



## EM SERIES

# EM18-LB600

Low Frequency Ferrite Woofer



### Features

- 3.5" Voice Coil
- 2400 Watts Peak Power Handling
- 96 dB Sensitivity
- Ferrite Magnetics
- Precision Round Wire Inside/Outside Coil Design
- Stamped Steel Chassis

### Applications

The P Audio EM18-LB600 is a high performance 18 inch (457mm) diameter low frequency transducer. The EM18-LB600 features a very large diameter silicone impregnated spider that substantially reduces component stress and improves both linearity and long term reliability. The large diameter suspension elements combine with the unique 3.5" (88.9mm) voice coil diameter and extended winding length to produce high Xmax performance and very tight low frequency sonic character. The EM18-LB600 is an excellent choice for sub woofer applications.

The EM18-LB600 features 2400 watt peak power handling (600 watts continuous) and extended bandwidth low frequency response. The unique 3.5 inch voice coil diameter provides an excellent balance between high power handling and controlled moving mass. The result is a high efficiency design that offers high impact low frequency response and high reliability. The 3.5 inch coil design offers less moving mass than a conventional 4 inch design. The reduced moving mass offers superior transient response.

The EM18-LB600 offers a 35Hz to 250Hz useable bandwidth. The performance of the EM18-LB600 is optimized when using a high pass 4th order Butterworth filter tuned near the enclosure vent frequency. Although the woofer is rated to 250Hz, typical applications will limit the high frequency response to 80Hz to 150Hz, depending on the response requirements of the full range or mid/high enclosure. The transducer is ideal for use in sub woofers that use bi-amped configurations.

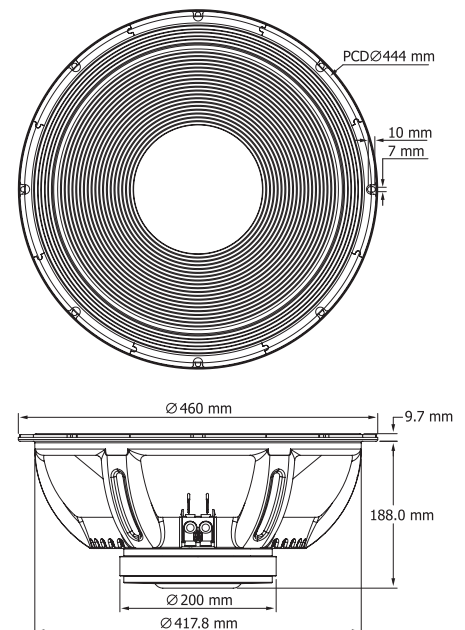
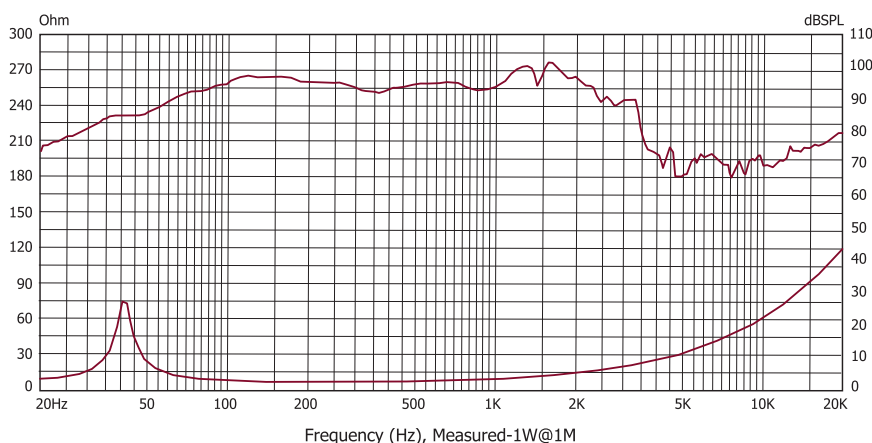
### General Specification

Nominal diameter	457 mm / 18 in
Peak Power	2400 W
AES Power	600 W
Nominal impedance	8 Ohm
Sensitivity (1W/1m)	96 dB
Frequency range	35 - 250 Hz
Chassis type	Heavy Duty Stamped Steel
Magnet type	Ferrite
Magnet weight	2.95 kg / 103.9 oz
Voice coil diameter	88.9 mm / 3.5 in
Coil material	Round Copper Wire
Former material	Glass fiber
Cone material	Paper
Surround material	Cloth
Suspension	Silicone Impregnated Spider
Xmax	6.4 mm / 0.25 in
Gap depth	10 mm / 0.39 in
Voice coil winding width	22.7 mm / 0.89 in
Unit weight	10.2 kg / 22.5 lb
Shipping weight	11.2 kg / 24.7 lb
Packaging dimension WxDxH	505x505x250 mm 19.9x19.9x9.8 in

### Thiele Small Parameters

Fs	41 Hz
Re	5.8 Ohm
Qms	8.29
Qes	0.69
Qts	0.63
Bl	21.29 Tm
Mms	209.64 g / 7.40 oz
Mmd	184.98 g / 6.53 oz
Vas	152.61 lt / 5.39 cu.ft. <sup>3</sup>
Sd	1225 cm <sup>2</sup>
Le	0.93 mH
Cms	7.3e - 05 m/N
Rms	6.5 Ns/m

### Frequency response and Impedance curve



P.AUDIO SYSTEM CO.,LTD.