## Quick Start Guide - How to install the C3X LUMIS 3D system

## Getting started

The C3X LUMIS 3D system consists on a pair of special C3X LUMIS projectors equipped with Infitec filter for 3D vision and a custom made double-decker bracket to install the system on a table.
Maximum two projector may be installed on the bracket.
The Quick Start Guide you are currently reading describes the installation procedure.
Necessary material:
N. 2 C3X LUMIS HC special projectors composing the C3X LUMIS 3D system
N. 1 table stacking system
N. 6 M6 screws ( 2 cm length minimum)

## Warnings

Due to the weight of the bracket and the projectors (around $45 \mathrm{Kgs} / 99 \mathrm{lbs}$ ) the whole system may represent danger if not handled with care. Many injuries especially among children can be avoided by taking simple precautions:

- Only use the projector model suggested by the supplier
- Only use furniture which will surely carry the equipment
- Place the table staking system on a plane surface and make sure that its rubber feet don't slide. If possible choose a rough surface
- Make sure the equipment does not hang outside the surface
- Do not place the equipment on high furniture like cupboards or bookshelves without securing both the furniture and the equipment securely
- Do not place the equipment on a tablecloth or other materials between the stacking system feet and the surface


## Placing the lower projector

Be sure the stacking system lower plate is horizontal: use a bubble level to be sure. Unscrew the standard projector's feet after having turned the projector upside down on a soft surface to. The projector must be inserted form the front side of the stacking system (see left picture). The projector is more than 11 Kgs (24lbs) weight so we recommend to hold it by two hands. Placing the projector avoid shakings and impacts to the staking system mechanical structure: those may damage the cabinet or the inner projector's parts. Once inside, check that the three feet sockets are coincident to the metallic plate holes. Screw the provided screws (see right picture) on the projector feet from the lower part of the plate until the projector is fixed safely.


## Placing the upper projector

Follow the same procedure as above for the lower projector taking in account that this projector is placed on a special adjustment plate. When placing the unit make sure the plate is horizontal also looking at the small bubble level mounted in the middle.


## Fine aligning the images

The C3X LUMIS model composing the system has 50\% UP lens shift. An optimal installation is obtained without using electronic keystone, so when the image is projected perpendicular to the screen.
This means that the system should be placed in order to have the upper projector's projection lens at a height equal or lower than that of the screen center. On the other hand, the lower projector's projection lens minimum height has to be on line with the bottom edge of the screen.
The best result is obtained when the upper projector has no lens shift and the lower one has slight lens shift up.
Once found the right system height follow these steps:

1. Turn on the projectors
2. Adjust the image by moving the motorized zoom and focus commands on both projectors to fit the screen dimensions. To do it easy, use the zoom and focus patterns. Find very close image sizes by both units.
3. Act on the lens shift of both unit using the provided allen spanner in order to find the same image center height. Help yourself by a cross test pattern like the zoom test pattern
4. If you see that the upper projector image has a lot of horizontal keystone you can unscrew the 4 adjustment plate knobs fixing it to the structure and rotate it till the image has no more keystone (see below image).

5. The images could be horizontally tilted one respect to each other, the image centers are horizontally shifted and the image dimensions slightly different.

Let's analyze the three cases:
a) the images are horizontally tilted one respect to each other: act on the right adjustment wheel (see below images) to tilt the upper projector respect the below one that will be used as reference.

b) the image centers are horizontally shifted: act on the left adjustment wheel (see below images) to shift horizontally the upper projector respect the below one that will be used as reference.

c) Following the instructions at points a) and b) you should have found the common image center. Now you could see that the image sides are not perfectly coincident. It means that the two images have slightly different zoom. Act on the front adjustment wheel to fine zooming the projector forth or back depending on the error you notice on the screen.


