

DH2010A

Very High-Frequency Reproducers



General Product Description

The Electro-Voice® DH2010A is a high-performance compression driver optimized for use as the super-tweeter component in professional two- and three-way sound reinforcement systems. Use above 5,000 Hz is recommended. Exceptional high-frequency performance is realized through a design which includes:

- 1) A specially formed lightweight titanium diaphragm and low-mass voice coil.
- 2) A unique glass-filled polycarbonate, convexdrive, distributed-source phase plug. This advanced design is akin to modern fluidic amplifier circuitry and is Electro-Voice's exclusive Time Path™ phase equalizer.
- 3) An optimum magnetic motor design, leading to a compact but sensible size and weight.
- 4) Exclusive Resonant Drive™ high-frequency suspension treatment (patent pending).

Recommended Horns

The following Electro-Voice horns are recommended for use with the DH2010A, HPT42, HPT64, HPT94, HP64M, HP85P.

Architects' and Engineers' Specifications

The loudspeaker shall be of the compression-driver type consisting of a titanium diaphragm joined to an aluminum voice coil on a polyimide form.

The nominal impedance shall be 8 ohms.

The loudspeaker shall exhibit essentially flat power response from 1.5-5.0 kHz with a smoothly rolled-off response from 5 kHz to 20 kHz. The efficiency shall not be less than 25%. The sensitivity, when mounted on an EV HPT42 horn, shall be 113 dB (1 W/1 m) with a 1.5 kHz to 5 kHz pink-noise signal applied.

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 54.26-1984). See AES Recommended Practice section.

Power Frequency Response:

- 1.5 kHz to 20 kHz (essentially flat)
- 1.5 kHz to 5 kHz with 6 dB-per-octave rolloff to 20 kHz, rapid rolloff beyond)

Nominal Impedance: 8 ohms

Minimum Impedance: 7 ohms at 10 kHz/5 ohms at 15 kHz

Nominal DC Resistance: 5 ohms

Long-Term Average Power Capacity on HP Horns, Indicated Bands of Pink Noise, 8 Ohm Impedance Assumed,

24 Hours, 6-dB Crest Factor: 20 watts (5 kHz-20 kHz)

2 Hours, 6-dB Crest Factor: 30 watts (5 kHz-20 kHz)

Nominal Efficiency, 1,000-5,000-Hz Pink Noise, 8-Ohm Impedance Assumed: 25%

Maximum Long-Term Acoustic Power Output (24 hours): 5 watts

Recommended Minimum Crossover Frequency: 5 kHz

Sound Pressure Level at 1 Meter, 1 Watt Input Averaged from 500 Hz to 5,000 Hz:¹

- 111 dB, HP64 horn
- 112 dB, HP94 horn



The loudspeakers shall be capable of handling a 20-watt, 5 kHz to 20 kHz pink noise signal with a 10-dB crest factor (200 watts peak) for a period of 24 hours.

The loudspeakers shall have a diameter of 12.2 cm (4.8in.) and a depth of 8.9 cm (3.5 in.). They shall have a 0.95 inch throat opening, with a 1-3/8"-18 thread for mounting. They shall weigh no more than 1.9 kg (4.2 lbs).

The loudspeakers shall be the Electro-Voice® model DH2010A.

Throat Diameter: 2.41 cm (0.95 in.)

Voice Coil Diameter: 3.17 cm (1.25 in.)

Voice Coil Construction:

Polyimide insulated aluminum wire on a polyimide form.

Diaphragm Construction:

Titanium integral half-roll surround diaphragm

Electrical Connection:

The DH2010A is fitted with a pair of chrome-plated connectors with color-coded ends. Electrical connection is made by pushing down, inserting wire completely through the rectangular slot and releasing pressure. One conductor of #9 AWG stranded, #8 AWG solid, a pair of twisted #15 AWG stranded or a pair of #14 AWG solid conductors will fit. A positive electrical signal applied to the red (+) terminal will displace the diaphragm away from the magnet, thus producing a positive acoustic pressure.

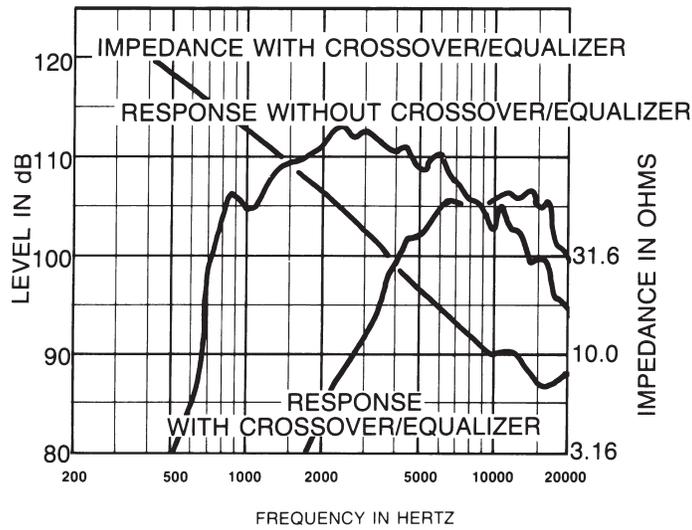
Mechanical Construction:

1-3/8"-18 x 5/8 long thread allows the DH2010A to be mounted on any HPT super-tweeter horn or the MTA-42 Manifold Technology™ adapter.

Net Weight: 1.9 kg (4.2 lb)

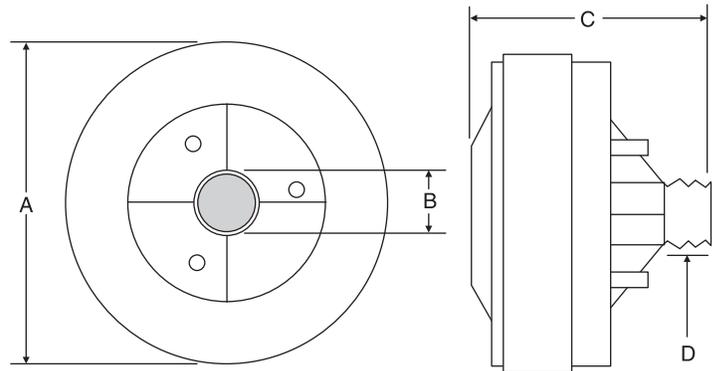
Shipping Weight: 2.0 kg (4.4 lb)

¹ Measured axis in the far field with 1 watt input of band-limited pink noise from 500-5,000 Hz end calculated to 1 m or equivalent by Inverse square law.



**Axial Frequency Response
1 Watt/1 Meter, HPT94 Horn**

Dimensions: (in)	
A	4.80
B	0.95
C	3.5
D	1 3/8 - 18



Dimensions

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Electro-Voice®

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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.