



## EN1215EOL EchoStream® Universal Transmitter with Wall Tamper

Installation Instructions - 05042E, March 24, 2011

### 1 Overview

The Inovonics EN1215EOL universal transmitter with an included wall tamper switch can be used with any standard contact or sensor. A 2.2K ohm end of line resistor is included with the EN1215EOL, and is required for operation.

The EN1215EOL includes a back tamper switch. The tamper condition must be defined within the control panel as a trouble condition when the system is disarmed, and as an alarm condition when the system is armed.

**Note:** For UL installations, refer to the *EN4216MR Installation and Operation Manual*, the *EN4232MR Installation and Operation Manual*, or the *EN7285 Installation Instructions*.

**Note:** For UL installations, the switch contact must be in the same room as the EN1215EOL.

**Note:** The cable length from the switch contact must not exceed 10 feet.

**Note:** For UL installations, the EN1215EOL must be installed in accordance with UL 681.

### 1.1 Inovonics Wireless Contact Information

If you have any problems with this procedure, contact Inovonics technical services:

- E-mail: support@inovonics.com
- Phone: (800) 782-2709

### 1.2 EN1215EOL Components

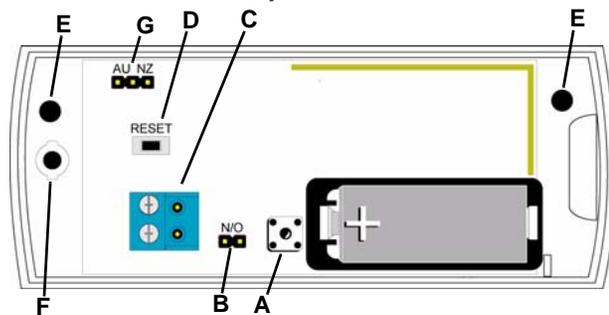


Figure 1 EN1215EOL components

- |                                 |                      |
|---------------------------------|----------------------|
| A Housing tamper button         | B N/O - N/C jumper   |
| C Input terminal                | D Reset button       |
| E Wall-mount screw holes        | F Housing screw hole |
| G Frequency band selection pins |                      |

## 2 Installation and Startup

### 2.1 Installation Notes

- These products are designed to be installed and maintained by professional security technicians.
- Products are intended for indoor use.
- Manually test all products weekly.

### 2.2 Install/Replace the Battery

1. Insert a small screwdriver to depress the housing release tab on the bottom of the transmitter; pry the housing apart.

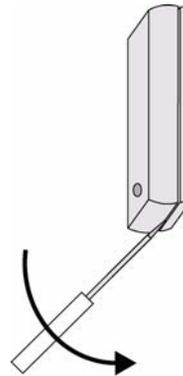


Figure 2 Open the EN1215EOL Housing

2. If replacing a battery, remove the old battery.
3. Install the new battery.
4. Press the **Reset** button to initialize the transmitter.
5. Test the transmitter and ensure appropriate response.

### 2.3 Select the Frequency Band

EchoStream products are able to use a range of radio frequencies, and must be configured for your geographic area. To configure the transmitter:

1. Place a selection jumper on the appropriate frequency band selection pins.
  - Place the jumper on the right two pins, marked NZ, to set the frequency range to 921-928 MHz for New Zealand.
  - Place the jumper on the left two pins, marked AU, to set the frequency range to 915-928 MHz for Australia.
  - Leave the jumper off the pins to set the frequency range to 902-928 MHz for North America.

**Note:** Only devices set for use in North America are configured for UL or cUL installations.

2. Press the **Reset** button to complete configuration.

**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 EN1215EOL to the wrong frequency band.

### 2.4 Select Input Type and Wire Resistor

The N/O-N/C selection pins allow the choice of a normally open or normally closed state for the contact circuit wired to the input terminal.

The transmitter is shipped set for normally closed, with no selection jumper on the N/O selections pins.

#### Set for Normally Open Operation

1. Place a selection jumper on the selection pins to select normally open.
2. Use 22 AWG wire to wire the 2.2K ohm resistor in parallel with the N/O contact per Figure 3. The distance from the external contact to the EN1215EOL must not exceed 10 feet (3 meters).
3. Press the **Reset** button to complete configuration.

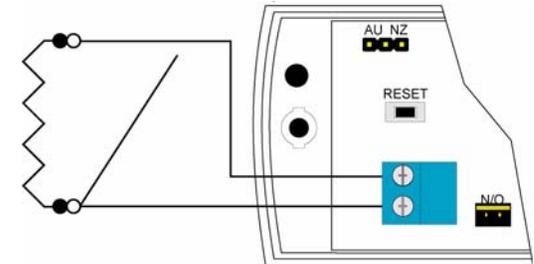


Figure 3 Wired for N/O operation

#### Normally Closed Operation

1. Remove the selection jumper from the selection pins.
2. Use 22 AWG wire to wire the 2.2K ohm resistor in series with the N/C contact per Figure 4. The distance from the external contact to the EN1215EOL must not exceed 10 feet (3 meters).
3. Press the **Reset** button.

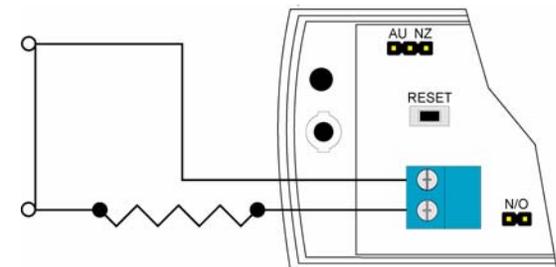


Figure 4 Wired for N/C operation

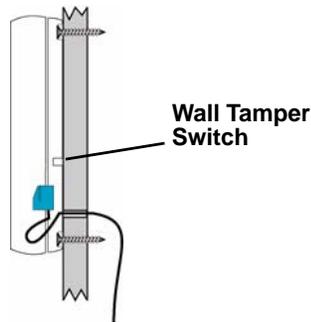
## 2.5 Register the EN1215EOL

Transmitters must be registered with the system in order to be monitored and supervised. When supervised, the transmitter will send a check-in message to the receiver every three minutes. Each transmitter has a unique factory-programmed identification number. Refer to the receiver installation instructions for details on registering a transmitter.

1. When prompted by the receiver to reset transmitter, press the **Reset** button (Figure 1).
2. Replace the cover.
3. Test the transmitter and ensure appropriate response.

## 2.6 Mount the EN1215EOL

1. Route the external wiring through the wall, as shown in Figure 5.
2. Mount the transmitter to the wall using the the wall-mount screw holes (Figure 1), ensuring the housing is flush against the wall and the wall tamper switch is firmly depressed.



**Figure 5** Mount the Transmitter to the Wall

3. Close the housing.
4. Secure the housing through the enclosed housing screw hole (Figure 1). Accessing this screw on an active transmitter requires opening the housing and removing the battery, causing a tamper condition.

## 3 Specifications

**Note:** A 2.2K ohm resistor is required to operate the EN1215EOL.

**Dimensions:** 3.5x1.7x0.9" (89x43x23 mm)

**Weight:** 3 oz (85g)

**External contacts:** N/O or N/C

**Distance, external contact to EN1215EOL:** 10 feet (3 meters) maximum

**Power requirement:** 3 VDC, 60 mA

**Typical battery life:** 3-5 years

**Battery type (BAT604):** Panasonic CR123A

**Operating environment:** 0 to 60°C (32 to 140°F), 90% relative humidity, noncondensing

**Note:** Specifications and data are subject to change without notice.

**UL listings:** UL 365, UL 1023, ULC/ORD-C1023-74, UL 1076, UL 1610.

**Compatible UL receiver:** EN4216MR, EN4232MR, EN7285

## 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

**Caution:** 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 Product.