# KARA III LONG THROW LINE SOURCE FOR INSTALL



- Added variable directivity and improved polar with Panflex
- 4-in-1 coverage patterns (70° / 90° L-R / 110°)
- Sleek design

- +2 dB SPL at 70°
- Best-in-class SPL per weight / footprint
- Install-specific rigging and accessories



## ELECTRO-ACOUSTICS



Part of the K Series, Kara IIi is a modular line source system that can be deployed standalone or with its companion subwoofer SB18 IIi. Assembled as a variable curvature line source with class-leading SPL per weight and footprint, Kara IIi is ideal for venues that require clarity and long throw capability such as performing arts centers, theaters, operas, houses of worship, corporate facilities, and exhibition centers.

Kara IIi can be tailored to any audience geometry with inter-element angles ranging from 0° to 10°, and Panflex<sup>™</sup> for adjustable coverage patterns. A single Kara IIi enclosure offers four horizontal directivities: 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 and even SPL distribution.

On its own Kara IIi can be used as a main system for vocal reinforcement and music material with light LF requirements. The discreet and lightweight enclosure maintains clear sightlines and minimizes load requirements. Associated with its companion subwoofer SB18 IIi, in flown or stacked configurations, Kara IIi modular system can accommodate any program material requiring bandwidth, contour, and output.

## PHYSICAL

Kara IIi enclosure is constructed of premium grade Baltic birch plywood to ensure maximum acoustical and mechanical integrity. The enclosure is designed for discreet yet lasting integration, and benefits from a thickness optimization process that greatly reduces weight. Sturdy mechanics and suspension frame enable flown arrays of up to 24 enclosures.

Kara IIi elements are assembled using dedicated rigging plates. Install-specific accessories allow array deployment in various compositions with or without SB18 IIi. For improved aesthetics or video projection mapping, an acoustically-transparent screen is available for Kara IIi and SB18 IIi enclosures.

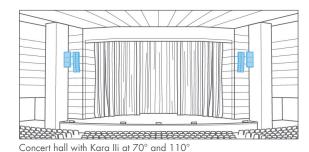
Kara IIi features terminal connectors sealed behind a plate with gland nuts. The enclosure has been weatherized to achieve an IP55 rating for outdoor operations and can be custom-colored using RAL references to melt into the venue decor.

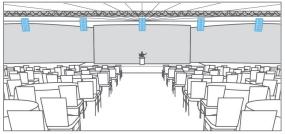


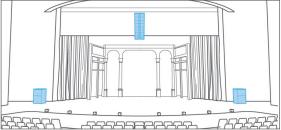
Discreet design with connecting plates and terminal connectors

# APPLICATIONS

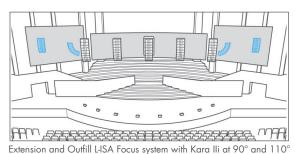
Kara IIi is a modular line source system that can be deployed on its own or with its associated subwoofer in medium to large installation venues. Perfect on its own as a main system for vocal or light music reinforcement ensuring clear sightlines and lightweight, Kara IIi can be supplemented with SB18 IIi in a coupled or decoupled configuration to host any program







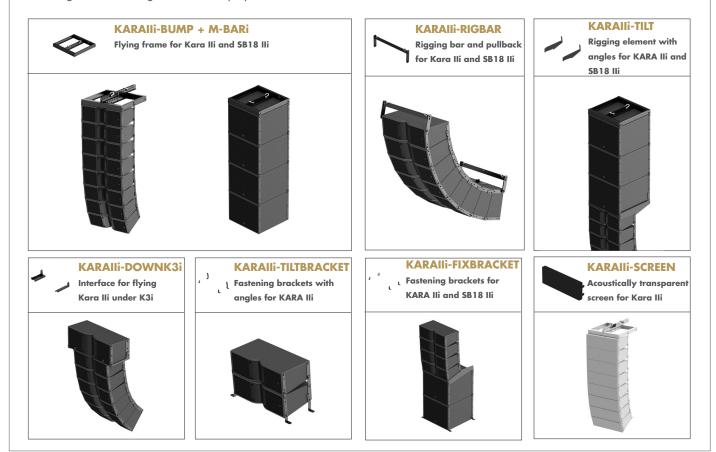
Auditorium with Kara IIi center cluster at 110°



Large corporate event with Kara Ili 70°

# RIGGING

Kara IIi can be flown with the dedicated frame KARAIIi-BUMP and the optional M-BARi. Small Kara IIi arrays can be flown with the lighter frame and pullback accessory KARAIIi-RIGBAR. Additional rigging accessories allow for flush connection to the ground or ceiling or downfill deployment.



# AMPLIFIED CONTROLLERS

LA2Xi and LA4X are the recommended amplified controllers with two Kara IIi per pair of output channels for optimal use of the Autosolver tools. LA12X can be used to power and control up to three Kara IIi per pair of output channels. This configuration simplifies deployment and cable management but reduces optimization capabilities.

Amplified controllers	LA2Xi	LA4X	LA12X
Front and back panel			
Install / Touring	Install	Install / Touring	Install / Touring
In x Out	4 x 4 / 4 x 3 / 4 x 2 / 4 x 1	4 x 4	4 × 4
Output power (W RMS) @ 16 ohms @ 8 ohms @ 4 ohms @ 2.7 ohms	4 x 200 W 4 x 360 W 4 x 640 W	4 x 1000 W 4 x 1000 W	4 x 1400 W 4 x 2600 W 4 x 3300 W
Height	10	2U	2U
Weight	4.40 kg / 9.70 lbs	11.3 kg / 24.9 lbs	14.5 kg / 32 lbs
		Drive capability Kara IIi	·
Max. number of enclosures per pair of channels	2	2	3
Max. number of enclosures per amplifier	4	4	6
Max SPL	137 dB	142 dB	142 dB

## SUBWOOFERS

#### SB18 IIi: Install-specific 18" subwoofer (1 x 18")

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



#### Other subwoofers: KS21i, 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(i)) can be deployed with or without their dedicated subwoofer extension, based on bandwidth/footprint priority requirement.

Large format line sources (K3i/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

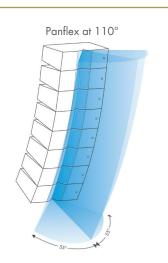
#### **About L-Acoustics Panflex**

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

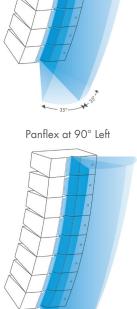
Narrowing or widening the horizontal directivity can serve many purposes: adapt to the width of the listening area, enable consistent SPL distribution for long and short distances, reduce or extend overlapping areas, and avoid reflecting surfaces. By combining WST<sup>®</sup> and Panflex, L-Acoustics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





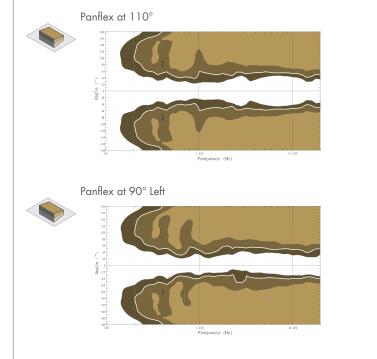


Panflex at 90° Right

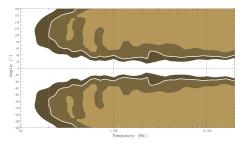


Panflex at 70°

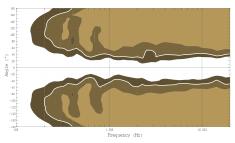
# BEAMWIDTH



Panflex at 70°



Panflex at 90° Right



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

# KARA IIi long throw line source for install





Kara IIi is the installation version of the Kara II, designed for long-throw installation applications. Kara IIi shares identical sonic performance with its touring counterpart but features a sleeker design and streamlined mounting hardware fitting integration requirements.

With class-leading SPL per weight and footprint, Kara IIi is ideal for venues that require clarity and long throw capability such as performing arts centers, theaters, operas, houses of worship, corporate facilities and exhibition centers.

Inter-element angles and Panflex<sup>™</sup> for user-adjustable horizontal directivity enable integrators, consultants and sound designers to precisely tailor the array coverage to any audience geometry.

Kara IIi is a discreet yet powerful solution featuring a range of accessories dedicated to installations. Kara IIi is highly weather-resistant as standard and can be color-matched to melt into any venue decor, indoor or outdoor.



# **SPECIFICATIONS**

Description	2-way active WST enclosure amplified by LA2Xi / LA4X / LA8 / LA12X		-	701 mm / 27.6 in	
Usable bandwidth (-10 dB)	55 Hz - 20 kHz ([KARA II 70])	-	 		
Maximum SPL <sup>1,2</sup>	142 dB ([KARA 11 70])	-			1
Nominal directivity (-6 dB)	Vertical : depending on number of elements and array curvature Horizontal : 70° / 110° symmetric or 90° asymmetric	-			
Transducers	LF: 2 × 8″ neodymium cone driver HF: 1 × 3″ neodymium diaphragm compression driver	-	4	Front	
Acoustical load	LF: Bass-reflex HF: DOSC waveguide, Panflex	-		252 mm / 9.9 in	
Nominal impedance	LF: 8 Ω HF: 8 Ω	-	4. Ľ		
Connectors	Two 4-point terminal blocks with push-in connection Connector sealing plate with cable gland	-	187 mm / 7.4 in		
Rigging and handling	External rigging kits M6 inserts for rigging plates and accessories Inter-enclosure angles [deg]: 0, 1, 2, 3, 4, 5, 7.5, 10	-	187	409 mm / 16.1 in Side	
Weight (net)	21 kg / 46 lb	-			
Cabinet	Premium grade Baltic birch plywood	-		-	
Front	Coated steel grill Acoustically neutral 3D fabric	.⊆		<u>A</u>	Ë.
Rigging components	High grade steel with anti-corrosion coating	15.9			15.1
Finish	Dark grey brown Pantone 426 C Pure white RAL 9010 Custom RAL code on special order	403 mm /			383 mm /
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).
<sup>2</sup> For Max SPL values using LA2Xi, refer to LA2Xi system specification sheet.

KARA III\_SPS\_EN\_1.0/03.21 © LAcoustics, all rights reserved. Information subject to change without prior notice.

# SB18 Ili subwoofer





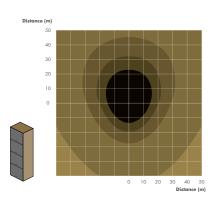


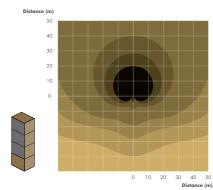
**ISOCONTOUR** 

DIMENSIONS

#### High power compact subwoofer: Description 1 × 18" amplified by LA2Xi / LA4X / LA8 / LA12X Usable bandwidth (-10 dB) 32 Hz - 100 Hz ([SB18\_100]) Maximum SPL<sup>1,2</sup> 138 dB ([SB18\_100]) Nominal directivity Standard or cardioid configurations Transducers 1 × 18" cone driver Acoustical load Dual bass-reflex, L-Vents Nominal impedance 8Ω Connectors 4-point terminal block with push-in connection Connector sealing plate with cable gland External rigging kits M6 inserts for rigging plates and accessories **Rigging and handling** Weight (net) 48 kg / 106 lb Cabinet Premium grade Baltic birch plywood Front Coated steel grill Acoustically neutral 3D fabric **Rigging components** High grade steel with anti-corrosion coating Dark grey brown Pantone 426 C Pure white RAL 9010 Finish Custom RAL code on special order IP IP55

<sup>1</sup> Peak level at 1 m under half space conditions using pink noise with crest factor 4 <sup>2</sup> For Max SPL values using LA2Xi, refer to LA2Xi system specification sheet.





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

### 701 mm / 27.6 in 701 mm / 27.6 in 728 mm / 28.7 in 540 mm / 21.2 in Front Side Тор

# served. KARA III\_SPS\_EN\_1.0/07-20 @ LAcoustics, all rights