



## **Overview**

Tape Delay is a VST plugin from ConcreteFX which simulates a tape delay effect unit.

## **Installing TapeDelay**

Unzip the TapeDelay.zip and put the TapeDelay.dll in your VST plugin directory. The VST host software should then automatically detect it.

## **Using dials and sliders**

For dials, using the left mouse button sets the position of the dial, moving the mouse up increases the position of the dial & moving the mouse down decreases the position of the dial. Moving left / right changes the amount of the dial by a small amount.

For sliders, using the left mouse button sets the position of the slider. Clicking with the left mouse button and shift allows for fine control of the slider.

For dials and sliders, clicking with the right mouse button on sliders and dials allows you to reset them to their default value.

The MIDI CC for the control and the current value of that control are shown in the display at the bottom.

## **Tape Setup**

Tape delay uses two delay lines, one for the left channel and one for the right channel. These delays can either be controlled independently or jointly.

In each delay line, the input goes into the delay and is then fed through two filters and a distortion unit before it feeds back into the delay.



## **Controls**

### **Main**

**Volume** - main volume

**Dry** – dry volume

**Left Volume** – left delay volume

**Right Volume** – right delay volume

**Tempo** – tempo used for calculated delay lengths, if you set it to the minimum value it's set to autosync to the host tempo

**Independent Delays** – when this is turned off then left and right delay's are the same, when it's turned on then left / right delays are independent of each other

**Ping Pong** – when this turned on the output of left delay line is feed back into the right delay and the right delay line is feed back into the left delay

**Inverse** – when this is turned on the output of the delay lines are inverted (i.e. negated)

**Feed Decay** – this turns on / off decay, decay is used so that when there is no input into the delay lines the delays eventually die away, this is very useful for infinite distorted feedback loops . The decay dial controls how quickly echoes die away

**Tape Ducking** – this turns delaying ducking on / off

**Limiter** – this turns limiter on / off

**Delay Smoothing** – this controls how quickly changes in delay lengths occur

**Filter Order** – this controls if the filters are applied serially, in parallel or one before distortion and then one after the distortion

### **Ducking**

Ducking is used so that if the input is loud then the delayed signals are suppressed, this stops the sound becoming too clutter

Ducking is turned on / off in the main panel

**Limit** - ducking limit, the volume where ducking starts

**Release** – ducking release , how quickly the delayed returns after the input volume goes under the ducking limit



## **Limiter**

The limiter ensures that the output sound is limited to the set volume

**Limit** – limit volume, any sound above this is volume is set to this volume

**Attack** – limiter attack , how quickly the volume is limited after the input volume goes over the limiter limit

**Release** – limiter release, how quickly the volume returns to normal after the input volume goes below the limiter limit

## **Noisegate**

The noisegate is used so that any sound below a set limit are suppressed and so not passed into the delay lines

**Limit** - noisegate limit, any sound below is volume are not passed into the delay lines

**Attack** –noisegate attack, how quickly the sound is stoped after the volume goes below the noise-gate limit

**Release** –noisegate release , how quickly the delayed returns after the input volume goes over the noisegate limit

## **Left Delay / Right Delay**

**Main Delay Time** – main delay time in quarter beats

**Fine Delay time** – fine delay time in milliseconds

**Long Delay time** – lon delay time in quarter beats , up to 256 qb

**Feedback** – feedback from –100% to 100%

**Crossback** – how much of the other delay line goes into this delay line, from –100% to 100%



## **Filters**

TapeDelay uses two filters which can be either in serial , in parallel or used one before the distortion and one after (this last one is good for amp simulations)

**Filter Type** – there are 10 types, 12db / 24 low, high , bandpass and bandreject filters, plus ring modulation and comb filters

**Frequency** – frequency of the filter

**Q** – for the 12/24 db filters, the resonance of the filters. For the ring modulation then this controls the amount of ring modulation and for the comb filter this controls the amount of feedback

**Speed** – filter modulation speed

**Mod 1 / 2** – amount filter 1 / 2 are modulated

## **Distortion**

The distortion unit limits and distorts the sound

**Sat type** – two different type of saturation, the first is a classic saturation effect, the second is more a distortion type

**Hard / Soft Limiter** – hard or soft limiting

**Limit** – limiter limit, the distortion volume never goes over this limit

**Saturation** – saturation / distortion amount

**Boost** – distortion volume boost



### **Static / Degrade**

Tape Delay adds static and also degrades the signal

**Static Volume** – static volume

**Static Frequency** – tuning of the static

**Static Bandwidth** – bandwidth of the static, controls the ‘colour’ of the static

**Degrade Frequency** – how often the signal is degraded

**Degrade Amount** – how much the signal is degraded

**Bits** – tape bit level

### **Flutter**

This emulators tape flutter by changing the length of the delay lines, two flutter LFO's are used to create more complex type effect. Also can be used to add chorus / vibrato type effects

**Flutter 1 / 2 Amount** – amount the delay lines are altered , flutter 1 goes up to 10 milliseconds, 2 up to 1 second

**Flutter 1 / 2 Speed** – how quickly the delay lines are altered

**Flutter Random** – the amount of randomisation in the flutter, at 0% this means then flutter length always stays the same , at 100% this means the flutter length varies between the flutter amount and twice the flutter amount