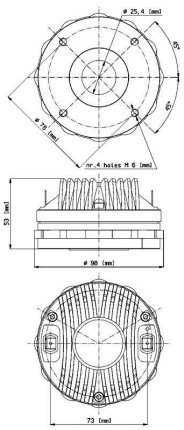
ND1070 8Ω

HF Drivers - 1.0 Inches



- 109 dB SPL 1W / 1m average sensitivity
- 1 inch exit throat
- 44 mm (1 3/4 inch) edgewound aluminum voice coil
- 100 Watt program power handling
- Titanium dome over polyester suspension
- Proprietary phase plug design
- Neodymium magnetic structure
- Excellent thermal exchange
- 16 Ohm version available

Eighteen Sound Srl
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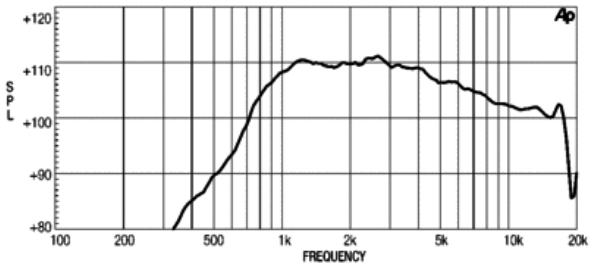
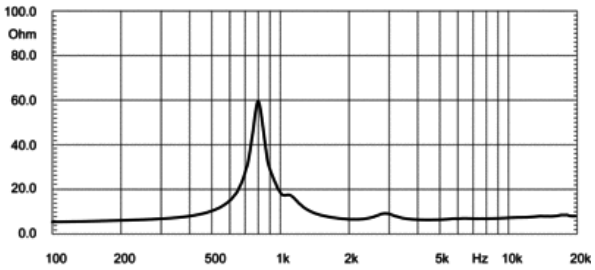
The ND1070 1-inch exit high frequency compression driver has been designed for use in high quality two-way audio systems. Equipped with Proprietary Phase Plug architecture, ND1070 shows high level manufacturing consistency and a smooth coherent wavefront at the horn entrance across the whole working frequency range. With its short openings and high flare rate value, this phase plug configuration assures low distortion and demonstrates remarkable improvements in mid-high frequency reproduction. The ND1070 diaphragm assembly is composed of a titanium dome sandwiched to a proprietary treated polyester suspension. This design maintains low resonance and lowers the minimum crossover point value to 1.6 kHz. An edge-wound aluminum voice coil wound on proprietary treated Nomex completes the diaphragm assembly. Nomex shows a 30% higher value of tensile elongation at a working operative temperature (200°C) when compared to Kapton. This feature enables proper energy transfer control from the voice coil to the dome in real working conditions. Moreover, this proprietary former material is also suitable for use in high moisture content environments. A copper ring on the pole piece reduces inductance above 10 kHz, improving phase and impedance linearization. By careful use of elementary pieces of neodymium magnets, Eighteen Sound engineers have developed a powerful neodymium magnet assembly capable of reaching 18KGauss in the gap within a compact and lightweight structure. The custom designed O-ring creates a tight seal between the plate and the cover assuring air chamber loading. Excellent heat dissipation and thermal exchange are guaranteed by the direct contact between the magnetic structure and the aluminum cover which leads to a lower power compression value. The ability to perform properly under inclement weather conditions is a key feature in Eighteen Sound philosophy. A special treatment has been applied to the magnet and the top and back plates of the magnetic structure making the driver more resistant to the corrosive effects of salts and oxidization. This treatment is more effective than any other treatment used by other manufacturers.





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SPECIFICATIONS[1]

Throat Diameter	25 mm (1.0 in)
Nominal Impedance	8 Ω
Minimum Impedance	7.0 Ω
Nominal Power Handling[2]	50 W
Continuous Power Handling[3]	100 W
Sensitivity[4]	109.0 dB
Frequency Range	1.6 - 20.0 kHz
Recommended Crossover[5]	1.6 kHz
Voice Coil Diameter	44 mm (1.75 in)
Winding Material	Aluminum
Diaphragm Material	Titanium - Pen
Flux Density	1.8 T
Magnet Material	Neodymium

MOUNTING AND SHIPPING INFO

Overall Diameter	98 mm (3.86 in)
Depth	53 mm (2.09 in)
Net Weight	1.1 kg (2.43 lb)
Shipping Weight	1.2 kg (2.65 lb)
Shipping Box	97x97x58 mm (3.82x3.82x2.28 in)

1. Driver mounted on Eighteen Sound XR1064 horn
2. 2 hour test made with continuous pink noise signal within the range from the recommended crossover frequency to 20 kHz. Power calculated on rated nominal impedance.
3. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
4. Applied RMS Voltage is set to 2.83 V for 8 ohms Nominal Impedance.
5. 12 dB/oct. or higher slope high-pass filter.