

# Operation Instructions

Make your choice...

## M-229G Safety Curtain Sensor

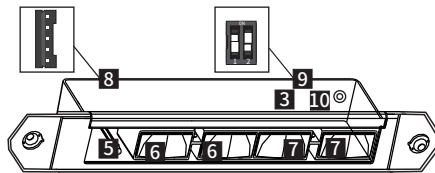
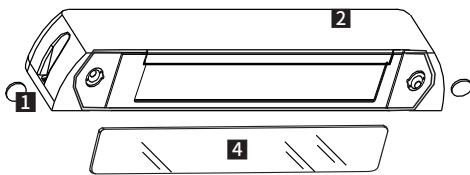


### 1 Safety Instruction



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

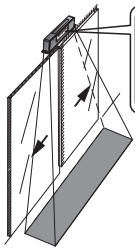


- |                               |   |
|-------------------------------|---|
| <b>1</b> Decorative cap       | <b>6</b> Transmitter window               |
| <b>2</b> Exposed cover        | <b>7</b> Receiver window                  |
| <b>3</b> Main Controller      | <b>8</b> Wiring terminal        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

### 3 Installation Precautions



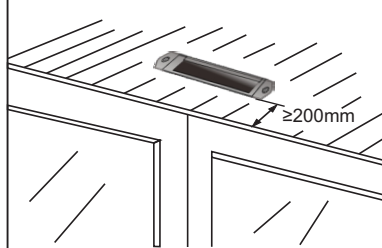
#### NOTE 1



The scanning range of this sensor is unidirectional, when actual installation, please turn the side with the label toward the moving object to avoid self-induction.



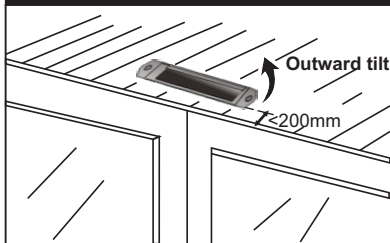
#### NOTE 2



When ceiling installation, in order to avoid self-induction, the installation distance between the automatic door and the safety curtain should be more than 200mm.



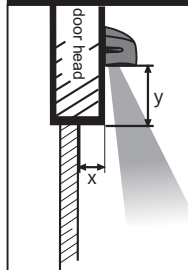
#### NOTE 3



If the distance from the automatic door can't reach 200mm, the safety curtain can be installed at outward tilt a certain angle.

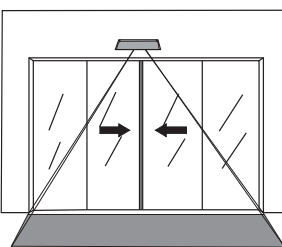


#### NOTE 4

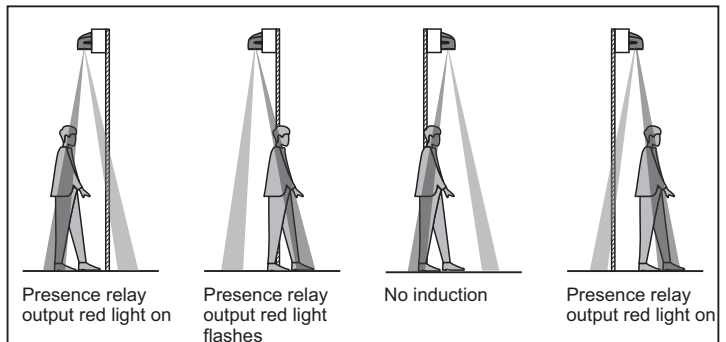


When exposed installation on the door head, in order to avoid the first row infrared ray being blocked by door head, the distance between the bottom of the door head and the sensor is ensured:  
 $X=50, Y=70$   
 $X=100, Y=50$   
 $X \geq 200, Y \leq 20$

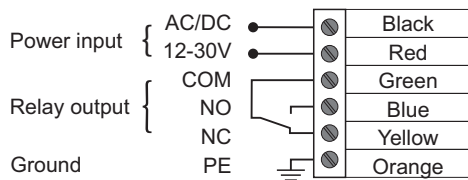
#### Note: ■ Presence detecting area



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 withdrawn from the detection range, such as workers, ladders, toolboxes, etc. When the sensor is power on, blue light indicator is flashes, simultaneously send out door open signal, entering the background learning state; When the sensor detect the stable background for 2s, blue light flashes quickly, and background learning success, blue light is always on, release door opening signal, the sensor is in standby state.



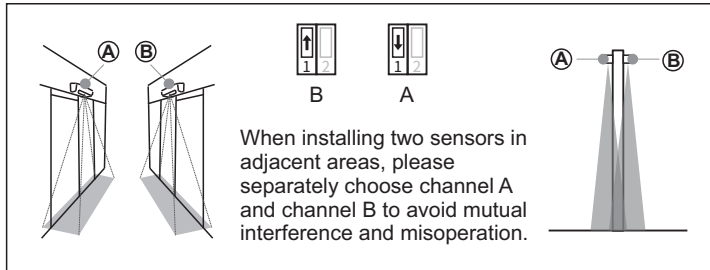
## 4 Wiring





This detector with self-learning function after starting up, the blue light flashes after power on, Simultaneously send out the door open signal, make sure door is in the opening state, so that the sensor can learn the door opening state correctly. At this time, the personnel must leave the sensing area and let the sensing area be relatively static. The sensor detects stability for 8 seconds, that is, the learning background, and after the learning is successful, the blue light is always on.

**Note: If the sensor is only used for presence safety function, should be connected the signal to the door controller's safety port; If used for close-range motion sensing or presence safety function, should be connected the signal to the door controller's induction port.**

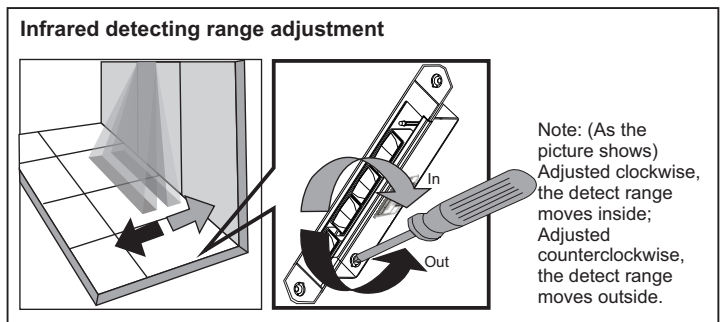
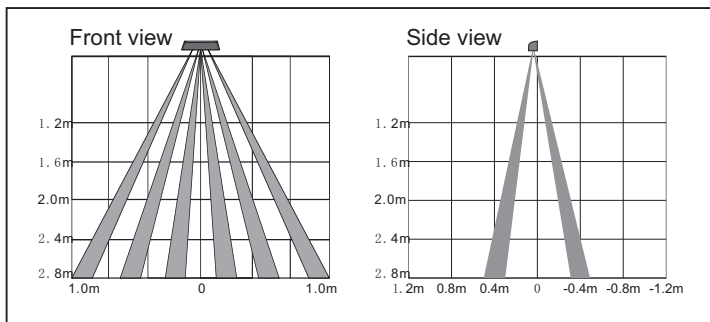
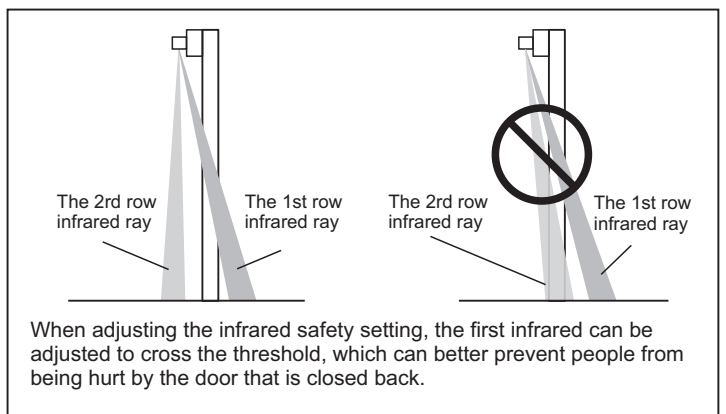
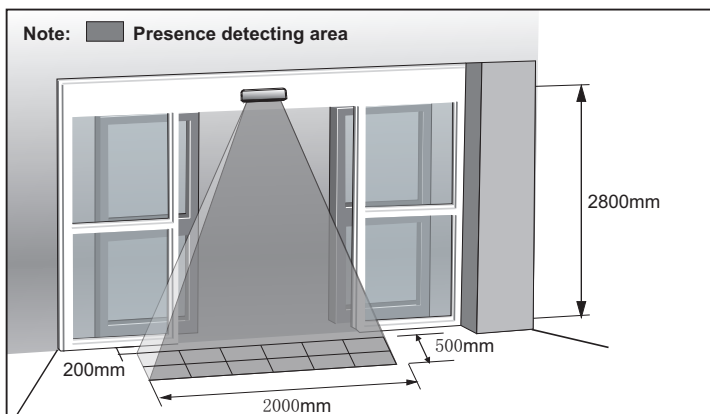
## 5 Function Setting



### Background automatic update time

- 
 ▶ When background update time is 5 min: key 2 up  
 - That is, if people stand under the door and don't move, after 5 minutes, the person will be learned as background.
- 
 ▶ When background update time is 15 seconds: key 2 down  
 - That is, if people stand under the door and don't move, after 15 seconds, the person will be learned as background.

## 6 Detection Range



## 7 Technical Parameters

Power input:	AC/DC 12-30V(-/+10%)	Maximum mounting height:	2.8 meters
Ray type:	Infrared modulated light	Detection range:	(=2.8m height) 2000 (W)*500(D)mm
Optical source:	Infrared 940nm	Output hold time:	500ms
Light beam:	2 row, 12 beams in total	Response time:	≤100 ms
Static current:	30 mA		Relay, 1 pair of selectable contact points
Action current:	62 mA	Signal output:	6-pin connect terminal
Learning time:	Dynamic stability for 8 seconds	Connection:	ABS
Background update time:	15s	Shell material:	PMMA
Operating display:	Standby mode: blue LED on; Detecting mode: Red LED on	Optical surface:	Surface mount or concealed mount
Temperature:	-25°C to +60°C	Installation methods:	200(L)x54(W)x32(H)mm (surface mount)
		External dimension:	152(L)x25(W)x36(H)mm (hidden hole size)

## 8 Packing List

Sensor \*1, 6-pin line (165mm) \*1, Screws bag \*1, Operating instructions \*1, Surface mount cover \*1