



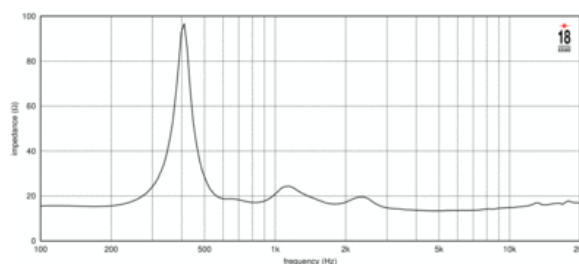
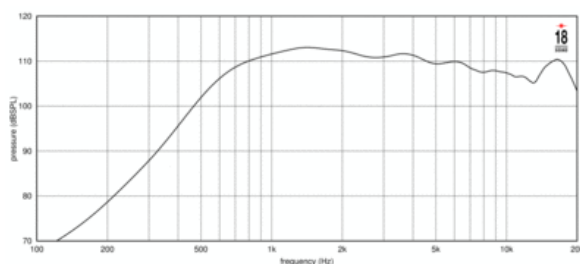
## NSD1480N 16Ω

HF Drivers - 1.4 Inches



- 111 dB 1W / 1m average sensitivity
- 1,4 inch exit throat
- 3 inch voice coil diameter
- 200W program power handling
- Titanium Nitride Coated Dome
- True Piston Motion TiN coated titanium diaphragm
- High grade neodymium magnetic structure
- Excellent thermal exchange

NSD1480N 1.4 inch exit, 3" voice coil neodymium compression driver has been designed for top quality sound systems application. A great innovation in the NSD1480N is the titanium nitride coated dome - so called TPM True Piston Motion technology - that dramatically improves stiffness with obvious benefits in transient and intermodulation distortion response. With its very high value of elasticity modulus (six times higher than titanium and two times higher than beryllium), nitride coated film is capable of doubling the titanium stiffness. The piston frequency range motion extends frequency by 25%, showing a predictable, ideal frequency response decay and avoiding top-end spurious resonances. The nitride-free ellipsoidal suspension shape has been designed to maintain constant titanium stiffness, assuring a 3rd harmonic distortion lower than 0.05% over the whole working frequency range. The titanium diaphragm is produced in-house and has been developed to assure unmatched transient response. The diaphragm assembly is made joining the former directly to the titanium dome on its upper bend edge. In comparison with a usual straight former joint, the driver design assures extended frequency energy transfer for improved response linearity and unparallel reliability. This feature allows proper motion control of the dome in real working conditions. A proprietary treated Nomex former shows a 30% higher value of tensile elongation at a working operative temperature (200°C) when compared to Kapton. This proprietary former material is also suitable for use in higher moisture content environments. The NSD1480N powerful neodymium magnet assembly has been designed to obtain 22KGauss in the gap for major benefits in transient response. The motor structure, throughout the precisely coherent phase plug with 3 circumferential slots and copper ring on the pole piece, reduces inductance effect and distortion. Four top plate air ducts have been designed to act as a loading chamber for the diaphragm, implementing mid band distortion and response figures. 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 gives a lower power compression value. A special treatment is 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<sup>1</sup>

|  |                |
|--|----------------|
| Throat Diameter                        | 35 mm (1.4 in) |
| Nominal Impedance                      | 16 Ω           |
| Minimum Impedance                      | 12.9 Ω         |
| Nominal Power Handling <sup>2</sup>    | 100 W          |
| Continuous Power Handling <sup>3</sup> | 200 W          |
| Sensitivity <sup>4</sup>               | 111.0 dB       |
| Frequency Range                        | 0.5 - 20.0 kHz |
| Recommended Crossover <sup>5</sup>     | 0.8 kHz        |
| Voice Coil Diameter                    | 75 mm (3.0 in) |
| Flux Density                           | 2.2 T          |

## MOUNTING AND SHIPPING INFO

|                  |                                   |
|------------------|-----------------------------------|
| Overall Diameter | 131 mm (5.16 in)                  |
| Depth            | 62 mm (2.44 in)                   |
| Net Weight       | 3.1 kg (6.83 lb)                  |
| Shipping Weight  | 3.3 kg (7.28 lb)                  |
| Shipping Box     | 132x132x68 mm (5.20x5.20x2.68 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.