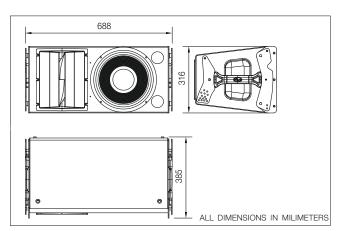
**EN54 CERTIFIED** aero series

# Aero 12

## **ULTRA COMPACT LINE ARRAY MODULE**







The Aero 12 is designed for use as a multi-box line 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 12's trapezoidal shape and rear located splay angle adjusters keep the front spacing between adjacent elements the same, for improved line array performance.

The captive rigging system splay angles range from 0° to 10° in 0.5° increments from 0° to 3° and 1° increments from 3° to 10° allowing a wide range of column curvatures to be accomplished.

The loudspeaker components of the Aero 12 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 wave-guide horn assembly.

## Technical Specifications

RMS (Average) Power Handling<sup>R</sup>: 400 W 800 W Program Power Handling<sup>P</sup>: Peak Power Handling<sup>k</sup>: 1600 W 62 Hz - 22 kHz On-axis Frequency Range: Nominal Impedance: 8 Ohms Minimum Impedance: 7,4 Ohms @ 140 Hz On-axis Sensitivity 1W/1m: 100 dB SPL Rated Peak SPL at Full Power: 132 dB SPL Nominal -6dB Beamwidths: 90° Horizontal x 10° Vertical Enclosure Material: Birch Plywood Colour/Finish: Black / Polyurea Transducers/Replacement Parts: LF: 1 x 12LNC/GM 12P HF: 1  $\times$  M75N/GM M-75N Connector: Two paralleled NL4MD Speakon, wired ±1 **Dimensions (H x W x D):** 31,6 x 68,8 x 38,5 cm 12,4 x 27 x 15,2 in Net Weight: 27 kg (59.5 lb) Optional Accessories: AX-aero12 Rigging Grid AX-Combo12 Rigging Adapter PL-12S Steel Transporting Dolly DSP2060A EQ: Frequency Q Gain 6k11 0.5 -5 2k52 4.3 -2.9

6k47

14k3

-3

-5

6.7

## EN54-24 Based Technical Specifications

Nominal Power T: 250 W On-axis Frequency Range (-10dB): 62 Hz - 22 kHz Nominal Impedance: 8 Ohms Minimum Impedance: 7,4 Ohms @ 140 Hz On-axis Sensitivity 1w/4m<sup>F,S</sup>: 81,4 dB Measured Maximum SPL at 4m <sup>M</sup>: 107 dB Horizontal Coverage Angles (-6dB)°: 500Hz, 132°. 1kHz, 91°. 2kHz, 95°. 4kHz, 91°. Vertical Coverage Angles (-6dB)°: 500Hz, 144°. 1kHz, 84°. 2kHz, 40°. 4kHz, 20°. Enclosure Material: Birch Plywood Colour/Finish: Black / Polyurea Transducers/Replacement Parts: LF: 1x 12LNC/GM 12P HF: 1x M75N/GM M-75N Weather Resistant Level: Covered Exposure Environmental Type: Type B Connector: Two paralleled NL4MD Speakon **Dimensions (H x W x D):** 31,6 x 68,8 x 38,5 cm 12,4 x 27 x 15,2 in Net weight: 27 kg (59,5 lb) Optional Accessories: AX-aero12 Rigging Grid, AX-Combo12 Rigging Adapter, PL-12S Steel Transporting Dolly DSP2060A EQ: Frequency Q Gain [Included processing for 1box flat response] 0,5 6k11 -5 2k52 4,3 -2,9 6k47 4 -3 14k3 6,7 -5

\*Based on a 2 hour test using a 6dB crest factor pink noise signal.

Conventionally, 3dB higher than RMS measure, although this already, utilizes a program

signal.  $^{\rm K}$ Corresponds to the signal crests for the test described in  $^{\rm R}$ .

Nominal Power based on a 100h test using a 6dB crest factor pink noise signal filtered according to the IEC 60268-1:1985 norm and band-pass filtered with Butterworth 24dB/Oct filters from 89Hz to 11,2kHz.

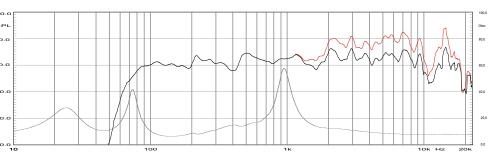
Sensitivity and Max SPL measured using a 6dB crest factor pink noise, averaged from 100Hz to 10kHz in 1/3 Octave bands. \*\*Coverage measured from 500Hz to 4kHz in Octave bands.

MObtained by integration over a period of at least 30s.

Aero 12 aero series

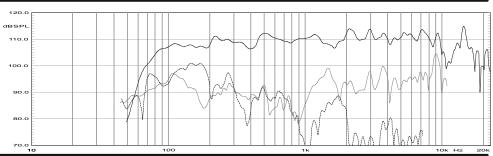
#### **Frequency Response**

Shows the frequency response at 4 m of a unit radiating to an anechoic environment  $(4\pi)$  and driven by a 1 W (2,83 V) swept sine signal, and impedance curve. For better detail, only light smoothing (1/12th Octave) has been used. Red curve, without EQ. Black curve, equalised as per EQ shown in the Technical Specifications chart



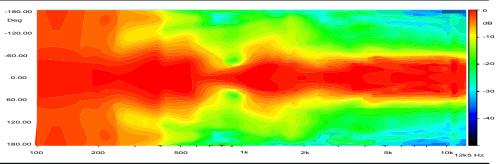
#### **Distortion**

Shows the Second Harmonic Distortion (grey) and Third Harmonic Distortion (dotted) curves (rised 20dB for clarity) for a unit driven at 10% of its RMS Power handling.



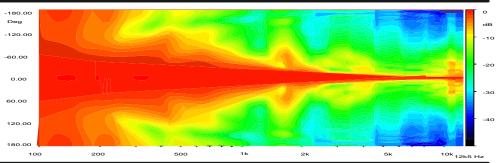
#### **Directivity**

Shows normalized horizontal isobar plot.



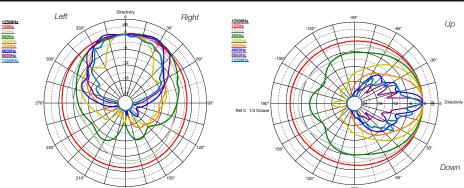
#### **Directivity**

Shows normalized vertical isobar plot.



#### **Polar Response**

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



NOTES: Frequency response measured at 4m (13,12ft). For better detail, only light smoothing (1/12th octave) has been used. Polars were acquired by placing the unit on a computer controlled turntable inside a 300 m³ (10594 ft³) anechoic chamber. Measurement distance is 4m (13,12ft).

Reference Axis: Axis is on the centre of the grille surface and perpendicular to the grille surface. Reference plane: Plane is on the grille surface and perpendicular to the reference axis. Horizontal plane: Plane is containing the reference axis and perpendicular to the reference plane Product improvement through research and development is a continuous process at D.A.S. Audio. All specifications subject to change without notice.

