



MK100A

self powered compact loudspeaker ▼

A radical new way of thinking about compact sound systems





MK100A

▼ Modern sound refinement

The MK100A is the first in a new generation of compact active loudspeaker systems from Acoustic Technologies.

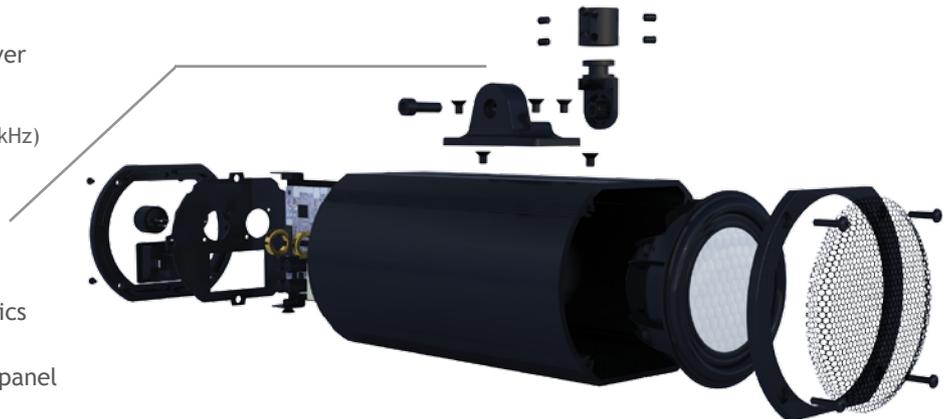
With its on-board 150 Watt ultra-reliable Class D power amplifier, the MK100A offers exceptional audio performance with a smooth, flat response extending from **90Hz** to **19kHz**.

With its integrated power module, balanced XLR input with link output and simple yet flexible mounting bracket, the MK100A is presented as a convenient solution to a wide variety of applications.

The MK100A's ultra-wide dispersion characteristics are what really set it apart from its competitors. With a nominal dispersion angle of 120°, the MK100A redefines the meaning of "Wide Dispersion". Even at 7kHz, the MK100A still offers a remarkable 120° (horizontal and vertical) dispersion - resulting in an unprecedented level of superior coverage.

Key Features ▼

- ▶ 100mm Flat Aluminium Planar Driver
- ▶ Fully integrated power module (150W at 6 Ω THD+N 0.002%, 20Hz - 20kHz)
- ▶ Rugged aluminium construction
- ▶ **360° flexible mounting bracket**
- ▶ Ultra-wide dispersion characteristics
- ▶ XLR input and link output on rear panel



150W POWER MODULE

A fully integrated audio power conversion solution

The natural choice for coherent sound from a compact package

Key Specifications:

150W at 6 Ω THD+N 0.002%, 20Hz - 20kHz
125dBA dynamic range
CE & FCC approved design
Thermal Protection
Over Current Protection
Sound Optimised Soft Clipping



ALUMINIUM PLANAR TECHNOLOGY

The newly developed 100mm Aluminium Planar Transducer
A radical departure from conventional compact loudspeaker systems

Revolutionary design:

The MK100A features a single 100mm full range neodymium transducer eliminating the need for any frequency dividing network. This eradicates any frequency or phase anomalies found in conventional loudspeaker design. The transducer utilises Aluminium Planar Technology (APT) and delivers unparalleled levels of uniform, ultra-wide dispersion.



HOW WIDE IS WIDE?

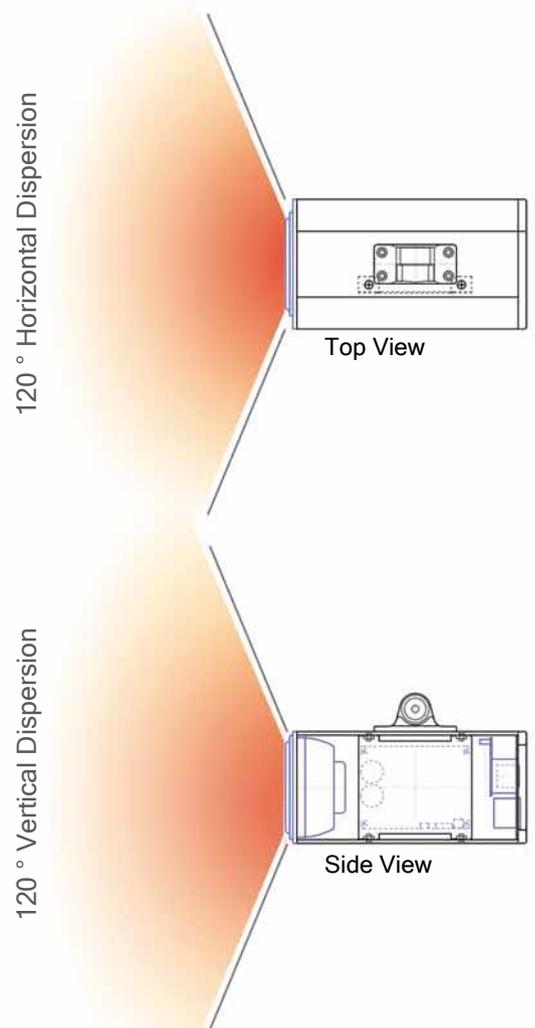
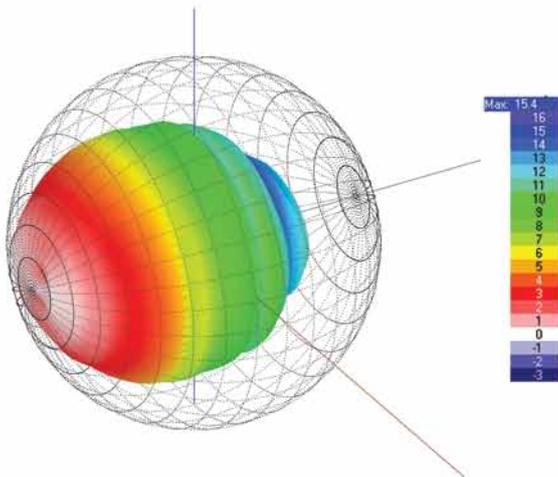
And what it means for you ▼

The MK100A provides the widest possible dispersion in a compact, unobtrusive design. Perfect for difficult spacial or acoustic environments when pristine, transparent audio is required.

The MK100A now makes it possible to provide clear, accurate sound with superior coverage from an ultra-compact, self-powered speaker system.

Balloon Plot ▼

Measured at 2.5 kHz, this plot is a perfect example of the unprecedented level of uniform dispersion provided by the aluminium planar driver in the MK100A. This uniform pattern is consistent from 90 Hz right up to 7kHz where the physical size of the driver begins to focus the dispersion.



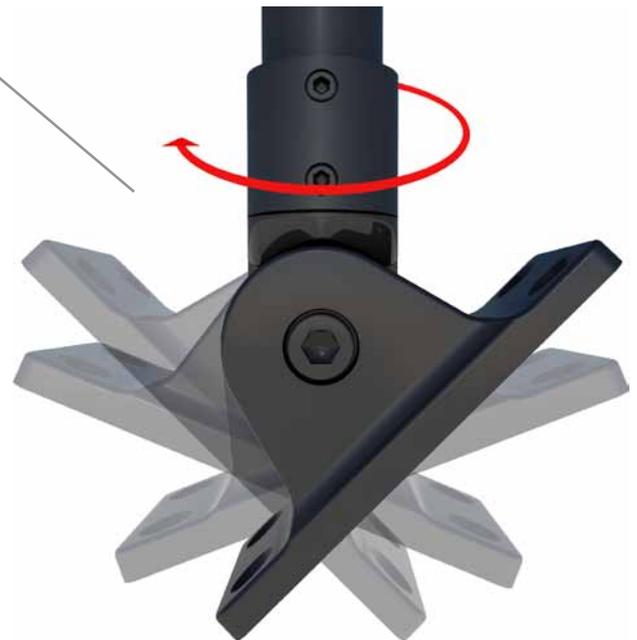
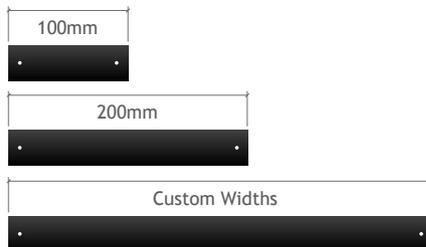
FLEXIBLE MOUNTING

▼ For ease in achieving optimal placement

360° Flexibility:

The MK100A features an ultra-flexible 360° mounting bracket with a simple swivelling interface. It has never been easier to position and angle your sound to best suit the greater acoustic environment.

The bracket can be lengthened via the option of three Vari-Shaft extension tubes. These tubes provide the extra reach that is sometimes necessary to drop or hang the device to the most appropriate position. ▼



APPLICATIONS

Equally suited to music reproduction and speech reinforcement, the variety of applications for the MK100A is virtually unlimited. Its compact dimensions and performance characteristics also make it an ideal compact active monitor for any sound reinforcement application where space is at a premium.



Corporate Environments ▼

Physically unobtrusive. Ideal for office or lobby ambience and demanding board room or conference applications



Hospitality Environments ▼

When the combination of discreet visual subtlety, superb audio clarity and wide dispersion is required to enhance the overall environment



Retail Spaces ▼

Achieve clear sound and smooth even coverage with a smaller number of speakers enabling seamless sonic integration with the surrounding visual and physical environment

▼ **Parliaments & Courts of Law**

In environments where the spoken word is of the utmost importance, speech intelligibility is crucial, the MK100A provides complete, articulate coverage



▼ **Sound Masking**

Perfectly suited to waiting rooms, open conference offices and consultation environments. When acoustic privacy is crucial, the MK100A's uniform wide dispersion enables effective sound masking



▼ **Trade Shows & Exhibitions**

The unique characteristics of the MK100A enable a widely dispersed sound to be contained within shared environments and spaces without disturbing the surrounding areas



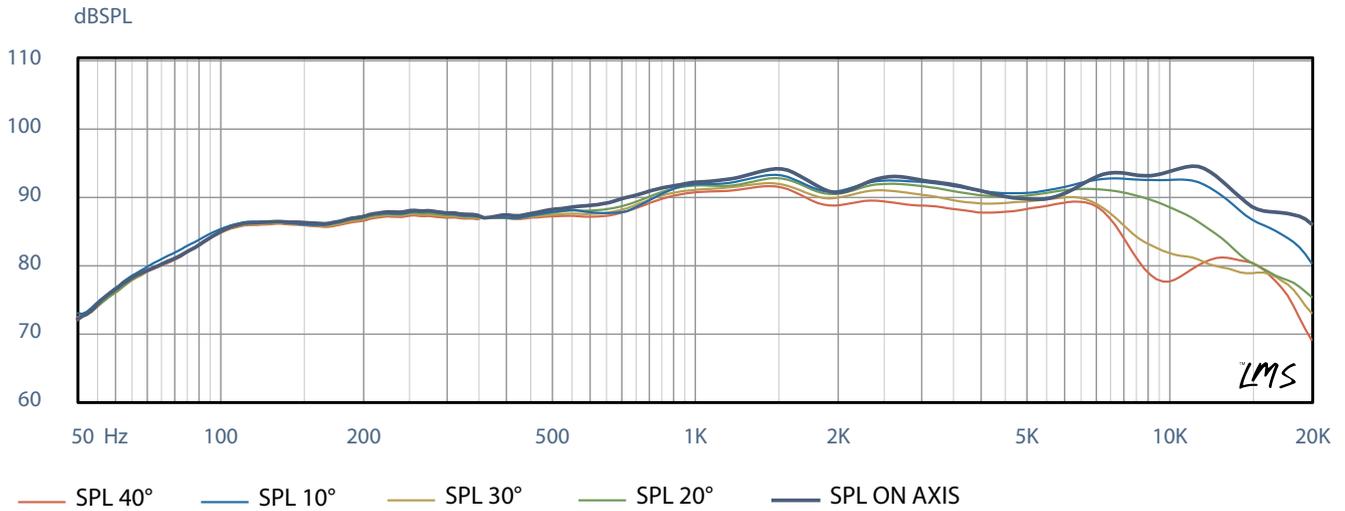
▼ **Education**

With its ultra-wide dispersion, the MK100A is the perfect solution for speech augmentation in educational facilities to ensure the teacher's message reaches every set of ears

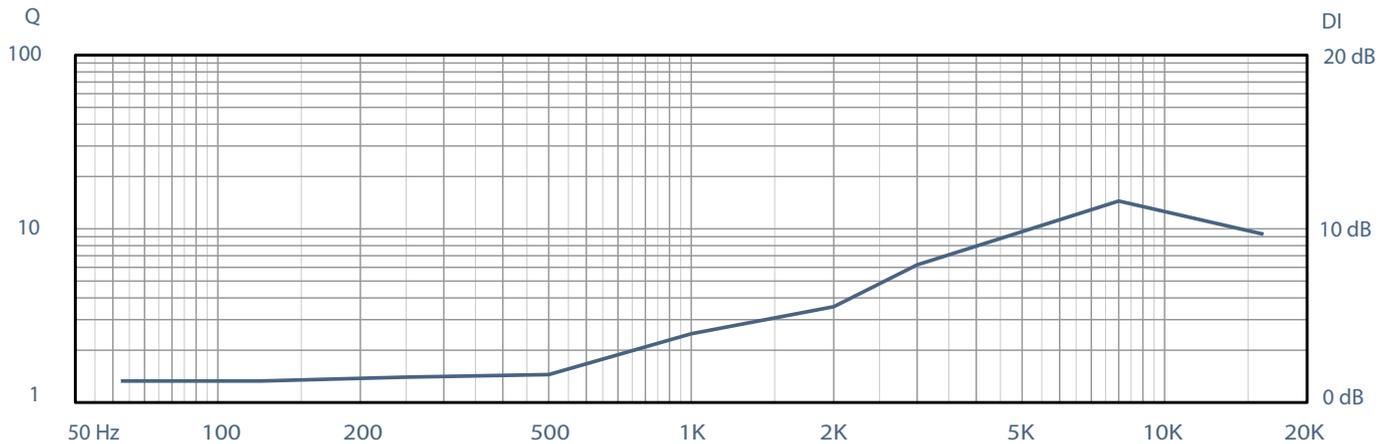


ACOUSTIC DATA

SPL Graph ▾

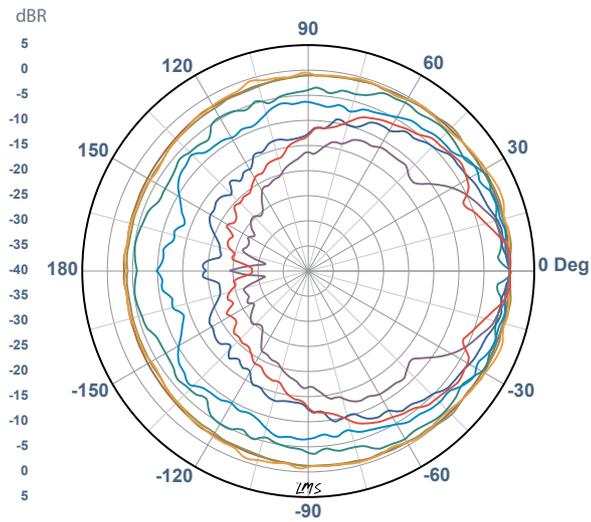


Octave band Q & DI ▾



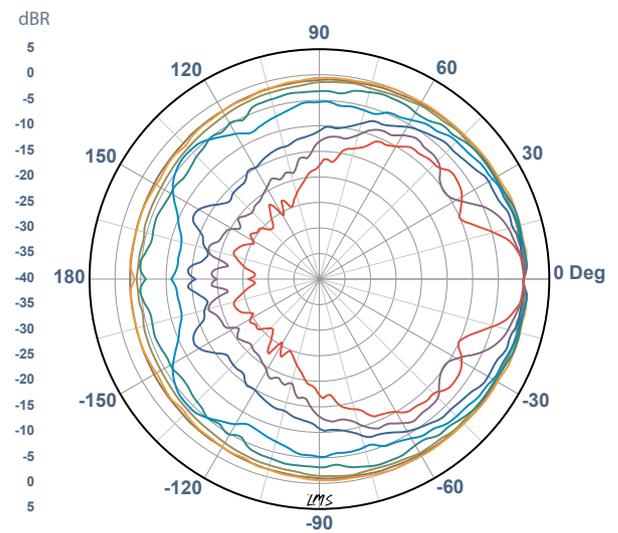
POLAR DATA

Vertical Polar Plot ▾



Curve	Freq	BW
	125.00	360
	250.00	360
	500.00	360
	1.00K	249
	2.00K	134
	4.00K	108
	8.00K	54
	16.00K	47

Horizontal Polar Plot ▾



Curve	Freq	BW
	125.00	360
	250.00	360
	500.00	360
	1.00K	230
	2.00K	170
	4.00K	126
	8.00K	53
	16.00K	32

THE MK ADVANTAGE

Key Benefits ▼

- ▶ Less speakers needed to achieve coverage due to ultra-wide dispersion
- ▶ Ease and flexibility of installation
- ▶ Self contained solution (no external amplification needed)
- ▶ Long-term, reliable operation
- ▶ Convection Cooling - no fan noise or moving parts
- ▶ Aesthetically pleasing & discreet



Australian innovation for a world market ▼

Acoustic Technologies and its team of dedicated engineering, audio and manufacturing specialists are at the forefront of developing solutions for the ever-changing and complex sound reinforcement industry. This passion has been evident from the initial conception and design right through to final manufacturing processes and is key to the success of this innovative, flexible and reliable product.

The MK100A is Designed, Engineered and Manufactured in Brisbane, Australia.

SUPPORT & CUSTOMISATION

▼ Design & Engineering Support

Acoustic Technologies continues to support the greater audio community by working first hand with acoustic engineers, designers and installation contractors to ensure that each unique project is completed with total confidence in the audio system.

The MK100A has been developed in direct association with some of Australia's most respected installation contractors and audio engineers and represents a collaborative approach to finding a quality solution when clean, crisp audio is required with ultra-wide dispersion characteristics.

▼ Customisation

Acoustic Technologies offers customised manufacturing and design services for larger installation requirements and bulk orders of the MK100A. We'll assist with the acoustic implementation of the unit from the ground up and ensure that the device perfectly caters for the installed environment both acoustically and visually.

Custom colour matching is available on specialist or bulk quantity orders to ensure a seamless transition between the visual and acoustic elements of an installation.



SPECIFICATIONS

Acoustic Performance

Frequency Response
Maximum SPL
(Calculated)

Program
Peak

90 Hz - 19 kHz
104 dB @ 1 metre
108 dB @ 1 metre

High Frequency Dispersion

Horizontal
Vertical

120° ± 10° (below 8.0 kHz)
120° ± 10° (below 8.0 kHz)

Enclosure Specifications

Physical Size
Weight
Enclosure Finish

108mm (H) x 126mm (W) x 234mm (D)
2.1 Kg
Satin Black Powder Coat Finish
Custom Finishes available on application
Versatile Dual Swivel Bracket supplied

Mounting Hardware

Transducer

Transducer Complement
Transducer Power Handling
Transducer Nominal Impedance

1 x 4" Aluminium Planar Technology Neodymium
Perfectly suited to power module output
6 Ohms

Amplifier

Amplifier Type
Amplifier Output Power
Amplifier Cooling

Class D
150 Watts into 6 Ohms THD+N 0.002%
Convection Cooled

Switch Mode Power Supply

SMPS Requirements
Power Connector

220 - 240 Volts AC @ 2 Amps
IEC Mains Lead with integrated
Fuse Holder and Mains Switch
Red LED on Rear Panel

Power On Indication

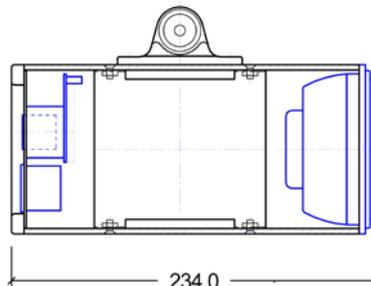
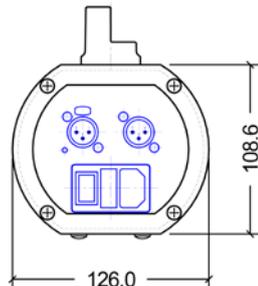
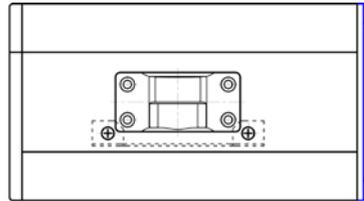
Audio Input

Input Connector
Input Impedance
Input Sensitivity

Neutrik 3 Pin XLR with Signal Link Connector
10 kOhm Electronically Balanced
0.755 V RMS (-2.5dBV) for onset of clipping

Data

EASE & CLF Data is available for
download from our website at:
www.atprofessional.com.au







Acoustic Technologies

8 - 10 Staple Street
Seventeen Mile Rocks
Qld, 4073
Australia

P: +61 7 3376 4122
F: +61 7 3376 5793

E: info@atprofessional.com.au
W: www.atprofessional.com.au



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