# HP85

# Constant-Directivity Horn



## **General Product Description**

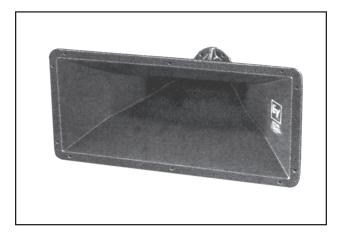
The Electro-Voice® HP85 is a wide-range, flat-front, constant-directivity, high-frequency horn. Furthermore, excellent loading is maintained to a low frequency of 1200 Hz.

The flat-front design makes the HP85 suitable for all modern boxed and clustered systems. A special vaned waveguide throat detail gives the HP85 unusually uniform vertical directivity control in the top octaves 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 80 degrees. It shall produce a vertical nominal beamwidth of 50 degrees. In addition, it shall provide useful acoustic loading at all frequencies above 1200 Hz.

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



The horn shall possess a throat of 3.3 cm (1.29-in.) diameter, and its flange shall be provided with four clearance holes for ¼-20 bolts, located on a 8.9 cm (3.5 in.) circle for the mounting of the compression driver. The horn shall be 15.2 cm (6.0 in.) high, 30.5 cm (12.0 in.) wide and 12.7 cm (5.0 in.) long. It shall weigh no more than 2.0 kg (4.5 lb).

The horn shall be the Electro-Voice HP85 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:

80°

#### Vertical Beamwidth:

50°

#### Directivity Factor R<sub>o</sub> (Q):

17.8

#### Directivity Index D<sub>i</sub>:

12.5 dB

10 log R<sub>θ</sub>

#### **Lowest Recommended Crossover Frequency:**

1200 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 1.4" diameter throat, 4.5" diameter mounting flange and four clearance holes for ¼" bolts on a 3.5" diameter bolt circle.

#### **Recommended Driver:**

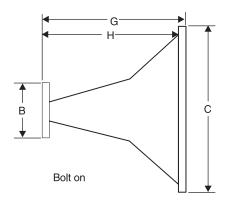
DH1Amt, DH2As1

# Weight:

2.0 kg (4.5 lb)



Dimensions:	Inches
Α	1.29
В	4.50
С	6.00
D	12.00
E	3.5
F	0.281 x 4
G	5.00
Н	4.75



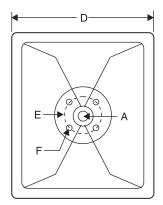


Figure 1: Dimensions

12000 Portland Ave South, Burnsville, MN 55337, Phone: 952-884-4051, FAX: 952-884-0043
705 Progress Avenue, Unit 46, Scarborough, Ontario, Canada, M1H2X1, Phone: 416-431-4975, 800-881-1685, FAX: 416-431-4588 USA Canada Hirschberger Ring 45, D94315, Straubing, Germany, Phone: 49 9421-706 0, FAX: 49 9421-706 287 Germany Parc de Courcerin, Alle Lech Walesa, Lognes, 77185 Marne La Vallee, France, Phone: 33/1-6480-0090, FAX: 33/1-6480-4538 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 France Australia Hong Kong Unit E & F, 21/F, Luk Hop Industrial Bldg., 8 Luk Hop St., San PO Kong, Kowloon, Hong Kong, Phone: 852-2351-3628, FAX: 852-2351-3329 Japan Singapore 5-3-8 Funabashi, Setagaya-ku, Tokyo, 156-0055 Japan, Phone: +81 (0) 3-5316-5020, FAX: +81 (0) 3-5316-5031 3015A Ubi Rd 1, 05-10, Kampong Ubi Industrial Estate, Singapore 408705, Phone: 65-746-8760, FAX: 65-746-1206 Av. Parque Chapultepec #66-201, Col. El. Parque Edo. Mex. 53390, Phone: (52) 5358-5434, FAX: (52) 5358-5588 4, The Willows Centre, Willow Lane, Mitcham, Surrey CR4 4NX, UK, Phone: 44 181 640 9600, FAX: 44 181 646 7084 12000 Portland Ave South, Burnsville, MN 55337, Phone: 952-887-7424, FAX: 952-887-9212 Africa, Mid-East 12000 Portland Ave South, Burnsville, MN 55337, Phone: 952-887-7491, FAX: 952-887-9212

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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.