

EASY TO INSTALL

TechLED

Installation Instructions for

Solatube[®]

Ø 25 cm

Ø 35 cm

Ø 53 cm

techcomlight
de daglichtprofessional



WWW.SOLATUBE.UK

Installation in 7 (10) steps

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Considerations

Warning

Touching the yellow surface of the LED may cause damage or shorten its life.

Safety

- Always observe the safety regulations of the materials and tools used.
- Always have the electrical connection carried out by a recognised installer.

The following (electrical) tools may be required:

- Screwdriver

Guarantee

Contrary to our general terms and conditions of delivery, a warranty period of 3 years applies to the TechLED system. The costs of reassembly or the exchange of (LED) light sources are for the account of the customer. For the warranty, keep the original proof of purchase.

Disclaimer

Techcomlight B.V. explicitly rejects any liability for any unexpected additional cost items arising as a result of building moisture contained in the Solatube® system during installation, as well as incorrect installation and any other external influence. Subject to changes to installation instructions. No rights can be derived from this publication.

TechLED

TechLED lighting fixture

- Suitable for 230VAC.
- Luminaire is already equipped with LED light source.

Tips

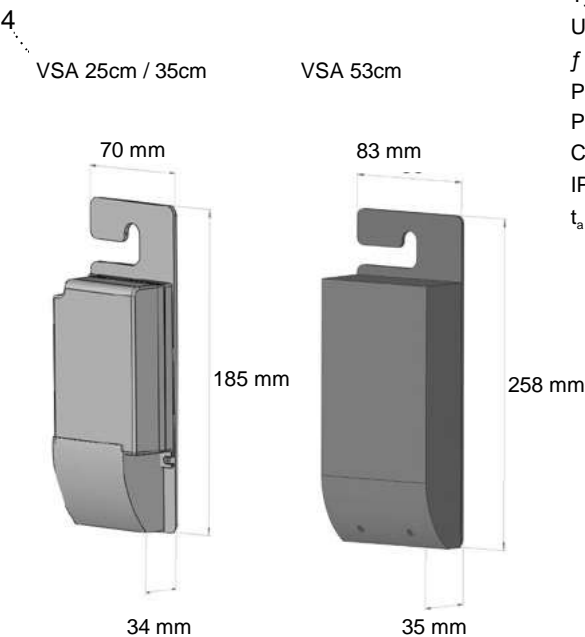
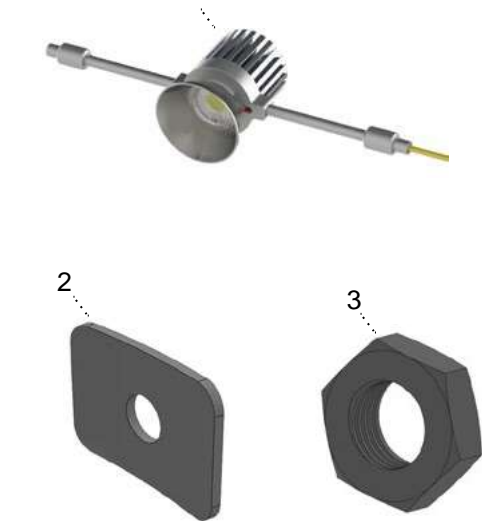
- Measure the suitable mounting height of the luminaire prior to installation. Place the fixture at least 10 cm above the ceiling diffuser and provide at least 10 cm of space above the fixture.
- Take into account the space required for the ballast, see fig. 4.
- By using a light / motion sensor, maximum energy savings and comfort can be achieved (Step 9).

Please note

- Touching the yellow surface of the LED may cause damage or shorten its life.
- In case of doubt and faults, always consult your installer or contact Techcomlight.

TechLED parts

- 1 TechLED fixture
- 2 Mounting plate
- 3 3 pcs nut M12x1.25
- 4 Ballast (VSA) equipped with strain relief mounted on rear plate



Technical specifications Ø25cm

Type	160DS/2000 LM
Un	220-240Vac
f	50 Hz
P _{max}	20 W
PLED _{max}	12 W
Class II	<input checked="" type="checkbox"/>
IP code	IP 40
t _a	35°C

Technical specifications Ø53cm DS-C SA

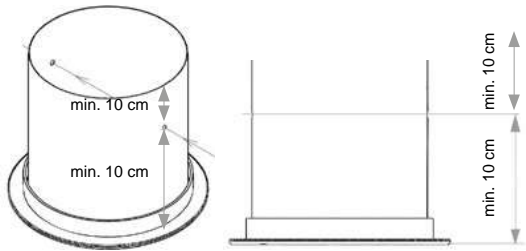
Type	330/750DS-10000 LM DS-C SA
Un	220-240Vac
f	50 Hz
P _{max}	104 W
PLED _{max}	70 W
Class II	<input checked="" type="checkbox"/>
IP code	IP 40
t _a	35°C

Technical specifications Ø35cm

Type	290DS/3000 LM
Un	220-240Vac
f	50 Hz
P _{max}	30 W
PLED _{max}	19 W
Class II	<input checked="" type="checkbox"/>
IP code	IP 40
t _a	35°C

Technical specifications Ø53cm DS-O SA

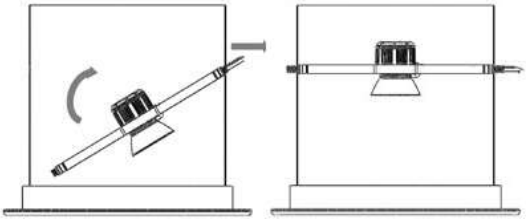
Type	330/750DS-10000 LM DS-O SA
Un	220-240Vac
f	50 Hz
P _{max}	103 W
PLED _{max}	70 W
Class II	<input checked="" type="checkbox"/>
IP code	IP 40
t _a	35°C



Step 1 - Install TechLED fixture in the Solatube®

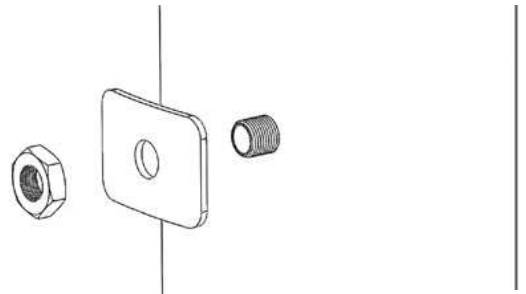
Drill two holes of Ø12 mm in the Solatube® pipe at the predetermined installation height.

Note: Place the fixture at least 10 cm above the ceiling diffuser and provide at least 10 cm of space above the fixture.



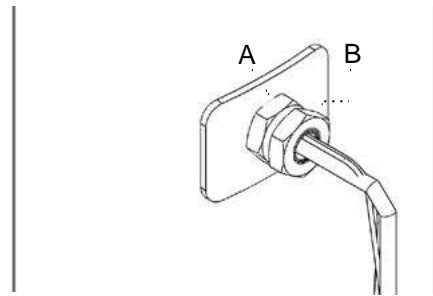
Pass the cables through the hole and install the fixture.

Note: Avoid damaging the inside of the tube.



Step 2 - Mount mounting plate and nuts M12

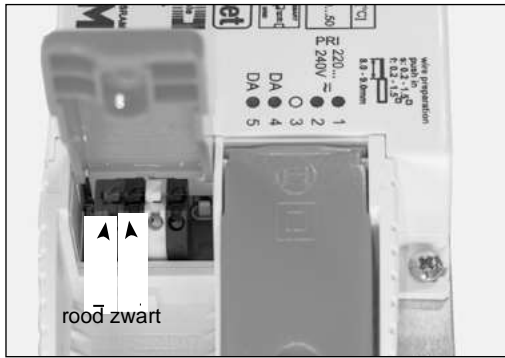
Fit the mounting plate and fix the nut.



Thread the cable through the mounting plate and nuts. Fix nut A.

Nut B is fixed in step 7.

Step 3 - Connect luminaire to ballast

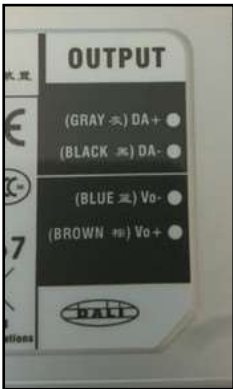


Instruction for TechLED fixture 25cm & 35cm:

Note: When connecting the LED, there should be no voltage on the 230V power supply. This can damage the LED!

Attach the TechLED power cable to the ballast. The red wire to LED +, black wire to LED-.

Continue to **step 4**.

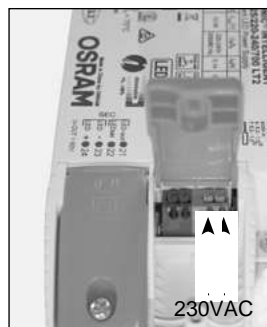


Instruction for TechLED fixture 53cm

Note: When connecting the LED, there should be no voltage on the power supply. This can damage the LED!

Attach the TechLED power cable to the gear on the OUTPUT side with welding clamps.

The red wire to the VO + (brown) and the blue wire to the VO - (blue).



25 – 35cm

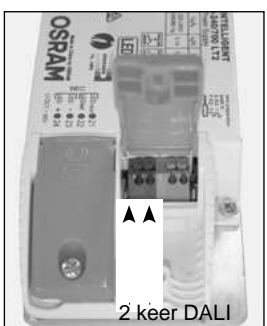


53cm

Step 4 - Connect ballast to 230VAC

Connect the 230VAC wires to terminals with the symbol ~ above them. (blue on blue, brown on brown).

Tip: If necessary, mount the ballast with an earth wire in one of the 4 mounting holes.



25 – 35cm



53cm

Step 5 - Connect DALI signal

This step is performed regardless of whether a DALI building management system is used. In this way the ballast and the controller are connected to each other.

Connect the DALI data cable to DA and DA. The + and - position of DALI does not matter.

Note: this cable is not included.



25 – 35cm

Step 6 - Close strain relief

After all connections have been made, screw on the two protective caps for the strain relief. (not with 53cm).

Step 7 - Hang up ballast

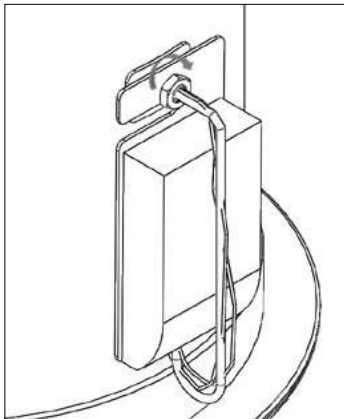
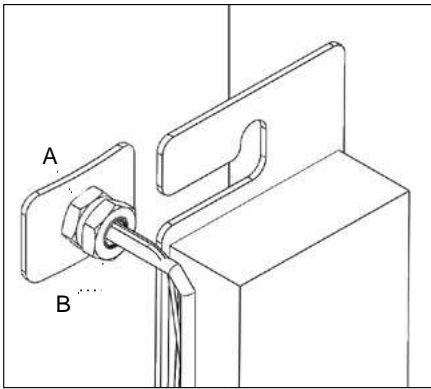
If desired, the ballast can be hung on the TechLED fixture. Slide the VSA hanger between nuts A and B.

If preferred, the ballast can be placed in a safe and dry place near the Solatube®.

Hand tighten nut B.

When using the light / motion sensor proceed to step 8.

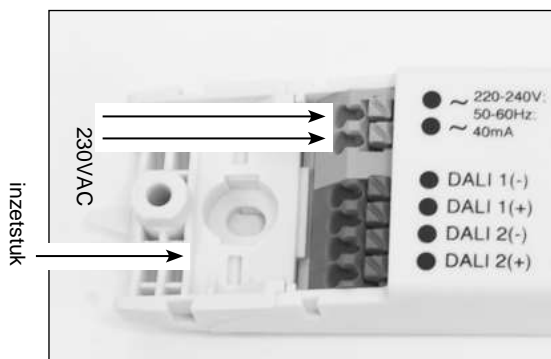
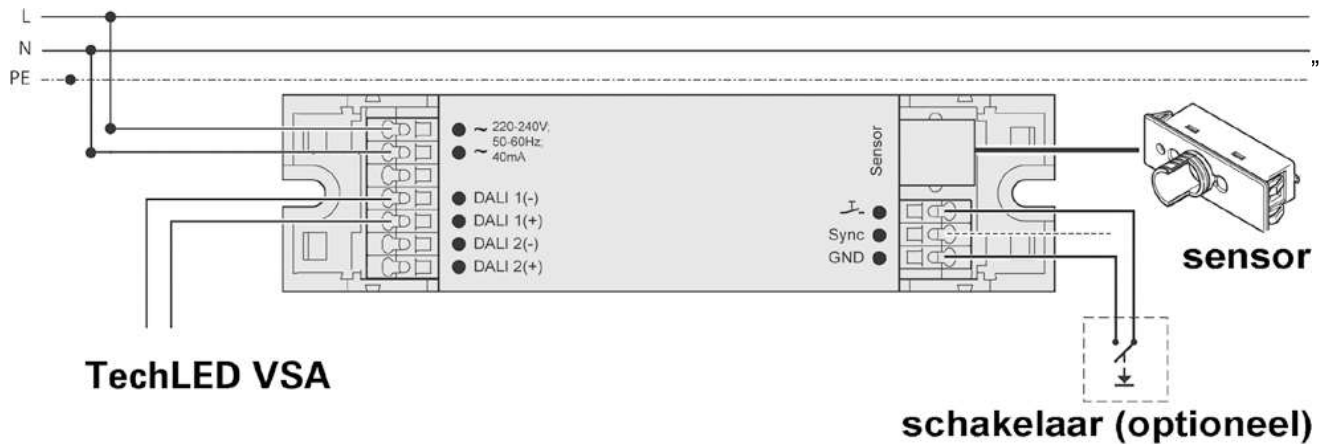
If you are not using the light / motion sensor, the installation of your TechLED is complete.



Step 8 - Connect DALIeco controller

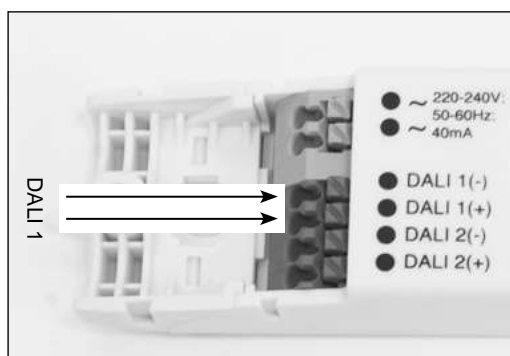
The DALIeco controller can be used to control the TechLED fixture with a sensor daylight and / or motion dependent. The DALIeco controller generates a DALI signal which is used to control the ballast.

The desired light program can be selected and programmed with a remote control. For more information see the OSRAM manual supplied with the DALIeco controller.



Connect DALIeco controller

First, place the white inserts on both ends of the controller. Connect the 230VAC wires to terminals with the symbol ~ above them.



Connecting DALI signal

The DALI signal is connected to the output DALI 1 (-) and DALI 1 (+). The + and - position of DALI does not matter. This signal is connected to the VSA.

This step is performed regardless of whether a DALI building management system is used. In this way the ballast and the controller are connected to each other.

Note: this cable is not included.

Several ballasts can be connected in parallel to one DALIeco controller. See chapter 5 of the Osram manual "Connecting DALI signal".



Connecting an external switch (optional)

An external (spring return) switch can be placed on the GND.



Connecting sensor

Connect the supplied “network cable” to the DALleco controller.

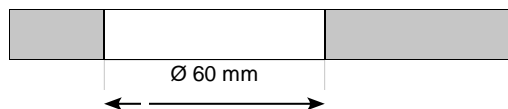
The network cable is 1 m long and can be replaced by a cable of max. 25 m.

Step 9 - Mount the sensor

The TechLED sensor is suitable for measuring the light level and detecting movement. For settings and user settings, see the supplied OSRAM user manual from page 5.

Make a recess of 60 mm in the ceiling if you have a DALI ECO sensor up to 5 m high.

The DALI ECO sensor up to 13m height is a surface mounted sensor. Thread the network cable through the opening.



Connect the network cable to the sensor (image). In step 8 the cable is already connected to the controller.

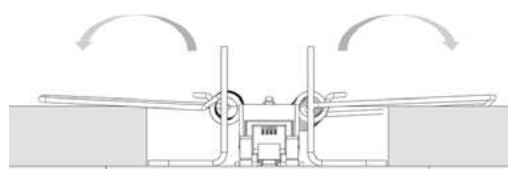
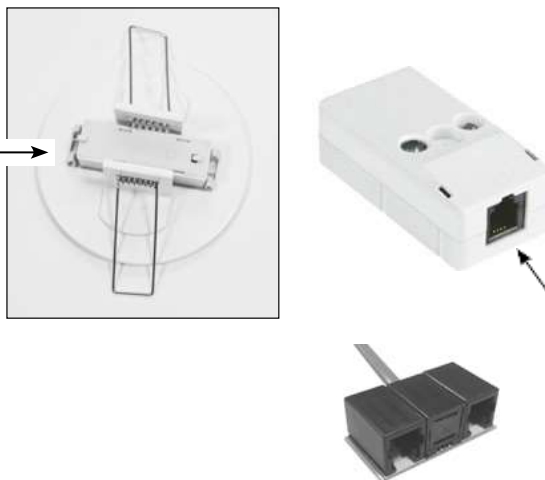
Multiple sensors

With multiple sensors, use a y-connector for network cables (not included). The maximum permitted length of all network cables together is 25 m.

Note: only 1 sensor can be set to light level per controller.

Mount the sensor using the springs in the recess if you have a DALI ECO sensor up to 5m height.

If you have a DALI ECO sensor up to 13m high, mount it directly on the ceiling or on the wall, and possibly with a bracket. (bracket not included).





Close strain relief

After all connections have been made, screw on the two protective caps for the strain relief.

The controller can now be connected to the mains at 220-240VAC.

Now remove the sticker from the TechLED 53cm.

Step 10 - Set system

The Master Remote control (item number D821003-00) is required to program the system.

Insert the batteries with the + side facing up in the remote control.



Step 1 - Enter programming mode

Briefly press (1 sec) the on / off button. The light around this button outward flashes green briefly three times. Press the "prog" button for 2 seconds.



The TechLED will burn and dim to full. This indicates that programming mode has started.

Note: Programming mode will automatically exit after 60 seconds of inactivity.

The set functions are automatically saved and the TechLED is active.



Step 2 - Set light intensity

The light intensity is set with the CH-1 knobs.

More light: button ▲ Less light: button ▼

To save the setting, briefly (1 sec) press the "manual setup" button. After entering "manual setup", the light will flash twice to confirm the settings.



Tip: The correct light intensity can be set with a lux meter. Preferably do this without the presence of daylight.



Step 3 - TechLED afterburn time

The TechLED can turn itself off after a period of time when the sensor no longer detects movement and there is insufficient daylight.

To save as much energy as possible, Techcomlight recommends setting this.

A time period can be specified via the "switch off delay" section. Briefly press (1 sec) on the desired time.



Step 4 - Test functions Sensor Range sensor

The sensor can be put into a test function to test the range of the sensor. Do this in the following way:



- Briefly press (1 sec) the "test" button at the top left.
- Now briefly (1 sec) press the red button "prog" to start the test.
- Now move out of range of the sensor and walk to the sensor to test it.



After the test is completed, you can wait 60 seconds or briefly press the on / off button to exit the test function. When the sensor is set correctly, a green light flashes on the sensor display.

Tip: if desired, the range of the sensor can be reduced. Pull out one or two sliders of the sensor with a narrow flat screwdriver. In this case, adjust the light intensity (Step 2) again.

Sensor screen

Point the remote control at the sensor to see if the functions are enabled as programmed.

Press the "sensor select" button for 2 seconds.

An orange light flashes once on the black screen of the sensor.

Look at the black screen on the sensor to see if the colours match the desired programming:

- orange: sensor is selected
- red: motion detection is active
- green: daylight detection is active

In brief

- Briefly press the on / off button. The light around this button flashes green briefly three times.
- Press the "prog" button for 2 seconds.
- Adjust the light intensity with the CH-1 knobs:
more light: button ▲, less light: button ▼
- Save the setting by briefly pressing the "manual setup" button.
- Set the afterburn time via the section "switch off delay" by short at the correct time.
- After entering 'manual setup', the light will flash twice to confirm the settings.

For the extensive programming of the system, see the user manual of the "DALIeco control" from chapter 5 on page 21.

The installation of your TechLED is now complete.