

# Operation Instructions

Make your choice...

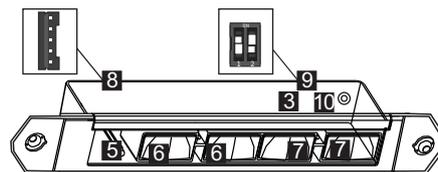
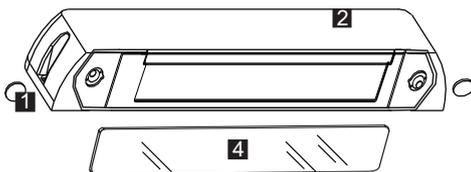
## M-229E Safety Curtain Sensor For Sliding Door



### 1 Safety Instruction

**!** This device must use a low voltage with protection and safety insulation, and adjustment or maintenance must be done by professional installation workers.

### 2 Product Overview



Power supply input	AC/DC	—	RED
	12-30V	—	GRN
	COM	—	BLU
Relay output	NO	—	YEL
	NC	—	ORG
		—	

- 1** Decorative cap    **2** Exposed cover    **3** Main Controller    **4** Optical surface lens    **5** LED indicator  
**6** Transmitter window    **7** Receiver window    **8** Wiring terminal    **9** Function setting button    **10** Sensing range adjustable screws

This detector with background self-learning function after starting up, the red LED light is always on after power on, at this time, the personnel must leave the sensing area and let it be relatively static state, after 6 seconds background learning success, LED indicator turns to Blue light is always on.

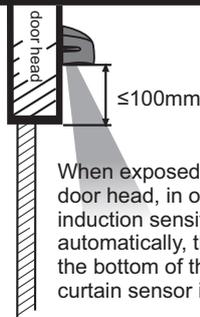
### 3 Installation Precautions

#### NOTE 1



When top suction installation, in order to avoid self-induction, the installation distance between the automatic door and the safety curtain should be more than 100mm.

#### NOTE 2



When exposed installation on the door head, in order to avoid the induction sensitivity decreases automatically, the distance between the bottom of the door head of the curtain sensor is ensured  $\leq 100\text{mm}$ .

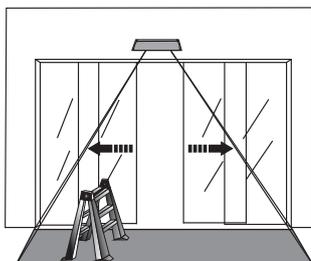
#### NOTE 3

**Note:** ■ Presence detecting area

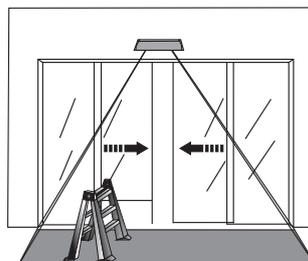
When debugging, in order to avoid the wrong foreground information in the system, before the self-learning state, please make sure the automatic door is in the close state, all irrelevant background objects must be withdrawn from the detection range, such as workers, ladders, toolboxes, etc.



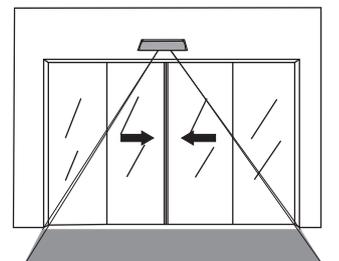
**Note:** ■ Presence detecting area



When place an extra stationary object in the detection area, the sensor will output a door opening signal in time.



Maintain 15 seconds, in addition to this stationary object, there is no other objects or human body enter into the detection area, the system of the sensor will learn the stationary object as new background and adapt to it, at this time, sensor won't output door opening signal, door will close automatically.



When remove this stationary object and recover the original background, the system of the sensor will recognize intelligently, and output the door opening signal for 2 seconds, then return to the standby state.

## 4 Function Setting

 ▶ High sensitivity: switch 1 up  
 - Default setting is high sensitivity mode.

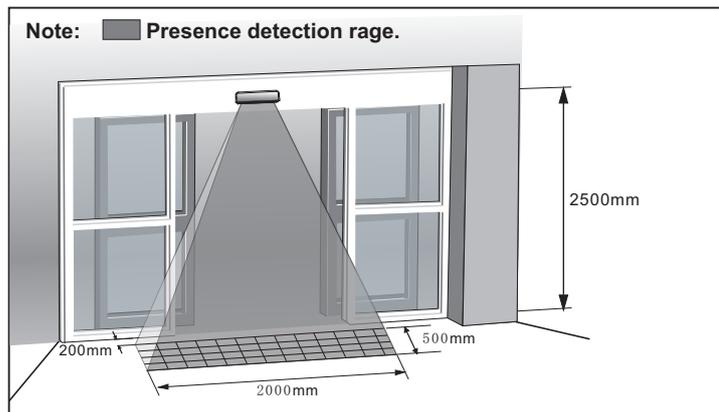
 ▶ Low sensitivity: switch 1 down  
 - If the reflectance of working environment is strong, it should set to low sensitivity to avoid self-induction or background mistaken.

 ▶ Horizontal width 2000mm: switch 2 up  
 - If the scan width is wide range, it should set to 2000mm.

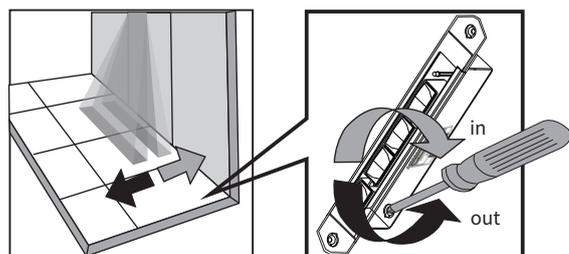
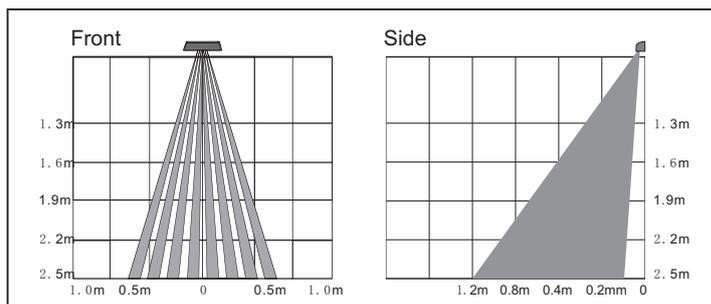
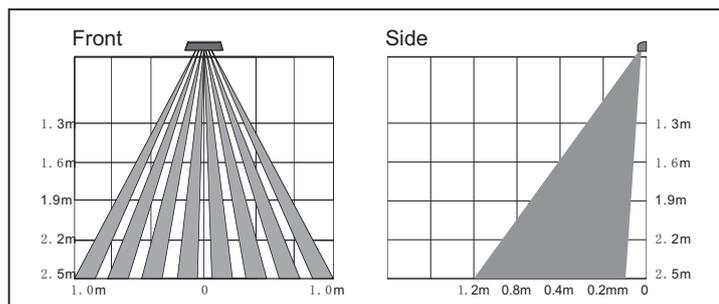
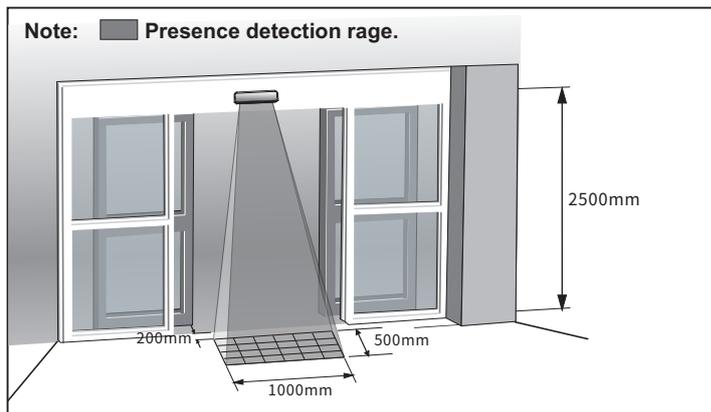
 ▶ Horizontal width 1000mm: switch 2 down  
 - If the scan width is narrow range, it should set to 1000mm.

## 5 Detection Range

**A: For large scanning range, function switch setting the horizontal scanning width is 2000mm.**



**B: For narrow scanning range, function switch setting the horizontal scanning width is 1000mm.**



### Infrared detecting range adjustment:

Note: (As the picture shows) Clockwise to adjust detect range moves inside; Counterclockwise to adjust detect range moves outside.

## 6 Technical Parameters

Power input:	AC/DC 12-30V(-/+10%)	Detection range:	2000(W)x500(D)mm/1000(W)x500(D)mm
Ray type:	Infrared modulated light	Output hold time:	500ms
Optical source:	Infrared 940nm	Response time:	≤100 ms
Light beam:	8 transmitting, 8 receiving	Switch mode:	Sensitivity can be switched, horizontal scanning range can be adjusted
Static current:	35 mA	Signal output:	Relay, 1 pair of selectable contact points
Action current:	73 mA	Shell material:	ABS
Learning time:	10 seconds	Optical surface:	PMMA
Operating display:	Standby mode: blue LED on; Detecting mode: Red LED on	Installation methods:	Surface mount or concealed mount
Temperature:	-40°C to +60°C	External dimension:	200(L)x54(W)x32(H)mm (surface mount) 152(L)x25(W)x36(H)mm (hidden hole size)
Maximum mounting height:	2500mm		

## 7 Packing List

NO.	PART	QTY	UNIT	REMARK
1	Sensor	1	PC	
2	5-pin line	1	PC	165mm
3	Screws	1	Bag	
4	Operating instructions	1	PC	
5	Surface mount cover	1	PC	Silver or black can be selected