

**MODEL: AC400X-PA-8**

**15" BASS-MID DRIVER 1000W**

**Features**

- 100 dBSPL sensitivity
- 100mm/4 inch voice-coil
- 500W AES rating

**Description**

The AC400X/PA is an Australian made professional 15" bass/mid loudspeaker with a useful upper limit of 4kHz. This model offers superb mid-range performance, high program power handling, and high efficiency, capable of producing extreme levels. The wide frequency range makes this model most suitable for vocal two-way systems.

This model features rigid die-cast aluminum frame, CNC precision components. The massive FE optimised ferrite magnet-assembly permits 3.0mm linear voice coil excursion with high efficiency. Improved BL linearity, lower distortion, less wind noise is achieved with an undercut and flared vented pole-piece.

The stiff damped curvilinear cone is a 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 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 big punchy bass in a vented enclosure.

Reliable performance and high thermal rating is achieved with a 4" voice coil and state of art high temperature adhesives coupled with a massive robust die-cast aluminium chassis for maximum heat dissipation. These features provide minimum thermal compression in demanding applications.

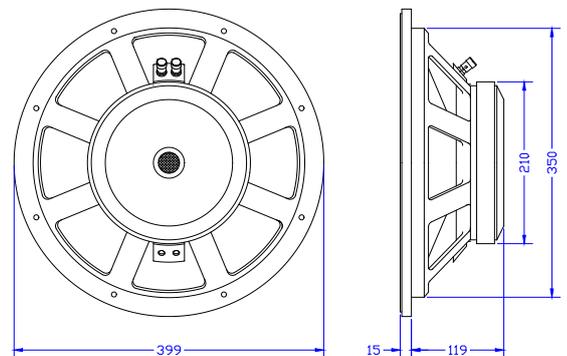
The AC400X model has been engineered and hand crafted to the highest and strictest tolerances to meet the demanding requirements of professional sound reinforcement applications.

**Options**

Model	Impedance
AC400X-PA-4	4 ohm
AC400X-PA-8	8 ohm
AC400X-PA-16	16 ohm

**Note**

This datasheet applies to our model AC400X-PA-8



**Mounting Details**

- Baffle opening diameter
  - front mounting 352 mm
  - rear mounting 352 mm
- Mounting pattern:
  - eight 7.0mm holes equi-spaced on a 370mm PCD.
- Flange thickness 15 mm.

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**Technical Data**

*Typical measured Thiele/Small parameters:*

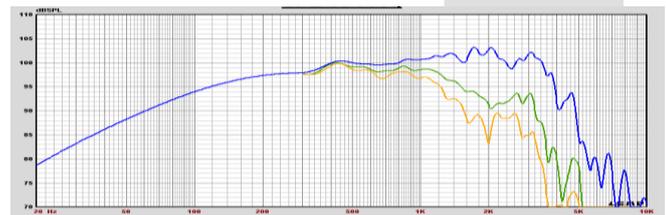
Maximum program power	=	1000 watt
AES power rating	=	500 watt rms
Rated nominal impedance	Z	= 8 ohms
Rated frequency range	=	40 - 4000 Hz
Sensitivity	=	100 dB SPL
Resonance frequency	=	50 Hz
Mechanical Q	Qm	= 1.8
Electrical Q	Qe	= 0.27
Total spk. Q	Qts	= 0.238
Diaphragm mass	Mmd	= 63.1 gms
Effective diaphragm diameter	D	= 33.5 cm
Effective diaphragm area	Sd	= .088 sq.m.
Vol. equiv to spk compliance	Vas	= 140 litres
Mechanical compliance	Cms	= 0.124mm/N
BL product	Bl	= 24.1 T.m.
Voicecoil diameter	d	= 100 mm
Voicecoil material		= copper
Voicecoil DC resistance	Re	= 6.37 ohms
Voicecoil inductance @1Kz	Lvc	= 1.29 mH
Voicecoil height		= 12 mm
Height of air-gap	Hg	= 8 mm
Peak linear displacement	Xpk	= 3.0 mm
Reference efficiency		= 6.4 %
Speaker total mass		= 9.53kg

*Specifications subject to change without notice.*

**Notes**

- (1) AES power is determined according to AES2-1984 standard in free-air 60Hz-600Hz. Power calculated on minimum impedance.
- (2) Maximum recommended program power is twice AES power providing the safe excursion limits are not exceeded.
- (3) Sensitivity is SPL at 1W at 1m derived from Thiele/Small parameters.
- (4) Frequency range is the useful frequency range for this transducer when mounted in its recommended enclosure.
- (5) Thiele/Small parameters are derived after the speaker has been preconditioned and are a better representation of the long term parameters in use.
- (6) Peak linear displacement Xpk derived from Klippel XBL-measurement at 82%.

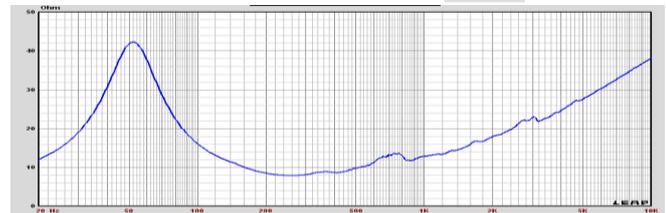
**Frequency Response**



Infinite baffle response recorded at 2.83V or nominal one watt at one meter.

- Blue curve on axis
- Green curve 30 deg off axis
- Orange curve 40 deg off axis

**Impedance**



Free-air impedance plot