# RF-SHK-345-NN – Wireless TOTAL Window Sensor

# Description

The RF-SHK-345 is a wireless window sensor designed for dual protection; open and close and to detect vibrations made by an intruder attempting to break a window. The sensor contains a piezo detection device that detects vibrations when mounted on a window frame. The detection circuit can be adjusted for sensitivity during installation to ensure maximum coverage. The device also has a built-in reed switch to monitor the open and close of the door or window.

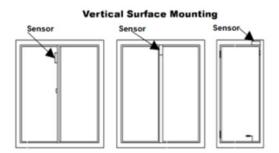
When activated, the sensor transmits a signal to the control panel. These are the signals the unit provides: supervisory, tamper and low battery (as needed). The sensor is powered by (2) replaceable 3-VDC, lithium coin-cell batteries.

### **Installation Guidelines**

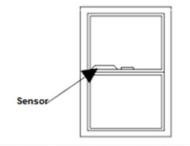
• Mounting the sensor on metal can affect the transmitting range performance. Therefore, test the sensor from the desired location using the installer sensor test, before permanently mounting it.

• Mount the sensor within 100 ft. of the panel.

• Mount the sensor on the frame of the door or window.



#### Horizontal (Flat) Surface Mounting



• The sensors can be mounted to either wood or metallic surfaces.

• After mounting the sensor, test the sensor using the procedure in the section "Testing the Sensor".

### Mounting the Sensor

Mount the sensor using the supplied mounting screws for permanent mounting installations or using the supplied doublesided tape is optional.

**Note:** The gap between the sensor and magnet should not exceed a maximum of 3/8".

#### **Mounting Screws**

1. Remove the sensor base from the sensor.

2. Place the sensor base in desired location and mount the base with the supplied screws. Attach the sensor to the base.

3. Mount the magnet into the desired location using the supplied screw and lock washer, making sure the alignment mark lines up with the sensor mark.

### **Double-Sided Tape**

1. Before applying double-sided tape, ensure that the desired location is a smooth, clean and dry surface.

**Note:** When applying the double-sided tape, evenly apply pressure to ensure a good surface contact.

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2. Apply double-sided tape to the bottom of the sensor and the magnet. Mount the sensor and magnet at the desired locations, ensuring the alignment marks line up with each other.

## **Shock Test Mode**

Test mode is entered automatically when the cover is removed. The LED activates on shock activation and goes out upon shock restoral.

LED is functional only in test mode.

Test mode is active as long as the cover is removed.

## Shock sensor sensitivity setting

An LED test mode (see above) is included to aide in setting sensitivity to desired level

1. Mount sensor in intended location and tap mounting surface with desired level of activation impact

2. Adjust potentiometer until correct sensitivity is obtained

The potentiometer adjusts shock sensitivity from minimum Low (CCW) to maximum Hi (CW). These setting are marked on the PCB.



In maximum sensitivity mode, the least amount of shock is required to activate a shock alarm

If the potentiometer is set all the way Low (CCW) the shock portion of the device is turned off and only the internal reed switch is active

### Programming

The following steps describe the general guidelines for programming the sensor into panel memory. Refer to the specific panel's documentation for complete programming details.

- 1. The internal magnetic reed switch and shock zone use the same ID number
- 2. Enter panel learn-in/enrollment mode
- 3. Remove battery tabs
- 4. Trip sensor using magnet or enter ID #

5. Enter sensor information

Note: Loop locations: Shock – Loop 1 Reed Switch – Loop 2 Tamper – Loop 4

6. For second zone trip sensor using magnet or enter ID #

- 7. Enter sensor information Note: Loop locations: Shock – Loop 1 Reed Switch – Loop 2 Tamper – Loop 4
- 8. Exit program mode

#### Testing and adjusting the Sensor

Take the sensor and magnet to the desired mounting location, making sure to line up the magnet alignment marks with each other. Trip the sensor by pulling the magnet away from the sensor.

Monitor the system after tripping the sensor. Refer to the specific panel documentation for interpretation of the results to ensure desired signal strength is achieved.

#### **Battery Replacement**

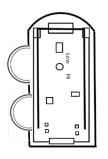
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**Note:** If a low battery alarm occurs, replace the battery within 7 days.

Low battery detect. LED flashes until battery is replaced. Device sends low battery signal to control panel.

The RF-SHK-345 requires (2) 3-VDC, lithium coin-cell batteries (Varta or Panasonic, Model CR2032), When replacing both batteries should be replaced at the same time.

- 1. Remove sensor cover by pressing on the latch and pulling the cover off
- 2. Do not remove the circuit board, slide the old batteries out as shown



Slide the batteries out from under the circuit board and insert new batteries observing polarity

- 3. Insert new batteries observing polarity
- 4. Replace sensor cover

**CAUTION**: Battery may explode if mistreated. Do not recharge, disassemble or dispose of in fire.

## Specifications

Model no.	RF-SHK-345
RF frequency	345 MHz
Compatibility	Honeywell, 2GiG Control panels
Battery type	(2) 3-VDC, lithium coin-cell battery (Varta or Panasonic, Model CR2032)

Battery	Varta CR2032 Panasonic CR2032
Operating temperature range	32 to 120°F (0 to 49°C)
Storage temperature range	-30 to 140°F (-34 to 60°C)
Relative humidity	95% non-condensing
Dimensions (L x W x D)	2.25 x 1.0 x 0.50 in.

# FCC / IC Statement

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 Industry Canada licenseexempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne doit pas provoquer d'interférences et (2) cet appareil doit accepter toute interférence, y compris celles pouvant causer un mauvais fonctionnement de l'appareil. In accordance with FCC requirements of human exposure to radio frequency fields, the radiating element shall be installed such that a minimum separation distance of 20 cm is maintained from the general population.

#### FCC: 2ABBZ-RF-SHK-345

#### IC: 11817A-RFSHK345

This Class B digital apparatus complies with Canadian ICES-3B.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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