Description

This 10" bass loudspeaker was engineered for use in professional sound reinforcement systems and musical instrument applications. This model offers high efficiency, smooth response, and wide frequency range. The emphasis in this model is efficient smooth midrange combined with good bass reproduction.

This model features rigid die-cast aluminum frame, CNC precision magnet components. The bumped back-plate allows for more cone excursion, the FE optimised ferrite magnet-assembly achieve efficiency at minimum mass.

 The stiff damped ribbed cone is product of our OFP technology and is molded in-house from a blend of premium air dried wood pulp and Kevlar fibres resulting in smooth controlled mid response. The aramid spider ensures high rigidity and long term stability in demanding applications. The accordion cloth cone surround was chosen for its smooth mid response and delivers large excursion with minimal distortion.

Efficient driver parameters have been selected to produce a full rich punchy bass in vented, band-pass and horn enclosures. Reliable performance and the high 200 watt AES power rating is achieved with a 50mm voice coil and state of the art voice coil materials and adhesives aided by heat sinking qualities of the diecast speaker frame.

The AC264U loudspeaker is engineered and hand crafted in Australia to the highest tolerances to meet the demanding requirements of professional sound reinforcement and music instrument applications.

Application

A high efficiency, low distortion bass driver recommended for high quality sound reinforcement applications in the frequency range 40 to 4000 Hz. The large linear diaphragm excursion makes this model an excellent choice for electric bass.

Refer: -C264U-B3-8 application notes for enclosure details

Options

Model	Impedance
AC264U-B3A-4	4 ohm
AC264U-B3A-8	8 ohm
AC264U-B3A-16	16 ohm

This datasheet applies to our model AC264U-PA-8
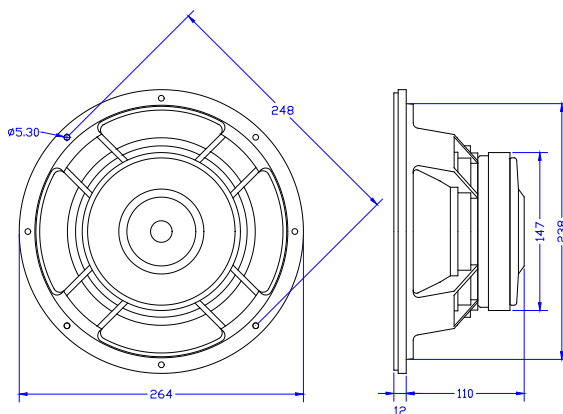
Mounting Details

Baffle opening diameter:
     front mounting   237 mm
     rear mounting   235 mm
Mounting pattern:
     eight 5.3mm holes eqi-spaced on a 248mm P.C.D.
Flange thickness   12mm

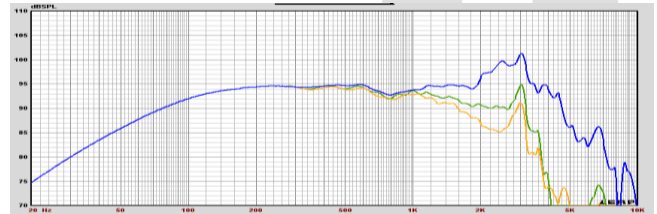## Technical Data

Typical measured Thiele/Small parameters

Maximum Program power			= 400 W
AES power rating			= 200 W
Rated nominal impedance	Z		= 8 ohms
Rated frequency range			= 40 – 5.0kHz
Piston range sensitivity level			= 96.5 dB/1W/1M
Resonance frequency	Fo		= 50 Hz
Mechanical Q	Qm		= 3.95
Electrical Q	Qe		= 0.246
Total spk. Q	Qt		= 0.223
Mechanical mass	Mmd		= 29.3 gms
Mechanical resistance	Rms		= 2.54 N.S/M
Effective diaphragm diameter	D		= 21.5 cM
Effective diaphragm area	Sd		= 0.0363 sq.M
Vol. equiv spk compliance	Vas		= 58.0 litre
Mechanical compliance	Cms		= 0.303 mm/N
BL product	BL		= 16.9 T.m
Voicecoil diameter	d		= 50 mm
Voice coil material			= copper
Voice coil dc resistance	Re		= 6.7 ohms
Voice coil inductance @ 1kHz	Lvc		= 1.5 mHenry
Voice coil height			= 16 mm
Height of air-gap			= 8.0 mm
Peak linear displacement	XBL		= 4.7 mm
X Damage peak to peak	Xpk-pk		= 28.4 mm
Reference efficiency			= 2.9 %
Speaker total mass			= 4200 gms

Specifications subject to change without notice.
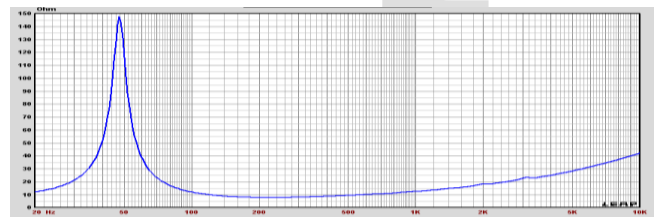
Frequency Response

Infinite baffle sound pressure response recorded at 2.83V or nominal one watt at one meter.
   Blue curve is on axis spl response
   Green curve is SPL at 30 degrees off axis.
   Orange curve is SPL at 40 degrees off axis

Impedance plot

Free-air impedance magnitude plot.

Notes

(1)   AES power is determined according to AES2-1984 standard in free-air at 60Hz – 600Hz. Power calculated on minimum impedance.

(2) Sensitivity is SPL at 1W at 1m derived from Thiele/Small parameters.

(3) Frequency range is the useful frequency range for this transducer when mounted in its recommended enclosure.

(4) Thiele/Small parameters are derived after the test speaker has been preconditioned and is a better representation of the long term parameters in use.

(5) Peak linear displacement Xpk derived from Klippel XBL at 82%.