

EN1210W/EN1210W-60 EchoStream® Door/ Window Transmitter with Reed Switch

1 Overview

The EN1210W and EN1210W-60 are universal transmitters with one internal contact magnetic reed switch. Inovonics mult-function add-on receivers will support both inputs as separate devices.

Note: The transmitter contains both a wired input and an input activated by a reed switch and magnet. The reed switch and magnet must be used unless the application (control panel) specifically supports both inputs as separate devices. Use of the wired input is optional.

Note: For UL 2560 installations, refer to the *EN6080 Area Control Gateway Installation Instructions*.

1.1 Maximum Number of Repeaters for a UL2560 Installation

To achieve the 99.99% alarm message reliability required for UL2560 compliance, system installations must operate within the following limits for end device and repeater counts.

End Devices	Maximum Repeaters
150	397
250	386
350	375
500	360
1000	313
2000	238
3000	184

1.2 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.

1.3 Internal Components

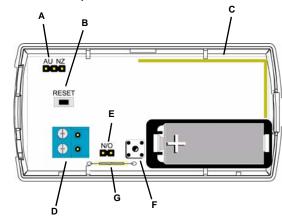


Figure 1 Components

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

G Reed switch

1.4 What's In The Carton

- Three wall mount screws.
- Three wall mount anchors.
- Two selection jumpers.
- One 3.0V lithium battery.
- One magnet.

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 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. Install the new battery.
- 4. 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 2.4, "Select Input Type"; if you are using the product in Australia or New Zealand, you will need to configure the transmitter.

- 5. 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.
- 6. 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 transmitter to the wrong frequency band.

2.4 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 terminal. The transmitter is shipped set for normally open, with a selection jumper on the N/O selections pins. If you are using the product in a normally open state, skip to section 2.5, "Register the Transmitter"; if you are using the product in a normally closed state, you will need to configure the transmitter:

- 7. Remove the selection jumper from the selection pins to select normally closed.
- 8. Press the reset button to complete configuration.

Caution: If only the reed switch and magnet are to be used, normally open should be selected.

2.5 Register the Transmitter

Transmitters must be registered with the system in order to be monitored and supervised. The EN1210W sends a check-in message every three minutes; the EN1210W-60 sends 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.

Note: For UL 2560 installations, transmitters must have a minimum check-in time of 60 minutes.

- 9. When prompted by the receiver to reset transmitter, press the reset button.
- 10. Replace the cover.
- **11.** Test the transmitter by activating each of the conditions and ensuring an appropriate response.

2.6 Mount the Transmitter

12. Mount the bracket on the wall with the screws provided, ensuring room for the magnet where indicated by the mounting directions on the inside of the bracket.

Mount the magnet per the mounting directions on the inside of the bracket

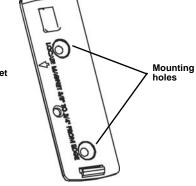


Figure 2 Mount the bracket

- **13.** Mount the magnet where indicated by the mounting arrow on the inside of the bracket,
- 14. Clip the transmitter onto the bracket. Hook the bottom catch first, then press the top into place.
- **15.** As desired, use the third mounting screw to secure the housing through the screw hole 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. Replace the housing lid.

3 Operate the Transmitter

The transmitter has one internal contact magnetic reed switch. The magnet should be parallel with the reed switch. The maximum operating gap between the magnet and the reed switch is 16mm (5/8"). The transmitter can monitor internal and external contacts at the same time.

4 US Patent Numbers

- 7,154,866.
- 7,554,932.
- 7,746,804.
- Other patents pending.

5 Specifications

External contacts: N/O or N/C.

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

Typical battery life: 3-5 years.

Battery type (BAT604): Panasonic CR123A or equivalent.

Power requirement: 3VDC, 60 mA.

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

Compatible receiver for UL 2560 installations with the EN1210W-60: EN6080.

Compatible repeater for UL 2560 installations with the EN1210W-60: EN5040-20T.

Note: The EN1210W-60 is a supplemental device that can be installed in a UL 2560 certified system. 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. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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