

# PRIMO - quad

## Quad Passive Infrared Detector IR-530Q / 530QC



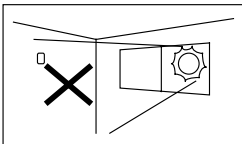
## Installation Instructions

### SPECIFICATIONS

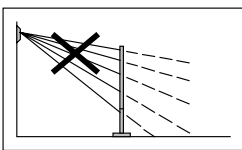
Infrared sensor.....	Quad element
Power supply .....	9 ~ 16 VDC, 12V typical
Current drain .....	12 mA, 12VDC
Alarm output.....	N.C, 30VDC, 0.2A max.
Alarm period.....	2 ± 0.5 sec.
Pulse count .....	1-2-3 selectable
Tamper switch.....	N.C cover open activates
Walk test LED .....	Red, can be disabled
LED remote control .....	+12 VDC
RFI immunity.....	Ave. 30V/m (10~1000 MHz)
Detectable speed .....	0.3 ~ 1.5m/sec.
Mounting height .....	2.2 ~ 3.6m (IR-530Q) 1.5 ~ 1.8m (IR-530QC)
Ceiling bracket .....	MB-99 (Optional)
Humidity .....	95% RH maximum
Temperature .....	-20°C ~ 60°C (-4°F ~ 140°F)
Dimensions .....	100 X 60 X 40mm
Unit weight .....	80 grams

\* Specifications subject to change without prior notice.

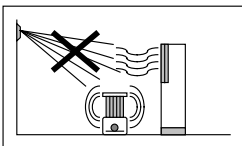
### INSTALLATION HINTS



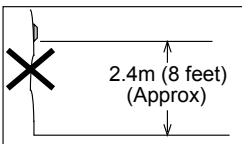
Do not install where the detector is in or facing direct/reflected sunlight, windows onto main roads (car head lights).



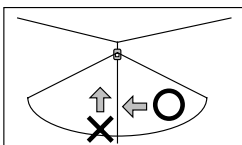
Ensure that there are not any obstructions (plants, screens, furniture etc.) in the field of view which may cause incorrect cover/ operation of the detector.



Avoid locating the detector in areas which contain equipment that may change the environment temperature rapidly.



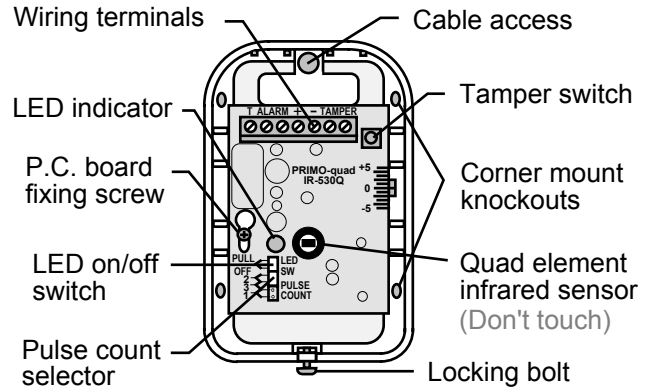
Install the detector at the recommended height on a rigid surface.



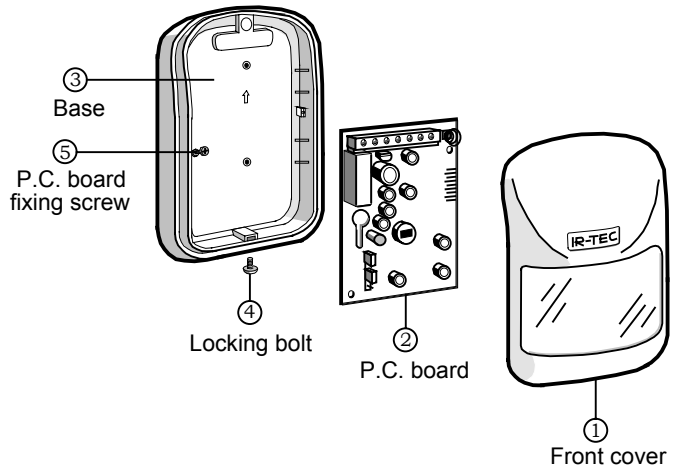
PIR detector is more sensitive to the motion "across" the detection zones than "toward" the unit.

**⚡** Avoid running alarm wiring close to mains cables !!!

### DESCRIPTION

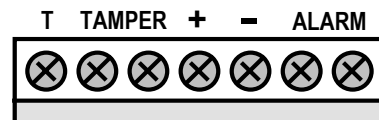


### INSTALLATION & WIRING



#### Installation

1. Open the front cover ① and remove the P.C. board ② from the base ③ by loosening the locking bolt ④ & P.C. board fixing screw ⑤.
2. Mount the base firmly to the selected position and replace the P.C. board at factory set position (0).
3. Connect the wires to the corresponding terminals according to the following instructions.



**ALARM** : Zone input of control panel (N.C loop)

**+** , **-** : 9 ~ 16 VDC power supply

**TAMPER** : 24 hours N.C. loop of control panel

**T** : LED remote control voltage input (+12VDC)

4. Replace the front cover and supply adequate DC power, then walk test can be proceeded.


## MOTION SIGNAL DISCRETION

The MSD (Motion Signal Discretion) circuit recognizes the difference between motion and non-motion signals. Alarm output is only generated when motion is detected by quad infrared sensor and analyzed by the MSD circuit. MSD circuit ensures supreme reliability even when environmental conditions are severe.

## WALK TEST

It is necessary to carry out a thorough walk test of the detector to ensure that the correct coverage is being achieved and no over spill of the microwave is occurring. Also to ensure that both PIR & microwave are working to the same detection area.

The PIR range/sensitivity is not adjustable. Accurate setting of the microwave is achieved by careful adjustment of the large pre-set on the front of the PCB, next to the PIR detector, the range is increased by turning the pre-set in clockwise direction. When you are satisfied with your setting, all of the LEDs may be disable, by removing the jumper loops (please retain for future walk testing). A remote control voltage may be used to switch on the LEDs for walk test (available on certain control panels only a positive 12V applied to the "LED" terminal will override the jumper setting.

 *Regular walk testing must be carried out, as part of your routine maintenance visits or at least once a year.)*

## ADJUSTMENT

The detection beams can be adjusted vertically by sliding the P.C. board up or down. When unit is mounted higher than 2.4m (8 feet), it may be necessary to adjust the range by slide the PC board upward which tilts the detection zones downward and thereby shortens the range.

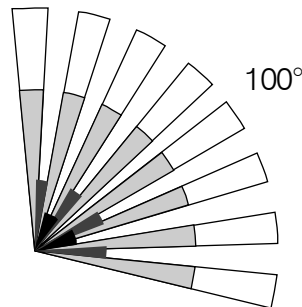
## PULSE COUNT

The PRIMO-quad features intelligent pulse count which reduces the possibility of false alarm caused by environmental and power line interference. The pulse count can be set to count 1, 2 or 3 pulse(s) by placing the jumper head on the corresponding pins. An alarm signal will only be sent when the selected pulse number is generated within delay time of 20 seconds. IR-TEC's intelligent pulse count circuitry analyzes the width difference of pulse signal. When human motion is detected a subsequent pulse signal will over-ride the pulse count setting and generate the alarm signal without any delay.

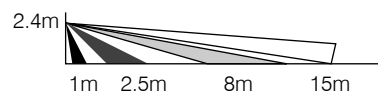
## DETECTION PATTERN

### IR-530Q

Top View

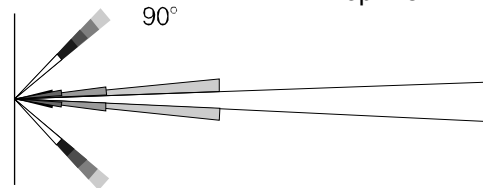


Side View

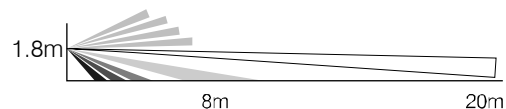


### IR-530QC

Top View



Side View



## 5- YEAR WARRANTY

IR-TEC warrants this product to be free from manufacturing defects in materials and workmanship for 5 years following the date of manufacture. IR-TEC will, within the warranty period, at its option, repair or replace any product failing to operate correctly with no charge to the original purchaser or user. In case of defect, this product must be returned to IR-TEC through its local distributor.

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