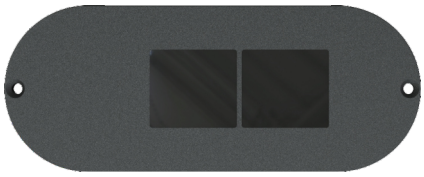
Operation Instructions

Make your choice...

M-901/M901Q Laser safety sensor

M-901
Exposed installation

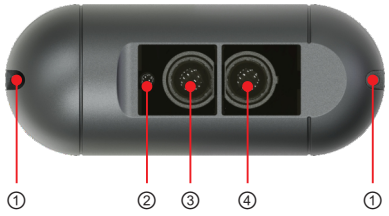


M-901Q
Concealed installation

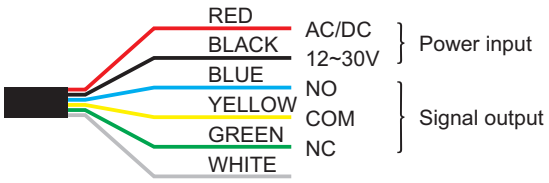
1 Safety Instructions

Thanks so much for your purchasing, please read this instruction before using

2 Product Overview And Wiring



① Fixing holes ② LED indicators
③ Laser receiving cabin ④Laser transmitting cabin



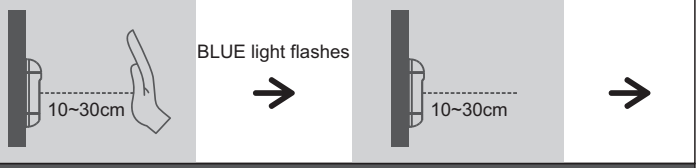
Input and output wiring

3 Installation and Debugging

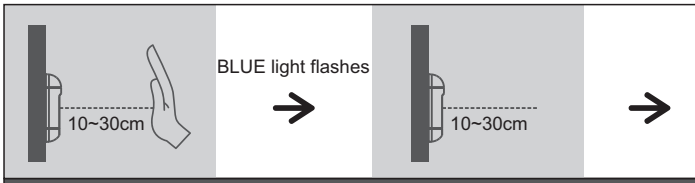
Connect the power, the sensor makes "beep beep ..." sounds and BLUE light flashes quickly, it means that it's in the initial background learning state. When you hear a long beep sound, learning completed, BLUE light is always on, sensor entering into the standby state. When the sensor detects the presence of a human body or objects, RED light is on.

NOTE: After power-on, complete the setting within 5 minutes. If not setting due to timeout, power off and power on again, then to setting.

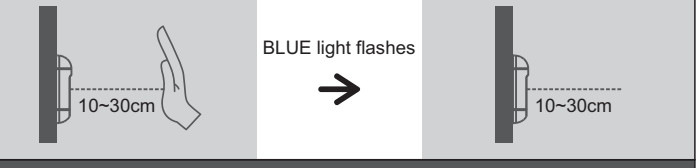
3-1. Set the sensing distance



Step 1: In the standby state, wave your hand and sensing to the sensor for 3 seconds between 10-30cm distance away from it, BLUE light flashes, remove your hand quickly and then sensing it again.



Step 2: Sensing it for 3 seconds and blue light flashes, remove your hand quickly and then sensing it again.

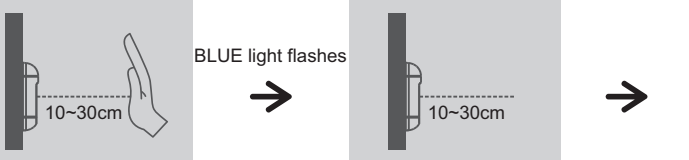


Step 3: Sensing it for 3 seconds and blue light flashes, then remove your hand quickly.

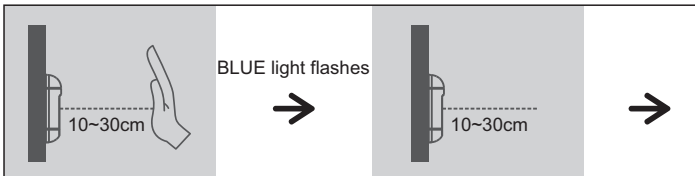
Step 4: In the position to set the sensing distance, place a flat object or person standing right in front of the sensor, so that the sensor can learn the backgrounds(sensing distance setting≥80cm).

After learning completed, the sensor makes a long beep sound, BLUE light is always on, it means learning background is completed, and entering into the standby state.

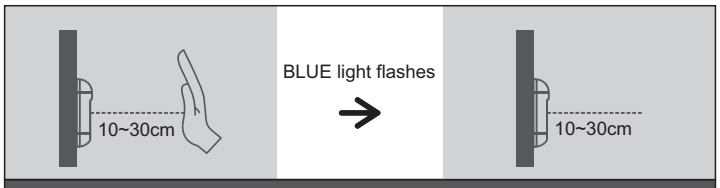
3-2. Cancel the sensing distance setting



Step 1: In the standby state, wave your hand and sensing to the sensor for 3 seconds between 10-30cm distance away from it, BLUE light flashes, remove your hand quickly and then sensing it again.



Step 2: Sensing it for 3 seconds and blue light flashes, remove your hand quickly and then sensing it again.

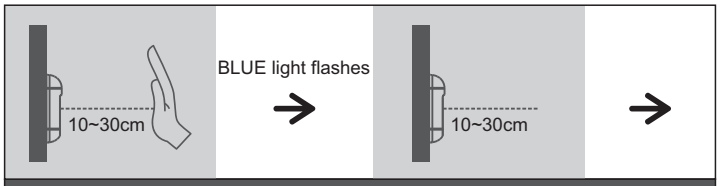


Step 3: Sensing it for 3 seconds and blue light flashes, then remove your hand quickly.

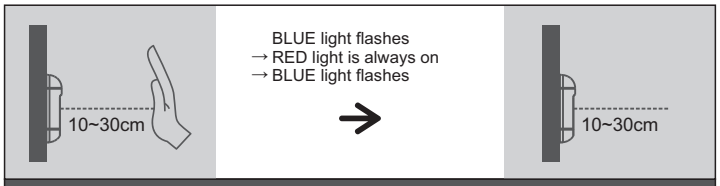
Step 4: There is no block in front of the sensor, so that the sensor can learn the distant background.

After learning completed, the sensor makes a long beep sound, BLUE light is always on, it means learning background is completed, and entering into the standby state.

3-3. Open/close ranin-proof mode



Step 1: In the standby state, wave your hand and sensing to the sensor for 3 seconds between 10-30cm distance away from it, BLUE light flashes, remove your hand quickly and then sensing it again.



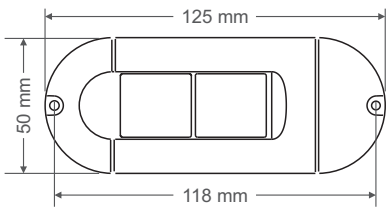
Step 2: Sensing it for 3 seconds and blue light flashes, don't remove your hand, after 2 seconds, RED light is always on, after another 3 seconds, BLUE light flashes, then remove your hand quickly.

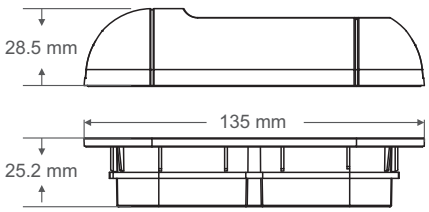
The sensor makes short "beep" sounds, it means open the rain-proof mode; or one long "beep" sound, it means close the rain-proof mode.

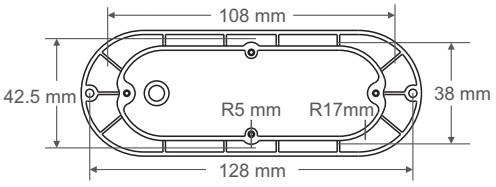
4 Trouble shooting

Symbol	Cause	Method
Indicator light don't work	Unconnect the power	Check the power supply and wiring
Indicator light is normal, but door can't be opened or opposite state	NO/NC signal are connected incorrectly	Reconnect the signal cable correctly
Power on and after learning background, RED indicator is always on	Set the sensing distance, and far than current distance	Cancel the sensing distance setting
Sensing distance is too near	Inductive distance cutting has been set	Reset the sensing distance cutting

5 Dimension







Hole depth need ≥35mm in concealed installation

6 Technical Parameter

Detection principle: Time of Flight (TOF)	Working temperature: -20℃~60℃
Light medium: 890nm infrared laser	Working voltage: AC/DC 12-30V
Laser category: Class I eye-safe laser	Standby current: 52mA(12V power)
Detection diameter: 100mm light spots(2.8meters height)	Action current: 74mA(12V power)
Detection reaction time: ≤50ms	Signal output: Relay NO or NC
Max detection distance: 10 meters	Trigger mode: Moving or stationary
Min cutting distance setting: 80cm	Function instruction: LED indicator, standby: BLUE, detection: RED
Waterproof grade: IP67	Shell material: ABS, PC

7 Packing List

NO.	NAME	QUANTITY	REMARK
1	Sensor	1 pc	
2	Screw bag	1 bag	
3	Manual	1 pc	