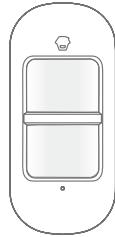


smanos®

## Pet-Immune PIR Motion Detector

### MD9100

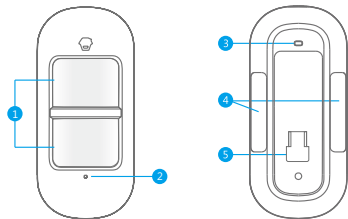


#### User Manual

##### Introduction

MD9100 motion detector adopts unique design with dual infrared sensors and intelligent analysis algorithm which effectively identify interference signal from body movement signals. It can reduce false alarm rate caused by pets under 20kgs or other interfering objects. The detector is suitable for lobby, hallway detection with a detective range of 0-9 m at front. With low power feedback function, the users will get SMS alert or push message for low battery if the detector has been connected to a GSM or Wi-Fi alarm system.

##### Product Overview

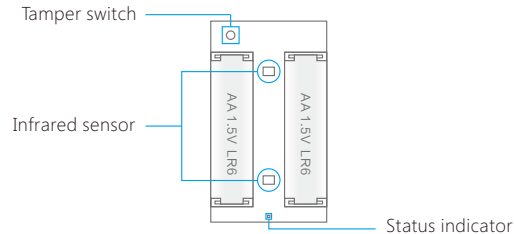


1. Detection window
2. Status indicator
3. Test button
4. Double-sided tape stick place
5. Bracket slot

##### Status Indication

| Display                     | Meaning                                                         |
|-----------------------------|-----------------------------------------------------------------|
| Blinks continuously         | Self testing                                                    |
| Blinks once                 | Intrusion detected                                              |
| Blinks twice                | Testing mode is finished, the detector enters power-saving mode |
| Blinks once every 3 seconds | Low battery, please replace the battery as soon as possible     |

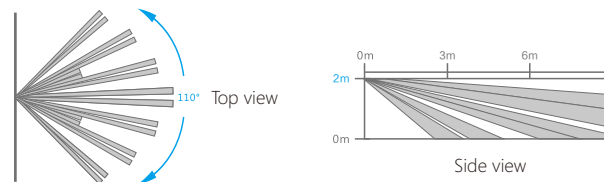
##### PCB Layout



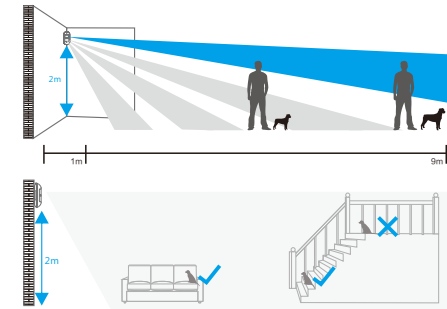
**Infrared sensor:** It detects the infrared rays released by human body motion, please don't touch the surface and always keep it clean.

**Tamper switch:** Once the case is opened in working mode, the tamper switch is triggered and then generates an alarm signal.

##### Detection Range



##### Pet-Immune Function Illustration



**IMPORTANT:** If you keep a pet at home, make sure the detector is installed at the upright position to achieve pet-immune function.

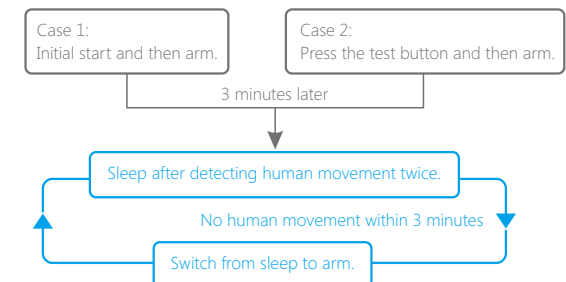
##### Working Mode

###### Testing Mode

Press the test button, the detector enters testing mode and detects once every 10 seconds. After 3 minutes, the status indicator blinks twice, and the detector switches to power saving mode.

###### Power Saving Mode

If the PIR motion detector detects movements twice in 3 minutes, it automatically goes into a sleep state. If there is no movement detected in next 3 minutes, it will switch from sleep state to arm. During the 3 minutes, the detector won't be active and send any signals to the control panel. As long as there is a movement detected within 3 minutes, the duration of power saving mode will be extended.



## Pairing to Control Panel

### Control panel enters pairing state

Make the control panel in pairing state.

### Press the test button

Press the test button on the back of the detector twice, the control panel beeps once to indicate a successful pairing.

**Note:** If the control panel beeps twice when the above operation is done, it means the detector has been paired already.

## Test

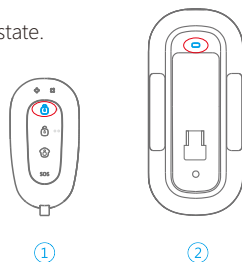
It is to check whether the PIR motion detector can work properly or not.

### ① Arm the system

Make sure the alarm system is in armed state.

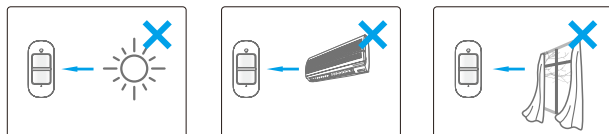
### ② Trigger an alarm

Press the test button until an alarm is triggered. The detector is proved to be connected successfully and ready for installation.

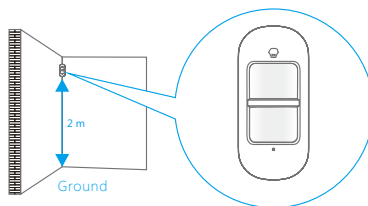


## Installation

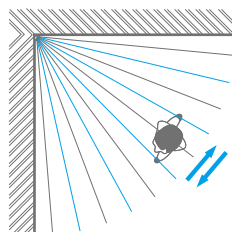
**Important:** Avoid installing the motion detector directly toward windows or near heat sources, such as heat extraction units, air-condition, micro-wave oven, refrigerator etc. Also try to avoid placing two motion detectors in the opposite of each other and don't place them in each other's detection range.



**Step 1:** The ideal mounting height of the motion detector is 2 meters from the floor. It is suggested to mount it at the corner of the wall or just stick it to the wall by using the supplied 3M sticker.



**Step 2:** After mounting the detector, please walk from left to right in the room for a test; The status indicator will blink once when motion is detected.



**Note:** This PIR motion detector can also be mounted at special location by using the supplied bracket and screw kits.

## Specifications

**Power Supply** DC 3V (AA 1.5V LR6 battery x 2 pcs)

**Static Current** <50 uA

**Alarm Current** <9.5 mA

**Detection Scope** 9m/110°

**Pet Immunity** <20 kgs

**Transmitting Distance** <80 m (open area/ no interference)

**Radio Frequency** 868 MHz or 915 MHz (±75KHz)

**Housing Material** ABS plastic

**Operating Condition** Temperature: -10°C ~+ 55°C

Relative Humidity: <80% (non-condensing)

**Detector Dimensions (L x W x H)** 108 x 52 x 36.8 mm

**Bracket Dimensions (L x W x H)** 52 x 30 x 26.5 mm

## FCC STATEMENT

1.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.

(2)This device must accept any interference received, including interference that may cause undesired operation.

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

**NOTE:** 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.