



# *æro 20A*

Advanced Line  
Array System





## INTRODUCTION

The third generation of Aero line array systems was born with the introduction of the Aero 40A Advanced Line Array System (ALAS™). Heralding a new era in sonic excellence and line array design, the Aero 40A broke away from the conventional to quickly become a benchmark for performance, reliability and user friendliness.

The Aero 20A is a new compact line array system which incorporates the ALAS™ philosophy and draws from the astounding success of the “all-purpose” capabilities of the Aero 12A, launched in 2009. The powered Aero 20A incorporates D.A.S.’s latest technical achievements in transducer design, power electronics and system management. This completely new system evidences D.A.S.’s commitment to provide users with more powerful, more compact and practical systems.





## AMPLIFIER

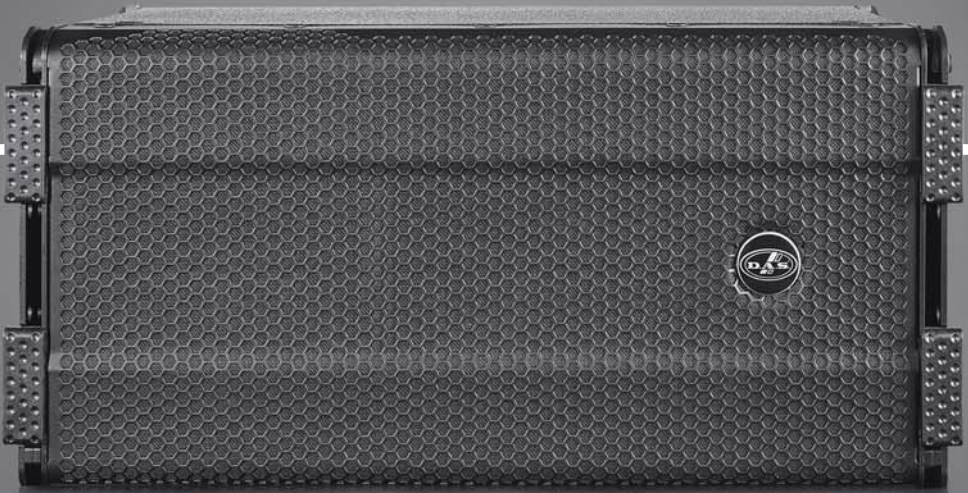
The Aero 20A is powered by an advanced electronics package comprising a Class D amplifier that combines the power supply, output stage and connectors in a compact, lightweight chassis. The two channel amplifier employs the latest in switch mode technology and offers maximum performance, high predictability and immunity from intermodulation artifacts thanks to the innovative design of the Pulse Width Modulation controller.

Optimized performance and reduced consumption are achieved as a result of the cutting-edge single-stage Power Factor Correction and low standby power requirements of just 0.5 W. Universal mains voltage selection and a complete set of protections allows the systems to be used safely, anywhere in the world.

The Aero 20A incorporates the latest in digital signal processors. Brick wall FIR filters have been used to provide perfect alignment between ways achieving exceptionally uniform coverage all the way down to the crossover point. The top-of-the-line AD/DA converters employed allow for significant improvements in dynamics, lower distortion and ultra-low noise levels.

System “presets” depending on the number of units in the array and the throw required can be configured via the amp’s rear panel, or remotely via DASnet™. The long-throw processing increases the system’s useful coverage area by providing balanced sound even at long distances.





## CABINET

The Aero 20A is constructed using Birch plywood and finished with the ISO-flex coating offering excellent protection and durability. Two injected aluminum assemblies attached to the front of the cabinet comprise the high frequency waveguide and the carrier for the 12" woofer.

The assemblies also dissipate heat from the components, reducing power compression.

An aluminum heat sink housing the amplifier and related electronics is attached to the rear of the cabinet.

A new captive rigging mechanism designed to provide enhanced ease-of-use, allows angle selection to be made while stacked on the transport dolly. A locking system can be triggered to secure angles between adjacent enclosures during the stacking and lifting procedures. Safe rigging and precise aiming is achieved thanks to the AX rigging system and the low-profile fly-bar that reduces the space needed between the upper rigging point and the top of the array.



# COMPONENTS

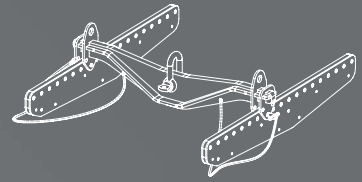
The Aero 20A incorporates a new D.A.S. 12" loudspeaker optimized to provide high output and reliability. A light aluminum voice coil bonded to a new fiberglass reinforced cone, an optimized magnet circuit, and a new suspension design, have contributed significantly to the exceptional performance of the 12AN4 in terms of distortion, power handling and maximum SPL. The 12AN4's new voice coil venting scheme is particularly effective in dissipating voice coil heat providing the speaker with a high thermal rating and low power compression.

The high frequencies rely 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.

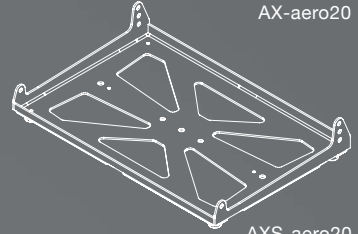


4 X *aero* 20A STACKED ON PL-20S

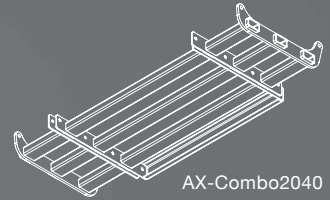
Model	<i>aero 20A</i>
Nominal LF Power Amplifier	<b>800 W (Class D)</b>
Nominal HF Power Amplifier	<b>400 W (Class D)</b>
Input Type	<b>Balanced Differential Line</b>
Input Impedance	<b>Line: 20 kohms</b>
Sensitivity	<b>Line: 6.2 V (+18 dBu)</b>
Frequency Range (-10 dB)	<b>60 Hz -20 kHz</b>
Horizontal Coverage (-6dB)	<b>90° Nominal</b>
Vertical Coverage	<b>Splay Dependent</b>
Rated Maximum Peak SPL at 1 m <sup>(1)</sup>	<b>136 dB</b>
Transducers/Replacement Parts	<b>LF: 1 x 12AN4/GM 12AN4 HF: 1 x M-75N/GM M-75N</b>
Enclosure Geometry	<b>Trapezoidal 3,5°</b>
Enclosure Material	<b>Birch Plywood</b>
Color/Finish	<b>Black ISO-flex Paint</b>
Rigging System Splay Angles	<b>Integrated in box design</b>
Connectors	<b>Audio INPUT: Female XLR Audio LOOP THRU: Male XLR Audio + Data INPUT: EtherCon Audio + Data LOOP THRU: EtherCon AC INPUT: PowerCon TRUE1 NAC3FX AC OUTPUT: Powercon TRUE1 NAC3MX</b>
AC Power Requirements	<b>3.6 A, 115 V, 50 Hz/60 Hz 1.8 A, 230 V, 50 Hz/60 Hz</b>
Dimensions (H x W x D)	<b>31.7 x 64.7 x 44.3 cm 12.4 x 25.2 x 17.3 in</b>
Weight	<b>34.5 kg (75.9 lb)</b>
Accessories	<b>AX-aero20 Rigging System AXS-aero20 Stacking Support AX-Combo2040 Rigging Adapter PL-20S Stacking Dolly Pick-Up AX-aero20</b>



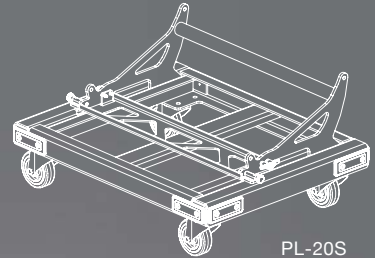
AX-aero20



AXS-aero20



AX-Combo2040



PL-20S

1. Maximum calculated Peak SPL based on sensitivity and RMS power handling.

Product improvement through research and development is an ongoing process at D.A.S. All specifications are subject to change without notice.

# DASnet

## REMOTE MONITORING AND CONTROL

The Aero 20A is DASnet™ capable, allowing for remote monitoring and control by way of DASnet™, the audio management application for D.A.S. powered cabinets and processors.

The optional DASnet™ rack provides a convenient way to route audio, monitoring and control data as well as power to different zones.



DASnet™ RACK

The Aero 20A provides the high performance live sound market with a cutting-edge product. Delivering outstanding sonic quality, user friendliness and durability, the Aero 20A reinforces D.A.S.'s reputation for products built to perform flawlessly throughout years of life on the road.

Exceptional products and full factory support aimed at providing solutions for the challenges faced by audio professionals all over the globe, have made D.A.S. one of the world's most respected brands.



**aero 20A**

[www.dasaudio.com](http://www.dasaudio.com)

**D.A.S Audio, S.A.**

C/ Islas Baleares, 24  
46988 Fuente del Jarro  
Valencia - Spain  
Tel. +34 961 340 860

**D.A.S Audio of America, Inc.**

6900 NW 52nd Street  
Miami, FL 33166 - U.S.A.  
Toll Free: 1 888 DAS 4 USA

**D.A.S Audio Asia PTE. LTD.**

25 Kaki Bukit Crescent #02-00  
Kaki Bukit Techpark, 1  
Singapore 416256  
Tel. +65 6742 0151



**PORT SPONSOR**

**VOLVO  
OCEAN  
RACE**

ROUND THE WORLD

**ALICANTE**