



DESCRIPTION

The **KIVA** Line Source element has an operating frequency bandwidth from 80 Hz to 20 kHz and this response can be increased to 50 Hz with the addition of the low frequency extension **KILO** cabinet.

KIVA features two 6.5" drivers in a bass-reflex tuned enclosure and a HF 1.5" diaphragm compression driver coupled to a DOSC waveguide for HF reproduction. The passive crossover network uses 2nd order filters with built-in phase compensation.

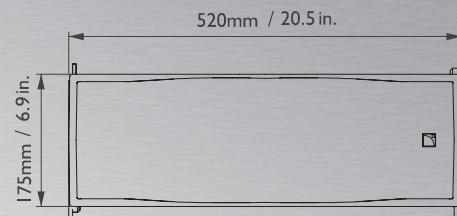
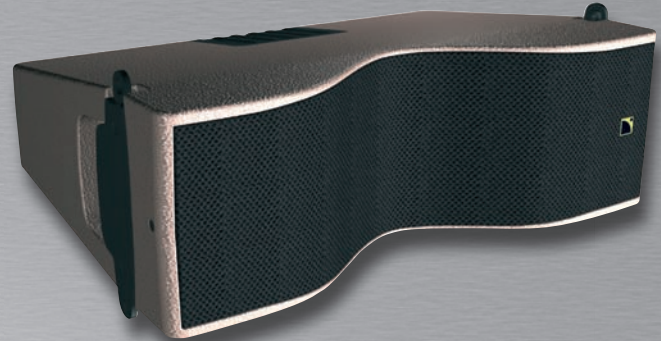
The V-shaped coplanar transducer configuration generates a polar pattern coverage of 100° horizontally with symmetric pattern control across the projection axis, without any conflicts over the entire frequency range.

The combination of coplanar symmetry and the DOSC waveguide in the HF region allows the system to fulfil the 5 WST criteria, thereby allowing the wavefront of a **KIVA** line source to be curved up to a maximum of 15° for each element without breaking the inter-element acoustic coupling.

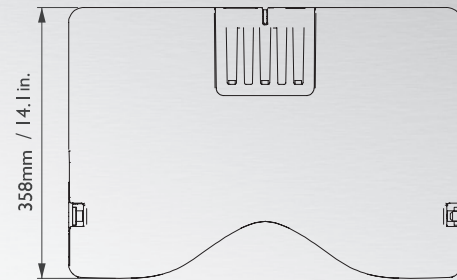
The captive diecast 3-point rigging system is fully integrated into the **KIVA** cabinet allowing up to 20 elements or 12 **KIVA** and 4 **KILO** to be flown in accordance with the manufacturer's recommendations.

The **KIVA** cabinet is made from a unique composite material with remarkable mechanical and acoustic properties very similar to Baltic birch plywood but with the added benefit of a high immunity to moisture.

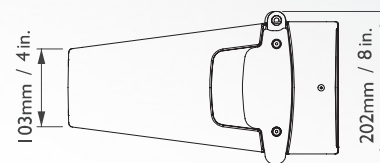
The **KIVA** enclosure is controlled and amplified using the delicate LA4 controller. The performance of **KIVA** depends upon the choice of preset and physical system configuration.



FRONT



TOP



SIDE

CHARACTERISTICS

Frequency response (-10dB)

Usable bandwidth: 80 - 20k Hz "Line Source" configuration

Nominal directivity (-6dB)

Horizontal: 100° Symmetric (500 - 18k Hz)
Vertical: Dependant upon number of elements and line source curvature
Between 0° and 15° inter-element angles

SPL max levels ¹

"FULL RANGE" mode: 120 dB (cont) 126 dB (peak) 1 x KIVA ([KIVA] preset)

Components

LF: 2 x 6.5" weather-resistant
HF: 1 x 1.5" diaphragm compression driver
Nominal impedance: 8 ohms

Rigging

Entirely captive, high-grade steel certified for 20 **KIVA** or 12 **KIVA** and 4 **KILO** according to manufacturer's recommendations ²

Angle increments: 0, 1, 2, 3, 4, 5, 7.5, 10, 12.5, 15°

Physical data

- W x H/h x D: 520 x 175/103 x 358 mm
20.5 x 6.9/4 x 14.1 in
- Weight (net): 13kg 28.7 lbs
- Connectors: 2 x 4-pin Neutrik Speakon
- Material: composite sandwich structure, zamac and steel
- Finish: maroon-gray, RAL 8017
- Front: plastic grill, black and acoustically neutral "Airnet" grill cloth
- Rigging: integrated flying hardware and handles (black epoxy paint)

¹ Max SPL at 1m under freefield measurement conditions using pink noise with specified preset and corresponding EQ settings.

² Installation guidelines are specified in the SOUNDVISION software designed to help with L-ACOUSTICS product implementation.



KIVA SYSTEM

WAVEFRONT SCULPTURE TECHNOLOGY

The **L-ACOUSTICS KIVA SYSTEM** establishes a new reference in Line Source Array technology. Packaged in a sleek fully integrated ultra-compact design, KIVA is intended to fulfil the highest demands of audio professionals and delivers the ultimate performance level in its category. KIVA fulfils the five WST[®] (Wavefront Sculpture Technology) criteria in line with the scientific concepts introduced by L-ACOUSTICS.

The L-ACOUSTICS KIVA system meets the demands of both the fixed installation and rental production markets. The main system components consist of the following:

- KIVA full range element operating from 80 to 20k Hz bandwidth.
- KILO complimentary low frequency extension element operating from 50 Hz.
- LA4 amplified controller.

KIVA delivers a considerable number of improvements over the traditional sound reinforcement approach particularly with regard to the intelligibility and overall clarity of vocal material. Utilising WST technology KIVA (although compact by design) allows for even coverage of extremely large acoustic environments where the number of elements (height of the array) constitutes the main factor in establishing the system throw, coverage pattern, and directivity control parameters.

With a fixed horizontal directivity of 100° and a vertical inter-element variation of between 0° and 15°, KIVA is fully configurable to match any audience geometry. Utilising the unrivalled characteristics of WST, KIVA delivers clarity, precision, and a unique near field proximity effect offering the audience an incomparable listening experience.

Packaged in a lightweight and compact enclosure in addition to a virtually invisible captive rigging system, KIVA combines extremely quick set up and system integration with significant savings on storage and handling logistics. Due to its compact size and low weight KIVA complies with rigging limitations in theatres, performing art centres, concert halls, convention centres, sport facilities, and TV/Broadcast studios, with the added bonus of being visually discrete.

The dedicated LA4 amplified controller delivers an extremely advanced and precise system drive for KIVA. System performance is optimized by a dedicated preset library exclusively designed for the LA4 controller. A wide range of system configurations are available for the sound designer and system engineer allowing for a high level of creative freedom. Additional features include an intelligent 2 way (real time and RMS) transducer protection circuit and a unique contour EQ interface allowing instant contouring of the line source array.

A single LA4 can drive up to 8 KIVA cabinets in a full range preset configuration for vocals and light music material. Alternatively, an LA4 can drive 6 KIVA and 2 KILO for medium music applications, while for more demanding low-end reinforcement the SBI 18 subwoofer can be deployed as part of a 3 way system.

KIVA configurations can be acoustically and mechanically modelled with the proprietary L-ACOUSTICS SOUNDVISION 3D simulation software. The KIVA software predictions realised in SOUNDVISION are modelled on the preset parameters of the LA4 amplified controller.

In addition to the above, The LA NETWORK MANAGER software offers remote control and monitoring of the amplified controllers via a user-friendly and intuitive graphic interface. The design of complex and sophisticated systems is made possible by the integration of an Ethernet-based network capability which allows for the simultaneous networking of up to 253 LA4 units.



SYSTEM COMPONENTS

- **KIVA**

Full range passive 2-way WST cabinet, operating bandwidth from 80 - 20 k Hz
 2 x 6.5" LF transducers + 1 x 1.5" HF compression driver mounted on DOOSC® waveguide
 Horizontal directivity - 100° from 500 to 18k Hz
 Vertical flexibility 0° to 15° in 1° increments up to 5° and 2.5° beyond
 Weight: 13 kg 28.7 lbs

- **KILO**

Low frequency extension cabinet, operating bandwidth from 50 Hz
 1 x 12" neodymium transducer
 Weight: 19 kg 41.9 lbs

- **LA4**

Amplified Controller with DSP library and networking capabilities
 2 analogue inputs and four amplifier channel outputs
 4 x 1000 W per channel into 4 ohms
 4 presets dedicated to KIVA
 LA NETWORK MANAGER control software

- **KIBU**

Rigging bumper for flying or ground stacking KIVA
 Certified for flying up to 20 KIVA or 12 KIVA + 4 KILO, in accordance with manufacturer's recommendations

- **KIET**

Accessory for rigging a maximum of 2 KIVA on a stand or for under balcony applications

- **SOUNDVISION**

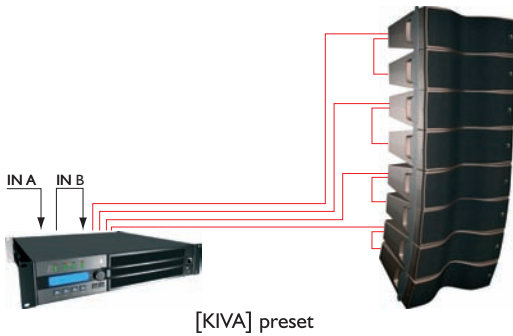
Electro-acoustic and mechanical simulation software (Windows® compatible) dedicated to L-ACOUSTICS products.



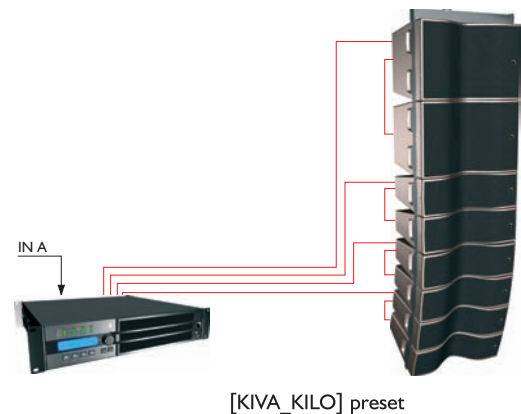
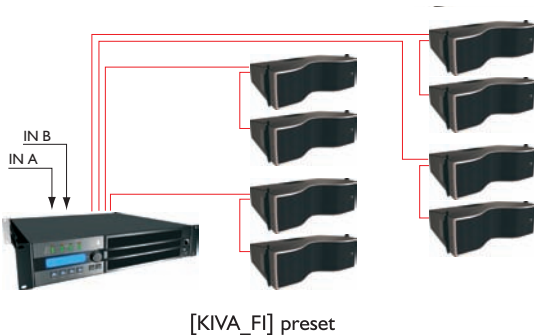
SYSTEM CONFIGURATION

Three main KIVA system configurations are available:

- **"Full Range"** Line Source
- **"LF extension"** Line Source
- **"Fill distributed"** mode.
- The **"Full Range"** mode consists of a KIVA-only line source array configuration. A single LA4 can drive between 4 and 8 KIVA cabinets from 2 independent left/right inputs.
 Preset : [KIVA] - Line Source



- The **"LF extension"** mode consists of a hybrid configuration with a ratio of 1 KILO to 3 KIVA. In this application, a single LA4 can drive up to 2 KILO and 6 KIVA from one mono input. Two additional presets allow use with a complimentary SB118 subwoofer.
 Preset : [KIVA_KILO] - Line Source + LF extension
 [KIVA_KILO_60] - Line Source + LF extension + 60 Hz high pass filter for additional subwoofer
- The **"Fill distributed"** mode corresponds to distributed applications featuring single or paired KIVA cabinets. This mode typically covers front-fill applications, under-balcony fills and delays.
 Preset : [KIVA_FI] - Single or paired Kiva for distributed mode



KIVA_SPS_EN_1