

COLOSSUS 18XB

PROFESSIONAL SERIES



ELECTRO ACOUSTIC SPECIFICATIONS

| | |
|-----------------------------|-----------------|
| Nominal Chassis Diameter | 18" |
| Impedance | 8 Ω |
| EIA 426A Power | 800 w |
| Program Power | 1600 |
| Peak Power 6dB Crest Factor | 3200 |
| Frequency Range -3dB | 35 Hz - 1.0 KHz |
| Sensitivity 1w - 1m | 99 dB |
| Magnet Weight | 126 oz |
| Magnetic Gap Depth | 0.39" / 10 mm |
| Coil Diameter | 4.0" / 102 mm |
| Flux Density (Tesla) | 1.2 |
| Coil Winding Length | 0.90" / 23 mm |
| Coil Material | Copper |
| Former Material | Fibreglass |

THIELE SMALL PARAMETERS

| | |
|--------------------|-------|
| FS Hz | 33 Hz |
| RE Ohms | 6.5 Ω |
| Qms | 5.77 |
| Qes | 0.358 |
| Qts | 0.337 |
| Vas Ltr | 236 |
| Vd | 0.803 |
| CMS (mm/N) | 0.13 |
| BL T/m | 25.9 |
| Mms grms | 173 |
| Xmax mm | 7.5 |
| Sd cm ² | 1131 |
| Efficiency % | 2.375 |

MOUNTING / SHIPPING INFORMATION

| | |
|-----------------------------------|---|
| Overall Diameter | 19.09" / 485 mm |
| Width Across Flats | 18.0" / 457 mm |
| Baffle Hole (Front Mount) | 16.53" / 420 mm |
| Flange Height | 0.46" / 11.8 mm |
| Mounting Hole Diameter & Quantity | 8 x 7mm dia on 468 PCD / 8 x 7mm dia on 438 PCD / 8 x 0.275" dia on 18.425 PCD / 8 x 0.275 dia on 17.25 PCD |
| Overall Height | 8.07" / 205 mm |
| Nett Weight | 14.2 kg |
| Shipping Weight | 16.2 kg |
| Packing Carton Dimensions | 250 x 520 x 520 mm |

MATERIALS OF CONSTRUCTION

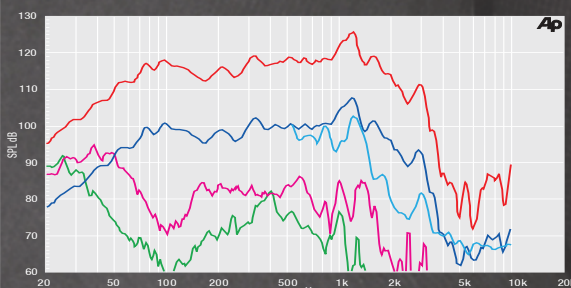
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|-----------------------------|--|
| Former Material | Fibreglass |
| Voice Coil | Copper |
| Magnet Material | Ferrite |
| Chassis | Die-cast Aluminium |
| Cone | Paper |
| Surround / Edge Termination | Polyvinyl Damped Fabric |
| Dust Dome | Paper |
| Connectors | Push-button Spring Terminals |
| Polarity | Positive Voltage at Red Terminal causes forward motion of cone |

- Please inquire about alternative impedances.
- A.E.S. power handling test. Pink noise bandpass filtered at 12 dB per octave with cutoff frequencies of 30 Hz and 300 Hz. Driver mounted in free air, test signal applied at rated power for two hours.

APPLICATION NOTES:

The Colossus 18XB is intended for use as a high-output sub-bass driver either singly or in multiway systems. The unit features a 4-inch voice coil immersed in a symmetric magnetic field and centralized by using two suspensions in a dual arrangement to maintain ultra linearity and stability at high excursions. The heavily ribbed straight-sided paper cone membrane is reinforced with high-strength composite fibres to resist deformation under extreme loads. The driver handles 800Watts (EIA) continuous and can cope with peaks in excess of 3200 Watts. This is due to advanced thermal management in the form of a vented die-cast chassis and motor system using an internal heatsink coupled to a large vaned heatsink mounted on the rear of the unit. These measures effectively remove heat from the voice coil resulting in extremely low-power compression. The Colossus 18XB is designed for use in 100 to 250 litre ported enclosures.

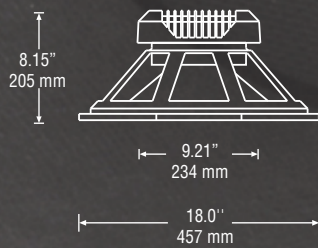
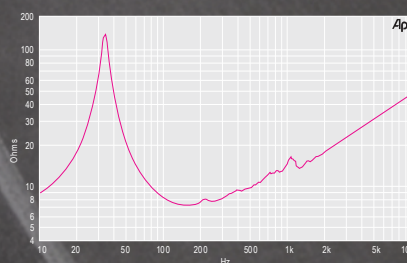
FREQUENCY RESPONSE DATA:



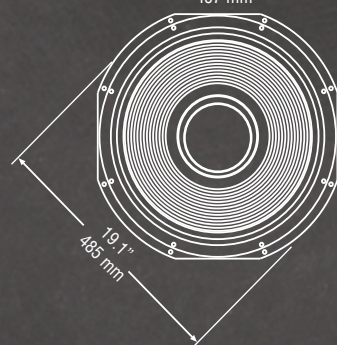
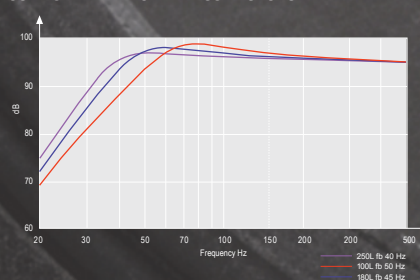
Data measured using swept sine wave input on an open baffle of dimensions 2.5 x 3.7 metres with a microphone distance of 1 metre.

- Fundamental 10 % Power
- Fundamental on-axis 1 W
- Fundamental 45° off-axis 1 W
- 2nd Harmonic 10 % Power
- 3rd Harmonic 10 % Power

IMPEDANCE:



COMPUTER PREDICTED BASS RESPONSE:



FANE