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PLATO

Passive Infrared Detector

IR-580/580C/580CS

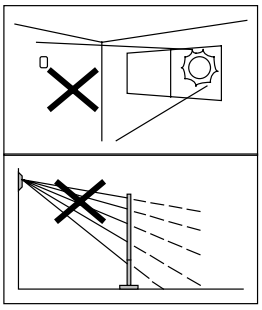
IR-TEC®

Installation Instructions

INTRODUCTION

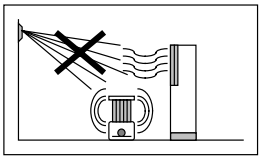
Thank you for choosing PLATO series passive infrared detector. This motion detector is designed to provide reliable intruder detection for today's security system. To ensure optimum performance of this device, please read all contents carefully before installing. Improper installation may result in false operation.

INSTALLATION HINTS

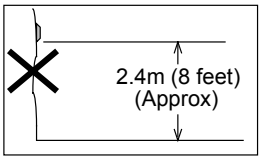


Do not install the detector at where faces direct or reflected sunlight or windows with direct car headlight.

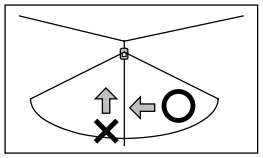
Ensure that there are no obstructions (plants, screens, furniture etc.) in the field of view that may cause incorrect cover/operation of the detector.



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

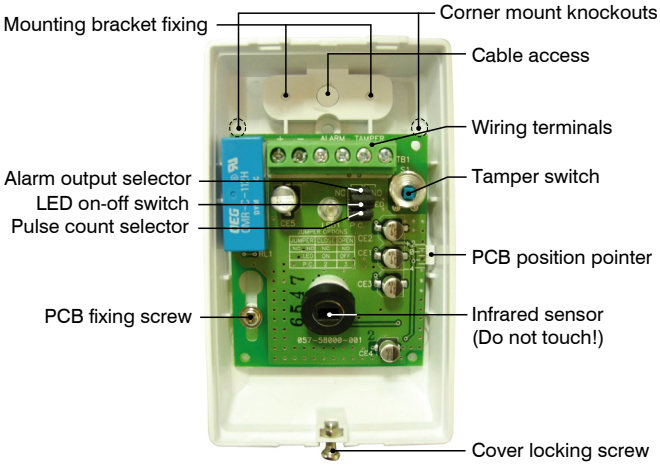


Install the detector at proper height on a rigid surface. Do not install the detector on vibrating surface.



PIR detector is more sensitive to the motions "across" the detection zones than "toward" or "away" the unit.

DESCRIPTION



INSTALLATION

DIRECT WALL/CORNER MOUNT

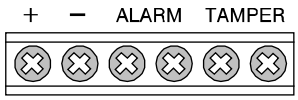
1. Open the front cover by releasing the cover locking screw.
2. Carefully remove the PCB from the unit base.
3. Knock out the mounting holes with proper tool.
4. Drill the holes on wall. Lead the cable through access hole and mounts the unit base firmly.
5. Replace the PCB to the unit base and complete the wiring as the next paragraph described.

CEILING/WALL MOUNT WITH BRACKET

1. Mount the bracket base on ceiling or wall. Lead the cable through central well.
2. Open the front cover of the detector by releasing the cover locking screw.
3. Carefully remove the PCB from the unit base.
4. Fix the unit base of detector and the swivel arm of mounting bracket with provided screws.
5. Lead the cable through the wire tunnel into the unit base. Assemble the unit base with the bracket base.
6. Replace the PCB to the unit base and complete the wiring as the next paragraph described.

WIRING CONNECTION

After the installation completed. Connect the wires to the corresponding terminals according to the following instructions.



+, – : 9 ~ 16 VDC power supply

ALARM : Zone input of control panel (N.C/N.O)

TAMPER : Tamper loop of control panel (N.C).

Replace the front cover, apply power supply to the detector to conduct the walk test.

WALK TEST

The walk test should be carried out to ensure proper detection coverage. Apply DC power to the detector and wait at least 60 seconds for sensor to warm up. Walk across the detection zones at normal speed. The LED will light whenever it detects the movement. To disable the LED, just remove the jumper head from the pins marked "LED".

PULSE COUNT

The detector features an intelligent pulse count that 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 or off the corresponding pins. The alarm signal will only be sent when the selected pulses are 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.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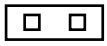
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ALARM OUTPUT SELECTION

The alarm output of this detector can be changed from NC (normally closed) to NO (normally open) by removing the jumper head from the pins. NC format is generally used in the intruder alarm system; NO format can be used for alarm event recording or other automatic control applications.

RANGE ADJUSTMENT

The detection zones can be vertically adjusted by sliding the PCB up or down. If the unit is mounted higher than 2.7m (9 feet), it maybe necessary to slide the PCB upwards to tilt the detection zones downwards to obtain optimum detection coverage. If the unit is mounted lower than 2.1 (6 feet), it maybe necessary to move the PCB downwards to tilt the detection zones upwards. Please refer to the following table to get the adequate PCB position for the respective maximum detection coverage with various mounting heights.

For IR-580 w/o bracket

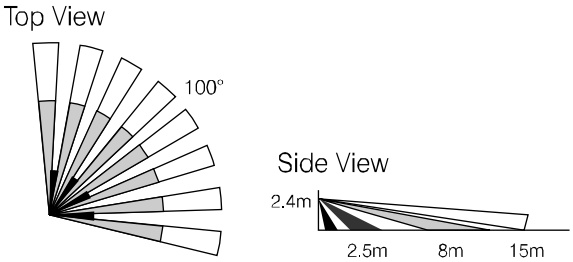
M/H	1.8m	2.0m	2.2m	2.4m	2.6m	2.8m	3.0m
B/P	Maximum Detection Coverage(m)						
+2	15	15	15	15	15	12	15
+1	15	15	15	15	13	15	15
0	15	15	15	15	15	15	15
-1	14	15	15	15	15	15	15
-2	13	14	14	15	15	15	14
-3	10	11	12	14	13	14	9
-4	8	9	11	11	12	13	8

M/H: Mounting Height **B/P**: PCB Position

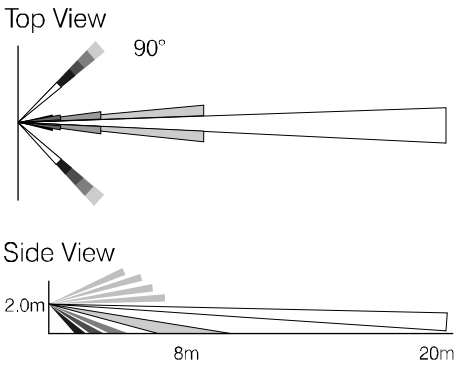
Note: The detection range might be reduced under high room temperature.

DETECTION PATTERN

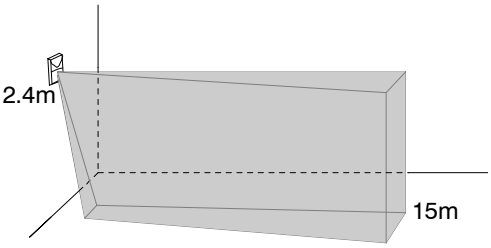
IR-580



IR-580C



IR-580CS



SPECIFICATIONS

Infrared sensor.....Dual element
Power supply.....9 ~ 16 VDC, 12V typical
Current drain.....NC: 15mA, NO: 8 mA, 12VDC
Alarm output .....NC/NO, 30VDC, 0.2A max.
Alarm period .....1.5 ~ 2.5 sec.
Pulse count.....2 / 3 selectable
Tamper switch .....NC, cover open activates
Walk test LED .....Blue, can be disabled
RFI immunity.....Ave. 25V/m (10~1000 MHz)
Detectable speed.....0.3 ~ 1.5m/sec.
Mounting height.....W/o bracket: 1.8~3.0m
With bracket: 1.8~3.6m
Humidity.....95% RH maximum
Temperature .....-20°C ~ 60°C (-4°F ~ 140°F)
Dimensions.....100 x 60 X 42 mm
Unit weight.....68 grams

** Specifications are subject to change without prior notice.*

CE

06/29/05' 058-58000-001