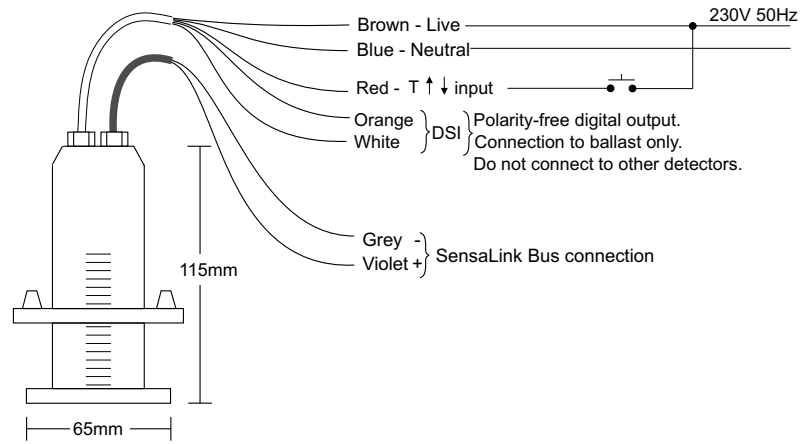
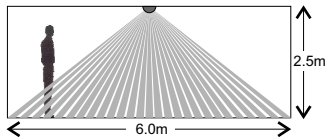


Electrical Connections



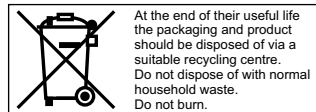
Technical Data

SensaLink CABLE: 1.5mm² unscreened twisted-pair
RECOMMENDED MAXIMUM MOUNTING HEIGHT: 3.0m
RANGE: 2.4 x mounting height (diameter in metres)



OPERATING VOLTAGE: 230V 50Hz
PRODUCT RATING & RECOMMENDED CIRCUIT PROTECTION: 10A
OUTPUT CAPACITY: 9 DSI ballasts
OUTPUT: 2-wire digital polarity-free (maximum extended cable length: 12m)
PHOTOCELL: Regulating
OFF DELAY: 5-60 minutes
DEPTH REQUIRED BEHIND CEILING: 125mm
WEIGHT: 70g excluding cable
COLOUR: White
MATERIAL: Flame retardant ABS
IP RATING: 40
POWER CONSUMPTION: <10W

Thorn Lighting Limited
www.thornlighting.com

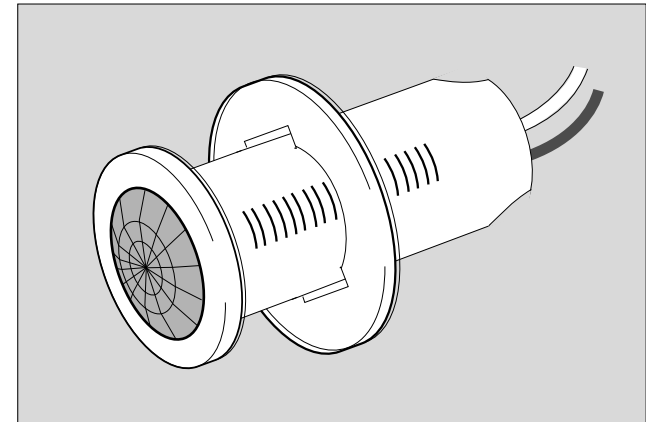


W4234E

THORN

SENSALINK MRE SENLDDSI (96102982)

**SensaLink Detector, ceiling mounted,
recessed, for DSI ballasts
(formerly known as SLKDR)**



**Installation and Commissioning
Instructions**

SENSALINK MRE SENLDDSI (96102982)

Only suitably qualified personnel should install this equipment.

Fixing

These SensaLink Detectors are suitable for flush-mounting in a suspended ceiling tile, maximum 54mm thickness with a minimum clearance of 125mm between the front surface of the tile and the hard ceiling behind and should be mounted in the centre of the area being monitored. Cut a 50mm diameter circular hole in the tile, feed the flying leads and detector through the hole and secure in position with the locking ring. Twist the locking ring to release the detector if necessary.

Note: Do not position within 25cm of a luminaire.

Connection

The detectors are supplied with two flying leads. The 5-core mains lead should be taken to the nearest 230V supply. This lead also contains connections for the polarity-free digital output (for connection to the control input on the ballast) and the T ↑ ↓ dimming input. The T ↑ ↓ dimming input is sheathed for applications which do not require this connection. This wire should be terminated safely if not being used - do not connect to Neutral or Earth. Please see below for T ↑ ↓ details.

The second lead contains connections for the SensaLink Bus. The bus enables the SensaLink Detector to communicate with the rest of the SensaLink devices in the system.

Each luminaire to be controlled must contain a digital regulating type ballast with the appropriate DSI input. Connect all ballasts in the control group (maximum 9) in parallel and also to the polarity-free digital output of the SensaLink Detector.

Each luminaire is controlled completely by its digital input and therefore would normally have a permanent power supply. Turning the power off to some lights within a control circuit will not affect the operation of those that remain powered-up.

The SensaLink Bus must be connected to the SensaLink bus wiring network. A SensaLink Bus Power Supply, eg. SENSALINK SENLPS LT (96232304) is required for each network of SensaLink Detectors. Please refer to Bus Power Supply installation instructions prior to commencement of any bus wiring.

It is imperative that the SensaLink bus is wired with the correct type of cable; normally it should be 1.5mm² unscreened twisted pair.

Do not connect mains to the SensaLink bus.

T ↑ ↓ Dimming Option

T ↑ ↓ dimming affords local control to the end-user whereby a simple, momentary, push-to-make wall switch can be used to raise or lower the lighting level or to toggle the output ON/OFF. The momentary action switch is connected between Live and the detector's T ↑ ↓ input. A short press of the switch (less than 1 second) will toggle the output status while a longer press will raise or lower the output. Each time the switch is pressed, the direction of dimming reverses. If the switch has not been pressed for 5 seconds, the direction will be up (brighter) - unless the output is already above 90% in which case the direction is down. If the switch is held continuously, and the output reaches maximum, the light output will remain at this level until the switch is released - a latching switch may be connected in parallel allowing the occupancy detection to be overridden on (Note: If the initial direction was down, when the output reaches minimum it will ramp back up automatically).

Several SENSALINK MRE SENLDDSI (96013500) may also be connected to one common momentary action switch in parallel - as long as all detectors and the switch are powered from the same phase.

NOTE: Only the ballasts connected to the SENSALINK MRE SENLDDSI and all ballasts connected to the other detectors allocated to the same Sensor Group (zone) will be controlled with the momentary action switch. The override will be reset by an external bus command, eg a scene recall.

Commissioning

Detectors are supplied factory pre-set which ensures the lighting will switch on automatically as soon as power is applied. Final commissioning of the detectors, including assigning to zones, requires the use of the SENSALINK SENLP (96102983) Programmer.

Photocell

The regulating photocell can be set using the SENSALINK SENLP. Ideally this should be done at night, or when no natural light is present. Raise or lower the light level as required with the UP and DOWN buttons on the SENSALINK SENLP until the desired Lux level is achieved. Storing this level will programme values for the photocell thresholds. Fine tuning of the light level can then be achieved by adjustment of these figures with the SENSALINK SENLP.

Using the SENSALINK SENLP (96102983)

It is important that the SENSALINK SENLP be held perpendicular and at a distance of between 0.5m and 2m from the detector.

1. Switch on SENSALINK SENLP by pressing the red power button.
2. Point SENSALINK SENLP at detector and press the DOWNLOAD button. The SENSALINK SENLP will confirm the product's identity and call up the correct menu of parameters and their current settings.
3. Use a combination of UP, DOWN, FORWARD and BACK buttons to navigate the parameter menu, selecting options for each shown. (See Tips below.)
4. When options for all parameters have been selected, point the SENSALINK SENLP at the detector and press the UPLOAD button. The luminaire(s) will switch off briefly during the programming process and the SENSALINK SENLP shows DATA OK to confirm operation.
5. After a short period of inactivity (default 5 minutes), the SENSALINK SENLP hibernates retaining the most recent settings.

Tips

- i) Where there are only two options such as ON/OFF, a double click of the OK button toggles between them.
- ii) Where there are multiple options, a double click of the OK button recalls a list of all options for that parameter. Use the UP, DOWN and OK buttons to select.
- iii) Use the OK button to go forward (through the menus) without displaying help pages.
- iv) Press UPLOAD at any time to transfer all current settings from the handset to the product.

Important Additional Notes

1. A means for disconnection must be incorporated in the fixed wiring in accordance with the current wiring regulations.
2. Although nominally 12V, the dimming output is not SELV and therefore should be treated with the same respect as mains with regard to wiring practice. The 0V line of the dimming output is almost at Neutral potential.
3. The dimming control output should be connected only to the control input of the ballasts - never to other detectors.
3. This equipment should be used to control only those ballasts powered from the same phase as the detector.
4. Due to the fact that the photocell is on the ceiling looking down, it is not possible for measurements made with a lux meter on the working plane to remain constant when daylight illuminates the ceiling and the working plane to a differing extent. Therefore, products of this type should be regarded as capable of maintaining an APPROXIMATE light level only.