



## MODEL: SL180N / SL180BN

### INSTALLATION AND OPERATING INSTRUCTIONS

Please read this instruction manual before installation and retain for future reference.

#### IMPORTANT NOTE:

Installation must be performed by a skilled electrician who is familiar with the appropriate standards and technical requirements of the appliance and its proper installation. Never modify the unit as there are no serviceable parts inside.

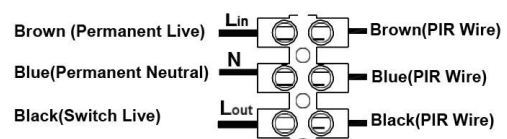
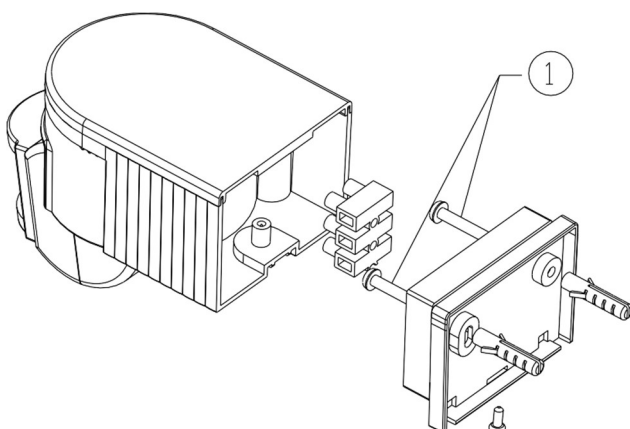
#### POSITIONING THE UNIT

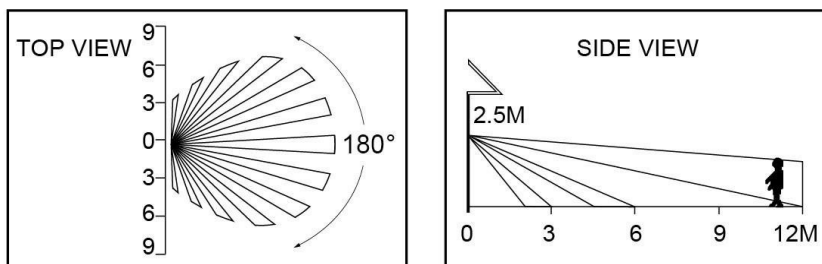
When selecting a mounting position, please take note of the following points;

1. The sensor is designed for optimum performance when mounted 2.5 meters above ground level.
2. Avoid positioning close to trees or shrubs, which may cause false triggering during wet, windy weather.
3. Avoid pointing at or positioning close to heat sources such as flues or heat extraction units, which may cause false triggering.
4. Avoid pointing at bright lights, as the unit will not function when you set **Lux** control level to dark (D position)
5. Avoid mounting near strong electromagnetic fields, as this may cause false triggering.
6. Do not aim the sensor towards reflective surfaces such as smooth white walls, ponds, swimming pools, etc.
7. Avoid locations where continuous dripping water onto the sensor.
8. The PIR Sensor scanning specifications (approximately 12 meters at approx. 180° horizontal) may vary slightly depending on the mounting height and location. The detection range of the unit may also alter with temperature change.
9. Before selecting a place to install the fitting, you should note that movement across the sensor is more effective than movement directly toward or away from the sensor. If movement is made walking directly towards or away from the sensor and not across, the apparent detection range will be substantially reduced.

#### INSTALLATION (Refer to the diagrams)

1. The person carrying out the installation is to check and verify that the total load on the circuit, including the rating of the cable, fuse and/or circuit breaker, is not exceeded.
2. Ensure the AC mains supply is isolated
3. Remove the screw underneath the unit, remove the main body cover and terminal block
4. Secure the backplate to a surface free from movement or vibration with appropriate fixings
5. Connecting the AC mains supply cables to the terminal block ('Lin' = Permanent Live, 'N' = Neutral, 'Lout' = lighting load and that all electrical connections are made good with no loose strands.
6. Re-fit the terminal block and replace the body of the sensor to the backplate re-fitting the screw underneath.
7. Adjust the settings and test.





### WALK TESTING:

Switch on the AC mains supply, the detector will enter into a “WARN-UP” period for approximately 30 seconds (within 1 minute) and then automatically change into “AUTO MODE”. Whilst in the AUTO MODE, you can then carry out a Walk-Test by placing the LUX control to day position (✱) and the TIME control to minimum (-). Once the PIR sensor receives a valid trigger signal (such as movement of a human body) within its detection area, the lamp(s) (load) will be turned on for the pre-set period of time. You will be able to determine the detection area by walking slowly, please note the sensor is more sensitive walking across the sensor rather than waking towards to sensor.

**After completing the walk-test, set the LUX adjuster to the required night position and adjust the TIME adjuster to the desired “ON’ time.**

### ADJUSTING THE LUX CONTROL LEVEL:

The Lux control module has a built-in photocell that detects daylight and darkness.

(✱) position denotes that the lamp(s) (load) will be turned on by PIR during day and night.

(☽) position denotes that the lamp(s) (load) will be turned on by PIR only at night.

You can set to operate the unit at the desired level by adjusting the LUX adjuster

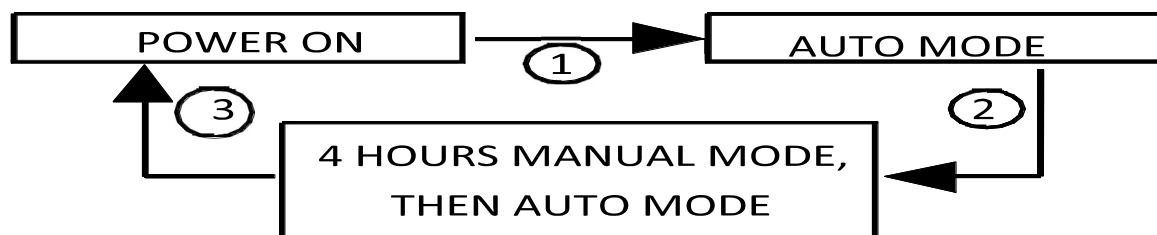
### ADJUSTING THE DURATION TIME:

The duration time is the length of time that the load is switched on after activation. The duration time can be adjusted from (10s ±5) seconds to (10m ±2) minutes. Rotating the TIME adjuster from (+) to (-) will reduce the duration time.

**Note:** Once the lamp(s) (load) has been triggered by the PIR sensor any subsequent detection will start the timed period again from the beginning.

### How to change into MANUAL CONTROL MODE

1. When AC power on, the PIR detector enters into the “WARM-UP” period (approximately 1 minute), then will automatically change to AUTO MODE.
2. During AUTO MODE, if the AC supply is switched OFF/ON **TWICE** within **3 seconds**, the PIR detector will automatically change into 4 hours MANUAL MODE from AUTO MODE, the lighting load will only switch on when the LUX level setting has been reached, i.e. if the PIR does operate during daylight then the Manual mode will not switch the lighting load until dusk or night time when the PIR has reached the LUX level setting.
3. During MANUAL MODE or AUTO MODE, by switching off the ON/OFF main switch over **10 seconds** and then on again, the PIR detector will reset to WARM-UP periods. Please note: the periods of “WARM-UP”



## SPECIFICATION

<b>Voltage:</b>	230v AC 50/60Hz
<b>Detection Range:</b>	Approximately 180° (horizontal) and 60°(vertical)
<b>Detection Distance:</b>	12m max
<b>Working Temperature:</b>	-20~45° C
<b>Power Consumption:</b>	approx. 1.5W
<b>Installation Height:</b>	1.8-2.5m
<b>Time Delay:</b>	Min.10sec ±5sec Max.10min ±2min
<b>Cable Terminals:</b>	Solid core cable 0.75~1.5mm <sup>2</sup>
<b>Dimensions:</b>	(H)80 mm x (W)70 mm x (D)125 mm
<b>IP Rating:</b>	IP44
<b>Rated Load:</b>	
<b>Incandescent:</b>	Max. 1,000W
<b>Fluorescent:</b>	Max. 300W (not exceed 6pcs)
<b>Energy Saving:</b>	Max. 300W (not exceed 6pcs)
<b>LED:</b>	Max. 200W or maximum 6 number of LED drivers

## Environment:

Please do not dispose of the packaging as unsorted waste, use the recycling facilities provided by your local authorities.

When the PIR sensor comes to the end of its life, or you choose to update or upgrade by replacing it, then do not dispose of with your normal household waste. Please recycle where facilities exist. When you need to dispose of this fitting, check with your retailer or local authority for suitable options.

Due to our policy of continuous improvement, we reserve the right to change specifications without prior notice. Errors and omissions excepted. These instructions have been carefully reviewed and verified before publication. However, Challenger accepts no responsibility for any misinterpretation of these instructions.

## CHALLENGER SECURITY PRODUCTS

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