

COLOSSUS 12MB

PROFESSIONAL SERIES



ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	12"
Impedance	8 Ω
Power Handling	450 (A.E.S.)
Usable Frequency Range -6dB	40 Hz - 3.5 kHz
Sensitivity 1 w - 1 m	98 dB
Moving Mass inc. Air Load	59 grams
Minimum Impedance Zmin	7 Ω
Effective Piston Diameter	10.24" / 260 mm
Peak Displacement Volume of Cone Vd	0.58 litres
Magnet Weight	93 oz
Magnetic Gap Depth	0.35" / 9 mm
Flux Density	1.16 Tesla
Coil Winding Height	0.70" / 18 mm
Voice Coil Length	72 ft / 21.8 m
Voice Coil Diameter	3.0" / 77 mm

THIELE SMALL PARAMETERS

FS Hz	55 Hz
RE Ohms	5.5 Ω
Qms	2.05
Qes	0.333
Qts	0.286
Vas Ltr	56
Vd Litres	0.58
CMS (mm/N)	0.142
BL T/m	18.3
Mms (grms)	59
Xmax mm	5.5
Sd cm ²	0.053 m ²
Efficiency %	2.71

MOUNTING / SHIPPING INFORMATION

Overall Diameter	13" / 330.2 mm
Width Across Flats	12.19" / 309.5 mm
Flange Height	0.305" / 7.8 mm
Baffle Hole Diameter F/M	11.03" / 281 mm
Baffle Hole Diameter R/M	10.13" / 257 mm
Gasket Supplied	Front & Rear
Fixing Holes	4 x 0.218" diam on 12.5 PCD 4 x 5.5 mm diam on 317.5 PCD
Depth	5.39" / 137 mm
Weight	17.1 lb / 7.8 kg
Recommended Enclosure	0.88-2.83 cu ft / 25-80 litres
Volume	0.10 cu ft / 2.8 litres
Volume Displaced by Driver	20.2 lb / 9.2 kg
Shipping Weight	20.2 lb / 9.2 kg
Packing Carton Dimensions	340 x 340 x 222 mm

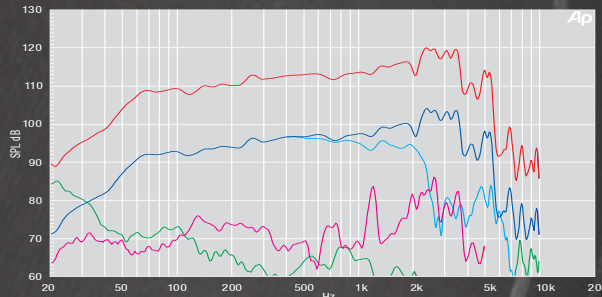
MATERIALS OF CONSTRUCTION

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

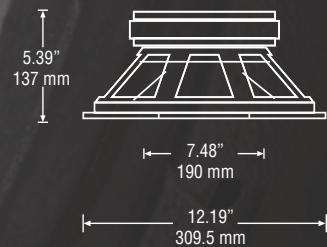
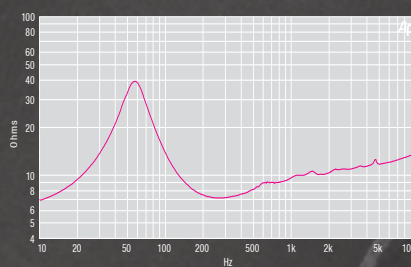
APPLICATION NOTES:

The Colossus 12MB is intended for use as a very high-output bass mid driver in two-way ported enclosures and also as a bass driver in multiway systems. The unit features a 3-inch voice coil driven by a noninductive motor system which dramatically reduces third-harmonic and intermodulation distortion. 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 high output levels. The mechanical and electrical properties of the unit have been carefully optimised to allow extended low frequency output up to its rated power handling of 450 Watts (A.E.S continuous), with peak power handling in excess of 1800 Watts. The driver exhibits an average sensitivity of 98 dB and is best used in ported enclosures of 25 to 80 litres.

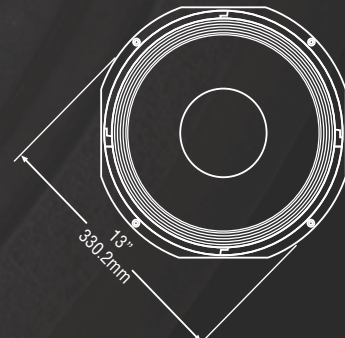
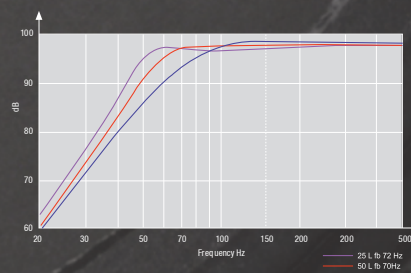
FREQUENCY RESPONSE DATA:



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.

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