

# Operation Instructions

Make your choice...

## M-204H Microwave Motion Sensor



### 1 Safety Instructions



Thank you for your purchasing, please refer to the following details before using.

### 2 Product Overview



- ① JST Connection
  - BROWN, YELLOW** Power Connection
  - GREEN, WHITE** Relay
- ② Doppler Sensor Module
  - Up** Far Distance
  - Down** Near Distance
- ③ Sensitivity Adjuster
  - Clockwise** High sensitivity
  - Anticlockwise** Low sensitivity
- ④⑤ Fixing screw holes

### 3 Installation

- Place the sensor in the proper position, remove the burrs completely of the cable hole, and open the mounting plate.
- Connect the signal cable to the power terminal of the automatic door.  
Brown, yellow: power input AC/DC12V~24V; Green, white: signal output COM/NO.
- Remove the outer cover and fix the sensor with screws.
- Finish the cable connection and get on power.
- Set the detection range and each function switch in sequence.
- Close the cover.

### 4 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:4\*2M

3. Adjustment of detection direction

Adjusting the Doppler Sensor Module(up and down) to get different detection range.

Fluctuation up and down

**NOTE:** Default setting is 45 degree by factory.  
All the parameters above are only for reference, detection height is 2.2M.  
Detection range may be different which caused by the materials of door, ground or wall on site, so please make use of the sensitivity adjustment knob to achieve the most suitable condition.

### 5 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

### 6 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 Blue 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

### 7 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: <5m W/cm <sup>2</sup>	Maximum switching power: 42W(AC)/60W(DC)
Installation Height: 4M(MAX)	Hold time: 2 Second
Installation Angle: 0-90 degree(lengthways)	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: 4m*2m(Installation Height 2.2M)	SIZE: 150(W)x50(H)x38(D)mm