# **MTurboDelay**



# **Devices**

This plugin can be though of as a collection of plugins listed on the left side of the GUI. Select a device simply by clicking on it. Its GUI will appear on the right side. Compared to other MeldaProduction plugins it doesn't have any **edit screen**, so you cannot edit the internal functionality, which may be extremely complex. If you are interested in complex editing, please check **MXXX**, **the ultimate modular effect**.

### **Global** presets

### **Presets**

Presets button shows a window with all available presets. A preset can be loaded from the preset window by double-clicking on it, selecting via the buttons or by using your keyboard. You can also manage the directory structure, store new presets, replace existing ones etc. Presets are global, so a preset saved from one project, can easily be used in another. The arrow buttons next to the preset button can be used to switch between presets easily.

Holding Ctrl while pressing the button loads a random preset. There must be some presets for this feature to work of course.

Presets can be backed up by 3 different methods:

- A) Using "Backup" and "Restore" buttons in each preset window, which produces a single archive of all presets on the computer.
- B) Using "Export/Import" buttons, which export a single folder of presets for one plugin.
- C) By saving the actual preset files, which are found in the following directories (not recommended):

Windows: C:\Users\{username}\AppData\Roaming\MeldaProduction

Mac OS X: /Library/Application support/MeldaProduction

Files are named based on the name of the plugin like this: "{pluginname}.presets", so for example MAutopan.presets or MDynamics.presets. If the directory cannot be found on your computer for some reason, you can just search for the particular file.

Please note that prior to version 16 a different format was used and the naming was "{pluginname}presets.xml". The plugin also supports an online preset exchange. If the computer is connected to the internet, the plugin connects to our server once a week, submits your presets and downloads new ones if available. This feature is manually maintained in order to remove generally unusable presets, so it may take some time before any submitted presets become available. This feature relies on each user so we strongly advise that any submitted presets be named and organised in the same way as the factory presets, otherwise they will be removed.



Left arrow button loads the previous preset.



## **Right arrow**

Right arrow button loads the next preset.



### **Randomize**

Randomize button loads a random preset.



#### **Randomize**

Randomize button (with the text 'Random') generates random settings. Generally, randomization in plug-ins works by selecting random values for all parameters, but rarely achieves satisfactory results, as the more parameters that change the more likely one will cause an unwanted effect. Our plugins employ a smart randomization engine that learns which settings are suitable for randomization (using the existing presets) and so is much more likely to create successful changes.

In addition, there are some mouse modifiers that assist this process. The smart randomization engine is used by default if no modifier keys are held.

Holding **Ctrl** while clicking the button constrains the randomization engine so that parameters are only modified slightly rather than completely randomized. This is suitable to create small variations of existing interesting settings.

Holding **Alt** while clicking the button will force the engine to use full randomization, which sets random values for all reasonable automatable parameters. This can often result in "extreme" settings. Please note that some parameters cannot be randomized this way.



### **Panic**

Panic button resets the plugin state. You can use it to force the plugin to report latency to the host again and to avoid any audio problems. For example, some plugins, having a look-ahead feature, report the size of the look-ahead delay as latency, but it is inconvenient to do that every time the look-ahead changes as it usually causes the playback to stop. After you tweak the latency to the correct value, just click this button to sync the track in time with the others, minimizing phasing artifacts caused by the look-ahead delay mixing with undelayed audio signals in your host. It may also be necessary to restart playback in your host.

Another example is if some malfunctioning plugin generates extremely high values for the input of this plugin. A potential filter may start generating very high values as well and as a result the playback will stop. You can just click this button to reset the plugin and the playback will start again.



#### Settings

Settings button shows a menu with additional settings of the plugin. Here is a brief description of the separate items.

**Licence manager** lets you activate/deactivate the plugins and manage subscriptions. While you can simply drag & drop a licence file onto the plugin, in some cases there may be a faster way. For instance, you can enter your user account name and password and the plugin will do all the activating for you.

There are 4 groups of settings, each section has its own detailed help information: **GUI & Style** enables you to pick the GUI style for the plug-in and the main colours used for the background, the title bars of the windows and panels, the text and graphs area and the highlighting (used for enabled buttons, sliders, knobs etc).

**Advanced settings** configures several processing options for the plug-in.

**Global system settings** contains some settings for all MeldaProduction plugins. Once you change any of them, restart your DAW if needed, and it will affect all MeldaProduction plugins.

Dry/Wet affects determines, for Multiband pluq-ins, which multiband parameters are affected by the Global dry/wet control.

**Smart interpolation** adjusts the interpolation algorithm used when changing parameter values; the higher the setting the higher the audio quality and the lower the chance of zippering noise, but more CPU will be used.



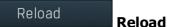
#### www

WWW button shows a menu with additional information about the plugin. You can check for updates, get easy access to support, MeldaProduction web page, video tutorials, Facebook/Twitter/YouTube channels and more.

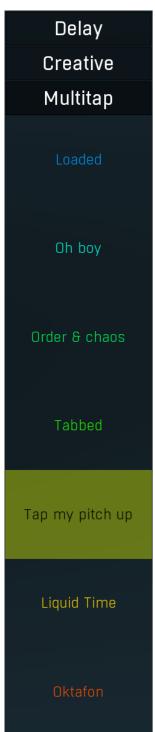


#### Sleep indicator

Sleep indicator informs whether the plugin is currently active or in sleep mode. The plugin can automatically switch itself off to save CPU, when there is no input signal and the plugin knows it cannot produce any signal on its own and it generally makes sense. You can disable this in Settings / **Intelligent sleep on silence** both for individual instances and globally for all plugins on the system.



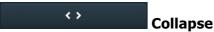
Reload button reloads the device and sets all non-locked controls in the current device to their default values. It may be useful, since the plugin stores current settings when switching between the devices, hence this button is a quick and easy way to get the defaults for the devices, before you changed them. If you want to reload all parameters for the device, you must unlock the Easy screen locks or disable them all by turning off the On/Off button in the Global Locking panel in Edit mode.



### **Device selector**

Device selector lets you choose from the predefined devices (previous 'active presets'). These are different from normal presets as they can actually have Easy-mode controls available via knobs or buttons. Click on an device to load it. Check out our video tutorials for information about creating your own devices. Although you cannot put your own devices into this selector, you can still save them as normal presets and on loading they will work in the exactly same way.

When browsing the devices, the plugin stores the control values (multiparameters). It doesn't store the full settings, only the multiparameters, so that if you switch between the devices, your settings will be kept intact, unless you switch to edit screen and perform some advanced editing, in which case it is recommended to use the A-H presets to store your work.



Collapse button minimizes or enlarges the panel to release space for other editors.

# Tap my pitch up



Tap my pitch up is a sixteen-tap spectral delay. It features control over pitch, frequency shifting and formant on a per-tap basis. The spectral processing is inside a feedback loop making the pitch effect increase with each pass-through.

# ₩ Device presets Presets

Presets button displays a window where you can load and manage available presets. Hold **Ctrl** when clicking to load a random preset instead.

# Left arrow

Left arrow button loads the previous preset.

# Right arrow

Right arrow button loads the next preset.

# Randomize

Randomize button loads a random preset.

# 0.00 dB Delay gain

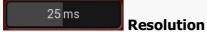
Delay gain controls the volume of the delay signal.



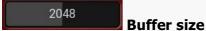
Delay gain controls the volume of the delay signal.

# 0.00 dB Output gain

Output gain controls the final output volume of the plugin.



Resolution defines how accurately the processor can analyze the audio. The lower the resolution, the more CPU is needed, but also more of the time domain characteristics are preserved, hence potentially higher audio quality.

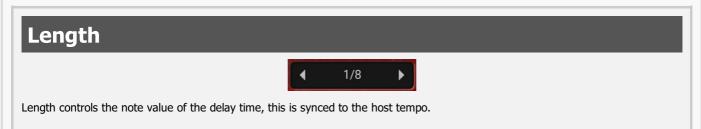


Buffer size controls the block size used for processing. This plugin performs processing in the so-called spectral domain. This allows it to access features that are normally unavailable, however in order to do that it requires the audio to be separated into blocks of audio. As a result, the plugin causes latency. This setting controls the latency length. Additionally, the higher it is the more detail the plugin has, which usually provides higher audio quality (but this is not always the case!), at the expense of greater CPU cost and increased latency. Also note that with some settings having too high a buffer size will produce a sort of time-smearing, ambient-like sound quality. Also note that this value is assigned only for sampling rates around 44-48KHz, the engine may readjust it for higher sampling rates in order to get similar audio results.



### Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.





LP controls the frequency of the low-pass filter.

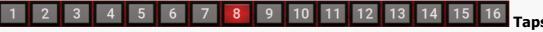


HP controls the frequency of the high-pass filter.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



Taps selects the number of delay taps.

#### **Pitch**

Pitch controls the pitch of each delay tap, this is measured in semitones.

Randomize creates random values for all taps.
Formant Formant controls the formant of each delay tap.
Randomize creates random values for all taps.
Frequency Frequency controls the frequency shift of each delay tap.
Randomize creates random values for all taps.  Level Level controls the volume of each delay tap.
Stepped / Continuous Stepped / Continuous Stepped / Continuous button lets you switch between 2 editor modes - stepped, which resembles the vintage analog gear by providing only a limit set of values, and continuous, which is traditional for digital user interfaces. There is absolutely no difference in sound, however for some people it is easier to have limited set of options to choose from, hence they prefer stepped mode. Others enjoy the full capacity of the digital processing, hence they prefer continuous mode.
BBD



0.00 dB **Delay gain**Delay gain controls the volume of the delay signal.

0.00 dB **Delay gain** 

Delay gain controls the volume of the delay signal.

0.00 dB **Output gain** 

Output gain controls the final output volume of the plugin.

Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.

# Mode



Mode selects the type of saturation.

# **Shape**



Shape selects the LFO shape for the vibrato modulation.



Rate

Rate Controls the speed of the vibrato.



Depth

Depth controls how much vbrato there will be.



**Harmonics** 

Harmonics controls the amount of even harmonic.



Drive

Drive controls the amount of saturation.



Low

Low controls the gain of a low shelf EQ.



Mid

Mid controls the gain of a mid peak EQ.



High

High controls the gain of a high shelf EQ.



Width

Width creates an offset in one of the channels to make the sound wider. This uses the haas effect.



**Delay** 

Delay controls the delay time.

# Length



Length controls the note value of the delay time, this is synced to the host tempo.



Sync

Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



Release

Release controls how fast the ducked signal will return to it's normal volume.



# **Ducking**

Ducking reduces the level of the delay when the dry signal is present. This is a great way to stop the delay from overwhelming the sound and lets it cut through a mix more clearly.



# | Ping/Pong

Ping/Pong is a classic delay effect that alternates each delay from channel to channel.



Min Repeats

Repeats Controls how long the tail of delays last. It is very similar to feedback, however it also changes some other processors such as filter and saturation.

# **Digital**



# 0.00 dB Delay gain Delay gain controls the volume of the delay signal.

#### 0.00 dB Output gain

Output gain controls the final output volume of the plugin.

# 0.00 dB Delay gain

Delay gain controls the volume of the delay signal.



### Shuffle

Shuffle simulates shuffling by offseting every other delay.



### **Ducking**

Ducking reduces the level of the delay when the dry signal is present. This is a great way to stop the delay from overwhelming the sound and lets it cut through a mix more clearly.



### Release

Release is the amount of time it takes for the ducked signal to return to it's normal volume.



Dry/Wet controls the mix of the delayed signal with the dry signal.



ΙНР

HP controls the frequency of the high-pass filter.



I ow

Low controls the gain of a low shelf EQ.



ΙP

LP controls the frequency of the low-pass filter.



High

High controls the gain of a high shelf EQ.



Mid

Mid controls the gain of a mid peak EQ.



Bass

Bass controls the amount of bass in the reverberated signal.



Treble

Treble controls the amount of treble in the reverberated signal.



Length

Length controls the reverb time.



Dry/Wet

Dry/Wet controls the amount of reverberated signal that will be mixed with the dry signal.



Shape Shape of the LFO used for the vibrato effect.



Rate

Rate controls the speed of the vibrato.



**Depth** 

Depth controls the amount of vibrato.



Speed controls the buffer size for the reverse effect.



Panorama controls the stereo position of the delay.



Width creates an offset in one of the channels to make the sound wider. This uses the haas effect.

# PING-PONG Ping/Pong

Ping/Pong is a classic delay effect that alternates each delay from channel to channel.

# Length

## Straight 1/16

Length controls the note value of the delay time, this is synced to the host tempo.



### **Repeats**

Repeats controls how long the tail of delays last. It is very similar to feedback, however it also changes some other processors such as filter and saturation.

CLEAN MODERN VINTAGE LO-FI BROKEN Style

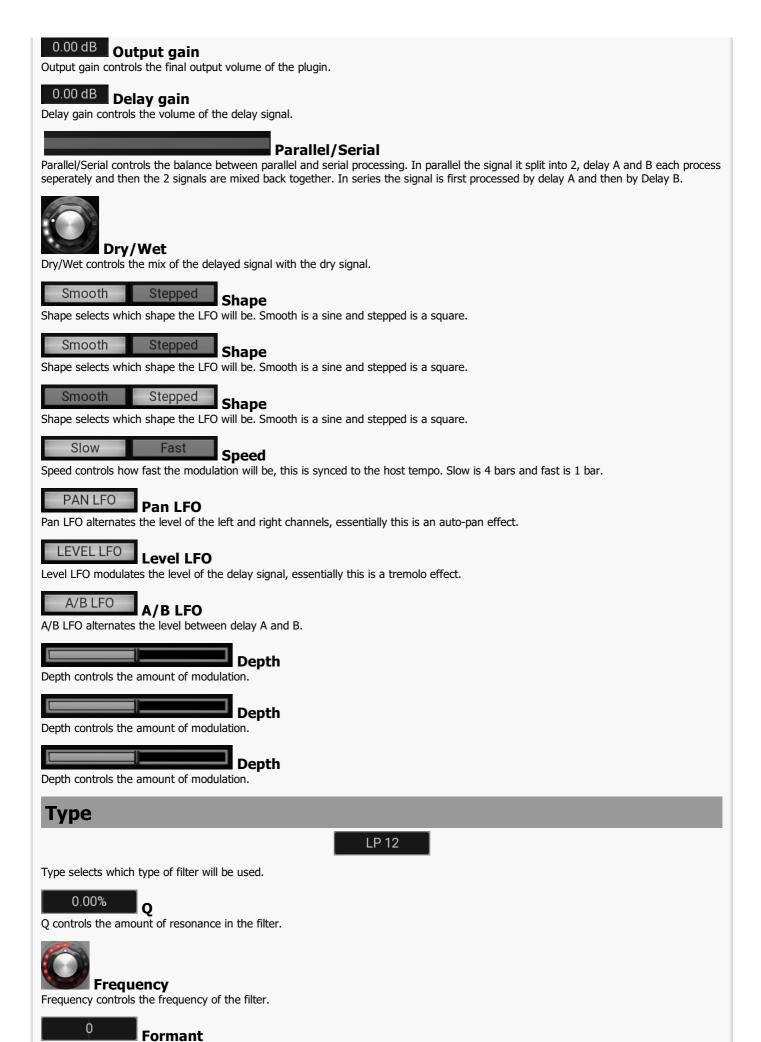
Style controls the character of the delay.

# **Double dribble**



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.



Formant controls the formant of the unison voices and can be used as a sort of brightness control.



Voices selects how many voices will be generated by the unison.



Dry/Wet controls the mix of the unison signal and the dry signal.

# Default Style

Style selects which type of distortion will be used.



Drive controls how much signal is fed into the distortion, therefore it controls the amount of distortion.



Dry/Wet controls the mix between the distorted signal and the dry signal.



Speed controls the attack and release times of the dynamic processor.



Threshold controls the detection level for the dynamic processor.

# DUCKER Ducker

Ducker reduces the level of the delay when the dry signal is present. This is a great way to stop the delay from overwhelming the sound and lets it cut through a mix more clearly.



Strength controls how much the level will be reduced.

# 20 ms Resolution

Resolution controls the length of the transient.

# 0.00 dB Gain

Gain is a basic gain, which can be used to compensate for the change in level due to the transient processor.

# TRANSIENT

Transient is a transent shaper that can be useful to make your delays punchier or softer.



Attack/Sustain controls the balance between the transient and tail volume.

0.00 dB Gain

Gain controls the volume of the pre-delay.

SYNC Sync

Sync activates sync mode where the pre-delay time will be in musical values and synced to the host tempo.

# Length

# Straight 1/16

Length controls the note value of the pre-delay time, this is synced to the host tempo.



Delay controls the pre-delay time.



Gain controls the volume of the pre-delay.



Sync activates sync mode where the pre-delay time will be in musical values and synced to the host tempo.

# Length

# Straight 1/16

Length controls the note value of the pre-delay time, this is synced to the host tempo.



Delay controls the pre-delay time.

# SWAP L/R Swap L/R

Swap L/R inverts the left and right channels.

# PING-PONG Ping/Pong

Ping/Pong is a classic delay effect that alternates each delay from channel to channel.



Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



LP controls the frequency of the low-pass filter.



HP controls the frequency of the high-pass filter.

# Length

## Dotted 1/4

Length controls the note value of the delay time, this is synced to the host tempo.



Delay controls the delay time.



### Pan

Pan controls the stereo position of the delay.



### Gain

Gain controls the volume of the delay.



#### Feedback

Feedback controls the amount of signal that gets fed back in to the delay's input.

# SWAP L/R Swap L/R

Swap L/R inverts the left and right channels.

# PING-PONG Ping/Pong

Ping/Pong is a classic delay effect that alternates each delay from channel to channel.



Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



 $\ensuremath{\mathsf{LP}}$  controls the frequency of the low-pass filter.



HP controls the frequency of the high-pass filter.

# Length

# Straight 1/8

Length controls the note value of the delay time, this is synced to the host tempo.



Delay controls the delay time.



#### Pan

Pan controls the stereo position of the delay.



#### Gain

Gain controls the volume of the delay.



## **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.

# **Echo man**





Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

Off

LP controls the frequency of the low-pass filter.

Off

HP controls the frequency of the high-pass filter.

Rhythm is a step sequencer that controls the volume of the delay signal. It can be used to create rhythmical motion to the delays.



### Even/Odd

Even/Odd controls the even and odd steps in the step sequencer. It can be used to make the delay feel more on beat or off beat.



### Push/Pull

Push/Pull controls if the delays will be exactly on the beat or pushed/pulled later/earlier.



### Shuffle/Swing

Shuffle/Swing simulates shuffling by offseting every other delay.



### Ping/Pong

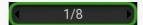
Ping/Pong is a classic delay effect that alternates each delay from channel to channel.

# **Type**



Type controls the note type of the delay time, this is synced to the host tempo.

# Length



Length controls the note value of the delay time, this is synced to the host tempo.

# Feedback

Feedback controls how much of the effect will be fed into the feedback loop.

# 63.25 Hz Frequency

Frequency controls the frequency of the EQ band.

# 0.00% Gain

Gain controls the gain of the EQ band.



#### **Low Shelf**

Low Shelf is an adjustable low-shelf EQ used to shape the character of the delay.

# Feedback

Feedback controls how much of the effect will be fed into the feedback loop.

# 632.5 Hz Frequency

Frequency controls the frequency of the EQ band.

# Gain controls the sain

Gain controls the gain of the EQ band.



### **Mid Peak**

Mid Peak is an adjustable mid-peak EQ used to shape the character of the delay.

# Feedback

Feedback controls how much of the effect will be fed into the feedback loop.

# 6325 Hz Frequency

Frequency controls the frequency of the EQ band.

# 0.00% Gain

Gain controls the gain of the EQ band.

High Shelf

High Shelf is an adjustable high-shelf EQ used to shape the character of the delay.

50.0% Feedback

Feedback controls how much of the effect will be fed into the feedback loop.

50.0% Amount

Amount controls the amount of the effect that will be mixed with the dry signal.

**6.000** Early/Late

Early/Late controls the balance between the reverb's early and late reflections.

50.0% Feedback

Feedback controls how much of the effect will be fed into the feedback loop.

50.0% Amount

Amount controls the amount of the effect that will be mixed with the dry signal.

**Wow/Flutter** 

Wow/Flutter controls the speed of the modulation used to simulate tape and vinyl.

50.0% Feedback

Feedback controls how much of the effect will be fed into the feedback loop.

50.0% Amount

Amount controls the amount of the effect that will be mixed with the dry signal.

0.00% Tape/Tube

Tape/Tube controls the balance between even and odd harmonics used in the saturator.

50.0% Feedback

Feedback controls how much of the effect will be fed into the feedback loop.

50.0% Amount

Amount controls the amount of the effect that will be mixed with the dry signal.

Tight/Loose

Tight/Loose controls the spread and offset of the voices in the unison.

50.0% Feedback

Feedback controls how much of the effect will be fed into the feedback loop.

50.0% Amount

Amount controls the amount of the effect that will be mixed with the dry signal.

0.00% Mid/Side

Mid/Side controls the balance between the mid and side signals.

50.0% Feedback

Feedback controls how much of the effect will be fed into the feedback loop.

50.0% Amount

Amount controls the amount of the effect that will be mixed with the dry signal.

Comp/Expand

Comp/Expand controls if the dynamic processor will compress or expand the dynamic range.

# Mode

**♦** Digital

Mode selects which preset will be used. Digital - A clean, standard delay. Lo-Fi - 8 bit with rate reduction. Memory - Influenced by the Memory Man delay. Pedal - Influenced by Boss DM-2 delay pedal. Plex - Influenced by Echo Plex tape delay. Ray - Influenced by TelRay tape delay. Space - Influenced by Roland Space Echo. Tape - A generic tape delay sound. Tube - A generic tube distortion. Punch - A puchy sound from dynamic expansion. Wide - Gets increasingly wider as the stereo widening feeds into the loop. Swarm - Hundreds of copies of the taps make a hugh swarm sound.



Character feedback this feedback is for the character page, it determins how much of the FX are fed into the feedback loop.



### **Delay feedback**

Delay feedback controls the amount of signal that gets fed back in to the delay's input.



#### Width

Width offsets the delay in one channel to make the sound wider.



### Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.

# **Envelope**



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.



Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



Shuffle

Shuffle simulates shuffling by offseting every other delay.



**Dry signal** 

Dry signal controls the level of the dry signal. This signal will not have any delay, but will still be processed by the effects.



**Repeats** 

Repeats controls how long the tail of delays last. It is very similar to feedback, however it also changes some other processors such as filter and saturation.



Width controls the amount of delay offset in one of the channels.



Panorama controls the stereo position of the delay.

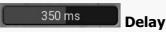


Ping/Pong

Ping/Pong is a classic delay effect that alternates each delay from channel to channel.



Length controls the note value of the delay time, this is synced to the host tempo.



Delay controls the delay time.



**Sync** 

Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



L/R Offset offsets the phase of the LFO by 180 degrees in one channel.



Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.

0.00% **Drive** 

Drive controls the filter distortion amount.

1.000 Hz Rate

Rate controls the LFO frequency therefore the speed of the modulation.

1/4 Length

Length controls the note value of the delay time, this is synced to the host tempo.

LP 24 Type

Type selects the type of filter to be used.



0.00 dB Mid

Mid controls the gain of a mid peak EQ.

0 ms Mod depth

Mod depth controls the depth of the vibrato effect.

Sine Mod shape

Mod shape selects the Ifo shape for the vibrato.

0.00 dB High

High controls the gain of a high shelf EQ.

0.00 dB **Low** 

Low controls the gain of a low shelf EQ.

10.00 Copies

Copies selects how many duplicate grains there will be.

707 ms Duration

Duration controls the random delay time for the copied grains.

0 ms Pre-delay

Pre-delay controls the amount of time before the grains start.

0.00 Pitch

Pitch controls the pitch of the grains.

0.00 Random

Random controls the random pitch value for each grain.

100.0% Width

Width controls the random pan position of each grain.

Release shape

Release shape controls the curvature of the release shape.

Attack shape

Attack shape controls the the curvature of the attack shape.

Threshold off
Threshold off controls the maximum detection level for the envelope.

-40.00 dB Threshold on

Threshold on controls the minimum detection level for the envelope.

Envelope

Envelope is a volume envelope that fades in and out the delay signal when it's level is within the thresholds.



Mode

Mode controls the type of saturation.



Drive controls the amount of saturation.



# Frequency

Frequency controls the central frequency of the filter.



### Range

Range controls the depth of modulation.



### **Grain size**

Grain size controls the length of each grain.



Wet/Dry
Wet/Dry controls the mix of the granulated signal with the dry signal.



## Release

Release controls the release time of the envelope.



Attack controls the attack time of the envelope.

# Fluid feedback



# Delay gain Delay gain controls the volume of the delay signal.

Output gain
Output gain controls the final output volume of the plugin.

# 0.00 dB Delay gain

Delay gain controls the volume of the delay signal.



### Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.

# Mid/High

Mid/High controls the crossover frequency that seperates the mid and high bands.

#### 200.0 Hz Low/Mid

Low/Mid controls the crossover frequency that seperates the low and mid bands.



High gain controls the volume of the high band.



# Mid gain

Mid gain controls the volume of the mid band.



Low gain

Low gain controls the volume of the low band.



Range

Range controls the depth of modulation.



Range

Range controls the depth of modulation.



Range

Range controls the depth of modulation.



Shape

Shape selects the shape of the LFO.



**Speed** 

Speed selects the note length of the LFO.



Shape

Shape selects the shape of the LFO.



**Speed** 

Speed selects the note length of the LFO.



Shape

Shape selects the shape of the LFO.



Speed

Speed selects the note length of the LFO.



Width

Width creates an offset in one of the channels to make the sound wider. This uses the haas effect.



Ping/Pong

Ping/Pong is a classic delay effect that alternates each delay from channel to channel.



Delay

Delay controls the delay time for the high band.



Width

Width creates an offset in one of the channels to make the sound wider. This uses the haas effect.



Ping/Pong

Ping/Pong is a classic delay effect that alternates each delay from channel to channel.



Delay controls the delay time for the mid band.



Width creates an offset in one of the channels to make the sound wider. This uses the haas effect.



## Ping/Pong

Ping/Pong is a classic delay effect that alternates each delay from channel to channel.



### **Delay**

Delay controls the delay time for the low band.



Lag controls the amount of time before the feedback happens.



Lag controls the amount of time before the feedback happens.



Lag controls the amount of time before the feedback happens.



Lag controls the amount of time before the feedback happens.



Lag controls the amount of time before the feedback happens.



Lag controls the amount of time before the feedback happens.



Mid controls the amount of high band signal that gets fed back in to the mid band input.



#### Low

Low controls the amount of high band signal that gets fed back in to the low band input.



High controls the amount of mid band signal that gets fed back in to the high band input.



### Low

Low controls the amount of mid band signal that gets fed back in to the low band input.



High controls the amount of low band signal that gets fed back in to the high band input.



Mid controls the amount of low band signal that gets fed back in to the mid band input.



Feedback controls the amount of high band signal that gets fed back in to the high band input.



#### **Feedback**

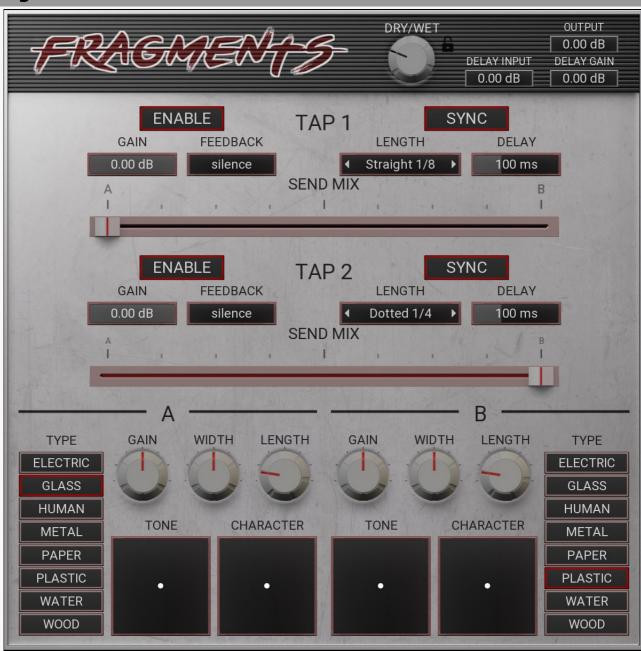
Feedback controls the amount of mid band signal that gets fed back in to the mid band input.



### **Feedback**

Feedback controls the amount of low band signal that gets fed back in to the low band input.

# **Fragments**



# 0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

# 0.00 dB Output gain

Output gain is the last thing in the signal chain and controld final output volume of the plugin.

# 0.00 dB Delay gain

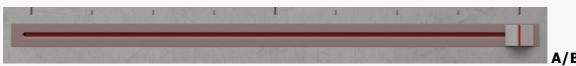
Delay gain controls the volume of the delay signal.



Dry/Wet controls the mix of the delayed signal with the dry signal.



A/B controls the balance of the delay's output being sent to convolution A or B.

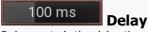


A/B controls the balance of the delay's output being sent to convolution A or B.

# Length



Length controls the note value of the delay time, this is synced to the host tempo.



Delay controls the delay time.

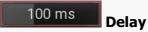


Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.

# Length



Length controls the note value of the delay time, this is synced to the host tempo.



Delay controls the delay time.



Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



### Length

Length shrinks or stretches the length of the impulse.



#### Width

Width controls the stereo widening of the convolution.



#### Gain

Gain controls the volume of the convolution.



## Length

Length shrinks or stretches the length of the impulse.



Width controls the stereo widening of the convolution.



### Character

Character changes the pitch and balance between 2 impulses.



### **Tone**

Tone uses an EQ to change the tone of the impulse.



### Character

Character changes the pitch and balance between 2 impulses.



### Tone

Tone uses an EQ to change the tone of the impulse.



Type
Type selects which impule texture will be used.



Type

Type selects which impule texture will be used.



Gain

Gain controls the volume of the convolution.

# M-S convolver



0.00 dB Output gain

Output gain controls the final output volume of the plugin.





HP controls the frequency of the high-pass filter.



LP controls the frequency of the low-pass filter.



Ducking reduces the level of the delay when the dry signal is present. This is a great way to stop the delay from overwhelming the sound and lets it cut through a mix more clearly.



### Saturation

Saturation controls the amount of distortion added to the signal.



# Ducking

Ducking reduces the level of the delay when the dry signal is present. This is a great way to stop the delay from overwhelming the sound and lets it cut through a mix more clearly.



#### **Saturation**

Saturation controls the amount of distortion added to the signal.



HP controls the frequency of the high-pass filter.



LP controls the frequency of the low-pass filter.



## Convolve

Convolve controls the mix of the convoluted signal and the dry signal.



#### **Convolve**

Convolve controls the mix of the convoluted signal and the dry signal.

# M-S focus



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

LLUDAUN **Feedback** 

Feedback controls the amount of signal that gets fed back in to the delay's input.

**Triplets** Dotted **Tuplets** Straight **Type** 

Type controls the note type of the delay time, this is synced to the host tempo.

1/8 Length

Length controls the note value of the delay time, this is synced to the host tempo.



### **Spread**

Spread generates stereo content for the processing to work correctly. If you already have a wide stereo signal you can set this to 0%. If you have a mono or very narrow signal, you can set this to 100%. For most signals it sounds good at 50%.



### Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



#### Offset

Offset controls the balance of the delay offset in the mid and side channels. Turning the knob to the left will offset the delay times in the mid channel and to the right in the side channel.



#### **Formant**

Formant controls the balance of formant offset in the mid and side channels. Turning the knob to the left will offset the formants in the mid channel and to the right in the side channel.



## **Ping-pong**

Ping-pong controls the balance of the ping-pong effect in the mid and side channels. Turning the knob to the left will increase the ping-pong effect in the mid channel and to the right in the side channel.



#### Blur

Blur controls the balance of spectral smearing in the mid and side channels. Turning the knob to the left will increase the amount of bluring in the mid channel and to the right in the side channel.



#### **Filter**

Filter controls the balance of the filter in the mid and side channels. Turning the knob to the left will add high-pass and low-pass filters in the mid channel and to the right in the side channel.



#### **Feedback**

Feedback controls the balance of the delay feedback in the mid and side channels. Turning the knob to the left will increase the feedback in the mid channel and to the right in the side channel.



#### Level

Level controls the balance of the delay output in the mid and side channels. Turning the knob to the left will make the delay louder in the mid channel and to the right will be louder in the side channel.

# **Multi-motion**



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

625 ms Delay

Delay controls the delay time.

# Length

Dotted 1/4

Length controls the note value of the delay time, this is synced to the host tempo.

PING PONG Ping Pong

Ping Pong is a classic delay effect that alternates each delay from channel to channel.



Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



Pan

Pan controls the stereo position of the delay.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



**Delay** 

Delay controls the delay time.

# Length

Straight 1/16

Length controls the note value of the delay time, this is synced to the host tempo.



**Ping Pong** 

Ping Pong is a classic delay effect that alternates each delay from channel to channel.



Sync

Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



Pan

Pan controls the stereo position of the delay.



# **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



Solo B

Solo B mutes delay A. This is useful, as it allows to more clearly hear how the crossover is splitting the sound.



Solo A

Solo A mutes delay B. This is useful, as it allows to more clearly hear how the crossover is splitting the sound.



**Separation** 

Separation is the crossover that splits the signal into A and B. It works differently depending on which mode is used.

FREQUENCY

LEVEL

**PANORAMA** 

**SPECTRUM** 

Mode

Mode selects how the signal will be split.

**Frequency** splits the signal by frequency. Frequencies below the crossover will be sent to delay A and above to delay B.

**Level** splits the signal by volume. The separation parameter acts as a threshold. Above the threshold is sent to delay B and below to delay A.

**Panorama** splits the signal by stereo position. Signal below the crossover will be considered left and sent to delay A and above will be right and sent to delay B.

Spectrum splits the signal bassed on how loud each frequency is. Louder frequencies are considered to be tonal and sent to delay B

and quiter are noise sent to delay A.



**Speed**Speed controls the rate of modulation, this is measured in bars.



Random

Random controls the amount of randomness in the LFO shape.



### Amount

Amount controls the depth of modulation.



Shape Shape of the LFO.

## **Space-time**





**Delay gain**Delay gain controls the volume of the delay signal.



### **Output gain**

Output gain controls the final output volume of the plugin.



**Delay gain**Delay gain controls the volume of the delay signal.



### Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



### Saturation

Saturation controls the amount of distortion.



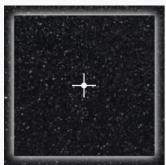
### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



X

X controls the early/late balance of the reverb.



X

X controls the ping-pong for the delays.



X

X controls the frequency of a high-pass and low-pass filter.



X

X selects a sequence that modulates time.



X selects a sequence that modulates volume.



**Delay gain**Delay gain controls the volume of the delay signal.



Output gain
Output gain controls the final output volume of the plugin.



**Delay gain**Delay gain controls the volume of the delay signal.

# **Super pong**



0.00 dB Output gain

Output gain controls the final output volume of the plugin.

0.00 dB **Delay gain**Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

**Ducking** 

Ducking reduces the level of the delay when the dry signal is present. This is a great way to stop the delay from overwhelming the sound and lets it cut through a mix more clearly.



**Exciter** 

Exciter is an expander and saturator for the lower and upper frequencies.



Tape

Tape controls the amount of the tape effect. It emulates delay drift, saturation and tone.



Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



LP

LP controls the frequency of the low-pass filter.



HP

HP controls the frequency of the high-pass filter.

### Length

Straight 1/8

Length controls the note value of the delay time, this is synced to the host tempo.



**Feedback** 

Feedback controls the amount of signal that gets fed back in to the delay's input.



HALF

**Speed** 

Speed selects how fast the ping pong effect will be. Normal, will be the same speed as the delay sync value. Half, will be double the delay value.



Mode

Mode selects the type of ping pong.

**Standard** is a classic ping pong effect that alternates from left to right with each delay.

**Paradiddle** is a special ping pong that uses a paradiddle pattern to alternate between left and right. The pattern is L R L L R L R R. This creates a more even stereo image, as classic ping pong can often sound louder on one side.



### Offset

Offset creates an offset in one of the channels to make the sound wider. This uses the haas effect.



### Ping/Pong

Ping/Pong controls the amount of the ping pong effect and decides if it will start on the right or left.

### **Tape**



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.



Output gain controls the final output volume of the plugin.

### 0.00 dB Delay gain

Delay gain controls the volume of the delay signal.



#### Repeats

Repeats controls how long the tail of delays last. It is very similar to feedback, however it also changes some other processors such as filter and saturation.



#### Shuffle

Shuffle simulates shuffling by offseting every other delay.



### **Ducking release**

Ducking release controls how fast the ducked signal can return to normal volume.



#### **Ducking**

Ducking reduces the level of the delay when the dry signal is present. This is a great way to stop the delay from overwhelming the sound and lets it cut through a mix more clearly.

### Length

Straight 1/8

Length controls the note value of the delay time, this is synced to the host tempo.



#### **Delay**

Delay controls the delay time.



#### Width

Width creates an offset in one of the channels to make the sound wider. This uses the haas effect.



#### **Panorama**

Panorama controls the stereo position of the delay.



#### Ping/Pong

Ping/Pong is a classic delay effect that alternates each delay from channel to channel.



#### **Sync**

Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



### Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



High controls the gain of a high shelf EQ.

Mid controls the gain of a mid peak EQ.



Mid

Low controls the gain of a low shelf EQ.



Color selects the sound character of the tape.



**N** Age

Age controls the quality of the tape.



Wow & Flutter

Wow & Flutter controls the fluctuations of tape speed.



Drive controls the amount of tape saturation.

### **Thrower**



# 0.00 dB Delay gain Delay gain controls the volume of the delay signal.

## 0.00 dB Output gain

Output gain controls the final output volume of the plugin.

# 0.00 dB Delay gain

Delay gain controls the volume of the delay signal.



### Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



### Length

Length controls the note value of the delay time, this is synced to the host tempo.



**Feedback** 

Feedback controls the amount of signal that gets fed back in to the delay's input.

Dotted 1/4 Length

Length controls the note value of the delay time, this is synced to the host tempo.

Straight 1/16 Length

Length controls the note value of the delay time, this is synced to the host tempo.



Length

Length controls the note value of the delay time, this is synced to the host tempo.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



#### **Phaser**

Phaser controls the amont of the phaser effect.



#### Width

Width creates an offset in one of the channels to make the sound wider. This uses the haas effect.



LP

LP controls the frequency of the low-pass filter.



#### HP

HP controls the frequency of the high-pass filter.



**Time manipulation** 

Time manipulation selects a special time modification.



Auto-pan selects the rate of stereo modulation.



Type selects if high-pass or low-pass filter will be used.



Position selects it the filter will be placed before or after the delay.



Speed selects how fast the filter frequency will be modulated. **Fast** = 1 bar, **Slow** = 2 bars.



Feedback controls the amount of signal that gets fed back in to the delay's input.

### Hold

Hold controls how long the on/off will stay on each time it is triggered.

### **Interval**

Dotted 1/2

Interval controls the speed at which the on/off is triggered.



On/Off switches the delay output on and off.



**Feedback** 

Feedback controls the amount of signal that gets fed back in to the delay's input.

### Hold

1/4

Hold controls how long the on/off will stay on each time it is triggered.

### **Interval**

Straight 1/4

Interval controls the speed at which the on/off is triggered.



On/Off

On/Off switches the delay output on and off.

### **Time machine**



Delay gain

Delay gain controls the volume of the delay signal.

Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

Dry/Wet

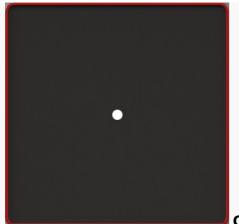
Dry/Wet controls the mix of the delayed signal with the dry signal.

Tape Modern Spectral Mode

Tape = Tape delay emulation. Modulation of the delay parameter creates pitch shifts as whith slowing down or speeding up tape playback speed. Tape saturatin, Wow & Flutter and vintage shelf EQ.

Modern = High quality transparant dealy. Has ping/pong and shuffle/swing, minimum phase peak EQ and wave shaping.

Spectral = Advanced spectral delay. Change pitch delay time and feedback individually for each frequency, has a new sound!



Character

Character

**Tape** = Wow and Flutter, creates a warm chorus trype sound. Helps to soften/defuse the delays when using higher feedback values. **X** = Modulation speed. **Y** = Modulation amount.

 $\label{eq:modern} \textbf{Modern} = \text{Introduces swing and ping pong to create variations in the delays.}$ 

**X** = Ping/Pong left or right. **Y** = Shuffle/Swing.

**Spectral** = Spectral morphing of pitch and delay time.

X =Offsets delay time for low or high frequencies. Y =Increaces or decreases pitch with each delay.



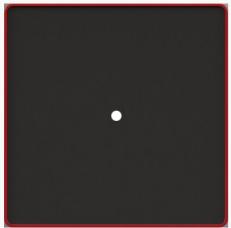
**High EQ** 

High EQ

**Tape** = Warm analog shelf EQ inside the feedback loop, simulates tape and increases in brilliance as the feedback increases.  $\mathbf{X} = \text{Frequency}, \ \mathbf{Y} = \text{Gain}$ 

**Modern** = Transparant minimum phase EQ, post feedback allows feedback to be changed without changing the EQ. **X** = Frequency, **Y** = Gain

**Spectral** = Spectral feedback, that has inividual feedback values for each frequency.  $\mathbf{X}$  = Central Frequency,  $\mathbf{Y}$  = Feedback Level



Low EQ

Low EQ

**Tape** = Warm analog shelf EQ inside the feedback loop, simulates tape and increases in brilliance as the feedback increases.  $\mathbf{X} = \text{Frequency}, \ \mathbf{Y} = \text{Gain}$ 

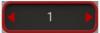
**Modern** = Transparant minimum phase EQ, post feedback allows feedback to be changed without changing the EQ.

X = Frequency, Y = Gain

**Spectral** = Spectral feedback, that has inividual feedback values for each frequency.

X = Central Frequency, Y = Feedback Level

### Count



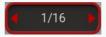
Count selects a value that the delay value wil be multiplied by.

### **Type**



Type selects the note type of the delay time, this is synced to the host tempo.

### Length



Length controls the note value of the delay time, this is synced to the host tempo.



**Delay** 

Delay controls the delay time.



### **Saturation**

Saturation

Tape = Emulates tape saturation,

**Modern** = Gain compensadted wave shaping, for smooth saturation.

**Spectral** = Polyphonic saturation, gives musical results by only saturating the harmonics in your audio.



#### Width

Width

**Tape** = Creates pitch variation between channels, making a double tracked type effect.

**Modern** = Offsets the delay in one channel to create a Haas effect.

**Spectral** = Multiband spectral stereo widening.



### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.

### **Top & bottom**



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB **Delay gain**Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



Intesity

Intesity controls how quickly each band fades into the next one. It's similar to the Slope parameter used with analog crossovers.



Speed

Speed controls the speed of the level follower. This can be used to control how quickly levels will rise/fall above/bellow the threshold.



#### Crossover

Crossover controls the threshold for the dynamic split. Levels above the threshold will be sent to the top delay nad bellow the threshold to the bottom delay.



#### **Solo Bottom**

Solo Bottom allows you to hear only the bottom delay. This is useful for setting the crossover settings.



### **Solo Top**

Solo Top allows you to hear only the top delay. This is useful for setting the crossover settings.



Reverb

Reverb controls the amount of reverb.



Chorus

Chorus controls the amount of chorus.



**Saturation** 

Saturation controls the amount of distortion.



**Formant** 

Formant controls the formant of the delay signal.



**Frequency** 

Frequency controls the frequency shift of the delay signal.



Pitch controls the pitch of the delay signal, this is measured in semitones.



l Reverb

Reverb controls the amount of reverb.



Chorus

Chorus controls the amount of chorus.



**Saturation** 

Saturation controls the amount of distortion.



**Formant** 

Formant controls the formant of the delay signal.



Frequency

Frequency controls the frequency shift of the delay signal.



**Pitch** 

Pitch controls the pitch of the delay signal, this is measured in semitones.



Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.

### Length

Dotted 1/4

Length controls the note value of the delay time, this is synced to the host tempo.



Delay controls the delay time.



Frequency controls the central frequency at which the feedback will be at its highest.



### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



### Gain

Gain controls the volume of the delay.



**Reverb** 

Reverb controls the amount of reverb.



#### **Chorus**

Chorus controls the amount of chorus.



#### **Saturation**

Saturation controls the amount of distortion.



### Formant

Formant controls the formant of the delay signal.



### **Frequency**

Frequency controls the frequency shift of the delay signal.



#### **Pitch**

Pitch controls the pitch of the delay signal, this is measured in semitones.



### Reverb

Reverb controls the amount of reverb.



### **Chorus**

Chorus controls the amount of chorus.



### Saturation

Saturation controls the amount of distortion.



#### **Formant**

Formant controls the formant of the delay signal.



#### **Frequency**

Frequency controls the frequency shift of the delay signal.



### Pitch

Pitch controls the pitch of the delay signal, this is measured in semitones.



#### **Sync**

Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.

## Length

Straight 1/8

Length controls the note value of the delay time, this is synced to the host tempo.



Delay controls the delay time.



### Frequency

Frequency controls the central frequency at which the feedback will be at its highest.



### Feedback

Feedback controls the amount of signal that gets fed back in to the delay's input.



### Gain

Gain controls the volume of the delay.

### Unison



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

**Dry/Wet** 

Dry/Wet controls the mix of the delayed signal with the dry signal.

Straight Triplets Dotted **Tuplets Type** 

Type controls the note type of the delay time, this is synced to the host tempo.

1/4 1/8 1/16 Length

Length controls the note value of the delay time, this is synced to the host tempo.

6X6 8X8 **Voices**  Voices selects how many delay taps and unison voices there will be. 8X8 means there will be 8 delay voices multiplied by 8 unison voices making a total of 64 voices. This is displayed in the panels.



Wash

Wash is a multi effect that is great for risers and transitions.



### **Duck/Match**

Duck/Match is a very special control. Negative values duck the delay signal when the dry signal is present. Positive values match the amplitude of the unison signal to the dry delay signal.



#### **Modulation**

Modulation controls the amount of modulation in the unison voices. There is visual representation of the modulation displayed in the panels.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.

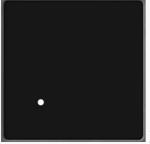


Įχ

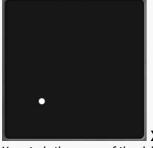
X controls the range of the filter values for the delay voices. Y controls the range of the formant values for the unison voices.



X controls the range of the pitch values for the delay voices. Y controls the range of the pitch values for the unison voices.



X controls the range of the panorama values for the delay voices. Y controls the range of the panorama values for the unison voices.



X controls the range of the delay values for the delay voices. Y controls the range of the delay values for the unison voices.

### **Alien voices**



# 0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

# 0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

# 0.00 dB Output gain

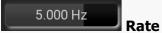
Output gain controls the final output volume of the plugin.



Depth controls the amount of vibrato.



Tremolo controls the deth of tremolo in the vibrato.



Rate controls the speed of the vibrato.



Harmonics changes the shape of the LFO which creates additional harmonics.



Frequency controls the frequency of the ring modulator.



Depth controls the amount of ring modulation.



Character controls the distribution of higher harmonics.



Drive controls the amount of distortion.



Formant controls the formant of the unison voices.



Dry/Wet controls the balance of the unsison voices with the dry signal.



Resonance controls the filter resonance.



Frequency controls the filter frequency.



Type selects what type of distortion will be used.



Voices selects the number of generated voices for the unison.



Type selects the type of filter to be used.

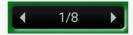


Dry/Wet controls the mix of the delayed signal with the dry signal.



Feedback controls the amount of signal that gets fed back in to the delay's input.

### Length



Length controls the note value of the delay time, this is synced to the host tempo.



### **Multiplier**

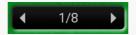
Multiplier Takes the delay time and multiplies it by the selected value.



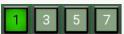
#### Shift

Shift controls the frequency for the frequency shifter.

## Length



Length controls the note value of the delay time, this is synced to the host tempo.



### **Multiplier**

Multiplier Takes the delay time and multiplies it by the selected value.



#### Shift

Shift controls the frequency for the frequency shifter.

## **Chimes**



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

**Shape** 

Shape selects the LFO shape for the ring modulator.

10000 Hz

LP controls the frequency of the low-pass filter.

100.00 Hz

HP controls the frequency of the high-pass filter.

75.0% Stepped

Stepped controls the smoothness of the transition from left to right. Higher values will make the effect suddenly jump from side to side.



Speed controls the LFO rate for the autopan.



**Feedback** 

Feedback controls the feedback level of the comb filter.



**Frequency** 

Frequency controls the frequency of the comb filter.



**Feedback** 

Feedback controls the feedback level of the comb filter.



**Frequency** 

Frequency controls the frequency of the comb filter.



Gain

Gain controls the level of the comb filter.



Gain

Gain controls the level of the comb filter.



Depth

Depth controls the amount of autopan.



Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



**Drive** 

Drive controls the amount of distortion.



Regeneration

Regeneration controls the number of additional delay taps that will be generated.



Shape selects the LFO shape for the ring modulator.



Shape

Shape selects the LFO shape for the ring modulator.



Ring - Depth

Ring - Depth controls the amount of the ring modulation.



Ring - Freq

Ring - Freq controls the frequency of the ring modulator.



Ring - Depth

Ring - Depth controls the amount of the ring modulation.



Ring - Freq controls the frequency of the ring modulator.



Ring - Depth

Ring - Depth controls the amount of the ring modulation.



Ring - Freq

Ring - Freq controls the frequency of the ring modulator.

### Length



Length controls the note value of the delay time, this is synced to the host tempo.



Level

Level controls the volume of the delay signal.

### Length



Length controls the note value of the delay time, this is synced to the host tempo.



evel

Level controls the volume of the delay signal.

### Length



Length controls the note value of the delay time, this is synced to the host tempo.



Level

Level controls the volume of the delay signal.

## **Digital chant**



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

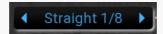
0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

### Length



Length controls the note value of the delay time, this is synced to the host tempo.



Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



Feedback controls the amount of signal that gets fed back in to the delay's input.



Octave selects which octave the harmonized signal will be.

f<sup>[2]</sup> Transpose

Transpose controls the pitch of the harmonized signal, measured in semitones.

75.0% Strumming

Strumming controls the delay offset of the harmonizer signal.



Dry/Wet

Dry/Wet controls the balance of the harmonizer signal and the dry signal.

2000 ms Decay

Decay controls the amount of time it takes for the reverb to decay.

25 m Size

Size controls the room size for the reveb.

20 ms Predelay

Predelay controls the amount of preday for the reverb.

50.0% Early/Late

Early/Late controls the balance of the early and late reflections.



Dry/Wet

Dry/Wet controls the balance of the reverb signal with the dry signal.

5.0 ms Delay

Delay controls the amount of predelay used for the chorus voices.

75.0% Spread

Spread controls how the chorus voices will be distributed over the stereo feild.

<sup>2</sup> Voices

Voices selects how many aditional voices will be used for the chorus.

0.2000 Hz Rate

Rate controls the speed of the chorus modulation.



Dry/Wet

Dry/Wet controls the balance of the chorus signal with the dry signal.



Dry/Wet controls the balance of the distorted signal with the dry signal.



Alpha, Beta, Delta, Gamma, Theta
Alpha, Beta, Delta, Gamma, Theta control the levels for different types of distortion.

### **Dirt texture**

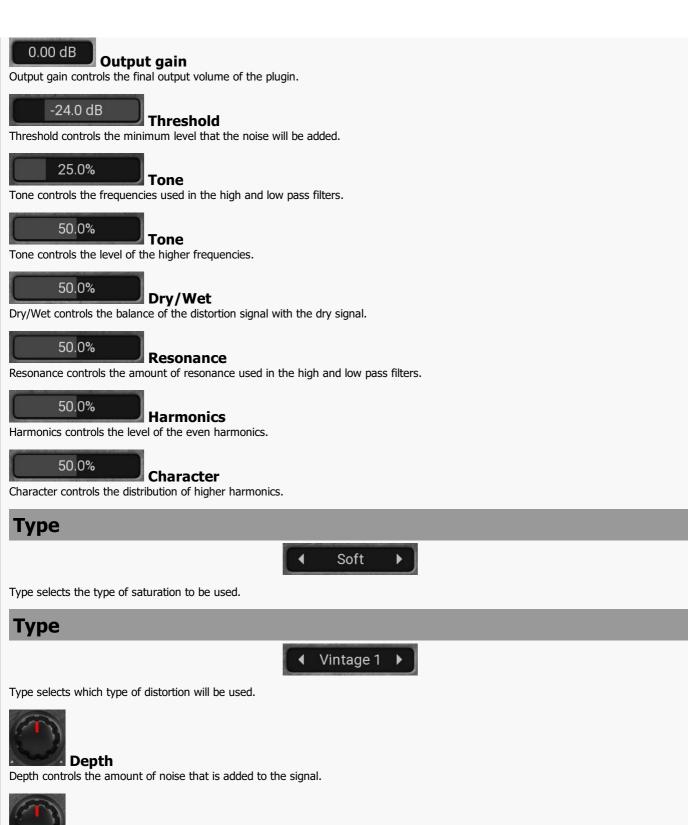


0.00 dB **Delay gain** 

Delay gain controls the volume of the delay signal.

0.00 dB **Delay gain** 

Delay gain controls the volume of the delay signal.





Drive controls the amount of saturation.



Drive

Drive controls the amount of distortion.



Dampening defines the absorption of the high frequencies caused by air and the room walls.

### Length



Length controls the note value of the delay time, this is synced to the host tempo.



**Delay/Reverb**Delay/Reverb controls the balance of the delay and reverb signals.



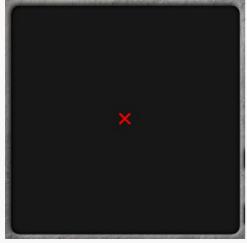
**Dry/Wet** 

Dry/Wet controls the mix of the delayed signal with the dry signal.



Decay

Decay controls the amount of time for the reverb signal to decay.



Width

Width controls the delay offset for the left and right channels.

## **Dystopia**



0.00 dB **Delay gain**Delay gain controls the volume of the delay signal.

0.00 dB **Delay gain**Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

### Length

◆ STRAIGHT 1/8 ▶

Length controls the note value of the delay time, this is synced to the host tempo.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



Ping/Pong is a classic delay effect that alternates each delay from channel to channel.



HP controls the frequency of the high-pass filter.



ΙP

LP controls the frequency of the low-pass filter.



Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



Pan

Pan controls the amount of panorama modulation.



**Grain size** 

Grain size controls the length of each individual grain.



Size

Size controls the room size of the reverb.



**Pitch** 

Pitch controls the pitch range, therefore the depth of modulation.



**Transpose** 

Transpose controls the pitch of the granular, measured in semitones.



**Time** 

Timecontrols the length of the reverb.



Speed

Speed controls the rate of modulation.



Dry/Wet

Dry/Wet controls the mix of the granular signal with the dry signal.



Dry/Wet

Dry/Wet controls the balance of the reverb signal with the dry signal.



Gain controls the level of the comb filter.



Gain

Gain controls the level of the comb filter.



Gain

Gain controls the level of the comb filter.



X controls the frequency of the comb filter.



X controls the frequency of the comb filter.



X controls the frequency of the comb filter.

### **Early reflections**



0.00 dB

**Delay gain**Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.



# Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



#### Low

Low controls the gain of a low shelf EQ.



HP controls the frequency of the high-pass filter.



LP controls the frequency of the low-pass filter.



# High

High controls the gain of a high shelf EQ.



#### Mid

Mid controls the gain of a mid peak EQ.



Mono switches the delay signal into mono.

# **Material**



Material selects the character of the resonance.



# **Stereo depth**

Stereo depth controls how much stereo widening there will be.



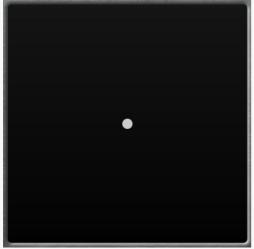
# **Complexity**

Complexity controls the density of the resonator.



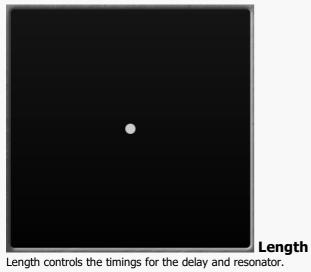
# **Absorbtion**

Absorbtion controls the amount of dampening in the resonator.



Left/Right

Left/Right controls the panorama of the delay.



# **Glitch buffer**



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB **Delay gain**Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

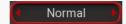
**Dry/Wet** 

Dry/Wet controls the mix of the delayed signal with the dry signal.

0.00% **Smoothness** 

Smoothness controls the smoothness between min and max values. If this parameter is set to 0% the the modulation will suddenly jump between min and max.

# **Speed**



Speed controls the rate of modulation.



A/B is a visual representation of the modulation from the A/B Switcher. If the A/B Switcher is disabled, then this parameter can control the mix of buffer A and B.

# A/B Switcher

A/B Switcher uses a step sequencer to modulate between delay buffer A and B.

# **Fill time**



Fill time controls how long the "Fill buffer" parameter will be recording until it automatically stope.



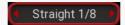
Gain controls the level of the delay signal.

# **Tap 2 length**



Tap 2 length controls the note value of the delay time, this is synced to the host tempo. In this example it decides at what rate the recorded audio will repeat.

# Tap 1 length



Tap 1 length controls the note value of the delay time, this is synced to the host tempo. In this example it decides at what rate the recorded audio will repeat.



Empty buffer clears the recorded audio, so you can capture a new take.



Fill buffer switches on recording of the dry signal, it automatically switches off. This recorded audio is then repeated and becomes the delay.

# **Fill time**



Fill time controls how long the "Fill buffer" parameter will be recording until it automatically stope.



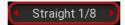
Gain controls the level of the delay signal.

# Tap 2 length



Tap 2 length controls the note value of the delay time, this is synced to the host tempo. In this example it decides at what rate the recorded audio will repeat.

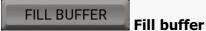
# Tap 1 length



Tap 1 length controls the note value of the delay time, this is synced to the host tempo. In this example it decides at what rate the recorded audio will repeat.



Empty buffer clears the recorded audio, so you can capture a new take.



Fill buffer switches on recording of the dry signal, it automatically switches off. This recorded audio is then repeated and becomes the delay.

# **Hippie**



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

# Multiplier



Multiplier takes the delay value and multiplies it by the paramiter value.

# Length



Length controls the note value of the delay time, this is synced to the host tempo.



## **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



# Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



#### Pitch

Pitch controls the pitch of the granular, it is measured in semitones.



### Dry/Wet

Dry/Wet controls the mix of the granular signal with the dry signal.



#### Time

Time controls the length of the reverb.



### Dry/Wet

Dry/Wet controls the mix of the reverb signal with the dry signal.



# Speed

Speed controls the rate of the phaser.



#### Depth

Depth controls the mix of the phaser signal with the dry signal.



# Speed

Speed controls the rate of the vibrato.



# Depth

Depth controls the amount of vibrato.



## **Speed**

Speed selects the sync rate of the flanger.



Depth controls the mix of the flanger signal with the dry signal.

# Mega mod



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



Pitch controls the pitch of the delays, measured in semitones.



# Delay freq

Delay freq controls how the delay times are distibuted accross the frequency spectrum.



#### Pan freq

Pan freq controls how the panorama positions are distributed accross the frequency spectrum.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



#### FB freq

FB freq controls how the feedback values are distibuted accross the frequency spectrum.



#### Gain

Gain controls the level of the delay.



#### Drive

Drive controls the amount of tape saturation.



### Delay mod

Delay mod modifies the delay length value.



#### 🖥 Pan

Pan controls the stereo position of the delay.



#### Feedback

Feedback controls the amount of signal that gets fed back in to the delay's input.



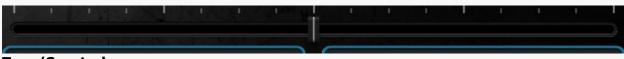
#### Filter

Filter controls the frequency of the high and low pass filters. Negative values are low-pass and posotive values are high-pass.



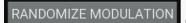
# **a** Gain

Gain controls the level of the delay.



## Tape/Spectral

Tape/Spectral controls the mix of the 2 delay types.



# **Modulation**

Modulation randomizes the values of all parameters in the Mod depth, Mod speed and Mod shape

RANDOMIZE DELAYS

Values

Values randomizes the values of all parameters in the Tape delay and Spectral delay

# Length

Straight 1/2

Length controls the note value of the delay time, this is synced to the host tempo.

# Length

Straight 1/8

Length controls the note value of the delay time, this is synced to the host tempo.

Triangle + Mod shape

Mod shape controls the modulation shape for each of the controls in the Spectral delay

Mod speed

Mod speed controls the modulation speed for each of the controls in the **Spectral delay** 

50.0% Mod depth

Mod depth controls the modulation depth for each of the controls in the **Spectral delay** 

Random Smooth Mod shape

Mod shape controls the modulation shape for each of the controls in the Tape delay

2 Mod speed

Mod speed controls the modulation speed for each of the controls in the **Tape delay** 

10.0% Mod depth

Mod depth controls the modulation depth for each of the controls in the Tape delay

# **Nebula**



O.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB **Delay gain**Delay gain controls the volume of the delay signal.

Output gain
Output gain controls the final output volume of the plugin.

Mod rate

Mod rate controls the speed of the vibrato.



Mod depth

Mod depth controls the amount of vibrato.



**Dry/Wet** 

Dry/Wet controls the mix of the delayed signal with the dry signal.



**Density**Density controls the number of generated grains.



# Freeze

Freeze stops receiving input grains and only uses the current ones.



# Mid

Mid controls the gain of a mid peak EQ.



# High

High controls the gain of a high shelf EQ.



Low

Low controls the gain of a low shelf EQ.



# **Echo time**

Echo time controls the time of the delay.



# Width

Width randomizes the panorama position of the grains.



# Length

Length controls the delay length between grains.



#### Size

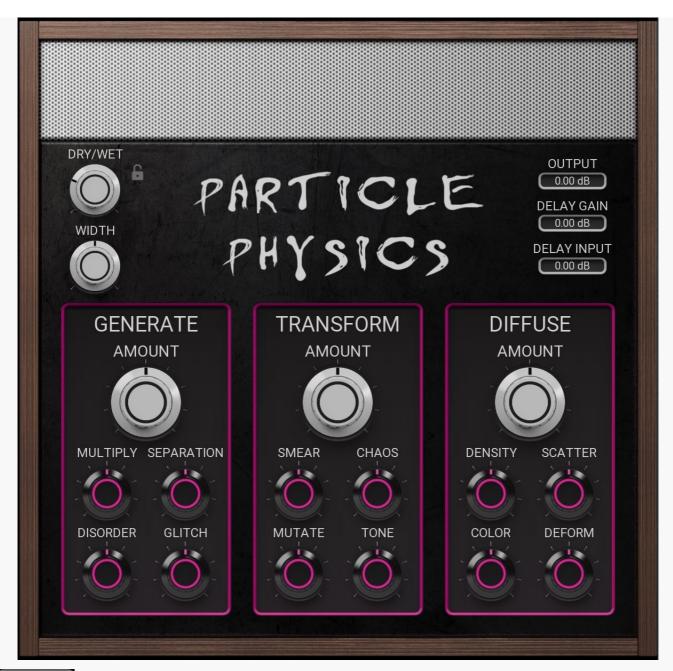
Size controls the length of each grain.



**Pitch** 

Pitch controls the pitch of the grains, measured in semitones.

# **Particle physics**



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

O.00 dB Delay gain
Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

**Deform** 

Deform skews the timing of the diffusion taps.



Color

Color controls the frequency distibution of the diffusion taps.



Scatter

Scatter controls the arrangement of the diffusion taps.



#### Density

Density controls the number of diffusion taps for the particles.



### **Amount**

Amount controls the mix between the diffused particles and non diffused particles.



#### **Tone**

Tone controls the formant of the particles.



#### Mutate

Mutate controls the amount of spectral feedback.



#### Chaos

Chaos conrols the amount of randomization of each individual frequency.



#### Smear

Smear controls how much the input time is slowed. With 100% the input spectrum gets completely frozen.



### **Amount**

Amount controls the mix of the transformed particles with the non transformed particles.



#### Width

Width controls the amount widening for the particles.



# Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



#### **Glitch**

Glitch randomizes the size of the particles.



#### Disorder

Disorder controls the delay randomness for the particles.



# Multiply

Multiply controls the amount of additional particles that are generated.



Amount controls the mix of generated particles with the dry signal.

# Resonator



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain is the last thing in the signal chain and controld final output volume of the plugin.

98.00 Hz Frequency

Frequency controls the frequency of the resonator.



Gain

Gain controls the volume of the resonator.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the resonator input.



### **Frequency**

Frequency controls the frequency of the resonator.



#### Gain

Gain controls the volume of the resonator.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the resonator input.



## **Frequency**

Frequency controls the frequency of the resonator.



#### Gain

Gain controls the volume of the resonator.



#### Feedback

Feedback controls the amount of signal that gets fed back in to the resonator input.



### Frequency

Frequency controls the frequency of the resonator.



#### Gain

Gain controls the volume of the resonator.



# **Feedback**

Feedback controls the amount of signal that gets fed back in to the resonator input.



### **Shuffle**

Shuffle simulates shuffling by offseting every other delay.



#### Dry

Dry controls  $\bar{t}$ he level of the non delayed signal, this is still processed by the resonator.



Panorama controls the stereo position of the delay.



Width creates an offset in one of the channels to make the sound wider. This uses the haas effect.

# Length

1 / 4T

Length controls the note value of the delay time, this is synced to the host tempo.

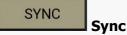


Delay controls the delay time.



Ping pong

Ping pong is a classic delay effect that alternates each delay from channel to channel.



Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



LP controls the frequency of the low-pass filter.



HP controls the frequency of the high-pass filter.



Low

Low controls the gain of a low shelf EQ.



High controls the gain of a high shelf EQ.



Mid

Mid controls the gain of a mid peak EQ.



**Dry/Wet** 

Dry/Wet controls the mix of the delayed signal with the dry signal.

Aluminum Chromium Cobalt Cadmium Tungsten **Bismuth Titanium** Lithium Iron Mode

Mode selects the type of resonator to be used.



**Feedback** 

Feedback controls the amount of signal that gets fed back in to the delay's input.

# **Shape shifter**



0.00 dB **Delay gain** 

Delay gain controls the volume of the delay signal.

0.00 dB **Delay gain** 

Delay gain controls the volume of the delay signal.

0.00 dB **Output gain** 

Output gain controls the final output volume of the plugin.

Dry/Wet

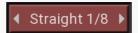
Dry/Wet controls the mix of the delayed signal with the dry signal.

Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



Delay controls the delay time.

# Length



Length controls the note value of the delay time, this is synced to the host tempo.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



### **Distortion delay**

Distortion delay is a delay with a distortion inside the feedback loop. Dry/Wet controls the mix of the distortion signal with the delay signal. X/Y Pad bellow, controls the character of the distortion.



# **Sync**

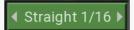
Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



Delay

Delay controls the delay time.

# Length



Length controls the note value of the delay time, this is synced to the host tempo.



# **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



#### Filter delay

Filter delay is a delay with a filter inside the feedback loop. Dry/Wet controls the mix of the filtered signal with the delay signal. X/Y Pad bellow, controls the character of the filter.



#### Svnc

Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



**Delay** 

Delay controls the delay time.

# Length



Length controls the note value of the delay time, this is synced to the host tempo.



# **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



## **Reverb delay**

Reverb delay is a delay with a reverb inside the feedback loop. Dry/Wet controls the mix of the reverb signal with the delay signal. X/Y Pad above, controls the character of the reverb.



#### Sync

Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



Delay controls the delay time.

# Length



Length controls the note value of the delay time, this is synced to the host tempo.



### **Feedback**

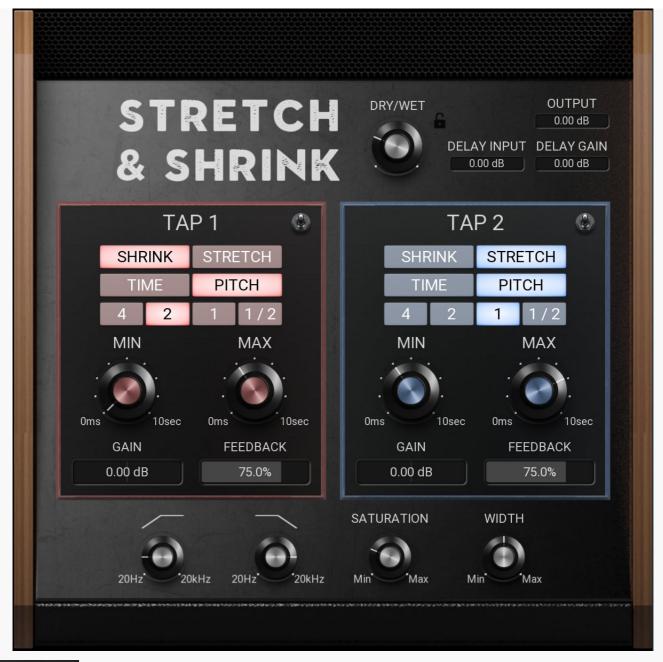
Feedback controls the amount of signal that gets fed back in to the delay's input.



### Stereo delay

Stereo delay is a delay with a stereo widener and autopan inside the feedback loop. Dry/Wet controls the mix of the stereo signal with the delay signal. X/Y Pad above, controls the character of the stereo effects..

# Stretch & shrink



0.00 dB

Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

75.0% **Feedback** 

Feedback controls the amount of signal that gets fed back in to the delay's input.

0.00 dB Gain

Gain controls the volume of the delay.



Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.

SHRINK **Shrink Stetch** 

Shrink Stetch selects if the delay time will speed up or slow down. Stretch modulates from min to max, Shrink modulates from max to

min.



Time Pitch selects if the delay modulation will affect pitch also.

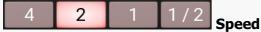


Min sets the minimum delay value for the modulation.



Max

Max sets the maximum delay value for the modulation.



Speed selects how long it takes the modulation to go from min to max (or max to min) this is measured in number of bars.



Feedback controls the amount of signal that gets fed back in to the delay's input.



Shrink Stetch selects if the delay time will speed up or slow down. Stretch modulates from min to max, Shrink modulates from max to min.



Time Pitch selects if the delay modulation will affect pitch also.

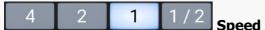


Min sets the minimum delay value for the modulation.

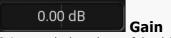


Max

Max sets the maximum delay value for the modulation.



Speed selects how long it takes the modulation to go from min to max (or max to min) this is measured in number of bars.



Gain controls the volume of the delay.



HP controls the frequency of the high-pass filter.



controls the frequency of the low-pass filter.



#### Saturation

Saturation controls the amount of saturation on the delay signal.



Width pans Tap 1 left and Tap 2 right. Both taps are in ping pong mode.

# **Twisted**



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

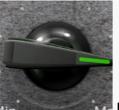
0.00 dB Output gain

Output gain is the last thing in the signal chain and controld final output volume of the plugin.



Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



**Feedback** 

Feedback controls the amount of signal that gets fed back in to the delay's input.

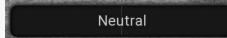


Attack

Attack controls the attack level of the transient shaper.



Decay Decay controls the number of taps.



Color

Color controls the filter frequencies of the taps.



**Rate** 

Rate controls the delay tap times.



Width

Width controls the stereo position of the taps.

# **Upsurge**



0.00 dB **Delay gain**Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB **Output gain** 

Output gain is the last thing in the signal chain and controld final output volume of the plugin.

**Dry signal** 

Dry signal controls the level of the non delay signal, this is still processed by the upsurge effect.

**Shuffle** 

Shuffle simulates shuffling by offseting every other delay.



#### **Panorama**

Panorama controls the stereo position of the delay.



Width

Width creates an offset in one of the channels to make the sound wider. This uses the haas effect.



Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



Length

Length controls the length of the reverse reverb.



Density

Density controls the density of the reverse reverb.



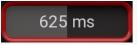
Size

Size controls the room size of the reverse reverb.



**Decay** 

Decay controls the speed of the decay of the reverse reverb.



**Dry delay** 

Dry delay controls the delay time of the delay signal that is not effected by the reverse reverb.



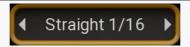
Dry

Dry activates a deley that is not effected by the reverse reverb.



Repeats

Repeats controls how long the tail of delays last. It is very similar to feedback, however it also changes some other processors such as filter and saturation.



Length controls the note value of the delay time, this is synced to the host tempo.



Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.



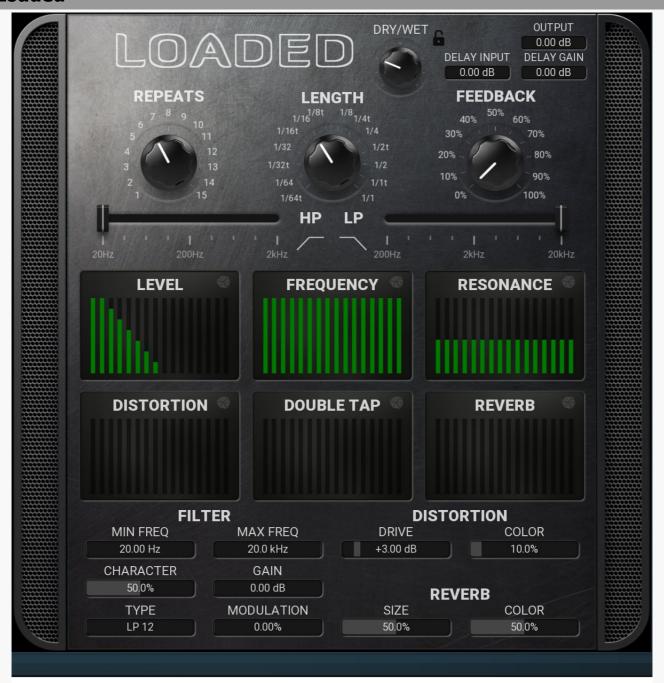
Delay controls the delay time.



Ping/Pong

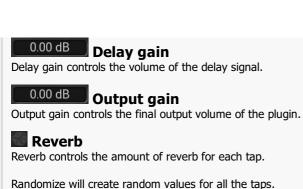
Ping/Pong is a classic delay effect that alternates each delay from channel to channel.

# Loaded



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.



**Double** Double controls the double speed of each tap.

Randomize will create random values for all the taps.

# Distortion

Distortion controls the amount of distortion for each tap.

Randomize will create random values for all the taps.

Reso controls the filter resonance of each tap.

Randomize will create random values for all the taps.

## Level

Level controls the volume of each tap.

Randomize will create random values for all the taps.

#### 50.0% Color

Color controls the sound character of the reveb.

#### 10.0% Color

Color controls the sound character of the distortion.

#### 0.00 dB Gain

Gain controls the central gain of the filter.

#### 50.0% Character

Character controls how the filter sounds, this is different for each filter type.

# **Modulation**

Modulation controls the modulation amount of the filter frequencies.

# LP 12

Type selects the filter type.

50.0% **Size** 

Size controls the length and room size of the reverb.

# +3.00 dB

Drive controls the amount of distortion.

#### 20.0 kHz **Max frequency**

Max frequency controls the maximum frequency of the filter.

#### 20.00 Hz Min frequency

Min frequency controls the minimum frequency of the filter.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



#### **Repeats**

Repeats selects the number of taps.

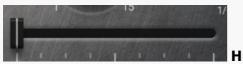


### Length

Length controls the note value of the delay time, this is synced to the host tempo.



LP controls the frequency of the low-pass filter.



HP controls the frequency of the high-pass filter.



### Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.

# **Frequency**

Frequency controls the filter frequency of each tap.

Randomize will create random values for all the taps.

# **Stepped / Continuous**

Stepped / Continuous button lets you switch between 2 editor modes - stepped, which resembles the vintage analog gear by providing only a limit set of values, and continuous, which is traditional for digital user interfaces. There is absolutely no difference in sound, however for some people it is easier to have limited set of options to choose from, hence they prefer stepped mode. Others enjoy the full capacity of the digital processing, hence they prefer continuous mode.

# Oh boy



# 0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

# 0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

# 0.00 dB Output gain

Output gain controls the final output volume of the plugin.



#### **High-shelf frequency**

High-shelf frequency controls the frequency at which the higher frequencies will be reduced.



#### High-shelf cut

High-shelf cut controls the amount that the higher frequencies will be reduced to lessen the harshness of the distortion.



### Color

Color controls the sound character of the distortion.



# Gain

Gain controls the central gain of the filter.



Q controls the filter resonance.



#### **Type**

Type selects the type of filter to be used.



#### **Drive**

Drive controls the amount of distortion.



# **Frequency**

Frequency controls the frequency of the filter.



#### Pan

Pan controls the stereo position of the delay.



#### Level

Level controls the volume of the delay.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



# **Delay**

Delay controls the delay time.



### High-shelf frequency

High-shelf frequency controls the frequency at which the higher frequencies will be reduced.



# High-shelf cut

High-shelf cut controls the amount that the higher frequencies will be reduced to lessen the harshness of the distortion.



### Color

Color controls the sound character of the distortion.



#### Gain

Gain controls the central gain of the filter.



#### l٥

Q controls the filter resonance.



# Type

Type selects the type of filter to be used.



#### **Drive**

Drive controls the amount of distortion.



### **Frequency**

Frequency controls the frequency of the filter.



# Pan

Pan controls the stereo position of the delay.



#### Level

Level controls the volume of the delay.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



#### Delay

Delay controls the delay time.



### Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.

# 0 ms Delay

Delay controls the delay time of the tap.

# silence Level

Level controls the volume of the tap.

# 0 ms Delay

Delay controls the delay time of the tap.

# silence Level

Level controls the volume of the tap.

# 0 ms Delay

Delay controls the delay time of the tap.

# 0.00 dB Level

Level controls the volume of the tap.



### Balance

Balance controls the output of the tap. -100% sends the signal to delay 1, 100% sends the signal to delay 2 and 0% sends an equal amount to both delays.



#### **Balance**

Balance controls the output of the tap. -100% sends the signal to delay 1, 100% sends the signal to delay 2 and 0% sends an equal amount to both delays.



# Balance

Balance controls the output of the tap. -100% sends the signal to delay 1, 100% sends the signal to delay 2 and 0% sends an equal amount to both delays.



#### **Depth**

Depth controls the modulation amount for the modulatable parameters.



Speed controls the rate for the modulatable parameters.

### Sine Shape

Shape controls the LFO shape for the modulatable parameters.

# **Order & chaos**



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

# 0.00 dB

0.00 dB **Delay gain**Delay gain controls the volume of the delay signal.

# 0.00 dB Output gain

Output gain controls the final output volume of the plugin.

Taps selects the number of delay taps.



**Dry/Wet** 

Dry/Wet controls the mix of the delayed signal with the dry signal.



LP controls the frequency of the low-pass filter.



HP controls the frequency of the high-pass filter.



# **Ducking**

Ducking reduces the level of the delay when the dry signal is present. This is a great way to stop the delay from overwhelming the sound and lets it cut through a mix more clearly.



### Reverb

Reverb controls the mix between the reverb signal and the dry signal.

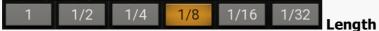


#### **Saturation**

Saturation controls the amount of distortion.



Type controls the note type of the delay time, this is synced to the host tempo.



Length controls the note value of the delay time, this is synced to the host tempo.

# RANDOM Random

Random sets random level values for all the taps.

# RANDOM

Pan controls the stereo position for each tap.

Random creates random values for all taps.

# RANDOM Filter

Filter controls the filter frequency for each tap. Positive values are high-pass and negative values are low-pass.

Random creates random values for all taps.

# VARIATE Time

Time modifies the delay times for each tap.

Variate creates a small random change for all taps. This is good for adding some subtle movement to the sound.

Random creates random values for all taps.

# RANDOM Feedback

Feedback controls the amount of feedback for each tap.

Random creates random values for all taps.

# **Tabbed**



0.00 dB **Delay gain**Delay gain controls the volume of the delay signal.

0.00 dB **Delay gain**Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.

200 ms **Auto-swell** 

Auto-swell controls the time it takes for the delay signal to fade in.



**Auto-swell** 

Auto-swell controls the time it takes for the delay signal to fade in.



Mod rate controls the speed of vibrato.



**Mod depth** 

Mod depth controls the amount of vibrato.



High

High controls the gain of a high shelf EQ.



#### Mid

Mid controls the gain of a mid peak EQ.



#### I ow

Low controls the gain of a low shelf EQ.



Style selects the sound character of the delay.



# **Output**

Output controls the volume of the delay tap.



### **Output**

Output controls the volume of the delay tap.



### Output

Output controls the volume of the delay tap.



### Output

Output controls the volume of the delay tap.



### Output

Output controls the volume of the delay tap.



### **Output**

Output controls the volume of the delay tap.



### **Output**

Output controls the volume of the delay tap.



### **Output**

Output controls the volume of the delay tap.



### Pan

Pan controls the stereo position of the delay.



### Pan

Pan controls the stereo position of the delay.



#### Pan

Pan controls the stereo position of the delay.



#### Pan

Pan controls the stereo position of the delay.



### Pan

Pan controls the stereo position of the delay.



### Pan

Pan controls the stereo position of the delay.



### Pan

Pan controls the stereo position of the delay.



#### Pan

Pan controls the stereo position of the delay.



### Feedback

Feedback controls the amount of signal that gets fed back in to the delay's input.



### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



### Feedback

Feedback controls the amount of signal that gets fed back in to the delay's input.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



#### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



Delay controls the delay time.



Delay controls the delay time.



### **Delay**

Delay controls the delay time.



### **Delay**

Delay controls the delay time.



### Delay

Delay controls the delay time.



### Delay

Delay controls the delay time.



Delay controls the delay time.



### Delay

Delay controls the delay time.

### Tap my pitch up



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

25 ms Resolution

Resolution defines how accurately the processor can analyze the audio. The lower the resolution, the more CPU is needed, but also more of the time domain characteristics are preserved, hence potentially higher audio quality.

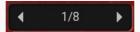
Buffer size

Buffer size controls the block size used for processing. This plugin performs processing in the so-called spectral domain. This allows it to access features that are normally unavailable, however in order to do that it requires the audio to be separated into blocks of audio. As a result, the plugin causes latency. This setting controls the latency length. Additionally, the higher it is the more detail the plugin has, which usually provides higher audio quality (but this is not always the case!), at the expense of greater CPU cost and increased latency. Also note that with some settings having too high a buffer size will produce a sort of time-smearing, ambient-like sound quality. Also note that this value is assigned only for sampling rates around 44-48KHz, the engine may readjust it for higher sampling rates in order to get similar audio results.



Dry/Wet controls the mix of the delayed signal with the dry signal.

## Length



Length controls the note value of the delay time, this is synced to the host tempo.



LP controls the frequency of the low-pass filter.



HP

HP controls the frequency of the high-pass filter.



### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.



Taps selects the number of delay taps.

#### **Ditch**

Pitch controls the pitch of each delay tap, this is measured in semitones.

Randomize creates random values for all taps.

#### Formant

Formant controls the formant of each delay tap.

Randomize creates random values for all taps.

### Frequency

Frequency controls the frequency shift of each delay tap.

Randomize creates random values for all taps.

#### Level

Level controls the volume of each delay tap.

### **Stepped / Continuous**

Stepped / Continuous button lets you switch between 2 editor modes - stepped, which resembles the vintage analog gear by providing only a limit set of values, and continuous, which is traditional for digital user interfaces. There is absolutely no difference in sound, however for some people it is easier to have limited set of options to choose from, hence they prefer stepped mode. Others enjoy the full capacity of the digital processing, hence they prefer continuous mode.

### **Liquid Time**



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.



Delay gain controls the volume of the delay signal.

### 0.00 dB Output gain

Output gain controls the final output volume of the plugin.



Max controls the maximum value of the modulation range.



Min controls the minimum value of the modulation range.



Rate selects the speed of the LFO, measured in bars.



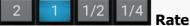
Shape selects the shape of the LFO.



Max controls the maximum value of the modulation range.



Min controls the minimum value of the modulation range.



Rate selects the speed of the LFO, measured in bars.



Shape selects the shape of the LFO.

### Length

◆ Straight 1/4 ▶

Length controls the note value of the delay time, this is synced to the host tempo.



I P

LP controls the frequency of the low-pass filter.



HP

HP controls the frequency of the high-pass filter.



| Ping/Pong

Ping/Pong controls the amount of the ping pong effect and decides if it will start on the right or left.



**Feedback** 

Feedback controls the amount of signal that gets fed back in to the delay's input.

## Length



Length controls the note value of the delay time, this is synced to the host tempo.



LP

LP controls the frequency of the low-pass filter.



ΗP

HP controls the frequency of the high-pass filter.



Ping/Pong

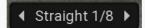
Ping/Pong controls the amount of the ping pong effect and decides if it will start on the right or left.



### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.

### Length



Length controls the note value of the delay time, this is synced to the host tempo.



LP

LP controls the frequency of the low-pass filter.



ΗP

HP controls the frequency of the high-pass filter.



Ping/Pong

Ping/Pong controls the amount of the ping pong effect and decides if it will start on the right or left.



### **Feedback**

Feedback controls the amount of signal that gets fed back in to the delay's input.

REVERSE FREEZE SLOW DOWN SPEED UP NORMAL Mode

Mode selects which time bassed effect will be used. Please note that there must be audio playing before selecting freeze mode, or it will feeze silence. If you wish to re freeze, you must select a different mode and the select freeze again.



Dry/Wet

Dry/Wet controls the mix of the delayed signal with the dry signal.



**Buffer feedback** 

Buffer feedback controls the amount of output from the buffer that will be fed back into the buffer input. This is a synced feedback and





Order selects which order the taps will be triggered.



Type selects the speed of the time bassed effect.



Buffer length selects the length of time the buffer will fill until it starts playback.

### Oktafon



0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Delay gain

Delay gain controls the volume of the delay signal.

0.00 dB Output gain

Output gain controls the final output volume of the plugin.

-6.00 dB Feedback

Feedback controls the level of signal fed back into the delay.

### Length

Straight 1/8

Length controls the note value of the delay time, this is synced to the host tempo.



Loop places all the pitch voices inside the feedback loop. This means that the pich values progressivly increace with each delay. It can be used to make rising or falling pitch and reverb type effects.



Length controls the note value of the delay time, this is synced to the host tempo.



Ping/Pong is a classic delay effect that alternates each delay from channel to channel.



Sync activates sync mode where the delay time will be in musical values and synced to the host tempo.

### Length

Straight 1/8

Length controls the note value of the delay time, this is synced to the host tempo.

### Multiply

1

Multiply selects multiples of the delay length.

80.00 Hz

HPF controls the frequency of the high-pass filter. It is inside the feedback chain, therefore the effect of the filter becomes more prominent with each delay.



Shuffle simulates shuffling by offseting every other delay.

8000 Hz LPF

LPF controls the frequency of the low-pass filter. It is inside the feedback chain, therefore the effect of the filter becomes more prominent with each delay.



Feedback controls the amount of signal that gets fed back in to the delay's input.



Delay controls the level of the deley signal.



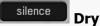
#### **Pitch**

Pitch controls the pitch shift for the voice. When "Chromatic" scale is set, then the Pitch shift happens in semitones. When any other scale is set, the pitch will shift to the nearest available note from the selected scale.

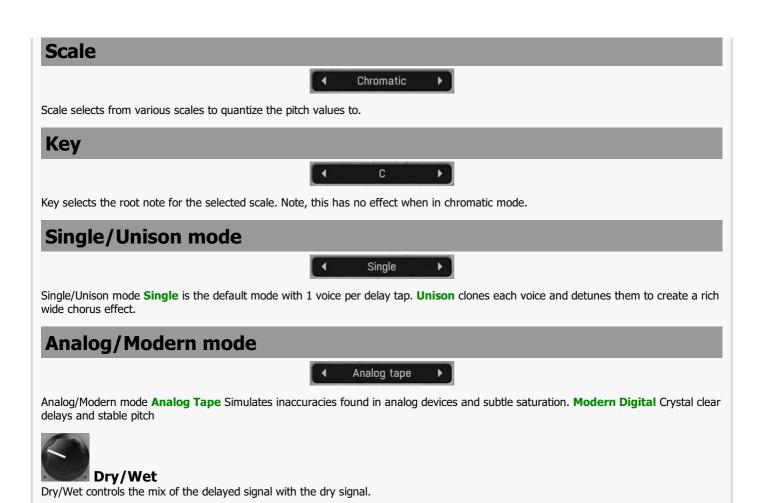


Pan

Pan controls the stereo position of the delay and dry signals.



Dry controls the level of non-delayed signal. This signal is still effected by the pitch shift.





Time graph button switches between the metering view and the time-graphs. The metering view provides an immediate view of the current values including a text representation. The time-graphs provide the same information over a period of time. Since different time-graphs often need different units, only the most important units are provided.



Pause button pauses the processing.

### Popun

Popup button shows a pop-up window and moves the whole metering / time-graph system into it. This is especially useful in cases where you cannot enlarge the meters within the main window or such a task is too complicated. The pop-up window can be arbitrarily resized. In metering mode it is useful for easier reading from a distance for example. In time-graph mode it is useful for getting higher accuracy and a longer time perspective.

# Enable

Enable button enables or disables the metering system. You can disable it to save system resources.

# Collapse

Collapse button minimizes or enlarges the panel to release space for other editors.

# Collapse

Collapse button minimizes or enlarges the panel to release space for other editors.

Collapse button minimizes or enlarges the panel to release space for other editors.	