

# Operating Instructions

Make your choice...

## M-531D Unidirectional Mini Microwave Sensor

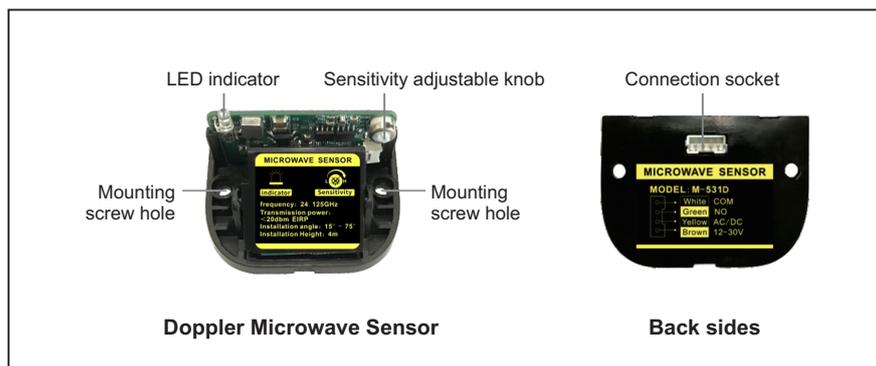


### 1 Safety instruction

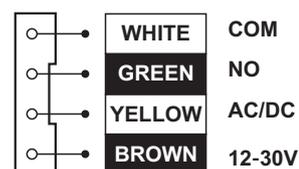


Thanks so much for your purchasing, please read this instruction before using

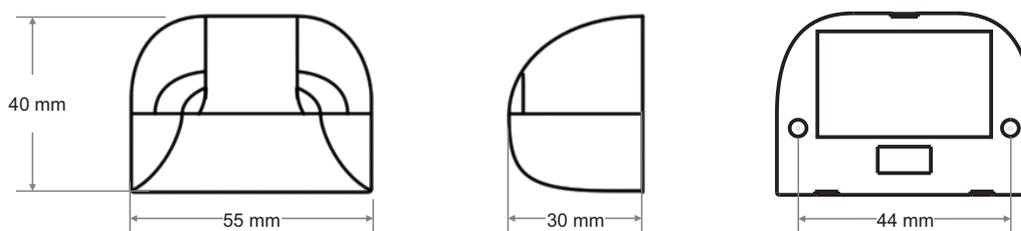
### 2 Product Overview



#### Wiring Diagram:

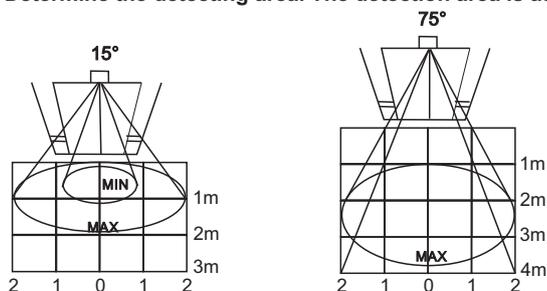


### 3 Product Dimension

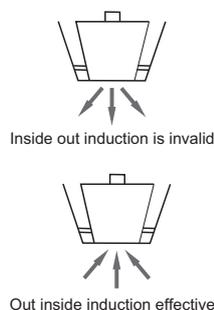


### 4 Adjustment

1) Determine the detecting area. The detection area is as shown below:



When the adjusted angle is larger, the induction distance is far, but also the blind area will be larger under the sensors at the same time.



2) Sensitivity Adjustment



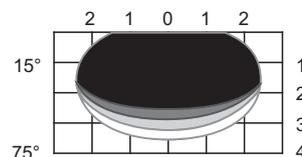
The higher sensitivity,  
the larger detection range;  
The lower sensitivity,  
the smaller detection range.

### 3) Detection direction adjustment (Front and rear directions can be adjusted flexibly)

Adjusting angle of Plane antenna to get different detection distance and range.

#### NOTE:

The factory default is 45 degrees. All the parameters above are only for reference, detection height is 2.8m. Detection range will be different because of the making material of door and ground, please adjust the sensitivity by the knob mentioned above.



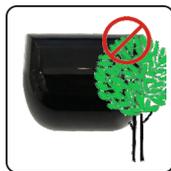
## 5 Installation Precautions



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	Output connection point: Normally open
Emission frequency: 24.125GHz	Output connect capacity: 120mA/60V
Emission power: <20dBm EIRP	Standby current: 22mA(DC12Vpower supply)
Emission frequency density: <5mW/cm <sup>2</sup>	Action current: 24mA(DC12Vpower supply)
Maximum mounting height: 4000mm	Output time: 1s
Induction adjustment Angle: 15°~75°(vertical)	Cable length: 2.5m
Detection Mode: Unidirectional movement	Temperature: -20°C~+55°C
Minimum detection speed: 5cm/s(Along the longitudinal axis of the sensor)	Power voltage: AC/DC12~30V
Detection range(Mounting height 2.8m): 4(W)x3(D)	Dimension: 55(L)×40(W)×30(H)mm

## 8 Packing List

NO.	PART	QTY	REMARK
1	Sensor	1	
2	4-pin line	1	2.5m
3	Screws bag	1	
4	Operating instructions	1	