

# 15LW1400 Extended Low Frequency Driver

0221583110 8 ohm



## Key features

- 98 dB SPL 1W / 1m average sensitivity
- 100mm ( 4" ) interleaved sandwich voicecoil (ISV)
- 1000 W continuous pink noise
- Weather protected cone and plates for outdoor use
- Double Silicon Spider (DSS) for improved excursion control and linearity
- Double Demodulating Rings (DDR) for lowest distortion and improved heat dissipation
- Improved heat dissipation via unique basket design
- Extremely low power compression

## GENERAL SPECIFICATIONS

NOMINAL DIAMETER	380mm	( 15 in )
RATED IMPEDANCE	8 ohms	
CONTINUOUS PINK NOISE	1000 W	(1)
CONT. POWER	700 W	(2)
PROGRAM POWER	1400 W	(3)
PEAK POWER	7000 W	(4)
SENSITIVITY	98 dB	(5)
FREQUENCY RANGE	40 - 2100 Hz	(6)
POWER COMPRESSION		
@-10 dB (70 W)	0,6 dB	
@-3 dB (350 W)	2,1 dB	
@FULL POWER (700 W)	3,0 dB	
MAX RECOMMENDED FREQUENCY	800 Hz	
RECOMM. ENCLOSURE VOLUME	70 - 150 lt.	( 2,47 - 5,30 cuft )
MINIMUM IMPEDANCE	7,8 ohms at 25 deg.	
MAX EXCURSION PEAK TO PEAK	39 mm	( 1,53 in )
VOICE COIL DIAMETER	100mm	( 3,95 in )
VOICE COIL WINDING MATERIAL	copper	

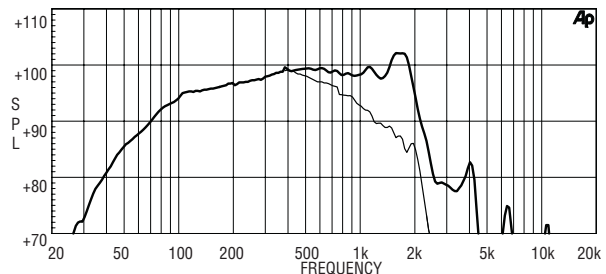
## THIELE-SMALL PARAMETERS

	(8)	
Fs	42 Hz	
Re	5,8 ohms	
Sd	0,090 sq.mt.	( 139,5 sq.in. )
Qms	4,36	
Qes	0,26	
Qts	0,25	
Vas	137 lt.	( 4,84 cuft )
Mms	120 gr.	( 0,26 lb )
BL	26,55 Tm	
Linear Mathematical Xmax	± 6,5 mm	( ± 0,26 in ) (9)
Le (1kHz)	2,55 mH	
Ref. Efficiency		
dB / 1W / 1m ( half space)	98,1 dB	

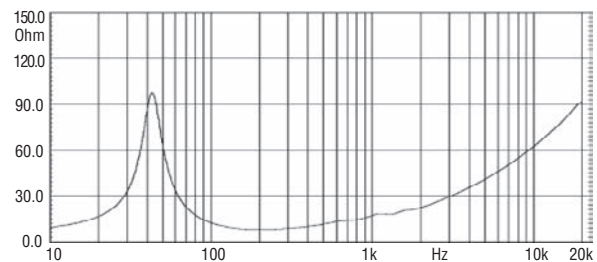
## MOUNTING INFORMATION

Overall diameter	387 mm	( 15,23 in )
N. of mounting holes	8	
Mounting holes diameter	7,15 mm	( 0,28 in )
Bolt circle diameter	370 - 371 mm	( 14,55 - 14,6 in )
Front mount baffle cutout diameter	353 mm	( 13,90 in )
Rear mount baffle cutout diameter	357 mm	( 14,06 in )
Total depth	164 mm	( 6,46 in )
Flange and gasket thickness	19 mm	( 0,75 in )
Net weight	12,4 kg	( 27,37 lb )
Shipping weight	13,4 kg	( 29,58 lb )
CardBoard packing dimensions	405 x 405 x 214 mm	( 15,94 x 15,94 x 8,43 in )

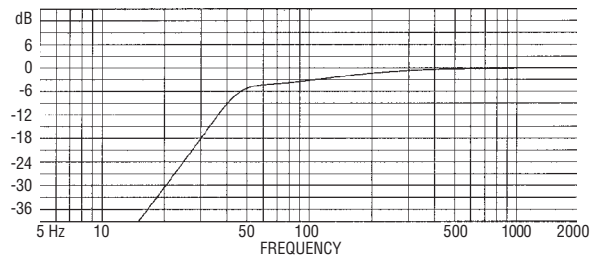
FREQUENCY RESPONSE CURVE OF 15LW1400 MADE ON 125 Lt. ENCLOSURE TUNED 50Hz IN FREE FIELD ( 4pi ) ENVIROMENT. ENCLOSURE CLOSE THE REAR OF THE DRIVER . THE THIN LINE REPRESENTS 45 DEG. OFF AXIS FREQUENCY RESPONSE



FREE AIR IMPEDANCE MAGNITUDE CURVE



NORMALIZED AMPLITUDE RESPONSE (dB/Hz)



## Box Parameters

### Custom Vented Box

<b>Vb</b>	= 75.00 Lt.	<b>Fill</b>	= normal
<b>Fb</b>	= 45.0 Hz	<b>Dv</b>	= 14,00 cm
<b>QL</b>	= 7.0	<b>Lv</b>	= 16,50 cm

(1) AES standard

(2) Continuous power rating is measured in 125 lit. enclosure tuned 50Hz 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 2.83V 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 a 5 min pink noise preconditioning test at the specified power.

(8) Thiele - small parameters are measured after the test specimen has been conditioned by 1000 W AES power and represent the expected long term parameters after a short 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.