NSD1095N 16Ω

HF Drivers - 1.0 Inches

- 110 dB SPL 1W / 1m average sensitivity
- 1 inch exit throat
- 1,75 inch voice coil diameter
- 100W program power handling
- True Piston Motion TiN coated titanium diaphragm
- Neodymium ring magnetic structure
- Proprietary phase plug design
- Excellent thermal exchange

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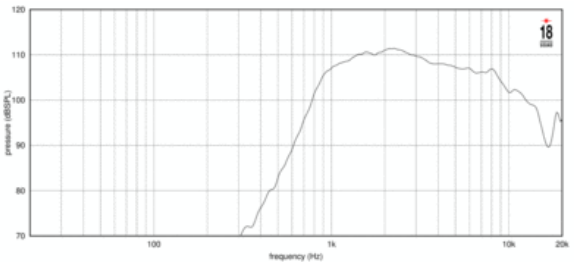
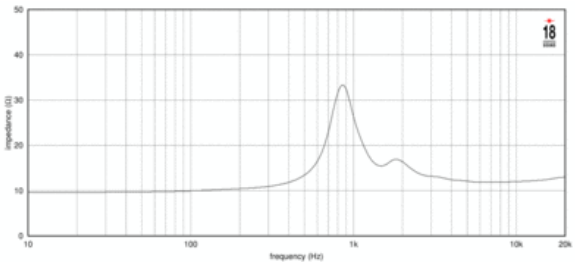
HF Drivers - 1.0 Inches

The NSD1095N 1 inch exit neodymium compression driver has been designed for situations where the highest quality is required. Equipped with proprietary phase plug architecture, the NSD1095N has been designed to give a smooth coherent wavefront at the horn entrance across the whole working frequency range. The phase plug short openings and high flare rate value assure low distortion and overall, this kind of phase plug demonstrates remarkable improvements in mid-high frequency reproduction. A further innovation in the NSD1095N is the titanium diaphragm nitrogen treatment, a proprietary technology defined as True Piston Motion - TPM technology developed after extensive research by Eighteen Sound. The coating is realized in a PVD - Physical Vapor Deposition - vacuum chamber. With its very high value of elasticity modulus (six times higher than titanium and two times higher than beryllium), the nitride thin film is capable of doubling the diaphragm overall stiffness with obvious benefits in terms of impulse response and intermodulation distortion reduction. The frequency response is then extended by 25%, showing a predictable, ideal pistonic behavior, avoiding top-end spurious resonances. An edge-wound copper-clad 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. Moreover, this proprietary former material is also suitable for use in high moisture content environments. The powerful neodymium magnet assembly has been designed to obtain 20KGauss in the gap giving major benefits in transient response. A copper ring on the pole piece reduces inductance above 10 kHz, improving phase and impedance linearization. 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. 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.





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SPECIFICATIONS[1]

Throat Diameter	25 mm (1.0 in)
Nominal Impedance	16 Ω
Minimum Impedance	11.9 Ω
Nominal Power Handling[2]	50 W
Continuous Power Handling[3]	100 W
Sensitivity[4]	110.0 dB
Frequency Range	1.6 - 20.0 kHz
Recommended Crossover[5]	1.6 kHz
Voice Coil Diameter	44 mm (1.75 in)
Flux Density	2.0 T

MOUNTING AND SHIPPING INFO

Overall Diameter	93 mm (3.66 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 XR1464C 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.