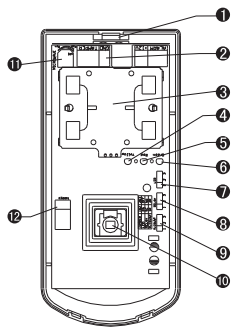
TRIPLE TECHNOLOGY DETECTOR

Triple technology detector combines microwave and passive infrared with intelligence, adopting advanced signal analysis technology, which can avoid various kinds of false alarms under worse environment. It is applicable in banks, warehouses and houses etc.

PCB General view



❶ wire exit
❷ terminal block
❸ microwave module
❹ yellow LED
❺ red LED
❻ green LED
❼ LED jumper
❽ RELAY jumper
❾ P.COUNT jumper
❿ Dual PIR
⓫ Microwave VR
⓬ Anti-tamper switch

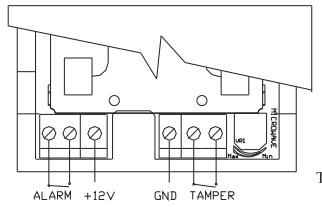
CHARACTERISTIC

- Adopted MCU
- Pulse count 1P/2P optional
- Streamline design
- Doppler + Power analysis
- X-Band plane antenna
- Microwave detecting range adjustable
- Auto temperature compensation reducing false alarm
- Valve adjustable technology with high anti-interference
- Unique look-down design without dead angle
- N.C./N.O. optional for different alarm panels
- Intelligence technology differing intruder from interference signals
- SMT technology

TECH. SPECIFICATION

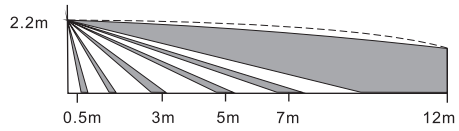
Working voltage	DC9～16V
Current	≤30mA
Detecting range	12m*12m
Warm-up time	≤60s
Detecting mode	Dopper+Power analysis
Sensor	dual low noise PIR
Microwave antenna	plane antenna with high frequency oscillator GaAs :FET
Microwave frequency	10.525GHz
Installation method	wall mounted
Installation height	about 2.2m
Working temperature	-10℃-+50℃
LED indication	Green:infrared Yellow:microwave Red:alarm
Terminal block	ALAM,GND,+12V,TAMPER
Relay output	N.C./N.O. optional, 28VDC,80mA
Anti-tamper switch	N.C. without voltage output,28VDC,100mA

TERMINAL BLOCK

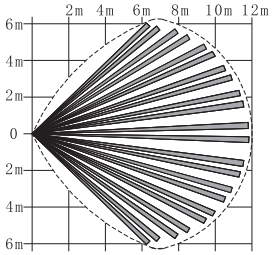


+12V: DC ANODE
GND: DC CATHODE
ALARM: RELAY OUTPUT PORT
TAMPER: ANTI-TAMPER SWITCH OUTPUT PORT

DETECTING RANGE



side view



top view

INSTALLATION

1、Fix the bracket of detector by screws in the wall, open the front cover and take out the PCB. Set the back cover on bracket by screws.(the best installation height is about 2.2m.)
2、Set the PCB in the back cover after connecting the wire according to the TERMINAL BLOCK FIGURE. Close the front cover.
3、Avoid installing the detector close to the following sources of interference: reflective surfaces, direct air flow form vents, fans, windows, sources of steam, oil vapor, infrared light sources and objects causing temperature changes such as heaters, refrigerators and ovens. Avoid installing the detector in the sun directly.
4、Avoid any object is in front of the lens of the detector, the look-down window must face down.

TEST AND USAGE

1、With 12V power on, the detector is in self-check with red LED, yellow LED, and green LED flash; The LED is off after 60 seconds and the detector is in operating state.
2、Make normal walk test in detecting range, different LED will be on: Green refers to infrared; Yellow indicates microwave; and Red means both infrared & Microwave, of which the detector is in alarm status.
3、RELAY jumper is used to set alarm output mode. Select different output mode according to the specification of control panel: 1&2-N.C.; 2&3-N.O. ; 1&2 N.C. is the factory default.
4、Microwave VR is used to adjust the detecting range of microwave according to customer's request. (the largest range is factory default)
5、LED jumper is used to control LED indication without interference to detector. To increase the concealment of detector, LED jumper can be interrupted after test.
6、P.COUNT jumper is used to select pulse count, select 1&2 for the first class pulse, which is suitable for general outdoor environment; select 2&3 for the second class pulse, which is suitable for atrocious environment, The default is the first class pulse.

NOTE

1、Please install and use the detector following the directions. Do not touch the sensor surface as this could result in a detector malfunction. If necessary, clean the sensor surface using a soft cloth with pure alcohol with power off..
2、Avoid to use the product in the area with huge change of temperature.
3、This product can reduce rate of accidents but is never no risk at all. The user should also take all necessary precautions to enhance the security consciousness.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference
to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.
To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

This equipment complies with Part 15 of FCC RF Rules. Operation is subject to the following two conditions:
1) This device may not cause interference and
2) This device must accept any interference, including interference that may cause undesired operation of the device.

Caution!

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.