

DUOGUARD

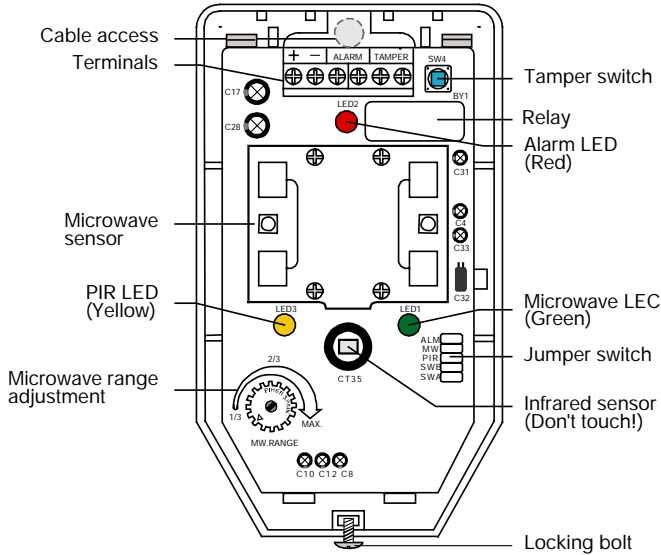
PIR + Microwave Motion Detector

DP-150/150L



Installation Instructions

INTERNAL VIEW

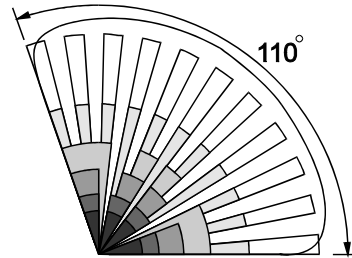


DETECTION PATTERN

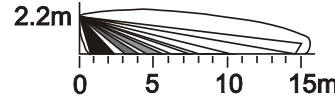
Model: DP-150

110°, 15 x 15m at 25°C

Top View

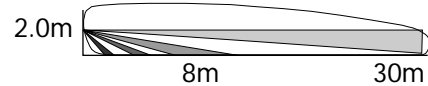
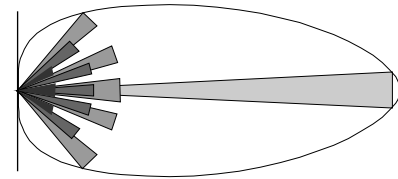


Side View



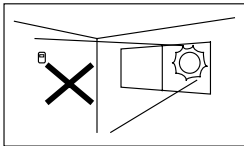
Model: DP-150L

90°

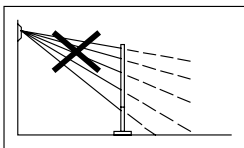


INSTALLATION HINTS

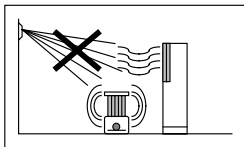
The DUOGUARD may be either wall or corner mounted by applying different knockouts. The MB-95 or MB-99 mounting bracket can be applied for ceiling or wall mount. Corner mount is generally recommended for optimum detection.



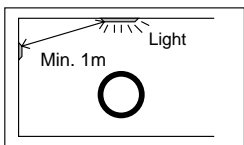
Do not install where the detector is in or facing direct/reflected sunlight, windows onto main roads (car head lights) or strong draughts / heaters.



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.

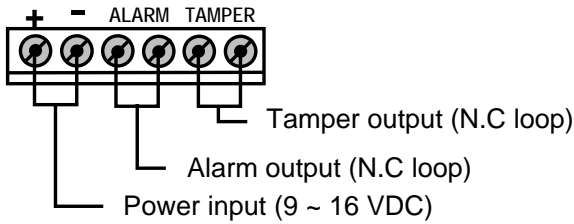
⚡ Avoid running alarm wiring close to mains cables !!!

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.

Wiring



☞ *TAMPER terminals should be connected to the 24-hour N.C supervisory loop of control panel.*

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

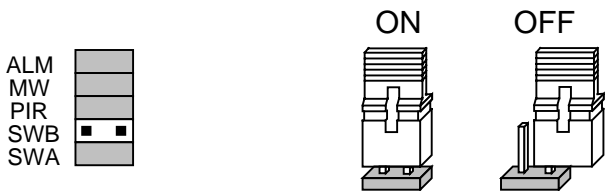
MOTION SIGNAL DISCRETION

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 infrared & microwave sensor and analyzed by the MSD circuit. MSD circuit ensures supreme reliability even when environmental conditions are severe.

SPECIFICATIONS

- MW Frequency 10.525 GHz
- Detection range 15 x15 m at 25°C
- Infrared sensor.....Low noise, dual element
- Microwave sensor..... DRO w/micro strip antenna
- MW output power 6 mW E.I.R.P. peak
- Power supply 9 ~ 16 VDC (12 VDC nominal)
- Current drain..... 30mA at 12 VDC
- Alarm period 2 ± 0.5 sec.
- Alarm output N.C 30 VDC, 0.2A max.
- 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. 20V/m (10~1000 MHz)
- Mounting height..... 2.0 ~ 2.4m (wall/corner mounted)

JUMPER SWITCH SETTING



(Factory set)

ALM - Alarm LED Indication

ALM jumper	ON	OFF
Red LED	ON	OFF

MW - Microwave LED Indication

MW. jumper	ON	OFF
Green LED	ON	OFF

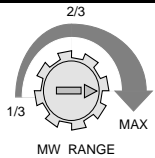
PIR - PIR LED Indication

PIR jumper	ON	OFF
Yellow LED	ON	OFF

SWA, SWB - Pulse count selection

Pulse Count	1	2	3
SWA jumper	ON	OFF	OFF
SWB jumper	OFF	ON	OFF

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. Accurate setting of the microwave is achieved by careful adjustment of the microwave range controller 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 from jumper switch (please retain for future walk testing).

- 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 110 grams
- In order to continue improving its product, IR-TEC reserves the right to change specifications without prior notice.*

2003/03/03 058-15022-00 V2.0

