HD1000

HIGH FREQUENCY DRIVER

KeyFeatures

- Best performance to price 1" exit driver on the market
- 109 dB 1W / 1m average sensitivity
- 1 inch throat exit
- 44.4mm inch edgewound aluminum voice coil
- 100 W program power handling
- Titanium-PEN diaphragm assembly
- Proprietary phase plug design

Description

The HD1000 1 inch exit high frequency compression driver has been designed for use in high quality audio systems.

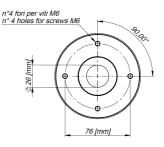
The proprietary titanium diaphragm has been developed to assure unmatched transient response and extended bandwidth. A proprietary treated Nomex former with edge-wound copper-clad aluminum wire (CCAW) 44mm voice coil completes diaphragm assembly. Equipped with Proprietary Phase Plug, the HD1000 has been designed to give a smooth coherent wave front in the horn entrance in all working frequency range with high level manufacturing consistency. The phase plug with its short openings and high flare rate assures low distortion with excellent mid-high frequency reproduction.

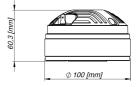
The HD1000 powerful ceramic magnet assembly has been designed to obtain 15 kGauss in the gap with one of the most compact ferrite motor structures in its class. The motor structure is equipped with copper ring on the pole piece to reduce inductance effect and distortion.

Models

Model	Code	Information
HD2000	421081000	









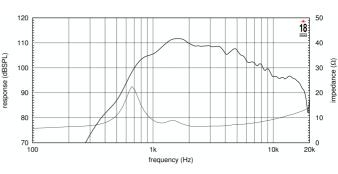


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General Specifications

Throat Diameter25,4 mm (1 in)Rated Impedance8 OhmDC Resistance5,3 OhmDC Resistance6,7 Ohm at 2400 HzLe (at 1kHz)N/AContinuos Power (1)50 WMaximum Program Power100 WSensitivity (2)109 dBFrequency Range1600 ÷ 20000 HzMinimum X-over Frequency1600 Hz (24 dB/Oct High-Pass Filter)Diaphragm MaterialTitanium - PENVoice Coil Diameter44,4 mm (1,7 in)Voice Coil Winding MaterialFerriteHur Darsity14 T			
DC Resistance5,3 OhmMinimum Impedance6,7 Ohm at 2400 HzLe (at 1kHz)N/AContinuos Power (1)50 WMaximum Program Power100 WSensitivity (2)109 dBFrequency Range1600 ÷ 20000 HzMinimum X-over Frequency1600 Hz (24 dB/Oct High-Pass Filter)Diaphragm MaterialTitanium - PENVoice Coil Diameter44,4 mm (1,7 in)Voice Coil Winding MaterialEdgewound Aluminum RibbonMagnet MaterialFerrite	Throat Diameter	25,4 mm (1 in)	
DefinitionDefinitionMinimum Impedance6,7 Ohm at 2400 HzLe (at 1kHz)N/AContinuos Power (1)50 WMaximum Program Power100 WSensitivity (2)109 dBFrequency Range1600 ÷ 20000 HzMinimum X-over Frequency1600 Hz (24 dB/Oct High-Pass Filter)Diaphragm MaterialTitanium - PENVoice Coil Diameter44,4 mm (1,7 in)Voice Coil Winding MaterialEdgewound Aluminum RibbonMagnet MaterialFerrite	Rated Impedance	8 Ohm	
Le (at 1kHz)N/AContinuos Power (1)50 WMaximum Program Power100 WSensitivity (2)109 dBFrequency Range1600 ÷ 20000 HzMinimum X-over Frequency1600 Hz (24 dB/Oct High-Pass Filter)Diaphragm MaterialTitanium - PENVoice Coil Diameter44,4 mm (1,7 in)Voice Coil Winding MaterialEdgewound Aluminum RibbonMagnet MaterialFerrite	DC Resistance	5,3 Ohm	
Continuos Power (1)50 WMaximum Program Power100 WSensitivity (2)109 dBFrequency Range1600 ÷ 20000 HzMinimum X-over Frequency1600 Hz (24 dB/Oct High-Pass Filter)Diaphragm MaterialTitanium - PENVoice Coil Diameter44,4 mm (1,7 in)Voice Coil Winding MaterialEdgewound Aluminum RibbonMagnet MaterialFerrite	Minimum Impedance	6,7 Ohm at 2400 Hz	
Maximum Program Power100 WSensitivity (2)109 dBFrequency Range1600 ÷ 20000 HzMinimum X-over Frequency1600 Hz (24 dB/Oct High-Pass Filter)Diaphragm MaterialTitanium - PENVoice Coil Diameter44,4 mm (1,7 in)Voice Coil Winding MaterialEdgewound Aluminum RibbonMagnet MaterialFerrite	Le (at 1kHz)	N/A	
Sensitivity (2)109 dBFrequency Range1600 ÷ 20000 HzMinimum X-over Frequency1600 Hz (24 dB/Oct High-Pass Filter)Diaphragm MaterialTitanium - PENVoice Coil Diameter44,4 mm (1,7 in)Voice Coil Winding MaterialEdgewound Aluminum RibbonMagnet MaterialFerrite	Continuos Power (1)	50 W	
Frequency Range1600 ÷ 20000 HzMinimum X-over Frequency1600 Hz (24 dB/Oct High-Pass Filter)Diaphragm MaterialTitanium - PENVoice Coil Diameter44,4 mm (1,7 in)Voice Coil Winding MaterialEdgewound Aluminum RibbonMagnet MaterialFerrite	Maximum Program Power	100 W	
Minimum X-over Frequency 1600 Hz (24 dB/Oct High-Pass Filter) Diaphragm Material Titanium - PEN Voice Coil Diameter 44,4 mm (1,7 in) Voice Coil Winding Material Edgewound Aluminum Ribbon Magnet Material Ferrite	Sensitivity (2)	109 dB	
Diaphragm Material Titanium - PEN Voice Coil Diameter 44,4 mm (1,7 in) Voice Coil Winding Material Edgewound Aluminum Ribbon Magnet Material Ferrite	Frequency Range	1600 ÷ 20000 Hz	
Voice Coil Diameter 44,4 mm (1,7 in) Voice Coil Winding Material Edgewound Aluminum Ribbon Magnet Material Ferrite	Minimum X-over Frequency	1600 Hz (24 dB/Oct High-Pass Filter)	
Voice Coil Winding Material Edgewound Aluminum Ribbon Magnet Material Ferrite	Diaphragm Material	Titanium - PEN	
Magnet Material Ferrite	Voice Coil Diameter	44,4 mm (1,7 in)	
	Voice Coil Winding Material	Edgewound Aluminum Ribbon	
Elux Doncity 14T	Magnet Material	Ferrite	
Flux Defisity 1,4 1	Flux Density	1,4 T	



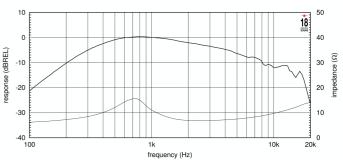
FREQUENCY RESPONSE MEASURED WITH 2,83 V INPUT ON AXIS AT 1 METER DISTANCE FROM THROAT OF XT1086 HORN. IMPEDANCE MEASURED ON SAME HORN

FREE AIR IMPEDANCE MAGNITUDE CURVE

Thiele Small Parameters

Mounting information

Overall diameter	100 mm (3,9 in)	
N. of mounting holes and bolt	4xM6 holes at 90° Ø 102 mm (4 in)	
Bolt circle diameter	76 mm (2,99 in)	
Total depth	61 mm (2,40 in)	
Net weight	1,5 kg (3,31 lb)	
Shipping weight	1,6 kg (3,53 lb)	
CardBoard Packaging dimensions	134x120x74 mm (5.28x4.72x2.91 in)	



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

Notes

1) Continous Power is defined as a level that is 3 dB greater than the one measured with the new AES2-2012 standard, using continous pink noise having 12 dB crest factor for 2 hours, mounted on XT1086 horn.

(2) Sensitivity represent the averaged value of acoustic output as measured on the central forward axis of a XT1086 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) 2.2 kHz is minimum recommended crossover frequency.

