



## COLOSSUS 15XB

The Colossus 15XB is intended for use as a high-output sub-bass driver either singly or in multi way systems. The unit features a 4 inch 'sandwich' inside and outside windings 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 800 Watts (A.E.S.) 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 15XB is designed for use in 70 to 150 litre ported enclosures.

### ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	15"
Impedance	8.4 Ω
Power Handling	800 w (A.E.S.)
Peak Power (6dB Crest Factor)	3200 w (A.E.S.)
Usable Frequency Range -6dB	40 Hz - 1 kHz
Sensitivity (1 w - 1 m)	99 dB
Moving Mass inc. Air Load	123 grams
Minimum Impedance Zmin	7.5 Ω
Effective Piston Diameter	13.03" / 331 mm
Peak Displacement Volume of Cone Vd	0.98 litres
Magnet Weight	120 oz
Magnetic Gap Depth	0.39" / 10 mm
Flux Density	1.1 Tesla
Coil Winding Height	0.90" / 23 mm
Voice Coil Diameter	4.0" / 101.6 mm

### THIELE SMALL PARAMETERS

FS Hz	38 Hz
RE Ohms	6.5 Ω
Qms	7.48
Qes	0.336
Qts	0.32
Vas Ltr	168
Vd litres	0.637
CMS (mm/N)	0.164
BL T/m	22.28
Mms (grms)	104
Xmax (mm)	7.5
Sd (cm <sup>2</sup> )	855.3
Efficiency %	1.67
Le (1k Hz)	2.191 mH

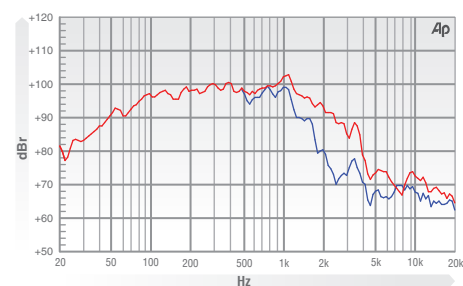
### MATERIALS OF CONSTRUCTION

Former Material	Glass Fibre
Voice Coil	Copper 'sandwich' inside and outside windings
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

### MOUNTING / SHIPPING INFORMATION

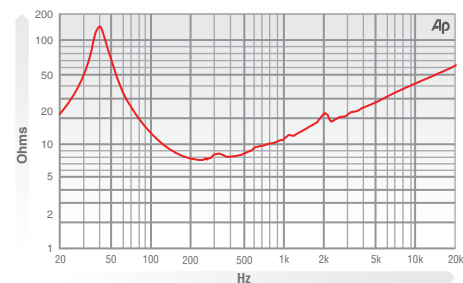
Overall Diameter	16" / 406.4 mm
Width Across Flats	15.25" / 387 mm
Flange Height	0.305" / 7.8 mm
Baffle Hole Diameter F/M	13.85" / 352 mm
Baffle Hole Diameter R/M	14" / 355.6 mm
Gasket Supplied	Front & Rear
Fixing Holes	4x 0.281" diam on 15.5 PCD / 8 x 0.281 diam on 14.56 PCD 4x 7.1 mm diam on 393.7 PCD / 8x 7.1 diam on 370 PCD
Depth	7.20" / 183 mm
Weight	27.28 lb / 12.4 kg
Recommended Enclosure Volume	2.47 - 4.41 cu ft / 70 - 125 litres
Shipping Weight	30.58 lb / 13.9 kg
Packing Carton Dimensions	415 x 415 x 250 mm

### FREQUENCY RESPONSE DATA\*

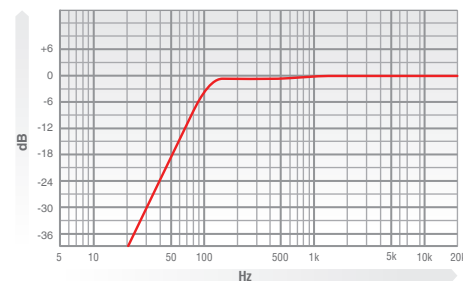


\* Half space response measured in a 975 litre sealed box

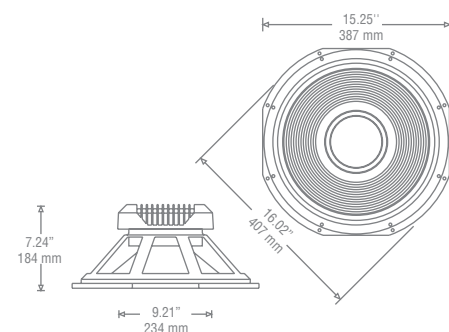
### IMPEDANCE



### PREDICTED BASS RESPONSE



\*\* Normalized bass response in 125 litre tuned to 55Hz



- Please enquire about alternative impedances.
- A.E.S. power handling test. Pink noise bandpass filtered at 12 dB per octave with cutoff frequencies of 40 Hz and 400 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.