TIMEGUARD®

360° Flush Mount Ceiling PIR Light Controller

Model: PDFMMINIL
Mini Recessed PIR Master Linkable
and Power Box

Model: PDFMMINILS
Mini Recessed PIR Slave Linkable

1. General Information

These instructions should be read carefully and retained for further reference and maintenance.

2. Safety

- Before installation or maintenance, ensure the mains supply to the PIR sensor is switched off and the circuit supply fuses are removed or the circuit breaker turned off.
- It is recommended that a qualified electrician is consulted or used for the installation of this PIR sensor and install in accordance with the current IEE wiring and Building Regulations.
- Check that the total load on the circuit including when this PIR sensor is fitted does not exceed the rating of the circuit cable, fuse or circuit breaker.

3. Technical Specifications

Power Box

- 230V AC 50 Hz
- This Power Box is of Class ll Construction and must not be earthed
- Maximum Switching Load;   2300W Halogen
  500W Low loss balance fluorescent
  250W Electronic balance fluorescent,
  CFL and LED Lighting
- Mounting Centres: 165mm
- Manual Override Mode: Double pulse within 2 seconds to enter
  6 hours ON time
- IP20 Rated suitable for restricted internal applications
- CE Compliant
- Dimensions: H= 35mm, W= 175mm, D= 35mm
- The power box will fit through a 40mm diameter hole

Master PIR Sensor

- These PIRs are of Class lll Construction and must not be earthed
- Motion Detection Range: 8m diameter at a 2.5m mounting height
- Presence Detection Range: 3m diameter
- Detection Angle: 360°
- Time ON Adjustment: 30 seconds to 30 minutes
- Warm Up Time: 60 seconds
- LUX level adjustment: 10 to 2000 Lux
- Operating Temperature: -20°C to +40°C
- Ceiling Cut Out: 40mm diameter hole
- Connection Cable: Pre-fitted 250mm long cable with an RJ11 connector
- IP40 Rated suitable for restricted internal applications
- CE Compliant
- Dimensions: 47mm diameter body, 64mm height

Slave PIR Sensor

- These PIRs are of Class lll Construction and must not be earthed
- Motion Detection Range: 8m diameter at a 2.5m mounting height
- Presence Detection Range: 3m diameter
- Detection Angle: 360°
- Warm Up Time: 60 seconds
- Operating Temperature: -20°C to +40°C
- Ceiling Cut Out: 40mm diameter hole
- Connection Cable: Pre-fitted 5m long cable with an RJ11 connector
- IP40 Rated suitable for restricted internal applications
- CE Compliant
- Dimensions: 47mm diameter body, 64mm height

Multiple PIR Sensor Switching – A maximum of 5 PDFMMINILS Slave PIR sensors can be linked to the PDFMMINIL Master PIR, to enable any detector to turn ON all the lights connected (The total load must not exceed the lamp rating of a single PDFMMINIL unit).
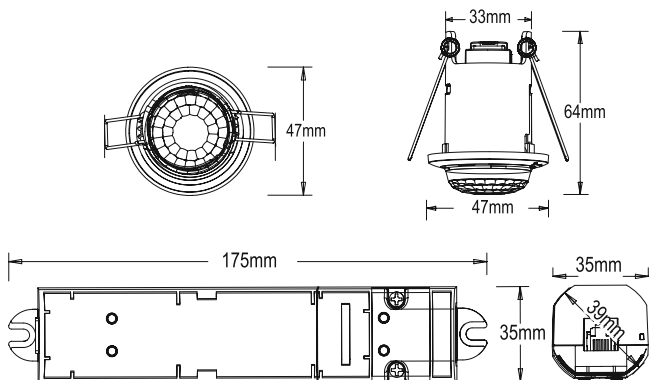
4. Installation Advice

As the PIR sensor responds to changes in temperature, avoid the following situations:

- Mounting the sensor near objects with highly reflective surfaces, such as mirrors etc.
- Mounting the sensor near heat sources, such as heating vents, air conditioning units, lights etc.
- Mounting the sensor near objects that may move in the wind, such as curtains, tall plants etc.

5. Installation

5.1 Ensure the mains supply is switched OFF and the circuit supply fuses are removed or the circuit breaker turned off.

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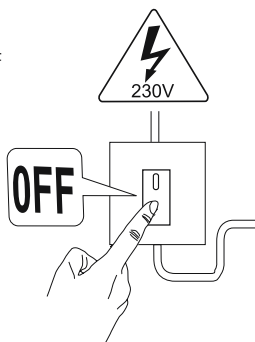
5.2 An isolating switch should be installed to enable the power to be switched ON and OFF for maintenance purposes and to activate the manual override function.

5.3 Mark the position of the 40mm diameter locating hole centre, taking care to avoid ceiling joists and other obstructions within the 40mm diameter.

5.4 Use a pad saw or suitable hole cutter to cut out a 40mm diameter hole.

5.5 Pass the 230V 50Hz mains supply and load cables through the hole and prepare for termination.

5.6 Undo the 2 fixing screw located on the far end of the power box and remove the terminal block cover (opposite side to the RJ11 connection socket).

5.7 Terminate the cables into the terminal block ensuring correct polarity is observed and that all bare conductors are sleeved (See section 6. Connection Diagram).

5.8 Re-attach the terminal block cover.

5.9 Use the 2 fixing screw to secure into place.

Ø = 40mm

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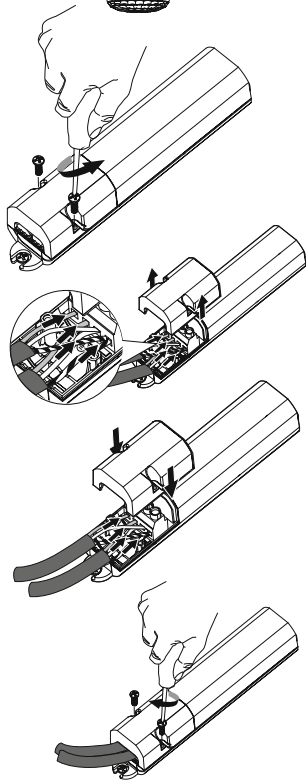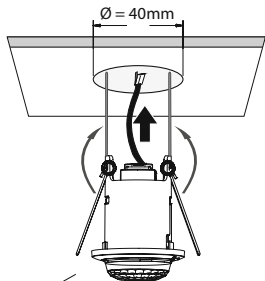
5.10 Insert the power box through the 40mm hole into the ceiling first, followed by the RJ11 cable from the master PIR sensor. Connect the RJ11 cable into the socket on the power box. Fix the master PIR sensor into position using the metal springs.
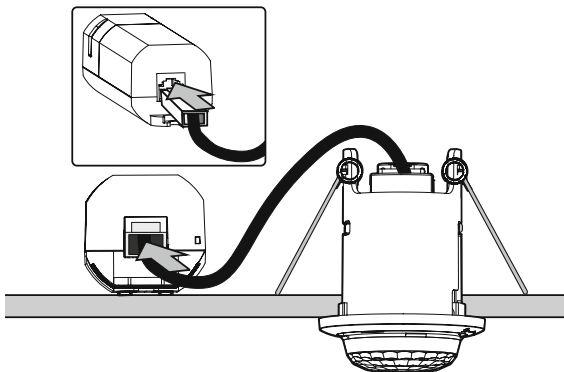

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Note: A maximum of 5 PDFMMINILS Slave PIR sensors can be linked to the PDFMMINIL Master PIR sensor, to enable any detector to turn ON all the lights connected (The total load must not exceed the lamp rating of a single PDFMMINIL unit).

Example:

POWER MODULE   RJ11 250mm   RJ11 5m   RJ11 5m

PSU   M   S   S
       MASTER   SLAVE   SLAVE
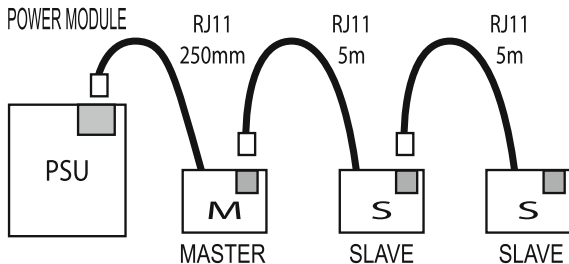
6 Connection Diagram

- Connect the 230V 50Hz mains supply cables to the terminal block in the power box as follows;

ISOLATION SWITCH

L

N

230V 50Hz MAINS SUPPLY

PDFMMINIL Power Box

- L1
- L
- Loop Terminal
- N

LAMP
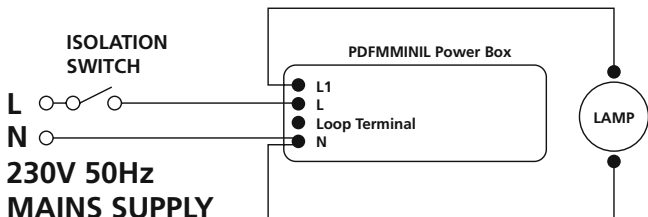
230V 50Hz Mains Supply

Live Supply (Brown or Red) to	L
Neutral Supply (Blue or Black) to	N

A 'Loop Terminal' (centre terminal) is provided should a 3 core cable be used

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Load

Switched Live (Brown or Red) to	L1
Neutral Load (Blue or Black) to	N

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7. Setting Up

Walk Test Procedure

- The adjustable LUX and TIME setting controls are factory set to 'Walk Test' mode i.e. LUX set fully clockwise to full daylight (Sun symbol) and the TIME set fully anti-clockwise to 'T' (Test mode)

- Turn the power to the unit ON. The lamp will immediately illuminate as the unit goes through its 'warm-up' period. After approximately 30 seconds to 1 minute the lamp will extinguish. This indicates the unit is wired correctly and the unit is in Test Mode.
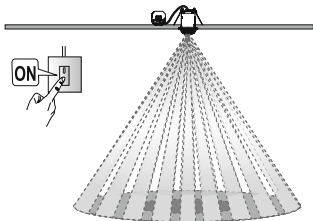
- Try to remain outside the detection 'zone' during the warm-up period.

- The unit will now operate during daytime as well as at night, illuminating the lamp for approx. 2 seconds each time. This allows testing to be carried out to establish whether the sensor is covering the required 'zone'.

- Walk around the sensor to establish the detection 'zone'.

- The sensor will detect within an approximately 8 metre diameter circle from the centre of the sensor location with a 2.5m ceiling.

- As you cross a detection 'zone' the lamp will illuminate. Now stand still until the lamp extinguishes (this should take approx. 2 seconds).

- Start moving again after 5 seconds. As you continue to cross the detection 'zone' the lamp will illuminate.

- Repeat the above, walking at various distances and angles to the unit. This will help you to confirm the detection pattern.

Setting Up for Automatic Operation

- When walk tests are complete, the unit can be adjusted for automatic operation (Auto Mode).
 Note: there is a flat headed screwdriver included in the accessory pack which you can use to make the adjustments.

- To access the setting controls, rotate the sensor body within its housing anti-clockwise and pull the sensor body downwards.
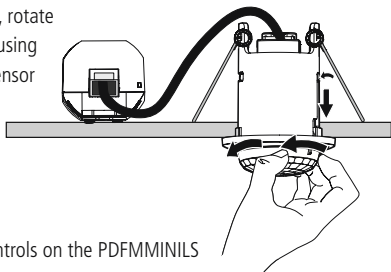
Note: there are no setting controls on the PDFMMINILS slave PIR sensor, only on the PDFMMINIL master PIR sensor.

- The TIME setting controls how long the unit remains illuminated following activation and after all motion ceases.
- The TIME control knob at fully anti-clockwise 'T' is Test Mode. You can adjust the TIME as marked 30secs, 2min, 5min, 10min, 15min and 30min max.
- Set the control to the desired setting.
- The LUX control determines the level of darkness required for the unit to start operating. The setting is best achieved by the procedure below;

1. Make sure the LUX control knob is set fully clockwise (Sun symbol).
2. When the ambient light level reaches the level of darkness at which you wish the lamp to become operative (i.e. at dusk) SLOWLY rotate the control in an anti-clockwise direction (towards the moon symbol) until a point is reached where the lamp illuminates.
3. Leave the control set at this point.

**Time On Setting**

Lux-Dusk/Dawn Setting
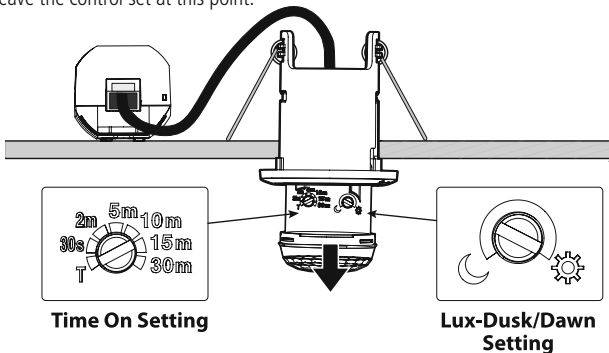
- At this position the unit should become operative at approximately the same level of darkness each evening.

- Observe the operation of the unit. If the unit is starting to operate too early (i.e. when it is quite light) adjust the control slightly anti-clockwise. If the unit starts to operate too late (i.e. when it is very dark). Adjust the control slightly clockwise.

- Continue to adjust until the unit operates as desired.

- Once the unit is set up as desired, push the sensor body fully upwards into its housing and rotate clockwise to lock into place.

LOCK
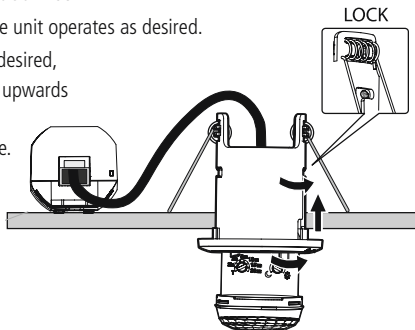
8. Lens Mask

- There is 1x lens mask included in the accessory pack.

- The purpose of the lens mask to mask out areas not desired for detection. You can restrict left or right detection, or reduce the 8 metre diameter to cover a smaller 'zone'.

- Use some pliers or a suitable tool to cut out the mask segment, exposing the required 'zone' of detection.

- Attach the lens mask to the sensor head, turning it slightly to lock into place.

MASKING
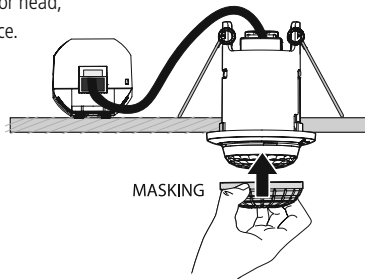
9. Manual Override Mode

- The light can be switched ON for longer time periods by use of the Manual Override Mode. This can be activated at night time (only) by using the internal wall switch or circuit breaker. Switch the internal wall switch twice (OFF/ON, OFF/ON) within 2 seconds.
- The unit will now illuminate continuously for 6 hours, or until it is switched back into Auto Mode.
- To return to Auto Mode, switch the internal wall switch OFF and then back ON again within 2 seconds.
- The unit will return to its Auto Mode and will operate normally as set up.

3 Year Guarantee

In the unlikely event of this product becoming faulty due to defective material or manufacture within 3 years of the date of purchase, please return it to your supplier in the first year with proof of purchase and it will be replaced free of charge. For years 2 and 3 or any difficulty in the first year, telephone the helpline on 020 8450 0515.

Note: A proof of purchase is required in all cases. For all eligible replacements (where agreed by Timeguard) the customer is responsible for all shipping/postage charges outside of the UK. All shipping costs are to be paid in advance before a replacement is sent.

If you experience problems, do not immediately return the unit to the store. Telephone the Timeguard Customer Helpline;

HELPLINE
020 8450 0515

or email helpline@timeguard.com

Qualified Customer Support Co-ordinators will be on-line to assist in resolving your query.

TIMEGUARD®

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