

HD110

High Frequency Driver

Key Features

- 109dB SPL 1W/1m average sensitivity
- 1 inch exit on 1 3/8" screw-in type horns
- 1 inch voice coil diameter
- 40 W program power handling
- Rugged phenolic diaphragm
- Usable in two way or multi-way system



General Description

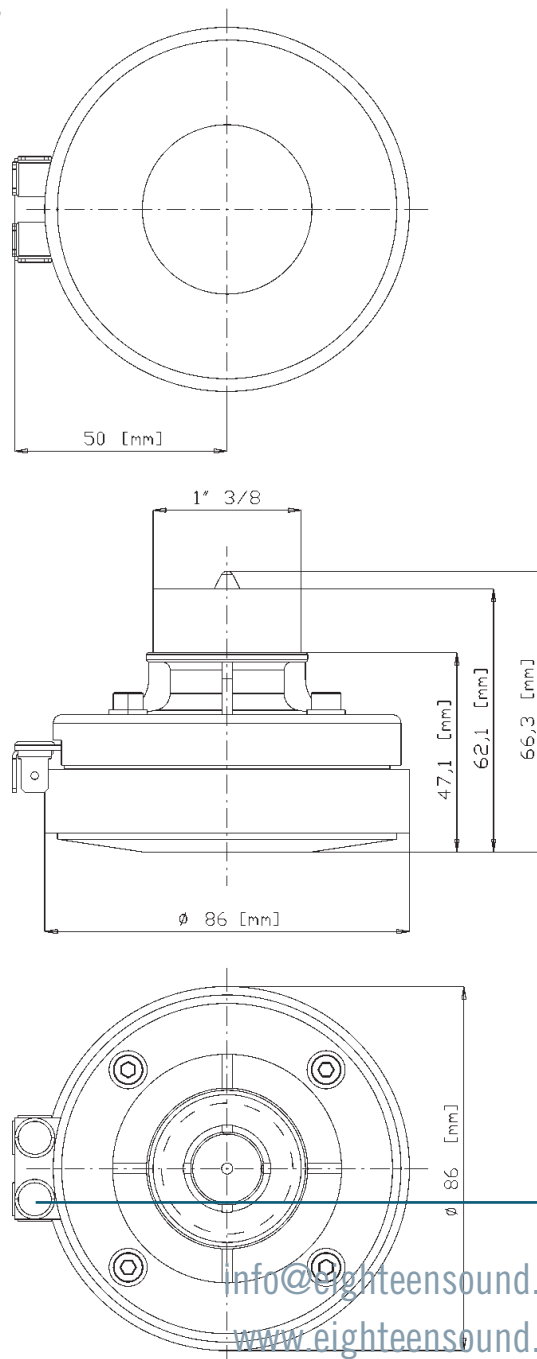
The HD110 is a HF unit suitable for compact size two and three-way lightweight systems. It will deliver an unmatched combination of extended linear frequency response and very high efficiency. With a 1-inch exit throat, the HD110 is developed to match all 1-3/8" screw-in type horns.

The phenolic diaphragm assembly features a 1 inch edgewound aluminum voice coil and is capable to handle up to 40W continuous program power for temperature ranges up to 250°C.

Computer Aided Finite Element Analysis and extensive testing were used to obtain phase plug shape made in high pressure injection-molded polypropylene foam, designed to assure maximum strength. The final result is a smooth coherent wavefront in the horn entrance, high thermal stability and manufacturing consistency.

The HD110 compact size and lightweight ceramic magnet assembly is designed to obtain 16KGauss in the gap.

0421F8H110 8ohm



FERRITE HF DRIVERS

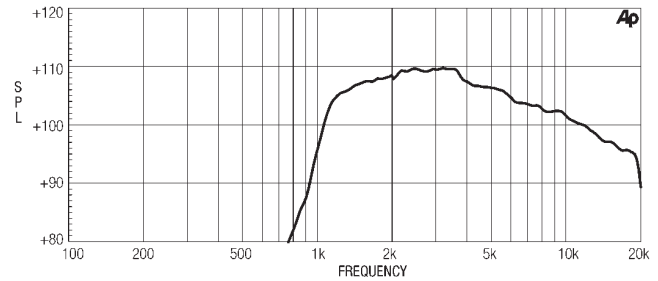
GENERAL SPECIFICATIONS

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|-----------------------------|--|
| THROAT DIAMETER | 25,4 mm (1 in) |
| RATED IMPEDANCE | 8 ohm |
| DC RESISTANCE | 5,6 Ohm |
| MINIMUM IMPEDANCE | 7 Ohm at 4000Hz |
| AES POWER (1) | 20 W above 2,5 kHz |
| CONTINUOUS PROGRAM POWER | 40 W above 2,5 kHz |
| SENSITIVITY(1W@1M) (3) | 109 dB |
| FREQUENCY RANGE | 2 kHz ÷ 20 kHz |
| RECOMM. XOVER FREQUENCY | 2500 Hz (12dB/oct slope) |
| DIAPHRAGM MATERIAL | Cloth |
| VOICE COIL DIAMETER | 25,4 mm (1 in) |
| VOICE COIL WINDING MATERIAL | Edge-wound aluminum |
| MAGNET MATERIAL | Ferrite |
| FLUX DENSITY | 1,6 T |
| POLARITY | Positive voltage on red terminal gives positive pressure in the throat |

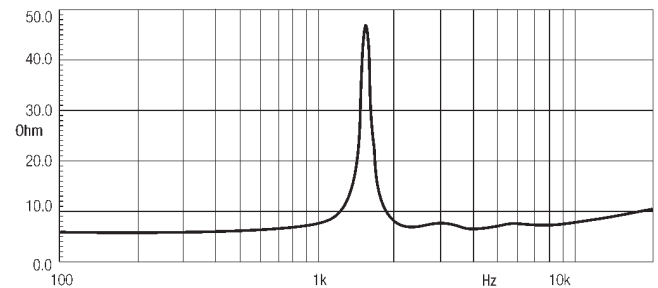
MOUNTING INFORMATIONS

| | |
|--------------------------------|------------------------------|
| Overall diameter | 86 mm (3,39 in) |
| Mounting holes diameter | 2 M5 at 180 degrees |
| Bolt circle diameter | 76 mm (3 in) |
| Total depth | 62,1 mm (2,44 in) |
| Net weight | 0,8 Kg (1,77 lb) |
| Shipping weight | 0,9 Kg (1,99 lb) |
| CardBoard Packaging dimensions | 90x90x70 mm (3,5x3,5x2,8 in) |

HD110 MEASURED WITH 1W INPUT ON RATED IMPEDANCE AT 1 M DISTANCE ON AXIS FROM THE MOUTH OF A 60°x 50° HORN



FREE AIR IMPEDANCE MAGNITUDE CURVE



NOTES

- (1) AES power rating is tested with a pink noise input having a 6 dB crest factor for two hours duration within the specified range. Power calculated on minimum impedance.
- (2) Program Power is defined as 3 dB greater than AES but with 50% dutycycle.
- (3) Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a 1 inch 60°x50° horn averaged between 1kHz and 4 kHz.

Eighteen Sound engages in research and product improvement. New materials and design refinements can be introduced into existing products without notice.