

COLOSSUS PRIME 18XS

SUB BASS DRIVER

18" / 457.2 mm CHASSIS DIAMETER	1200 W (A.E.S.) AES POWER HANDLING	35 Hz - 500 Hz FREQUENCY RESPONSE	4.0" / 101.6 mm COPPER - INSIDE/ OUTSIDE WINDINGS VOICE COIL	100 dB SENSITIVITY (1W/ 1m)	12 mm Xmax MAXIMUM LINEAR EXCURSION
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- Highest grade Y35 ferrite magnet structure.
- Low interference flux path.
- Aluminium demodulation ring.
- Fibre loaded, UK manufactured cone offering increased strength, durability and performance.
- 64 mm peak to peak maximum linear excursion.
- For bass reflex and scoop enclosure designs. Also works well in horn loaded systems.

The Prime 18XS is intended for use as a high output bass driver in multi-way systems and features a 4 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 12 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 Prime 18XS exhibits 100 dB sensitivity and can deliver bass down to 29 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	35 Hz - 500 Hz
Sensitivity (1 w - 1 m)	100 dB
Moving Mass inc. Air Load	177 grams
Minimum Impedance Zmin	6.5 Ω
Effective Piston Diameter	15.43" / 391.92 mm
Magnet Weight	145 oz
Magnetic Gap Depth	0.43" / 11.00 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 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	8.50" / 216.00 mm
Weight	33.75 lb / 15.30 kg
Recommended Enclosure Volume	4.41 - 14.12 cu ft / 125 - 400 Litres
Shipping Weight	37.45 lb / 17.00 kg
Packing Carton Dimensions	(W) 495 (D) 495 (H) 255 mm

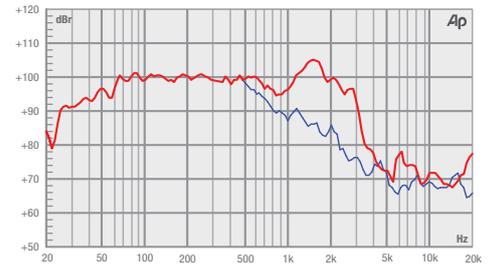
THIELE SMALL PARAMETERS

FS Hz	33 Hz
RE Ohms	5.2 Ω
Qms	8.200
Qes	0.404
Qts	0.385
Vas Ltr	257.00 Litres
Vd Litres	1.450 Litres
CMS (mm/N)	0.124 mm/N
BL T/m	22.4 T/m
Mms (grms)	188 grams
Xmax (mm)	12 mm
Sd (cm²)	1210 cm²
Efficiency %	2.200%
Le (1k Hz)	1.50 mH
EBP	81.68 Hz

MATERIALS OF CONSTRUCTION

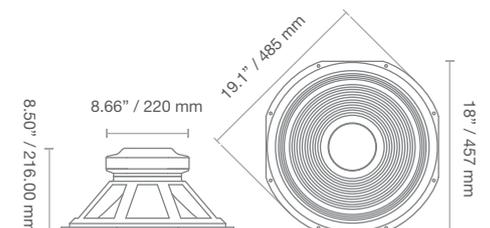
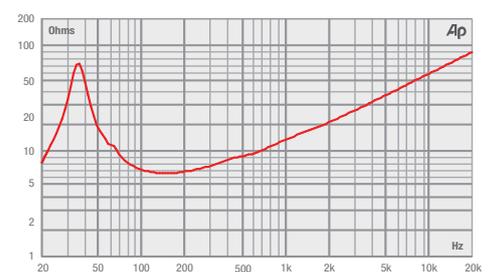
Former Material	Glass Fibre
Voice Coil	Copper - Inside/ Outside Windings
Magnet Material	Ferrite Y35
Chassis	Die-cast Aluminium
Cone	Straight Fibre Loaded Polycellulose Ribbed Cone
Surround / Edge Termination	Polyvinyl Damped Multi Roll. Poly Cotton
Dust Dome	Solid Paper (Inverted)
Connectors	Push-button Spring Terminals
Polarity	Positive voltage at red terminal causes forward motion of cone

FREQUENCY RESPONSE DATA†



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

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.