

Adjustment Manual for Acumotion Prototype

1. Parts list

1)Acumotion: pc

2)3 conductor

Cable: pc (5ft)

3)Antenna: pc



There are two type of the Antenna, such as Wide field which has 3 chips and Narrow Field which has 6 chips.

2. Function of LED

| Sensor Status | Power ON & No Detection | Microwave detects | Infrared detects | Microwave & Infrared detect |
|---------------|-------------------------|-------------------|------------------|-----------------------------|
| LED Status | Green | Orange | Red | Off |



3. Adjustment

1) **Lever for mounting angle of entire sensor**

This white lever is to adjust the angle of the entire sensor and will be used to adjust the field of the around threshold for Infrared. When you move this white lever to upside, sensing field will be move to close side of the door. 9 positions adjustment is available. (-4 ~ 4 deg.)

2) **Angle adjustment for Microwave sensor**

This part is to adjust the angle of microwave head. 11 positions adjustment is available. (15 ~ 45 deg.)

3) Depth adjustment lever of Infrared sensor

This slidable lever is to adjust the depth of infrared field.

Lever position [1] : Depth of infrared field 1 ft

Lever position [2] : Depth of infrared field 2 ft

Lever position [3] : Depth of infrared field 3 ft

When you need the enough depth of microwave field, please adjust this lever ,there is no detection zone between Infrared beams and microwave beams.

4) Dip Switch 1 (8 positons)

This switches are for Infrared sensor.

| Switch Number | Function | Adustment | | |
|---------------|---------------------------------------|-----------|-----|---|
| 1, 2 | Mutual Interference Prevention Mode | 1 | 2 | |
| | | ON | ON | Mode A |
| | | ON | OFF | Mode B |
| | | OFF | ON | Mode C |
| 3, 4 | Sensitivity& Presence time adjustment | 3 | 4 | |
| | | ON | ON | High Sensitivity 15 sec |
| | | ON | OFF | High Sensitivity sec |
| | | OFF | ON | Low Sensitivity 30 sec |
| 5, 6, 7, 8 | Adjustment of width | OFF | OFF | Snow Mode 15 sec |
| | | | | |
| | | ON | ON | No Cancellation |
| | | OFF | ON | One spot of left outside is cancelled. |
| | | OFF | OFF | Two spots of left outside are cancelled. |
| | | ON | OFF | Three spots of left outside are cancelled. |
| | | | | |
| | | ON | ON | No Cancellation |
| | | ON | OFF | One spot of Right outside is cancelled. |
| | | OFF | OFF | Two spots of Right outside are cancelled. |
| | | OFF | ON | Three spots of Right outside are cancelled. |

5) Dip Switch 2 (4 positions)

This switches for the microwave sensor.

| Switch Number | Function | Adjustment | | |
|---------------|--------------------------------|------------|-----|-------------------------|
| 1 | Bi/Unidirectional | ON | | Uni-directional |
| | | OFF | | Bi-directional |
| 2, 3 | Sensitivity of Frequency Noise | | | |
| | | ON | ON | Standard |
| | | ON | OFF | High |
| | | OFF | ON | Noise prevention Mode 1 |
| | | OFF | OFF | Noise prevention Mode 2 |
| 4 | Infrared ON/OFF | ON | | Effective |
| | | OFF | | Invalid |

6) Sensitivity of power for Microwave sensor (Potentiometer)

10 positions adjustment of sensitivity is available by a potentiometer.

CW: High Sensitivity, CCW: Low Sensitivity High

4. Wiring

Red: 12VDC Input

Black: 12VDC Ground & Output Common

White: Out put (DC30V/0.1A max)

Compliance Statement (Part 15.19)

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions;

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Warning (Part 15.21)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF Exposure (OET Bulletin 65)

To comply with FCC RF exposure requirements for mobile transmitting device, this transmitter should only be used or installed at locations where there is at least 20 cm(7.78 inches) separation distance between the antenna and all person.