

CHALLENGER

YOUR PARTNER IN A MORE SECURE FUTURE

BULKHEAD LIGHT WITH PIR SENSOR MODEL: SL11

INTRODUCTION

The bulkhead fitting incorporates a PIR (Passive Infra Red) sensing device which continuously scans a preset operating zone and immediately switches the lamp on when it detects movement in that area (depend on lux level).

This means that whenever movement is detected within the range of the sensor the lamp will switch on automatically to illuminate pathways, steps, patios, porches, or whatever area you have selected to light for reasons of safety, convenience or security.

While there is movement within range of the unit the lamp will remain on.

WHERE TO FIT YOUR BULKHEAD LIGHT

To achieve best results, we suggest you take into account the following points:

Fix to a solid surface free from vibration

Ideally the bulkhead light should be mounted 1.8 to 2.5 meters (6 to 8ft) above the area to be scanned (refer Fig.1A).

To avoid damage to unit-do not aim the sensor towards the sun.

To avoid nuisance triggering,

the sensor should be directed away from trees, shrubs and flues, heat extraction units, also keep away from the area of strong electromagnetic fields.

Do not aim the sensor towards reflective surfaces such

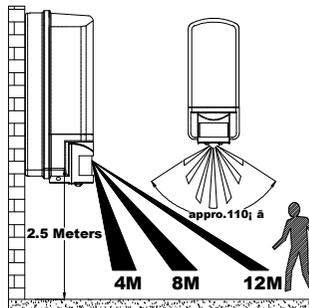


Fig. 1(A) DETECTION AREA

as smooth white walls, swimming pools, etc. The PIR Sensor scanning specifications (approximately 12 meters at approx. 110°-horizontal) may vary slightly depending on the mounting height and location. The detection range of the unit may also alter with temperature change. Before selecting a place to install your fitting you should note that movement across the sensor scan area is more effective than movement directly toward or away from the sensor (refer Fig.1B). If movement is made walking directly towards or away from the sensor and not across, the apparent detection range will be substantially reduced. (refer Fig. 1C)

INSTALLATION

Installation the bulkhead light, please referring to the Fig.2

1. Installation by a licensed electrician and according to IEC wiring Regulation.

2. Switch power off at the meter box and ensure that there is no power to the lamp.

3. Remove the **Lampshade**

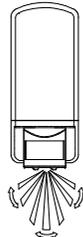


Fig. 1(B) GOOD

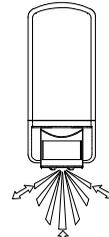


Fig. 1(C) NOT GOOD

4. Unscrew the **Screw (A)** and remove the **Transparent Plate**.

5. Mark the mounting hole positions onto the wall. Drill and plug the wall at the marked positions. Screw the lamp body to wall with suitable **Mounting Screws** (supplied)

6. Connecting the main power wires to the **Terminal Block** (see the relative symbols—Fig.2), the **Cable** must pass through the **Wiring Rubber Gasket**.

7. Insert the Max. 60Watt / 230V~ 50Hz incandescent Bulb into the Lamp-holder (E27) Not supplied.

8. Re-screw **Transparent Plate**.

9. Re-fit the **Lampshade**

10. After finish the mounting, you can adjust the detection area and working state of PIR Sensor

NOTES FOR ELECTRICIAN-- Installation by a licensed electrician

1) The Bulkhead Light should be wired to its own lamp switch. Do not interconnect with other lights on the same switch.

2) Do not connect to Dimmer.

UNDERSTANDING THE CONTROLS

---- Referring to Fig. (3)

ADJUSTING THE

DURATION TIME: The length of time that remains switched on after activation can be adjusted from (10±5) seconds to (4±1) minutes. Rotating the TIME knob from (+) to (-) will reduce the duration time.

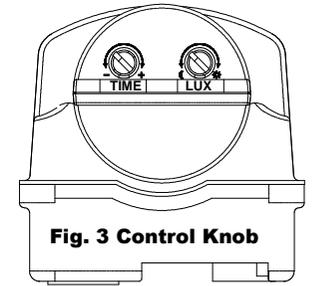


Fig. 3 Control Knob

Note: Once the light has been triggered by the PIR sensor any subsequent detection will start the timed period again from the beginning.

ADJUSTING THE LUX CONTROL LEVEL: The Lux control module has a built-in sensing device (photocell) that detects daylight and darkness. The (☀) position denotes that the bulkhead light can work at day and night, and the (☾) position only work at night. You can set to operate the unit at the desired level by adjusting the LUX knob.

SETTING THE CONTROLS

1. Put the Lux control knob to light (☀) position, turn the wall switch on and wait half a minute for the control circuit to stabilize. At this stage ensure that the TIME control knob is set at minimum duration time (-) position. The bulkhead light will now switch on and remain on for about 30 seconds (within 60 seconds).

2. Direct the sensor toward the desired area to be scanned by adjusting the PIR sensor.

3. Have another person move across the center of the area to be scanned and slowly adjust the PIR sensor until the unit sensors the presence of the moving person, causing the lamp to switch on. (refer Fig. 1B).

4. Adjust time control to required setting.

5. To set the lux level at which the lamp will automatically switch "on" at night, please turn the LUX control knob from daylight to night. If the lamp is required to switch on earlier, e.g. Dusk, wait for the desired environment light level, then slowly turn the LUX control knob towards the daylight (☀) while someone walks across the center of the area to be

detected. When the lamp switches on, release the LUX control knob. You may need to make further adjustments to achieve your ideal light level setting.

Important: 1) To avoid dust build-up and ensure correct operation of the fitting, wipe the sensor lens lightly with a damp cloth every 3 months. But never modify the unit, there are no any user serviceable parts inside. 2) Before touching the lamp or replacement of the bulb, please switch off first and then let it cool 3) Any replacement of bulb, please Switch power off.

■ SPECIFICATIONS

Voltage: 230 V~ 50 Hz

Wattage: Max. 60 Watt for incandescent (lamp not supplied)

Detection range: Approx.110° (horizontal), Max. 12 meters adjustable and sensitivity adjustable

Duration time: from (10±5) seconds to (4±1) minutes adjustable

LUX control level: from daylight to night adjustable

Weatherproof: IP44

Class I protection

Fuse: Ø5 X 20 mm, 6.3A/250VAC

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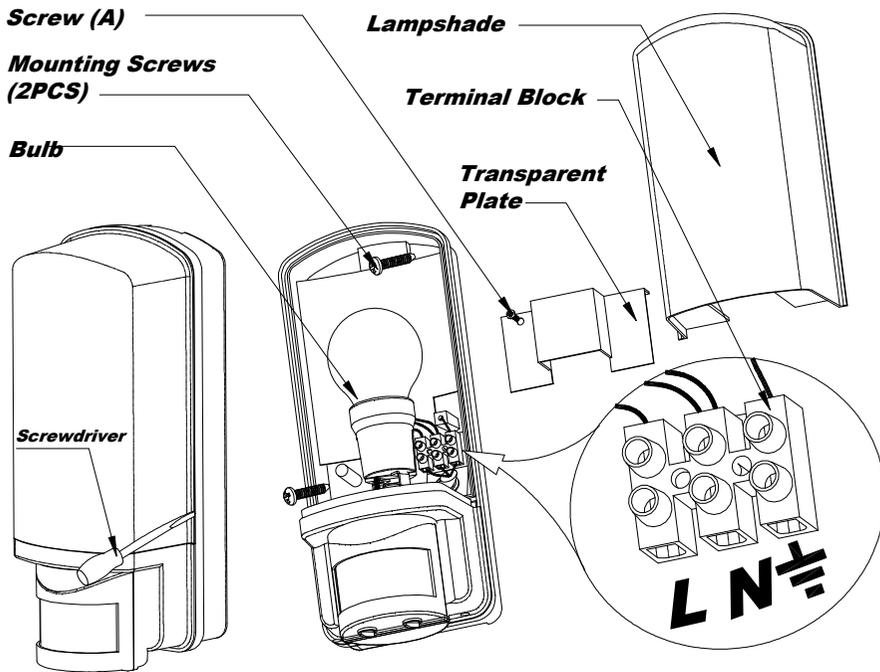


Fig. 2 Mounting and Wiring to Terminal

Trouble shooting and user hints

PROBLEM	POSSIBLE CAUSE	SUGGESTED REMEDY
Lamp does not switch on when there is movement in the detection area.	1. no mains voltage	Check all connections, and Fuses/switches
	2. near by lighting is too bright.	Redirect sensor or relocate the unit
	3. controls set incorrectly	Readjust sensor angle or control knob
	4. sensor positioned in wrong direction	Redirect sensor and/or adjust direction
Lamp switches on for no apparent reason (false trigger)	1. heat sources such as air-con, Vents, heater flues, barbecues, other outside lighting, moving cars are activating sensor.	Away from heat sources.
	2. animals/birds e.g. possums or domestic animals.	Redirecting sensor head may help.
	3. interference from on/off switching of electric fans or lights on the same circuit as your security floodlight. (this problem does not always occur but a faulty switch or noisy fluorescent light may cause the security floodlight to switch on.)	Should the false triggering become, troublesome, consider: a) replacing a faulty switch. b) Replacing noisy fluorescent Tubes and/or starters. c) connecting the global lamp to a separate circuit.(in most cases where one or more of the above suggestions have been carried out, false triggering has been reduced.)
	4. reflection from swimming pool, or reflective surface.	Redirect sensor.
Light remains on.	1. continuously false triggered	Redirecting sensor head may help
	2. time is set too long.	Reduce time
Light switches on during daylight hours.	LUX control knob is set to daylight position.	Turn the LUX control knob to desired light level setting.
When setting controls in daylight the detection distance becomes shorter.	1.interference by sunlight	Re-test at night.