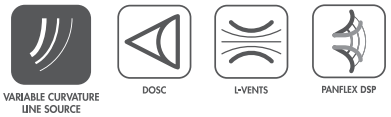
# K2 LONG THROW LINE SOURCE

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




## ELECTRO-ACOUSTICS

Part of the K Series, K2 is a full range line source system designed for large-scale 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™ 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.

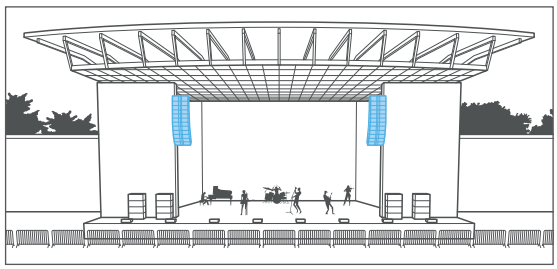
K2 features an ergonomic four-point captive rigging system, time-tested and widely recognized, that integrates large handles and provides visual safety assessment. K2 transportation and rigging accessories have been designed to facilitate manipulation from truck loading to on-site deployment.

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

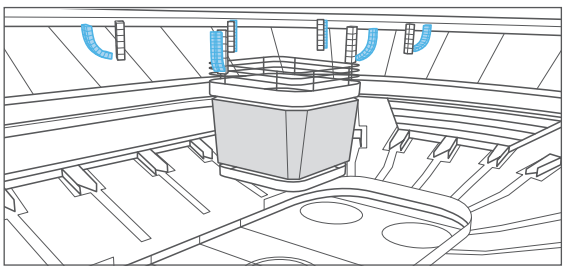
Integrated rigging with safety check; ergonomic handles; rigging and enclosure protection elements.

# APPLICATIONS

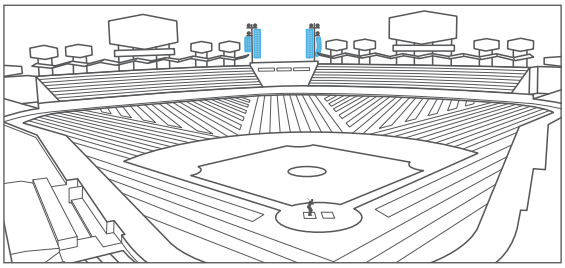
K2 is a full-range line source that can be deployed on its own or combined with K1-SB and KS28 subwoofers to address large-scale mobile and touring applications. Dimensioned to keep sightlines clear and deploy easily, K2 integrates into large indoor and outdoor venues with weight restrictions or complements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



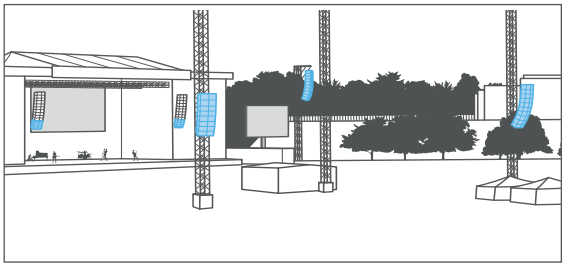
Outdoor shed venues with KS28



Indoor sport venues with KS28



Large outdoor sport venues with K1-SB



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.

**K2-BUMP + K2-BAR**
**Flying frame up to 24 K2**
**(incl. BPCHAIN 1.5T)**

**K2-RIGBAR**
**Rigging bar up to 12 K2 and pullback**

**K2-LINK**
**Rigging element to fly K2 below K1 or K1-SB**

**K2-RAKMOUNT**
**Mounting cradles for 2 LA-RAK II AVB**

# 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.

**K2-CHARIOT with K2-JACKS**
**Chariot for up to 4 K2**

**K2-CHARIOTCOV**
**Protective cover for 4 K2 on K2-CHARIOT**

**K2-BUMPFLIGHT**
**Modular flightcase for 2 K2-BUMP and 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")**

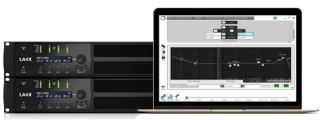
K2 + KS28: bandwidth: 25 Hz – 20 kHz
Ratio of 3 K2 to 2 KS28
Contour reinforced by 15 dB at 65 Hz

# SOFTWARE

**SOUNDVISION: simulation software**

3D electro-acoustic and mechanical simulation software

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



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

Kiva II Kara II(i) K3(i) K2 K1

**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.

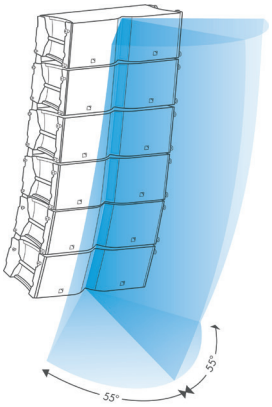
# COVERAGE

### About L-Acoustics Panflex

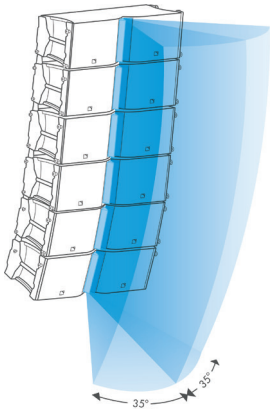
K2 employs L-Acoustics Panflex™, a unique horizontal steering technology that combines mechanically adjustable fins with DSP algorithms effective from 300 Hz.

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, K2 can match complex audience geometries with best sonic performance and minimized noise pollution.

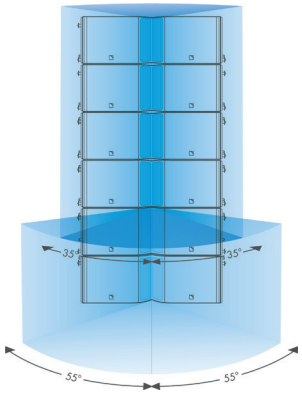
Panflex at 110°



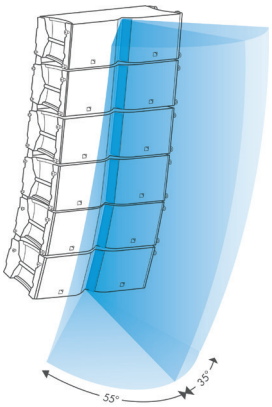

Panflex at 70°



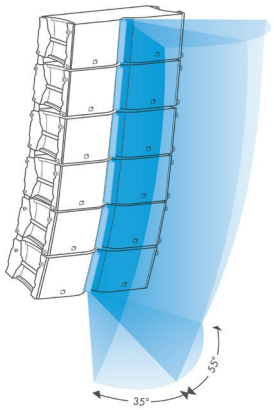

Mixed Panflex at 70°/110°




Panflex at 90° Right

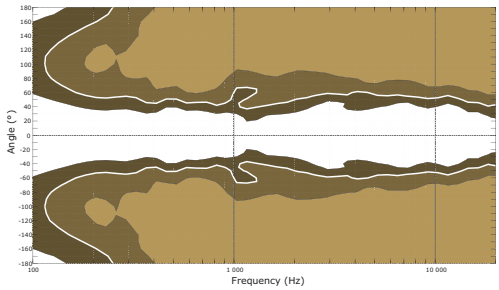



Panflex at 90° Left

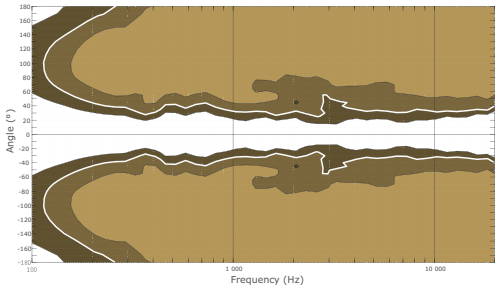


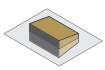

# BEAMWIDTH

Panflex at 110°

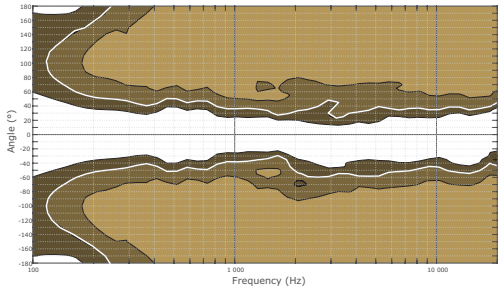



Panflex at 70°

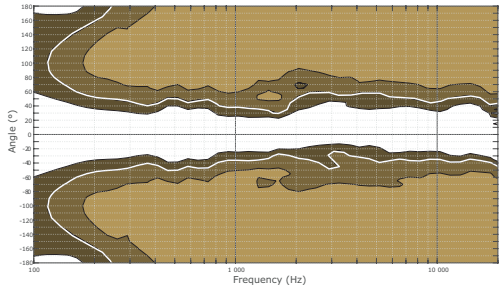


Panflex at 90° Left




Panflex at 90° Right




▶ Dispersion angle diagrams of a single K2 in the horizontal plane for all Panflex settings using lines of equal sound pressure at -3 dB, -6 dB, -12 dB.

# K2 LONG THROW LINE SOURCE


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.

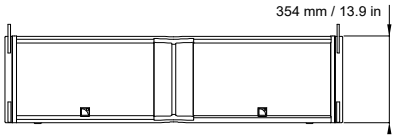
K2 delivers full-range bandwidth down to 35 Hz with reinforced LF contour and boasts a strong output of 147 dB, making it a record-holder in performance to weight ratio. Designed as a three-way active loudspeaker, quad amplified, K2 benefits from the LA-RAK II AVB touring rack for powerful amplification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

K2 features Panflex™ 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.

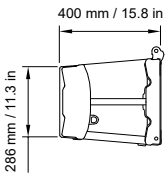
The rugged K2 enclosure integrates an efficient, captive rigging system fitted with visual safety for secured and effortless deployment. A comprehensive set of rigging and transportation accessories facilitate storage, truck-loading and multiply deployment options.

## SPECIFICATIONS

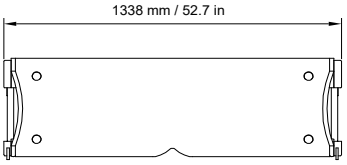
| | |
|---|---|
| **Description** | 3-way active WST enclosure,<br>quad-amplified by LA4X/LA8/LA12X |
| **Usable bandwidth (-10 dB)** | 35 Hz - 20 kHz ([K2_70]) |
| **Maximum SPL**[1] | 147 dB ([K2_70]) |
| **Nominal directivity** | Vertical : depending on number of elements and array curvature<br>Horizontal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




Front




Side




Top

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

# K1-SB LF SUBWOOFER

OMNI / CARDIO SUBWOOFER

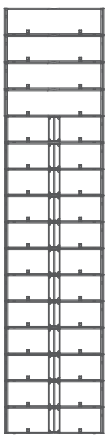
L-VENTS

| | |
|---|---|
| **Description** | Low frequency subwoofer:<br>2 × 15″ amplified by LA8 / LA12X |
| **Low frequency limit (-10 dB)** | 30 Hz ([K1-SB_60]) |
| **Maximum SPL**[1] | 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<br>2 large side handles<br>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<br>Acoustically neutral 3D fabric |
| **Rigging components** | High grade steel with anti-corrosion coating |
| **Finish** | Dark grey brown Pantone® 426 C |
| **IP** | IP45 |

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

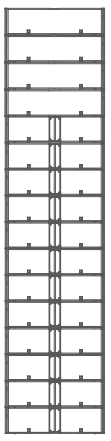
## USAGE MODES

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

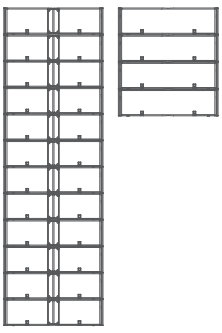


12 K2 + 4 K1-SB

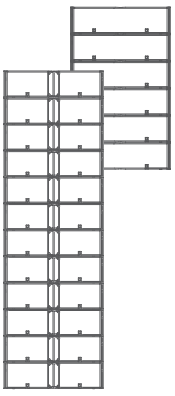
K1-SB coupled mode using [K1-SB_60] preset for enhanced low frequency contour



12 K2 + 4 K1-SB

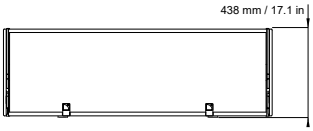


12 K2 + 4 K1-SB

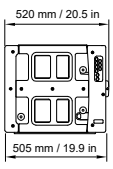


12 K2 + 6 K1-SB

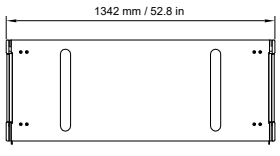
## DIMENSIONS




Front




Side




Top

# KS28 INFRA SUBWOOFER

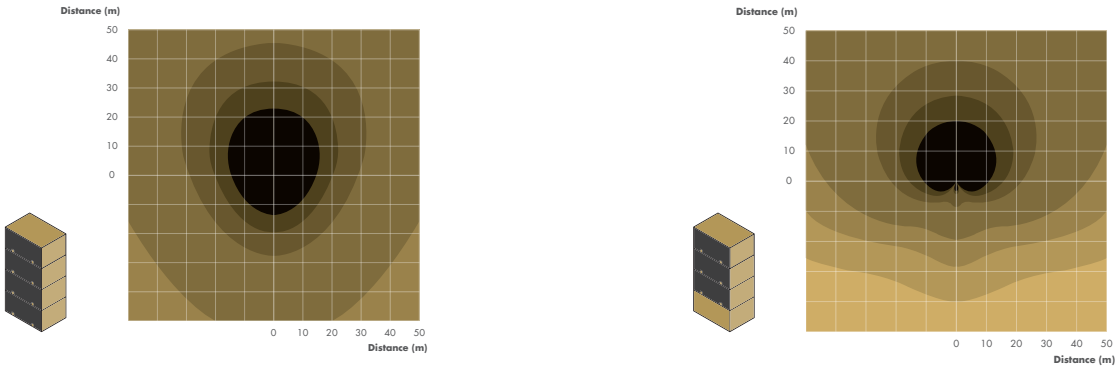
OMNI / CARDIO SUBWOOFER

L-VENTS

| | |
|---|---|
| **Description** | High power subwoofer:<br>2 × 18″ amplified by LA12X |
| **Low frequency limit (-10 dB)** | 25 Hz ([KS28_100]) |
| **Maximum SPL**[1] | 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<br>6 ergonomic handles<br>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<br>Acoustically neutral 3D fabric |
| **Rigging components** | High grade steel |
| **Finish** | Dark grey brown Pantone® 426 C |
| **IP** | IP55 |

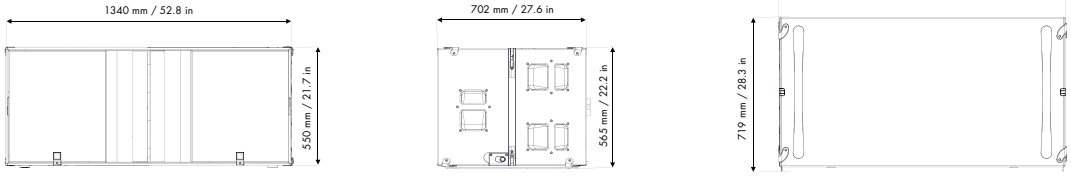
[1] Peak level at 1 m under half space conditions using pink noise with crest factor 4 (preset specified in brackets).

## ISOCONTOUR




▶ SPL mapping of a block of four 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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