ADAMSON
BUILT. STRONG.

E-Series Configurations

E-Series Configurations

Adamson's E-Series has been built to deliver outstanding performance in the world's most demanding touring environments. The E-Series has received critical acclaim from many of the world's leading engineers for performance that achieves unmatched clarity and responsiveness in the extreme far field. System techs have come to know the line as agile, durable and lightning fast to rig no matter the local conditions. The E-Series has been engineered for versatility and outstanding acoustical delivery, not just for the needs of today but well into the future. We've partnered with industry experts that can add to what is already a rock solid foundation. Whether it is amplification, control, networking and monitoring, our package is built to perform and endure. Our partnerships have been made with companies that are leading the industry in their technologies and in their ideologies: Dante-networking, Lake-processing and Lab.gruppen-amplification. After all it's the total system performance that matters.

Advanced Technology

Known for pioneering the use of Kevlar in driver design, we went even further with the release of Advanced Cone Architecture, 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 concave curvature up-turned at the edge. This minimizes radial modes and cone break-up while significantly increasing the usable linearized pass-band.

The heart of the system are the proprietary Co-Linear Drive Modules. These modules contain sound chambers that produce perfectly curved, iso-phase, co-linear sound sources for both mid and high frequency energy where time-smear, midrange frequency lobing and comb filtering are virtually eliminated. These Co-Linear Drive Modules avoid the typical lobing artifacts caused by path length differences when using multiple mid-band devices as is popular in many other designs. Optimizing the design of our Co-Linear Drive Modules has taken years; using Boundary Element Analysis, Finite Element Analysis, and refining prototypes. The result is a family of Wave Shaping Devices that produce the highest defined audio possible.

Adamson's patented Autolock™ rigging system has been designed to remove operator stress while adding confidence. A single technician can 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.

E12

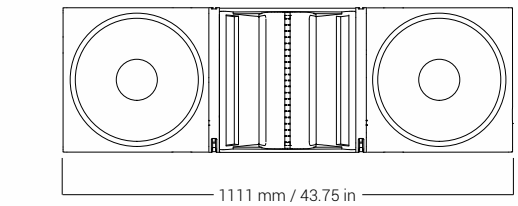
The Adamson E12 is a 3 way, true line source enclosure, incorporating proprietary transducer and waveguide technology which reduces weight and minimizes its footprint. The heart of the E12 is the E-Capsule, which is precisely engineered and constructed of lightweight aluminum. The patent pending skeletal structure provides an accurate and rigid frame for mounting the modular aircraft grade steel Autolock™ rigging system, while simultaneously housing ultra-efficient mid-high components coaxially mounted on Adamson's newly modified E12 Co-Linear Drive Module.

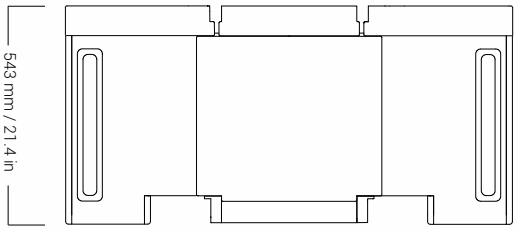
A vector corrected low-excursion 7" Kevlar Neodymium midrange transducer paired with a next generation 4" HF compression driver energize the drive module and provide seamless mid-high energy with no audible distortion at very high SPL levels. The critically optimized waveguide, based on a prolate-spheroidal geometry ensure precise pattern control and minimum THD, producing a dispersion pattern of 110° x 8° (H x V). The E-Capsule is flanked with two separate birch ply enclosures, each containing Adamson's proprietary Kevlar Neodymium 12" woofer, capitalizing on the advantages of Adamson's Advanced Cone Architecture and optimized heat dissipation management of the 4" voice coil.

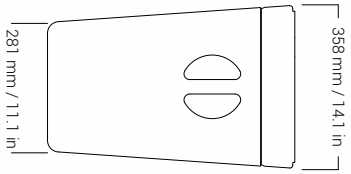
Specifications

Frequency Range (+/-3 dB)	60 Hz - 18 kHz
Nominal Directivity (-6 dB) H x V	110° x 8°
Maximum Peak SPL**	145 dB
Components LF	2x ND12-S 12" Kevlar Neodymium Driver
Components MF	YX7 7" Kevlar Neodymium Driver
Components HF	NH4TA2 4" Diaphragm / 1.5" Exit Compression Driver
Nominal Impedance LF	2x 8 Ω
Nominal Impedance MF	8 Ω
Nominal Impedance HF	8 Ω
Power Handling (AES / Peak) LF	2x 800 / 2x 3200 W
Power Handling (AES / Peak) MF	350 / 1400 W
Power Handling (AES / Peak) HF	160 / 640 W
Rigging	Autolock™ Rigging System
Connection	2x Speakon™ NL8
Height Front (mm / in)	358 / 14.1
Height Back (mm / in)	282 / 11.1
Width (mm / in)	1111 / 43.75
Depth (mm / in)	543 / 21.4
Weight (kg / lbs)	59.9 / 132
Processing	Lake

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







E15

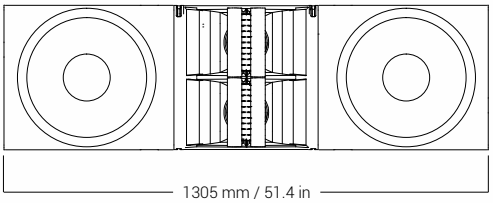
The Adamson E15 is a 3 way, true line source enclosure, incorporating proprietary transducer and waveguide technology which reduces weight and minimizes the footprint. The heart of the E15 is the E-Capsule, which is precisely engineered and constructed of lightweight aluminum. The patent pending skeletal structure provides an accurate and rigid frame for mounting the modular aircraft grade steel Autolock™ rigging system, while simultaneously housing a series of efficient mid-high components coaxially mounted on Adamson's pioneering Co-Linear Drive Modules.

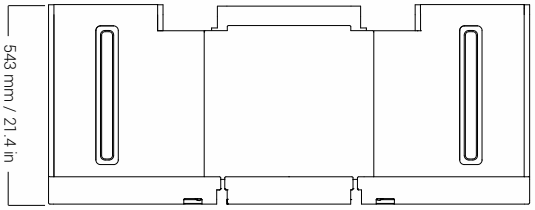
Two vector corrected low-excursion 7" Kevlar Neodymium midrange transducers paired with two next generation 4" HF compression drivers energize the drive modules and provide seamless mid-high energy with no audible distortion at very high SPL levels. Critically optimized waveguides based on a prolate-spheroidal geometry ensure precise pattern control and minimum THD, producing a dispersion pattern of 90° x 6° (H x V). The E-Capsule is flanked with two separate birch ply enclosures, each containing Adamson's proprietary Kevlar Neodymium 15" woofer, capitalizing on the advantages of Adamson's Advanced Cone Architecture and optimized heat dissipation management of the 4" voice coil.

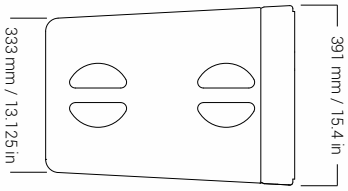
Specifications

Frequency Range (+/-3 dB)	60 Hz - 18 kHz
Nominal Directivity (-6 dB) H x V	90° x 6°
Maximum Peak SPL**	147 dB
Components LF	2x ND15-L 15" Kevlar Neodymium Driver
Components MF	2x YX7 7" Kevlar Neodymium Driver
Components HF	2x NH4TA2 4" Diaphragm / 1.5" Exit Compression Driver
Nominal Impedance LF	2x 8 Ω
Nominal Impedance MF	16 Ω
Nominal Impedance HF	16 Ω
Power Handling (AES / Peak) LF	2x 800 / 2x 3200 W
Power Handling (AES / Peak) MF	700 / 2800 W
Power Handling (AES / Peak) HF	320 / 1280 W
Rigging	Autolock™ Rigging System
Connection	2x Speakon™ NL8
Height Front (mm / in)	391 / 15.4
Height Back (mm / in)	333 / 13.125
Width (mm / in)	1306 / 51.4
Depth (mm / in)	544 / 21.4
Weight (kg / lbs)	79.8 / 176
Processing	Lake

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







E119

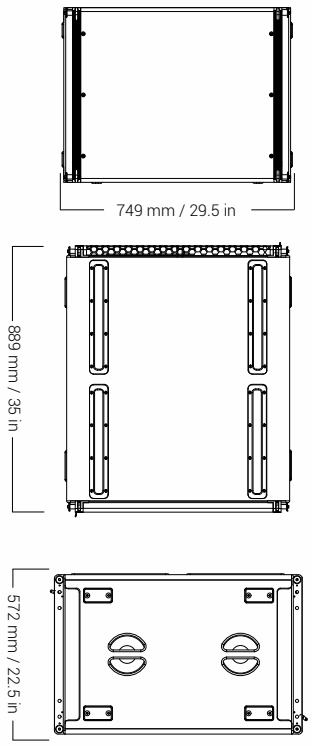
The E119 Subwoofer was developed to bolster the low-end of the E-Series line of products. The enclosure is loaded with a light weight, long excursion, 19" SD19 Kevlar Neodymium driver utilizing Adamson's Advanced Cone Architecture and Symmetrical Drive Technology. The driver employs a dual 5" voice coil for exceptional power handling, with a dual-spider suspension system for extra stability even under extreme excursion. It is mounted in an ultra-efficient front-loaded enclosure, designed to reproduce clean, musical low frequency information. Users will appreciate the lower fundamental notes of this design.

The cabinet construction uses marine grade birch plywood as well as aircraft grade steel and aluminum, and is equipped with four Speakon™ NL4 connectors, two parallel In/Out rear plugs and two dedicated cardioid input connecters in the front. The integrated rigging system allows for either 0° or 3° splay between adjacent cabinets. The E119 can travel on installed casters, or on a 3-high covered dolly.

Specifications

Frequency Range (+/- 3dB)	30 Hz - 60 Hz
Maximum Peak SPL**	138 dB
Components LF	SD19 19" Kevlar Neodymium Driver
Nominal Impedance LF	8 Ω
Power Handling (AES / Peak) LF	1600 / 6400 W
Rigging	Integrated Rigging System
Connection	4x Speakon™ NL4: 2x Rear Parallel (Pins 1 +/-) and 2x Front Cardioid Input (Pin 2 to 1)
Height Front (mm / in)	572 / 22.5
Width (mm / in)	749 / 29.5
Depth (mm / in)	889 / 35
Weight (kg / lbs)	56.7 / 125
Supported Processing	Lake

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



E219

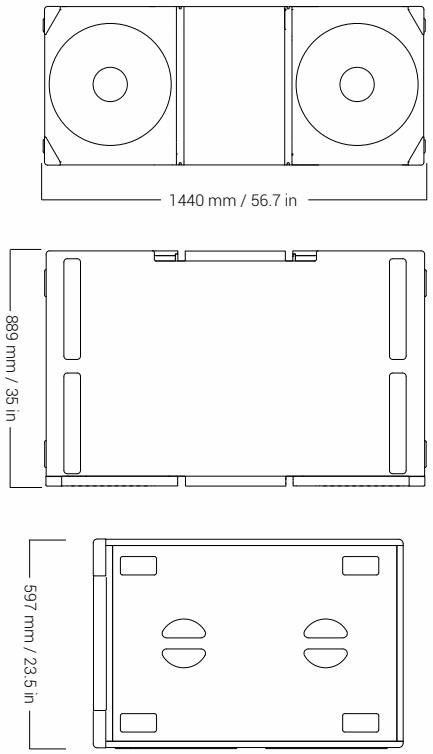
The E219 Subwoofer was developed to bolster the low-end of the E-Series line of products. The enclosure is loaded with two light weight, long excursion, 19" SD19 Kevlar Neodymium drivers utilizing Adamson's Advanced Cone Architecture and Symmetrical Drive Technology. The drivers employ dual 5" voice coils for exceptional power handling, with a dual-spider suspension system for extra stability even under extreme excursion. They are mounted in an ultra-efficient front-loaded enclosure, designed to reproduce clean, musical low frequency information. A typical user would appreciate the lower fundamental notes of this design.

The E219 can be ground stacked or flown utilizing the E-Frame Full Line Adapter or the E-Frame Sub. The cabinet construction uses marine grade birch plywood as well as aircraft grade steel and aluminum, and is equipped with three Speakon™ NL8 connectors, two parallel In/Out plugs and one dedicated output connection to optimize speaker cabling. The integrated rigging system allows for either 0° or 3° splay between adjacent cabinets.

Specifications

Frequency Range (+/- 3dB)	28 Hz - 90 Hz
Maximum Peak SPL**	144 dB
Components LF	2x SD19 19" Kevlar Neodymium Driver
Nominal Impedance LF	2x 8 Ω
Power Handling (AES / Peak) LF	2x 1600 / 2x 6400 W
Rigging	Integrated Rigging System
Connection	3x Speakon™ NL8: 2x Rear Parallel (Pins 1 +/-) and 1x Rear Output (Pin 2 to 1)
Height Front (mm / in)	597 / 23.5
Width (mm / in)	1440 / 56.7
Depth (mm / in)	889 / 35
Weight (kg / lbs)	106.6 / 235
Supported Processing	Lake

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



Recommended System Configurations

E12 Sets

Compact Set (12 E12 / 8 E119)

- Entry level E-Series configuration
- Ground stacked and flown setups possible
- Add four more E119 per side without adding amps
- Only one E-Rack 12-Channel per side required

Performance Set (18 E12 / 12 E119)

- Caters for small to medium arenas and outdoor festivals
- Unmatched low-mid performance in its class
- 2 E-Rack 8-Channel per side required

High Performance Set (24 E12 / 16 E119)

- Easily handles mid-size arenas and outdoor festivals
- Can be split into two E12 compact sets
- 2 E-Rack 12-Channel per side required

Recommended System Configurations

E15 Sets

Compact Set (18 E15 / 8 E219)

- Huge punch in a small package
- 2 E-Rack 8-Channel per side required

Performance Set (24 E15 / 16 E219)

- Perfect for high SPL concerts and large halls
- Unmatched long-throw and SPL capabilities
- 2 E-Rack 12-Channel per side required

High Performance Set (36 E15 / 16 E219, 16 E119)

- Thrives at stadiums and large scale festivals
- 3 E-Rack 12-Channel per side required

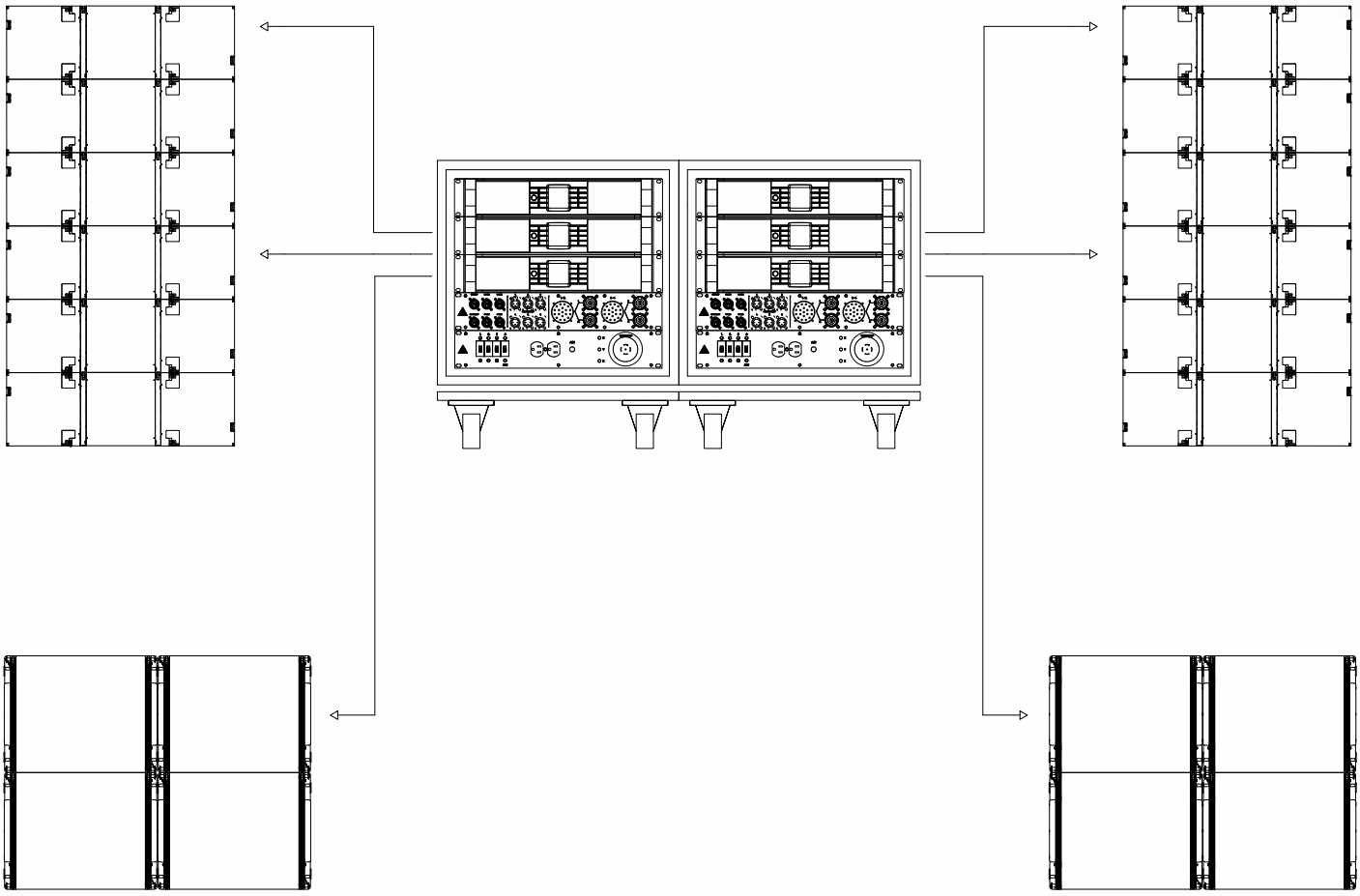
E-Series Configurations

E-Series Arena Set
(36 E15/ 24 E12/ 24 E219/ 24 E119)

- Turn-Key system for typical Arena or Large Scale Outdoor Festival
- Maintains sonic conformity for well over 100 meters
- 10 E-Rack 12-Channel per side allows for versatile distributed configurations

E12 Configurations

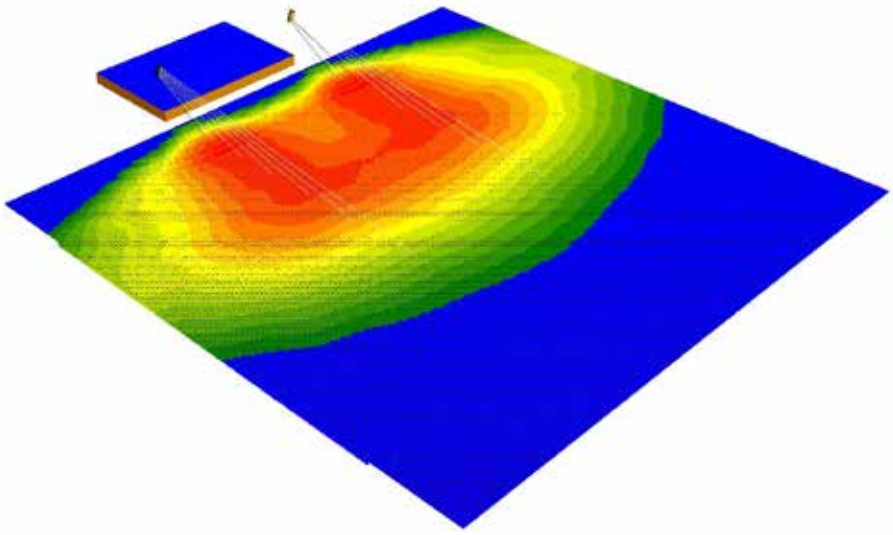
Compact Set (12 E12 / 8 E119)



E12 Configurations

Compact Set (12 E12 / 8 E119)

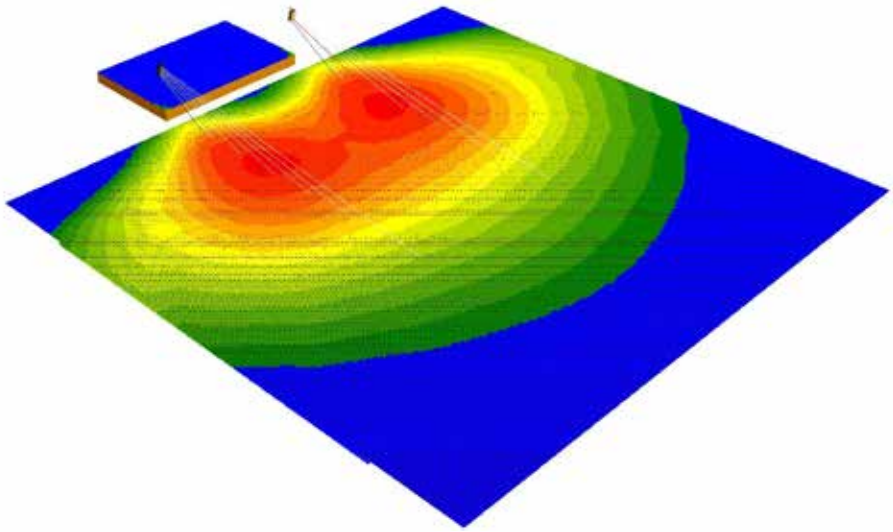
E12 Compact Set Y-weighted Simulation



**Y-weighted decibel scale (2K - 8K) is used to effectively view level variance

Audience area size: 100m x 100m

E12 Compact Set A-weighted Simulation

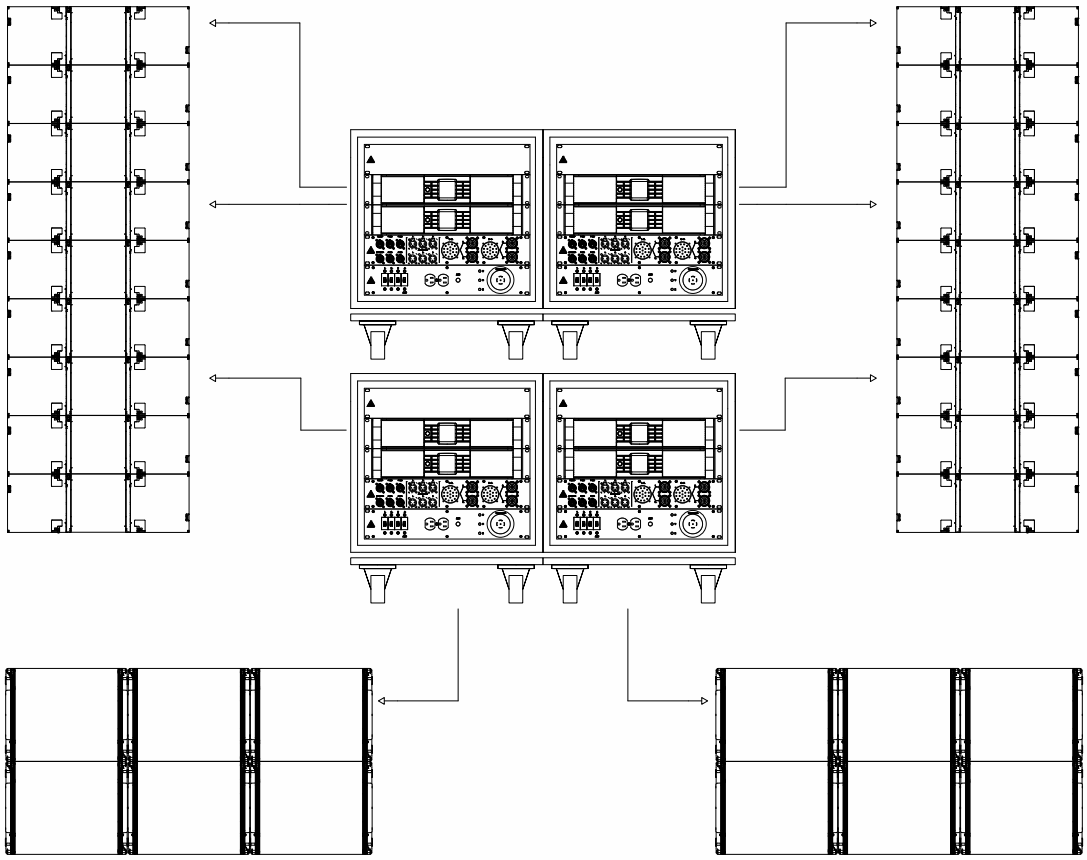


***A-weighted sound pressure level representing possible show levels

Audience area size: 100m x 100m

E12 Configurations

Performance Set (18 E12 / 12 E119)

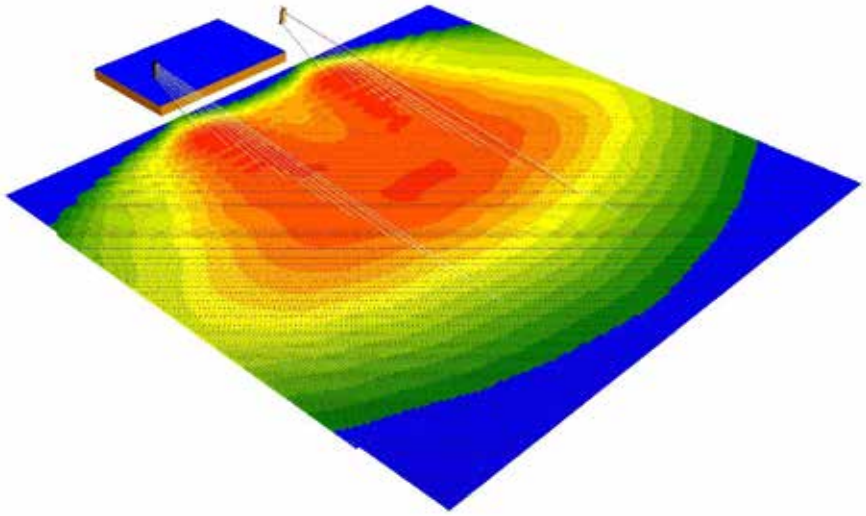


E12 Configurations

Performance Set (18 E12 / 12 E119)

E12 Performance Set Y-weighted Simulation

111 dBY Max

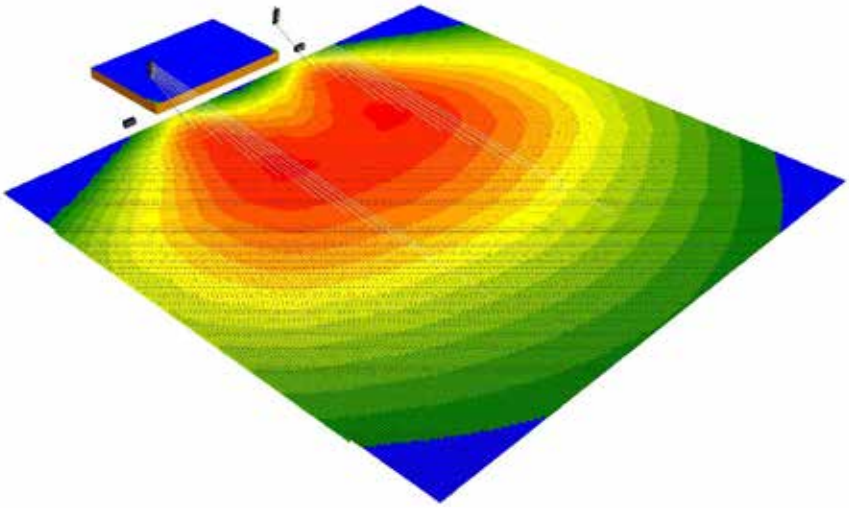


**Y-weighted decibel scale (2K - 8K) is used to effectively view level variance

Audience area size: 100m x 100m

E12 Performance Set A-weighted Simulation

121 dBA Max

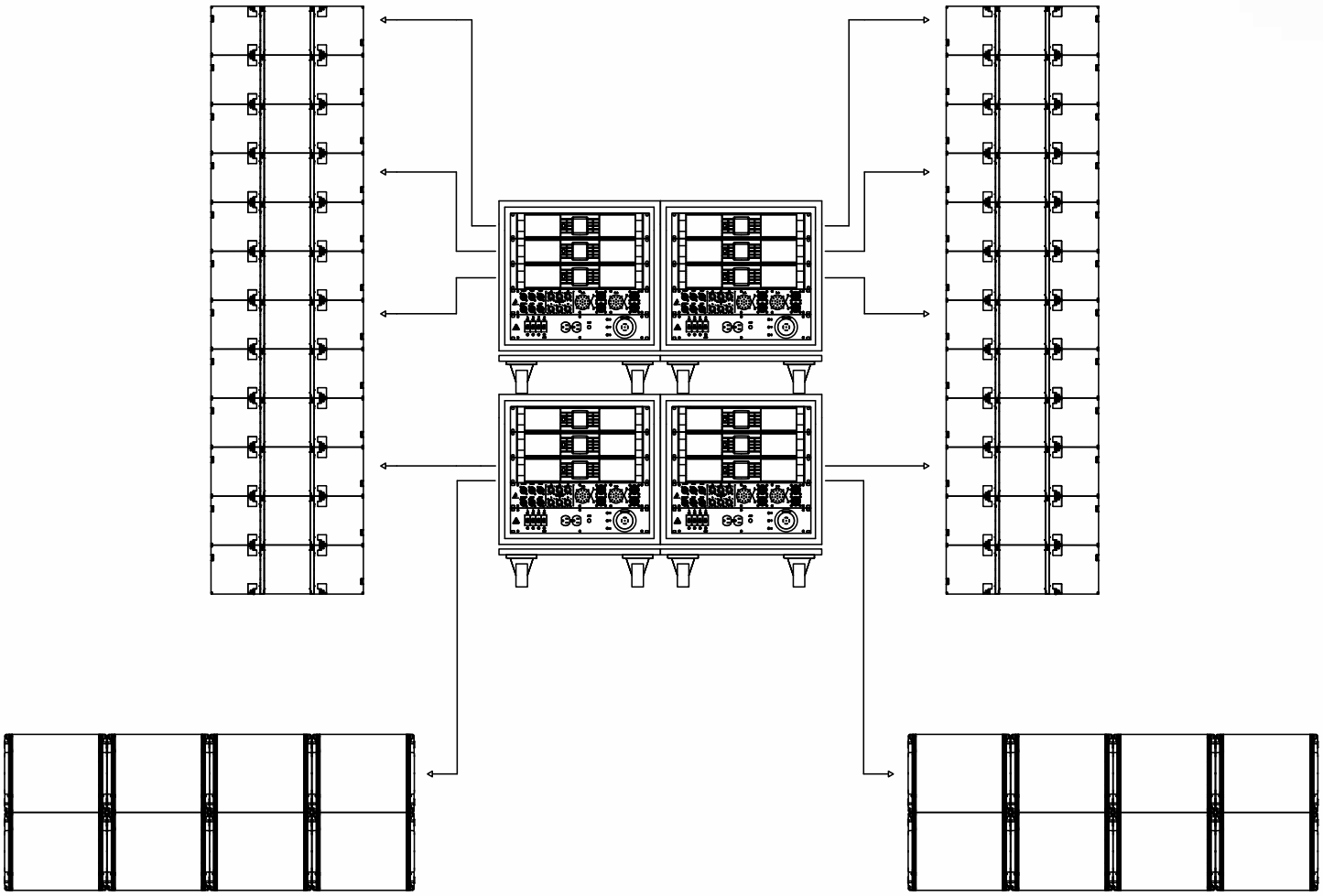


***A-weighted sound pressure level representing possible show levels

Audience area size: 100m x 100m

E12 Configurations

High Performance Set (24 E12 / 16 E119)

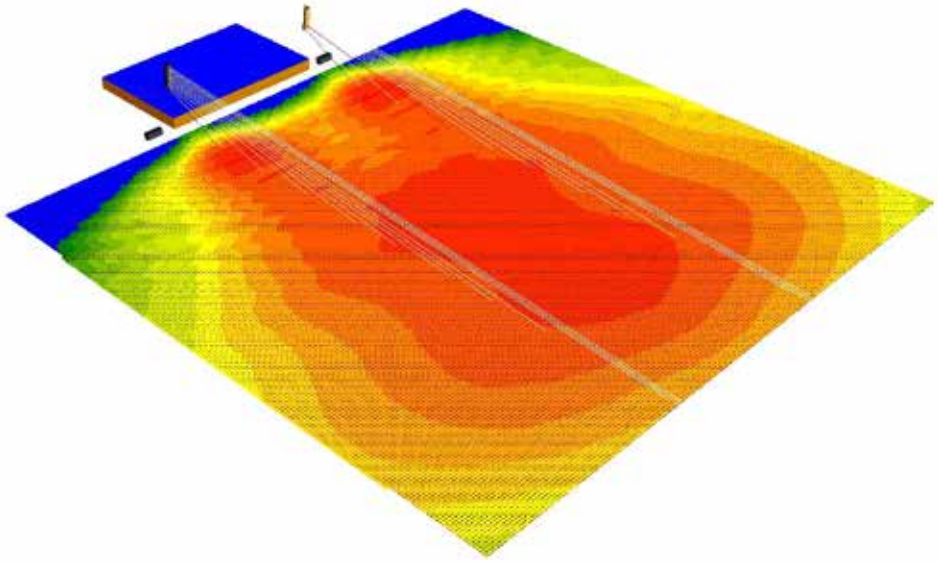


E12 Configurations

High Performance Set (24 E12 / 16 E119)

E12 High Performance Set Y-weighted Simulation

109 dBY Max

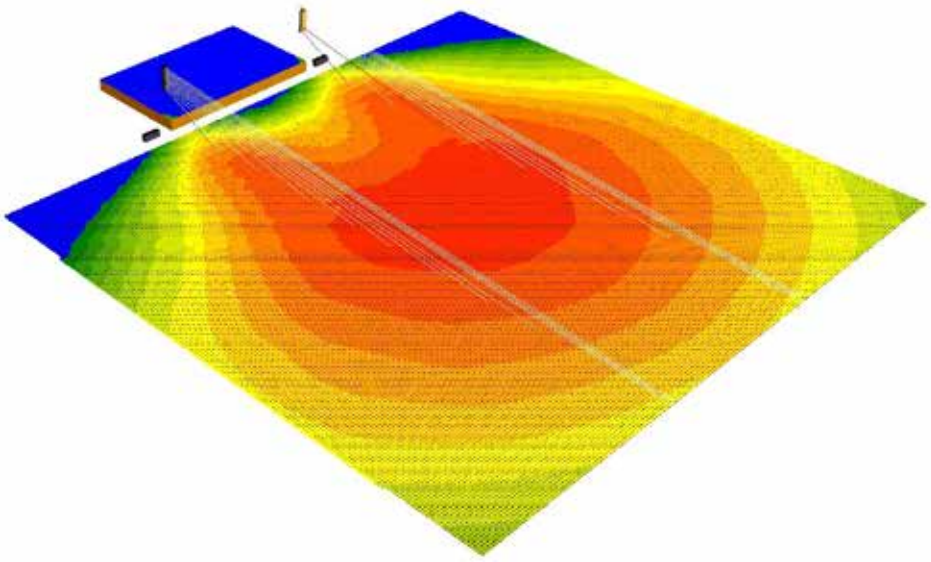


**Y-weighted decibel scale (2K - 8K) is used to effectively view level variance

Audience area size: 100m x 100m

E12 High Performance Set A-weighted Simulation

121 dBA Max

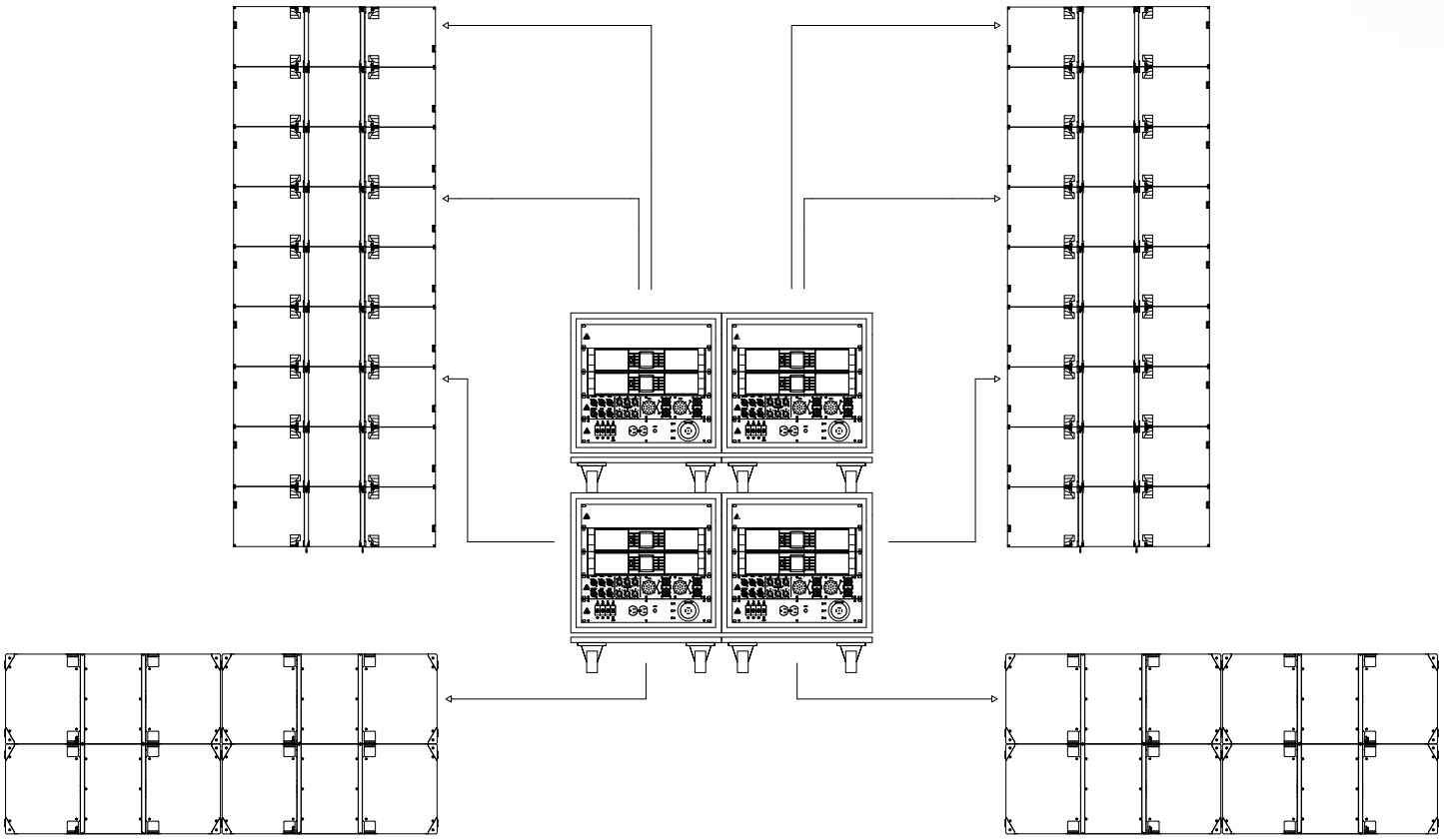


***A-weighted sound pressure level representing possible show levels

Audience area size: 100m x 100m

E15 Configurations

Compact Set (18 E15 / 8 E219)

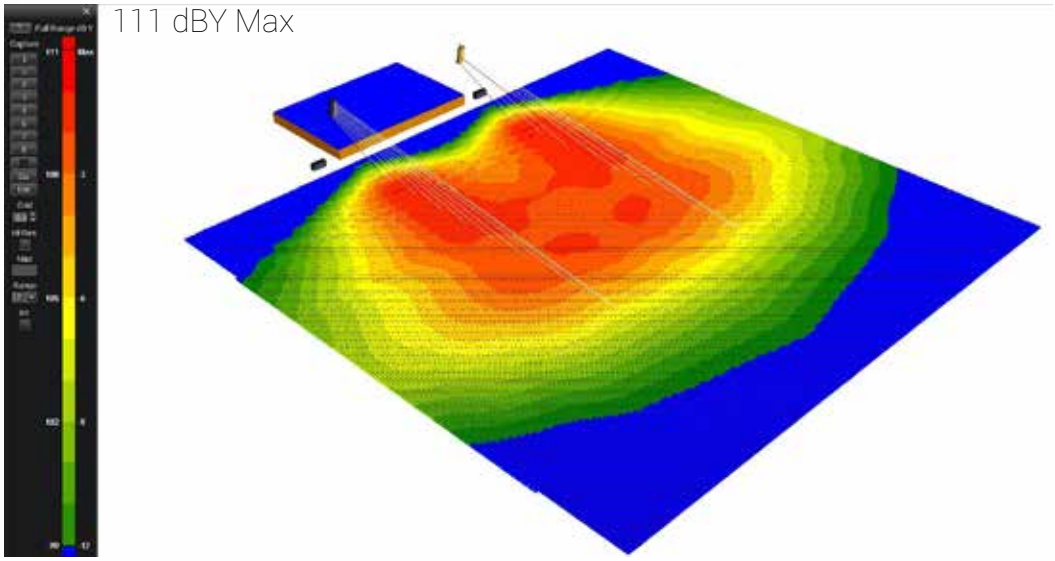


Fly Your Subs: *The Compact Set is even more versatile with the addition of two or more E-Frame Full Line Adaptor rigging frames which allow the subwoofers to be flown within the array or on their own.*

E15 Configurations

Compact Set (18 E15 / 8 E219)

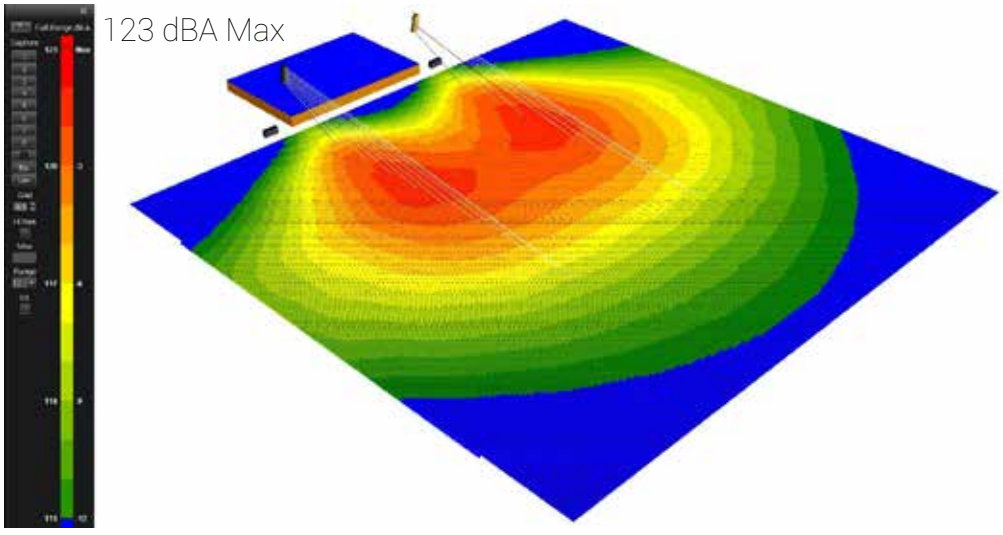
E15 Compact Set Y-weighted Simulation



**Y-weighted decibel scale (2K - 8K) is used to effectively view level variance

Audience area size: 100m x 100m

E15 Compact Set A-weighted Simulation

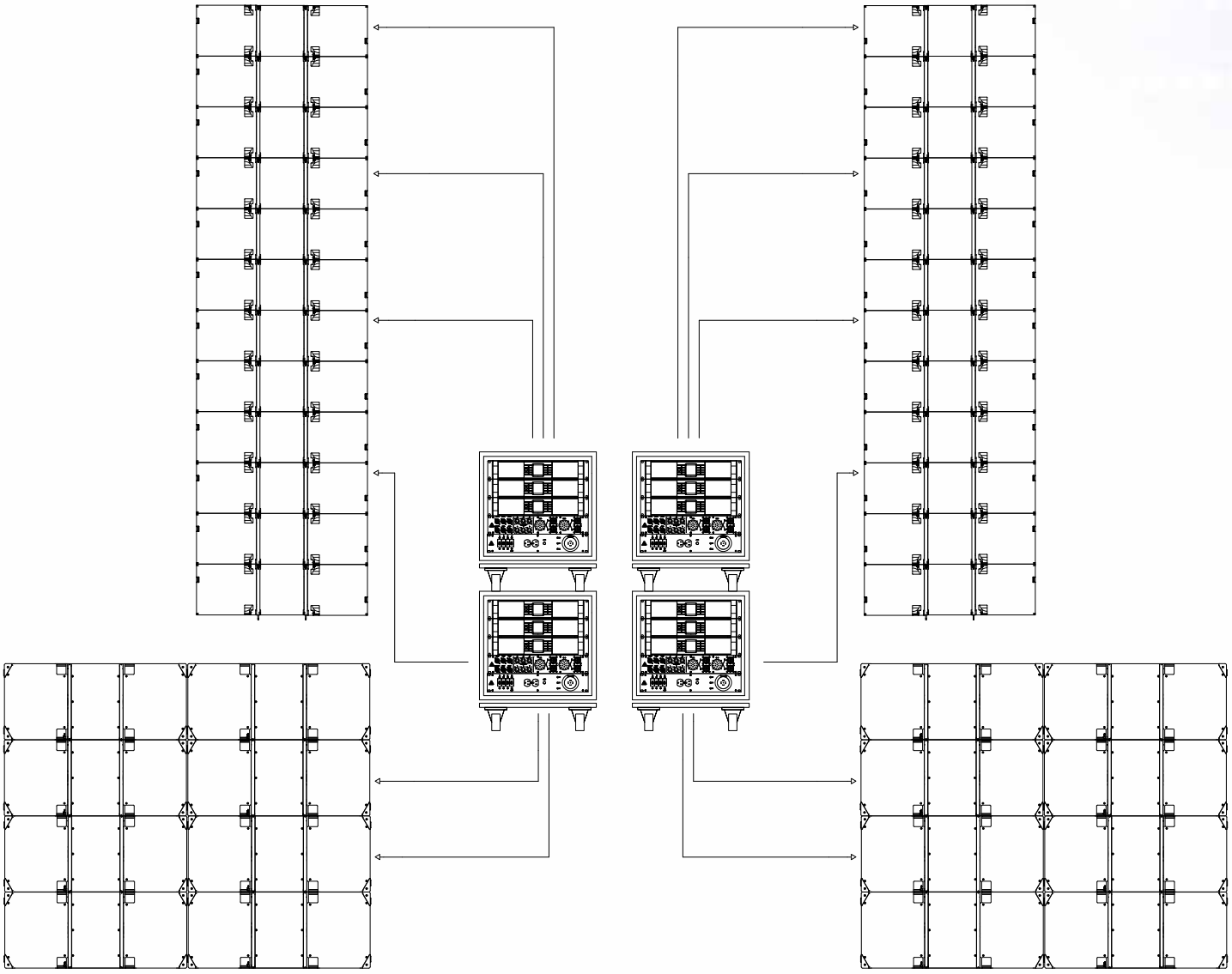


***A-weighted sound pressure level representing possible show levels

Audience area size: 100m x 100m

E15 Configurations

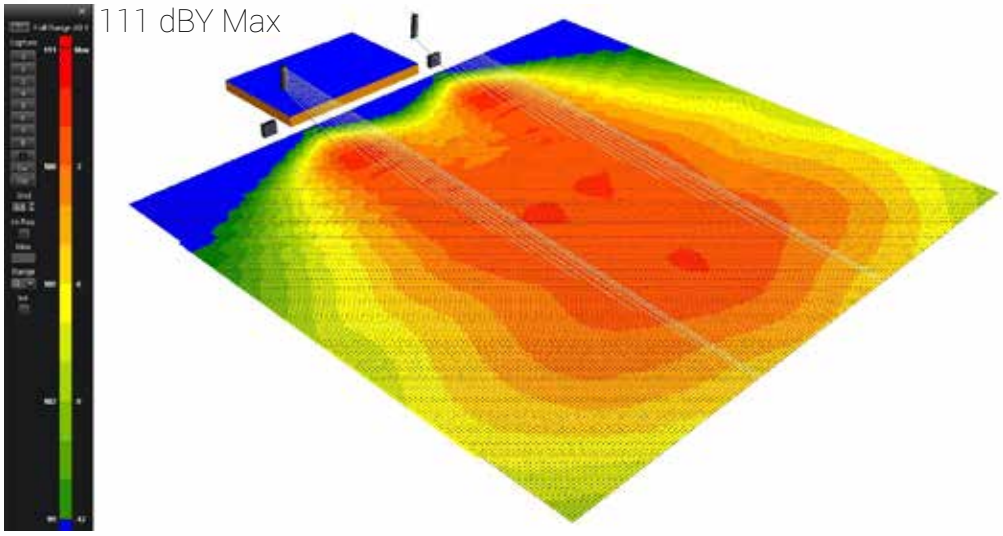
Performance Set (24 E15 / 16 E219)



E15 Configurations

Performance Set (24 E15 / 16 E219)

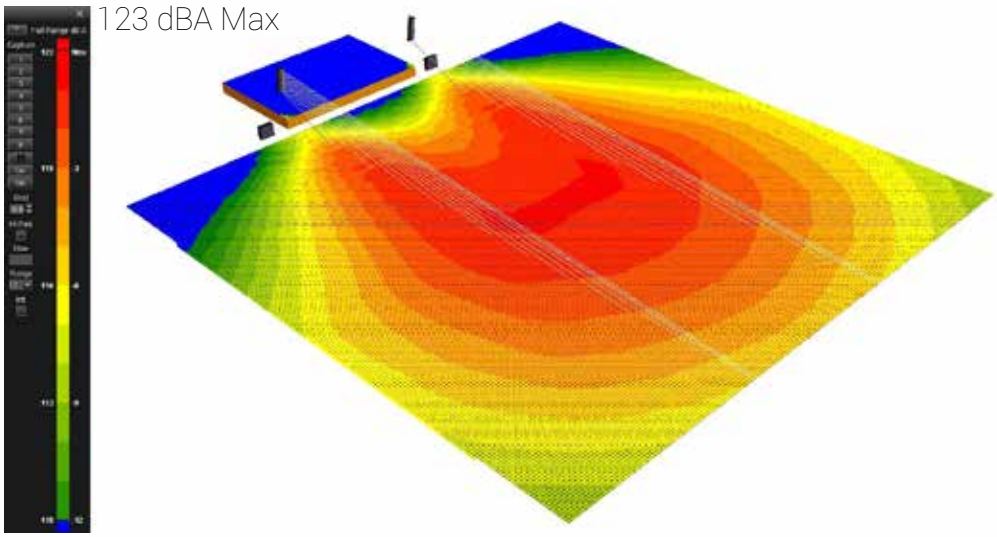
E15 Performance Set Y-weighted Simulation



**Y-weighted decibel scale (2K - 8K) is used to effectively view level variance

Audience area size: 100m x 100m

E15 Performance Set A-weighted Simulation

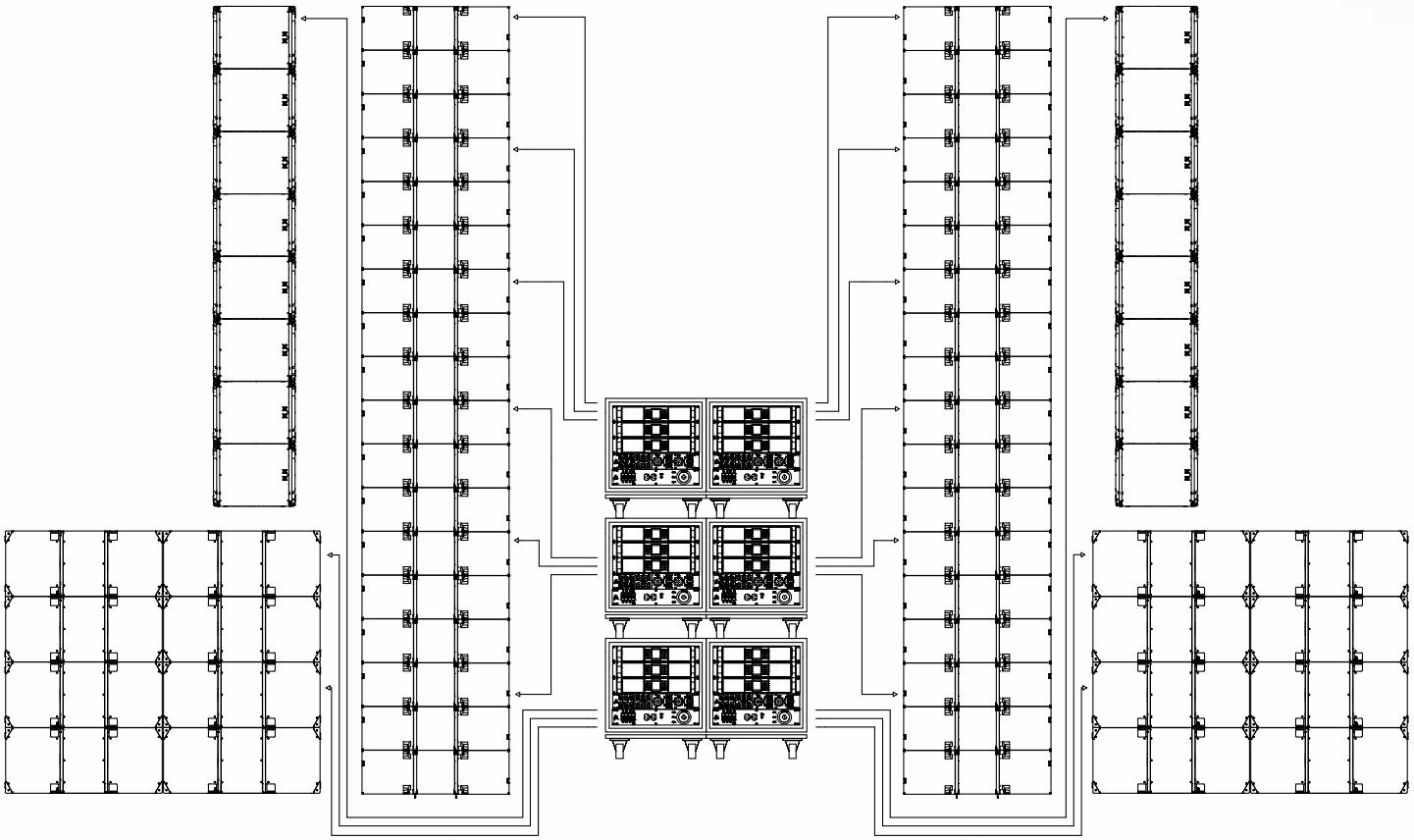


***A-weighted sound pressure level representing possible show levels

Audience area size: 100m x 100m

E15 Configurations

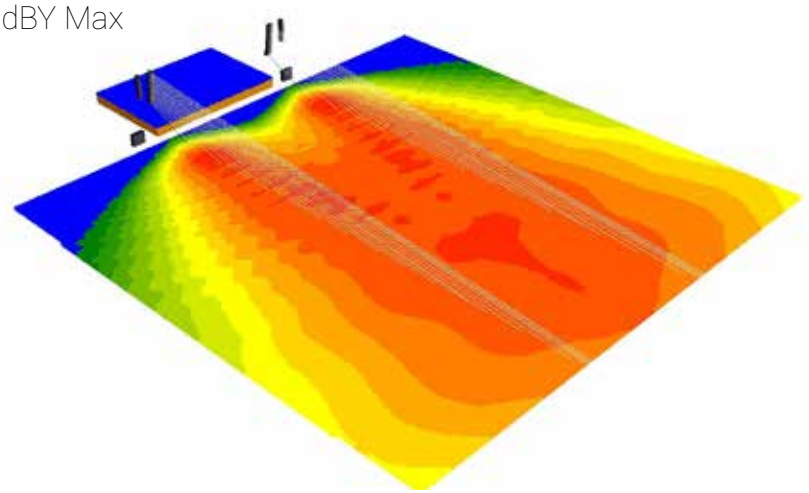
High Performance Set (36 E15 / 16 E219 / 16 E119)



E15 Configurations

High Performance Set (36 E15 / 16 E219 / 16 E119)

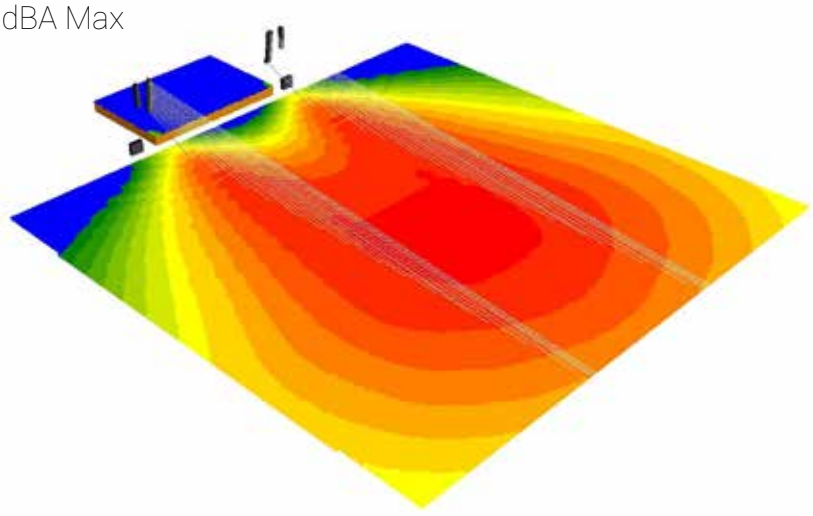
E15 High Performance Set Y-weighted Simulation



**Y-weighted decibel scale (2K - 8K) is used to effectively view level variance

Audience area size: 100m x 100m

E15 High Performance Set A-weighted Simulation



***A-weighted sound pressure level representing possible show levels

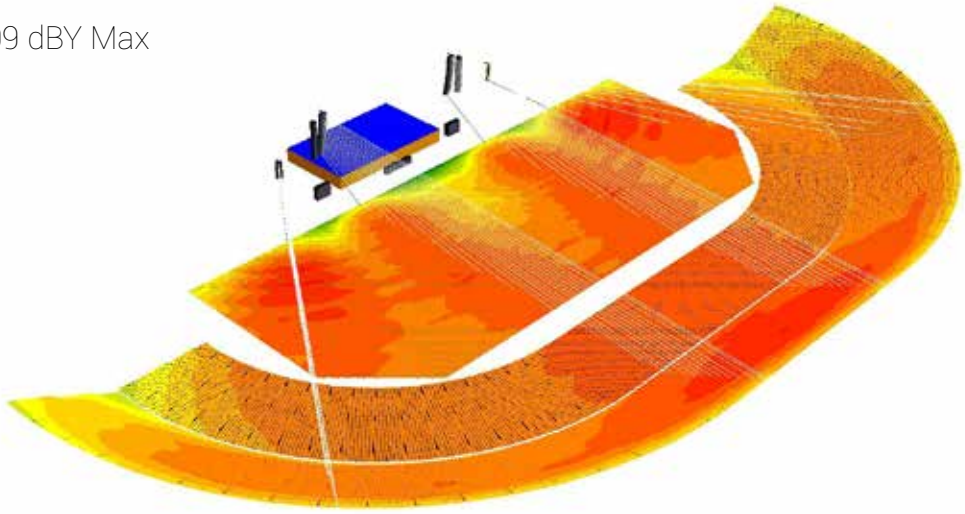
Audience area size: 100m x 100m

E-Series Configurations

Arena Set (36 E15/ 24 E12/ 24 E219/ 24 E119)

E-Series Arena Set Y-weighted Simulation

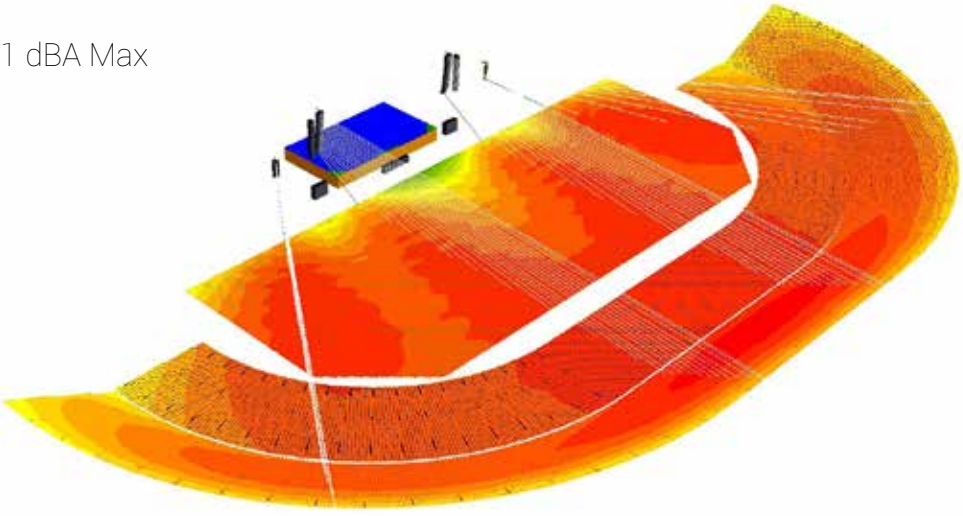
109 dBY Max



**Y-weighted decibel scale (2K - 8K) is used to effectively view level variance

E-Series Arena Set A-weighted Simulation

121 dBA Max

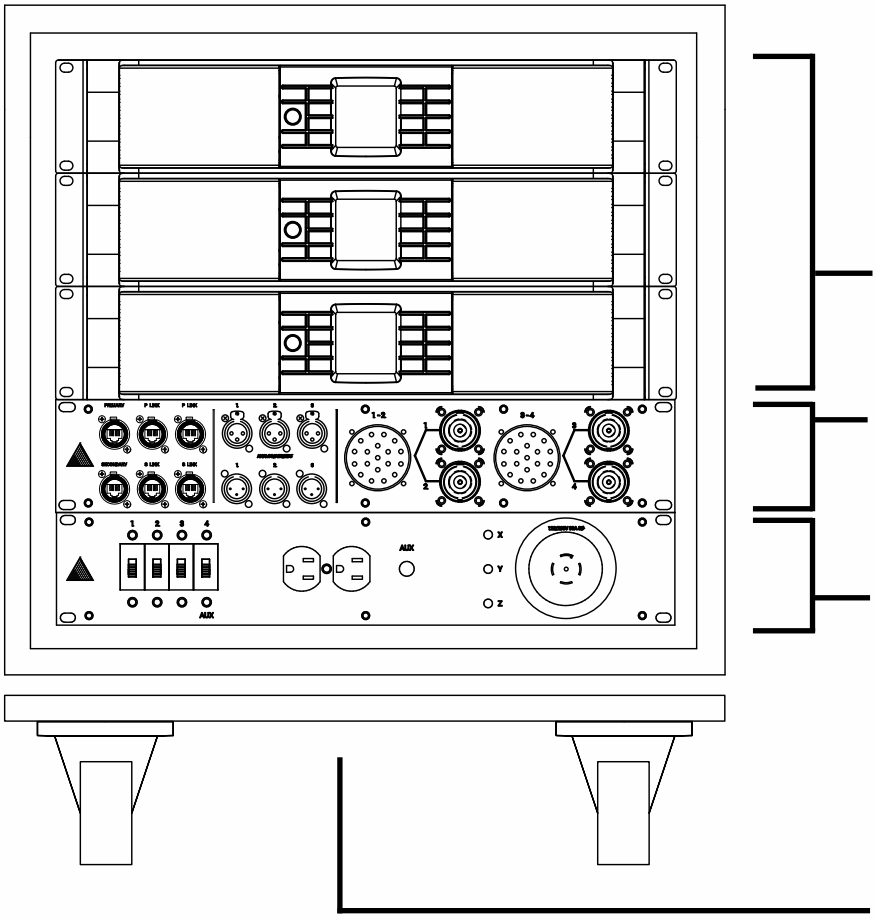


***A-weighted sound pressure level representing possible show levels

E-Series Configurations

E-Rack Components

Adamson has developed a unified rack solution configured to interface seamlessly with our line of loud-speaker products. For more information on the E-Rack, please refer to the E-Rack brochure available on the Adamson Systems website.



2 or 3x Lab.gruppen PLM 20K44

1x Adamson Audio Panel, incl. Analog and AES in and thru-puts (XLR), Speaker out-puts (NL8 and Socapex), Gigabit Network Ports (Ethercon RJ45)

1x AC Distribution Panel, L21-30 input *or* CEE 32A 3-Phase 400V/230V 3L+N+PE (Red CEE connector), depending on region

1x DANTE Certified Switch (Rear Side)

E-Series Configurations

Master Parts List

PART NUMBER	PRODUCT	E12 Compact	E12 Performance	E12 High Performance	E15 Compact	E15 Performance	E15 High Performance	E-Series Arena
975-0001	**E15**				18	24	36	36
	3-way line source enclosure: LF - 2x 15" ND15-L, MF - 2x 7" YX7, HF - 2x 4" NH4TA2, Autolock™ rigging system							
974-0001	**E12**	12	18	24				24
	3-way line source enclosure: LF - 2x 12" ND12-S, MF - 1x 7" YX7, HF - 1x 4" NH4TA2, Autolock™ rigging system							
994-0001	**E219**				8	16	16	24
	Subwoofer: LF - 2x 19" SD19, integrated rigging system							
994-0003	**E119**	8	12	16			16	24
	Subwoofer: LF - 1x 19" SD19, integrated rigging system							
930-0004	**E-Frame with Extender Beam**	2	2	4	2	2	4	4
	Rigging: suspension frame for Energia 3-way line source enclosures							
930-0019	**E-Frame Full Line Adapter**				2 (opt.)	2 (opt.)	2 (opt.)	2 (opt.)
	Rigging: adapter frame for E-Series enclosures; ground stack and underhang compatible							
930-0023	**E-Frame Sub**			2			2	2
	Rigging: suspension frame for all E-Series subwoofers							
938-0004	**E15 Dolly**				6	6	9	9
	Accessory: transports up to 4x E15							
907-0015	**E15 Cover 4up**					6	9	9
	Accessory: cover for 4x E15 stacked on an E15 Dolly (part no. 938-0004)							
907-0019	**E15 Cover 3up**				6			
	Accessory: cover for 3x E15 stacked on an E15 Dolly (part no. 938-0004)							
938-0015	**E12 Dolly**	3	6	6				6
	Accessory: transports up to 4x E12							
907-0016	**E12 Cover 4up**	3		6				6
	Accessory: cover for 4x E12 stacked on an E12 Dolly (part no. 938-0015)							
907-0023	**E12 Cover 3up**		6					
	Accessory: cover for 4x E12 stacked on an E12 Dolly (part no. 938-0015)							
938-0014	**Dolly Stacking Legs**	2	2	4	2	2	4	4
	Accessory: set of 4 legs to support one dolly							
938-0017	**E219 Dolly**					8	8	8
	Accessory: transports up to 3x E219							
907-0020	**E219 Cover 3up**							8
	Accessory: cover for 3x E219 stacked on an E219 Dolly (part no. 938-0017)							
907-0024	**E219 Cover 2up**					8	8	
	Accessory: cover for 2x E219 stacked on an E219 Dolly (part no. 938-0017)							
939-0003	**E219 Castor-/Cover Kit**				8	4		
	Accessory: 1x dolly and 1x cover for E219 - single subwoofer							
938-0020	**E119 Dolly**		4				4	8
	Accessory: transports up to 3x E219							
907-0029	**E119 Cover 3up**		4				4	8
	Accessory: cover for 3x E119 stacked on an E119 Dolly (part no. 938-0020)							
907-0030	**E119 Cover 2up**		4				4	8
	Accessory: cover for 3x E119 stacked on an E119 Dolly (part no. 938-0020)							

E-Series Configurations

Master Parts List

PART NUMBER	PRODUCT	E12 Compact	E12 Performance	E12 High Performance	E15 Compact	E15 Performance	E15 High Performance	E-Series Arena
939-0004	E119 Castor/Cover Kit	8		16				
	Accessory: 4x casters and 1x cover for E218 - single subwoofer							
291-0001	Adamson Inclinometer Kit (1 Unit)	2	2	4	2	2	4	4
	Electronics: 1x sensor with 3 mW laser, 1x reader, remote cabling, 1x 10M tape, 1x hardshell case with dye-cut foam inserts							
920-0014	NL803	12	18	24	12	16	24	
	Wiring: NL8 3' female-female, 12 AWG with Neutrik STX series connector, top link							
920-0023	NL806	6	10	20	4	8	12	
	Wiring: NL8 6' female-female, 12 AWG with Neutrik STX series connector, sub link							
920-0010	NL810				2	4	6	6
	Wiring: NL8 10' female-female, 12 AWG with Neutrik STX series connectors							
920-0013	NL825	2	2	4	2	4	6	6
	Wiring: NL8 25' female-female, 12 AWG with Neutrik STX series connectors							
920-0015	NL850	2	2	4	2	4	6	6
	Wiring: NL8 50' female-female, 12 AWG with Neutrik STX series connectors							
920-0011	NL8100	4	6	8	6	8	12	22
	Wiring: NL8 100' female-female, 12 AWG with Neutrik STX series connectors							
920-0025	NL8 - NL4 Splay	2	2	2			2	2
	Wiring: NL8 to 4x NL4 female, 12 AWG with Neutrik STX series connectors							
920-0008	NL405		4	8			8	8
	Wiring: NL4 5' female-female, 12 AWG with Neutrik STX series connectors							
945-0001	E15 Service Kit				1	1	1	1
	Service: 2x ND15-L, 3x ND15-LR, 2x YX7, 2x NH4TA2, 6x ND4015TA2, 2x complete screen sets, screws, pins, toolkit							
945-0002	E12 Service Kit	1	1	1				1
	Service: 2x ND12-S, 4x ND12-SR, 1x YX7, 1 xNH4TA2, 4x ND4015TA2, 2x complete screen sets, screws, pins, toolkit							
945-0004	E219 Service Kit				1	1	1	1
	Service: 2x SD19, 2x outside screens, 1x center screen, screws							
945-0004	E119 Service Kit				1	1	1	1
	Service: 2x SD19, 2x outside screens, 1x center screen, screws							
945-0005	Rigging + Screws Service Kit	1	1	1	1	1	1	2
	Service: 4x large frame pins w/leash, 2x small frame pins w/leash, screws							
905-0025	E-Rack Turn-key 12 Channel	2		4		4	6	10
	Electronics: 3x PLM+ 20K44 (916-0021), 1x Adamson Audio Panel (925-0005), 1x 120V AC-Distribution (926-0006), 1x Dante switch (913-0002), 1x 10U Rack (902-0011)							
905-0026	E-Rack Turn-key 8 Channel		4		4			
	Electronics: 2x PLM+ 20K44 (916-0021), 1x Adamson Audio Panel (925-0005), 1x 120V AC-Distribution (926-0006), 1x Dante switch, (913-0002), 1x 10U Rack (902-0011)							
905-0003	Driverack Turn-key 2 LM 44	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
	FOH Driverack with 2x LM44 (915-0013), 2x Dante Switch (913-0002), 1x Audio Panel, 1x 4U Rack (902-0009)							
999-0001	Factory Training 2 day	1	1	1	1	1	1	1
	Training: at customer location, theory, software, rigging system overview, measurement							

E-Series Configurations

Notes

*Blueprint AV™ is Adamson's 2D and 3D modeling suite, which provides fast and accurate simulations of all of our products in an environment designed by you, the end user.

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.

** 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 all 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 a far greater insight into how a targeted area will actually be covered, and how it will actually sound.

*** Max. Average (RMS) SPL using IEC-weighted 6dB crest factor pink noise stated. Reduce by 10 dB to get a reasonable value for a live show

ADAMSON

www.adamsonsystems.com
www.facebook.com/adamsonsystems

CANADA: 905-982-0520
UNITED STATES: 952-892-6003
EUROPE: +49 40 7699 9959 0