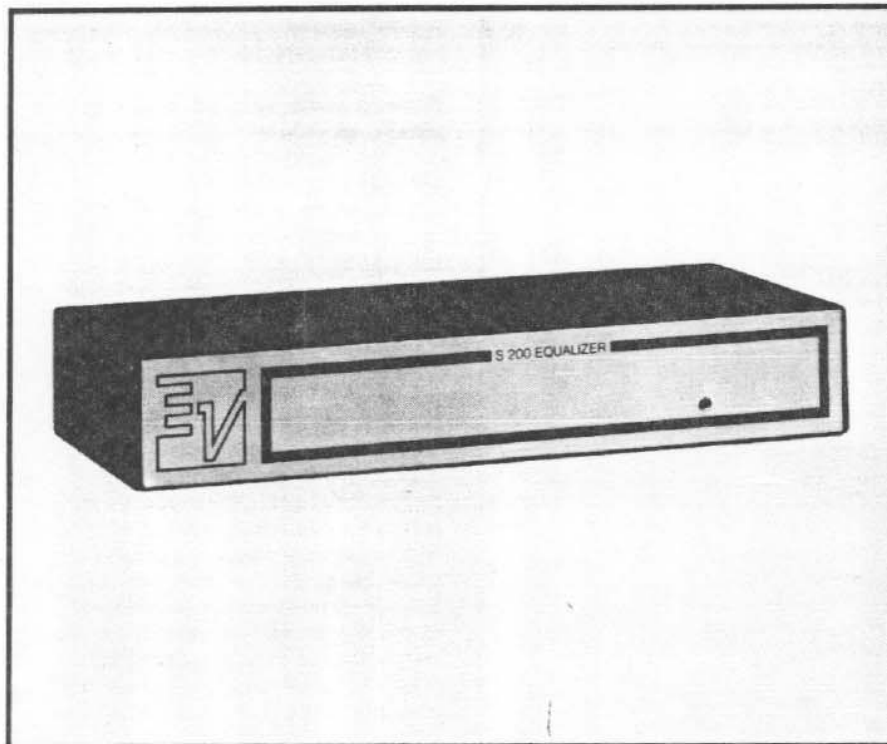




Electro-Voice®

a MARK IV company

Model S-200 Equalizer

SPECIFICATIONS

Number of Channels:

Two

Gain:

0 dB above 1 kHz (See Figure 1)

Input:

500 kilohms, unbalanced

Output:

Unbalanced

Internal Impedance:

560 ohms

Recommended Load:

≥2000 ohms

Maximum Output Level:

+18 dBu (+16 dB V)
into 10-kilohm load

Noise, 20-20 kHz:

-90 dBu (input terminated
with 600 ohms)

Total Harmonic Distortion:

<0.01% maximum
.002% typical at +12 dBu (+10 dB V)

Channel Separation (20-20 kHz):

>85 dB

Power Requirements,

Domestic Model:

100-130 V, 60 Hz, 2.5 W max.

Export Model:

200-260 V, 50/60 Hz, 2.5 ² max.

Dimensions (less rack adaptor plate):

4.2 cm (1.67 in.) high,
24.3 cm (9.58 in.) wide,
11.1 cm (4.35 in.) deep

Weight:

822 grams (1 lb 13 oz)

Rack Space Required:

4.4 cm (1.75 in.)

DESCRIPTION

The Model S-200 Equalizer is a two-channel active device designed to be used with the Model S-200 Stage Speaker system as an option. With its application to the sound system it allows the speakers to be switched into their equalized (step-down) mode of operation, thereby extending the low frequency response limit by almost one octave, from 90 Hz to 50 Hz. In addition, this mode provides four decibels of increased efficiency.

Unlike some competitive systems which provide up to 18 dB of electrical boost at high frequencies, the S-200 equalizer is essentially flat above 1 kHz. This substantially reduces the amount of high frequency energy which must be provided by the power amplifier. In addition, the sharp cutoff filter operating below 50 Hz attenuates subsonic signals and noise that lie below the useful response range of the speakers. Not only are these energy-robbing signals eliminated from the power amplifiers, but speaker cone excursion can be significantly reduced. See Figure 1.

Standard ¼-inch phone jacks are provided for input and output connections. The equalizer is designed to drive two high impedance, unbalanced loads, as provided by typical power amplifiers. Up to five such amplifiers may be driven in parallel without appreciable degradation of specifications, and up to ten, with only a reduction in output level (headroom).

An adapter panel is provided to allow the S-200 equalizer to be mounted in a standard, 19-inch rack. The input and output circuit grounds are isolated from the chassis by an internal 10-ohm resistance, to reduce the likelihood of generating a ground loop when mounted in an equipment rack.

Although it is unlikely that the equalizer could be overloaded at its input under any normal conditions, Figure 2 shows the maximum permissible input level versus frequency. At high and low frequency extremes, this represents a substantially greater level than that of competitive units.

The S-200 Equalizer should be connected between the mixer (or preamplifier) and the power amplifier of your sound system. Connect the output of the mixer to the input of the equalizer. Then connect the output of the equalizer to the input of the power amplifier, using shielded cable for both of these connections. Connect the line cord to a source of ac power, as indicated by the red LED on the front panel. Since power drain is less than 2½ watts, the equalizer may be left energized between uses, if desired.

The equalizer can deliver over 8 volts RMS output into a high impedance load, which is much greater than that required to drive most power amplifiers to full output. A number of amplifiers may be driven in parallel, so long as their combined impedance does not fall appreciably below

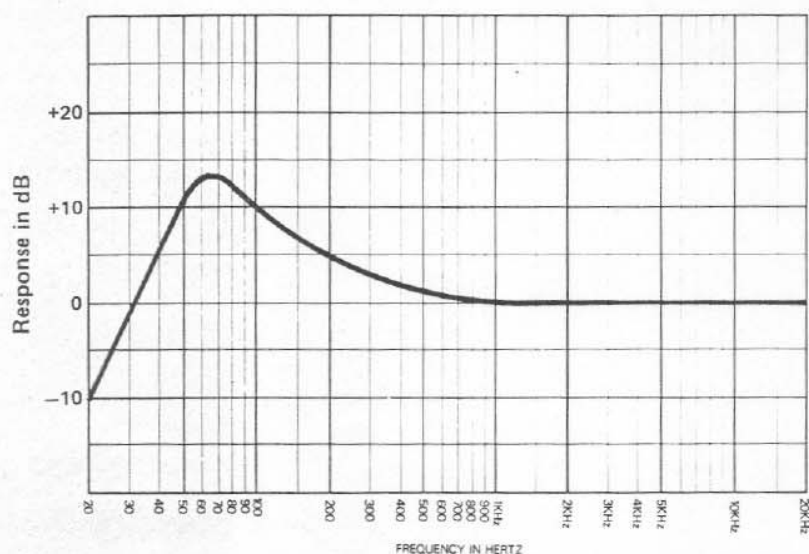


FIGURE 1
Frequency Response

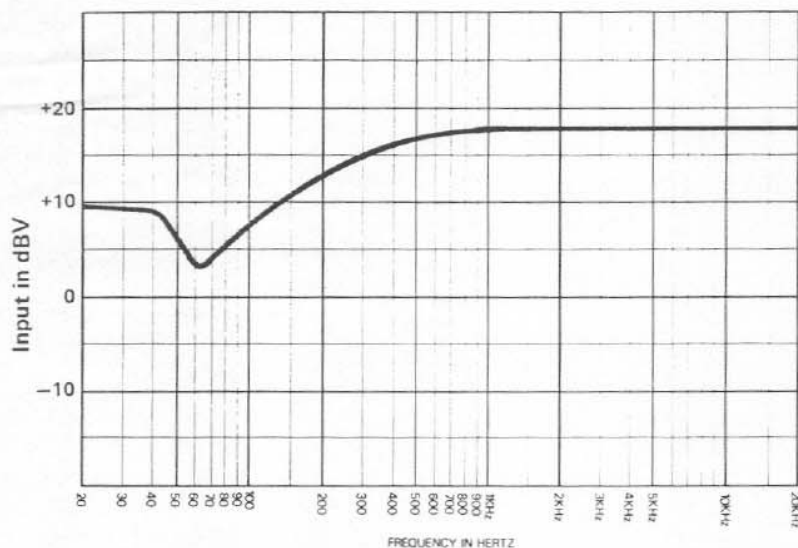


FIGURE 2
Maximum Input Voltage

1000 ohms. The latest BI-FET operational amplifier circuitry is employed to assure very fast slew-rate capability, and clean sound. The inputs are very high impedance, and protected against incidental dc leakage voltages up to 50 V.

Although a line voltage within the specified range (see "Power Requirements") is required for full rated output, satisfactory performance will extend 15 percent below this range, with some sacrifice in output voltage capability.

WARRANTY (Limited)

Electro-Voice Electronic Components are guaranteed for one year from date of original purchase against malfunction due to defects in workmanship and materials. If such malfunction occurs, unit will be repaired or replaced (at our option) without charge for materials or labor if delivered prepaid to the proper Electro-Voice service facility. Unit will be returned prepaid. Warranty does not extend to finish, appearance items or malfunction due to abuse or operation under other than specified conditions, nor does it extend to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee. A list of authorized warranty service centers is available from Electro-Voice, Inc., 600 Cecil Street, Buchanan, MI 49107 (AC/616-695-6831); Electro-Voice, Inc., 3810 148th Avenue N.E., Redmond, WA 98052 (AC/206-881-9555); and/or Electro-Voice West, 8234 Doe Avenue, Visalia, CA 93291 (AC/209-651-7777). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Service and repair address for this product: Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107.

Specifications subject to change without notice.



ELECTRO-VOICE, INC., 600 Cecil Street, Buchanan, Michigan 49107

MANUFACTURING PLANTS AT ■ BUCHANAN, MI ■ NEWPORT, TN ■ SEVIERVILLE, TN ■ REDMOND, WA ■ GANANOQUE, ONT.
© Electro-Voice, Inc. 1988 ■ Litho In U.S.A. Part Number 700105-828

a MARK IV company