

TS940D

Theatre Stage System

Electro-Voice

Theatre Sound System®

Description

In the TS940D, Electro-Voice has combined its expertise in constant-directivity horns, high-frequency compression drivers and low-frequency speakers and enclosures to produce a compact, easily installed theatre stage system with superior performance in all areas: uniform dispersion to the highest frequencies, high efficiency, high power capacity and wide, smooth frequency response.

The TS940D matches the only second-generation constant-directivity high-frequency horn to a world-class high-frequency driver, providing accurate reproduction and coverage of frequencies from 500 Hz to 20,000 Hz. Electro-Voice invented constant-directivity technology, first introduced in our HR series horns in 1974. The HP horn is the TS940D is a significant refinement. Constant directivity means that all frequencies are evenly spread over the horn's rated coverage angle, so that every seat in the house can receive both clear dialogue and subtle high-frequency effects. For low frequencies, two 15-inch woofers are vertically stacked in a direct-radiating configuration, providing a coverage pattern that closely matches that of the

high-frequency horn in the crossover region. Such a match is not possible with more traditional horn-loaded bass enclosure. The high excursion woofers, mounted in an optimally vented, Thiele-Small enclosure, provide high-impact bass from 40-500 Hz, at average powers up to 800 watts, when required. In the field, the TS940D's combination of high- and low-frequency reproduction has proven to be an excellent choice for small to medium sized houses.

The TS940D incorporates a number of installer-recommended features, for quick, trouble-free and low-cost installation. Among these features is a dedicated crossover/equalizer that is easily flush mounted in the pre-sized, pre-drilled hole located in the side of the low-frequency enclosure. Side mounting provides easy wiring access when the system is installed against a wall. Through the use of the horn mounting kit and pre-drilled holes in the low-frequency system, the high-frequency section is easily mounted in the proper position on top of the low-frequency section. All pre-drilled holes are T-nut loaded, including bass driver mounting holes. This means quick and easy driver replacement. All components of the TS940D

are finished in matte black, to eliminate any reflections back through the screen.

Frequency Response

Figure 2 shows TS992-LX frequency response with presets of the Electro-Voice Dx34A digital speaker system processor (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. Figure 3 shows the frequency response of the individual sections of the TS992-LX, measured under the same conditions but with a 4-volt input constant with frequency, the results of which were then normalized to 1 watt/1 meter.

Frequency Response

The data was measured in an anechoic (echoless) environment at 20 feet on axis with 4 volts of swept 1/3-octave random noise. The frequency response curve for the TS940D is shown in Figure 2.

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Limited Warranty

Electro-Voice products are guaranteed against malfunction due to defects in materials or workmanship for a specified period, as noted in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual, beginning with the date of original purchase. If such malfunction occurs during the specified period, the product will be repaired or replaced (at our option) without charge. The product will be returned to the customer prepaid. **Exclusions and Limitations:** The Limited Warranty does not apply to: (a) exterior finish or appearance; (b) certain specific items described in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual; (c) malfunction resulting from use or operation of the product other than as specified in the

product data sheet or owner's manual; (d) malfunction resulting from misuse or abuse of the product; or (e) malfunction occurring at any time after repairs have been made to the product by anyone other than Electro-Voice Service or any of its authorized service representatives. **Obtaining Warranty Service:** To obtain warranty service, a 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.

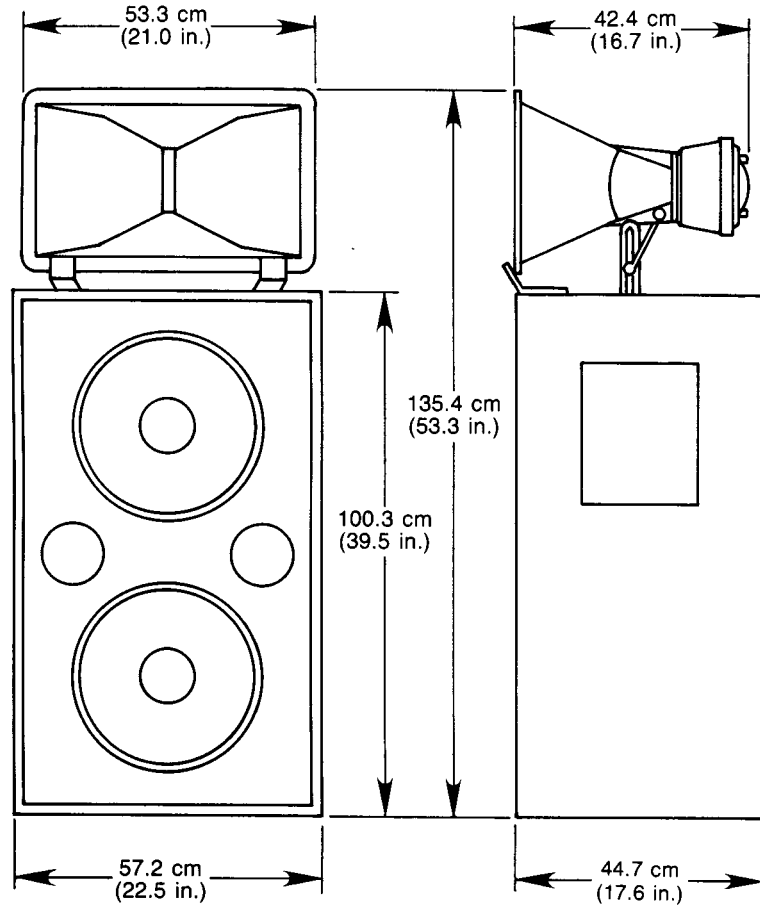
For warranty repair or service information, contact the service repair department at: 616/695-6831 or 800/685-2606.

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 subject to change without notice.

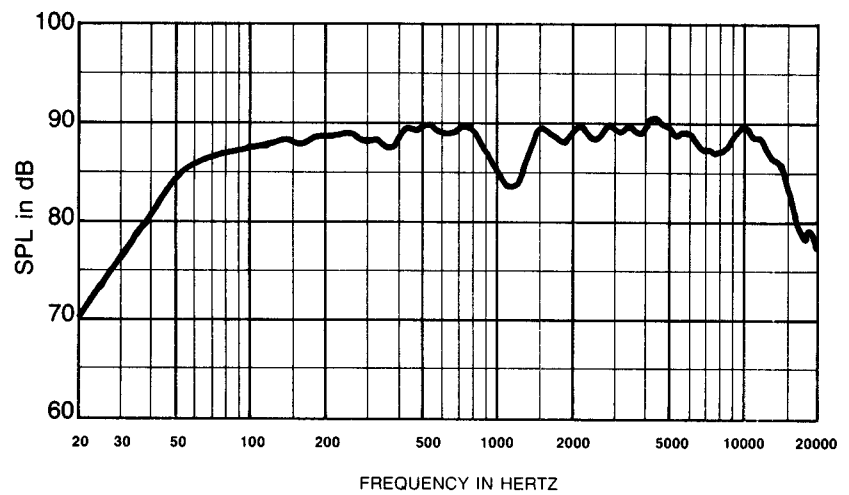
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Figure 1—Dimensions



TS940D Theatre Stage System

Figure 2—TS940D Frequency Response
4 Volts/20 Feet



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Specifications

Usable Frequency Response

30-20,000 Hz

Sound Pressure Level at 1 Meter, 1 Watt Input:

100 dB

Power Capacity Per EIA Standard RS-426A,

Long-Term Average:

300 watts

Short-Term Peak:

1,200 watts

Crossover Frequency:

500 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):

600 watts

Low Frequency, Continuous

Program:***

1,000 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:

DH2As1 compression driver; HP99T horn; TL15-1XS low-frequency system with EVX-150A woofer; HMK-4 horn/driver-mounting bracket

Finishes:

Matte black HF horn, black driver and mounting bracket, and black textured-painted LF system

Overall Dimensions, Assembled (see Figure 1),

Height (approximate):

1.295 m (51 in.)

Width:

680 mm (26.75 in.)

Depth:

254 mm (10 in.)

Net Weight (total):

46.0 kg (101.1 lb)

Shipping Weight (total):

51.1 kg (112.6 lb)

* THX is a registered trademark of Lucasfilm Ltd.
** 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.

Electro-Voice®

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Manufacturing Plants at

Buchanan, MI • Newport, TN • Sevierville, TN • Austin, TX

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