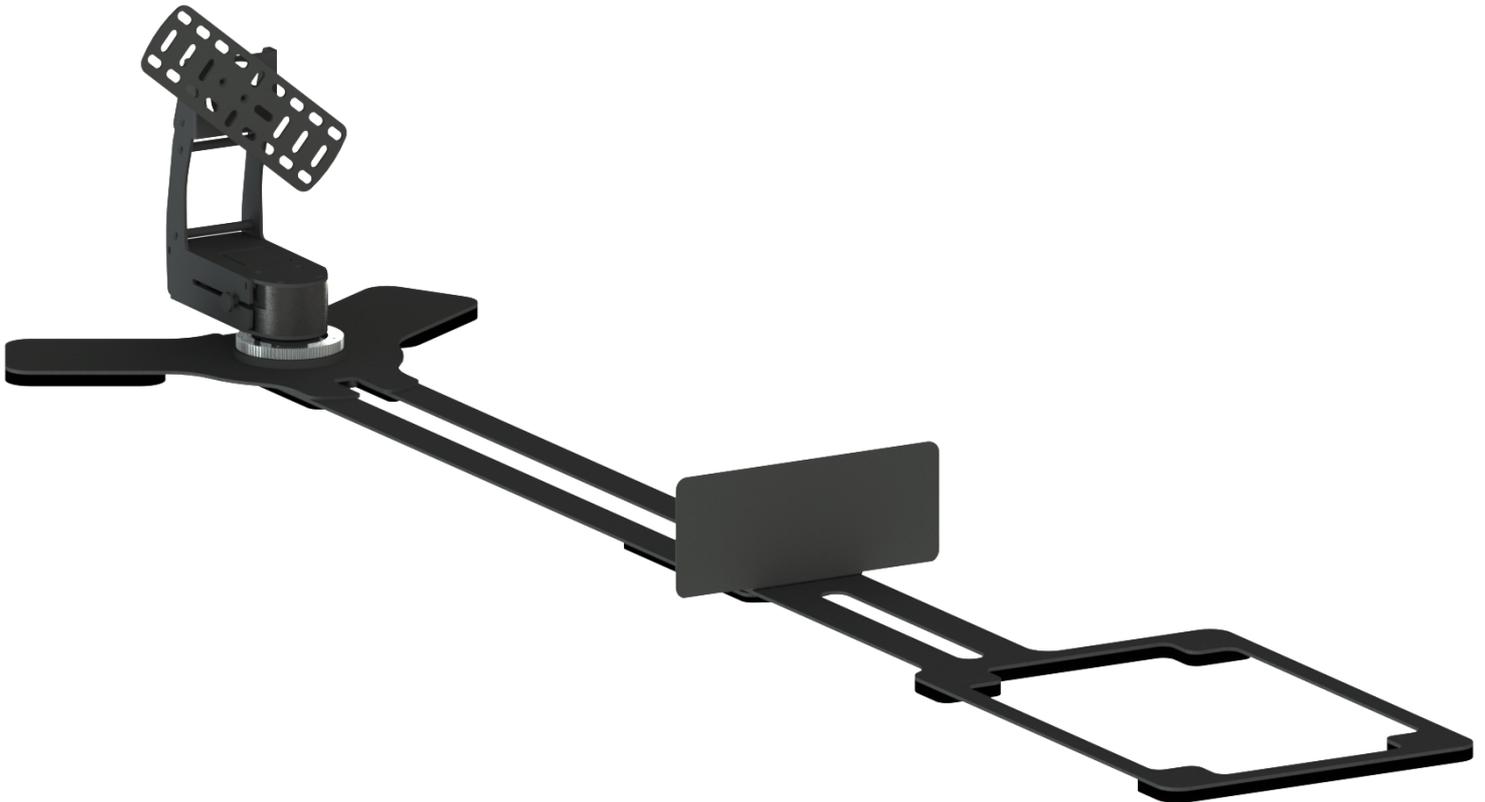


# LightSpion Extender

User guide



Last edited 7  
/6-2017

**VISO**  
SYSTEMS

# Content

Safety Information .....	3
Introduction .....	4
About the LightSpion Extender .....	4
About this document.....	4
Dimensions.....	5
Packaging and weight .....	6
Extender items .....	7
Shipping Packages .....	7
Installation .....	8
LightSpion Case plate + Slider plate .....	8
Installing the Gonio Base.....	8
Mount tower .....	9
Configuration .....	10
Long configuration .....	10
Short configuration .....	10
LightSpion alignment.....	11
Connecting the Extender .....	12
Lamp Mounting.....	13
Lamp Alignment .....	13
Center of luminaires.....	15
photometric center .....	15
Illustration explanation .....	16
Lamp connection .....	17
Making measurements .....	17
Stray Light Corrections .....	17
Specifications .....	18

# Safety Information

**Warning! This product is not for household use.**

Read this manual before installing and operating the controller, follow the safety warnings listed below, and study all the cautions in the manual.

## Preventing electric shocks



Make sure the power supply is always grounded.

Use a source of AC power that complies with the local building and electrical codes, that has both overload and ground-fault protection.

If the controller or the power supply are in any way damaged, defective, wet, or show signs of overheating, disconnect the power supply from the AC power and contact Viso Service for assistance.

Do not install or use the device outdoors. Do not spray with or immerse in water or any other liquid.

Do not remove any covers or attempt to repair the controller or the power supply. Refer any service to Viso.



### Disposing of this product

Viso products are supplied in compliance with Directive 2002/96/EC of the European Parliament and of the Council of the European Union on WEEE (Waste Electrical and Electronic Equipment), as amended by Directive 2003/108/EC, where applicable.

Help preserve the environment! Ensure that this product is recycled at the end of its lifetime. Your supplier can give details of local arrangements for the disposal of Viso products.

# Introduction

## About the LightSpion Extender

The LightSpion Extender expands the ability of LightSpion to measure the light sources with a diameter of up to 220mm. The device is easily connected to the previously installed LightSpion and gets detected by the Light Inspector software automatically.

## About this document

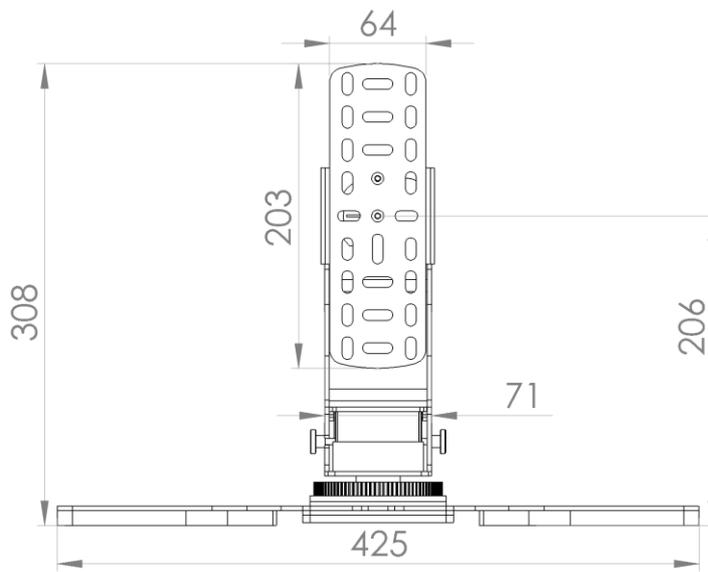
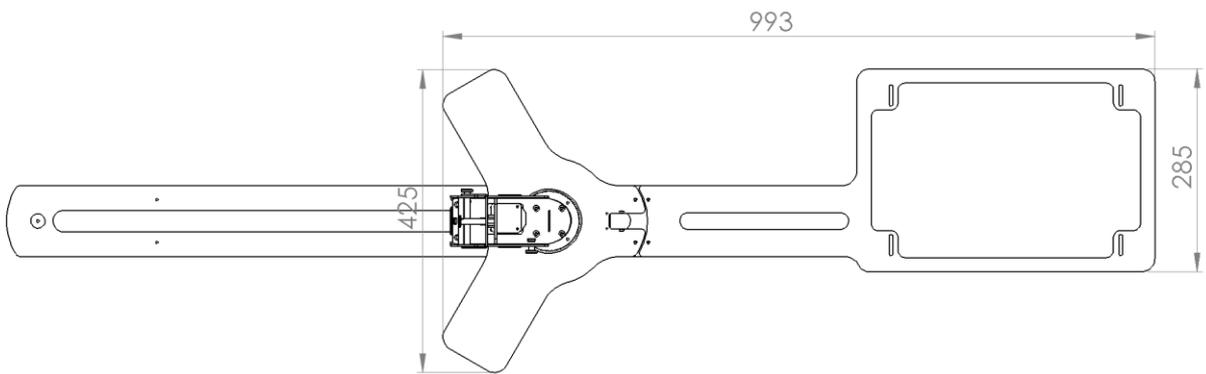
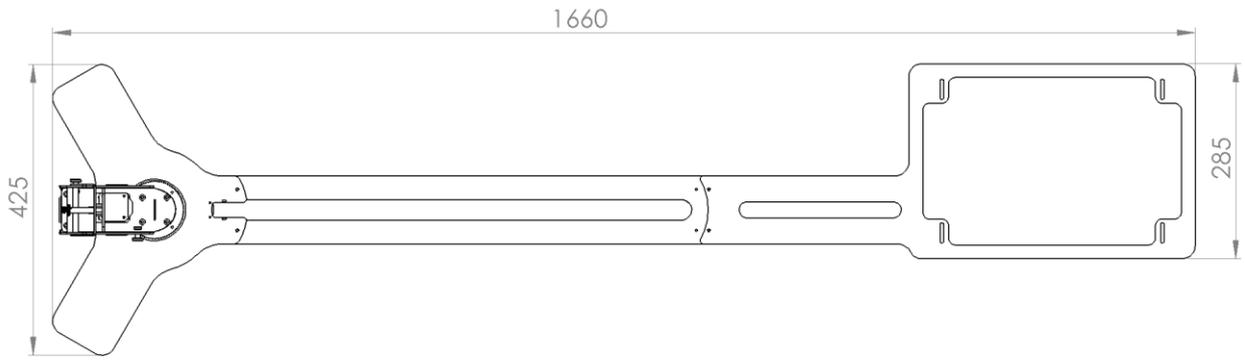
These guidelines describe the installation process of the LightSpion Extender and the alignment of light sources to be measured.

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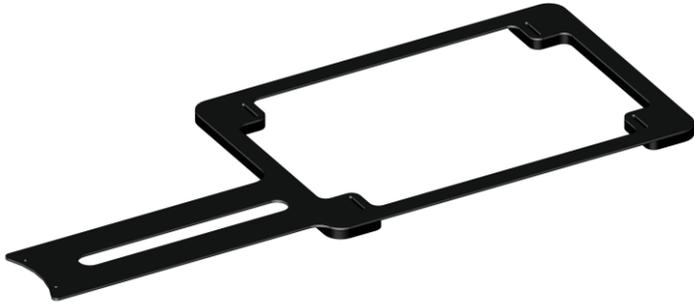
Information subject to change without notice. Viso Systems ApS and all affiliated companies disclaim liability for any injury, damage, direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this manual.

# Dimensions

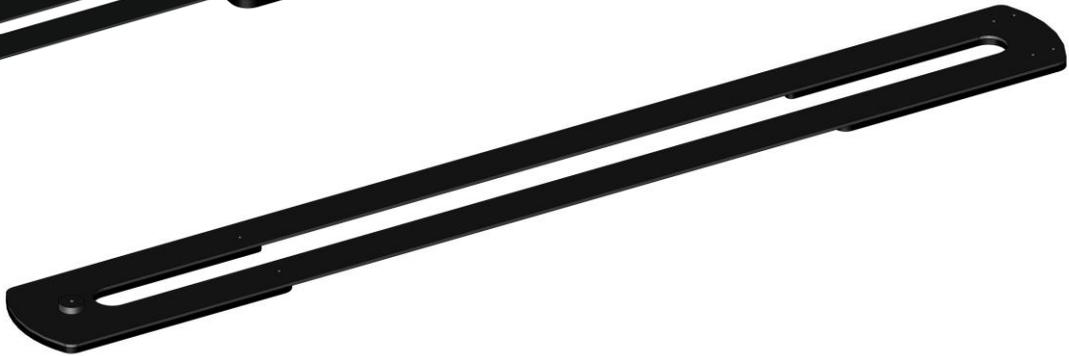


# Packaging and weight

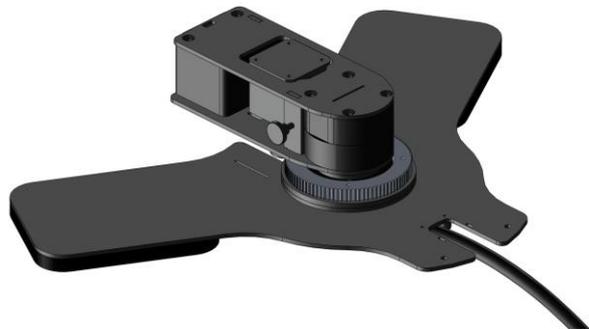
Case Plate



Slider Plate



Base



Tower



Straylight Plate



4 x M4x10  
Thumb screws



2 x M4x16  
Thumb screws

## Extender items

- Case Plate
- Slider Plate
- Tower
- Base
- Straylight Plate
- Screws for assembly

## Shipping Packages

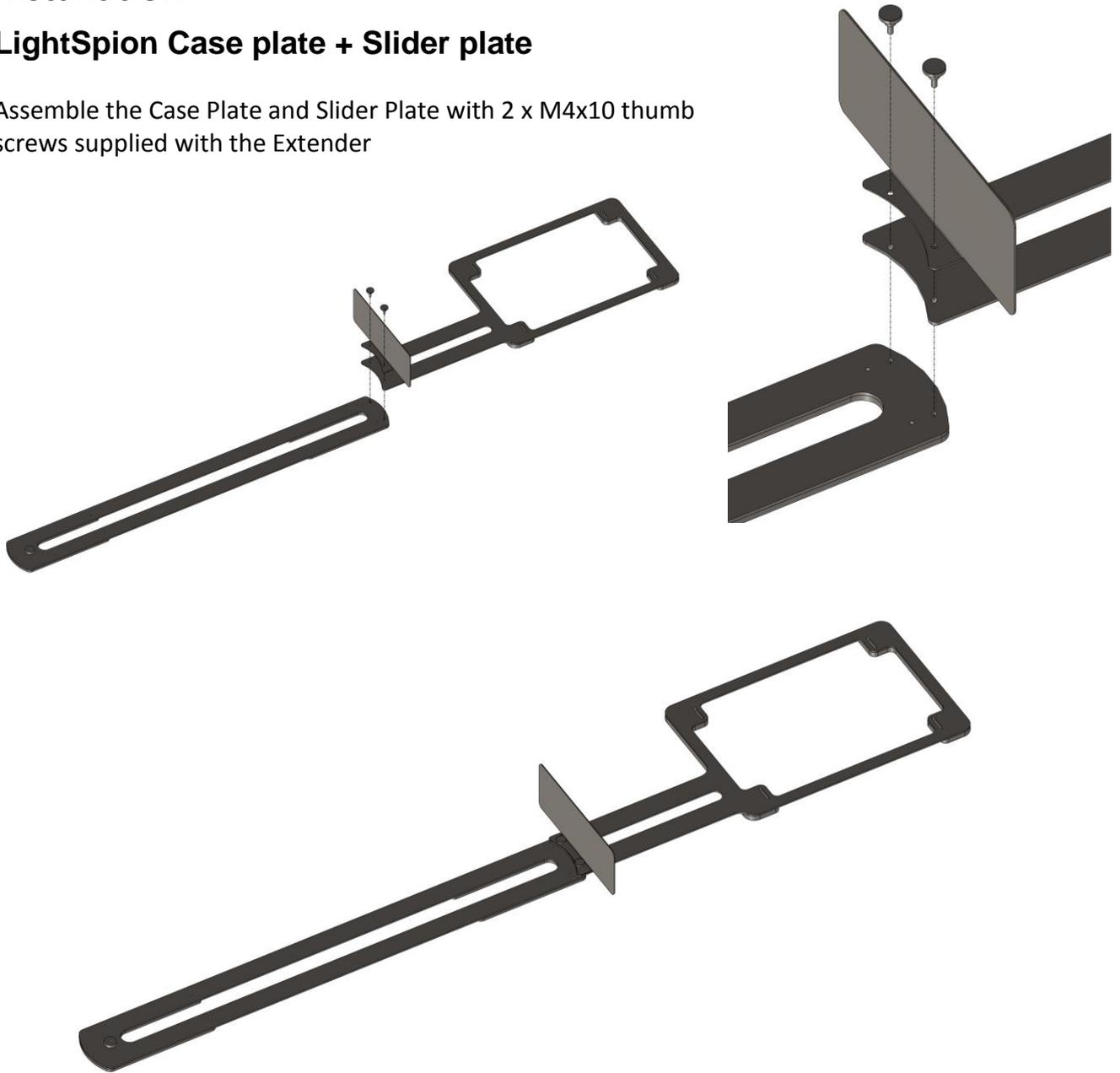
	<b>Shipping packages</b>	<b>Shipping dimensions</b>	<b>Weight</b>
1.	Extender	105 x 32 x 28 cm	7 Kg

**Total shipping weight: 7 kg.**  
**The shipment is done in a total of 1 package**

## Installation

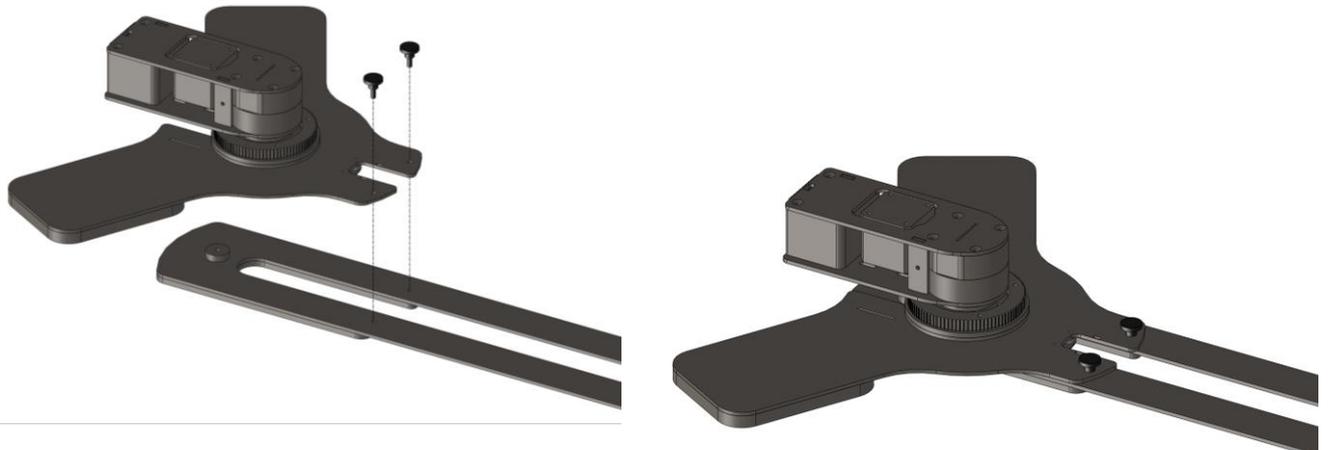
### LightSpion Case plate + Slider plate

Assemble the Case Plate and Slider Plate with 2 x M4x10 thumb screws supplied with the Extender



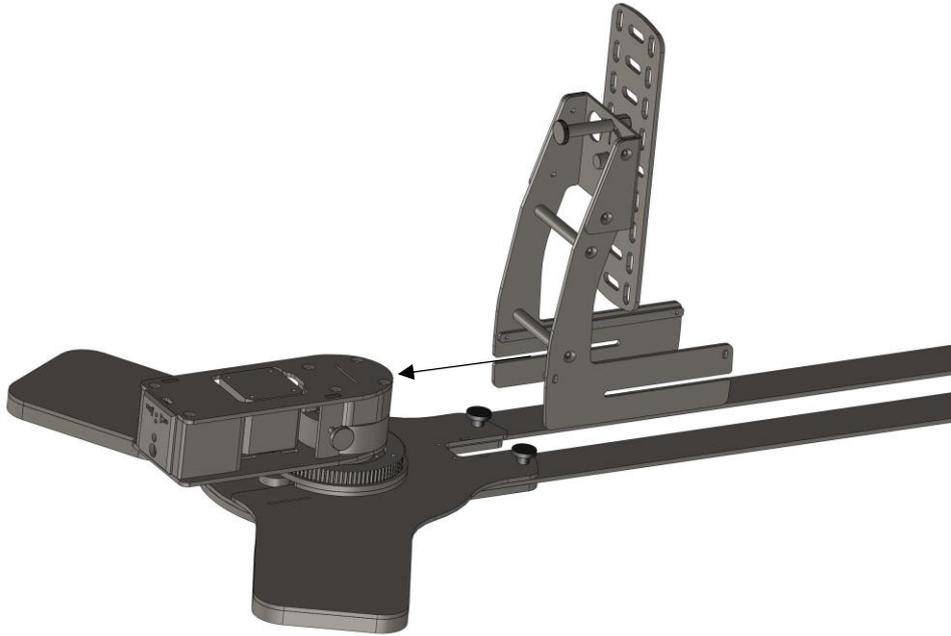
### Installing the Gonio Base

The Base is installed using the supplied 2 x M4x10 thumb screws. Slide the Base into the Slider plate and fix with the two screws.

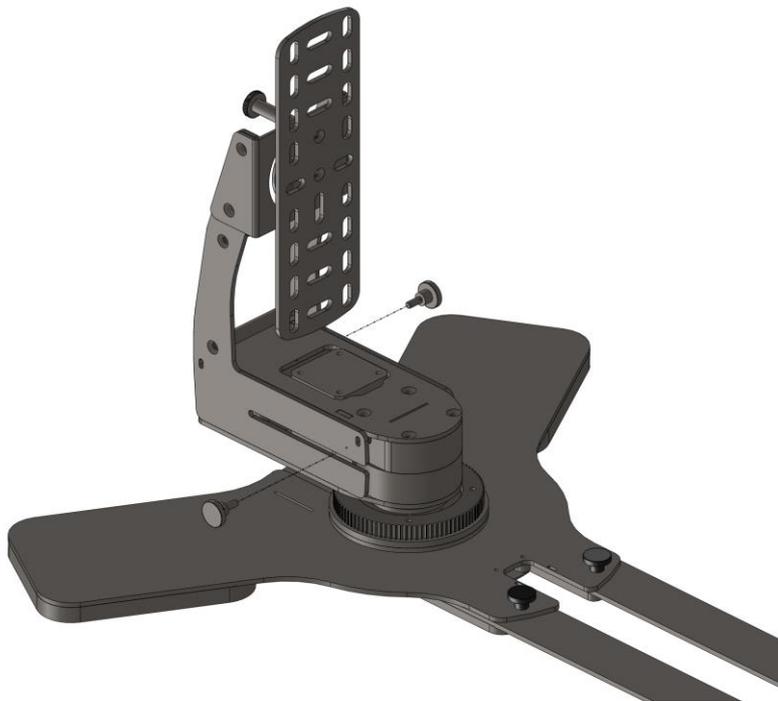


## Mount tower

Slide on the tower from the front



Mount the two M4x16 thumb screws for locking the Tower

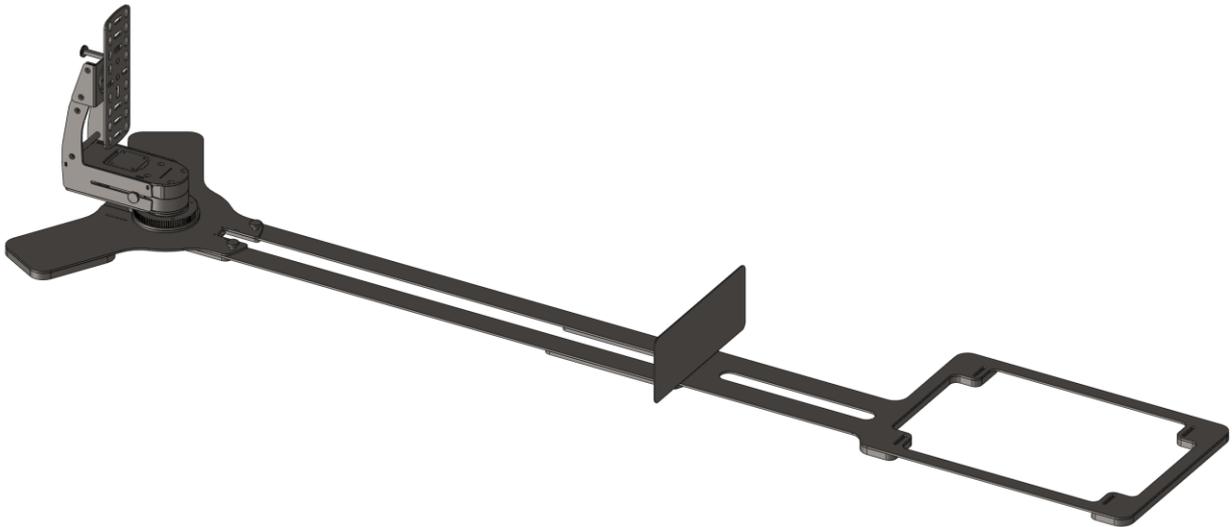


## Configuration

The Extender Base can be set in two positions depending on the lamp to measure.

### Long configuration

The full goniometer-sensor length of 181cm allows the measurements of light sources up to 220mm in diameter.



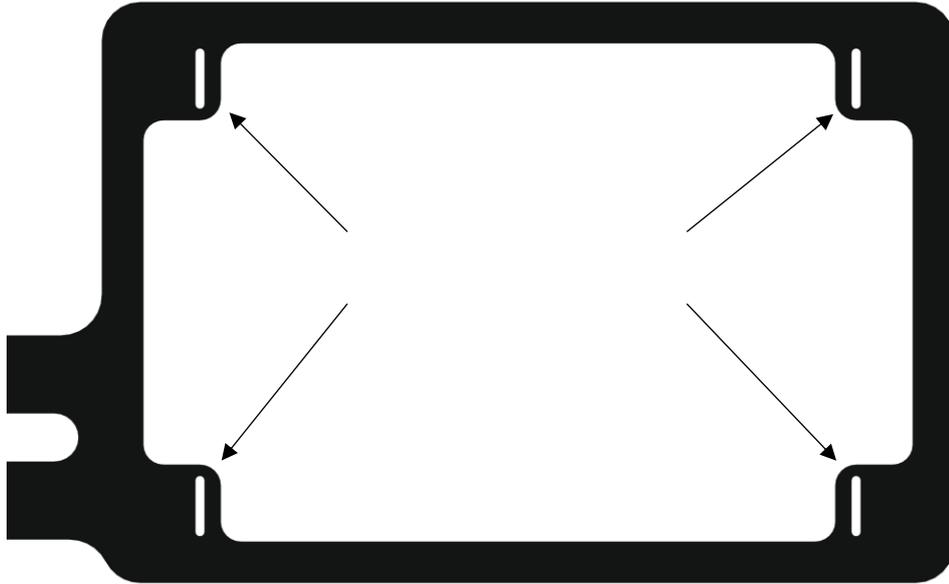
### Short configuration

The reduced goniometer-sensor length of 114 cm allows the measurements of light sources up to 135mm in diameter. This configuration can be useful when measuring smaller light sources and/or of low power, where a shorter distance will increase the sensitivity of the sensor. In this position you should remove the Straylight Plate.



## LightSpion alignment

The Extender base plate comes with alignment points and a visual outline for the LightSpion ensuring that the LightSpion is fixed at the right location for accurate measurements.



The alignment points clicks into bottom of the LightSpion as shown below.



## Connecting the Extender

The extender's connection is done via unplugging the built-in goniometer and connecting the RJ45 of the Extender goniometer.

The power going to the built-in goniometer lamp holder must also be unplugged and connected to the Extender instead.



The Light Inspector software will automatically detect the Extender. Various configurations can be seen in the photometric window.



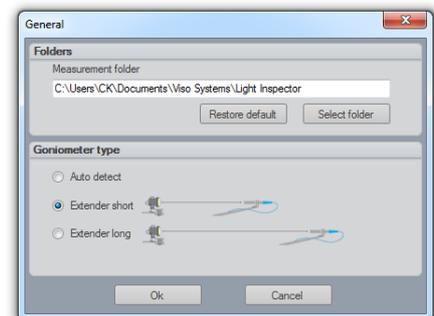
*Long configuration*



*Short configuration*

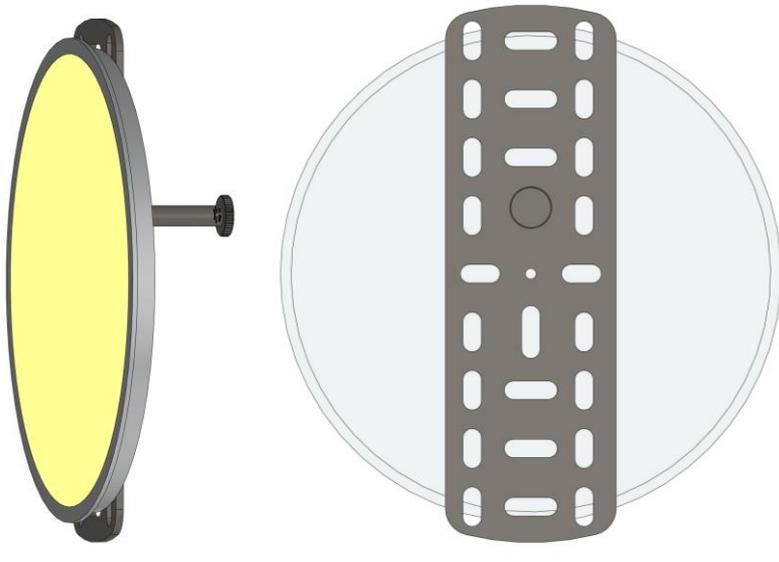
In case the system does not detect the Extender due to an outdated hardware it is possible to select it manually in:

Setup - Options.



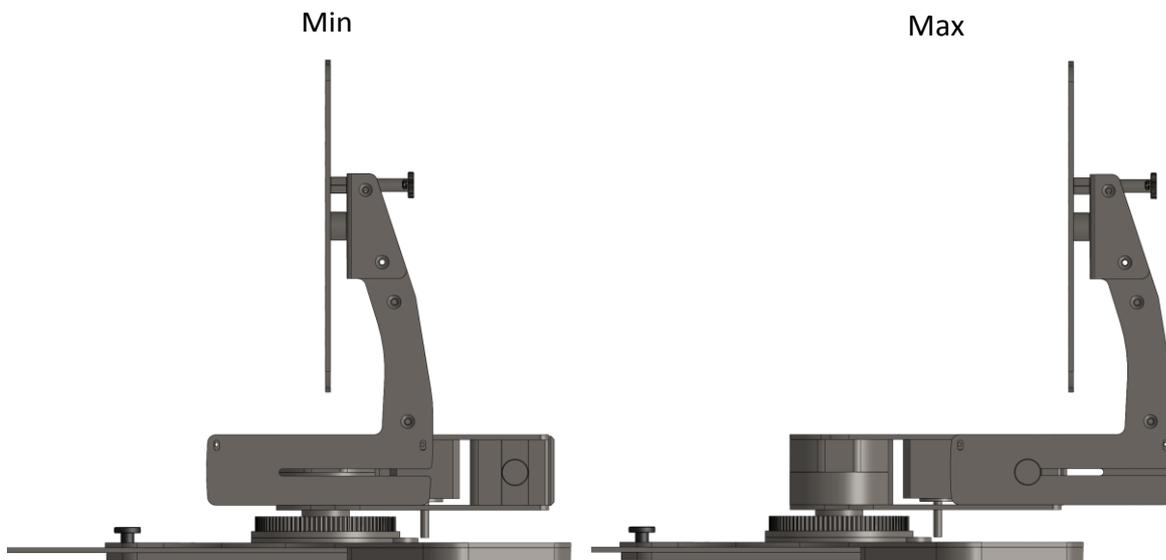
## Lamp Mounting

The vertical alignment of the lamp is done automatically by the centred twin clamp holder.

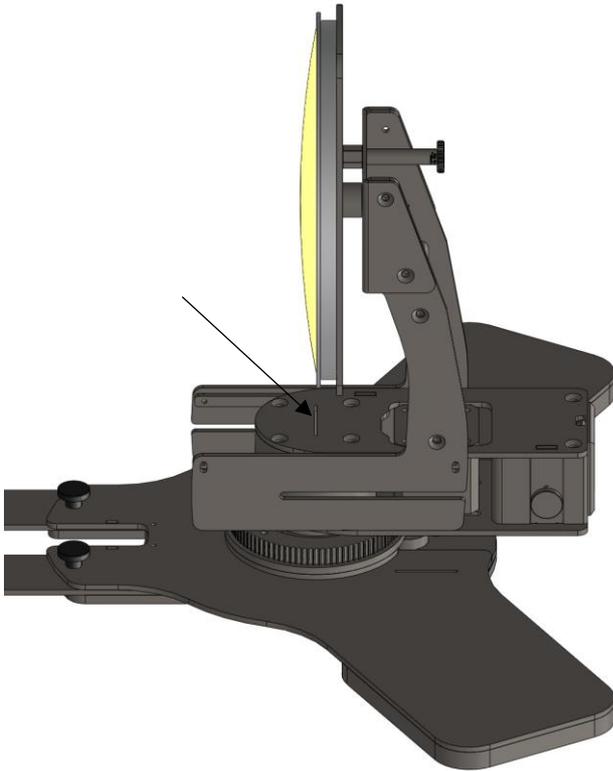


## Lamp Alignment

To slide the Tower, loosen the two thumb screws and slide the it to the wanted position. The Tower can be slid from 0 – 140mm



The horizontal position of the lamp should be placed in such a way so that the illuminating part is at the centre of rotation, as shown below. The center of rotation is marked with a slit in the topplate



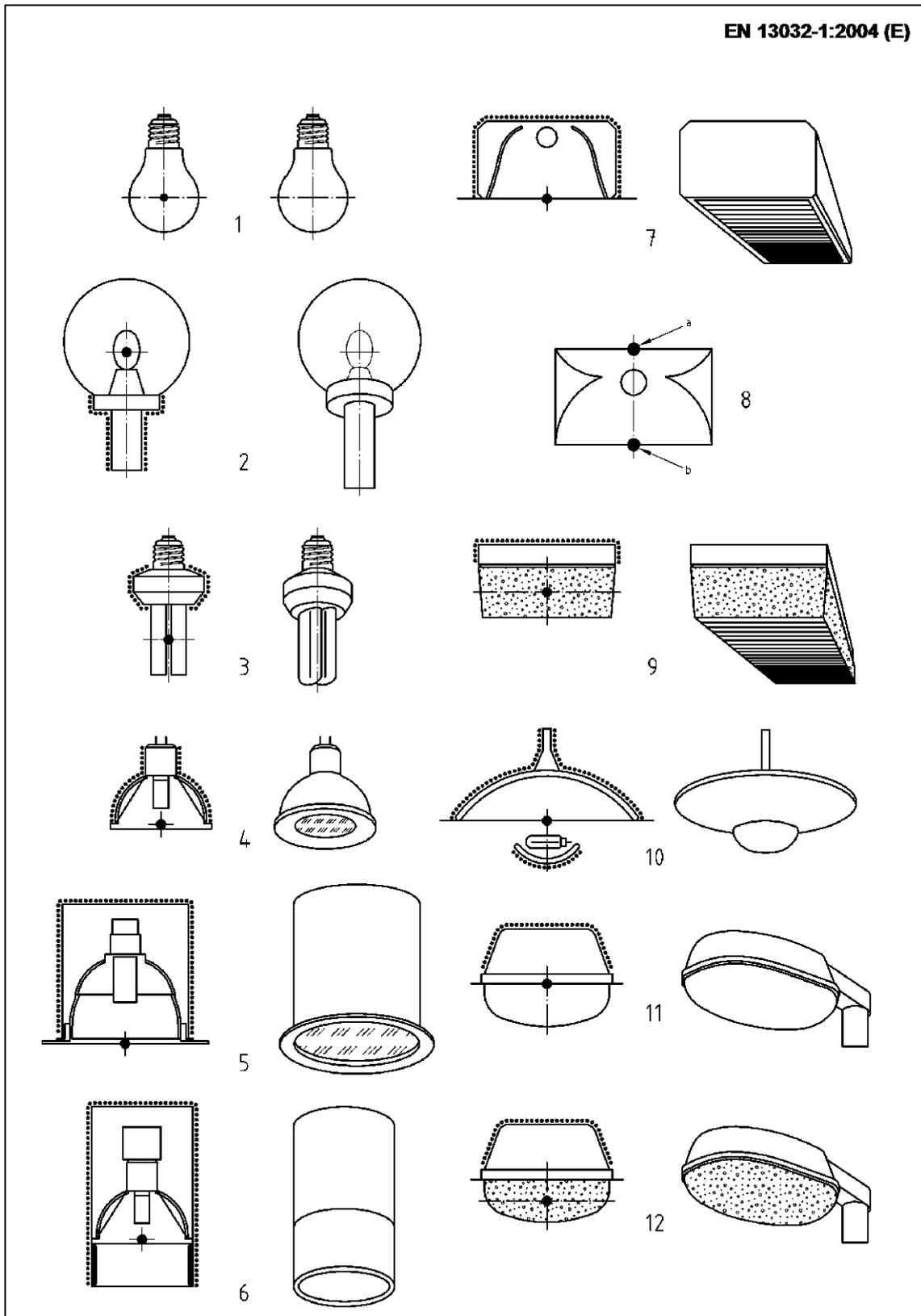
Failing to align the lamp to the centre of rotation can affect the accuracy of the peak intensity value and the beam angle.

The flux value is not affected by the incorrect horizontal placement.

# Center of luminaires

## *photometric center*

The black spot marks the photometric center of the different lamps. This photometric center is what should be aligned with center of rotation of the Base.



## Illustration explanation

### EN 13032-1:2004 (E)

#### Explanation of presentation

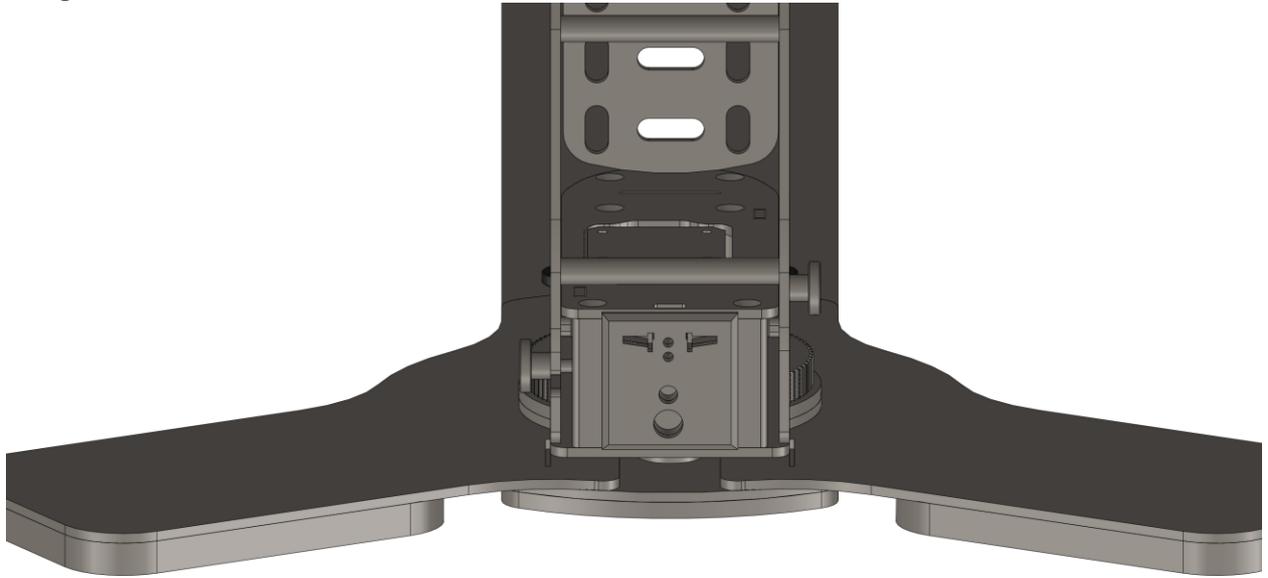
Presentation	Explanation
●	Photometric centre
—	opaque, substantially black
/// /// ///	opaque, dif use or specular ref ectant
••••••••••	translucent, clear
.....	compartment

#### Photometric centre of light sources

- 1) Incandescent lamp
- 2) With a clear cover
- 3) Compact fluorescent lamp
- 4) Reflector lamp
- 5) Luminaire with reflecting mirror
- 6) Luminaire with shield, substantially black
- 7) Luminaire with opaque sides
- 8) Direct-indirect luminaire
  - a) Luminant area 1 with photometric centre 1
  - b) Luminant area 2 with photometric centre 2
- 9) Luminaire with dif using/prismatic sides
- 10) Indirect luminaire with secondary reflector
- 11) Outdoor luminaire with clear cover
- 12) Outdoor luminaire with dif using/prismatic cover

## Lamp connection

The measured lamp is connected using an all-purpose power connector placed on the back of the goniometer base, as shown below.



## Making measurements

The LightSpion Extender measurements are done in the exact same way as in the case of LightSpion.

Please refer to the LightSpion user manual for further details.

When measuring linear tubes, their width should not exceed half of the maximal diameter of light sources for the Extender, namely 220 cm. That means the maximal width of the tubes is 110 cm.

## Stray Light Corrections

Sometimes when measuring particular lamps, you can observe glares. They are reflected from the black surface of the extender plate, enhancing the amount of the light detected by the sensor. Such an example is shown in the picture to the right:

To avoid the unnecessary illumination, remember to use the Straylight Plate in the long configuration.



# Specifications

## Physical dimensions

Shipping dimensions (L x W x H).....	105 x 32 x 28 cm
Shipping weight.....	9 Kg
Dimensions (L x W x H) .....	166 (99) x 43 x 31 cm
Weight.....	7 Kg
Sensor distance.....	114 and 181 cm
Light sources diameter range.....	0 - 220 mm
Linear light sources depth range.....	0 - 140 mm
Light source maximum weight.....	4 Kg

## Warranty

Warranty period.....	2 years
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## Ordering information

LightSpion Extender.....	P/N EXLIGSP002
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