

TX+GB Wireless Glassbreak Installation Instructions

PLEASE SEE REVERSE SIDE FOR IMPORTANT PRODUCT WARNINGS AND DISCLAIMER INFORMATION.

Description

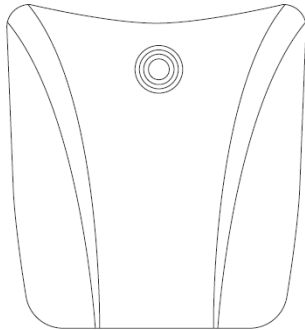
The TX+GB is a glassbreak sensor designed to detect breaking glass made by an intruder breaking a window. The glassbreak sensor contains an acoustic detection device that detects sounds when glass is broken. The detection circuit uses an omnidirectional microphone to maximize coverage.

When activated, the sensor transmits a signal to the control panel. The signals the unit provides are: supervisory, tamper and low battery (as needed). The sensor is powered by 2x Panasonic CR-123A batteries

The TX+GB features the TX+ Encryption protocol which provides encrypted wireless communication to select Interlogix control panels. Please refer to your panel's installation instructions to see if it is TX+ Encrypted capable.

The TX+GB also utilizes the standard ITI-319 protocol which is compatible with all Interlogix control panels and receivers.

Figure 1: TX+GB



Enrollment Into TX+ Encryption Supported Panels

To enroll the TX+GB as an encrypted sensor into a panel that supports the TX+ Encryption protocol, follow these steps:

- 1) Place the panel into program mode, then go to Learn Sensors menu. Refer to your specific alarm panel manual for details on these menus.
- 2) Once the Learn Sensors mode has been activated, remove the battery pull tabs to auto-enroll the device. Then select the appropriate sensor group and number. Refer to your specific alarm panel manual for details on the different sensor groups.
- 3) If the panel does not respond upon removing the battery pull tabs, exit the Learn Sensors mode and then remove the front sensor housing and transmitter from the back housing by depressing the tab located on the bottom of the device. Remove the batteries from the sensor.
- 4) With the batteries removed, return back to the panel and activate the Learn Sensors mode again. With Learn Sensors mode activated, re-insert the batteries (paying close attention to the battery polarity indicators) to auto-enroll the device.

Note: Utilization of the TX+ Encrypted protocol is only compatible with select Interlogix control panels. When enrolled into a panel that is TX+ Encrypted capable, the enrollment menu screen may indicate "TX+ Encrypted" to verify that the sensor is communicating to the panel via the encrypted protocol. Please refer to your panel's installation instructions to verify that the panel supports TX+ Encrypted capability.

Enrollment Into Non TX+ Encryption Supported Panels (ITI-319 Protocol)

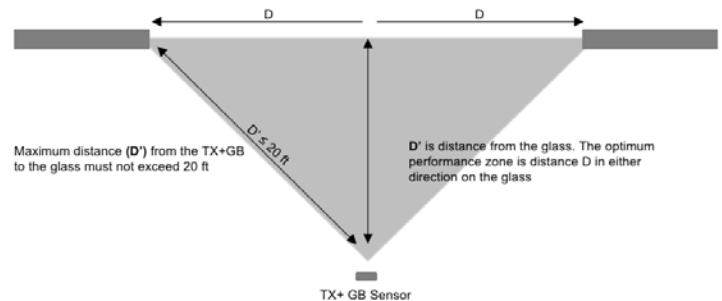
To enroll the TX+GB into a panel utilizing the standard ITI-319 protocol, follow these steps:

- 1) First remove the battery pull tabs from the device.
- 2) After the pull tabs have been removed, place the panel into program mode, then go to Learn Sensors menu. Refer to your specific alarm panel manual for details on these menus.
- 3) Once the Learn Sensors mode has been activated, remove the front sensor housing and transmitter from the back housing by depressing the tab located on the bottom of the device. This will activate the tamper switch which will auto-enroll the device. Then select the appropriate sensor group and number. Refer to your specific alarm panel manual for details on the different sensor groups.
- 4) If the panel does not respond upon tampering the device, replace and then remove the cover again to tamper the sensor another time, or manually press and release the tamper switch located on the circuit board. Repeat until the panel responds, and then continue to selecting the appropriate sensor group and number.

Installation Guidelines

The maximum detection range is 20' (6 m) for plate, tempered, laminated and wired glass.) Coverage is measured from the sensor to the point on the glass farthest from the sensor (see D and D' in Figure 2 below).

Figure 2: Optimum Performance Zone



Note: The TX+GB may not consistently detect cracks or breaks in glass. Glassbreak sensors should always be backed up by additional methods of interior protection.

- For best detection, avoid installing in rooms with lined, insulating, or sound deadening drapes or rooms with closed wooden window shutters inside.
- Do not use sensor near air compressors. A blast of compressed air may cause a false alarm.
- Avoid stairwells, glass booths, and all rooms smaller than 10' x 10' (3 m x 3 m).
- TX+GB ignores most false alarm sounds. Some sounds can duplicate the glass break pattern the TX+GB detects, so the device works best in rooms with only moderate noise. Avoid rooms where white noise, such as a fan, is present. Avoid rooms with noisy areas or multiple noise sources such as small kitchens or bathrooms, garages, etc.

Note: For glass break protection in these applications (where TX+GB is not appropriate), use shock sensors on the windows or window frames.

- Avoid adding (learning) the sensor into 24-hour sensor groups, where the sensor will be armed even when the room is in use. Like a motion detector, a glass break sensor may be tripped when occupants are in the protected area. Adding the TX+GB to a perimeter sensor group, which is armed only when the perimeter doors and windows are armed, will help prevent false alarms.
- The device may not work properly in humid rooms. Do not install it in such conditions.

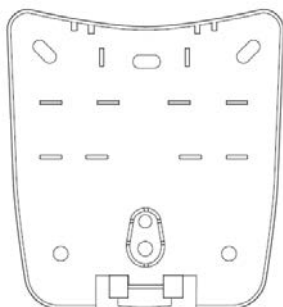
Installation and Mounting

Choose a mounting location. Since the sound of breaking glass travels straight out from the broken window, the best location for mounting the sensor is the wall opposite the window—assuming the glass to be protected is within the sensor range and line of sight. The ceiling and adjoining (side) walls are also good sensor locations. A ceiling mounted sensor will have better detection if located 6' - 10' (2m - 3m) back from the glass rather than directly above the glass.

IMPORTANT: DO NOT EXCEED THE 20' MAXIMUM DETECTION RANGE OF THE TX+GB. While the sensor may function beyond the 20' range it could miss a minimum output glassbreak. Furthermore, changing conditions in the room, such as rearranging furniture, could reduce the range of the sensor back to 20'.

Remove the cover from the sensor base. Hold the base against the wall or ceiling at the desired mounting location. Insert screws through the mounting holes and into the wall at the desired mounting location. Then re-attach the front cover.

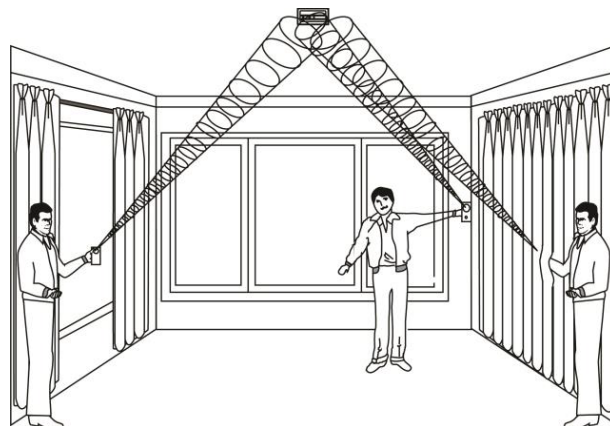
Figure 3: TX+GB mounting holes



Where possible, install sensors within 100 ft. (30 m) of the panel. While a transmitter may have an open-air range of 500 ft. (150 m) or more, the environment at the installation site may have a significant effect on operational range. Changing a sensor location may improve wireless communication.

Sensor Testing via Handheld Tester (5709C-W)

Figure 4: Testing the TX+GB



The TX+GB is designed to detect the breaking of framed glass. Testing the sensor with unframed glass, such as broken bottles etc. may not trip the sensor. Use the hand-held tester and the following procedure to test the device:

- 1) Place the panel into Sensor Test Mode.
- 2) Holding the handheld tester near the surface of the glass and behind any closed drapes or blinds, aim the tester at the TX+GB and hold down the test button (see Figure 4). Remember, the device should not be installed in rooms with lined, insulating, or sound deadening drapes or rooms with closed wooden window shutters inside.
- 3) Observe the LED on the sensor. If the sensor is detecting the tester signal, the LED will illuminate red. A one-second illumination indicates the sensor has woken up and has detected the tester signal. A two-second illumination indicates that the sensor has detected the tester signal, and an alarm transmission has been sent. These LED responses mean the sensor is mounted within range and is working properly. If the LED does not illuminate when the test button is pressed, the sensor is not detecting the tester signal. Replace the tester battery if you suspect it is not producing a strong signal. If you are certain that the tester signal is strong, reposition the sensor closer to the window and retest. Add more sensors if necessary to achieve complete coverage.
- 4) Exit Sensor Test Mode on the panel.

Sensor Testing via Hand Clap

You can also test the TX+GB by clapping your hands loudly under the sensor. This sound will not trip the alarm, but the sensor LED will illuminate red for one second. This indicates that the sensor has power and that the microphone and circuit board are functioning.

Sensor Testing for Wireless Communication

The sensor test verifies proper communication between the sensor and the panel/receiver. The sensor should be tested prior to permanent installation, as well as weekly. To test the sensor, refer to the specific panel/receiver documentation and do the following:

- 1) Put the panel/receiver into sensor test mode
- 2) Use the handheld tester to trip the sensor – the sensor will then transmit a signal
- 3) Listen for the siren beeps to determine the appropriate response.

Note: When enrolled into a TX+ Encryption supported panel and communicating via the TX+ Encryption protocol, the panel will beep up to 8 times for each transmission, indicating the total number of packets received. It is recommended that at least 6 out of 8 packets are received in the desired sensor location to ensure reliable communication to the panel.

When enrolled into a panel and communicating via the standard ITI-319 protocol, the panel will beep up to 4 times for each transmission during the sensor test mode, indicating the total number of packets received. It is recommended that at least 3 out of 4 packets are received in the desired sensor location to ensure reliable communication to the panel.

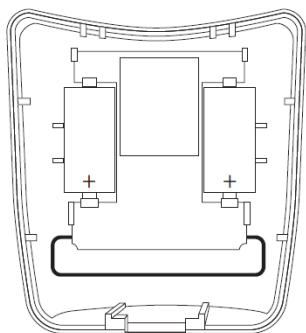
- 4) Exit sensor test mode when proper communication between the sensor and panel/receiver has been verified.

Replacing the Batteries

The TX+GB comes pre-installed with two Panasonic CR-123A Lithium batteries that provide up to 5 years of battery life under normal usage conditions. When the battery is low, a signal will be sent to the control panel, and the LED on the device will blink yellow. To replace the battery, do the following:

- 1) With the sensor mounted, remove the case cover from the back housing by depressing the tab on the bottom of the device.
- 2) Remove the existing batteries and re-install new Panasonic CR-123A batteries. When inserting the batteries, pay close attention to the battery polarity indicators to ensure proper placement of the battery.
- 3) Replace the case cover and perform a sensor test to ensure proper communication to the panel/receiver.

Figure 5: TX+GB Circuit Board Layout



TX+GB

RF Frequency	319.5 MHz – (Crystal Based)
Compatibility (TX+ Encrypted)	Only Select Interlogix 319.5 MHz control panels/receivers (refer to panel's installation instructions to verify compatibility)
Compatibility (Standard ITI-319)	All Interlogix 319.5 MHz control panels/receivers
Battery Type	2x CR-123A (Panasonic)
Typical Battery Life	Up to 5 years at 68° F (20° C)
Operating Temperature Range	32° to 120°F (0° to 49°C)
Relative Humidity	0-95% non-condensing
Supervisory Interval	64 Minutes
Storage Temperature Range	-30 to 140°F (-34 to 60°C)
Dimensions	3.6" x 3.5" x 1"

FCC Compliance Statement

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. 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.

Changes or modifications not expressly approved by UTC Fire and Security could void the user's authority to operate the equipment.

This device complies with Industry Canada license-exempt 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 radiofrequency fields, the radiating element shall be installed such that a minimum separation distance of 20 cm is maintained from the general population.

Conformément aux exigences d'Industrie Canada en matière d'exposition humaine aux champs de radiofréquences, l'élément rayonnant doit être installé de telle sorte qu'une distance minimale de 20 cm soit maintenue par rapport à la population générale.

FCC: 2ABBZ-RF-GB-319-UTC
IC: 11817A-RFGB319UTC

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.

Contact information

For contact information, visit us online at www.interlogix.com.
For technical support, see www.interlogix.com/support

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Product Warnings and Disclaimers



WARNING: CHOKING HAZARD - Small parts. Keep away from children.

ATTENTION: RISQUE D'ÉTOUFFEMENT – Petite pice. Garder éloigner des enfants.

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