

aero 20A

Powered, bi-amplified
compact line array module



- » Bi-amplified 2-way system
- » 1200 W Class D power amplifier
- » Powerful DSP with Brickwall FIR Filters
- » Remote monitoring and control via DASnet™
- » New SERPIS BPS-1912 high frequency plane wave generator

The Aero 20A is a compact line array system which incorporates D.A.S.'s latest technical achievements in transducer design, power electronics and system management.

The low-mid range incorporates a new D.A.S. 12AN4 loudspeaker optimized to provide high output and reliability. High frequency response relies on a compression driver-waveguide assembly developed for the Aero 20A. The M-75N compression driver employs a powerful neodymium magnet structure, a titanium diaphragm and 75 mm (3") voice coil. The M-75N is attached to a new aluminum waveguide that has been designed to be free of resonances and provide a natural sound.

The Aero 20A 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.

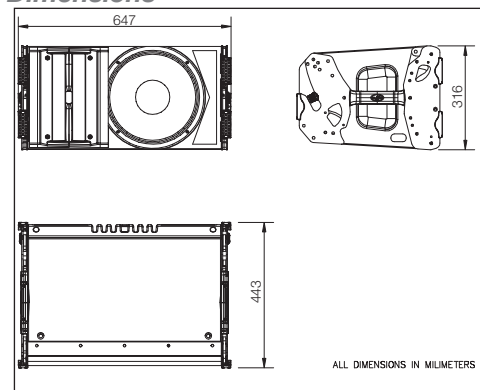
Top-of-the-line AD/DA converters have been employed allowing for significant improvements in dynamics, lower distortion and ultra-low noise levels. Remote monitoring and control is provided by way of DASnet™.

A new captive rigging mechanism enhances ease-of-use by allowing angle selection to be made while stacked on the transport dolly.

Technical Specifications

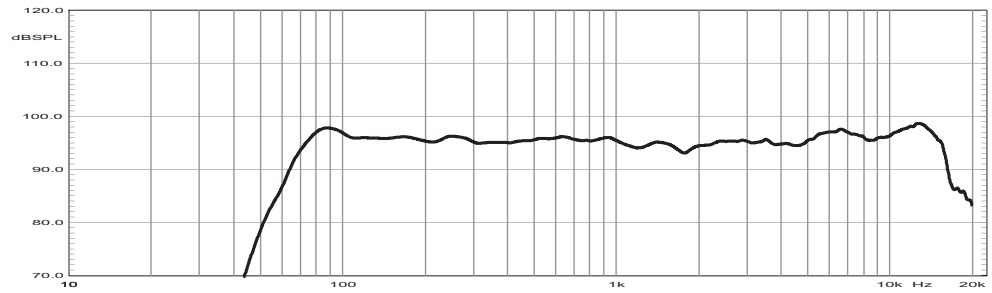
Low-mid Frequency Power Amplifier	1600 W _{peak} - 800 W _{continuous}
High Frequency Power Amplifier	800 W _{peak} - 400 W _{continuous}
Input Type	Balanced Differential Line
Input Impedance	Line: 20 kohms
Sensitivity	Line: 4.9 V (+16 dBu)
On-axis Frequency Range (-10 dB)	60 Hz - 20 kHz
Maximum Peak SPL at 1 meter	136 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 12AN4/GM 12AN4 HF: 1 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
AC Power Requirements	3.6 A, 115 V, 50 Hz/60 Hz 1.8 A, 230 V, 50 Hz/60 Hz
Dimensions (H x W x D)	31.7 x 64.7 x 44.3 cm; 12.4 x 25.2 x 17.3 in
Weight	33.1 kg (72.82 lb)
Accessories (optional)	AX-aero20 / AXS-aero20 / Pick-Up AX-aero20 / PL-20S / Fun-4aero20 / AX-combo2040

Dimensions



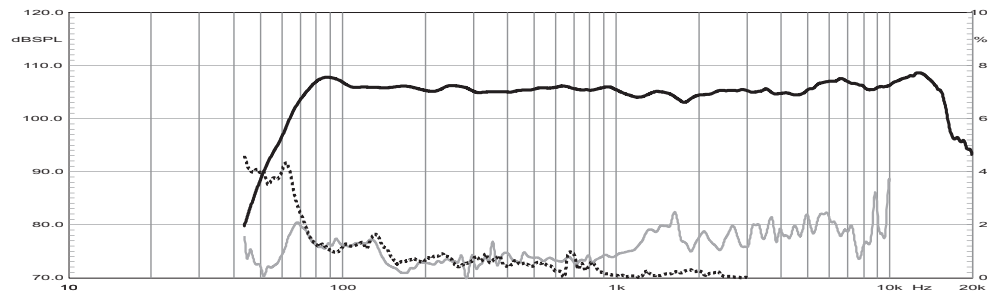
Frequency Response

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 - 1 unit MT preset).



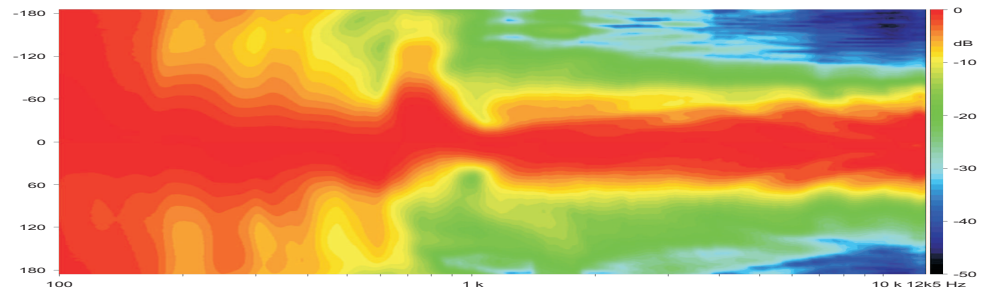
Distortion

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).



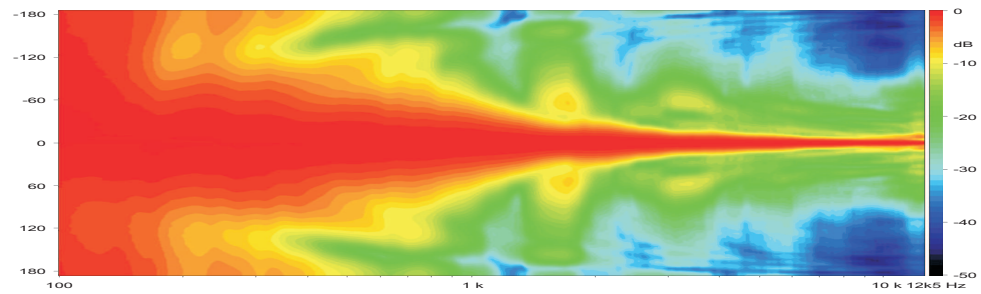
Horizontal Directivity

Shows normalized horizontal isobar plot.



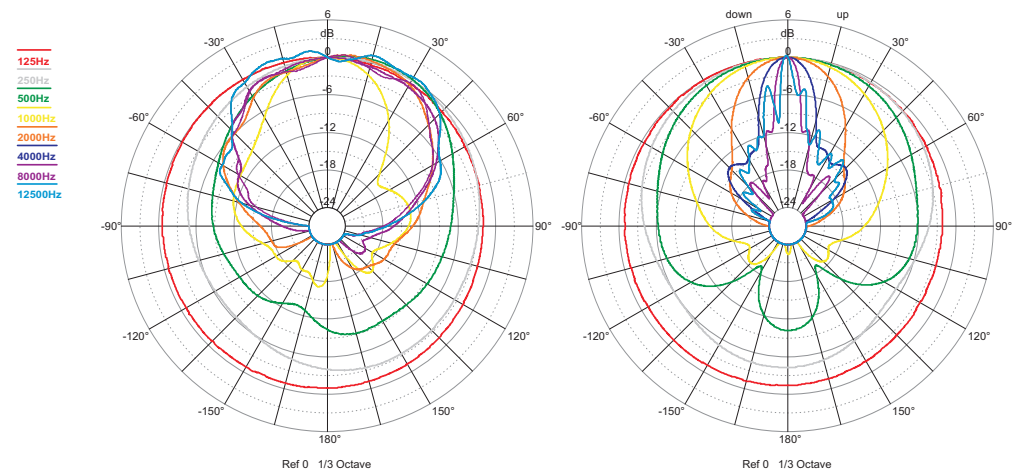
Vertical Directivity

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.