



MODEL: A-C390X/B1/8

Description

The C390X/B1 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 dynamics is attributed to features not often found in one model.

The C390X range features rigid diecast aluminum frame, CNC precision components. The massive FE optimised ferrite magnet-assembly permit large linear voice coil excursion with efficiency. Improved BL linearity, lower distortion, less wind noise is achieved with an undercut and flared vented polepiece.

The stiff damped ribbed cone is product of our OFP technology and is molded in-house from a blend of premium air dried wood pulp and Kevlar fibres resulting in smooth controlled mid response. The spider is made of Aramid material chosen for its high rigidity and long term stability in demanding applications. The accordion cloth cone surround assures extreme levels with minimal distortion.

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 400Wrms 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.

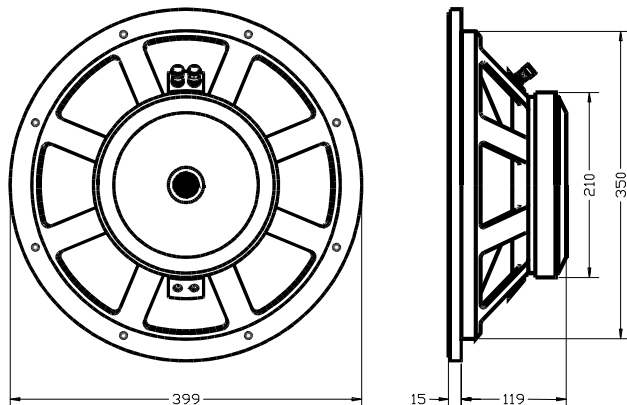
Refer: -C390X/B1 application notes for enclosure details.

Mounting Details

Baffle opening diameter

front mounting 352 mm
rear mounting 352 mm
eight 6.5 mm holes equi-spaced on a 370mm PCD.

Flange thickness 15 mm.



15" BASS - DRIVER-800W

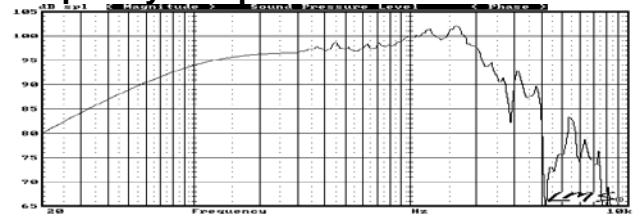
Technical Data

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	=	98 dB SPL
Octave band SPL pink noise	=	100 dB SPL
Resonance frequency	=	40 Hz
Mechanical Q	Qm	= 3.2
Electrical Q	Qe	= 0.26
Total spk. Q	Qts	= 0.25
Moving mass	Mms	= 99 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	= 170 litres
Mechanical compliance	Cms	= 1.54E-4 M/N
BL product	Bl	= 24 T.M.
Voicecoil diameter	d	= 100 mm
Voicecoil material	=	copper
Voicecoil DC resistance	Re	= 6.0 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	=	4.2 %
Speaker total mass	=	9000 gms

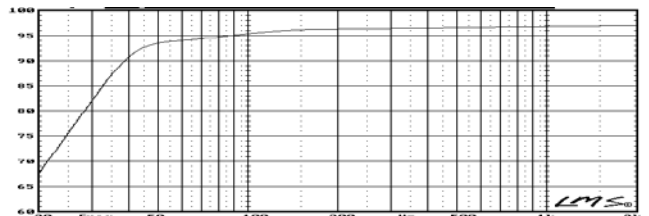
Specifications subject to change without notice.

Frequency Response



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

Bass Response



Typical bass response at 1W at one meter including typical box losses for a single driver mounted in a vented enclosure:

(a) 110 litres net volume tuned to 43Hz, this being accomplished with two 100mm PVC ports 168mm long.

Options

Available in 4, 8 and 16 ohm impedance

Refer C390X/B1 application notes for enclosure details.