

# K2 VARIABLE CURVATURE WST SYSTEM

The L-ACOUSTICS<sup>®</sup> KI system has achieved international recognition and is today the prime choice of engineers for the largest stadium tours and outdoor festivals. Its sonic performance, its fully integrated system package and its rider friendliness are considered as the industry benchmarks. With K2, L-ACOUSTICS<sup>®</sup> offers KI performance in a rescaled package. The K2 system flexibility makes it suited to both permanent installation and touring applications, from theatre to stadium productions. The main system components are as follows:

- K2, full-range element, with adjustable horizontal directivity, operating from 35 Hz to 20 kHz
- KI-SB, low-frequency element, reinforcing LF contour down to 30 Hz or LF throw down to 35 Hz
- SB28, low-frequency element, extending the operating bandwidth down to 25 Hz
  - LA4X/LA8 amplified controllers or LA-RAK, touring rack fitted with three LA8

The 3-way quad amplified design, the transducers resources are among the characteristics giving K2 an exceptional ability to perform in many applications and with a record-breaking performance/weight ratio. Any on-site deployment can be easily and quickly achieved thanks to an extremely ergonomic, fast and captive rigging system.

A K2 line source utilizes the unrivalled characteristics of Wavefront Sculpture Technology<sup>®</sup>. Interelement angles can be set with laser like accuracy up to a generous 10°, allowing the optimization of the vertical coverage with SPL smoothly spread across the audience. The K2 also features the PANFLEX<sup>TM</sup> technology, a unique solution for adjusting the horizontal coverage pattern to any audience or room geometry. Four different settings are possible: two symmetric (70° or 110°) and two asymmetric (90° as  $35^{\circ}/55^{\circ}$  or  $55^{\circ}/35^{\circ}$ ).

Thanks to its full range capability, the K2 enclosure can be deployed as a standalone line source. For applications demanding extreme LF impact (contour mode), or maximized LF projection (throw mode), K2 can be arrayed with its dedicated and flyable K1-SB LF extension. The K2 system can also address applications with demanding infrasonic reproduction when combined to the SB28 subwoofer. Before installation, any system configurations can be acoustically and mechanically modeled with SOUNDVISION 3D simulation software.

For touring applications, K2 can be associated to the LA-RAK, a universal distribution platform for power, audio signals and network which facilitates cross rental between rental companies. LA-RAK houses three LA8 amplified controllers and can be flown onto a K2 array. Other applications can feature LA8 amplified controllers. For high-end installation projects, K2 can also be driven by the LA4X amplified controller. The scheme authorizes fully discrete DSP treatment per section and maximum power headroom for the best possible sonic performance.



Thanks to dedicated factory presets, the LA8/LA4X amplified controller constitutes an extremely advanced and precise drive system for the enclosures. All L-ACOUSTICS<sup>®</sup> amplified controllers feature the L-DRIVE, a thermal and over-excursion protection circuit.

Up to 253 LA8/LA4X amplified controllers can be connected together via the Ethernet-based L-NET protocol. The LA NETWORK MANAGER software allows online remote control and monitoring of all the connected units, via a user-friendly and intuitive graphic interface, and features the Array Morphing EQ. This exclusive tool allows the engineer to quickly adjust the tonal balance of the system to reach a reference curve or to ensure consistency of the sonic signature.





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# **K2**

# SYSTEM COMPONENTS

#### **K2**<sup>1,2</sup>

Quad-amplified, full range, 3 way active WST enclosure  $2 \times 12^{\circ} + 4 \times 6.5^{\circ} + 2 \times 3^{\circ}$ DOSC HF. Bandwidth = 35 Hz - 20 kHz.



#### KI-SB<sup>1,2</sup>

Low frequency extension cabinet 2 x 15". Used as LF line source element (throw) with LF limit = 35 Hz or subwoofer element (contour) with LF limit = 30 Hz



#### SB28<sup>1,2</sup>

High power subwoofer  $2 \times 18^{\circ}$ . LF limit = 25 Hz.



#### LA8/LA4X/LA-NETWORK MANAGER<sup>1</sup>

Amplified controller with DSP library and networking capabilities. Remote control software.



#### LA-RAK<sup>1</sup>

Touring rack for mains, audio and network distribution fitted with 3 LA8 amplified controllers.



#### SOUNDVISION

3D acoustic and mechanical simulation software dedicated to L-ACOUSTICS  $^{\otimes}$  products.



#### K2-BUMP

Rigging frame for flying K2 and LA-RAK. Certified up to  $24 \times K2$  or  $16 \times K1$ -SB and  $2 \times LA$ -RAK, including adjustable motor chain (1 m) and laser adaptater plate.



#### K2-BAR

Extension bar for K2-BUMP.



### KI-DELTA

Rigging accessory for azimuth adjustement with K1-BUMP or K2-BUMP.



#### **K2-RAKMOUNT**

4 x Mounting cradle for LA-RAK (including rack stabilizer).



#### **K2-BUMPFLIGHT**

Modular flight case for 2 x KI-BUMP or K2-BUMP (including K2 adapter kit).



Chariot for 4 x K2. Protective cover for 4 x K2 on CHARIOT.



#### K2-JACK

Pair of stabilizers with adjustable feet to use K2-CHARIOT as a stacking platform.



#### **K2-LINK**

Rigging accessory for rear attachment of K2 below K1 or K1-SB or K1-BUMP.



#### LA-SLING2T

Chain sling with two-leg bridles Mandatory element when flying I LA-RAK only on top of K2-BUMP.

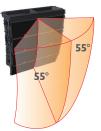
I See product spec sheet for more details. 2 Available in white color. 3 Verify the mechanical conformity of any installation using SOUNDVISION.



K2-CHARIC

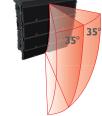
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# K2 HORIZONTAL DIRECTIVITY

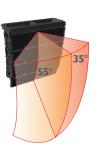


110° Symmetric

Preset [K2 110]



70° Symmetric Preset [K2 70]



ABOUT L-ACOUSTICS PANFLEX<sup>T</sup>

**90° Asymmetric** Preset [K2 90] (35°/55° or 55°/35°)

K2 employs the L-ACOUSTICS PANFLEX<sup>TM</sup>, a unique horizontal steering technology which 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, fit long and short distances coverage/ SPL requirements, reduce or extend overlapping areas, and avoid reflecting surfaces.

By combining WST<sup>®</sup> and PANFLEX<sup>™</sup>, L-ACOUSTICS exclusively addresses the control of directivity in both vertical and horizontal planes. As a result K2 can match the complex shape of any audience geometry with best sonic performance and minimum noise pollution.

# K2

# LINE SOURCE CONFIGURATIONS

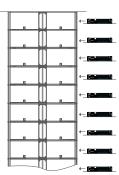
## **K2 LINE SOURCE**

Deployed as a standalone line source, a K2 system operates over the nominal bandwidth of the K2 enclosure, with an adjustable horizontal directivity. An LA4X can drive I K2 enclosure. An LA8 can drive up to 3 K2 enclosures.

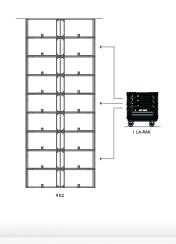
Presets: K2 line source: [K2 110] or [K2 70] or [K2 90]

# K2/K1-SB LINE SOURCE

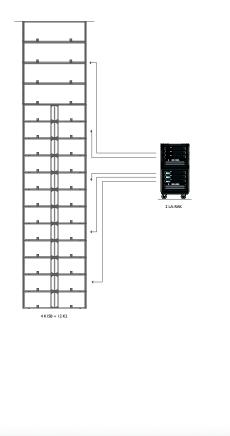
Deployed with K1-SB as additional LF line source elements, the K2 system provides an enhanced LF throw. An LA8 can drive up to 3 K2 enclosures or 4 K1-SB.







Presets: K2 line source: [K2 110] or [K2 70] or [K2 90] K1-SB, as an LF line source element : [K1SB\_X K2]



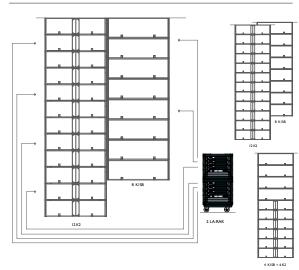
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# K2 ADDITIONAL SUBWOOFER

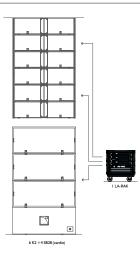
A K2 line source or a K1-SB/K2 line source can be deployed with additional K1-SB or SB28 subwoofers to provide increased sub-low resources to demanding applications (reinforced LF contour and extended bandwidth). Recommended ratio is 2 subwoofers for 3 K2. An LA8 can drive up to 3 K2 enclosures or 4 K1-SB or 4 SB28.

Presets: K1-SB as a subwoofer: [K1SB\_60] SB28: [SB28\_60] or [SB28\_60\_C]

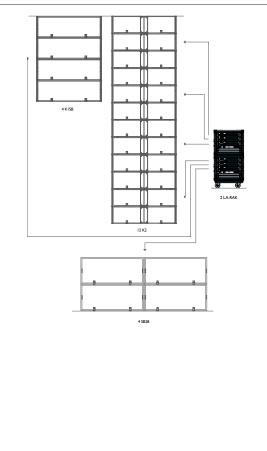
### K2 LINE SOURCE + COUPLED KI-SB



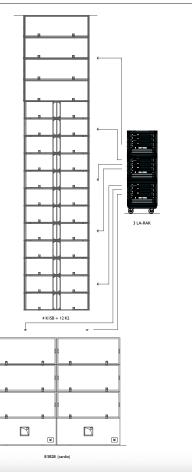




#### K2 LINE SOURCE + COUPLED KI-SB + SB28



#### K2/K1-SB LINE SOURCE + SB28



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K2\_SF5\_EN\_I 2/04-14. Product specifications subject to change without notice.