
4-Pole Manual

Synthetic FX



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4-Pole Users Manual



Figure 1: 4-Pole

4-Pole is an implementation of a Four Pole Filter, which provides a 24db drop drop at the cutoff frequency.

Input

4-Pole has a single input that drives filter.

Output

4-Pole has a single output that is the result of processing from the filter.

Parameters

4-Pole 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.

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.

In addition, 4-Pole 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.

Resonance

The Resonance parameter adjusts the amount of signal fed back into itself. This provides a louder but richer overall signal. This can be from 0 to 1.0, or 0% and 100%.

Polyphony

4-Pole is a polyphonic module, meaning that it can process input and output for more than one set of inputs at a time. 4-Pole 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.