

- 95 dB 1W/1m sensitivity
- 3000W program power handling
- 100mm (4in) ISV Tetracoil technology for maximum power handling
- 45 mm (1,77 in) peak to peak excursion
- Symmetric flux density and inductance behaviour
- Straight ribbed, water repellent composite cone
- Suitable for vented, horn loaded and bandpass subwoofer designs

The 15TLW3000 is an 15 inch diameter high performance subwoofer, specifically designed for high SPL subwoofer applications in either a reflex, bandpass or horn loaded configuration. For optimum results we recommend the usage of power amplifiers able to deliver 3600W program power without clipping

The 15TLW3000 uses Eighteen Sound proprietary Tetracoil technology, where two different, axially separated magnetic gaps and two inside-outside 4" diameter voice coils are wound on the same former and suspended evenly in the two magnetic gaps.

The Tetracoil design key advantages are:

1) a symmetric flux density versus displacement behavior, that minimizes the even distortion products;

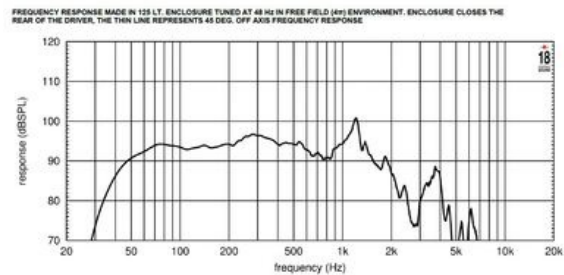
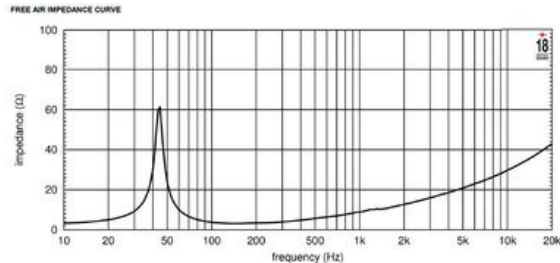
2) a very symmetric and flat inductance curve;

3) the equivalent voice coil diameter of a 4" Tetracoil speaker is greater than 6". Consequently heat dissipation occurs over a larger surface area, driving AES power handling up to 1500 W.

15TLW3000 design features include a large displacement suspension system which, in conjunction with a fiberglass reinforced, straight ribbed cone allows an ultra-linear piston action and provides full mechanical control across the entire working range.

In order to furtherly increase power handling and reduce power compression figure, a low density material air diffractor is placed into the backplate venting hole acting as a cooling system, increasing power handling capability and lowering the power compression figure.

15TLW3000 is able to perform properly under inclement weather conditions: the exclusive cone treatment improves pulp strength and gives water repellent properties to both sides of the membrane. In addition, magnetic structure metal plates coating is far more resistant than standard zinc coating to the corrosive effects of salts and oxidization.



SPECIFICATIONS

Nominal Diameter	380 mm (in)
Nominal Impedance	4 Ω
Minimum Impedance	3.6 Ω
Nominal Power Handling ¹	1500 W
Continuous Power Handling ²	3000 W
Sensitivity ³	95.0 dB
Frequency Range	48 - 2200 Hz
Voice Coil Diameter	100 mm (4.0 in)

DESIGN

Surround Shape	Triple roll
Cone Shape	Straight
Magnet Material	Ferrite
Woofer Cone Treatment	Water,UV repellent
Recommended Enclosure	100.0 dm ³ (3.53 ft ³)
Recommended Tuning	50 Hz

PARAMETERS⁴

Resonance Frequency	44 Hz
Re	2.5 Ω
Qes	0.41
Qms	9.8
Qts	0.39
Vas	80.0 dm ³ (2.83 ft ³)
Sd	881.0 cm ² (136.56 in ²)
η _o	1.6 %
X _{max}	9.0 mm
M _{ms}	177.0 g
Bl	18.0 Txm
Le	1.0 mH
EBP	107 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	393 mm (15.47 in)
Bolt Circle Diameter	371 mm (14.61 in)
Baffle Cutout Diameter	354.0 mm (13.94 in)
Depth	245 mm (9.65 in)
Flange and Gasket Thickness	12 mm (0.47 in)
Net Weight	12.5 kg (27.56 lb)
Shipping Weight	13.5 kg (29.76 lb)
Shipping Box	400x400x260 mm mm (15.75x15.75x10.24 in)

1. 2 hours test made with continuous pink noise signal within the range Fs-10Fs. Power calculated on rated minimum impedance. Loudspeaker in free air.
2. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
3. Applied RMS Voltage is set to 2.83 V for 8 ohms Nominal Impedance.
4. Thiele-Small parameters are measured after a high level 20 Hz sine wave preconditioning test.