

# INSTALLATION AND OPERATING INSTRUCTIONS FOR OUTDOOR LANTERN WITH PIR SENSOR

MODEL: MPES40 BLACK, MPES40 WHITE,  
MPES40 BEIGE and MPES40 GREEN

## Introduction

The Lantern Light 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 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.

## When fitting your security LIGHT

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

- Ideally the Lantern Light should be mounted 1.8 to 2.5 meters (6 to 8ft) above the area to be scanned (refer Fig.1A).
- To avoid damage to 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.
- To avoid nuisance triggering, keeping away from the area of strong electromagnetic disturbance.
- Do not aim towards reflective surfaces such as smooth white walls, swimming pools, etc. The Security light scanning specifications (approximately 12 meters at 110°) 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 lantern light you should note that movement across the scan area is more effective than movement directly toward or away from the sensor. (refer Fig.1B). If movement is made walking directly towards or away from the sensor and not across, the apparent detection range will be substantially reduced. (refer Fig. 1C)

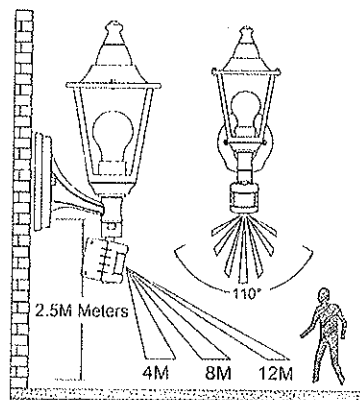


Fig.1(A) Detection Range

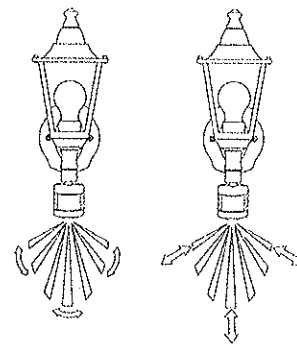


Fig.1(B) OK Fig.1(C) NOT GOOD

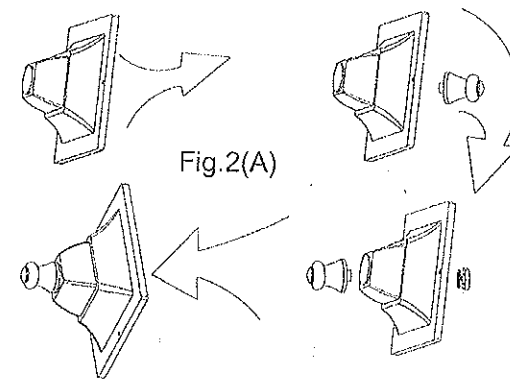


Fig.2(A)

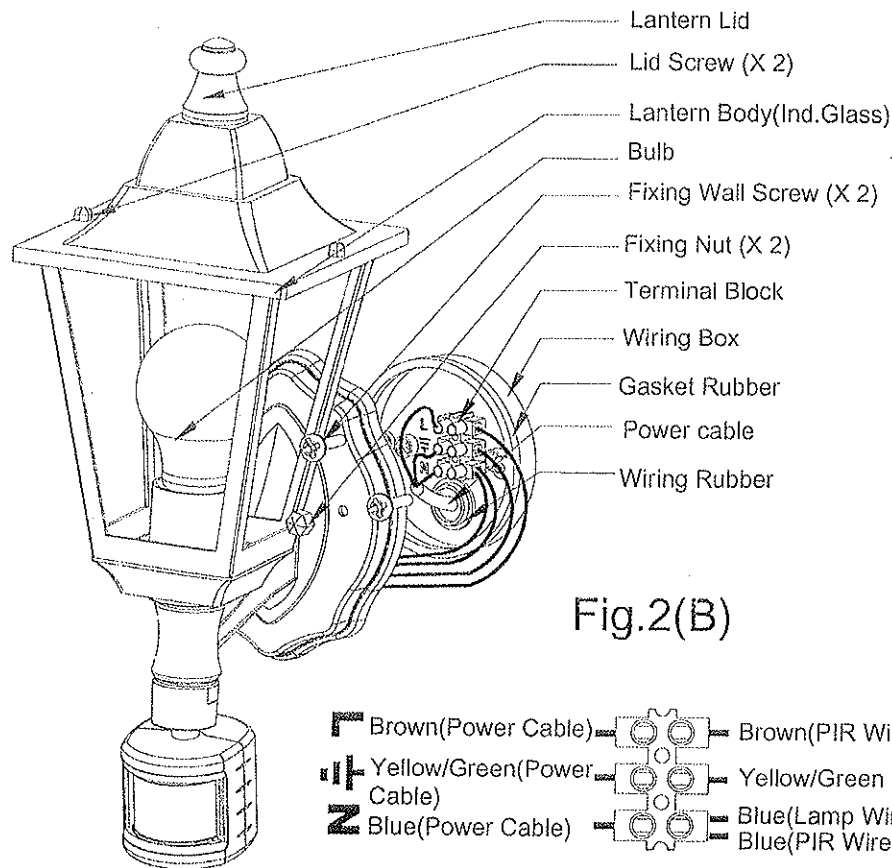


Fig.2(B)

## Fitting the unit

This product must be installed by a licensed electrician.

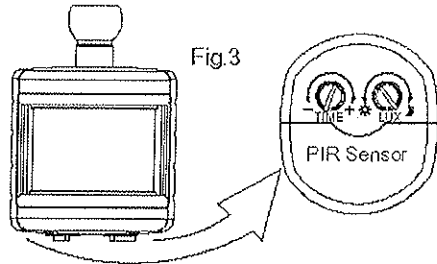
Before commencing any electrical work, ensure mains supply cables are isolated by switching off and removing the relevant fuse.

1. Re-fix the Lantern Lid as the Fig.2(A)
2. Un-screw the Fixing Nut, remove the Wiring Box and terminal block, not missing the Gasket Rubber and Fixing Bolts (at back of Wiring Box). Use the Wiring Box to mark the position of Fixing Wall Screw holes onto mounting surface. Then drill the wall to depth of about 4 cm with a no.8 size bit. Fit the Wiring Box onto the mounting wall with Fixing Wall Screws and Plastic Rawl-plugs (not supplied).
3. Pierce the Wiring Rubber and bring Power Cable through. Connect Power Cable to the terminal block as relative symbol, see the Fig.2(B)
4. Position the lantern on the Wiring Box with the Fixing Nut,

ensuring the Gasket Rubber is in position and do not over-tighten

5. Fit Max. 75 Watt incandescent bulb (E27). Not suitable for low energy compact fluorescent bulbs.
6. Fit the Lantern Lid onto the Body.

### Understanding the controls (referring to the Fig.3)



#### ADJUSTING THE DURATION TIME:

The length of time that remains switched on after activation can be adjusted from (10±5) seconds to (4±1) minutes. Rotating the TIME 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

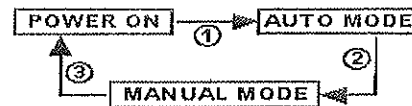
#### ADJUSTING THE LUX CONTROL LEVEL:

The Lux control module has a built-in sensing device (photocell) that detects daylight and darkness. The (\*) position denotes that the Lantern Light can work at day and night, and the (y) position only work at night. You can set to operate the unit at the desired level by adjusting the LUX knob.

### Setting the controls

1. Put 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 (-). The Lantern light will now switch on and remain on for about 30 seconds (within 60 seconds).
2. Direct the sensor toward the desired area to be scanned by adjusting the sensor
3. Have another person move across the center of the area to be scanned and slowly adjust the angle of the sensor until the unit sensors the presence of the moving person, causing the Lantern to switch on. (refer Fig. 1B).
4. Adjust time control to required setting.
5. To set the Lux level at which the Lantern will automatically switch "on" at night, turn the LUX control knob from daylight to night. If the Lanterns are 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 Lantern switch on, release the LUX control knob. You may need to make further adjustments to achieve your ideal light level setting.

#### How to change into MANUAL CONTROL MODE



#### Trouble shooting and user hints

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 Fuses/switches
	2. Globe(s) faulty or missing.	Check. Replace
	3. Nearby lighting is too bright.	Redirect sensor or relocate the unit
	4. controls set in correctly	Readjust sensor angle or control knob
	5. Sensor positioned in wrong direction	Redirect sensor and/or adjust
Light switches on for no apparent reason (false trigger)	1. Heat sources such as air-con, Vents, heater flues, barbecues, other outside lighting, moving cars are activating sensor.	Adjust direction of sensor head away from these sources.
	2. Animals/birds e.g. possums or domestic animals.	Redirecting sensor head may help.
	3. 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, consider: (a) Replacing a faulty switch. (b) Replacing noisy fluorescent tubes and/or starters. (c) Connecting the Lantern to a separate circuit (in most cases where one or more of the above suggestions have been carried out, false triggering has been reduced.)
	4. Reflection from swimming pool, or reflective surface.	Redirect sensor.
Light remains on.	1. Continuously false triggered	Redirecting sensor head may help
	2. Time is set too long.	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 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 weather than warm weather

1. When power is first switched on, the PIR detector enters into the "WARM-UP" period for about 1 minute, then automatically changes into AUTO MODE.
2. During AUTO MODE, by switching off and on the main switch twice within **4 seconds**, the PIR detector will automatically change into MANUAL MODE from AUTO MODE. In MANUAL MODE, the floodlight will remain ON, not affected by duration time and Lux control level.
3. During MANUAL MODE or AUTO MODE, by switching off the ON/OFF main switch over 30 seconds and then on again, the PIR detector will reset to WARM-UP period.

To avoid dust build-up and ensure proper functioning of the security light, wipe the sensor lens lightly with a damp cloth every 3 months. But never modify the unit, there are not any user serviceable parts inside.

#### Technical details :

- Voltage: 230V - 240V ~ 50 Hz
- Wattage: E27 incandescent lamp Max. 75 Watt
- Detection range: 110° and Max. 12 meters adjustable
- Duration time: from (10±5) seconds to (4±1) minutes adjustable
- Weatherproof: IP33
- Detection circuitry: Passive Infra-Red (PIR)
- Fuse: Type 50F, 6.3A/250VAC
- Power Cable: 3G, 1.0mm<sup>2</sup> flexible Cable