

Installer

This high-quality product has been manufactured, tested and packaged with the assurance of your complete satisfaction. Please read all of the instructions before installation. This will help you to be familiarized with all the features and options available to you with these devices. This will also assist you to minimize installation time and provide maximum energy savings and trouble-free operation.

Safety Warnings



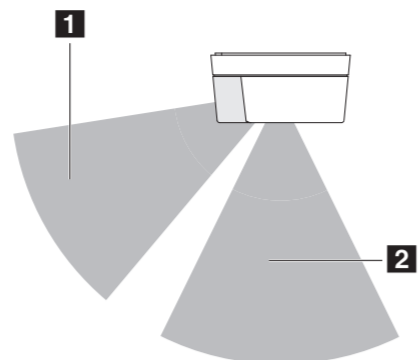
- Disconnect the power supply before attempting any wiring to the device!
- Confirm that power has been switched OFF at the breaker and power is OFF with a voltage tester.
- The Photo Sensor PS DCS is a polarity insensitive bus powered device.
- The wiring of this device must be carried out professionally and in accordance with all local and National Electric Codes and electrical operating conditions.
- Class 2 outputs are not suitable for Class 1 installations.

Product Overview

Product description

The Photo Sensor PS DCS is a bus powered photocell designed to sense the light level and send the data over the bus to the DCS room controller device. The photo sensor is designed for mounting in a dry location that is exposed to daylight.

Photo sensor field of view



- 1** OL: Open Loop Control
- 2** CL: Closed Loop Control

Following options are available for configuring via the app:
OL: Open Loop Control.
CL: Closed Loop Control.
The range is automatically given by the data communication.

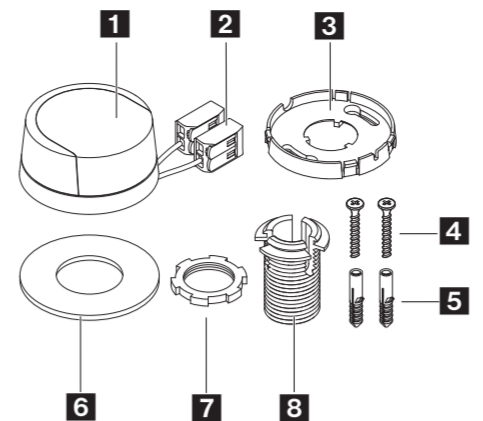
Content

- 1 x photo Sensor
- 1 x lock nut
- 1 x backplate
- 2 x screws and dowels
- 1 x 1/2-inch washer
- 1 x 1/2-inch threaded chase nipple
- 1 x users' manual

Specifications

Voltage	12 - 22.5 VDC (polarity insensitive) class 2
Current consumption	4 mA / 2 bus participants
Power supply	4 Supplied by the DCS control unit
Dimensions	D = 2.01 x 1.06 inches D = 53 x 27 mm
Threaded nipple Dimensions	1.07 x .83 in 27.2 x 21.0 mm
Rated for indoor use only	(0 to 50 °C/32 to 122 °F) IP20
Warranty	5 years
Standard	UL 60730-1
Made in Romania	
www.steinel.net	

Product Overview



- 1** Photo Sensor
- 2** Wires including WAGO connectors
- 3** Backplate
- 4** Screws
- 5** Dowels
- 6** Washer
- 7** Lock nut
- 8** 1/2-inch threaded chase nipple

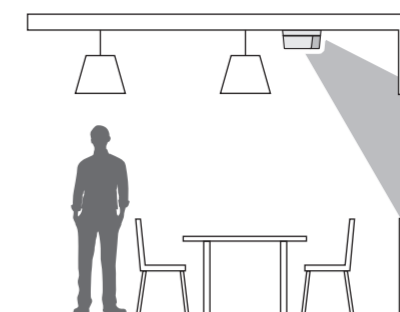
Wires:

- Black (GND)
- Red (22.5 VDC)

Photo Sensor Placement

For open loop (OL) control window application

Where windows are the primary source of daylight, the photo sensor typically mounts on the ceiling between the window and the first row of fixture. The photo sensor points toward the window and should not be exposed to direct illumination from an electric light source. Refer to illustration below:

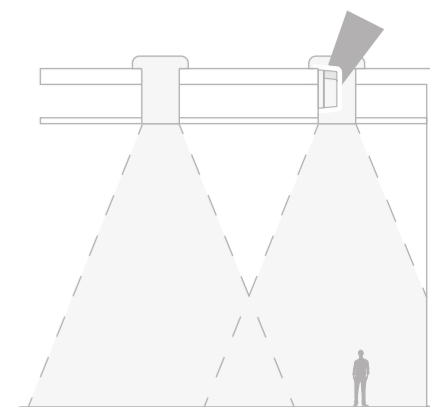


Commissioning

- Select Open Loop control option over the app.

For open loop (OL) control skylight application

The photo sensor mounts in the lightwell of the skylight and should be oriented toward the incoming daylight. Typically, the photo sensor is aimed toward the skylight. See picture below.



Commissioning

- Select Open Loop control option over the app.



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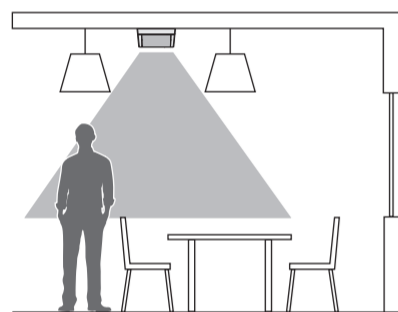
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For closed loop (CL) control at desk level

For closed loop control, the light sensor should be mounted above the working space so that it reads the light level generated by the artificial light source combined with the natural light coming through a nearby window. The ambient light level will fluctuate in different areas of the room due to the influence of wall colors, windows, fixtures etc. Make sure to measure the light level over the workspace.



Commissioning

- Select Open Loop control option over the app.

Commissioning procedure for daylight harvesting

Through the app:

- Enter the photo sensor page.
- Choose the proper photo sensor.
- Set the desired light level at desk level.
- Start the calibration routine. The system will generate 10 different light levels that will be recorded automatically.
- Make sure to step away during calibration to avoid shade interference.

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Features

List of all key features

- Open loop and closed loop control on the same device.
- Mounting with threaded nipple or screws.
- Knockout for surfaced mounting.
- No need of selecting a light level range.

Warranty

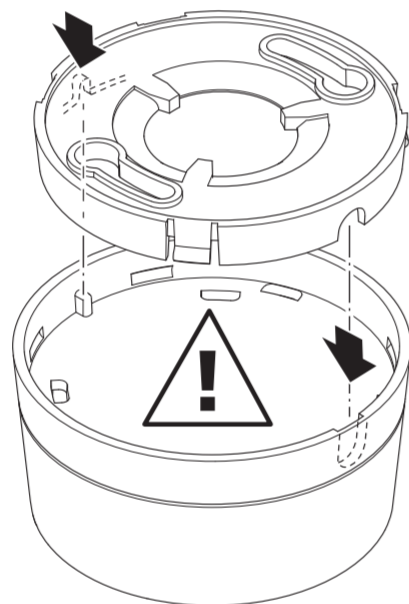
STEINEL America warrants its products against defects in material or workmanship for a period of five years. STEINEL will replace or repair the item provided that it has not been altered or subjected to abuse, accident, improper installation or improper use. There are no obligations or liabilities on the part of STEINEL for consequential damages arising out of or in connection with the use or performance of this product or other indirect damage with respect to loss of property, revenue, or profit, or cost of removal, installation or reinstallation.



Mounting

Mounting guidelines

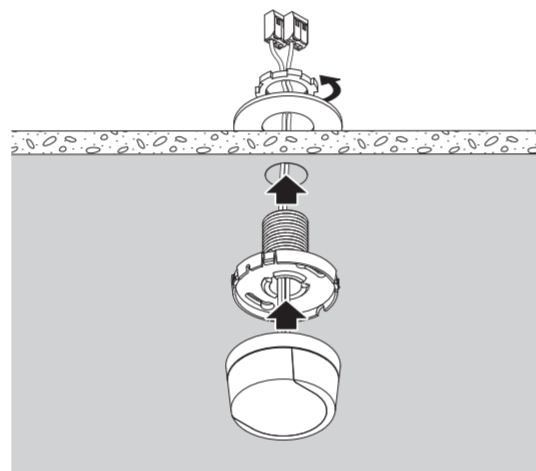
- The lens must always look towards the window.
- The light sensor can be mounted in 3 ways.
- Always mount the sensor on a vibration-free surface.
- Be aware to consider the correct mounting position between the sensor head and the back plate. See picture below.



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Mounting 1: Flush mount with nipple

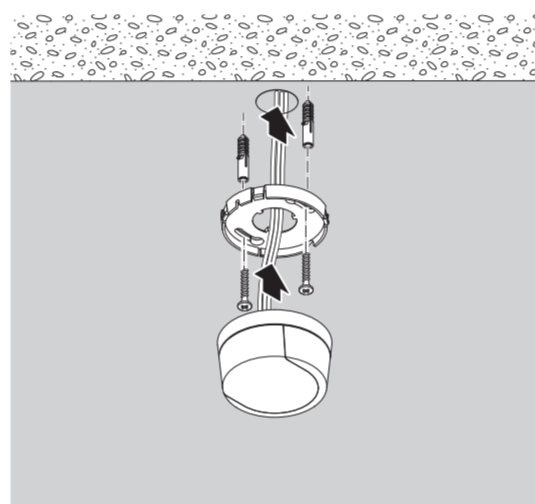
Use this mounting option when wires run through the nipple and are concealed within the ceiling.



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Mounting 2: Surface mount with screws and concealed wires

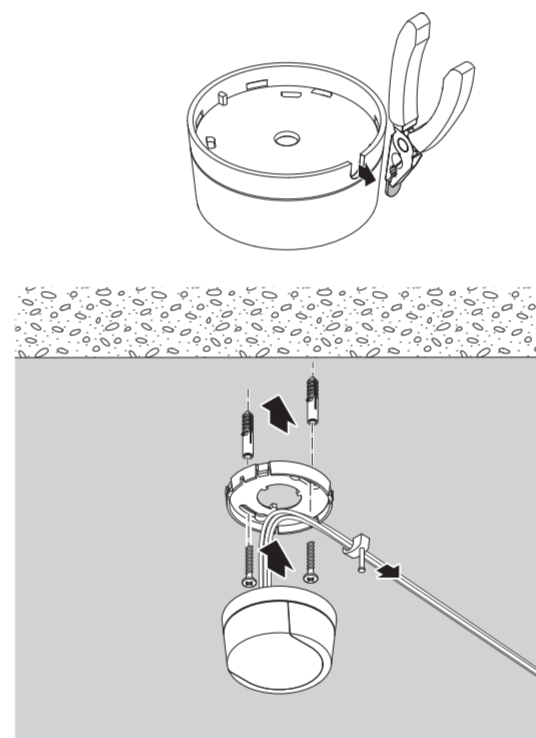
Use this option when the nipple cannot be used, e.g., concrete.



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Mounting 3: Surface mount with screws and surfaced wires

Use this option when the nipple cannot be used and the wires are entering through the side of the housing. Locate the wire entry location in the knockout part of the housing at the opposite side of the lens.

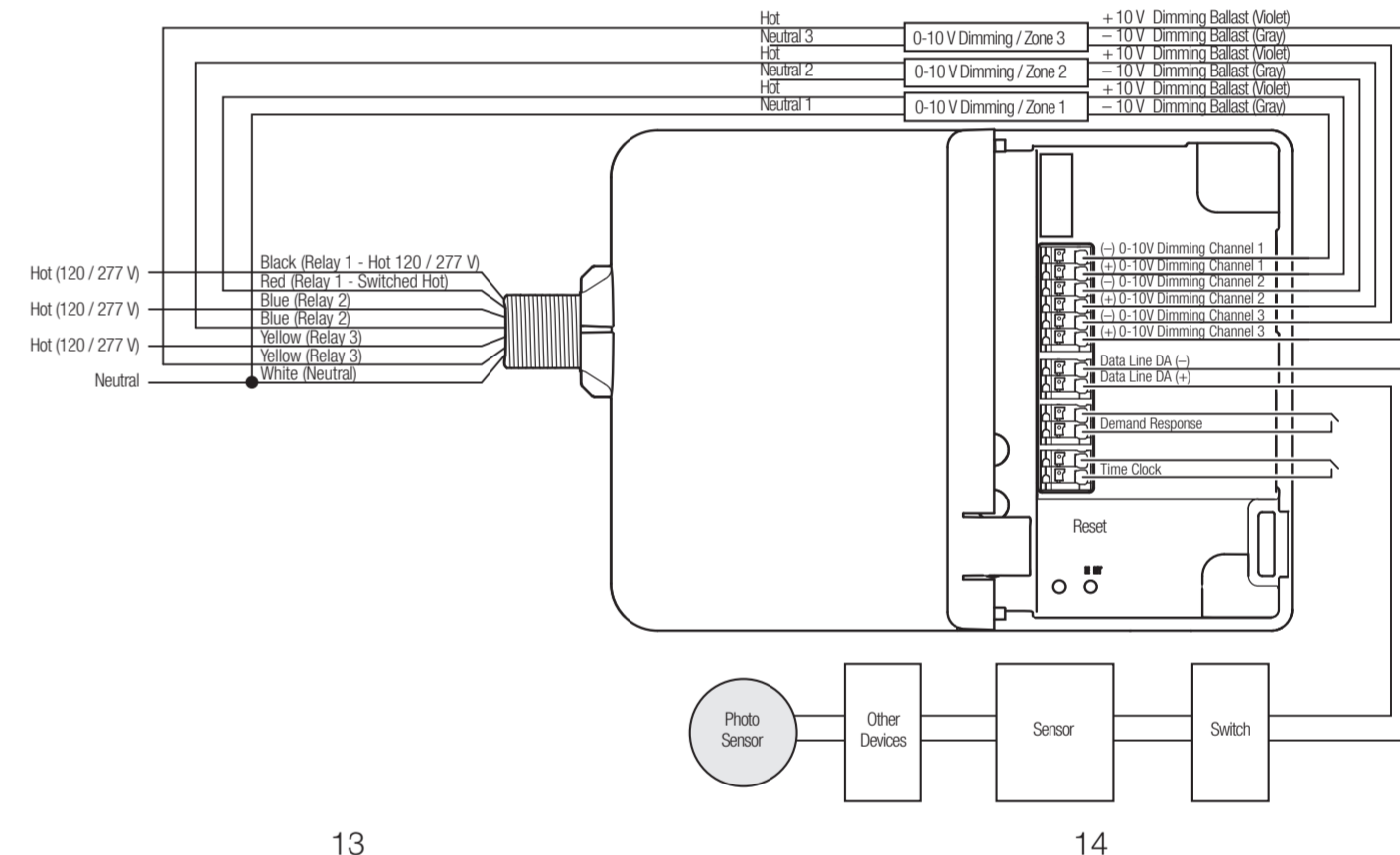


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Wiring

The data line is a polarity insensitive bus connection.

- Before installation, make sure that power has been switched OFF at the breaker and check that the circuit is dead with a voltage meter.
- After installation, verify wiring is correct to avoid damage to the controller, lighting, and control devices.



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