# Panel Light Microwave Motion Sensor



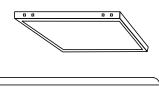
PRODUCT.:	Panel Light Microwave Motion Sensor
MODEL NO.: _	MS036
SPEC NO.:	

R & D DEPARTMENT				
WRITED BY	CHECKED	APPROVED		

### **»**»

### **Features**

- » 5.8GHz dimming microwave motion sensor
- $\,\gg\,$  DC input, PWM dimming output control
- $\, \mathbb{B}\,$  Compact size configuration suitable for panels; troffer; linears
- $\ensuremath{\,^{>}}$  Remote control setting.
- » 5 years warranty.



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## Technical data

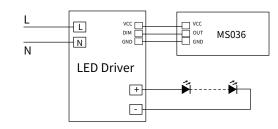
Input	Operating voltage	11-15VDC
	Operating current	22mA
Output	Output	PWM
Sensor Parameters	Microwave frequency	5.8GHz±75MHz
	Microwave power	<0.3mW
	Detection angle	≤150°
	Sensitivity	100%/75%/50%/25% (Refer to Remote Control)
	Hold time	3s/30s/90s/3min/5min/15min/20min/30min (Refer to Remote Control)
	Daylight threshold	5Lux/15Lux/50Lux/100Lux/300Lux/Disable (Refer to Remote Control)
	Stand-by period	0s/5s/30s/3min/5min/15min/45min/+∞ (Refer to Remote Control)
	Stand-by dimming level	10%/20%/30%/50% (Refer to Remote Control)
	Mounting height	Max.5m (ceiling mounted); 1.5-1.8m (Wall Mounted)
	Detection range	Radius, Max.5m (ceiling mounted); Max.10m (Wall Mounted 1.8m)
	Operating temperature	-25°C~70°C
	IP rating	IP44
	Warranty	5 years
Other		

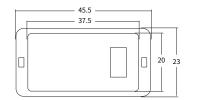


## Mechanical structure (Unit: mm)

Daylight sensor



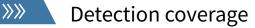


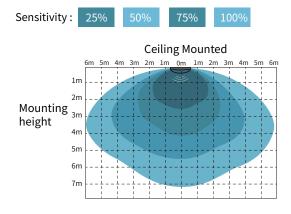


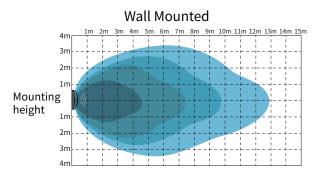
Antenna module



Red: VCC White: DIM Black GND 300±10mm 15±2.0mm





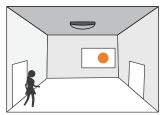




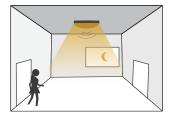
## Application

### 1. ON/OFF function

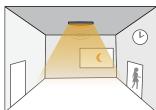
1). The daylight threshold is set to "5Lux/15Lux/50Lux/100Lux/300Lux, Stand-by period is set to "0s".



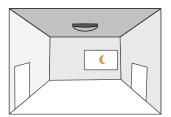
With sufficient daylight, even when motion detected, light remains OFF.



With insufficient ambient brightness, light dims to 100% when motion was detected.

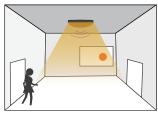


Light keeps on 100% within the holdtime.

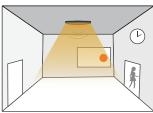


After the last detection and the preset hold time elapsed, light OFF.

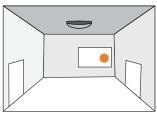
2). The daylight threshold is set to "Disable". Light on when detect movement, After people leave, Light off after hold time.



When motion is detected, the sensor will switch on the light to 100% brighteness.



After people leave the detection area, light remains 100% brightness within hold time.

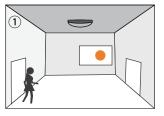


After the last detection and the present hold time elapsed, light OFF.

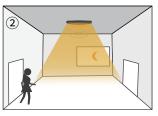
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### 2. Dimmable control/Corridor function

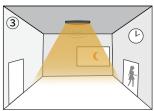
The daylight threshold is set to "5Lux/15Lux/50Lux/100Lux/300Lux, stand-by period is set to "5s/30s/3min/5min/15min/45min".



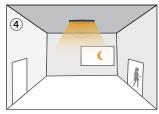
With sufficient daylight, even when motion detected, light remains OFF.



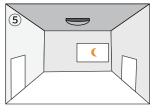
With insufficient ambient brightness, light dims to 100% when motion was detected.



Light keeps on 100% within the holdtime.



Light dims to standby level if no motion detected after holdtime.

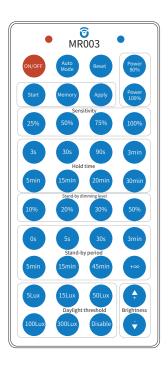


After the stand-by period, light OFF.

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## Installation precautions

- » Wiring must be strictly in accordance with the wiring diagram to avoid short circuit.
- » The detected surface cannot be shielded by metal objects.
- » Microwave sensor can be installed in any lamp except the one with full metal shell.
- » Should be kept away from the driver to avoid interference generation and lamp flashing.
- » Shall not be installed next to large operating machines such as ventilator/ceiling fan to avoid false triggering caused by machine vibration.
- » Suitable for indoor installation to avoid false triggering due to external factors such as rain, wind or tree swing.

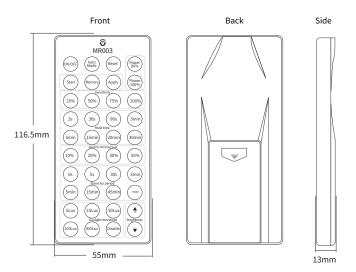


### MR003 Programable one key commission remote controller

Кеу		Function
ON/OFF		Setting the light permanent ON or OFF without motion mode
Auto		Switch to sensor mode and restore the latest sensor setting
Reset		Turn the sensor in a default setting (3s hold time, 0s stand-by period, lux disable, 100% sensitivity).
Power (80%/100%)		Quick setting the power output in 80% or 100%
Brightness (+/-)		Long press this button to set the power from 20% to 100%, available in permanent ON mode or in sensor mode.
Start	Program Mode	<ol> <li>Press Start to program mode, then select the ①Sensitivity② Holdtime③Standby dimming level④Standby period⑤Daylight threshold to setting</li> <li>Press Memory to save the parameters ①-⑤ had selected in step 1</li> <li>Press Apply to transmit the ①-⑤ parameters to the target sensor Remark: After press Start, you need to press any of ①-⑤ parameter button within 30S, the time windown between press any button is 30S, it will quit program mode if no any button is pressed within 30S.</li> </ol>
Memory	Save Setting	
Apply	One Key Apply	
Sensitivity		In this area, movement will be detected and able to trigger the sensor. 100% detection area is also known as the strongest sensitvity.
Hold time		The period of light keeping 100% brightness after moving objects leave the detection area.
Stand-by dimming level		The dimming level in the standby period.
Stand-by period		The period of light keeping low output before it's completely switched off. When it's preset as"+∞", the light always keep at low output if no movement in the detection area and doesn't turn off.
Daylight threshold		Definition of the ambient brightness; when the ambient brightness is lower than the preset specific lux amount, the sensor will work; when it's preset as "disable", the sensor will detects motion regardless the ambient brightness.

Remote Setting Tips: When press any button, if the light is flickering one time, means the setting is successful.

#### Size (L\*W\*H): 116.5\*55\*13mm AAA battery is recommended



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#### FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular

installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

Note: The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. such modifications could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirement.

To maintain compliance with FCC's RF exposure guidelines, the distance must be at least 20 cm between the radiator and your body, and fully supported by the operating and installation