

Description

A hand crafted Australian made ferrite magnet electric guitar loudspeaker made to replicate vintage 60's guitar models. Where possible materials and processes used in the 60's has been employed to regain 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 high efficiency, bright top typical of guitar loudspeakers manufactured by Rola in the 60's, this model only requires moderate amplifier power for delivery. 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, classic 60's performance and reliability are desired.



Application

Best match with 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 to emulate guitar speakers made in the 60's.

Options

Model	Impedance
AC304P30-MI-8	8 ohm
AC304P30-MI-16	16 ohm

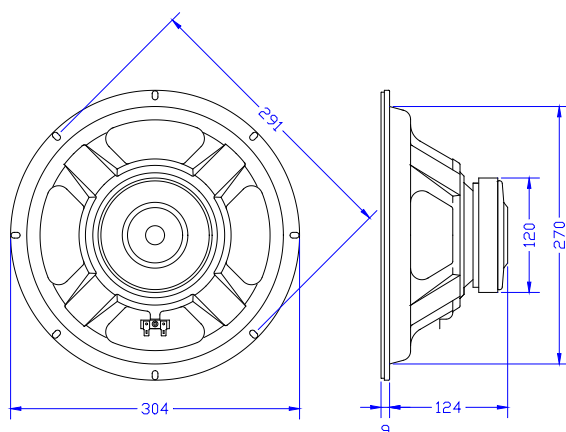
This datasheet applies to our AC304P30-MI-8 model.

MODEL: AC304P30-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	= 45 - 6000 Hz
Piston sensitivity level	= 96.3 dB SPL
Max SPL @ 1w	= 103 dB SPL
Resonance frequency	= 80 Hz
Mechanical Q Qm	= 7.8
Electrical Q Qe	= 0.74
Total spk. Q Qts	= 0.68
Diaphragm mass Mmd	= 26.5 gms
Effective diaphragm diameter D	= 25.3 cm
Effective diaphragm area Sd	= 0.050 sq.m.
Vol. equiv to spk compliance Vas	= 49.6 litres
Mechanical compliance Cms	= 0.138 mm/N
BL product Bl	= 12.1 T.m
Voicecoil diameter d	= 45 mm
Voicecoil material	= Copper
Voicecoil DC resistance Re	= 7.09 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	= 3.0 %
Speaker total mass	= 2200 gms

Specifications subject to change without notice.

Mounting Details


Baffle opening diameter

Front mounting 273 mm

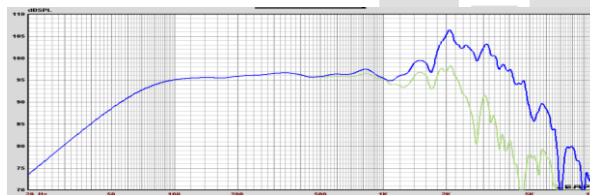
Rear mounting 273 mm

Mounting pattern:

eight 6 x 9 mm slots equi-spaced on 291 mm PCD.

Flange thickness

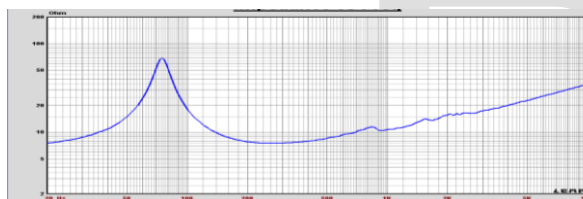
9 mm

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.