## **F**ΛNE



## **SOVEREIGN PRO 12-350N**

The Sovereign Pro 12-350N is intended for use as a medium output bass mid driver in two-way ported enclosures and. The 2.5 inch voice coil is driven by a Neodymium non inductive motor system which dramatically reduces third-harmonic and intermodulation distortion. The cone membrane is much stronger and more durable than conventional paper pulps and allows the driver to combine high-sensitivity with the excellent structural integrity required to produce undistorted frequencies at high output levels. The mechanical and electrical properties of the unit have been carefully optimised to allow extended low frequency output up to its rated power handling of 350 Watts (A.E.S) continuous, with peak power handling in excess of 1400 Watts. The driver exhibits an average sensitivity of 97.5 dB and is best used in ported enclosures of 25 to 80 litres.

FS Hz

Oms

Qes

Qts

Vas Ltr

Vd litres

BL T/m

CMS (mm/N)

Mms (grms)

Xmax (mm)

Efficiency %

Le (1k Hz)

Sd (cm<sup>2</sup>)

**RE Ohms** 

THIELE SMALL PARAMETERS

46 Hz

5.75 Ω

0.375

0.35

114

0.24

0.278

14.8 43

4.5

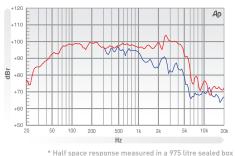
540

2.89

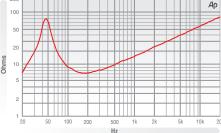
1.64 mH

52

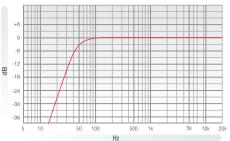
## FREQUENCY RESPONSE DATA\*



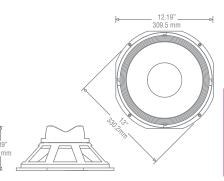




## PREDICTED BASS RESPONSE



\*\* Normalized bass response in 50 litre tuned to 47Hz



ELECTRO ACOUSTIC SPECIFICATIONS	
Nominal Chassis Diameter	12"
Impedance	8 Ω
Power Handling	350 w (A.E.S.)
Peak Power (6dB Crest Factor)	1400 w (A.E.S.)
Usable Frequency Range -6dB	50 Hz - 4.5 kHz
Sensitivity (1 w - 1 m)	97.5 dB
Moving Mass inc. Air Load	43 grams
Minimum Impedance Zmin	6.84 Ω
Effective Piston Diameter	10.31" / 262 mm
Peak Displacement Volume of Cone Vd	0.24 litres
Magnetic Gap Depth	0.39" / 10 mm
Flux Density	1.1 Tesla
Coil Winding Height	0.70" / 18 mm
Voice Coil Diameter	2.5" / 63.5 mm

MATERIALS OF CONSTRUCTION	
Former Material	Glass Fibre
Voice Coil	Aluminium 'sandwich' inside and outside windings
Magnet Material	Neodymium
Chassis	Die-cast Aluminium
Cone	Curvilinear Paper
Surround / Edge Termination	Polyvinyl Damped Dbl Half Roll Linen
Dust Dome	Solid Paper
Connectors	Push-button Spring Terminals
Polarity	Positive Voltage at Red Terminal Causes Forward Motion of Cone

Overall Diameter	13" / 330.2 mm
Width Across Flats	12.19" / 309.5 mm
Flange Height	0.305" / 7.8 mm
Baffle Hole Diameter F/M	11.03" / 281 mm
Baffle Hole Diameter R/M	10.13" / 257 mm
Gasket Supplied	Front & Rear
Fixing Holes	4x 0.218" diam on 12.5 PCD 4x 5.5 mm diam on 317.5 PCD
Depth	5.39" / 137 mm
Weight	8.15 lb / 3.7 kg
Recommended Enclosure Volume	0.88 - 2.83 cu ft / 25 - 80 litres
Shipping Weight	9.4 lb /4.3 kg
Packing Carton Dimensions	340 x 340 x 222 mm

- Please enquire about alternative impedances.
- A.E.S. power handling test. Pink noise bandpass filtered at 12 dB per octave with cutoff frequencies of 50 Hz and 500 kHz. 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.