

## TIEN IP65 PIR SENSOR LED OUTDOOR WALL

These instructions are provided for your safety.

Please read them carefully before commencing work and retain them for future reference.

**This fitting has an IP rating of IP65 and is suitable for outdoor use when connected as instructed.**

### SAFETY INFORMATION

- \* We recommend any electrical wiring in an outdoor environment is carried out by a qualified electrician. All wiring must comply with the current edition of the IEE wiring regulations and any relevant Building Regulations.
- \* If you are in any doubt consult a person competent to give advice on the installation of electrical equipment.
- \* This fitting is Class I =  $\frac{1}{\text{I}}$  and should be fitted to a lighting supply (with earth) protected by a 5 amp fuse or equivalent circuit breaker. Product should be connected to a supply protected by a 30mA RCD.
- \* This fitting is rated IP65 and is suitable for outdoor use when fitted in accordance with these instructions and IEE wiring regulations.
- \* Before installation and servicing disconnect the electricity supply at the fuse board.
- \* To avoid damage to concealed wiring during installation, establish the direction of the supply cable before drilling fixing holes.
- \* **IMPORTANT: This fitting is NOT dimmable.**
- \* The light source of this luminaire is not replaceable; when the light source reaches the end of its end of life the whole luminaire shall be replaced.  
**LED LIGHTING HEAD ON THIS FITTING IS ADJUSTABLE IN A 180 DEGREE ARC  
FOR THE BEST OPERATION OF THE FITTING WE RECOMMEND THAT THIS LIGHT IS CONNECTED TO AN INTERNAL WALL SWITCH**

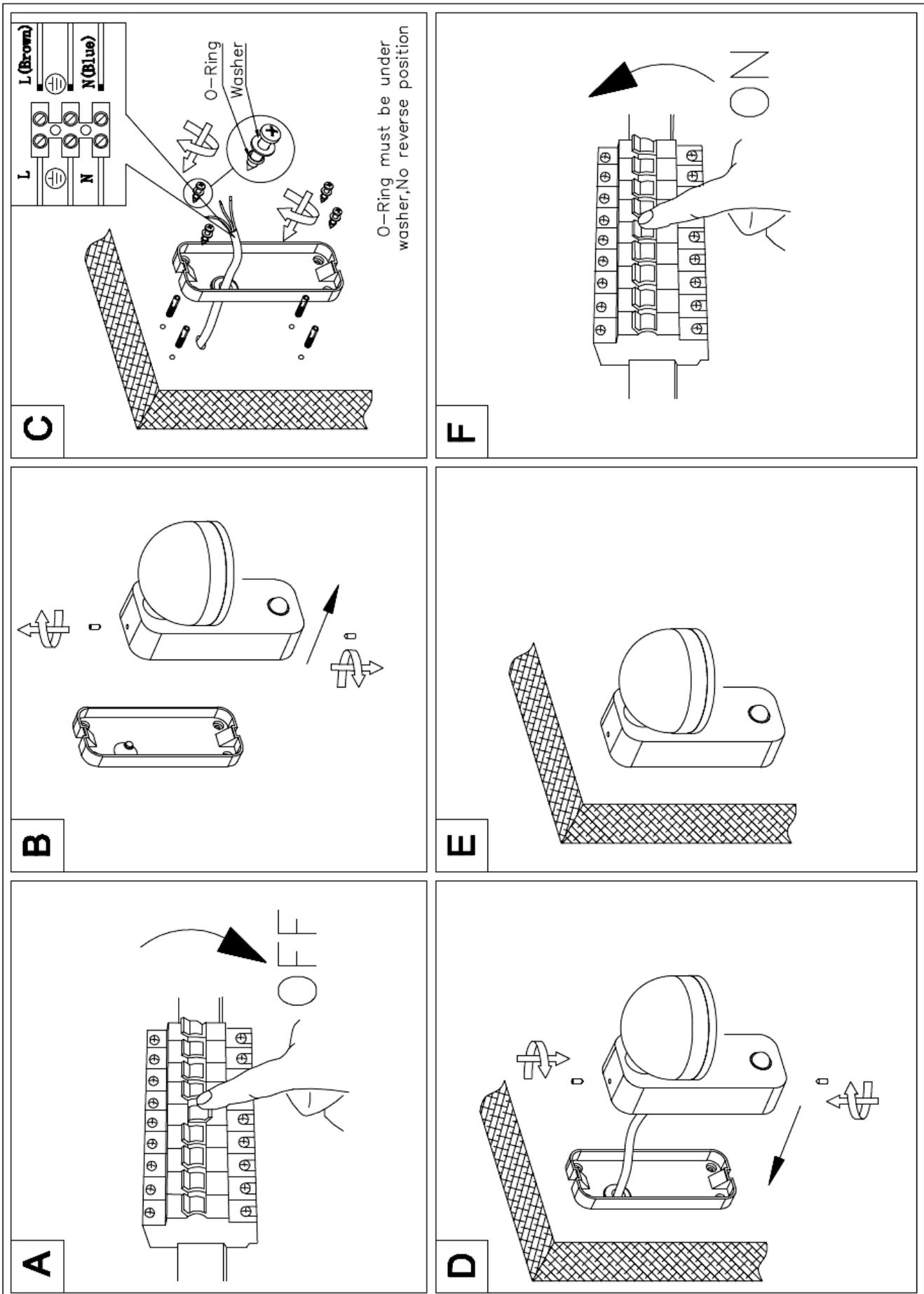
### INSTALLATION

**Note: This fitting has a 3 year guarantee against corrosion. This fitting should only be installed in normal non aggressive atmospheric locations to prevent corrosion. Aggressive environments to be avoided include locations by the sea, polluted atmospheres or near heating flue outlets.**

1. Ensure the house electricity supply is off at the fuse board. Ⓐ
2. If removing existing fitting, carefully note the position of each set of cables. If there are loop in cables that are not connected to the light these must be terminated in a separate terminal block not connected to the fitting.
3. Remove the backplate from main body of fitting by undoing the retaining screws, retain the screws and any washers for later. Ⓑ
4. Using backplate as a template, mark and drill fixing holes. Ensure holes are drilled into a solid wall or other suitable mounting. Ⓒ
5. Pass cable from the wall through the rubber grommet enclosed terminal block ensuring rubber grommet makes a good watertight seal around cable. Ⓒ
6. Attach the back plate onto the wall using suitable fixings whilst making sure the 'O rings' provided are used to prevent moisture ingress, take care not to overtighten screws or damage the 'O rings'. Ⓒ
7. Make electrical connections as follows: Ⓒ  
Connect supply live (normally brown or red) to fitting live (marked "L") on the plastic casing terminal block.  
Connect supply neutral (normally blue or black) to fitting neutral (marked "N") on the plastic casing terminal block.  
Connect supply earth (normally green/yellow or unsheathed) to earth (marked " $\frac{1}{\text{E}}$ ") on plastic casing terminal block.  
Ensure electrical connections are tight and no loose strands of wire are left out of the connector block and ensure terminal block and cable are not protruding.
8. Attach the main body of the fitting over the back plate and make sure rubber seals are correctly situated before securing main body into position. Ⓓ **Take care not to damage cable and ensure care is taken not to over tighten screws or damage 'O ring'.**
9. Clean the fitting from dust and finger marks. Ⓔ
10. Switch on the electricity supply at the fuse board. Ⓕ

### GENERAL INFORMATION

This fitting is designed for external use, it must be fitted to a DRY FINISH as any dampness in concrete, wood stain, paint and etc can damage finish. **Do not use polish or abrasive cleaner - just a soft slightly damp cloth**



## TIEN IP65 PIR SENSOR LED USER INFORMATION

### PIR (Passive Infra Red) Sensor:

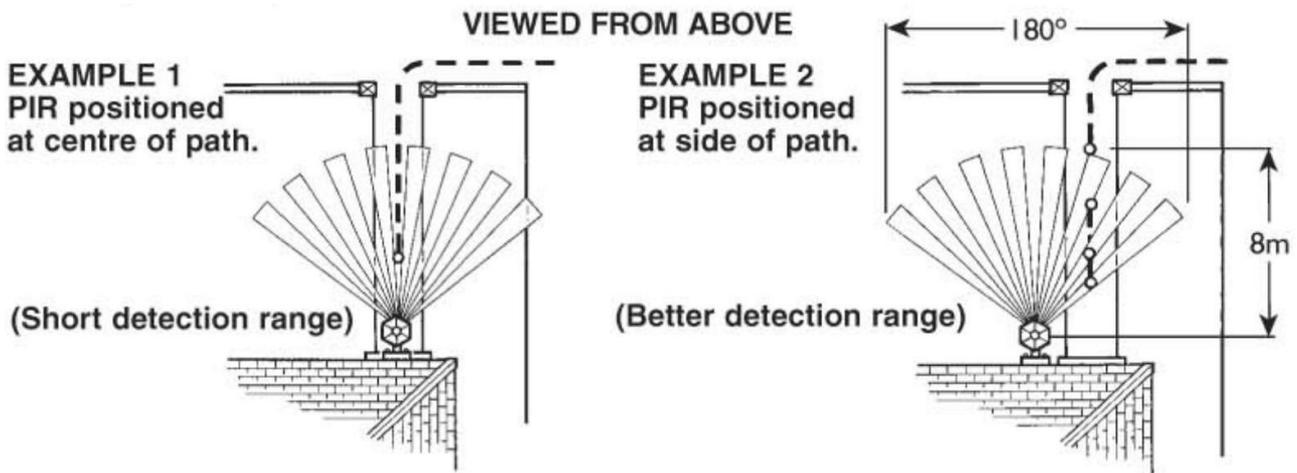
The fitting has a PIR (Passive Infra Red) sensing device which continuously scans the operating zone and immediately switches the light on when it detects movement in that area. Whenever movement is detected within the range of the sensor, the light will switch on automatically to illuminate the area. While there is movement within the sensor range, the light will remain on.

### Sensor Location and Information:

To find a suitable location for installation, please take into consideration the following points:

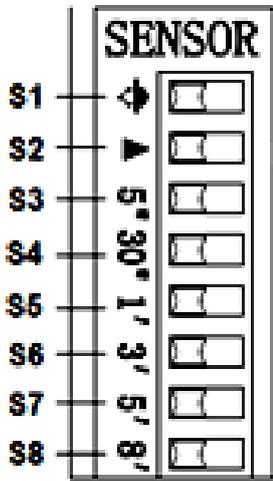
- The ideal mounting height for the fitting is between 1.5m to 2.3m above the detection area.
- The detection area is approximately 5 metres away at an angle of 90° wide. This may vary depending on the mounting height and location.
- The detection area may also alter at different temperatures. PIR sensors are more sensitive in cold weather than warm weather.
- The sensor has reduced sensitivity with movement straight towards or away from the detection area. Example 1.
- The sensor has better sensitivity with movement across the detection area. Example 2
- To avoid false triggering, the sensor should be directed away from potential heat sources, such as barbecues, air-conditioners, air vent etc.
- Avoid areas with electromagnetic disturbance, outside lighting, moving cars, trees or pets etc.
- Avoid installing the fitting in close proximity or on the same circuit to any fluorescent light fittings or ceiling fans. RFI (Radio Frequency Interference) may cause the fitting to switch on unintentionally.
- Do not aim the sensor towards reflective surfaces, such as smooth white walls, swimming pools etc.
- To avoid damage to the sensor, do not aim the sensor towards the sun.
- It is recommended that the fitting is installed on its own switch and does not interconnect with other lights on the same switch as it may cause false triggering.

For the PIR to detect as early as possible, the beams should be crossed, not approached head-on; the examples below illustrates this.



### Sensor Switch Settings:

The DIP switches are located in the rear of the main body for the fitting and can be adjusted as follows to alter the sensitivity and time for illumination



**Lux Level:** The lux control module has a built-in sensing device (photozell) that detects daylight and darkness. The switch S1 (☀️) set up at the **left** position means that the fitting will work during both day and night. The switch S1 (🌙) set up at the **right** position will only work at night.

**Note:** If you want to test the detection area of the PIR sensor, please refer to sensor testing section below

**Adjusting the sensitivity:** The sensitivity switch S2 (➡️) means the distance at which the PIR Sensor can be triggered by body movement. Set the S2 switch at the **left** position, the PIR sensor can be triggered by body movement between 1 -5 meters. Slide the S2 switch to the **right** position, the PIR sensor can be triggered by body movement between 1- 3 meters.

**Duration time:** The length of time the light will remain switched on after activation can be adjusted from 5secs through to 8mins

- Switch S3 = 5S
- Switch S4 = 30S
- Switch S5 = 1min
- Switch S6 = 3mins
- Switch S7 = 5mins
- Switch S8 = 8mins

For example, sliding the switch S3 from the **left** to the **right** position will set the duration of illumination time to be 5 seconds.

**NOTE:** Do not set more than two switches to the right position, it will disorder the time control. Set one duration time switch to the right only.

**NOTE:** Once the light has been triggered by the PIR sensor, any subsequent detection will restart the timed period again from the beginning, the light will remain on until there is no movement detected and then for the set duration after.

### Sensor Testing:

- Slide the LUX control switch S1 (🌙) to the left position and the TIME control switch S3 (5") to the right position. Turn the wall switch on and the light will turn on and remain on for about 15 seconds for the "warm-up" mode. After this initial "warm up" mode the light will turn off and the fitting will be in AUTO MODE.
- Have someone walk across the centre of the area to be scanned until the fitting can sense the moving person and causes the light to switch on.
- Adjust the TIME control switches (S3-S8) to the desired length of time for the fitting to remain on.
- Adjust the LUX control switch to achieve the ideal ambient light for the fitting to switch "on".

### Manual Mode: (Sensor Override Function)

Manual mode is used when you want the LED lights to be constantly on. The PIR sensor will be disabled and will not be affected by the time and lux level settings. The maximum duration for manual mode is 8 hours.

- During normal use the wall switch is in the ON position and the fitting is in AUTO MODE with the PIR sensor detecting any movement and the LED lights will switch on and off accordingly.
- To switch into MANUAL MODE, turn the wall switch off and on twice within three seconds.  
Wall switch action: OFF → ON → OFF → ON.  
Wait for 3 seconds and the LED lights will turn on and the fitting will be in MANUAL MODE.  
**NOTE:** If the wall switch action is done more than once, the fitting will not enter into MANUAL MODE.
- To change back to AUTO MODE, turn the wall switch off and on, the fitting will enter "warm-up" mode and the LED light will remain on for about 15 seconds. After this the LED lights will turn off and the fitting will be in AUTO MODE.  
Wall switch action: OFF → ON