



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