

aero 12A

Powered, bi-amplified
ultra compact line array module



- » **Bi-amplified 2-way system**
- » **500 W low frequency 3rd Generation Class D power amplifier**
- » **100 W high frequency 3rd Generation Class D power amplifier**
- » **12" neodymium speaker**
- » **3" diaphragm neodymium compression driver**

The Aero 12A is designed for use as a multi-box array in mid-sized live events where rapid deployment, precise coverage and high power are required.

The easily portable and rugged enclosure is manufactured using Birch plywood and finished with a durable black paint. The Aero 12A's trapezoidal shape and rear located splay angle adjusters keep the front spacing between adjacent elements the same, providing the array with a "seamless" front baffle, for improved array performance. The captive rigging system splay angles range from 0° to 10° in increments of 0.5° from 0° to 3° and increments of 1° from 3° to 10° allowing a wide range of column curvatures to be accomplished.

The loudspeaker components of the Aero 12A include a 12LN4C, 12" cone transducer and one M-75N neodymium compression driver with 3" titanium diaphragm. The driver is attached to a BPS-9010 aluminium waveguide-horn assembly.

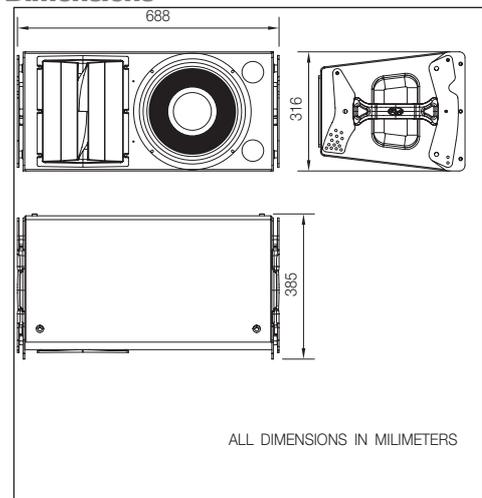
The two-way 3rd Generation Class D amplifier offers 500 W for the low frequency transducer and 100 W for the high frequency section. The amplifier provides extended bandwidth, improved dynamic range and exceptionally low distortion.

Signal processing is accomplished by way of a powerful 24 bit DSP providing unparalleled control over critical signal parameters.

Technical Specifications

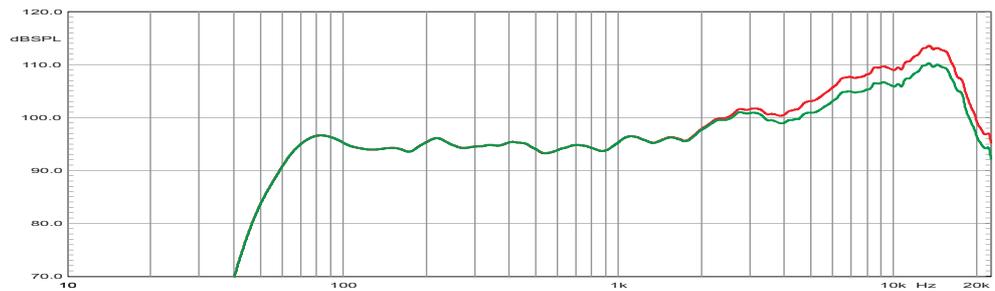
Low Frequency Power Amplifier	1000 W _{peak} - 500 W _{continuous}
High Frequency Power Amplifier	200 W _{peak} - 100 W _{continuous}
Input Type	Balanced Differential Line
Input Impedance	Line: 20 kohms
Sensitivity	Line: 1.95 V (+8 dBu)
On-axis Frequency Range (-10 dB)	63 Hz - 20 kHz
Maximum Peak SPL at 1 meter	134 dB
Nominal -6 dB Beamwidths	90° Horizontal Splay Dependent Vertical
Enclosure Material	Birch Plywood
Finish	Black Paint
Transducers/Replacement Parts	LF: 1 x 12LNC4/GM 12P4 HF: 1 x M-75N/GM M-75N
Connectors	INPUT: Female XLR LOOP THRU: Male XLR AC INPUT: PowerCon NAC 3 FCA AC OUTPUT: PowerCon NAC 3 DFCB
AC Power Requirements	115 V, 50 Hz/60 Hz 230 V, 50 Hz/60 Hz
Dimensions (H x W x D)	31.6 x 68.8 x 38.5 cm (12.4 x 27 x 15.2 in)
Weight	27 kg (59.4 lb)
Accessories (optional)	AX-aero12 Rigging Grid AX-Combo12 Rigging Adapter KITGS-AX-aero12 PL-12S Steel Stacking Dolly

Dimensions



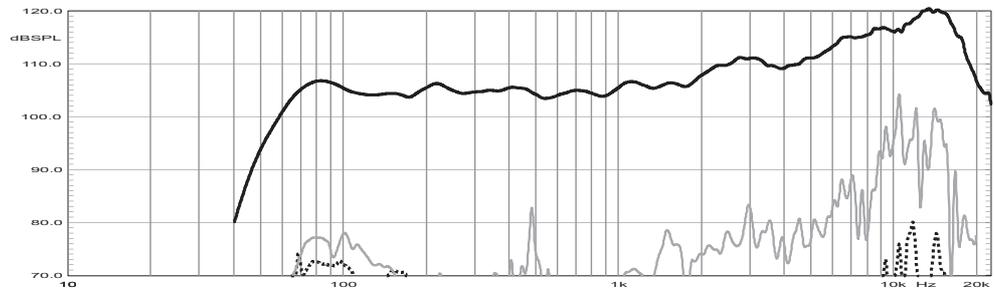
Frequency Response

Shows the frequency response at 1 m of a unit radiating to an anechoic environment and driven by a swept sine wave signal (-20 dBu input). Red (HF EQ. ON)



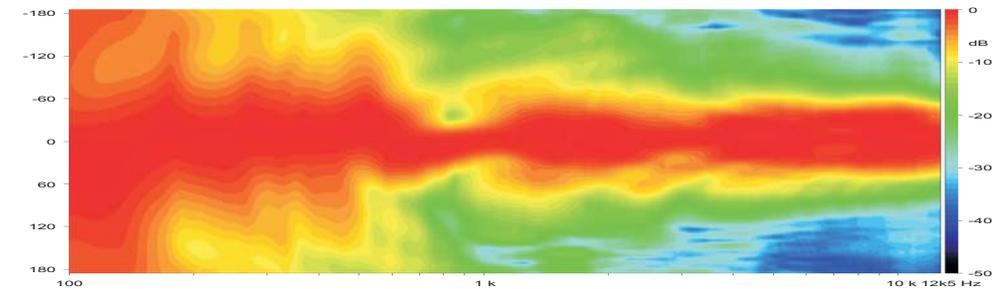
Distortion

Shows the Second Harmonic Distortion (grey) and Third Harmonic Distortion (dotted) curves for a unit driven by a swept sine wave signal (-10 dBu input).



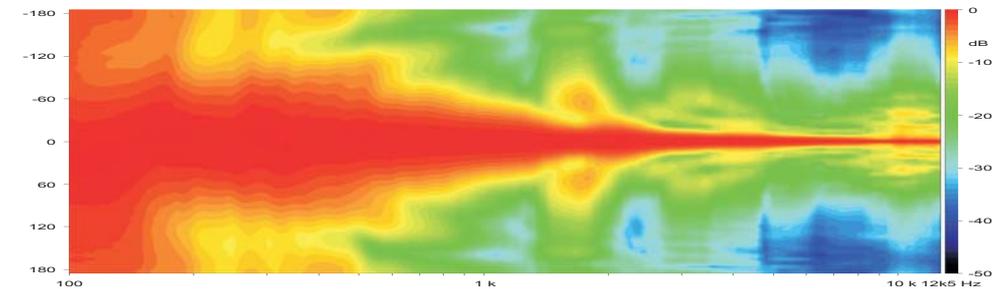
Horizontal Directivity

Shows normalized horizontal isobar plot.



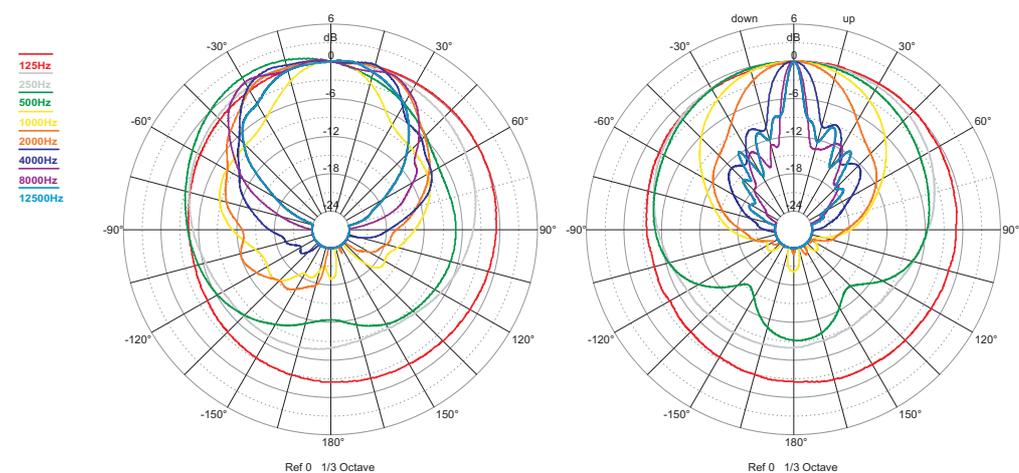
Vertical Directivity

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.