

These instructions apply to the SET-PDOCH-L sensor. Setsquare recommend all installations are carried out by a suitably qualified electrician and that these instructions are followed. Failure to do so may lead to damage to either the circuits or installer.

Unit Description

The SET-PDOCH-L is a small sensor which detects the movement of infra-red radiation from a human body. The sensor is designed to be used as a motion sensor to provide occupancy detection for lighting and other types of controller that need to sense the movement of a human body. This unit has a solid state relay as the output device.

Use with LUTRON homeworks controllers

Sensors can be connected together to provide a larger detection area. This can be simply achieved as the units have an isolated solid state relay on the output. They should only be used with controllers that are able to provide time delays.

Use with other systems

The SET-PDOCH-L unit has a solid state relay output which could be used to drive a relay or other load within its capabilities.

The output from the SET-PDOCH-L is not provided with any form of time delay, and so any load will switch ON and OFF as the infra red source moves within the detection zone.

Locating Sensor

The sensor should be mounted on a rigid surface where it has a clear view of the occupancy zone, and should preferably be mounted in front of rather than behind activity.

Avoid placing adjacent to forced air heating or cooling systems (1 metre or more in direct flows).

Fitting Sensors - Standard Version Only

Sensors are fitted by drilling a 38mm diameter hole through the ceiling tile and then either retained using the metal clip supplied.

For 'FF' (Front Fitting) Version Only

OPTION 1:-

Carefully drill a 72mm hole through the ceiling.

After drilling the hole, find the cable that goes to the controller and connect this to the cable coming from the back of the sensor. Ensuring that the correct connections are made.

When these connections have been made, it is now possible to fit sensor through the hole in ceiling.

To fit sensor retract the two spring wings so that they meet above the sensor, then carefully feed these wings through the hole, they will spring down and retain the sensor in place.

OPTION 2 :-

It is possible to fit the sensor in two sections if required.

Carefully drill a 72mm hole in the ceiling.

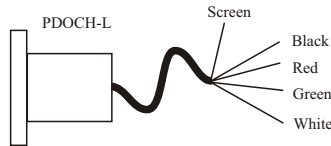
Carefully twist the sensor clockwise (when looking at the back of the unit) in its housing and it should then fall out the front along with its retaining ring.

Now by retracting the two spring wings until they nearly meet, it should now be possible to feed the housing through the hole in the ceiling and carefully allowing the wings to return to their original position.

It is now possible to connect the sensor to any cables running to the controller. Ensure that the correct wires are joined together. Once the cable has been attached it is possible to fit the sensor back into its housing.

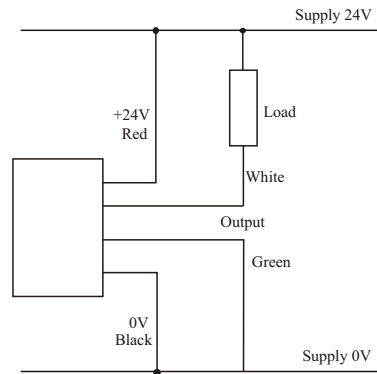
Carefully align the two lugs on the retaining ring with the cutout in the housing then push upwards and twist clockwise to lock the sensor in place.

Connection details



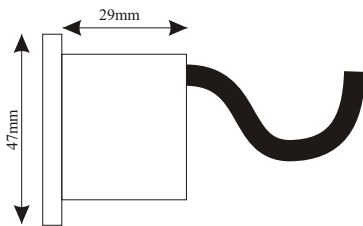
Connect the cable screen lead to system earth.

To extend the connecting cable it is recommended that you use a 4 core screened cable such as Setsquare SET-D4SC100-MR-7-W or alternatively BELDEN 8723 or similar.

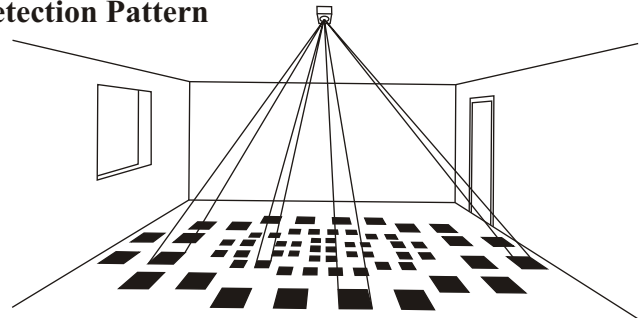


The output will be high when not detecting any Infra Red signal, and will go low when Infra Red detected.

The body of the sensor has a depth of 29mm behind the mounting face (standard version). Allow a further 10mm for the cable exit. Cable diameter is 5mm.



Detection Pattern



Specification

Motion Sensor

Detector	Passive Infra Red.
Supply Voltage	24 Volts DC. (other supply voltages available).
Supply Current	1mA Maximum not detecting 15mA Maximum when detecting, not including load.

Output	
Maximum voltage	30V
Maximum current	30mA

Optical

Field of view	360 Deg
Coverage	Dependant on ceiling height, Radius:- 1.46 x ceiling height

Order Codes	SET-PDOCH-L, SET-PDOCHL-FF
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The SET-PDOCH-L is one of a range of energy conservation products available from Setsquare.

This apparatus may be 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.

For details of other products contact:-

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