

Features

- 4.5" Very Large Format Voice Coil
- 6000 Watts Peak Power Handling
- Active Balanced Cooling
- Ferrite Magnetics
- Inside/Outside Coil Design Cooper Wire
- Double Spider Suspension
- Integrated Demodulation Rings
- Die Cast Aluminum Chassis

Applications

The C18-1000v3 is a high output low frequency transducer. 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 high energy ferrite magnetics to achieve a very high acoustic output to weight ratio.

The C18-1000v3 employs a very large 4.5 inch (114.4mm) diameter voice coil that provides an AES rated 1600 watts of continuous power handling and a full 6000 watts of peak rated power handling when sufficient amplifier headroom is available. It is recommended that the transducer be loaded into a properly designed vented enclosure and that active high order high pass filtering be employed if extremely high power levels are expected as low frequencies. The C18-1000v3 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 an "inside/outside" geometry with P.Audio's square wire technology to improve conversion efficiency and provide a very large cross-sectional area for superior cooling.

System Linearity is achieved by employing 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 insures very high displacement and linear response while maintaining excellent control. 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	
Nominal impedance	Ω8
Sensitivity	
Frequency range	30-200 Hz
Chassis type	Aluminum
Magnet type	Ferrite
Magnet weight	1118.8 oz
Voice coil diameter	
Coil material	Copper Wire (I/O)
Former material	Glass fiber
Cone material	Paper
Surround material	Cloth
X-max	5 mm
Gap depth	15mm

Thiele Small Parameters

FS	38Hz
Re	5.8Ω
Qms	13
Qes	0.72
Qts	0.68
Mms	
Mmd	
Vas	
Sd	1225 cm ²
BI	23.13 Tm
Cms	
Rms	5.16 Ns/m
Le (at 1kHz)	1.01 mH

Packing Dimensions

WxDxH (mm)......505 x 505 x 275

Weight

Net Weight	14.2 kg
Shipping Weight	16.0 kg



