

## Description

A hand crafted Australian made ferrite magnet electric guitar loudspeaker made to replicate the tone of vintage 60's guitar models. Where possible materials and processes used in the 60'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.

The 50 Watt power rating is achieved with a high thermal rated copper voice-coil wound onto glass fibre bobbin, prior art, emulates the seventies tone. 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. High acoustic output and consistent tone is achieved with a FE optimized magnet assembly with CNC machined magnet components. The magnet components are e-coated for superior corrosion resistance.

This Australian hand crafted model is an excellent choice for serious musicians where high efficiency, classic 60's performance and high reliability are desired.

## Application

Best match with guitar amplification up to 50W. This model experiences cone breakup at a moderate 20W thereby delivering vintage tone with crunch and overdriven character at rated power typical of guitar speakers made in the 70's.

## Options

Model	Impedance
AC257P50-MI-8	8 ohm
AC257P50-MI-16	16 ohm

*This datasheet applies to our AC257P50-MI-8 model.*



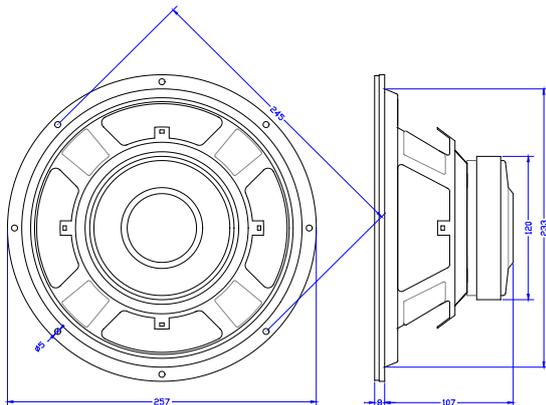
**Technical Data**

*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	= 70 – 5kHz
Piston sensitivity level	= 98 dB SPL <sub>0</sub>
Max SPL @ 1w	= 102 dB SPL
Resonance frequency	= 80 Hz
Mechanical Q	Qm = 10.0
Electrical Q	Qe = 0.52
Total spk. Q	Qts = 0.49
Diaphragm mass	Mmd = 15.2 gms
Effective diaphragm diameter	D = 12.8cm
Effective diaphragm area	Sd = 373 sq.m.
Vol. equiv to spk compliance	Vas = 40.0 litres
Mechanical compliance	Cms = 201 mm/N
BL product	Bl = 10.9 T.m
Voicecoil diameter	d = 45 mm
Voicecoil material	= Copper
Voicecoil DC resistance	Re = 6.3 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	= 3.8 %
Speaker total mass	= 2.53 Kgm

*Specifications subject to change without notice.*

**Mounting Details**



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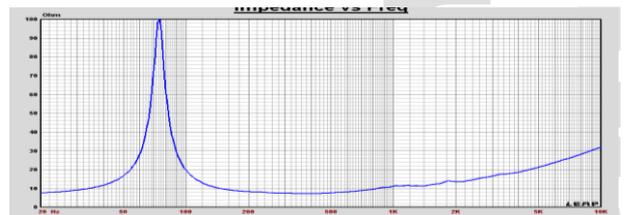
- Baffle opening diameter:
  - front mounting 233 mm
- Mounting pattern:
  - Eight 5.0 mm holes eqi-spaced on a 245mm P.C.D.
- Flange thickness 8.3mm

**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.