

Sparkelec LED Smart Sensor Light

MODEL: SP5003BK

1. Introduction

This advanced smart sensor light incorporates a microwave motion detector that continuously scans a pre-set operating zone. It automatically switches the light on when it detects movement in that area.

Unlike traditional IR sensors, the microwave sensor provides superior detection by emitting low-power signals and measuring their reflections. This technology allows for instant activation, reliable performance across all temperatures, and even the ability to detect movement through thin obstacles like glass or plastic. This light is the ideal solution for illuminating pathways, patios, porches, or any area you choose for enhanced safety, convenience, and security. This light comes with an override switch, that can be used to manually control light on and off (added on and off)



2. Where to Fit Your Security Lamp

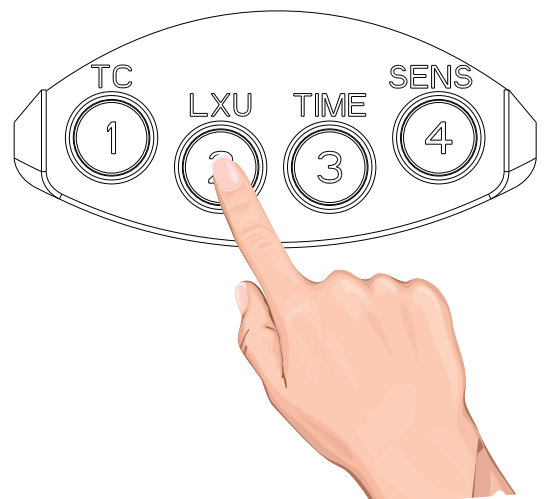
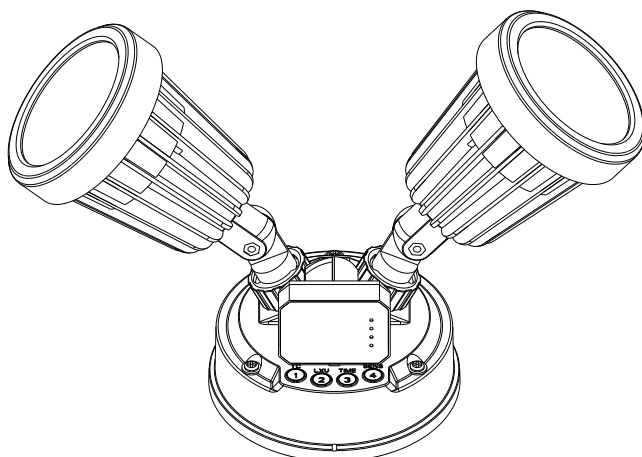
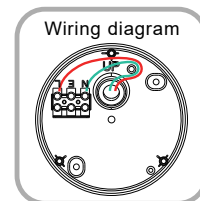
To achieve the best results, please consider the following points:

- **Mounting Height:** Ideally, the security lamp should be mounted 1.8 to 3.5 meters above the ground.
- **Avoid Nuisance Triggering:**
 - Be mindful that the sensor can detect movement through some materials. Use the Sensitivity (SENS) settings to prevent detection of movement in unwanted areas.
 - Keep the sensor away from areas with constant movement you don't want to trigger the light, such as rustling trees and bushes.
 - Avoid pointing the sensor directly at large metal surfaces, which can interfere with the microwave signals.
- **Optimising Detection:** Movement *across* the detection area is more effective than movement directly *toward* or *away from* the sensor.

3. Installation

WARNING: Installation must be carried out by a licensed electrician and in accordance with AS/NZS 3000.

1. **Safety First:** Switch the power off at the meter box and ensure there is no power.
2. **Prepare the Unit:** Unscrew the fixing cover screws and remove the cover.
3. **Mounting:** Use the plastic back box to mark the position for drilling on your desired mounting surface. Drill the holes and fit the provided wall plugs.
4. **Wiring:** Connect the power cable to the terminal block as per the wiring diagram. Ensure the cable passes through the cable gasket to maintain the weatherproof seal.
5. **Final Assembly:** Secure the light to the back box.



4. Setting the Controls

This light is configured using the four touch-sensitive keys on the unit. Each press is confirmed with a beep sound, and the panel indicator lights show the current selection for each mode.

Touch Key	Function Definition	Function Details	Key Status Indication
key1	Colour Temp Selection	LED three-color selection (cycle switching):	During key press, the main light's colour temperature adjusts with the key switch.
		A - Warm White (Colour Temp 3000K)	
		B - Neutral White (Colour Temp 4000K)	
		C - Cool White (Colour Temp 6000K)	
key2	LUX Day/Night	Automatic mode - light sensitivity selection (cycle switching):	Panel Indicator Light
		A - On during day and night -- photosensitive function off	A - ● ○ ○ ○
		B - On only at night -- low sensitivity LUX-140	B - ● ● ○ ○
		C - On only at night -- medium sensitivity LUX-70	C - ● ● ● ○
		D - On only at night -- high sensitivity LUX-20	D - ● ● ● ●
		The smaller the LUX value, the darker the ambient light needed.	
key3	TIME	Automatic mode - light duration selection (cycle switching):	Panel Indicator Light:
		A - Light on for 30s	A - ● ○ ○ ○
		B - Light on for 2min	B - ● ● ○ ○
		C - Light on for 5min	C - ● ● ● ○
		D - Light on for 10min	D - ● ● ● ●
key4	SENS (Sensitivity)	Automatic mode - sensing area sensitivity selection:	Panel Indicator Light:
		A - Low sensitivity threshold - 2000	A - ● ○ ○ ○
		B - Medium sensitivity threshold - 1500	B - ● ● ○ ○
		C - Medium-high sensitivity threshold - 1000	C - ● ● ● ○
		D - High sensitivity threshold - 500	D - ● ● ● ●
		The smaller the threshold value, the farther the sensing distance.	
key1+key2	Dimming Function	Composite key - LED brightness adjustment:	LED enters 5-level dimming mode:
		Short press both keys simultaneously - Adjust LED brightness.	20%-40%-60%-80%-100%
			Cycles in sequence.

5. Troubleshooting

Problem	Possible Cause	Suggested Remedy
Light does not switch on with movement.	<ol style="list-style-type: none"> 1. No mains voltage. 2. LUX setting is incorrect. 3. Sensitivity is set too low. 	<ol style="list-style-type: none"> 1. Check all RCD/MCBs, switches, and connections. 2. Press Key 2 to select a different LUX setting. For testing, choose setting A (Always Active). 3. Press Key 4 to increase the sensitivity.
Light remains on continuously.	<ol style="list-style-type: none"> 1. Constant movement is being detected. 2. The unit is in "Always Active" mode, and it is daytime. 3. Time delay is set too long. 	<ol style="list-style-type: none"> 1. The sensor may be detecting movement through a wall or from rustling trees. Press Key 4 to reduce sensitivity. 2. Press Key 2 to select a "Night Only" setting (B, C, or D). 3. Press Key 3 to select a shorter time delay.
Light switches on for no apparent reason.	<ol style="list-style-type: none"> 1. Sensitivity is too high, detecting movement through walls or from small animals/debris. 2. Interference from other electronic devices. 	<ol style="list-style-type: none"> 1. Press Key 4 to reduce the sensitivity setting. 2. Ensure the sensor is not installed immediately next to devices like Wi-Fi routers.
Light switches on during daylight hours.	The LUX setting is in "Always Active" mode.	Press Key 2 to cycle to one of the "Night Only" settings (B, C, or D).
Touch keys are not responding.	No power to the unit.	Check the mains power supply, fuses, and switches.

6. Specifications

- **Detection System:** Microwave Radar
- **Detection Range:** Up to 18 meters at 180° scan (Sensitivity is adjustable via touch controls)
- **Duration Time:** Adjustable from 30 seconds to 10 minutes
- **Power Requirement:** 240V AC, 50HZ
- **Maximum Load:** 2 x 16 Watt LED
- **Weatherproof Rating:** IP65
- **Controls:** Digital Touch-Sensitive Keys with LED Indicators
- **Unit Dimensions:** 195*180mm