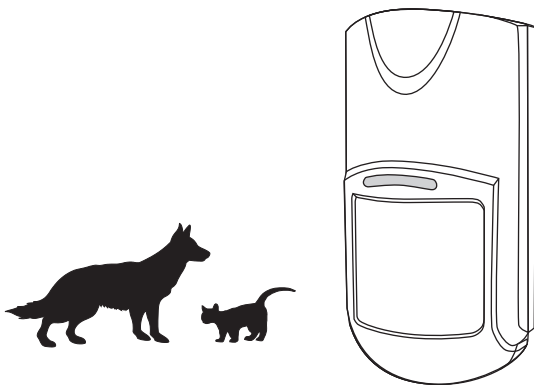


## PRODUCT INTRODUCTION

This TriTech (microwave + passive infrared + artificial intelligence) detector uses micro-doppler effect analysis, spectral analysis, dynamic thresholds adjustment, artificial intelligence etc. advanced analyzing and processing technologies for detection, providing good immunity to false alarms caused by pets. Through analyzing intellectually and quantifying on the infrared spectra from human body and the doppler frequency shift caused by human motion and then analyzing the background disturbance with comparing the background temperature, the detector reports alarms on human motion accurately with freedom from false alarms. Suitable for safety protection in houses, villas, factories, shopping centers, warehouses, office buildings, banks etc. places.

## PRODUCT PROFILE



## TECHNICAL SPECIFICATIONS

Operating Voltage: DC9-24V  
Consumption Current:  $\leq 30\text{mA}$   
Detecting Distance: 12m  
Detecting Angle: 90 degrees  
Detecting Speed: 0. 3m/s ~3m/s  
Self-Testing Time: 60s  
Alarm Delay Time: 3s/30s optional  
Alarm Indication: Red LED  
Sensor: Double element pyroelectric infrared sensor  
Microwave Antenna: Plane antenna with high frequency oscillator GaAs :FET  
Microwave Frequency : 10. 525GHz  
Operating Temperature:  $-10^{\circ}\text{C} \sim +50^{\circ}\text{C}$   
Environment Humidity: Max 95% RH (no congelation)  
Installation Mode: Wall or corner mount  
Installation Height: 1.7-2.5m (2m is recommended)  
Alarm Output: NC/NO optional, contact rated at DC28V 100mA  
Tamper Output: NC, contact rated at DC28V 100mA  
Execute Criterion: GB10408.1; GB10408.6; GB16796  
Dimension: 123\*62\*46mm

## FEATURES

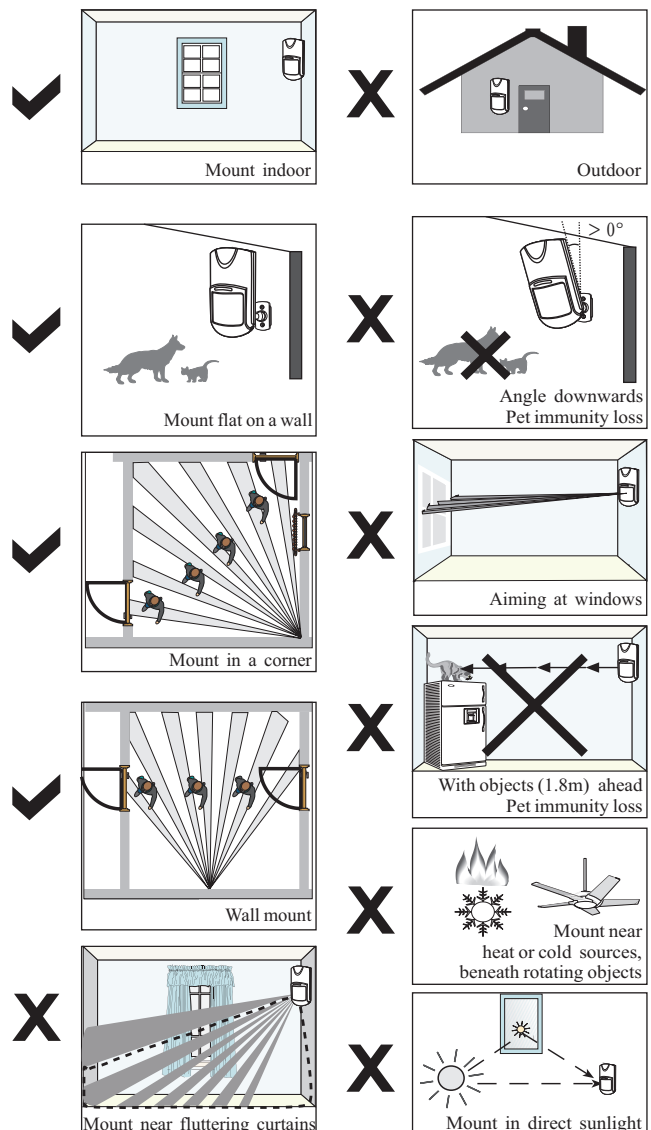
- Adopts Doppler Effect + Spectral Analysis + Artificial Intelligence
- Microwave X-Band Plane Antenna
- UP to 20kg Pet Immunity
- Dual-mode Temperature Compensation

- Dynamic Thresholds Adjustment Technology
- Bipolar Pulse Count Adjustable
- Anti White Light Interference, Anti RF Interference
- Fresnel Lens
- Alarm Output N.C./N.O. Optional
- Alarm Delay Time Optional (3s/30s)
- SMT Manufacture Technology, Stabler Performance
- Design Passed Patent Application

## INSTALLATION CONDITIONS

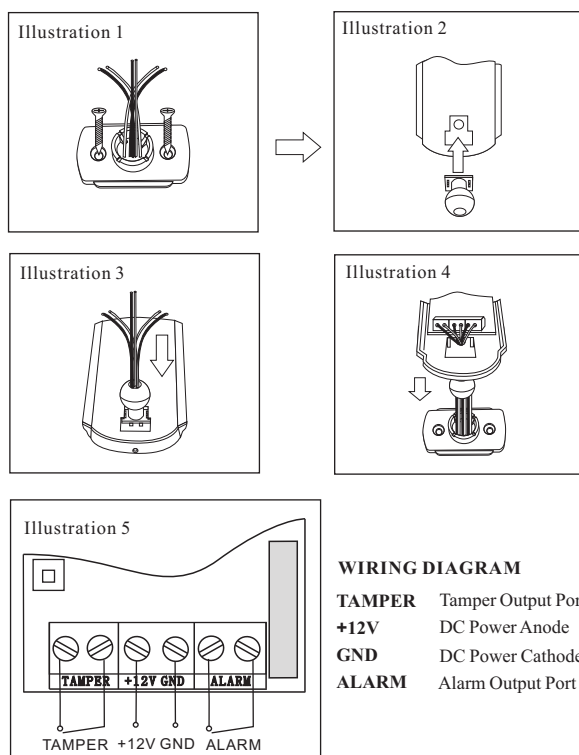
1. For good pet immunity performance, the installation height is recommended not lower than 2m. Mount the detector flat on a wall or in a corner. Do not angle it downwards.
2. Avoid placing the detector in outdoors, near a air-conditioner or a heat source, in direct sunlight, beneath a rotating object and near fluttering curtains. Do not place objects about 1.8m high in front of the detector, that a pet can jump onto and pet immunity will be reduced.
3. Surface of installation should be firm with no vibration.
4. Mount the detector where an intruder passes easily.

## INSTALLTION HINTS



## INSTALLATION STEPS

1. Choose a proper position. Pull the prepared power wires and signal wires through the hole in the middle of the detector bracket base and fix the base onto the wall by screws (see Illustration 1).
2. Snap the flat head of the bracket ball into the detector bottom cover (see Illustration 2).
3. Open the detector top cover and pull the power wires and the signal wires through the round hole in the middle of the bracket ball (see Illustration 3).
4. Connect the wires as the wiring diagram (see Illustration 5) and then snap the bracket ball into the base (see Illustration 4).
5. Fix the detector top cover and adjust the installation angle in accordance with demands.



## OPERATING INSTRUCTION

1. Jumper setting (see Illustration 6)
  - 1) PULSE Jumper: used to adjust sensitivity and the ability of anti RF interference by choosing different settings.  
Short 1&2: First-order pulse (Default), high sensitivity, good anti RF interference ability, suits for ordinary environment.  
Short 2&3: Second-order pulse, low sensitivity, strong anti RF interference ability, suits for environment with heavy RF interference.
  - 2) Relay Jumper: choose N.C. or N.O. to set the state of alarm output according to different requirements of alarm hosts.  
Short 1&2: N.O.  
Short 2&3: N.C. (Default)
  - 3) Delay Jumper: used to set the lasting time of relay and alarm indicator when alarming.  
Short 1&2: 3S (Default)  
Short 2&3: 30S
  - 4) LED jumper: used to control the LED indicator. For better

concealment, the LED indicator can be turned off by pulling out the LED JUMPER after testing, which not influence the detector normal operation.

### 2. LED indicators

- Yellow LED Light ----- Microwave triggered  
Green LED Light ----- Passive infrared triggered  
Red LED Light ----- Alarming

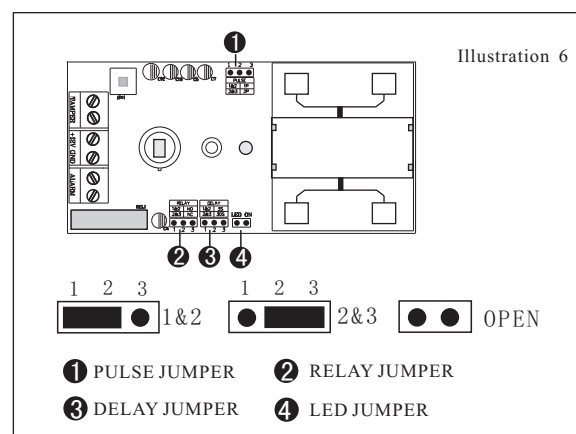
### 3. Walking test

Connecting the power supply, LED indicator flashes in red and green alternatively. The detector goes into self testing for about 60s. When the indicator off, the detector enters into normal monitoring. The tester should walk within the detector coverage parallel to the installing wall. When the microwave and PIR technologies detect motion, the detector will alarm and the LED indicator lights in red.

## NOTICE

1. Install and use the detector correctly according to this Manual. If the detector fails to work, pls contact with the selling agent for maintenance.
2. The detector improves security of places, but can not assure no risk at all. For safety concern, besides proper usage of the detector, please enhance vigilance in daily life and take good protections.
3. Constant power supply should be provided to ensure normal working of the detector. Walking test should be carried out periodically. Once a week is recommended.

## JUMPER SETTING ILLUSTRATION



## DETECTION COVERAGE

