



EN1210EOL EchoStream® Single Input Universal Transmitter with EOL Protection

Installation Instructions - 04857F

1 Overview

The EN1210EOL is a universal transmitter with an end of line resistor.

A 2.2K ohm resistor is required to operate the EN1210EOL.

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

1.2 EN1210EOL Components

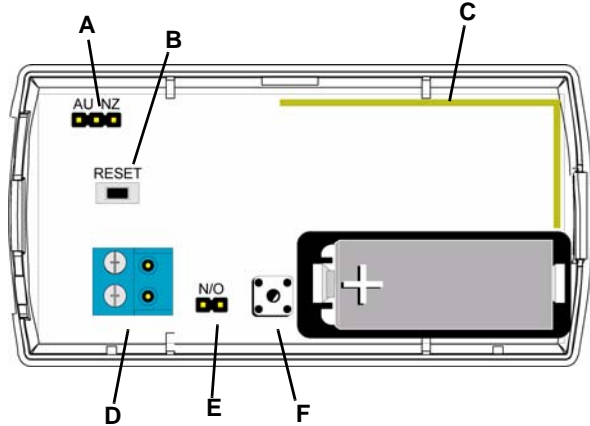


Figure 1 EN1210EOL components

- A Frequency band selection pins
- B Reset button
- C Antenna
- D Input terminal
- E N/O - N/C selection pins
- F Tamper button and spring

2 Installation and Startup

2.1 Install/Replace the Battery

1. Pry the top lip of the mounting bracket up, and lift the bracket off of the transmitter.
2. Use your thumb to depress the housing release tab on the bottom of the transmitter; separate the housing.
3. If replacing a battery, use the hole in the back of the housing to push the old battery out of the battery holder.
4. Install the new battery.
5. Press the **Reset** button to initialize the transmitter.

2.2 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.
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 EN1210EOL to the wrong frequency band.

2.3 Select Input Type

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. Wire the 2.2K ohm resistor in parallel with the N/O contact per Figure 2.
3. Press the Reset button to complete configuration.

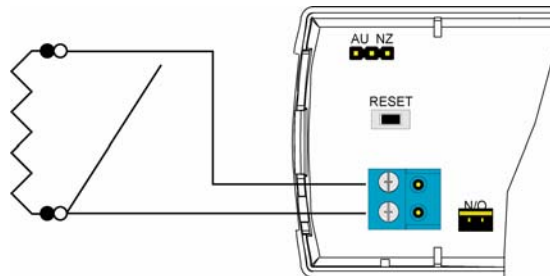


Figure 2 Wired for N/O operation

Set for Normally Closed Operation

1. Remove the selection jumper from the selection pins.
2. Wire the 2.2K ohm resistor in parallel with the N/O contact per Figure 3.

3. Press the **Reset** button.

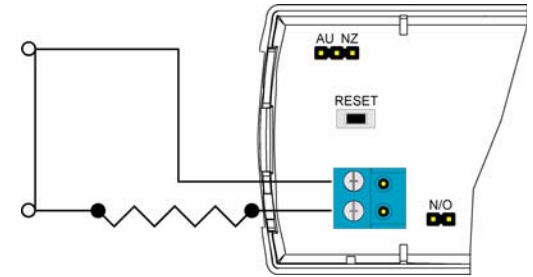


Figure 3 Wired for N/C operation

2.4 Register the EN1210EOL

Transmitters must be registered with the system in order to be monitored and supervised. Transmitters send a check-in message 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.
2. Replace the cover.
3. Test the EN1210EOL by activating each of the conditions and ensuring an appropriate response.

2.5 Mount the EN1210EOL

1. Mount the bracket on the wall with the screws provided.
2. Clip the transmitter onto the bracket. Hook the bottom catch first, then press the top into place.
3. The housing may be secured with a third mounting screw, located beneath the battery.

Note: Accessing this screw on an active transmitter requires opening the housing and removing the battery, causing a tamper condition.

4. To dismount the EN1210, pull the transmitter housing carefully out of the mounting bracket from the top.

3 Specifications

Note: A 2.2K ohm resistor is required to operate the EN1210EOL.

External contacts: N/O or N/C

Distance, external contact to EN1210EOL: 3 meters (10 feet) maximum

Typical battery life: 3-5 years

Battery type (BAT604): Panasonic CR123A or equivalent

Operating environment: -20° to 60°C (-4° to 140°F), noncondensing

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

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 and 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.