



# EN7286NX GE NetworX™ Serial Receiver Interface

Installation Instructions - 05938A

## 1 Overview

The EN7286NX serial receiver interface converts Inovonics EchoStream wireless messages for compatibility with GE security systems. The EN7286NX supports 48 wireless points.

### 1.1 Product Service Information

Contact Inovonics technical services:

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

## 2 EN7286NX Components

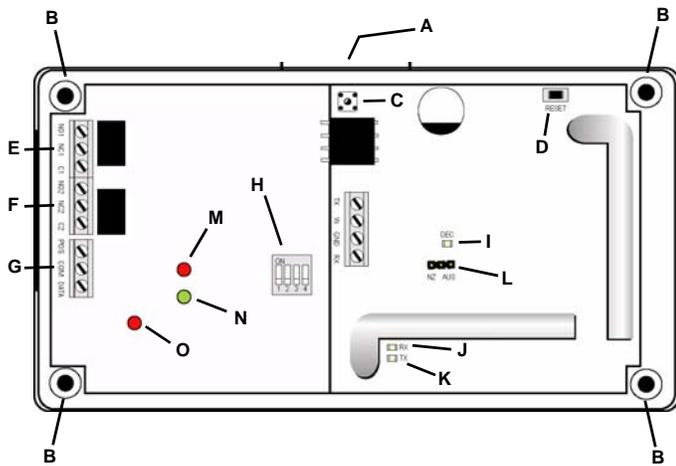


Figure 1 EN7286NX components

- |                                    |                                 |  |
|------------------------------------|---------------------------------|--|
| <b>A</b> Housing release tab       | <b>B</b> Mounting holes         | <b>C</b> Housing tamper switch         |
| <b>D</b> Reset button              | <b>E</b> Relay 1 terminal block | <b>F</b> Relay 2 terminal block        |
| <b>G</b> Power/data terminal block | <b>H</b> EN7286NX dipswitches   | <b>I</b> Receiver Decode LED           |
| <b>J</b> Receiver Receive LED      | <b>K</b> Receiver Transmit LED  | <b>L</b> Frequency band selection pins |
| <b>M</b> Interface Receive LED     | <b>N</b> Interface Decode LED   | <b>O</b> Interface Serial Receive LED  |

## 3 Setup the EN7286NX

### 3.1 Select the Frequency Band

EchoStream products are able to use a range of radio frequencies, and must be configured for your geographic area. By default, the EN7286NX is set for the United States. If you want to configure the EN7286NX for a different geographic area:

1. Use a small screwdriver to press the housing release tab (Figure 1, A); separate the housing.
2. Place a selection jumper on the appropriate frequency band selection pins (Figure 1, L).
  - Leave the jumper off the pins to set the frequency range to 902-928 MHz for North America.
  - Place the jumper on the top two pins, marked AUS, to set the frequency range to 915-928 MHz for Australia.
  - Place the jumper on the bottom two pins, marked NZ, to set the frequency range to 921-928 MHz for New Zealand.
3. Remove the power source to reset.

### 3.2 Connect the EN7286NX to the NX Panel

**Caution:** Long cable runs should not be adjacent to high current power feeds. Keep cable lengths as short as possible to minimize noise pickup. Measure voltage at the serial receiver interface on long cable runs.

1. Connect the serial receiver interface data terminal block (Figure 1, G) to the NX Panel. Cabling should meet the following specifications:

**Cable requirements** 4-conductor 20AWG (or larger) stranded-tinned copper with PVC insulation rated to 300 volts at 26°C (80°F). (Belden #8205, for example.)

**Maximum cable length** 30.5 meters (100 feet).

- Connect POS on the power/data terminal block (Figure 1, G) to POS on the GE NetworX Panel.
  - Connect COM on the power/data terminal block (Figure 1, G) to COM on the GE NetworX Panel.
  - Connect DATA on the power/data terminal block (Figure 1, G) to DATA on the GE NetworX Panel.
2. Connect the relay 1 (Figure 1, E) and 2 (Figure 1, F) terminal blocks to external devices as desired.

### 3.3 Set the Serial Receiver Interface Address

Dipswitches 1 and 2 (Figure 1, H) are used to set the serial receiver interface address. Use the following table to choose settings appropriate for your installation:

	1	2	3	4
35	Off	Off		
36	On	Off		
37	Off	On		
38	On	On		

Once you have made your selection, you will need to cycle power to complete the interface address change.

### 3.4 Set Functions on Four-Button Transmitters

Dipswitches 3 and 4 (Figure 1, H) are used to set the functionality of buttons 3 and 4 on four-button transmitters.

Function	1	2	3	4
Button 3: arm stay; Button 4: relay 1 momentary			Off	Off
Button 3: arm stay; Button 4: relay 1 toggle			Off	On
Button 3: relay 2 momentary; Button 4: relay 1 momentary			On	Off
Button 3: relay 2 toggle; Button 4: relay 1 toggle			On	On

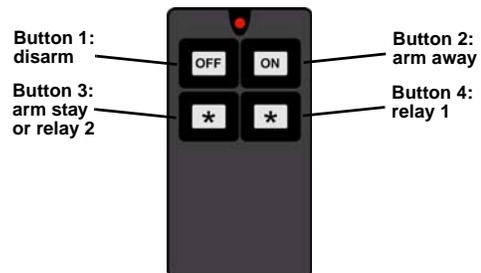


Figure 2 Four-button transmitter

## 4 Programming Location Descriptions

This section describes the programming locations specific to the EN7286NX serial receiver interface and Inovonics transmitters. For more information about programming, see the control panel's installation manual.

### 4.1 Transmitter Enrollment Location

#### Location 0

Location 0 is used to initiate the enrollment of transmitters. To enroll transmitters:

1. Enter the number of the zone to which you wish to enroll the transmitter.
2. Press \* to save.
3. Within 150 seconds, press the **Reset** button on the transmitter you wish to enroll.

**Caution:** Make sure the transmitter has not already been registered with the receiver.

The keypad will sound a chime indicating successful enrollment of the transmitter; if the zone number does not exist, or if a transmitter has already enrolled to it, the keypad will sound a triple beep.

Enrollment can be stopped at any point by entering a value of 0.

If auto-increment is enabled in location 193, the next zone value will be automatically entered into the location, and subsequent transmitters can be enrolled without returning to the keypad. If there is no successful enrollment within 150 seconds, the keypad will sound a triple beep.

Enrollment can be stopped at any point by entering a value of 0.

### 4.2 Transmitter Options Location

#### Locations 1-192

Up to 48 of these locations can be accessed, depending on the value of the bank offset value in location 194. Each transmitter has three options that can be configured.

Standard Transmitter	
Option 1-5	Not used
Option 6	Supervision: off = use burg supervision; on = supervised
Option 7	Off = not supervised; on = supervised
Option 8	Off = transmitter disabled; on = transmitter enabled
Arm/Disarm Transmitter	
Option 1-6	On = activates current partition
Option 7	Off = not supervised; on = supervised
Option 8	Off = transmitter disabled; on = transmitter enabled

These options can be changed once the transmitter is enrolled.

To disable a transmitter, turn option 8 off.

### 4.3 Serial Receiver Interface Options Location

#### Location 193

This location sets serial receiver interface options. The location contains five options.

Option 1	Off = RF jam detection disabled; on = RF jam detection enabled
Option 2	Off = transmitter enrollment is one at a time; on = transmitter enrollment is auto incremented
Option 3	Off = all arm/disarm devices report as user 99; on = arm/disarm devices report as zone number
Option 4	Off = serial receiver interface case tamper disabled, on = serial receiver interface case tamper enabled
Option 5	Off = disarming can occur at any time; on = disarming can only occur during entry delay or arm stay

### 4.4 Serial Receiver Interface Zone Bank Offset Location

#### Location 194

Normally this location is set to 0, and the corresponding zones for the serial receiver interface are 1 through 48. If a panel that supports more than 48 zones is used, this location can be changed to allow the available zones to start at a higher number in order to reach the highest zones of the panel. As shown in the following table, each count of 1 in this location increases the starting zone by 8 up to a maximum 192 zones.

0	Zones 1 - 48
1	Zones 9 - 56
2	Zones 17 - 64
3	Zones 25 - 72
4	Zones 33 - 80
5	Zones 41 - 88
...	
18	Zones 145 - 192

### 4.5 Supervision Window Location

#### Location 195

Range settings are from 0 - 255, in 10 minute increments. For example, a setting of 6 will set the supervision window to 60 minutes. The first segment is used to store the supervision window for a burg/intrusion transmitter and the second segment is used to store the supervision window for smoke/fire transmitter. The typical check in time for EchoStream transmitters is 3 minutes.

## 5 Specifications

**Housing dimensions** 6.38" x 3.60" x 1.10"(162.0 mm x 91.4 mm x 27.9 mm)

**Weight** 212 g (6.8 oz)

**Power requirement** 12 - 14 VDC at 160mA maximum; 80mA normal

**Operating environment** 0-60°C, (32-140°F) up to 90% relative humidity (non-condensing)

**Operating frequency** 902 - 928Mhz

## 6 Warranty and Disclaimer

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.

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