# MD-209R Wireless Door Sensor

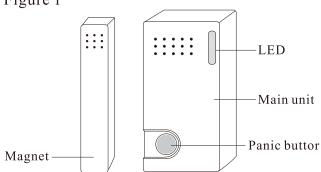
### 1. Introduction

The MD-209R is a fully supervised mini style magnetic contact transmitter. It features door/window close/open instant alarm function. It features a built-in reed switch (that opens upon 2 cm removal of a magnet placed near it). Each input has a unique 36-bit Code ID, selected in the factory from over 16 million possible code combinations.

Upon alarm, a digital message is transmitted, alarm and other data are thus forwarded to the receiver. An LED lights whenever alarm or tamper events are reported. The LED does not light while a supervision message is being transmitted. Operating power is obtained from 3 on-board AAA alkaline battery. A weak battery will cause a low battery alarm message transmitted. When the door/window remains open, it also will give an alarm message.

A movement of the magnet triggers the internal sensor in the detector. It can trigger an Instant or Delayed intruder.

Figure 1



### 2. Specification

Model:MD-209R

Working range:200m(open area) Code:28 + 8 (function) ID Working frequency: 433MHz

Working voltage: 4.5V 3x AAA alkaline battery

Battery life: 1 year

Current: static ≤10uA, alarm≤15mA (433MHz)

Alarm output: alarm, tamper Working Temeprature:-10C~50C

Dimesion:8x32x24mm

Color: ivory

### 3. Main functions

- A. Adopted low consumption CPU
- B. Adopted unique Mutil code
- C. Auto status report
- D. Anti-lost report
- E. Open door/window indication

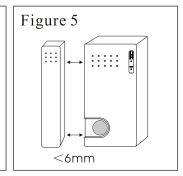
**Attention!** The MD-209R carries an additional tamper switch under the board. This switch is actuated by a leaf spring, mounted on a small base segment that is loosely connected to the mounting frame.

Figure 2 remove the mounting frame

Figure 3
frame on the door/window.

door or windowmounting frame

Figure 4
insert bateries to the nain unit.
tamper suitch.



# 4. Mounting

- 4.1 Caution: ensure the proper performance, you should avoid to installing the place 1),2) and 3)
- 1) Places easy to damaged
- 2) Places unstable
- 3) Places nearby the magnetic objects
- 4.2 Installation introduction
- A. Remove the mounting frame from the main unit . (Figure 2).
- B. Hold the frame against the mounting surface and mark the 2 drilling points through the mounting holes.
- C. Drill the holes and fix the frame to the wall using the screws with countersunk heads supplied in the package. (Figure 3).
- D. Remove the battery cover at the back of the main unit shown in the figure. Here you see the code ID attached. (Figures 4) and insert the batteries between the battery clip. The MD-209R will generate an enrollment signal after the batteries are installed. Attach the main unit to the fixed mounting frame and the magnet to the movable part (door or window see Figure 3). Locate the magnet not more than 6 mm

(0.25 in.) from the transmitter's marked side. F. Enrollment of the detector to the system: Study the installation manual of the control panel to learn how to enter the enrolling mode to enroll the MD-209R. Now the control panel is ready to enrolling

- a) Triggering the MD-209R by moving the magnetic, then the MD-209R will be enrolled automatically.
- b) Remember the zone enrolled for maintenance convenience in the future.
- c) Testing: triggering the MD-209R by moving the magnet, when the magnet leaving the main unit, a message will be transmitted, meanwhile the LED light 3 times. When moving the magnet back to the main unit, there will be another alarm message transmitted.
- G. Install the main unit back to the clips. removed.

CAUTION! When installing the PCB board back to he case, ensure don't make Short circuit or damage the components on the PCB board.

## 5. Battery testing and replacement

The detector checks its batteries conditions automaticaiiy. If it is necessary to replace its batteries (recommend 12 months), the detector will inform the system about the need for new batteries. If a low battery is indicated, it should be replaced as soon as possible (in a week). Use only alkaline AAAbatteries for replacement. After replaced new batteries the detector will be in testing mode and each triggering will be indicated by detector's LED. Five minutes after the cover is closed, the detector will automatically enter the normal mode and its LED indicator will be switched off (battery energy saving function). 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.

# 6.System limited

Our wireless products are reliable, while in certain situation, our system will be limited, the situation can be some one as below;

- 1. When the control panel is not stable, it may lead to signal sending not success.
- 2. Undervoltage of the remote controller, etc. For any requirement for help, please contact with our company

Note: without getting permission from corresponding person to change the products at will, may lose the right of using this product

### **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.