

## Sx80 175-Watt Two-Way Speaker System

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customer must deliver the product, prepaid, to Electro-Voice Service or any of its authorized service representatives together with proof of purchase of the product in the form of a bill of sale or receipted invoice. A list of authorized service representatives is available from Electro-Voice Service at 600 Cecil Street, Buchanan, MI 49107 (800/234/6831 or FAX 616/695/4743). **Incidental and Consequential Damages Excluded:** Product repair or replacement and return to the customer are the only remedies provided to the customer. Electro-Voice shall not be liable for any incidental or consequential damages including, without limitation, injury to persons or property or loss of use. Some

states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. **Other Rights:** This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**Electro-Voice Speakers and Speaker Systems** are guaranteed against malfunction due to defects in materials or workmanship for a period of five (5) years from the date of original purchase. The Limited Warranty does not apply to burned voice coils or malfunctions such as cone and/or coil damage resulting from improperly designed enclosures. Electro-Voice active electronics associated with

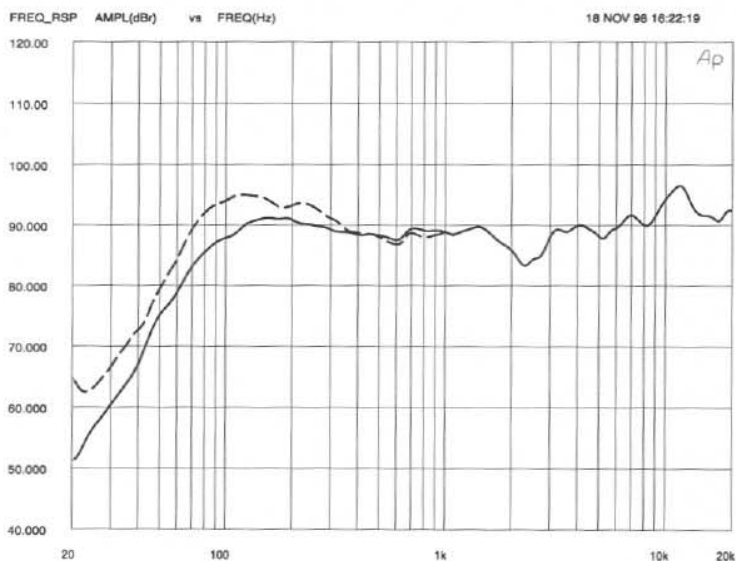
the speaker systems are guaranteed for three (3) years from the date of original purchase. Additional details are included in the Uniform Limited Warranty statement.

**Electro-Voice Electronics** are guaranteed against malfunction due to defects in materials or workmanship for a period of three (3) years from the date of original purchase. Additional details are included in the Uniform Limited Warranty statement.

For warranty repair, service information, or a listing of the repair facilities nearest you, contact the service repair department at: 616/695-6831 or 800/685-2606.

**Figure 1— Sx80 Axial Frequency Response, (full space and half space anechoic environment, 1 watt (2.83 volts) /1 meter (3.281 feet)**

— Full space  
- - - Half space

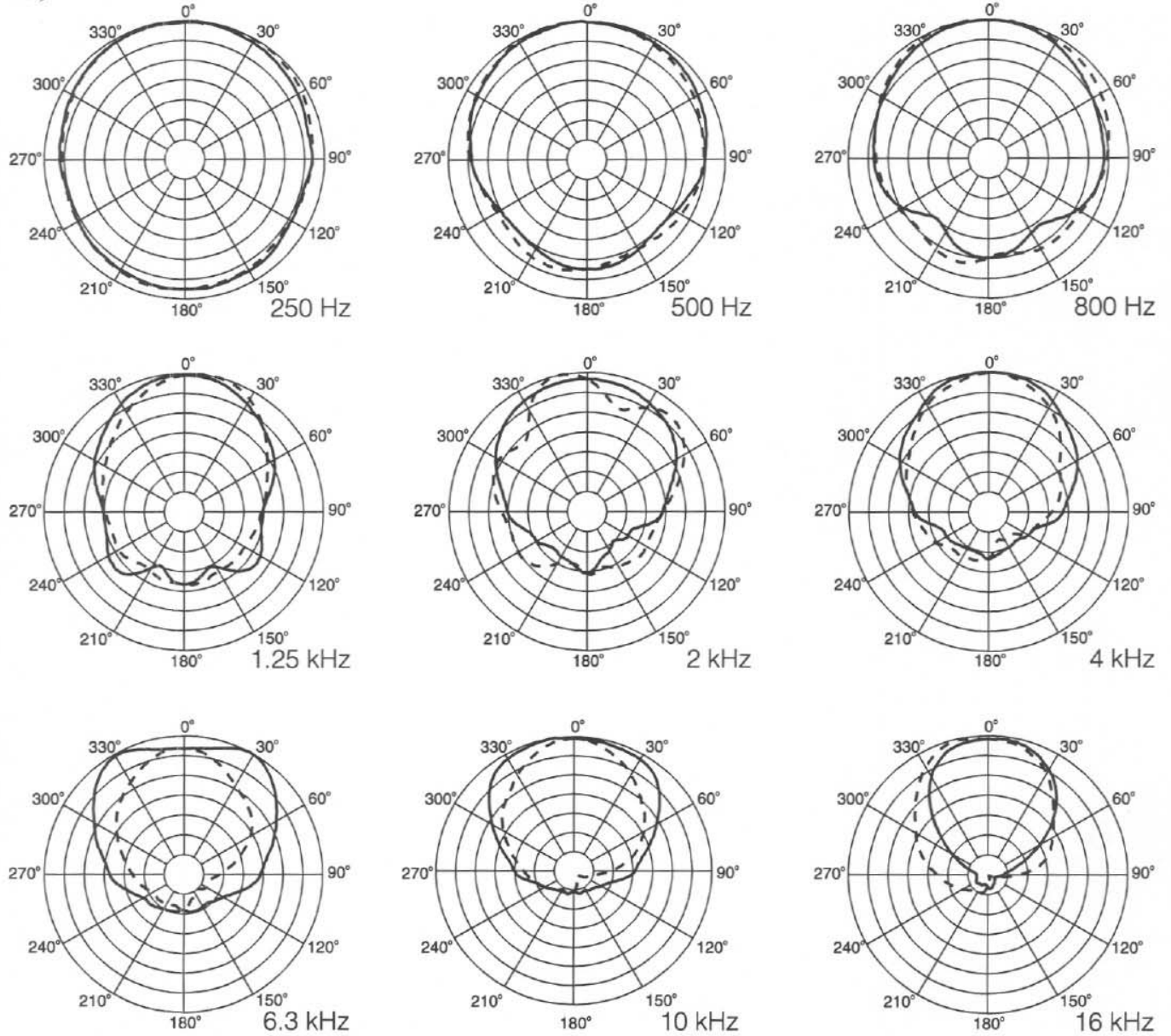


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**Figure 2— Sx80 One-Third-Octave Polar Responses (full space anechoic environment, 4 volts/6.10 meters (20 feet))**

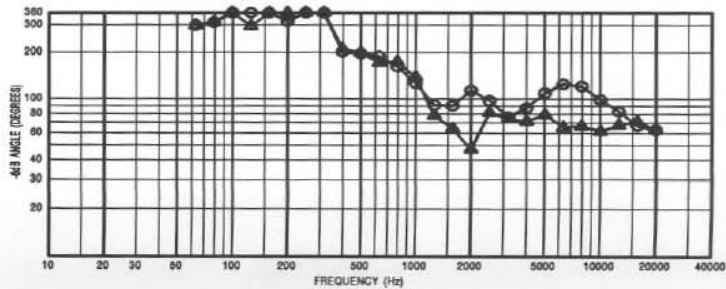
5 dB per division

— HORIZONTAL  
- - - VERTICAL



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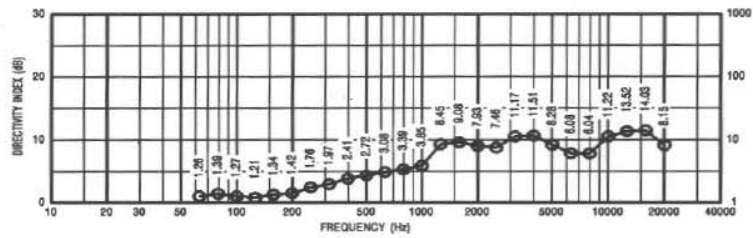
**Figure 3 Sx80 Beamwidth vs. Frequency (full-space anechoic environment)**



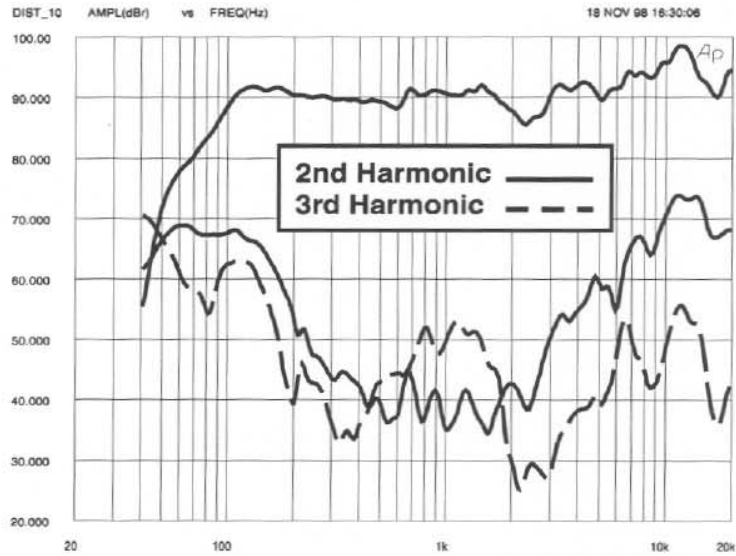
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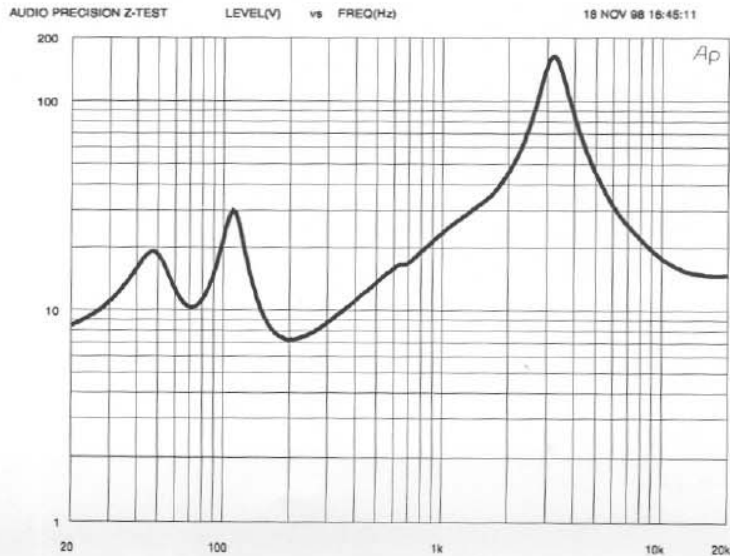
**Figure 4— Sx80 Directivity vs. Frequency (full-space anechoic environment)**



**Figure 5—Sx80 Harmonic Distortion Response 10% Rated Power Input (17.5 watts), (full-space anechoic environment, 3.05 meters (10 feet) on axis)**



**Figure 6— Sx80 Impedance Curve**



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Figure 7— Sx80 Dimensions and Inserts

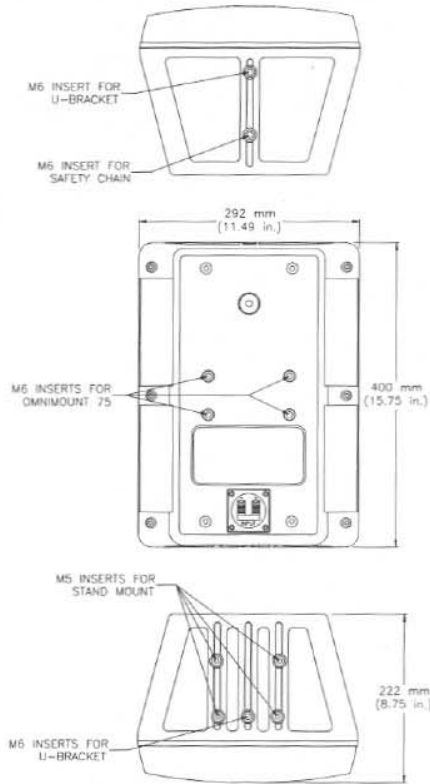


Figure 8— Sx80 enclosure with Sx80MB wall/ceiling mounting bracket.

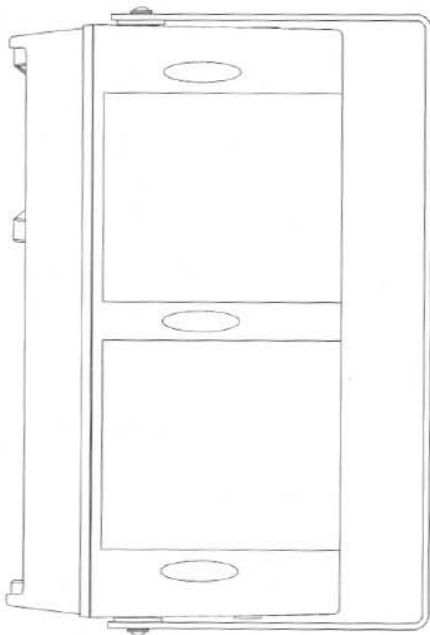
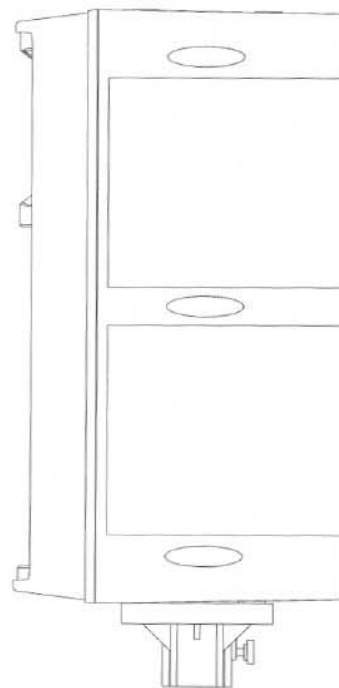


Figure 9— Sx80 enclosure with Sx80SM stand mounting kit.



## Sx80 175-Watt Two-Way Speaker System

For technical assistance, contact Technical Support at 800/234-6831 or 616/695-6831, M-F, 8:00 a.m. to 5:00 p.m. Eastern Standard time.

### Specifications

**Typical Axial Frequency Response, Swept Sine Wave, 4 volts at 3.05 meters (10 feet), (half-space, normalized for 1 watt at 1 meter; see Figure 1):**

65-20,000 Hz

**Low-Frequency 3-dB-Down Point:**

65 Hz

**Usable Low-Frequency Limit (10-dB-down point):**

51 Hz

**Half Space Reference Efficiency:**

1.2 %

**Long-Term Average Power-Handling Capacity per EIA Standard RS-426-A 1980 (see Power-Handling Capacity section):**

175 watts

**Maximum Woofer Acoustic Output:**

2.1 watts

**Sensitivity (SPL at 1 watt, 1 meter input, half-space, swept sine wave):**

92 dB

**Nominal Coverage Angle,**

Horizontal: 90°

Vertical: 65°

**Dispersion Angle Included by 6-dB-Down Points on Polar Responses, Indicated One-Third-Octave Bands of Pink Noise (see Figure 3),**

2,000-20,000 Hz, Horizontal:

90° (+34°, -27°)

2,000-20,000 Hz, Vertical:

65° (+31°, -4°)

**Directivity Factor  $R_0(Q)$ , 800- to 16,000-Hz Median (see Figure 4):**

8.3 (+5.7, -4.9)

**Directivity Index  $D_1$ , 800- to 16,000-Hz Median (see Figure 4):**

9.2 dB (+2.3 dB, -3.9 dB)

**Distortion, 0.1 Full Power Input, (see Figure 5)**

**Second Harmonic,**

**100 Hz:**

-21 dB, 9.0%

**1,000 Hz:**

-55 dB, 0.2%

**10,000 Hz:**

-25 dB, 5.6%

**Third Harmonic,**

**100 Hz:**

-26 dB, 4.9%

**1,000 Hz:**

-41 dB, 0.9%

**10,000 Hz:**

-47 dB, 0.5%

**Transducer Complement,**

**High Frequency:**

DH2005 driver

**Low-Frequency:**

203-mm (8-in.) woofer

**Box Tuning Frequency:**

70 Hz

**Crossover Frequency:**

2,200 Hz

**Crossover Slope,**

12 dB per octave

**Impedance,**

**Nominal:**

8 ohms

**Minimum:**

7.2 ohms

**Input Connections,**

**Sx80:**

Push-pins

**Sx80BE, Sx80WE:**

(white or black with single 4 pin Neutrik Speakon®) (1+ positive, 1- negative)

**Sx80BP, Sx80WP:**

(white or black with dual ¼-in. phone)

**Driver Protection, High Frequency:**

Solid-state self-resetting circuit (PROJ circuit) drops output 6 dB; blocking capacitor with 800-Hz corner frequency and 6-dB-per-octave slope

**Materials,**

**Enclosure:**

Injection-molded high-impact polystyrene, black or white

**Grille:**

Perforated metal grille matches enclosure color

**Dimensions (see Figure 7)**

**Height:**

400 mm (15.75 in.)

**Width:**

292 mm (11.49 in.)

**Depth:**

222 mm (8.75 in.)

**Net Weight:**

8.2 kg (18 lb)

**Shipping Weight:**

10.0 kg (22 lb)

**Optional Accessories:**

Sx80MB installation kit, black or white; Sx80SM stand mount kit

**Attachment Points:**

Seven M6 and four M5 metric inserts (see Figures 7 and 8 and Suspending Sx80 Enclosures section)

# Electro-Voice®

600 Cecil Street, Buchanan, MI 49107

616/695-6831, 616/695-1304 Fax