

# 360° Ceiling Mount PIR+MW Dual-Tech Motion Detector

## DP-363

## Installation Instructions

### GENERAL

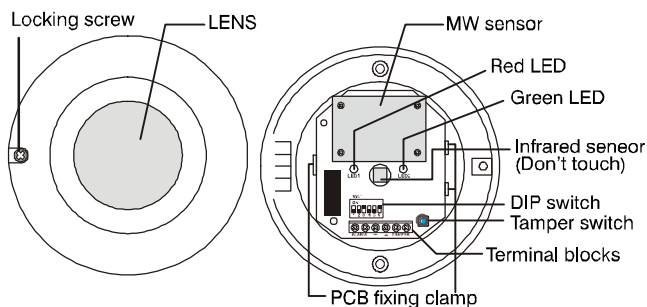
Thank you for choosing IR-TEC dual technology motion detector for your security system. The DP-363 is a 360° ceiling mount motion detector that combines a passive infrared (PIR) and a DRO microwave (MW) motion sensor in a sleek housing. It utilizes AND logic discretion and advanced signal processing to provide superior intrusion detection reliability. To achieve the best detection, please read all instructions thoroughly prior to installation.

### INSTALLATION HINTS

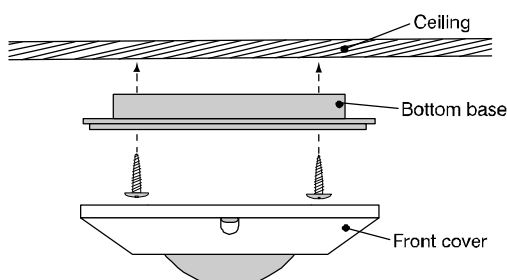
1. The DP-363 should be mounted on a firm section of ceiling and located for optimum coverage.
2. Do not install where the detector is exposed to direct or mirror-reflected sunlight.
3. Make sure the detection area does not have obstruction which may block the detection zones.
4. Avoid running the alarm cable along with AC mains cable to prevent EMI.
5. Locate the detector at least 0.3 m (1ft) away from fluorescent light to avoid possible interference to the microwave sensor.

### INTERNAL VIEW/INSTALLATION

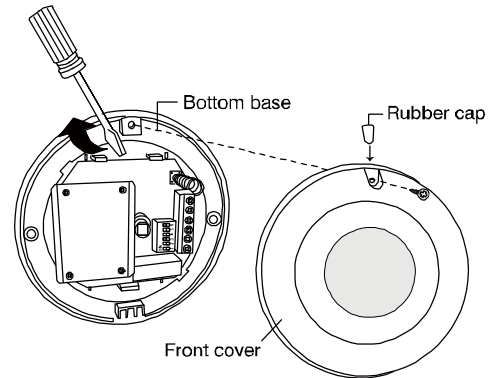
#### Internal View



#### Installation Illustration



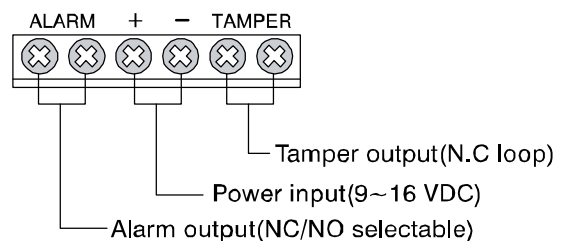
#### PCB Disassembly Diagram



#### Description

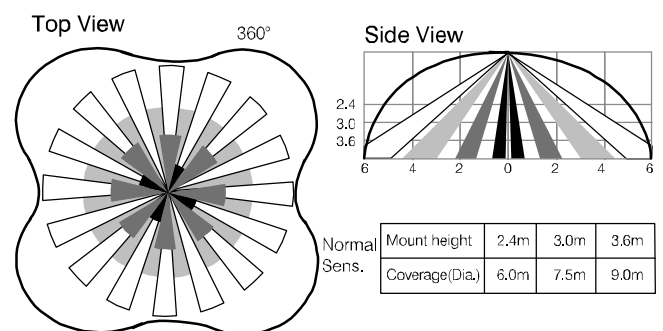
1. Loosen the cover locking screw, open the cover.
2. Refer to the PCB disassembly diagram, carefully remove the PC board from the bottom base.
3. Knockout the adequate cable access and mounting holes on the bottom base.
4. Lead the alarm cable through the access hole, and mount the bottom base at the selected location.
5. Replace the PCB at the bottom case. Connect the signal wires with the terminals according to the wiring diagram as below.
6. Replace the front cover and then walk test can be conducted.

#### Wiring Diagram



**Warning:** TAMPER output should connect with the 24- hour N.C supervised loop of control panel.

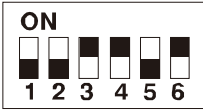
### DETECTION PATTERN



## FUNCTION SETTING

SW1 DIP switch is available for all function settings of the detector. Please refer to the following instructions for setting options.

SW1



- The black blocks indicate switch position.
- The left shows factory default setting.

### Function Setting Indication

SW#	1	2	3	4	5	6
Function Setting	Pulse Count	Trigger Count	LED ON/OFF	Alarm Output	MW Sensitivity	
ON	3	ON	ON	NC	(Refer to next table)	
OFF	1	OFF	OFF	NO		

### Microwave Sensitivity Setting

MW Sensitivity	60%	80%	100%	120%
Detection Coverage (@3m high)	4x4m	6x6m	8x8m (default)	12x12m
Switch Setting	5  6	5  6	5  6	5  6

#### 1. Pulse Count

The DP-363 features intelligent pulse count in its PIR sensor which can effectively prevent false alarms cause by environmental interference. If it is installed at the places with rapid temperature change or unknown electrical interference, DIP switch #1 which controls the PIR pulse count can be set to ON position for 3 pulses to increase the detection reliability.

#### 2. Trigger Count

When pulse count is already set on, and the detector still experiences false alarm caused by unknown factor, then "Trigger Count" can be enabled. With trigger count enabled, the detector will hold the alarm output for a short period of time and release the alarm signal only when a true intrusion is verified by sophisticated signal processing software.

**Warning: Once the trigger count is enabled, the alarm output will be slower than normal. Thus, walk test must be conducted to ensure that detector not to miss catching the intrusion.**

#### 3. LED Indication

The LED of DP-363 indicates the operation status of the detector. When the green LED lights up, it means the MW sensor is active. When the red LED lights up, it shows the alarm output (also represents the infrared sensor is active). If it is necessary to disable the LED indication, just set DIP switch #3 to OFF position.

## WALK TEST & ADJUSTMENT

Please refer to the following instructions to conduct walk test and MW adjustment.

### Walk Test

1. Apply DC power supply and wait about 60 seconds for sensor to warm up. During warm up period, both red and green LEDs will light up.
2. After the warm up time expires, walk across the detection area at normal speed. Check if the red and green LED turn on/off following by tester's walk/stop.

### Sensitivity Adjustment

If there is no movement within the detection range and the green LED remains on, this means that MW sensor is probably over sensitive (usually appears in a smaller room). Please reduce the MW sensitivity in accordance with the MW sensitivity setting table.

**Note: Regular walk test must be carried out, as part of routine maintenance at least once a year. The mounting height should be at least at 2.4m.**

## SPECIFICATIONS

MW frequency	10.525GHz
MW output power	10dBm EIRP
Power supply	9~16VDC (12 VDC nominal)
Current drain	17mA@12VDC
Infrared sensor	Omni-directional, dual element, low noise
Microwave sensor	DRO w/m micro strip antenna
Mounting height	2.4~3.6m
Alarm period	2~4 sec.
Alarm output	NC/NO, selectable, 30VDC, 0.2A max.
Warm up period	60sec.Red/Green LED on
Alarm output LED	Red, can be disabled
MW sensor LED	Green, can be disabled
Tamper protection	NC, cover open activates
Pulse count	PIR 1/3, selectable
Op. temperature	-20°C ~ 55°C (-4°F~131°F)
Dimensions	110 (dia.) x 44mm (H)

06/07' 058-36321-001

FCC ID: NRIDP363

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.



**Note:**

**1. Any changes of modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.**

**2. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:**

- Reorient or relocate the receiving antenna.**
- Increase the separation between the equipment and receiver.**
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- Consult the dealer or an experienced radio/TV technician for help.**