



## SOVEREIGN 18-500

Optimised for ported bass enclosures for PA applications and sealed bass guitar cabinets.

### ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	18"
Impedance	8 Ω
Power Handling	500 w (EIA 426A)
Peak Power (6dB Crest Factor)	1000 w (EIA 426A)
Usable Frequency Range -6dB	42 Hz - 1.5 kHz
Sensitivity (1 w - 1 m)	99 dB
Moving Mass inc. Air Load	130 grams
Minimum Impedance Zmin	6.36 Ω
Effective Piston Diameter	13.97" / 355 mm
Peak Displacement Volume of Cone Vd	0.73 litres
Magnet Weight	120 oz
Magnetic Gap Depth	0.39" / 10 mm
Flux Density	1.0 Tesla
Coil Winding Height	0.82" / 21 mm
Voice Coil Diameter	3" / 76.2 mm

### THIELE SMALL PARAMETERS

FS Hz	33 Hz
RE Ohms	5.3 Ω
Qms	9.2
Qes	0.6
Qts	0.563
Vas Ltr	346
Vd litres	0.73
CMS (mm/N)	0.18
BL T/m	15.43
Mms (grms)	130
Xmax (mm)	6.3
Sd (cm <sup>2</sup> )	1178
Efficiency %	2
Le (1kHz)	1.95 mH

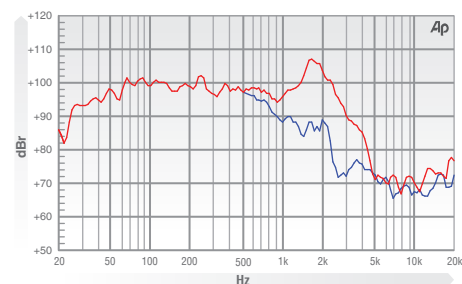
### MATERIALS OF CONSTRUCTION

Former Material	Glass Fibre
Voice Coil	Copper
Magnet Material	Ferrite
Chassis	Steel
Cone	Paper
Surround / Edge Termination	Polyvinyl Damped Dbl. Half Roll Linen
Dust Dome	Paper
Connectors	Solder Tag
Polarity	Positive Voltage at Red Terminal Causes Forward Motion of Cone

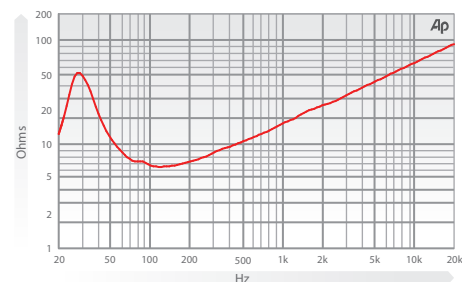
### MOUNTING / SHIPPING INFORMATION

Overall Diameter	18" / 457 mm
Flange Height	0.47" / 12 mm
Baffle Hole Diameter F/M	16.69" / 424 mm
Baffle Hole Diameter R/M	16.69" / 424 mm
Gasket Supplied	Front & Rear
Fixing Holes	8x 8.5 mm on 17.44" / 443 mm PCD
Depth	8.03" / 204 mm
Weight	17.85 lb / 8.09 kg
Recommended Enclosure Volume	4.41 - 7.06 cu ft / 125 - 200 litres
Shipping Weight	21.59 lb / 9.8 kg
Packing Carton Dimensions	240 x 490 x 490 mm

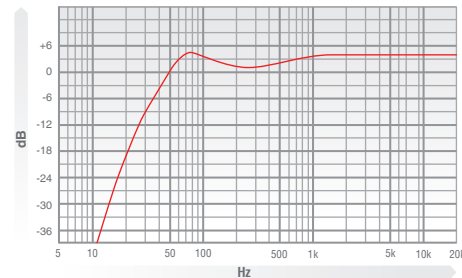
### FREQUENCY RESPONSE DATA\*



### IMPEDANCE



### PREDICTED BASS RESPONSE



\* Half space response measured in a 975 litre sealed box \*\* Normalised bass response in 175 litre vented enclosure tuned to 40Hz • Please enquire about alternative impedances. • EIA 426A, power handling test. Pink noise bandpass filtered at 12 dB per octave. Driver mounted in free air, test signal applied at rated power for 8 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.