

 **ADAMSON**  
BUILT. STRONG.

E-Series  
Full Line Brochure







At Adamson, we believe that loudspeakers need to be built from the ground up. This means having total control over every aspect of the design and manufacturing process. The E-Series is the culmination of decades of research that has allowed us to deliver the highest performing, large format line array on the planet.

At the heart of the E-Series is the E-Capsule. It houses the patented Co-Linear Drive Module - a revolutionary dual chamber waveguide concept capable of virtually eliminating mid-frequency lobing in line source designs. The patented Autolock™ rigging system is mounted to this core rather than the cabinet exterior. One engineer can set angles and hoist the system in tight quarters using the smallest and lightest rigging frame in the industry. In true Adamson tradition, Kevlar cones are essential to the design and a part of an unmistakable sonic signature of unmatched vocal clarity, power and punch.

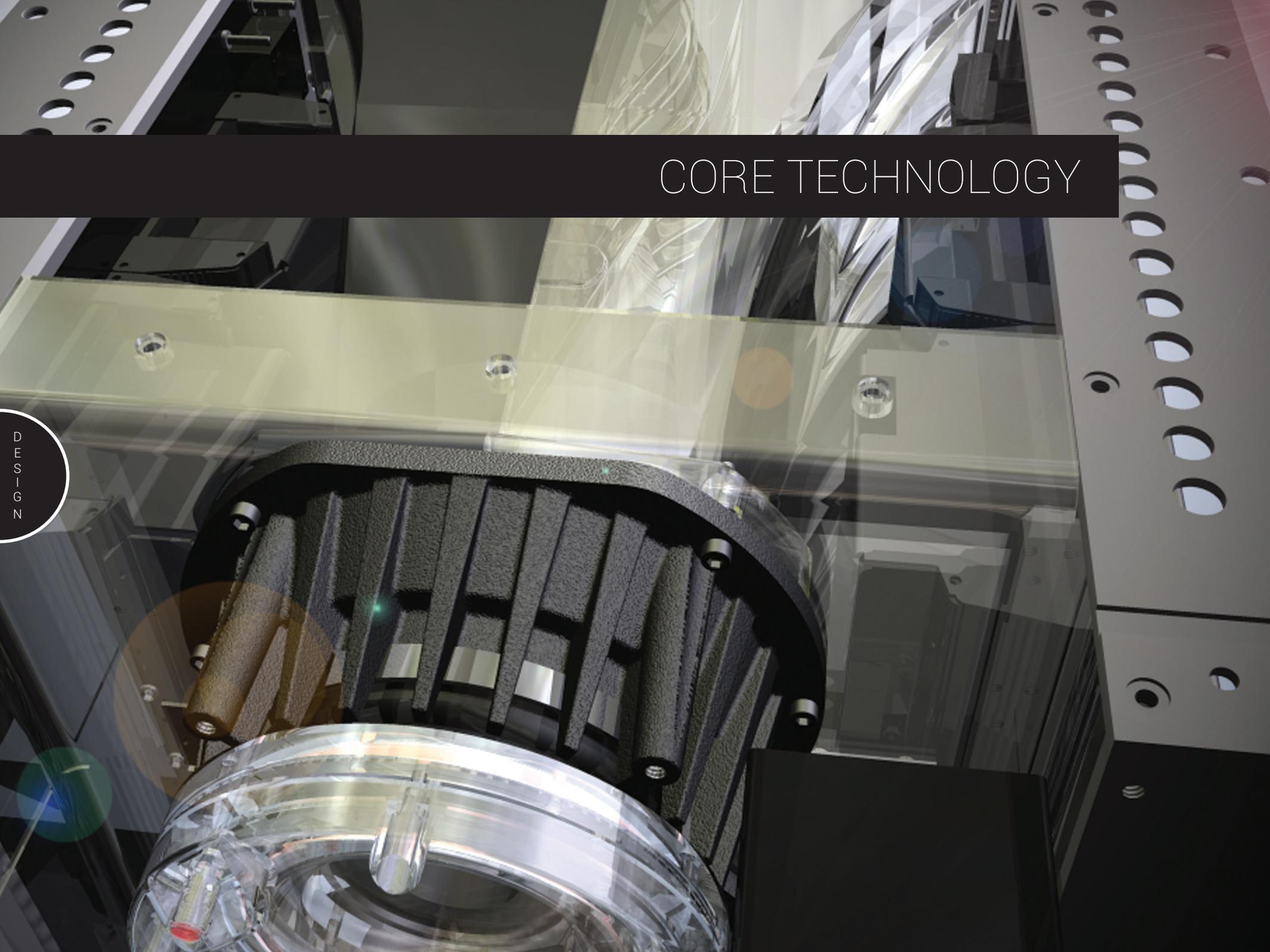
We've set the modern touring standard by using only rugged, durable and light weight materials. From Marine Grade Baltic birch to Air Craft Grade aluminium and Kevlar Neodymium drivers. The entire system is designed to maximize use of space in a standard North American or European truck pack. It features the fastest and most intuitive rigging system available. System owners can rest assured that their investment will perform, last and give them the most efficient pack for their clients.

The sum of the line is more than the combination of its parts. The packaging specified herein will provide you the means to offer your clients an experience not possible with any other manufacturer's products.

BUILT. STRONG.

# CORE TECHNOLOGY

DESIGN



# E-Capsule

A rigid skeletal frame constructed of light weight Aluminum and Aircraft grade steel houses Adamson's patented Co-Linear Drive Module™, the individual mid and high components and the Autolock™ rigging system. The E-Capsule is flanked by Baltic birch enclosures containing Kevlar Neodymium low frequency transducers.

# Co-Linear Drive Module

The heart of the E-Capsule is the proprietary Co-Linear Drive Module; energy from coaxially mounted mid and high components pass through a co-entrant device into separate sound chambers that produce perfectly curved wavefronts. Time-smear and comb filtering are virtually eliminated. These modules avoid the typical lobing artifacts caused by path length differences when using multiple mid-band devices as is popular in many other designs.

# Autolock Rigging

Adamson's patented Autolock rigging system allows for a single technician to safely and quickly fly the entire rig, setting all angles while the cabinets are sitting securely on the 4-up dolly. Once the array is lifted, all cabinets simply align into 1 of 8 incremental splay positions.

# Advanced Cone Architecture

Advanced Cone Architecture is our proprietary cone design topology. Made possible through the use of Kevlar, which has a much higher Young's modulus than a standard paper cone, our drivers take advantage of a flatter geometric shape, with a concave curvature up-turned at the edge. This minimizes radial modes and cone break-up while significantly increasing the usable linearized pass-band.



# Lab.gruppen

The Powered Loudspeaker Management (PLM+) series of product, by Lab.gruppen, seamlessly integrates an extraordinarily powerful four-channel amplifier platform with on board Lake® Processing, Dante networked signal distribution, accurate load verification and real-time, real world, performance monitoring.

Engineered as a unified system, the PLM+ range affords significant advantages—in sonic performance, user functionality, inventory utilization, and long-term cost savings—when compared to conventional approaches using separate components. Incorporating several new advancements to maintain reliable, sustained output at unprecedented power levels, the Regulated Switch Mode Power Supply (R.SMPS) is a new universal design that connects to any AC power source in the world. The design also incorporates power factor correction (PFC) to more effectively use the available power service. Rational Power Management allows the user true flexibility in allocating available power across all output channels.

## Dante

Digital media distribution significantly reduces implementation anxiety by separating the logical and physical connection attributes of the system. This approach can offer significant costs saving in time and money, while providing better performance than analog wiring. Digital audio distribution eliminates masses of bulky, heavy, expensive, copper wires. Installation is simplified; a single lightweight, inexpensive CAT5e cable can carry all the required inputs and outputs as digital audio data.





CONNECTED AND SECURE



**A. E15:** 3-way line source enclosure: LF - 2x 15" ND15-L, MF - 2x 7" YX7, HF - 2x 4" NH4TA2, Autolock™ rigging system

**B. E12:** 3-way line source enclosure: LF - 2x 12" ND12-S, MF - 1x 7" YX7, HF - 1x 4" NH4TA2, Autolock™ rigging system

**C. E218:** Subwoofer: LF - 2x 18" ND18-S, integrated rigging system



**D. E219:** Subwoofer: LF - 2x 19" SD19, integrated rigging system

**E-Rack Turn-Key 12 Channel:** 3x PLM+ 20K44, 1x Adamson Audio Panel, 1x 120V AC-Distribution or 1x 230V AC-Distribution, 1x Dante switch, 1x 10U Rack

# Specifications

E15

E12

Frequency Range (+/-3 dB)	60 Hz - 18 kHz	60 Hz - 18 kHz
Nominal Directivity (-6 dB) H x V	90° x 6°	110° x 8°
Maximum Peak SPL **	147 dB	145 dB
Components LF	2x ND15-L 15" Kevlar Neodymium Driver	2x ND12-S 12" Kevlar Neodymium Driver
Components MF	2x YX7 7" Kevlar Neodymium Driver	YX7 7" Kevlar Neodymium Driver
Components HF	2x NH4TA2 4" Diaphragm / 1.5" Exit Compression Driver	NH4TA2 4" Diaphragm / 1.5" Exit Compression Driver
Nominal Impedance LF	2x 8 Ω	2x 8 Ω
Nominal Impedance MF	16 Ω	8 Ω
Nominal Impedance HF	16 Ω	8 Ω
Power Handling (AES / Peak) LF	2x 800 / 2x 3200 W	2x 800 / 2x 3200 W
Power Handling (AES / Peak) MF	700 / 2800 W	350 / 1400 W
Power Handling (AES / Peak) HF	280 / 1120 W	140 / 560 W
Rigging	Autolock™ Rigging System	Autolock™ Rigging System
Connection	2x Speakon™ NL8	2x Speakon™ NL8
Height Front (mm / in)	391 / 15.4	358 / 14.1
Height Back (mm / in)	333 / 13.125	282 / 11.1
Width (mm / in)	1306 / 51.4	1111 / 43.75
Depth (mm / in)	544 / 21.4	543 / 21.4
Weight (kg / lbs)	79.8 / 176	59.9 / 132
Processing	Lake	Lake

\*\*12 dB crest factor pink noise at 1m, free field using specified processing and amplification

E218

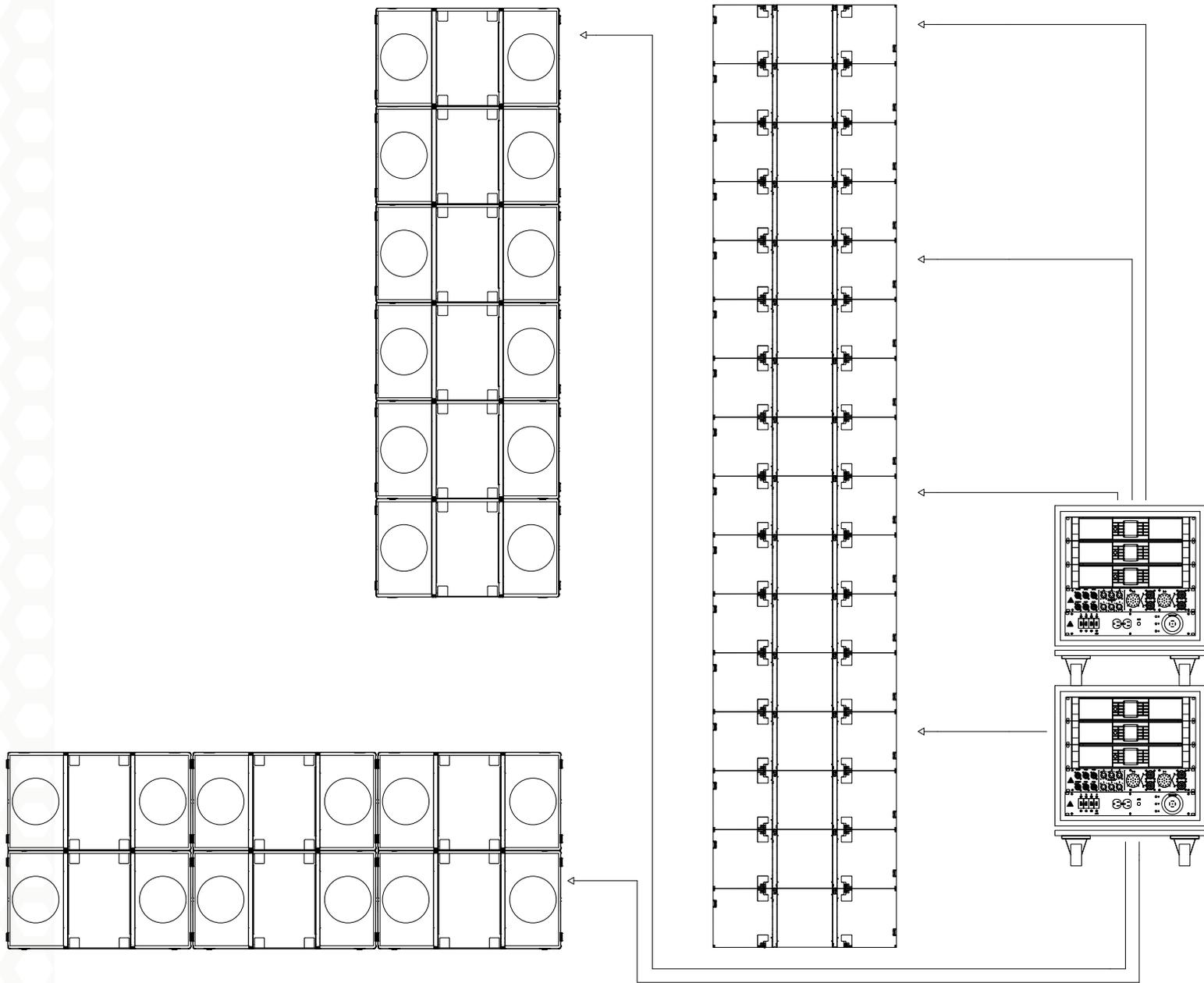
E219

Frequency Range (+/- 3dB)	30 Hz - 110 Hz	28 Hz - 90 Hz
Maximum Peak SPL **	142 dB	144 dB
Components LF	2x ND18-S 18" Kevlar Neodymium Driver	2x SD19 19" Kevlar Neodymium Driver
Nominal Impedance LF	2x 8 Ω	2x 5 Ω
Power Handling (AES / Peak) LF	2x 800 / 2x 3200 W	2x 1600 / 2x 6400 W
Rigging	Flyable with E-Frame Full Line	Flyable with E-Frame Full Line
Connection	3x Speakon™ NL8: 2x Rear Parallel (Pin 1 +/-) and 1x Rear Output (Pin 2 to 1)	3x Speakon™ NL8: 2x Rear Parallel (Pin 1 +/-) and 1x Rear Output (Pin 2 to 1)
Height Front (mm / in)	597 / 23.5	597 / 23.5
Width (mm / in)	1111 / 43.75	1418 / 55.83
Depth (mm / in)	870 / 34.25	889 / 35
Weight (kg / lbs)	86 / 190	112.9 / 249
Processing	Lake	Lake

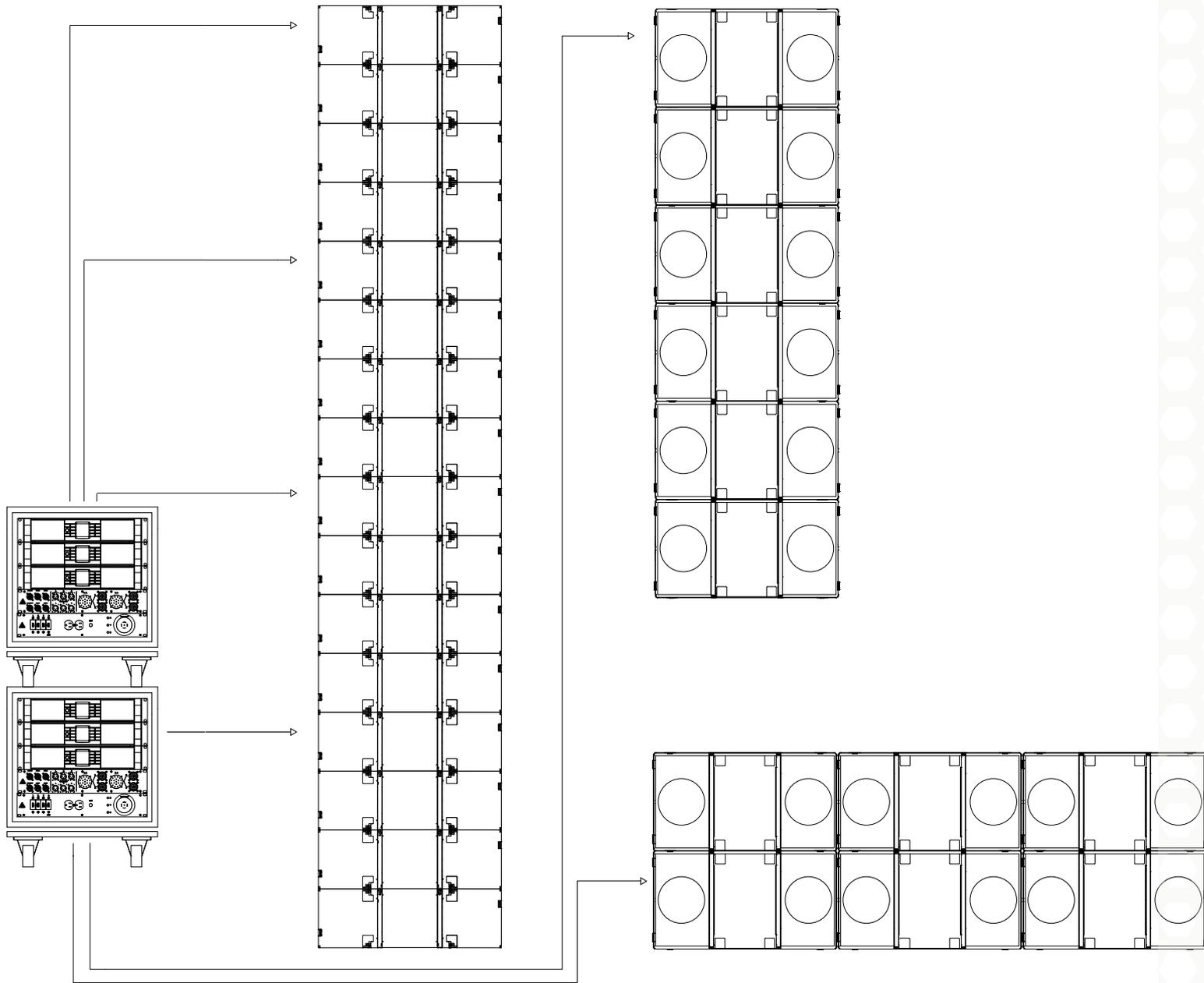
\*\*12 dB crest factor pink noise at 1m, half space, using specified processing and amplification

S  
P  
E  
C  
S





This configuration is the E12 High Performance Set. Please see the "E-Series Configurations" brochure for factory recommended sets.



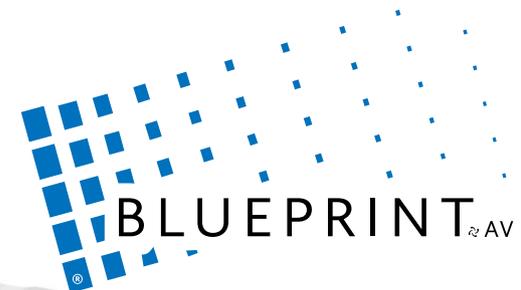
E12 High Performance Set includes; 32x E12, 24x E218, 4x 12-Channel PLM 20K44 E-Rack, 4x Blueprint AV™ Personal License, 2 day factory training

# Blueprint AV™

Blueprint AV™ is Adamson's 2D and 3D modeling suite, which provides fast and precise simulations of all of our products in an environment created by you.

Room design is simple and efficient. With tools such as the 2D Room Calculator at your disposal, a detailed representation of the space you are working in is simple to create. Through the use of various geometric shapes, complex room-design becomes rudimentary, allowing you to spend more time perfecting your loudspeaker deployment.

Blueprint AV™ offers a wide variety of simulation options, from multi-weighted SPL measurements, to virtual microphone placement, to delay and directivity simulations, Blueprint AV™ provides Adamson users all the tools necessary to refine the use of their system in a given space.



ADAMSON

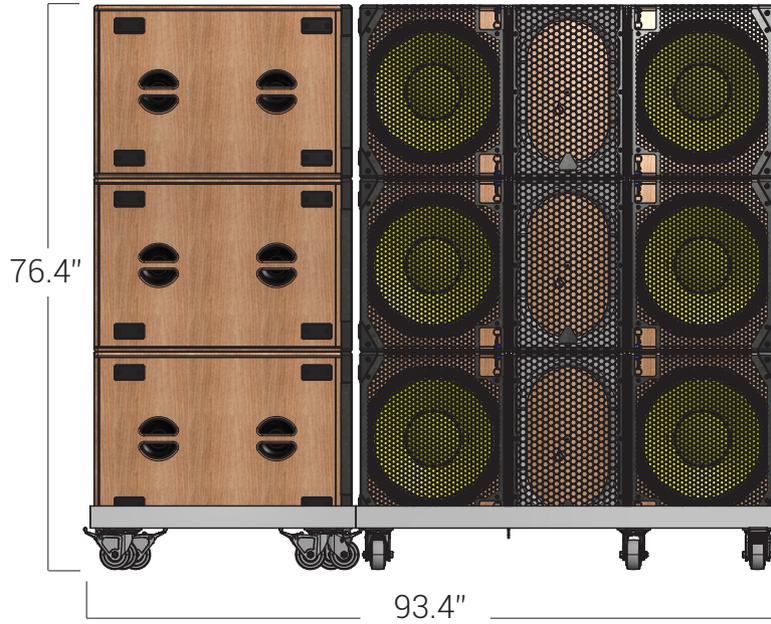
# E-Rack™

Adamson has developed a unified rack solution configured to interface seamlessly with the Adamson product range. An E-Rack can power any one group of 12 E12, 9 E15, 18 E218, 12 E219 cabinets, or combinations of these systems. As a standard setup, all E-Racks are equipped with 3 Lab.gruppen PLM 20K44 amplifiers, featuring Lake processing and Dante networking functionality. The Adamson Audio Panel provides Analog and AES in and thru-puts, Speakon NL8 and Socapex outputs as well as RJ45 connections. An Audinate approved Ethernet switch provides primary & secondary Dante sources and Lake Controller software addresses routing implementation of its four stage redundancy capability. This entire package fits into a compact and lightweight 10U amp rack, designed with interior suspension, hinged doors, and extra rails for secure & efficient use of space.

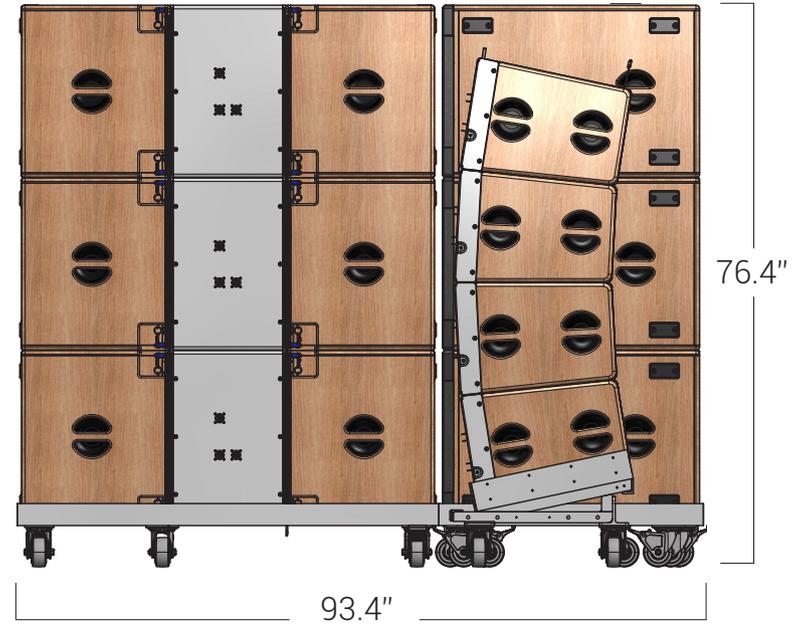


NETWORKING IN EVERY RACK

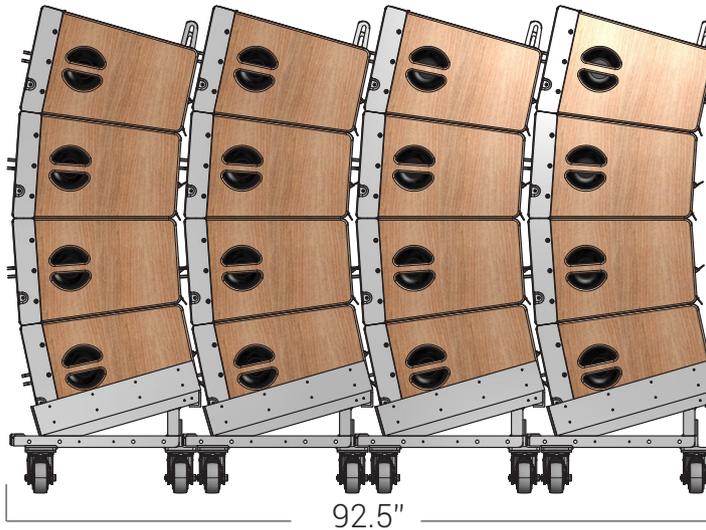
# E219



# E219 & E15



# E12



## Truck Pack

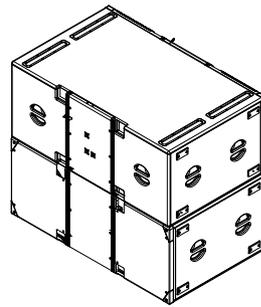
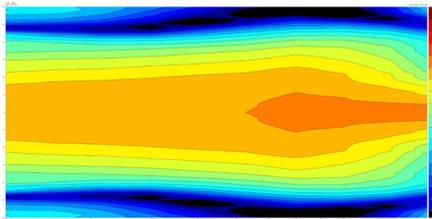
Every enclosure in the E-Series has been designed to maximize truck space. Configurations to suit every region specific standard truck width are available. Examples are shown on this page, but other configurations are possible.

# CARDIOID MADE EASY

Every Adamson subwoofer has specifically designed cardioid presets. Adamson utilizes three configurations ranging from a minimal footprint and minimized rear rejection to larger setups that eliminate virtually all audio energy behind the array.

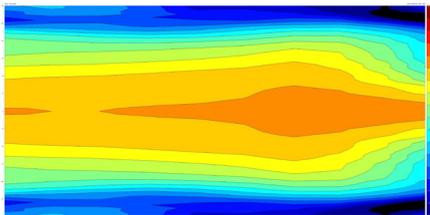
## Front-Back

The FB preset should be used in situations where a minimal footprint is desired. Only 2 enclosures stacked ensures that sightlines will not be impaired.



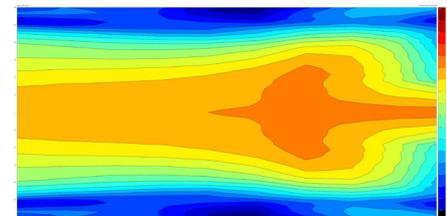
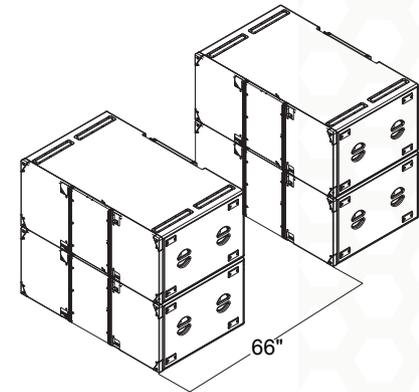
## Front-Back-Front

The FBF preset exhibits higher output from the front of the array. A similar footprint to the FB configuration, this stack is 3 enclosures high.



## End-Fire 66

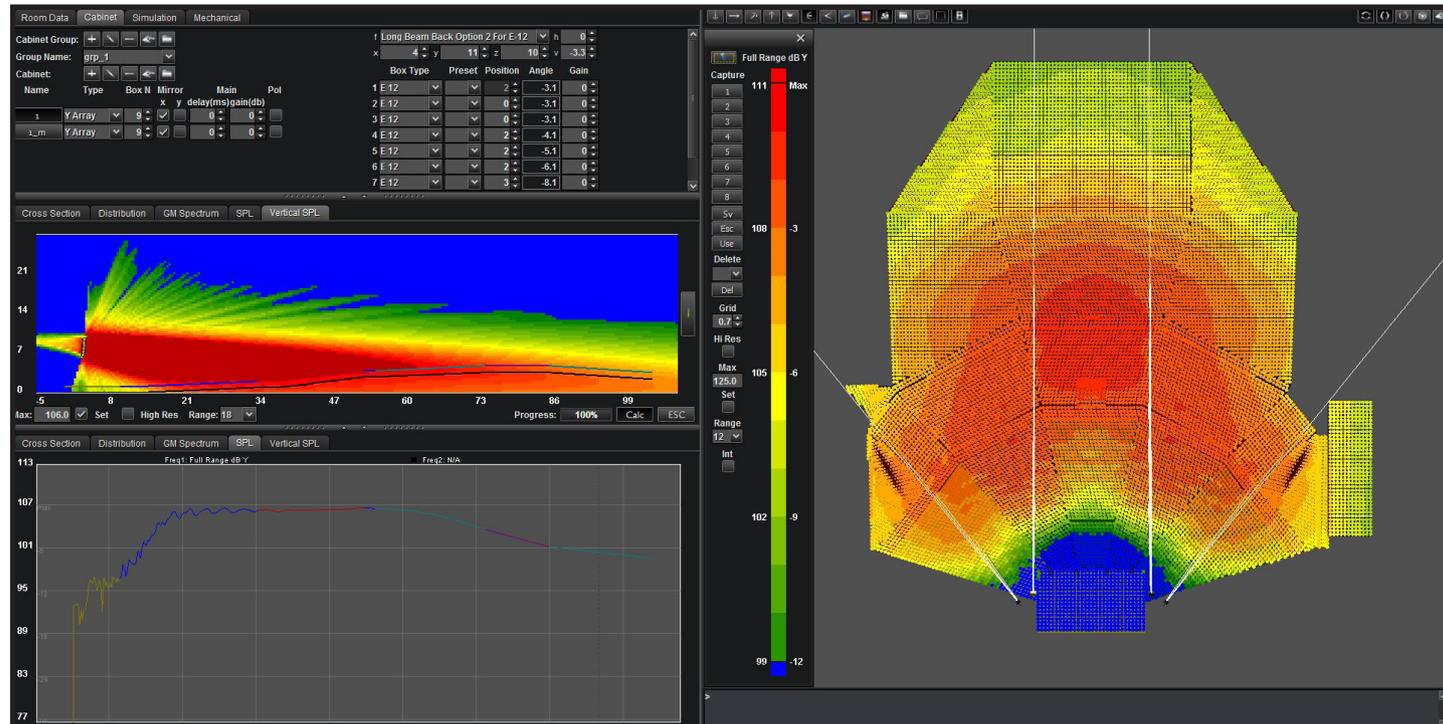
The EF66 preset should be used in situations where the most rear cancellation is desired. Unlike traditional end-fire arrays, Adamson's proprietary preset eliminates a wide range of frequencies in the rear of the array.



# Array Design Philosophy

The accepted norm in audio is to measure overall level with an A weighted curve. While this measurement is very important, it is primarily used to set targets for noise abatement or governance. When designing a system to provide even coverage throughout a targeted area, we in this industry typically use the A weighted curve to show that a minimal dBA level variance across that area correlates to the performance received.

In our experience, minimal dBA differences across a given space do not necessarily produce an even listening experience due to typical system high frequency distribution approaches. These high frequency variances are small enough not to affect the overall dBA rating but large enough to be experienced by listeners across a given space. While A and C weighted curves are available for use in Blueprint AV™, using the Adamson Systems Y weighted curve, which looks at all audio from 2 kHz to 8 kHz, gives the user far greater insight into how a targeted area will actually be covered, and how it will actually sound.







 **ADAMSON**  
BUILT. STRONG.

[WWW.ADAMSONSYSTEMS.COM](http://WWW.ADAMSONSYSTEMS.COM)  
[WWW.FACEBOOK.COM/ADAMSONSYSTEMS](https://WWW.FACEBOOK.COM/ADAMSONSYSTEMS)  
CANADA: +1 905-982-0520  
UNITED STATES: +1 952-892-6003  
EUROPE: +49 40 7699 9959 0