

HP42S
TransPlanar™
Constant-Directivity
Horn



General Product Description

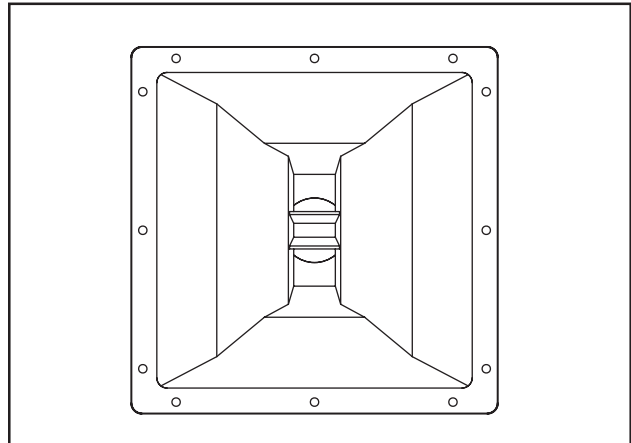
The Electro-Voice® model HP42S is a wide-range, flat-front, high-frequency, constant-directivity horn. Furthermore, excellent loading is maintained to a low frequency of 1000 Hz.

The flat-front design makes the HP42S suitable for all modern boxed and clustered systems. A special vaned waveguide throat detail gives the HP42S unusually good high-frequency control, vertically, when compared to similar 2-inch-throat horn designs.

Architects' and Engineers' Specifications

The horn shall be of the constant-directivity type. It shall produce a horizontal nominal beamwidth (6 dB-down angle) of 40 degrees. It shall produce a vertical nominal beamwidth of 20 degrees. In addition, it shall provide useful acoustic loading at all frequencies above 1000 Hz.

The horn shall be of hybrid fiberglass-and-zinc construction. The driver-mounting flange and initial throat section shall be constructed of die-cast zinc and shall be integrally laminated into the fiberglass portion of the horn.



The horn shall possess a throat of 4.92-cm (1.94in.) diameter and its flange shall be provided with four ¼-20 clearance bolt holes on a 10.2 cm (4.0 in.) circle for the mounting of the compression driver. The horn shall be 27.9 cm (11.0 in.) high, 27.9 cm (11.0 in.) wide, and 43.6 cm (17.8 in.) long. It shall weigh no more than 4.0 kg (8.8 lb).

The horn shall be the Electro-Voice model HP42S constant-directivity horn.

Specifications:

The following specifications are in accordance with or exceed the AES Recommended Practice for Specification of Loudspeaker Components Used in Professional Audio and Sound Reinforcement (AES2-1984; ANSI S4.26-1984).

Horizontal Beamwidth: 40°

Vertical Beamwidth: 20°

Directivity Factor R₀ (Q): 18.1

Directivity Index D_i:

12.6 dB

10 log R_i

Lowest Recommended Crossover Frequency:

..... 1000 Hz

Construction:

Polyester resin and glass-fiber laminate integrally molded to a die-cast zinc throat section. This hybrid construction assures a rigid driver mount, accurate, loss-free throat-wave transmission and low total weight compared to horns of similar size.

Mechanical Connection of Driver:

Bolt on; standard 2" diameter throat, 5" diameter mounting flange and four clearance holes for ¼" bolts on a 4" diameter bolt circle.

Recommended Driver:

DH1A, DH2A

Weight: 4.0 kg (8.8 lb)

Dimensions:	Inches
A	1.938
B	5.00
C	11.00
D	11.00
E	4.00
F	0.281 x 4
G	17.18
H	16.93

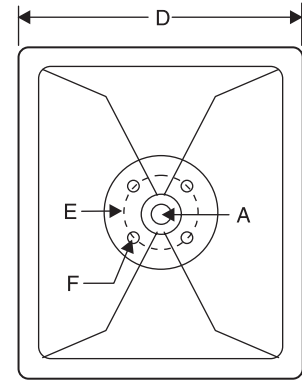
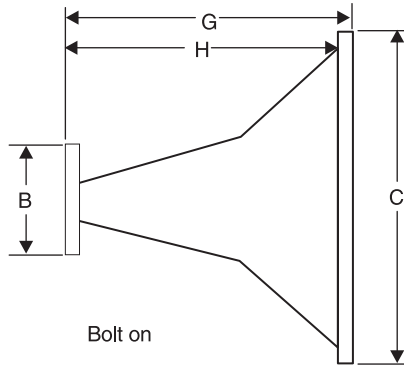


Figure 1: Dimensions

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Germany Hirschberger Ring 45, D94315, Straubing, Germany, Phone: 49 9421-706 0, FAX: 49 9421-706 287
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Australia Unit 23, Block C, Slough Business Park, Slough Avenue, Silverwater, N.S.W. 2128, Australia, Phone: 61/2-9648-3455, FAX: 61/2-9648-5585
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For customer orders, contact the Customer Service department at
800/392-3497 Fax: 800/955-6831

For warranty repair or service information, contact the Service
Repair department at 800/685-2606

For technical assistance, contact Technical Support at 866/78AUDIO
Please refer to the Engineering Data Sheet for warranty information.

Specifications subject to change without notice.