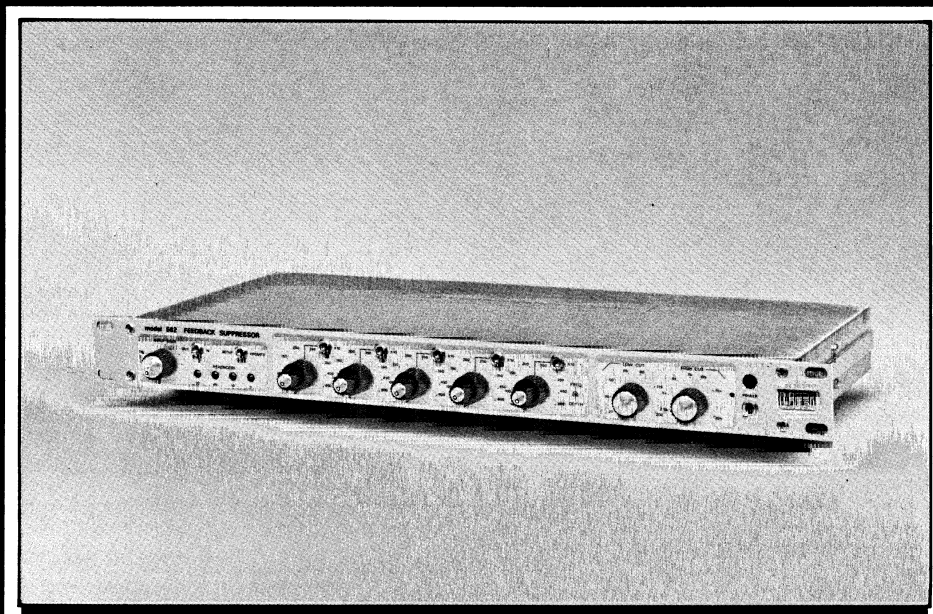


562

FEEDBACK SUPPRESSOR



FEATURES:

- 5 independently adjustable notch filters.
- Narrow notches minimize sound coloration.
- Built in peak clipper for driver protection during setup tuning.
- High cut and low cut end filters.
- Headroom indicator monitors signal levels and approach of overload.
- Bypass switch for easy setup and A-B comparison.

The Model 562 Feedback Suppressor has been designed to reduce feedback in sound reinforcement systems such as fixed and portable installations, in auditoriums, concert halls, meeting rooms, schools and churches. Experience with narrow band notch filters has demonstrated that in a typical sound reinforcement system, gain before feedback can be significantly improved by centering a narrow band-reject filter on four or five of the most prominent system resonant frequencies. It has also been found that rolling off the low and high frequency ends of the spectrum to pass only a required program's bandwidth, increases gain before feedback at the band edges. In addition, many sound systems are improved through the application of broad or narrow band equalization.



**UREI
ELECTRONIC
PRODUCTS**

The 562 contains 5 active notch filters, each continuously adjustable in notch depth from 0 to 20 dB, and in frequency from 60 Hz to 6000 Hz. Low cut and high cut filters with 12 dB/octave slopes are tunable from 20 to 200 Hz and 2.5 to 20 kHz respectively. The Model 562 has front panel adjustable gain, ranging from -10 to +20 dB and headroom indicators to optimize the signal level. A bypass switch allows A-B comparison, and a setup switch provides system protection during tuning. XLR/QG connectors and terminal strips are provided for both input and output.

In using the Feedback Suppressor, the system's gain is slowly increased until the first sustained feedback occurs. One notch filter is then "tuned" until the feedback ceases. The gain is increased again, and the next resonance attenuated with the second filter. This procedure is repeated with filters 3 through 5. If feedback occurs at the extreme high or low end it can be reduced by using the end cut filters. A typical result is an increase of several dB in actual system gain before feedback. In addition intelligibility is improved without undesirable changes in fidelity.

SPECIFICATIONS

ELECTRICAL:

INPUT:	
Input Impedance:	40 kohms balanced, 20 kohms unbalanced.
Maximum Input Level:	+20 dBu
Gain:	Variable -10 dB to +20 dB with front panel level control.
Headroom Indicator:	4 LED indicators showing maximum signals: 0, -10, -20, -30 dB relative to overload.
NOTCH FILTERS:	
Frequency Range:	60 Hz to 6 kHz, continuously variable in two ranges.
Notch Depth:	0 to -20 dB, continuously variable.
Filter Bandwidth:	Approx. 1/6 octave at 5 dB notch depth (3 dB points).
END CUT FILTERS:	
Low Cut Filter:	12 dB per octave filter slope, continuously adjustable from 20 Hz to 200 Hz.
High Cut Filter:	12 dB per octave filter slope, continuously adjustable from 2.5 kHz to 20 kHz.
OUTPUT:	
Output Circuit:	Floating, transformer isolated.
Output Load:	600 ohms or greater.
Power Output:	+20 dBm
Distortion:	Less than 0.5% THD, 30 Hz to 15 kHz at maximum rated output.
Frequency Response:	±0.5 dB, 20 Hz to 20 kHz (EQ out). +0.5 dB, -1.5 dB, 20 Hz to 20 kHz (EQ in).
Output Noise:	Less than -90 dBm (15.7 kHz noise bandwidth, input and output terminated with 600 ohms; controls set for unity gain).
Power Requirements:	Less than 10 W, 100-125 V AC or 200-250 V AC, 50/60 Hz, switch selectable.
Environment:	Operating 0°C to +50°C (+32°F to +122°F). Storage -20°C to 60°C (-4°F to +140°F).

PHYSICAL:

Connections:	Input and output on rear panel barrier strip and 3-pin XLR/QG connectors. Power through 3-wire IEC style connector.
Dimensions:	483 × 44 mm rack panel, depth behind panel 248 mm, (19 in × 1 3/4 in × 9 3/4 in).
Finish:	Panel is 3.18 mm (1/8 in) brushed clear anodized aluminum in two shades. Chassis is cadmium plated steel.
Weight:	4.31 kg (9.5 lb).
Shipping Weight:	6.35 kg (14 lb).
Accessory:	Model SC-3 Security Cover; smoke gray transparent plastic; covers all operating controls.

Note: 0 dBm = 1 mW
0 dBu = 0.775 volts

JBL/UREI continually engages in research related to product improvement. New materials, production methods and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current JBL/UREI product may differ in some respect from its published description but will always equal or exceed the original design specifications unless otherwise stated.