



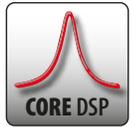
AXIOM



Drop-in  
on the  
wings  
of  
Sound

AX800A NEO





# AX800A NEO

Dual 8", High Output, Powered, CORE Processed, Two-Way Line Array Element

**AX800A NEO** is an evolution of the renowned and appreciated **AX800A**, thanks to the introduction of several new technologies combined to the well-known features of its predecessor. It represents a new standard of molded PP enclosure line arrays as it combines superior sound quality, high SPL, innovative look and technologies, ease of use, lightness and **energetic efficiency** but still in a cost-effective way, to bring a higher level of Line arrays to a wide range of users.



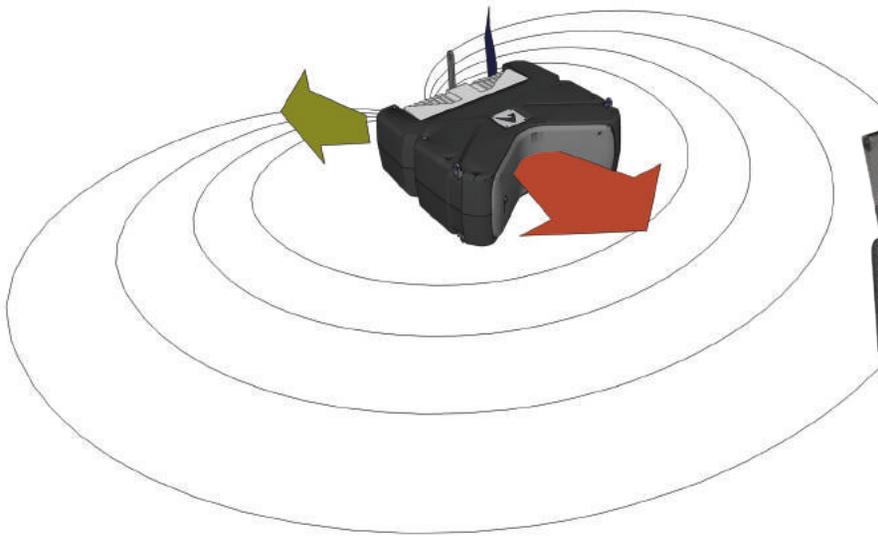
## HF TRANSDUCER

The high frequency range is reproduced by a low distortion titanium diaphragm compression driver with neodymium magnet and edge-wound 2.5" voice coil, loaded by an acoustic transmission line waveguide.

The exceptionally lightweight high frequency diaphragm features also a very low mechanical resonance that is outside of the pass band which allows a low crossover point of 900Hz.

## LF TRANSDUCER

Two 8" neodymium woofers with very lightweight cones ensure fast response at bass and mid-bass frequencies. They are back-loaded by a new Aerodynamic Transmission Line design for clean mid-bass, natural cardioid, minimized enclosure resonances and absence of "boxy" mid-bass sound commonly obtained from regular bass-reflex enclosures.

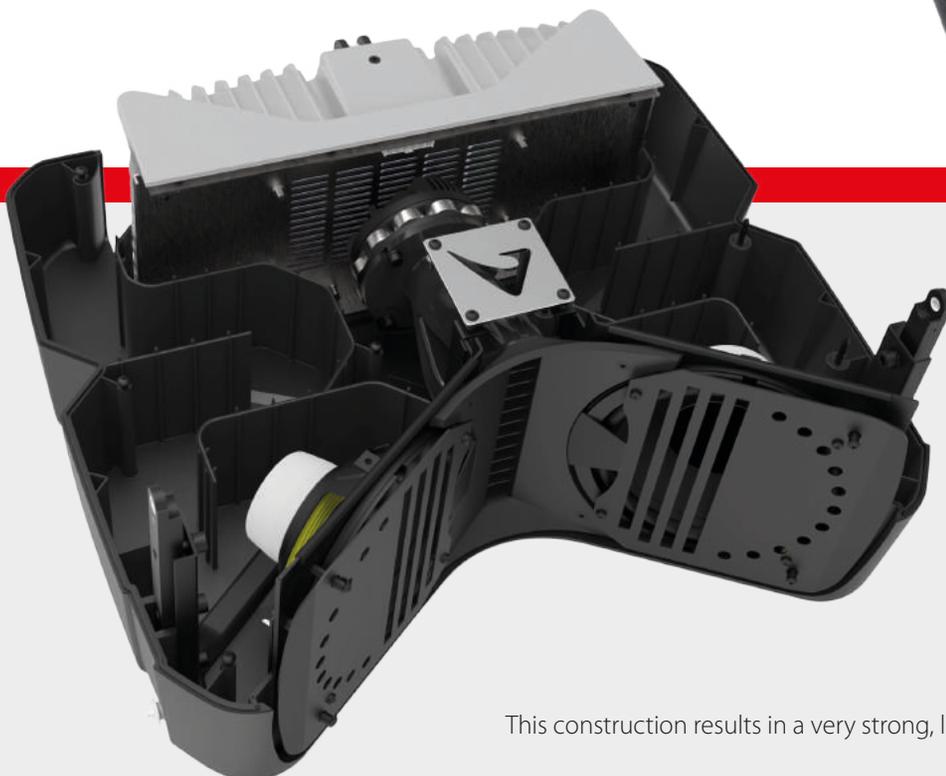


The rigging hardware is fully integrated, making it easy to transport and use, as well as offering the benefits of good protection against harsh environmental conditions.

## CONSTRUCTION

The AX800A NEO enclosure is manufactured from structurally rigid polypropylene, internally ribbed to entirely eliminate cabinet resonances, and providing the precise transmission line back loading to the two 8" woofers without the need for additional internal panels.

The positioning of the amplifier module between the outlets of the two rear ducts provides an additional level of cooling.



This construction results in a very strong, lightweight, and sonically neutral cabinet.

## POWER AMPLIFIER

The AX800A NEO is powered by an extremely compact and lightweight CLASS D power amplifier with SMPS and PFC. The innovative technology used for these amplifiers offers top-of-the range performances.

PFC power supply with automatic mains voltage selection for worldwide operation, guarantees reliability, consistency with a very high efficiency and low power consumption.



Mains power is connected through a locking Neutrik PowerCON system, which includes a Power Out connector allowing mains power to be linked to additional cabinets.

## SIGNAL PROCESSING

The system processing is based on the new CORE2 DSP platform designed by the PROEL R&D Laboratories using one of the most advanced SHARC DSP devices available for audio applications.

It features 40bit, floating point resolution and top-quality 24-bit AD/DA converters for perfect signal integrity, dynamic range in excess of 110dB, and superior sonic performance.

Thanks to its massive processing power, the CORE platform is capable of providing the most sophisticated algorithms for speaker processing, including linear phase FIR filters, together with comprehensive remote control and networking capabilities.



The PRONET AX control software, working on a solid and reliable CANBUS based network protocol, provides an intuitive interface for the remote control of the whole audio system via the rear panel etherCON RJ45 connectors, with the possibility to equalise and delay individual devices, as well as setting driver protection parameters, and monitoring the status of the amplifier.

Four factory DSP presets are provided for when the AX800A NEO cabinets are not connected to a network, and allow for rapid and simple setup:

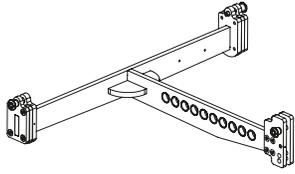
- Standard
- Long Throw
- Down-fill / Single Box
- User - for specific situations when off-line



# ACCESSORIES

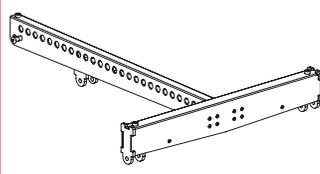
## KPTAX800

Flying Bar for up to 4 x AX800A



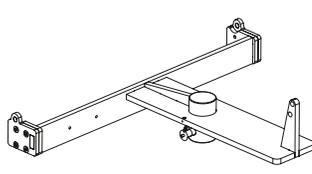
## KPTAX800L

Flying Bar for up to 12 x AX800A



## KPTAX8

Pole adapter for AX800A



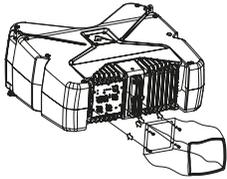
## DHSS10M20

Sub-Speaker spacer with M20 screw



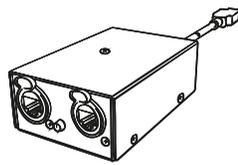
## RAINCOV800

Rain cover for AX800A



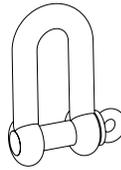
## USB2CAND

Dual Output USB to CAN converter



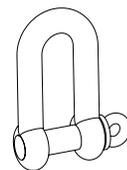
## PLG714

Steel Shackle for KPTAX800



## PLG716

Steel Shackle for XPTAX800L



### TECHNICAL SPECIFICATIONS

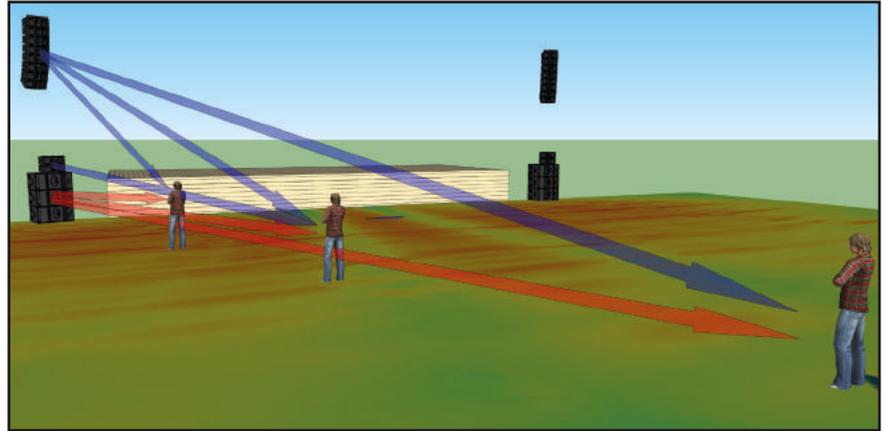
Frequency Response ( $\pm 3\text{dB}$ )	85 Hz – 16.8kHz (Processed)
Horizontal/ Vertical Coverage Angle	100° x 10° (-6dB)
Maximum Peak SPL @ 1m	133.5 dB
<b>TRANSDUCERS</b>	
LF	Two 8" neodymium woofers, 2" voice coil, 8 $\Omega$ each, paralleled
HF	1.4" neodymium driver, 2.5" edge-wound voice coil, titanium diaphragm, 8 $\Omega$
<b>ELECTRICAL</b>	
Signal Processing	CORE2 processing, 40bit floating point SHARC DSP, 24 bit AD/DA converters
Remote Controls	PRONET AX control software
Network Protocol	CANBUS
Amplifier Type	Class D with SMPS
Output Power	800W + 400W
Mains Voltage Range (Vac)	100 - 240V 50/60Hz with PFC
<b>ENCLOSURE &amp; CONSTRUCTION</b>	
Dimensions (W x H x D)	600 mm (23.6") x 265.5 mm (10.5") x 516 mm (20.3")
Enclosure Material	Polypropylene
Net Weight	22.5 Kg (49.6 lbs.)

The essence  
of Sound

# APPLICATIONS

To fully extend low frequency response, the **AX800A NEO** can be combined to many different AXIOM Subwoofers thanks to the new factory presets featuring harmonized subwoofer phase responses and excellent mutual-coupling.

This allows totally free combinations among AXIOM's Line Array and Subwoofer models.

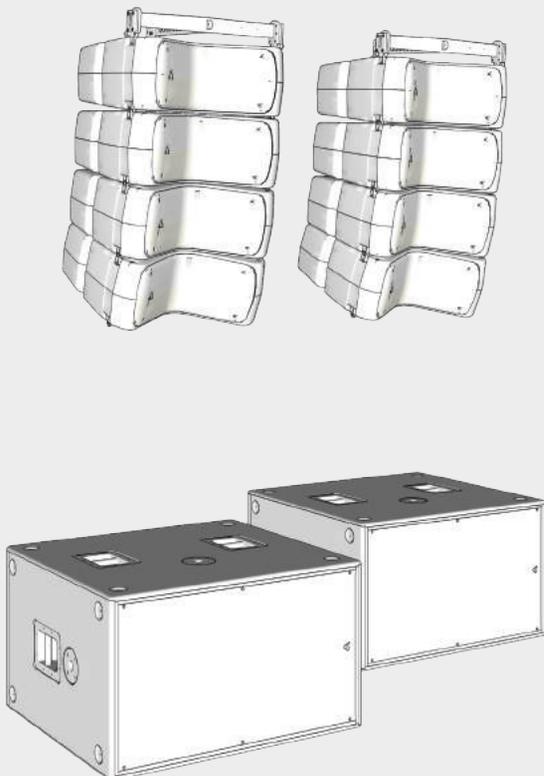


## SW1800A

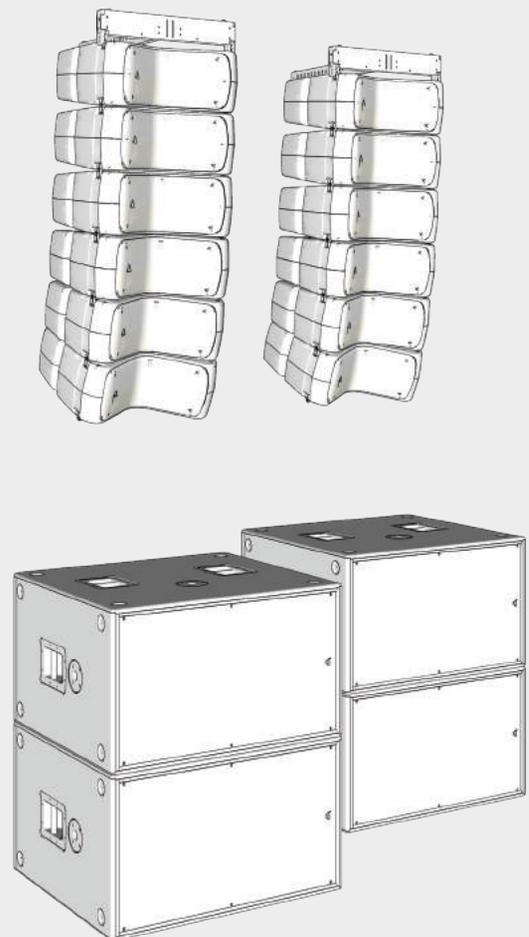
Compact dual 18", manifolded bandpass design 1000W + 1000W continuous power.

SW1800A can be used with AX800A NEO in a recommended 4:1 ratio for basic/multipurpose setups or 3:1 for more demanding gigs.

## 4:1 RATIO



## 3:1 RATIO



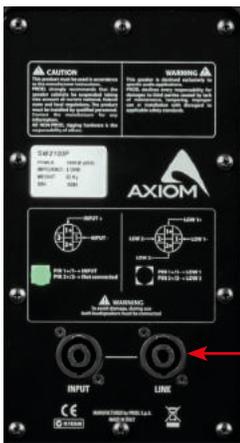


**SW2100A**

High Output, Ultra-Compact 21", 4000W Subwoofer

- 2000W used to drive its internal 21" Woofer
- 2000W used to drive an external SW2100P 21" Subwoofer

*To make SW2100A able to drive SW2100P, specific Presets must be requested to the AXIOM technical support*

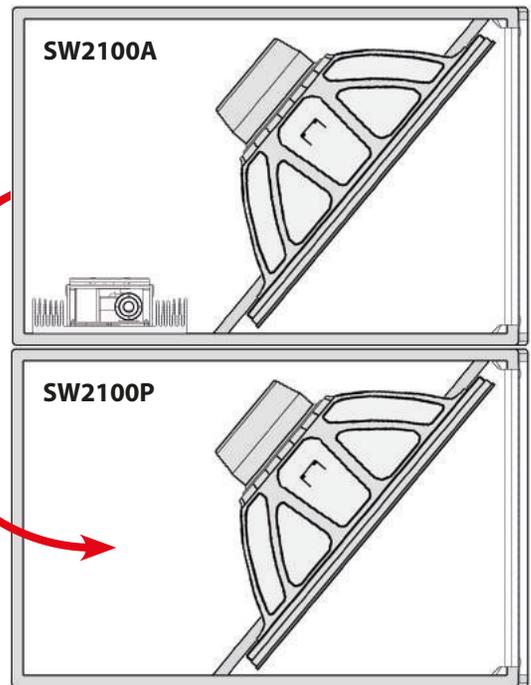


**SW2100P**

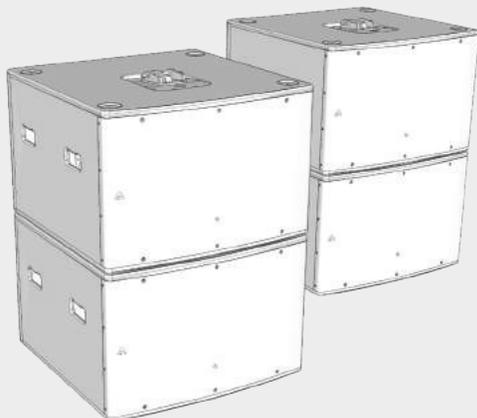
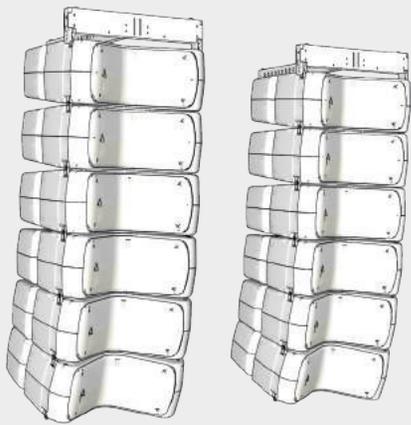
Passive



**SW2100A**  
Self-Powered



**3:1 RATIO**



AX800A NEO combined to SW2100A + SW2100P is an innovative, highly scalable and very powerful solution.

Subs and line array elements are all provided by PFC power supply





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