

**LINE ARRAY DRIVER**

**KEY FEATURES**

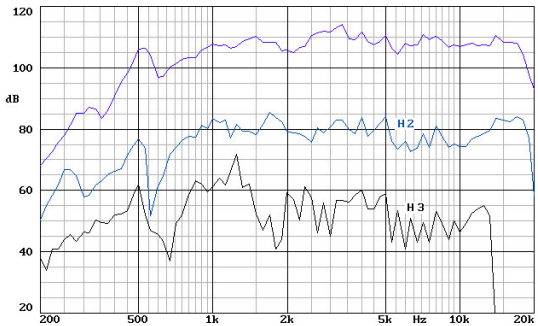
- Wave guide fulfilling requirements for Line Array applications.
- 4" x 0.5" rectangular exit
- Neodymium magnetic circuit for high efficiency.
- Effective acoustical coupling up to 18 kHz.
- True 105 dB sensitivity 1w @ 1m (averaged 1-7 kHz).
- Extended frequency range: 0.7 - 20 kHz.
- 1.75" voice coil for excellent power handling (40 w AES).



**GENERAL DESCRIPTION**

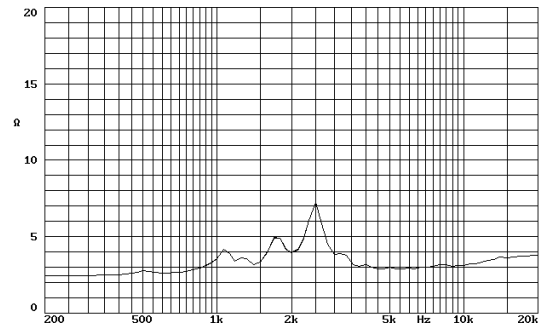
This combination of high power neodymium compression driver with wave guide gives a straightforward solution to build a Line Array System, solving the difficult problem of achieving an optimum coupling between adjacent high frequency transducers. Instead of using expensive and complicated wave-shaping devices, a simple but effective wave guide transforms the circular aperture of the compression driver into a rectangular surface, without excessive angle aperture to provide low curvature to the acoustic wavefront, arriving to fulfill the curvature requirement for optimal acoustic coupling between adjacent sources until 18 kHz. This is achieved with the minimum possible length for low distortion, but without being excessively short, which would cause strong high frequency interferences. This waveguide can be combined with loudspeakers of different diameters but it specially matches with 8", 6" and 5" loudspeakers.

**FREQUENCY RESPONSE AND DISTORTION CURVES**

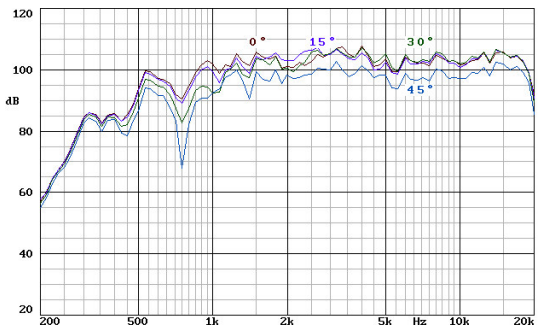


Note: on axis frequency response measured with two waveguides coupled to a 90° x 5° horn in anechoic chamber, 1w @ 1m.

**FREE AIR IMPEDANCE CURVE**

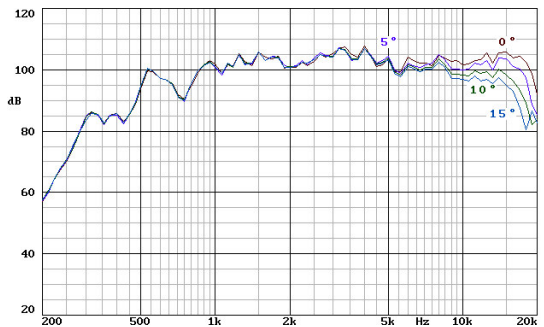


**HORIZONTAL DISPERSION**



Notes: dispersion measured with two waveguides coupled to a 90° x 5° horn in anechoic chamber, 1w @ 2m. All angle measurements are from the axis (45° means ±45°)

**VERTICAL DISPERSION**



Notes: dispersion measured with two waveguides coupled to a 90° x 5° horn in anechoic chamber, 1w @ 2m. All angle measurements are from the axis (45° means ±45°)

**TECHNICAL SPECIFICATIONS**

|                                 |                                               |
|---------------------------------|-----------------------------------------------|
| <b>Throat diameter</b>          | 20.5 mm. 0.8 in.                              |
| <b>Rated impedance</b>          | 8 ohms.                                       |
| <b>Minimum impedance</b>        | 5.5 ohms. @ 4.5 kHz                           |
| <b>D.C. Resistance</b>          | 5.6 ohms.                                     |
| <b>Power capacity *</b>         | 40 w AES above 1.5 kHz                        |
| <b>Program power</b>            | 80 w above 1.5 kHz                            |
| <b>Sensitivity **</b>           | 105 dB 1 w @ 1m<br>coupled to a 90° x 5° horn |
| <b>Frequency range</b>          | 0.7 - 20 kHz                                  |
| <b>Recommended crossover</b>    | 1500 Hz or higher (12 dB/oct. min.)           |
| <b>Voice coil diameter</b>      | 44.4 mm. 1.75 in.                             |
| <b>Magnetic assembly weight</b> | 0.6 kg. 1.32 lb.                              |
| <b>Flux density</b>             | 1.8 T                                         |
| <b>BL factor</b>                | 8 N/A                                         |

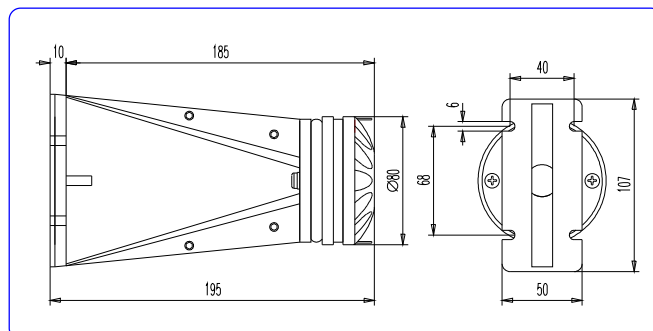
**MOUNTING INFORMATION**

|                                  |                                                                                                             |
|----------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Overall diameter</b>          | 80 mm. 3.15 in.                                                                                             |
| <b>Depth</b>                     | 195 mm. 7.68 in.                                                                                            |
| <b>Mounting</b>                  | Two M4 threaded holes, 180° apart<br>on 60 mm (2.36 in.) diameter circle.<br>Mounting hardware is supplied. |
| <b>Net weight (1 unit)</b>       | 1.1 kg. 2.42 lb.                                                                                            |
| <b>Shipping weight (2 units)</b> | 2.6 kg. 5.72 lb.                                                                                            |

**MATERIALS**

- **Waveguide:** aluminium.
- **Driver diaphragm:** polyester.
- **Driver voice coil:** edgewound aluminium ribbon wire.
- **Driver voice coil former:** kapton.
- **Driver magnet:** neodymium.

**DIMENSION DRAWINGS**



**Notes:**

\*The power capacity is determined according to AES2-1984 (r2003) standard.  
Program power is defined as the transducer's ability to handle normal music program material.  
\*\*Sensitivity was measured at 1 m distance, on axis, with 1 w input, averaged in the range 1-7 kHz.