

# 12LW801 Extended Low Frequency Driver

0221283220 8 ohm  
0221243220 4 ohm



## Key features

- 96 dB SPL 1W / 1m average sensitivity
- 75mm ( 3" ) interleaved sandwich voice coil (ISV)
- 500 W continuous pink noise
- Weather protected cone and plates for outdoor use
- Ideal for compact reflex subwoofer
- Double Silicon Spider (DSS) for improved control and linearity
- Improved heat dissipation via unique basket design.

## GENERAL SPECIFICATIONS

NOMINAL DIAMETER	300mm	( 12 in )
RATED IMPEDANCE	8 ohms	
CONTINUOUS PINK NOISE	500 W	(1)
CONT. POWER	400 W	(2)
PROGRAM POWER	800 W	(3)
PEAK POWER	4000 W	(4)
SENSITIVITY	96 dB	(5)
FREQUENCY RANGE	40 - 4000 Hz	(6)
POWER COMPRESSION		(7)
	@-10 dB (40 W)	0,8 dB
	@-3 dB (200 W)	2,3
	@FULL POWER (400 W)	3,9 dB
MAX RECOMM. FREQUENCY	1000 Hz	
RECOMM. ENCLOSURE VOLUME	40 - 100 lt.	( 1,41 - 3,53 cuft )
MINIMUM IMPEDANCE	6,1 ohms at 25 deg.	
MAX EXCURSION PEAK TO PEAK	34 mm	( 1,34 in )
VOICE COIL DIAMETER	75 mm	( 3 in )
VOICE COIL WINDING MATERIAL	copper	

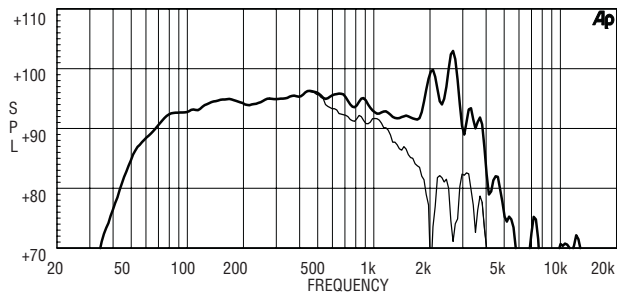
## THIELE-SMALL PARAMETERS (8)

Fs	54 Hz	
Re	5 ohms	
Sd	0,0531 sq.mt.	( 82,31 sq.in. )
Qms	9	
Qes	0,34	
Qts	0,33	
Vas	41 lt.	( 1,7 cuft )
Mms	84 gr.	( 0,17 lb )
BL	20,3 Tm	
Linear Mathematical Xmax	±8 mm	( ± 0,31 in ) (9)
Le (1kHz)	1,7 mH	
Ref. Efficiency		
dB / 1W / 1m ( half space)	94,7 dB	

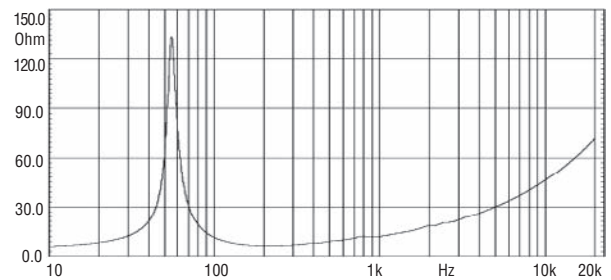
## MOUNTING INFORMATION

Overall diameter	315 mm	( 12,4 in )
N. of mounting holes	8	
Mounting holes diameter	7,15 mm	( 0,28 in )
Bolt circle diameter	296 - 300 mm	( 11,65 - 11,8 in )
Front mount baffle cutout diameter	282 mm	( 11,1 in )
Rear mount baffle cutout diameter	282 mm	( 11,1 in )
Total depth	149 mm	( 5,87 in )
Flange and gasket thickness	16,5 mm	( 0,65 in )
Net weight	8,1 kg	( 17,85 lb )
Shipping weight	8,9 kg	( 19,65 lb )
CardBoard packing dimensions	332 x 332 x 184 mm	( 13,07 x 13,07 x 7,24 in )

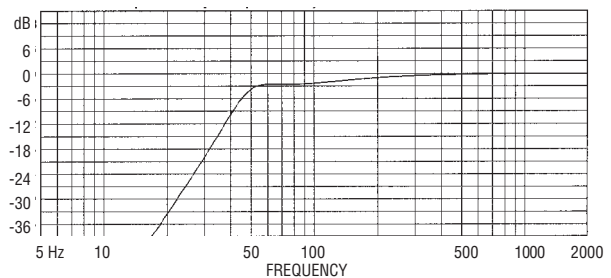
FREQUENCY RESPONSE CURVE OF 12LW801 MADE ON 50 Lit. ENCLOSURE TUNED 60Hz IN FREE FIELD ( 4pi ) ENVIRONMENT. ENCLOSURE CLOSE THE REAR OF THE DRIVER . THE THIN LINE REPRESENTS 45 DEG. OFF AXIS FREQUENCY RESPONSE



FREE AIR IMPEDANCE MAGNITUDE CURVE



NORMALIZED AMPLITUDE RESPONSE (dB/Hz)



## Box Parameters

### Custom Vented Box

<b>Vb</b>	= 45,00 Lt.	<b>Fill</b>	= normal
<b>Fb</b>	= 50,0 Hz	<b>Dv</b>	= 12,50 cm
<b>QL</b>	= 7.0	<b>Lv</b>	= 20,33 cm

(1) AES standard

(2) Continuous power rating is measured in 50 lit enclosure tuned 60Hz using a 40-400Hz band limited pink noise test signal applied continuously for 2 hours.

(3) "Program power rating is measured as for "2" above but 50% duty cycle."

(4) The peak power rating is based on a 10dB crest factor above the continuous power rating and represents the maximum permitted instantaneous peak power level over a maximum period of 10ms which will be withstood by the loudspeaker without damage.

(5) Sensitivity represents the averaged value of acoustic output as measured on the forward central axis of cone, at distance 1m from the baffle panel, when connected to 2,83 V sine wave test signal swept

between 100Hz and 500Hz with the test specimen mounted in the same enclosure as given for 2 above.

(6) Frequency range is given as the band of frequencies delineated by the lower and upper limits where the output level drops by 10 dB below the rated sensitivity in half space environment.

(7) Power compression represents the loss of sensitivity for the specified power, measured from 50-500 Hz, after 5 min pink noise preconditioning test at the specified power.

(8) Thiele - small parameters are measured after the test specimen has been conditioned by 500 W AES power and represent the expected long term parameters after ashort period of use .

(9) Linear Mat. Xmax is calculated as;  $(Hvc \cdot Hg) / 2 + Hg / 4$  where Hvc is the coil depth and Hg is gap depth.