# Rez Manual

Synthetic FX

SV MODULAR

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# Rez Users Manual

**Figure 1:** Rez

A Rez filter adds resonance to the input signal and provides three filtered outputs at a specific cutoff frequency: Band Pass, High Pass, and Low Pass.

## Input

Rez has a single input that drives filter.

## Output

Rez has a three outputs, filtered by cutoff frequency, that are the result of the processed input.

### 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.

## Parameters

Rez 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, Rez 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

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