

MODEL: AC304P-PA-8

12" BASS-MID -300W

Description

An Australian made general purpose ferrite-magnet musical instrument loudspeaker refined over 30 years to offer superb performance and reliable operation in a wide range of musical applications. This driver is an excellent selection for combo amplifiers built in the 70's.

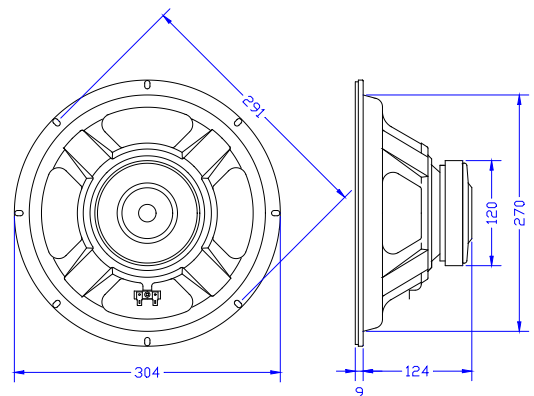
Crisp clear sound, wide frequency range, high efficiency is achieved with a paper cone manufactured and treated under our control. The cone body is manufactured from our OFP cone material, air dried for maximum stiffness and terminated with an "m" type treated cloth surround.

Its predecessor in the 70's was rated at 30w, now using state of art voice coil technology and materials result in a high 150W AES rating.

The voice coil is securely bonded to the cone body with epoxy adhesive to ensure reliable performance in demanding applications. The spider also made in house from aramid fibers for long term stability.

This model is an excellent economical choice where high efficiency; wide frequency range and high reliability are required.

For over 40 years this model has earned its reputation in musical instrument and sound reinforcement applications. The AC304P model is engineered and hand crafted to the highest and strictest tolerances to meet the demanding requirements of professional sound reinforcement systems.



Options

Model	Impedance
AC304PT-PA-8	8 ohm
AC304PT-PA-16	16 ohm

This datasheet applies to our model AC304PT-PA-8

Mounting Details

- Baffle opening diameter
 - front mounting 273 mm
 - rear mounting 273 mm
- Mounting pattern:
 - eight 6 x 9 mm slots equi-spaced on 291 mm PCD.
- Flange thickness 9 mm

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Technical Data

Typical measured Thiele/Small parameters:

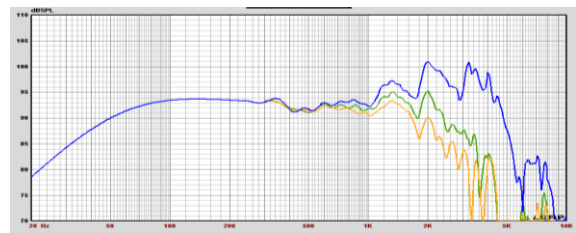
Maximum program power	= 300 watt
AES power rating	= 150 watt rms
Rated nominal impedance Z	= 8 ohms
Rated frequency range	= 35 - 5000 Hz
Sensitivity	= 95 dB SPL
Resonance frequency	= 50 Hz
Mechanical Q Qm	= 4.2
Electrical Q Qe	= 0.55
Total spk. Q Qts	= 0.52
Diaphragm mass Mmd	= 32.4 gms
Effective diaphragm diameter D	= 25.8 cm
Effective diaphragm area Sd	= 0.0522 sq.m.
Vol. equiv to spk compliance Vas	= 108 litres
Mechanical compliance Cms	= 0.278 mm/N
BL product Bl	= 12.1 T.m
Voicecoil diameter d	= 45 mm
Voicecoil material	= Copper
Voicecoil DC resistance Re	= 7.35 ohms
Voicecoil inductance Lvc	= 1.17 mH
Voicecoil height	= 12.0 mm
Height of air-gap Hg	= 8 mm
Peak linear displacement Xpk	= 3.3 mm
X Damage peak to peak Xpk-pk	= 21 mm
Reference efficiency	= 1.96 %
Speaker total mass	= 2620 gms

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) Recommended program power is twice AES power providing safe excursion limits are not exceeded.
- (3) Sensitivity is SPL at 1W at 1m derived from Thiele/Small parameters.
- (3) Frequency range is the useful frequency range for this transducer when mounted in its recommended enclosure.
- (4) Thiele/Small parameters are derived after the speaker has been preconditioned and are a better representation of the long term parameters in use.
- (5) Peak linear displacement Xpk derived from Klippel XBL measurement at 82%.

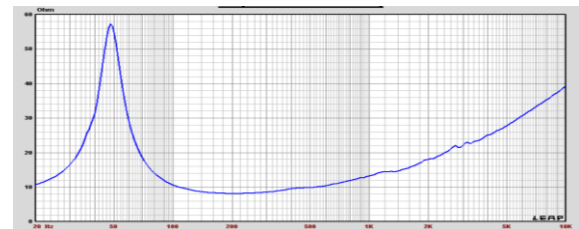
Frequency Response



Infinite baffle sound pressure response recorded at one watt at one meter.

- (a) Blue curve on axis
- (b) Green curve 30 degree off axis
- (c) Orange curve 40 degree off axis

Impedance plot



Free-air impedance magnitude plot.