SAFETY AND INSTALLATION INSTRUCTIONS

Model: **FL124BPIR**

24W Low Energy Floodlight with PIR

IMPORTANT! Please read these instructions before installing your new fitting. Please retain for future reference.

Pack Contents

Floodlight	x 1
24W Compact Fluorescent Lamp	x 1

General Information, Safety and Installation Instructions

Introduction

Your new floodlight incorporates a PIR (Passive Infra Red) sensing device which is sensitive to movement of warm objects within a preset operating zone and immediately switches the light on when movement is detected.

This makes this fitting ideal for automatically illuminating 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 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 light fitting must be installed by a competent person in accordance with the Building Regulations making reference to the current edition of the IEE Wiring Regulations (BS7671). The Building Regulations may be obtained from HMSO or viewed and downloaded from www.communities.gov.uk following the link for Building 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.

If in any doubt, consult a qualified electrician.

The lamps (bulbs/tubes) supplied with this fitting are consumable parts and therefore may be outside of any warranty offered.

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

When working at heights, please use a suitable platform.

Disconnect the fitting from the electrical supply before flash or high voltage testing.

Suitable for indoor and outdoor use.

This product is suitable for installation on surfaces with normal flammability e.g. wood, plasterboard, and masonry. It is not suitable for use on highly flammable surfaces (e.g. polystyrene, textiles).

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

The chosen location of your new fitting should allow for the product to be securely mounted and safely connected to the mains supply (lighting circuit).

When choosing the location for your new fitting, ensure that the fixings will be anchored in a solid surface e.g. concrete, brick or a joist—do not fix directly onto panelling, cladding, plasterboard etc.

If the location of your new fitting requires the provision of a new electrical supply, the supply must conform with the requirements of the Building Regulations making reference to the current edition of the IEE Wiring Regulations (BS7671).

This product is designed for permanent connection to fixed wiring: this should be either a suitable lighting circuit (protected with a 5 or 6 Amp MCB or fuse) or a fused spur (with a 3 Amp fuse) via a fused connection unit.

We recommend that the supply incorporates a switch for ease of operation.

Make connections to the electrical supply in accordance with the following code:
Live - Brown or Red
Neutral - Blue or Black
Earth - Green and Yellow

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.

IMPORTANT - Always switch off at the mains before changing the lamp.

Do not mount on a surface that is likely to vibrate.

For maximum detection area, the light should be mounted 1.8 to 2.5 meters (6 to 8ft) above the detection area (refer Fig.1A). The floodlight scanning specifications (approximately 12 meters at 180°) may vary slightly depending on the mounting height and location.
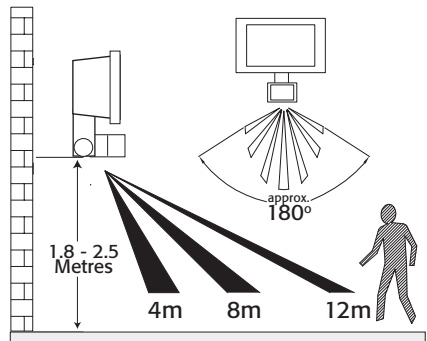

Fig. 1(A) Detection Area

Installation Instructions and Care

The detection range of the unit may alter with changes in ambient temperature.

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

To avoid nuisance triggering, the sensor should be directed away from heat sources such as barbecues, air-conditioners, other outside lighting, moving cars and flue vents.

Do not connect to circuits with other light fittings or appliances such as large fans, washing machines, fluorescent lights etc. that may cause false triggering through spikes generated in the mains supply.

Do not aim towards reflective surfaces such as smooth white walls, swimming pools, etc.

Before selecting a place to install your floodlight you should note that movement across the scan area is more effective than movement directly towards or away from the sensor (refer Fig.1B). When walking directly towards or away from the sensor rather than across, the apparent detection range will be substantially reduced (refer Fig. 1C).
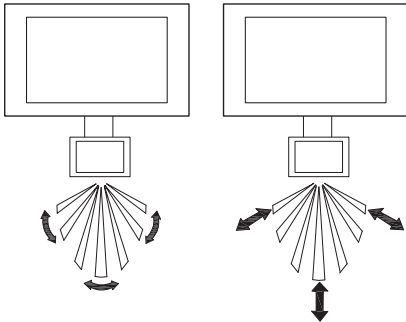

Fig. 1(B) Good   Fig. 1(C) Bad

Do not attempt to modify the light or PIR sensor unit, there are no user serviceable parts inside.

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 Wiring Regulations (BS7671) referred to in the Building Regulations. If in doubt, consult a qualified electrician.
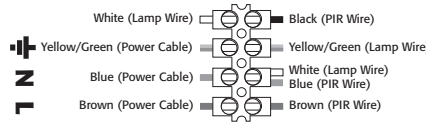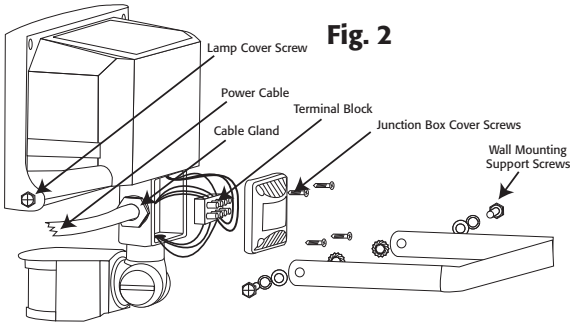
Installation

1. Choose the location for your new floodlight giving consideration to all of the conditions listed above.

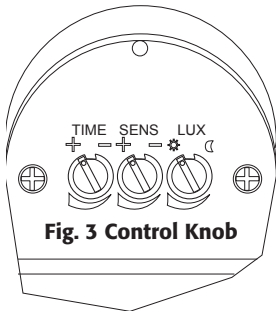2. Loosen the screws at each end of the fixing bracket and remove it. Note the position of each of the washers, it is important to fit them in the correct order (see Fig. 2)

3. Using the fixing strap as a template, mark the position for the fixing holes on your mounting surface.

4. Prepare your mounting surface as appropriate for your chosen fixings (not supplied). Use a spirit level to ensure the fitting will be level.

5. Secure the strap in place.

6. Fit the floodlight back onto the fixing strap and replace the screws.

7. Before tightening the screws at the ends of the fixing strap, adjust the position of the floodlight to give the desired area of illumination.

8. Tighten the screws to lock your floodlight in position.

9. Undo the four screws in the connection box cover and remove it, take care not to lose any of the screws or the sealing gasket.

10. Undo the screws and lift off the cable clamp.

11. Undo and remove the cable entry nut and gland.

12. If necessary, pierce the gland making a hole just large enough for your supply cable to pass through so that the gland makes a tight seal around it.

13. Thread your supply cable through the nut and gland and into the connection box.

14. Make the connections to your mains supply as described in the "Read this first" section.

15. Replace the cable grip and connection box cover ensuring that the cable is held securely and the gasket is correctly positioned.

16. Using a cross-headed screwdriver, undo the screws that secure the diffuser and allow to hang down.

17. Fit the fluorescent lamp by pressing straight into the lampholder.

18. Replace the diffuser and tighten the screws making sure that the waterproof gasket is correctly positioned and compressed.

19. Restore the power and switch on.

Installation Instructions & Care

Fig. 2

Lamp Cover Screw
Power Cable
Cable Gland
Terminal Block
Junction Box Cover Screws
Wall Mounting Support Screws

White (Lamp Wire) — Black (PIR Wire)
Yellow/Green (Power Cable) — Yellow/Green (Lamp Wire)
Blue (Power Cable) — White (Lamp Wire)
Blue (PIR Wire)
Brown (Power Cable) — Brown (PIR Wire)

Understanding the Controls (Refer to the Fig.3)

TIME   SENS   LUX

Fig. 3 Control Knob

Adjusting the duration time: The length of time that the light remains switched on after activation can be adjusted from (10±5) seconds to (4±1) minutes. Rotating the TIME knob anti-clockwise 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. Rotating the LUX knob clockwise is from light (☼) to dark (☽). The (☼) position denotes that the Floodlights 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.

Adjusting the sensitivity: The sensitivity means the maximum distance at which PIR sensor can be triggered. Turning the SENS knob anti-clockwise will decrease the sensitivity

Setting the controls: Turn 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 (Rotating the TIME knob anti-clockwise to stop-position). The floodlight will now switch on and remain on for about 30 seconds (within 60 seconds).

1. 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.

2. Have another person move across the centre of the area to be scanned and slowly adjust the angle of the sensor arm until the unit sensors the presence of the moving person, causing the floodlight to switch on (refer Fig. 1B).

3. Adjust time control to required setting.

4. To set the light level at which the floodlight will automatically switch "on" at night, turn the LUX control knob from daylight (☼) to night (☽). 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 centre 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

Specifications

Detection Range: Max. 12 meters at approx. 180° scan (see notes above)
Duration Time Adjustment: (10±5) secs to (4±1) mins
Detection Circuitry: Passive Infra-Red (PIR)
4W Consumption (sensor head only)
Weatherproof: IP44
Power Required: 220-240V~ 50 Hz
Maximum Load: E27;1x24W CFL Energy saving lamp
Recommended power supply cable: H05RN-F 3G 1.0mm2
Protection: Class I
Unit Dimension: 222(L) x 133(W) x 234(H) mm

Safety Markings

IP44

Installation Instructions & Care

Cleaning

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.

Lamp Replacement

1. Switch off the electricity at the mains.

2. Using a cross-headed screwdriver, loosen the screws and lift off the diffuser.

3. Remove the lamp. Pull directly out of lampholder, do not twist.

4. Insert new lamp.

5. Replace the diffuser and secure in position making sure that the gasket is correctly positioned and compressed.

6. Restore the power and switch on.

Replacement Lamp Type

Wattage: 24W
Type: 24W ES Helical CFLi

This fitting is designed for low energy compact fluorescent lamps, do not use incandescent or halogen lamps.

Trouble Shooting & User Hints

Problem	Possible Cause	Suggested Solutions
Light does not switch on when there is movement in the detection area	1. No mains voltage 2. Bulb - faulty/missing 3. Light nearby is too bright 4. Controls set incorrectly 5. Sensor postioned in wrong direction	• Check all connections, fuses and switches • Check. Replace • Redirect sensor or relocate the unit • Readjust sensor angle or control knob • Redirect sensor and/or adjust
Lamp 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 40mm between floodlight body and sensor head
	2. Heat sources i.e; air-con, vents, heater flues, bbq's, outside light, moving cars can activate sensor	• Adjust direction of sensor head away from these sources
	3. Animals or birds e.g. possums or domestic animals	• Redirecting sensor may help
	4. Interference from on/off switching of electric fans, 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/starters (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)
	5. Reflection from swimming pool or reflective surface	• Relocate the fitting
Light remains on	1. Continuously false triggered 2. Time to set too long	• Redirecting sensor head may help • Reduce time
Light switches on during daylight hours	1. LUX control knob is set to daylight position	• Turn the LUX control knob to desired light level setting
When setting lux controls in daylight the detection distance becomes shorter	1. Interference by sunlight	• Re-test at night

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

Eventually, you may want to replace this light fitting

When your light fitting comes to the end of its life or you choose to update or upgrade it by replacing it, please do not dispose of it with your normal household waste, please recycle where facilities exist. When you need to dispose of this fitting, check with your retailer or local authority for suitable options. New 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

If your light is defective or develops a fault, please return it to the place where you bought it. You can call our Helpline for advice. The Helpline will gladly give advice on any aspect of any Eterna Lighting product but may not be able to give specific instructions regarding individual installations.

If in doubt, consult a qualified electrician.

Help Line
Tel: 01933 673 144
Fax: 01933 678 083
Email: sales@eterna-lighting.co.uk
For all other information visit our website www.eterna-lighting.co.uk