

-Pro-

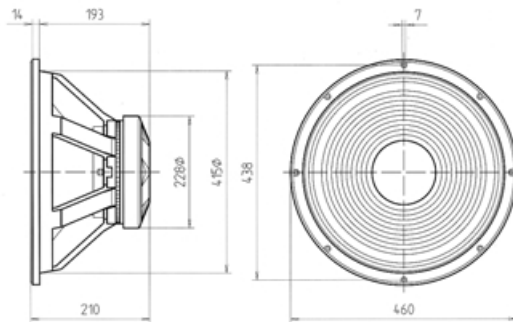
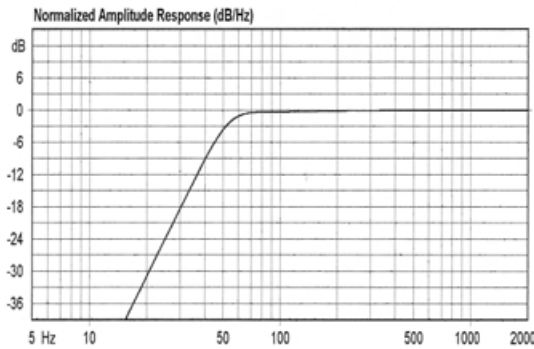
(18G50)
LOW
FREQUENCY

This 18" low frequency transducer has been specially designed to supply incredibly high sound pressure in the low frequency region, with exceptional high power capacity and minimum harmonic distortion. This model features a 4"1/2 (114 mm) voice coil, edgewound aluminium ribbon wire, a moving mass at least half the weight of pure copper, a powerful, vented magnetic circuit, optimum cooling system which provides fast heat exchange, reduced thermal power compression and double spider assembly. The result is an incredible highly efficient transducer for subwoofer applications, the ability to handle high elongation, extremely low distortion and reduced thermal power compression.

Este tranductor de 18" ha sido diseñado para entregar altos niveles de presión acústica con una potencia admisible impresionante. Incorpora una bobina de 4"1/2 (114 mm.) realizada con hilo de aluminio de masa menor a la mitad de la que tendría en cobre; Utiliza un potente circuito magnético con un sistema optimizado de ventilación que proporciona un rápido intercambio del calor generado en la bobina, y una suspensión de doble centrador para controlar los desplazamientos en grandes elongaciones. Este modelo se caracteriza por un elevado rendimiento, alta potencia admisible y excelente linealidad de la respuesta en frecuencia.



PREDICTED LOW FREQUENCY RESPONSE • Bass-reflex cabinet, Vb=120,00 l, fb=50,0 Hz



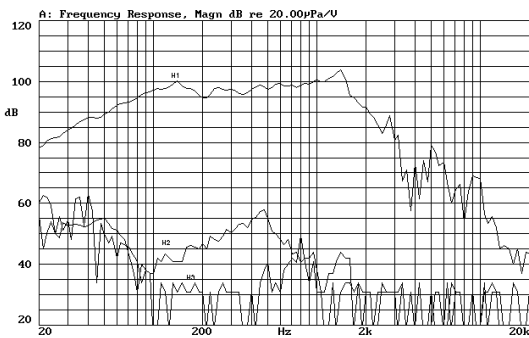
SPECIFICATIONS

Nominal diameter	460 mm. 18 in.
Rated impedance	8 ohms.
Power capacity*	700 w RMS
Program Power	1400 Watts.
Sensitivity	98 dB, 2.83v @ 1m @ 2π
Frequency range	25-1500 Hz
Recom. enclosure vol.	80-200 l 2.8-7 ft. ³
Voice coil diameter	114 mm. 4.5 in.
Magnetic assembly weight	11.5 kg, 25.3 lb.
BL factor	28.8 N/A
Moving mass	0.170 kg.
Voice coil length	25 mm.
Air gap height	11 mm.
X damage (peak to peak)	40 mm.

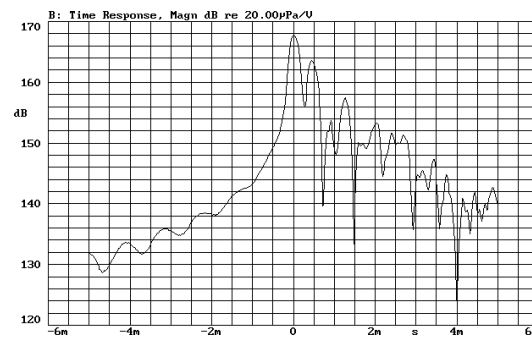
MOUNTING INFORMATION

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	425 mm. 16.73 in.
Depth	210 mm. 8.27 in.
Volume displaced by driver	13 l 0.46 ft. ³
Net weight	14 kg, 30.8 lb.
Shipping weight	15.65 kg. 34.43 lb.

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



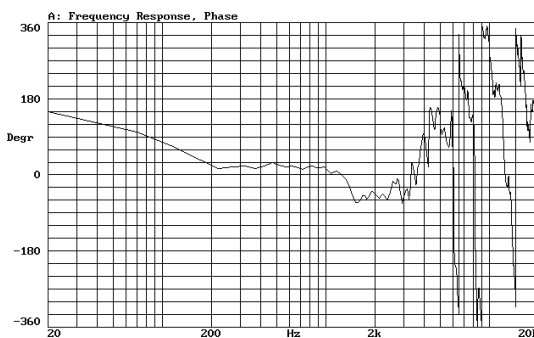
TIME RESPONSE, MAGN.



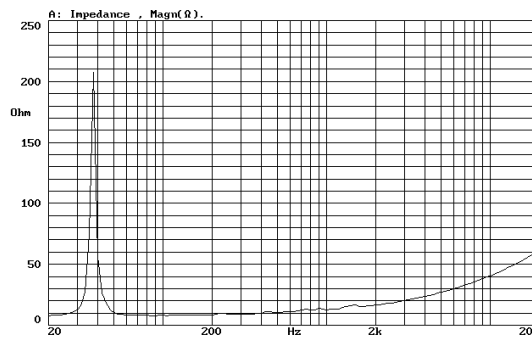
MATERIALS

Basket	Die Cast aluminium
Cone	Paper
Surround	Plasticised cloth
Voice coil	Edgewound alum. flat wire
Magnet	Ferrite

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



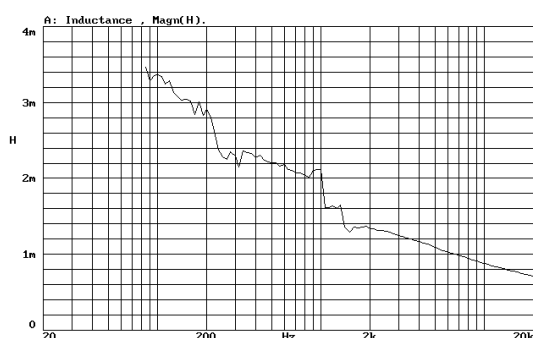
FREE AIR IMPEDANCE CURVE



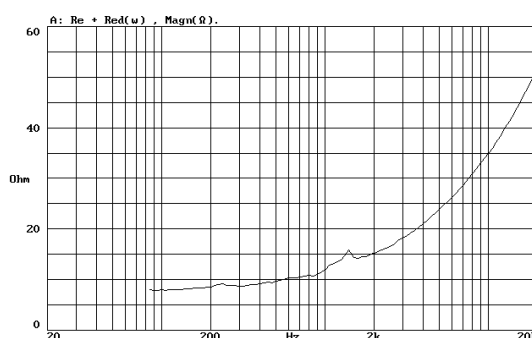
THIELE-SMALL PARAMETERS**

Resonant Frequency, fs	40 Hz
D.C. Voice Coil Resistance, Re	6.1 ohms.
Mechanical Quality Factor, Qms	12.05
Electrical Quality Factor, Qes	0.334
Total Quality Factor, Qts	0.325
Equivalent Air Volume to Cms, Vas	212 l
Mechanical Compliance, Cms	93 μm/N
Mechanical Resistance, Rms	3.54 kg/s
Efficiency, ηo (%)	4
Effective Surface Area, Sd(m ²)	0.1320 m ²
Maximum Displacement, Xmax	9 mm.
Displacement Volume, Vd	1180 cm. ³
Voice Coil Inductance, Le @ 1kHz	2 mH

VOICE COIL INDUCTANCE CURVE



Re + Red(w) CURVE



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.