

# COLOSSUS 18XT5N

### BASS DRIVER



**18" / 457.2 mm**  
CHASSIS DIAMETER

**1200 W (A.E.S.)**  
AES POWER HANDLING

**28 Hz - 2 kHz**  
FREQUENCY RESPONSE

**5.0" / 127 mm**  
COPPER - INSIDE/ OUTSIDE  
WINDINGS VOICE COIL

**98.5 dB**  
SENSITIVITY (1W/ 1m)

**11.75 mm Xmax**  
MAXIMUM LINEAR  
EXCURSION

- 5" Voice coil.
- Lightweight neodymium magnet assembly.
- Weighs only 11.85 kg.
- High BL, 28.4 T/m.
- Ultimate high output.
- Low power compression.
- Fibre loaded, UK manufactured cone offering increased strength, durability and performance.
- Peak to peak travel of 60 mm.

The Colossus 18XT5N is intended for use as a high output bass driver in multi-way systems and features a 5 inch 'sandwich' (inside and outside windings) voice coil, immersed in a symmetric magnetic field yielding increased linearity and lower distortion. This, coupled with laminated silicone suspensions, a large Xmax of 11.75 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. The driver handles 1200 Watts (A.E.S.) continuous and can cope with peaks in excess of 4800 Watts. This is due to advanced thermal management in the form of vented die-cast chassis and increased motor system venting. These measures effectively remove heat from the voice coil, resulting in extremely low-power compression. The Colossus 18XT5N exhibits 98.5 dB sensitivity and can deliver bass down to 28 Hz (-6 dB) in a 200 Litre ported enclosure.

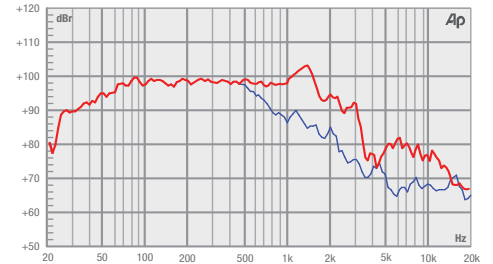
### ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	18" / 457.2 mm
Impedance	4 Ohm / 8 Ohm / 16 Ohm
Power Handling	1200 W (A.E.S.)
Peak Power (6dB Crest Factor)	4800 W (A.E.S.)
Usable Frequency Range -6dB	28 Hz - 2 kHz
Sensitivity (1 w - 1 m)	98.5 dB
Moving Mass inc. Air Load	216 grams
Minimum Impedance Zmin	6.9 Ω
Effective Piston Diameter	15.50" / 385.00 mm
Magnetic Gap Depth	0.43" / 13.00 mm
Flux Density	1.25 Tesla
Coil Winding Height	1.10" / 30.00 mm
Voice Coil Diameter	5.0" / 127 mm

### THIELE SMALL PARAMETERS

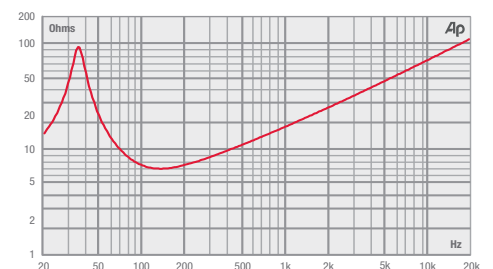
FS Hz	36 Hz
RE Ohms	5.6 Ω
Qms	6.050
Qes	0.350
Qts	0.339
Vas Ltr	185.00 Litres
Vd Litres	1.340 Litres
CMS (mm/N)	0.095 mm/N
BL T/m	28.4 T/m
Mms (grms)	216 grams
Xmax (mm)	11.75 mm
Sd (cm <sup>2</sup> )	1169 cm <sup>2</sup>
Efficiency %	3.000%
Le (1k Hz)	2.30 mH
EBP	102.86 Hz

### FREQUENCY RESPONSE DATA†



† Half space response measured in a 975 Litre sealed box.

### IMPEDANCE

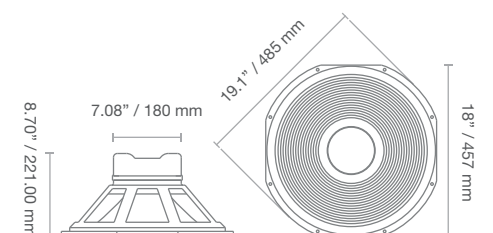


### MOUNTING / SHIPPING INFORMATION

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" / 419.86 mm
Baffle Hole Diameter R/M	16.33" / 414.78 mm
Gasket Supplied	Front & Rear
Outer Fixing Holes	8x Ø 0.275" on 18.425" PCD / 8x Ø 7 mm on 468 mm PCD
Inner Fixing Holes	8x Ø 0.275" on 17.25" PCD / 8x Ø 7 mm on 438.15 mm PCD
Depth	8.70" / 221.00 mm
Weight	26.12 lb / 11.85 kg
Recommended Enclosure Volume	4.41 - 14.12 cu ft / 125 - 400 Litres
Shipping Weight	29.76 lb / 13.50 kg
Packing Carton Dimensions	(W) 500 (D) 500 (H) 275 mm

### MATERIALS OF CONSTRUCTION

Former Material	Glass Fibre
Voice Coil	Copper - Inside/ Outside Windings
Magnet Material	Neodymium
Chassis	Die-cast Aluminium
Cone	Straight Fibre Loaded Polycellulose Ribbed Cone
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 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.