

SVGS-5 Shock, Vibration & Glass Break Sensor

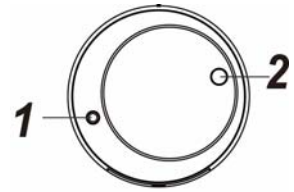
SVGS-5 is a Shock, Vibration/Glass Break Sensor. It is capable of sending wireless signals to the Control Panel upon detection of window glass break or shock/vibration.

Parts Identification

1. Learn/Test Button

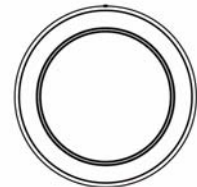
(Press the button with a sharp tool such as paper clip.)

- Press the Button once to transmit a Learn/Test code.
- Press the Button once to enter Test Mode for 3 minutes.
- Press the Button for 5 seconds to adjust sensitivity settings from the Control Panel.



2. LED Indicator

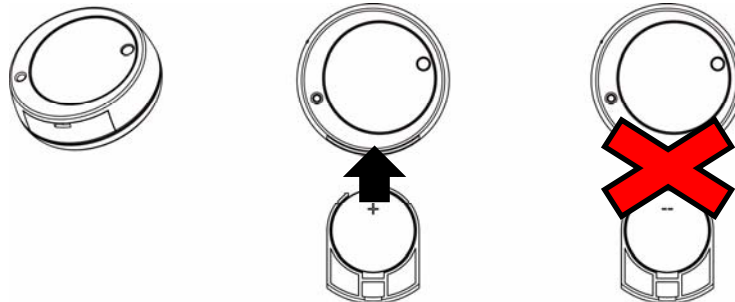
- **Lights up for 1 second:** When the Sensor is powered on.
- **Flashes once:** Transmitting signal.
- **Flashes three times slowly:** Low battery detected when powering on.



Features

● **Battery and Low Battery Detection**

- The Sensor uses one **CR2477 3V** Lithium battery as its power source.
- The Sensor can detect low battery voltage. When the Battery is low, a low battery signal will be sent to the Control Panel along with regular transmission.
- When changing battery, use a sharp tool to open the battery slot to remove and insert battery.
- When inserting battery, the **positive(+)** side of the battery must face upward. **NEVER** insert the battery with negative(-) side facing upward.



● **Supervision**

The Sensor will transmit a supervision signal to report its condition regularly according to the user's setting. The factory default interval is 15-18 minutes.

● **Sensitivity**

- The Sensor can send alarm signal to the Control Panel according to different sensitivity levels set in the Control Panel.
- The Sensitivity levels include high, medium, and low (default is medium if no sensitivity level is set in the Control Panel). The higher the sensitivity the easier to trigger the Sensor when window/glass break or shock vibration detected.

● **Detection Mode**

- The device's shock/vibration detection feature may be triggered according to different mode selected in the Control Panel.
 - **Single Pulse Shock Mode (default mode for SVGS-5 If no detection mode is set in Control Panel)**
The device is triggered by a single shock detection which exceeds detection threshold.
 - **Multi Pulse / Accumulated Vibration Mode**
The device is triggered by either of the following condition:
 - I. When **3** pulse counts are detected within **20 seconds**.
 - II. When accumulated minor vibration detected with **2 minutes** exceeds detection threshold.
- For details on shock/vibration detection mode range, see section **Installation** in later section.

Setting Sensitivity Level and Detection Mode from the Control Panel

After the Sensor is added into the Control Panel, you can further set its sensitivity level and Detection Mode from the Control Panel or Home Portal Server webpage.

- 1) Refer to your Control Panel manual or Home Portal Server manual to edit the device.
- 2) Go to **Type & Sensitivity** and select a desired setting from the dropdown menu. Click OK to confirm.

- To receive the new sensitivity level and mode data from the Panel straightaway, press the Test button of SVGS-5 once. The LED indicator will brighten and dim within two 2 seconds to indicate successful operation. Otherwise, SVGS-5 will receive sensitivity level and mode change data automatically when next time it is transmitting signal (e.g. supervision or alarm trigger).

● **Test Mode**

The Sensor can be put into 3 minutes Test Mode by pressing the test button:

- Press the Learn/Test button once, the LED will flash to indicate the Sensor is put into Test Mode.
- Under Test Mode, every time when the Sensor is triggered, the LED will flash.
- The Sensor will exit Test Mode after 3 minutes.

● **Sleep Timer**

The Sensor will enter a sleep time of 2 minutes after each trigger. The sensor will not retransmit detection signal during this 2-minute period. Each shock detection trigger during this period will reset the sleep timer back to 2 minutes. The sleep time will only expire if no shock is detected for 2 minutes, then the Sensor will return to normal operation and transmit the next shock detection signal.

Learning and Installation

● **Learning**

1. Pull out the battery insulator power on the sensor.
2. Refer to Control Panel manual to put panel into learning mode.
3. Press the Learn/Test button once to transmit a learn code.
4. Refer to your Control Panel operation manual to complete the learn-in process.

● **Mounting Surface and Material**

The Sensor should be mounted direct on glass or plywood surface.

- Glass thickness: Plated, tempered and laminated glass: Minimum 5 mm.
- Plywood thickness: Maximum 9mm.
- Safety Box thickness: Minimum 3mm

● **Sensitivity and Detection Range**

The Sensor sensitivity is adjusted via Control Panel. The detection range of different sensitivity varies depending on the mounting surface materials.

		Glass	Plywood	Safety Box
Material		Plated/Tempered/Laminated /Wired Glass	Plywood	Steel / Silicon Dioxide
Thickness		Minimum 5mm	Maximum 9mm	Minimum 3mm
Shock/Vibration Detection Mode		Single Pulse Mode		Multi Pulse /Accumulated Vibration Mode
Sensitivity	Low	8000mm	2000mm	-
	Medium	10000mm	2500mm	-
	High	12000mm	3000mm	1400mm

● **Installation Steps and Guideline**

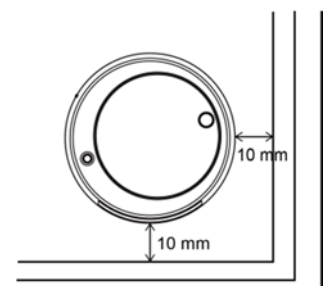
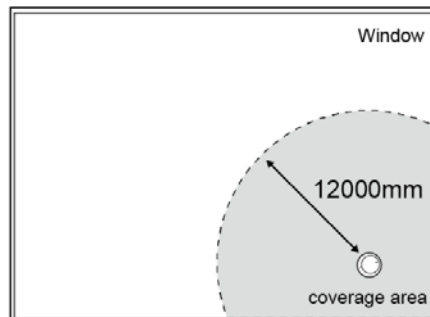
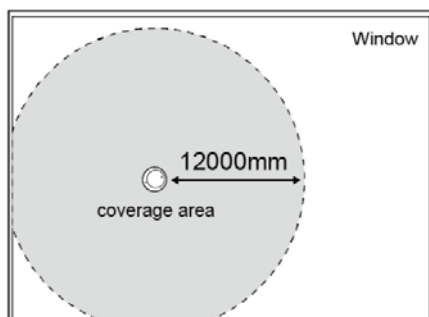
1. Adjust the sensor's sensitivity as desired according to mounting surface material using table supplied in previous section.

Window/Wall Installation:

Determine the mounting location on window or wall. The sensor may be mounted at the center or at the corner. If one sensor is unable to cover the entire surface, use multiple sensors.

<NOTE>

- ☞ When mounting at corner, make sure to keep at least 10mm distance between the sensor and the edge of window or wall. Adjust the battery slot direction (**Do not face the corner**) to avoid difficulty when removing the battery slot.



Safety Box Installation:

When mounting on Safety Box, mount the Sensor no more than 2cm away from the door pivot.

2. Clean and dry the mounting location. Do not install on dirty or web surface.
3. Use the provided double-sided adhesive tape (Ø35mm x 8mm) to apply to the back cover of SVGS and stick the sensor onto the mounting location.

<NOTE>

- ☞ Please do not apply the double-sided adhesive tape to the front cover where Test Button and LED indicator are located, and do not apply the tape twice.

Front Cover



Back Cover



● ***Installation Guideline***

- Always make sure to test detection range after installation to confirm the actual detection range.
- The adhesive tape may lose its stickiness over time. Make sure to check the sensor at least once every 6 months.
- Avoid mounting at location prone to strong wind that could dislocate the Sensor.
- Avoid mounting at location prone to shaking or vibration, which will cause false alarm.
- Set the Sensor to low sensitivity when installing on movable windows to prevent false alarming.
- Avoid mounting at location where the Sensor could easily collide with object.
- When mounting on plywood:
 - 1 Use only high sensitivity setting.
 - 2 Mounting on wall next to large furniture may affect the sensor's detection range and signal transmission range. Make sure to test the sensor if choose to mount at such location.
- Sensor detection range is affected by adhesive tape size and material. The sensitivity-range table provided in this document is tested with factory provided adhesive tape. If different adhesive tape is used, make sure to retest the detection range.

Federal Communication Commission Interference 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 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.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

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.