

# THE PROFESSIONAL SERIES SOVEREIGN PRO 18-800P

BASS DRIVER



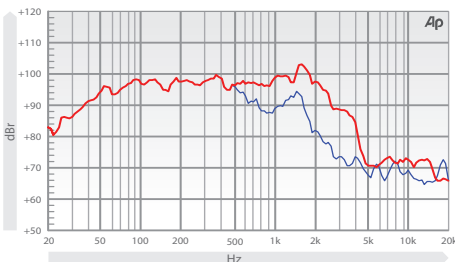
<b>18" / 457.2 mm</b> CHASSIS DIAMETER	<b>800 w (A.E.S)</b> POWER HANDLING	<b>97.5 dB</b> SENSITIVITY (1w / 1m)
<b>35 Hz - 1 kHz</b> FREQUENCY RESPONSE	<b>4.0" / 101.6 mm</b> COPPER - INSIDE / OUTSIDE WINDINGS VOICE COIL	<b>Delivers bass down to 35 Hz in a 200 litre ported enclosures</b>

The Sovereign Pro 18-800P 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 ensures fast accurate bass at high levels of excursion. The driver handles 800 Watts continuous and can cope with peaks in excess of 3200 Watts. This is due to advanced thermal management in the form of vented die-cast chassis. These measures effectively remove heat from the voice coil, resulting in extremely low-power compression. The Sovereign 18-800P exhibits 97.5 dB sensitivity and can deliver bass down to 35 Hz (-6 dB) in a 200 litre ported enclosure.

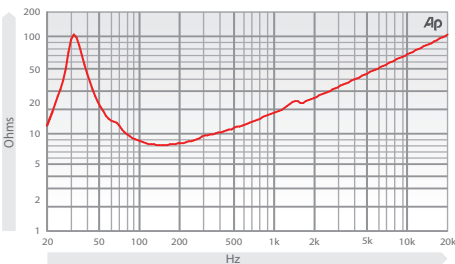
- Highly versatile in 2-way ported enclosures.
- UK manufactured cone with optimised pulp offering increased strength, durability and performance.

THE PROFESSIONAL SERIES

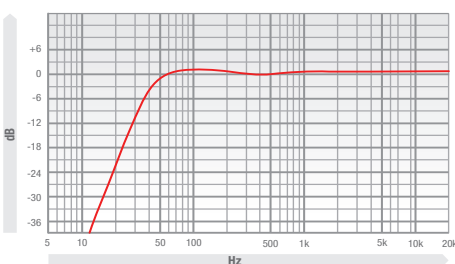
## FREQUENCY RESPONSE DATA\*



## IMPEDANCE



## PREDICTED BASS RESPONSE



## ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	18" / 457.2 mm
Impedance	8 Ω
Power Handling	800 w (A.E.S)
Peak Power (6dB Crest Factor)	3200 w (A.E.S)
Usable Frequency Range -6dB	35 Hz - 1 kHz
Sensitivity (1 w - 1 m)	97.5 dB
Moving Mass inc. Air Load	147 grams
Minimum Impedance Zmin	7.92 Ω
Effective Piston Diameter	15.03" / 381.76 mm
Peak Displacement Volume of Cone Vd	0.85 litres
Magnet Weight	120 oz
Magnetic Gap Depth	0.39" / 10 mm
Flux Density	1.2 Tesla
Coil Winding Height	0.90" / 23 mm
Voice Coil Diameter	4.0" / 101.6 mm

## MOUNTING / SHIPPING INFORMATION

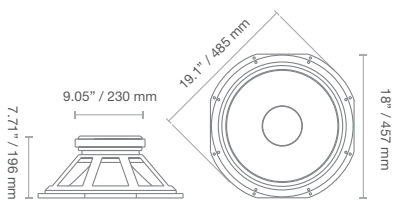
Overall Diameter	19.1" / 485 mm
Width Across Flats	18" / 457 mm
Flange Height	0.465" / 11.8 mm
Baffle Hole Diameter F/M	16.53" / 419.86 mm
Baffle Hole Diameter R/M	16.33" / 414.78 mm
Gasket Supplied	Front & Rear
Fixing Holes	8x 0.275" diam on 18.425 PCD / 8x 0.275 diam on 17.25 PCD 8x 7 mm diam on 468 PCD / 8x 7 diam on 438.15 PCD
Depth	7.71" / 196 mm
Weight	27.6 lb / 12.5 kg
Recommended Enclosure Volume	4.41 - 14.12 cu ft / 125 - 400 litres
Shipping Weight	28.9 lb / 13.1 kg
Packing Carton Dimensions	250 x 520 x 520 mm

## THIELE SMALL PARAMETERS

FS Hz	34 Hz
RE Ohms	6.6 Ω
Qms	4.83
Qes	0.363
Qts	0.337
Vas Ltr	234 litres
Vd litres	0.848 litres
CMS (mm/N)	0.129 mm/N
BL T/m	25.5 T/m
Mms (grms)	170 grams
Xmax (mm)	7.5 mm
Sd (cm²)	1131 cm²
Efficiency %	2.88%
Le (1k Hz)	2.43 mH

## MATERIALS OF CONSTRUCTION

Former Material	Glass Fibre
Voice Coil	Copper - Inside / Outside Windings
Magnet Material	Ferrite
Chassis	Die-cast Aluminium
Cone	Straight fibre loaded Polycellulose Ribbed Cone
Surround / Edge Termination	Polyvinyl Damped Dbl. Half Roll Poly Cotton
Dust Dome	Solid Paper
Connectors	Push-button Spring Terminals
Polarity	Positive voltage at red terminal causes forward motion of cone



• Please enquire about alternative impedances.  
• 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.  
• 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.

SOVEREIGN PRO 18-800P