# K2 long throw line source



- K1 performance rescaled in 12" format
- Extended LF contour and bandwdith
- Time-tested effortless rigging system
- 4-in-1 coverage patterns (70°/90° L-R/110°)



# ELECTRO-ACOUSTICS

Lightweight design



Part of the K Series, K2 is a full range line source system designed for largescale applications. Offering the same pristine, powerful sonic signature as K1 into a lighter and more flexible enclosure, K2 is ideal for applications that require long throw, extended bandwidth and low-frequency contour, with limited weight such as national and international touring acts, festivals or sporting events.

K2 features Panflex<sup>™</sup> to offer four horizontal directivity patterns: 70° or 110° symmetrical or 90° asymmetrical on either side. With Panflex and inter-element angles ranging from 0° to 10°, a K2 line source coverage can be precisely tailored to any audience geometry.

Boasting a strong output of 147 dB and a broad bandwidth of 35 Hz to 20 kHz, K2 is a record-holder in performance to weight ratio. K2 can be used on its own or accompanied by K1-SB subwoofers, flown in the same line or beside, to further support low-frequency throw and contour. K2 can also complement K1 as a downfill, outfill or delay system.

Deployed with KS28 subwoofer, K2 is perfect as a main system for demanding large-scale live events in conventional and L-ISA deployment.

# PHYSICAL

K2 enclosure is constructed of premium grade Baltic birch plywood to ensure maximum acoustical and mechanical integrity. A thickness optimization process greatly reduces weight and maximizes robustness for touring applications.

K2 features an ergonomic four-point captive rigging system, time-tested and widely recognized, that integrates large handles and provides visual safety assessment. K2 transportation and rigging accessories have been designed to facilitate manipulation from truck loading to on-site deployment.

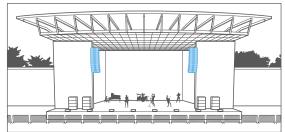
K2 has been weatherized to achieve an IP55 rating for outdoor operations.



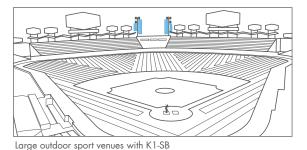
Integrated rigging with safety check; ergonomic handles; rigging and enclosure protection elements.

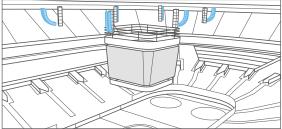
# APPLICATIONS

K2 is a full-range line source that can be deployed on its own or combined with K1-SB and KS28 subwoofers to address large-scale mobile and touring applications. Dimensioned to keep sightlines clear and deploy easily, K2 integrates into large indoor and outdoor venues with weight restrictions or complements K1 systems in international touring acts and festivals.

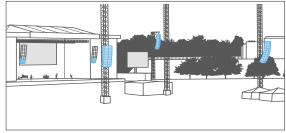


Outdoor shed venues with KS28





Indoor sport venues with KS28



Large festival downfill, outfill and delay system with K1

## RIGGING

K2 can be flown with the dedicated flying frame K2-BUMP and the optional K2-BAR for greater tilt angles. The lighter K2-RIGBAR can be used to hang smaller K2 arrays or acts as a pullback accessory. K2-CHARIOT can be used for transportation or a stacking platform with K2-JACK for added stability.



# TRANSPORTATION ACCESSORIES

K2 can be transported or stored in groups of 4 elements on top of K2-CHARIOT, and protected with the dedicated chariot cover. A dedicated flightcase facilitates storage and transport of K2-BUMP and other rigging elements.



# AMPLIFIED CONTROLLERS

Designed as a three-way active loudspeaker, K2 requires four channels of amplification using LA12X or LA4X. LA12X can be used for maximum power density while LA4X offers maximum discretization.

#### LA12X: amplified controller with DSP



4 x 3300 W/2.7 ohms 4 inputs x 4 outputs architecture Max 3 enclosures per amplified controller

#### LA4X: amplified controller with DSP



4 x 1000 W/8 ohms 4 inputs x 4 outputs architecture Max 1 enclosure per amplified controller



### SUBWOOFERS

#### K1-SB: Companion LF subwoofer (2 x 15")

K2 + K1-SB line source: extended LF throw bandwidth: 35 Hz – 20 kHz Ratio of 3 K2 to 1 K1-B K2 + K1-SB coupled: extended LF contour bandwidth: 30 Hz – 20 kHz Ratio of 3 K2 to 2 K1-SB



#### KS28: Companion infra-subwoofer (2 x 18")

LA Network Manager: control & monitoring software

K2 + KS28: bandwidth: 25 Hz – 20 kHz Ratio of 3 K2 to 2 KS28 Contour reinforced by 15 dB at 65 Hz



## SOFTWARE

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



3D electro-acoustic and mechanical simulation software



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



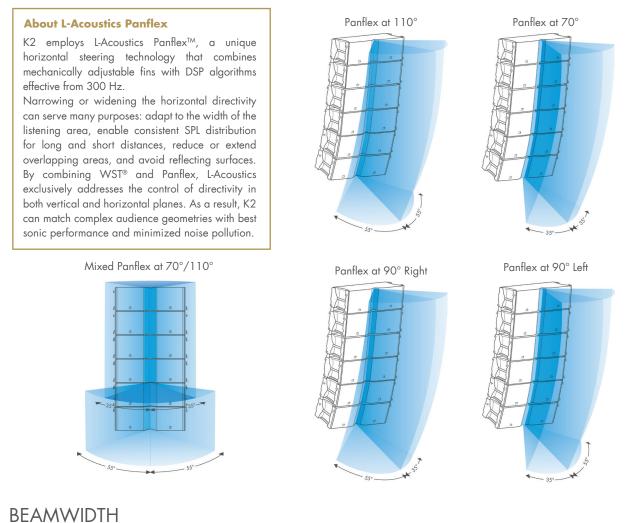
#### K series: Long throw variable curvature line sources

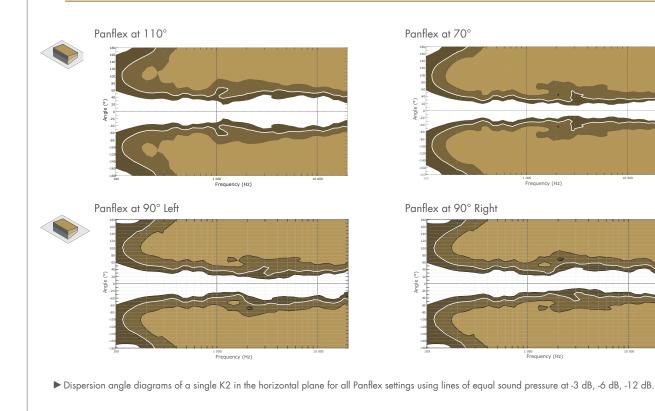
The K range comprises modular and large format line sources adapted to long throw applications in rental productions and fixed installations.

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/K2/K1) are true full range systems with a maximized coherence due to the proximity of their LF/HF driver acoustic centers. K1 and K2 systems can be deployed with K1-SB to boost the LF throw.

# COVERAGE





# K2 long throw line source



K2\_SPS\_EN\_3.1/07-24 © LAcoustics, all rights reserved. Information subject to change



**SPECIFICATIONS** 

Part of the K Series, K2 is a full range line source element designed for large-scale applications. Designed upon the K1, the industry-reference touring system, K2 offers the same pristine, powerful sonic signature into a lighter and more flexible enclosure, making it ideal for national and international touring acts, festivals or sporting events.

K2 delivers full-range bandwidth down to 35 Hz with reinforced LF contour and boasts a strong output of 147 dB, making it a recordholder in performance to weight ratio. Designed as a three-way active loudspeaker, quad amplified, K2 benefits from the LA-RAK II AVB touring rack for powerful amplification and advanced protection.

K2 features Panflex<sup>TM</sup> to increase flexibility. A single enclosure offers four horizontal directivity patterns: 70° or 110° symmetrical or 90° asymmetrical on either side. Ultra-precise audience coverage and smooth SPL distribution are granted by the combination of Panflex and a large choice of inter-element angles.

The rugged K2 enclosure integrates an efficient, captive rigging system fitted with visual safety for secured and effortless deployment. A comprehensive set of rigging and transportation accessories facilitate storage, truck-loading and multiply deployment options.

Description	3-way active WST enclosure, quad-amplified by LA4X/LA8/LA12X	354 mm / 13.9 in
Usable bandwidth (-10 dB)	35 Hz - 20 kHz ([K2_70])	
Maximum SPL <sup>1</sup>	147 dB ([K2_70])	
Nominal directivity	Vertical : depending on number of elements and array curvature Horizontal : 70°/110° symmetric or 90° asymmetric	
Transducers	LF: 2 × 12" cone drivers MF: 4 × 6,5" cone drivers HF: 2 × 3" diaphragm compression drivers	Front
Acoustical load	LF: Bass-reflex, L-Vents MF: Bass-reflex HF: DOSC waveguide, Panflex	400 mm / 15.8 in
Nominal impedance	LF/MF/HF : 2 x 8 Ω / 8 Ω / 16 Ω	
Connectors	2 × 8-point PA-COM®	
Rigging and handling	4-point captive rigging system 2 large side handles Inter-enclosure angles [deg]: 0.25, 1, 2, 3, 4, 5, 7.5, 10	Side
Weight (net)	56 kg/123.2 lb	Side
Cabinet	Premium grade Baltic birch plywood	
Side panels	Die cast aluminum	1338 mm / 52.7 in
Front	Coated steel grill Acoustically neutral 3D fabric	
Rigging components	High grade steel with anti-corrosion coating	T1) (//T
Finish	Dark grey brown Pantone <sup>®</sup> 426 C	
IP	IP55	Тор

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

# K1-SB lf subwoofer





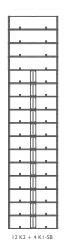


## USAGE MODES

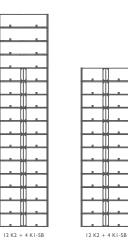
Description	Low frequency subwoofer: 2 × 15″ amplified by LA8 / LA12X
Low frequency limit (-10 dB)	30 Hz ([K1-SB_60])
Maximum SPL <sup>1</sup>	145 dB ([K1-SB_X])
Nominal directivity	Standard
Transducers	2 × 15" cone drivers
Acoustical load	Bass-reflex, L-Vents
Nominal impedance	4 Ω
Connectors	IN: 1 × 4-point speakON®
Rigging and handling	4-point captive rigging system 2 large side handles Inter-enclosure angles [deg]: 0°, 0.5°, 1°, 1.5°, 2°, 2.5°, 3°, 4° or 5°
Weight (net)	83 kg/183 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	IP45

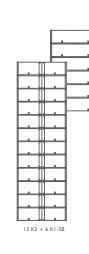
<sup>1</sup> Peak level at 1 m under half space conditions using pink noise with crest factor 4 (preset specified in brackets).

K1-SB line source mode using [K1-SB\_X] preset for enhanced low frequency throw

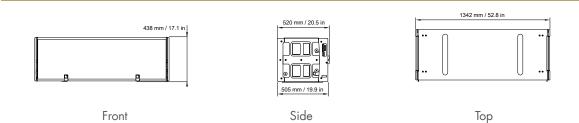


#### K1-SB coupled mode using [K1-SB\_60] preset for enhanced low frequency contour





# DIMENSIONS



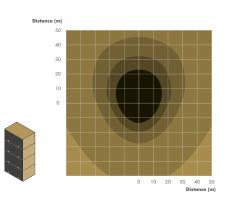
# KS28 infra subwoofer





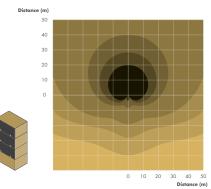


# ISOCONTOUR



Description	High power subwoofer: 2 × 18″ amplified by LA12X
Low frequency limit (-10 dB)	25 Hz ([KS28_100])
Maximum SPL <sup>1</sup>	143 dB ([KS28_100])
Nominal directivity	Standard or cardioid configurations
Transducers	2 × 18" neodymium cone drivers
Acoustical load	Bass-reflex, L-Vents
Nominal impedance	4 Ω
Connectors	IN: 1 × 4-point speakON®
Rigging and handling	Captive two-point rigging system 6 ergonomic handles 2 ground runners and 8 side runners
Weight (net)	79 kg/174 lb
Cabinet	Premium grade Baltic beech and birch plywood
Front	Coated steel grill Acoustically neutral 3D fabric
Rigging components	High grade steel
Finish	Dark grey brown Pantone <sup>®</sup> 426 C
IP	IP55

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



SPL mapping of a block of four KS28 in standard (left) and cardioid (right) arrangements, using surfaces of equal sound pressure with three dB step colored scale.

# DIMENSIONS



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