

## aero 50

Large format, high efficiency line  
array module

- » Full range 3-way system
- » 2 x 15" low frequency neodymium speakers
- » 4 x 8" mid frequency neodymium speakers
- » 2 x 3" diaphragm neodymium compression drivers with copper shorting ring

The large format Aero 50 is the evolution of the highly successful Aero 48. Designed for use in large-scale events in stadiums and arenas, the Aero 50 offers a number of important improvements in terms of performance and weight reduction.

The low frequency reproduction is handled by two new 15GNR loudspeakers in a bass-reflex configuration. The 15GNR speaker incorporates a 100 mm (4") edge-wound flat wire (EFW) voice coil. A redesigned motor structure which utilizes an internal neodymium ring focuses magnetic energy in the gap where it is needed, ensures reduced magnetic leakage and lowers the component weight.

Four purpose-built 8MN, 8" cone transducers

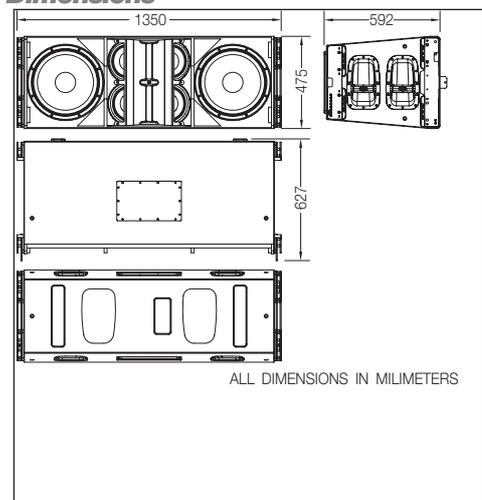
incorporating neodymium magnetic assemblies and 62 mm (2.5") voice coils are used for mid frequency reproduction. These rugged, yet lightweight components take advantage of the unique Total Air Flow (TAF) cooling scheme which effectively evacuates voice-coil heat minimizing power compression.

High frequency reproduction is handled by two M-75N compression drivers. A pure titanium diaphragm featuring 75 mm (3") copper-clad aluminum EFW voice coil yields high sensitivity, low distortion and extended frequency response. Each motor system has a copper shorting ring surrounding the pole piece which effectively reduces eddy current induced distortion with the added benefit of increasing the very high frequency output by reducing the inductive rise of the voice coil.

### Technical Specifications

<b>Frequency Range (-10 dB)</b>	45 Hz - 20 kHz
<b>Horizontal Coverage (-6 dB)</b>	90° Nominal
<b>Vertical Coverage (-6 dB)</b>	Splay Dependent
<b>RMS (Average) Power Handling <sup>(1)</sup></b>	LF: 2 x 700 W, MF: 700 W, HF: 300 W
<b>On-Axis Sensitivity 1 W / 1 m</b>	LF: 99 dB SPL, MF: 104 dB SPL, HF: 112 dB SPL
<b>Rated Maximum Peak SPL at 1 m <sup>(2)</sup></b>	LF: 136 dB, MF: 139 dB, HF: 141 dB
<b>Transducers/Replacement Parts</b>	LF: 2 x 15GNR/GM 15G MF: 4 x 8MN/GM 8MN HF: 2 x M-75N/GM M-75N
<b>Nominal Impedance</b>	LF: 8 + 8 ohms, MF: 8 ohms, HF: 16 ohms
<b>Recommended Amplifier Power</b>	4 amps 2 x 1400 W @ 4 ohms (4 units aero 50)
<b>Enclosure Geometry</b>	Trapezoidal 5°
<b>Enclosure Material</b>	Birch Plywood
<b>Color/Finish</b>	Black Paint
<b>Rigging System</b>	Integrated in box design
<b>Connectors</b>	2 x NL8 wired as LF1±1, LF2±2, MF±3, HF±4
<b>Dimensions (H x W x D)</b>	47.5 x 135 x 62.7 cm (18.7 x 53.1 x 24.7 in)
<b>Weight</b>	85 kg (187 lb)
<b>Accessories</b>	AX-aero50 Bumper AX-Combo12 Rigging Adapter PL-50 Dolly Panel (included)

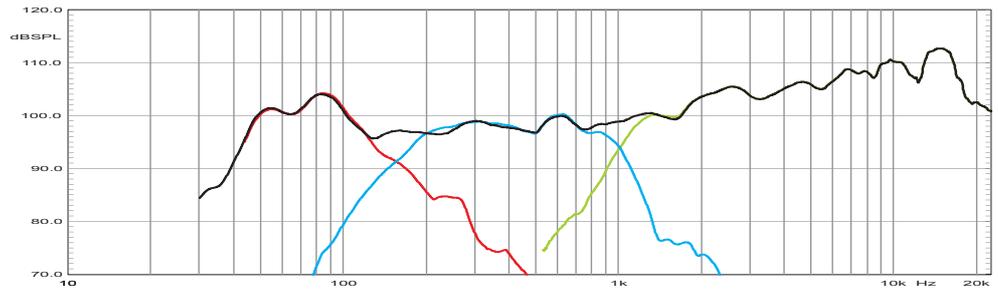
### Dimensions



<sup>1</sup> Corresponds to the AES power handling rating for the component, based on a 2 hour test using a 6 dB crest factor bandlimited pink noise signal.  
<sup>2</sup> Corresponds to the signal crests for the test described in<sup>1</sup>.

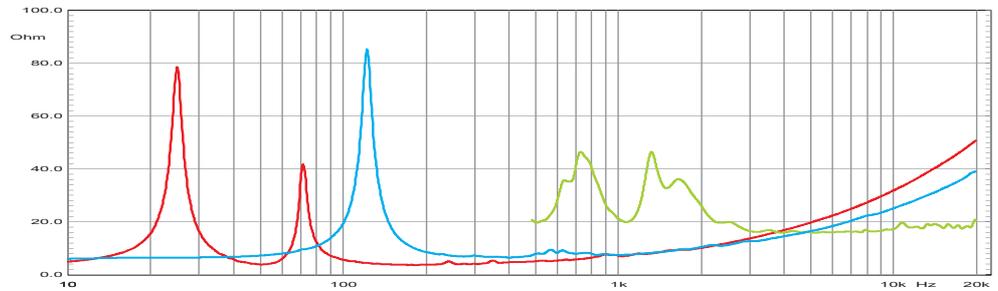
**Frequency Response**

Shows the frequency response at 1 m of a unit radiating to an anechoic environment and driven by a swept sine wave signal. 12 units DSP preset.



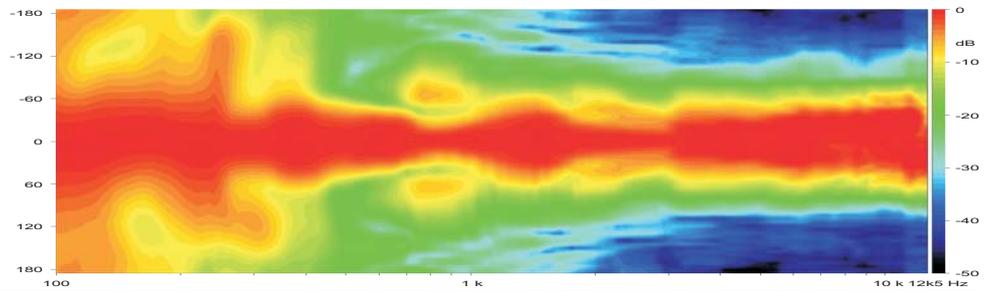
**Impedance**

Shows impedance curves for low (red), mid (blue) and high (green).



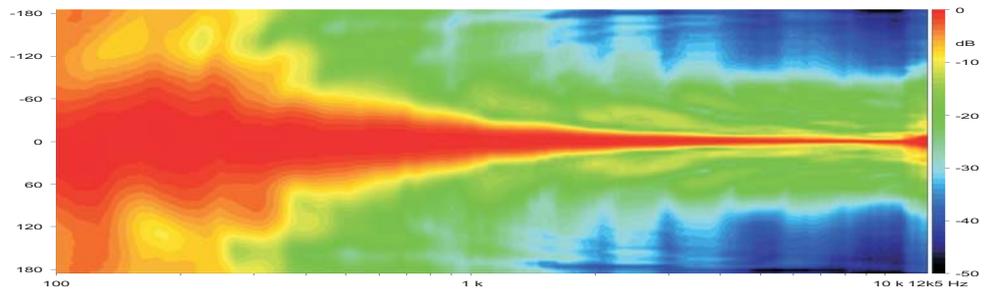
**Horizontal Directivity**

Shows normalized horizontal isobar plot.



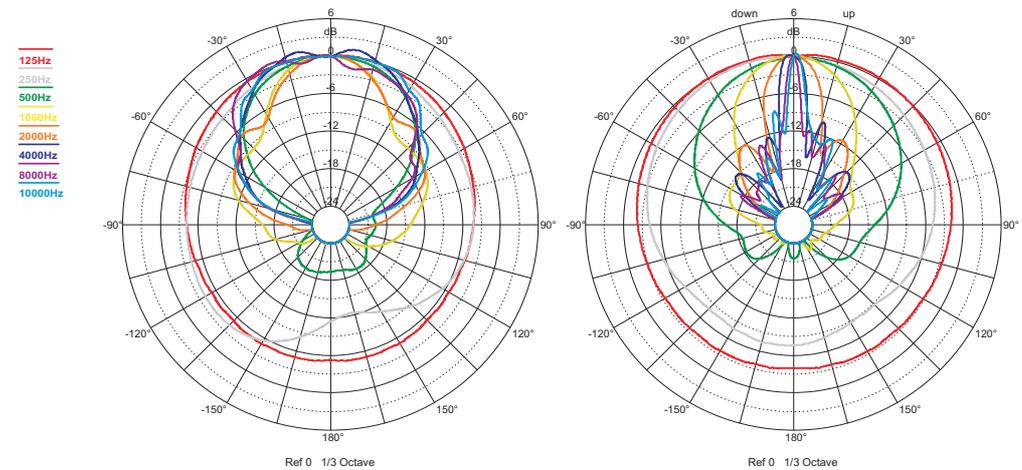
**Vertical Directivity**

Shows normalized vertical isobar plot.



**Polar Response**

Shows the 1/3 octave band horizontal (left) and vertical (right) polars for the indicated frequencies. Full scale is 30 dB, 6 dB per division.



NOTES. 1.Frequency response: referred to 1 m; low end obtained through the use of near field techniques; one-third octave smoothed for correlation with human hearing. 5.Polars were acquired by placing the unit on a computer controlled turntable inside our anechoic chamber. Measurement distance was 4 m.

Product improvement through research and development is a continuous process at D.A.S. Audio. All specifications subject to change without notice.