

Neodymium Magnet Die-cast Chassis Driver



Features

- 3.9" Large Format Voice Coil
- 4000 Watts Peak Power Handling
- Active Balanced Cooling
- Integrated Demodulation Rings
- Double Spider Design
- Neodymium Magnetics
- Precision Rectangular Ribbon Wire Geometry
- Die Cast Aluminum Chassis

Applications

The P Audio P-18N is a high output low frequency transducer designed with a vintage voicing. The P-18N is an upgraded design that features many of P Audio's new technologies and performance upgrades. The 18 inch (457mm) diameter piston will produce extremely high sound pressure levels at very low frequencies and is ideal for high level deep bass and sub woofer response in both live sound and recorded music venues. The operating range is 30Hz to 200Hz. The transducer uses very high energy neodymium magnetics to achieve a very high acoustic output to weight ratio.

The P-18N employs a large 3.9 inch (99.3mm) diameter voice coil and has been upgraded to an AES rated 1000 watts of continuous power handling and a full 4000 watts of peak rated power handling when sufficient amplifier headroom is available. The P-18N 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 Rectangular wire technology to improve conversion efficiency and provide a large cross-sectional area for superior cooling.

The transducer employs magnetic flux demodulation devices in the structure to increase fidelity and sonic accuracy. The system suspension has been designed specifically for high linear displacement and extended low frequency response. The double spider design further enhances system mechanical control and reliability.

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

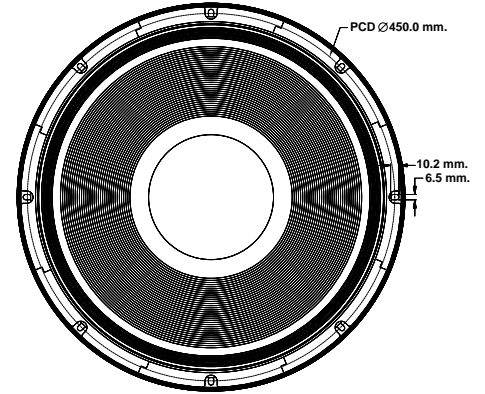
Specifications

General Specifications

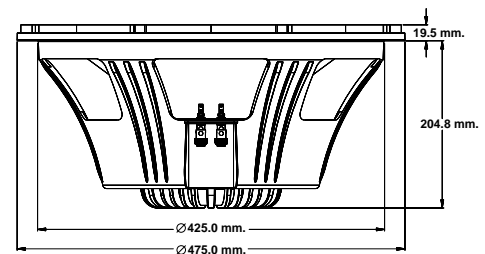
Nominal diameter.....	457 mm/18 in
Power rating.....	1000 W(AES)
Nominal impedance.....	8Ω
Sensitivity.....	98 dB
Frequency range.....	30-200 Hz
Chassis type.....	Cast aluminum
Magnet type.....	Neodymium
Magnet weight.....	0.54 kg/19.0 oz
Voice coil diameter.....	99.3 mm/3.9 in
Coil material.....	CCA-R
Former material.....	Glass fiber
Cone material.....	Paper
Surround material.....	Cloth
Suspension.....	Double
X-max.....	5.25 mm/0.21 in
Gap depth.....	15.0 mm/0.6 in
Voice coil winding width.....	25.5 mm/1.0 in
Net Weight.....	8.0 kg/17.6 lb
Packing Dimension WxDxH.....	505 x 505 x 270 mm
Shipping Weight.....	10.0 kg/22.0 lb

Small Signal Parameters

Re.....	5.5Ω
Fs.....	42 Hz
Mms.....	164.08 g/5.79 oz
Mmd.....	137.50 g/4.85 oz
Qms.....	6.02
Qes.....	0.44
Qts.....	0.41
Vas.....	202.68 lt/7.16 ft ³
Bl.....	23.5 Tm
Cms.....	7.6e-05 m/N
Rms.....	9.21 Ns/m
Le (at 1kHz).....	0.54 mH
Sd.....	1288 cm ²



TOP VIEW



SIDE VIEW

Frequency Response and Impedance Curves

