

PRELIMINARY

KARA II LONG THROW LINE SOURCE



- Added variable directivity and improved polar with Panflex
- +2 dB SPL at 70°
- 4-in-1 coverage patterns (70° / 90° L-R / 110°)
- Best-in-class SPL per weight / footprint



ELECTRO-ACOUSTICS



Part of the K Series, Kara II is a modular line source system that can be deployed standalone or with its companion subwoofer SB18. Assembled as a variable curvature line source with class-leading SPL per weight and footprint, Kara II is ideal for applications that require clarity and long throw capability such as performing arts, congregations, large corporate, or special events.

Based on the Kara design, Kara II adds flexibility with Panflex. A single Kara II enclosure offers four horizontal directivity patterns: 70° or 110° symmetrical and 90° asymmetrical on either side. With a tighter control of the directivity, the 70° setting brings an additional 2 dB compared to the 110° setting increasing throw capability. With Panflex and inter-element angles ranging from 0° to 10°, a Kara II line source coverage can be precisely tailored to any audience geometry.

On its own Kara II can be used as a main system for vocal reinforcement and music material with light LF requirements or as a complement to large sound systems in fill and delay applications. Associated with its companion subwoofer SB18, Kara II modular system can accommodate any program material requiring bandwidth, contour and output.

PHYSICAL

Kara II enclosure is constructed of premium grade Baltic birch plywood to ensure maximum acoustical and mechanical integrity. The compact enclosure is fitted with protective elements to secure the enclosure panels during transport and handling. Ergonomic side and rear handles facilitate manipulation and assembly.

Kara II features a time-tested and efficient four-point captive rigging system, that provides visual safety assessment. A set of rigging accessories have been designed to answer all deployment needs when used as mains or fill system.

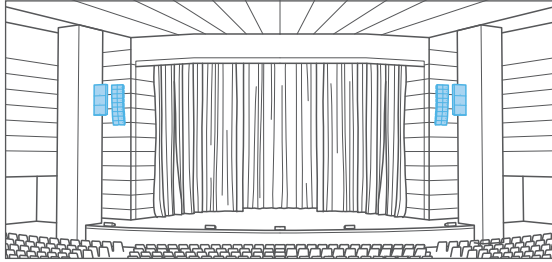
Kara II has been weatherized to achieve an IP55 rating for outdoor operations.



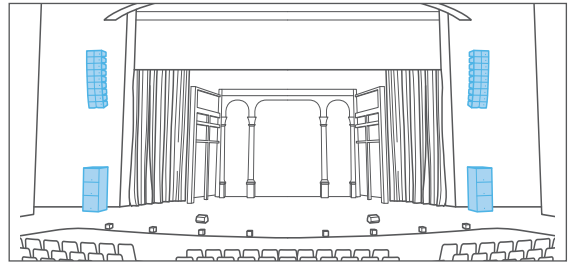
Integrated rigging with safety check; ergonomic handles; rigging and enclosure protection elements.

APPLICATIONS

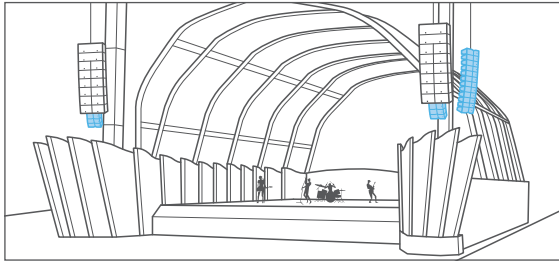
Kara II is a modular line source system that can be deployed on its own or combined with associated subwoofers to address medium scale mobile and touring applications. Kara II can also be used to complement a large format system as out-fills, infills and down-fills.



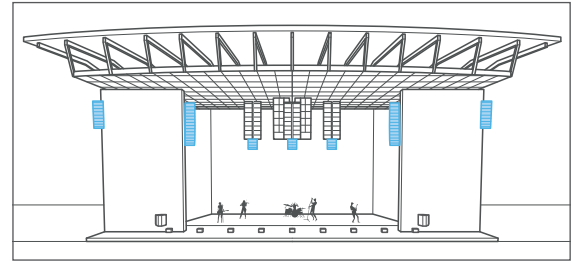
Fan shaped amphitheater with Kara II at 110°



Shoe-box concert hall with Kara II at 70° and 110°



Large event with Kara II as outfill at 90° and downfill at 110°



Shed Scene and Extension LISA Focus system with Kara II at 110°

RIGGING

Kara II can be flown or stacked with the dedicated frame M-BUMP and the optional M-BAR for greater tilt angles. Small Kara II arrays can be flown or stacked with the lighter frame KARA-MINIBU. Additional rigging accessories allow for strong negative tilt angle or downfill deployment.

M-BUMP + M-BAR
Flying and stacking frame up to 24 Kara II

KARA-MINIBU(EX)
Lighter flying and stacking frame up to 6 Kara II

KARADOWNK1/K2
Interface for up to 6 Kara II below K1/K2

KARA-PULLBACK
Pullback accessory for up to 12 Kara II

KARA-ANGARMEX + M-JACK
Angle extension bar + screw jacks for M-BAR for up to 9 Kara II

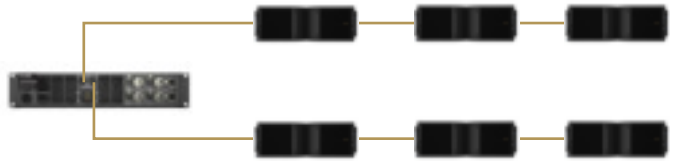
AMPLIFIED CONTROLLERS

Kara II can be powered by LA4X and LA12X. LA12X provides maximum power density while LA4X offers maximum discretization for best use of Soundvision and LA Network Manager Autosolver tools.

LA12X: amplified controller with DSP



4 x 3300 W / 2.7 ohms
4 inputs x 4 outputs architecture
Max 6 enclosures per amplified controller



LA4X: amplified controller with DSP



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



SUBWOOFERS

SB18: Companion 18" subwoofer (1 x 18")

KARA II + SB18: bandwidth: 32 Hz – 20 kHz
Ratio of 1 SB18 to 3 Kara II (coupled)
Ratio of 2 SB18 to 3 Kara II (decoupled)
Contour reinforced by 10 dB at 100 Hz



Other subwoofers: KS21, SB28, KS28



SOFTWARE

SOUNDVISION: simulation software



3D electro-acoustic and mechanical simulation software

LA Network Manager: control & monitoring software



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



K series: Long throw variable curvature line sources

The K range comprises modular and large format line sources adapted to long throw applications in rental productions and fixed installations.

Modular line sources (Kiva II/Kara II) can be deployed with or without their dedicated subwoofer extension, based on bandwidth/footprint priority requirement.

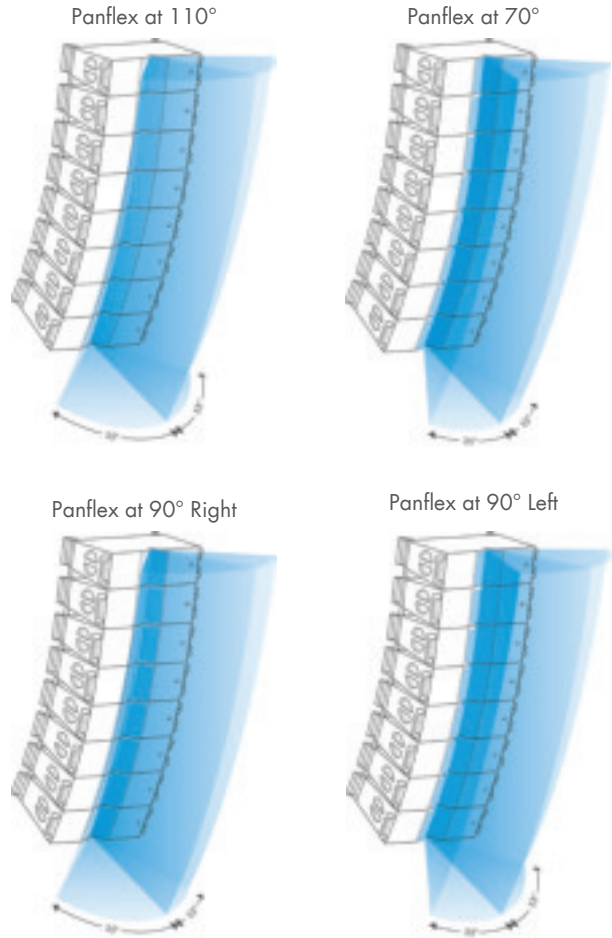
Large format line sources (K2/K1) are true full range systems with a maximized coherence due to the proximity of their LF/HF driver acoustic centers. Additionally, these systems can be deployed with K1-SB to boost the LF throw.

COVERAGE

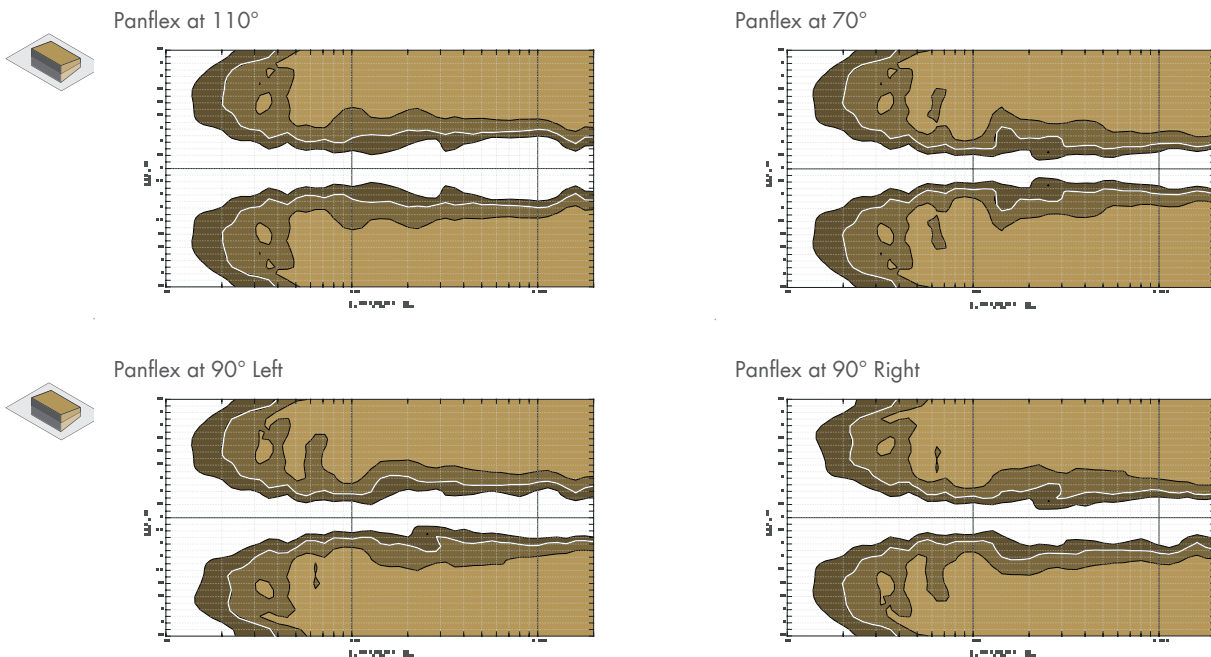
About L-Acoustics Panflex

Kara II employs L-Acoustics Panflex™, a unique horizontal steering technology that combines mechanically adjustable fins with DSP algorithms effective from 800 Hz.

Narrowing or widening the horizontal directivity can serve many purposes: adapt to the width of the listening area, enable consistent SPL distribution for long and short distances, reduce or extend overlapping areas, and avoid reflecting surfaces. By combining WST® and Panflex, L-Acoustics exclusively addresses the control of directivity in both vertical and horizontal planes. As a result Kara II can match complex audience geometries with best sonic performance and minimized noise pollution.



BEAMWIDTH



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

PRELIMINARY

KARA II LONG THROW LINE SOURCE



Part of the K Series, Kara II is a modular line source element designed for production applications beyond 35 m of throw. Assembled as a variable curvature line source with high SPL per line length, Kara II is ideal for applications that require precise vertical control and long-throw capabilities such as performing arts, congregations, large corporate, or special events.

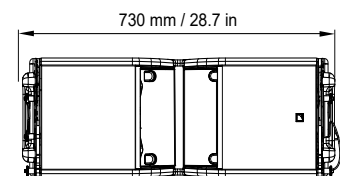
Based on the Kara design, Kara II adds flexibility with Panflex. A single Kara II enclosure offers four horizontal directivity patterns: 70° or 110° symmetrical or 90° asymmetrical on either side. With a tighter control of the directivity, the 70° setting brings an additional 2 dB compared to the 110° setting increasing throw capability. Ultra-precise audience coverage and smooth SPL distribution is granted by the combination of Panflex and a large choice of inter-element angles.

The rugged Kara II is made for touring. It features ergonomic side and rear handles as well as enclosure protection elements. The captive rigging system is fitted with a visual safety indication making for secured and effortless deployment. A comprehensive set of rigging accessories enable flow and stacked deployment in various configurations.

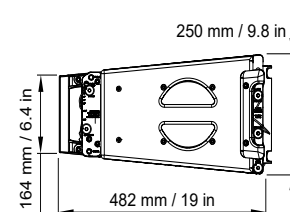


SPECIFICATIONS

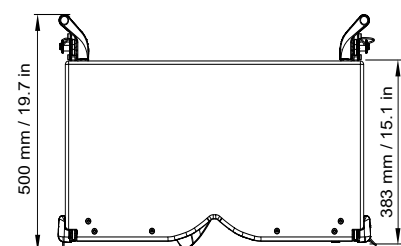
Description	2-way active WST enclosure, amplified by LA4X / LA8 / LA12X
Usable bandwidth (-10 dB)	55 Hz - 20 kHz ([KARA II 70])
Maximum SPL¹	142 dB ([KARA II 70])
Nominal directivity	Vertical : depending on number of elements and array curvature Horizontal : 70° / 110° symmetric or 90° asymmetric (35°/55°)
Transducers	LF: 2 x 8" neodymium cone driver HF: 1 x 3" neodymium diaphragm compression driver
Acoustical load	LF: Bass-reflex HF: DOSC waveguide, Panflex
Nominal impedance	LF: 8 Ω HF: 8 Ω
Connectors	IN: 1 x 4-point speakON LINK: 1 x 4-point speakON
Rigging and handling	Four-point captive rigging system 2 side handles, 2 rear handles Inter-enclosure angles [deg]: 0, 1, 2, 3, 4, 5, 7.5, 10
Weight (net)	26 kg / 57 lb
Cabinet	Premium grade Baltic 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



Front



Side



Top

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

PRELIMINARY

SB 18 SUBWOOFER



OMNI / CAROID
SUBWOOFER

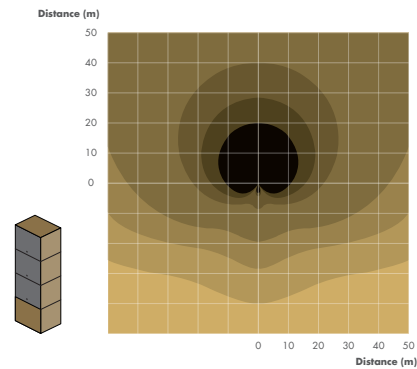
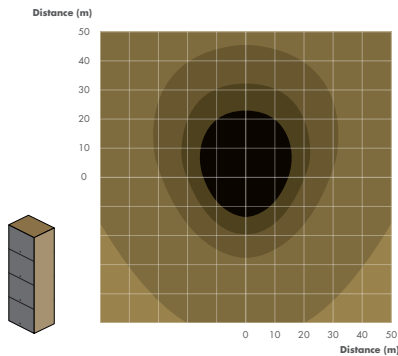


L-VENTS

Description	High power compact subwoofer: 1 x 18" amplified by LA4X / LA8 / LA12X
Usable bandwidth (-10 dB)	32 Hz - 100 Hz ([SB18_100])
Maximum SPL¹	138 dB ([SB18_100])
Nominal directivity	Standard or cardioid configurations
Transducers	1 x 18" cone driver
Acoustical load	Dual bass-reflex, L-Vents
Nominal impedance	8 Ω
Connectors	IN: 1 x 4-point speakON LINK: 1 x 4-point speakON
Rigging and handling	Captive four-point rigging system 1 pole mount - 35 mm 4 handles integrated into the cabinet
Weight (net)	52 kg / 115 lb
Cabinet	Premium grade Baltic 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

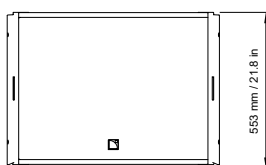
¹ Peak level at 1 m under half space conditions using pink noise with crest factor 4 (preset specified in brackets).

ISOCONTOUR

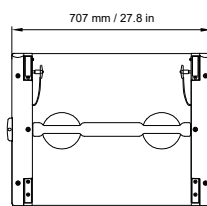


► SPL mapping of a block of four SB18 in standard (left) and cardioid (right) arrangements, using surfaces of equal sound pressure with three dB step colored scale.

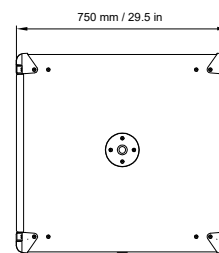
DIMENSIONS



Front



Side



Top