

# Operation Instructions

Make your choice...

## M-204T Microwave Motion Sensor



### 1 Safety Instruction

Related part should be operated under low voltage condition. All installation process and maintenance should be carried out by the supplier.

### 2 Installation



**LED Indicator**  
After the sensor is powered, LED indicator will flash for 5 times; The sensor detected the moving objects, LED indicator and output terminal are on at the same time.

**Sensitivity potentiometer**

**Doppler microwave sensor**  
(Fluctuation up and down, rotation left or right)

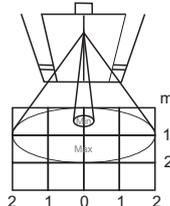
**JST connection**  
Brown, Yellow: Relay  
Green, White: Power cable

1. Install the sensor. Place the device in the proper position, and remove the burrs completely when processing the cable hole. Open the mounting plate after opening the hole.
2. Connect the signal cable to the power terminal of the automatic door.  
Green, white: power input AC / DC12V~24V Brown, yellow: signal output COM/NO
3. Remove the outer cover and fix the sensor with screws.
4. Connect the terminal to the sensor.
5. Connect the power supply to the sensor, set the detection range and each function switch in sequence.
6. Close the cover.

### 3 Adjustment

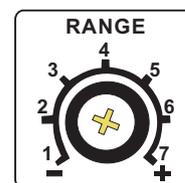
1. Detection range as below shown

NOTE: Please stand out of the detection range around 5S to ensure the sensor has enough time to finish the self-adjustment.



2. Sensitivity Adjustment

Detection Range  
MIN:0.5\*0.4M MAX:3.5\*2M  
Select different detection range by adjusting sensitivity knob



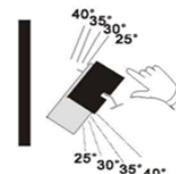
3. Adjustment of detection direction

(Adjust Direction of front and back/Left and Right flexibly)  
Adjusting angle of Plain aerial to get different detection distance and range 30=15\*2 range.

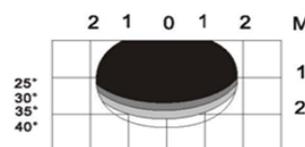
NOTE: The factory default is 45 degrees. All the parameters above are only for reference, detection height is 2.2M. Detection range will be different because of the making material of door and ground, please adjust the sensitivity by the knob mentioned above. When adjusted to 60 degrees, the detection range is widest, which may cause self-sensing and the door will always open and close.



Fluctuation up and down



Rotation left and right



### 4 Cautions



Position should be fixed tightly to avoid vibrating



Sensors should not be placed behind the shield.



Moving object should be avoided



Fluorescent should be avoided



Do not touch directly, ESD Protection is necessary

### 5 Troubleshooting

Symptom	Cause	Method
Door&Indicator lose failure	Did not get on power	Check cable connection & power supply
Door keep on closed and open	Sensor detected the movement of autodoor; vibration of movement	1, Increase the antenna installation height. 2.check the position 3, Reduce the sensitivity.
Door do not close Red indicator lose failure	1.Switch of autodoor controller lose failure 2.incorrect position 3.Incorrect output of sensor	Check the switch of autodoor controller & setting of output.
Door keeps on moving when it rains	Sensor detected the actions of rain	Adopt waterproof accessories

### 6 Parameter

Technology: Microwave&microwave processor	Relay output(No initial potential): COM NO
Frequency: 24.125GHz	Maximum current: 1A
Transmitting power: <20dBm EIRP	Maximum voltage: 42V AC/60V DC
Launch frequency density: <5mW/cm <sup>2</sup>	Maximum switching power: 42W(AC)/60W(DC)
Installation Height: 3M(MAX)	Hold time: 1.5 Second
Installation Angle: 0-90 degree(lengthways) -30 to +30(lateral)	Cable length: 2.5 meters
Detection Mode: Motion	Working temperature: -20 °C to +55 °C
Min detection speed: 5cm/s	Sheating material: ABS plastic
Power: <2W(VA)	Power supply: AC/DC 12-24V ±10% (50Hz to 60Hz)
Detection range: 3.5m*2m(Installation Height 2.2M)	SIZE: 120(W)x80(H)x50(D)mm