THE PROFESSIONAL SERIES

COLOSSUS 18SB

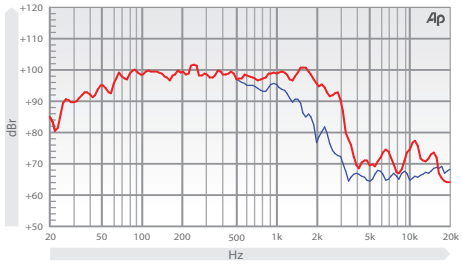
SUB BASS DRIVER

18" / 457.2 mm CHASSIS DIAMETER	**1000 w (A.E.S.)** POWER HANDLING	**100 dB** SENSITIVITY (1w / 1m)
35 Hz - 2.5 kHz FREQUENCY RESPONSE	**4.0" / 101.6 mm** COPPER - INSIDE / OUTSIDE WINDINGS VOICE COIL	**8.25mm Xmax**

The Colossus 18SB is intended for use as a high-output bass driver in multi way systems. It features a 4 inch 'sandwich' inside and outside windings voice coil, immersed in a symmetric magnetic field yielding increased linearity and lower distortion. This, coupled with a large Xmax of 8.25 mm and laminated silicone suspension, 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 1000 Watts (A.E.S.) continuous and can cope with peaks in excess of 4000 Watts. This is due to advanced thermal management in the form of vented die-cast chassis and increased motor system venting. These measures effectively remove heat from the voice coil, resulting in extremely low-power compression. The Colossus 18SB exhibits 100 dB sensitivity and can deliver bass down to 35 Hz (-6 dB) in a 200 litre ported enclosure.

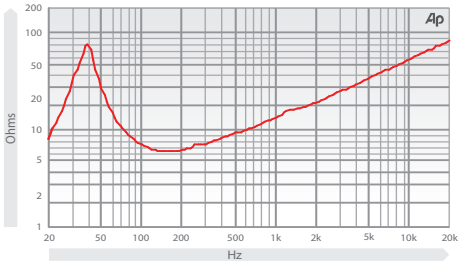
- **Fast, accurate bass. Defined, clean and punchy.**
- **Fibre loaded, UK manufactured cone offering increased strength, durability and performance.**
- **Delivers bass down to 35 Hz in a 200 litre ported enclosure.**

FREQUENCY RESPONSE DATA*

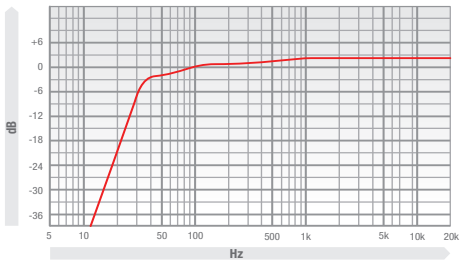


* Half space response measured in a 975 litre sealed box.

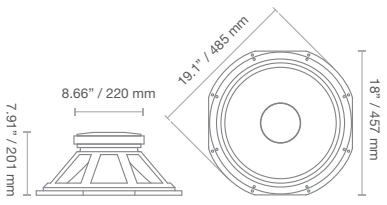
IMPEDANCE



PREDICTED BASS RESPONSE



** Normalised bass response in 175 litre tuned to 35 Hz



ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	18" / 457.2 mm
Impedance	8 Ω
Power Handling	1000 w (A.E.S.)
Peak Power (6dB Crest Factor)	4000 w (A.E.S.)
Usable Frequency Range -6dB	35 Hz - 2.5 kHz
Sensitivity (1 w - 1 m)	100 dB
Moving Mass inc. Air Load	177 grams
Minimum Impedance Zmin	6.5 Ω
Effective Piston Diameter	14.84" / 376.93 mm
Peak Displacement Volume of Cone Vd	0.893 litres
Magnet Weight	120 oz
Magnetic Gap Depth	0.43" / 11 mm
Flux Density	1.1 Tesla
Coil Winding Height	0.87" / 22 mm
Voice Coil Diameter	4.0" / 101.6 mm

THIELE SMALL PARAMETERS

FS Hz	36 Hz
RE Ohms	5.2 Ω
Qms	6.583
Qes	0.366
Qts	0.346
Vas Ltr	199 litres
Vd litres	0.893 litres
CMS (mm/N)	0.109 mm/N
BL T/m	24 T/m
Mms (grms)	177.2 grams
Xmax (mm)	8.25 mm
Sd (cm^2)	1134 cm^2
Efficiency %	2.49%
Le (1k Hz)	2.23 mH

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" / 419.86 mm
Baffle Hole Diameter R/M	16.33" / 414.78 mm
Gasket Supplied	Front & Rear
Fixing Holes	8x 0.275" diam on 18.425 PCD / 8x 0.275 diam on 17.25 PCD 8x 7 mm diam on 468 PCD / 8x 7 diam on 438.15 PCD
Depth	7.91" / 201 mm
Weight	27.6 lb / 12.51 kg
Recommended Enclosure Volume	4.41 - 14.12 cu ft /125 - 400 litres
Shipping Weight	28.9 lb / 13.1 kg
Packing Carton Dimensions	250 x 520 x 520 mm

MATERIALS OF CONSTRUCTION

Former Material	Glass Fibre
Voice Coil	Copper - Inside / Outside Windings
Magnet Material	Ferrite
Chassis	Die-cast Aluminium
Cone	Curvilinear Polycellulose
Surround / Edge Termination	Polyvinyl Damped Multi Roll. Poly Cotton
Dust Dome	Solid Paper
Connectors	Push-button Spring Terminals
Polarity	Positive voltage at red terminal causes forward motion of cone

- Please enquire 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.
- 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.