

Description

A hand crafted Australian made ferrite magnet electric guitar loudspeaker made to deliver better bass and clean tops whilst maintaining a classic guitar tone.

This 75W model employs a thicker cone body produced in house. The 75W cone is produced in house under our control from a blend of natural renewable Eucalypt and Hemp fibres; this fibre formulation and processing delivers the classic Australian tone. This Australian tonal voice, musicians choice, is based upon prior art, research and developed refined in-house over 30 years of paper cone production.

This model employs a longer PESV copper voice-coil wound onto modern high temperature Kapton bobbin to deliver reliable performance at 75W power rating and delivering cleaner bass tones. The voice-coil is adhered to the cone body with a selected adhesive to ensure reliable performance but retain the classic guitar tone.

The voice-coil, cone materials, and magnet properties have been selected to emulate high efficiency, crisp clean guitar tone. The magnet assembly has been FE optimized and the machined components are finished in e-coat for superior corrosion resistance.

This Australian hand crafted model is an excellent choice for serious musicians where high efficiency, clean production, combined with high reliability are desired.

Application

Best choice for valve and solid state amplifiers with effects. This model delivers clean tones and responds well to effects pedals. Also a great choice for vintage amplifiers where clean output is required and production enhanced electronically.

This model developed to deliver a clean guitar tone below 40W. Crunch and overdriven character develops at higher power.

Options

Model	Impedance
AC304P75-MI-8	8 ohm
AC304P75-MI-16	16 ohm

This datasheet applies to our AC304P75-MI-8 model.



MODEL: AC304P75-MI-8
12" Guitar
75W

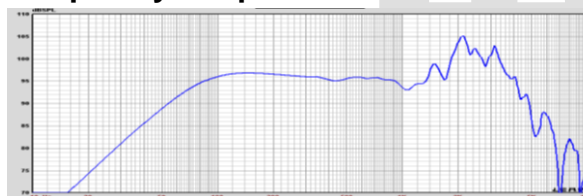
Technical Data

Typical measured Thiele/Small parameters

Maximum program power		= 75 watt
Rated nominal impedance	Z	= 8 ohms
Rated frequency range		= 45 - 6000 Hz
Piston sensitivity level		= 98 dB SPL
Max SPL @ 1w		= 101 dB SPL
Resonance frequency		= 80 Hz
Mechanical Q	Q _m	= 7.2
Electrical Q	Q _e	= 0.73
Total spk. Q	Q _{ts}	= 0.66
Moving mass	M _{md}	= 27.5 gms
Effective diaphragm diameter	D	= 25.3 cm
Effective diaphragm area	S _d	= 0.050 sq.m.
Vol. equiv to spk compliance	V _{as}	= 42.2 litres
Mechanical compliance	C _{ms}	= 0.116mm/N
BL product	BL	= 12.1 T.m
Voicecoil diameter	d	= 45 mm
Voicecoil material		= Copper
Voicecoil DC resistance	R _e	= 6.6 ohms
Voicecoil inductance @ 1kHz	L _{vc}	= 1.2 mH
Voicecoil height	H _v	= 11.6 mm
Height of air-gap	H _g	= 8 mm
Peak linear displacement	X _{pk}	= 1.8 mm
Reference efficiency	η _o	= 3.0 %
Speaker total mass		= 2200 gms

Specifications subject to change without notice.

Frequency Response



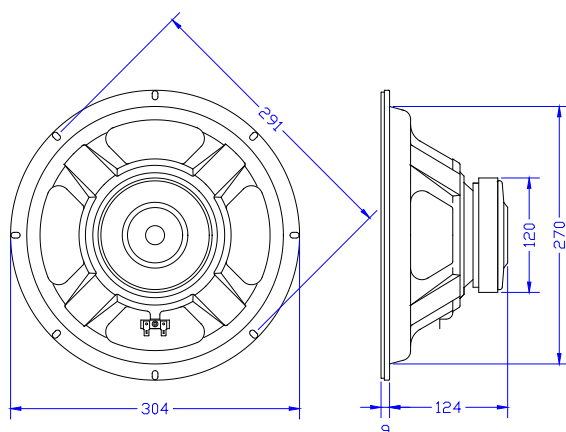
Typical infinite baffle SPL response recorded at 2.83V at one meter on axis.

Impedance plot



Free-air impedance magnitude plot.

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