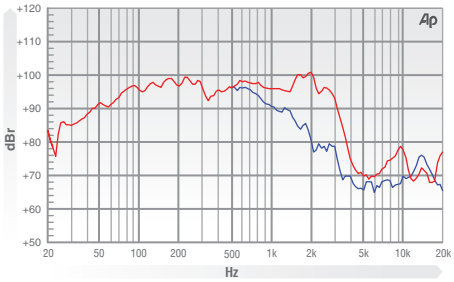
COLOSSUS PRIME 15XS

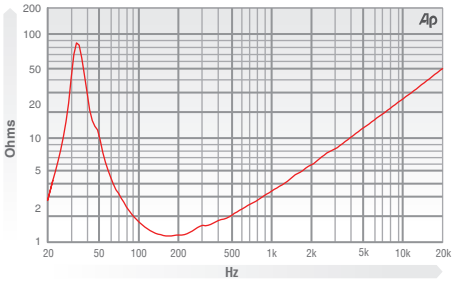
The Prime 15XS is intended for use as a high-output bass driver in multi way systems and features a 4 inch 'sandwich' (inside and outside windings) voice coil, immersed in a symmetric magnetic field yielding increased linearity and lower distortion. This, coupled with laminated silicone suspensions, a large Xmax of 12mm with peak to peak travel of 60mm, 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 15XS exhibits 98 dB sensitivity and can deliver bass down to 29 Hz (-6 dB) in a 200 litre ported enclosure.

FREQUENCY RESPONSE DATA*

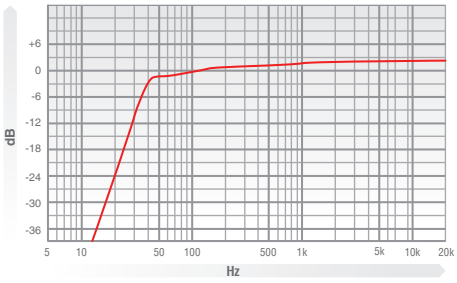


* Half space response measured in a 975 litre sealed box

IMPEDANCE



PREDICTED BASS RESPONSE



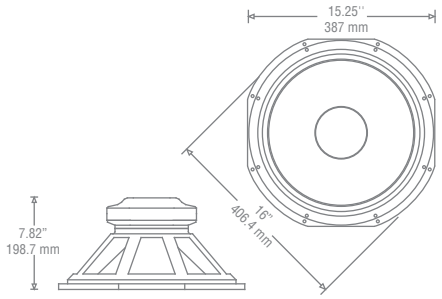
** Normalized bass response in 175 litre tuned to 35Hz

ELECTRO ACOUSTIC SPECIFICATIONS	
Nominal Chassis Diameter	15 "
Impedance	5.2 Ω
Power Handling	1000w (EIA 426A)
Peak Power (6dB Crest Factor)	4000 w (EIA 426A)
Usable Frequency Range -6dB	30 Hz - 500 kHz
Sensitivity (1 w - 1 m)	98 dB
Moving Mass inc. Air Load	149.7 grams
Minimum Impedance Zmin	6.84 Ω
Effective Piston Diameter	15.43" / 392 mm
Peak Displacement Volume of Cone Vd	3.247 litres
Magnet Weight	120 oz
Magnetic Gap Depth	0.43" / 11 mm
Flux Density	1.1 Tesla
Coil Winding Height	1.18" / 30 mm
Voice Coil Diameter	4.0" / 101.6 mm

THIELE SMALL PARAMETERS	
FS Hz	36.3 Hz
RE Ohms	5.2 Ω
Qms	7.7
Qes	0.32
Qts	0.31
Vas Ltr	149.7
Vd litres	1.01
CMS (mm/N)	0.147
BL T/m	22.1
Mms (grms)	133
Xmax (mm)	12
Sd (cm^2)	2706
Efficiency %	2.137
Le (1k Hz)	1.93 mH

MATERIALS OF CONSTRUCTION	
Former Material	Glass Fibre
Voice Coil	Copper 'sandwich' inside outside windings
Magnet Material	Ferrite
Chassis	Die-cavst Aluminium
Cone	Curvilinear polycellulose
Surround / Edge Termination	Straight polycellulose Ribbed Cone
Dust Dome	Solid Paper (Inverted)
Connectors	Push-button Spring Terminals
Polarity	Positive Voltage at Red Terminal Causes Forward Motion of Cone

MOUNTING / SHIPPING INFORMATION	
Overall Diameter	16" / 406.4 mm
Width Across Flats	15.25" / 387 mm
Flange Height	0.305" / 7.8 mm
Baffle Hole Diameter F/M	13.85" / 352 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	7.82" / 198.7mm
Weight	28lb / 12.7kg
Recommended Enclosure Volume	2.47 - 4.41 cu ft / 70 - 125 litres
Shipping Weight	30.45 lb / 13.8 kg
Packing Carton Dimensions	415 x 415 x 250 mm



- Please enquire about alternative impedances.
- A.E.S. power handling test. Pink noise bandpass filtered at12 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.