

# FLOOD LIGHT WITH PIR SENSOR MODEL:SL24LED

## INTRODUCTION

The 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.

# WHILE TO FIT YOUR LIGHT

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

Ideally the Light should be mounted 1.8 to 2.5 meters (6 to 8ft) above the area to be scanned (refer Figure).



- 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 (Max. 8 meters at 130°) 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 light you should note that movement across the scan area is more effective than movement directly toward or away from the sensor. (refer Figure). If movement is made walking directly towards or away from the sensor and not across, the apparent detection range will be substantially reduced. (refer Figure )

# FITTING THE UNIT

Installation by a competent electrician and according to IEC wiring Regulation.

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

1. Unscrew the Terminal Box Cover Screw then remove the Terminal Box Cover

2. Use the Terminal Box Cover to mark the position of screw holes onto mounting surface. Drill the wall to depth of about 30 mm and fit the plastic plugs, and then fix the Cover to the mounting surface with rightly screws. Be careful to avoid drilling or screwing into concealed electrical wiring.

3. Connecting the mains Cable (not included) to the Terminal Block, see the relative symbol. Ensure the cable must pass through the Cable Gasket.

4. Fit the lamp body to the Terminal Box Cover. Adjusting the light direction you desired, then tighten the screws.

5. Switch the main power on.

**Important:** loosen the lock nuts and screws and outdoor wall light before making any adjustments.



UNDERSTANDING THE CONTROLS (referring

### to the Figure)

ADJUSTING THE DURATION TIME: The length of time that remains switched on after activation can be adjusted from  $(10\pm5)$  seconds to  $(4\pm1)$  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 DURATION SENS: The sensitivity means the Maximum distance which PIR Sensor can be triggered by movement body. Turning the SENS knob + to - will decrease the

## Trouble shooting and user hints

#### sensitivity.

**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 Floodlights can work at day and night, and the ( $\mathbb{D}$ ) position only work at night. You can set to operate the unit at the desired level by adjusting the LUX knob.

### SETTING THE CONTROLS

- 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 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 Light to switch on. (refer Figure).
- 4. Adjust time control to required setting.
- 5. To set the Lux level at which the Light will automatically switch "on" at night, turn the LUX control knob from daylight to night. If the Light 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 Light switch on, release the LUX control knob. You may need to make further adjustments to achieve your ideal light level setting.

# **TECHNICAL DETAILS :**

- Voltage: 220-240 V ~ 50 Hz
- Wattage: 2 ×16 ×0.5W LED
- Detection range: 130° and Max. 8 meters
- Duration time: from (10±5) seconds to (4±1) minutes adjustable
- IP Rating: IP44

Due to our policy of continuous improvement we reserve the right to change specification without prior notice.

### Errors and omissions excepted.

These instructions have been carefully checked prior to publication. However, no responsibility can be accepted by Challenger Security Products for any misinterpretation of these instructions.



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PROBLEM	POSSIBLE CAUSE	SUGGESTED REMEDY
Light does not switch on when there is	1. no mains voltage	Check all connections, and Fuses/switches
movement in the detection area.	2. nearby lighting is too bright.	Redirect sensor or relocate the unit
	3. controls set incorrectly	Readjust sensor angle or control knob
Light switches on for no apparent	1. heat sources such as air-con, Vents, heater flues,	Adjust direction of sensor head away from these sources.
reason (false trigger)	barbecues, other outside lighting, moving cars are	
	activating sensor.	
	2. animals/birds	Redirecting sensor head may help.
	3. 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	1.interference by sunlight	Re-test at night.
detection distance becomes shorter.		

Note: all passive infra red detectors are more sensitive in cold weather than warm weather SL24LED Instructions Rev01