

IR-840M/LM

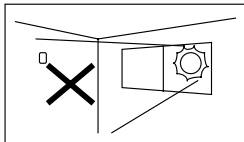
Passive Infrared Detector

SPECIFICATIONS

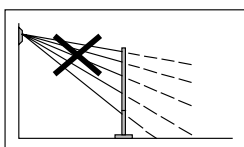
| | |
|--------------------------|----------------------------|
| Infrared sensor..... | Dual element |
| Power supply | 9 ~ 16 VDC, 12V typical |
| Current drain | 15 / 25mA (N.O / N.C) |
| Alarm output..... | N.C/N.O, 28VDC, 0.2A max. |
| Alarm period..... | 3 ± 1 sec. |
| Pulse count | 1-2-3 selectable |
| Tamper switch..... | N.C cover open activates |
| Walk test LED | Red, can be remote control |
| LED remote control | +12 VDC |
| RFI immunity..... | Ave. 30V/m (10~1000 MHz) |
| Detectable speed | 0.3 ~ 1.5m/sec. |
| Mounting height | 1.5 ~ 3.0m (5 ~ 10ft) |
| Humidity | 95% RH maximum |
| Temperature | -20°C ~ 50°C |
| Dimensions | 108 X 74 X 43mm |
| Unit weight | 88 grams |

* Specifications subject to change without prior notice.

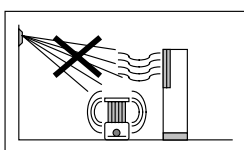
INSTALLATION HINTS



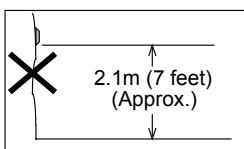
Do not install where the detector is in or facing direct/reflected sunlight, windows onto main roads (car head lights).



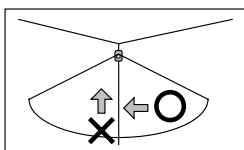
Ensure that there are not any obstructions (plants, screens, furniture etc.) in the field of view which may cause incorrect cover/ operation of the detector.



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.



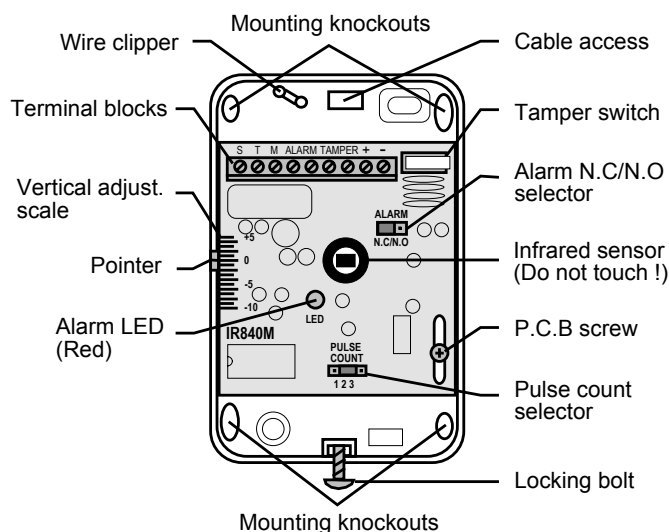
PIR detector is more sensitive to the motion "across" the detection zones than "toward" the unit.

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



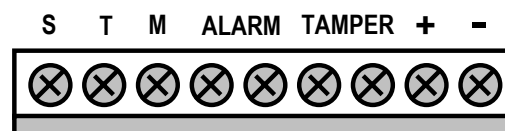
Installation Instructions

DESCRIPTION



INSTALLATION & WIRING


1. Release the locking bolt at the bottom of the unit. Select the appropriate wire access hole and knock out the plastic for the cable to come through.
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.



- +, -** : 9 ~ 16 VDC power supply
 - TAMPER** : 24 hours N.C loop of control panel
 - ALARM** : Zone input of N.C or N.O control panel (Be sure that the N.C/ N.O selector is on the correct position)
 - M (MEMORY)** : Alarm memory, the voltage must be 0 VDC when disarmed and 12 VDC when armed.
 - T (TEST)** : Alarm LED remote control voltage input (+12 VDC)
 - S (SPARE)** : Used for the end-of-line resistor connection.
4. Replace the front cover after completing the wiring and carry out a through walk test.

WALK TEST

It is necessary to carry out a thorough walk test of the detector to ensure that the correct coverage is being achieved after installation. The alarm LED should have a positive (+) 12 VDC connected to the terminal marked "T". When first powered up the detector will take approximately 30 seconds to warm up. After this warm up time, confirm detection coverage by walking across the detection zones at normal speed. The alarm LED will light for approximately 2 seconds whenever motion is detected.

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

ALARM MEMORY

The alarm memory function allows you to install multiple IR-840M / IR-840LM on a single zone and still maintain identification of the detector that triggered the alarm.

While the alarm system is armed, a tripped detector memories the alarm system is armed (set) a detector that is triggered will memorize the alarm event. Also alarm relay (N.C or N.O selectable) will trip the alarm control system. When the system is disarmed the LED on each triggered detector will latch on identifying the areas where the intrusion occurred. The LED and memory will automatically reset when the system is rearmed.

INTELLIGENT PULSE COUNT

The IR-840M / IR-840LM provide programmable pulse count which can be set to count 1, 2 or 3 pulses by placing the jumper head on the appropriate pins. An alarm signal will only be sent if the selected number of pulses (1, 2 or 3) are generated within a 20 second period. This feature will minimize the false alarm cause by environmental disturbance.

VERTICAL ADJUSTMENT

The detection pattern can be adjusted vertically by moving the P.C. board up or down. The board is factory set at the 0 position, giving optimum coverage when the detector is mounted at 2.0 ~ 2.4m from the floor.

Using the mounting height chart. Moving the P.C. board DOWN will **increase** the far range the near beams closer to the mounting wall. Moving the P.C. board UP will **reduce** the far range and move the near

beams farther out from the mounting wall.

| H | C | | | | | | | | | | |
|------|---|-----|-----|-----|------|------|------|------|------|------|------|
| | S | 5 m | 7 m | 9 m | 10 m | 11 m | 12 m | 13 m | 14 m | 15 m | 30 m |
| 1.5m | | -3 | -3 | -2 | -1 | -1 | 0 | +1 | N/A | N/A | 0 |
| 1.6m | | -4 | -3 | -2 | -1 | -1 | 0 | +1 | N/A | N/A | 0 |
| 1.8m | | -4 | -3 | -2 | -2 | -1 | -1 | 0 | 0 | N/A | 0 |
| 2.0m | | -5 | -4 | -3 | -2 | -2 | -1 | -1 | 0 | 0 | 0 |
| 2.2m | | -5 | -4 | -4 | -3 | -3 | -2 | -1 | 0 | 0 | -1 |
| 2.4m | | -5 | -4 | -4 | -3 | -3 | -2 | -1 | -1 | 0 | -1 |
| 2.6m | | -5 | -5 | -4 | -4 | -3 | -2 | -2 | -1 | -1 | -2 |
| 2.8m | | -6 | -6 | -5 | -5 | -4 | -4 | -3 | -2 | -2 | N/A |
| 3.0m | | -7 | -6 | -6 | -5 | -5 | -4 | -4 | -3 | -3 | N/A |
| 3.2m | | N/A | -7 | -6 | -6 | -5 | -5 | -4 | -4 | -4 | N/A |
| 3.4m | | N/A | -8 | -7 | -6 | -6 | -5 | -5 | -4 | -4 | N/A |
| 3.6m | | N/A | N/A | N/A | -8 | -7 | -6 | -6 | -5 | -5 | N/A |

C: Detection coverage (Room temp. 25°C).

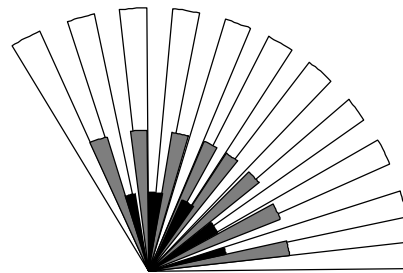
S: Scale on P.C. board.

H: Mounting height from floor.

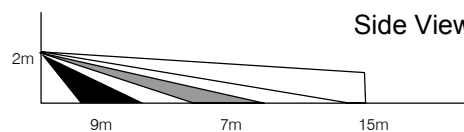
DETECTION PATTERN


IR-840M

120°, 15 x 15m at 25°C Top View



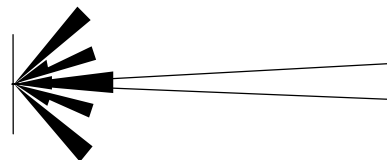
Side View



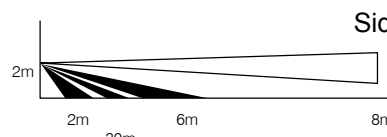
 A pet alley detection pattern can be simply obtained by turning the standard lens upside down.

IR-840LM

30 x 3m at 25°C Top View



Side View



V1.0

