User Manual of MD-343R Wireless Glass Break Detector

1. Introduction

MD-343R Wireless glass break detectors can detect breaking sound of ordinary glass, tamper glass, laminated glass, foil glass and double insulated glass. it is only for indoor use.

2.Installation

The best installation location for MD-343R is a wall or ceiling, the microphone should be directed to the protected glass surface. To enable the detector to work best, we select the following installation location:

?The detector should be no more than 4. 6 m from the protected glass surface .

★Detectors have a clear sight to the glass

★The detector should be at least two meters from the door

★The detector should be from the passive ventilation pipes at least one meter

★The detector should be at least one meter from alarm siren and bell diameter of more than 5 cm

Sometimes there is cover material between the protected glass and thick glass . When there is cover material on thick glass , the detector can be mounted to the glass frame.

To avoid installing detectors in a protected glass surface wall, we can' t install in the absence of fixed pillars and beams. Avoid indoor noise sources (air compressors, bells, electric tools, etc.), the work of these noise sources may cause the detector alarm.

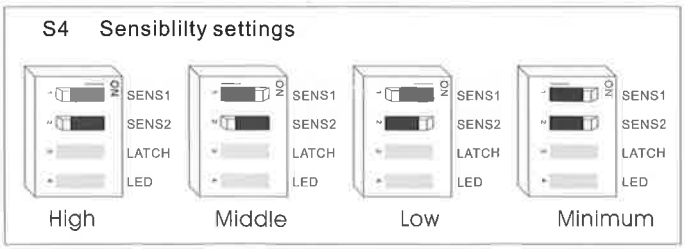
Note: If you install the detector on the ceiling, the hole (microphone side) should face the protected glass.

3 .Functions of DIP switch

Switch1, 2 are sensitive switches

Switch 3 is function switch to lock alarm indicator

Switch 4 is function switch to control indicator, when it is ON, the indicator light, OFF indicator does not light



4. Detection sensitivity (range):

The maximum detection range of the detector is 4.6 meters, the sensitivity can be set.

Use the FG-701 glass break emulator to detect range

5. Settings of alarm latching LED indicator

DIP switch 3 is set in the ON state, the two LED indicators are in standby mode,ready to enter enable mode.When the detector alarm, the red light is on and lockout (Alarm duration is not effected by latching alarm LED) LED lights can return to normal by power down / power up, or let the probe enter and exit the method to re-enable detection mode.

6. Test the detector

MD-343R should be tested at least annually, use FG-701 glass break simulator to test. If the FG-701 glass break simulator is set to hot glass sound,it can also be used for testing. Other emulators can not accurately test the detection distance.

Manually enter the detection mode

1. Open the front cover, middle cover
2. Put J1 (1,2) short circuit,
3. Close the cover

The green LED light of he detector flashes about once per second, indicating detector has entered detection mode.

Test detectors (low and sound signals)

Follow these steps to test the MD-343R

1 Start the detector into test mode

2 Turn FG-701 switch to "Test" and "low" position

3 The FG-701 is placed on the windows farthest point and point to detectors

If the windows are covered, close the covering, use FG-701 to test between the covering and the windows.

4 Press the red "Start" button, the emulator will start 8seconds arming time

5 Use padded tools, carefully tap the glass to make a low-frequency signal

FG-701 should have a glass breaking sound. If the detector receives low and sound signals,at the same time and its redy receiving sound signal (For more information, please refer to the FG-701 instructions)

When the detector receives a sound signal, the green light will blink

Exit Test Mode:

After the test is completed, short-circuit the 2 and 3 pins of J1 in the same way as entering the test mode.

If MD-343R has not detected event signal within 5 minutes , it will automatically exit the test status. The detector has two LED: green event LED and a red alarm LED.When the LED is enabled, the working condition is showed by a different light detector , the following table lists is the LED information.

Status	Green LED	Red LED
Normal, no events	Light off	Light off
Normal, detect events	Blink	Light off
Normal, alarm latch	Light off	Light on
Power self-detect	Light on for one second	Light on for one second
Low voltage	Flash once every 3 seconds	Light off
Test Mode	Light on once per second	Light off
Test mode, detect an event	Blink	Light off

When alarming: When the blocking switch is in the ON state, the red light is blocked; in the OFF state, the red light is on and off once.

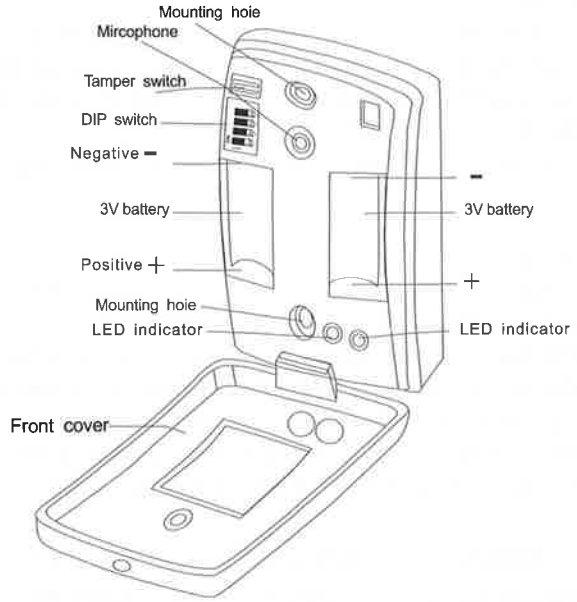
7.Table of nominal thickness of the glass

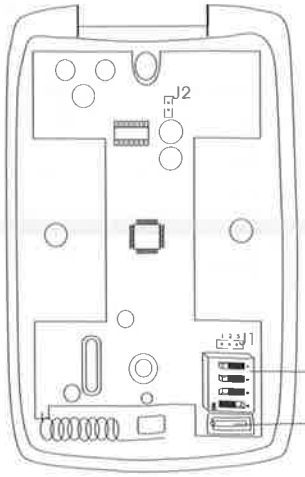
	Nominal thickness	
	Minimum	Maximum
Ordinary glass	2mm(3/32in.)	10mm(3/8in.)
Tamper Glass	3mm(1/8in.)	10mm(3/8in.)
Laminated glass	3mm(1/8in.)	14mm(9/16in.)
Wired glass	6mm(1/4in.)	6mm(1/4in.)
foil glass	3mm(1/8in.)	6mm(1/4in.)
double insulated glass	3mm(1/8in.) [13mm(1/2 in.)overall]	6mm(1/4in.) [19mm(3/4 in.)overall]
Ordinary glass	7-8mm	400*400

The minimum size of glass is 28 cm2, the glass should be framed in a room or in a partition whose width is greater than 0.9 m(36in)

Only when both sides of the glass is broken it can detect. The thickness of foil glass 's safety film should not exceed 0.35mm(14mils)

MD-343R Wireless glass break detector





J1:1, 2 short circuit, enter test mode
2, 3 short circuit, enter the normal mode

J2: After short circuit,no tamper function

DIP switch

Tamper switch

8. Performance Parameters

Detection distance:As far as 4.6 m(15ft), no minimum distance all-round.
Adjustable sensitivity: high, medium, low, minimum
Supply voltage: 3V (CR123 battery) when the voltage drops to 2.3-2.5V, the low pressure information is sent, at the same time the green light flashes
Current: alarm, 15mA or so; static, about 120uA
Wireless transmission frequency:433/868MHz (Optional)
Wireless transmission distance:100m(in open air)
Status Information alarms,(alarm resume the normal state, the battery voltage status, tamper open state)10 seconds later alarm recovery information is sent , 2 minutes later status information is sent and 15 minutes later status information is sent again , and then it is sent once an hour.
Operating Temperature:-20℃to 50℃(-4 to 122)
Anti-axis radiation interference:30V/m,10MHZ-100MHZ
Anti-static electricity interference:10KV in the case of discharge 12VDC the peak is 4V
Size:115mm*72mm&27mm(4.5in.H*28in.W*1.05in.D)
Weight:98g(3.5oz)
Product with packaging:126g(4.5oz)

Choose installation location