Wired Passive Infrared Motion Detector
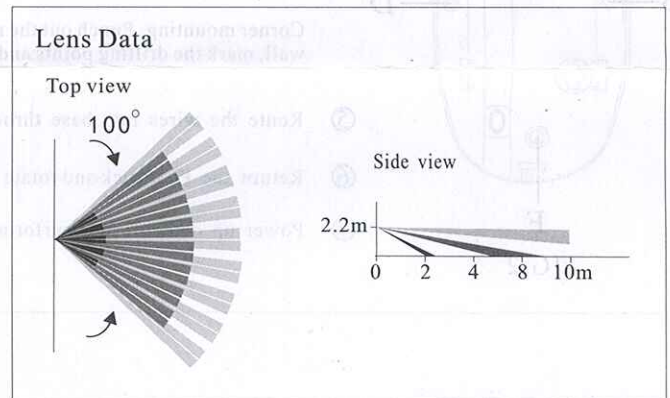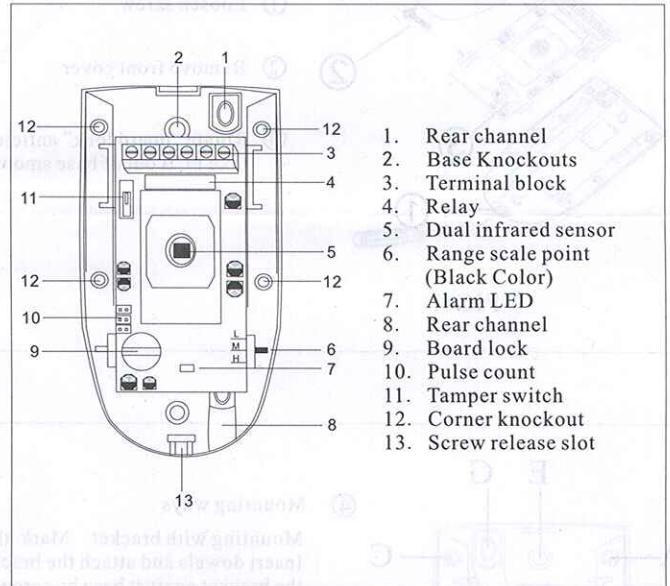
1.INTRODUCTION

- The digital analysis of environmental variable based on microprocessor to prevent false alarm
- Programmable pulses counter
- Temperature compensation controlled by Microprocessor
- Immunity to pet weighing up to 10Kg
- State-of-the-art SMT, inhibit RFI, EMI interference
- Front cover tamper switch
- Elegantly styled, on board "Easy Lock"
- Special design for supermarkets, factories, offices, stores and families

3.SPECIFICATIONS

| Input voltage	10~15VDC
Current drain	Transmit current drain <15mA(12VDC)
	Standby current drain <11mA(12VDC)
Detection distance	10m
Detection angle	100°
Range scale	Range scale "L" "M" "H" See 2. Overview "L"the furthest range "H" the shortest range. Recommend "M" scale(default) and the mount height is 2.2m. With "M" scale please adjust detector vertical angle down 5 degree.
Alarm output	Relay N.C
Tamper contacts	Normally closed
Alarm indication	Alarm LED lights for 2~3 seconds
Pulse counter	Selectable "1""2"or"3"motion pulses
Sensor	Dual element low noise pyroelectric sensor
Mounting	Mounting height 1.8-2.4m
Temperature	Operate temperature: -10℃～50℃
	Storage temperature: -20℃～60℃
Dimension	114*61*44mm(L*W*H)
Accessory	Mounting Bracket Adjust vertical from-20° to 20° Horizontal-20° to 20°

2.OVERVIEW

1. Rear channel
2. Base Knockouts
3. Terminal block
4. Relay
5. Dual infrared sensor
6. Range scale point (Black Color)
7. Alarm LED
8. Rear channel
9. Board lock
10. Pulse count
11. Tamper switch
12. Corner knockout
13. Screw release slot

Lens Data

Top view

100°

Side view

2.2m

0 2 4 8 10m

4. PULSE COUNTER

Sensitivity	Pulse	Jumper1	Jumper2
High	1pulse	ON	OFF
Middle	2pulses	OFF	ON
Low	3pulses	OFF	OFF

The 1 pulse for fast catch performance

The 3 pulses for more false alarm protection

The default 2 pulses. Please set the motion pulse counter as installation environment requirement
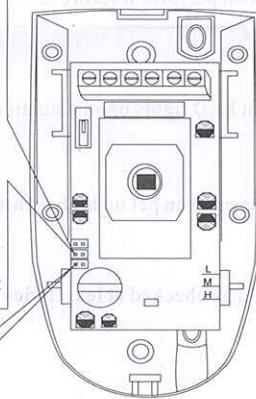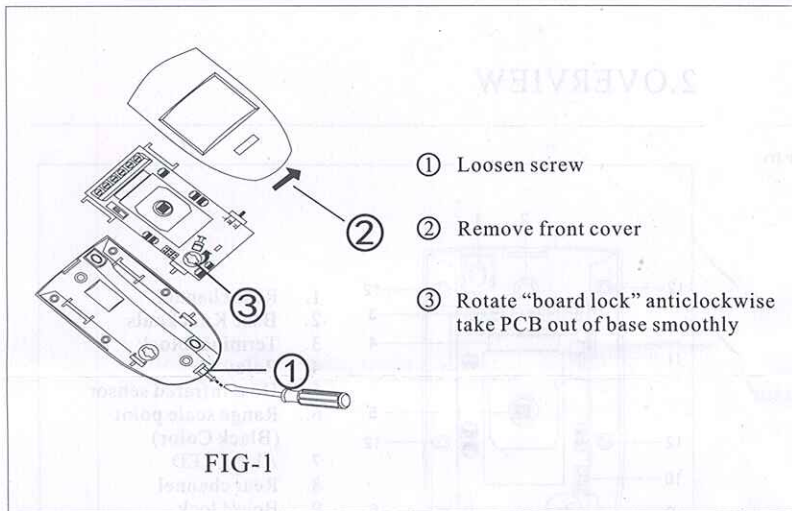

LED Jumper :LED Switch

The off setting is to prevent intruder from tracing detector position
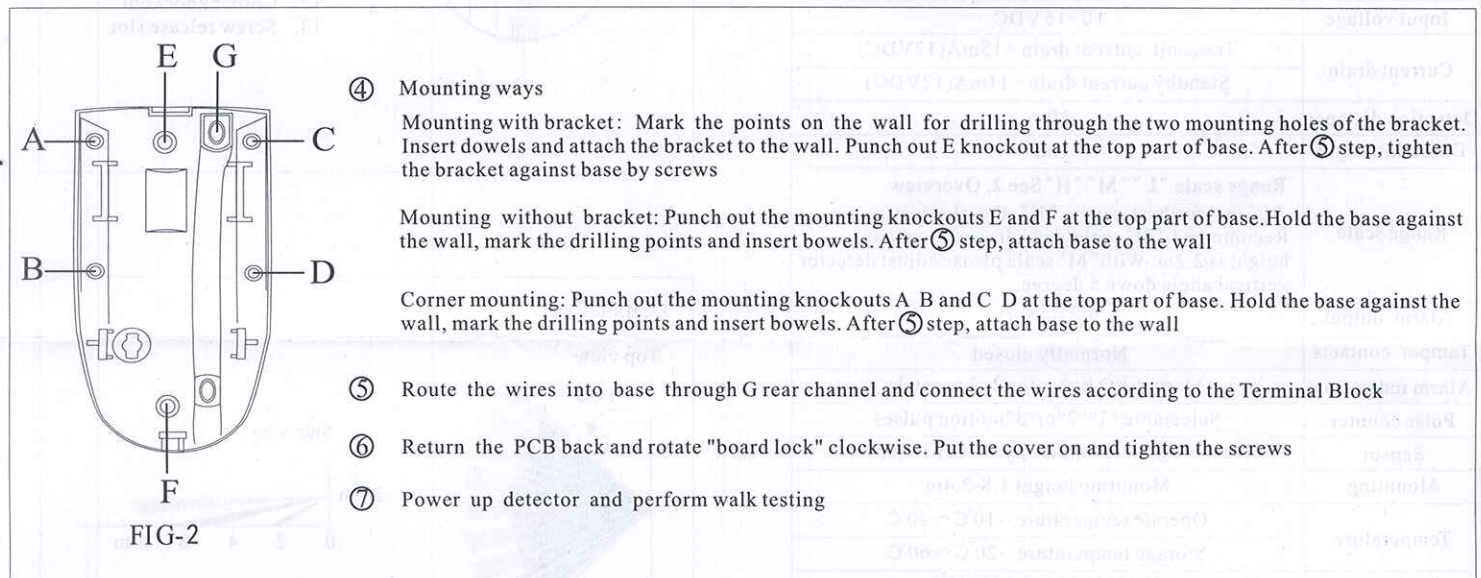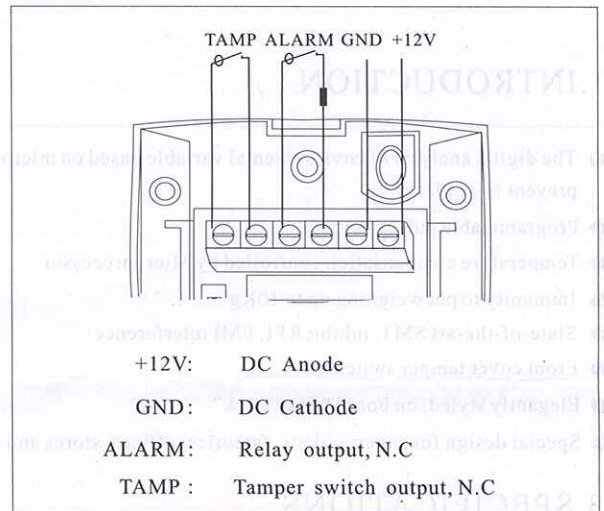
5. INSTALLATION

5.1 Installation Hints

1. Select the mounting location so that intruder's motion will be perpendicular to the detector's coverage pattern

2. Recommend the mount height is 2.2m.With H scale, adjust detector vertical angle down 3~5 degree; With L scale, adjust detector vertical angle down almost 15 degree; With M scale(default), adjust detector vertical angle down 5 degree. But the true degree still depends on installer's walking test

3. To minimize false alarms, avoiding aiming the detector at heating source, air blowing and windows subject to direct sunlight. Please install the detector at steady place.Forbidden installing it at outdoor; Keep wiring away from electrical power cable;Do not install behind partitions.

4. In pet-immune applications, the bracket should be used for horizontal alignment only. The detector who remains vertical is always perpendicular to the floor. The detection pattern keeps away from the high furniture the pet may climb up. Set the range scale to the M or H position and the motion counter 2 pulses.

5.2 Installation Diagram

① Loosen screw

② Remove front cover

③ Rotate "board lock" anticlockwise take PCB out of base smoothly

FIG-1

5.3 Terminal Block

TAMP ALARM GND +12V

+12V :   DC Anode

GND :   DC Cathode

ALARM :   Relay output, N.C

TAMP :   Tamper switch output, N.C

FIG-2

④ Mounting ways

Mounting with bracket : Mark the points on the wall for drilling through the two mounting holes of the bracket. Insert dowels and attach the bracket to the wall. Punch out E knockout at the top part of base. After ⑤ step, tighten the bracket against base by screws

Mounting without bracket: Punch out the mounting knockouts E and F at the top part of base. Hold the base against the wall, mark the drilling points and insert bowels. After ⑤ step, attach base to the wall

Corner mounting: Punch out the mounting knockouts A B and C D at the top part of base. Hold the base against the wall, mark the drilling points and insert bowels. After ⑤ step, attach base to the wall

⑤ Route the wires into base through G rear channel and connect the wires according to the Terminal Block

⑥ Return the PCB back and rotate "board lock" clockwise. Put the cover on and tighten the screws

⑦ Power up detector and perform walk testing

6. WALK TESTING

A. Power up detector and waiting for one minute until detector stabilized. Then perform walking test.

B. Set the motion pulse counter and adjust the vertical angel as desired.

C. Walk-test the entire protected area across the field view of detector. Alarm LED lights upon detection. Pause for 5 seconds after each detection to allow the detector stabilizes.

D. If pet may cross protected area, according to observer , sensor does not alarm even pet on high furniture.

Attention: To assure proper function of the detector, the protected area should be checked at least twice a year.