

Operation instructions

Make your choice...

M-506 Microwave Motion & Infrared Presence Sensor

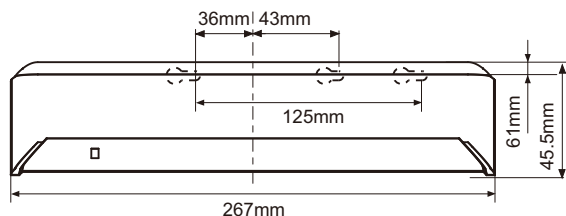
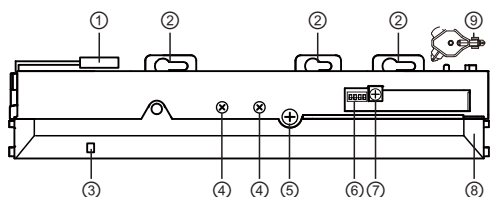


1 Safety instructions

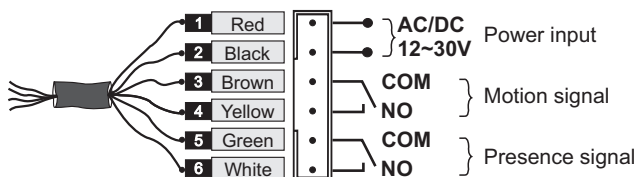


The device must be protected with safety insulation at low voltage. All adjustment and maintenance work must be carried out by a professional engineering installer.

2 Product Overview



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



Note:

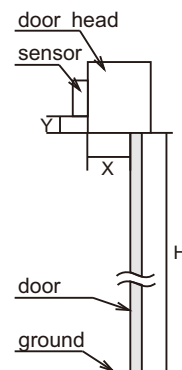
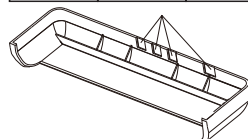
1. When connecting the wire, please don't tear the protection cover, as this may cause an electric leakage hazard or sensor failure.
2. Check whether the sensor is properly connected to the door controller. power the sensor and adjust its detection range.
3. Please don't enter the detection area after power on and during the green LED light flashes.

3 Installation

1. Measure and mark the positions of the installing holes, according to the installation diagram.
 2. Drill two fixing screw holes of $\varnothing 3.5\text{mm}$, and one wiring hole of $\varnothing 8\text{mm}$.
 3. Fix the sensor tightly by 2 screws.
- H. Distance from the ground 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: Please install the sensor on the door head as low as possible, but make sure the sensor is not lower than the bottom of the door head.

(mm)	2000	2200	2500	3000	3500
X	200	200	200	200	200
Y	180	180	180	180	200
H	150	100	120	150	170
	200	50	80	100	140

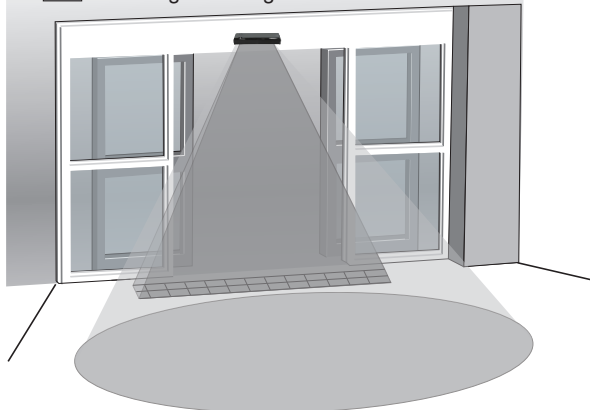


If wiring with surface-mounted way, can cut the outside shell concealed hole wire.

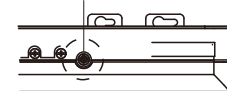
4 Sensitivity & detection range adjustment

Activation and presence detecting Field

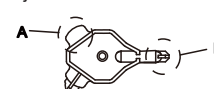
Note: Detecting area diagram



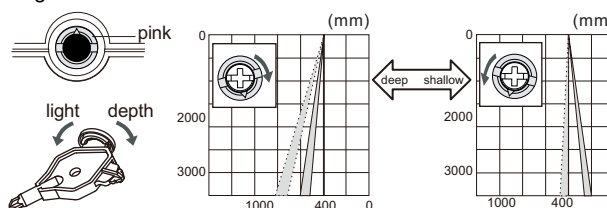
Depth adjusting screw



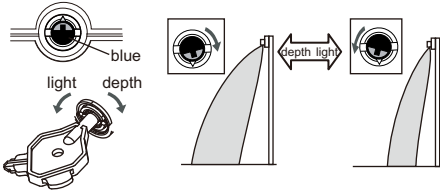
Adjustment tool



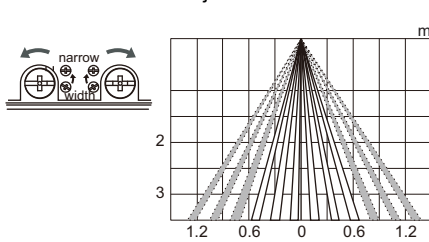
Rotating the pink screw by the adjustment tool to adjust the depth of infrared presence induction. Turn clockwise to adjust the sensing area away from the automatic door. Turn counterclockwise to adjust the sensing area close to the automatic door.



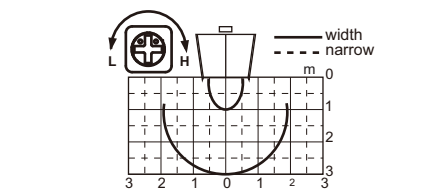
Rotating the blue screw by the adjustment tool to adjust the depth of microwave induction. Turn clockwise to adjust the sensing area away from the automatic door. Turn counterclockwise to adjust the sensing area close to the automatic door.



Rotating the left&right width screws by adjustment tool to change the induction width of infrared presence, narrow and wide two levels can be adjusted.

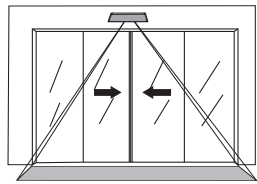


Microwave sensitivity adjustment: clockwise adjustment of the potentiometer increases the microwave sensitivity and the detection area becomes larger. counterclockwise adjustment reduce the sensitivity and the detection area becomes smaller.

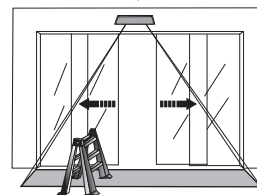


5 Attentions

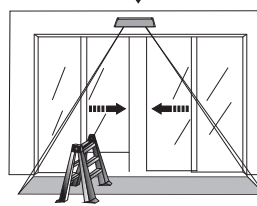
Note: active infrared detection field



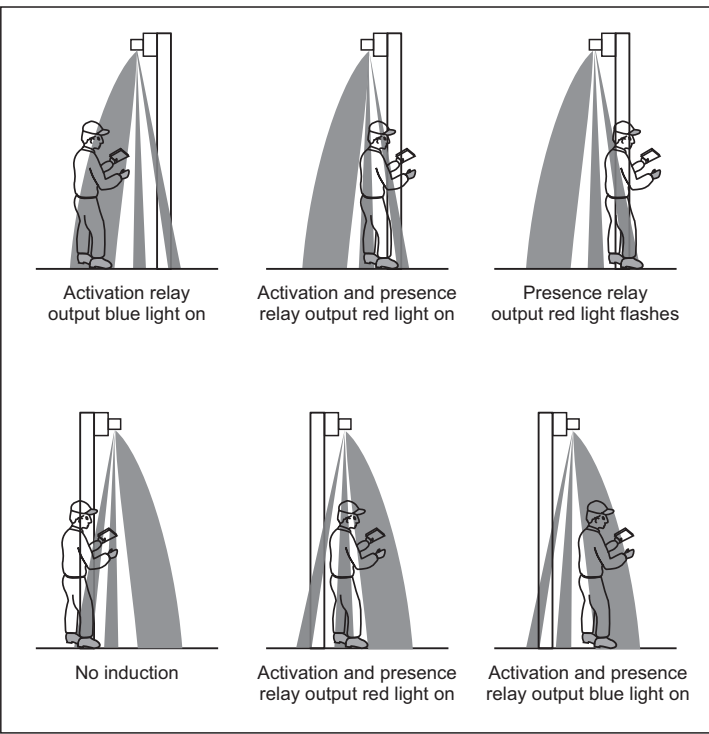
When debugging, in order to avoid the wrong background information in the system, during the entire self-learning process, all irrelevant background objects must be removed from the detection range, such as workers, ladders, toolboxes, etc. After the sensor is powered, the blue and green light flashes and output door opening signal, after 5 seconds the blue LED is off. When the sensor detects 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 enter 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)



It lasts for 15 seconds(15s,1m,30m are optional) in the state of the previous scene. If there is still only this static object and no other objects or human bodies appear in the detection range, the system will automatically learn the static object as the new background. In the new background, the static object is the part of background and no longer trigger door opening signal, and the automatic door will close back automatically.



6 DIP SWITCH SETTING

				Presence output signal		NO		NC
		Presence background update time		15s		1min		30min
				∞		High		Low

7 Parameters

Power input:	AC/DC 12~30V(±10%)	Working temperature:	-40°C~60°C
Wire length:	2.5m	Detection field:	2500(W)×600(D)mm
Signal output:	Relay, one way activation, one way presence, NO/NC optional	Output holding time:	0.5s
Installation height:	3500mm(max)	Respond:	≤100ms
Current:	43mA(static current), 115mA(action current)	Optical surface:	PMMA
Dimension:	268(L)×61(W)×38(H)mm(exclude the bottom shell)	Background update time:	15S.1M.30M.∞ Four optional
Sheating material:	ABS plastic	Microwave induction	
Infrared presence		Technology:	Microwave and microwave processors
Ray type:	Infrared modulated ray	Frequency:	24.125GHz
Ray source:	infrared 940nm	Transmitting power:	<20dBm EIRP
Light beam:	2 way transmitting, 24 light spot	Transmitting power density:	<5mW/cm ²
Self-learning time:	Dynamic stable 2s for self-learning	Detection mode:	Motion
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.	Operation display:	Microwave induction Blue LED light on
		Detection field:	4m(W)×2m(D)(Installation height=2.2meter)
		Retention time:	2s
		Working temperature:	-20°C~+55°C