

INTRODUCTION

The iRX series routers include capabilities such as 10/100 Ethernet, embedded TCP/IP stack, Network address translation, store-and-forward for GPS coordinates and integration for a handheld speaker-microphone to enable voice communication. The device also boasts advanced available features such as 802.11 Wireless Ethernet and IPSec tunneling.

PRE-IMPLEMENTATION

Procurement Instructions

To purchase iRX routers, contact an eLutions Sales Representative at 1-800-836-9909 or email sales@elutions.com.

Required Components for Installation

To install and use the iRX, you need to purchase these required components.

Components required for a mobile (vehicle) type of installation:

• Approved Cellular Antenna
• Vehicle Power Harness
• Ethernet crossover cable
• Approved GPS Antenna (if so equipped)
• Data cable for GPS (if so equipped)
• Approved 802.11 Antenna (if so equipped)

Components required for a stationary (SCADA or telemetry) type of installation:

• Approved Cellular Antenna
• AC Power Adapter
• Ethernet crossover cable
• Approved 802.11 Antenna (if so equipped)



IMPORTANT: Use only approved and tested components. Damage due to use of unapproved components will not be covered by the warranty.

How to Order Required Components

To order components for the iRX router, visit the eLutions' website at www.elutions.com/wireless or contact the Wireless Support Center at 1-888-349-4338.

Required Components for Operation

To use the iRX and connect to the iDEN® network, you must have the following components:

- Activated Data Account with Nextel.

Activation Instructions

If your router was not activated by Nextel or an authorized representative, please contact eLutions' Wireless Support Center at 1-888-349-4338.

INSTALLATION STEPS

Please refer to the Installation Guide for detailed steps on how to install the router in the desired location. The following is a summary of the steps for installing the router.

- **Install Router**
- **Install Antenna**
- **Install Additional Antennas (GPS and/or 802.11)**
- **Install and Connect Power Cable**
- **Install and Connect the Ignition Cable**
- **Install and Connect Antenna Cable(s)**
- **Install and Connect Data Cable**

CONFIGURING THE ROUTER

The following is a summary of the steps for configuring the router. The router is configured with a standard web browser such as Internet Explorer or Mozilla compatible browser, such as Netscape (must support Javascript v1.3).

1. Decide how to connect to router

There are several ways to connect to the router.

- Connect remotely via the Internet or Nextel's private network over iDEN®. Use an Internet enabled PC to connect to the unit via its wide-area IP address.
- Connect locally via Ethernet. Use an Ethernet crossover cable to connect directly to the Ethernet port. Set the PC to obtain its IP address automatically.
- Connect locally via 802.11b (if available). Use an 802.11b-enabled PC to connect to the units 802.11 cloud. The default network name is "NEW iRX".

2. Open the browser

3. Enter the web address

- Enter <http://<ip address>> where <ip address> is equal to the IP address obtained from your activator. (May be written on the other side of this card for easy reference.) An example web address is <http://172.16.18.5>.
- Hit go or enter on the browser.

4. Enter the login information

- A password screen will appear.
- Default user is admin, default password is engage.
- It is recommended that the password be changed and recorded in a secure place. (If the password is lost or forgotten, contact eLutions Wireless Support Center at 1-888-349-4338)

5. Make desired changes

- Edit desired values.
- If any values are changed, a save configuration link will appear on the screen. Clicking this link will cause the unit to store the new configuration values and restart.
- If the settings were successfully changed, you will see the following message: "Settings Saved Successfully"

Using your Device (High Level Instructions)

POWERING UP THE ROUTER

The router is designed to power up or turn ON when an ignition signal is sensed.

Power up – Mobile Environment:

1. Turn ON your iRX router by starting your vehicle.
2. The router automatically turns on and registers to the iDEN® network (this process may take up to 3 minutes).
3. Set your locally connected Ethernet (or 802.11) device to obtain an IP address automatically or set it to match the Ethernet sub-net of the iRX.
4. Use your locally connected device to receive or send information.

Power up – Stationary Environment:

1. Insert the Power/Ignition connector into the PWR/IGN port located on the back panel of the router.
2. Turn ON your iRX router by plugging the power connector into a 12-volt DC power supply.
3. Set your locally connected Ethernet (or 802.11) device to obtain an IP address automatically or set it to match the Ethernet sub-net of the iRX.
4. Configure NAT rules if desired.
5. Interrogate fixed device from a remote location or set fixed device to push its data to the remote location.

BASIC FUNCTIONALITY

The features of the iRX router are summarized below:

1. **Handheld Speaker-Microphone Interface** – The router is equipped with an integrated port for connection to an external microphone-speaker device, enabling voice communication.
2. **Status LEDs** – These lights give operating feedback for the unit. LEDs present include Power, iDEN Status, iDEN Signal Strength, iDEN Rx/Tx, RS232 Rx/Tx, and if applicable, 802.11 Rx/Tx and GPS Status.
3. **Reset Button** – When pressed, this button will cause the iDEN® radio set to perform a soft reboot.
4. **Master Reset Button** – When pressed, this button will cause the iDEN® radio set to perform a master reset.
5. **Ethernet Port** – 10/100 Ethernet port designed for connecting local equipment.

6. **iDEN® Radio** – Packet based data connection featuring lifetime static IP (can be activated with private or routable address).
7. **Serial Port** – Multimode configurable RS-232 port.
8. **NAT Routing** - Outbound TCP or UDP traffic is routed freely to the wide area (either the Nextel private network or the Internet). Inbound traffic that matches pre-set NAT rules is routed to the specified local IP device.

ADVANCED FUNCTIONALITY

These optional hardware and firmware components increase the versatility of the device.

1. **802.11** – Available as NIC (uplink) or cloud (downlink) this wireless data connection allows the unit to interact with any standard 802.11b equipment.
2. **IPSec** – Secure encrypted data tunneling featuring DES, 3DES, AES and other configurable encryption options. Allows the unit to create a VPN tunnel to any standard firewall.
3. **Option Cards** – The unit may be ordered with a factory installed internal option card such as Digital and Analog I/O. See the website (www.elutions.com/wireless) for the full range of option cards.

URL TO USER GUIDE

To access and download copies of the user's guide for the iRX, go to www.elutions.com/wireless. All instruction manuals and other product specific documentation can be found on the Product Support page.

For Pre-Implementation Assistance
Customer Care
<p>For Pre-implementation or Customer Care assistance, contact eLutions' Wireless Support Center at 1-888-349-4338 or email at components@elutions.com.</p>
Warranty and Repair Information
<p>The iRX router comes with a 12-month Manufacturer's Limited Warranty. An optional 5-year Extended Warranty can be purchased at an additional cost. A copy of the Limited Warranty can be downloaded from www.elutions.com/wireless.</p>

IMPORTANT NUMBERS

Use the following table to record important information about your unit.

Part Number	
Serial Number	
IMEI	
SIM ID	
IP Address	

