

COLOSSUS 18B



PROFESSIONAL SERIES



ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	18"
Impedance	4,8,16 Ω
Power Handling	400 (A.E.S.)
Usable Frequency Range -6dB	35 Hz - 1.5 kHz
Sensitivity 1 w - 1m	99.3 dB
Moving Mass inc. Air Load	148 grams
Minimum Impedance Zmin	7.8 Ω
Effective Piston Diameter	14.84" / 377 mm
Peak Displacement Volume of Cone Vd	0.896 litres
Magnet Weight	120 oz
Magnetic Gap Depth	0.39" / 10mm
Flux Density	1.0 Tesla
Coil Winding Height	0.67" / 17 mm
Voice Coil Length	100 ft / 30 m
Voice Coil Diameter	4.0" / 101.6 mm

THIELE SMALL PARAMETERS

FS Hz	30 Hz
RE Ohms	6.35 Ω
Qms	4.03
Qes	0.207
Qts	0.197
Vas Ltr	320
Vd Litres	
CMS (mm/N)	0.184
BL T/m	29.5
Mms (grms)	148
Xmax mm	4
Sd cm ²	0.112 m ²
Efficiency %	4.25

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 7 dia on 468 PCD 8 x 7 dia on 438.15 PCD
Depth	7.75" / 197 mm
Weight	28 lb / 12.7 kg
Recommended Enclosure Volume	3.5-8.8 cu ft / 100-250 Litres
Volume Displaced by Driver	0.261 cu ft / 7.4 Litres
Shipping Weight	32.5 lb / 14.65 kg
Packing Carton Dimensions	485 x 485 x 276 mm

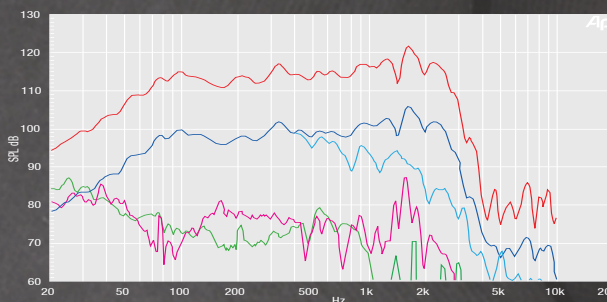
MATERIALS OF CONSTRUCTION

Former Material	Fibreglass
Voice Coil	Copper
Magnet Material	Ferrite
Chassis	Die-cast Aluminium
Cone	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

APPLICATION NOTES:

The Colossus 18B has an outstanding reputation as a bass driver that operates in most cabinet applications. It is optimised for 100-250 litre ported enclosures and with its high sensitivity has been a favourite of the bass enthusiast looking to generate high level bass from a lower wattage power amp. Utilising a 4" voice coil and large 120oz magnet this driver offers exceptional performance.

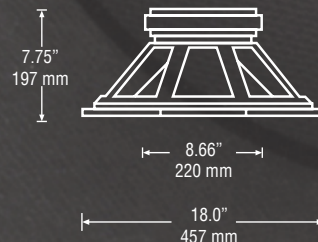
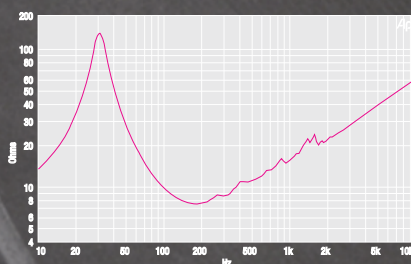
FREQUENCY RESPONSE DATA:



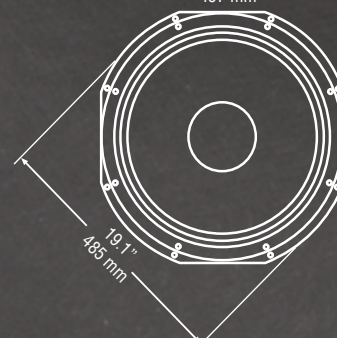
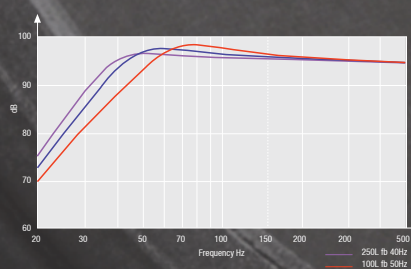
Data measured using swept sine wave input on an open baffle of dimensions 2.5 x 3.7 metres with a microphone distance of 1 metre.

- 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:



- A.E.S power handling test. Pink noise bandpass filtered at 112 dB per octave with cutoff frequencies of 35 Hz and 350 Hz. Driver mounted in free air, test signal applied at rated power for two hours.
- Please note that the frequency response measurements are supplied for comparison only and are not a measure of the low frequency performance which may be achieved in a fully optimised system.

FANE