



Raven-E iDEN

Quick Start



Version 2.40 - September 2006

Raven-E iDEN for TELUS - Quick Start, version 2.40

The SIM (Subscriber Identity Module) card in the Raven-E is a smartcard securely storing the key identifying a mobile subscriber. Generally, you will only need to install the SIM once in the life of the modem and it may be pre-installed by AirLink.



For additional modem configuration options, please refer to the Raven-E iDEN Users Guide for TELUS.



Note: If the SIM card was pre-installed by AirLink, there is nothing more you need to do. Skip to the Hardware section and/or to the DUN instructions, if you need Dial-Up Networking.

Installing the SIM

To install the SIM, you will only need a small phillips head screw driver.

1. Opening the Case

- a. Unplug the Raven-E's power and all cables.
- b. Using a small phillips head screw driver, remove the screws on the back of the Raven-E.
- c. Slide the casing off of the Raven-E and set it aside.

FIGURE 1. Raven-E back

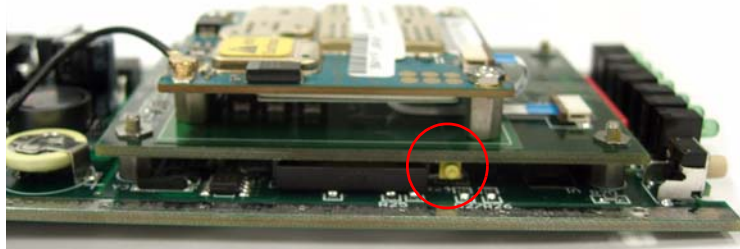


2. Ejecting the SIM tray



- a. Using the tip of a PDA stylus, an unbent paperclip, or other slim *blunt* item press the yellow button of the SIM tray. On the Raven-E, the button is between two boards.

FIGURE 2. Tray button: Raven-E



- b. Slide the tray out of the slot.

FIGURE 3. Empty SIM Tray



3. Inserting the SIM

- a. Place the SIM into the tray and gently press to click it into place.

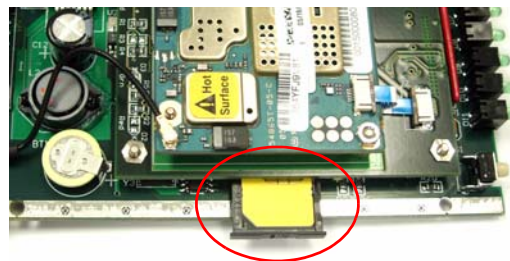
FIGURE 4. SIM Tray with a SIM



The SIM may be a different color than this example.

- b. Slide the tray back into the modem and gently press to click it into place.

FIGURE 5. Inserting the SIM: Raven-E





4. Finishing the SIM installation

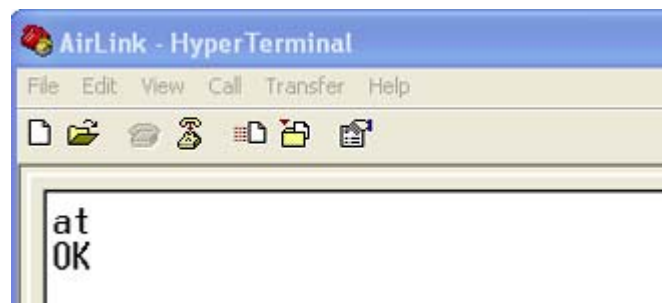
- a. Slide the Raven-E back into the case.
- b. Secure the back of the Raven-E with the screws.

Modem Master Reset

The final step is issuing a master reset for the Raven-E. You will need to connect to the Raven-E using a terminal application such as HyperTerminal and connect directly to the Raven-E from your computer.

1. Connect your modem to your computer using an Ethernet cable.
2. Connect the Raven-E to power.
3. Using a terminal application, connect to the Raven-E.

FIGURE 6. Terminal connection



Enter the Master Reset Command

1. Type **AT*PROVISION=000000,0123456789**
2. The Raven-E should respond with: "Master Reset Succeeded". With any other response, contact TELUS to check the account status.
3. Press the reset button on the Raven-E.

FIGURE 7. Reset button



The Raven-E should now register on the network.

Hardware Installation

Your AirLink Raven-E should be mounted in a position that allows easy access for the cables so they are not bent or constricted. The LEDs on the front panel should be visible for ease of opera-



tional verification. You should ensure that there is adequate airflow around the modem but that it is kept free from direct exposure to the elements (sun, rain, etc.)

An optional accessory for your modem is a mounting kit. The bracket is designed to snugly cradle the modem and hold it in place where you need it.

Connecting the Antenna

Antennas selected should not exceed a maximum gain of 5 dBi under standard installation configuration. In more complex installations (such as those requiring long lengths of cable and/or multiple connections), it's imperative that the installer follow maximum dBi gain guidelines in accordance with Industry Canada's regulations.

Please refer to the following guidelines:

- RSS-102 (...Health Canada's Safety Code 6 for Exposure of Humans to RF Fields)
- RSS-129 (800 MHz Dual-Mode CDMA Cellular Telephones) (Analogue & CDMA)
- RSS-133 r1 (2 GHz Personal Communications)

For more information visit <http://www.industrycanada.ca>.

Your AirLink Raven-E will work with most Dual-Band PCS cellular antennas with a TNC connector that works in the high and low frequencies of iDEN. Connect the antenna or RF cable directly to the connector on the back of the Raven-E.



Connecting power

Your Raven-E can be used with either DC (available in most automobiles) or 110 AC (standard US wall power) with the appropriate power adapter (available from AirLink).

The power cable positive lead should be connected to the battery or power source positive terminal. The power cable negative lead should be connected to the battery or power source negative terminal. The Raven-E has an internal polysilicon circuit breaker that opens at 0.5 to 1.0 amps of current.



Note: When using a DC power source (such as a car battery or solar cell), AirLink recommends placing a fuse on the line close to the power source to protect your power source from possible surges due to shorts or other line issues.

Connecting the Raven-E to a computer or other device



Your Raven-E's Ethernet port can be connected directly to a computer or other Ethernet device using a cross-over cable. Most newer computers have an auto-sensing Ethernet port allowing you to use a straight through cable. If you are connecting the modem to a hub or switch you should use a straight through cable or use the uplink port on the hub or switch with a cross-over cable.

Your Raven-E can also be connected to a USB to Ethernet device connected to a computer or other device which does not have an available Ethernet port but does have USB.

Raven-E Indicator Lights

When your Raven-E is connected to power and an antenna, there is a specific pattern to the lights to indicate its operation mode. Refer to the User Guide for more information on light patterns.

Tx (transmit) and **Rx** (receive) - Lights will flash as data is transferred to and from the Raven-E on the remote network.

RSSI(signal level) - Light shows the strength of the signal and may be nearly solid (strong signal) or flashing (weaker signal). A slow flash indicates a very weak signal.

Reg (registration) - Indicates the Raven-E has acquired an IP from TELUS.

Chan (channel) - Indicates the modem has acquired a network channel.

Link - Indicates a successful connection to the cellular network.

Pwr (power) - Indicates the power adapter is connected and there is power getting to the modem.

The **Reset** button performs the same function as unplugging power from the modem and plugging it back in. Reset will not alter any saved configuration settings.

AirLink Technical Support

If you encounter problems with operation of your Raven-E, AirLink's support staff can help.



Refer to the User Guide for your modem or the AirLink website for AirLink product warranties.

AirLink Support Web Site

The AirLink web site is updated frequently with Setup Wizards, Utilities, How-To Guides, and other documentation: <http://www.airlink.com/support>.

AirLink Documentation and Guides

- **Modem User Guides** - These guides are specific to your modem type, cellular provider, and cellular technology and contain comprehensive information about the operation of the modem and its features.
- **Modem Quick Start guides** - These guides are also specific to the modem type, cellular provider, and cellular technology and are a step by step guide to activating the modem using the Setup Wizard or other steps as applicable.



- **Utility Guides** - These guides focus on the features of one of the AirLink modem utilities: Wireless Ace, AceView, AceNet, Modem Doctor, etc.
- **Application Notes and How-To Guides** - These guides detail configuring the modem to work with a specific feature set or how the modem can be set up to work with a specific 3rd party (non-AirLink) device.
- **Data Sheets and White Papers** - These are technology based information documents.

Contacting Technical Support

For support assistance please email support@airlink.com or call 510-781-9760 Monday through Friday 5 AM to 5 PM Pacific Time (8 AM to 8 PM Eastern Time). Support is not available weekends or holidays.