

Ferrite Magnet Die-cast Chassis Driver



Specifications

General Specifications

Nominal diameter.....	305 mm/12 in
Power rating.....	500 W(AES)
Nominal impedance.....	8Ω
Sensitivity.....	96 dB
Frequency range.....	50-3000 Hz
Chassis type.....	Cast aluminum
Magnet type.....	Ferrite
Magnet weight.....	2.7 kg/96.6 oz
Voice coil diameter.....	76 mm/ 3 in
Coil material.....	Aluminum wire
Former material.....	Glass fiber
Cone material.....	Paper
Surround material.....	Cloth
Suspension.....	Single
X-max.....	3.25 mm/0.13 in
Gap depth.....	12 mm/0.47 in
Voice coil winding width.....	18.5 mm/0.73 in
Net Weight.....	9.1 kg/20.1 lbs
Packing Dimension WxDxH.....	355 x 355 x 200 mm
Shipping Weight.....	10.2 kg/22.5 lbs

Small Signal Parameters

Re.....	5.5 Ω
Fs.....	56 Hz
Mms.....	65.85 g/2.32 oz
Mmd.....	58.40 g/2.06 oz
Qms.....	8.34
Qes.....	0.51
Qts.....	0.48
Vas.....	52.86 lt/1.87 ft³
SD.....	552 cm²
Bl.....	15.70 Tm
Cms.....	1.2e-04 m/N
Rms.....	2.78 Ns/m
Le (at 1kHz).....	0.52 mH

Features

- 3" Medium Format Voice Coil
- 2000 Watts Peak Power Handling
- Active Balanced Cooling
- Ferrite Magnetics
- Aluminum wire Inside/Outside Coil Design
- Single Spider Suspension

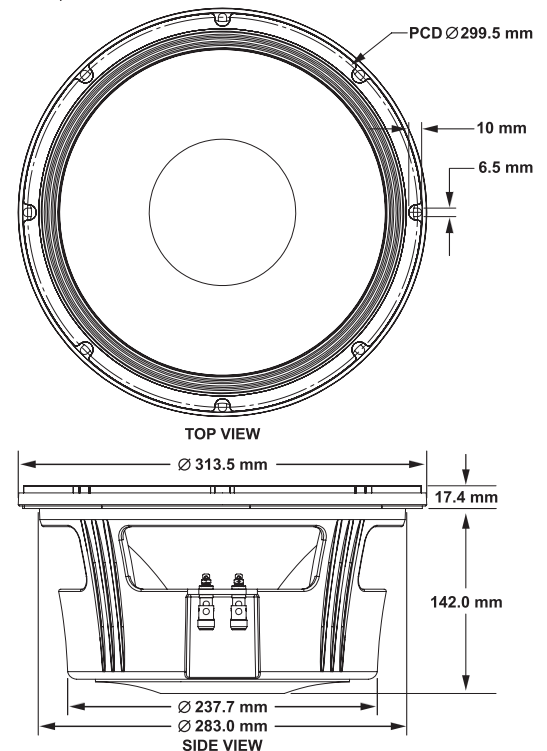
Applications

The P Audio GST-12500 is a 12 inch (305mm) diameter high performance woofer. The design utilizes a medium format 3 inch (76mm) nominal voice coil diameter with a very light weight aluminum coil configured in an inside/outside wind geometry. This light weight design, coupled with a low moving mass cone offers excellent transient response. The large format ferrite based magnet structure produces very high conversion efficiency. Inside/outside winding geometry assists in coil cooling and improves both transducer power handling and system reliability. The GST-12500 also features a very long air gap height that improves transducer linearity

The GST-12500 offers very smooth and controlled amplitude response to 2000Hz and has a useable high frequency limit of 3000Hz. The GST-12500 is an excellent choice for high output two way system designs and is ideally coupled with P Audio BM-D series and SD series compression drivers. P Audio offers a wide range of high frequency horns that can provide short throw or medium throw designs when coupled with the GST-12500.

The design features very large diameter impregnated spiders to insure long term linearity. The impregnated spiders and very high system power handling will insure excellent long term performance. The cone is waterproof to improve reliability in high humidity environments.

The GST-12500 features an aluminum die cast chassis that includes P Audio's "Auto Balanced Cooling" design that minimizes coil and magnet structure heating, and further improves system performance.



Frequency Response and Impedance Curves

