

TIMEGUARD[®]

360° Night Eye PIR Light Controller

Model: MLSA360N



Installation & Operating Instructions

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

- 230V AC 50 Hz
- This PIR is of Class II Construction and must not be earthed
- Motion Detection Range: Up to 12 metres
- Detection Angle: 360°
- Maximum Switching Load: 3000W Halogen Lighting
500W Fluorescent Lighting
140W LED Lighting
150W Discharge Lighting (SON, HQI)
- Time ON adjustment: 5 seconds to 12 minutes
- Dusk Level Adjustment: Day and Night or Night time only operation
- IP45 Rated for restricted external applications
- CE Compliant
- EC Directives: Conforms to latest directives
- Manual Override

4. Selecting a Location

- The motion detector has number of detection zones, at various vertical and horizontal angles as shown (See diagram "A")
- The optimum mounting height is 2.5m (the minimum is 1.7m)
- Careful positioning of the sensor will be required to ensure optimum performance (See diagram "A" & "B" detailing detection range and direction.)
- The sensor is more sensitive to movement ACROSS its field of vision than to movement directly TOWARDS (See diagram "B"). Therefore position the unit so that the sensor looks ACROSS the likely approach path.
- Avoid positioning the sensor where there are any sources of heat in the detection area (extractor fans, tumble dryer exhausts etc.) including opposite any other light sources such as other security lights (See diagram "C").
- Reflective surfaces (i.e. pools of water or white painted walls) may cause false activation under extreme conditions.

Diagram A

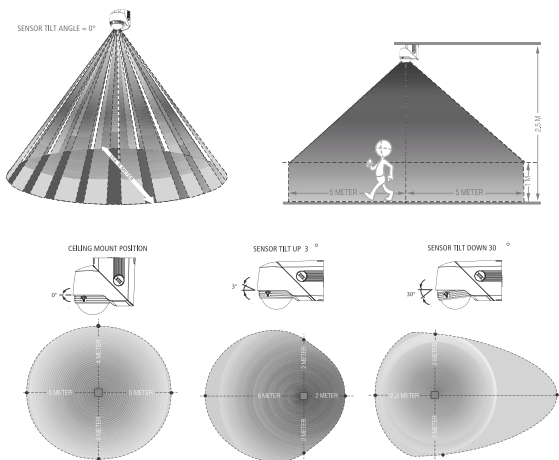


Diagram B

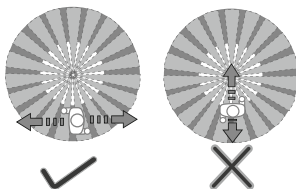
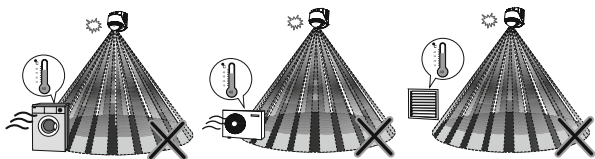
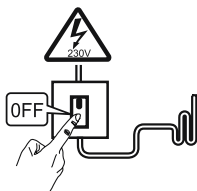


Diagram C



5. Installation

- Ensure the mains supply is switched off and the circuit supply fuses are removed or the circuit breaker turned off.
- An isolating switch should be installed to enable the power to be switched ON & OFF for maintenance purposes and to activate the manual/auto override function.



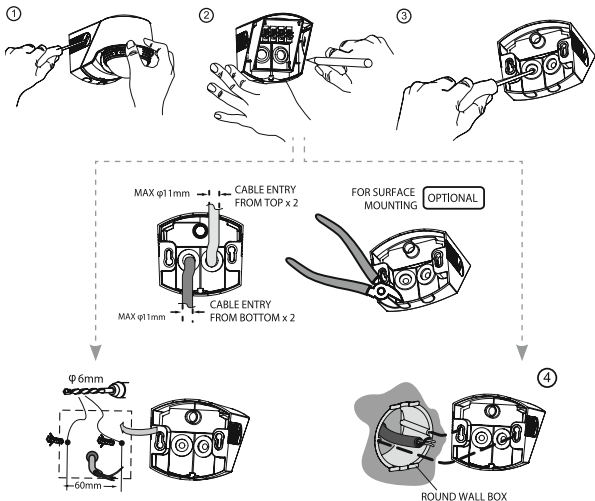
- Remove the mounting plate from the PIR by releasing one of the lugs (left or right side) firmly grip with your hand, and slide in a downward direction to release.
- Mark the position of the fitting holes using the mounting plate as a template (See section 6. Mounting Installation Steps, for the different ways of mounting the PIR). Drill out the mounting holes taking care to avoid any joists, electrical cables or water/gas pipes that may be hidden beneath the surface. Insert the rawl plugs into the holes.

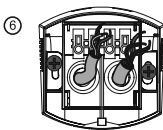
- Pass the 230V 50Hz mains supply and load cables through the cable entry points on the backing plate, ensuring the grommet(s) is used to maintain the IP rating of the PIR sensor.
- Fix the mounting plate to the wall using the correct screws for the rawl plugs installed.
- Terminate the cables into the terminal block ensuring correct polarity is observed and that all bare conductors are sleeved (see section 7. Connection Diagram).
- Ensure all connections are secure.
- Slide the main body back onto the mounting plate then pull in a downwards direction so that it is fully engaged with the mounting plate.
- Secure the unit by replacing the screw on the underside.

6. Mounting Installation Steps

Wall Mounting

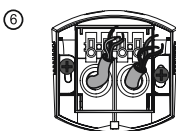
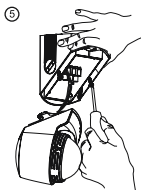
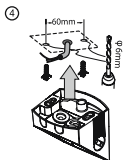
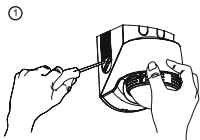
- Please use the following steps for wall/surface mounting.



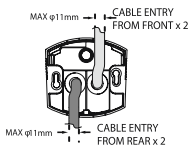


Ceiling/Eave Mounting

- Please use the following steps for ceiling/eave mounting.

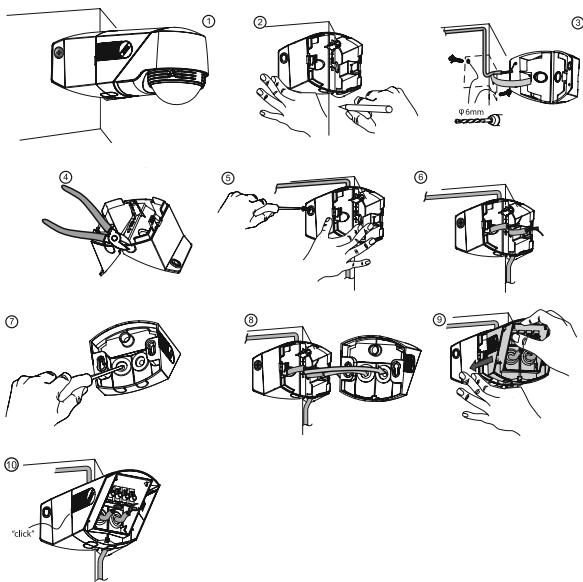


OPTIONAL FOR SURFACE MOUNTING

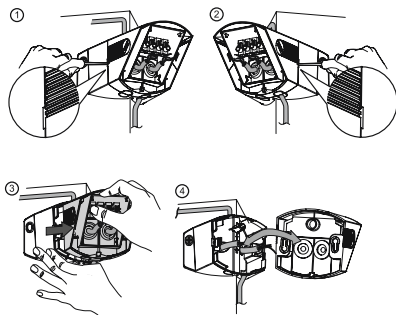


External Corner Mounting

- Please use the following steps for external corner mounting.

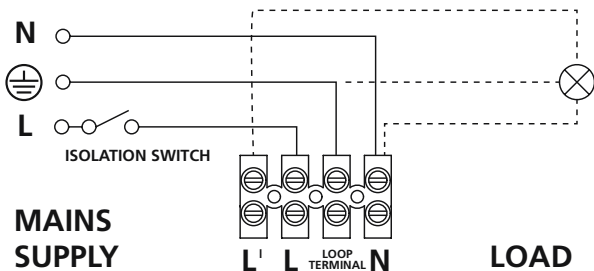


- Please use the following steps to remove the PIR from the corner mounted bracket.



7. Connection Diagram


- Connect the cables to the terminal block as follows;



Mains Supply

Live (Brown or Red) to **L**


Neutral (Blue or Black) to **N**

A 'Loop Terminal' is provided should a 3 core cable be used, which is marked .

Load

Switch Live (Brown or Red) to **L¹**

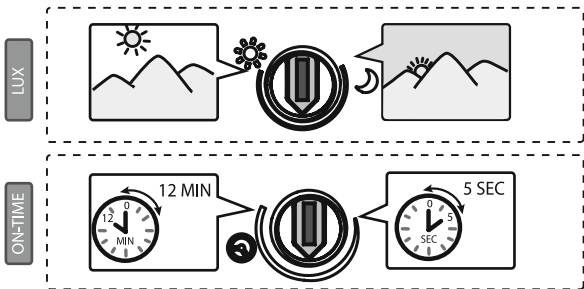
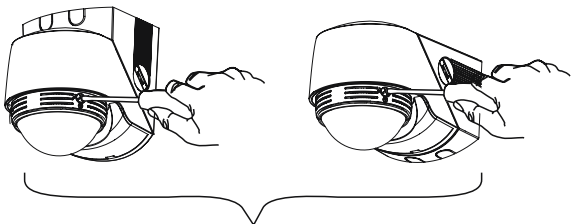
Neutral (Blue or Black) to **N**

A 'Loop Terminal' is provided should a 3 core cable be used, which is marked .

8. Operation and Testing

Adjustment

- The PIR can be adjusted using a flathead screwdriver;

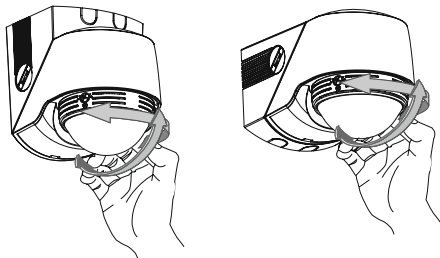


Walk Test Procedure

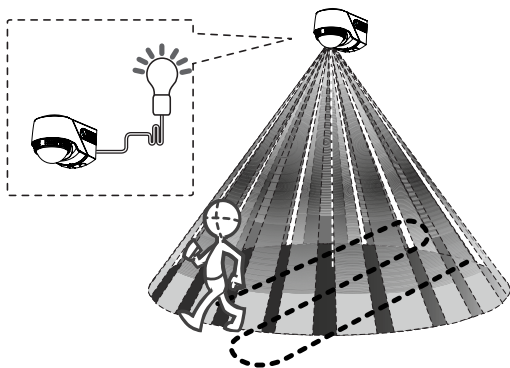
- The sensor will rotate from left to right, and tilt forward or backward.

PAN AJUSTMENT : LEFT 45°, RIGHT 45°

TILT ADJUSTMENT: UP 3° - TO EXTEND (MAX. 8 m) THE FORWARD DETECTION.
DOWN 30° - TO SHORTEN THE FORWARD DETECTION TO 2.5M.



- The small arrow on the underside of the sensor indicates the direction of the main detection area.
- The adjustment knobs located on the sides of the sensor head factory set to "Walk Test Mode" i.e. LUX set to the 'Sun' symbol and the Time set to the minimum.
- Turn the power to the unit ON. The lamp will immediately illuminate as the unit goes through its "warm-up" period. After approximately 1 – 2 minutes the lamp will extinguish. Try to remain outside the detection area during the warm-up period.
- Adjust the sensor to point in the desired direction for best coverage.
- The unit will now operate during daytime as well as at night, illuminating the lamp for approx. 5 seconds each time.
- Walk across the detection area approx. 2.5 metres from the unit. As you cross a detection "zone" the lamp will illuminate. Now stand still until the lamp extinguishes (this should take approx. 5 seconds).
- Start moving again. As you cross each "zone" the lamp will illuminate.
- Repeat the above, walking at various distances and angles to the unit. This will help you to establish the detection pattern.



- If the detection area is too small for your requirements, try angling the sensor head up. This will increase the coverage distance. Angling the head downwards will reduce the range should a smaller coverage area be required.

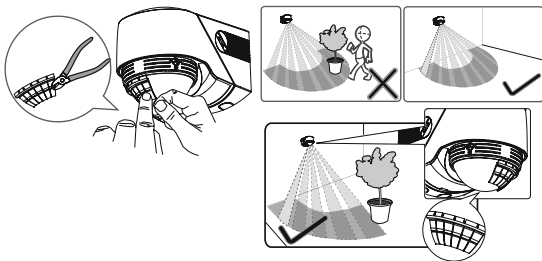
Setting Up for Automatic Operation

When walk tests are complete, the unit can be switched to automatic operation.

- The TIME setting controls how long the unit remains illuminated following activation & after all motion ceases. The minimum time (fully anti-clockwise) is approx. 5 seconds, whilst the maximum time (fully clockwise) is approx. 12 minutes. Set the control to the desired setting between these limits.
- The DUSK control determines the level of darkness required for the unit to start operating.
- The setting is best achieved by the procedure below;
 1. Set the DUSK control knob fully anti clockwise.
 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 a clockwise direction until a point is reached where the lamp illuminates.
 3. Leave the control set at this point.
- 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.

Masking the Sensor Lens

- To restrict the sensor coverage, preventing detection in unwanted areas, mask the sensor lens using the masks provided in the accessory pack (see diagram below).
- The top section of the lens covers long range detection, the bottom covers short range. Similarly the left and right lens sections cover the left and right detection areas respectively.



9. Manual Override Operation

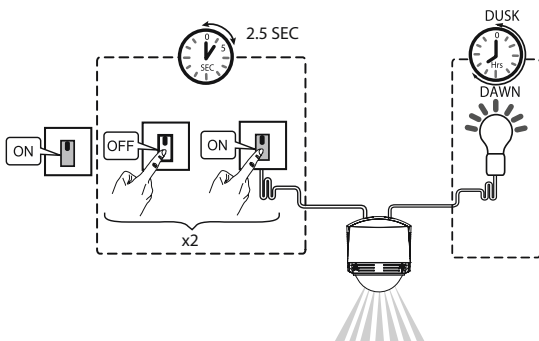
Permanent OFF

- Flick the isolation switch to the OFF position.

Pulse Manual Override Mode– For the light to turn ON

- Flick the isolation switch at day or night, OFF/ON twice within 2.5 seconds. The PIR will then be set to activate your lamp the same night.
- The unit will illuminate continuously until dawn, or until the unit is switched back into auto mode.

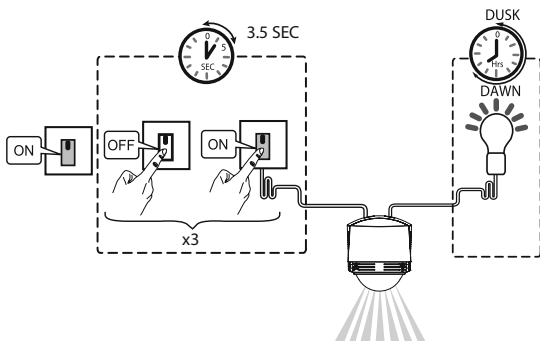
Note: The Pulse Manual Override will only operate for 1 night, then after will revert back to auto mode.



- To manually return to Auto Mode, flick the isolation switch OFF/ON once within 1.5 seconds.

10. Holiday Mode Operation

- Flick the isolation switch at day or night, OFF/ON within 3.5 seconds to activate the Holiday mode. The PIR will then be set to operate your lamp each night.
- The unit will now illuminate continuously until dawn, or until the unit is switched back into auto mode.



- To manually return to Auto Mode, flick the isolation switch OFF/ON once within 1.5 seconds.

11. Troubleshooting

Problem

- Lamp stays ON all the time night and day.

Solution

The unit may be suffering from false activation. Cover the sensor lens completely with a thick cloth. This will prevent the sensor from “seeing” anything. If the unit now switches off after the set time duration and does not re-activate, this indicates that the problem was caused by false activation. The problem may be solved by slightly adjusting the direction/angle of the sensor head (See section 4. Selecting a location).

Check LED status:- If a single LED is constantly visible, the unit is in Manual Override Mode and will illuminate until dawn or until reset to Automatic Mode. To reset to Automatic Mode, switch the internal switch/circuit breaker off/on within one second. Automatic Mode is indicated by scrolling LEDs from Left to right. If a single flashing LED is visible, Holiday Mode has been selected. Switch the internal wall switch/circuit breaker OFF/ON with one second and the unit will return to Automatic Mode. The light will illuminate only when motion is detected. Automatic Mode is indicated by scrolling LEDs from Left to right.

- The PIR keeps activating for no reason at random.

You may not be allowing the unit time to complete its warm-up period. Stand well out of the detection range & wait (the warm-up period should never exceed 5 minutes). Occasionally, wind may activate the PIR. Also passages between buildings etc. can cause a 'wind tunnel' effect. Ensure the unit is not positioned so as to allow detection of cars/people using public thoroughfares adjacent to your property.

- The PIR will not operate at all.

Check that the power is switched ON at the circuit breaker/internal wall switch. Turn OFF the power to the unit & check the wiring connections (See section 7.Connection Diagram). Ensure no connections are loose. Check the lamp. If the lamp has failed, replace. Ensure that the lamp is seated correctly in the lamp holder.

- The PIR sensor will not operate at night.

The level of ambient light in the area may be too bright to allow operation at the current DUSK setting. During the hours of darkness, adjust the DUSK control slowly clockwise until the lamp illuminates. (See section 8. Operation and Testing).

- The Unit activates during the daytime. The level of ambient light in the area may be too dark for the current DUSK setting. During daylight, adjust the DUSK control slightly anti-clockwise. When the lamp load extinguishes, enter the detection area. If the PIR still activates, the setting is still too high. Repeat the above procedure until the PIR does not activate when you enter the detection area. (See section 8. Operation and Testing).
- The PIR coverage is poor/sporadic. The Unit may be poorly located. See section 4. Selection a Location, and relocate the unit.
- Detection range varies from day to day. The PIR sensors are influenced by climatic conditions. The colder the ambient temp, the more effective the PIR will be. You may need to make seasonal adjustments to the sensor head position to ensure trouble-free operation all year round.

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.



A **theben** Group Company

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