

Electro-Voice®

a MARK IV company

Model APX-200 Equalizer

SPECIFICATIONS

Number of Channels:

Two

Gain:

0 dB above 1 kHz (see Figure 1)

Input:

30 kilohms, balanced

Output:

Unbalanced

Internal Impedance:

< 100 ohms

Recommended Load:

≥ 1000 ohms

Maximum Output Level:

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

Noise, 20-20,000 Hz:

- 85 dBu (input terminated
with 600 ohms)

Total Harmonic Distortion:

< 0.01% maximum

Channel Crosstalk, Typical:

75 dB

I/O Connections and Mounting:

Two octal plugs

Power Requirements:

± 15 V dc

Overall Dimensions (see Figure 3):

69 mm (2.75 in.) high
91 mm (3.58 in.) wide
32 mm (1.25 in.) deep

Net Weight:

0.25 kg (8.5 oz.)

Shipping Weight:

0.40 kg (14 oz.)

DESCRIPTION

The Model APX-200 equalizer is a two-channel active device designed to be used with Electro-Voice amplifiers in conjunction with S-200/FR200 speaker systems. 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 at mid and high frequencies.

Unlike some competitive systems which provide up to 18 dB of electrical boost at high frequencies, the APX-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 infrasonic 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.

Phono jacks are provided for external output connections. The equalizer is designed to drive two high-impedance inputs, as provided by the host power amplifier. 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). Input to each

channel of the APX-200 is provided by the host amplifier's Channel 1 and Channel 2 inputs.

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.

INSTALLATION

1. Turn the power amplifier off and turn the input attenuators down (full counterclockwise).
2. Remove the four jumper pins from the two octal sockets on the amplifier.
3. Orient the APX module so that the octal connector keys are aligned and plug it in.

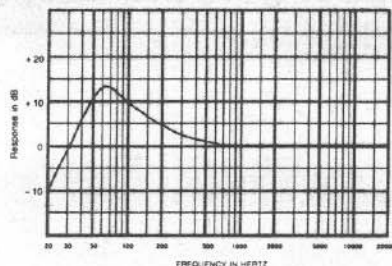


FIGURE 1
Frequency Response

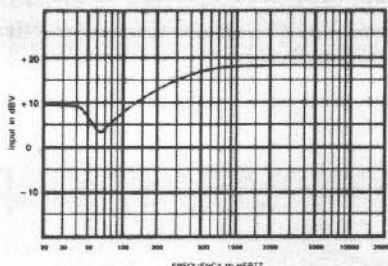


FIGURE 2
Maximum Input Voltage

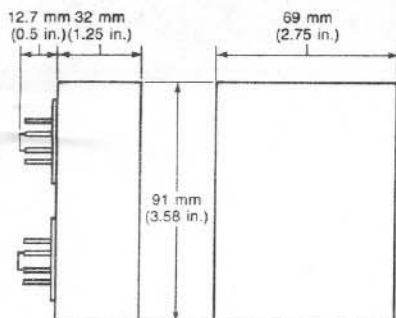


FIGURE 3 — Dimensions

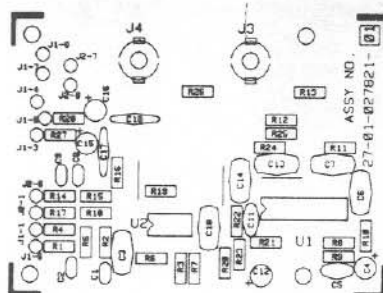


FIGURE 4
APX-200 PCB Layout

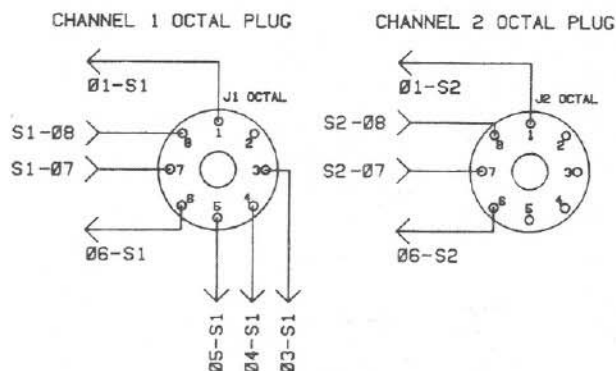


FIGURE 5 — Octal Plug Connections

WARRANTY (Limited)

Electro-Voice Electronic Components are guaranteed for three years 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 service centers is available from Electro-Voice, Inc., 600 Cecil Street, Buchanan, MI 49107 (AC/616-695-6831); Electro-Voice West, 8234 Doe Avenue, Visalia, CA 93291 (AC/209-651-7777); or Electro-Voice, Inc., 10500 West Reno, Oklahoma City, OK 73126. 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 ■ OKLAHOMA CITY, OK ■ GANANOQUE, ONT.
© Electro-Voice, Inc. 1990 ■ Litho in U.S.A. P38 Number E21665-022