

# BNDP556

#### **VARIABLE BANDPASS FILTER**

[RACK EXTENSION] MANUAL



FX device by Turn2on Software



Bandpass filters pass the selected range or band of frequencies (without distorting the input signal) that can be either narrow or wide, attenuating all those outside of this range. In other words, a frequency selective filter known as Band Pass Filter (BPF). The bandwidth of the filter is the difference between the upper and lower cutoff frequency points of two filters.

**BNDP556** bandpass filter is a pair of frequency cutoff state-variable filters, designed to adjust the audio frequency bandwidth.

The filters are 3-Slope (18 dB/oct), designed for Butterworth response.

The cutoff frequencies are tunable. The Low-end cutoff filter can be adjusted to a frequency in the range from 20 Hz to 200 Hz. The High-end cutoff filter can be adjusted to a frequency in the range from 2 kHz to 20 kHz.

The ideal bandpass filter would have a completely flat response (all frequencies would be passed to the output without amplification or attenuation, and would completely attenuate all frequencies outside the passband). In practice, bandpass filters are not ideal. There is a region outside of the intended passband where frequencies are attenuated, but not rejected. This is a filter roll-off (stop-band) before and after the bandpass range.

A bandpass filter can be characterized by the flatness of the frequency response

Bandpass filters can be used as tone shaping elements.

**BNDP556** is inspired by the legendary UREI<sup>™</sup> 556 Variable Bandpass Filter.

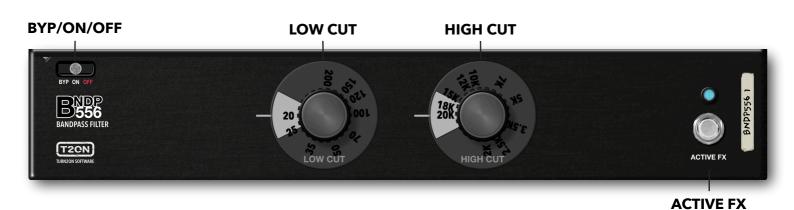
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### **FRONT PANEL**



NAME	DESCRIPTION
LOW CUT	Low-end (Highpass) filter, that cuts the Low frequency from 20 Hz to 200 Hz
HIGH CUT	High-end (Lowpass filter), that cuts the High frequency from 2 kHz to 20 kHz
LOW FREQ FLATNESS	Sets the flattest possible frequency response of the LowCut filter
HIGH FREQ FLATNESS	Sets the flattest possible frequency response of the HighCut filter
OUTPUT	Sets level of the processed signal
ACTIVE FX	Switches the effect between Active and Soft-Bypass modes. Variation of effect bypass with fade in and fade out that excludes loud peaks when you enable or disable the effect

### **REAR PANEL**





#### **AUDIO INPUT/OUTPUT:**

Mono or Stereo connections for audio signals.



#### **CV INPUTS**

Use these CV inputs to control the main parameters with external CV source curves



### **SIGNAL ROUTING ICONS**

This is a true stereo device





## BNDP556

VARIABLE BANDPASS FILTER

Reason Studios Add-on Shop



## Turn2on

Rack Extension Developer

contacts: <a href="https://turn2on.com/support@turn2on.com/">https://turn2on.com/</a>

Thanks to all beta-testers,

Special thanks to

- MrFigg (Cameron Jeffrey)
- Philip Meadows (Despondo)



Thank you very much for supporting us by choosing our products.

This allows us to develop future interesting and creative effects / utilities / instruments in the Rack Extension format.



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