

# ND1480A

## HF Neodymium Driver

### KeyFeatures

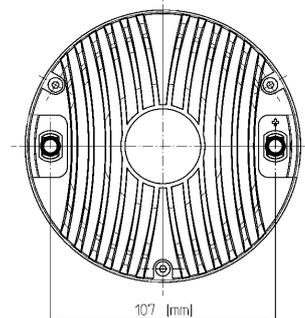
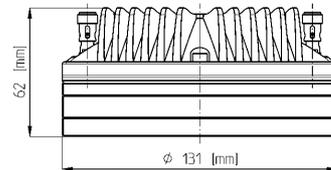
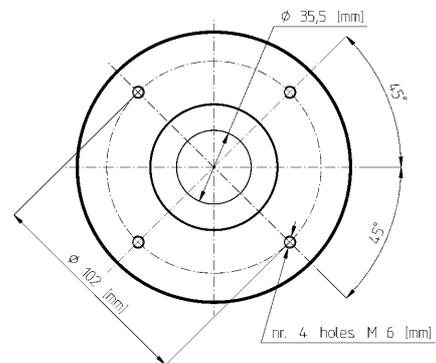
- 111 dB 1W/1m average sensitivity
- 1,4 inch exit throat
- 3 inch edgewound aluminum voice coil
- 160 W program power handling
- Aluminum PEN sandwich diaphragm
- Neodymium magnetic structure
- Ideal for line array applications

### Description

The ND1480A is a 1.4 inch exit, 3 inch diaphragm neodymium HF compression driver that has been designed for high level sound systems application. The diaphragm assembly is composed by an aluminum dome sandwiched to a proprietary treated polyester suspension. This design maintains low resonance and lowers the minimum crossover point value at 800Hz. The composite diaphragm assembly is made by an aluminum dome strongly joined to the PEN suspension, in order to assure unmatched transient response. The lower density of the aluminum and PEN structure permits higher levels of sensitivity, especially in the mid-high frequency range. A bended former edge-wound aluminum 75mm voice coil completes the diaphragm assembly. The proprietary treated Nomex former material shows 30% higher value of tensile elongation at working operative temperature (200°C) when compared to Kapton. Moreover, Nomex is suitable to work also in higher moisture contents environments. The bended former is jointed in a sandwich configuration between PEN suspension and the aluminum dome, assuring extended frequency energy transfer for improved response linearity and unparallel reliability. The ND1480A powerful neodymium magnet assembly has been designed to obtain 22 KGauss 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 effects and distortion. Four top plate air ducts were 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 that allows to obtain a lower power compression value. The ability to perform properly under inclement weather conditions is a key-point of Eighteen Sound philosophy. The special coating applied to the magnet and the top and back plates of the magnetic structure makes the ND1480A compression driver resistant to the corrosive effects of salts and oxidation.

### Models

| Model      | Code       | Information |
|------------|------------|-------------|
| 0422A8N600 | 0422A8N600 | 8 Ohm       |
| 0422A6N600 | 0422A6N600 | 16 Ohm      |



# ND1480A

## HF Neodymium Driver

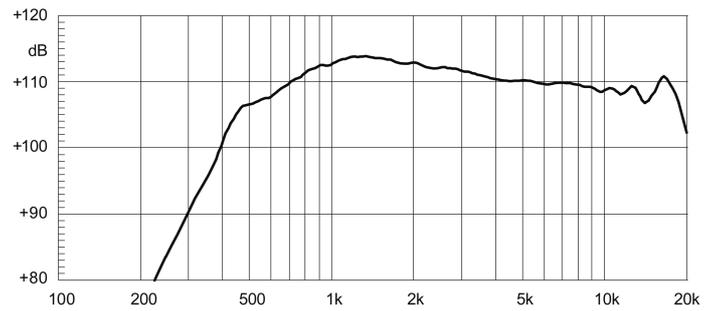
### General Specifications

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| 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                                                                 |
| AES Power                   | 80 W above 1,2 kHz                                                     |
| Program Power               | 160 W above 1,2 kHz                                                    |
| Sensitivity (1W@1M)         | 111 dB                                                                 |
| Frequency Range             | 500 Hz ÷ 20 kHz                                                        |
| Recomm. Xover Frequency     | above 800 Hz (12 dB/octave)                                            |
| Diaphragm Material          | Polyethylene-Aluminum                                                  |
| Voice Coil Diameter         | 74,4 mm (2,93 in)                                                      |
| Voice Coil Winding Material | Edge-wound aluminum                                                    |
| Magnet Material             | Neodymium                                                              |
| Flux Density                | 2,2 T                                                                  |
| BL Factor                   | 15,5 N/A                                                               |
| Polarity                    | Positive voltage on red terminal gives positive pressure in the throat |

### Thiele Small Parameters

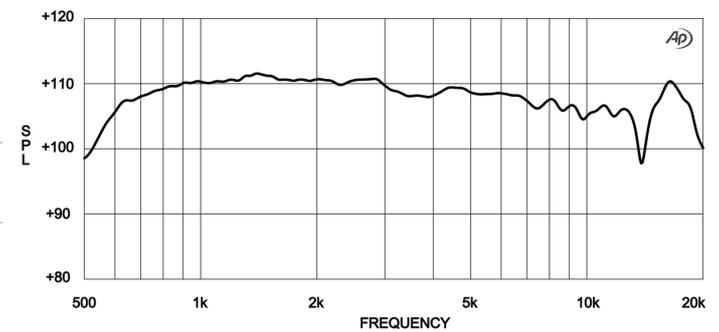
### Mounting information

|                                |                                  |
|--------------------------------|----------------------------------|
| Overall diameter               | 131 mm (5,1 in)                  |
| N. of mounting holes and bolt  | 4 M6 holes 90° at Ø102 mm (4 in) |
| Bolt circle diameter           | 102mm (4 in)                     |
| Total depth                    | 62 mm (2,5 in)                   |
| Net weight                     | 3,1 Kg (7 lb)                    |
| Shipping weight                | 3,3 Kg (7,3 lb)                  |
| CardBoard Packaging dimensions | 132x132x68 mm (5,2x5,2x2,7 in)   |



ND1480A MEASURED WITH 1W INPUT ON RATED IMPEDANCE AT 1 M DISTANCE ON AXIS FROM THE MOUTH OF XT1464 HORN

### FREE AIR IMPEDANCE MAGNITUDE CURVE



### Notes

- 1) AES power rating is tested with a pink noise input having a 6 dB crest factor for two hours duration within the specified range. Power calculated on minimum impedance.
- 2) Program power rating is defined as 3 dB greater than AES rating, and is a conservative expression of the transducer ability to handle music program material.
- 3) Sensitivity is measured at 1W input on rated impedance at 1 m distance on axis from the mouth of the horn, averaged between 1kHz and 4 kHz.