



LORANTZ

AUDIO SERVICES PTY. LTD.

technical data

ACN 007 396 705

MODEL: A-C390X/B6/8

15" BASS - DRIVER-800W

Description

The C390X/B6 is an Australian made professional low frequency 15" bass loudspeaker with a useful upper limit of 2.5 KHz. This model offers superb bass performance, high program power handling, high efficiency, and therefore capable of producing extreme levels. The smooth response, wide frequency range, wide dynamic range is attributed to many features not often found in one model.

Computer aided design, leading Australian technology; advanced materials produce superior speaker performance.

The C390X range features a massive ferrite magnet with engineered components to achieve maximum magnet efficiency. Symmetrical gap geometry combined with and large linear voice coil travel ensures minimum distortion at extreme levels.

This model features our Kevlar® reinforced ribbed bass-cone employing OFP technology and special treatments which produce extreme bass levels, smooth mids and wide frequency range. Efficient driver parameters have been selected to produce a full rich punchy bass in a vented, bandpass and horn enclosure.

Reliable performance and the high 400W rms thermal rating, 800W max. program is achieved with a 4" voice coil and state of art high temperature adhesives coupled to a massive die-cast aluminum chassis for optimum heat dissipation. These features provide minimum thermal compression in demanding applications.

The C390X model has been engineered 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 speaker for horn-loaded, vented and bandpass applications in the frequency range 30Hz to 2.5KHz 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 C390X/B1 be driven by a power amplifier capable of delivering between 100 and 800 watts into 8 ohms providing the average RMS program power does not exceed 400 watt.

Refer: -C390X/B6 application notes for enclosure details.

Mounting Details

Baffle opening diameter

front mounting 352 mm

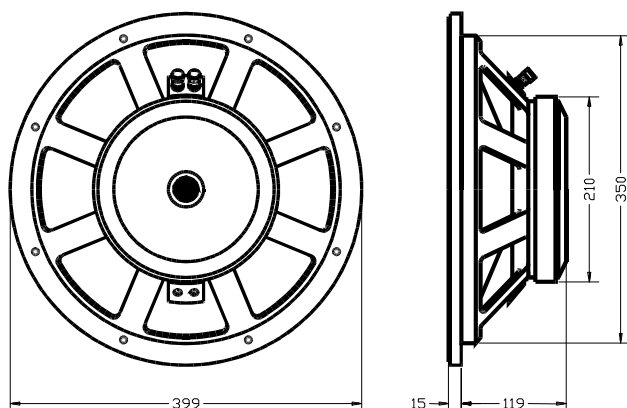
rear mounting 352 mm

Mounting pattern:

eight 6.5 mm holes equi-spaced on a 370mm PCD.

Flange thickness

15 mm.



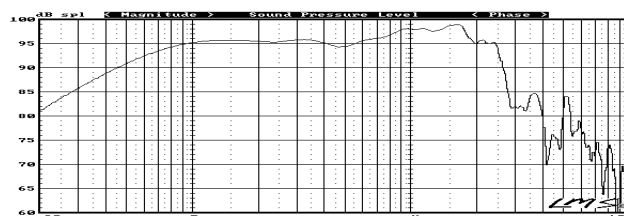
Technical Data

Typical measured Thiele/Small parameters:

Maximum program power	=	800 watt
Thermal power rating	=	400 watt rms
Rated nominal impedance	Z	= 8 ohms
Rated frequency range	=	30 - 2500 Hz
Piston sensitivity level	=	96.8 dB SPL
Octave band SPL pink noise	=	97 dB SPL
Resonance frequency	=	42.9 Hz
Mechanical Q	Qm	= 4.35
Electrical Q	Qe	= 0.39
Total spk. Q	Qts	= 0.36
Moving mass	Mms	= 98 gms
Effective diaphragm diameter	D	= 33.5 cm
Effective diaphragm area	Sd	= .088 sq.m.
Peak linear vol. displacement	Vd	= 425 ccm
Vol. equiv to spk compliance	Vas	= 153 litres
Mechanical compliance	Cms	= 1.40E-4 M/N
BL product	Bl	= 20 T.M.
Voicecoil diameter	d	= 100 mm
Voicecoil material	=	copper
Voicecoil DC resistance	Re	= 5.95 ohms
Voicecoil inductance @1Kz	Lvc	= 1.2 mH
Voicecoil height	=	18 mm
Height of air-gap	Hg	= 8 mm
Peak linear displacement	Xpk	= 5 mm
Reference efficiency	=	3.0 %
Speaker total mass	=	9000 gms

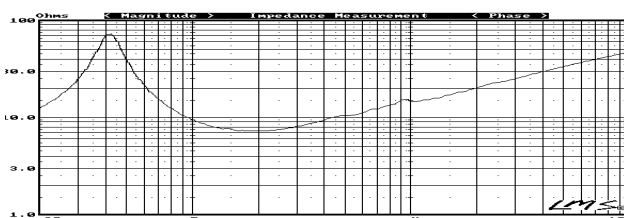
Specifications subject to change without notice.

Frequency Response



LMS infinite baffle response recorded at one watt at one meter.

Impedance



Typical impedance plot.

Options

Available in 4, 8 and 16 ohm impedance.