



EE4200 EchoStream® Serial Receiver Installation Instructions - 05161D

1 Overview

The serial receiver is a gateway that uses reliable frequency-hopping, spread-spectrum technology to decode radio frequency (RF) transmissions from end devices and high-power repeaters, then outputs the decoded data to the application controller in a common serial data format.

2 Inovonics Wireless Contact Information

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

- E-mail: support@inovonics.com
- Phone: (303) 939-9336

3 Connect the Serial Cable

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 on long cable runs.

1. Use a small screwdriver to press the housing release tab (Fig. 1A); separate the housing.
2. Connect a serial cable to either the serial data port (Fig. 1B) or the serial data terminal (Fig. 1C). 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).

3. Route the cabling through either the bottom cabling knockout (Fig. 1D) or the side cabling knockout (Fig. 1E).

4 Mount the Serial Receiver

Caution: Mount the serial receiver in a location removed from metal. Metal objects (duct work, wire mesh screens, boxes) will reduce RF range.

1. Use the provided anchors and screws to mount the serial receiver in a location accessible for future maintenance.
2. Close the serial receiver housing.

5 Enable EchoStream Select

To meet ETSI requirements, Inovonics has developed a new line of EE 868MHz-only products. These new 868MHz-only products are compatible with older systems that include EchoStream select products. If you are using any ES products in your current system, you will need to enable EchoStream select compatibility on this new 868MHz-only product.

To enable/disable EchoStream select compatibility:

1. To enable compatibility with ES products, place a selection jumper on the enable EchoStream selection pins (Fig. 1).
2. If no ES products are used in your system, remove the selection jumper from the EchoStream selection pins (Fig. 1).

6 Grade 2 Requirements

To meet European Grade 2 requirements, the following procedures must be performed:

6.1 Secure the Housing

There are two screw tabs on the bottom of the housing and one screw tab on the top; all three must be used to secure the housing.

To secure the housing:

1. Open the housing
2. Drill out the three screw holes on the housing base: two on the bottom of the housing, one on the top.
3. Use the three 6 x 1/4 screws included in your accessory pack to secure the housing.

6.2 Cover the Indicator Lights

The indicator lights must be disabled, so that operation cannot be determined externally.

To cover the indicator lights:

1. Open the housing.
2. Apply black electrical tape over the light-holes on the inside of the housing.
3. Close the housing.

7 Serial Receiver Operation

Caution: The EchoStream system should be tested regularly to ensure operation. To test, place the system in test mode, activate an end device, and ensure an appropriate response.

The following LEDs are used to monitor serial receiver operation:

Transmit LED Lit when the serial receiver is transmitting data to the application controller (Fig. 1F).

Receive LED Lit when the serial receiver is receiving data from the application controller (Fig. 1G).

Decode LED Lit when the serial receiver is decoding an RF transmission from another Inovonics Wireless device (Fig. 1H).

8 Specifications

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

Weight: 133 g (4.7 oz)

Power requirement: 10-14 VDC at 100mA

Radio: Inovonics Wireless EchoStream

Operating frequency: 868-869 MHz

Operating environment: -10° to 60°C, (14° to 140°F) up to 90% relative humidity (non-condensing)

Tamper: Type B, fixed device

Compliance: EN150131-1 Security Grade 2; Environmental Class II

Certification: Telefication B.V.

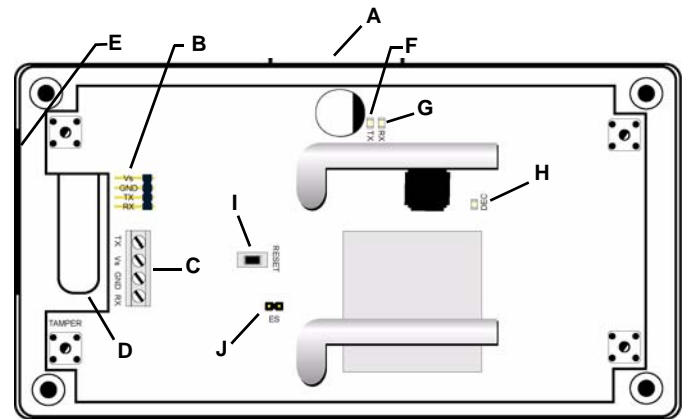


Figure 1 Serial Receiver components

A Housing release tab	B Serial data port
C Serial data terminal	D Bottom cabling knockout
E Side cabling knockout	F Transmit LED
G Receive LED	H Decode LED
I Reset button	J Enable EchoStream selection pins

9 Warranty and Disclaimer

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