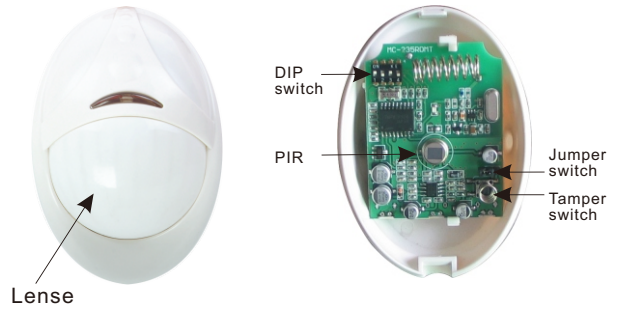


# MC-235R WIRELESS PIR DETECTOR

## 1. Introduction

MC-235R is PIR intrusion detector with Pet immunity. It adopts digital microprocessor control technology. By using refined cylindrical FRESNEL lens in PIR section, it has high energy receiving efficiency and high sensitivity and false alarm immunity. With advanced patented software technology, It well settles the false alarm and malfunction caused by other interference factors. It has ultra-high detecting sensitivity and excellent anti-False alarm performance. It is widely used in various indoor applications by choosing proper pulse quantity. Special battery-saver feature and working life is up to more than 2 years.



## 2. Specification

Model:

MC-235R

Detection distance: 9m (25°C)

Emitting distance: 120-150m (in open area)

Operating voltage: 6V(4 \* 1.5 V)

**Current consumption:**

**Static** ≤ 30 μA, **Alarm** ≤ 20mA (433MHz)

Infrared section(as shown in the figure)

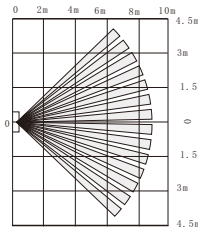
Optical lens data

Infrared area: 11+5 (typical)

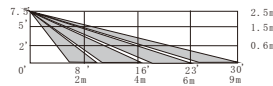
Max.coverage: 9m\*9m (23\*46feet)/90°

Emitting frequency: 433MHz

Alarm indication: LED flashes for seconds.



Wall mounting wide -angle lens view



Side view

Mounting:

Wall or corner mountable, 2.0-2.4m above ground

Operating environment:

Operating temp: -10°C-50°C (14°F-122°F)

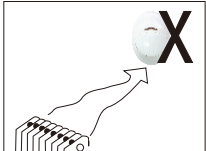
Storage Temp.: -20°C-60°C (-4°F-140°F)

Anti-white light (indoor) : >9000LUX

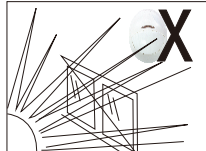
Dimensions: (L\*W\*H) 94\*62\*53mm

## 3. Installation

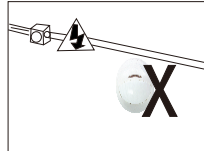
### 3.1 Notes



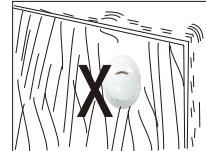
Do not face the cold and heat source directly



Do not face the sunlight directly



Keep wiring away from high-voltage cable

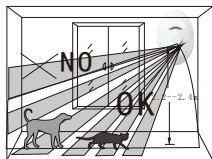


Do not install on unstable object

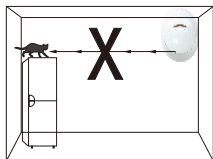


Do not face the metal wall directly

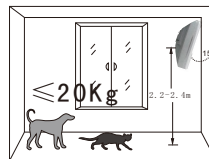
### 3.2 pet-immunity guidebook



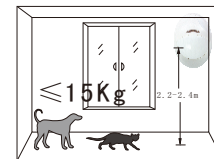
the top of the detecting area is the non-pet-immunity area



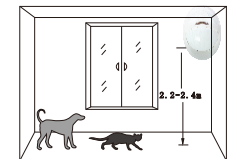
prevent direct the places where the pets can climb up



the pet is smaller than 20kg



the pet is smaller than 15kg



The installation height of 2.2m to 2.4m is available pet-immunity height

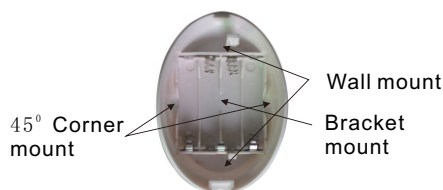
### 3.3 Illustrated installation

#### ①.Dismantle procedure:



A. Remove the screw by screwdriver

#### ②.Non bracket mounting: 2.0-2.4m above the ground, Wall, bracket or 45° corner mountable



B. Mark screw hole and drill

C. Insert two expandable dowel and attach the base to the wall with two screws.

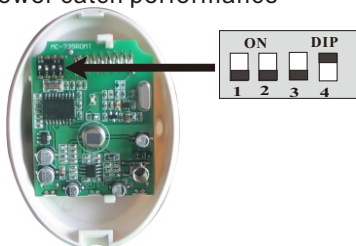
D. Replace the battery and cover

#### 4. DIP switch functions:

MC-235R can choose 3 kinds of pulse as follows:

- 1-pulse: Alarm 1-pulse.
  - 2-pulse: Alarm 2-pulse.
  - 3-pulse: Alarm 3-pulse (Factory default) .
- Higher pulse counting and lower catch performance and can avoid false alarm

1	2	MODE
ON	OFF	1-Pulse
OFF	ON	2-Pulse
OFF	OFF	3-Pulse



MC-235R can set three modes as follows:

- Test Mode:** Emitting alarm signal once detector is triggered. No time-lag between two emissions. Default mode for installing test.
- Power-saver mode:** Detect every 3 minutes. Send detection signal of detector and battery status once detector is triggered.
- Coding Mode:** Press tamper switch for more than 3 seconds and send an identification code to receiver.

3	4	MODE
ON	OFF	TEST
OFF	ON	POWER-SAVER
OFF	OFF	CODING

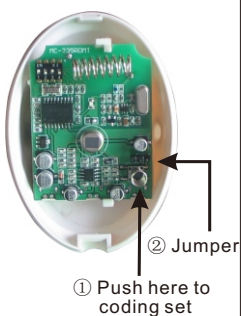
Modes of DIP switch 3&4:

#### 5. Coding method between detector and control pane and tamper switch setting:

##### ① Coding set:

Install the battery, LED flashes, when the detector gets stable after seconds, press tamper switch for more than 3 seconds and detector will send a wireless signal. If the control panel receives the signal and get the response sound then code successfully. Please refer to control panel manual for details.

② If short circuit of the jumper as shown then tamper alarm function invalid



#### 6. Detection distance adjustment and battery change

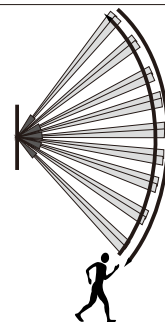
The detector checks its batteries conditions when the batteries in low voltage then it will transmit signals to warning users to replace the batteries. It only transmit once to warn users.

Pull out the base cover and change battery. Please pay attention to the positive and negative.



#### 7. Walk test in coverage area :

- ① Set as Test Mode to proceed walk-test, pulse count set as 1, 2 or 3
- ② Walk across the far edge of coverage area at the speed of 1 step/second (about 0.75m/s) The LED will flash for seconds then alarm (as shown in the right figure)
- ③ Do walk-test in opposite direction to confirm the boundary of both sides, Make sure the detection centre pointing to the centre of protected area..
- ④ Make sure the detection centre at the proper place. Should properly adjust the detection area if you can not get an ideal detection area.
- ⑤ After adjust the detection angle, should redo the walk test as above.
- ⑥ Please change TEST mode to NORMAL mode after the Walk-test.



#### 8. Customer Service

Our products are very reliable, but for some special reasons, the working performance will be limited in certain range. We here list some cases as follows:

- ①. The voltage of control panel is not stable;
- ②. Low-voltage of the detector.

For any help please contact with our company and your could visit our website for more information.



**Warning:** We are not responsible for the problem caused by improper operation by users!

#### FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.