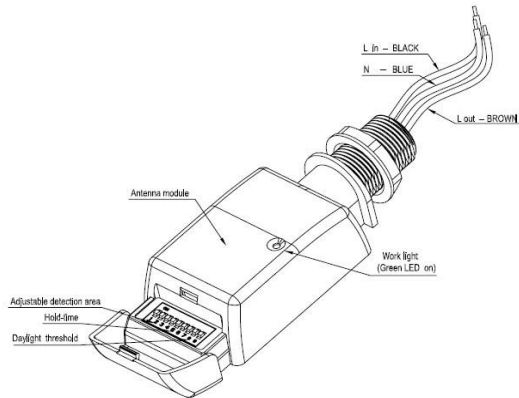
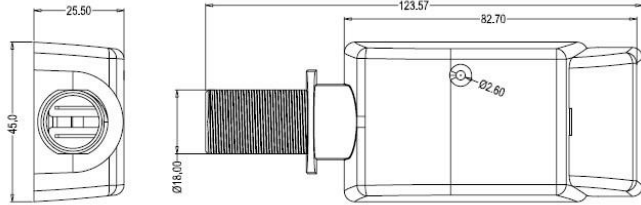


# MICROWAVE MOTION SENSOR USER GUIDE

## Model No.: OS/ EXO



Model: OS EXO



Dimensions (mm)

### Technical Specifications

Input voltage	220/240Vac 50Hz
Rated load	400W(Inductive load), 800W(Resistive load)
Detection area	0.5m ~ 8m, adjustable.
Hold time	5sec / 3min / 5min / 10min / 20min / 30min.
Daylight sensor	5 lux / 10 lux / 30 lux / 50 lux / Disable. (Typical)
Sensor principle	Microwave motion detector
Microwave frequency	5.8GHz±75Hz, ISM wave band
Transmitting power	<0.5mW (1% of transmitting power for cell phone)
Detection range	Max. (Φ x h): 16m x 6m.
Detection angle	150° (Wall installation) 360° (Ceiling installation)
Motion detection	0.5 ~ 3m/s.
Operating temperature	-20°C - 60°C
IP rating	IP20



### General Guidelines for Installation



- 1, Specifications for detection area, detection range and daylight sensor levels are typical, so suitability should be determined for sensitive applications.
- 2, The Motion sensor should be installed by a qualified electrician. Ensure the electricity supply is switched off before installing or servicing the product.
- 3, The sensor should not be modified in any way. Any modifications made to this product will immediately invalidate any warranties issued.
- 4, The company does not accept responsibility for any consequences resulting from unauthorized modification of the product.
- 5, The sensor should be connected to a stable power supply of 220/240Vac 50Hz.
- 6, Microwaves cannot pass through metal or brick walls if thicker than 20cm. They will pass through thinner walls but there will be some attenuation.
- 7, Installation inside a glass or plastic housing will result in a reduction of detection sensitivity. Expect a reduction of approximately 20% for every 3mm of thickness.

### Installation & Wiring

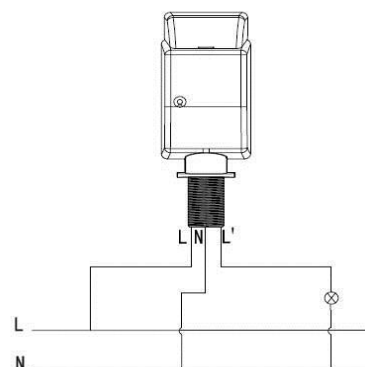
The sensor is designed for installation at 1~6m in height.

Suggested mounting height:

1~1.8m (Wall mounting)

2.5~6m (Ceiling mounting)

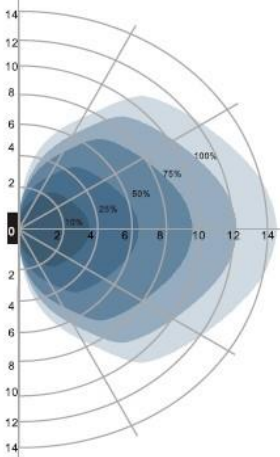
Note: L(BLACK) , N(BLUE) ,L'(BROWN)



## 100H burn-in mode for fluorescent lamps

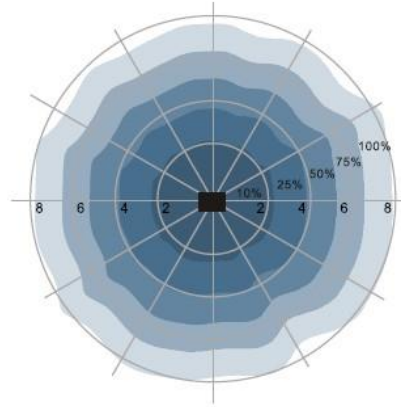
With simple operation, rapidly turn on/off the power 4 times within 4 seconds. Lamps will be 100% on for 100 hours and then automatically revert to sensor mode. This is crucial to secure the lifetime of fluorescent lamps when a new fixture is installed or an old lamp is replaced. This 100H burn-in feature can be cancelled by turning off the power.

## Detection Pattern



Wall mounting pattern (Unit: m)

Suggested mounting height: 1-1.8m



Ceiling mounting pattern (Unit: m)

Suggested mounting height: 2.5-6m

## Settings

Detection area, hold time and daylight sensor can be set using DIP switches on the sensor. Note that reducing the detection area will also reduce the sensitivity.

### 1, Sensitivity

Refers to the typical detection range sensitivity. 100% being most sensitive.

- I: 100% - Up to 8m
- II: 75% - Up to 6m
- III: 50% - Up to 4m
- IV: 25% - Up to 3m
- V: 10% - Up to 2m

#### SENSITIVITY )))

1	2	3	
ON	ON	ON	100%
-	ON	ON	75%
ON	-	ON	50%
-	-	ON	25%
-	-	-	10%

### 2, On time

Refers to the time period the lamp remains at 100% illumination after no motion detected.

- I: 5s
- II: 3 min
- III: 5 min
- IV: 10 min
- V: 20 min
- VI: 30 min

#### ON TIME ⌚

1	2	3	
ON	ON	ON	5s
-	ON	ON	3 min
ON	-	ON	5 min
-	-	ON	10 min
ON	ON	-	20 min
-	-	-	30 min

### 3, Light sensor

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold. Settings are typical and as follows:

Disable\*

- Max - 50 lux, twilight operation
- II - 30 lux, twilight operation
- I - 10 lux, darkness operation only
- Min - 5 lux, darkness operation only

#### LIGHT SENSOR ☉

1	2	3	
ON	ON	ON	Disable
ON	ON	-	Max
-	ON	-	II
ON	-	-	I
-	-	-	Min

\*When set to Disable the daylight sensor will switch on the lamp when motion is detected regardless of ambient light levels.

## FAQS

Question	Cause	Remedy
The load will not illuminate.	Incorrect daylight sensor setting selected.	Adjust setting.
	Load has failed.	Replace load.
	Power is switched off.	Switch on.
The load is permanently illuminated.	Continuous movement in the detection area.	Check detection area setting.
	The lamp (containing sensor) is installed in an area too close to reflective surfaces, i.e. metal, glass or concrete walls.	1, Make sure installation area suitable with at least 30cm space between lamp and surrounding reflective surfaces. 2, Reduce sensitivity (detection area).
The load will not illuminate despite movement.	Speed of moving object is not in the range of 0.5-3m/s or the detection radius is too small.	Check detection area setting.