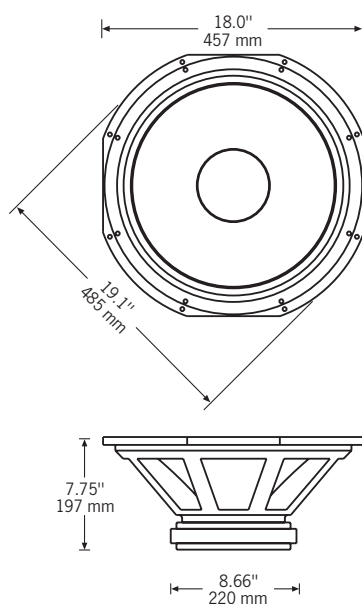


The Colossus 18B is designed as a high power general purpose bass unit. It is built around a die-cast aluminium chassis and uses a 4 inch diameter voice coil driven by a vented motor system with a high density paper cone suspended by a wide, high compliance, double roll

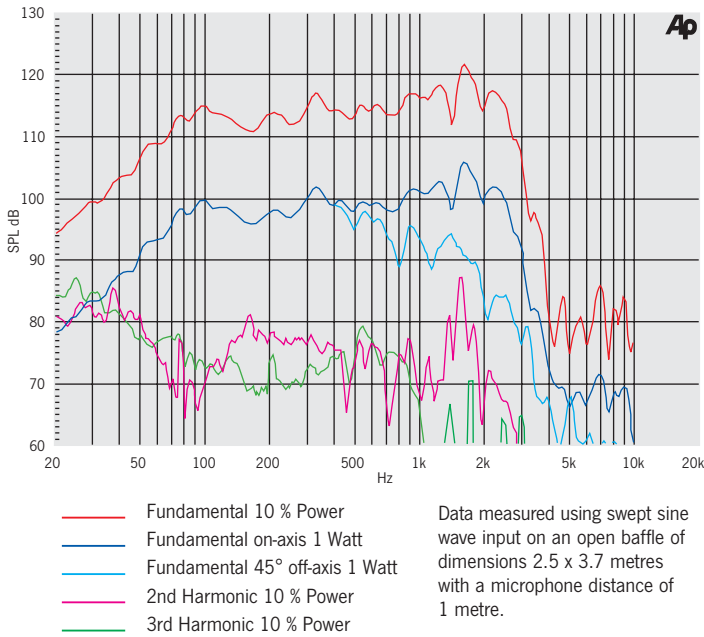
surround and a solid paper dome. Although basically a classic design, it has stood the test of time, and advances in material science have brought this unit along to become a very durable and workmanlike unit. The Colossus 18B is optimal for use in 100 to 250 litre ported enclosures.



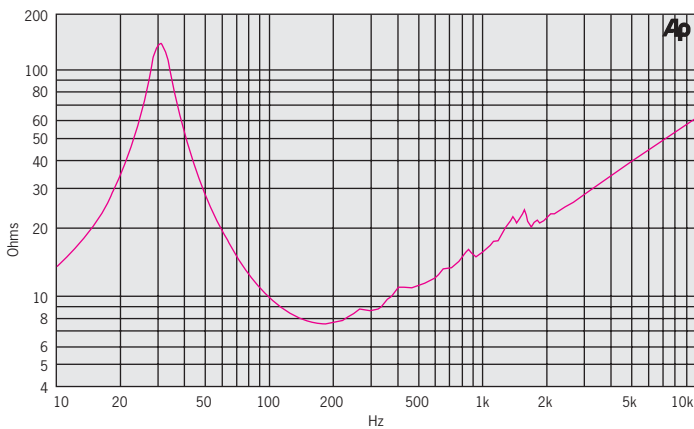
Mounting information

Overall diameter	19.1 inch/485 mm
Width across flats	18 inch/457mm
Flange thickness	.465 inch/11.8 mm
Baffle hole diameter, front mount	16.53 inch/420 mm
Baffle hole diameter, rear mount	16.33 inch/ 414 mm
Gasket Supplied	Front & Rear
Fixing holes	8 x 7 dia on 468 PCD 8 x 7 dia on 438.15 PCD
Depth	7.75 inch/197 mm
Weight	28 lb/12.7 kg
Recommended enclosure volume	3.5-7.0 cu ft/100-200 litres
Volume displaced by driver	0.261 cu ft/7.4 Litres
Shipping weight	32.5 lb/14.65g
Packing Carton dimensions (mm x mm x mm)	485 x 485 x 276 mm

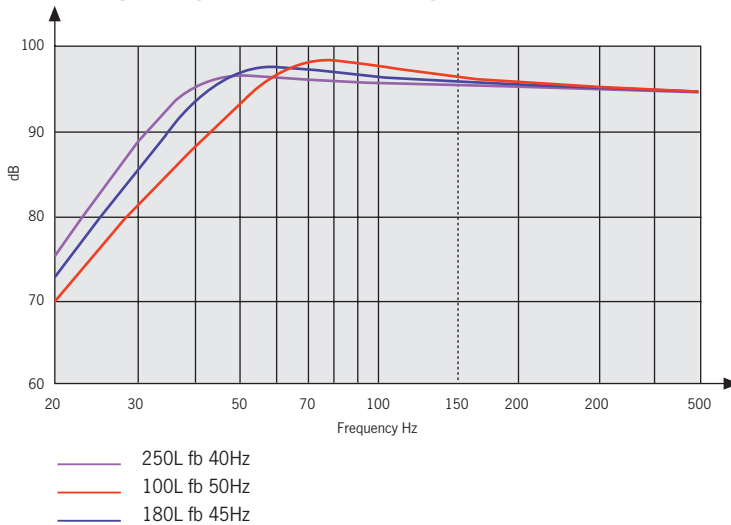
Frequency response data



Impedance



Computer predicted bass response



Electro mechanical specifications

Nominal chassis diameter (inches-mm)	18 inch/457 mm
Impedance (ohms)	4,8 or 16
Power Handling (A.E.S.) ¹	400 (A.E.S.) ¹
Maximum output (dB) continuous/peak	122/128 dB
Power compression at rated power (dB)	3.0 dB
Usable Frequency range (-6dB) Hz-kHz	35 Hz-1.5 kHz
Average Sensitivity (in above range) 1W/1m	98.5
Resonance (Hz)	30 Hz
Moving mass inc. air load (grams)	148 grams
BL product (Newtons/amp)	29.4
Minimum impedance (Zmin) (ohms)	7.8
Effective piston diameter (mm)	14.84 inch/377 mm
Flux Density (Tesla)	1.0 Tesla
Magnetic gap depth	0.39 inch/10 mm
Coil winding height	0.67 inch/17 mm
Voice coil length	100 feet/30 M
Magnet weight	120 oz/3.4 Kg
Maximum cone displacement	0.70 inch/18 mm
Peak displacement volume of cone, Vd	0.896 Litres
Voice coil diameter	4.0 inch/101.6 mm

Construction materials

Coil former	Fibreglass
Voice coil material	Copper
Magnet	Ferrite
Chassis	Die Cast Aluminium
Cone	Paper
Surround/edge termination	Polyvinyl Damped Fabric
Dust dome	Paper
Connectors	Push Button Spring Terminals
Polarity	Positive voltage at red terminal causes forward motion of cone

Thiele-Small parameters

Resonant frequency fs (Hz)	30.5 Hz
D.C resistance Re (ohms)	6.35
Qts	0.197
Qes	0.207
Qms	4.03
Mms (grams)	148
Cms (microns per Newton)	184
BL product (Tesla metres)	29.5 Tesla metres
Vas (litres)	320 litres
Reference efficiency no (%)	4.25%
Piston area Sd (m ²)	0.112 m ²
Xmax (mm)	4.0 mm

¹ A.E.S. power handling test. Pink noise bandpass filtered at 12 dB per octave with cutoff frequencies of 35 Hz and 350 Hz. Driver mounted in free air, test signal applied at rated power for two hours.