

TS992E

Passive Theatre Stage System

- Only 254 mm (10 in.) deep overall—more room for seats
- For use in small to medium sized rooms—up to 1,274 m³ (45,000 ft³) with stage-to-last-row distances up to 12 m (40 ft)*
- Digital Dynamics Capable™—DH2T compression driver and DL15MT 15-in. woofer are highly resistant to long-term mechanical fatigue
- Wideband response—30-20,000 Hz
- 90° x 90° coverage pattern appropriate for smaller rooms
- HMK-4 horn mounting bracket allows ±30° of horizontal aiming and +10°/-15° of vertical aiming
- Input panel on top of LF system for convenient installation

Description and Application

The TS992E is a Digital Dynamics Capable™ theatre stage system using a passive crossover. It is designed for absolute minimum depth—only 254 mm (10 in.) deep—but with performance as close as possible to the large-format, THX[®]-approved TS9040D-LX. Electro-Voice has combined its expertise in constant-directivity horns, high-frequency compression drivers and low-frequency reproducers to produce a stage system with superior performance in all areas: uniform dispersion to the highest frequencies, high efficiency, high power-handling capacity and wide, smooth frequency response.

The TS992E features a single ultrahigh-reliability, high-output 381-mm (15-in.) DL15MT woofer, with continuous power capacity of 400 watts. The DL15MT is crossed over at 1,150 Hz where its coverage pattern is a perfect match to that of the HP99 compact 90° x 90° horn to which a DH2T medium-format “short nose” compression driver is mounted. The unique, 90° vertical coverage angle of the HP99 horn provides more uniform coverage at the front of small rooms.

All components of the TS992E are black finished to eliminate any light reflections back through the screen. The high-frequency horn is matte black and the black textured finish of the low-frequency system is of low reflectivity. The TS992E is mechanically designed for easy installation, including convenient system connection and horn aiming (see Installation section).

The TS992E provides high performance for all film-sound formats in small to medium size rooms of up to 1,274 m³ (45,000 ft³) in volume and stage-to-last-row distances of up to 12 m (40 ft).

Frequency Response

Figure 2 shows TS992E frequency response with (see Crossover and Basic Equalization section). The measurement was made with a swept sine-wave signal, 4 volts at 500 Hz, in an anechoic (echoless) environment. The microphone was at a distance of 3.0 m (10 ft), on an axis at the lower edge of the high-frequency horn.

Crossover Equalization

The TS992E uses the TL15-1ESX which is equipped with the Electro-Voice XEQ-1108. This passive crossover provides all the nec-

essary filtering and equalization for smooth efficient operation. Figure 3 shows system impedance with the XEQ-1108 crossover.

Installation

The TS992E incorporates a number of installer-recommended features, for quick, trouble-free and low-cost installation. Among these features is a top-mounted input panel for the TL15-1ESX low-frequency system, perfect when space is restricted to the rear or sides of the system. In addition, through the use of the driver-to-horn adapter ADH-3, HMK-4 horn-mounting kit and supplied T-nuts in the top of the low-frequency system, the high-frequency section is easily mounted in the proper position on top of the low-frequency section. The HMK-4 allows ±30° of horizontal horn aiming and +10°/-15° of vertical aiming. Complete installation instructions are on the engineering data sheet supplied with the HMK-4.

Warranty (Limited)

Electro-Voice Theatre Sound Systems are guaranteed for five 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

TS992E Passive Theatre Stage System

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materials or labor if delivered prepaid to the proper Electro-Voice service facility. Unit will be returned prepaid. Warranty does not cover finish or appearance items or malfunction due to abuse or operation at other than specified conditions. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee.

For repair information and service locations, please write: Service Department, Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan, 49107 (phone 616/695-6831) or (toll-free 800/234-6831). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Specifications subject to change without notice.

Specifications**

Usable Frequency Response (see Figures 2 and 3):

30-20,000 Hz

Low-Frequency 3-dB-Down Point:

38 Hz

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

30 Hz

Recommended Crossover Frequency (see Crossover and Basic Equalization section):

1,150 Hz

Crossover Slopes,

Recommended:

24 dB per octave

Minimum:

12 dB per octave

Sound Pressure Level at 1 Meter, 1 Watt Input,

LF (100- to 800-Hz average):

96 dB

LF (65- to 125-Hz average):

94 dB

HF (800- to 5,000-Hz average):

110 dB

Power Capacity Average Power-Handling Capacity,

Low Frequency (per EIA RS-426-A 1980):

400 watts

High Frequency (per AES2-1984/ANSI S4.26-1984):

60 watts

Dispersion, Horizontal and Vertical:

90°

Nominal Impedance, HF and LF:

8 ohms

Components:

DH2T compression driver; driver to horn adapter ADH-3, HMK-4 horn/driver mounting bracket, HP99 horn; TL15-1ESX low-frequency system with DL15MT woofer; XEQ1108 passive crossover

Finishes:

Matte black HF horn, black driver and mounting bracket, and black wood grain vinyl clad LF system

Overall Dimensions, Assembled (see Figure 1),

Height (approximate):

1,295 mm (51 in.)

Width:

680 mm (26.75 in.)

Depth:

254 mm (10 in.)

Net Weight (total):

43.9 kg (97 lb)

Shipping Weight (total):

49.2 kg (108.5 lb)

** Additional information is contained on the individual component engineering data sheets.

*** This rating facilitates competitive comparisons. Continuous program power is twice the two-hour sine-wave power capacity at minimum impedance.

Figure 1—TS992E Dimensions

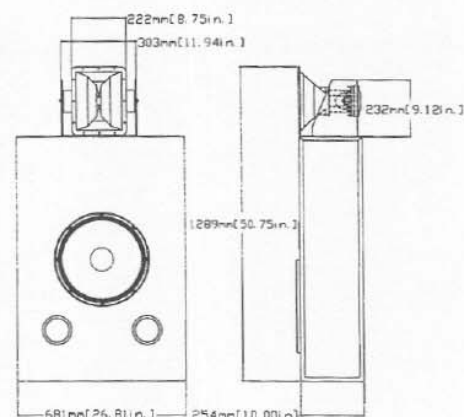


Figure 2—TS992E Typical frequency response with an Electro-Voice XEQ1108 passive crossover, 4 volts at 500 Hz at 10 feet, mic on an axis coincident with lower edge of the HF horn

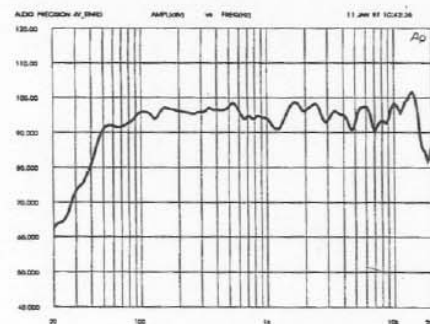
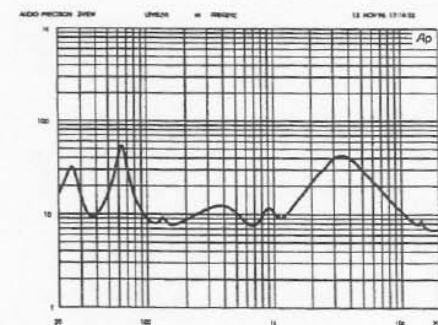


Figure 3—TS992E System impedance curve



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