

# Challenger SERIES

# C12-500MB v2

Ferrite Magnet Die-cast Chassis Driver

## Features

- 1000 W continuous program power capacity
- 99.3 mm (3.9 inch) voice coil
- 60 - 3000 Hz response
- 95 dB sensitivity
- Ferrite magnet

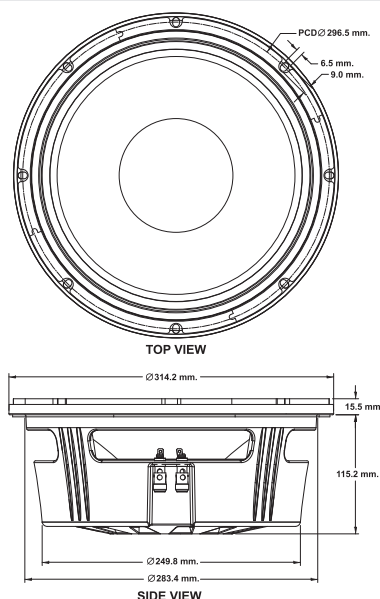


The P Audio C12-500MB v2 is a high performance wide bandwidth transducer. The C12-500MB v2 is an upgraded design that features many of P Audio's new technologies and performance upgrades. The 12 inch (305mm) diameter piston will produce extremely high sound pressure levels in the mid band and upper mid frequencies and is ideal for high level response in both live sound and recorded music venues. The transducer uses high energy ferrite magnetics to achieve a very high acoustic output to weight ratio. The C12-500MB v2 has been optimized for use in two way or three way sound reinforcement systems. The transducer is also ideal as a mid bass driver for ultra high performance system designs and has an operating bandwidth of 60Hz to 3000Hz.

The C12-500MB v2 features a very large 4 inch (101.6mm) diameter voice coil that provides an AES rated 500 watts of continuous power handling and a full 2000 watts of peak rated power handling when sufficient amplifier headroom is available. The C12-500MB v2 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 ribbon rectangular wire technology to improve conversion efficiency and provide a large cross-sectional area for superior cooling.

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	95 dB
Frequency Range	60-3000 Hz
Voice Coil Diameter	99.3 mm (3.9 in)
Voice Coil Material	CCA-R
Former Material	Glass fiber
Effective Piston Diameter	262.4 mm (10.3 in)
Flux Density	1.3T

## 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

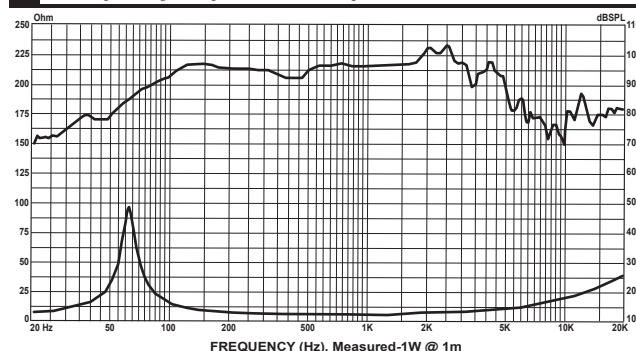
Fs	62 Hz	Vas	37.95 lt
Re	5.8 Ω	Sd	552 cm <sup>2</sup>
Qms	6.66	Le	0.31 mH
Qes	0.42	Eff (η <sub>0</sub> )	2.10%
Qts	0.40	Cms	8.9 e-05 m/N
BL	20.03 Tm	Xmax	4.45 mm
Mms	75.80 g	Hag	8.0 mm
Mmd	68.35 g	Hvc	16.9 mm

## Mounting and Shipping Info

Diameter	314.2 mm (12.3 in)
Baffle Cutout Diameter	283.4 mm (11.1 in)
Mounting Hole Diameter	296.5 mm (11.6 in)
Bolt Circle Diameter	8 x Ø (6.5x9) mm
Depth	115.2 mm (4.5 in)
Flange and Gasket Thickness	15.5 mm (0.61 in)
Net Weight	9.7 kg
Shipping Units	1
Shipping Weight	10.5 kg
Shipping Box	355 x 355 x 180 mm

Recone Kit	Model Number
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## Frequency response and Impedance curve



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