

## MEDIUM THROW LINE SOURCE



- Very high output (141/144 dB SPL max)
- Solid LF resources (>10 dB LF contour)
- Lightweight (33/35 kg)
- Simple, fast, integral rigging
- Flexible coverage (2 enclosures + Panflex)
- Application versatility (horizontal or vertical arrays)
- Exceptional scalability (50 to 5000 people)
- Plug-and-play simplicity









#### ELECTRO-ACOUSTICS



Part of the A Series, A15 is a medium throw product line designed for production applications up to 45 m. The highly multifunctional family includes A15 Focus and A15 Wide, passive 15" systems with distinct coverage patterns. A15 products can be flown or stacked in combinations to form vertical or horizontal line sources or used individually as configurable directivity point sources.

The A15 can adapt to virtually any audience geometry with two enclosure coverage options (10° or 30°), Panflex for user configurable waveguide directivity (70°, 110° or 90° asymmetrical) and a range of accessories for vertical or horizontal deployment.

A15 deployment requires a single preset that is optimized to provide amazing plug-and-play performance for both A15 models regardless of Panflex configuration. Performance can be further enhanced with L-Acoustics software optimization tools.

A15 provides the low frequency contour of a large concert system and the dedicated KS21 subwoofer can be groundstacked or flown with A15 products to reinforce contour and extend bandwidth to 29 Hz.

The A15 family is a highly scalable system that can do it all – delivering concert level performance for events large and small or supplementing a larger L-Acoustics solution for the world's biggest stages.

#### PHYSICAL

The A15 Focus and Wide enclosures are constructed of premium grade Baltic beech and birch plywood to ensure maximum acoustical and mechanical integrity. Bent wood technology combined with a thickness optimization process greatly reduces weight and ensures a sturdy and acoustically optimized cabinetry.

The A15 products integrate a patent pending two-point captive rigging system that simplifies deployment and provides visual safety assessment. Each enclosure features ergonomic handles, bottom ground runners, matching top tracks and corner stops to protect side panels during handling.

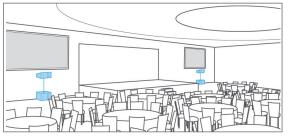
The A15 family has been weatherized to achieve an IP55 rating for outdoor operations.



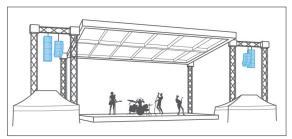
Integrated rigging with safety check; ergonomic handles; ground runners; corner stops.

#### APPLICATIONS AND BENEFITS

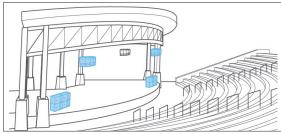
A15 is a multifunctional solution that can be deployed in a wide variety of ways to address most applications. A15 can stand on its own for small to medium sized events or complement a variable curvature system on larger applications.



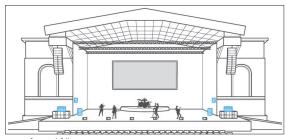
Corporate main system



Green field main system



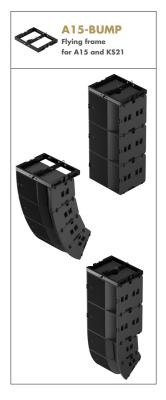
Amphitheater main system



Large festival fill system

#### **RIGGING**

The A15 products can be flown or stacked on their own or in combinations with KS21. Dedicated rigging elements allow for vertical or horizontal line source deployment. The A15 products can also be flown or pole-mounted individually as a configurable directivity point source.













#### **AMPLIFIED CONTROLLERS**

LA4X is the recommended amplified controller for A15 with one enclosure per output channel. This configuration delivers amazing plug-and-play performance and allows users to leverage the L-Acoustics software optimization tools to further optimize the system response. LA12X can be used to power and control up to 3 A15 per output channel. This configuration simplifies deployment and cable management but reduces optimization capabilities.

#### LA4X: amplified controller with DSP

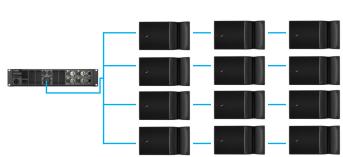


4 x 1000 W/8 ohms or 4 ohms 4 inputs x 4 outputs architecture Max 4 enclosures per amplified controller

#### LA12X: amplified controller with DSP



4 x 3300 W/2.7 ohms 4 inputs x 4 outputs architecture Max 12 enclosures per amplified controller



#### L-CASE: transport and operation case for electronics



Capacity: single 2U amplified controller Stacked or flown





#### **SUBWOOFERS**

#### KS21: reference 21" subwoofer (1 x 21")

A15 + KS21 bandwidth: 29 Hz – 20 kHz Ratio of 1 KS21 to 1 A15 Contour reinforced by 10 dB at 100 Hz





#### **SOFTWARE**

#### **SOUNDVISION: simulation software**



3D electro-acoustic & mechanical simulation software

#### LA Network Manager: control & monitoring software



Real-time control and monitoring up to 253 units Multiple network topologies

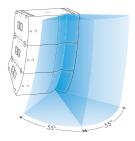
#### A Series: flexibility and scalability for medium throw applications



The multifunctional A series comprises four medium throw loudspeakers and a dedicated subwoofer with flexible coverage options, adaptable directivity and up to 45 meters of throw. The A series delivers the performance of a large concert system in a plug-and-play solution that is easier to design and deploy. Scaling to a variety of applications, A Series loudspeakers can be used individually as a point source or combined to form vertical or horizontal line sources.

## COVERAGE

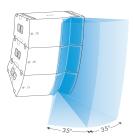
Panflex at 110°



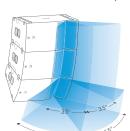
Panflex at 90° LF side



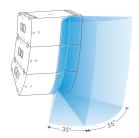
Panflex at 70°



Mixed Panflex at 70°/110°



Panflex at 90° HF side



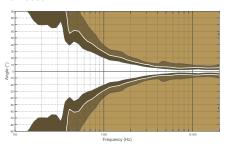
Panflex at 90° down



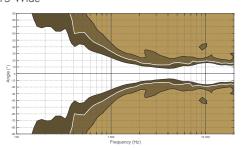
#### **BEAMWIDTH**

A15 Focus





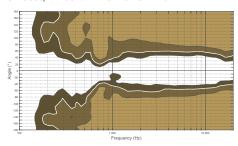
A15 Wide



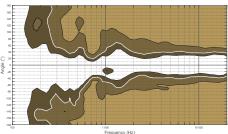
▶ Dispersion angle diagram of a single A15 Focus (left) and A15 Wide (right) in the vertical plane using lines of equal sound pressure at -3 dB, -6 dB, -12 dB.

A15 Focus/Wide with Panflex at 110°



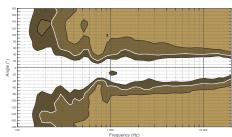


A15 Focus/Wide with Panflex at  $70^{\circ}$ 

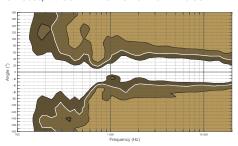


A15 Focus/Wide with Panflex at  $90^{\circ}$  LF side





A15 Focus/Wide with Panflex at  $90^{\circ}$  HF side



▶ Dispersion angle diagrams of a single A15 in the horizontal plane for all Panflex settings using lines of equal sound pressure at -3 dB, -6 dB, -12 dB.

# A 15 FOCUS

## MEDIUM THROW LINE SOURCE













A15 Focus is a medium throw loudspeaker designed for production applications. Part of the multifunctionnal A15 family, the passive 15" enclosure offers exceptional deployment flexibility and simplicity without compromising performance.

With a tightly-controlled 10° enclosure coverage, A15 Focus boasts an impressive output of 144 dB and ensures projection up to 45 m. Panflex allows users to adapt the directivity to the audience geometry and ensure exceptional frequency response stability.

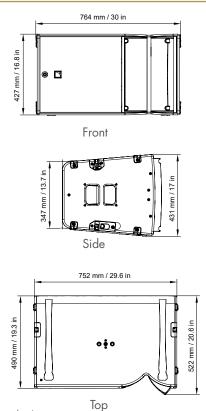
Combinations of A15 Focus and A15 Wide can be flown or stacked to form a vertical line source. A15 Focus can also be used individually as a configurable directivity point source for front fill or delay applications where a narrow coverage is required.

A15 Focus provides the low frequency contour of a large concert system and KS21 subwoofer further reinforces the contour and extends the bandwidth to 29 Hz.

A15 Focus is a highly scalable solution that delivers concert level performance for small to large events or supplements a larger L-Acoustics solution for the world's biggest stages.

#### **SPECIFICATIONS**

Description	2-way passive constant curvature WST 10°, amplified by LA4X / LA8 / LA12X
Usable bandwidth (-10 dB)	41 Hz - 20 kHz ([A15])
Maximum SPL <sup>1</sup>	144 dB ([A15])
Nominal directivity	Enclosure: 10° Panflex: 70°/110° symmetric or 90° asymmetric
Transducers	LF: $1 \times 15^{\prime\prime}$ neodymium cone driver
	HF: 1 × 3" diaphragm neodymium compression driver
Acoustical load	LF: Bass-reflex, L-Vents HF: DOSC waveguide, Panflex
Nominal impedance	8 Ω
Connectors	IN: 1 × 4-point speakON
	LINK: 1 × 4-point speakON
Rigging and handling	Flush-fitting two-point rigging system
	2 handles, 8 corner stops and 2 ground runners
Safety	1 DIN580-compatible M8 insert
Weight (net)	35 kg/77 lb
Cabinet	Premium grade Baltic beech and birch plywood
Front	Coated steel grill Acoustically neutral 3D fabric
Rigging components	High grade steel with anti-corrosion coating
Finish	Dark grey brown Pantone 426 C
IP	IP55

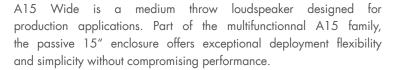


<sup>1-</sup> Peak level at 1 m under free field conditions using pink noise with crest factor 4 (preset specified in brackets).

## MEDIUM THROW LINE SOURCE







The 30° enclosure of A15 Wide enables a compact array to provide expansive coverage while preserving sightlines. Panflex allows users to adapt the directivity to the audience geometry and ensure exceptional frequency response stability.

Combinations of A15 Wide and A15 Focus can be flown or stacked to form a vertical line source. A15 Wide deploys radially to offer broad horizontal coverage, particularly suited for infill and side-fill applications on large stages. A15 Wide can also be used individually as a configurable directivity point source for delays and pole-mounted applications.

A15 Wide provides the low frequency contour of a large concert system and KS21 subwoofer further reinforces the contour and extends the bandwidth to 29 Hz.

A15 Wide is a highly scalable solution that delivers concert level performance for small to large events or supplements a larger L-Acoustics solution for the world's biggest stages.



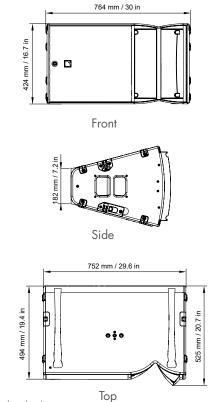






**SPECIFICATIONS** 

Description	2-way passive constant curvature WST 30°, amplified by LA4X / LA8 / LA12X
Usable bandwidth (-10 dB)	42 Hz - 20 kHz ([A15])
Maximum SPL <sup>1</sup>	141 dB ([A15])
Nominal directivity	Enclosure: 30° Panflex: 70°/110° symmetric or 90° asymmetric
Transducers	LF: 1 × 15" neodymium cone driver
	HF: 1 × 3" diaphragm neodymium compression driver
Acoustical load	LF: Bass-reflex, L-Vents HF: DOSC waveguide, Panflex
Nominal impedance	8 Ω
Connectors	IN: 1 × 4-point speakON
	LINK: 1 × 4-point speakON
Rigging and handling	Flush-fitting two-point rigging system
	2 handles, 8 corner stops and 2 ground runners
Safety	1 DIN580-compatible M8 insert
Weight (net)	33 kg/73 lb
Cabinet	Premium grade Baltic beech and birch plywood
Front	Coated steel grill Acoustically neutral 3D fabric
Rigging components	High grade steel with anti-corrosion coating
Finish	Dark grey brown Pantone 426 C
IP	IP55



<sup>1-</sup> Peak level at 1 m under free field conditions using pink noise with crest factor 4 (preset specified in brackets).

# PRELIMINARY KS21 SUBWOOFER





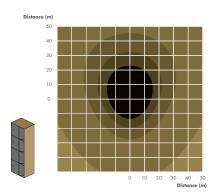
Description	High power compact subwoofer: 1 × 21" amplified by LA4X / LA8 / LA12X
Usable bandwidth (-10 dB)	31 Hz - 100 Hz ([KS21_100])
Maximum SPL <sup>1</sup>	138 dB ([KS21_100])
Nominal directivity	Standard or cardioid configurations
Transducers	1 × 21" neodymium cone driver
Acoustical load	Bass-reflex, L-Vents
Nominal impedance	8 Ω
Connectors	IN: 1 × 4-point speakON
	LINK: 1 × 4-point speakON
Rigging and handling	Flush-fitting two-point rigging system
	1 pole mount with M20 x 150 insert
	4 handles, 8 corner stops and 2 ground runners
Weight (net)	49 kg / 108 lb
Cabinet	Premium grade Baltic beech and birch plywood
Front	Coated steel grill Acoustically neutral 3D fabric
Rigging components	High grade steel with anti-corrosion coating
Finish	Dark grey brown Pantone 426 C

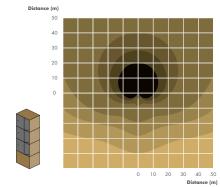






## **ISOCONTOUR**





▶ SPL mapping of a block of four KS21 in standard (left) and cardioid (right) arrangements, using surfaces of equal sound pressure with three dB step colored scale.

### **DIMENSIONS**



