![Inovonics logo]

EN1212/EN1212-60 Dual Input Universal Transmitter
Installation Instructions

1 Overview
The EN1212/EN1212-60 is a universal dual input transmitter designed to be used with any standard contact or sensor.

Note: The universal dual input transmitter requires use of a serial receiver or network coordinator, as well as an application designed to support advanced functionality.

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
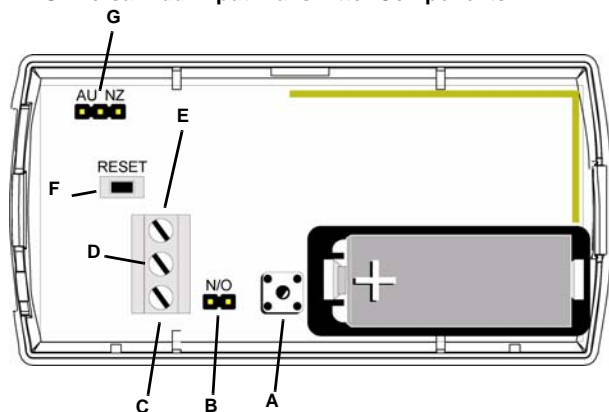
1.2 Universal Dual Input Transmitter Components

Figure 1 Universal dual input transmitter components

A Tamper button and spring   **B** NO/NC selection pins
C Input one terminal   **D** Ground terminal
E Input two terminal   **F** Reset button
G Frequency band selection pins

1.3 What's In The Carton
- Three wall mount screws
- Three wall mount anchors
- Two selection jumpers
- One 3.0V lithium battery

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. 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.

2.3 Select the Frequency Band
EchoStream products are able to use a range of radio frequencies, and must be configured for your geographic area. This product ships with a default frequency range of 902-928 MHz for use in North America. If you are using the product in North America, skip to section 3, "Connect Input Wiring"; if you are using the product in Australia or New Zealand, you will need to configure the transmitter.

6. 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.
7. 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 single input universal transmitter to the wrong frequency band.

3 Connect Input Wiring
The transmitter has a three-terminal contact block that can connect inputs from one or two external contact loops. The middle terminal is a ground, which is shared by both contact loops. Input one can be configured for either a normally open or a normally closed contact loop using the NO/NC selection pins; input two is always normally closed.

8. Connect input wiring as desired.

4 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 one terminal.

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

9. Place a selection jumper on the selection pins to select normally open; remove the selection jumper from the selection pins to select normally closed.
10. Press the reset button to complete configuration.

4.1 Register the Universal Dual Input Transmitter
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. EN1212 transmitters send a check-in message every three minutes; EN1212-60 transmitters send a check-in message every 60 minutes. Each transmitter has a unique factory-programmed identification number.

Refer to the receiver installation instructions for details on registering a transmitter.

11. When prompted by the receiver to reset transmitter, press the reset button.
12. Replace the cover.

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

4.2 Mount the Universal Dual Input Transmitter
13. Mount the bracket on the wall with the screws provided.
14. Clip the transmitter onto the bracket. Hook the bottom catch first, then press the top into place.
15. 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.

16. To dismount the universal dual input transmitter, pull the transmitter housing carefully out of the mounting bracket from the top.

5 Specifications
External contacts: NO or NC

Distance, external contact to universal dual input transmitter: 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.

6 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.

7 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.

8 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 EchoStream 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.