

Ferrite Magnet Die-cast Chassis Driver



Specifications

General Specifications

Nominal diameter.....	457 mm/18 in
Power rating.....	1200 W(AES)
Nominal impedance.....	8Ω
Sensitivity.....	98 dB
Frequency range.....	30-200 Hz
Chassis type.....	Cast aluminum
Magnet type.....	Ferrite
Magnet weight.....	3.56 kg/125.7 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/0.59 in
Voice coil winding width.....	25.5 mm/1.0 in
Net Weight.....	13.3 kg/29.3 lb
Packing Dimension WxDxH.....	505 x 505 x 275 mm
Shipping Weight.....	14.7 kg/32.4 lb

Small Signal Parameters

Re.....	5.8Ω
Fs.....	46 Hz
Mms.....	179.84 g/6.34 oz
Mmd.....	155.18 g/5.47 oz
Qms.....	5.39
Qes.....	0.58
Qts.....	0.52
Vas.....	144.23 lt/5.09 ft³
Bl.....	22.76 Tm
Cms.....	6.9e-05 m/N
Rms.....	9.57 Ns/m
Le (at 1kHz).....	0.63 mH
Sd.....	1225 cm²

Features

- 3.9" Large Format Voice Coil
- 4800 Watts Peak Power Handling
- Active Balanced Cooling
- Ferrite Magnetics
- Precision Rectangular Ribbon Wire
- Double Spider Suspension
- Integrated Demodulation Rings
- Die Cast Aluminum Chassis

Applications

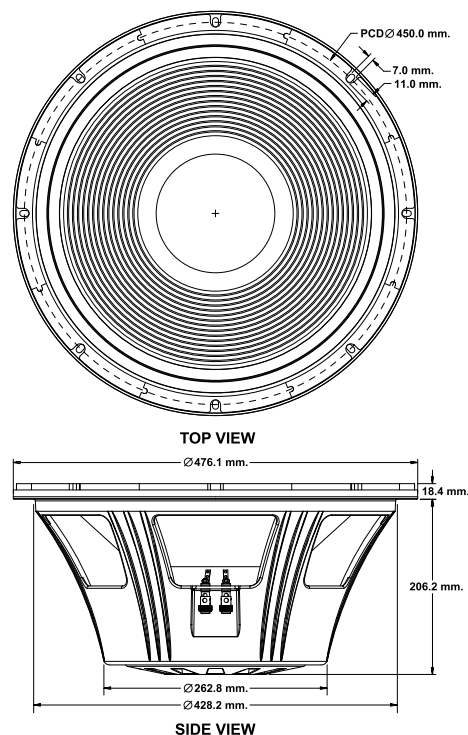
The P Audio C18-650EL is a high output low frequency transducer. The C18-650EL is an upgraded design that features many of P Audio's new technologies and performance upgrades. The 18 inch (457mm) diameter piston will produce extremely high sound pressure levels at very low frequencies and is ideal for high level deep bass and sub woofer response in both live sound and recorded music venues. The transducer uses high energy ferrite magnetics to achieve a very high acoustic output to weight ratio.

The C18-650EL employs a large 3.9 inch (99.3mm) diameter voice coil that provides an AES rated 1200 watts of continuous power handling and a full 4800 watts of peak rated power handling when sufficient amplifier headroom is available. The transducer is optimized for use in properly tuned vented enclosures and will provide maximal reliability when both a vented enclosure and active high pass filtering are employed. The C18-650EL 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 cone has been treated with a conformal coating designed to provide additional mechanical damping and moisture resistance.

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



Frequency Response and Impedance Curves

