# ND1460

## Neodymium High Frequency Driver

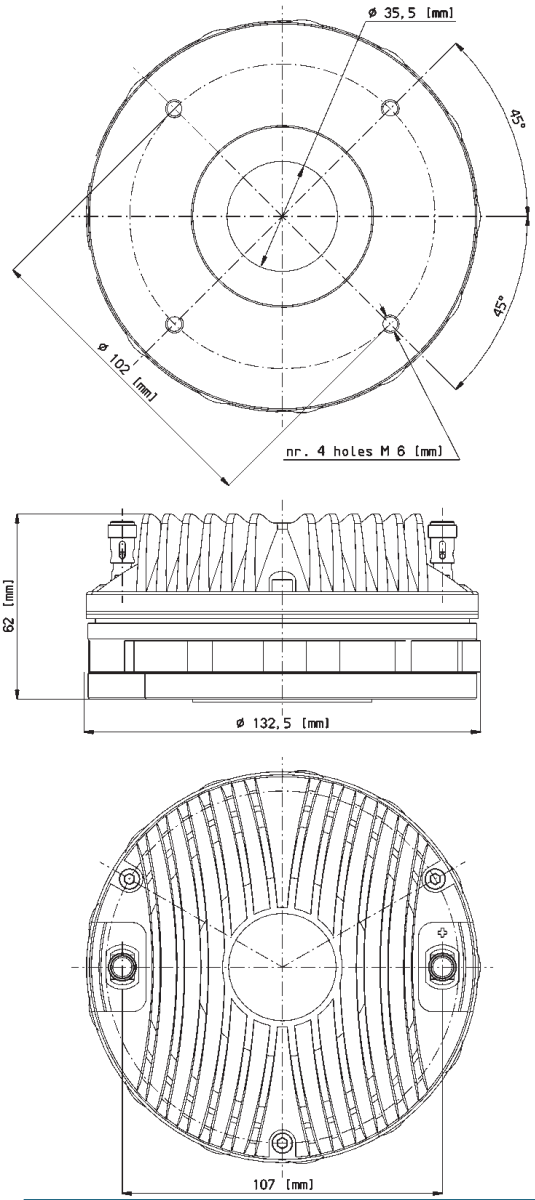
### Key Features

109 dB 1W / 1m average sensitivity
1,4 inch exit throat
3 inch voice coil diameter
160 W continuous program power handling
Pure Titanium diaphragm assembly
Excellent thermal exchange
Neodymium magnetic structure


### General Description

The ND1460 high frequency compression driver has been designed for use in high quality sound systems. With a 1.4 inch exit throat, it has been developed to match the XT1464 constant directivity horn.
Its titanium diaphragm is produced in house and has been developed to assure unmatched transient response. The diaphragm assembly is made by joining the former directly to the titanium dome using its upper bend edge. In comparison with a usual straight former joint, the driver design assures extended frequency energy transfer giving improved response linearity and unparallel reliability. This feature facilitates proper motion control of the dome in real working conditions. 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 high moisture content environments.
The big innovation in the ND1460 is its new innovative magnetic architecture. By carefully using elementary pieces of neodymium magnets, Eighteen Sound engineers have developed a powerful neodymium magnet assembly capable of reaching 19KGauss in the gap in compact and lightweight structures. The motor structure, throughout the precisely coherent phase plug with 3 circumferential slots and copper ring on the pole piece, reduces inductance effects 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 leads to a lower power compression value.
Due to the increase in use of high power audio systems at outdoor events or in marine environments, the ability of equipment to perform properly under inclement weather conditions is a key feature of the Eighteen Sound philosophy. Hence, a special treatment is applied to the magnet and the top and back plates of the magnetic structure which increases the driver's resistance to the corrosive effects of salts and oxidization. This treatment is more effective than any other treatment in use today.

042106N200 16 Ohm
042108N200 8 Ohm




NEODYMIUM HF DRIVERS

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# ND1460
## Neodymium High Frequency Driver

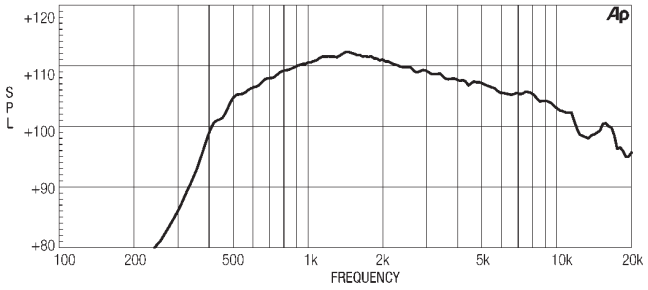
## GENERAL SPECIFICATIONS

| | |
|---|---|
| THROAT DIAMETER | 35,5 mm (1,4 in) |
| RATED IMPEDANCE | 8 ohm |
| DC RESISTANCE | 6,2 ohm |
| MINIMUM IMPEDANCE | 8 ohm at 3500 Hz |
| LE (AT 1KHZ) | 124 µH |
| <STRONG>POWER HANDLING</STRONG> | |
| CONTINUOUS PINK NOISE (1) | 80 W above 1,2 kHz |
| CONTINUOUS PROGRAM (2) | 160 W above 1,2 kHz |
| SENSITIVITY(1W@1M) (3) | 109 dB |
| FREQUENCY RANGE | 500 Hz ÷ 20 kHz |
| RECOMM. XOVER FREQUENCY | above 800 Hz (12 dB/octave) |
| DIAPHRAGM MATERIAL | Titanium |
| VOICE COIL DIAMETER | 74,4 mm (2,93 in) |
| VOICE COIL WINDING MATERIAL | Edge-wound aluminum |
| MAGNET MATERIAL | Neodymium |
| FLUX DENSITY | 1,9 T |
| BL FACTOR | 13,5 N/A |
| POLARITY | Positive voltage on red terminal gives positive pressure in the throat |

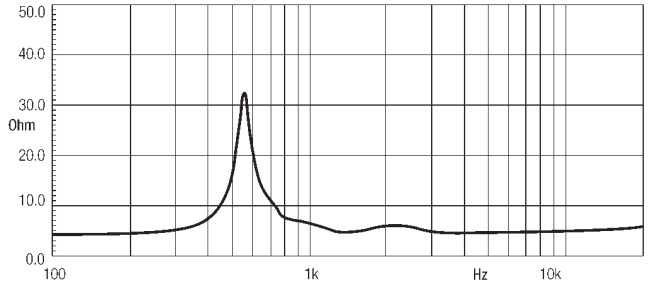
## MOUNTING INFORMATIONS

| | |
|---|---|
| Overall diameter | 132,5 mm (5,22 in) |
| Mounting holes diameter | 4 M6 holes 90° at Ø102 mm (4 in) |
| Bolt circle diameter | 102mm (4 in) |
| Total depth | 62 mm (2,5 in) |
| Net weight | 3,2 Kg (7,1 lb) |
| Shipping weight | 3,4 Kg (7,5 lb) |
| CardBoard Packaging dimensions | 132x132x68 mm (5,2x5,2x2,7 in) |

**ND1460 MEASURED WITH 1W INPUT ON RATED IMPEDANCE AT 1 M DISTANCE ON AXISFROM THE MOUTH OF XT1464 HORN**




**FREE AIR IMPEDANCE MAGNITUDE CURVE**




*NOTES*

*(1) Continuous pink noise power rating is tested with a pink noise input having a 6 dB crestfactor for two hours duration within the specified range. Power calculated on minimumimpedance.*

*(2) Program Power is defined as 3 dB greater than continuous pink noise but with 50% dutycycle.*

*(3) Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth ofXT1464 averaged between 1kHz and 4 kHz.*