

E-Series Full Line Brochure









MADAMSON

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.

We approach loudspeaker design differently, a fact that becomes evident the first time you listen to the E-Series. 99% of the components that make up the E-Series are designed, manufactured, assembled, tested and supported from our facility in Canada. We combine brilliant engineering with handcrafted care and precision.

At the heart of the E-Series is the E-Capsule. It houses the patented Co-Linear Drive Module - a revolutionary dual chamber waveguide which virtually eliminates mid-frequency lobing. The patented Autolock™ rigging system is mounted to this core rather than the cabinet exterior, which means that one engineer can prep and hoist the system in a small window of time. 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 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, clients that are increasingly asking for the E-Series as their top choice.

BUILT. STRONG.



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 Autolock rigging system. Bringing all rigging towards the middle of the enclosure allows Adamson to produce the smallest rigging frame available on the touring market.

Co-Linear Drive Module

The concept was first employed in the ground breaking Y-Axis series. Coaxially mounted mid and high frequency components pass through a co-entrant device into separate sound chambers that produce a perfectly curved high frequency wavefront. This design also solves the mid frequency proximity concern without resorting to solutions that introduce interference in the pass-band and cause lobing artifacts. Time-smear and comb filtering are virtually eliminated.

Autolock Rigging

This ingenious system allows for a single technician to prep and fly an entire rig. All the prep work is done without any heavy lifting, while the enclosures sit on their dollies. The E-Frame travels on a stack of 4 enclosures, never needing to be removed to fit in a truck. Once weight is taken, enclosures within an array simply align into their designated positions and the next set is ready to be snapped into place.

Advanced Cone Architecture

Adamson pioneered the use of Kevlar cones in professional audio, and years of experience has led us to refine our design to capitalize on the benefits of the material. Kevlar has a much higher Young's modulus (a ratio of stiffness to mass) than traditional paper cones, allowing for a much flatter geometric shape. As a paper cone attempts to reproduce higher frequencies, radial modes begin to occur, passing inconsistently reflected concentric sound waves to the listener, producing a time smear effect. With Kevlar, the rigidity of the cone means that these reflected waves are not produced homogenously across the cone's surface, dispersing before being projected to the listener.



Lab.gruppen

The Powered Loudspeaker Management (PLM+) series of product, by Lab.gruppen, seamlessly integrates an extraordinarily powerful 4-in, 4-out amplifier platform with on board Lake® Processing, redundant Dante, 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, especially 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.





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

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

C. E119: Subwoofer: LF - 1x 19" SD19, integrated rigging system

Not Shown. E219: Subwoofer. LF - 2x 19" SD19, integrated rigging system

D. 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

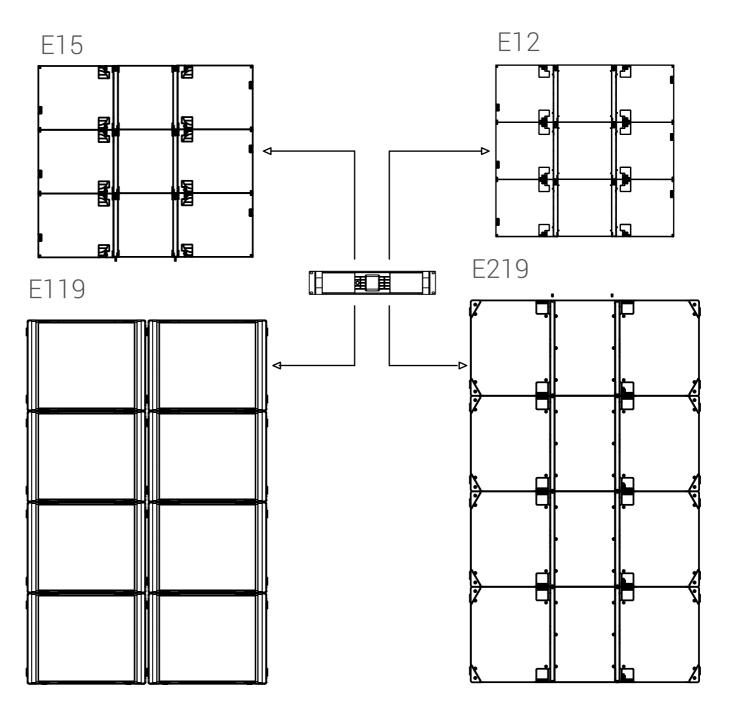
	E15	E12				
Frequency Range (+/-3 dB)	60 Hz - 18 kHz	60 Hz - 18 kHz				
Nominal Directivity (-6 dB) H x V	90° x 6°	110° x 8°				
Maximum Peak SPL**	147 dB	145 dB				
Components LF	2x ND15-L 15" Kevlar Neodymium Driver	2x ND12-S 12" Kevlar Neodymium Driver				
Components MF	2x YX7 7" Kevlar Neodymium 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	8Ω				
Nominal Impedance HF	16 Ω	8Ω				
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	320 / 1280 W	160 / 640 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

	E119	E219			
Frequency Range (+/- 3dB)	30 Hz - 90 Hz	28 Hz - 90 Hz			
Maximum Peak SPL**	138 dB	144 dB			
Components LF	SD19-S 19" Kevlar Neodymium Driver	2x SD19 19" Kevlar Neodymium Driver			
Nominal Impedance LF	8Ω	2x 8 Ω			
Power Handling (AES / Peak) LF	1600 / 6400 W	2x 1600 / 2x 6400 W			
Rigging	Integrated Rigging System	Integrated Rigging System			
Connection	4x Speakon™ NL4: 2x Rear Parallel (Pin 1 +/-) and 2x Front Parallel Input (Pin 2 to 1)	3x Speakon™ NL8: 2x Rear Parallel (Pin 1 +/-) and 1x Rear Output (Pin 2 to 1)			
Height Front (mm / in)	572 / 22.5	597 / 23.5			
Width (mm / in)	749 / 29.5	1440 / 56.7			
Depth (mm / in)	889 / 35	889 / 35			
Weight (kg / lbs)	56.7 / 125	112.9 / 249			
Processing	Lake	Lake			

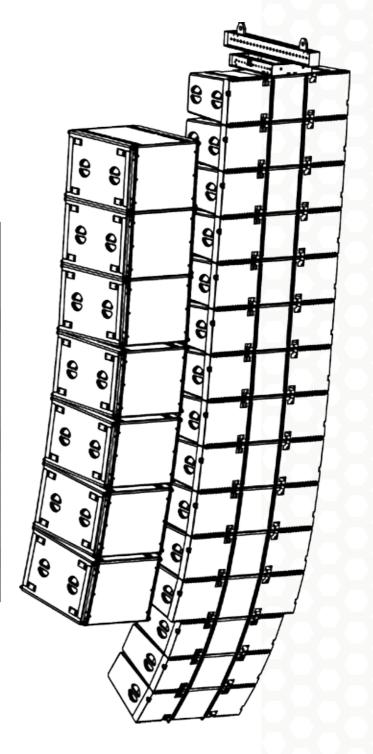
 $^{^{**}}$ 12 dB crest factor pink noise at 1m, half space, using specified processing and amplification





1x Lab.gruppen PLM 20K44 can power 3x E15 or E12, 8x E119 or 4x E219.

Configurations	E15	E12	E219	E119	E-Rack 8 Channel 20K44	E-Rack 12 Channel 20K44
E15 Compact Set			8		4	
9 E15 over 4 E219 per side, Entry-level E15 Set	L					
E15 Performance Set			16			4
12 E15 over 8 E219 per side, long-throw, high output festival set						
E15 High Performance Set			16	16		6
18 E15 over 8 E219 and 8 E119 per side, Festival A-Stage set						
E12 SETS						
E12 Compact Set		12		8		2
6 E12 over 4 E119 per side, Entry-level E12 set						
E12 Performance Set		18		12	4	
9 E12 over 6 E119 per side, E12 Festival set						
E12 High Performance Set		24		16	2	2
9 E12 over 6 E119 per side, E12 Festival A-Stage set						
E-SERIES COMBO						
E-SERIES Arena Set	36	24	24	24		10
E-Series touring set, main and outfill arrays with flown and ground stacked subs						



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 or 3D 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.



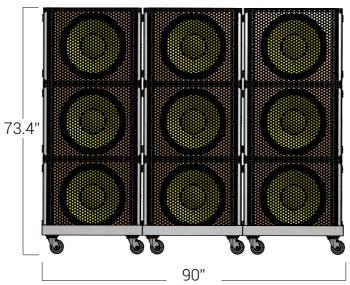
E-Rack™

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 9 E12, 9 E15, 24 E119, 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 ether CON 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.

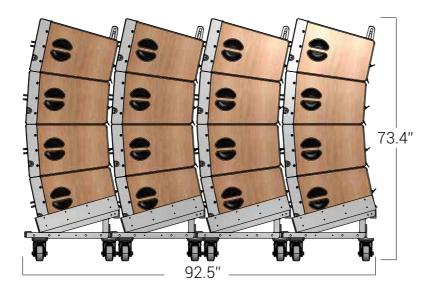


NETWORKING IN EVERY RACK

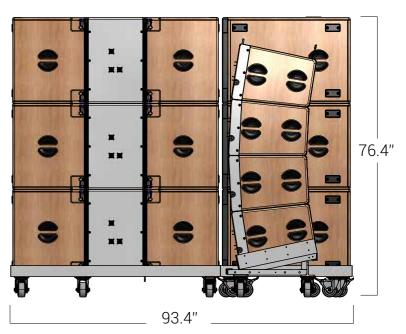
E119



F12



E219 & E15



Truck Pack

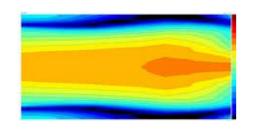
Every enclosure in the E-Series has been designed to maximize truck space. Configurations to suit every region specific standard truck width are available. Examples are shown on this page, but other configurations are possible.

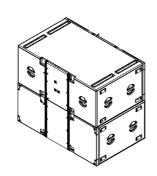
CARDIOID MADE EASY

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

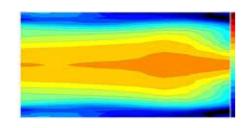
The FB preset should be used in situations where a minimal footprint is desired. Only 2 enclosures stacked ensures that sightlines will not be impaired.





Front-Back-Front

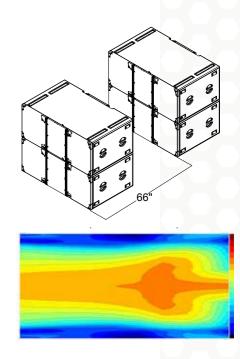
The FBF preset exhibits higher output from the front of the array. A similar footprint to the FB configuration, this stack is 3 enclosures high.





End-Fire 66

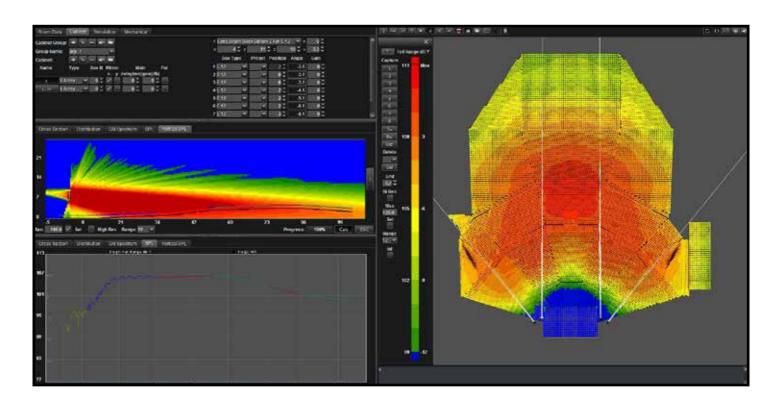
The EF66 preset should be used in situations where the most rear cancellation is desired. Unlike traditional end-fire arrays, Adamson's proprietary preset eliminates a wide range of frequencies in the rear of the array.



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.









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