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TIMEGUARD MLSA360NP Multiway Mounting PIR Light Controller

TIMEGUARD MLSA360NP Multiway Mounting PIR Light Controller Instruction Manual

Contents

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Product Information

Specifications

- **Model:** MLSA360NP
- **Power Supply:** 230V AC 50Hz
- **IP Rating:** IP55
- **Contact Type:** Normally open, micro disconnection
- **Mounting Options:** Ceiling, Surface, Internal, and External Corner Mount (2.5 metres)
- **Weatherproof:** Yes

Product Usage Instructions

1. Installation

Follow these steps to install the Multiway Mounting PIR Light Controller:

1. Read the provided instructions carefully.
2. Ensure the power supply is switched off before installation.
3. Select the appropriate mounting option based on your requirements.
4. Connect the controller according to the IEE wiring regulations and Building Regulations.
5. Securely fix the controller in place to avoid movement.

2. Operating Instructions

To operate the PIR Light Controller:

1. Ensure the controller is connected to a power source.
2. Adjust the settings as per your preference for light activation and duration.
3. Test the controller by moving within the detection range to verify functionality.
4. Regularly check and maintain the controller for optimal performance.

Frequently Asked Questions

Q: Can the Multiway Mounting PIR Light Controller be used outdoors?

A: Yes, the controller is suitable for external use with its IP55 rating providing protection against dust and water ingress.

Q: What is the recommended mounting height for the controller?

A: The controller can be mounted at a height of up to 2.5 meters for effective motion detection.

General Information

These instructions should be read carefully and retained for further reference and maintenance. Timeguard reserve the right to alter these instructions at any time. Up to date instructions will always be available for download at **www.timeguard.com**

Safety

- Before installation or maintenance, ensure the mains supply to the luminaire 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 luminaire and install in accordance with the current IEE wiring and Building Regulations.
- Check that the total load on the circuit including when this luminaire is fitted does not exceed the rating of the circuit cable, fuse or circuit breaker.
- To clean use a clean dry cloth only. Do not use liquid cleaners.
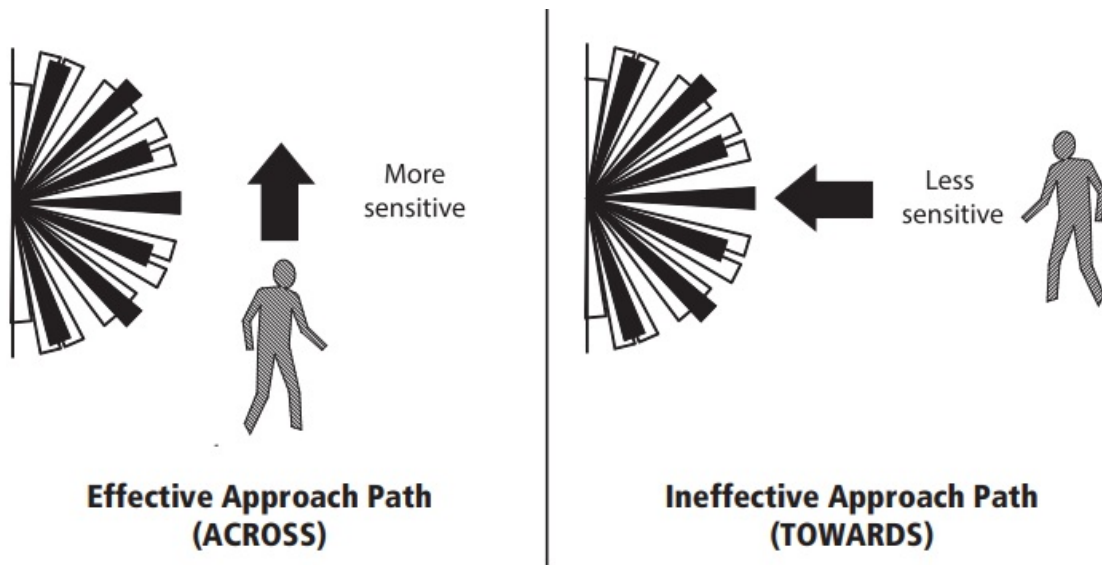
Technical Specifications

- Mains Supply: 230V AC 50Hz
- This PIR is of Class II Construction and must not be earthed
- IP Rating: IP55
- Operating Temperature: -20˚ to 45˚C
- Contact Type: Normally open, micro disconnection
- Max Mounting Height: 2.5 metres
- Mounting Modes: Ceiling, Surface, Internal and External Corner Mount
- Detection Angle: 200º Front 12m at 2.5m height.
- Anti-Creep Detection: 360º Downward Ø5m at 2.5m
- Time ON Adjustment: 1- 20 minutes
- (LUX) level adjustment: 10 – 1000
- Manual Override: Yes
- Pan & Tilt Function: 90º Horizontal Pan / 30º Tilt
- Standby Consumption: <0.5W
- PIR Modes: Auto, Pulse, Test, Dusk To Dawn, Learn (Teach)
- PIR Switching Capacity: 2000W, High Voltage Halogen:
    - 1000W, Low Voltage Halogen:

- 1000VA / 900W, Fluorescent:
  - 900VA / 100uF, Energy Saving:
  - 600VA / 400W, LED Lighting:
  - 10A (at 230VAC, cos φ = 1).
- Construction: Polycarbonate
- Dimensions (H x W x D): 74mm x 72mm x 134mm
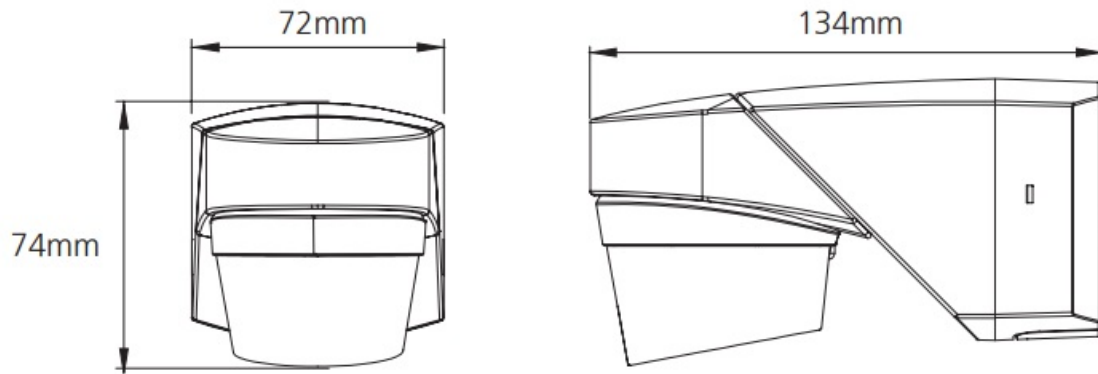
Selecting a location

- The PIR has a number of detection zones at various horizontal and vertical angles as shown below.

Effective Approach Path (ACROSS) — More sensitive

**Ineffective Approach Path (TOWARDS)** — Less sensitive

- A moving human body or object needs to cross one of these zones to activate the sensor. The optimum height for this is between 1.5m – 2m mounting height. Careful positioning of the PIR is required to ensure the best performance from the PIR and the appointed approach path.
- Avoid positioning the PIR near any sources of heat in and around the detection area such as extractor fans, tumble dryers or boiler exhausts etc. This would also include other light sources such as security lights.
- Reflective surfaces (i.e. pools of water, white-painted walls, overhanging branches and other types of foliage) may cause false activation under heightened weather conditions
- During extreme weather conditions, the PIR may exhibit unusual behaviour. Once normal weather resumes, the PIR will carry out normal operations.

Installation

- Ensure the mains supply is switched off and the circuit supply fuses are removed or the circuit breaker is turned off.
- An isolating switch should be installed to enable the power to be switched ON and OFF to the luminaire. This allows the unit to be easily switched OFF for maintenance purposes.
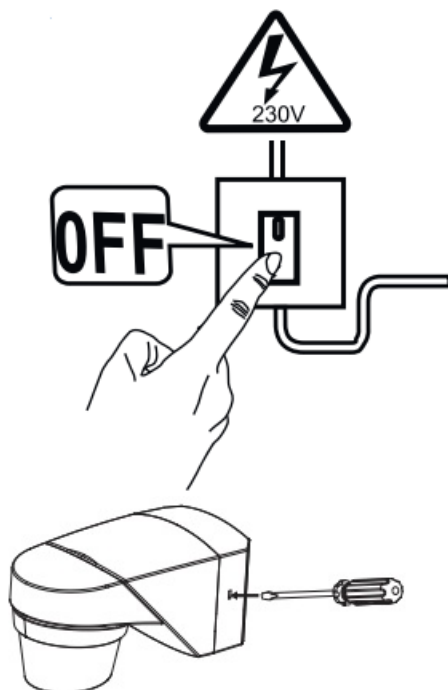
- Remove the wall plate from the PIR sensor as shown on the diagram.
- If the PIR is going to be used for horizontal and vertical surface mounting, use the wall plate as a template to mark the position of the fitting holes. Drill the holes. Then, insert the rawl plugs into the holes. For corner mounting please follow the next bullet point
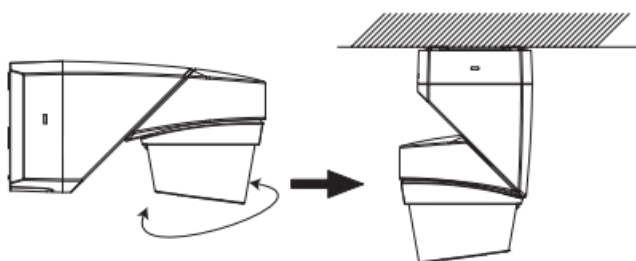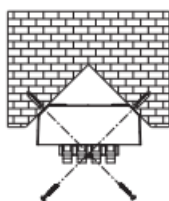

**Horizontal Surface Mounting to Vertical Surface Mounting**
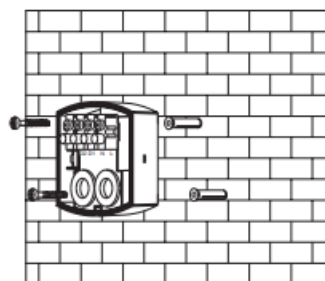
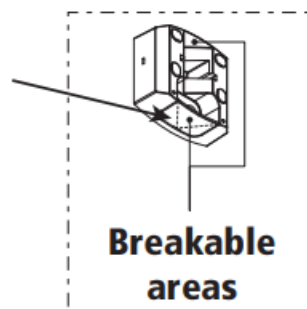**Horizontal Position On Wall**

- If the PIR is going to be used on a internal or external corner mounting position use the appropriate knockouts to line up the wall plate to be used as a template to mark the position of the fitting holes. Drill the holes. Then, insert the rawl plugs into the holes


Internal Corner

External Corner

Breakable areas
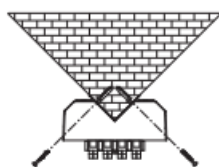
- Pass the supply cable through the cable entry point on the wall plate, ensuring the grommet(s) are used to maintain the IP rating of the PIR sensor.

- Fix the wall plate to the wall. Take care not to over-tighten the screws to prevent damage to the wall plate. If using a power screwdriver, use the lowest torque setting.
- Terminate the cable into the terminal block ensuring the correct polarity is observed and that all bare conductors are sleeved see section 6 (Connection Diagram).
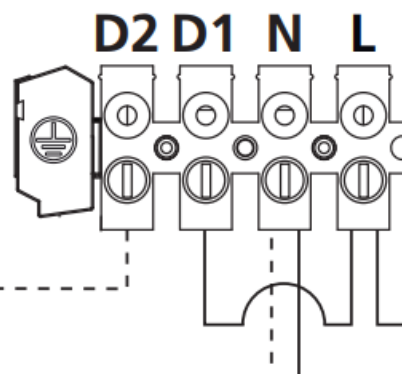- After the cables have been terminated reconnect the PIR main body to the wall plate
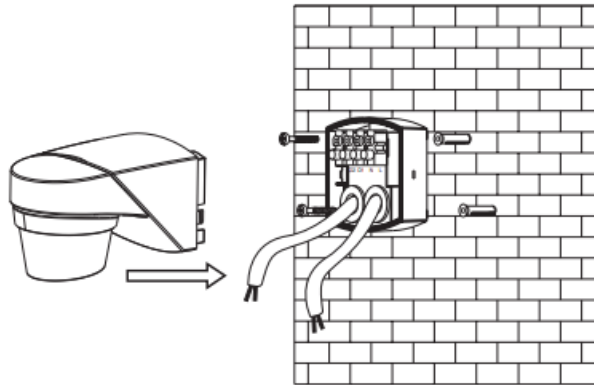
Connection Diagram

230V 50Hz AC Mains Connection Diagram

Use the earth (loop) terminal to join the supply and load if earth continuity is required.

For 230V 50Hz mains switching a link cable must be used between terminals "L" and "D1".
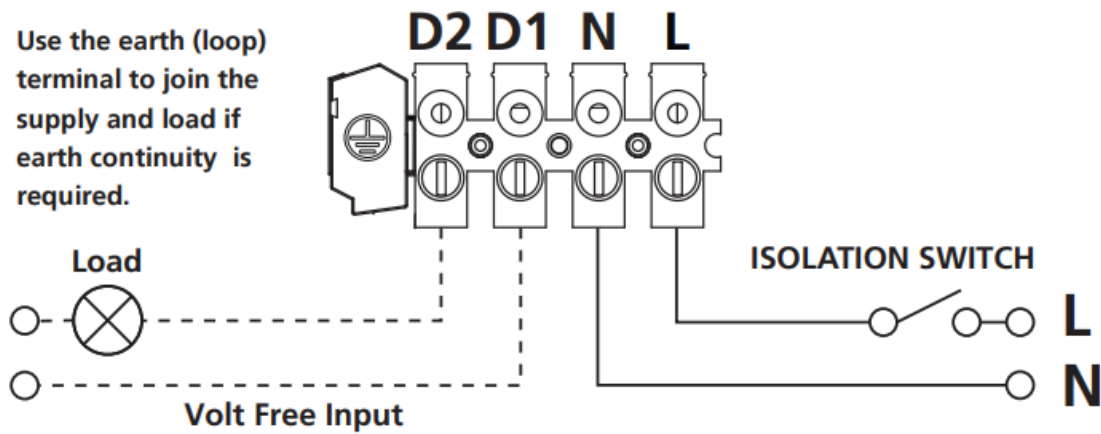
Supply

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

Load

- Switched Live (Brown or Red) to D2
- Neutral (Blue or Black) to N

Volt Free Output Connection Diagram

Use the earth (loop) terminal to join the supply and load if earth continuity is required.

Supply

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

Load

- Volt Free Output to D2
- Volt Free Input to D1

Walk Test & Automatic Operation

- Restore the power from the mains supply breaker or isolating switch and test for the correct operation.
- Once the PIR's pan and tilt angles have been set, adjust the time dial (fully clockwise), to test mode. This should bypass the photocell so the walk test can commence at day or night periods.
- The PIR should now switch on the luminaire at anytime where movement is detected. If the PIR fails to switch ON set the lux dial to 1000 lux.
- Once the unit times out to the OFF position walk across the detection area, when the PIR is triggered and the load will turn ON briefly for a set amount of time.
- Once satisfied with the pickup area of the PIR twist the lux dial in the anti-clockwise direction to trigger when dusk is approaching, then set the time delay to your preference. (Best performed in real time conditions). It is worth noting that the sensitivity dial can alter how sensitive the PIR is to movement if this is a requirement
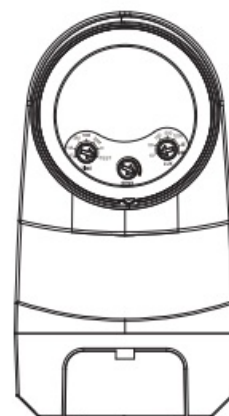

**Time Dial**   **Sensitivity Dial**   **LUX Dial**

Masking the Sensor Lens

- To restrict the sensor coverage, and prevent 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


Manual Override Operation

- Flick the isolation switch, OFF/ON twice within 2.5 seconds. The PIR will then switch on for up to 6 hours and then revert back to Auto Mode.
- The unit will illuminate continuously until dawn, or until the unit is switched back into auto mode.
- To switch off the manual override early, flick the isolation switch OFF/ON once to return to Auto Mode
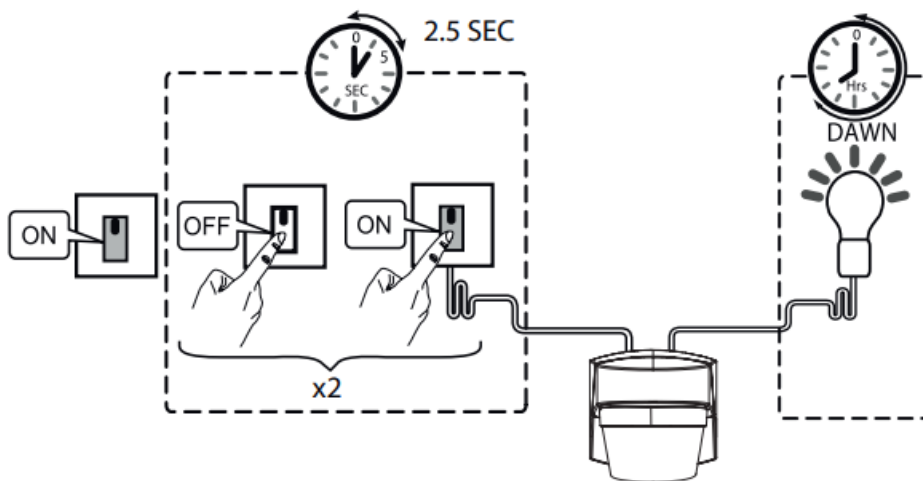

Dusk To Dawn Mode

- To enable dusk to dawn mode, twist the arrow head on the time delay dial to point to "D".
- When in dusk-to-dawn mode the lux level you set will determine when the PIR enters and exits dusk-to-dawn mode.

TIME

LUX
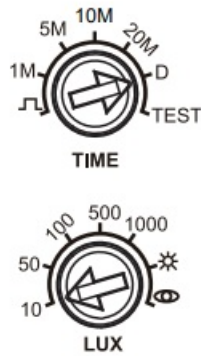
- The PIR will now switch on each evening once the lux level threshold set has been reached i.e. if the lux is set to the value of 50 and the lux level is below this, the PIR will then switch on. As the sun rises an the lux level increases above the value 50, the PIR will then switch off. This process will then repeat daily.

Pulse Mode

- To enable pulse mode, twist the arrow head on the time delay dial to point to " ⊓ ".
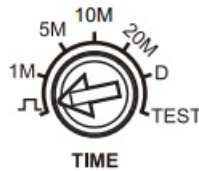
TIME

- When the sensor is triggered, the load will now switch on for 1 second and off for 9 seconds as a complete cycle before next detection. This mode is only applicable for use with staircase timer switches.

Learn Mode (Teach)

- To enable learn mode, twist the arrow head on the lux delay dial to point to " ⊙ ".
- The sensor will memorize the ambient light level, within the range 10 lux to 1000 lux as the on/off threshold.

LUX

Troubleshooting

Problem	Cause/Solution
The luminaire does not switch on when in the detection area.	Bulb faulty or missing. Nearby light sources cause interference. Redirect the PIR or light source if possible.
False activation. (Luminaire switches on for no apparent reason)	Heat sources as described in section 4. Reflective surfaces are described in section 4.
	Moving pedestrians, cars or animals in the area. Check the detection area.
Luminaire remains switched on	Continuous false activation resetting the delay time when an object is detected.
Luminaire switches on during daylight hours	Shadow casting over the PIR sensor
	Clouds create a dark presence.
	Ensure the PIR receives adequate daylight from all angles (not covered).

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 with proof of purchase and it will be replaced free of charge. For years 2 to 3 or with any difficulty in the first year, telephone our helpline. Note: 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.
Email the Timeguard Customer Helpline:

HELPLINE

- **helpline@timeguard.com**
- or call the helpdesk on 020 8450 0515

Qualified Customer Support Coordinators will be online to assist in resolving your query.

Deta Electrical Co Ltd

- Panattoni Park, Luton Road,
- Chalton, Bedfordshire, LU4 9TT
- Sales Office: 0208 452 1112
- or email **csc@timeguard.com**

- **www.timeguard.com**

Documents / Resources

TIMEGUARD MLSA360NP Multiway Mounting PIR Light Controller [pdf] Instruction Manual
MLSA360NP Multiway Mounting PIR Light Controller, MLSA360NP, Multiway Mounting PIR Light Controller, Mounting PIR Light Controller, PIR Light Controller, Light Controller

References

- **TG** **timeguard.com**
- **User Manual**