

Neodymium Magnet Die-cast Chassis Driver



Features

- 4" Large Format Voice Coil
- 4800 Watts Peak Power Handling
- Active Balanced Cooling
- Neodymium Magnetics
- Precision Circular Wire Inside/Outside Coil Design
- Double Spider Suspension
- Integrated Demodulation Rings
- High Excursion Half Roll Rubber Surround
- Die Cast Aluminum Chassis

Applications

The P Audio SD15R100 is a high output wide bandwidth transducer. The SD15R100 is a highly upgraded design that features many of P Audio's new technologies and performance upgrades. The 15 inch (381mm) diameter piston will produce extremely high sound pressure levels at both low and mid band frequencies and is ideal for high level response in both live sound and recorded music venues. The transducer has a rated bandwidth of 40Hz to 2000Hz. The transducer uses high energy neodymium magnetics to achieve a very high acoustic output to weight ratio. The SD15R100 has been optimized for use in two way or three way sound reinforcement systems.

The SD15R100 employs a large format 4 inch (101.6mm) 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 SD15R100 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 precision round wire technology in an inside/outside geometry to insure very high conversion efficiency. The P Audio circular wire technology and inside/outside winding configuration provides a very large cross-sectional area that substantially improves system cooling and reduces power compression.

The system suspension has been designed specifically for high linear displacement and extended low frequency response. The SD15R100 also features a double spider configuration that provides system reliability and mechanical control. The cone suspension is a high excursion rubber based design that is ideal for deep bass applications in band pass enclosures and extended bass vented designs.

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

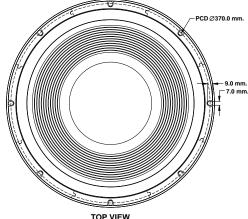
Specifications

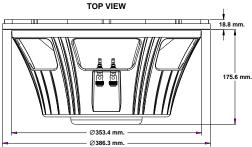
General Specifications

Nominal diameter	381 mm/15 in
Power rating	1200 W(AES)
Nominal impedance	8Ω
Sensitivity	91 dB
Frequency range	40-2000 Hz
Chassis type	Cast aluminum
Magnet type	
Magnet weight	
Voice coil diameter	
Coil material	SV-W
Former material	Glass fiber
Cone material	
Surround material	
Suspension	Double
X-max	
Gap depth	
Voice coil winding width	
Net Weight	
Packing Dimension WxDxH (mm) 430mm	
Shipping Weight	
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Small Signal Parameters

Re	6.6Ω
Fs	43 Hz
Mms	232.5 g/8.20 oz
Mmd	218.11 g/7.69 oz
Qms	6.40
Qes	0.60
Qts	0.55
Vas	58.76 lt/2.08 ft ³
BI	26.46 Tm
Cms	5.7e-05 m/N
Rms	10.01 Ns/m
Le (at 1kHz)	1.03 mH





Frequency Response and Impedance Curves

FREQUENCY (Hz), Meas

SIDE VIEW