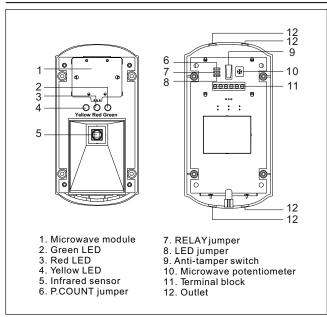
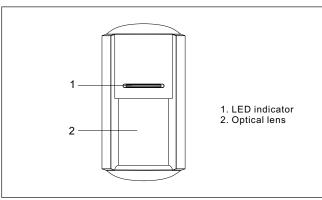


# This product accords with national standards of P. R. of China: GB10408.1-2000 GB10408.6-91

The product is a tri-discrimination detector composed by microwave, passive infrared and artificial intelligence, and it works based on detecting human body's infrared spectrum and microwave Doppler effect. The product uses special optical filter and advanced signal analysis and process technology, it is provided with waterproof function, being suitable for outdoor usage. The product can be applied on banks, warehouses and homes etc.

## PRODUCT DIAGRAMMATIC SKETCH





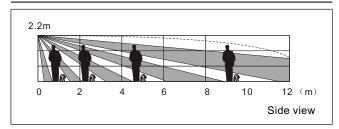
# PRODUCT CHARACTERISTICS

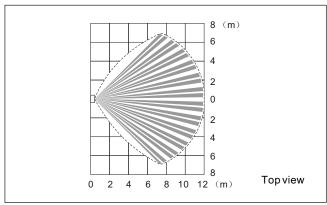
- Using microprocessor
- Pulse count option
- Special optical filterlens, white lightimmunity at 10000 lux
- Waterproof function for outdoor environment
- Omniseal insect immunity
- Using Doppler effect and energy analysis
- Microwave uses X-Band patch antenna
- Microwave detection range adjustment
- Omnibearing automatic temperature compensation, avoiding misdeclaration
- Alarm output N.C./N.O. Option, suitable for all types of alarm system
- Distinguish inbreak signal and interference signal by using artificial intelligence technology
- Pet below 20kg immunity

## **TECHNICAL PARAMETERS**

Working voltage	9∼16V DC
Consumed current	≤30mA (DC 12V)
Detection range	12m×12m
Detection angle	110 °
Infrared sensor	Dual low noise pyroelectricity infrared sensor
Microwave antenna type	Patch antenna by GaAs FET dielectric oscillator
Microwave frequency	10.525GHz
Self-checking time	≤60 s
LED indicator	Green: infrared triggering Yellow: microwave triggering Red: alarm
Installation mode	Wall hanging
Installation height	Optimal 2.2m
Working temperature	-10°C∼+50°C (14°F∼122°F)
Relay output	N.C./N.O. option, contact rating 28VDC, 80mA
Anti-tamper	N.C., no voltage output, contact rating 28VDC, 100mA
Size	153mm×80mm×58mm

# **DETECTION RANGE SKETCH**





# **PRODUCT OPERATIONS**

- Connect 12V DC power, three indicators flashing, and detector entries self-checking status, self-checking time is about 60 seconds; indicators stop flashing, which means detector entries normal monitoring status.
- Testing by normal walk speed in detection range, at this time relevant indicator flashing. Green indicator illuminates, indicating infrared triggering; yellow indicator illuminates, indicating microwave triggering; red indicator illuminates, indicating infrared and microwave triggering together and detector entries alarm status.

- LED jumper controls LED indicator to indicate or not, and it does not effect normal work of detector. LED indicator set in factory setting can be illuminated.
- Microwave potentiometer is used to adjust microwave detection range, user can adjust according to requirement. Set maximal detection range in factory setting.
- 5. P.COUNT jumper JP1(1P/2P) is sensitivity jumper, 1P(1&2) is high sensitivity, supplying maximal detection range; 2P(2&3) is normal sensitivity, supplying maximal anti-interference capability. Set 1P in factory setting.
- RELAY jumper JP2(N.C./N.O.) is output relay jumper, used to set alarm output status, choosing different output according to different types of security system. Choose N.C.(2&3) for normal closed status; choose N.O.(2&3) for normal open status. Set N.C. in factory setting.

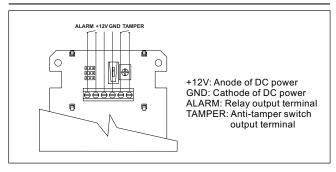
#### SELECT INSTALLATION LOCALITY AND NOTICES

- 1. Do not install detector in the place as followed:
- ★ The area where vehicle pass through
- ★ The position easy to be blowed by wind ,such as swing sign, tree etc.
- 2. Avoid proximity to objects which is easy to cause temperature change.
- 3. Avoid any object in front of the lens of detector.
- 4. Confirm installation place steadily and no shake.
- 5. Connect power after finishing all wire connection and checking.
- 6. Do not set redundant wires in detector.

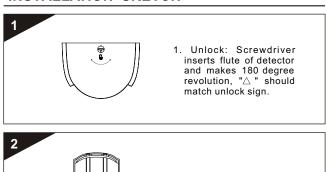
## PRODUCT INSTALLTION

- 1. Select a position where intruder is prone to pass through, optimal installation height is 2.2m.
- When opening detector, open the locked cam by screwdriver, slip subpanel down, then take subpanel away from cover plate.
- Fix subpanel on the selected position by screws, wire connection according to connection sketch map. Notice waterproof carrier ring, the direction of wire outlet is down, and we suggest you use 22AWG(0.8mm) wire.
- Slip detector on the subpanel until finishing all wires connection with detector.
- 5. Fix the detector by 180 revolution of cam on subpanel.
- 6. we suggest you use set swinging to increase detection range.

# **CONNECTION SKETCH**

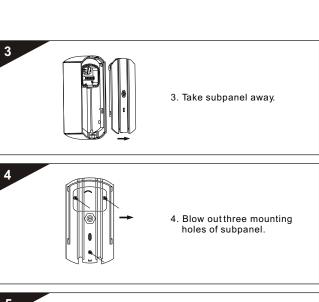


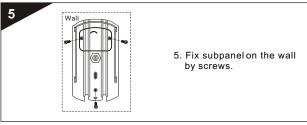
# INSTALLATION SKETCH

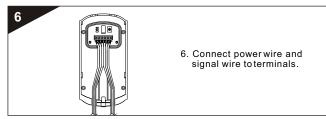


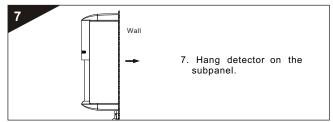
2. Push subpanel down to

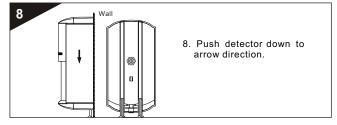
arrow direction.

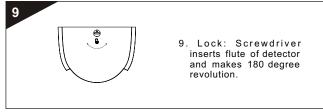












# **MATTERS NEED ATTENTION**

- Please mount and use according to this manual, do not touch the surface of infrared sensor, if detector need to be cleaned, use soft cloth with alcohol to clean after turning off power.
- Yearly testing is required to ensure proper operation of this detector.
- Though this product can reduce accident, it do not ensure perfectly safe. For your security, you should enhance security consciousness in daily life besides using this product.