

HF Drivers - 1.0 Inches





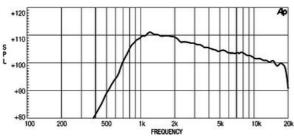


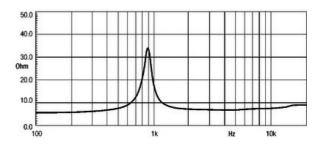
- 1 inch exit throat
- 108 dB SPL 1W / 1m average sensitivity
- 44 mm (1 3/4 inch) voice coil
- 100 Watt program power handling
- Titanium diaphragm
- Neodymium magnet structure
- Proprietary Phase Plug design

The ND1018BT 1-inch exit high frequency compression driver is designed for high quality two-way systems applications. Equipped with proprietary Phase Plug architecture, the ND1018BT compression driver offers high level manufacturing consistency and smooth coherent wavefront at horn entrance over all the working frequency range. The phase plug design with short openings and high flare rate value assures low distortion and remarkable improvements in mid-high frequency reproduction. With its ellipsoidal suspension shape, the ND1018BT titanium diaphragm assembly exhibits constant slope response from 1kHz to 18kHz with uniform smooth roll-off behavior. An edge-wound aluminum voice coil, wounded on proprietary treated Nomex, completes diaphragm assembly. Thanks to its physical properties, the proprietary treated Nomex former shows 30% higher value of tensile elongation at working operative temperature (200°C) when compared to Kapton. Moreover, this proprietary former material is suitable to work also in higher moisture contents environments. Through careful use of elementary pieces of neodymium magnets, Eighteen Sound engineers have developed a powerful neodymium magnet assembly able to reach 18 KGauss in the gap in compact and lightweight structure. 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. For the increase in use of high power audio systems at outdoor events or in marine environments, the ability to perform properly under inclement weather conditions is a key-point of the Eighteen Sound philosophy. In addition, the special treatment applied to the magnet and the top and back plates of the magnetic structure makes the driver more resistant to the corrosive effects of salts and oxidization.



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SPECIFICATIONS¹

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	108.0 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
Flux Density	1.8 T
Magnet Material	Neodymium

MOUNTING AND SHIPPING INFO

Overall Diameter	98 mm (3.86 i	in)
Depth	50 mm (1.97	in)
Net Weight	1.0 kg (2.2	lb)
Shipping Weight	1.0 kg (2.2	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.

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