

Operation instruction

M-506 Microwave Motion & Infrared Presence Sensor

Make your choice

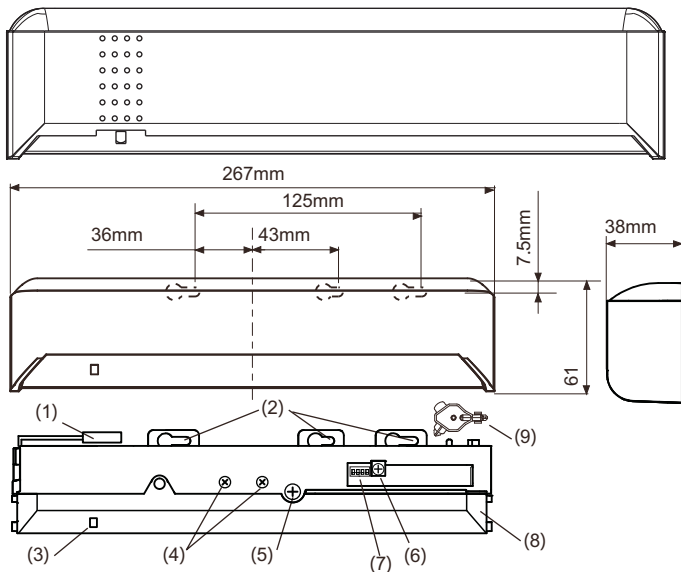


1 Safety instructions



The device must be protected with safety insulation at low voltage. All adjustment and maintenance work must be carried out by a professional engineering installer.

2 Product Overview



- 1 Wiring port
- 2 Installation hole
- 3 Activation indicator light
- 4 Presence width adjustment screw
- 5 Angle adjustment screw
- 6 Microwave sensitivity adjusting screw
- 7 Coding switch
- 8 Testing window
- 9 Adjustment tool

3 Overall Characteristics

- Motion and safety 2 in 1 for sliding door. The activation function is performed by microwave technology, the presence detection is performed using an active infrared function.
- Have function of background self-learn. Can learn background automatically when power on. Suit all kinds of occasions. Always self-correcting once be influenced by quake, distortion, move, dark and sunshine. Ensure the sensor can work durable.
- The microwave technology adopts the 24.125 GHz microwave sensor module imported from Germany, which is not affected by temperature, humidity and other environmental factors, and its working performance is extremely reliable.

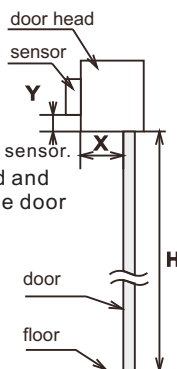
4 Installation

1. Making the sign of hole according to the installation size diagram
2. Screw two 3.5MM installation hole.
3. Screw one 8MM wiring hole.
4. Use two screw fix the sensor in the surface.

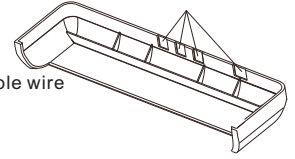
H. Distance from the floor to the bottom of the door head.
X. Distance from the door to the fix surface.
Y. The maximum distance from the bottom of door head to the sensor.

Note: Install the sensor to the bottom of the door head and make sure the sensor not higher than the bottom of the door head as much as you can.

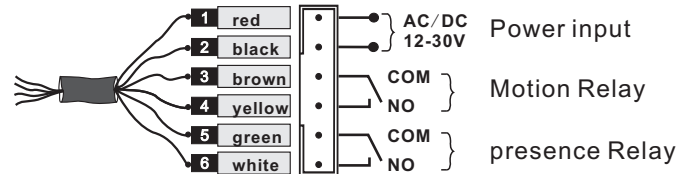
	2000	2200	2500	3000	3500
50	200	200	200	200	200
100	180	180	180	180	200
150	100	100	120	150	170
200	50	80	100	120	140



If wiring with surface-mounted way, can cut the outside shell concealed hole wire



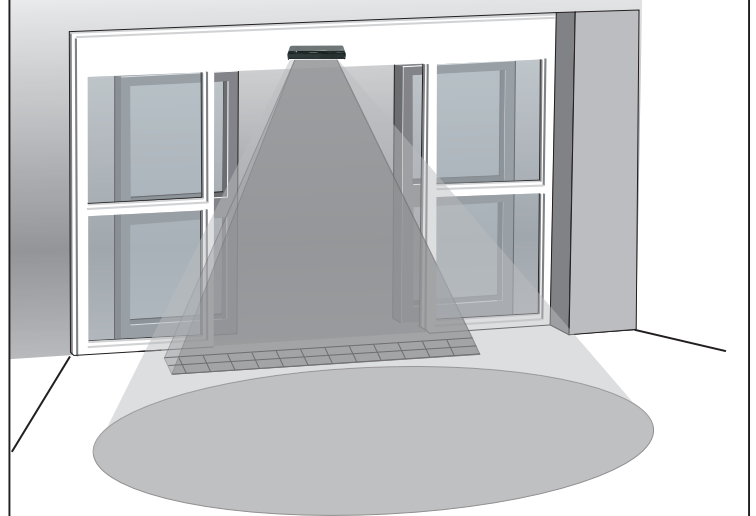
5 I/o wiring diagram



- Note: 1. When connecting with the Electricity, please do not tear the protection cover, otherwise there will be leak of electricity and cause discharge and sensor breakdown.
2. Check whether the sensor is properly connected to the door controller. power the sensor and adjust its detection range.
3. Please don't enter the detection area after power on and during the green LED light flashes.

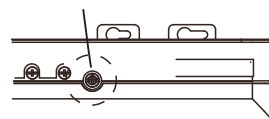
6 Activation and presence detecting Field

Note: ■ Detecting area diagram

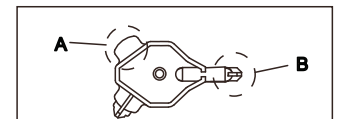


7 Sensitivity & detection range adjustment

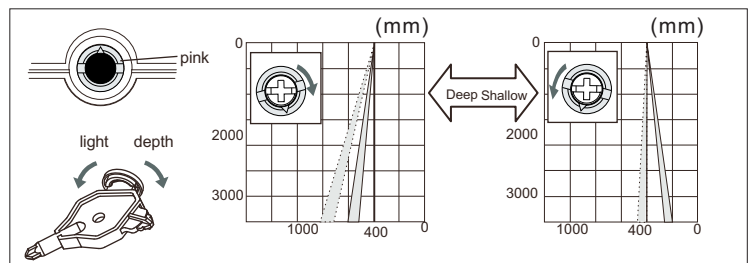
Depth adjusting screw



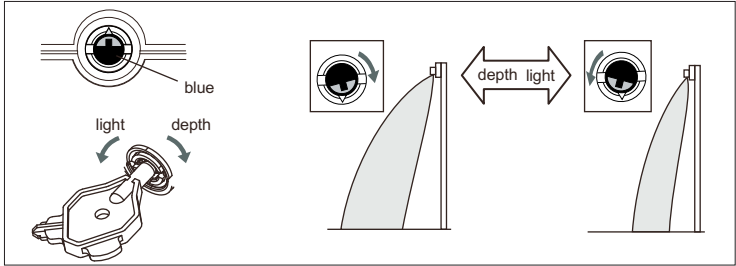
Adjustment tool



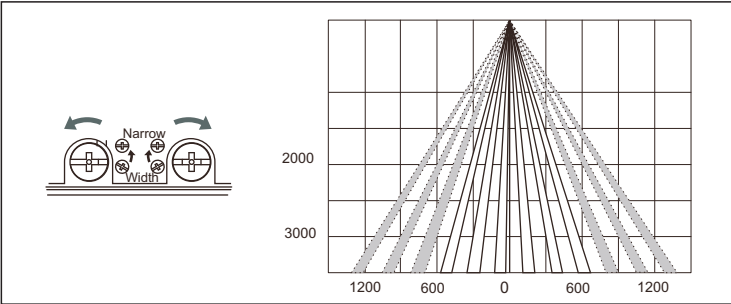
Adjust the pink screw by the adjustment tool to adjust the depth of infrared anti - clip induction. Turn clockwise to adjust the sensor area away from the automatic door. Turn counterclockwise to adjust the induction zone close to the automatic door.



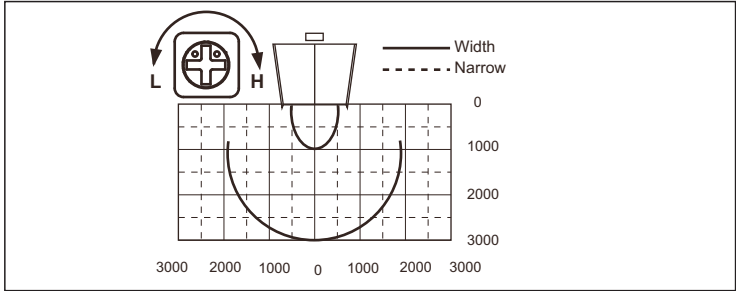
Adjust the blue screw by the adjustment tool to adjust the depth of microwave induction. Turn clockwise to adjust the sensor area away from the automatic door. Turn counterclockwise to adjust the induction zone close to the automatic door



Use the adjustment tool to adjust the left and right width of the infrared anti-clip, two levels can be adjusted.

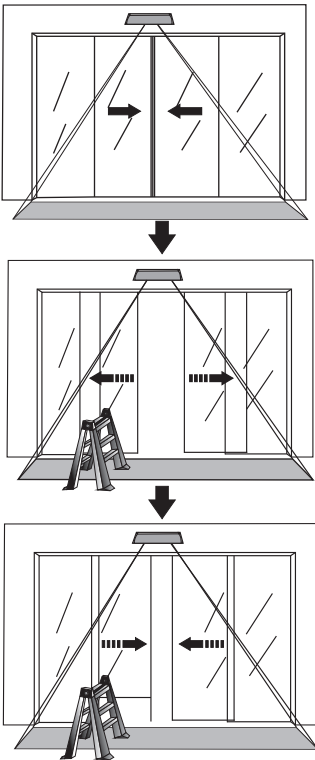


Microwave sensitivity adjustment: clockwise adjustment of the potentiometer increases the microwave sensitivity and the detection area becomes larger. Counterclockwise adjustment reduces the sensitivity and the detection area becomes smaller.



8 Attentions

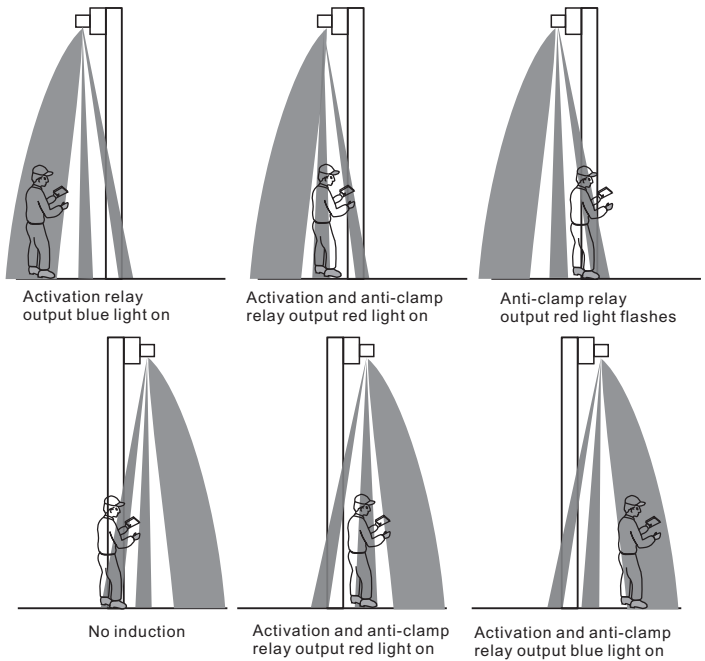
Note:  active infrared detection field



When debugging, in order to avoid the wrong background information in the system, during the entire self-learning process, all irrelevant background objects must be removed from the detection range, such as workers, ladders, toolboxes, etc. After the sensor is powered, the blue and green light flashes and output door opening signal, after 5 seconds the stable background for 2 consecutive seconds, green LED indicator flashes quickly and the self-learning is succeeded, green LED indicator always on, release the door opening signal, and the sensor enters the standby state.

When put another one object in the safety presence detection range, the sensor will transmitting the door opening signal in time. (As the picture shows)

After 15s(15s. 1m. 30m. Optional), the sensor will learn the stationary object enter the background automatically when has no other objects and has no human body enters the sensor area again, to adapt to the new background. final will not give the door open signal and close again (as the picture show)



9 DIP SWITCH SETTING

	Anti-clamping background update time				
1 2		15S	1M	30M	∞
					
3					
	PRESENCE RELAY				
4		NO (Regular opening)	NC (Normal closing)		
					
5					
	SENSIBILITY OF PRESENCE				
6		High	Low		

10 Parameters

Power Input:	AC/DC 12~30V (-/+10%)
Wire length:	2. 5m
Signal output:	Relay, one way activation, one way presence, NO/NC optional
Max installation height:	3500mm
Static current:	43mA
Action current:	115mA
Dimension:	267. 2 (L) × 61. 1 (W) × 46 (H) mm
Sheating material:	ABS plastic
Infrared presence:	
RAY TYPE:	Infrared modulated ray
Ray Source:	infrared 940nm
Light beam:	2 way transmitting, 24 light spot
Self-learning time:	Dynamic stable 2s for self-learning
LED indicator:	Standby mode: Green LED; 2nd row infrared ray detect mode red light always on; 1st row infrared ray detect mode red light flashes.
Working temperature:	-40°C to 60°C
Detection field:	2500 (W) × 600 (D) mm
Output holding time:	0.5s
Respond:	≤100ms
Optical surface:	PMMA
Background update time:	15S. 1M. 30M. ∞ Four optional
Microwave induction:	
Technology:	Microwave and microwave processors
Frequency:	24.125GHz
Transmitting power:	<20dBm EIRP
Transmitting power density:	<5mW/cm ²
Detection mode: motion:	Motion
Operation display:	Microwave induction Blue LED light on
Detection field (Installation height=2.2meter):	4m (W) × 2m (D)
Retention time:	2s
Working temperature:	-20°C to +55°C