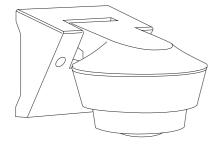


# Outdoor IP55 PIR Motion Sensor OMS-360 INSTALLATION MANUAL



#### 1. PRODUCT FEATURES

- Adjustable 360°, 32m diameter (16m radius) detection range
- Suitable for wall or ceiling/under-eave mounting
- First-fix wired base and second fix plug-in sensor head for easy installation
- Optional 8-hour manual override via a standard wall switch
- Lux level setting to ensure after dark operation only

#### 2. OPERATIONAL OVERVIEW

#### **Auto Mode**

In Auto mode, the load will turn ON automatically when movement is detected and the ambient light level is below the Lux setting. When no movement is detected and the delay time has expired, the load will turn OFF automatically.

#### **Auto Mode with Manual Override**

Using a manual override switch, the sensor can be bypassed to turn the load ON for 8 hours, regardless of movement or light level. After 8 hours the sensor reverts to normal Auto operation.

### 3. PACKAGE CONTENTS

Sensor x 1
Lens Shields x 3
Screws and anchors x 2 (each)
Wall-dog screws x 2
Cable connector x1 (for earth termination)

**Note:** The corner mounting bracket is not included with the sensor. This can be ordered separately. Product code OSM-360C.

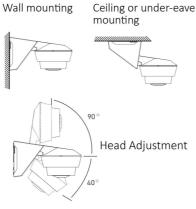
#### 4. INSTALLATION LOCATION

The sensor's coverage or 'field of view' is optimal when the sensor is mounted at a height of 2.5 metres and the object triggering the sensor approaches across the face of the sensor, rather than directly towards it [see section 9].

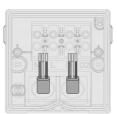
#### 5. MOUNTING THE SENSOR

**Note:** As the sensor responds to changes in temperature, the following conditions should be avoided.

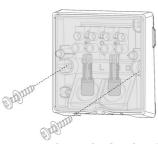
- Avoid aiming the sensor towards objects with reflective surfaces such as glass.
- Avoid mounting the sensor near heat sources, such as heating vents, air conditioners, metal roofs, etc.
- Avoid aiming the sensor towards objects which move in windy conditions, such as large plants or trees.
- Must be mounted at a height greater than 1.7m



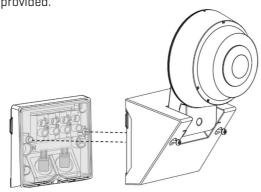
Bring the mains supply and load cabling though the two cable entries on the rear of the base (see Section 7 for wiring details).



Fix the base to the mounting surface using the mounting holes (shown below) and the screws / anchors / Wall-dogs provided.

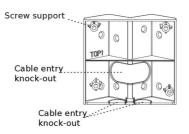


Wire the sensor as shown in Section 7, then line up the connection pins in the sensor head with the terminal block in the base and push firmly. Fix in place using the two captive screws provided.



#### **6. CORNER MOUNTING BRACKET**

An optional corner mounting bracket is available separately Voltex product code OMS-360C. Please contact Voltex for further details.

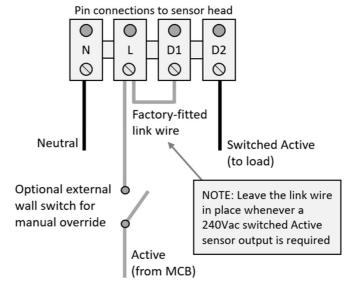


Corner Mounting Bracket Accessory (purchased separately)

#### 7. WIRING THE SENSOR

**IMPORTANT:** This device must be installed by a licensed electrical contractor or electrician and in accordance with national and local building regulations and the Australian and New Zealand wiring rules AS/NZS 3000 latest edition thereof

The sensor requires a '3-wire' connection, with a Neutral



#### **Manual Override Operation**

Using a manual override switch, the sensor can be bypassed to turn the load ON for 8 hours, regardless of movement or light level. After 8 hours the sensor reverts to normal Auto operation.

Manual override mode is set as follows.

With the manual override switch ON, switch the manual override  $\mathbf{OFF} \to \mathbf{ON} \to \mathbf{OFF} \to \mathbf{ON}$  quickly [within 2 seconds]. The load will flash to confirm the sensor has entered permanent 8 hours ON mode.

When in permanent 8 hours ON mode, the sensor can be set back to Auto mode at any time by switching the manual override  $\mathbf{OFF} \to \mathbf{ON}$  quickly [within 1 second]. The load will turn OFF and the sensor reverts to Auto mode.

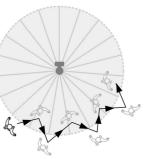
#### 8. COMMISSIONING

The sensor is commissioned using the following steps.

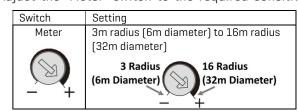
- 1. If not ON already, switch ON the power to the sensor. The sensor takes approximately 60 seconds to warm up. During this warm-up time, the load and the Green LED indicator turn ON. Both turn OFF after the warm-up time is complete.
- 2. Set the 'Time' switch adjustment to the 'Test' position.

Switch	Setting
Time 5m 15m 5s 30m Test 1sL	Set the 'Time' switch adjustment to the 'Test' position

- 3. When movement is detected in 'Test' mode, a red LED indicator and the load both turn ON for approximately 2 seconds, then both turn OFF. This is repeated at 2 second intervals when movement is being detected in 'Test' mode.
- 4. Walk around the required detection area to confirm the sensor is activated successfully from within this area.

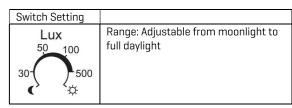


5. Adjust the 'Meter' switch to the required sensitivity



Note: The included lens shields can be used to limit the detection range if required. See Section 10 for details

6. Set the 'Lux' switch adjustment to activation as required.



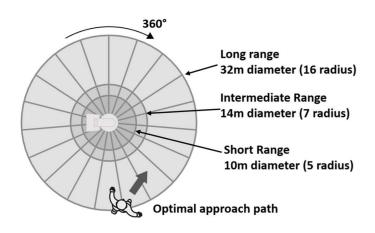
7. Set the 'Time' switch for required normal operation

Switch	Setting
Time	Normal Operation: Switch OFF time
5m 15m	delay adjustable from 5 seconds to 30
50	minutes
30m	1s: Pulse output mode (Load will be 1
Test /IsL	second ON, 9 seconds OFF)
	Time 5m 15m 5s 30m

The sensor is now commissioned, with the option to use the additional setting shown in Section 11.

#### 9. FIELD OF VIEW

Field of view at 2.5m mounting height (view from above)

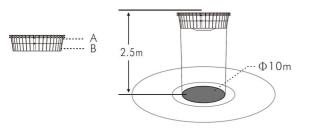


**Note:** The sensor detection range can vary as a result of changing environmental conditions such as ambient temperature, the speed and size of object being detected, clothing worn, etc.

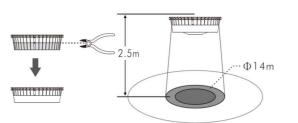
#### **10. USING THE LENS SHIELDS**

The sensor package includes three lens shields. These shields can be used to alter the detection pattern for specific applications. Each lens shield has 2 layers [layer A and B] and 13 segments. See below for examples on how the shields can be used.

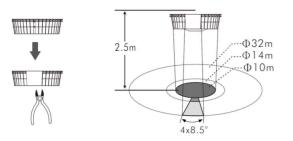
Example #1: 3 lens shields to reduce the detection range to a 10m diameter



Example #2: 3 lens shields with layer B removed to reduce the detection range to 14m diameter



Example #3: Layers A and B removed to maintain a 32m detection range at the front and reduce the detection range



#### 11. WATCH MODE (optional)

'Watch' mode flashes the four sensor red LED indicators as shown below.

#### LED flashing patterns with Watch Mode Enabled

Movement not detected (Load OFF)	The four red LED indicators flash on/off, one at a time, in a continuous pattern	****  ***  ***  ***  ***  **  **  **
Movement detected (Load ON)	The four red LED indicators flash ON/OFF together for 5 seconds after movement is detected	****

## **Enabling / Disabling Watch Mode**

Watch mode is enabled / disabled by turning the 'Watch' switch to the ON / OFF position.

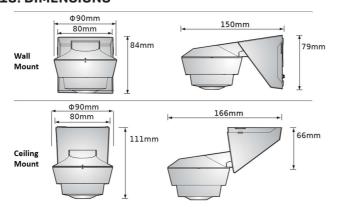


**Note:** When Watch mode is disabled, the four red LED indicators are permanently OFF.

#### 12. SPECIFICATIONS

Rated Voltage	220-240Vac 50/60Hz
Maximum Load	LED lamp (and driver): 400W Incandescent lamp: 2300W 240V Halogen lamp: 1200W LV Halogen lamp: 600W (Iron Core) LV Halogen lamp: 900W (Electronic) CFL: 400W
Operating Temp.	-20 C to +50 C
Environmental Protection	IP55 (wall mount)
Detection Range	360°, 32m diameter (16m radius) at height of 2.5m
Auto OFF Time Adjustment	5 seconds to 30 minutes (normal operation) Pulse output (1 second pulse)
Light Level Adjustment	Moonlight to full sunlight
Warm up time	60 Seconds

#### 13. DIMENSIONS



#### 14. FAULT FINDING

Fault	Possible Cause	Suggested Solution
	Power not turned on	Switch on the power
	Sensor is wired incorrectly	Refer to wiring diagram (Section 7)
Load does not turn on	Lux switch is adjusted incorrectly	Check if Lux switch is set correctly [Section 8]
	Connected load not functional	Repair/replace load device(s)
	OFF time is set too long	Set OFF time to a shorter time, Section 8
Load does not turn off	Wired incorrectly	Refer to wiring diagram, Section 7
	Manual override switch fitted and set to 'Manual'	Reset according to Section 7
The sensor is false triggering	Heat sources, highly reflective objects or moving objects within the detection area	Remove heat sources / reflective objects, and/or alter sensitivity (Section 8)
Light turns ON Lux switch set incorrectly		Adjust the Lux switch to the required level [Section 8]
Lights do not turn ON in dim or	Incorrect setting on 'Lux' switch	Reset according to Section 8
dark conditions	Defective load	Repair / Replace load

#### **15. CONTACT INFORMATION**

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