

## Description

A hand crafted Australian made ferrite magnet electric guitar loudspeaker made to replicate vintage 60's guitar models. Where possible both materials and processes used in the 60's has been employed to retain the vintage sound.

The 30W 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 copper voice-coil wound onto Kraft paper bobbin to emulate the sixties sound, this prior art produces a nominal 30Watt-power rating. The voice-coil is adhered to the cone body with a selected adhesive to ensure reliable performance but retain the sixties 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 60's, this model only requires moderate amplifier power for delivery. The magnet assembly has been FE optimized to maximize performance but minimize weight. The magnet components are CNC machined and finished in e-coat 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 low power guitar amplification up to 30W. This model experiences cone breakup at a moderate 15W thereby delivering vintage tone with crunch and overdriven character at rated power typical of guitar speakers made in the 60's.

## Options

Model	Impedance
AC257P30-MI-8	8 ohm
AC257P30-MI-16	16 ohm

*This datasheet applies to our AC257P30-MI-8 model.*



**MODEL: AC257P30-MI-8**

**12" Guitar**

**30W**

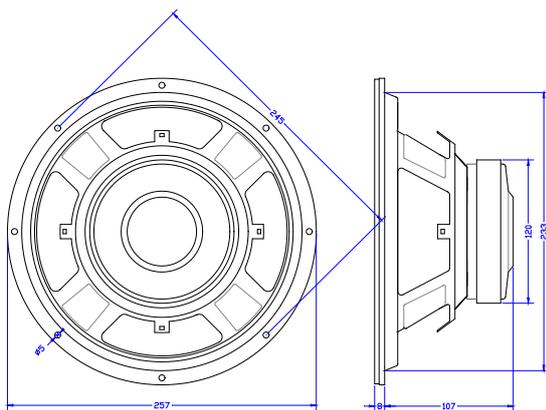
**Technical Data**

*Typical measured Thiele/Small parameters*

Maximum program power	= 30 watt
Thermal power rating	= 30 watt rms
Rated nominal impedance Z	= 8 ohms
Rated frequency range	= 50 – 5kHz
Piston sensitivity level	= 97 dBSPLo
Max SPL @ 1w	= 100 dBSPLo
Resonance frequency	= 80 Hz
Mechanical Q Qm	= 10.0
Electrical Q Qe	= 0.56
Total spk. Q Qts	= 0.53
Diaphragm mass Mmd	= 15.5 gms
Effective diaphragm diameter D	= 12.8cm
Effective diaphragm area Sd	= 373 sq.m.
Vol. equiv to spk compliance Vas	= 40.9litres
Mechanical compliance Cms	= 206 mm/N
BL product BI	= 11.0 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	= 3.6 %
Speaker total mass	= 2.53 Kg

*Specifications subject to change without notice.*

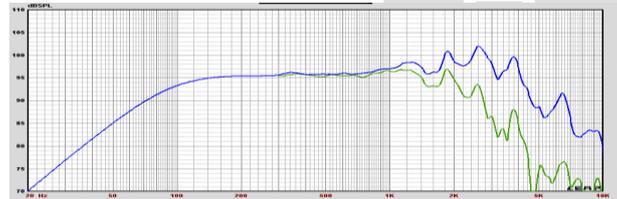
**Mounting Details**



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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

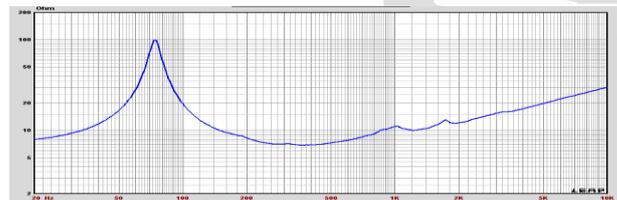
**Frequency Response**



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.