# MC-335R(DMT) Wireless Motion Detector

1. Introduction

The MC-335R(DMT) is a PIR technology intruder detector designed to detect human body movement in a protected area. Digital processing ensures a high immunity to false alarms and outstanding stability. The MC-335R(DMT) uses a sophisticated radio communication protocol wit h a high level of data safety. The detector makes regular auto testing and reports its conditions regularly to the system for full supervision. Built-in tamper switch trigger an alarm if there is any attempt to tamper with the detector. An automatic testing mode makes testing an ease.

Lithium battery


LED

Infrared lens

Fig.1 Appearance

Tamper key

DIP

Fig.2. Internal Structure
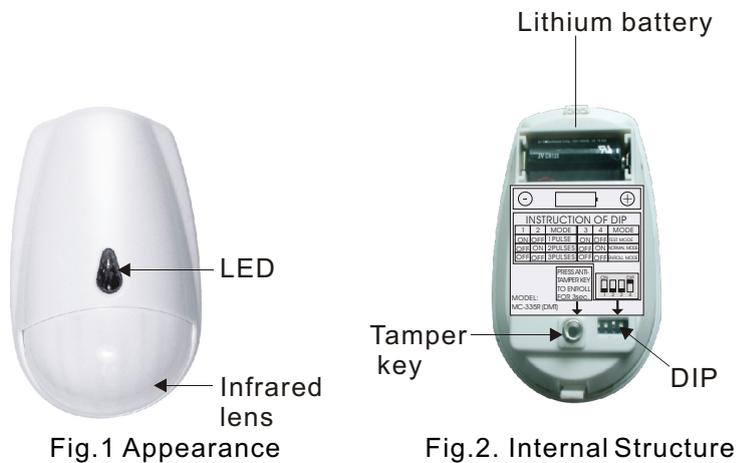
2.Specifications

Type: MC-335R(DMT)

Detection range: 9m(25℃)
Transmit range: 120m-150m (open area)
Power supply: 3 VDC lithium battery
Static current consumption: 9uA
Current consumption of momentary Emission : 4.5mA
Battery life: about 1 year

Infrared part e.g right picture
Max coverage area: 9m*12m
(23*46 inches)/90°

Top View

Sise View
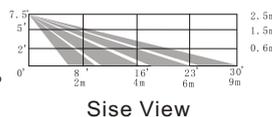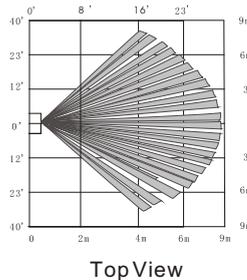
Transmit frequency: 433MHz/868MHz

Alarm indication: LED lights for several seconds

3.Installation

Installation:

Installation height from 1.8 to 2.5m (6-8 inches)
Allow an 45° angle between wall bracket optional

Environment:
Work environment:-10℃ to +50℃
(14℉ - 122℉)

Storage environment:-20°C to +60℃
(-4℉ - 140℉)

White light protection(inner): >9000LUX
Dimension: 95*64*49mm

4.1 Installation Notice
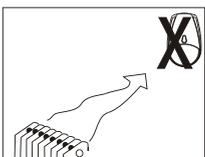
Do not expose to heating/cooling object

Prevent direct sun-light from reaching the detector
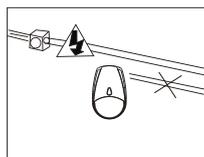
Keep wiring away from electrical power cables
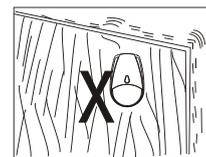
Ensure the stable mounting location

Avoid facing metal wall

4.2   Introduce DIP function:

Three work modes to be set:

Test mode: Detector alarms once being triggered, no time interval between two alarm emissions. This mode is used for walking test.

Normal mode: Detector probes one time each interval 2.5min, sends supervision signal which reports status of the detector and battery each interval 65min.

Enroll mode: Sends identity code to receiver after pressing tamper key over 3 seconds.

Refer to follow form to set each mode:

DIP3	DIP4	MODE
ON	OFF	TEST MODE
OFF	ON	NORMAL MODE
OFF	OFF	ENROLL MODE

Three types of pulse for option:

One pulse: Detector alarms once detecting one pulse.
Two pulses: Detector alarms once detecting two pulses.
Three pulses: Detector alarms once detecting three pulses.(Default)
The more pulse counts, the lower performance for sensitivity of capture. But more pulse counts can reduce false alarms.

DIP1	DIP2	MODE
ON	OFF	ONE PULSE
OFF	ON	TWO PULSES
OFF	OFF	THREE PULSES
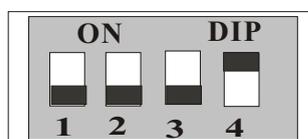
4.3 Enrollment of the detector to the system

Set detector to enroll mode and then insert one lithium battery into detector. LED will start up for lighting for several seconds. Detector will send the identity signal to receiver after pressing tamper key over 3 seconds. If panel receives this identity signal, it will have corresponding sound for hinting enrollment is successful. Please refer to manual of panel to know how to make panel to ready for studying detector.

Press the tamper switch for study the ID code

4.4 Replace lithium battery

It means low battery of detector under the condition that LED light flashes when detector emits signal each time. Meantime, It also will send signal of low battery to receiver.
Refer to follow pictures to change one new battery:

Insert one new battery

5 Walk test appointed to coverage area

1. Set detector to test mode for walking test. According to surrounding, pulse counts 1, 2 or 3 for option.

2. Horizontal movement which triggers detector alarming at the remote of the detection coverage at the speed of 0.75m/s , the LED indicator will light several seconds.

3 .Testing in different direction to confirm the two boundaries of the coverage, ensure the detector is appointed to the central desired area.

4.The centre of detection area should not be towards vertical incline. If can not obtain an ideal detection area , please adjust the vertical angle to ensure direction for detector neither high nor low.

5. Attention: Once detection angle is adjusted, walking test must be performed again.

6. Please set detector to normal mode after finishing walking test.