Introduction

From the version 3.1.2 of Soundvision, Kiva / Kiva II configurations trigger an orange (intermediate) warning when the load is between 200 kg and 300 kg at the rear linking points. In this case, a mechanical warning appears in the Mechanics View window.

In permanent installation, these configurations must be secured with a KIVA-PULLBACK as described in this document. In touring application, this warning can be ignored.

Safety

Instructions

⚠️ Inspect the system before any deployment.
Perform safety related checks and inspections before any deployment.

Perform preventive maintenance at least once a year.
Refer to the preventive maintenance section in the user documentation for a list of actions and their periodicity. Insufficient upkeep of the product can void the warranty.

If any safety issue is detected during inspection, do not use the product before performing corrective maintenance.
Check for issues. A rigging system part or fastener is missing or loose. A rigging system part exhibits: bends, breaks, broken parts, corrosion, cracks, cracks in welded joints, deformation, denting, wear, holes. A safety cue or label is missing. A loose part is not adequately secured.

⚠️ Work with qualified personnel for rigging the system
Installation should only be carried out by qualified personnel that are familiar with the rigging techniques and safety recommendations outlined in this manual.
Ensure personnel health and safety
During installation and set-up personnel must wear protective headgear and footwear at all times. Under no circumstances is personnel allowed to climb on a loudspeaker assembly.

Respect the Working Load Limit (WLL) of third party equipment.
L-Acoustics is not responsible for any rigging equipment and accessories provided by third party manufacturers. Verify that the Working Load Limit (WLL) of the suspension points, chain hoists and all additional hardware rigging accessories is respected.

Respect the maximum configurations and the recommended safety precautions.
For safety issue, respect the maximum configurations outlined in this manual. To check the conformity of any configuration in regards with the safety precautions recommended by L-Acoustics, model the system in Soundvision and refer to the warnings in Mechanical Data section.

Be cautious when flying a loudspeaker configuration.
Before installing/raising the product, check each individual element to make sure that it is securely fastened to the adjacent element. Always verify that no one is standing underneath the product when it is being installed/raised. Never leave the product unattended during the installation process.
As a general rule, L-Acoustics recommends the use of secondary safety at all times.

Be cautious when ground-stacking a loudspeaker array.
Do not stack the loudspeaker array on unstable ground or surface. If the array is stacked on a structure, platform, or stage, always check that the latter can support the total weight of the array.
As a general rule, L-Acoustics recommends the use of safety straps at all times.

Risk of falling objects
Verify that no unattached items remain on the product or assembly.

Risk of tipping
Remove all rigging accessories before transporting a product or an assembly.

Take into account the wind effects on dynamic load.
When a loudspeaker assembly is deployed in an open air environment, wind can produce dynamic stress to the rigging components and suspension points.
If the wind force exceeds 6 bft (Beaufort scale), lower down and/or secure the product or the assembly.

Intended use
This system is intended for use by trained personnel for professional applications.

Read the OWNER’S MANUAL before installing the system.
Use the loudspeaker system components described in the manual and follow the operating instructions.

As part of a continuous evolution of techniques and standards, L-Acoustics reserves the right to change the specifications of its products and the content of its documents without prior notice.
Check www.l-acoustics.com on a regular basis to download the latest document and software updates.

Contact L-Acoustics for advanced maintenance.
Any unauthorized maintenance operation will void the product warranty.

Symbols
The following symbols are used in this document:

This symbol indicates a potential risk of harm to an individual or damage to the product.
It can also notify the user about instructions that must be strictly followed to ensure safe installation or operation of the product.

This symbol notifies the user about instructions that must be strictly followed to ensure proper installation or operation of the product.

This symbol notifies the user about complementary information or optional instructions.
Securing Kiva / Kiva II arrays with KIVA-PULLBACK

**Always respect the maximum limit**

The load at the rear linking points must not exceed 300 kg.

**Mechanical safety of the rigging system**

Refer to the Kiva and Kiva II user documentation for maximum configurations.

**Required equipment**

<table>
<thead>
<tr>
<th>KIVA-PULLBACK</th>
<th>turnbuckle</th>
<th>wire rope</th>
<th>Ø12 mm shackles WLL 1 t</th>
</tr>
</thead>
</table>

The turnbuckle must be compatible with the Ø12 mm shackles WLL 1 t.

The length of the wire rope depends on the configuration of the permanent installation. The wire rope must have a WLL of 300 kg.

**Procedure**

1. Set up the array.
   - Refer to the rigging procedures of the Kiva rigging manual or of the Kiva II owner's manual.
2. Lower the array.
3. Secure a KIVA-PULLBACK under the bottom enclosure.
   - Secure the rear piece in the spring-lock safety of the bottom enclosure.
4. Secure a shackle to the flying frame:
   - on hole 13 (bottom) for KIBU-SB
   - on hole 13 for KIBU / KIBU II

For KIBU / KIBU II, secure a second shackle to the first one to avoid friction.

5. Secure the turnbuckle to the shackle.
6. Connect KIVA-PULLBACK to the turnbuckle with a wire rope and two shackles.
7. Tense the wire rope using the turnbuckle.
   - **Do not apply overtension on the wire rope**
   - Tense it so that the wire rope is not slack.
8. Raise the array.