



## EM SERIES

# EM12-LB300

Low Frequency Ferrite Woofer



### Features

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

### Applications

The P Audio EM12-LB300 is a high performance 12 inch (305mm) diameter low frequency/full range transducer. The EM12-LB300 is an excellent choice for full range two way designs where high reliability and power handling as well as excellent transient detail are specified.

The EM12-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 EM12-LB300 offers a 40Hz to 3500Hz useable bandwidth. The performance of the EM12-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 3500Hz, typical high frequency crossover points will be based on the compression driver and horn combination used for the high frequency section.

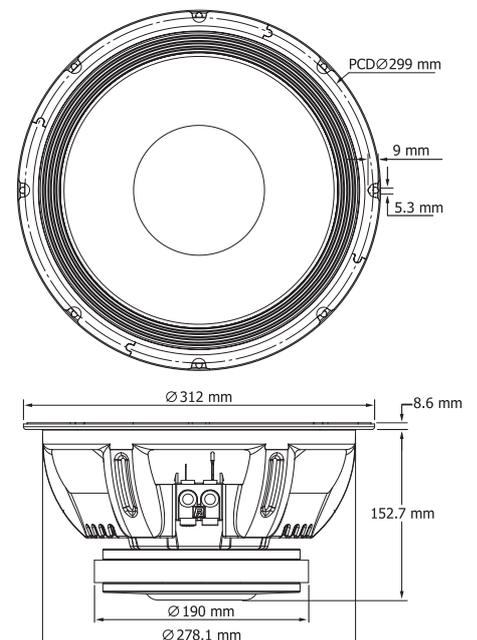
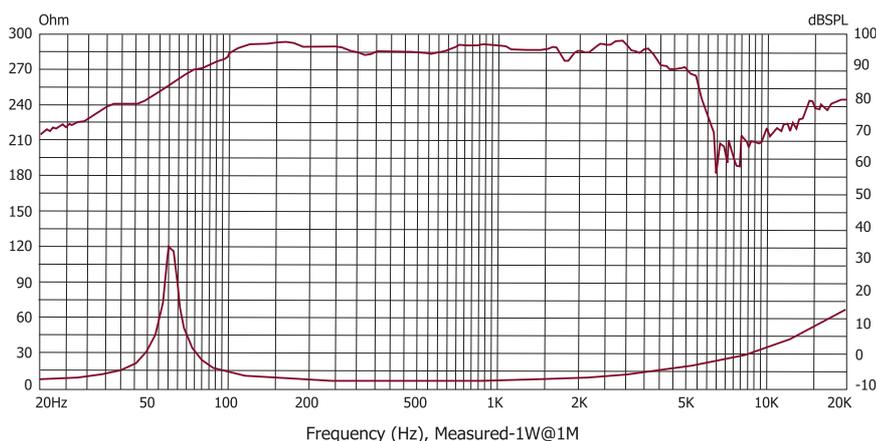
### General Specification

|                           |                                |
|---------------------------|--------------------------------|
| Nominal diameter          | 305 mm / 12 in                 |
| Peak Power                | 1200 W                         |
| AES Power                 | 300 W                          |
| Nominal impedance         | 8 Ohm                          |
| Sensitivity (1W/1m)       | 95 dB                          |
| Frequency range           | 40 - 3500 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               | 7.7 kg / 17 lb                 |
| Shipping weight           | 8.5 kg / 18.7 lb               |
| Packaging dimension WxDxH | 355x355x200 mm<br>14x14x7.9 in |

### Thiele Small Parameters

|     |                                     |
|-----|-------------------------------------|
| Fs  | 61 Hz                               |
| Re  | 5.6 Ohm                             |
| Qms | 9.33                                |
| Qes | 0.45                                |
| Qts | 0.42                                |
| Bl  | 16.08 Tm                            |
| Mms | 53.88 g / 1.90 oz                   |
| Mmd | 46.84 g / 1.65 oz                   |
| Vas | 50.01 lt / 1.77 cu.ft. <sup>3</sup> |
| Sd  | 531 cm <sup>2</sup>                 |
| Le  | 0.53 mH                             |
| Cms | 1.3e - 04 m/N                       |
| Rms | 2.23 Ns/m                           |

### Frequency response and Impedance curve



P.AUDIO SYSTEM CO.,LTD.