

Electro-Voice® a gultan company Model DH1012A High-Frequency Driver

GENERAL SPECIFICATIONS

Power Frequency Response:

400-12,000 Hz

(Essentially flat, 400-2500 Hz, with 6 dB per octave rolloff to 6 kHz, 12 dB per octave rolloff to 12 kHz, rapid rolloff beyond.

Nominal Impedance:

8 ohms

Minimum Impedance:

6.3 ohms

(on HR series horns, above 300 Hz)

Nominal DC Resistance:

4.5 ohms

Nominal Efficiency:

25%

(band-limited pink noise input, 400-2000 Hz, assuming 8 ohm driver impedance)

Maximum Long-Term Acoustic Power Output (24 Hours):

10 watts

(17.9 volts RMS applied to nominal 8 ohm load, pink noise signal with 10 dB crest factor band-limited to 400-2000 Hz, HR series horns)

Recommended Minimum Crossover Frequency:

400 Hz

Short-Term Power Capacity (5 Seconds):

200 watts above 1500 Hz 100 watts above 800 Hz 60 watts above 400 Hz (40,28.3, and 21.9 volts RMS, respectively, applied to nominal 8 ohm impedance, sine wave signal, power not to exceed 40 watts when averaged over any 20 second period, HR series horns)

Long-Term Average Power Capacity (24 Hours):

40 watts

(17.9 volts RMS applied to nominal 8 ohm impedance, pink noise signal with 10 dB crest factor band-limited to 400-15,000 Hz, HR series horns)

Sound Pressure Level at 10 Feet, 1 Watt Input:

106 dB, HR4020A horn

104 dB, HR6040A horn

102 dB, HR9040A horn

105 dB, HR40 horn

103 dB, HR60 horn

101 dB, HR90 horn

99 dB, HR120 horn

Voice Coil Diameter:

7.62 cm (3 in.)

Voice Coil Construction:

Flat, edge-wound aluminum wire on an aluminum form

Diaphragm Construction:

Aluminum dome with polyamide surround

Polarity

The DH1012A diaphragm moves away from the magnetic assembly when a positive (+) DC voltage is applied to the T1 terminal.

Magnet Material:

Ceramic (Indox V)

Horn Throat Diameter:

3.3 cm (1.3 in.)

Horn Mounting Method:

Bolt-on

(4 equally spaced holes on a 3.5 in. diameter circle, 1/4"-20 threads, bolts supplied with HR series horns)

Size (see Figure 1):

19.1 cm (7.5 in.) overall diameter, 7.1 cm (2.8 in.) overall deep

Net Weight:

6.7 kg (14 lb, 11 oz)

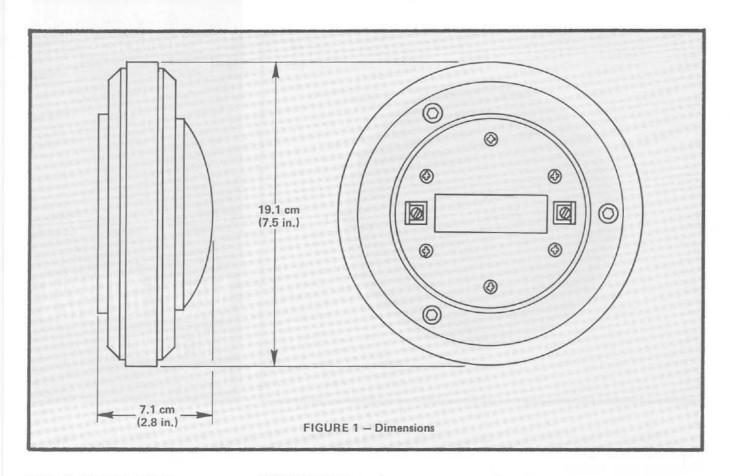
Shipping Weight:

7.1 kg (15 lb, 10 oz)

DESCRIPTION

The Electro-Voice DH1012A is a highperformance high-frequency driver capable of unprecedently high acoustic power output over a wide frequency range. This performance results from a combination of high conversion efficiency and high power handling capacity, attained through design which includes:

- A drawn aluminum diaphragm with high stiffness-to-weight ratio for extended response.
- A polyamide diaphragm surround for large excursions without fracture,
- A voice coil of flat, edgewound aluminum wire for high BL product.
- A very large, efficient magnetic structure for high flux density.
- An aluminum voice-coil form for rapid heat transfer.
- Glass-filled Lexan phasing plug capable of in-phase transfer of diaphragm energy to nearly 20 kHz.



DRIVER INSTALLATION

The DH1012A is designed for use with the Electro-Voice HR series horns. The DH1012A's mounted to these horns with four 1/4"—20 bolts. Appropriate bolts and washers are packed with each HR horn.

HR SERIES HORNS

The HR series horns are light-weight, modified radial designs that provide extremely uniform beamwidth and directivity over a wide frequency range. Detailed information is presented on separate data sheets

FIELD REPLACEMENT

In case of voice coil or diaphragm failure, the diaphragm cover sub-assembly on the rear of the driver can be field replaced by the removal of six cover screws. A replacement kit with instructions may be ordered under Electro-Voice Part No. 88244-XX from the Electro-Voice Service Department in Buchanan, Michigan. If desired, the complete driver may be returned for service.

WARRANTY (Limited)

Electro-Voice Professional Sound reinforcement Loudspeakers and Accessories 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 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 shipping address and instructions on return of Electro-Voice products for repair and locations of authorized service agencies, please write: Service Department, Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107 (Phone: 616/695-6831) or Electro-Voice, West, 8234 Doe Avenue, Visalia, California, 93277 (Phone: 209/625-1330,-1).

Electro-Voice also maintains complete facilities for non-warranty service.

Service and repair address for this product: Electro-Voice, Inc., 600 Cecil St., Buchanan, Michigan 49107.

Specifications subject to change without notice.