MODEL: AC257P75-MI-8 10” Guitar 75W

Description

A hand crafted Australian made ferrite magnet electric guitar loudspeaker made to replicate vintage guitar models. Where possible both materials and processing have been employed to deliver a vintage tone.
The 75W 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 75W power rating is achieved with a longer copper voice-coil wound onto a high temperature rated Kapton bobbin. A thicker cone body is employed to deliver a cleaner tone at 75W. The voice-coil is adhered to the cone body with selected adhesives to deliver guitar voicing characteristics.
The voice-coil, cone materials, and magnet properties have been selected to deliver high efficiency, bright top typical of guitar loudspeakers manufactured in the 60’s. This high power model still maintains high efficiency typical of guitar models. The magnet components are cnc machined to tight tolerances and finished in e-coat for superior corrosion resistance. These tight tolerances maintain consistent voicing characteristics. The magnet structure has been FE optimized to achieve high acoustic output whilst minimising weight.
This Australian hand crafted model is an excellent choice for serious musicians where high efficiency, classic guitar tone and high reliability are desired.

Application

Best match with guitar amplification up to 75W. This model experiences cone breakup at a moderate 35W. Choose this model for a clean vintage tone. Good choice for electronic enhancement. The thicker cone body employed in this model requires more power for crunch and overdriven character.

Options

Model	Impedance
AC257P75-MI-8	8 ohm
AC257P75-MI-16	16 ohm

This datasheet applies to our AC257P75-MI-8 model.

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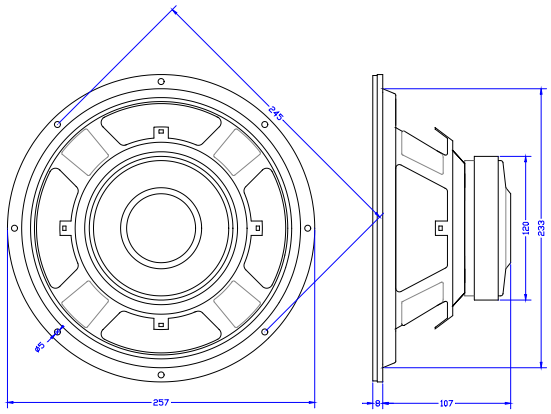
Technical Data

Typical measured Thiele/Small parameters

Maximum program power		= 75 watt
Thermal power rating		= 75 watt rms
Rated nominal impedance	Z	= 8 ohms
Rated frequency range		= 50 – 5kHz
Piston sensitivity level		= 97.6 dBSPLo
Max SPL @ 1w		= 101 dBSPL
Resonance frequency		= 80 Hz
Mechanical Q	Qm	= 8.7
Electrical Q	Qe	= 0.52
Total spk. Q	Qts	= 0.49
Diaphragm mass	Mmd	= 16.4 gms
Effective diaphragm diameter	D	= 12.8cm
Effective diaphragm area	Sd	= 373 sq.m.
Vol. equiv to spk compliance	Vas	= 38.0 litres
Mechanical compliance	Cms	= 191 mm/N
BL product	Bl	= 11.3 T.m
Voicecoil diameter	d	= 45 mm
Voicecoil material		= Copper
Voicecoil DC resistance	Re	= 6.5 ohms
Voicecoil inductance @ 1kHz	Lvc	= 0.97 mH
Voicecoil height		= 11.6 mm
Height of air-gap Hg		= 8 mm
Peak linear displacement	Xpk	= 1.8 mm
Reference efficiency		= 3.6 %
Speaker total mass		= 2.53 Kgm

Specifications subject to change without notice.

Mounting Details



Mounting Details

Baffle opening diameter:

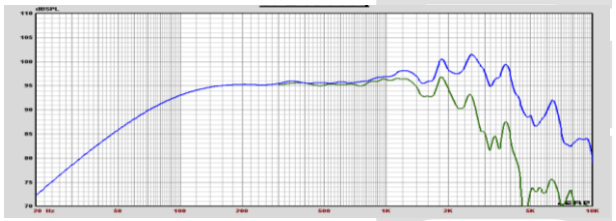
front mounting 233 mm

Mounting pattern:

Eight 5.0 mm holes eqi-spaced on a 245mm P.C.D.

Flange thickness 8.3mm

Frequency Response

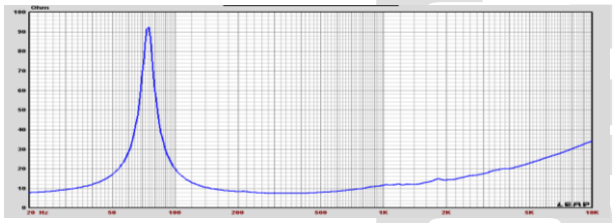


Infinite baffle sound pressure response recorded at 2.83V at one meter.

Blue curve - on axis spl response

Green curve - 30 degrees off axis response

Impedance plot



Free-air impedance magnitude plot.

21-1-2020