MC-335R Wireless PIR Detector

1. Introduction

The MC-335R 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 uses a sophisticated radio communication protocol with 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.



Fig.1 Appearance



Fig.2. Internal Structure

2.Specifications

Type: MC-335R

Detection range: 9m(25℃)
Transmit range: 120m-150m (open area)

Power supply: 3 VDC lithium battery

Current consumption:

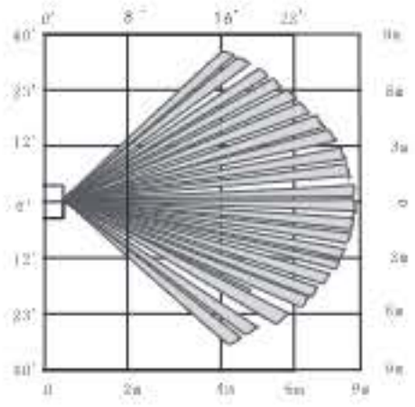
Static≤30μA, Alarm≤20mA（433MHz）

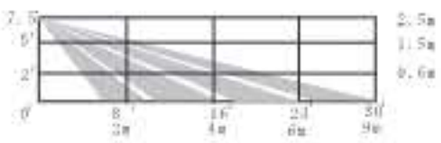
Battery life: about 1 year

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

Transmit frequency: 433MHz

Alarm indication: LED lights for several seconds


Top View


Sise View

3.Installation

Installation:

Installation height from 2.0 to 2.5m

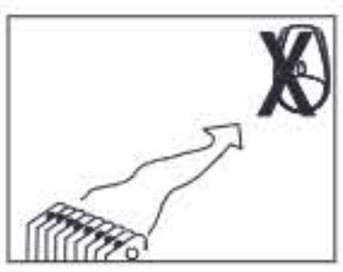
Allow an 45° angle between wall bracket optional

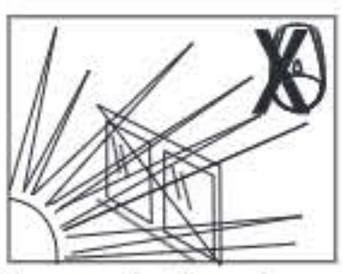
Environment:
Work environment:-10℃ to +50℃
(14℉ - 122℉)

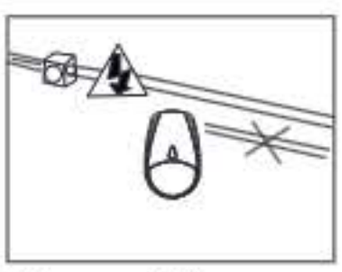
Storage environment:-20° C to +60℃
(-4℉ - 140℉)

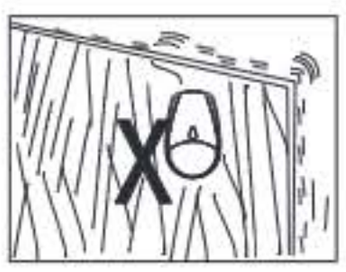
White light protection(inner): >9000LUX
Dimension: 95*64*49mm

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

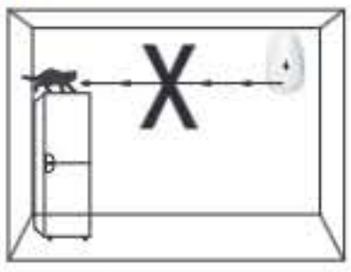

Ensure the stable mounting location

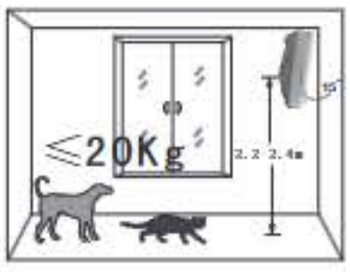

Avoid facing metal wall

4.2 pet-immunity guidebook

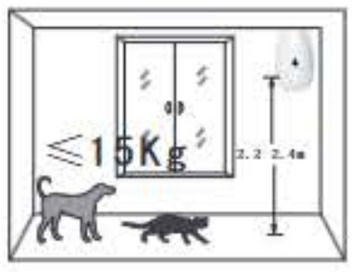


the top of the detecting area is the non-pet-immunity area

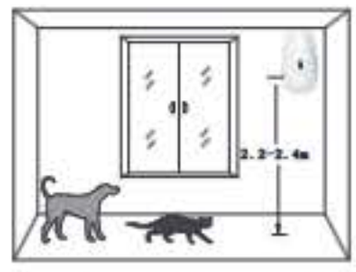

prevent direct the places where the pets can clamb up



the pet is smaller than 20kg



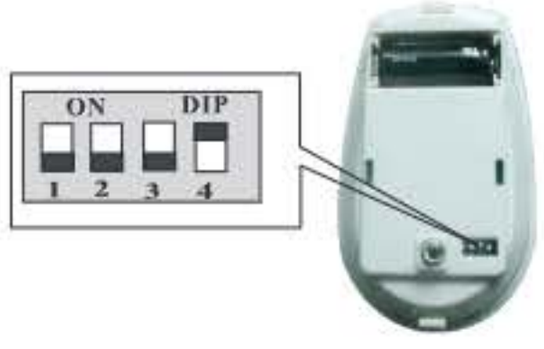
the pet is smaller than 15kg


The installation height of 2.2m to 2,4m is available pet-immunity height

4.3 Introduce DIP function:

MC-355R 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	Modes
ON	OFF	1-pulse
OFF	ON	2-pulse
OFF	OFF	3-pulse



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MC-355R can set three modes as follows:

Test Mode: Emitting alarm signa nce detector is triggered. No time-lag between two emissions.

Power-saver mode: Send detection signal of detector and battery status

Coding Mode: Press tamper switch for more than 3 seconds and send an identification code to receiver.

Dip switch 3 and 4 set modes

3	4	Modes
ON	OFF	Test
OFF	ON	Power-saver
OFF	OFF	Coding

4.4. Coding method between detector and control panel:

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 give the response sound then code successfully. Please refer to control panel manual for details.



Press the tamper switch for study the ID code

② If short-circuit pin "A" with a jumper then the tamper alarm function invalid.

4.5. Detection distance adjustment and battery changes

① Shorten detection distance by pushing down the PCB and vice versa User can adjust it to meet different need. As shown on the right picture, the detection distance is the farthest.

②When the signal between detector and control panel becomes weak. That means a low battery condition. Users should change new battery with same type. Pull out the base cover and change battery.Please pay attention to the positive and negative.



Insert one new battery

5. Walk test in coverage area:

① Set as Test Mode to precess walk-test,pulse count set as 1,2 or3。
② Walk across the far edge of coverage area at the speed of 1 step/second(about0.75m/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 .



6. 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

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.