![inovonics logo]

# EN1247 EchoStream® ShatterPro™ Glassbreak Transmitter
Installation and Operation Manual - 04864E

## 1 Overview
The EN1247 is an acoustic glassbreak sensor that transmits digital RF messages to Inovonics Wireless receivers. The glassbreak sensor module is the wireless ShatterPro, manufactured by GE Interlogix, Inc. The wireless transmitter module is manufactured by Inovonics Wireless Corporation.

### 1.1 Inovonics Wireless Contact Information
If you have any problems with this procedure, contact Inovonics Wireless technical services:
- E-mail: support@inovonics.com
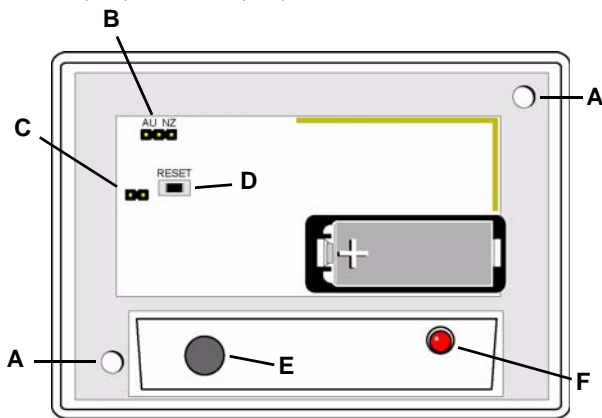- Phone: (800) 782-2709; (303) 939-9336



**Fig. 1** *EN1247 components*

| | | |
|---|---|---|
| **A** Mounting holes | **B** Frequency selection pins | **C** Tamper pins |
| **D** Reset button | **E** Microphone | **F** Sensor LED |

## 2 Installation and Startup

**Note:** The tamper pins are used to test the EN1247. If the jumper is removed from the tamper pins, the unit will remain in a state of tamper, and will not be operational.

### 2.1 Install the Battery
Before installing the EN1247 glassbreak transmitter you will need to install the battery. To install the battery:
1. Press the housing release tab on the bottom of the EN1247 housing; pull the housing apart.
2. Install the battery.

### 2.2 Select Frequency Band
EchoStream products are able to use a range of radio frequencies, and must be configured for your geographic area. To configure the EN1247:
1. Place a selection jumper on the appropriate frequency band selection pins.
   - Place the jumper on the right two pins to select 921-928 MHz for New Zealand.
   - Place the jumper on the left two pins to select 915-928 MHz for Australia.
   - Leave the jumper off the pins to select 902-928 MHz for North America.

**Caution:** When pressing the **Reset** button, make sure you don't also touch the frequency band selection pins. Touching the frequency band selection pins while pressing the **Reset** button can inadvertently set the EN1247 to the wrong frequency band.

### 2.3 Register the Transmitter
EN1247 transmitters must be registered. Refer to receiver, network coordinator or control panel installation instructions to register the EN1247 transmitter. Press **Reset** when prompted to register the transmitter.

**Caution:** The EN1247 should be tested after registration to ensure operation. To test the EN1247, activate each of the conditions and ensure an appropriate response.

### 2.4 Mount the EN1247
1. Use the provided anchors and screws to mount the EN1247, paying careful consideration to the following best practices:
   - To avoid false alarms, install the unit as a perimeter zone that is armed only when the perimeter doors and windows are armed. Installing the unit as a 24-hour zone can create false alarms.
   - Mount the EN1247 at least .91 m (3ft) from the window to be monitored, but no more than 7.62 m (25ft) away.
   - Mount the EN1247 at least 1.2 m (4 ft) away from noise sources (televisions, speakers, sinks, doors, etc.).
   - Mount the EN1247 so that it is in direct line of sight of all windows to be protected.
   - The best location for mounting the EN1247 is on the wall opposite of the window to be protected. The EN1247 may also be mounted on the wall adjoining the window to be protected, or on the ceiling.
   - The glass should have the following dimensions:
     - Height and Weight: 0.3 m x 0.6 m (1 x 2ft) or larger
     - Plate thickness: 2.4 mm to 6.4 mm (3/32" to 1/4")
     - Tempered thickness: 3.2 mm to 6.4 mm (1/8" to 1/4")
     - Wired thickness: 6.4 mm (1/4")
     - Laminated thickness: 3.2 mm to 6.4 mm (1/8" to 1/4")
   - Avoid glass airlocks and glass vestibule areas, noisy kitchens and residential car garages.
   - Avoid rooms smaller than 3 x 3 m (10 x 10 ft), such as small utility rooms, stairwells and small bathrooms.
   - Because the unit is not hermetically sealed, avoid humid rooms.
   - Avoid rooms where white noise, such as air compressor noise, is present. (A blast of compressed air may cause a false alarm.)
   - Avoid rooms with noise insulation or sound-deadening drapes or with closed, wooden window shutters inside.
   - Avoid placing the EN1247 in the corner of a room.

### 2.5 Test the EN1247
The EN1247 should be tested following installation.
1. Remove the jumper from the tamper pins to test the transmitter. This should cause a tamper fault.
2. To confirm the sensor has power and the microphone and circuit board are functioning, clap your hands loudly in front of the sensor. The LED will blink twice, but the alarm will not trip.
3. For full functionality testing, use the Sentrol 5709C acoustic glassbreak tester to switch the unit into test mode and simulate alarm conditions via sonic bursts.

## 3 Specifications
**Dimensions:** 108 x 80 x 43mm (4.2 x 3.1 x 1.7")
**Typical battery life:** 2 years
**Battery (BAT604):** 3.0V lithium Panasonic CR123A or approved equivalent
**Operating environment:** -20° to 60°C (-4° to 140°F), noncondensing
**RF frequency range:** 902-928 MHz
**Microphone:** Omnidirectional Electret

## 4 Television and Radio Interference
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.

# 5 FCC Part 15 and Industry Canada Compliance

This device complies with part 15 of the FCC Rules and 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.

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.

# 6 Warranty/Disclaimer

**Note:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Inovonics Wireless Corporation ("Inovonics") warrants its products ("Product" or "Products") to conform to its own specifications and to be free of defects in materials and workmanship under normal use for a period of thirty-six (36) months from the date of manufacture. Within the warranty period, Inovonics will repair or replace, at its option, all or any part of the warranted Product. Inovonics will not be responsible for dismantling and/or reinstallation charges. To exercise the warranty, the User ("User", "Installer" or "Consumer") must work directly through their authorized distributor who will be given a Return Material Authorization ("RMA") number by Inovonics. Details of shipment will be arranged directly through the authorized distributor.

This warranty is void in cases of improper installation, misuse, failure to follow installation and operating instructions, alteration, accident or tampering, and repair by anyone other than Inovonics.

This warranty is exclusive and expressly in lieu of all other warranties, obligations or liabilities, whether written, oral, express, or implied. There is no warranty by Inovonics that Inovonics product will be merchantable or fit for any particular purpose, nor is there any other warranty, expressed or implied, except as such is expressly set forth herein.  In no event shall Inovonics be liable for an incidental, consequential, indirect, special, or exemplary damages, including but not limited to loss of profit, revenue, or contract, loss of use, cost of down time, or interruption of business, nor any claim made by distributor's customers or any other person or entity.

This warranty will not be modified or extended. Inovonics does not authorize any person to act on its behalf to modify or extend this warranty. This warranty will apply only to Inovonics Products. Inovonics will not be liable for any direct, incidental, or consequential damage or loss whatsoever, caused by the malfunction of Product due to products, accessories, or attachments of other manufacturers, including batteries, used in conjunction with Inovonics Products.

**Note:** E-mail support@inovonics.com for a copy of the CE Declaration of Conformity.