Eterna

Everyday Lighting For Professionals

INSTALLATION INSTRUCTIONS

A guide for qualified electricians

Pack contents:
1 x Stand-alone PIR sensor
1 x Corner mounting bracket
1 x Fixing pack

Model:

EX360PIRWH

IP44 External 360° PIR Detector

These instructions are provided as a guideline to assist you.

PLEASE READ THESE INSTRUCTIONS BEFORE INSTALLATION AND RETAIN FOR FUTURE REFERENCE

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.

CLEANING:

To avoid dust build-up and ensure proper functioning of the PIR sensor, please wipe the sensor lens lightly with a dry cloth every 3 months.

Do not use any chemical or abrasive cleaners.

IF YOU EXPERIENCE 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.

IP44

Email: sales@eterna-lighting.co.uk / technical@eterna-lighting.co.uk

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Visit our website: **www.eterna-lighting.co.uk**

Made in China

SPECIFICATION:

- Detection range: Approx. 12 metres at 240° (horizontal) and 130° (vertical)
- Duration time: from 10(±5) seconds up to 4(±1) minutes adjustable
- Weatherproof: IP44
- Voltage: 230-240VAC~50Hz
- Fuse Rating: 6.3A/250VAC • 5x20mm
- Wattage:
  Max. 1000W incandescent lamp (resistive load)
  Max. 300W fluorescent lamp (inductive load)
  Max. 150W LED (no more than 8 lights)
- Lux Control Level: from daylight to night adjustable

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 must be installed by a qualified electrician in accordance with the current building and IEE wiring regulations.

The installer must ensure that this fitting is suitable for the purpose intended. Eterna Lighting Ltd cannot accept any liability for loss, damage or premature failure resulting from inappropriate use.

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.

This fitting is double insulated and does not require an earth (however there is an earth post for earth continuity).

INTRODUCTION:

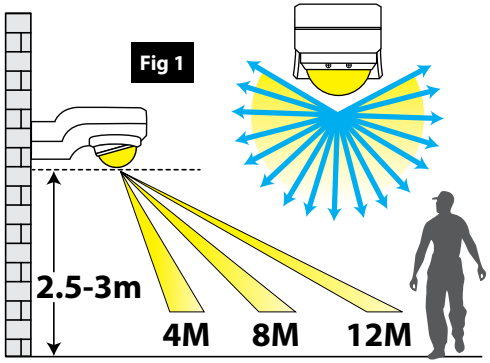
The PIR (passive Infrared) sensing device continuously scans a preset operating zone and immediately switches the load-light on when it detects movement in that area. While there is movement within range of the unit the load light will remain on.

WHERE TO FIT YOUR PIR SENSOR:

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

Do not mount on a surface that suffers vibration.

The PIR sensor should be mounted 2.5 to 3 metres above the area to be scanned (refer to Fig. 1 below).



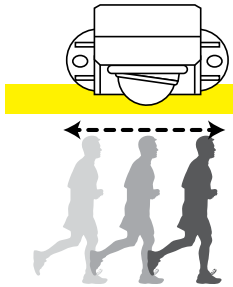
To avoid damage to the unit do not aim the sensor eyeball towards the sun.

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 and ponds
- Heat sources such as boiler flues

The PIR sensor detection range may vary slightly depending on the mounting height, location and temperature changes.

For optimal performance ensure your sensor is installed where pedestrian traffic crosses the detection zone (refer to Fig. 2 opposite). Note that movement directly towards or away from the sensor is less effective in triggering the sensor. (refer to Fig. 3 opposite).



INSTALLATION:

When installing the PIR sensor please refer to Fig. 4 below.

01) Switch off the mains before commencing installation.

02) Unscrew the bottom screw and remove back plate.

03) Using back plate as a template to mark the mounting surface.

04) Drill and plug the fixing holes.

05) Pass both the feed and load cables through the rubber grommet in the back plate.

06) Fix the back plate to the mounting surface with the screws supplied, noting the mounting direction (indicator on plastic back plate) ⇧.

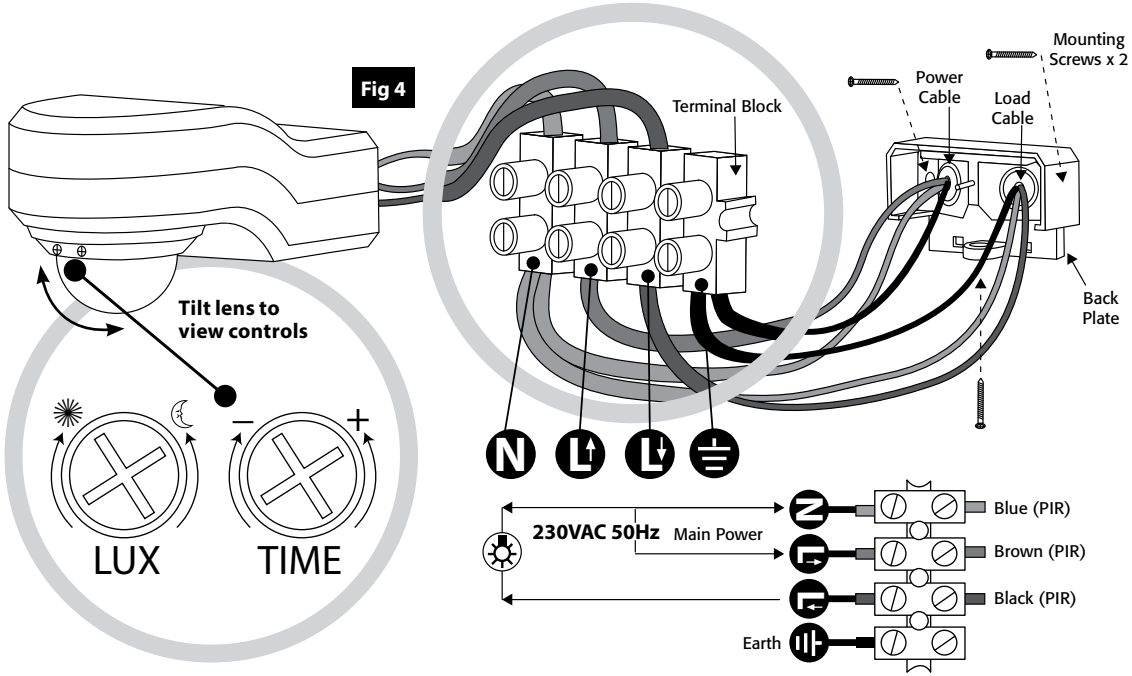
07) Connect the main cable and load cable to the terminal block (see Fig. 4 below)
(Cable for 6A/230VAC: 3 cores not less than 1.5mm² conducting cross-sectional area, not included).

08) Refit the terminal block.

09) Fit the body to the back cover and secure using screw.

10) Restore mains power.

11) Adjust the PIR sensor to desired working requirements.



UNDERSTANDING THE CONTROLS:

Referring to Fig. 5 below.

ADJUSTING THE DURATION TIME:
The length of time that the load-light 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 time duration.

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

ADJUSTING THE LUX CONTROL:
The lux control module has a built-in photocell which detects daylight.
The (☼)position denotes that the unit can work during day and night.
The (☾) position denotes that the unit only works at night.

You can set the PIR sensor to operate the unit at the desired dawn/dust level, by adjusting the LUX screw shown in Fig. 5 below.

SETTING THE CONTROLS:

Referring to Fig. 5 below.

1) Fully turn the LUX control screw clockwise to the sun (☼) position, turn the power on and wait 30 seconds for the control circuit to stabilise. Turn the time control screw clockwise to set at minimum duration time (-) position. The load-light will now switch on and remain on for about 30 seconds.

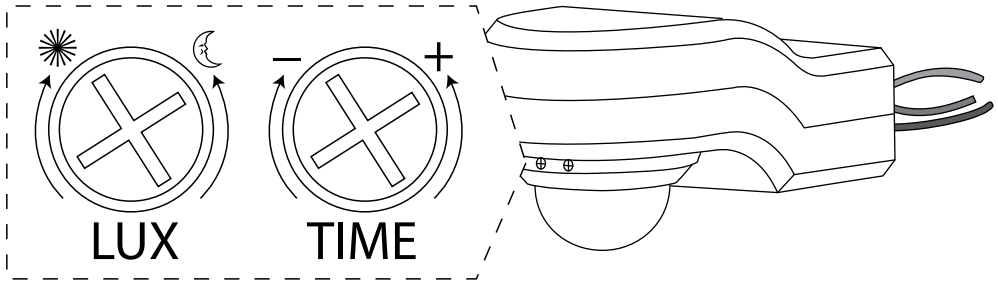
2) Direct the sensor eyeball towards the desired detection area.

3) Have another person move across the detection area and slowly adjust the angle of the sensor eyeball until the unit senses the presence of the moving person, causing the load-light to switch on.

4) Re-adjust time control to required duration setting.

5) To set the light level at which the load-light will automatically switch "on" at night, turn the LUX control screw from daylight (☼) to night (☾). If the load-light is required to switch on earlier, e. g. dusk, wait for the desired light level, then slowly turn the LUX control screw towards daylight whilst someone walks across the centre of the detection area. When the load-light switches on, release the LUX control screw. You may need to make further adjustments to achieve your ideal light level setting.

Fig 5



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
Load-light does not switch on when there is movement in the detection area	1. Nearby lighting is too bright	Redirect sensor or relocate the unit
	2. Controls set incorrectly	Readjust sensor angle or the LUX control
	3 Sensor positioned in wrong direction	Adjust angle and direction of PIR, for best results movement should cross detection beam
	4. Lamp blown on load-light	Check lamp functions and replace if necessary
	5. Lamp not fitted correctly on load-light	Make sure the lamp is correctly seated in the lampholder
	6. No mains voltage	A qualified electrician should check all connections and MCB fuses / switches
	7. Wired incorrectly	A qualified electrician should check the wiring and confirm it is wired as per the installation instructions
Load-light switches on for no apparent reason (false trigger)	1. Heat from lamp body activating sensor	A minimum gap of 40mm between floodlight body and sensor head is required
	2. Heat sources such as air-con, vents, heaters, flues, other outside lighting, moving cars trees or shrubs are activating sensor	Adjust direction of sensor head away from these sources
	3. Animals / birds activating sensor	Redirecting sensor head may help
	4. 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, a qualified electrician should review the wiring circuit and find a suitable solution
	5. Reflection from ponds or swimming pools, or other reflective surfaces such as smooth white walls	Redirect sensor
Load-light remains on	1. Continuously false triggered	Redirecting sensor head may help
	2. Time is set to long	Reduce time control screw
Load-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
Load-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