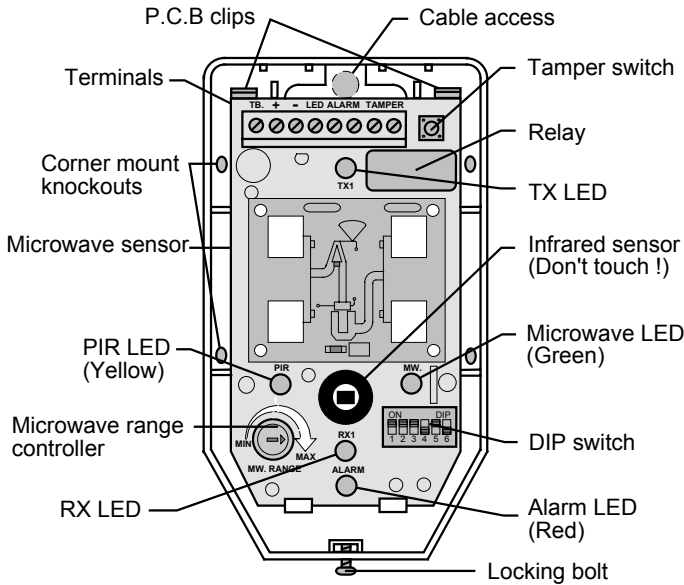


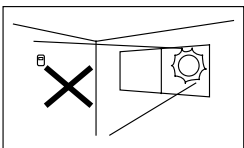
Anti-masking PIR + Microwave Detector DP-150A

INTERNAL VIEW

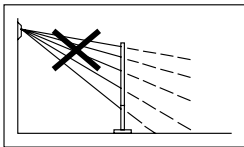


INSTALLATION HINTS

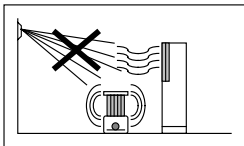
The detector may be either wall or corner mounted by applying different knockouts. MB-95 / MB-99 mounting bracket can be applied for ceiling / wall mount. Corner mount is generally recommended for optimum detection.



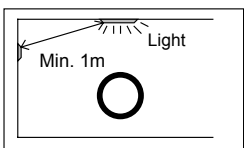
Do not install where the detector is in or facing direct/reflected sunlight, windows onto main roads (car head lights) or strong draughts / heaters.



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.



Locate the detector at least 1 meter away from any illumination to avoid possible interference to microwave sensor or anti-masking function.

Avoid running alarm cable close to mains cable!!!

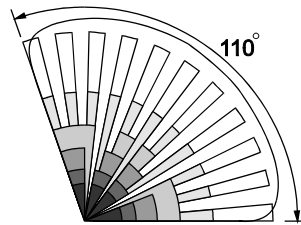
Installation Instructions

DETECTION PATTERN

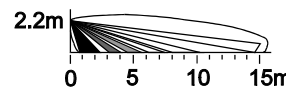
Model: **DP-150A**

110°, 15 x 15m at 25°C

Top View



Side View



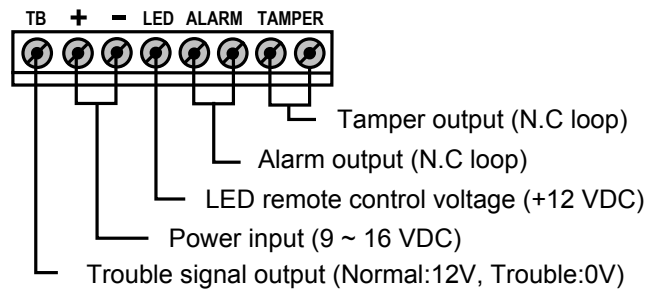
INSTALLATION & WIRING

Installation

1. Open the front cover by loosening the locking bolt at the bottom of the case.
2. Remove the printed circuit board from the base of the unit, by bending the P.C.B clips gently upwards (handle printed circuit board with care).
3. Punch out the required knockouts and mount the unit base to the wall, corner or bracket.
4. Lead the cable through the access hole and then refit the printed circuit board.
5. Connect the wires to the respective terminals according to the wiring instructions.
6. Replace the front cover* after completing the wiring and carry out a through walk test.

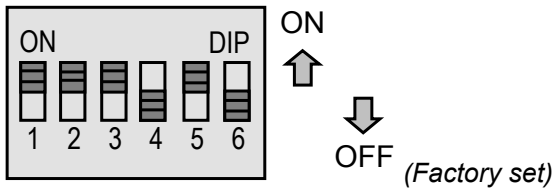
*** Before replacing the cover, carefully locate the TX LED into position and close the cover, by a gentle upward movement locate the locking lugs and then tighten the bottom bolt.**

Wiring



TAMPER terminals to be connected to a 24 hours N.C supervisory loop of control panel.

DIP SWITCH SETTING



PIN 1 - Alarm LED Indication

ALM	ON	OFF
Red LED	ON	OFF

PIN 2 - Microwave LED Indication

MW.	ON	OFF
Green LED	ON	OFF

PIN 3 & 4 - Pulse count selection

Pulse Count	1	2	3
PC2 (PIN 3)	OFF	ON	OFF
PC1 (PIN 4)	ON	OFF	OFF

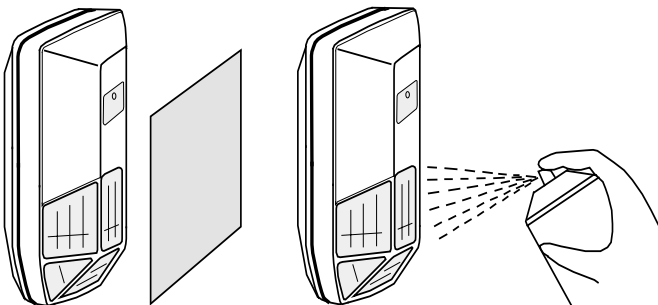
PIN 5 - PIR LED Indication

PIR	ON	OFF
Yellow LED	ON	OFF

PIN 6 - Trouble output selection

A-M	ON	OFF
Mode	Alarm + Trouble	Trouble

ANTI-MASKING & SPRAYING

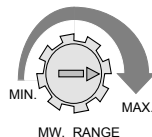


The anti-masking & anti-spraying system detects the unit being masked or sprayed (masking approximately 25cm or sprayed after 10 seconds). The alarm LED will latch and a trouble signal is transmitted to the control panel through "TB" output terminal. The trouble output format is selected by the "A-M." PIN 6 switch.

WALK TEST & ADJUSTMENT

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. Microwave detection range can be changed by adjusting the microwave range controller on the front



of the PCB (next to the PIR sensor). The range is increased by turning the pre-set in clockwise. When the range is satisfactory, all of the LEDs may be disabled from DIP switch (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 switch setting.

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

SPECIFICATIONS

- Detection range 15 x 15m at 25°C
- Infrared sensor..... Low noise, dual element
- Microwave sensor..... Micro strip antenna type
- MW output power..... 6 mW E.I.R.P. peak
- Power supply 9 ~ 16 VDC (12 VDC nominal)
- Current drain..... 37mA at 12 VDC
- Alarm period 2 ± 0.5 sec.
- Alarm output N.C 30 VDC, 0.2A max.
- Trouble signal Normal: 12V, trouble: 0V
- Anti-masking About 25cm (10") for 10 seconds
- Alarm output LED Red, can be disabled
- MW sensor LED..... Green, can be disabled
- PIR sensor LED Yellow, can be disabled
- Pulse count..... 1, 2, 3 selectable
- Tamper protection..... N.C cover open activates
- RFI immunity..... Ave. 30V/m (10~1000 MHz)
- Mounting height 2.0 ~ 2.4m (wall/corner mounted)
2.4 ~ 3.6m (with bracket)
- Mounting bracket MB-95 or MB-99 (Optional)
- Temperature -10°C ~ 55°C (14°F ~ 131°F)
- Detection zones 68 zones
- Humidity 95% RH max.
- Dimensions 125 x 68 x 42mm
- Unit weight 130 grams

Specifications are subject to change without prior notice.

Shepherd System DP-150A Eng. I/M V1.0