ND3BE 8Ω

HF Drivers - 1.4 Inches

- • Ultra compact design (OD 109mm - 4.3 in)
- • Pure Beryllium diaphragm
- • 112 dB SPL 1W-1m average sensitivity
- • 1.4 inch exit throat
- • 220W maximum program power handling
- • Natural Sound frequency response extended up to 20 kHz
- • Next-gen 4-slot metal alloy phase plug
- • Edge-wound 75mm (3 in) CCAW voice coil
- • Neodymium ring magnetic structure
- • Copper ring for reduced distortion and increased output
- • Self-centering d-kit for accurate and fast service

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The ND3BE 1.4 inch exit Natural Sound neodymium high frequency compression driver has been designed for high level sound systems application. The unit has been designed to fulfill tight geometrical requirements, thanks to its ultra compact 109mm overall diameter.

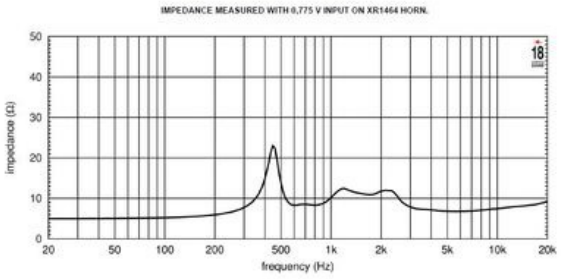
In addition to the next-gen titanium diaphragm of the standard ND3T version, pure Beryllium has been used for this benchmark component, avoiding spurious resonances at very high frequencies, assuring the lowest possible harmonic distortion over the whole working range.

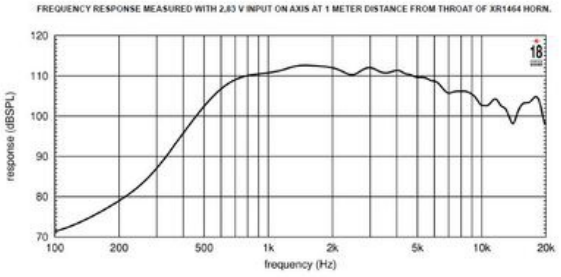
A proprietary treated Nomex former is used as Nomex shows a 30% higher value of tensile elongation at a working operative temperature (200°C) when compared to Kapton. Moreover, this proprietary former material is also suitable for use in higher moisture content environments.

Despite of its compact size, the ND3BE neodymium magnet assembly has been designed to obtain 20KGauss in the gap for major benefits in transient response. The motor structure, throughout the precisely coherent metal alloy phase plug with 4 circumferential slots and copper ring on the pole piece, reduces inductance effect and distortion.

The diaphragm kit self centering design allows high precision mounting and at the same time makes very easy the servicing procedure.

The ability to perform properly under inclement weather conditions is a key point of the Eighteen Sound philosophy. Hence, a special treatment is applied to the magnet and the top and back plates of the magnetic structure in order to make the driver more resistant to the corrosive effects of salts and oxidization. This treatment is more effective than any other coating commonly used.





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SPECIFICATIONS[1]

Throat Diameter	36 mm (1.4 in)
Nominal Impedance	8 Ω
Minimum Impedance	6.4 Ω
Nominal Power Handling[2]	90 W
Continuous Power Handling[3]	180 W
Sensitivity[4]	112.0 dB
Frequency Range	0.8 - 20.0 kHz
Recommended Crossover[5]	1.2 kHz
Voice Coil Diameter	75 mm (3.0 in)
Winding Material	Aluminum
Diaphragm Material	Pure Beryllium
Flux Density	2.0 T
Magnet Material	Neodymium

MOUNTING AND SHIPPING INFO

Overall Diameter	109 mm (4.29 in)
Depth	53 mm (2.09 in)
Net Weight	1.65 kg (3.64 lb)
Shipping Box	165x150x65 mm (6.50x5.91x2.56 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.