aero 40A

Powered, tri-amplified compact line array module





- » Tri-amplified 3-way system
- » 4000 W Class D power amplifier
- » Powerful DSP with Brickwall FIR Filters
- » Remote monitoring and control via DASnet™
- » New SERPIS BPS-2912 high frequency plane wave generator

The Aero 40A is a 3-way powered line array system which incorporates connectivity for remote monitoring and control. The unique configuration of the Aero 40A Advanced Line Array System (ALAS™) incorporates a rear-loaded 12" transducer in a bass-horn configuration for low-end reproduction. The mid-range is handled by the 8AN4 transducer developed specifically for the Aero 40A. High frequency reproduction relies on two D.A.S. M-75N compression drivers attached to a BPS-2912 waveguide.

The three channel, high efficiency Class D amplifier design is equipped with a switch mode power supply (SMPS) and a comprehensive protection package for both the amplifier as well as the components. Channel

one powers the low frequency way, channel two the midrange with channel three powering the high frequency drivers. The Aero 40A incorporates the latest in digital signal processors. Brick wall FIR filters provide perfect alignment between ways achieving exceptionally uniform coverage all the way down to the crossover point.

Top-of-the-line AD/DA converters have been employed allowing for significant improvements in dynamics, lower distortion and ultra-low noise levels. Remote monitoring and control is provided by way of DASnet™, the audio management application for D.A.S. powered cabinets and processors which offers users instant and intuitive view of the system status as well as control over a range of parameters of a single cabinet or a network of them.

Dimensions

Technical Specifications

Dimensions (H x W x D)

Accessories (optional)

Weight

Low Frequency Power Amplifier 2000 W_{peak} - 1000 W_{continuous} Mid Frequency Power Amplifier 1000 W_{peak} - 500 W_{continuous} 1000 W_{peak} - 500 W_{continuous} **High Frequency Power Amplifier** Input Type Balanced Differential Line Input Impedance Line: 20 kohms Sensitivity Line: 6.2 V (+18 dBu) On-axis Frequency Range (-10 dB) 60 Hz - 20 kHz Maximum Peak SPL at 1 meter 138 dB Nominal -6 dB Beamwidths 90° Horizontal - Splay Dependent Vertical **Enclosure Material** Birch Plywood Finish Black/ISO-Flex Paint Transducers/Replacement Parts LF: 1 x 12GNRC/GM 12G MF: 1 x 8AN4/GM 8AN4 HF: 2 x M-75N/GM M-75N Connectors Audio INPUT: Female XLR Audio LOOP THRU: Male XLR Audio + Data INPUT: etherCON Audio + Data LOOP THRU: etherCON AC INPUT: powerCON TRUE 1 AC OUTPUT: powerCON TRUE 1 115 V, 6 A, 50 Hz/60 Hz **AC Power Requirements**

> 230 V, 3 A, 50 Hz/60 Hz 31.5 x 94.2 x 40 cm

12.4 x 37.1 x 15.75 in

AX-aero40 / Pick up AX-aero40 / PL-40S

68 kg (149.6 lb)

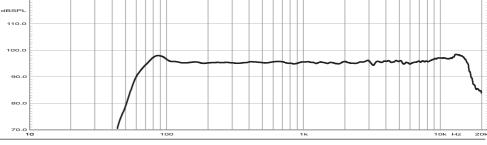
ALL DIMENSIONS IN MILIMETERS

aero 40A aero series²

Frequency Response

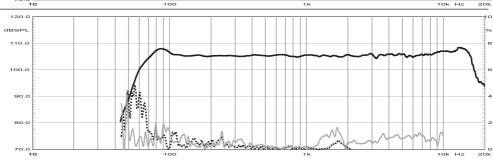
120.0

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).



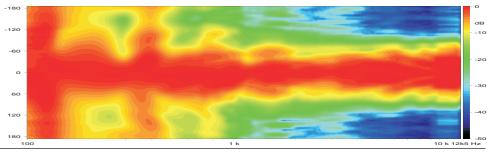
Distortion

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).



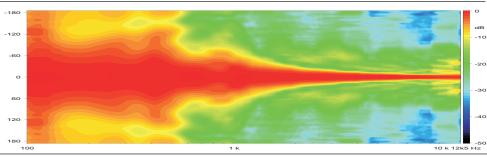
Horizontal Directivity

Shows normalized horizontal isobar plot.



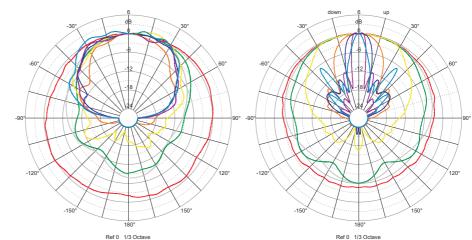
Vertical Directivity

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.



125Hz

500Hz

4000Hz