

# Installation and Operation Manual

## STI Universal Sensor

*Model:* STI-34401

Thank you for purchasing the STI Universal Sensor. Your satisfaction is very important to us. Please take the time to read this manual carefully to get the most from your new product.

### How The Product Works:

The STI Universal Sensor is a wireless transmitter that can be configured to initiate a transmission to any STI Receiver three different ways: internal magnetic sensor, internal tilt sensor or external switch.

### Plan Your Installation:

- 1) Refer to the **Operation** section on the following pages to determine which sensor configuration is best for your application.
- 2) Refer to the **Sensor Supervision** section to understand the use of this feature. It is recommended to leave the sensor in the supervised state (J2 uncut) until false trouble signals are displayed on the receiver. If you need to disable sensor supervision, the sensor must be deleted from the receiver and reprogrammed into the receiver. Refer to your **receiver's installation instructions**.

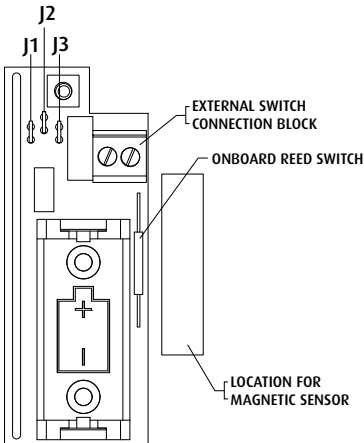
### Universal Sensor Setup:

1. Open sensor case using a flat head screwdriver in side case slot.
2. Configure the jumpers for the desired application (see Jumper Configurations Fig. 1).
3. Activate battery by removing the red tape.
4. Program the STI Universal Sensor into the STI receiver. Refer to the STI **receiver installation instructions** for programming instructions.
5. Snap base into lid. Tamper switch spring automatically seats within the locator ring on the lid. Tamper alert is triggered when the spring releases identifying when case is opened/broken/ajar.
6. Test the sensor for proper operation before permanently mounting.
7. Select mounting option.

OPTION 1: Mount with double sided foam tape provided to the back of the case (Fig. 2).

OPTION 2: Remove the circuit board from the case bottom. Drill 1/8 inch holes through the case and use the screws (provided). For added protection, cover metal screw heads on the inside of the case bottom with electrical tape (Fig. 2) to isolate the circuit board. Replace the circuit board in the case bottom.

### Jumper Configurations:



Cut jumpers with "X", do not cut jumpers with "□".

	J1	J2	J3
Magnetic Sensor (supervised)	□	□	□
Tilt Sensor (supervised)	X	□	□
External Terminals (supervised)	X	□	X
Magnetic Sensor (not supervised)	□	X	□
Tilt Sensor (not supervised)	X	X	□
External Terminals (not supervised)	X	X	X

**Fig. 1**

**NOTE:** After cutting jumpers, tape each of the cut ends with electrical tape to prevent wires from shorting.

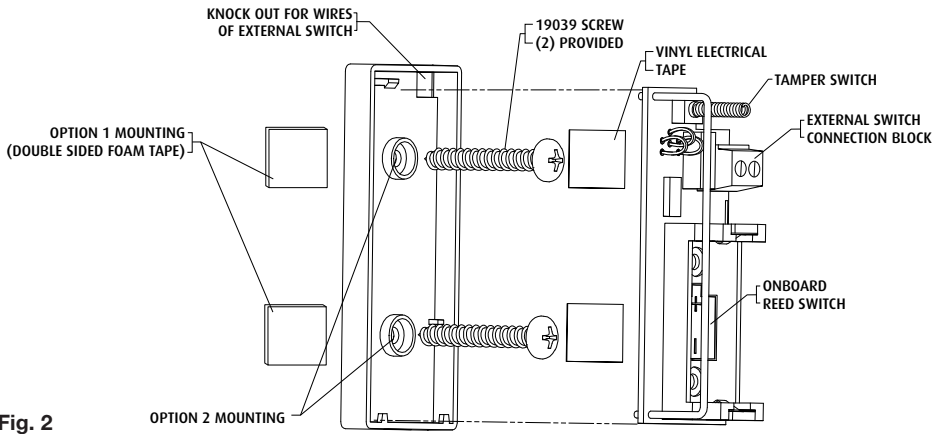


Fig. 2

**Operation:**

Magnetic Sensor: (Fig. 3)

- Alert Signal – Magnet is over approximately 1 1/3 inches from the device.
- Restore Signal – Magnet is brought within approximately 1 inch from the device.

When using the Magnetic Sensor, the bottom case may be inserted into the top case in reverse depending on which direction the Magnetic Sensor should face.

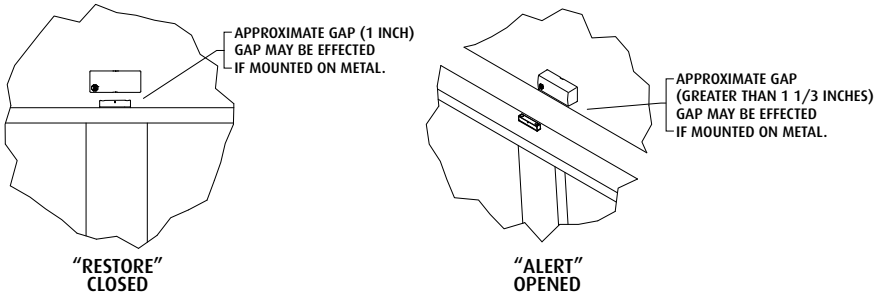


Fig. 3

Tilt Sensor: (Fig. 4)

- Alert Signal – Sensor is tilted more than 45° from vertical.
- Restore Signal – Sensor is tilted less than 45° from vertical.

When using the Tilt Sensor, the arrow on the bottom should point straight up in the non-triggered state.

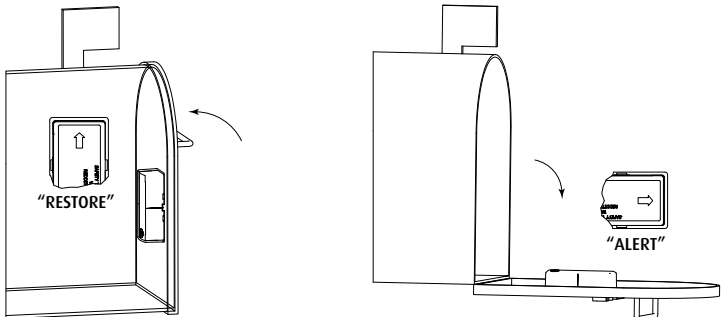


Fig. 4

## Sensor Supervision:

The STI Universal Sensor has a supervision feature that monitors the battery condition, sensor tampering and verifies that the sensor is within range of the STI Receiver. Sensor supervision can be disabled for installations where the transmission signals may be locked when in the sensor's normal condition.

If the STI Universal Sensor has a Low Battery or triggered Tamper Switch, the sensor will send a trouble signal to the receiver.

If the signal is out of range or there is a loss of communication, the receiver will indicate a trouble condition between 12 and 24 hours from the time the signal was lost.

External Contacts: (Fig. 5)

- Alert Signal – Terminals must first have a **closed** circuit then an **open** circuit any time afterward will trigger an Alert signal.
- Restore Signal – Terminals have a **closed** circuit.

When using the External Switch Terminals, remove the case knock out (Fig. 2) in the corner of the case bottom to insert sensor wires. Connect to external contact block.

**NOTE:** If mounted outdoors, use silicone sealant on the wire and screw hole knock outs.

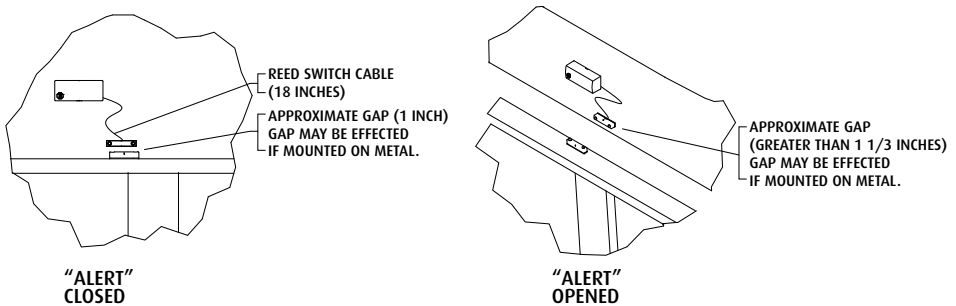


Fig. 5

**NOTE:** In any configuration, an Alert or Restore signal must be triggered for any STI receiver to acknowledge the device.

## Important Notice:

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.

Changes or modifications not expressly approved by Safety Technology International, Inc. could void the user's authority to operate the equipment.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'Appareil ne doit pas produire de brouillage, et
2. L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Model: 34401                      FCC ID: TXL34401                      IC: 6335A-34401

This device is a transmitter intended for home and office use in all EU and EFTA member states.

## Limited Warranty:

STI, Inc. warrants to the original consumer/purchaser that this product shall be free of defects in material and workmanship under normal use and circumstances for a period of one (1) year from the date of original purchase for use.

## Additional Wireless Alert Series Products:

STI-34099	Single Channel Slave Receiver	STI-6200WIR	Wireless Fire Extinguisher Theft Stopper
STI-34104	4-Channel Receiver	STI-6200WIR4	Wireless Fire Extinguisher Theft Stopper w/Receiver
STI-V34104	4-Channel Voice Receiver	STI-6400WIR	Wireless Exit Stopper Door Alarm
STI-34108	8-Channel Receiver	STI-6400WIR4	Wireless Exit Stopper Door Alarm with Receiver
STI-34188	8-Zone Relay Board	STI-6517A	Stopper Station Shield with Sound
STI-34101	Solar Powered Driveway Monitor Sensor	STI-6517B	Stopper Station Shield with Sound and Transmitter
STI-34151	Battery Powered Driveway Monitor Sensor	STI-30104	Lamp Controller
STI-34201	Wireless Mailbox Alert Sensor	STI-30105	Extended Antenna
STI-34301	Wireless Garage Sentry Sensor	STI-34105	Voltamax 12VDC (500mA) Power Supply
STI-34401	Wireless Universal Alert Sensor	STI-34106	Keyfob
STI-34501	Wireless Pool Alert Sensor	STI-34109	Repeater
STI-34601	Wireless Doorbell Button		
STI-34701	Indoor Wireless PIR		
STI-34751	Outdoor Wireless PIR		



**Safety Technology International, Inc.**  
2306 Airport Rd • Waterford, MI 48327  
Phone: 248-673-9898 • Fax: 248-673-1246  
info@sti-usa.com • www.sti-usa.com

## Safety Technology International (Europe) Ltd.

Unit 49G Pipers Road • Park Farm Industrial Estate • Redditch  
Worcestershire • B98 0HU • England • Tel: 44 (0) 1527 520 999  
Fax: 44 (0) 1527 501 999 • Freephone: 0800 085 1678 (UK only)  
E-mail: info@sti-europe.com • Web: www.sti-europe.com

