PIR Motion Detector with Pet Immunity up to 25kg

Reliable and effective dual element PIR detectors for home or office security applications. It attractive and easy to install with the features to match. It has a built-in automatic temperature compensation to help eliminate false triggers in certain environments. 100 degree convex honey comb hemispherical infrared lenses are used and each unit has an extremely low current draw at 8mA. This feature a swivel bracket for quick position adjustment.

TYPICAL INSTALLATION

Select mounting location

Choose a location most likely to intercept an intruder. See detection pattern(Fig.5). The Dual element low noise pyroelectric sensor detects motion crossing the beam; it is less sensitive detecting motion towards the detector. The performs best when provided with a constant and stable environment.

Avoid the following locations

* Facing direct sunlight. * Facing areas subject to rapid temperature changes. * Areas with air ducts or substantial air flows.

MOUNTING THE DETECTOR

1. To remove the front cover (Fig.4), unscrew the holding screw (Fig.4-11) and gent ly raise the front cover.
2. To remove the PC board, carefully unscrew the holding screw (Fig.4-9) located on the PC board (Fig.4-10).
3. Break out the desired holes (Fig.2-B or C) for proper installation (flat or corner).
4. The circular and rectangular indentations at the bottom base are the knockout holes (Fig.2-D) for wire entry. You may also use mounting holes that are not in use for running the wiring into the detector.(For option with bracket (Fig.1 & 3)(Fig.4-7), lead wire through thebracket)
5. Mount the detector base to the wall, corner or ceiling. (For options with bracket install bracket).
6. Reinstall the PC board by fully tightening the holding screw. Connect wire to terminal block.
7. Replace the cover by inserting i t back in the appropriate closing pins and screw in the holding screw.

DETECTOR INSTALLATION

Terminal block connections (Fig.6)

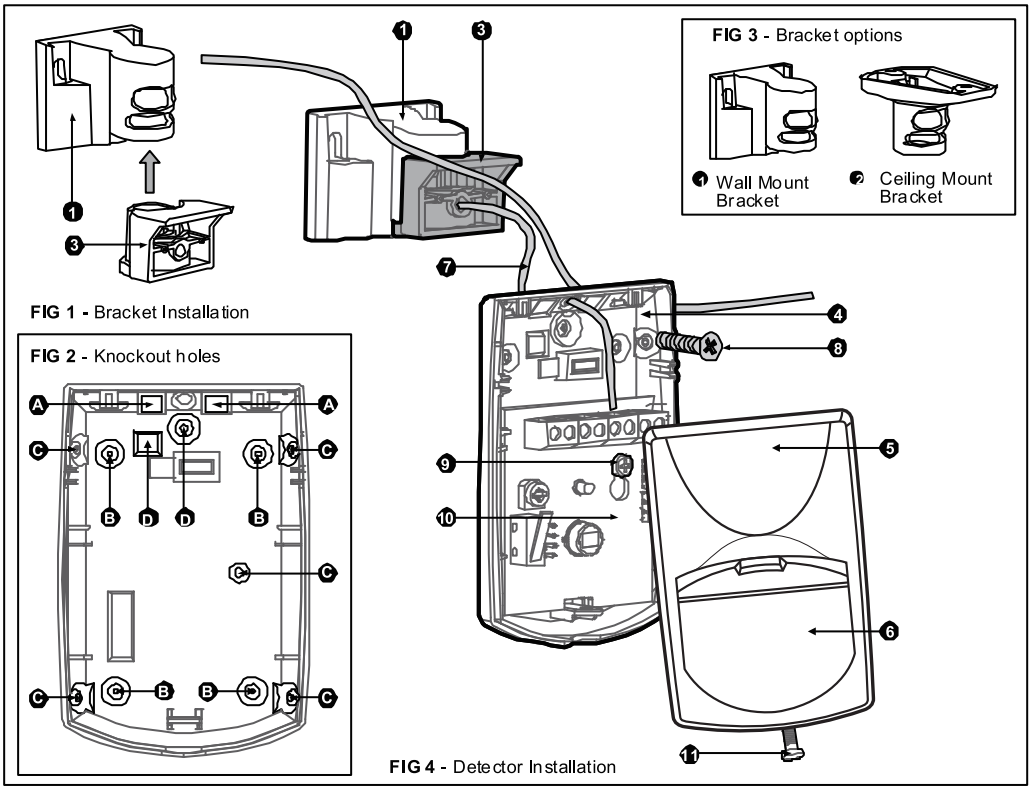
Terminal 1 - Marked . - . (GND) Connect to the negative Voltage output or ground of the control panel.

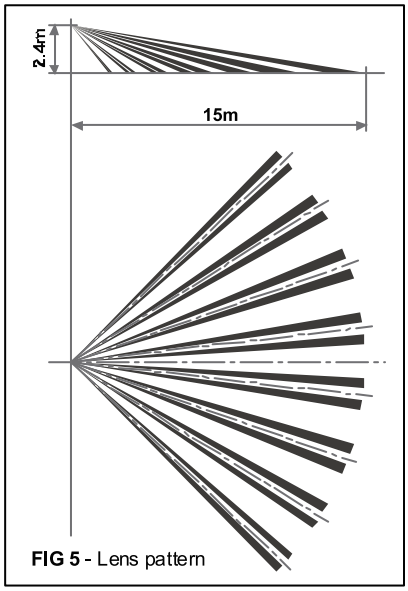
Terminal 2 - Marked . + . (+12V) Connect to a positive Voltage output of 8.2 -16Vdc source (usually from the alarm control unit).

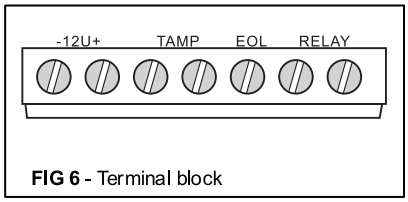
Terminals 3 & 4 - Marked (TAMPER) If a Tamper function is required connect these terminals to a 24-hour normally closedprotective zone in the control unit. If the front cover of the detector is opened, an immediate alarm signal will be sent to the control unit.

Terminal 5 - Marked . EOL . End of line option.

Terminals 6 & 7- Marked (RELAY) These are the output relay contacts of the detector. Connect to a normally closed zone in the control panel.







SETTING - UP THE DETECTOR

PULSE WIDTH JUMPER SETTING

Very stable environment
Position 1
Without PET

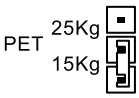
Relatively high change of false alarms
Position 2
PET up to 25Kg (55 lb)

LED ENABLE JUMPER SETTING

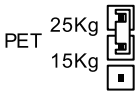
LED ON

LED OFF

PET IMMUNITY JUMPER SETTING



Immunity to an animal up to 15Kg (33.1 lb)



Immunity to an animal up to 25Kg (55 lb)

TECHNICAL SPECIFICATION

Model:	
Detection Method	Dual element PIR
Power Input	8.2 to 16 VDC
Current Draw	Standby: 8mA (± 5%) Active: 10mA (± 5%)
Temp.Compensation	YES
Alarm Period	2 sec (± 0.5sec)
Alarm Output	N.C 28VDC 0.1 A with 27Ohm series protection resistor
Tamper Switch	N.C 28VDC 0.1A with 10 Ohm series protection resistor - open when cover is removed
Warm Up Period	60sec (± 5sec)
LED Indicator	LED is ON during alarm
RFI Protection	30V/m 10 - 1000MHz
EMI Protection	50,000V of electrical interference from lightning or power through
Dimensions	92(L) x 60(W) x 35(H)mm
Weight	40gr (1.4oz)

PIR sensitivity adjustment

POTENTIOMETER “SENS”. adjustment according to protected area range.
Use the potentiometer to adjust the detection range between 68% and 100%(factory set to 84%). Rotate the potentiometer clockwise to increase range,counter-clockwise to decrease range.

Wire size requirements

Use #22 AWG (0.5 mm) or wires with a larger diameter.
Use the following
table to determine required wire gauge (diameter) and length of wire between
the detector and the control panel.
Wire Length m 200 300 400 800
Wire Diameter mm .5 .75 1.0 1.5
Wire Length ft. 800 1200 2000 3400
Wire Gauge AWG 22 20 18 16

TESTING

Test procedures
Wait one minute - warm up time after applying 12 Vdc power.
Conduct testing with the protected area cleared of all people.

Walk test

Remove front cover. The pulse jumper must be in position
1. The LED must be enabled.
2. Replace the front cover.
3. Start walking slowly across the detection zone.
4. Observe that the detector.s LED lights whenever motion is detected.
5. Allow 5 sec. between each test for the detector to stabilize.
6. After the walk test is completed, the LED may be disabled.
Note: Walk tests should be conducted, at least once a year, to confi rm proper operation and coverage of the detector.

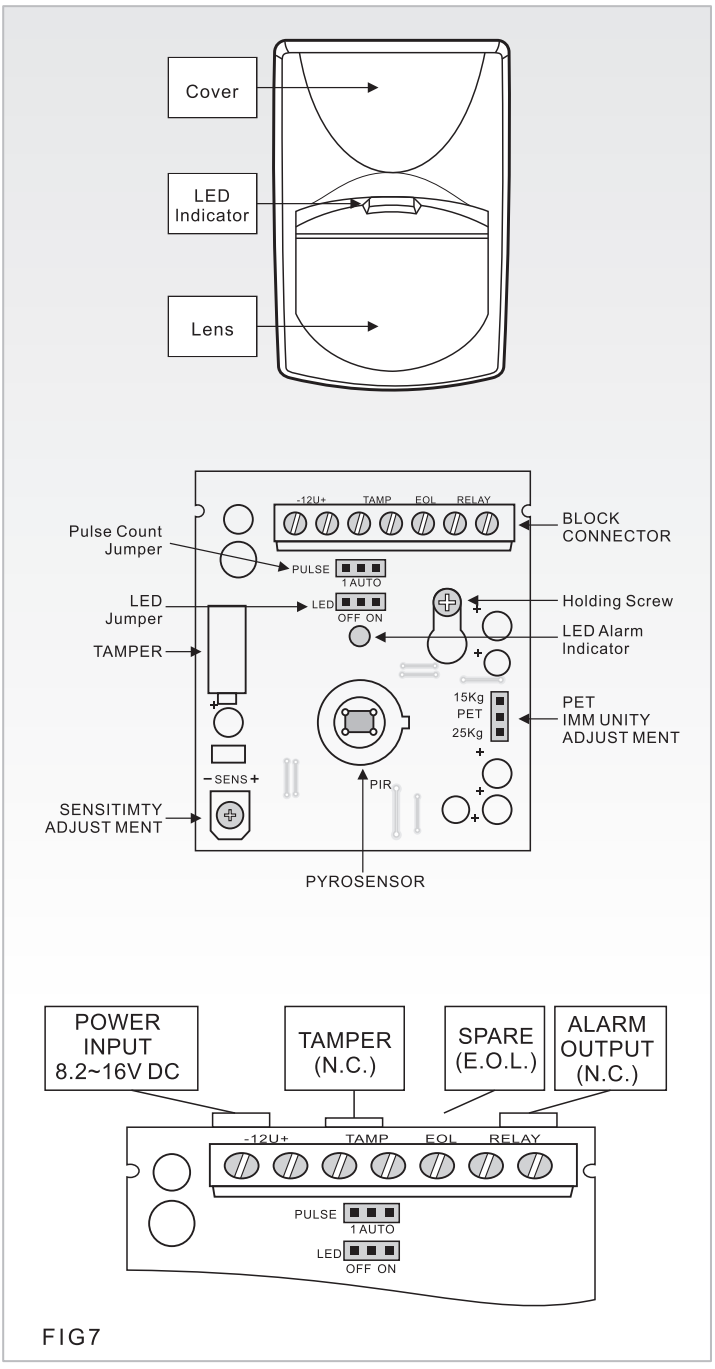


FIG7