

# 18G550

LOW FREQUENCY



This 18" bass loudspeaker has been specifically designed to deliver high impact bass response, with exceptional high power handling capacity. It incorporates an edgewound ribbon voice coil (4"1/2 diameter) and massive vented magnetic structure. An optimum cooling system allows a fast heat exchange, thus reducing the thermal power compression. This model covers the low frequency range with smooth response, low harmonic distortion and high efficiency.

Este modelo de 18" está diseñado para entregar unos bajos impactantes con una potencia admisible poco común. Para ello, utiliza una bobina de 4"1/2 (114mm.) de diámetro realizada en hilo plano de cobre, y un sistema magnético sobredimensionado. Un optimizado sistema de refrigeración permite un rápido intercambio del calor generado por la bobina reduciendo de esta manera la compresión de potencia por efecto térmico. Este altavoz cubre la gama de bajas frecuencias con una respuesta plana y baja distorsión armónica.

### SPECIFICATIONS

Nominal diameter	460 mm. 18 in.
Rated impedance	8 ohms.
Power capacity*	750 RMS
Program Power	1500 Watts.
Sensitivity	98 dB, 2.83v @ 1m @ 2π
Frequency range	25-1500 Hz
Recom. enclosure vol.	80-200 l 2.8-7 ft. <sup>3</sup>
Voice coil diameter	114 mm. 4.5 in.
Magnetic assembly weight	11.5 kg. 25.3 lb.
BL factor	24.4 N/A
Moving mass	0.190 kg.
Voice coil length	25 mm.
Air gap height	11 mm.
X damage (peak to peak)	40 mm.

### MOUNTING INFORMATION

Overall diameter	460 mm. 18.11 in.
Bolt circle diameter	438 mm. 17.24 in.
Baffle cutout diameter:	
-Front mount	415 mm. 16.34 in.
-Rear mount	400 mm. 15.75 in.
Depth	210 mm. 8.27 in.
Volume displaced by driver	13 l 0.46 ft. <sup>3</sup>
Net weight	14 kg. 30.8 lb.
Shipping weight	15.65 kg. 34.43 lb.

### MATERIALS

Basket	Die Cast aluminium
Cone	Paper
Surround	Plasticised cloth
Voice coil	Edgewound copper ribbon
Magnet	Ferrite

### THIELE-SMALL PARAMETERS\*\*

Resonant Frequency, fs	36 Hz
D.C. Voice Coil Resistance, Re	5.25 ohms.
Mechanical Quality Factor, Qms	8.875
Electrical Quality Factor, Qes	0.385
Total Quality Factor, Qts	0.37
Equivalent Air Volume to Cms, Vas	210 l
Mechanical Compliance, Cms	103 μm/N
Mechanical Resistance, Rms	5.50 kg/s
Efficiency, η (%)	2.5
Effective Surface Area, Sd(m <sup>2</sup> )	0.1200 m <sup>2</sup>
Maximum Displacement, Xmax	9 mm.
Displacement Volume, Vd	1075 cm. <sup>3</sup>
Voice Coil Inductance, Le @ 1kHz	1.4 mH

### NOTES

\*The power capacity corresponds to the RMS maximum value that can dissipate the loudspeaker when a sinus signal is applied for a period of at least two hours. Program power is defined as the transducer's ability to handle normal music program material.

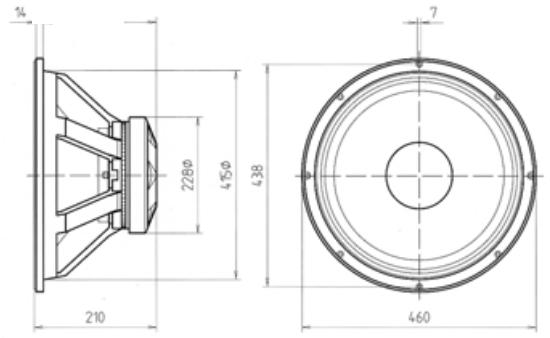
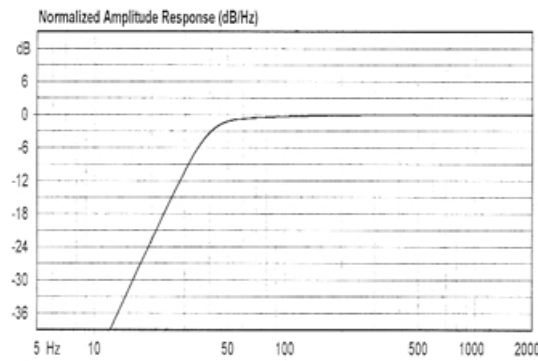
\*\* T-S parameters are measured after an exercise period using a preconditioning power test, using a velocity-current laser transducer, and will reflect the long term parameters, once the loudspeaker has been working for a short period of time.

### NOTAS

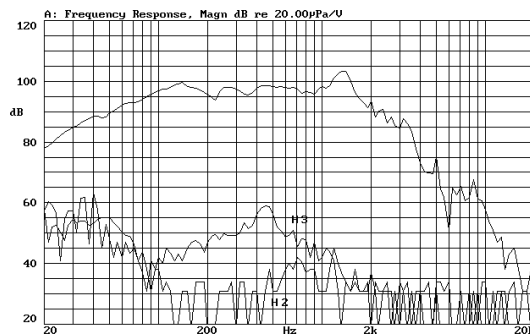
\*La potencia admisible corresponde a la máxima potencia RMS que puede disipar el altavoz durante al menos dos horas, cuando se le aplica una señal senoidal determinada. Por potencia programa se entiende la capacidad del altavoz en el manejo de señales transitorias, como sería el proporcionado por el contenido de un pasaje musical normal.

\*\* Los parámetros T-S han sido medidos después de un periodo de fatiga y estabilización de las suspensiones, mediante transductor laser de velocidad-corriente, y son el reflejo de los parámetros a largo plazo del altavoz, una vez éste haya sido instalado y haya trabajado en un corto espacio de tiempo.

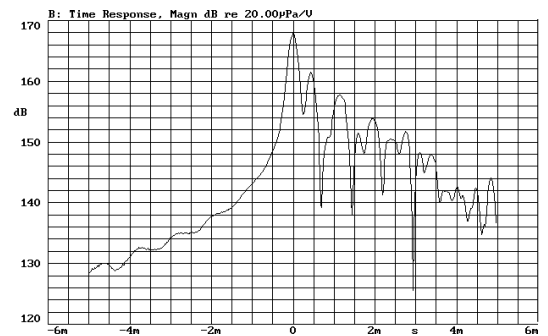
PREDICTED LOW FREQUENCY RESPONSE • Bass-reflex cabinet, Vb=150,00 l, fb=38,0 Hz



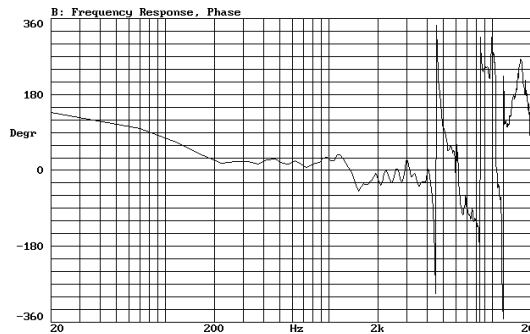
FREQUENCY RESPONSE & DISTORTION CURVES, MAGN. On axis, 1w @ 1m.



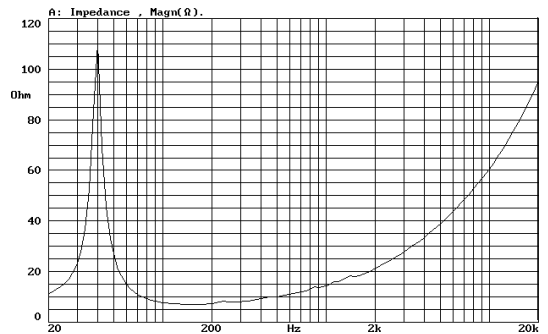
TIME RESPONSE, MAGN.



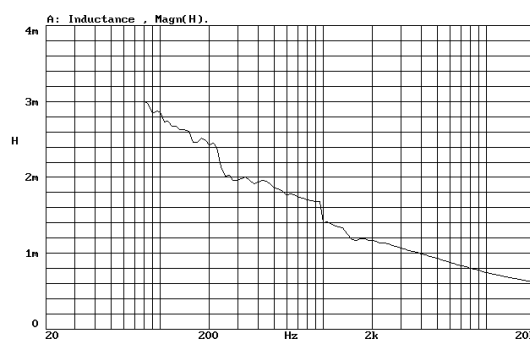
FREQUENCY RESPONSE, PHASE. On axis, 1w @ 1m.



FREE AIR IMPEDANCE CURVE



VOICE COIL INDUCTANCE CURVE



Re + Red(w) CURVE

