

## Description

A hand crafted Australian made Alnico magnet electric guitar loudspeaker made to replicate vintage 70's guitar models. Where possible both materials and processes used in the 70's has been employed to regain the vintage sound.

The 50W cone is produced in house under our control from a blend of natural renewable Eucalypt and Hemp fibres; this fibre formulation delivers the classic Australian tone. This Australian tonal voice, musicians choice, is based upon prior art and research developed and refined over 30 years of in-house paper cone manufacturing experience.

This model employs a high thermal rated copper voice-coil wound onto glass-fibre bobbin to emulate the seventies sound, this prior art produces a nominal 50Watt-power rating. The voice-coil is adhered to the cone body with a selected adhesive to ensure reliable performance but retain the seventies voicing characteristics.

The voice-coil, cone materials, and magnet properties have been selected to emulate the high efficiency, bright top typical of guitar loudspeakers manufactured in the 70's, this model only requires moderate amplifier power for delivery. The magnet assembly has been FE optimized and the machined components are zinc plated for corrosion resistance.

This Australian hand crafted model is an excellent choice for serious musicians where high efficiency, classic alnico tone of the 70's and high reliability are desired.

## Application

Best match with 50W guitar amplification up to 50W. This model experiences cone breakup at a moderate 25W thereby delivering vintage tone with crunch and overdriven character at rated power, typical of guitar speakers made in the 70's.

## Options

Model	Impedance
AA304U50-MI-8	8 ohm
AA304U50-MI-16	16 ohm

*This datasheet applies to our AA304U50-MI-8 model.*



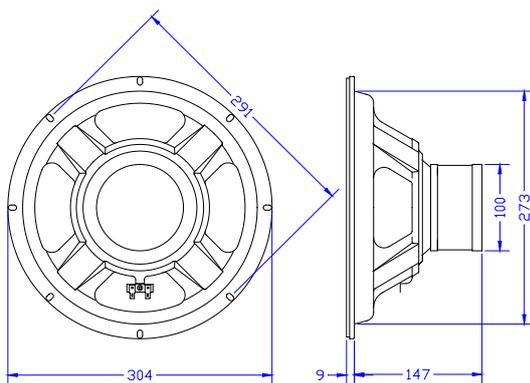
**Technical Data**

*Typical measured Thiele/Small parameters*

Maximum program power		= 50 watt
Thermal power rating		= 50 watt rms
Rated nominal impedance	Z	= 8 ohms
Rated frequency range		= 50 - 6000 Hz
Piston sensitivity level		= 98.5 dB SPL
Max SPL @ 1w		= 110 dB SPL
Resonance frequency		= 80 Hz
Mechanical Q	Qm	= 20
Electrical Q	Qe	= 0.57
Total spk. Q	Qts	= 0.56
Diaphragm mass	Mmd	= 21.6 gms
Effective diaphragm diameter	D	= 25.3 cm
Effective diaphragm area	Sd	= 0.050 sq.m.
Vol. equiv to spk compliance	Vas	= 51 litres
Mechanical compliance	Cms	= 0.139 mm/N
BL product	Bl	= 12.8 T.m
Voicecoil diameter	d	= 45 mm
Voicecoil material		= Copper
Voicecoil DC resistance	Re	= 6.7 ohms
Voicecoil inductance @ 1kHz	Lvc	= 0.97 mH
Voicecoil height		= 10.0 mm
Height of air-gap	Hg	= 8 mm
Peak linear displacement	Xpk	= 1.0 mm
Reference efficiency		= 4.5
Speaker total mass		= 3.07 Kg

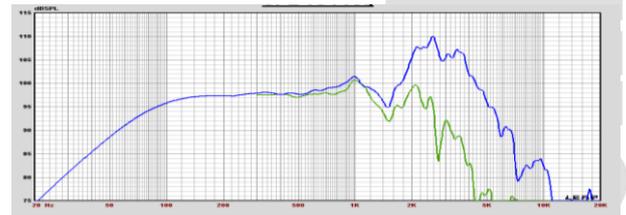
*Specifications subject to change without notice.*

**Mounting Details**



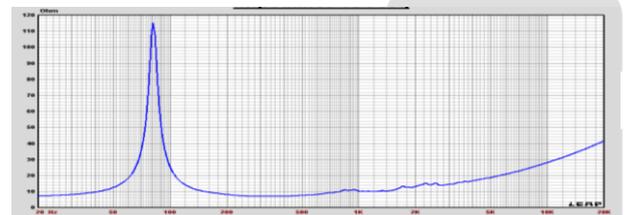
Baffle opening diameter  
 front mounting 273 mm  
 rear mounting 273 mm  
 Mounting pattern:  
 eight 6 x 9 mm slots equi-spaced on 291 mm PCD.  
 Flange thickness 9 mm

**Frequency Response**



Infinite baffle sound pressure response recorded at 2.83V at one meter.  
 Blue curve - on axis spl response  
 Green curve - 30 degrees off axis response

**Impedance plot**



Free-air impedance magnitude plot.

