



EE4000 EchoStream® Serial Receiver Installation Instructions - 05633A

1 Overview

The EE4000 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, and then output the decoded data to the application controller in a common serial data format. The EE4000 is used for all one way Inovonics applications.

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

2 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 (ES) 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 ES selection pins.

Note: Selection jumpers are included in the EE4000 hardware packet.

2. If no ES products are used in your system, remove the selection jumper from the ES selection pins.
3. Cycle power.

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. Connect a serial cable to either the serial data port (Fig. 1C) or the serial data terminal (Fig. 1D). 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 15.25 meters (50 feet).

2. Route the cabling through either the bottom cabling knockout (Fig. 1E) or the side cabling knockout (Fig. 1F).

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 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. 1G).

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

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

6 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 MHz

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

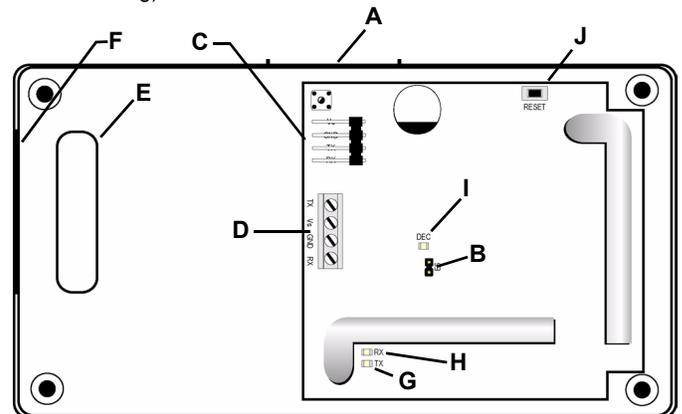


Figure 1 EE4000 serial receiver components

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

7 Warranty and Disclaimer

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 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.