

# PRIMO

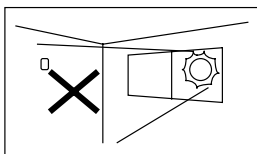
## Passive Infrared Detector IR-530/530C/530CS

### SPECIFICATIONS

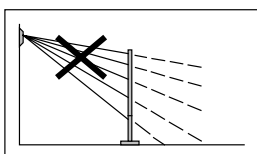
Infrared sensor.....	Dual element
Power supply .....	9 ~ 16 VDC, 12V typical
Current drain.....	10 mA, 12VDC
Alarm output.....	N.C/N.O 30VDC, 0.2A max.
Alarm period.....	2 ± 0.5 sec.
Pulse count .....	2 - 3 selectable
Tamper switch.....	N.C cover open activates
Walk test LED .....	Red, can be disabled
RFI immunity.....	Ave. 20V/m (10~1000 MHz)
Detectable speed.....	0.3 ~ 1.5m/sec.
Mounting height .....	2.2 ~ 3.6m (IR-530) 1.8 ~ 2.2m (IR-530C/530CS)
Mounting bracket .....	MB-95 or MB-99 (Optional)
Humidity .....	95% RH maximum
Temperature .....	-20°C ~ 60°C (-4°F ~ 140°F)
Dimensions .....	100 X 60 X 40mm
Unit weight .....	86 grams

\* Specifications subject to change without prior notice.

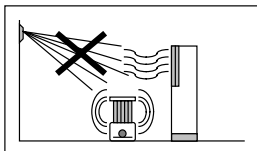
### INSTALLATION HINTS



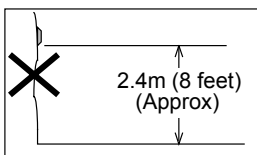
Do not install where the detector is in or facing direct/reflected sunlight, windows onto main roads (car head lights).



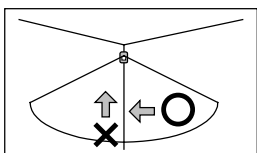
Ensure that there are no obstructions (plants, screens, furniture etc.) in the field of view, which may cause incorrect cover/operation of the detector.



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.

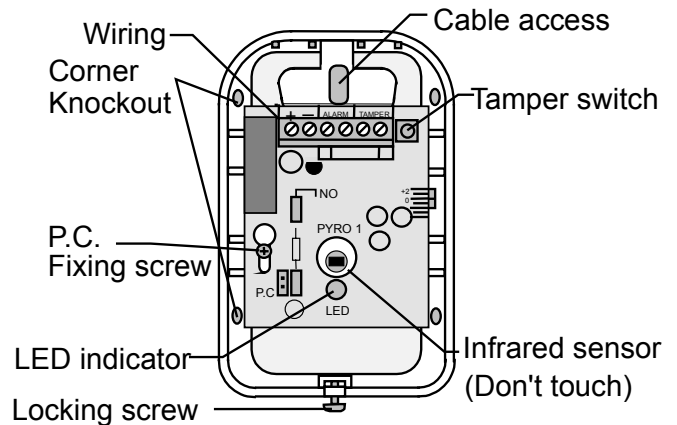


PIR detector is more sensitive to the motion "across" the detection zones than "toward" the unit.

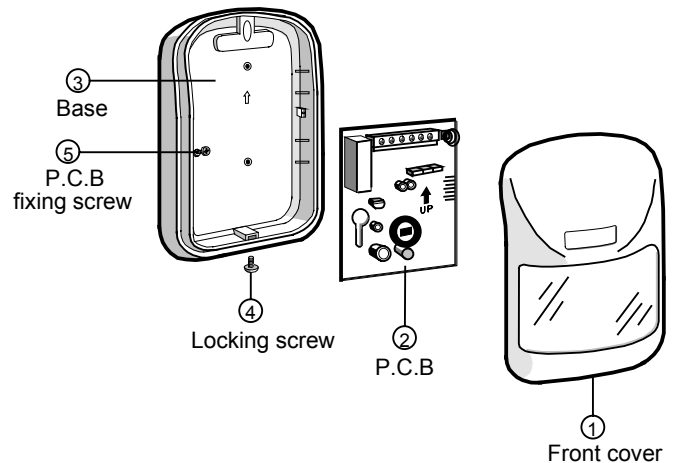


## Installation Instructions

### DESCRIPTION



### INSTALLATION & WIRING



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

+	-	ALARM	TAMPER
⊗	⊗	⊗	⊗

+, - : 9 ~ 16 VDC power supply


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

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

4. Replace the front cover, apply power to the detector and carry out a walk test.

## WALK TEST

A walk test should be carried out to ensure that the desired detection coverage is achieved. Apply power to the detector and wait for it to warm up and stabilize (approx. 30 seconds). Walk around the detection area and note that the LED lights on detecting movement. The LED can be disabled by pulling the jumper off the PCB pins labeled "LED".

 Verify the correct operation of the detector by carrying out a walk test at least once a year.

## PULSE COUNT

The PRIMO 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 2 or 3 pulses 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.

## ADJUSTMENT

The detection beams can be adjusted vertically by sliding the PCB up or down. When unit is mounted higher than 2.4m (8 feet), you may need to slide the PCB upwards to aim the detection beams downwards. Following table provides reference of PCB position and respective detection coverage.

M/H	1.8m	2.0m	2.2m	2.4m	2.6m	2.8m	3.0m
B/P	Maximum Detection Coverage(m)						
+2	9	N/A	N/A	N/A	N/A	N/A	N/A
+1	11	14	13	N/A	N/A	N/A	N/A
0	12	14	15	15	15	15	N/A
-1	10	14	13	14	14	14	15
-2	9	13	11	14	13	13	14
-3	8	11	10	13	11	12	12
-4	7	10	9	12	10	11	10

M/H: Mounting Height

B/P: PCB Position

## ALARM OUTPUT SELECTOR

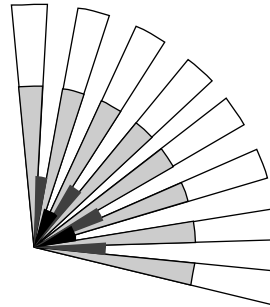
The alarm output can be changed to N.O by removing the jumper from N.C/N.O selector. N.O output can be applied to activate VCR of CCTV systems or other facility.

## DETECTION PATTERN

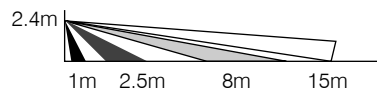
### IR-530

100°, 15 x 15m at 25°C

Top View



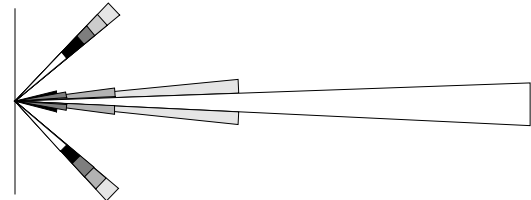
Side View



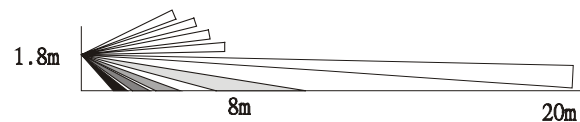
### IR-530C

20m corridor + 90°, 8m curtain

Top View



Side View



### IR-530CS

