

COLOSSUS 18XLS

SUB BASS DRIVER

18" / 457.2 mm

CHASSIS DIAMETER

1200 W (A.E.S.)

AES POWER HANDLING

28 Hz - 500 Hz

FREQUENCY RESPONSE

4.0" / 101.6 mm

COPPER - INSIDE/ OUTSIDE WINDINGS VOICE COIL

97 dB

SENSITIVITY (1W/ 1m)

12.5 mm Xmax

MAXIMUM LINEAR EXCURSION

- 250 mm Diameter magnet structure.
- Low interference flux path.
- Fibre loaded UK manufactured cone.
- 64 mm peak to peak maximum linear excursion.
- 24.5 T/m BL.
- Fast, accurate and controlled bass at high levels of excursion.
- Intended for bass reflex and scoop enclosure designs.

The Colossus 18XLS features a 4-inch, inside / outside windings, copper voice coil and is intended for use as a high output bass driver in multi-way systems. The coil is immersed in a symmetric magnetic field that yields increased linearity and lower distortion. This, coupled with laminated silicone suspensions, a large Xmax of 12.5 mm with peak to peak travel of 60 mm, ensures fast accurate 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. Thanks to advanced thermal management the vented die-cast chassis and increased motor system venting effectively remove heat from the voice coil, resulting in extremely low-power compression. The driver handles 1200 Watts (A.E.S.) continuous coping with peaks in excess of 4800 Watts, exhibiting 97 dB sensitivity over it's working band.

ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	18" / 457.2 mm
Impedance	8 Ohm
Power Handling	1200 W (A.E.S.)
Peak Power (6dB Crest Factor)	4800 W (A.E.S.)
Usable Frequency Range -6dB	28 Hz - 500 Hz
Sensitivity (1 w - 1 m)	97 dB
Moving Mass inc. Air Load	209 grams
Minimum Impedance Zmin	7.44 Ω
Effective Piston Diameter	15.43" / 391.92 mm
Magnet Weight	165.78 oz
Magnetic Gap Depth	0.47" / 12.00 mm
Flux Density	1.1 Tesla
Coil Winding Height	1.18" / 30.00 mm
Voice Coil Diameter	4.0" / 101.6 mm

MOUNTING / SHIPPING INFORMATION

Overall Diameter	19.1" / 485.14 mm
Width Across Flats	18" / 457.2 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
Outer Fixing Holes	8x Ø 7 mm on 468 mm PCD
Inner Fixing Holes	8x Ø 7 mm on 438.15 mm PCD
Depth	8.66" / 220.00 mm
Weight	36.95 lb / 16.76 kg
Recommended Enclosure Volume	125 - 210 Litres
Shipping Weight	39.80 lb / 18.05 kg
Packing Carton Dimensions	(W) 512 (D) 512 (H) 244 mm

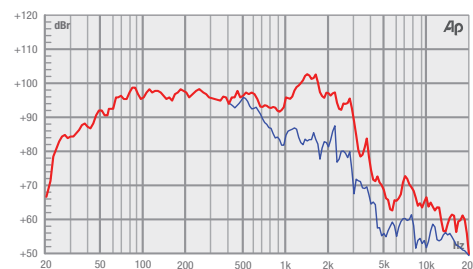
THIELE SMALL PARAMETERS

FS Hz	36 Hz
RE Ohms	5.2 Ω
Qms	13.610
Qes	0.420
Qts	0.400
Vas Ltr	187.00 Litres
Vd Litres	1.560 Litres
CMS (mm/N)	0.090 mm/N
BL T/m	24.5 T/m
Mms (grms)	209 grams
Xmax (mm)	12.5 mm
Sd (cm²)	1210 cm²
Efficiency %	2.000%
Le (1k Hz)	1.50 mH
EBP	85.71 Hz

MATERIALS OF CONSTRUCTION

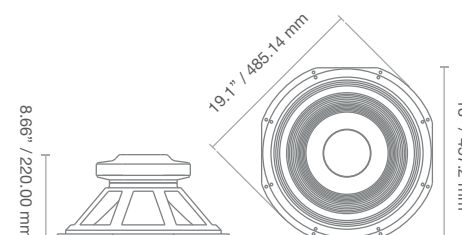
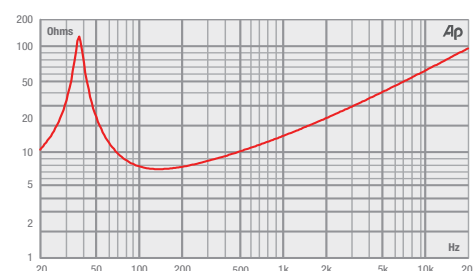
Former Material	Resin Bonded Glass Fibre
Voice Coil	Copper - Inside/ Outside Windings
Magnet Material	Ferrite
Chassis	Die-cast Aluminium
Cone	Straight Polycellulose Ribbed Cone
Surround / Edge Termination	Multi Roll Polyvinyl Damped Fabric
Dust Dome	Paper
Connectors	Push-button Spring Terminals
Polarity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

FREQUENCY RESPONSE DATA†



† Measured with swept sine wave on open baffle of 2.5 x 3.7m. Blue Line = fundamental 45° off-axis.

IMPEDANCE



* 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.