect to the reverb.



## How to restart LFOs

\*LF01  
POT1 0.01f 0°  
WAV 30% SRR

Restarting a Sample and hold LFO controlling the filter frequency in time with the tempo of your music. Each time the SRR input receives a clock or square wave signal a new random voltage is generated.

Ramp or triangle waves can be synced to midi clock by getting the internal LFO frequency close to the midi tempo and using the SRR input for LFO sync.



## How to vibrato with SSR

\*LF01  
SRR 4.50f 0°  
WAV 3% PUSH

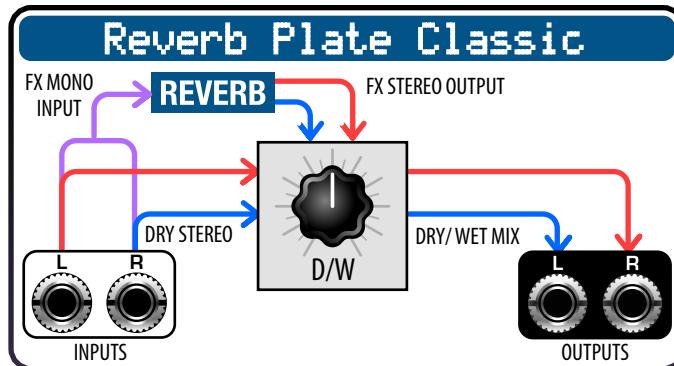
Using internal LFO1 on SRR you can add pitch vibrato to any FX, the LFO slowly modulates the SRR (sample rate reduction) with a triangle wave.

Or use a smooth random wave on SRR to get a warbled and warped pitch effect.



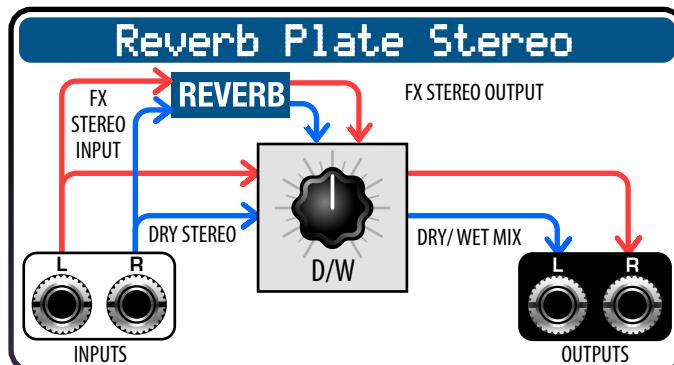
## Mono Input FX's

On effects that have mono inputs and stereo outputs, the dry signal maintains the stereo input. The FX input mixes the left and right inputs into a mono signal, the FX wet output is stereo and the wet/dry mixes the two stereo mixes together.



## Stereo Input FX's

Effects that have stereo inputs and stereo outputs, the dry signal maintains the stereo input. The FX input preserves the left and right inputs as a stereo signal, the FX wet output is stereo and the wet/dry mixes the two stereo mixes together.



## Mono Output FX's

Effects that have mono inputs and outputs as the dry signal maintains the stereo input. The FX input mixes the left and right inputs into a mono signal, the FX wet output is mono and sends the same signal to the left and right outputs, the wet/dry mixes the Dry stereo mix and FX mono mix together.

