Operation Instructions Argus Scan

Laser Safety Curtain Sensor

Right-type

Left-type

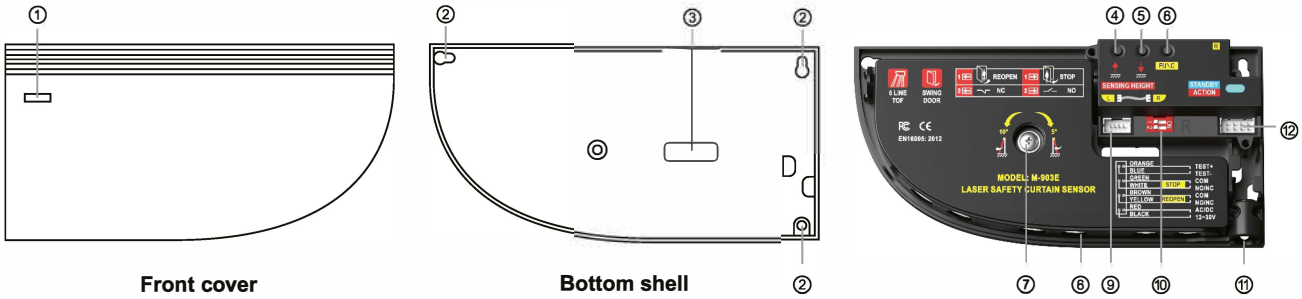
NOTE: Silver, black color are optional

1 Safety Instructions

Thanks so much for your purchasing, please read this instruction before using. **Do not disassemble by yourself to avoid product errors.**

2 Product Overview

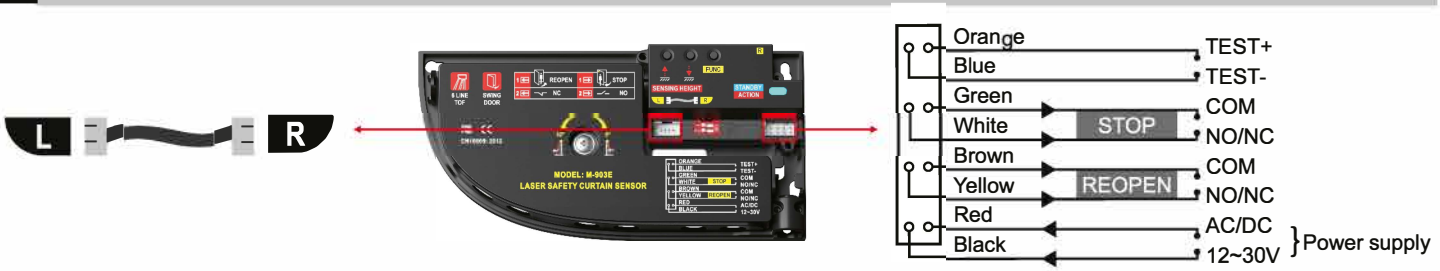
This products have left-type and right-type, the right angle on the left/right side is left-type/right-type.



Front cover　　Bottom shell

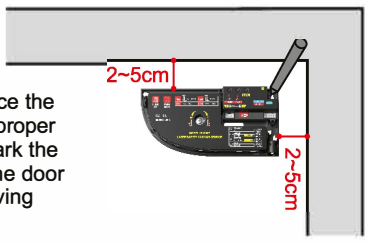
① Indicator light　② Fixing screw hole　③ Threading hole　④ Scanning range away the ground key
⑤ Scanning range near the ground key　⑥ Function key　⑦ Light curtain angle adjusting knob　⑧ Optical filter
⑨ Connecting terminal for master and slave machine　⑩ DIP switch　⑪ Wire pressing bracket　⑫ Automatic door machine wiring terminal

3 Wiring Definition

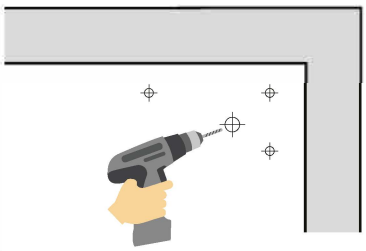


4 Installation & debugging

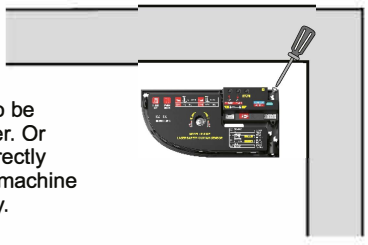
Installation



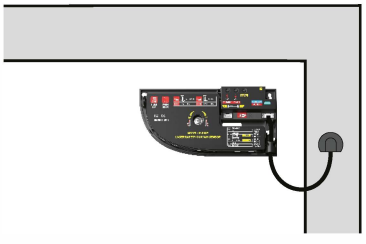
1. Remove the front cover, place the sensor on the door leaf in the proper position for late installation, mark the hole position(the sensor and the door side should be suitable for leaving 2~5cm)



2. Drill the installing holes and threading holes for the master and slave machine in the door leaf.



3. Tighten the screws to fix the sensor, connect the master and slave machine, then only one of them needs to be connected with the door opener. Or don't drill holes on the door, directly connect the master and slave machine to the door opener respectively.



4. Use the matching hose to cover the automatic door machine connection line, fixed into a U shape, so that the door leaf will not pinch the line when moving.

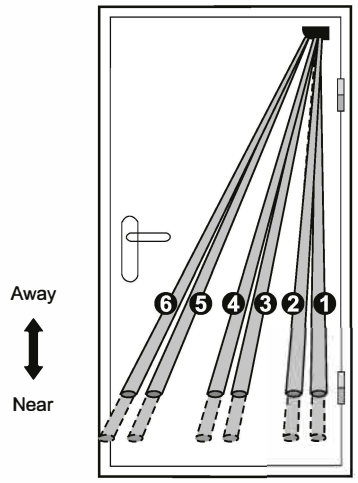
Debugging

After installation, close the front cover and power on, the sensor self-learning for 16-30 seconds(the learning time depends on the different scene and climate), hearing quick beep voice and blue indicator light flashes, in the learning background state; When heard a long beep voice, learning is complete, blue light is on, system work normally. Generally, no special adjustment, the factory default scanning range is about 50cm from the ground. If you need to adjust, the steps are as follows:

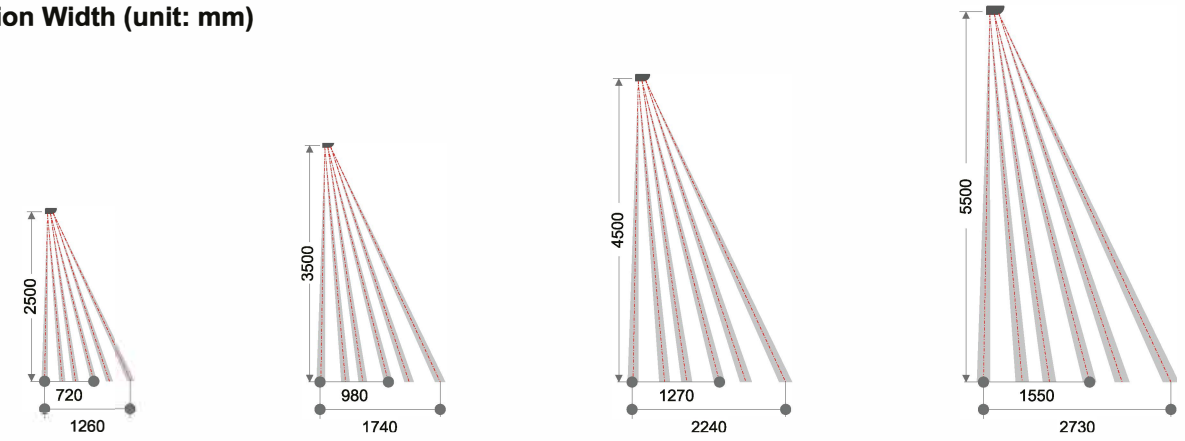
[1] Adjust scanning range

		❶ ~ ❹ row light beams entire scanning range away from the ground.
		❶ ~ ❹ row light beams entire scanning range near to the ground.
Press FUNC key		Individually adjust ❺❻ row light beams, scanning range away from the ground. When adjusting to the 8th level, the buzzer beeps 2 short voice, turn off ❺❻ row light beams.
		Individually adjust ❺❻ row light beams, scanning range near to the ground. When the ❺❻ rows is OFF, the first press will open the ❺❻ rows.

Scanning range in all 8 levels, push once, one buzzer voice, scanning range will increase or decrease by 10cm. For ❶ ~ ❹ rows adjustment, if the buzzer beeps 2 voice that it means the adjustment has reached the limit.



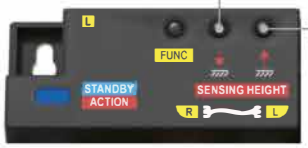
Detection Width (unit: mm)



[2] Working mode

Normal mode

Press and hold for 5 seconds, hear a long beep voice, enter the normal mode.

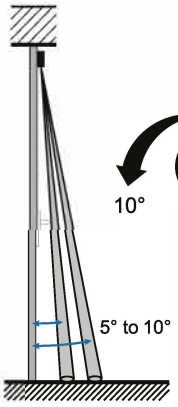


Stable mode

Press and hold for 5 seconds, hear a long beep voice, enter the stable mode.

Please use stable mode when in the scenes such as floating leaves, complex ground, rainy days etc unstable factors. The factory default is normal mode.

[3] Curtain angle adjustment



Induction angle can be adjusted by "installation angle adjusting knob". Turn the knob clockwise, the angle near to the door leaf, turn the knob counterclockwise, the angle away to the door leaf.

[4] DIP switch

1 ←	**Safety presence** function	1 →	**Anti-collision** function
2 ←	**NC**	2 →	**NO**

[5] LED indicators

Blue light is on	Standby	Red light is on	1,2,3,4 rows light curtain induction
Blue light flashes	Learning background	Red light flashes	5,6 rows light curtain induction

[6] TEST signal input high/low switch		
STEP 1		Push and hold " Scanning range close to ground switch" for 5 seconds
STEP 2		You will hear one long beep, and don't release the switch
STEP 3		Continue to push and hold it for 5s

STEP 4		You will hear one long beep again
STEP 5		Release it
Heard one long beep		Heard continuous short beep
Test signal is switched to high input active (Factory default high input active)		**Test signal is switched to low input active**

NOTE: When the test signal function is not used, it must be set in the high input active state, otherwise the sensor will not work normally.

5 Fault resolutions

Failures	Possible reasons	Improvements
Sensor's LED indicators don't work, and no beep voice	No power on	Check power connection
Red light is on, causing automatic door can't operate normally	The scanning range of 1,2,3,4 rows light curtain is too near the ground	Adjust the scanning range height by " " key
Red light flashes, causing automatic door can't operate normally	The scanning range of 5,6 rows light curtain is too near the ground	Adjust the scanning range height by "FUNC + " key
Sensor's LED indicators is normal, but the door is in the normally open state	NO.2 DIP switch is wrong	Set NO.2 DIP switch correctly
Sensor's red LED indicators is on, but the door is in the normally open state	Background self-learning isn't complete	Power off and re-power, then self-learning background

6 Technical parameters

Detection principle:	Time of Flight (TOF)	Maximum installation height:	3.5 m @ 2% reflectivity,
Light medium:	890nm infrared laser		5.5 m @ 10% reflectivity
Laser category:	Class I eye-safe laser	Working voltage:	AC/DC 12-30V
Numbers of laser:	6-line	Standby current:	50mA(DC 12V supply)
Detection response time:	≤50ms	Action current:	60mA(DC 12V supply)
Detection area diameter:	Each 100mm light spot(height=2.8m)	Signal output:	Relay NO or NC
Detection angle:	5°~10° adjustable	Function instruction:	LED indicator, standby state with BLUE,
Detection range:	Minimum 300mm away from the ground		detection state with RED
Working temperature:	-25°C ~ 55°C	Dimension:	153(L)x77(W)x30(H) mm

7 Packing List

NO.	Name	QTY	Remark
1	Sensor	1	
2	8-pin line	1	2500mm
3	Wire hose	1	400mm
4	Exposed installation bracket	1	
5	Cable fixing bracket	1	
6	Screws bag	1	

NO.	Name	QTY	Remark
1	Master and slave machine	2	
2	Connecting line for master and slave machine	1	
3	8-pin line	2	2500mm
4	Wire hose	2	400mm
5	Exposed installation bracket	2	
6	Cable fixing bracket	2	
7	Screws bag	1	