

CHANNEL

SAFETY SYSTEMS

SoHo



LED luminaire from Channel Safety Systems

CHANNEL SAFETY SYSTEMS

Petersfield Business Park
Bedford Road
Petersfield
Hampshire
GU32 3QA

t: 0845 884 7000

f: 0845 884 6000

e: sales@channelsafety.co.uk

w: www.channelsafety.co.uk

INSTRUCTION MANUAL

INSTALLATION

- Operating environmental temperature:** 0°C - 50°C.
- Relative humidity:** <90% non-condensing.
- Rated input voltage:** AC 240v ±10% frequency: 50hz.
- Rated input current:** 0.104A
- Power factor:** 0.90.
- Battery standard:** 6V 1800mAH nickel-cadmium battery-high temperature.
- Emergency duration:** 3 hours



To release the diffuser simply lift up the release catch

All Installations should be carried out by a competent electrician.

The luminaire should be mounted using the fixing holes provided, on a sound flat surface. Route the incoming cables around the outside of the body well away from the control gear, and make-off the conductors in the gear-tray mounted terminal block.

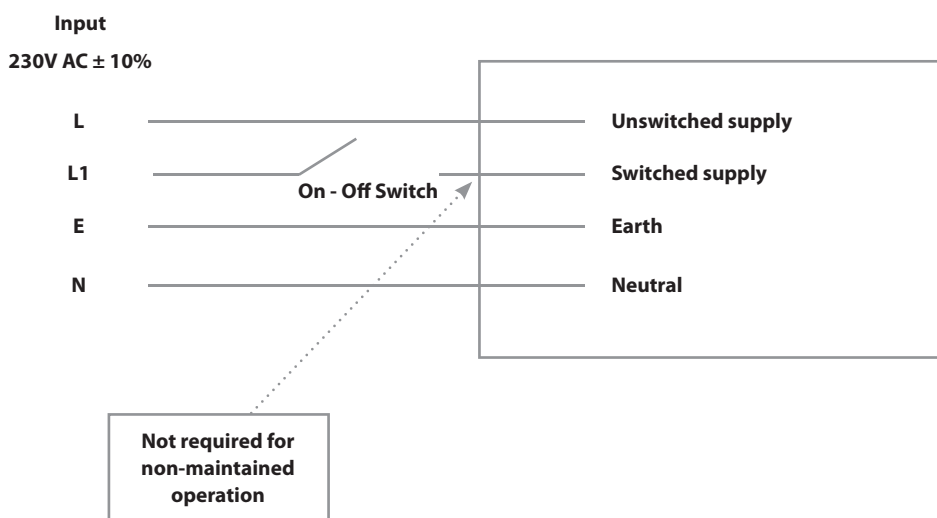
Please Note: Please refer to the interconnection diagram before connecting to mains supply, ensure that the mains 230V AC supply is connected as shown. A competent electrician should carry this out.

DO NOT CONNECT THE BATTERY THE WRONG WAY ROUND, EVEN MOMENTARILY.

Switch off mains supply before opening the light. If Non-maintained operation is required, connect a permanent live supply to the L terminal only

CONNECTION DIAGRAM

Emergency Operation

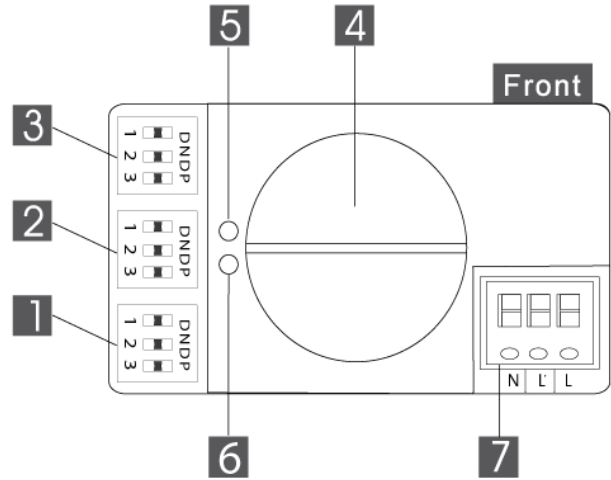


MICROWAVE SENSOR

Microwave sensors work by detecting movement, any objects within the field of detection which move, such as trees, animals, cars etc. will trigger the light. If mounted externally rain running down the diffuser may also cause the unit to be triggered.

Layout & switches

1. Daylight sensing setting (Minimum light level when unit will operate)
2. Time setting (how long the unit stays on after movement is detected)
3. Sensitive setting (Distance of detection)
4. Sensor
5. LED indicator
6. Light sensor
7. Terminals



Functions

Daylight Setting

Day light value can be adjusted to 2 Lux, 5 Lux, 20 Lux, 30 Lux and Disabled. If you choose 'Disabled' then the light will operate all the time no matter how bright the ambient light level is.

| | 1 | 2 | 3 | |
|-----|----------------------------------|----------------------------------|----------------------------------|---------|
| I | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 2 Lux |
| II | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | 5 Lux |
| III | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | 20 Lux |
| IV | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | 30 Lux |
| V | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | Disabie |

Time Setting

The 'Time on setting' of the sensor can be adjusted to 6s, 30s, 180s, 300s, 15min and 30min. The unit will remain on until no movement has been detected for the chosen period.

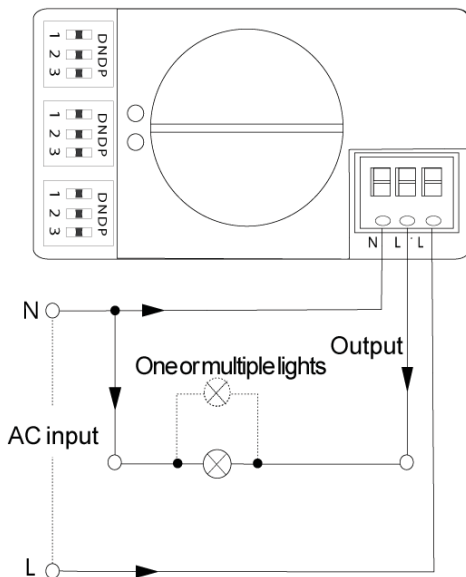
| | 1 | 2 | 3 | |
|-----|----------------------------------|----------------------------------|----------------------------------|-------|
| I | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | 6s |
| II | <input type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | 30s |
| III | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | 180s |
| IV | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | 300s |
| V | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | 15min |
| VI | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | 30min |

Distance (sensitivity) Setting

The detector has a maximum range of 10 meters. Distance detected range can be adjusted to 10%, 30%, 50%, 75% and 100% of the maximum range.

| | 1 | 2 | 3 | |
|-----|----------------------------------|----------------------------------|----------------------------------|------|
| I | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | 10% |
| II | <input type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | 30% |
| III | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | 50% |
| IV | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | 75% |
| V | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 100% |

Wiring Diagram



| SPECIFICATION | |
|--------------------------------------|------------------------|
| Input Voltage/Frequency | AC 220V / 50Hz |
| Power rating | ≤ 500W |
| Light level sensing | 2-30 lux |
| Sensitive distance | 1 - 10 meters |
| Time Setting | 6 seconds – 30 minutes |
| Angle Coverage | 160° |
| Recommended mounting height | 2.5m |
| Ambient operating temperature | -10°C ~ +50°C |
| Stand-by power consumption | ≈0.9W |

FAULT FINDING AND CORRECTIVE ACTION

Follow the procedure below to establish that the luminaire is working correctly.

1. Connect the batteries to the Printed circuit board by inserting the black & red battery wires in to the correct 'push fit' battery terminals on the emergency module.
2. Simply push down the locking lug & insert the wire & then release the lug.
3. The permanent live supply should be switched on, and the green LED should light, this indicates the batteries are charging.
4. Turn On the normal lighting supply (if a Switched Live supply is present), the lamp should light.
5. Leave the luminaire in this state for at least one hour before failing all live supplies. The lamp should light in the emergency mode at reduced brightness.
6. Restore the mains supply and leave the luminaire to fully charge the batteries, this will normally be 24 hours. It is nevertheless advisable, to allow an initial charge of 48 hrs before putting the batteries into service for the first time.

The date that this is carried out must be marked in the space provided on the battery label.

Periodic testing (Emergency luminaire) (Consult BS 5266-1:2005 for full details)

The luminaire must be checked periodically for correct operation, and to evaluate the remaining capacity in the battery at regular intervals during its life. The unswitched supply should be failed which will cause the luminaire to operate in the emergency mode.

- The LED charge indicator should be checked on a daily basis.
- Every month the luminaire should be tested in the emergency mode to ensure the lamp is illuminated.
- Annually the luminaire should be tested to ensure it achieves its entire rated duration of emergency operation.
- Record the periodic testing of individual luminaire in the table below, and keep all records in a safe place.
- **If the luminaire fails to achieve its rated duration, firstly replace the 28w tube with the correct type, re-charge & re-test. if the fitting fails the second test the batteries must be replaced, of an identical type, see the label on the battery for the order reference.**
- **FLUORESCENT TUBES MUST BE CHANGED AT THE FIRST SIGNS OF BLACKENING**