LEDLITE™
Energy Saving LED

Installation Instructions

LTOSS

SURFACE-MOUNTED

OCCUPANCY SENSOR - WHITE

CE UKCA RoHS IP20

Please read these instructions before commencing installation & retain them for future reference.

Important information:

It is recommended that the sensors are installed by a qualified electrician ensuring the installation complies to current IEE wiring regulations & local building control.

- These products are designed for connection to a 220-240V mains supply.
- Any broken or damaged parts should be replaced as soon as possible.
- We will not accept responsibility for any claims arising from a poor installation.

Important User Advice:

⚠ WARNING Risk of Fatal Electric Shock!
Always switch off mains supply before servicing.

- This sensor is suitable for indoor use only and should not be installed on damp or wet surfaces, such as freshly plastered or painted walls or ceilings.
- Do not install the sensor near large operating machines, such as ventilators or ceiling fans, to avoid false triggering caused by machine vibrations.
- This product is Class II, double insulated, and does not require an earth connection.


Movement


Shake


Breathe

REAL OCCUPANCY SENSOR

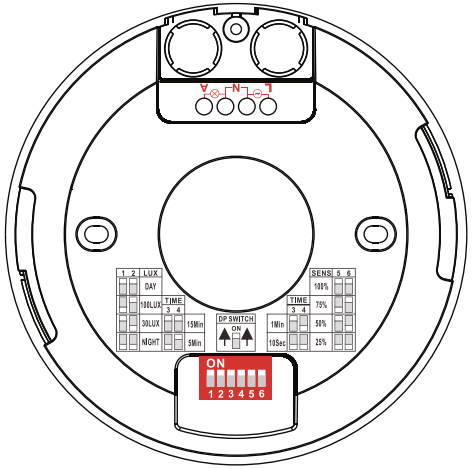
INTRODUCTION

This sensor utilizes 24GHz Millimeter Wave Radar technology. The LTOSS Real Occupancy Sensor is capable of detecting both large and small movements, such as hand gestures, head movements, and subtle fluctuations caused by breathing.
It features a relay mechanism that switches on or off in response to detected movement.

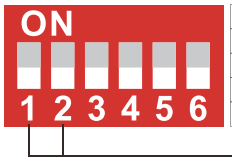
TECHNICAL SPECIFICATION

Voltage / Frequency	AC220-240 V/AC ~ 50/60Hz
HF System	24Ghz
Rated Load	400W LED / 800W Other Loads
Ambient Light	10lux / 30lux / 100lux / Day 24h Adjustable
Time Delay	10sec / 1min / 5min / 15min Adjustable
Detection Range	360° Ceiling / 180° Wall
Detection Distance	Max 3-4m (radius) Movement / 2-3m (radius) Breath
Power Consumption	<0.90W
Installation Height	2.2-4m
Body Material	PC
Working Temp.	-20 ~ +40°C
Working Humidity	<93% RH
IP Rating	IP20

SENSOR SETTING

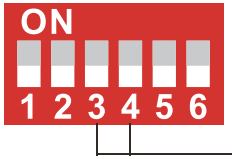


1 Daylight Sensor



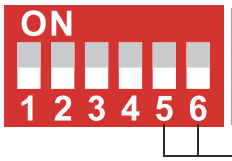
	1	2	range	Ambient light
I	OFF	OFF	<10Lux	very dark
II	ON	OFF	<30Lux	dark
III	OFF	ON	<100Lux	slight light
IV	ON	ON	DAY	whole day

2 Hold Time



	3	4	delay time
I	ON	ON	15Min
II	OFF	ON	5 Min
III	ON	OFF	1 Min
IV	OFF	OFF	10sec

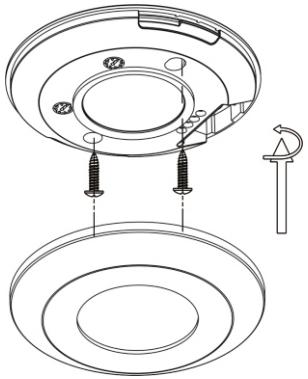
3 Detection Area



	5	6	sensitivity	detect breathe
I	ON	ON	100%	25m² (5x5m room)
II	OFF	ON	75%	16m² (4x4m room)
III	ON	OFF	50%	4m² (2x2m room)
IV	OFF	OFF	25%	1m² (1x1m room)

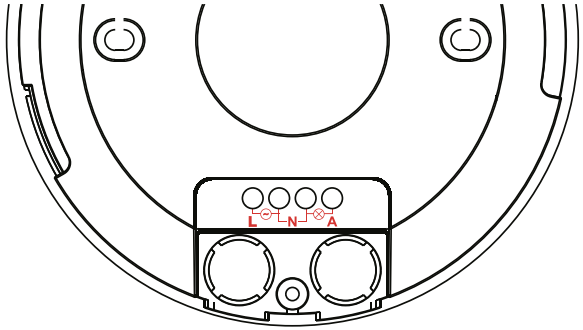
Note: Detection sensitivity is influenced by several factors, including the height of the person being tested, their movement speed, the sensor's installation position, and the presence of barriers or reflections from metal or glass surfaces. The provided data assumes a sensor installation height of 3 meters, a tester height of 165 cm, a movement speed of 0.3 m/s, and the tester facing directly toward the sensor. These measurements are for reference only. Sensitivity settings should be adjusted to suit the actual installation environment.

INSTALLATION INSTRUCTION

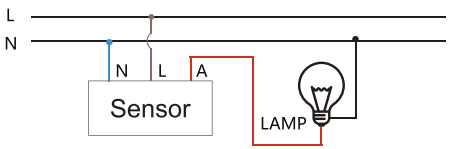


- Remove the upper cover by turning it counterclockwise, as illustrated in the diagram on the left.
- Connect the power and load according to the wiring diagram.
- Secure the base in the desired position using the provided screws.
- Reattach the upper cover to the sensor by turning it clockwise.
- Once the cover is securely in place, switch on the power test the sensor for proper operation.

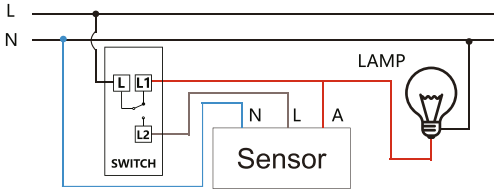
WIRING DIAGRAM



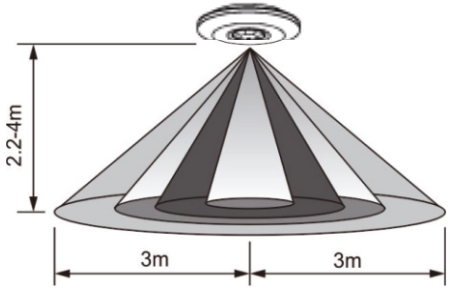
Normal wiring diagram



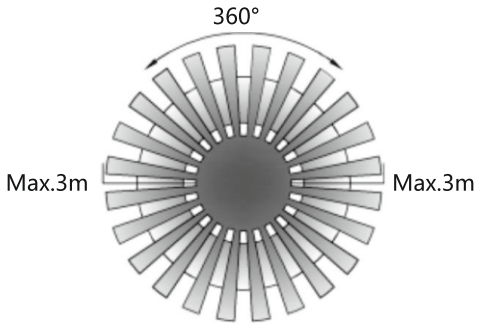
Manual override wiring diagram



DETECTION COVERAGE

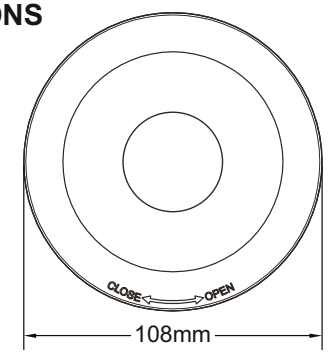


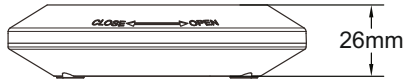
Height of Installation: 2.2-4m



Detection Distance: Max. 6m

DIMENSIONS





TROUBLESHOOTING

Event	Reason	Solution
The sensor is false triggered or can't be turned off	The sensor detects movement through glass or wood or non-metallic structures	Turn down the sensitivity
	The sensor is installed close to other wireless devices	Move the sensor more than 2m away from the wireless equipment
	Vibration or buffeting signals in the installation environment	Ensure that there are no other sources of movement in the area, such as vibrating devices, oscillating fans or swinging curtains.
The sensor can't detect movement	Installation location is outside of the breathing signal coverage area	Adjust the installation position
	Installation location is behind or to the side of the user	Adjust the installation position Install in the front of the user
	The microwave signal is blocked by obstacles	Adjust the installation position away from obstacles
	Ambient light illumination level is more than the set LUX level of the sensor	Check the environment for any other light sources or lamps. Adjust the light level (lux) or disable the dark and very dark sensor function.
The sensor does not work	The input-output connection is reversed, damaging the sensor	Replace the sensor
	The load exceeds the sensor's rated power or the surge current limit, damaging the sensor	Replace the sensor

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