

MMF

MMF is a 12dB/Octave state variable filter, otherwise known as a Multi-Mode Filter. The list of features packed into this 4hp design include manual and voltage control over cutoff frequency and resonance, a 1V/OCT CV input and a novel PING input for plucking the filter. Three independent outputs are provided for the HP, BP and LP response.

C **CUTOFF**
Use this control to change the **CUTOFF** frequency of the filter.

R **RESONANCE**
Use this control to **adjust the resonant frequency level**. Filter will self oscillate at maximum resonance.

F **FREQUENCY MOD ATTENUATOR**
This controls the **level and polarity of CV signals patched into the FM input**.

L1 **CUTOFF LEVEL LED**
Indicates the cutoff frequency level based on the manual CUTOFF control and any applied CV at the FM input and/or PING input. This LED becomes brighter as the frequency level is increased

IN **SIGNAL INPUT**
Input to the state variable filter.

FM **FM CV INPUT**
Control voltage input for the filter. CV signals will be attenuated and polarized using the FM level panel control.

1V OCT **1V/OCTAVE CV INPUT**
FM input for pitch tracking the filter cutoff. Performance is good but not perfect for VCO use.

RES CV **RESONANCE CV INPUT**
Control voltage input for the **RESONANCE** control.

PING **PING CV INPUT**
Simulated vactrol ping input. Use a trigger or gate signal at this input to ping the filter in a similar response to a fast vactrol. PING can be set to affect the filter directly or through the FM circuitry via a switch on the rear of the module.

HP **HIGH PASS OUTPUT**
High pass response output.

BP **BAND PASS OUTPUT**
Band pass response output.

LP **LOW PASS OUTPUT**
Low pass response output.

COLOR KEY LEGEND

■	PANEL CONTROL
■	LED INDICATOR
■	INPUT
■	OUTPUT

