

COLOSSUS 18-1000

PROFESSIONAL SERIES



ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	18"
Impedance	8.4 Ω
Power Handling	1000 (A.E.S.)
Usable Frequency Range -6dB	27 Hz - 1 kHz
Sensitivity 1 w - 1m	98 dB
Moving Mass inc. Air Load	144 grams
Minimum Impedance Zmin	7 Ω
Effective Piston Diameter	15.19" / 386mm
Peak Displacement Volume of Cone Vd	1.5 litres
Magnet Weight	120 oz
Magnetic Gap Depth	0.43" / 11 mm
Flux Density	1.0 Tesla
Coil Winding Height	0.98" / 25 mm
Voice Coil Length	118 ft / 36 m
Voice Coil Diameter	4.0" / 101.6 mm

THIELE SMALL PARAMETERS

FS Hz	32 Hz
RE Ohms	5.8 Ω
Qms	6.8
Qes	0.336
Qts	0.32
Vas Ltr	236
Vd Litres	1.5
CMS (mm/N)	0.122
BL T/m	26.6
Mms (grms)	192.8
Xmax mm	12.75
Sd cm ²	1178 cm ²
Efficiency %	2.4

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 diam on 468 PCD 8 x 7 diam on 438.15 PCD
Depth	8.5" / 205 mm
Weight	32.00 lb / 14.5 kg
Recommended Enclosure	3.5-8.8 cu ft /
Volume	100-200 Litres
Volume Displaced by Driver	0.269 cu ft / 7.6 Litres
Shipping Weight	36.37 lb / 16.5 kg
Packing Carton Dimensions	485 x 485 x 276 mm

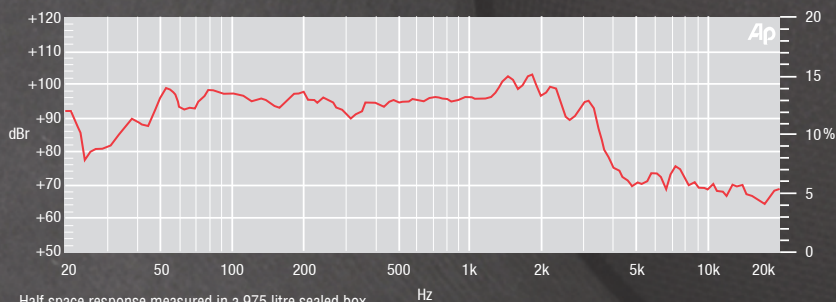
MATERIALS OF CONSTRUCTION

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

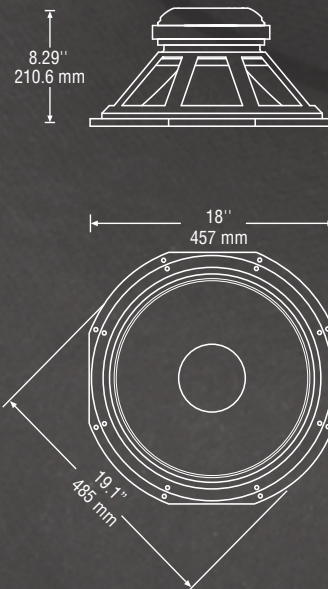
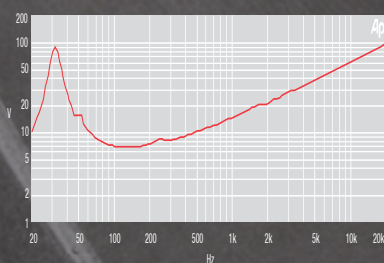
APPLICATION NOTES:

The Colossus 18-1000 is intended for use as a high-output sub-bass driver either singly or in multiway systems. It is suitable for loading in a variety of enclosure types since it allows enclosure designers considerably more freedom with specialised loading techniques without having to make allowances for physical characteristics or power handling limitations. The unit features a 4-inch 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 curvilinear Polycellulose cone is reinforced with high strength Fibrillated Nylon fibres to resist deformation under extreme loads. 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 a vented die-cast chassis and motor system using an internal heat sink coupled with increased motor system and voice coil venting. These measures effectively remove heat from the voice coil resulting in extremely low-power compression. The Colossus 18-1000 is designed for use in 100 to 250 litre ported enclosures.

FREQUENCY RESPONSE DATA:



IMPEDANCE:



- 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.
- 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.

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