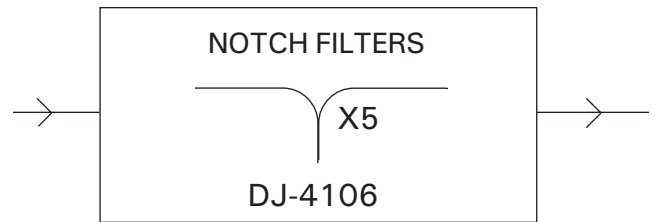


DESCRIPTION

The DJ-4106 provides five tunable notch filters for suppressing feedback in sound reinforcement systems. A setup mode enables constant feedback level for simplified adjustment. The DJ-4106 is also useful for cancelling peaks in system transducers.

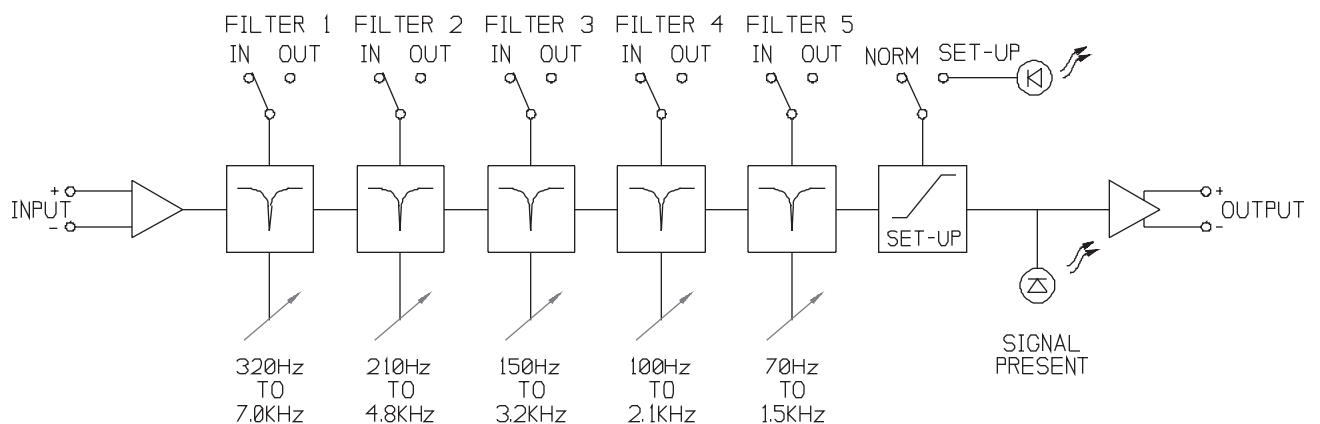
DESIGN SYMBOL



FEATURES

- 1/6 octave bandwidth
- Bypass switch on each filter
- Unity gain in passband
- Set up mode stabilizes feedback
- Flashing LED reminder inset up mode
- 20 to 1 tuning range each filter
- Filter set covers 70 Hz - 7 kHz
- Five Year Limited Warranty

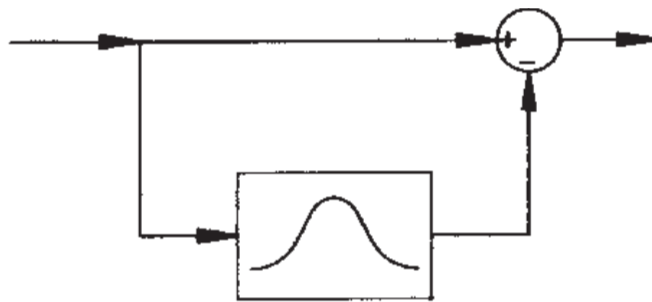
FUNCTIONAL DIAGRAM



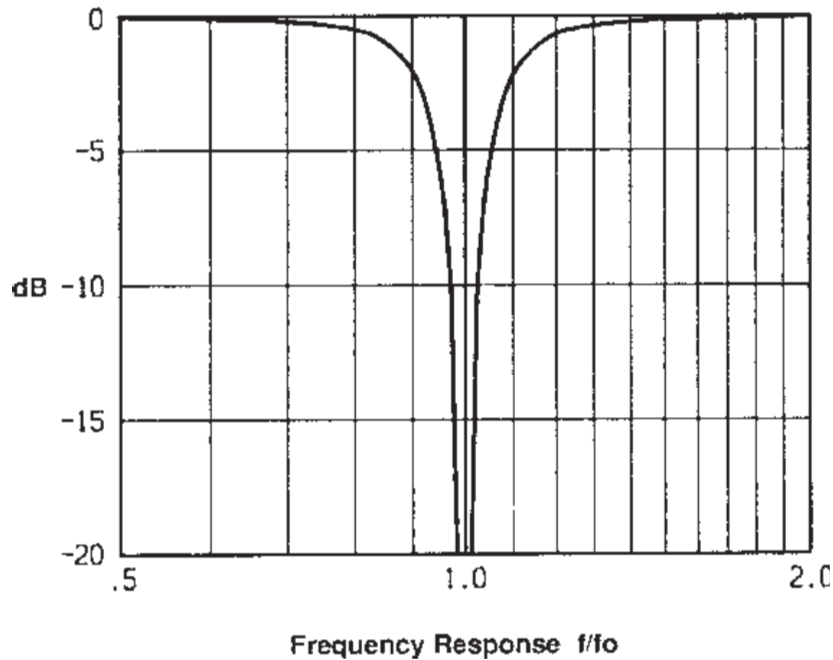
OPERATION

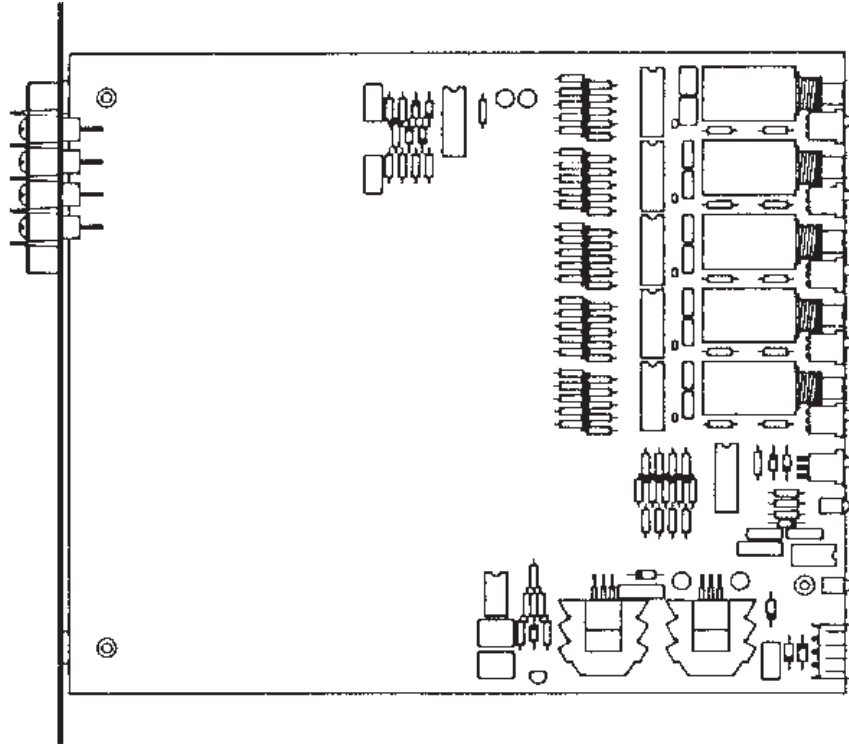
The notch filter response is produced by subtracting the output of a two pole resonant circuit from the input. This implementation has minimum phase and minimal passband signal processing. An improved bi-quadratic resonant circuit provides an optimal combination of stability, adjustability, low noise and low distortion.

The set up mode stabilizes feedback without introducing phase shift, thus assuring an accurate notch when returned to normal operation.

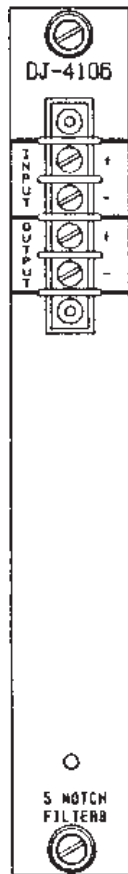


Implementation Diagram

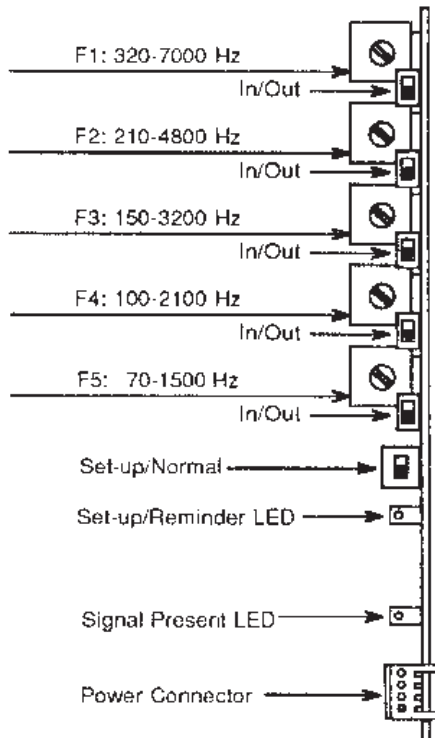




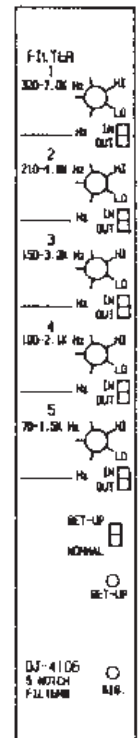
REAR PANEL



FRONT EDGE CONTROLS



DOCUMENTATION PANEL



SPECIFICATIONS

TUNING RANGE	Filter 1, 320 Hz - 7.0 kHz Filter 2, 210 Hz - 4.8 kHz Filter 3, 150 Hz - 3.2 kHz Filter 4, 100 Hz - 2.1 kHz Filter 5, 70 Hz - 1.5 kHz
FILTER BANDWIDTH	One-sixth octave (-3dB points)
NOTCH DEPTH.....	Greater than 20dB field alterable
LINE INPUT	Standard SYSTEM 41 active balanced
Impedance	82k Ω balanced, 41k Ω unbalanced
Maximum Input	+ 19dBV
GAIN:	0 dB (passband)
FREQUENCY RESPONSE*:	+0 dB, -0.5 dB
THD**	Less than .04%, 20 Hz - 20 kHz
EQUIVALENT INPUT NOISE*,**	Less than -85dBV
MODULE SPACE	One unit, 1.2 inches wide
CURRENT CONSUMPTION	50 mA

* Measured over a 20 Hz - 20 kHz bandwidth

ARCHITECT'S SPECIFICATIONS

Five tunable 1/6 octave notch filters shall be provided. Notch depth shall exceed 20dB. The notch frequency of each filter shall be adjustable over a 20 to 1 range. A 70 Hz to 7000 Hz frequency shall be covered by the set. Passband gain shall be unity and each filter shall have an individual bypass. A set-up mode shall stabilize feedback during adjustment. The set-up mode shall not affect the proper notch frequency setting. When in the set-up mode, a flashing LED shall be activated. The input shall be buffered active balanced and the output shall be groundable active balanced. THD shall be less than .04% @ 1 kHz @ 0 dBV. Equivalent input noise shall be less than -85dBV, 20 Hz to 20 kHz. Input and output maximum levels shall be + 19dBV. The output signal shall be monitored by a signal present LED. The filter set shall mount in and be powered by the IRP Model DJ-4100/4101/4150/4151 mainframe. The filter set shall be the IRP Model DJ-4106.

ORDERING INFORMATION

Specify: 5 Notch Filters DJ-4106