

# SOVEREIGN 12-500LF

## BASS DRIVER

12" / 304.8 mm  
CHASSIS DIAMETER

500 W (A.E.S.)  
AES POWER HANDLING

38 Hz - 5 kHz  
FREQUENCY RESPONSE

2.5" / 63.5 mm  
COPPER VOICE COIL

95 dB  
SENSITIVITY (1W/ 1m)

5.5 mm Xmax

- High-power bass driver ideally suited for use in 2 way ported enclosures.
- Optimised cone pulp offering increased strength, durability and performance.

### ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	12" / 304.8 mm
Impedance	8 Ohm
Power Handling	500 W (A.E.S.)
Peak Power (6dB Crest Factor)	2000 W (A.E.S.)
Usable Frequency Range -6dB	38 Hz - 5 kHz
Sensitivity (1 w - 1 m)	95 dB
Moving Mass inc. Air Load	75 grams
Minimum Impedance Zmin	7.4 Ω
Effective Piston Diameter	10.67" / 271.01 mm
Magnet Weight	56 oz
Magnetic Gap Depth	0.39" / 10.00 mm
Flux Density	0.97 Tesla
Coil Winding Height	0.74" / 19.00 mm
Voice Coil Diameter	2.5" / 63.5 mm

### MOUNTING / SHIPPING INFORMATION

Overall Diameter	12" / 304.8 mm
Width Across Flats	N/A
Flange Height	0.27" / 6.9 mm
Baffle Hole Diameter F/M	11.25" / 285.75 mm
Baffle Hole Diameter R/M	11.25" / 285.75 mm
Gasket Supplied	Front & Rear
Outer Fixing Holes	8x Ø 7.0 mm on 11.75" / 298 mm PCD
Inner Fixing Holes	N/A
Depth	5.69" / 144.52 mm
Weight	11.02 lb / 5.00 kg
Recommended Enclosure Volume	1.05 - 2.64 cu ft / 30 - 75 Litres
Shipping Weight	12.89 lb / 5.85 kg
Packing Carton Dimensions	(W) 330 (D) 330 (H) 170 mm

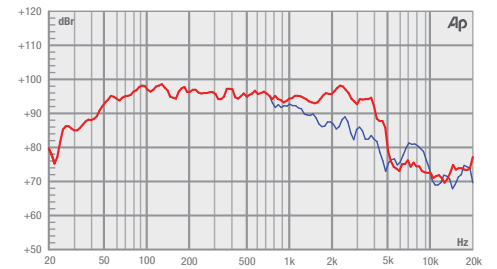
### THIELE SMALL PARAMETERS

FS Hz	50 Hz
RE Ohms	5.9 Ω
Qms	7.500
Qes	0.530
Qts	0.510
Vas Ltr	66.00 Litres
Vd Litres	0.298 Litres
CMS (mm/N)	0.140 mm/N
BL T/m	16.37 T/m
Mms (grms)	75 grams
Xmax (mm)	5.5 mm
Sd (cm <sup>2</sup> )	576.1 cm <sup>2</sup>
Efficiency %	1.500%
Le (1k Hz)	2.36 mH
EBP	94.34 Hz

### MATERIALS OF CONSTRUCTION

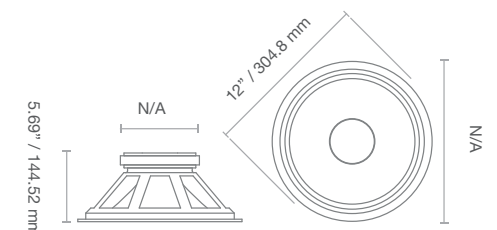
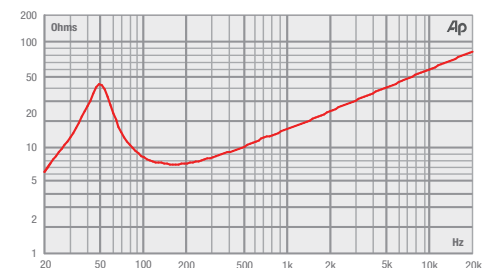
Former Material	Glass Fibre
Voice Coil	Copper
Magnet Material	Ferrite
Chassis	Pressed Steel
Cone	Straight Polycellulose Ribbed Cone
Surround / Edge Termination	Polyvinyl Damped Multi Roll. Poly Cotton
Dust Dome	Paper
Connectors	Solder Tag
Polarity	Positive voltage at red terminal causes forward motion 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 40 Hz and 400 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.