

# **EM SERIES**

# EM15-LB300

**Low Frequency Ferrite Woofer** 



#### **Features**

- 3" Voice Coil
- 1200 Watts Peak Power Handling
- 96 dB Sensitivity
- **Ferrite Magnetics**
- 2 Layer Round Wire Coil Design
- **Stamped Steel Chassis**

## **Applications**

The P Audio EM15-LB300 is a high performance 15 inch (381mm) diameter low frequency/full range transducer. The EM15-LB300 features a very large diameter spider that substantially reduces component stress and improves both linearity and long term reliability. The large diameter suspension elements combine with the 3 inch (76mm) voice coil diameter and extended winding length to produce controlled Xmax performance and very tight full range sonic character. The EM15-LB300 is an excellent choice for full range two way designs.

The EM15-LB300 features 1200 watt peak power handling (300 watts continuous) and extended bandwidth frequency response. The 3 inch voice coil diameter provides excellent power handling and controlled moving mass. The result is a high efficiency design that offers high impact response and high reliability. The 3 inch coil design offers less moving mass than larger voice coil designs. The reduced moving mass offers superior transient response as well as extended high frequency bandwidth.

The EM15-LB300 offers a 40Hz to 2000Hz useable bandwidth. The performance of the EM15-LB300 is optimized when using a high pass 4th order Butterworth filter tuned to near the enclosure vent frequency. Although the woofer is rated to 2000Hz, typical high frequency crossover points will be based on the compression driver and horn combination used for the high frequency section.

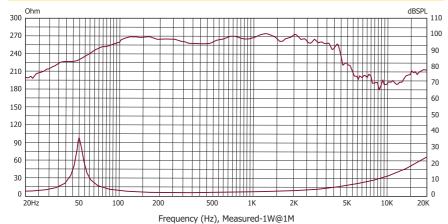
### **General Specification**

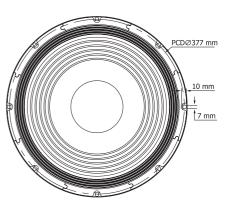
Nominal diameter	381 mm / 15 in
Peak Power	1200 W
AES Power	300 W
Nominal impedance	8 Ohm
Sensitivity (1W/1m)	96 dB
Frequency range	40 - 2000 Hz
Chassis type	Heavy Duty Stamped Steel
Magnet type	Ferrite
Magnet weight	2.31 kg / 81.4 oz
Voice coil diameter	76.2 mm / 3 in
Coil material	Copper Clad Aluminium
Former material	Glass fiber
Cone material	Paper
Surround material	Cloth
Suspension	Single
Xmax	3.4 mm / 0.13 in
Gap depth	10 mm / 0.39 in
Voice coil winding width	16.8 mm / 0.66 in
Unit weight	8.2 kg / 18.1 lb
Shipping weight	9.2 kg / 20.3 lb
Packaging dimension	415x415x220 mm
WxDxH	16.3x16.3x8.7 in

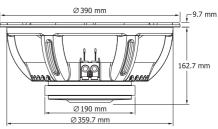
#### **Thiele Small Parameters**

Fs	49 Hz
Re	5.5 Ohm
Qms	9.07
Qes	0.53
Qts	0.50
Bl	16.68 Tm
Mms	85.84 g / 3.03 oz
Mmd	71.46 g / 2.52 oz
Vas	122.88 lt / 4.34 cu.ft <sup>3</sup>
Sd	855 cm <sup>2</sup>
Le	0.52 mH
Cms	1.2e - 04 m/N
Rms	2.97 Ns/m

# Frequency response and Impedance curve







P.AUDIO SYSTEM CO.,LTD.