

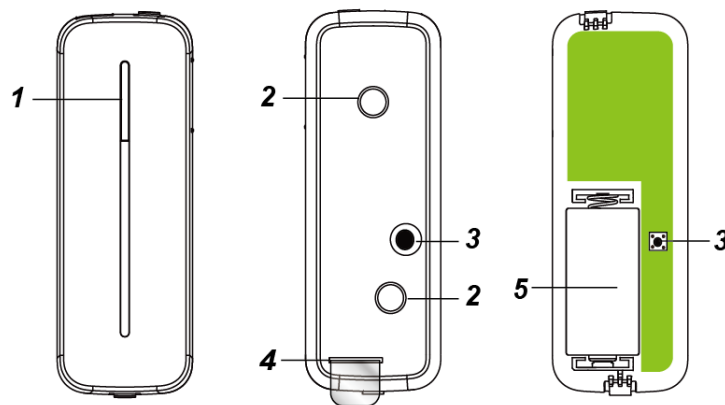
Garage Tilt Sensor (Gdts-1) User Manual

Draft Version

The Garage Tilt Sensor monitors bi-direction tilting of overhead garage door. The Garage Tilt Sensor is fixed to the monitored device frame. When the door is open and the detected surface is tilted less than or equals to $35^{\circ}(+-5)$ degrees, or when the door is closed and the detected surface is tilted more than or equals to $55^{\circ}(+-5)$ degrees, the Garage Tilt Sensor will transmit alarm signal to the Control Panel. The device also has the capabilities of communicating signal problems along with low battery situations.

The Garage Tilt Sensor design consists of a cover and base. The cover contains all electronics and the base provides a means for fixing the device. An enclosed PCB tamper switch provides tamper protection against unauthorized device opening and/or removal.

Parts Identification



1. LED indicator / Test button

- Press the Test button to transmit learning code or enter test mode for 3 min.
- Press the Test button once to send a supervision/test signal.

2. Mounting Holes

Used to fixed and screw the Garage Tilt Sensor directly on top of the garage door.

3. Tamper Switch

- When Garage Tilt Sensor is mounted, the Tamper switch will be activated when the cover is opened or when the Garage Tilt Sensor is removed from mounted surface.

4. Battery Insulator

5. Battery Compartment

Features

● LED Indicator

- In Normal Operation Mode, the LED will light up when the Garage Tilt Sensor is activated (device opened/close).
- When the cover is opened or the tamper switch is triggered, the LED will light up.
- When the Garage Tilt Sensor is in Test mode, the LED will light up every time it is activated.
- The LED will light up when the Garage Tilt Sensor is activated under low battery status. When the battery is exhausted, the Garage Tilt Sensor will stop all function, the LED will flash every 4 seconds.

● Battery

- The Garage Tilt Sensor is powered by one CR123 3V Lithium battery. Please note: **ALWAYS** replace battery with the correct size and voltage.
- The Garage Tilt Sensor can detect low battery condition. When the battery voltage is low, a low battery signal will be sent to the Control Panel to notify the condition. When the battery is exhausted, the Garage Tilt Sensor will stop all function, the LED will flash every 4 seconds.
- When changing battery, after removing the old batteries, press the Tamper Switch twice to fully discharge before inserting a new battery.

● **Getting Started**

- Pull out the battery insulator to provide power to the device.
- Put the Control Panel into Learning Mode (please refer to panel operation manual).
- Press the Garage Tilt Sensor test button.
- Refer to your Control Panel operation manual to complete the learn-in process.
- After the Garage Tilt Sensor is learned-in, place the Control Panel into **(Walk Test)** mode, hold the Garage Tilt Sensor in the desired location, and press the Test button to transmit test signal to Control Panel. If the Control Panel is within Garage Tilt Sensor signal range, the panel will display Garage Tilt Sensor information accordingly.
- Proceed with mounting and installation once you are satisfied that the Garage Tilt Sensor location functions properly.

● **Test Mode**

- Under Normal Mode, press the Test Button to transmit a test signal and learning code to the Control Panel. The Garage Tilt Sensor will also enter the Test Mode for 3 minutes.
- Under Test Mode, the LED will light up whenever the Garage Tilt Sensor is activated.
- Each additional Test Button press will reset Test Mode time to 3 minutes.

● **Tamper Switch**

- The Garage Tilt Sensor is protected by a tamper switch which is compressed when the device is mounted. When the device is removed from the mounting position or when the device cover is opened, the tamper switch will be activated and the device will send a tamper open signal to the system Control Panel to remind the user of this condition.

● **Supervisory Signal**

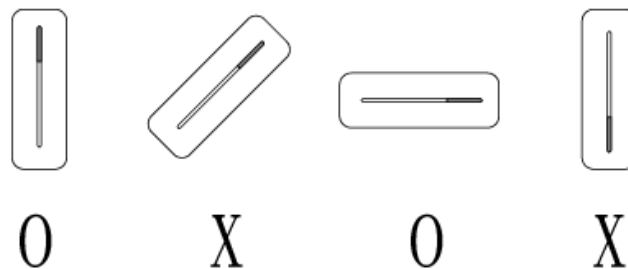
- The Garage Tilt Sensor will automatically transmit Supervisory Signals periodically to the Control Panel at random intervals of 30-50 minutes.
- If the Control Panel has not received the signal from the Garage Tilt Sensor for a preset period time, the Control Panel will indicate the particular Garage Tilt Sensor is experiencing an out-of-signal problem.

Installation

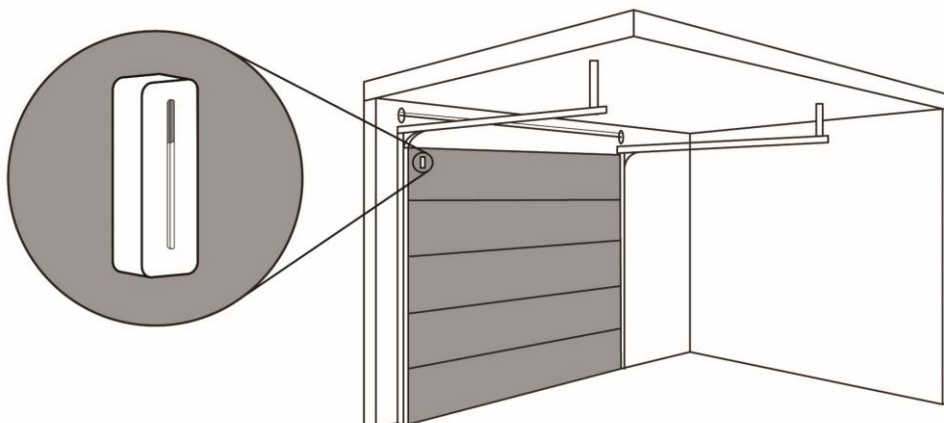
● **Installation Guideline & Recommendations**

Guideline:

- The Garage Tilt Sensor should be installed on garage door. When the door is open and the detected surface is tilted less than or equals to $35^{\circ}(+/-5)$ degrees, or when the door is closed and the detected surface is tilted more than or equals to $55^{\circ}(+/-5)$ degrees, the Garage Tilt Sensor will transmit alarm signal to the Control Panel.



- The Garage Tilt Sensor should be mounted on the top panel of the garage door.



- Please make sure the location is within signal range of the Control Panel before mounting.

Recommendations:

- The Garage Tilt Sensor is designed to be mounted on overhead garage door, not to be used on roll up garage door. Mount the detector at 1.8 height for best performance.
- The device shall be mounted vertically with the ground and shall be no greater than ± 5 degrees when mounted.
- Mount the device on a dry and clean surface. Ensure the device is mounted with the LED indicator on top.

● ***Mounting the Garage Tilt Sensor***

There are two ways to mount the Garage Tilt Sensor. Please follow steps below to mount the sensor:

Screw Mounting:

- Find a suitable location to install the Garage Tilt Sensor. The mounting surface should be clean and dry. Clean the mounting surface thoroughly if needed.
- Use the 2 Garage Tilt Sensor mounting holes as a template to drill holes.
- Use the provided wall plugs for plaster/brick installation. Screw the Garage Tilt Sensor into the provided wall plugs.

<NOTE>

☞ Only use this type of mounting method when the garage doors are thicker than the screws.

Adhesive Mounting:

- Find a suitable location to install the Garage Tilt Sensor. The mounting surface should be clean and dry. Clean the mounting surface thoroughly if needed.
- Remove the protective covering from one side of the double-sided adhesive pad. Apply to the back of the Garage Tilt Sensor and press firmly for 30 seconds to ensure good contact.
- Remove the other cover and firmly press the Garage Tilt Sensor onto the desired location for 30 seconds. Please avoid applying the adhesive pad on uneven surface or re-apply it.