# stammen[n] V3

exp

Stammelmi (U

drolo





#### wet/dry:

Controls the level of the wet and dry signals. Unity gain is around noon position.

## sample rate

Controls the sample rate at which the DSP chip will run. It goes from around I6kHz to 60kHz. Increasing the sample rate will have different effects depending on the chosen patch but as a general guide, as you decrease the sample rate, the delay/sample times get bigger (from 0.5 to 2sec), the audio quality gets lower and filter ranges get lower. At both extremes of this control you might hear noise as the sample rate gets in the audio range.

#### mode selector:

Select one of the 8 loaded patches (Note: When you change to a different patch, any sample that was held or looped in the previous patch will be deleted). Also both of the footswitches get reset to the off position.

## control knob

its function will depend on the selected mode.

# bypass switch:

If you give it a short tap (<0.3sec) it acts in latching mode. If you press it for more than 0.3sec you are in momentary mode.

## function switch:

its function will depend on the selected mode. If you give it a short tap (<0.3sec) it acts in latching mode. If you press it for more than 0.3sec you are in momentary mode. (Except in TT mode where it is only used to tap in the tempo)

## **Description of the 4 looping modes**

## TT (tap tempo)

A microlooper with tap tempo and 4 subdivisions.

The bypass switch starts the loop when engaged. The tempo can be set manually with the control knob or by tapping the tempo with the function switch. When adjusting the tempo manually, turning the control knob while a loop is running will change the pitch and content of the loop in a destructive manner.

When tapping the tempo with the function switch, you need to allow at least 150ms between each tap. The control knob is used to define the tap tempo multiplier and is divided in 4 sections. Turning from left to right the multiplier is : 8x - 4x - 2x - 1x

When turning the control knob after you have tapped a tempo, the pitch change does not occur like when you only adjust the tempo manually.

## RT (random tempo)

A microlooper with random tempo and time stretch options.

You can adjust the loop size with the control knob. When you set the control knob to its minimum you engege the random tempo mode. Then each time you press the bypass switch, the loop starts with a different, random tempo (smaller or larger sample sizes).

When you engage the function switch (momentarily or latching) the loop gets stretched and slowed down while keeping the original pitch.

# GL (glitch delay):

The sample size randomly changes, feeds back and loops. When you engage the function switch (momentarily or latching) feedback with an octave up pitch shifter is added. The control knob defines the rate at which the random states change and how glitchy the audio gets processed.

## TL (tape loop):

Works like a loop of tape that can be sped up or slowed down with the control knob. In the middle position the loop runs at normal speed/pitch. CW is double speed/1 octave up. CCW is half speed/1 octave down. When you engage the function switch (momentarily or latching) you will start looping the current sample.

# **Description of the 4 hold modes**

#### The 4 modes have these functions in common:

The bypass switch starts the effect and freezes the ongoing sample. Over time the signal will start to slowly degrade as it circles through the effect (after about 5 minutes using low resolution it gets noticeable)

The function switch can be used to add another layer of audio. If you leave the function switch engaged, you can use these modes as reverbs, since the effect keeps processing new incoming audio and letting it decay.

## SW (swell)

The control knob defines how fast the held sample fades in and out. NOTE: in order to allow the signal to fade out appropriately, in this mode the output of the effect is still connected even when the pedal is bypassed.

# **PT (pitch)**

The control knob detunes the held signal when turning CCW (like slowing down a tape).

# FL (filter)

The held signal gets processed through a filter. The control knob goes from a low pass filter on the left to a high pass filter on the right.

# ST (stutter)

The held signal gets randomly chopped off. The control knob adjusts the rate of the chopping.

# exp input:

Can be used to externally take over the control knob's function. When an expression pedal is connected, the the control knob can be used to define the max setting of the expression pedal.

Most commercially available expression pedals using a TRS plug should work. The value is not really critical, although I would not go lower than I0k.

Some examples are the Moog EP-2, Roland EV-5, and M-Audio EX-P.

You need to use 1/4 inch TRS (Stereo) plugs and cables. NO MONO PLUGS OR CABLES! These will short out the voltage regulators inside the pedal and damage it.

Here is how such a TRS plug looks like.

tip: controlling pin
ring: 3.3V supply voltage
sleeve : ground

Power Supply:

The power supply needs to be 9V/100mA center negative like the commonly used guitar pedal power supplies:



Make sure the polarity of your power supply is correct or it will damage the pedal. Do NOT run at higher voltages.

As the pedal uses a digital processor operating at high frequencies, you may hear some high pitched noise if you use it together on the same power supply with other pedals (daisy chained) even when it is bypassed. The noise can bleed through the power supply into the other pedal's signal. This is normal for such devices. It might not be the case in your particular setup but if you notice that, I would suggest using an isolated power supply.

If you really know what you are doing you can actually use a control voltage instead of a resistance based controller. But you need to consider the connections and never exceed 3.3V. If you do you will damage the pedal. Use a TRS plug. No Mono plug. TRS, not MONO :)

If you have any doubt when deciding what to connect to the expression input please send me an email and I will verify that everything is safe. Thanks ! David

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