Installation and Operating Instructions CellOptik-EcoLUX Range

GENERAL INFORMATION

This is a “dusk to dawn sensor switch” that has been designed to switch on when it gets dark and switch off when it gets light (excluding the CellOptik CO which has an additional output which also offers a reverse action – on when light off when dark)

Installation

Please read and fully understand these instructions before installing this sensor switch to obtain the best results.
All electrical work should be carried out by a qualified electrician or a supervised competent person.

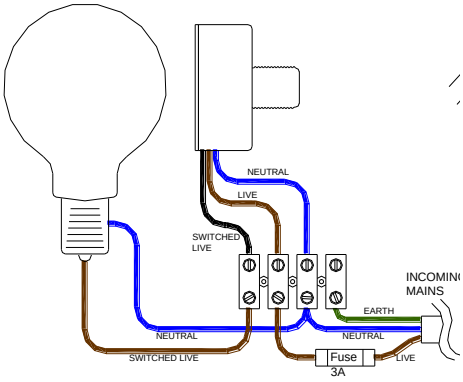
Position

In order to obtain the most accurate results it is important to position the sensor where the only influences are day light levels. Pointing the sensor at the ground or in a position where a tree may shelter the light at certain times of the year will effect the switching times. The best position is to face the sensor at the sky but not aimed towards the sun and it must not be influenced by the light it is controlling as this will effectively lengthen the daylight hours. The rear of this sensor must be protected from water ingress. A suitable enclosure must be used and can be obtained from Acetek.

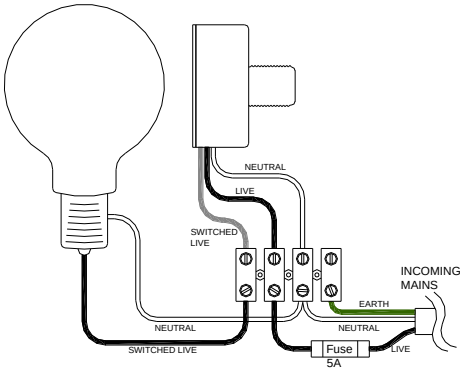
Electrical

Before carrying out the electrical installation ensure the power has been disconnected and can not be switch back on by accident. Follow the relevant wiring diagram below using the correct fuse for protection. This sensor does not require an earth connection although if the light being controlled requires one a separate earth must be run.

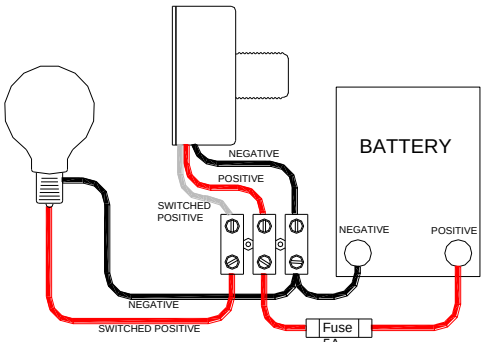
240v Standard Version



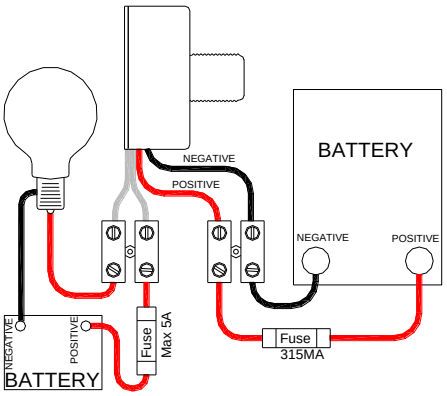
110v Standard Version



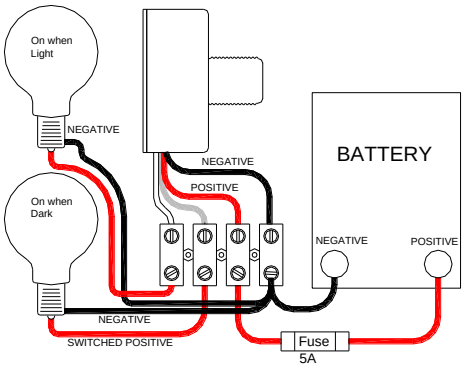
DC Versions 6v, 12v and 24volt



DC version with Volt-Free contacts



DC version changeover



Please recheck your wiring before connecting the power

Reaction time & Sensing

The sensor can take up to 5 seconds to change status and an adjustable sensitivity setting with a lower on light level than off light level to reduce the possibility of cycling on and off.

Setting Sensitivity level

Switch off the power to the unit and using the spindle at the rear of the housing, rotate the adjuster to the desired position. Switch the unit back on and check the level for suitability. If the level is incorrect switch off and increase or decrease the sensitivity. Rotating the spindle with the power applied will have no effect.

If you require any assistance please contact us:

Acetek Electrical Ltd
11 Woodside, Blackwater, Camberley, Surrey GU17 9JJ

Helpline: 01276 38657 Email: sales@acetek.co.uk

Acetek is a WEEE registered company Certificate Number: WEE/CE0102WU

Compliance

BS EN 50081-1
BS EN 6100-4-4
BS EN 6100-4-5
BS EN 6100-4-11

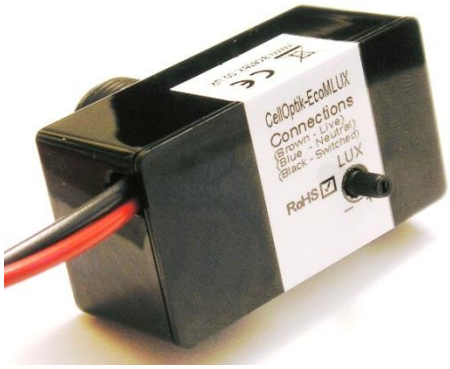
RoHS Compliant

Specifications:

Product code	CellOptik-EcoLUX110	CellOptikEcoLUX	CellOptik-EcoLUX24	CellOptik-EcoLUX12
Nominal Voltage	110Vac	240Vac	24V dc	12V dc
Voltage Range	100-150 Vac	200-250 Vac	28-20V dc	15-11V dc
Product Class	Class II (no earth required)	Class II (no earth required)	Safety Extra Low Voltage	Safety Extra Low Voltage
Maximum Load	300 Watt (1.25 amps)	500 Watt (2 amps)	120 Watt (5 amps)	60 Watt (5 amps)
Relay contact material	Silver-Tin-Oxide	Silver-Tin-Oxide	Silver-Tin-Oxide	Silver-Tin-Oxide
Temperature Range	-18 to + 60C (0 to 140F)	-18 to + 60C (0 to 140F)	-18 to + 60C (0 to 140F)	-18 to + 60C (0 to 140F)
Cable Material	PVC	PVC	PVC	PVC
Enclosure Material	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
Colour	Black with frosted clear lens	Black with frosted clear lens	Black with frosted clear lens	Black with frosted clear lens
Flammability Rating	94V2	94V2	94V2	94V2
Ingress Rating	IP65 when installed	IP65 when installed	IP65 when installed	IP65 when installed
Clamping Thread mm	M20	M20	M20	M20
Clamping Range mm	0.5 to 13mm	0.5 to 13mm	0.5 to 13mm	0.5 to 13mm
Enclosure dimensions mm	W31xL58xD48	W31xL58xD48	W31xL58xD48	W31xL58xD48
Protect with fuse	3amp	3amp	5amp	5amp
Thread Length	20mn	20mn	20mn	20mn
Overall Depth	48mm	48mm	48mm	48mm
Front Width	31mm	31mm	31mm	31mm
Box Length	58mm	58mm	58mm	58mm
Weight	0.08kg	0.07kg	0.06kg	0.06kg

CellOptik-EcoLUX Range Instructions

(Image is of the 12vdc)



Energy Saving Dusk to Dawn Photocell Switch

Installation check list

1. The voltage is suitable for the supplied unit.
2. The wiring is correct to the above diagram.
3. The maximum load has not been exceeded.
4. The correct fuse has been fitted.
5. The optimum position has been chosen.
6. The water seal has been used.
7. The correct LUX level has been set.

Drill a 20mm hole in the mounting enclosure. Ensure that all burs and chips have been removed and that the mounting surface is smooth. Thread the first nut onto the sensor with the flange facing out as in the photo. Place the water seal gasket on the thread with the flange nut and offer the unit through the mounting hole. Fit the second flange nut and secure to complete the water seal. Connect using the correct wiring diagram above.