

HD2000

HIGH FREQUENCY DRIVER

KeyFeatures

- Best performance to price 1.4" exit driver on the market
- 108 dB 1W / 1m average sensitivity
- 1.4 inch throat exit
- 2.4 inch edgewound aluminum voice coil
- 140 W program power handling
- Pure Titanium diaphragm assembly
- Proprietary phase plug design
- HF copper sleeve for reduced distortion and increased output

Description

The HD2000 1.4 inch exit high frequency compression driver has been designed for use in high quality audio systems.

The titanium diaphragm is produced in-house and has been developed to assure unmatched transient response. A proprietary treated Nomex former with edge-wound copper-clad aluminum wire (CCAW) 60mm voice coil completes diaphragm assembly. It has been made by joining the proprietary-treated Nomex former directly to the titanium dome through 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 unparalleled reliability. This feature maintains proper motion control of the dome in real working conditions. Due to its physical properties, the proprietary-treated Nomex former shows a 30% higher value of tensile elongation at working operative temperatures (200°C) when compared to Kapton. Moreover, this material is suitable to work also in higher moisture-content environments.

Equipped with Proprietary Phase Plug 3P architecture, the HD2000 has been designed to give a smooth coherent wave front at the horn entrance in all working frequency ranges with a high level manufacturing consistency. The phase plug with its short openings and high flare rate, assures low distortion with excellent mid-high frequency reproduction.

The HD2000 powerful ceramic magnet assembly has been designed to obtain 16 kGauss in the gap within a compact ferrite motor structure. The motor structure is equipped with copper ring on the pole piece, reducing inductance effect and distortion.

Models

Model	Code	Information
HD2000	0424B8N000	



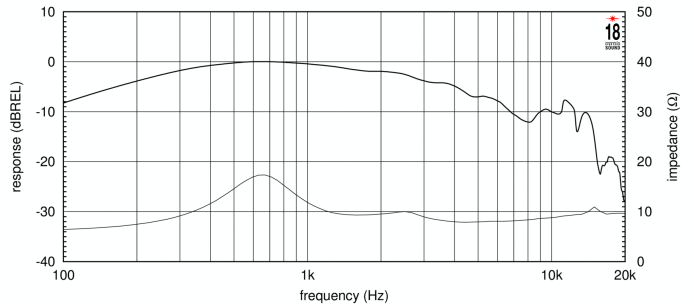
General Specifications

Throat Diameter	35,5 mm (1,4 in)
Rated Impedance	8 Ohm
DC Resistance	5,9 Ohm
Minimum Impedance	7,6 Ohm at 5100 Hz
Le (at 1kHz)	N/A
Continuous Power (1)	70 W
Maximum Program Power	140W
Sensitivity (2)	108 dB
Frequency Range	1000 Hz \pm 20 kHz
Minimum X-over Frequency	1100 Hz (24 dB/Oct High-Pass Filter)
Diaphragm Material	Titanium
Voice Coil Diameter	61mm (2,4 in)
Voice Coil Winding Material	Edge-wound aluminum Ribbon
Magnet Material	Ferrite
Flux Density	1,6 T
BL Factor	N/A Tm

Thiele Small Parameters

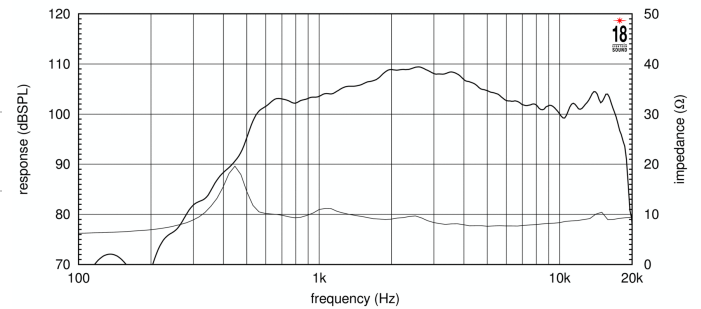
Mounting information

Overall diameter	145 mm (5,7 in)
N. of mounting holes and bolt	4xM6 holes at 90° \varnothing 102 mm (4 in)
Bolt circle diameter	102 mm (4,02 in)
Total depth	65 mm (2,56 in)
Net weight	3.4 Kg (7,50 lb)
Shipping weight	3.6 Kg (7,94 lb)
CardBoard Packaging dimensions	132 x 132 x 68 mm (5,20 x 5,20 x 2,68 in)



FREQUENCY RESPONSE MEASURED WITH 2,83 V INPUT ON AXIS AT 1 METER DISTANCE FROM THROAT OF XR1464 HORN. IMPEDANCE MEASURED ON SAME HORN

FREE AIR IMPEDANCE MAGNITUDE CURVE



FREQUENCY RESPONSE MEASURED WITH 77,5 mV INPUT ON 1,4 in PLANE WAVE TUBE. IMPEDANCE MEASURED ON SAME PLANE WAVE TUBE

Notes

- 1) Continuous Power is defined as a level that is 3 dB greater than the one measured with the new AES2-2012 standard, using continuous pink noise having 12 dB crest factor for 2 hours, mounted on XR1464 horn.
- 2) Sensitivity represent the averaged value of acoustic output as measured on the central forward axis of a XR1464 horn, at a distance 1 m from horn mouth, when connected to 2,83 V sine wave swept between 1000-4000 Hz.
- 3) Minimum crossover frequency suggested with 4 order high pass filter. By using a 2nd order filter (12 dB / oct) 1.5 kHz is minimum recommended crossover frequency.