



SET-DOL-RJ: PASSIVE INFRA-RED (PIR) DETECTOR AND LIGHT LEVEL SENSOR WITH RJ12 CONNECTOR

SET-PDOCH-RJ: PASSIVE INFRA-RED (PIR) DETECTOR WITH RJ12 CONNECTOR

SET-ALD5-RJ: LIGHT LEVEL SENSOR WITH RJ12 CONNECTOR

INSTALLATION INSTRUCTIONS

WARNING. These products should only be installed by a qualified electrician in accordance with the latest edition of the IET wiring regulations and this instruction leaflet.

The SET-RJ range of sensors have been designed to allow easy connection to the SET-DLCM range of Setsquare products.

SET-DOL-RJ

The sensor is ideally suited for mounting into a false/suspended ceiling tile, but can be mounted into any ceiling arrangement as long as it is of rigid construction and access can be gained to the back of the sensor to allow the supplied fixing clip to be fitted.

The sensor should be mounted where it has a clear and uninterrupted view of the light level and area it is required to control. Do <u>not</u> mount the sensor too close to windows. Position the sensor in such a way that it can accurately monitor light in the area it is expected to control. The sensor should preferably be in front of rather than behind activity. Avoid placing adjacent to forced air heating or cooling systems, we recommend at least 1m from direct flows. Position the sensor where it does not look out of a door. (See the 'Detection Pattern' on page 2 and the 'Do's and Don'ts' on page 3 for further information).

SET-PDOCH-RJ

The sensor is ideally suited for mounting into a false/suspended ceiling tile, but can be mounted into any ceiling arrangement as long as it is of rigid construction and access can be gained to the back of the sensor to allow the supplied fixing clip to be fitted.

The sensor should be mounted where it has a clear view of the area to be controlled and should preferably be in front of rather than behind activity. Avoid placing adjacent to forced air heating or cooling systems, we recommend at least 1m from direct flows. Position the sensor where it does not look out of a door. (See the 'Detection Pattern' on page 2 and the 'Do's and Don'ts' on page 3 for further information).

SET-ALD5-RJ

The sensor is ideally suited for mounting into a false/suspended ceiling tile, but can be mounted into any ceiling arrangement as long as it is of rigid construction and access can be gained to the back of the sensor to allow the supplied fixing clip to be fitted.

The sensor should be mounted where it has a clear and uninterrupted view of the light level it is required to control. Do <u>not</u> mount the sensor too close to windows. Position the sensor in such a way that it can accurately monitor light in the area it is expected to control. (See the 'Do's and Don'ts' on page 3 for further information).

MOUNTING DETAILS.

Drill a 38mm diameter hole in the ceiling or tile as applicable. Fit the sensor into the hole in ceiling/tile and fit the spring clip provided to secure sensor into place. Route the RJ12 patch cable (supplied) and plug into RJ12 connector on back of sensor. Plug the other end of the patch cable into the relevant sensor input on the SET-DLCM marshalling box. (See 'Connection Diagram' on page 2, 'Channel Self Configuration Table' on page 3 and the 'Daylux SET-DLCM User Guide' for further information).

CONFIGURATION AND SETUP.

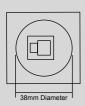
The range of SET-DLCM marshalling boxes will self-configure depending on which sensor inputs sensors are plugged into. For example:- If a SET-DOL sensor is plugged into sensor input 'A' only, the SET-DLCM will configure all outputs as a single channel or if a SET-DOL sensor is plugged into input 'A' and another is plugged into input 'C', then the outputs will configure as two channel (channel 1's outputs work as a single channel and channel 3 to 5's outputs will work as a the second channel). Note: The above configuration allows for separate light level control, movement detection is 'linked' across both channels. (See 'Channel Self Configuration Table' on page 6).

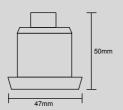
Sensor inputs can be re-configured from the factory defaults to control the desired channel outputs via the setup procedure detailed in the 'SET-DLCM User Guide'.

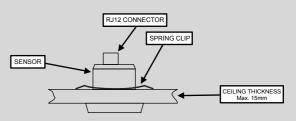
It is advised that the functionality of the sensor(s) is proven - see 'Daylux SET-DLCM User Guide' for details. Once satisfied that the sensor(s) and associated SET-DLCM are functioning correctly, tidy and secure cables.

DIMENSIONS

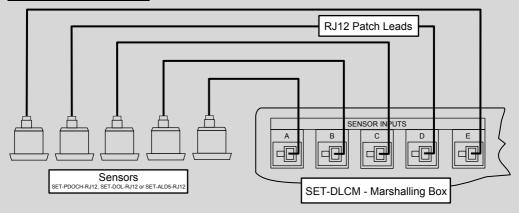
MOUNTING DIAGRAM.







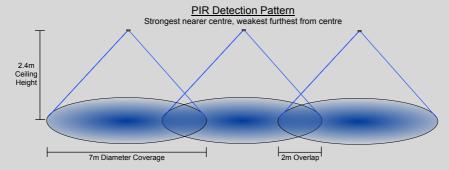
CONNECTION DIAGRAM.



PIR Detection Zones.

The PIR detection pattern consists of two 'zones', an inner and outer zone. The outer zone will detect large movements such as someone walking and the inner zone will detect smaller movements such as that of an hand or arm.

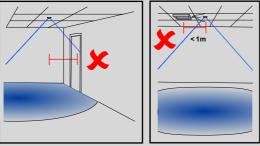
PIR sensors should be mounted every 5 meters to ensure the best possible coverage, reducing 'dead spots' and ensuring optimum movement detection.

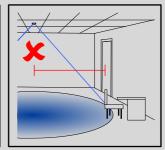


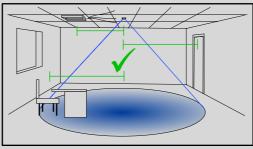
Sensor Inputs and Channel Outputs.

Sensors will control the desired output channels through self-configuration on light level according to the table on page 3. Movement detection is 'linked' across all channels.

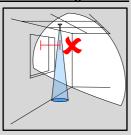
DO'S AND DON'TS - PIR.

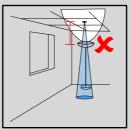


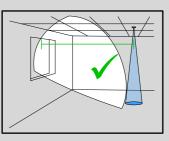




DO'S AND DON'TS - Light Level.







CHANNEL SELF CONFIGURATION TABLE.

SENSOR INPUTS					OUTPUT CHANNELS	
CH A	СН В	СН С	CH D	CH E	SET-DLCM3	SET-DLCM5
SENSOR 1				•	1 to 3	1 to 5
SENSOR 1			•	SENSOR	1&2, 3	1 to 4, 5
SENSOR 1	-	•	SENSOR 1	-	1&2, 3	1 to 3, 4&5
SENSOR 1	1	SENSOR 1		•	1, 2&3	1&2, 3 to 5
SENSOR	SENSOR 1			•	1, 2&3	1, 2 to 5
SENSOR	SENSOR	SENSOR			1, 2, 3	Not Applicable
SENSOR	SENSOR	SENSOR 1		•	1, 2, 3	1, 2, 3 to 5
SENSOR	SENSOR	SENSOR	SENSOR 1	•	Not Applicable	1, 2, 3, 4&5
SENSOR	SENSOR	SENSOR	SENSOR	SENSOR	Not Applicable	1, 2, 3, 4, 5



CHANNEL OUTPUTS
SET-DLCM5 = 2 x per channel.
SET-DLCM3 = 4 x for channel 1, 4 x for channel 2 and 2 x for channel 3.

Technical Data.

Pack Contents: Either 1 x SET-PDOCH-RJ or 1 x SET-DOL-RJ or 1 x SET-ALD5-RJ plus 1 x Spring Clip and 1 x RJ12 Patch Lead.

Mounting: Suspended/false or plasterboard ceiling using spring clip provided. Recessed mounting kit available for use when it is not possible to fit the spring clip due to access restrictions - Part code: FF.

Supply Voltage: 12v D.C.

Total Power consumption: SET-PDOCH-RJ = 12 mW. SET-DOL-RJ = 84 mW. SET-ALD5-RJ = 60 mW.

Outputs: PIR - Open Collector. Light Level - 0-10v Analogue.

PIR Sensor: Dual Element (Ying-Yang) Pyroelectric Passive Infra-red Detector - detects body heat.

PIR Coverage: 360° Field Of View. Coverage is dependant on ceiling/mounting height.

(Radius = $1.46 \times \text{mounting height} \times 2 = \text{diameter of coverage}$).

Light Level Sensor: Photo Diode. Range 0-300 Lux.

Patch Lead Specifications: RJ12 to RJ12 (6P6C). Length = 5 Metres.

Dimensions: Front Bezel/Lens = 47mm x 47mm x 6mm. Sensor including Bezel/Lens & RJ12 Connector

L=50mm x D=38mm.

Material: Flame retardant ABS.

Weight: 44 grams (including spring clip).

I.P. Rating: 50.

Operating Temperature: 0-40°C.

WARNING

This product contains electronic devices.

Do not perform any high voltage tests on this product or to any equipment connected to it. Mains connections can be high voltage tested in accordance with BS 7671:2008, IET Wiring Regulations 17th Edition section 612.3.3.

The RJ12 SENSORS are part of a range of energy conservation products available from Setsquare. This apparatus maybe turned on by high powered RF interference and should not be installed near pager aerials or Inductive loop equipment. It will recover when the RF ceases.





WEEE Directive.

Electrical and electronic equipment should never be disposed of with general domestic or commercial waste but collected for their proper treatment and recovery. The crossed out wheely bin symbol is to remind you of the need to dispose of this product at the end of its life in a way that will assist in the recovery, recycling and reuse of many of the materials used in this product. Where possible also recycle the packaging.



WFF/D.I00027R

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