



# THE PROFESSIONAL SERIES **SOVEREIGN PRO 10M**

## MID RANGE DRIVER

10" / 254 mm CHASSIS DIAMETER

280 w (A.E.S.) POWER HANDLING

98.5 dB

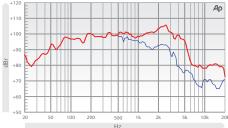
200 Hz - 3.5 kHz FREQUENCY RESPONSE

2.5" / 63.5 mm ALUMINIUM - INSIDE / OUTSIDE WINDINGS VOICE COIL

Suited to sealed, 5-15 litre enclosures

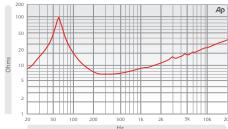
- The Sovereign Pro 10M is designed as a dedicated mid range driver delivering high output, low distortion from 200 Hz to 3.5 kHz. The 2.5" voice coil driver' benefits from an average sensitivity of 98.5 dB throughout the units active operating range. This combined with an A.E.S power handling of 280 watts ensures perfect mid range reproduction for the most demanding applications. The large magnet structure and cast aluminium frame ensure efficient heatsinking and gives the Sovereign Pro 10M low power compression and maximum output levels of up to 124 dB. The Sovereign Pro 10M is best suited to sealed enclosures 5 to 15 litres.
- . Smooth midrange response.
- Output levels up to 124dB.
- UK manufactured cone with optimised pulp offering increased strength, durability and performance.
- · Suitable for line array applications.

#### FREQUENCY RESPONSE DATA:

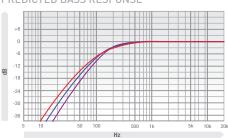


\* Half space response measured in a 975 litre sealed box

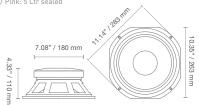
## **IMPEDANCE**



### PREDICTED BASS RESPONSE



Red: 20 Ltr sealed / Blue: 10 Ltr sealed



ELECTRO ACOUSTIC SPECIFICATIONS	
Nominal Chassis Diameter	10" / 254 mm
Impedance	4 /8 /16 Ω
Power Handling	280 w (A.E.S.)
Peak Power (6dB Crest Factor)	1120 w (A.E.S.)
Usable Frequency Range -6dB	200 Hz - 3.5 kHz
Sensitivity (1 w - 1 m)	98.5 dB
Moving Mass inc. Air Load	37 grams
Minimum Impedance Zmin	7 Ω
Effective Piston Diameter	8.19" / 208.02 mm
Peak Displacement Volume of Cone Vd	0.068 litres
Magnet Weight	78 oz
Magnetic Gap Depth	0.31" / 8 mm
Flux Density	1.24 Tesla
Coil Winding Height	0.47" / 12 mm
Voice Coil Diameter	2.5" / 63.5 mm

MOUNTING / SHIPPING INFORMATION	
Overall Diameter	11.14" / 283 mm
Width Across Flats	10.35" / 263 mm
Flange Height	0.305" / 7.8 mm
Baffle Hole Diameter F/M	8.97" / 227.83 mm
Baffle Hole Diameter R/M	N/A
Gasket Supplied	Rear
Fixing Holes	4x 0.218" diam on 10.625 PCD 4x 5.5 mm diam on 270 PCD
Depth	4.33" / 110 mm
Weight	13.34 lb / 6.05 kg
Recommended Enclosure Volume	0.17 - 0.52 cu ft / 5- 15 litres
Shipping Weight	14.77 lb / 6.70 kg
Packing Carton Dimensions	288 x 288 x 195 mm

THIELE SMALL PARAMETE	ERS
FS Hz	56 Hz
RE Ohms	5.6 Ω
Qms	4.9
Qes	0.286
Qts	0.27
Vas Ltr	37 litres
Vd litres	0.068 litres
CMS (mm/N)	0.231 mm/N
BL T/m	15.8 T/m
Mms (grms)	35 grams
Xmax (mm)	2 mm
Sd (cm²)	340 cm <sup>2</sup>
Efficiency %	2.46%
Le (1k Hz)	1.45 mH

MATERIALS OF CONSTRUCTION	
Former Material	Glass Fibre
Voice Coil	Aluminium - Inside / Outside Windings
Magnet Material	Ferrite
Chassis	Die-cast Aluminium
Cone	Curvilinear Paper
Surround / Edge Termination	Polyvinyl Damped Half Roll Linen
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
- Rease enquire about atternative impedances.
  A.E.S. power handling test. Pink noise bandpass filtered at 12 dB per octave with cutoff frequencies of 100 Hz and 1000 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.