

# THE SOVEREIGN SERIES SOVEREIGN 12-250TC

FULL RANGE DRIVER



**12" / 304.8 mm**  
CHASSIS DIAMETER

**250 w (A.E.S.)**  
POWER HANDLING

**98 dB**  
SENSITIVITY (1w / 1m)

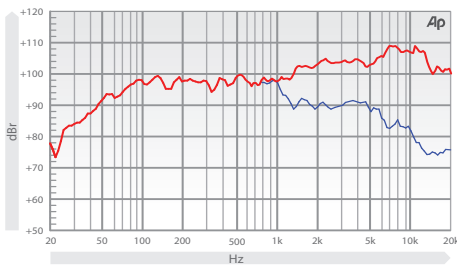
**45 Hz - 17 kHz**  
FREQUENCY RESPONSE

**2.0" / 50.8 mm**  
CCA W Voice Coil

- Medium power 12" twin cone model.
- Suited for full range output in compact PA systems.
- Unrivalled extended frequency range, working up to 17K.
- Ideal for house of worship installations.
- Optimised cone pulp offering increased strength, durability and performance.

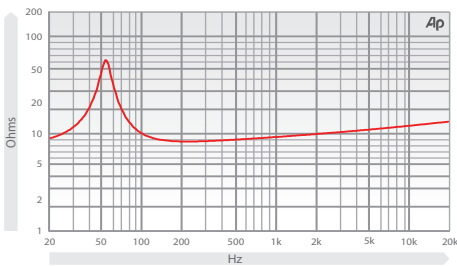
THE SOVEREIGN SERIES

## FREQUENCY RESPONSE DATA\*

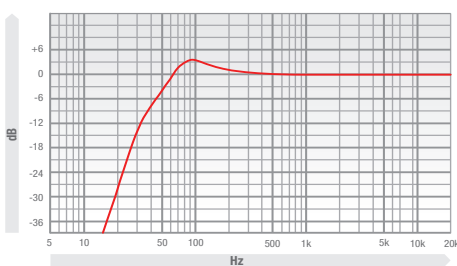


\* Half space response measured in a 975 litre sealed box.

## IMPEDANCE



## PREDICTED BASS RESPONSE



\*\* Normalised bass response in 75 litre tuned to 50 Hz

## ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	12" / 304.8 mm
Impedance	8 Ω
Power Handling	250 w (A.E.S.)
Peak Power (6dB Crest Factor)	1000 w (A.E.S.)
Usable Frequency Range -6dB	45 Hz - 17 kHz
Sensitivity (1 w - 1 m)	98 dB
Moving Mass inc. Air Load	52 grams
Minimum Impedance Zmin	7.4 Ω
Effective Piston Diameter	10.31" / 261.87 mm
Peak Displacement Volume of Cone Vd	0.165 litres
Magnetic Gap Depth	0.31" / 7.87 mm
Flux Density	1.1 Tesla
Coil Winding Height	0.43" / 10.92 mm
Voice Coil Diameter	2.0" / 50.8 mm

## THIELE SMALL PARAMETERS

FS Hz	50 Hz
RE Ohms	7.2 Ω
Qms	7.6
Qes	0.72
Qts	0.64
Vas Ltr	78.06 litres
Vd litres	0.165 litres
CMS (mm/N)	0.195 mm/N
BL T/m	13 T/m
Mms (grams)	52 grams
Xmax (mm)	5.25 mm
Sd (cm²)	530.9 cm²
Efficiency %	1.30%
Le (1k Hz)	1.56 mH

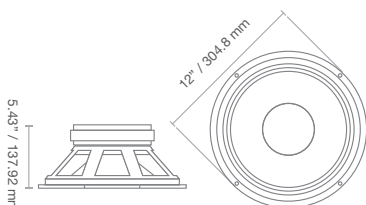
## MOUNTING / SHIPPING INFORMATION

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
Fixing Holes	8x 7.0 mm on 11.75" / 298 mm PCD
Depth	5.43" / 137.92 mm
Weight	9.47 lb / 4.3 kg
Recommended Enclosure Volume	1.05 - 2.64 cu ft / 30 - 75 litres
Shipping Weight	11.35 lb / 5.15 kg
Packing Carton Dimensions	165 x 330 x 330 mm

## MATERIALS OF CONSTRUCTION

Former Material	1.1 Tesla
Voice Coil	Copper Clad Aluminium Wire
Magnet Material	Ferrite
Chassis	Pressed 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

SOVEREIGN 12-250TC



- 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 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.
- Technical Schematic provided for illustrative purposes only and is not indicative of the actual product.