

COLOSSUS 18B-600

PROFESSIONAL SERIES



ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	18"
Impedance	8,4 Ω
Power Handling	600 (A.E.S.)
Usable Frequency Range -6dB	30 Hz - 1 kHz
Sensitivity 1 w - 1 m	98 dB
Moving Mass inc. Air Load	148 grams
Minimum Impedance Zmin	7 Ω
Effective Piston Diameter	14.84" / 377 mm
Peak Displacement Volume of Cone Vd	1.61 litres
Magnet Weight	120 oz
Magnetic Gap Depth	0.43 inch/11 mm
Flux Density	1.04 Tesla
Coil Winding Height	0.87" / 22 mm
Voice Coil Length	115 ft / 35 m
Voice Coil Diameter	4.0" / 101.6 mm

THIELE SMALL PARAMETERS

FS Hz	29 Hz
RE Ohms	5.8 Ω
Qms	6.75
Qes	0.245
Qts	0.236
Vas Ltr	354
Vd Litres	1.61
CMS (mm/N)	0.203
BL T/m	25.25
Mms (grms)	148
Xmax mm	7.2
Sd cm ²	0.112 m ²
Efficiency %	3.41

MOUNTING / SHIPPING INFORMATION

Overall Diameter	19.1" / 485 mm
Width Across Flats	18" / 457 mm
Flange Height	0.465" / 11.8 mm
Baffle Hole Diameter F/M	16.53" / 420 mm
Baffle Hole Diameter R/M	16.33" / 414 mm
Gasket Supplied	Front & Rear
Fixing Holes	8 x 0.275" diam on 18.425 PCD / 8 x 0.275 diam on 17.25 PCD 8 x 7 mm diam on 468 PCD/8 x 7 diam on 438.15 PCD
Depth	8.18" / 208 mm
Weight	29.92 lb / 13.6 kg
Recommended Enclosure Volume	4.41-14.12 cu ft / 125-400 litres
Volume Displaced by Driver	0.269 cu ft / 7.6 litres
Shipping Weight	34.32 lb / 15.6 kg
Packing Carton Dimensions	485 x 485 x 276 mm

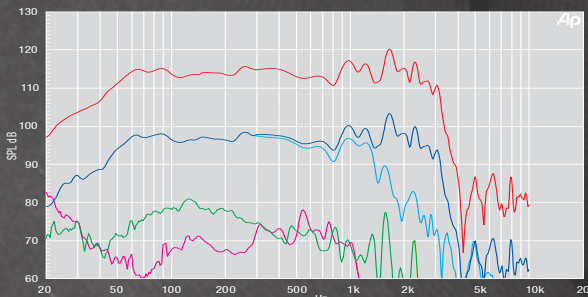
MATERIALS OF CONSTRUCTION

Former Material	Fibreglass
Voice Coil	Copper
Magnet Material	Ferrite
Chassis	Die-cast Aluminium
Cone	Curvilinear Polycellulose
Surround / Edge Termination	Polyvinyl Damped Dbl. Half Roll Linen
Dust Dome	Solid Paper
Connectors	Push-button Spring Terminals
Polarity	Positive Voltage at Red Terminal Causes Forward Motion of Cone

APPLICATION NOTES:

The Colossus 18B-600 is intended for use as a high-output bass driver in multiway systems. It features a 4-inch voice coil immersed in a symmetric magnetic field yielding increased linearity and lower distortion. This, coupled with a large Xmax of 7.2 mm, ensures tight, punchy bass at high levels of excursion. The cone membrane, manufactured from Polycellulose, is much stronger and more durable than conventional paper pulp alternatives. This allows the driver to combine high-sensitivity with the structural integrity required to produce undistorted low frequencies at extreme sound pressure levels. The driver handles 600 Watts (A.E.S.) continuous and can cope with peaks in excess of 2400 Watts. This is due to advanced thermal management in the form of vented die-cast chassis and motor system 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 18B-600 exhibits 98 dB sensitivity and can deliver bass down to 32 Hz (-6 dB) in a 200 litre ported enclosure.

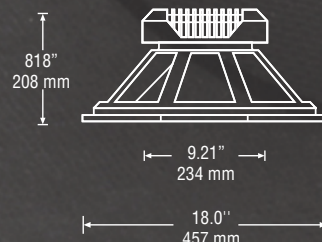
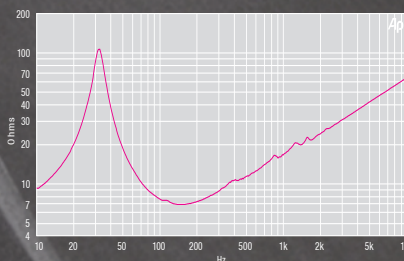
FREQUENCY RESPONSE DATA:



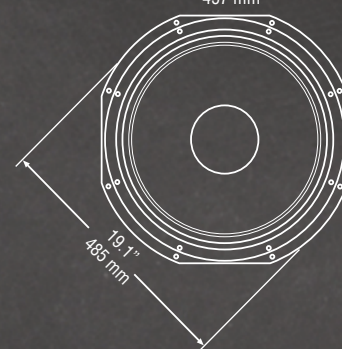
Data measured using swept sine wave input on an open baffle of dimensions 2.5 x 3.7 metres with a microphone distance of 1 metre.

- 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:



- 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.

FANE