External Light Level Sensor

Features

- Link selectable ranges
- 24Vac/dc supply
- 0-10Vdc output

Specification

Sensor reference	Photo-diode
Accuracy	±5% across range
Ranges (Switch selectable):	
	10-2000 Lux
	10-4000 Lux
	10-10000 Lux
Housing:	
Material	ABS (Flame retardant type VO)
Dimensions	55 x 90mm dia.
Mounting holes	4mm spaced 85mm apart.
Ambient range:	
Temp.	0°C - 50°C
RH	0 - 100% non-condensing
Power supply	24Vac/dc (±10%)
Connections	3-wire
Output	0-10Vdc
Protection	IP65
Country of origin	UK

Product Codes

LL-SE-V

External light level sensor 0-10Vdc output range selectable

Technical Overview

The LL-SE is a light level transmitter designed for use in the active control of artificial lighting, both to optimise light levels and to achieve maximum energy efficiency.
The LL-SE transmitter uses a photo-diode cell to detect light levels in a selection of lux ranges, providing a linear 0-10Vdc output signal.
The LL-SE is designed for outdoor mounting for the measurement of external light levels.

Installation

1. It is recommended that the unit be mounted with the cable entry at the bottom.

2. If the cable is fed from above then into the cable gland at the bottom, it is recommended that a rain loop be placed in the cable before entry into the sensor.

3. Remove the front cover by twisting the lid and separating from the main body.

4. Using the base of the housing as a template mark the hole centres. Drill two pilot holes at 85mm centres in the surface to which the sensor is to be mounted.

5. Fix the sensor to the wall using appropriate screws.

6. The housing is designed to make it easy for an electrical screwdriver to be used if desired.

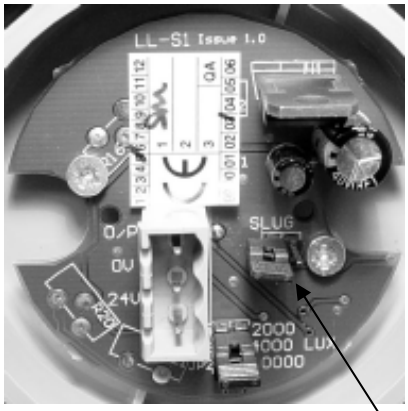
7. Feed the cable through the waterproof gland and terminate at the terminal block. Leaving some slack inside the housing, tighten the cable gland onto the cable to ensure water tightness.

8. Replace the lid after the electrical connections have been made.

Slug Link

The slug link is used to reduce the speed of response of the photo-diode to prevent spurious reaction to transitory light level changes, such as passing clouds etc. The slugging effect operates when the slug link is fitted.

Connections



24V = Supply
0v = Gnd
O/P = 0-10Vdc output

Slug link

Trend Scaling

10-2000 Lux:

Trange	2000
Brange	-1980
Upper	2000
Lower	10
Exp	4

10-4000 Lux:

Trange	4000
Brange	-3980
Upper	4000
Lower	10
Exp	5

10-10000 Lux:

Trange	10000
Brange	-9980
Upper	10000
Lower	10
Exp	5