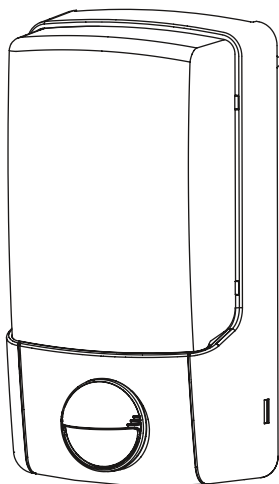


5W LED Energy Saver PIR Bulkhead

Model: LED88PIR – Black



Installation & Operating Instructions

1. General information:

The unit utilises passive infrared technology to detect heat radiation of moving human bodies.

Upon detection, the lamp will illuminate for a user-determined time period.

An integral daylight sensor ensures all day or night only operation.

Parts Included

- Luminaire c/w PIR Sensor unit.
- Instruction manual. Please keep safe for future reference.
- Accessory pack.

Tools & Parts Needed

- Electric or hand-held drill & bits.
- Terminal or electricians screwdriver.
- Flat and philips screwdriver.
- Wire cutters.

2. Selecting the location:

Unit is for indoor and outdoor use. Unit must be mounted on a non-flammable surface as a fixed luminaire, and is not suitable for portable use.

The unit can get very hot during use. Ensure the unit has cooled before handling.

Ensure adequate ventilation space is allowed between the unit and any object above, in front or to either side of the unit. Suggested space is 0.5m above, 0.3m to either side & 1.0m in front.

The motion detector has a number of detection zones, at various vertical and horizontal angles as shown (see Fig A).

A moving human body needs to cross/enter one of these zones to activate the sensor. The best all-round coverage is achieved with the unit mounted at the optimum height of 1.8m.

Careful positioning of the sensor will be required to ensure optimum performance.

See diagram A detailing detection range and direction.

The sensor is more sensitive to movement ACROSS its field of vision than to movement directly TOWARDS (see Fig 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.).

Reflective surfaces (ie pools of water or white-painted walls) and overhanging branches may cause false activation under extreme conditions.

During extreme weather conditions the motion 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.

3. Installation:

After choosing a suitable location (see previous section) install the unit as follows:

IMPORTANT

Switch off the electricity at the fuse box by removing the relevant fuse or switching off the circuit breaker before proceeding with the installation.

We recommend this unit be fitted by a qualified electrician. Install in accordance with wiring and current building regulations. Please read the instructions carefully.

The unit is suitable for connection to a 230 V AC 50Hz electricity supply. It is suggested that 3-core round flexible cable of 1mm² gauge is used. An isolating switch should be installed to switch the power to the unit ON & OFF. This allows the sensor to be easily switched off when not required or for maintenance purposes.

Loosen up the bottom screw (Fig C). Remove wall plate by using a small flat screwdriver (Fig C) by gently easing the wall plate outwards.

Open the rubber plug, mark position of the fixing holes (Fig D). Drill the holes. Insert the wall plugs into the holes.

Pierce the grommet and pass the cable through the grommet. Clamp the cable to the rear of the unit before securing the unit to the wall. Fit grommet into its location hole ensuring a good seal.

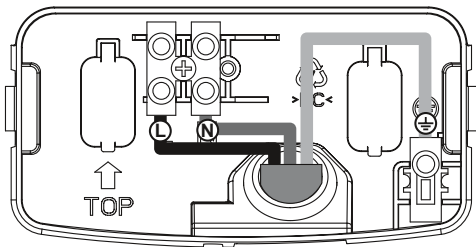
Fix the unit to the wall (Fig E). Close the rubber plug after tighten the screws (Fig E). Attach the unit to the wall plate by a sound of click, tighten the bottom screw (Fig F). If using a power screwdriver, use the lowest torque setting.

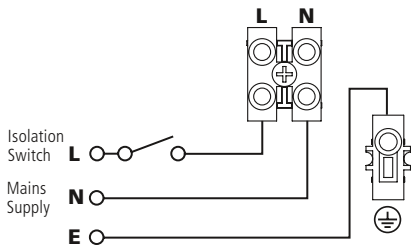
Connection

Connect the cable to the terminal block as follows (see connection diagram):

LIVE (Brown)	L
NEUTRAL (Blue)	N
EARTH (Green/Yellow)	⊕

Ensure the connections are secure. Refit wall plate ensuring it clicks firmly into place.





4. Operating and testing:

Test Mode

Rotate the sensor cover to reveal the adjustment knobs (Fig G).

The unit can be set up in daylight or at night. The adjustment knobs are factory set. Lux is set to the 'moon' setting and Time is set to a minimum (fully anti-clockwise) see Fig H.

Turn the power ON. The lamp will illuminate for approximately 30 seconds.

This indicates the unit is wired correctly.

After approximately 30 seconds the light will turn off.

The unit is now in Test Mode.

Walk Test Procedure

The lamp will now illuminate for approximately 5 seconds every time movement is detected.

Walk across the detection area approximately 5 metres from the unit. Each time you are detected the lamp will illuminate. Now stand still until the lamp extinguishes (this should take approx. 5 seconds)

Start moving again, when you are detected again the lamp will illuminate.

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

Setting Up for Automatic Operation

The TIME setting controls how long the unit remains illuminated following activation and after all motion ceases.

(See Fig H, the Time adjustment knob is indicated by the "Clock" symbol).

The minimum time (anti-clockwise) is approx. 5 seconds, whilst the maximum time (clockwise) is approx. 10 minutes (Fig H). 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:

(See Fig H, the Dusk adjustment knob is indicated by the "Moon" and "Sun" symbols).

Set the DUSK control knob fully anti clockwise. Wait until darkness falls.

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. 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 bright), 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.

Knob Settings

Bulkhead has two adjustment knobs:

Time and Dusk at the front of the detector head which is covered by sensor cover.

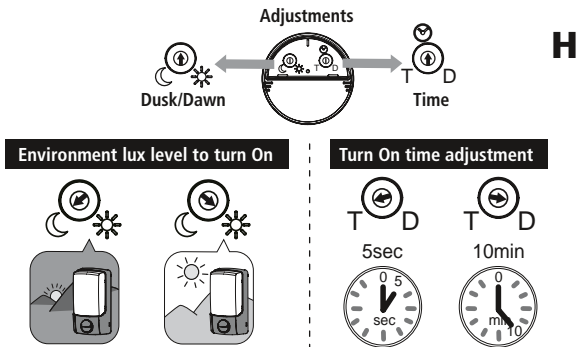
- Rotate the sensor cover and adjust knobs carefully with screwdriver.

TIME knob setting

- You can set the time knob from 5 seconds to about 10 minutes, the lamp will turn On for the time duration set after each detected movement.
- Adjust the knob as desired.

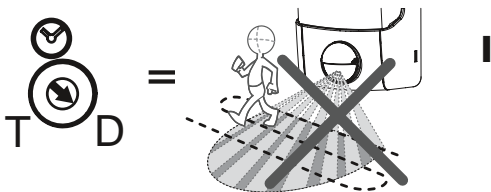
LUX knob setting

- When setting the Dusk knob at "MOON", Bulkhead will only operate in the dark.
- When setting the Dusk knob at "SUN", Bulkhead will operate in any light level.



Dusk Setting (Time knob setting)

- When setting the Time knob to "D" (fully clockwise) (Fig I), the motion detector of Bulkhead won't function.
- The lamp will operate depending on the "LUX" level, ie Dusk to Dawn.



5. Technical specifications:

Energy Efficiency	Class A+
Energy Usage	6kWh/1000h
Output	310lm typical
Lamp Beam Angle	90x90 degrees The lamps are not replaceable in this product
Detection Range	Up to 7 metres
Detection Angle	140°
Power Supply	230 V AC ~ 50Hz
Lamp Type	5W LED which is the equivalent light output of a 70W Halogen Lamp
Time On Adjustment	5 seconds – 10 minutes
Dusk Level Adjustment	Day & night or night only operation
Environmental Protection	IP55 (suitable for indoor and outdoor use)
EC Directives	Conforms to current EC Directives

If you experience problems refer to Troubleshooting Guide.
If problems still exist, do not immediately return the unit to store.
Telephone the Timeguard Customer Helpline

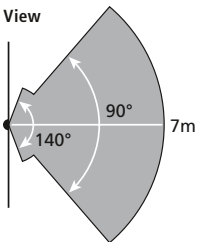
020 8450 0515

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

6. Trouble shooting guide:

Problem	Solution
<ul style="list-style-type: none">Lamp stays ON all the time at night.	<p>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.</p>
<ul style="list-style-type: none">PIR keeps activating for no reason/at random.	<p>You may not be allowing the unit time to complete it's warm-up period. Stand well out of the detection range and wait (the warm-up period should never exceed 5 minutes).</p> <p>Occasionally, winds may activate the sensor. Sometimes passages between buildings etc. can cause a "wind tunnel" effect.</p> <p>Ensure the unit is not positioned so as to allow detection of cars/people using public thoroughfares adjacent to your property.</p>
<ul style="list-style-type: none">PIR sensor will not operate at all.	<p>Check that the power is switched ON at the circuit breaker/internal wall switch.</p> <p>Turn OFF the power to the unit and check the wiring connections as per the diagram (see previous section 3). Ensure no connections are loose.</p>
<ul style="list-style-type: none">The PIR sensor will not operate at night.	<p>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. Refer to previous section for more details.</p>
<ul style="list-style-type: none">Unit activates during the daytime	<p>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 turns off, 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. Refer to previous section for more details.</p>
<ul style="list-style-type: none">PIR coverage is poor/sporadic	<p>Unit may be poorly located. See previous section – 'Selecting The Location' and re-locate the unit.</p>
<ul style="list-style-type: none">Detection range varies from day to day	<p>PIR sensors are influenced by climatic conditions. The colder the ambient temperature, the more effective the sensor will be.</p>

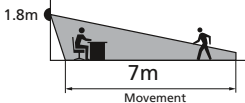
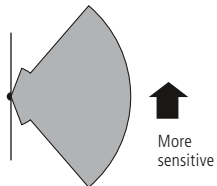
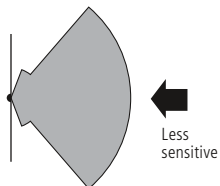
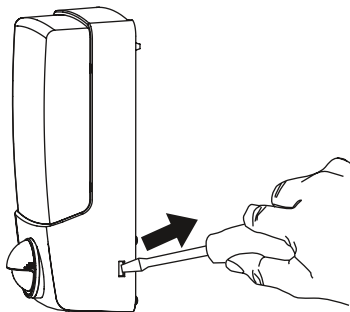
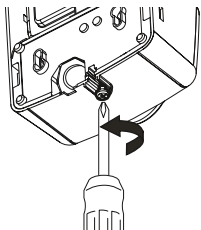
Top View

**A****Detection Angle and Range:**

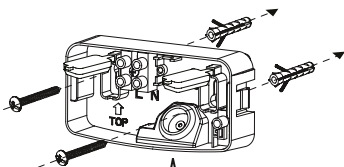
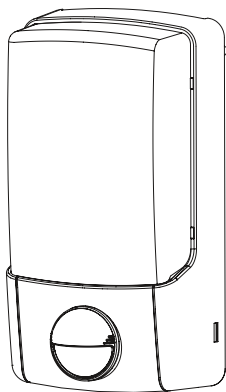
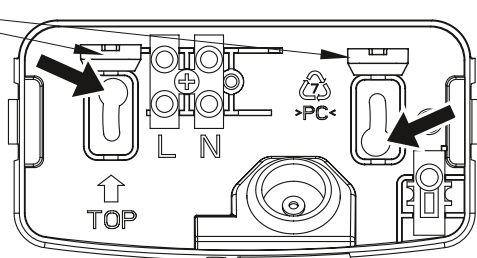
Min 7m range at 90° angle

Min 3m range at 140° angle

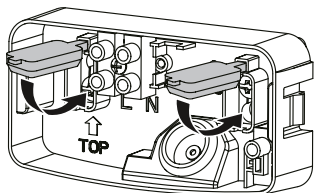
Side View

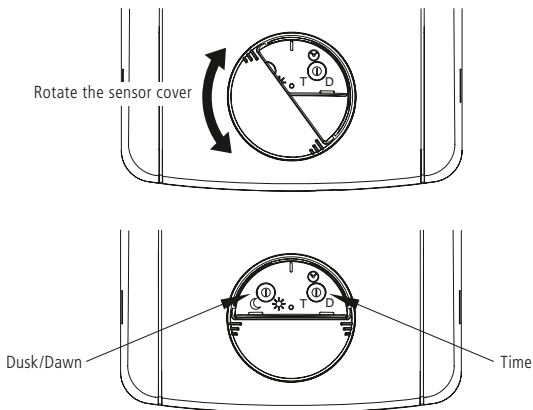
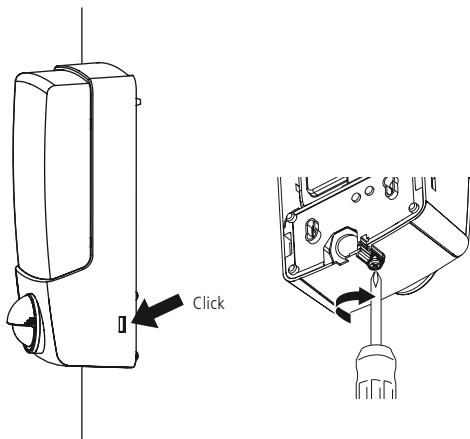
**B****C**

Open rubber
plug



Close the rubber plug after
tighten the screws.







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 to 3 or any difficulty in the first year telephone our 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.

For assistance with the product please contact:

HELPLINE
020 8450 0515

or email helpline@timeguard.com



For a product brochure please contact:

Timeguard Limited.

Victory Park, 400 Edgware Road,

London NW2 6ND

Sales Office: 020 8452 1112

or email csc@timeguard.com

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