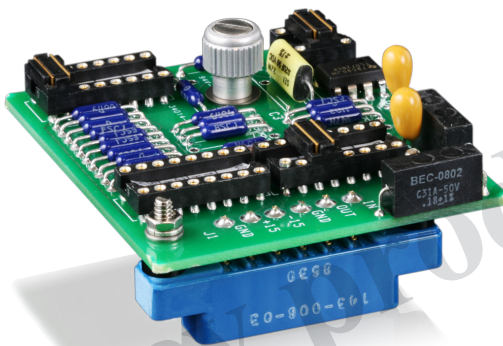


Model 35771 Programmable filter

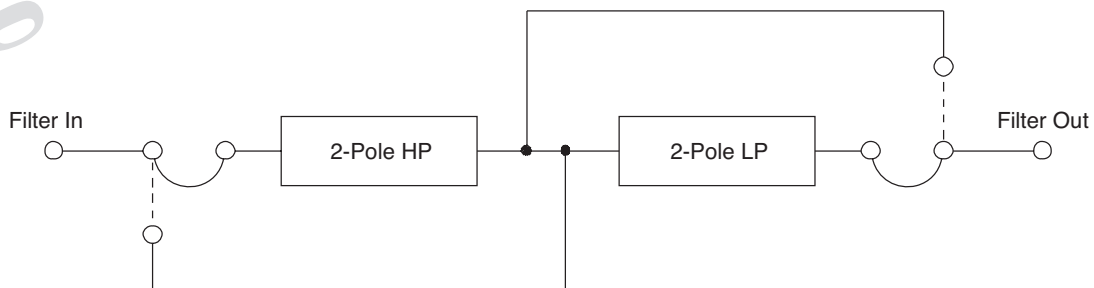
Features

- Plug in filter card
- Used in 2775A/AM4
- Two pole Butterworth filtering
- Low pass, high pass or band pass
- Jumper selectable corner frequencies



Description

The Endevco model 35771 programmable filter is a plug-in filter designed for use in the Endevco models 2775A and 2775AM4 signal conditioners. It contains an active high pass (HP) two pole Butterworth filter stage, followed by an active low pass (LP) two pole Butterworth filter stage. DIP programming jumpers select any combination of these two stages; the resulting overall response is HP, LP, or band pass (BP). The corner frequencies are also selected via programming jumpers. One HP corner frequency and one LP corner frequency may be established by customer-installed resistors. The remaining 2 HP and 7 LP corners are determined by factory-installed components.



Model 35771 Programmable filter



Specifications

Inputs

Type	Single-ended with one side connected to signal ground
Impedance (passband only)	HP mode: 0.18 μ F \pm 1% LP mode: 1000 G Ω BP mode: 0.18 μ F \pm 1%

Outputs

Type	Single-ended with one side connected to signal ground
Impedance	10 Ω maximum
DC offset	\pm 50 mV
Load impedance	5 k Ω minimum to meet all specifications
Minimum linear output voltage	10.00 V pk to 20 kHz
Residual noise	4 μ V rms maximum

Transfer characteristics

Gain	1.0 \pm 0.5%
Frequency response	.95 \pm 1% gain at corner frequency
Corner frequency options	

-5% Corner [1]	Response type [2]
2 Hz	HP
10 Hz	HP
100 Hz	LP
200 Hz	LP
500 Hz	LP
1 kHz	LP
2 kHz	LP
5 kHz	LP
10 kHz	LP

Gain stability with temperature	The gain will change less than \pm 0.001% referred to room temp gain over the range \pm 1 $^{\circ}$ C to 52 $^{\circ}$ C
Total harmonic distortion	Less than 0.1% at any output level
Warm-up time	30 seconds maximum to meet all specifications

Environmental

Temperature	
Operating	32 $^{\circ}$ F to 158 $^{\circ}$ F (0 $^{\circ}$ C to 70 $^{\circ}$ C)
Storage	-85 $^{\circ}$ F to 302 $^{\circ}$ F (-65 $^{\circ}$ C to 150 $^{\circ}$ C)
Humidity	95% R.H. maximum

Power

Voltage	\pm 15 VDC \pm 1%,
Current	10 mA maximum
Transients and ripple	The maximum transient or ripple output from the amplifier over the frequency range of 0-20 kHz is 1.0 mV/V change on the supply

Physical characteristics

Dimensions	2.15" h x 2.45" w x 1.125" d (54.6mm x 62.2mm x 28.6mm)
Weight	1.4 oz (40 gm)
Case	Molded plastic case
Connectors	Input, output and power connector is an Amphenol 143-006-03

Notes:

1. These are the HP and LP, programmable corners standard to all 35771.
2. BP frequency corners are determined by any combination of HP and LP corners, standard, or custom.
3. Accuracy of custom filtering is dependent on component tolerance and accuracy in translating values from nomogram.
4. Maintain high levels of precision and accuracy using Endevco's factory calibration services.
Call Endevco's inside sales force at 800-982-6732 for recommended intervals, pricing and turn-around time for these services as well as for quotations on our standard products.