Tuffet Manual

Synthetic FX



December, 2019

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Tuffet Users Manual



Figure 1: Tuffet

Tuffet is a unique digital filter that alters the input via two parameters.

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Input

Tuffet has a single input that drives filter.

Output

Tuffet has a five outputs that are the result of processing from the filter.

Output

The Output provides an unfiltered direct output ignoring any frequency. This is a straight output without any equalization applied.

High Pass

The High Pass output provides frequency output above the cutoff frequency.

Low Pass

The Low Pass output provides frequency output below the cutoff frequency.

Band Pass

The Band Pass output provides filtered output near the cutoff frequency.

Notch

The Notch output provides filtered output with the frequencies around and including the cutoff frequency lowered. ## Parameters

Tuffet provides parameters to adjust the overall sound of the module. Each parameter is accompanied by a CV input that accepts input from -5 volts to 10 volts that affect the value of the parameter. Each volt is equal to 10% of the total value of the parameter, and is additive. This means that if a parameter has a range of 0 to 1, and is set to 0.5, the addition of a CV input set to 1 volt will set the parameter to 0.6.

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Frequency

The Frequency parameter controls the target frequency of the frequency filter. This is defined in hertz and can be set between 0 and 20000 hertz. This Frequency is used for the split outputs:

- · Band Pass
- · High Pass
- Low Pass
- Notch

In addition, Tuffet has a V/Oct frequency input that can track the intended frequency of the filter. When a frequency is input, the Frequency parameter becomes additive.

Q

The Q parameter adjusts the "Quality" signal. This allows you to change the bandwidth of the equalization.

Lactose

The Lactose parameter controls one aspect of the signal processing, and has an input value ranging from 0 to 1.

Acid

The Acid parameter controls one aspect of the signal processing, and has an input value ranging from 0 to 1.

Delay

The Delay parameter introduces two artificial delays into the signal.

Polyphony

Tuffet is a polyphonic module, meaning that it can process input and output for more than one set of inputs at a time. Tuffet can process up to 16 channels per input. Each channel is processed separately, with its own copy of the filter, but all copies use the same parameter settings.

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