

DUOGUARD

Pet Immune Dual Technology Detector

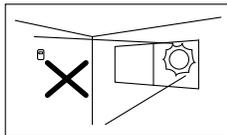
DP-550P

GENERAL

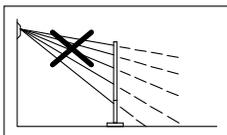
Thank you for choosing IR-TEC DP-550P pet immune dual technology motion detector for your security system. The DP-550P is a compact motion detector that combines a passive infrared (PIR) and a microwave (MW) motion sensor. The alarm signal will be transmitted when both sensors detect the motion at the same time. It provides superior reliability in intrusion detection to your alarm system. Its patent pending Target Size Verification (TSV) technology makes this detector able to immune the detection of domestic pet up to 18 kgs.

INSTALLATION HINTS

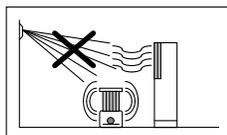
The DP-550P may be either wall or corner mounted by applying different knockouts. Corner mount is usually recommended for optimum detection.



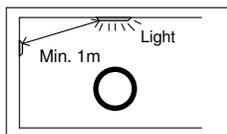
Do not install where the detector is in or facing direct/reflected sunlight, window onto main road to avoid car head light.



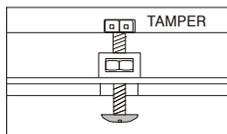
Ensure that there are not any obstructions (plants, screens, furniture etc.) within the range which may block the detection.



The detector should not face to the ventilation of HVAC or any equipment that may produce strong temperature change.



Locate the detector at least 1 meter away from the nearest fluorescent light to avoid interference to MW sensor.



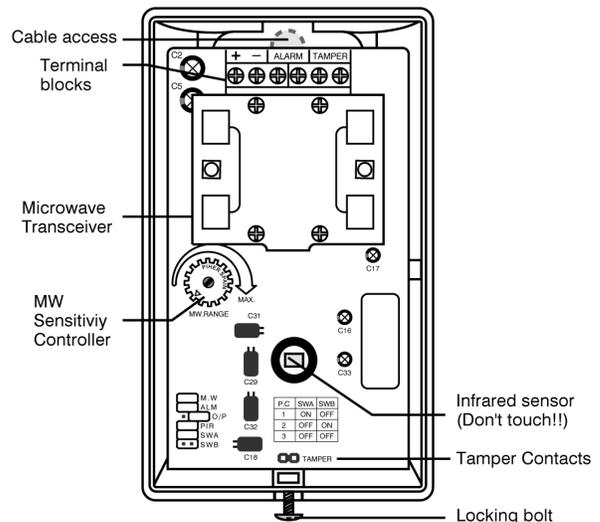
The tamper protection will be activated if the locking screw of front cover and bottom case is loosen. Ensure to fix the screw.

⚠️ Avoid running the alarm cable along with AC mains cables !!!



Installation Instructions

DESCRIPTION



PET IMMUNITY NOTICES

Important!!

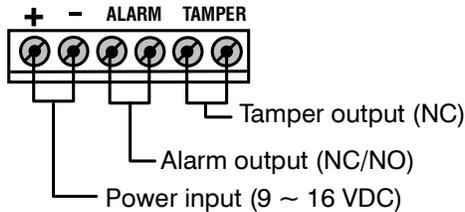
To ensure optimum pet immunity of this detector, please read the following notices carefully.

1. This detector is immune one domestic pet up to **18 kg** or **60 cm** moving on the floor. If animal is slightly bigger or taller, mount the detector a bit higher may still maintain similar immunity.
2. If animal activity may take place above 1 meter high, pet immunity allowance will be significantly reduced. It is therefore recommended to select a mounting location where animal's possible movements are not available within 1.8 m from the detector.
3. This detector should be mounted on the wall or corner at 2.3 m high and perpendicular to the floor.
4. **DO NOT USE** any mounting bracket with swivel adjustment.
5. The weight of animal can only be used as a reference. Other factors such as height and color of fur could also affect the level of immunity.
6. **DO NOT AIM** the detector at the stairways that animal can climb or pass through.
7. It is vitally important to verify the pet immunity function after installation. If animal movement is detected, relocate the detector may be necessary.

MOUNTING & WIRING

1. Open the front cover and carefully remove the PCB from the bottom case. Select the adequate knockouts and mount the bottom case on.
2. Connect the cable to the correct terminals according to the following instructions. Replace and fix the PCB on the bottom case. Replace the front cover and then walk test can be conducted.

Wiring Diagram



- ◆ **TAMPER:** Connect to the tamper protection loop.
- ◆ **ALARM:** Alarm output.
- ◆ **- :** Ground of DC power input.
- ◆ **+**: Positive of DC power input.

WALK TEST

It is necessary to carry out a thorough walk test of the detector to ensure correct coverage. Also to ensure that both PIR & microwave sensors are detecting the same area.

1. Apply the DC power supply and give about 60 seconds for sensor to warm up. After the warm up time expires, walk across the detection zones at normal speed. The red LED will lit when it detects the motion.
2. If microwave sensor is over sensitive (green LED remains on), adjust of the thumb wheel of MW sensitivity trimmer in counterclockwise until ideal detection range is obtained.



Taiwan Patent M242802
China Patent ZL03240302X

JUMPER SWITCH SETTING

A 6x2-pin jumper switch is available for various settings of the detector. Please refer the following instructions for setting options.

Code	Description	Placed (ON)	Removed (OFF)
MW	MW sensor detection	Enable MW LED indication	Disable MW LED indication
ALM	Alarm relay output	Enable alarm LED indication	Disable alarm LED indication
O/P	Output format	N.O. output	N.C. output
PIR	PIR sensor detection	Enable PIR LED indication	Disable PIR LED indication

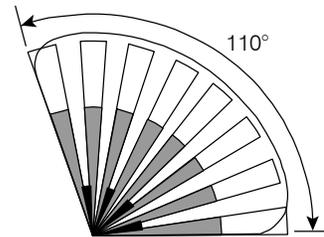
Pulse count selection

Code	Pulse count 1	Pulse count 2	Pulse count 3
SWA	ON	OFF	OFF
SWB	OFF	ON	OFF

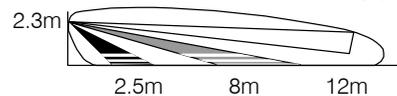
DETECTION PATTERN

110°, 12 x 12m at 25°C

Top View



Side View



SPECIFICATIONS

Power supply 9 ~ 16 VDC, 12 VDC typical
 Current drain 30 mA @ 12 VDC
 Infrared sensor Dual element, pyroelectric
 Microwave sensor DRO, patch antenna
 MW Frequency 10.525 GHz
 MW output power 13 dbm E.I.R.P.
 Alarm period 1.5 ~ 2.5 seconds
 Alarm output NC/NO, 30 VDC, 0.2A max.
 Tamper protection NC, screw release activated
 Mounting height 2.2~2.3 m
 Pulse count 2/3 selectable
 Detectable speed 0.1~3.0 m/sec.
 RFI immunity Av. 20 V/m (10~1,000 MHz)
 Temperature -20°C~50°C (-4°F ~ 122°F)
 Humidity 95% RH max.
 Dimensions 112 x 66 x 45 mm