

**BM
SERIES**

12BM-500B

Ferrite Magnet Die-cast Chassis Driver

Features

- 3.2" Voice coil
- 1000 Watts Continuous program power capacity
- Ferrite magnetics
- Precision circular wire geometry
- Die cast aluminum chassis



The P.Audio 12BM-500B NEW is a high output wide bandwidth transducer. The 12BM-500B NEW is an upgraded design that features many of P.Audio's new technologies and performance upgrades. The 1 inch (305mm) diameter piston will produce extremely high sound pressure levels at both low and mid band frequencies and is ideal for high level response in both live sound and recorded music venues. The Transducer has a rated bandwidth of 50Hz to 3000Hz. The transducer uses high energy ferrite magnetics to achieve a very high acoustic output to weight ratio. The 12BM-500B NEW has been optimized for use in two way or three way sound reinforcement systems.

The 12BM-500B NEW employs a medium format 3.25 inch (82.5mm) diameter voice coil that provides an AES rated 500 watts of continuous power handling and a full 2000 watt of peak rated power handling when sufficient amplifier headroom is available. The 12BM-500B NEW utilizes P.Audio's Auto Balanced Cooling (ABC) technology to not only improve transducer power handling and reliability but to also increase power compression performance by carefully balancing and directing airflow to critical areas.

The voice coil design is a bobbin wound geometry with P.Audio's precision circular wire technology to insure high conversion efficiency. The P.Audio circular wire technology and inside/outside winding configuration provides a very large cross-sectional area that substantially improves system cooling and reduces power compression.

The system suspension has been designed specifically for high linear displacement and extended low frequency response. The 12BM-500B NEW also features a single spider configuration that provides system reliability and mechanical control.

The transducer chassis is a die cast aluminum design that insures a very high degree of structural integrity.

General Specifications

Nominal Diameter	305 mm (12 in)
Nominal Impedance	8 Ω
Nominal Power Handling	500 W(AES)
Continuous Program Power Capacity	1000 W
Sensitivity	96 dB
Frequency Range	50-3000 Hz
Voice Coil Diameter	82.5 mm (3.25 in)
Voice Coil Material	CCA-W
Former Material	Glass fiber
Effective Piston Diameter	264 mm (10.4 in)
Flux Density	1.1T

Physical Information

Magnet Material	Ferrite
Basket Material	Aluminium
Surround Material	Cloth
Cone Material	Paper
Dust Cap Material	Paper
Spider Material	Cotton (Single)
Gasket	EVA
Pole Design	T-Pole
Woofer Cone Treatment	No Treatment

Parameters

Fs	52 Hz	Vas	69.76 lt
Re	5.6 Ω	Sd	551.5 cm ²
Qms	5.94	Le	0.63 mH
Qes	0.37	Eff (η _o)	2.64%
Qts	0.35	Cms	1.6 e-04 m/N
BL	16.59 Tm	Xmax	4.8 mm
Mms	56.09 g	Hag	10.0 mm
Mmd	48.64 g	Hvc	19.6 mm

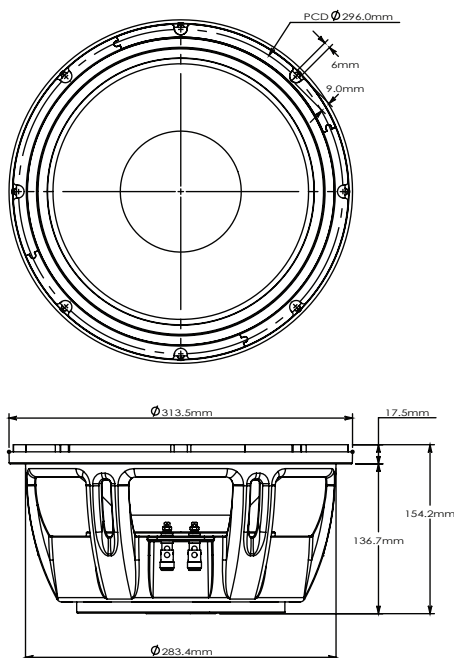
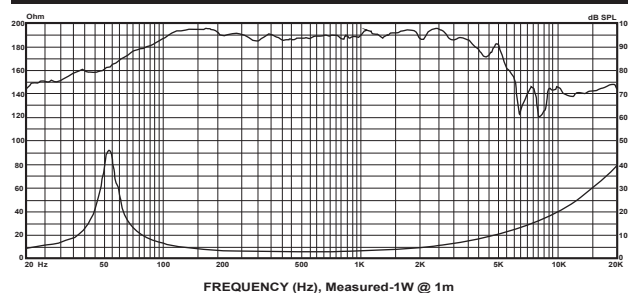
Mounting and Shipping Info

Diameter	313.5 mm (12.3 in)
Baffle Cutout Diameter	283.4 mm (11.1 in)
Mounting Hole Diameter	296 mm (11.6 in)
Bolt Circle Diameter	8 x Ø (6.5x10) mm
Depth	129.7 mm (5.1 in)
Flange and Gasket Thickness	17.6 mm (0.69 in)
Net Weight	9.2 kg
Shipping Units	1
Shipping Weight	10.0 kg
Shipping Box	355 x 355 x 195 mm

Recone Kit

Model Number

Frequency response and Impedance curve

**STH PROFESSIONAL AUDIO CO.,LTD.**

AIA Sathorn Tower, unit 1607-1608, 16th floor, No.11/1, South Sathorn Road, Yannawa, Sathorn, Bangkok 10120

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