

# 180 Degree PIR Sensor



## INSTRUCTIONS

Please read carefully before installation and retain instructions for future reference.

If you are in any doubt about installing this product, consult a qualified electrician. Fittings must be installed by a competent person in accordance with current IEE Wiring Regulations (BS7671). This product should not be modified. Any modification will invalidate the warranty and may render the product unsafe.

### FUSE VALUE

The fitting can be connected to a lighting circuit protected by a 5A fuse or 6A residual current device; alternatively, it can be connected to a ring main by means of a fused connection fitted with a BS 1362 3A fuse. This product is only suitable for connection to 220 / 240V, 50 Hz supply and in accordance with Local Wiring and Building regulations. For domestic use only.

### WHAT TO DO

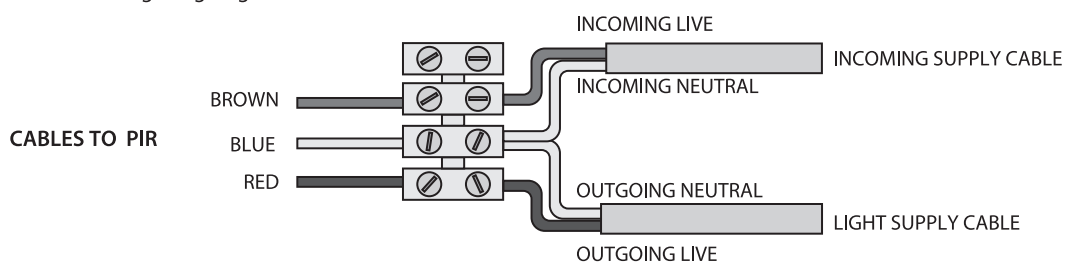
- This unit is suitable for use outdoors. It is rated IP44 (splash proof) and should not be immersed in water or exposed to water jets (e.g. pressure washers).
- The product should be wall mounted at a height of between 1.8 to 2.5 mtrs from the ground for optimum operation.
- Avoid locations where the sensor may be triggered accidentally (e.g. by trees, ponds, animals, air vents).
- If the unit is located in any area that could be triggered unnecessarily/accidentally by pedestrians/traffic/animals the sensor angle should be lowered in direction/angle and range to stop unnecessary triggering. This is done through trial and error once installed.
- PIR detectors are more reactive to movement across the sensor than towards the sensor.
- The chosen location should allow for the product to be securely mounted and safely connected to the mains supply (lighting circuit).
- The product must be securely fixed to the mounting surface using the screws supplied. The wall plugs supplied are suitable for masonry only. Other fixings (not supplied) should be obtained for cavity walls etc.

**BEFORE COMMENCING INSTALLATION ENSURE THE POWER SUPPLY IS SWITCHED OFF AT THE FUSE BOX AND FUSE IS REMOVED TO PREVENT ACCIDENTAL SWITCHING. TURNING THE LIGHT SWITCH OFF IS NOT SUFFICIENT.**

### INSTALLATION & WIRING

- Open the fitting by removing the retaining screws on the rear of the unit and gently easing the backplate away.
- Using the backplate as a template, mark the positions of the fixing holes on the mounting surface. Drill out the fixing holes, taking care not to foul any pipes or mains cables behind the mounting surface (Ensure the lampholder is to the bottom).
- **NOTE** – The dials on the PIR should be at the bottom (facing downwards)
- Run the supply cable (2 Core Cable 1.5mm<sup>2</sup>) to the PIR location.
- Pass the incoming/outgoing cable through the rubber grommet supplied. You may need to puncture the grommet with a screwdriver to access.
- Strip 8mm (approx) of insulating wire from the cable to expose the metal conductor.

Connect the incoming/outgoing wires into the terminal block as below:

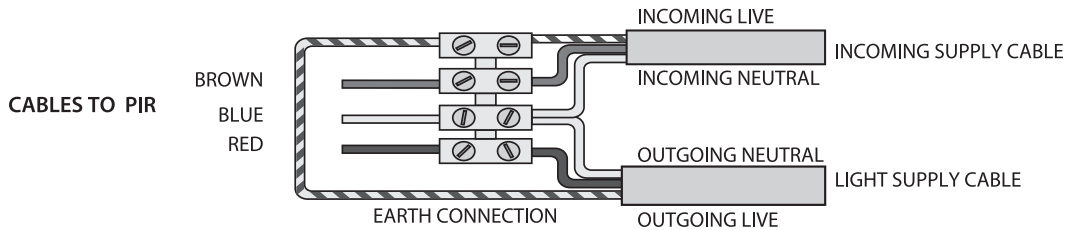


- Ensure the INCOMING 'LIVE' is opposite the BROWN wire (L).
- Ensure the INCOMING 'NEUTRAL' is opposite the BLUE wire (N)
- Ensure the OUTGOING 'LIVE' is opposite the RED wire (LS)
- Ensure the OUTGOING 'NEUTRAL' is opposite the BLUE wire (N)

: This fitting is Double Insulated and does not require an Earth lead to operate.

**Note:** Although this fitting does not require an Earth, your light fitting may do.

If the light fitting DOES require an earth you will need to wire as per the above but add the earth terminal wiring as below:



**Note:** The incoming and outgoing cable will need to be twin and earth. All Earths must be connected together to ensure earth continuity.

- Ensure that connections are tight and no loose strands of wire are left out of the connections.
- Using screws and wall plugs, secure the backplate to the mounting surface.
- Re-connect the fitting to the backplate ensuring that the rubber grommet is in position before tightening the retaining screws.

**Note:** The load on the PIR must not exceed 1200w Max (1200w Incandescent or 300w Fluorescent or 300w LED).

- Restore mains power and switch on to test.

## TESTING THE PIR

On the base of the PIR are 2 adjustment dials.

**Time (TIME)** - This dial controls how long the light remains on once activated. Turning the dial fully clockwise (to the right) will set the unit to its longest time setting (approx 7 minutes) and turning fully anti-clockwise (to the left) will set it at its shortest setting (approx 5 seconds).

**Daylight Adjustment (LUX)** - This adjusts the light sensitivity. To activate the unit during the hours of daylight turn clockwise (to the right). To activate the unit during the hours of darkness (Dusk till Dawn) turn the dial anti clockwise (to the left).

The easiest way to do this is to wait until the required exterior light level and turn the dial fully to the left. Slowly turn the dial towards the right (clockwise) until the light comes on. The sensor will now operate and detect at this light level.

The PIR is located on a movable joint. In addition to using the 2 dials, the PIR can also be adjusted and directed to allow further flexibility with regards to the detection range and angle required.

All of the above settings are sensitive and as such need to be adjusted slightly/gradually with a method of trial and error adopted to customise the PIR to your desired setting.

## PRODUCT SPECIFICATIONS

**Power Source:** 220~240V (Power Frequency: 50~60Hz).

**Rated Load:** 1200w Max (1200w Incandescent or 300w Fluorescent or 300w LED).

**Time Delay:** 5 Secs ~ 7 mins (Approx & Adjustable). **Detection Distance:** Up to 12mtrs (approx).

**Installation Height:** 1.8mtrs ~ 2.5mtrs. **Protection Class:** Class II. **Ingress Protection:** IP44.

CORE COLOUR	OLD	NEW
LIVE	Red	Brown
SWITCHED LIVE	Red, or Black with red sleeve	Brown, or Blue with brown sleeve
NEUTRAL	Black	Blue
EARTH	Bare, with green/yellow sleeve	Bare, with green/yellow sleeve (no change)
2-WAY SWITCHED LIVE	Red, blue and yellow	Brown, black and grey



If you have a product or a component within the product, which has this logo, it should not be disposed of within your household waste. Please recycle where the facility exists. Check with your Local Authority or Retailer for recycling advice.