

## EVENTUALLY, YOU MAY WANT TO REPLACE THIS PRODUCT:

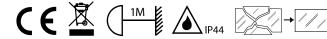
Regulations require the recycling of Waste from Electrical and Electronic Equipment (European "WEEE Directive" effective August 2005—UK WEEE Regulations effective 2nd January 2007). Environment Agency Registered Producer: WEE/GA0248QZ.

WHEN YOUR PRODUCT COMES TO THE END OF ITS LIFE OR YOU CHOOSE TO REPLACE IT, PLEASE RECYCLE IT WHERE FACILITIES EXIST - DO NOT DISPOSE WITH HOUSEHOLD WASTE.

## **IFYOUEXPERIENCE PROBLEMS:**

If you believe your product is defective, please return it to the place where you bought it. Our Technical Team will gladly advise on any Eterna Lighting product, but may not be able to give specific instructions regarding individual installations.

Issue 2013





# **INSTALLATION INSTRUCTIONS**

# A guide for qualified electricians



# PIRF120BK / PIRF120WH / PIRF400BK / PIRF400WH

## 120W / 400W 180° PIR Halogen Floodlights

These instructions are provided as a guideline to assist you. PLEASE READ THESE INSTRUCTIONS BEFORE USING YOUR NEW FITTING PLEASE RETAIN FOR FUTURE REFERENCE

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### INTRODUCTION:

The floodlight incorporates a PIR (Passive Infra Red) sensing device which continuously scans a preset operating zone and immediately switches the light on when it detects movement in that area.

This means that whenever movement is detected within the range of the sensor the light will switch on automatically to illuminate the area you have selected to light. While there is movement within range of the unit the light will remain on.

### READ THIS FIRST:

Check the pack and make sure you have all of the parts listed on the front of this booklet. If not, contact the outlet where you bought this product.

This product contains glass, care must be taken when assembling, fitting or handling to prevent personal injury or damage to the product.

This product must be installed by a competent person in accordance with the current building and IEE wiring regulations.

As the buyer, installer and/or user of this product it is your own responsibility to ensure that this fitting is fit for the purpose for which you have intended it. Eterna Lighting cannot accept any liability for loss, damage or premature failure resulting from inappropriate use.

This product is designed and constructed according to the principles of the appropriate British Standard and is intended for normal domestic service. Using this fitting in any other environments may result in a shortened working life.

Switch off the mains before commencing installation and remove the appropriate circuit fuse or lock off MCB.

When replacing the lamp, do not touch with bare fingers, grip the lamp with a tissue or clean soft cloth.

This unit is suitable for outdoor use.

This product is designed for permanent connection to fixed wiring: this must be a suitable circuit (protected with the appropriate MCB or fuse).

Before making fixing hole(s), check that there are no obstructions hidden beneath the mounting surface such as pipes or cables.

Make sure that the fixings are strong enough to support the considerable weight of the fitting and hold it rigidly.

The lamp must be positioned so that there is at least 1M between the bulb and any illuminated surface.

When making connections ensure that the terminals are tightened securely and that no strands of wire protrude. Check that the terminals are tightened onto the bared conductors and not onto any insulation. This product must be connected to earth termination.

#### WARNING: This product becomes hot!

This product is not intended to be used by children and persons with sensory, physical and/or mental impairments that would prevent them from using it safely.

# IMPORTANT - Always switch off the mains power before changing the lamp.

You are advised at every stage of your installation to double-check any electrical connections you have made. After you have completed your installation there are electrical tests that should be carried out, these tests are specified in the current IEE wiring and building regulations.

#### GUE/ANING:

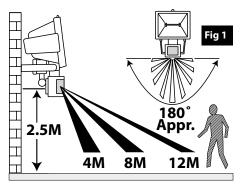
- To avoid dust build-up and ensure proper functioning of the floodlight, please wipe the sensor lens lightly with a damp cloth every 3 months.
- Disconnect the power and clean the exterior only of this fitting with a moist (not wet) cloth.
- Do not use any chemical or abrasive cleaners.

## WHERE TO FIT YOUR PIR FLOODLIGHTS

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

Do not mount on a surface that has vibration.

Ideally the PIR flood light should be mounted 1.8 to 2.5 metres (6 to 8ft) above the area to be scanned (refer to fig.1 below).



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

Avoid positioning the sensor unit adjacent to a bright light source which may prevent the unit from operating when the lux control is set to operate in dark conditions. Avoid nuisance / false triggering by directing sensor away from:

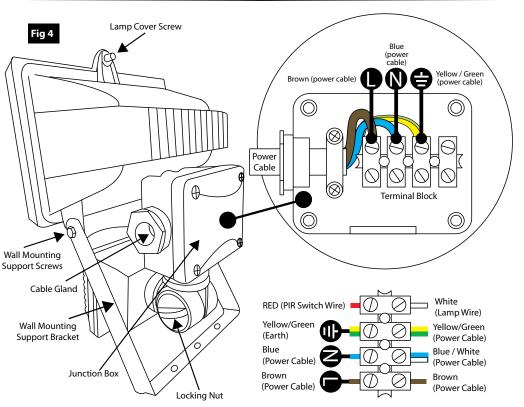
- Trees and shrubs
- Reflective surfaces such as smooth white walls
- Swimming pools
- Heat sources such as boiler flues

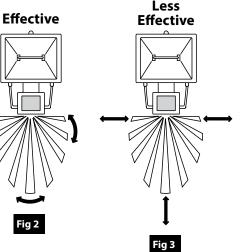
The PIR sensor scanning specifications (approximately 12 metres at 180°) may vary slightly depending on the mounting height and location.

The detection range of the unit may also alter with temperature change. Before selecting a place to install your PIR floodlight you should note that movement across the scan area is more effective than movement directly towards or away from the sensor. (Refer fig.2).

If movement is made walking directly towards or away from the sensor and not across the sensor the apparent detection range will be substantially reduced (refer fig. 3).







## INSTALLATION:

When installing the PIR flood light refer to Fig.4 on the previous page.

- 01) Switch off the mains before commencing installation.
- 02) Remove the wall bracket from the fitting by removing the screws and nuts from each side. Take care not to lose any of these parts as the nuts are not captive within the fitting see fig.4.
- 03) Using the bracket as a template mark and then drill the appropriate fixing holes.
- 04) Secure the bracket with suitable fixings (not supplied).
- 05) Unscrew the junction box cover screws and remove cover, unscrew the gland nut and loosen the cable restraint clamp. Connect the power cable (not included) to the terminal block, see fig. 4. Ensure the cable passes through the cable gland and gasket.
- 06) Re-fit the terminal block, tighten the cable restraint clamp, tighten the gland nut and re-fit the cover.
- 07) Fix housing back into wall mounting bracket and secure with screws, washers and nuts previously removed.
- 08) Unscrew the lamp cover screw and insert the lamp making sure it is correctly seated in the lampholder (do not touch the bulb with bare hands use a soft cloth) then re-fix the cover.
- 09) Adjust the direction of the floodlight and tighten the head fixings ensuring that you have used the lock washers.
- 10) Restore mains power.
- 11) Adjust the PIR sensor floodlight to the desired settings.

#### IMPORTANT

Loosen the lock nuts and screws on sensor and floodlight before making any adjustments.

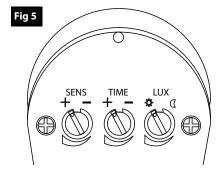
#### UNDERSTANDING THE CONTROLS:

#### (Referring to Fig.5 above)

#### ADJUSTING THE DURATION TIME:

The length of time that unit remains switched on after activation can be adjusted from  $(5\pm1)$  seconds to  $(8\pm1)$  minutes approximately. Rotating the TIME knob from (+) to (-) will reduce the duration time.

**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 (C) position denotes that the floodlights can work at day and night, and the (C) position only work at night. You can set to operate the unit at the desired level by adjusting the LUX knob.

#### ADJUSTING THE SENSITIVITY:

The sensitivity means the maximum distance which PIR sensor can be triggered by movement - turning the SENS knob from (+) to (-) will decrease the sensitivity.

#### SETTING THE CONTROLS: WALK TEST

Turn the Lux control knob to light (۞) ensure that the TIME control knob is set at minimum duration time (-) position (rotating the TIME knob anti-clockwise to stop-position). The floodlight will now switch on and remain on for about 5-15 seconds after each detection.

01) Direct the sensor toward the desired area to be scanned by adjusting the swivel joint on the sensor arm.

#### Important: loosen the lock nuts and screws on sensor and floodlight before making any adjustments.

02) Have another person move across the center of the area to be scanned and slowly adjust the angle of the sensor arm until the unit senses the presence of the moving person, causing the floodlight to switch on (refer to Fig. 2).

03) Adjust time control to required setting.

04) To set the light level at which the floodlight will automatically switch "on" at night, turn the LUX control knob from daylight (⇔) to night (ℂ). If the floodlight is required to switch on earlier, e.g. dusk, wait for the desired light level, then slowly turn the LUX control knob towards daylight while someone walks across the center of the area to be detected. When the floodlight switches on, release the LUX control knob. You may need to make further adjustments to achieve your ideal light level setting.

### TROUBLESHOOTING AND USER HINTS:

Note: all passive infra red detectors are more sensitive in cold and dry weather than warm and wet weather.

PROBLEM	POSSIBLE CAUSE	SUGGESTED REMEDY	
Light does not switch on when there is movement in the detection area.	1. No mains voltage	Check all connections, and MCB Fuses / switches	
	2. Nearby lighting is too bright	Redirect sensor or relocate the unit	
	3. Controls set incorrectly	Readjust sensor angle or control knob	
	4. Lamp blown	Check lamp functions and replace if necessary	
	5. Lamp not fitted correctly	Make sure the lamp is correctly seated in the lampholder	
	6. Wired incorrectly	Check wiring and confirm its wired as per the wiring diagram	
	7. Sensor positioned in wrong direction	Adjust angle and direction of PIR for best results walk across beam	
Light switches on for no apparent reason (false trigger)	1. Heat from lamp body activating sensor	Adjust PIR sensor or floodlight to allow a minimum gap of 40mm between floodlight body and sensor head	
	<ol> <li>Heat sources such as air-con, vents, heaters, flues, other outside lighting, moving cars trees or shrubs are activating sensor</li> </ol>	Adjust direction of sensor head away from these sources. Reduce sensitivity (if available)	
	3. Animals / birds activating sensor	Redirecting sensor head may help (Reduce sensitvity settings)	
	<ol> <li>Interference from on/off switching of electric fans or lights on the same circuit as your security floodlight.</li> <li>(This problem does not always occur but a faulty switch or noisy fluorescent light may cause the security floodlight to switch on)</li> </ol>	<ul> <li>Should the false triggering become, troublesome, consider:</li> <li>(a) Replacing a faulty switch</li> <li>(b) Replacing noisy fluorescent tubes and/or starters</li> <li>(c) Connecting the floodlight to a separate circuit (in most cases where one or more of the above suggestions have been carried out, false triggering has been reduced)</li> </ul>	
	<ol> <li>Reflection from swimming pool, or reflective surface such as smooth white walls</li> </ol>	Redirect sensor	
Light remains on	1. Continuously false triggered	Redirecting sensor head may help	
Light remains on	2. Time is set too long	Reduce time	
Light remains on at nighttime	Possible heat source in detection zone	Cover PIR sensor lens with a thick cloth, if the light turns off check detection area for heat or reflective source, reposition head and decrease the sensitivity setting if this control is available	
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 the lux controls in daylight the detection distance becomes shorter	Interference by sunlight	Re-test at night	

## LAMP REPLACEMENT:

### For breakage information visit: www.eterna-lighting.co.uk

- Switch off the electricity at the mains.
- Release front cover.
- Remove and replace lamp making sure it sits correctly in the lampholder. Do not use bare fingers.
- Replace front safety glass ensuring gasket is fitted correctly and secure with single screw.
- Restore power.

## **REPLACEMENT LAMP TYPE:**

Wattage:	120W / 400W	
Supply Voltage:	240V	
Type:	R7s Linear Halogen	

• Reco 1.0m • Prote

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SPECIFICATIONS:	PIR120BK//WH	PIR400BK//WH
Voltage	240V	240V
Frequency	50Hz	50Hz
Nominal lumens	2218 lm	8550 lm
Wattage	120W	400W
Nominal life time of the lamp	2,000 hrs	2,000 hrs
Number of switching cycles before premature lamp failure	8,000	8,000
Colour temperature	2800K	2800K
Warm-up time up to 60 % of the full light output	Instant full light	Instant full light
Dimmable	Yes	Yes
Lamp dimensions (mm)	78 x 10	118 x 10
Cap type	R7s	R7s

## SPECIFICATIONS:

- Detection range: Max. 12M at approx. 180° scan
- Duration time adjustment: (5-10) seconds to (8±1) minutes
- Detection circuitry: Passive Infra-Red (PIR)
- Weatherproof: IP44
- Power required: 230V~ 50 Hz
- Maximum load: 120W R7s Linear Halogen (PIRF120BK / PIRF120WH)
- Maximum load: 400W R7s Linear Halogen (PIRF400BK / PIRF400WH)
- Recommended power supply cable: H05RN-F 3G 1.0mm<sup>2</sup>
- Protection: Class I
- Tempered Glass