

# SOVEREIGN 12-300

BASS / MID-RANGE DRIVER



**12" / 304.8 mm**  
CHASSIS DIAMETER

**600 W**  
PROGRAM POWER

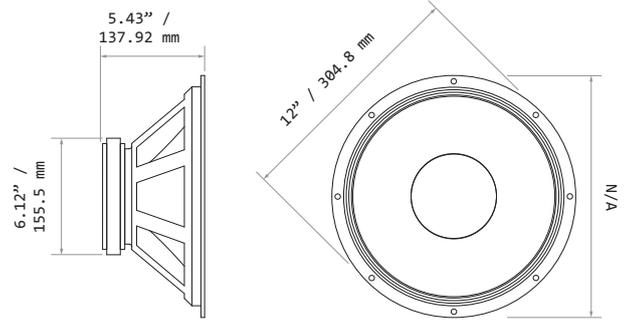
**45 Hz - 4.5 kHz**  
FREQUENCY RESPONSE

**2.5" / 63.5 mm**  
VOICE COIL

**97.5 dB**  
SENSITIVITY (1W/ 1m)

**4.5 mm Xmax**  
MAXIMUM LINEAR EXCURSION

- + Versatile unit intended for use as a bass/ mid woofer in medium sized vented enclosures.
- + Can also be used as a mid-range driver in small sealed designs.
- + Optimised cone pulp offers increased strength, durability and performance.
- + 2.5-Inch Copper voice coil.



### GENERAL SPECIFICATIONS

Nominal Chassis Diameter	12" / 304.8 mm
Nominal Impedance <sup>(1)</sup>	8 Ohm
Minimum Impedance Zmin	6.84 Ω
AES Power Handling <sup>(2)</sup>	300 W (A.E.S.)
Program Power	600 W
<b>Peak Power</b> (6dB Crest Factor)	<b>1200 W</b>
Frequency Range <sup>(6dB)</sup>	45 Hz - 4.5 kHz
<b>Sensitivity</b> (1W/ 1m)	<b>97.5 dB</b>
<b>Magnet Material</b>	<b>Ferrite</b>
Magnet Weight	56 oz
Magnetic Gap Depth	0.39" / 10 mm
Flux Density	1.1 Tesla
Former Material	Glass Fibre
Voice Coil Material	Copper
Coil Winding Height	0.70" / 18mm
<b>Voice Coil Diameter</b>	<b>2.5" / 63.5 mm</b>
Cone/ Dust Dome Material	Curvilinear Paper / Paper
Surround / Edge Termination	Polyvinyl Damped Multi Roll. Poly Cotton

### TECHNICAL & THIELE SMALL PARAMETERS

Fs	46 Hz
Re	5.75 Ω
Qms	5.2
Qes	0.375
Qts	0.35
Vas	110 Litres
Vd	0.24 Litres
Cms	0.278 mm/N
Bl	14 T/m
Mms	43 g
Xmax	4.5 mm
Sd	530 cm <sup>2</sup>
Efficiency	2.75 %
Le (1k Hz)	1.64 mH
EBP	122.67 Hz
Effective Piston Diameter	10.31" / 261.87 mm
Rec. Enclosure Volume	1.05 - 2.64 ft <sup>3</sup> / 30 -75 Litres

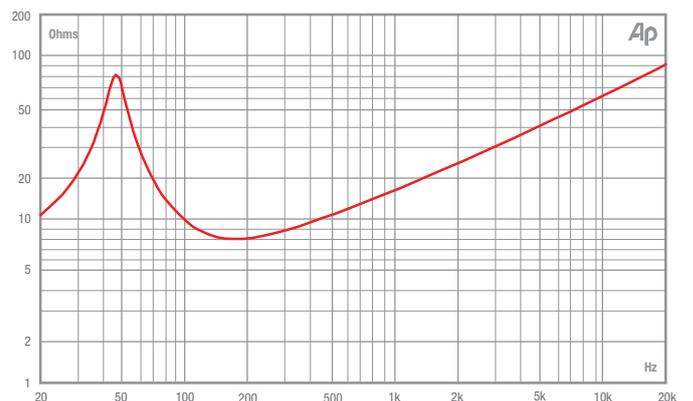
### MOUNTING / SHIPPING INFORMATION

Overall Diameter	12" / 304.8 mm
Width Across Flats	N/A
Depth	5.43" / 137.92 mm
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
<b>Chassis Material</b>	<b>Pressed Steel</b>
Gasket Supplied	Front & Rear
Outer Fixing Holes	8x ø 7.0 mm on 11.75" / 298 mm PCD
Inner Fixing Holes	N/A
Connectors <sup>(4)</sup>	Solder Tag
<b>Weight</b>	<b>11.02 lb / 5.0 Kg</b>
Shipping Weight	12.89 lb / 5.85 Kg
Packing Carton Dimensions (mm)	(W) 330 (D) 330 (H) 170

### FREQUENCY RESPONSE DATA<sup>(3)</sup>



### IMPEDANCE



(1) Please enquire about alternative impedances.

(2) 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.

(3) Half space response measured in a 975 Litre sealed box. Blue line = fundamental 45° off-axis. 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.

(4) Positive voltage at red terminal causes forward motion of cone.