LORANTZ AUDIO SERVICES PTY. LTD. technical data ABN 91 007 396 705

MODEL: AC465Y/B3/8 — 18" BASS DRIVER-1000W

Description

The C465X/B3 is a professional low frequency 18" bass loudspeaker with a useful upper limit of 3KHz. This model has been designed for peak linear travel of 22mm before damage, and therefore capable of producing extreme levels.

Computer aided design, leading Australian technology, advanced materials produce a reliable superior bass loudspeaker.

The C465Y range features a massive 220mm diameter ferrite magnet with engineered components to achieve maximum magnet efficiency. Symmetrical gap geometry combined with large linear voice coil travel ensures minimum distortion and optimum operation at extreme levels.

This model features our in house Kevlar® reinforced ribbed paper cone employing OFP technology and treatments to produce extreme bass levels and wide frequency range. Efficient driver parameters have been selected to produce a full rich punchy bass in vented, bandpass and horn loaded enclosures.

Reliable performance, high 500Wrms thermal rating, 1000W max. program rating is achieved with a 4" voice coil and state of art high temperature adhesives, under spider venting, and a massive diecast aluminium chassis for heat dissipation. Magnet components are black plated for added heat dissipation all these features ensure minimal thermal compression in demanding applications.

The C465Y model employs CNC machined magnet components and hand crafted to the highest and strictest tolerances to meet the demanding requirements of professional sound reinforcement applications.

Application

Professional high-quality bass sound reinforcement applications in the frequency range 30Hz to 800Hz where high sound pressure levels are required i.e. live music clubs, music playback systems for discos, theater public address systems and high power indoor/outdoor PA systems and other general applications. In the correct enclosure and under controlled conditions we recommend each C465Y be driven by a power amplifier capable of delivering between 100 and 1000 watts into 8 ohms providing the average RMS program power does not exceed 500 watt.

This model is also an excellent choice for front loaded vented bass applications and also horn loaded and bandpass applications.

Refer: -C465Y/B3 application notes for enclosure details.

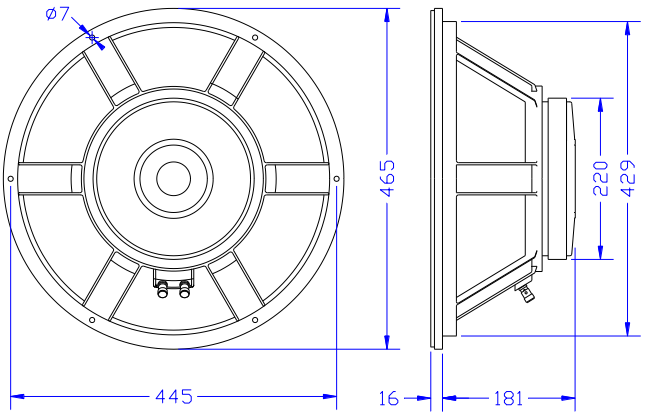
Mounting Details

Baffle opening diameter

front mounting	426 mm
rear mounting	426 mm

Mounting pattern:

six 7.0 mm holes equi-spaced on a 445mm PCD



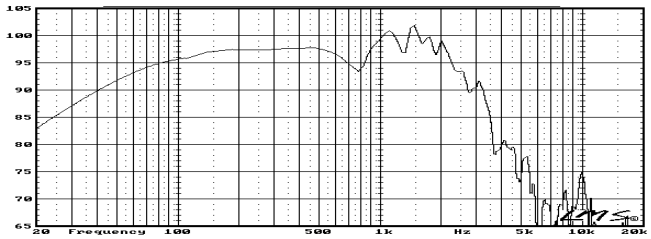
Technical Data

Typical measured Thiele/Small parameters:

Maximum program power		=	1000 watt
Thermal power rating		=	500 watt rms
Rated nominal impedance	Z	=	8 ohms
Free-air resonance		=	33Hz
Rated frequency range		=	30 - 3000 Hz
Piston sensitivity level		=	98 dBSPL
Mechanical Q	Qm	=	2.9
Electrical Q	Qe	=	0.32
Total spk. Q	Qts	=	0.29
Moving mass	Mms	=	160 gms
Effective diaphragm diameter	D	=	40 cm
Effective diaphragm area	Sd	=	.124 sq.m.
Peak linear vol. displacement	Vd	=	937 ccm
Vol. equiv to spk compliance	Vas	=	310 litres
Mechanical compliance	Cms	=	142E-6 m/N
BL product	Bl	=	24.5 T.M.
Voicecoil diameter	d	=	100 mm
Voicecoil material		=	copper
Voicecoil DC resistance	Re	=	5.7 ohms
Voicecoil inductance @ 1kHz	Lvc	=	1.7 mH
Voicecoil height		=	23 mm
Height of air-gap	Hg	=	12 mm
Peak linear displacement	Xpk	=	5.5 mm
Reference efficiency		=	3.5 %
Speaker total mass		=	12.7 Kgm

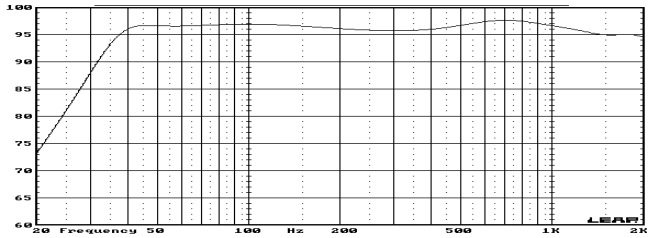
Specifications subject to change without notice.

Frequency Response



Infinite baffle response recorded at one watt at one meter.

Bass response



Typical half space bass response @1W @1m including typical box losses for a single loudspeaker mounted in the following enclosure:

- 180 litre vented enclosure tuned to 40Hz accomplished with four 100mm PVC ports each 233mm long.

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