



# THE NEODYMIUM SERIES COLOSSUS 15 -750BMN

BASS, BASS / MID DRIVER

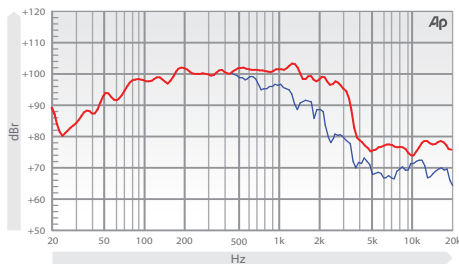
<b>15" / 381 mm</b> CHASSIS DIAMETER	<b>750 w (A.E.S.)</b> POWER HANDLING	<b>100 dB</b> SENSITIVITY (1w / 1m)
<b>40 Hz - 3 kHz</b> FREQUENCY RESPONSE	<b>4.0" / 101.6 mm</b> COPPER - INSIDE / OUTSIDE WINDINGS VOICE COIL	<b>Delivers bass down to 40Hz in a 125 litre enclosure</b>

The Colossus 15-750BMN is intended for use in high-power two-way ported enclosures and as a high-output bass, bass/mid driver in multi way systems. It features a 4 inch voice coil immersed in a symmetric magnetic field yielding increased linearity and lower distortion at high excursion levels. 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 driver handles 750 Watts (A.E.S) continuous and can cope with peaks in excess of 300 Watts. This is due to advanced thermal management in the form of vented die-cast chassis and motor system. The Colossus 15-750BMN exhibits an average sensitivity of 100 dB and can deliver bass down to 40 Hz (-6 dB) in a 125 litre ported enclosure.

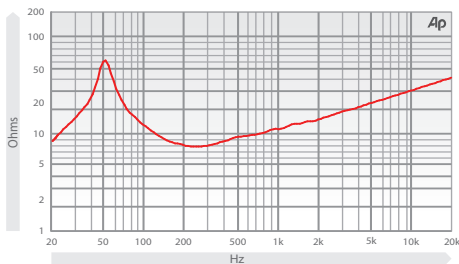
- **Lightweight neodymium magnet assembly**
- **Weighs only 6.8 kg.**
- **Tight accurate bass.**
- **Fibre loaded, UK manufactured cone offering increased strength, durability and performance.**
- **FEA optimised magnet assembly allowing high force factor and excursion capability.**

THE NEODYMIUM SERIES

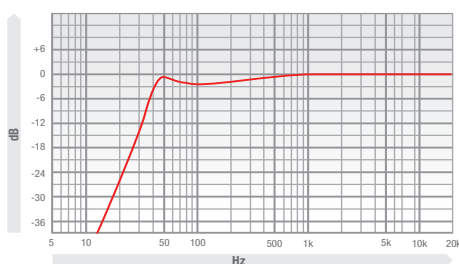
## FREQUENCY RESPONSE DATA\*



## IMPEDANCE



## PREDICTED BASS RESPONSE



## ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	15" / 381 mm
Impedance	8 Ω
Power Handling	750 w (A.E.S.)
Peak Power (6dB Crest Factor)	3000 w (A.E.S.)
Usable Frequency Range -6dB	40 Hz - 3 kHz
Sensitivity (1 w - 1 m)	100 dB
Moving Mass inc. Air Load	109 grams
Minimum Impedance Zmin	7.5 Ω
Effective Piston Diameter	13.03" / 331 mm
Peak Displacement Volume of Cone Vd	0.65 litres
Magnetic Gap Depth	0.43" / 11 mm
Flux Density	1.1 Tesla
Coil Winding Height	0.75" / 22 mm
Voice Coil Diameter	4.0" / 101.6 mm

## THIELE SMALL PARAMETERS

FS Hz	45 Hz
RE Ohms	5.5 Ω
Qms	3.97
Qes	0.29
Qts	0.27
Vas Ltr	127 litres
Vd litres	0.65 litres
CMS (mm/N)	0.119 mm/N
BL T/m	24.5 T/m
Mms (grms)	109 grams
Xmax (mm)	7.5 mm
Sd (cm²)	866 cm²
Efficiency %	3.80%
Le (1k Hz)	1.69 mH

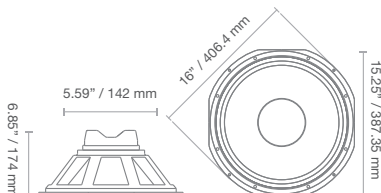
## MOUNTING / SHIPPING INFORMATION

Overall Diameter	16" / 406.4 mm
Width Across Flats	15.25" / 387.35 mm
Flange Height	0.305" / 7.8 mm
Baffle Hole Diameter F/M	13.85" / 351.79 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	6.85" / 174 mm
Weight	14.99 lb / 6.80 kg
Recommended Enclosure Volume	2.47 - 4.41 cu ft / 70 - 125 litres
Shipping Weight	17.41 lb / 7.90 kg
Packing Carton Dimensions	415 x 415 x 250 mm

## MATERIALS OF CONSTRUCTION

Former Material	Glass Fibre
Voice Coil	Copper - Inside / Outside Windings
Magnet Material	Neodymium
Chassis	Die-cast Aluminium
Cone	Curvilinear Polycellulose
Surround / Edge Termination	Polyvinyl Damped Dbl. Half 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 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.



COLLOSSUS 15 -750BMN

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