



Creative Lighting Solutions



CLS Luxo 6

Version 1.1 October 2011

**INTRODUCTION:**

The Luxo 6 is a superior LED downlighter with a very high lightoutput.

With a power consumption of only 18 Watt it is capable of replacing the following traditional lightsources; 75-100 Watt Halogen, 2 x 18 Watt CFL and 35 Watt HQI.

**Available CLS Luxo 6 modules:**

- L-6-1-02-2 CLS Luxo 6 module, mfl 40°, 6 x Cree/Luxeon neutral white 4000K IP40
- L-6-1-03-2 CLS Luxo 6 module, mfl 40°, 6 x Cree/Luxeon warm white 3000K IP40
- L-6-1-04-2 CLS Luxo 6 module, mfl 40°, 6 x Cree/Luxeon extra warm white 2700K IP40

**Included items**

The CLS Luxo 6 is shipped in one package containing the following items:

- 1 CLS Luxo 6
- 1 user manual

**Optional accessories**

- 113000 CLS LDC-41 DMX LED dimmer, 0.35-1A per channel
- 872021 CLS MTD44 universal dimmable LED driver 350/700/1000mA
- 872024 CLS MTD16 LED driver 700mA 6-8 LEDs mains dimmable
- 872022 CLS MTD25 LED driver 700mA 9-12 LEDs mains dimmable
- 872020 CLS Dimmer Jung phase cut max. 270VA 230-240VAC
- 872010 CLS Dimmer electr. 1-10V for MT35/MTD44 LED driver
- 87129900 CLS SmartConnect, 2-fold junctionbox & shortcircuit connect.
- 87129905 CLS SmartConnect, 6-fold junctionbox & shortcircuit connect.
- 87129915 CLS SmartConnect short circuit plugs (10pcs)
- 87129959 CLS SmartConnect extensioncable betw. 2 junctionboxes 5mtr
- 911367 CLS LDC adaptercable LDC to SmartConnect system
- Y111611 CLS Luxo 6 round ceiling unit alu-brushed 1 hole
- Y111621 CLS Luxo 6 square ceiling unit alu-brushed 1 hole
- Y111632 CLS Luxo 6 rectangular ceiling unit alu-brushed 2 holes
- Y111633 CLS Luxo 6 rectangular ceiling unit alu brushed 3 holes
- Y111025 CLS multilens spot 25° for Luxo
- Y111060 CLS multilens flood 60° for Luxo
- Y111690 CLS Soft diffusion filter for Luxo 6

**Note: It is important to read this manual before you install this product.**

**SAFETY INFORMATION**

**Warning! This product is for professional use only, not for domestic use.**

**Read this manual before powering up or installing the CLS Luxo 6. Follow the instructions listed below and observe all warnings in this manual.**

**Protection from electric shock**

- Disconnect the power supply from AC power before installing, dismantling or maintaining the product.
- Make sure all connectors are connected properly.

- Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault protection.
- Do not expose the unit to rain or moisture.
- Refer all service to a qualified technician.

#### Protection from burns and fire

- Provide a clearance of at least 50 mm around the unit.
- Do not install the product near a heat source.
- Do not install the product in a corrosive, flammable or explosive area.
- Do not modify the product, or install other than genuine parts.
- Do not operate the product if the ambient temperature exceeds 40°C.
- Do not stare into the LED, this can cause damage to the eyes.
- Operate in a well-ventilated area

#### Protection from injury due to falls

- Verify that all covers and mounting hardware are securely fastened.
- Block the access below the work area whenever installing or removing the product.

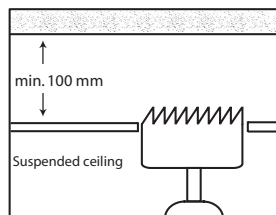
#### INSTALLATION

Installing the CLS Luxo 6 has never been easier. The product is intended for installation in suspended ceilings. Make sure that the product is mounted on a stable, even and tilt fixed background. A minimum space of **100 mm** is needed in the ceiling for ventilation purposes. Do not cover the product.

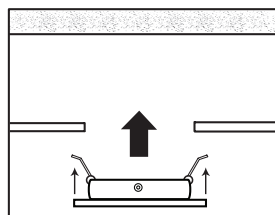
Indication for the installer: In case you do not install a completely supplied system (with transformer), you are considered a 'manufacturer' by the low-voltage directive. In this case you are required to ensure the conformity of the whole system and declare it by attaching the **CE-sign**.

#### Separate assembly steps

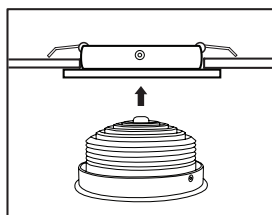
Mark and cut the opening.



Drill a hole into the ceiling panel. A minimum space of **100 mm** is required for ventilation purposes.

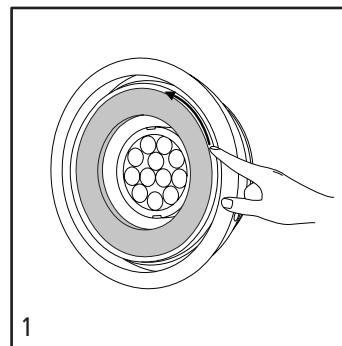


Place the CLS Luxo 6 ceiling unit in the hole by pressing the springs.

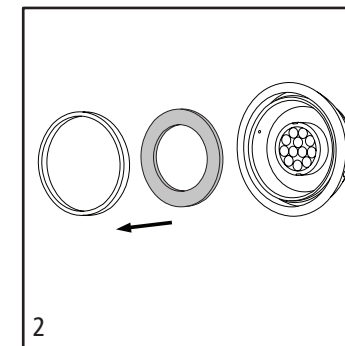


Push the CLS Luxo 6 module into the CLS Luxo 6 ceiling unit.

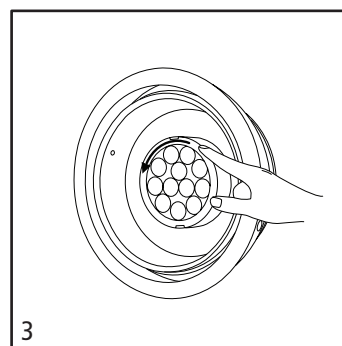
#### REPLACE THE LENSPLATE / DIFFUSION FILTER



Unscrew the middle of the CLS Luxo 6. Firm pression is not necessary. The use of your finger will be sufficient.

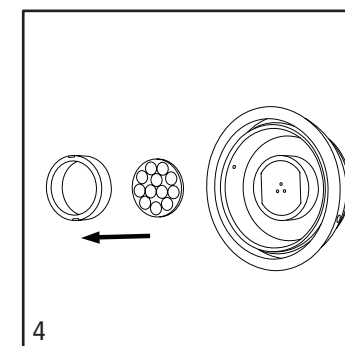


Take the middle ring & diffusion glas out of the CLS Luxo 6.



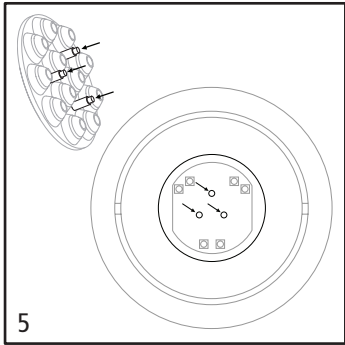
Unscrew the second ring.

**ATTENTION:** The CLS Luxo 6 is facing upward in the following steps.

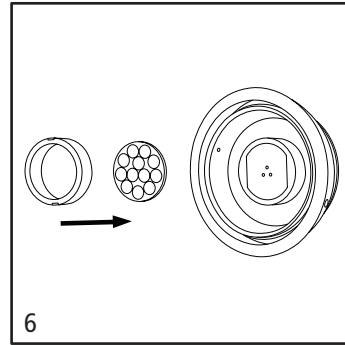


Take the ring out of the CLS Luxo 6 and remove the current lensplate.

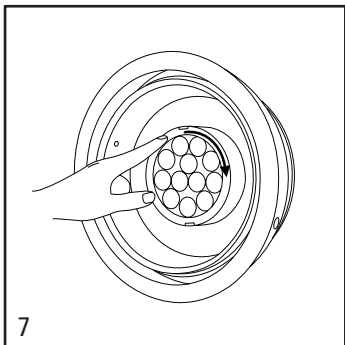
**ATTENTION:** Handle all parts with care during the following steps. Make sure not to touch the LEDs. Do not use any force while setting the lensplate.



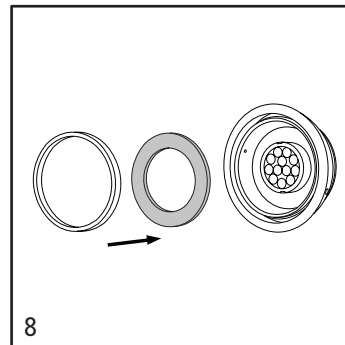
5  
Place the desired lensplate back on the PCB. Make sure the lensplate falls straight over the LEDs, in the 3 indicated holes.



6  
Place the lensplate on the PCB and screw the ring back on.

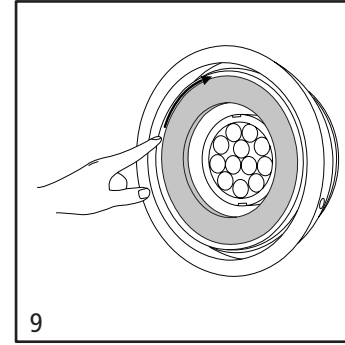


7  
Tighten the ring by using your finger.

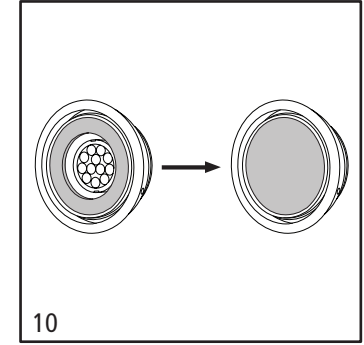


8  
Place the diffusion glass in the CLS Luxo 6 and screw the ring back on.

*For the following steps, see the next page*



9  
Tighten the ring by using your finger. The CLS Luxo 6 is ready to use.

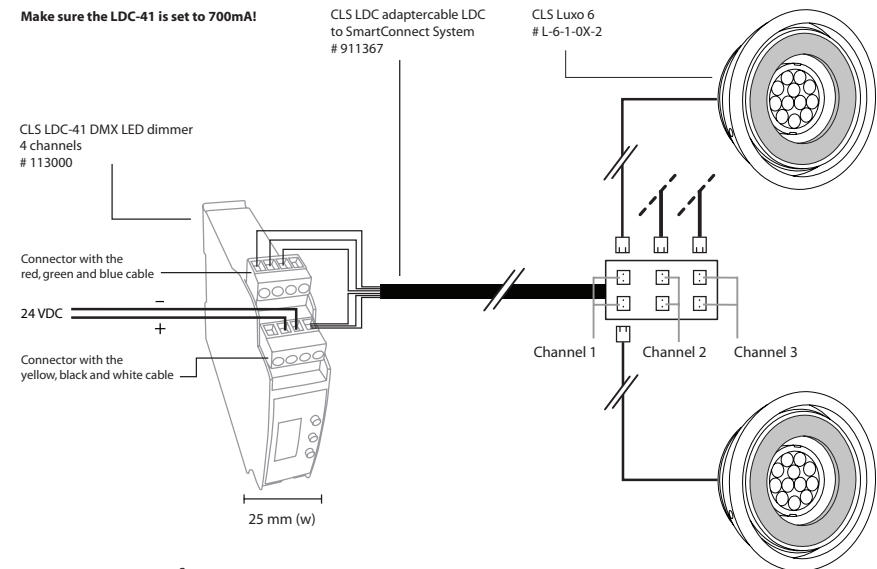


10  
Follow step 1, 2, 8 and 9 to replace the diffusion glass for the soft diffusion filter.

## WIRING DIAGRAMS

### LDC-41 DMX LED Dimmer, 4 channels

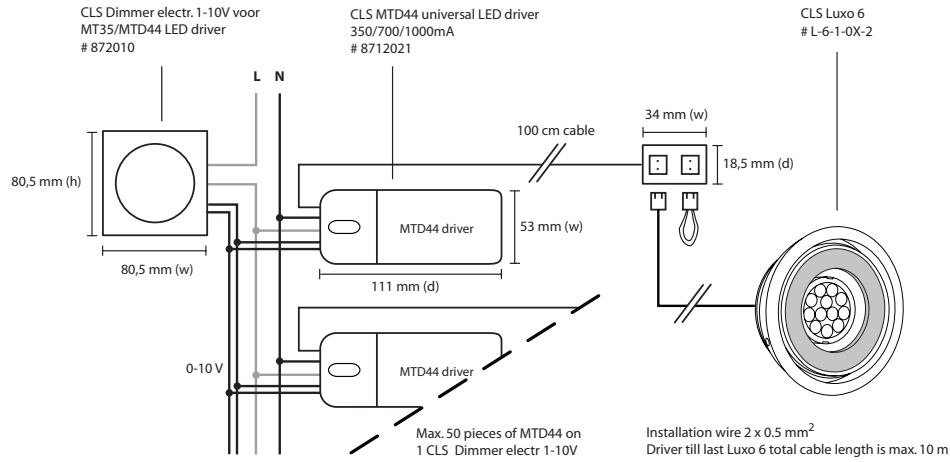
**Make sure the LDC-41 is set to 700mA!**



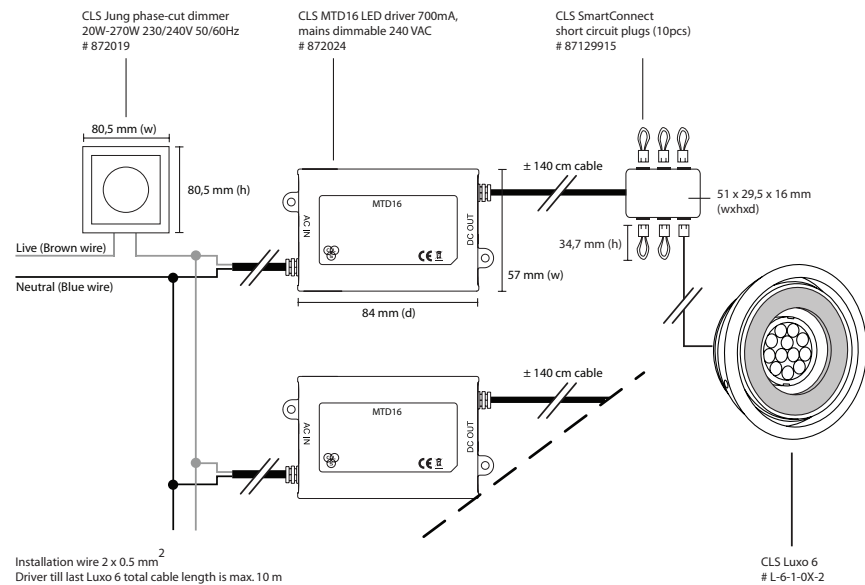
Installation wire  $2 \times 0.5 \text{ mm}^2$   
Driver till last Luxo 6 total cable length is max. 10 m

Max. 2 pcs of Luxo 6 on each channel.  
Depends on the power consumption of the selected BT power supply.

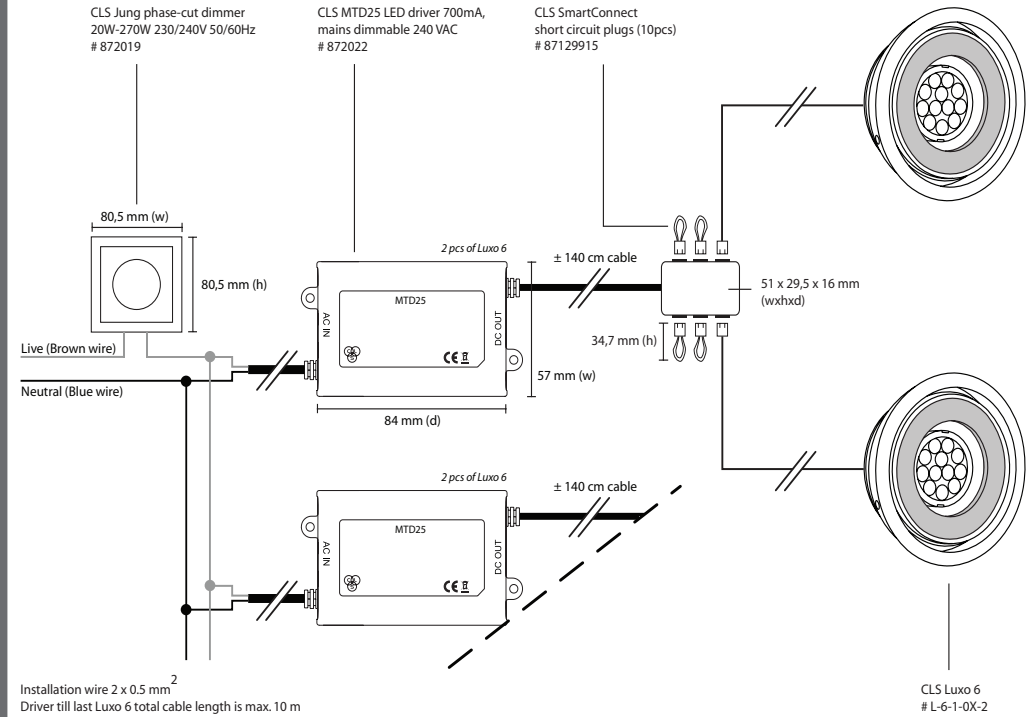
### MTD44 universal LED driver 350/700/1000mA, 1-10V dimmable, pulse switch



### MTD16 LED driver 700mA, mains dimmable



### MTD25 LED driver 700mA, mains dimmable



### OPERATION

Operate the product only if it functions correctly. In case of malfunction, switch off immediately and only operate it again after inspection by an electrical specialist. This is the case, when:

- visible damages appear
- smoke or steam appears
- the product does not work
- crackling sounds are heard

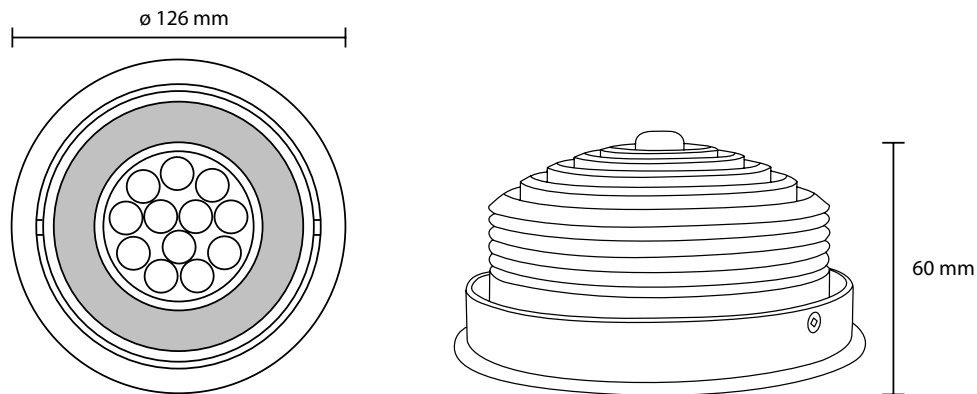


**ATTENTION!**  
**ELECTRIC SHOCK HAZARD. CAN CAUSE INJURY OR DEATH!**

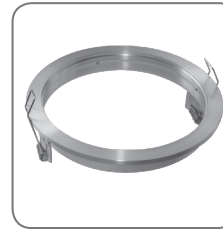
### What to do if the LED shows signs of deficiency or does not work?

- Under regular usage the LED has an extraordinary long lifetime. In case of first-time damage or failure, contact your local dealer to exchange the LED.

### MEASUREMENTS

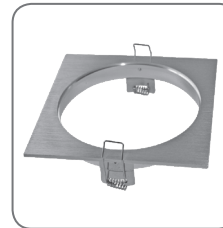


### OPTIONAL CEILING UNITS



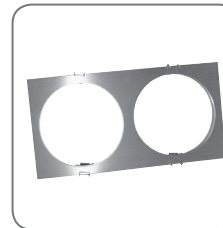
CLS Luxo 6 ceiling unit round 1 hole

Item nr: Y111611  
Measurements:  $\varnothing$  145 x 42 mm ( $\varnothing$ xh)  
Cut-out size:  $\varnothing$  140 mm ( $\varnothing$ xh)  
Housing: Aluminum brushed



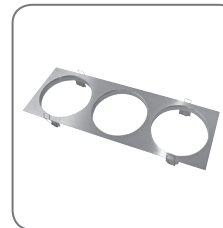
CLS Luxo 6 ceiling unit square 1 hole

Item nr: Y111621  
Measurements: 42 x 145 x 145 mm (hxwxd)  
Cut-out size:  $\varnothing$  140 mm ( $\varnothing$ xh)  
Housing: Aluminum brushed



CLS Luxo 6 ceiling unit rectangular 2 holes

Item nr: Y111632  
Measurements: 42 x 290 x 145 mm (hxwxd)  
Cut-out size: 280 x 140 mm (wxd)  
Housing: Aluminum brushed



CLS Luxo 6 ceiling unit rectangular 3 holes

Item nr: Y111633  
Measurements: 42 x 430 x 145 mm (hxwxd)  
Cut-out size: 415 x 140 mm (wxd)  
Housing: Aluminum brushed

## TECHNICAL SPECIFICATIONS

LEDs:	Cree/Luxeon
Available colours:	Neutral white 4000K, warm white 3000K, extra warm white 2700K
Lenses:	25°, 40°, 60°, 120°
Power supply:	Max. 700 mA
Power consumption:	Max. 18 Watt
Housing:	Aluminum brushed
IP value:	IP40
Cable length:	1,5 meter
Swivel angle:	+ 20° / -20°, rotate 360°
Measurements:	∅ 126 x 60 mm (∅xh)
Weight:	460 gr
ambient temperature:	-10 °C till +40 °C



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## LIST OF SYMBOLS

	<b>Protection class</b> One, two or three		<b>Colour</b> Available colours; Amber, blue, red or green
	<b>Application area</b> Indoor or outdoor		<b>Colour temperature</b> White in different Kelvin values; Cold white, neutral white, warm white or extra warm white
	<b>Application area</b> Floor, wall or ceiling		<b>Colour changing</b> RGB, RGB-W or RGB-A
	<b>Swivel</b> Fixture is horizontally rotatable, indicated in degrees		<b>Curve</b> Minimal bending curve in centimeters
	<b>Swivel</b> Fixture is vertically rotatable, indicated in degrees		<b>Cutting length</b> Indicated by the cutting marks
	<b>Multiple connection</b> Daisychain connectivity		<b>LED pitch</b> Pitch between the LEDs in millimeters
	<b>Installation depth</b> In centimeters		<b>Power supply</b> In VAC, VDC or milliAmpere
	<b>Mounting hole</b> In centimeters		<b>Power consumption</b> In VA or Watt
	<b>Cable length</b> Maximum cable attached to the fixture in centimeters		<b>IP value</b> Ingress Protection classifies the degrees of protection provided against the intrusion of the product
	<b>Driver</b> Inclusive or exclusive		<b>Housing</b> Housing material
	<b>Weight</b> In grams/kilograms		<b>DMX channels</b> Numbers of DMX channels on a product
	<b>Pressure</b> Maximum pressure on the fixture in kg/cm <sup>2</sup>		<b>DMX input</b> Fixture works on DMX512 protocol
	<b>Lifespan</b> Of the light source in hours		<b>Combined product</b> Compose your own fixture
	<b>Lenses</b> Available lenses, indicated in degrees		<b>Warranty</b> 3 years warranty on the product
	<b>LEDs</b> Kind of LED used in the fixture		<b>Conformité Européenne</b> CE marking for free marketability of industrial goods within the EU
	<b>Plug &amp; play</b> Easy connection using the SmartConnect system		<b>Energy label</b>