# K 3 LONG THROW LINE SOURCE



- Large format system performance
- Compact size
- Uncompromised LF contour and bandwidth
- Time-tested effortless rigging system
- 4-in-1 coverage patterns (70°/90° L-R/110°)
- Efficient amplification









## **ELECTRO-ACOUSTICS**



Part of the K Series, K3 is a full range line source system designed for mid-sized mobile applications. Housing the internationally recognized K2 system components into a compact enclosure, K3 is ideal for applications that require long throw, reinforced low-frequency contour, broad bandwidth and limited footprint such as live events in mid-sized festivals, and tours, performing arts, corporate events in large exhibition halls or special events.

With exceptional bandwidth for its size - 42 Hz to 20 kHz - K3 can be used as a stand-alone system boasting strong output and innate reinforced LF contour without the need of a flown companion subwoofer. For infra reinforcement and augmented LF resources, K3 can be supplemented by the KS28 subwoofer.

K3 features Panflex<sup>TM</sup> to offer four horizontal directivity patterns:  $70^{\circ}$  or  $110^{\circ}$  symmetrical or  $90^{\circ}$  asymmetrical on either side. With Panflex and inter-element angles ranging from  $0^{\circ}$  to  $10^{\circ}$ , a K3 line source coverage can be precisely tailored to any audience geometry.

On its own K3 can be used as a main system for vocal and music reinforcement in most applications, or as a complement to K1 or K2 as outfills or delays. Deployed with KS28 subwoofer, K3 is perfect as a compact main system for demanding live events in conventional and L-ISA deployment.

### **PHYSICAL**

K3 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.

K3 features an ergonomic four-point captive rigging system, time-tested with K2, that integrates large handles and provides visual safety assessment. K3 transportation and rigging accessories have been designed to facilitate manipulation from truck loading to on-site deployment.

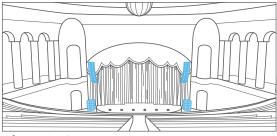
K3 has been weatherized to achieve an IP55 rating for outdoor operations.



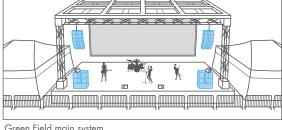
Integrated rigging with safety check; ergonomic handles; rigging and enclosure protection elements.

### **APPLICATIONS**

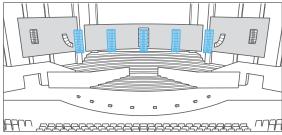
K3 is a compact full-range line source that can be deployed on its own or combined with the KS28 subwoofer to address medium scale mobile and touring applications. Ideally dimensioned to keep sightlines clear, K3 integrates easily in venues with space restrictions or complements larger K1 or K2 systems in sport facilities, festivals or large concert venues .



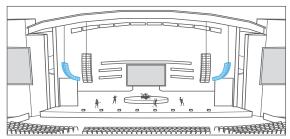
Performing Arts Center main system



Green Field main system



L-ISA Wide with K3



Large festival outfill system

### RIGGING

K3 can be flown with the dedicated flying frame K3-BUMP and the optional K3-BAR for greater tilt angles. The lighter K3-RIGBAR can be used to hang smaller K3 arrays or acts as a pullback accessory. K3 can be mounted on KS28 for ground stacked applications. K3-CHARIOT can be used for transportation or a stacking platform with K2-JACK for added stability.









# TRANSPORTATION ACCESSORIES

K3 can be transported or stored in groups of 4 elements on top of K3-CHARIOT, and protected with the dedicated chariot cover. K3-CHARIOT can also be used as a stacking platform for up to 6 K3 when used with the K2-JACKS. K3-CHARIOTLID provides a strong and flat surface to stack objects on top of K3 on K3-CHARIOT. A dedicated flightcase facilitates storage and transport of K3-BUMP and other rigging elements.









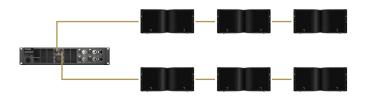
## AMPLIFIED CONTROLLERS

Designed as a two-way active loudspeaker, K3 requires only two channels of amplification using LA12X or LA4X. LA12X can be used for maximum power density while LA4X offers maximum discretization for best use of the 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 2 enclosures per amplified controller



## **SUBWOOFERS**

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

K3 + KS28: bandwidth: 25 Hz – 20 kHz Ratio of 2 K3 to 1 KS28 Contour reinforced by 15 dB at 65 Hz Ratio of 3 K3 to 1 KS28 Contour reinforced by 12 dB at 65 Hz



#### Other subwoofers: KS21, SB28



# **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 (K3/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.

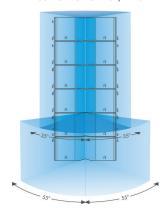
# **COVERAGE**

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

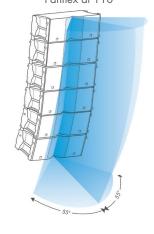
K3 employs L-Acoustics Panflex<sup>TM</sup>, a unique horizontal steering technology that combines mechanically adjustable fins with DSP algorithms effective from 300 Hz.

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 K3 can match complex audience geometries with best sonic performance and minimized noise pollution.

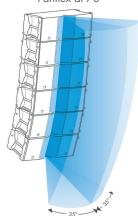
Mixed Panflex at 70°/110°



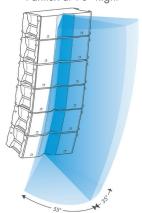
Panflex at 110°



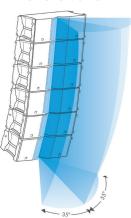
Panflex at  $70^{\circ}$ 



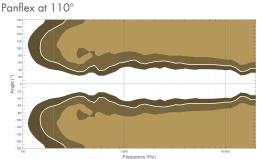
Panflex at 90° Right



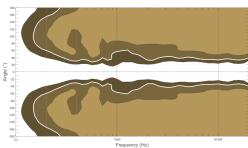
Panflex at 90° Left



# **BEAMWIDTH**

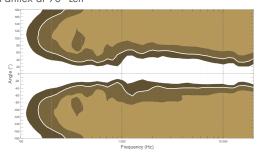


Panflex at 70°

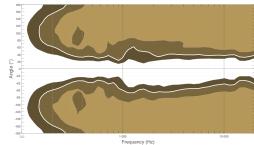


Panflex at 90° Left





Panflex at 90° Right



▶ Dispersion angle diagrams of a single K3 in the horizontal plane for all Panflex settings using lines of equal sound pressure at -3 dB, -6 dB, -12 dB.

# K3 Long throw line source













Part of the K Series, K3 is a full range line source element designed for mid-sized mobile applications. Housing the internationally recognized K2 components, K3 offers uncompromised large format system sonic performance in a compact enclosure.

K3 delivers exceptional bandwidth with reinforced LF contour for its size and high output capacity for use as a stand-alone line source. Designed as a two-way active loudspeaker, K3 requires two channels of amplification resulting in high density of loudspeaker per amplified controller.

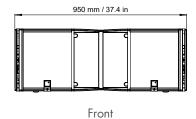
K3 features Panflex<sup>TM</sup> to increase flexibility. A single enclosure offers four horizontal directivity patterns: 70° or 110° symmetrical or 90° asymmetrical on either side. Ultra-precise audience coverage and smooth SPL distribution is granted by the combination of Panflex and a large choice of inter-element angles.

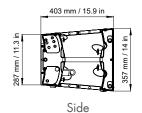
The rugged K3 enclosure integrates an efficient, captive rigging system fitted with visual safety for secured and effortless deployment. A comprehensive set of rigging and transportation accessories facilitate storage, truck-loading and multiply deployment options.

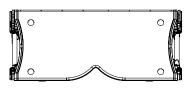
# **SPECIFICATIONS**

Description	2-way active WST enclosure, amplified by LA4X/LA8/LA12X
Usable bandwidth (-10 dB)	42 Hz - 20 kHz ([K3_70])
Maximum SPL <sup>1</sup>	143 dB ([K3_70])
Nominal directivity	Vertical : depending on number of elements and array curvature Horizontal : 70°/110° symmetric or 90° asymmetric
Transducers	LF: 2 × 12" neodymium cone drivers HF: 1 × 4" diaphragm neodymium compression driver
Acoustical load	LF: Bass-reflex, L-Vents HF: DOSC waveguide, Panflex
Nominal impedance	LF/HF : 8 Ω/8 Ω
Connectors	2 × 4-point speakON
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
Weight (net)	43 kg/94.7 lb
Cabinet	Premium grade Baltic birch plywood
Side panels	Die cast aluminum
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>&</sup>lt;sup>1</sup>- Peak level at 1 m under free field conditions using pink noise with crest factor 4 (preset specified in brackets).







Тор

# KS28 SUBWOOFER





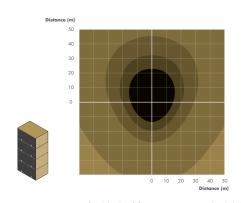


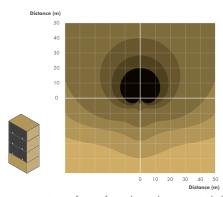


Description	High power subwoofer: 2 × 18" amplified by LA12X
Low frequency limit (-10 dB)	25 Hz ([KS28_100])
Maximum SPL <sup>1</sup>	143 dB ([KS28_100])
Nominal directivity	Standard or cardioid configurations
Transducers	$2 \times 18^{\prime\prime}$ neodymium cone drivers
Acoustical load	Bass-reflex, 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 426 C
IP	55

 $<sup>^{\</sup>rm 1}$  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 KS28 in standard (left) and cardioid (right) arrangements, using surfaces of equal sound pressure with three dB step colored scale.

# **DIMENSIONS**

