

- 96 dB SPL 1W/ 1m average sensitivity
- 75 mm (3 in) Interleaved Sandwich Voice coil
- 500W AES power handling
- Weather protected cone and plates for outdoor usage
- Double Silicon Spider (DSS) for improved control and linearity
- Improved heat dissipation via unique basket design
- Ideal for compact reflex subwoofers

The 12LW801 is a 12" low frequency driver, achieving high SPL at low frequencies with reduced THD. The 12LW801 has been designed for use as a low bass or sub-woofer component, in either highly compact reflex, bandpass or horn loaded configurations. It provides clean, linear frequency reproduction at high power levels, or as part of a compact high power fullrange system. In its reflex configuration, it can be used in extremely compact enclosures (40 - 70 lt), making it ideal for portable applications, such as road shows or use with bass musical instruments.

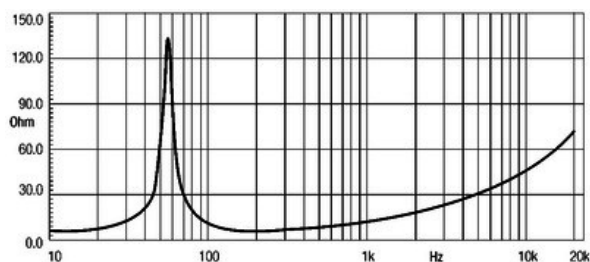
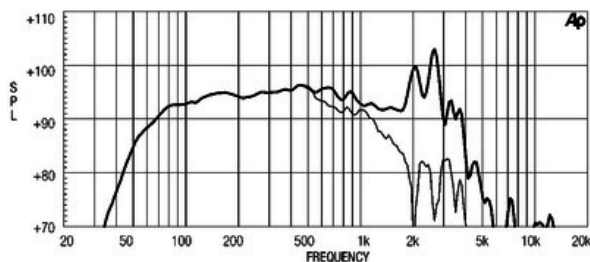
The high excursion capabilities of the double-action roll surround and suspension system, in conjunction with Eighteen Sound's Double Silicon Spider technology (DSS), enable the 12LW801 to achieve exceptionally high levels of linear travel for a 12" unit.

With its custom design surround, the carbon fiber reinforced curvilinear ribbed cone assures smooth response and exceptional strength, with maximum reliability under high mechanical stress.

The 75 mm state-of-the-art voice coil is similar to that of our 18LW1400 top-of-the-range model. It employs Interleaved Sandwich Voice coil (ISV), in which a high strength fiberglass former carries windings on both its outer and inner surfaces, resulting in a mass balanced coil and providing a uniform motive drive. This, in conjunction with the use of unique high temperature resin adhesives, creates an extremely linear motor assembly with a reduced tendency for break-up under hard drive conditions. Excellent heat dissipation has been achieved by incorporating air channels between the basket and the top plate.

Maximum flux concentration and force factor in the gap is assured by the unique shape and design of the top and back plates, designed using our in-house Magnetic Flux FEA CAD resource.

Due to the increasing use of high power audio systems at outdoor events or in marine environments, the ability to perform properly under inclement weather conditions is an essential part of the Eighteen Sound philosophy. This is achieved using an exclusive cone treatment which improves pulp strength and gives water repellent properties to the cone. In addition, a special treatment is applied to the top and back plates making the loudspeaker resistant to the corrosive effects of salts and oxidization. This treatment is more effective than after any other treatment in use today.





12LW801 8Ω

LF drivers - 12.0 Inches

SPECIFICATIONS

Nominal Diameter	300 mm (in)
Nominal Impedance	8 Ω
Nominal Power Handling ¹	500 W
Continuous Power Handling ²	800 W
Sensitivity ³	96.0 dB
Frequency Range	40 - 4000 Hz
Voice Coil Diameter	75 mm (3.0 in)
Winding Material	copper

PARAMETERS⁴

Resonance Frequency	54 Hz
Re	5.0 Ω
Qes	0.34
Qms	9.0
Qts	0.33
Vas	41.0 dm ³ (1.45 ft ³)
Sd	531.0 cm ² (82.31 in ²)
Xmax	8.0 mm
Mms	84.0 g
Bl	20.3 Txm
Le	1.7 mH
EBP	158 Hz

DESIGN

Surround Shape	Single roll - Rubber
Cone Shape	Curvilinear
Magnet Material	Ferrite
Woofers Cone Treatment	Weather protected
Recommended Enclosure	70.0 dm ³ (2.47 ft ³)
Recommended Tuning	60 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	315 mm (12.4 in)
Bolt Circle Diameter	296 mm (11.65 in)
Baffle Cutout Diameter	282.0 mm (11.1 in)
Depth	159 mm (6.26 in)
Flange and Gasket Thickness	20 mm (in)
Net Weight	8.1 kg (17.86 lb)
Shipping Weight	8.9 kg (19.62 lb)
Shipping Box	332 x 332 x 184 mm (13.07x13.07x7.24 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.