

TIMEGUARD®

10W Round LED
Wall/Ceiling Light
with Microwave Sensor

Model: LEDMR10WHMS3K



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 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.

3. Technical Specifications

- 230V AC 50 Hz
- This luminaire is of class II construction and must not be earthed
- 10W LED Non-replaceable lamp
- Energy efficiency: Class A+
- Energy Usage: 10kWh/1000H
- Lumen Output: 800lm
- Colour Temperature: 3000K
- Transmission Power: <0.2mW
- Working Frequency: 5.8GHz
- Standby Power Consumption: 0.9W approx.
- Detection Angle: 360°
- Adjustable Detection Range: 1 to 8m (radius)
- Adjustable Time Delay: 10 seconds to 30 minutes
- Dusk Level Adjustment: 10 to 2000 Lux
- IP44 Rated suitable for restricted external applications
- Operating Temperature: -15°C to +45°C

- CE Compliant
- EC Directives: Conforms to latest directives
- Dimensions: 180mm Diameter x 55mm
- Mounting Hole Centres: 134mm

Note: The high-frequency output of this sensor is $<0.2\text{mW}$, that is just one 5000th of the transmission power of a mobile phone or the output of a microwave oven.

4. Selecting a Location

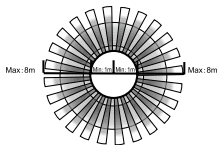
- Careful positioning of the sensor will be required to ensure optimum performance (See diagram A & B).
- The best all-around coverage is achieved with the unit mounted at the optimum height of 2.5 metres.
- During extreme weather conditions the microwave sensor may exhibit unusual behaviour. This does not indicate a fault with the sensor. Once normal weather conditions return, the sensor will resume normal operation.

Warning: The product will not operate normally if there is any metal material in front of the installation location.

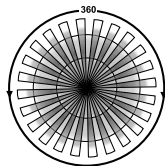
2



Height of installation 2.5~3.5M



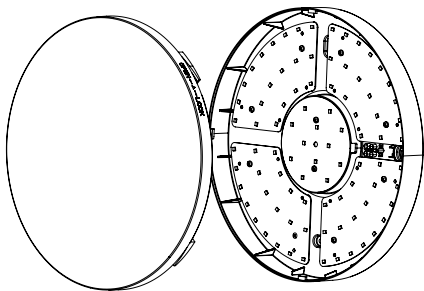
(Height of installation 2.5M)
Detection range



Detection angle

5. Installation

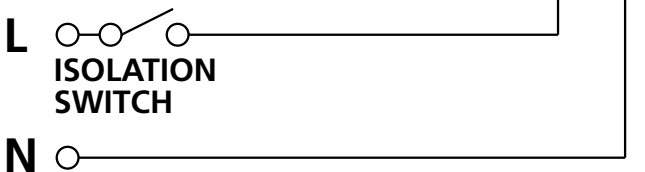
- Ensure the mains supply is switched off and the circuit supply fuses are removed or the circuit breaker turned off.
- An isolating switch should be installed to switch the power ON and OFF to the luminaire. This allows the unit to be easily switched OFF for maintenance purposes.
- Remove the diffuser from the base by turning 45 degrees anti-clockwise and pulling away from the base of the luminaire.
- Select a suitable cable entry point either provided or by drilling into the base ensuring not damage or infringe on any of the internal components.
- Mark the position of the mounting holes on the wall or ceiling.
- Drill the holes for the wall plugs ensuring not to infringe with any gas/water pipes or electrical cables that may be hidden below the surface.
- Secure the 230V AC 50Hz mains supply cable into the luminaire through the hole(s) provided ensuring that a cable gland, grommet or sealing compound is used to maintain the IP rating of the luminaire.
- Fix the luminaire using the correct screws for the wall plugs installed.
- Terminate the cable into the terminal block (See section 6. Connection Diagram below) ensuring correct polarity is observed and that all bare conductors are sleeved.
- Set the microwave sensor adjustments i.e. TIME, LUX and SENS using a thin flat blade screwdriver (See section 7. Setting Up).
- Reposition the lens over the luminaire and twist clockwise to close.



6. Connection Diagram

- Connect the 230V AC 50Hz mains supply to the terminals as marked below;

**230V~50Hz
MAINS SUPPLY**



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

7. Setting Up

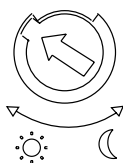
- Take note of the 3 adjusters located beneath the diffuser/lens;



SENS



TIME



LUX

- By default the 3 adjusters will be set as follows in order for you to complete a full walk test (from powering the unit ON for the first time);

TIME fully anticlockwise to its minimum (approx. 10 seconds time delay).

LUX fully clockwise to its minimum (full day and night time operation).

SENS fully clockwise to its maximum (maximum detection range).

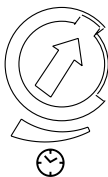
5

Walk Test Procedure

- Turn the power to the unit ON. The lamp will immediately illuminate for approximately 2 seconds and then will extinguish. This indicates the unit is wired correctly.
- The unit will now operate during daytime as well as at night, illuminating the lamp for approx. 10 seconds each time. This allows testing to be carried out to establish whether the sensor is covering the required area.
- Walk across the location the luminaire is fitted, to establish the detection area.
- With sensitivity set to the maximum, the sensor will detect you within an approximately 8 metre radius from the centre of the luminaire location with a 2.5 metre ceiling mounting height.
- As you cross the detection "zone" the lamp will illuminate. Now stand still until the lamp extinguishes (this should take approx. 10 seconds).
- Start moving again after 4 seconds. As you cross the detection zone the lamp will illuminate.
- Repeat the above, walking at various distances and angles to the unit to confirm the detection pattern.

Setting Up for Automatic Operation

- With the walk tests complete, the luminaire can be set up for automatic operation.
- Use a thin flat blade screwdriver to make the adjustments.



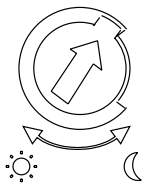
10sec~30min

TIME – Time ON Delay Setting

- The TIME setting controls how long the unit remains illuminated following activation and after all motion ceases.
- The luminaire can be set to stay ON for any period of time between approx. 10 seconds (dial turned fully anti-clockwise) to approx. 30 minutes (dial turned fully clockwise)
- Any movement detected during the ON period will instantly reset the timer.
- The LED indicator located above the three adjusters will flash when adjusting the ON time delay;

1 flash	10 seconds (minimum time delay),
2 flashes	1 minute,
3 flashes	2 minutes,
4 flashes	5 minutes,
5 flashes	8 minutes,
6 flashes	10 minutes,
7 flashes	15 minutes,
8 flashes	20 minutes,
9 flashes	25 minutes,
10 flashes	30 minutes (maximum time delay).

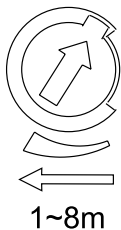
Note: After the light switches OFF, it takes approx. 4 seconds before it is able to start detecting movement again. The light will only switch ON in response to movement once this period has elapsed.



10~2000LUX

LUX – Light Control Setting

- The LUX control determines the level of darkness required for the unit to start operating.
- Turn it fully anti-clockwise to select full dusk until timed OFF operation (approx. 10 Lux).
- Turn it fully clockwise to select full daytime until timed OFF operation (approx. 2000 Lux).
- The setting is best achieved in real time by following the procedure below;
 1. Set the LUX control knob fully 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 an anti-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.



SENS – Detection Range Setting

- The SENS control setting determines the range of detection produced with the luminaire mounted at an optimum height of 2.5 metres.
- Turn it fully anti-clockwise to select the minimum detection range of approx. 1 metre radius.
- Turn it fully clockwise to select the maximum detection range of approx. 8 metres radius.

8. Troubleshooting

Problem

Solution

- The luminaire will not switch ON

Check the LUX light control setting is not set in the wrong position according to the current light level. Adjusting the setting (fully clockwise for day and night operation) and test again.

Make sure the mains supply is connected correctly (See section 6. Connection Diagram) and switched ON.

The luminaire could be faulty, replace the light fitting.
- The luminaire is permanently ON

There is continuous movement within the detection zone. Reduce the SENS and TIME control setting to the minimum and test again.
- The luminaire activates without any noticeable movement

Make sure the unit is mounted securely so it does not move.

Ensure that there is no movement that is not identified i.e. behind a wall or the movement of a small object in the immediate vicinity, if so reduce the SENS control setting and test again.

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.



Note: If you have any concerns that the intended application of this product does not meet your requirements, please contact Timeguard directly prior to installation.

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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