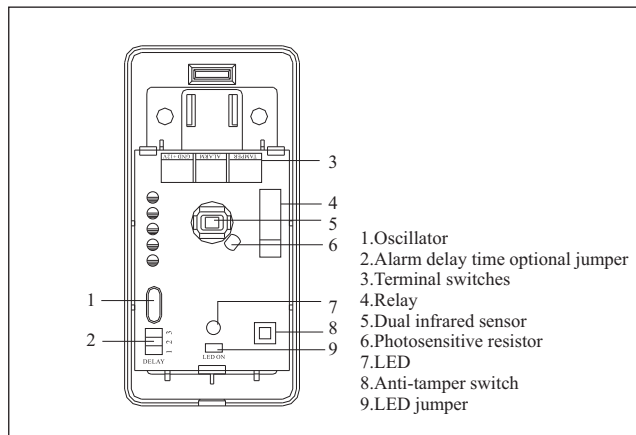# DUAL PASSIVE INFRARED DETECTOR

The Dual Passive Infrared Detector works through detecting the human bodies' infrared spectrum. While receiving the heat source signal from bodies' movement in the detecting area, the sensor will enlarge and calculate, then send out the relative signal to control the detector's alarm port. The Detector is used widely in banks, warehouses, families and etc.

GENERAL VIEW

1. Oscillator
2. Alarm delay time optional jumper
3. Terminal switches
4. Relay
5. Dual infrared sensor
6. Photosensitive resistor
7. LED
8. Anti-tamper switch
9. LED jumper

CHARACTERISTIC

The Dual Passive Infrared Detector includes the following unique features:

- 8-Bit Low-power CMOS Prolessor
- Auto temperature compensation
- White light immunity
- RFI Protection: 20 to 1000 MHz (e.g.: mobile communication)
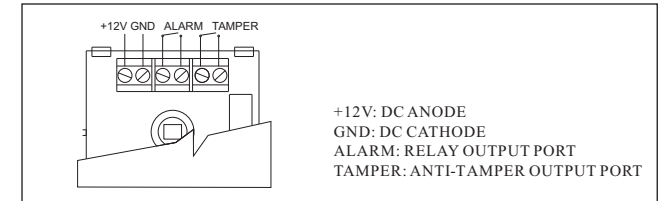- Alarm,delay.time solectable(1,2,or3)

TECHNICAL SPECIFICATIONS

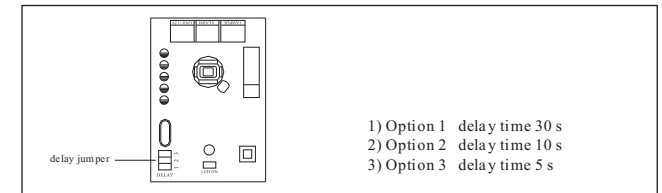|	
Operating voltage	DC 9~16V
Current operating	Standby≤DC/20mA Alarm≤DC/15mA
Operating temperature	-10℃～+50℃ （14℉～122℉）
Sensor type	Dual elements infrared sensor
Alarm delay	1、2or3
Installation method	Wall mounted
Installation height	About 2.2m
Detecting range	12m
Detecting angle	110°
Alarm output	N.C., 28V DC, 80mA max
Anti-tamper switch	N.C., 28V DC, 100mA max

INSTALLATION AND USAGE

1. Installation:
a) Choosing the suitable position, setting the bracket with screws, then insert the Detector.
b) The recommended installation height is about 2.2M. and the angle between the detector and the wall is 6°~12° .
c) 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.
d) Avoid any object is in front of the lens of the detector.
e) Note: the alarm LED must be under the lens.
2. Usage:
a) Fitting the front cover onto the base after wiring according to the manual.
b) With 12V DC power supply, the arm is into self-checking, the LED on, and send alarm signal.
c) Then, the detector is into operating state after the LED off in 60 seconds; If somebody is moving in the range of the detecting coverage, the LED is on.
d) To reach the best effect by adjusting the installation angle of detector.
e) "LED ON" jumper control the LED operation only of no effect on the detector's operation.
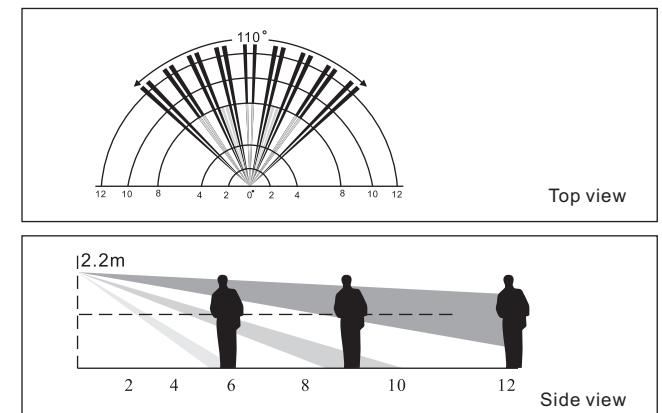
TERMINAL BLOCK FIGURE

+12V GND ALARM TAMPER

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

ALARM DURATION OPTION

delay jumper

1) Option 1   delay time 30 s
2) Option 2   delay time 10 s
3) Option 3   delay time 5 s

TESTING RANGE FIGURE

110°

12 10 8   4 2 0° 2 4   8 10 12   Top view

2.2m

2   4   6   8   10   12   Side view

NOTICE

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.
2 .Avoiding to use the Products in the environment with huge temperature change.
3. The user should follow the installation and operation instructions and among other things test the Product and the whole system at least once a week. For various reasons, including, but not limited to, changes in environmental conditions, electric or electronic disruptions and tampering, the Product may not perform as expected. The user is advised to take all necessary precautions for his/her safety and the protection of his/her property.