# Sprint

**Sprint Mobile Broadband**
**USB Modem**
**by Sierra Wireless**
**AirCard® 595U**

SIERRA WIRELESS
*HEART OF THE WIRELESS MACHINE®*

**www.sprint.com**

# Table of Contents

# Welcome to Sprint

We are committed to bringing you the best wireless technology available, and we built our network right from the start, so no matter where you are on the network, all your services will work the same.

When it comes to mobile connectivity, the Sprint Mobile Broadband USB modem offers more freedom than ever before. No wires, no cables, just access to your data when you need it. The power of the Internet and company data is truly at your fingertips.

This guide will familiarize you with our technology and with Sprint Connection Manager<sup>SM</sup> software with location-enhanced Local Search and your new Sprint Mobile Broadband USB modem through simple, easy-to-follow instructions.

**Welcome and thank you for choosing Sprint.**

# Introduction

This User's Guide introduces you to Sprint service and all the features of your new wireless Sprint Mobile Broadband USB modem. It's divided into six sections:

- **Section 1:  Basics of Your Sprint Mobile Broadband USB Modem**
- **Section 2:  Installing the Sprint Mobile Broadband USB Modem**
- **Section 3:  Using the Sprint Mobile Broadband USB Modem**
- **Section 4:  Technical Specifications and Regulatory Information**
- **Section 5:  Safety Information and Terms & Conditions**
- **Section 6:  Glossary and Index**

Throughout the guide, you'll find tips that highlight special shortcuts and timely reminders to help you make the most of your wireless USB modem and services.

The Table of Contents and Index will help you locate specific information quickly. The Sprint Connection Manager software includes extensive online help to guide you through the steps to use each feature.

You'll get the most out of your new Sprint Mobile Broadband USB modem if you read each section of this document. However, if you'd like to get right to a specific feature, simply go to that page. Follow the instructions in that section and you'll be ready to use your device in no time.

| **Tip:** | You can view this guide online or print it to keep on hand. If you're viewing it online, simply click a topic in the Table of Contents, a page number in the Index, or any page or section reference. The PDF automatically displays the appropriate page. |
|---|---|

# Basics of Your
# Sprint Mobile Broadband USB Modem

# Introducing the Sprint Mobile Broadband USB Modem

## In This Section

⬩ **Your Sprint Mobile Broadband USB Modem**

⬩ **CDMA Networks**

⬩ **Package Contents**

⬩ **About This Guide**

This section introduces the basic features and functions of your Sprint Mobile Broadband USB modem, what is included with your device, and how to use this guide to get you started.

# Your Sprint Mobile Broadband USB Modem

The Sierra Wireless AirCard® 595U USB modem is a dual-band wireless USB modem. It enhances the functionality of your mobile or desktop computing devices by adding wireless data.

This device allows you to do the following (subject to feature availability), without using a landline phone or network:

- Connect to the Internet, VPN, and corporate networks
- Send and receive large email messages
- Use Location-Based Services (on Windows® only)
- Conduct video-conferencing
- Access streaming, real-time media
- Play games online

Your Sprint Mobile Broadband USB modem fits into a USB slot (available on most notebook and desktop PCs).

# CDMA Networks

The Sprint Mobile Broadband USB modem operates over a type of wireless network called CDMA (Code Division Multiple Access).

To use the Sprint Mobile Broadband USB modem, you need an account that gives you access to the CDMA network. Some features described in this manual may not be available with your account. For details of the services and accounts available, contact Sprint (page 28).

There are CDMA networks that operate in the frequency bands supported by the Sprint Mobile Broadband USB modem throughout North America and parts of Latin America, Asia, and New Zealand. However, each service provider operates a network that covers a limited geographical area within the overall CDMA coverage area.

The fee for service may be higher when you are roaming (connecting to a network other than Sprint).

Sprint has "roaming" agreements with other service providers, so that you can get service outside of the coverage area of the network. (There may be additional charges for roaming service.)

CDMA technology provides a variety of connectivity features, depending on your Sprint account (actual speed depends on the network conditions):

- 1xEV-DO Rev. A (Sprint Power Vision$^{SM}$) supports Internet connections with data rates up to 3.1 Mbps (downlink from the network) and 1.8 Mbps (uplink to the network). Average data rates are 600 kbps - 1.4 Mbps (downlink from the network) and 350-500 kbps (uplink to the network).

- 1xEV-DO Rev. 0 (Sprint Power Vision) supports Internet connections with data rates up to 2.4 Mbps (downlink from the network) and 153 kbps (uplink to the network). Average data rates are 400-700 kbps (downlink from the network) and 40-80 kbps (uplink to the network).

- 1X (Sprint Vision) supports Internet connections with data rates up to 153 kbps.

You can set Sprint Connection Manager to automatically establish a packet data connection (Sprint Power Vision or Sprint Vision) when it starts.

You can also set Sprint Connection Manager so that, without running Sprint Connection Manager, you can make a Sprint Power Vision or Sprint Vision connection simply by starting whatever application you want to use (such as your Web browser or email application).

If the packet data connection is lost, the connection is restarted automatically. This provides an "always-on" network connection (as far as permitted by network coverage). Once the connection is established, you can open your browser and connect to any Web site that is accessible through the Internet, or access other Internet services (such as email).

The connection is "active" when data transmission is occurring. If data transmission stops for a period of time (determined by the network), the connection becomes "dormant." (See page 35.)

| **Tip:** | More information about CDMA networks is available on the CDMA Development Group Web site, **www.cdg.org**. |
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| **Tip:** | For pointers on optimizing your settings, see "How can I optimize my settings to achieve the fastest speeds and conserve data when accessing my corporate network?" on page 79. |
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# Package Contents

Your Sprint Mobile Broadband USB modem package contains the following components:

- Sprint Mobile Broadband USB modem by Sierra Wireless (Model AirCard 595U)
- Rechargeable modem battery
- Docking station with attached cable
- Getting Started guide
- Installation CD containing the Sprint Connection Manager software, warranty information, and this document

# About This Guide

This user's guide is designed to provide you with all the information you need to install and use your Sprint Mobile Broadband USB modem by Sierra Wireless (AirCard 595U).

| Note: | The comprehensive Getting Started guide that comes with the Sprint Mobile Broadband USB modem should be sufficient for most installations. |
|---|---|

- **Section 1** (which you are reading) gives you an overview of the Sprint Mobile Broadband USB modem (AirCard 595U).
- **Section 2** provides step-by-step instructions for installing the Sprint Mobile Broadband USB modem and Sprint Connection Manager software (page 13).
- **Section 3** provides step-by-step instructions on using the device (page 29).
- **Section 4** provides electrical, radio frequency, and other parameters of the Sprint Mobile Broadband USB modem for those who require technical information, as well as regulatory information (page 87).
- **Section 5** provides important safety and liability information and the Terms and Conditions of use for the Sprint Mobile Broadband USB modem (page 101).
- **Section 6** include a glossary (page 125) and index (page 129).

# Getting Started With Your Sprint Mobile Broadband USB Modem

## In This Section

♦ **Getting Started**

♦ **System Requirements**

♦ **The Sprint Mobile Broadband USB Modem Software**

♦ **Care and Maintenance**

This section describes the basics of getting started with your Sprint Mobile Broadband USB modem, and how to look after your device.

# Getting Started

| CAUTION: | Do not insert the Sprint Mobile Broadband USB modem into the USB slot until you have installed and run the Sprint Connection Manager software, and the software displays "No device." |
|---|---|

Before you begin using your Sprint Mobile Broadband USB modem, you must:

1. Check that your computer has the system requirements listed below ("System Requirements").

2. Install the Sprint Connection Manager software, located on the installation CD, onto your PC. See page 16.

3. Start Sprint Connection Manager.

4. Insert the battery into the Sprint Mobile Broadband USB modem, and insert the device into your computer; this installs the drivers for the device.

5. Charge the battery for approximately two hours.

6. Activate your Sprint account and configure the Sprint Mobile Broadband USB modem to use your account (unless the device has been preactivated). See page 23.

## System Requirements

The Sprint Mobile Broadband USB modem is supported on:

● Windows Vista.

● Windows XP.

● Windows 2000 with Service Pack 1 or later (Service Pack 4 is recommended), with high encryption support. (See "High Encryption Requirements" on page 9.)

● Mac OS X version 10.4 or newer. Software and instructions are available at www.sprint.com/downloads. **Note:** The Mac software (Watcher™ Lite) currently does not support Location-Based Services.

To install and run the Sprint Mobile Broadband USB modem and accompanying Sprint Connection Manager software on a Windows PC, you will need the minimum system resources shown in the following table.

| USB slots | One USB slot. (If your computer's USB slot is vertical, use the docking station. Do not use the Sprint Mobile Broadband USB modem in a USB hub or in a USB slot on a keyboard.) |
| --- | --- |
| Optical drive | CD-ROM |
| Memory | 32 MB |
| Disk space | 32 MB |

## High Encryption Requirements

Depending on your configuration, an IOTA (Internet Over The Air) session may automatically start as part of the installation/activation process. IOTA requires high-security 128-bit encryption to establish a secure Internet connection to the CDMA network. (For more information, see "Data Provisioning [IOTA]" on page 26.)

If you are running Windows Vista or Windows XP, your computer should already include high-security 128-bit encryption.

### If you are running Windows 2000 with Internet Explorer

1. Ensure you have installed the Windows 2000 High Encryption Pack: in Internet Explorer, select **Help > About Internet Explorer**.

   If you see "Cipher Strength: 128-bit," then the High Encryption Pack is installed. Proceed to step 2.

   If the High Encryption Pack is not installed, download and install it (www.microsoft.com/windows2000/downloads/recommended/encryption).

2. If your version of Internet Explorer is earlier than 5.5, download and install the latest version (www.microsoft.com/windows/ie/downloads).

### If you are running Windows 2000 with Netscape Communicator

Ensure your version of Netscape Communicator is 4.7 or higher.

To verify that your version supports 128-bit encryption:

1. In Navigator, select **Help > About Navigator**.

   – or –

   In Netscape Communicator, select **Help > About Communicator**.

2. See the section "Contains encryption software from RSA Data Security, Inc."

   If the next paragraph states "This version supports U.S. security," you have 128-bit security.

   If the paragraph states that you have International security, you have 40-bit security. Download a version that supports 128-bit security.

## The Sprint Mobile Broadband USB Modem Software

The Sprint Mobile Broadband USB modem comes with the following software:

- Sprint Connection Manager, which allows you to manage the device's actions and monitor your connections
- The driver software that forms the interface between the Sprint Mobile Broadband USB modem and your Windows operating system

Before you insert the Sprint Mobile Broadband USB modem for the first time, you must install and then run the Sprint Connection Manager software. The driver software is installed the first time you insert the device into your computer.

Detailed instructions are provided beginning on page 16.

## Care and Maintenance

As with any electronic device, the Sprint Mobile Broadband USB modem must be handled with care to ensure reliable operation. Follow these guidelines in using and storing the device:

- The device should fit easily into your USB slot. Forcing the device into a slot may damage the connector pins.
- Protect the device from liquids, dust, and excessive heat.
- When not installed in your computer, store the device in a safe place.
- Remove the device before storing or transporting your computer.
- When inserting or removing the device, always grip it by the sides rather than the end; this prevents damage to the device.
- To avoid the risk of explosion, use the same battery model when replacing the battery. Properly dispose of the used battery.
- The device's USB connector is adjustable to three positions. Do not force the hinge past the last position—this may break the connector. For more information, see the picture on page 18.

- Do not use the device with a handheld computer; it is designed only for notebook or desktop computers running Windows® Vista, Windows XP, Windows 2000, or Mac OS X.

- Do not handle or operate the device while driving or operating a vehicle. Doing so may distract you from properly operating the vehicle. In some states and provinces, operating communication devices while in control of a vehicle is a criminal offense.

# Installing the Sprint Mobile Broadband USB Modem

Sprint®

# Installing the Software

## In This Section

◆ **Getting Started**

This section explains how to install your Sprint Connection Manager software.

The process may vary, depending on the version of Windows that you are running. (If you're using your device on a Mac computer, visit www.sprint.com/downloads for the Watcher™ Lite software and the installation instructions.)

# Getting Started

| Note: | For comprehensive instructions on installing the Sprint Connection Manager software and activating the device, see the Getting Started guide. |
|---|---|

Before you can use your device, you must first install the device's software and configure the device for your computer. The installation process consists of:

- **Software installation** - Installing the Sprint Connection Manager software on your computer (described in this section).

- **Insertion of the rechargeable battery into the device**

- **Device insertion and driver installation** - Starting the Sprint Connection Manager software and inserting the device, which automatically installs the drivers on your computer.

- **Device activation and provisioning** - Activating your Sprint account and configuring the device to use your account. (See "Setting Up Service" on page 22.)

| CAUTION: | Do not insert the device into your computer's USB slot before installing the software. |
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| Note: | **Windows Vista and Windows 2000 users:** You must log in with administrative privileges to install the software and drivers. **Windows XP users:** You may need to log in with administrative privileges, depending on your Windows configuration. Before beginning the installation process, it is recommended that you close all open applications. |
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**Section 2A: Installing the Software**

**To install the software on your computer:**

1. If the installation CD is not already in your CD-ROM drive, insert it.



The CD should autostart.

If the CD does not autostart, select **Start > Run** and enter **d:\SCMInstaller.exe**, where **d** is the drive letter of your CD-ROM drive.

2. Use the **Next** and **Back** buttons to navigate through the wizard, noting the following:

   - You must select **I accept the terms in the license agreement** to indicate your acceptance of the terms of the license agreement to proceed with the installation.

   - Use the default settings for the Destination Folder unless you have special requirements and an advanced understanding of PC configuration. (The Destination Folder dictates where the software is installed.)

3. When the "Installation Complete!" window is displayed, click **Finish**.

4. Run Sprint Connection Manager.

   (Double-click the program's icon [] on your desktop.)

5. Wait for Sprint Connection Manager to start up and display "No device...".

6. Slide the front panel off the Sprint Mobile Broadband USB modem.

7. Hold the battery so that the side with two white arrows faces up and the gold contact points on the end of the battery line up with the gold contact points on the Sprint Mobile Broadband USB modem. Insert the battery into the device.

| **Warning:** | To avoid the risk of explosion, use the same battery model when replacing the battery. Properly dispose of the used battery. |
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8. Slide the front panel onto the device until the panel clicks into place.

9.  Slide the lever on the bottom of the device in the direction indicated by the triangle to release the device's USB connector.

10. Adjust the USB connector to the desired angle. (The USB connector is adjustable to three positions—approximately 90, 135, and 160 degrees. Do not force the hinge past the last position—this may break the connector.)
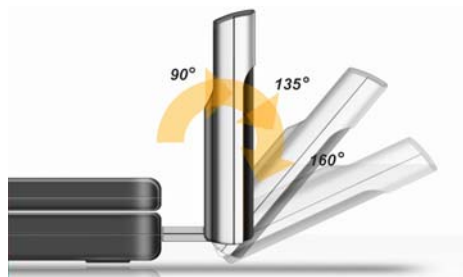


11. Insert the device into your computer's USB slot.

    Alternatively, you can attach the docking station to your computer's USB slot, and insert the device into the docking station.

| Note: | If your computer's USB slot is vertical, use the docking station.<br>Do not insert the device into a USB hub or a USB slot on a keyboard. |
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| Warning: | If the orientation of your computer's USB slot or the thickness of your computer are such that pressure is applied to the device's end or side (as shown by the red circles in the drawings below), you may damage the device or your computer. In such cases, do not insert the device directly into your computer's USB slot; use the docking station instead. |
|---|---|
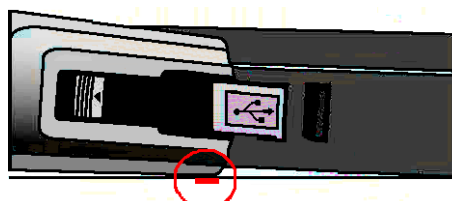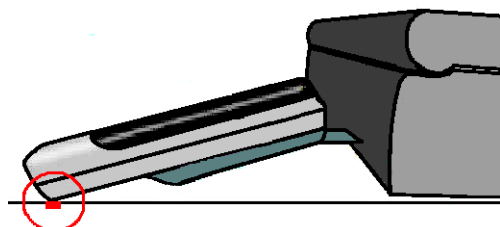


Windows detects the device and installs the drivers for it. This may take a few minutes. Once completed, Sprint Connection Manager should display "Disconnected." The PWR LED is lit.

12. Charge the battery for approximately two hours.

| Note: | If you have an older version of Sprint Connection Manager and are experiencing problems during installation, use the Add/Remove Programs Utility (see page 54) to remove the older version of Sprint Connection Manager. Then reinstall the current version of Sprint Connection Manager from the Installation CD. |
|---|---|

**Section 2A: Installing the Software**

After you've charged the battery, proceed to configure the device to use your account (if it was not preactivated); see "Activating and Using Sprint Service" on page 23. If your device is preactivated, after you've charged the battery, you are ready to connect to the network; to learn about using the software, see "Your Sprint Mobile Broadband USB Modem: The Basics" on page 31.

# Inserting and Removing the Sprint Mobile Broadband USB Modem

## In This Section

⧫ **Inserting the Sprint Mobile Broadband USB Modem**

⧫ **Removing the Sprint Mobile Broadband USB Modem**

This section describes how to properly insert the Sprint Mobile Broadband USB modem and remove it from your PC.

# Inserting the Sprint Mobile Broadband USB Modem

To insert the Sprint Mobile Broadband USB modem into a notebook or desktop computer:

▶ Holding the Sprint Mobile Broadband USB modem by its sides, insert the device into the USB slot of your computer.

Alternatively, you can attach the docking station to your computer's USB slot, and insert the device into the docking station.

| Note: | If your computer's USB slot is vertical, use the docking station. Do not insert the Sprint Mobile Broadband USB modem into a USB hub or a USB slot on a keyboard. |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|

When you insert the Sprint Mobile Broadband USB modem, the following should occur:

● The first time the device is inserted, Windows detects the device and installs the drivers for it. This may take a few minutes. Once completed, Sprint Connection Manager should display "Disconnected." To connect to the network, click **GO**.

● If sound effects are enabled, the PC beeps.

The Sprint Mobile Broadband USB modem is powered as soon as you insert it.

# Removing the Sprint Mobile Broadband USB Modem

| IMPORTANT! | When inserting or removing your device, always grip the device by its sides; this prevents damage to the device. |
|------------|-----------------------------------------------------------------------------------------------------------------|

**To remove the Sprint Mobile Broadband USB modem:**

1. Exit Sprint Connection Manager if it is open (page 44).

2. Remove the device from your computer's USB slot by gripping both sides of the device and pulling straight out.

# Setting Up Service

## In This Section

- ◆ **Activating and Using Sprint Service**
- ◆ **Preactivated Device**
- ◆ **Non-preactivated Device: Activation Wizard**
- ◆ **Data Provisioning (IOTA)**

This section walks you through setting up service for your Sprint Mobile Broadband USB modem, after you have installed the Sprint Connection Manager software (page 16) and inserted the Sprint Mobile Broadband USB modem.

# Activating and Using Sprint Service

Before using your Sprint Mobile Broadband USB modem, you must have a Sprint wireless network account set up. The process of setting up an account is called activation.

When the Sprint Mobile Broadband USB modem is inserted and Sprint Connection Manager is started, it will detect whether the device has been configured with an account ("preactivated"). If it has not, the Activation Wizard starts automatically.

# Preactivated Device

If you received your Sprint Mobile Broadband USB modem in the mail or purchased it at a Sprint Store, it probably has already been activated.

To prevent unauthorized use, preactivated devices may have been set with a security lock. If so, Sprint Connection Manager displays the message "Device locked."

**To unlock your Sprint Mobile Broadband USB modem:**

1. Click the 🔒 icon. (If is not visible, click + to expand Sprint Connection Manager.)

2. In the Enter User Lock Code window, enter your four-digit lock code, and click **OK**. For security purposes, the code is not visible as you type.

| Tip: | If you can't recall your lock code, try using the last four digits of either your Social Security number or your device's phone number (MDN), or try 0000. If none of these work, call Sprint Customer Service at 1-888-211-4727. |
|------|---|

After unlocking your preactivated Sprint Mobile Broadband USB modem, it is ready for use. See "Using the Sprint Mobile Broadband USB Modem" on page 29.

# Non-preactivated Device: Activation Wizard

If your device is not preactivated, please see the Getting Started guide included with your device.

If your Sprint Mobile Broadband USB modem is not preactivated, Sprint Connection Manager automatically detects that no account has been configured when you run it for the first time. It then runs the Activation Wizard to guide you through the activation and configuration process.

To set up your account, you will be contacting Sprint.

## Before you call Sprint, have these things ready:

- A phone
- Your Sprint Mobile Broadband USB modem
- Your Social Security number
- Your driver's license number
- The city and state where the device will be primarily used
- A pen and paper to write down your account information. Your package includes a printed Getting Started guide, where you can record this information.

When you call Sprint, Sprint Customer Service will help you select your service plan and guide you through the activation process. They will also provide you with this information:

- Your device's activation code (gives you access to configure the account)
- Your device's phone number (MDN)
- Your device's MSID (Mobile System ID) code, used for WLNP (Wireless Local Number Portability) and to determine whether you are "home" or "roaming"

## Stepping Through the Activation Wizard

**If the Activation Wizard has not started automatically:**

1. Ensure the Sprint Mobile Broadband USB modem is inserted, and Sprint Connection Manager is running. If Sprint Connection Manager is not running, select:
(Windows Vista or Windows XP) **Start > All Programs > Sprint > Sprint Mobile Broadband (Sierra)**.
(Windows 2000) **Start > Programs > Sprint > Sprint Mobile Broadband (Sierra)**.

    Sprint Connection Manager should display "Disconnected."

2. If Sprint Connection Manager displays "Device locked," unlock the device (page 52).

3. If Sprint Connection Manager displays "Device powered off," power the device on (page 38).

4. Start the Activation Wizard: select **MENU > Settings > Sprint Vision - Sierra Wireless > Activation Wizard**.

**Once the Activation Wizard is running:**

1. To begin activation of the Sprint Mobile Broadband USB modem, click **Next**.

2. Call Sprint at the phone number listed on the screen. Click **Next**.

3. Give the account representative your ESN (Electronic Serial Number) or MEID (Mobile Equipment IDentifier) number as displayed by the Activation Wizard. Enter the activation code provided by the account representative and click **Next**.

4. Enter the phone number (no spaces or hyphens) and, if not the same value as the phone number, the MSID value given by the account representative, and then click **Next**.

    A confirmation window will be displayed.

5. Confirm with the service representative that the information is correct. If it is, click **Yes**. If it isn't, click **No**, and re-enter the information.

6. Click **Finish** to close the Activation Wizard.

7. Wait a few moments for the Sprint Mobile Broadband USB modem to automatically reset. Depending on your configuration, an IOTA session may automatically start. (See "Data Provisioning [IOTA]" on page 26.)

After Sprint sets up your account on the network, your Sprint Mobile Broadband USB modem should be configured and ready for use.

# Data Provisioning (IOTA)

IOTA (Internet Over The Air), supported by some service providers (including Sprint), is an automated feature to perform account setup for you by making a connection to the CDMA network and using a secure Internet connection to download account parameters to your Sprint Mobile Broadband USB modem. To make this secure connection, IOTA requires that your computer support 128-bit encryption. (See "High Encryption Requirements" on page 9.)

Depending on your configuration, the first time Sprint Connection Manager detects the activated device, an IOTA session may automatically start, during which status messages ("Updating User Profile...") are displayed.

After this first activation, there may be changes to your account that require updating the parameters in the Sprint Mobile Broadband USB modem. If this is needed:

1.  In the Device Info & Diagnostics window (page 72), click **Update Data Profile**. (If this button is not displayed, remove and reinsert the device.)

2.  In the IOTA Provisioning window, click **Yes**.

Your Sprint Mobile Broadband USB modem then retrieves the updates to your data services account. Once the updates are successful, Sprint Connection Manager is displayed ("Disconnected"). You can now connect to the network.

# Getting Help

## In This Section

- **Visiting the Sprint Web Site**
- **Contacting Sprint Customer Service**
- **Troubleshooting**

This section describes where you can find more information on Sprint services, options, and troubleshooting problems you have encountered.

## Visiting the Sprint Web Site

Stop by www.sprint.com and log on to get up-to-date information on Sprint services, options, and more.

You can also:

- Review coverage maps.
- Access your account information.
- Add additional options to your service plan.
- Purchase accessories.
- Check out frequently asked questions.
- And more.

## Contacting Sprint Customer Service

You can reach Sprint Customer Service by:

- Logging on to your account at www.sprint.com.
- Calling us toll-free at **1-888-211-4727**.
- Writing to us at Sprint Customer Service, P.O. Box 8077, London, KY  40742.

## Troubleshooting

The Online Help for Sprint Connection Manager (see page 49) includes descriptions of most common error messages. Look in the Contents under Troubleshooting.

For help with other problems:

- See "Troubleshooting Tips" on page 80.
- Consult the Sierra Wireless Web site at www.sierrawireless.com, where you will find an extensive knowledge base that can be searched to address most problems, and the Installation Troubleshooting wizard (in the Support & Download section).
- Contact Sprint as noted above.

# Using the Sprint Mobile Broadband USB Modem

Sprint

# Your Sprint Mobile Broadband USB Modem: The Basics

## In This Section

- ◆ **Sprint Connection Manager**
- ◆ **Starting Sprint Connection Manager**
- ◆ **Starting Sprint Connection Manager Automatically**
- ◆ **Sprint Connection Manager Window**
- ◆ **Connection States**
- ◆ **System Tray Connection States**
- ◆ **Determining the Type of Coverage**
- ◆ **Location-Based Services**
- ◆ **Powering the Device On and Off**
- ◆ **Controlling the Sprint Connection Manager Window**
- ◆ **Launching a Sprint Power Vision or Sprint Vision Connection**
- ◆ **Viewing the Amount of Data Transferred**
- ◆ **Ending a Connection**
- ◆ **Online Help**
- ◆ **Displaying Your Phone Number**
- ◆ **Security**
- ◆ **Accessing Links**
- ◆ **Uninstalling the Sprint Connection Manager Software**

Your Sprint Mobile Broadband USB modem is packed with features that simplify your life and expand your ability to stay connected to the people and information that are important to you. This section guides you through the basic features of your Sprint Mobile Broadband USB modem.

# Sprint Connection Manager

Sprint Connection Manager is the application that allows you to manage and monitor the high-speed Sprint Power Vision (1xEV-DO) and Sprint Vision (1X) connection to the Sprint network. You use Sprint Connection Manager to:

- Determine your signal strength and other network connection parameters (page 33).
- Initiate data calls (page 45).
- Access Location-Based Services (page 40).
- View call statistics (page 70) and messages (page 35).
- Customize features and options (page 60).

| Tip: | Without running Sprint Connection Manager, you can make a data connection simply by starting whatever application you want to use (such as your Web browser or email application). Prerequisites: you must have previously selected, in Sprint Connection Manager, **Enable NIC for data connections** (page 64). However, to make use of other features of the Sprint Mobile Broadband USB modem (including Location-Based Services), you must run Sprint Connection Manager. |
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# Starting Sprint Connection Manager

**To start Sprint Connection Manager:**

1. Ensure the Sprint Mobile Broadband USB modem is inserted into your computer's USB slot.

2. Double-click the program's icon (⊞) on your desktop, or, from the **Start** menu on your Windows desktop, select:
   (Windows Vista or Windows XP) **All Programs > Sprint > Sprint Mobile Broadband (Sierra)**.
   (Windows 2000) **Programs > Sprint > Sprint Mobile Broadband (Sierra)**.

When Sprint Connection Manager is running, it places an icon (⊞) in the system tray, usually at the right end of the taskbar. (See page 39.)

| Tip: | You can also set Sprint Connection Manager to launch automatically whenever Windows starts. (See "Starting Sprint Connection Manager Automatically" on page 33.) |
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# Starting Sprint Connection Manager Automatically

To set Sprint Connection Manager to start automatically whenever **Windows starts:**

▶ From the General option of the Settings window (page 61), select **Launch when Windows starts**.

| Note: | Changes to this setting apply only after you restart Windows. |
|---|---|

| Tip: | You can also set the connection to launch automatically whenever available. (See "GO automatically when ready" on page 64.) These settings provide an "always-on" connection, as long as you have network coverage. |
|---|---|

# Sprint Connection Manager Window
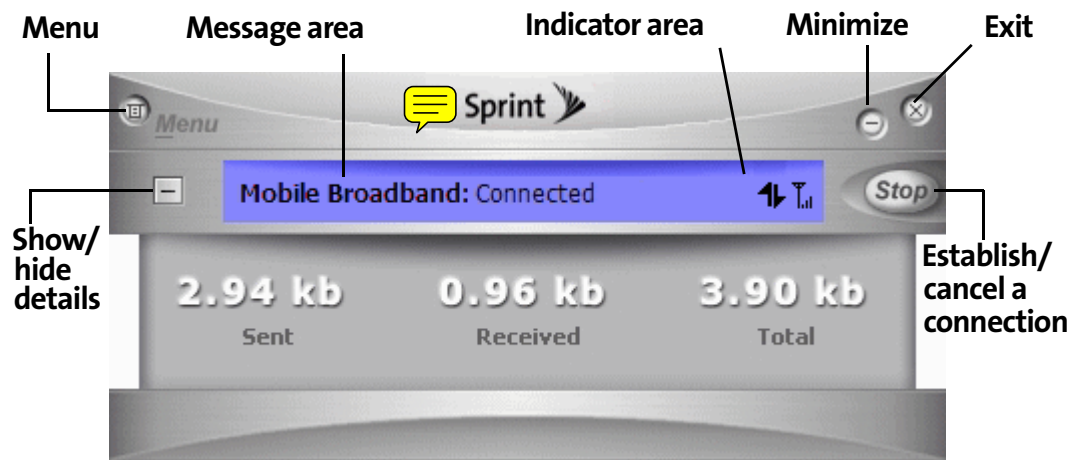


The text and icons in Sprint Connection Manager indicate the connection state (page 35), and, when disconnected, whether the device is locked 🔒 or unlocked 🔓 (page 50).

Sprint Connection Manager may display, depending on the connection state, some of the following icons:

| | |
|---|---|
|  | CDMA network signal strength, indicated by the number of bars. The ToolTip indicates the type of coverage you have (for example, 1X and/or 1xEV-DO), and the signal strength, in dBm. |
|  | You are roaming. Roaming charges may apply. If this icon is flashing, you are in a non-preferred roaming area, and you may not be able to complete your calls. **Tip:** You can change the roaming option ("Roam Mode"; for example, to disable roaming, select Sprint), and also enable the Roam Guard feature (from the Sprint Vision Settings window; page 63). |
|  | 1xEV-DO Rev. A transmit/receive icon: a data connection is active. The up arrow is animated (for example: ) when data is being transmitted to the network. The down arrow is animated (for example: ) when data is being received from the network. |
|  | 1xEV-DO Rev. 0 transmit/receive icon: a data connection is active. The up arrow is animated (for example: ) when data is being transmitted to the network. The down arrow is animated (for example: ) when data is being received from the network. |
|  | 1xEV-DO (Rev. 0 and Rev. A) transmit/receive icon: the data connection is dormant. The up and down arrows are gray. |
|  | 1X transmit/receive icon: a data connection is active. The up arrow is black and animated when data is being transmitted to the network. The down arrow is black and animated when data is being received from the network. |
|  | 1X transmit/receive icon: the data connection is dormant. The up and down arrows are gray. |

Sprint Connection Manager has the following buttons and text:

- **Menu** or the ▦ button — Displays the Sprint Connection Manager menu (page 56).

- [+] — Expands Sprint Connection Manager (page 43) and displays the amount of data transferred (when Connected), or, when disconnected, the lock status of your device (locked 🔒 or unlocked 🔓).

- [−] (Displayed when Sprint Connection Manager is expanded) — Hides the amount of data transferred and the lock status of your device (page 43).

- ▬ (upper right corner of the window) — Minimizes Sprint Connection Manager (page 44).

- ⊗ — Exits Sprint Connection Manager (page 44).

- **GO** — Starts the Sprint Power Vision or Sprint Vision connection (page 45).

- **Stop** — Ends the connection (visible when a connection is established; page 49).

## Connection States

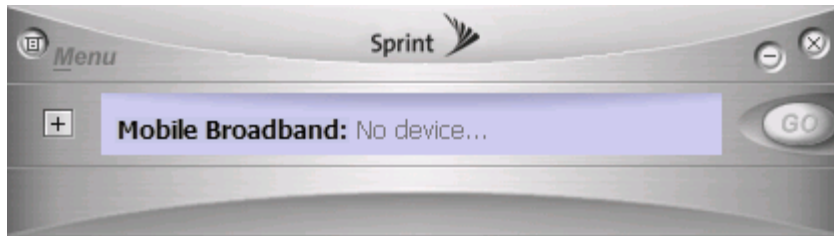Sprint Connection Manager can display various connection and interaction states, including:

- No device
- Initializing
- Updating User Profile... (See "Data Provisioning [IOTA]" on page 26.)
- Searching for service...
- Disconnected
- Connecting
- Connected
- Connected to NDIS
- Device locked
- Device powered off
- Searching

| **Note:** | The system tray icon also indicates the connection state (page 16). |
|---|---|

## No device

Sprint Connection Manager did not detect the Sprint Mobile Broadband USB modem. The **GO** button is unavailable.



Insert the Sprint Mobile Broadband USB modem. If it is already inserted, remove and reinsert it; wait a few moments. If this message is still displayed, uninstall (page 54) and reinstall Sprint Connection Manager, or contact Sprint (page 28).

## Initializing

Sprint Connection Manager is attempting to establish communication with the Sprint Mobile Broadband USB modem.

## Searching for service...

Sprint Connection Manager is determining whether 1X or 1xEV-DO service is available. If this message persists, see page 82.

## Disconnected

Sprint Connection Manager is ready to make a connection to the network or to use Location-Based Services. The **GO** button is available; the signal strength icon () and the roaming icon (△) (if you're roaming) are visible. If Sprint Connection Manager is expanded, the lock icon ( or ) is visible.

To connect to the network, click **GO**.
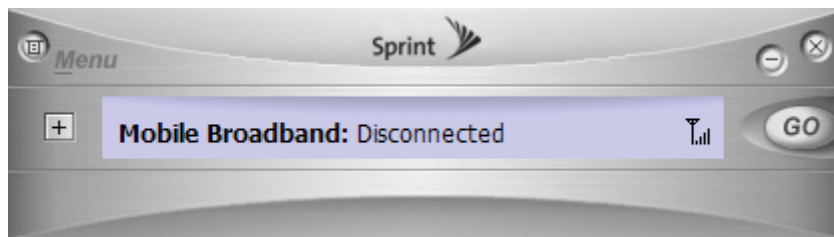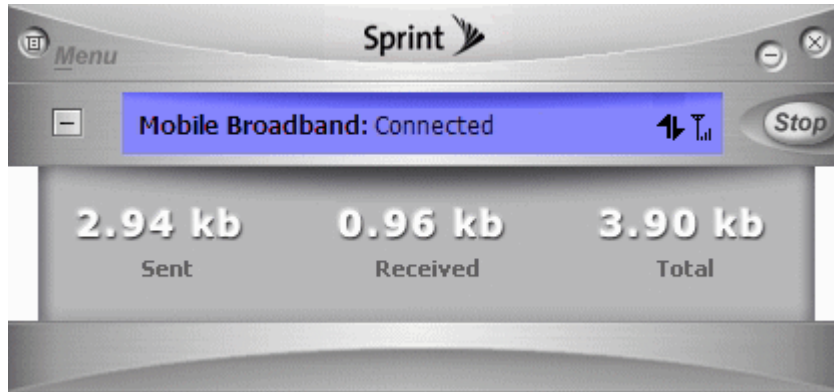


## Connecting

Sprint Connection Manager is establishing a connection to the network.

## Connected

The connection is established. In addition to the signal strength icon ( 📶 ) and the roaming icon ( △ ) (if you're roaming), the transmit/receive icon ( ⚡ for 1xEV-DO Rev. A; ⚡ for 1xEV-DO Rev. 0; ⚡ for 1X) is also displayed.

If you expand Sprint Connection Manager ( + ), the amount of data transferred is shown. (See note on page 48.)
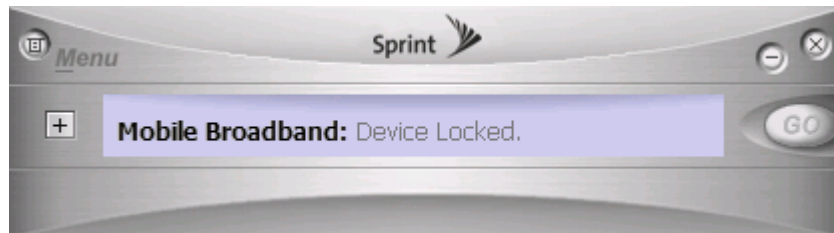
To end the connection, click **Stop**.



## Connected to NDIS

This message applies only if **Enable NIC for data connections** (page 64) has been selected. For a description, see "Connected" (above).

## Device locked

The device is locked, so that others cannot use the device and your account. To use most of the features, you must unlock the device (page 52).

## Device powered off

The device has been powered off (through **Menu > Power Off Modem**). To use the device, select **Menu > Power On Modem**.
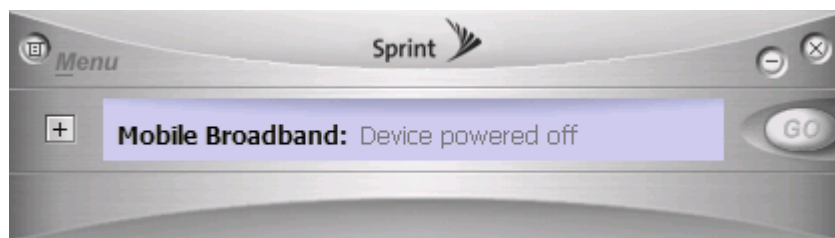
For more information, see "Powering the Device On and Off" on page 42.

## Searching

The device is requesting GPS satellite information from the network (to use Location-Based Services).

## System Tray Connection States

Sprint Connection Manager has an associated icon () that appears in the system tray. The icon reflects the connection state.

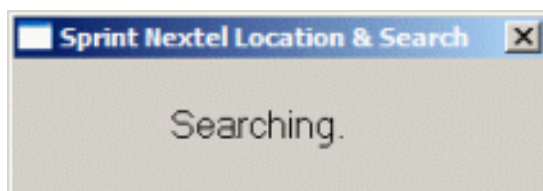| | |
|---|---|
|  | Sprint Connection Manager is not ready to connect to the network. Your Sprint Mobile Broadband USB modem is either locked ("Device locked"; page 37), or not detected ("No device"; page 36), or powered off ("Device powered off"; page 38). |
|  | **Disconnected** — Sprint Connection Manager is ready to make a connection to the network (page 36), or<br>**Connecting** — Sprint Connection Manager is making a connection to the network (page 36). |
|  | **Connected** — Connection is established to the network; data transfer is in progress (page 37). |
|  | **Dormant** — Connection is established, but no data transfer is taking place. |

Clicking the system tray icon toggles between displaying and minimizing Sprint Connection Manager.

Right-clicking the icon displays the shortcut menu (page 58).
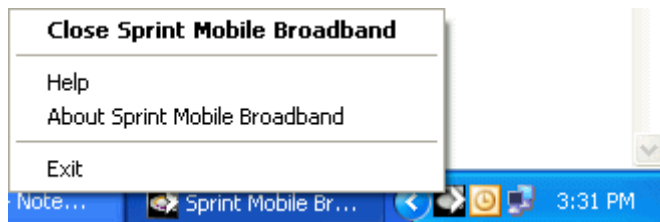
## Determining the Type of Coverage

The ToolTip over the signal strength indicator (  ) indicates the type of coverage you have (for example, 1X [synonym of 1xRTT] or 1xEV-DO):



| Tip: | The type of coverage is also displayed in the lower left part of the Device Info & Diagnostics window under "Network Service" (page 73). |
|---|---|

## Attaching an External Antenna

You can improve the signal strength, by attaching an external antenna (sold separately).

To attach an external antenna:

1. Remove the device from your computer (page 21).
2. Flip open the rubber tab on the side of the device.
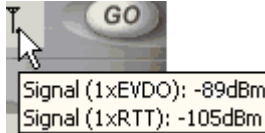3. Hold the antenna cable by the connector (end) part, and carefully insert the connector part of the cable into the corresponding connector on the device.
4. Reinsert the device into your computer (page 21).

## Location-Based Services

Location-Based Services (Location & Search Services) allow you to query the network for information on points of interest that are near your current location. The network automatically determines your current location. All you have to do is specify the type of business that you are looking for (for example, a restaurant or hotel).

To use Location-Based Services:

► In Sprint Connection Manager, click **Menu > Location & Search Services**.

| Note: | If the menus and windows (page 40 and page 66) related to Location-Based Services are unavailable in Sprint Connection Manager, see "Location-Based Services Don't Seem To Be Available" on page 84. |
|---|---|

If the GPS fix is successful or if data from a recent GPS fix is available, then the Sprint Nextel Location & Search window is displayed. The bottom part of the window displays location information (latitude and longitude) of your device, and the time that the location information was acquired.
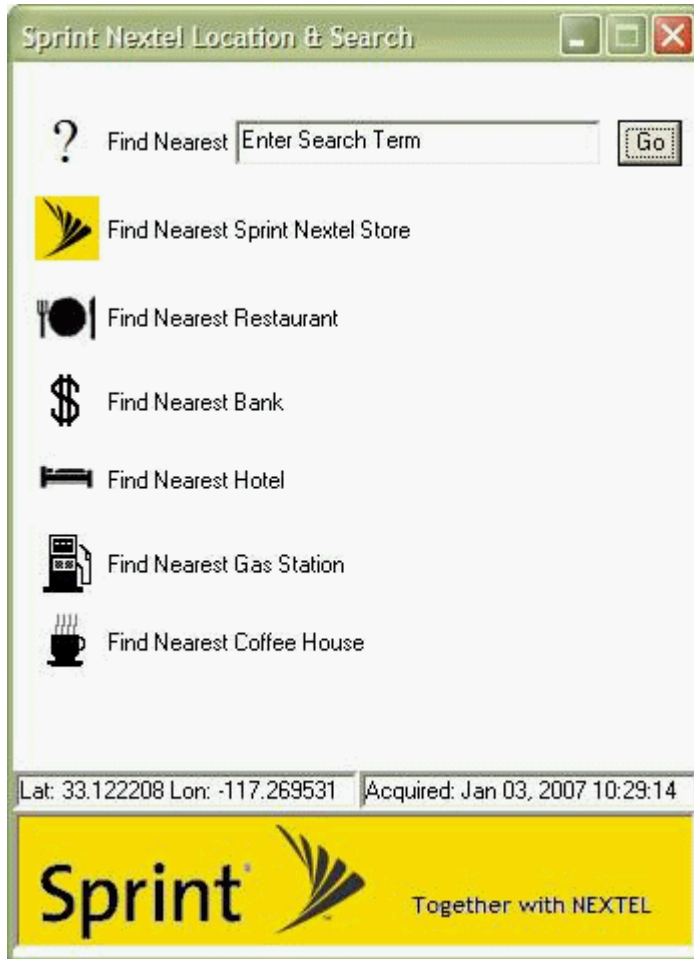


From the Location & Search window, enter or select the type of item you want to find, and click **Go**.

If more than a preconfigured period of time has elapsed since the last time you've submitted a location search, a window is displayed asking whether you want to get an updated (GPS) position fix. (Depending on your account, you may be charged for each position fix or after you have performed a certain number of fixes.) If your current location is different from where you submitted your last location search, click **Yes**.

| Note: | Sprint Connection Manager uses Microsoft Internet Explorer to display the results of Location-Based Services. |
| --- | --- |

Internet Explorer opens and displays the results of your search query. In the search results of some mapping and search services, you can right-click your location to get additional information—for example, driving instructions.

From the Location & Search window, you can submit additional searches.

From the Settings window, you can specify the settings for Sprint Location Services (page 66).

## Powering the Device On and Off

If you are using your Sprint Mobile Broadband USB modem in an aircraft, hospital, or other environment where the device may cause interference, you can power the device off (without removing it from your USB slot), and still use other functions of your computer.

This also allows you to conserve your notebook computer's battery and charge the device's battery.

To power the device off:

1. Close any active data connection (page 49).
2. Select **MENU > Power Off Modem**.

When the device is powered off, the menu option switches to **Power On Modem**, and Sprint Connection Manager displays the message "Device powered off ."
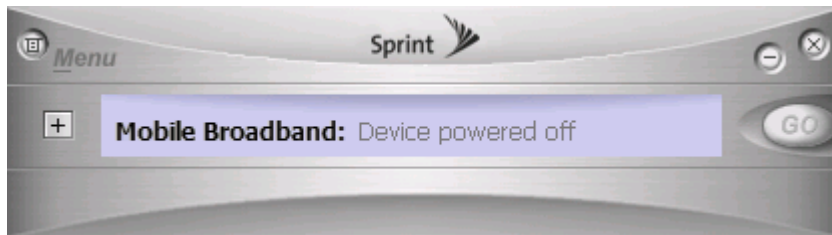


To power the device on:

▶  Select **MENU > Power On Modem**.

# Controlling the Sprint Connection Manager Window

## Expanding Sprint Connection Manager

Sprint Connection Manager has two views: compact and expanded.

Compact view:
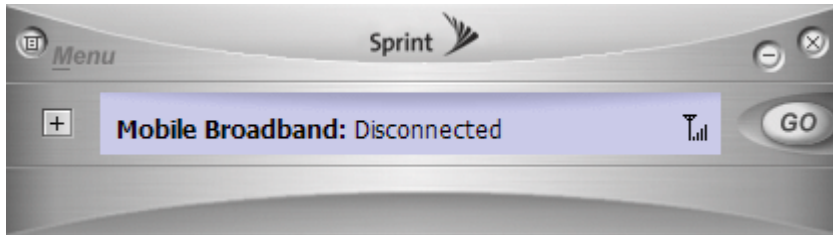


To expand Sprint Connection Manager, click [+]. Sprint Connection Manager now also displays the amount of data transferred during the current connection, and (only when disconnected) the lock state of the device (locked 🔒 or unlocked 🔓).

Expanded view:



To change back to the compact view, click [−].

## Minimizing Sprint Connection Manager

To save space on your screen for other programs, you can minimize Sprint Connection Manager:

▶ Click ▬ (in the upper right corner of Sprint Connection Manager).

– or –

Click the Sprint Connection Manager icon ![icon] in the system tray.

– or –

Right-click the system tray icon and select **Close Sprint Mobile Broadband**.

You can use the system tray icon to monitor the connection state (page 39).

| **Tip:** | You can set Sprint Connection Manager to start minimized. (See "Start in system tray" on page 62.) |
|---|---|

| **Tip:** | You can prevent Sprint Connection Manager from minimizing by setting **Always on top** (page 62). |
|---|---|

## Restoring Sprint Connection Manager

To restore Sprint Connection Manager when it is minimized:

▶ Click the Sprint Connection Manager icon ![icon] in the system tray.

– or –

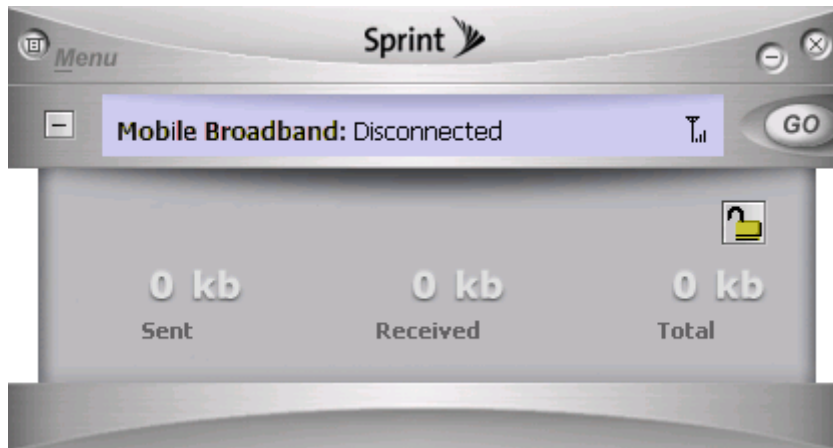Right-click the system tray icon and select **Open Sprint Mobile Broadband**.

## Exiting Sprint Connection Manager

To exit Sprint Connection Manager:

▶ In Sprint Connection Manager, select **Menu > Exit**, or click the ![icon] button,

– or –

Right-click the Sprint Connection Manager icon ![icon] in the system tray and, from the shortcut menu, select **Exit**.

If **Enable NIC for data connections** (page 64) has not been selected, and a connection is in progress, a window is displayed asking whether you want to disconnect the call. To end the connection and close Sprint Connection Manager, you must click **Yes**.

Sprint Connection Manager closes, and the Sprint Connection Manager icon disappears from the system tray.

| Note: | If **Enable NIC for data connections** (page 64) has been selected, after exiting Sprint Connection Manager you are still connected to the network (data may still be transferred). To manage the connection, use the Windows network connection icon in the system tray. |
|---|---|

## Launching a Sprint Power Vision or Sprint Vision Connection

**To launch a connection:**

▶ In Sprint Connection Manager, click **GO**. (If **GO** is unavailable, see "GO Button Is Unavailable" on page 82.)

| Note: | A connection is automatically established if, after you select **Menu > Location & Search Services**, a GPS fix is successfully acquired. |
|---|---|

When the connection is successfully established, the network welcome screen appears (unless you have turned off the display of the welcome screens; see "Always show Welcome Screens" on page 64).



Sprint Connection Manager displays "Connected" or "Connected to NDIS" (page 37).

You can now use your Web browser, perform data transfers, and so on.

To monitor the status of the connection, you can use the text (page 35) and icons (page 33) in Sprint Connection Manager, and the icon in the system tray (page 39). You can also view the amount of data transferred (page 48).

| Tip: | You can optionally specify which application to automatically launch when the connection is established. (See "Auto-launch Upon Network Connection" on page 47.) |
|---|---|
| | You can also set the connection to launch automatically whenever available. (See "GO automatically when ready" on page 64.) If you also set Sprint Connection Manager to launch automatically (see "Launch when Windows starts" on page 62), this can provide an "always-on" connection, as long as you have network coverage. |
| | You can have a connection established automatically—without running Sprint Connection Manager—simply by starting whatever application you want to use (such as your Web browser or email application). Select **Enable NIC for data connections** (page 64). However, Sprint Connection Manager and its icon in the system tray won't be available for you to monitor the status of the connection. Location-Based Services also won't be available. |

## Roam Guard

The Roam Guard feature, when enabled, displays a warning message if you are roaming and a data connection is established or about to be established. The message reminds you that roaming rates may apply.



From the window with the warning message, you can:

- Turn off the warning message for this data session only ("Do not ask again during this data session.").

- Continue with the data connection ("Roam"), in which case you may be subject to roaming rates.

- End the data connection ("Cancel").

| **Note:** | This feature is available only if **Roam Mode** is set to **Automatic** (from the Sprint Vision option of the Settings window; page 63). |
|---|---|

**To turn on the Roam Guard feature:**

1. From the Sprint Vision option of the Settings window, ensure **Roam Mode** is set to **Automatic**.

2. Select **Roam Guard**.

**To permanently turn off the Roam Guard feature:**

▶ From the Sprint Vision option of the Settings window, clear **Roam Guard**.

# Auto-launch Upon Network Connection

You can optionally specify which application to automatically launch when a Sprint Power Vision or Sprint Vision connection is established.

**To specify which application to automatically launch:**

1. Ensure Sprint Connection Manager is running and not locked (page 51).

2. Ensure that your Sprint Mobile Broadband USB modem is not powered off (page 38).

3. Select **MENU > Settings > Sprint Vision - Sierra Wireless**.

4. Select **Auto Launch**.

5. In the Auto-Launch Options window, select one of the following:

   ▪ **None** — Do not auto-launch any application.

   ▪ **Website** — Auto-launch Internet Explorer. In the URL field, specify the Web site (such as http://www.sierrawireless.com) you want to view on connection.

   ▪ **Microsoft VPN (PPTP) Connection** — Auto-launch a Windows VPN connection. Type in the address of the VPN connection, or, from the drop-down list, select the VPN connection.

   ▪ **Application (VPN client, etc.)** — Auto-launch an installed VPN program, or any other program. In the field, enter the path to the program, or use the Browse button to locate the program.

The changes are applied the next time you launch a connection.

| **Note:** | This feature functions only when Sprint Connection Manager is running. |
|---|---|

# Viewing the Amount of Data Transferred

| **Note:** | Even though the number of bytes sent and received is displayed while the connection is running, this is not necessarily the actual amount of data being transmitted across the network. **Do not use this information to estimate billing.** |
| --- | --- |
| | If **Enable NIC for data connections** (page 64) has been selected, after exiting Sprint Connection Manager you are still connected to the network. Data may still be transferred. |

**To view the number of bytes sent/received during the current connection:**

▶ If Sprint Connection Manager is not expanded, click the ⊞ button.

The number of bytes sent/received during the current connection is displayed, in three significant digits (such as 581 kb, 1.23 Mb, 1.81 Mb).
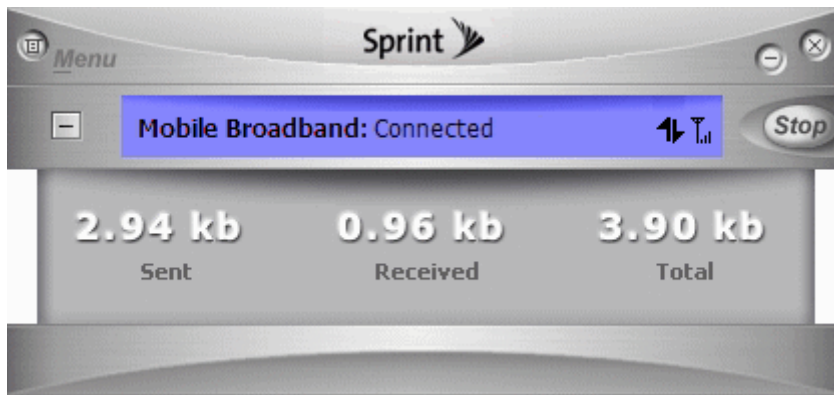
Once you end the connection, the figures reset to zero.

To hide the part of Sprint Connection Manager that displays this information, click the ⊟ button.

# Ending a Connection

**To end a connection:**

▶ In Sprint Connection Manager, click **Stop**.

If **Enable NIC for data connections** (page 64) has not been selected, and you exit Sprint Connection Manager while a connection is in progress, a window is displayed asking whether you want to disconnect the call. By clicking **Yes**, you can end the connection and exit Sprint Connection Manager. (See "Exiting Sprint Connection Manager" on page 44.)

If **Enable NIC for data connections** has been selected, manually disconnecting will leave the device disconnected. It will not reconnect until you remove and reinsert the device.

If **GO automatically when ready** (page 64) has been selected, manually disconnecting will leave the device disconnected. It will not reconnect until one of the following occurs:

● You make a connection through Sprint Connection Manager

● A GPS fix is successfully acquired after you initiate Location-Based Services (page 40)

● You restart Sprint Connection Manager

# Online Help

Sprint Connection Manager includes extensive online help to provide operating hints and step-by-step instructions for getting the most from your Sprint Mobile Broadband USB modem.

With Sprint Connection Manager running, you can access online help in several ways:

● Press <F1> in any window.

● From the Sprint Connection Manager window, select **MENU > Help**.

● Right-click the system tray icon (  ) and select **Help**.

● Click the **Help** button available in many windows.

The help file has a table of contents and an index.

# Displaying Your Phone Number

You can view your phone number in the Device Info & Diagnostics window
(**Menu > Device Info & Diagnostics**).

# Security

When it is disconnected, you can lock your Sprint Mobile Broadband USB modem
so that others cannot use the device and your account. A four-digit lock code is
needed to unlock the device.

You can set the Sprint Mobile Broadband USB modem to lock:

- Whenever Sprint Connection Manager is started (page 51).

    – or –

- Immediately (without restarting Sprint Connection Manager) — useful if you
  are lending your Sprint Mobile Broadband USB modem and PC or leaving your
  computer for a short time (page 51).

## Initial Lock Code

The initial lock code value is determined by your service provider.

For service provider configurations that do not require account activation, a
default lock code is set at the factory to a value determined by the service
provider. For assistance, contact Sprint (page 28).

Configurations that use the Activation Wizard set the initial lock code to the last
four digits of your account phone number whenever a new phone number is
activated.

After activation, you can change the lock code (page 53) from the initial value to
any four-digit code you choose. (See "Warning Regarding the Lock Code" below.)

| Note: | The security lock code is reset to the last four digits of the phone number whenever an account is activated. This may change a custom value you have set. |
|---|---|

## Warning Regarding the Lock Code

If you lock the Sprint Mobile Broadband USB modem and forget the lock code, you
will not be able to use the device until you receive assistance from Sprint.

## When the Sprint Mobile Broadband USB Modem Is Locked

When the Sprint Mobile Broadband USB modem is locked, you can:

● Unlock the device (page 52).

● Power off the device (page 42).

When the device is locked, you cannot:

● Make data connections (the **GO** button is unavailable).

● Use Location-Based Services.

● Run the Activation Wizard.

## Locking the Device

| | |
|---|---|
| **Warning:** | If you forget the lock code, you will not be able to use the device until you receive assistance from Sprint. |

**To lock the Sprint Mobile Broadband USB modem immediately:**

1. End any active connection. (You can lock the device only when it is disconnected; page 36.)

2. If Sprint Connection Manager is not expanded, click [+] to expand it.

3. Click the [🔓] icon.

4. In the Enter User Lock Code window, enter the lock code, and click **OK**.

When the device is locked, Sprint Connection Manager displays "Device locked," and the lock icon is now [🔒]. The **GO** button is unavailable.

| | |
|---|---|
| **Tip:** | You can also set the device to be locked upon startup of Sprint Connection Manager, as described next. |

## Locking Upon Sprint Connection Manager Startup

**To set the Sprint Mobile Broadband USB modem to lock as soon as Sprint Connection Manager starts up:**

1. End any active connection. (You can lock the device only when disconnected; see page 36.)

2. If Sprint Connection Manager is not expanded, click [+] to expand it.

3. Click the lock icon ([🔒] or [🔓], depending on the current lock status).

**4.** In the Enter User Lock Code window, enter the lock code, and select **Relock modem when program exits**.

**5.** Click **OK**.

| Note: | This setting takes effect only after you exit and restart Sprint Connection Manager. |
|---|---|

## Unlocking the Device

When the device is locked, Sprint Connection Manager displays "Device locked," and the lock icon is .

**To unlock the device:**

**1.** If Sprint Connection Manager is not expanded, click  to expand it.

**2.** Click the  icon.

**3.** In the Enter User Lock Code window, enter the lock code, and click **OK**.

When the device is unlocked, Sprint Connection Manager no longer displays "Device locked," and the lock icon is .
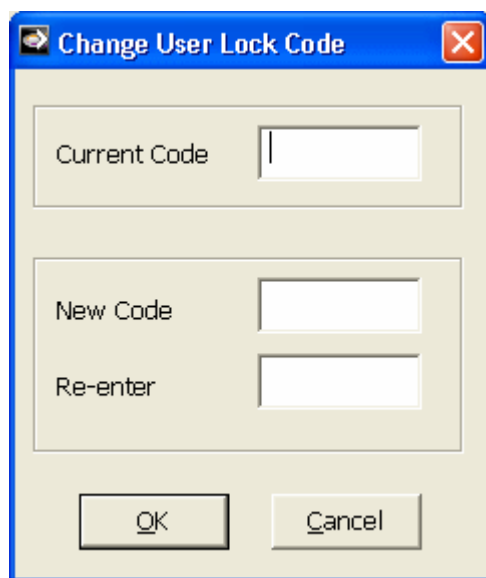
## Changing the Lock Code

| Warning: | If you forget the lock code, you will not be able to use the device until you receive assistance from Sprint. |
|---|---|

**To change the lock code:**

1. In the Sprint Vision settings window, click **User Lock Change**.

   The Change User Lock Code window is displayed:



2. Enter the current lock code.

3. Enter a new four-digit lock code.

4. Enter the new lock code for confirmation.

5. Click **OK**.

# Accessing Links

For your convenience, Sprint Connection Manager includes links to Sprint products and services. To access these links:

1. In Sprint Connection Manager, click **Menu**.

2. Select **Links**.

| Note: | You cannot add or remove links from the **Links** menu. To add or remove links, use your Web browser. |
|---|---|

# Uninstalling the Sprint Connection Manager Software

To remove the Sprint Connection Manager software from your computer, use the Add/Remove Programs utility built into your Windows operating system.

1. Exit Sprint Connection Manager (page 44).

2. Remove the Sprint Mobile Broadband USB modem. (See "Removing the Sprint Mobile Broadband USB Modem" on page 21.)

3. Select **Start > Control Panel** and select:

   (Windows Vista) **Programs and Features**.
   (Windows XP or Windows 2000) **Add/Remove Programs**.

   The Windows Add/Remove Programs utility will start. Be sure the Change or Remove Programs feature is selected (default).

4. From the list, select **Sprint Mobile Broadband (Sierra)**, and click **Remove** or **Uninstall**.

# Menu Options

## In This Section

♦ **Sprint Connection Manager Menu**

♦ **System Tray Menu**

This chapter describes each menu option you may encounter while using your Sprint Mobile Broadband USB modem and the Sprint Connection Manager software.

# Sprint Connection Manager Menu

Clicking **Menu** or the ▣ button, located in the upper left corner of Sprint Connection Manager, displays the Sprint Connection Manager menu.
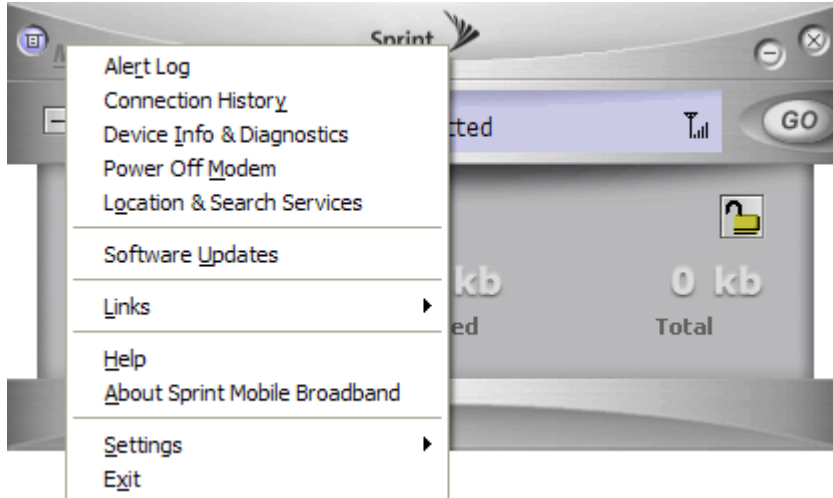


| Note: | Depending on your configuration and settings, not all menu options may be shown or enabled as described here. |
|---|---|

| Tip: | You can also display the menu by positioning the cursor over the **Menu** text or ▣ button and then pressing the spacebar or Enter key on your keyboard. To hide the menu, press **Esc**, or click outside the menu. |
|---|---|

The following table describes the menu options:

| Menu Item | Description |
|---|---|
| **Alert Log** | View a record of all alerts (for example, connection errors) that have been received while establishing and maintaining connections.<br><br>See "Viewing Alerts" on page 71. |
| **Connection History** | View a record of connections established using your Sprint Mobile Broadband USB modem (unavailable if the Connection History is empty, or if **Keep Connection History** [page 62] is not selected).<br><br>See "Viewing the Connection History" on page 70. |

| Menu Item | Description |
|---|---|
| **Device Info & Diagnostics** | View information about your Sprint Mobile Broadband USB modem and run diagnostic tests.<br><br>See "Running Diagnostics" on page 72. |
| **Power Off Modem** | Power off your Sprint Mobile Broadband USB modem.<br><br>See "Powering the Device On and Off" on page 42. |
| **Location & Search Services** | Query the network for information on points of interest that are near your current location.<br><br>See "Location-Based Services" on page 40. |
| **Software Updates** | Retrieve updates for Sprint Connection Manager and your Sprint Mobile Broadband USB modem.<br><br>See "Updating the Software" on page 74. |
| **Links** | Access links to Sprint products and services.<br><br>See "Accessing Links" on page 53. |
| **Help** | Display the online Help, which has operating hints and step-by-step instructions for getting the most from your Sprint Mobile Broadband USB modem.<br><br>See "Online Help" on page 49. |
| **About Sprint Mobile Broadband** | Display brief information about the Sprint Connection Manager software. To close the window, click anywhere inside it.<br><br>See "About Sprint Mobile Broadband" on page 75. |
| **Settings** | Change the settings for Sprint Connection Manager. Contains submenu items:<br><br>● **General**: See "General Settings" on page 61.<br>● **Sprint Vision - Sierra Wireless**: See "Sprint Vision Settings" on page 63.<br>● **Sprint Location Services**: See "Sprint Location Services Settings" on page 66. |
| **Exit** | Exits Sprint Connection Manager. |

# System Tray Menu

When you right-click the system tray icon (), a shortcut menu is displayed:



The following table describes the menu options:

| Menu Item | Description |
|---|---|
| **Open/Close Sprint Mobile Broadband** | Minimize Sprint Connection Manager (**Close**), or restore (**Open**) if Sprint Connection Manager is minimized. |
| **Help** | Display the online Help. |
| **About Sprint Mobile Broadband** | Display brief information about the Sprint Connection Manager software. To close the window, click anywhere inside it. |
| **Exit** | Exit Sprint Connection Manager. |

# Changing the Settings of Sprint Connection Manager

## In This Section

♦ **Settings Window**

♦ **General Settings**

♦ **Sprint Vision Settings**

♦ **Sprint Location Services Settings**

This chapter describes the windows from which you can change the settings for Sprint Connection Manager.

## Settings Window

| Note: | This feature is temporarily unavailable if you have powered off the device (page 42). |
|---|---|

From the Settings window, you can specify the settings for Sprint Connection Manager.

1. In Sprint Connection Manager, click **Menu**.

2. Select **Settings**.

3. From the drop-down list, select one of the following categories of settings:

   - General (general behavior of Sprint Connection Manager)

   - Sprint Vision - Sierra Wireless (behavior of your Sprint Power Vision or Sprint Vision connection)

   - Sprint Location Services

4. Make the appropriate changes to the settings (described in the following pages).

5. To change other settings, repeat steps 3 and 4.

6. Click **OK**.

| Note: | Changes to the setting **Launch when Windows starts** apply only after you restart Windows. Changes to the setting **Start in system tray** apply only after you exit and restart Sprint Connection Manager. |
|---|---|

| Tip: | You can also access the Settings window from the Connection History window (page 70): click **File > Settings**. |
|---|---|

# General Settings

From the General option of the Settings window, you can specify settings that affect the general behavior of Sprint Connection Manager.

The following table describes the options:

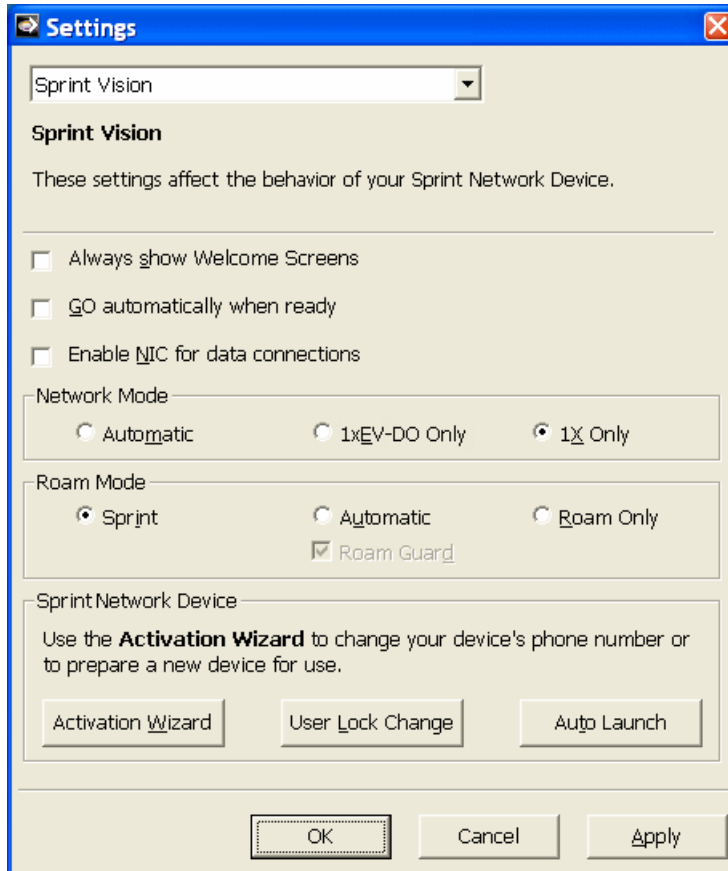| Menu Item | Description |
|---|---|
| **Play sound effects** | Play a clicking sound whenever an action is made in Sprint Connection Manager. |
| **Always on top** | Keep Sprint Connection Manager visible on your screen regardless of which applications are open. |
| **Start in system tray** | Have Sprint Connection Manager start (minimized) in the system tray on startup. (See "Restoring Sprint Connection Manager" on page 44.) |
| **Keep Connection History** | Have Sprint Connection Manager keep a log of your data connections (page 70). |
| **Launch when Windows starts** | Have Sprint Connection Manager start automatically when Windows starts.<br><br>**Tip:** You can also set the Sprint Power Vision or Sprint Vision connection to launch automatically whenever available (see "**GO automatically when ready**" on page 64). These settings provide an "always-on" connection, as long as you have network coverage. |
| **Check for updates once per month** | Have Sprint Connection Manager automatically check for software updates (page 74). |
| **Check Now** | Check for software updates immediately.<br><br>**Note:** During the software update, Sprint Connection Manager will close. Before you initiate the software update, finish any Web browsing, data transfers, and so on. |

| **Note:** | Changes to the setting **Launch when Windows starts** apply only after you restart Windows. Changes to the setting **Start in system tray** apply only after you exit and restart Sprint Connection Manager. |
|---|---|

# Sprint Vision Settings

From the Sprint Vision option of the Settings window, you can change the behavior of your Sprint Power Vision or Sprint Vision connection.
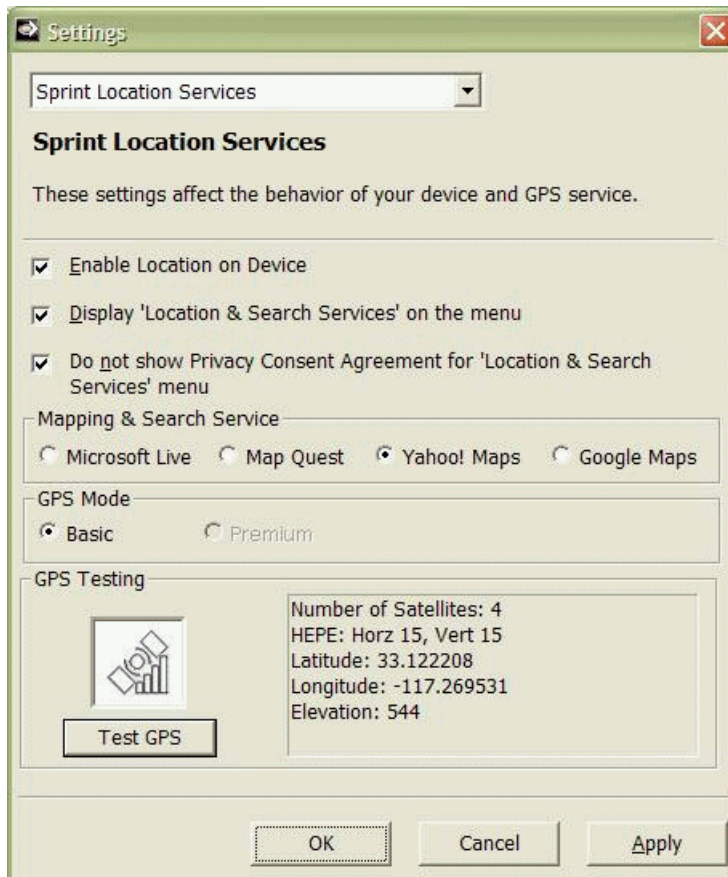
The following table describes the options:

| Menu Item | Description |
|---|---|
| **Always show Welcome Screens** | Display a welcome screen upon a successful connection to the network. |
| **GO automatically when ready** | Automatically connect to the network after Sprint Connection Manager starts, or whenever Sprint Connection Manager loses the network connection.<br><br>To select **GO automatically when ready**, ensure that **Enable NIC for data connections** (below) is not selected.<br><br>**Tip:** You can also set Sprint Connection Manager to start automatically (see "**Launch when Windows starts**" on page 62). These settings provide an "always-on" connection, as long as you have network coverage.<br><br>You can have a connection established automatically, without having to run Sprint Connection Manager. Ensure that **GO automatically when ready** is not selected, and select **Enable NIC for data connections** (below). |
| **Enable NIC for data connections** | Make a connection automatically, without running Sprint Connection Manager—simply by starting whatever application you want to use (such as your Web browser or email application).<br><br>To select **Enable NIC for data connections**, ensure that **GO automatically when ready** (above) is not selected.<br><br>**Note:** Location-Based Services are available only when Sprint Connection Manager is running. |
| **Network Mode: Automatic** | Attempt a Sprint Power Vision (1xEV-DO) connection and, if not successful, attempt the slower Sprint Vision (1X) connection. |
| **Network Mode: 1xEV-DO Only** | Attempt only a Sprint Power Vision (1xEV-DO) connection.<br>**Note:** When in an area that has only Sprint Vision (1X) coverage, you won't be able to connect to the network. |

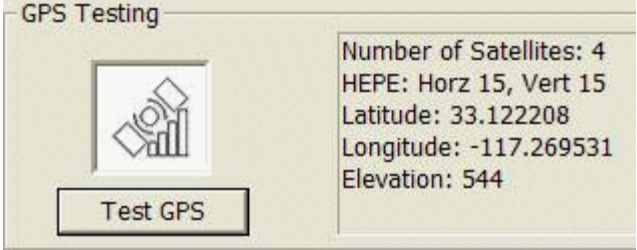| Menu Item | Description |
|---|---|
| **Network Mode: 1X Only** | Attempt only a Sprint Vision (1X) connection (even when you are in Sprint Power Vision [1xEV-DO] coverage, which provides faster data transmission speeds). <br><br> **Note:** When in an area that has only Sprint Power Vision (1xEV-DO) coverage, you won't be able to connect to the network. |
| **Roam Mode: Sprint** | Disable roaming when Sprint coverage is unavailable. You will be able to connect only when Sprint coverage is available. |
| **Roam Mode: Automatic** | Allow roaming when Sprint coverage is unavailable. <br><br> **Note:** Roaming rates may apply. Roam Guard (page 46) can remind you of this. |
| **Roam Mode: Roam Only** | Allow only roaming. <br><br> **Note:** Roaming rates may apply. Roam Guard (page 46) can remind you of this. |
| **Roam Mode: Roam Guard** | Display a warning message when you are about to establish a data connection while roaming. For more information, see "Roam Guard" on page 46. <br><br> Available only if Roam Mode is set to Automatic (page 65). <br><br> **Note:** If you proceed with the data connection, roaming rates may apply. |
| **Activation Wizard** | Used only when activating a Sprint Mobile Broadband USB modem, or when changing your device's phone number (page 24). |
| **User Lock Change** | Change the security lock code of the Sprint Mobile Broadband USB modem (page 53). |
| **Auto Launch** | Optionally specify which application to automatically launch when a connection is established. <br><br> See "Auto-launch Upon Network Connection" on page 47. |

# Sprint Location Services Settings

From the Sprint Location Services option of the Settings window, you can change the behavior of the Location-Based Services. (For more information on Location-Based Services, see page 40.)

The following table describes the options:

| Menu Item | Description |
|---|---|
| **Enable Location on Device** | Turn on support (by your device) for Location-Based Services.<br><br>**Note:** To use Location-Based Services, your account must also be configured appropriately. If you are unable to use Location-Based Services, contact Sprint Customer Service (page 28). |
| **Display 'Location & Search Services' on the menu** | Show or hide the Sprint Connection Manager menu item that displays the Sprint Nextel Location & Search window. For more information on this window, see "Location-Based Services" on page 40.<br><br>**Note:** If you hide this menu item, you won't be able to access Location-Based Services. |
| **Do not show Privacy Consent Agreement for 'Location & Search Services' menu** | Prevent a Privacy Consent Agreement window from appearing every time you invoke Location-Based Services. |
| **Microsoft Live**<br><br>**MapQuest**<br><br>**Yahoo! Maps**<br><br>**Google Maps** | Specify which mapping and search service (for example, Microsoft® Live, or Google™ Maps) Internet Explorer uses for Location-Based Services.<br><br>Some mapping and search services may have data that is more current or accurate than that of other mapping and search services. |

| Menu Item | Description |
|-----------|-------------|
| **Test GPS** | Verify that your device is able to obtain data for Location-Based Services. |
| | The results  (including the number of satellites, latitude, longitude, and elevation information) are displayed to the right of the **Test GPS** button. |

GPS Testing

Number of Satellites: 4
HEPE: Horz 15, Vert 15
Latitude: 33.122208
Longitude: -117.269531
Elevation: 544

Test GPS

# Tools

## In This Section

- ◆ **Viewing the Connection History**
- ◆ **Viewing Alerts**
- ◆ **Running Diagnostics**
- ◆ **Updating the Software**
- ◆ **About Sprint Mobile Broadband**

This chapter describes various features you can use to view information about the Sprint Mobile Broadband USB modem and the Sprint Connection Manager software.

# Viewing the Connection History

Connection History displays a record of connections established using your Sprint Mobile Broadband USB modem. You can sort records by connection name to easily distinguish between personal and business usage.
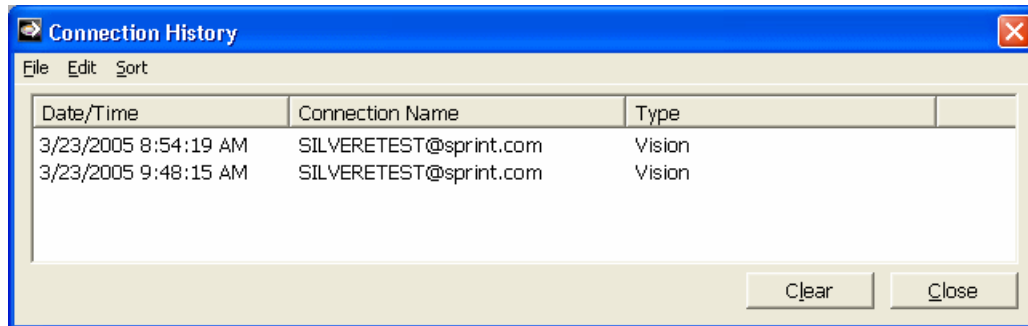


From this window you can also access the Settings window (page 60) (**File > Settings**).

| Note: | For connections to be recorded, **Keep Connection History** must be enabled (page 62). |
|---|---|

**To view the Connection History:**

1. In Sprint Connection Manager, click **Menu**.

2. Select **Connection History**.

**To sort the entries:**

▶ Click the button that contains the title of the column you want to sort by. (You can reverse the sort order by clicking the button again.)

– or –

Click an option under the **Sort** menu.

**To export the entries to a text file:**

1. Select **File > Export**.

2. Specify a file name and path.

3. Click **Save**.

**To copy one or more entry:**

1. Select the entries. (Click a single entry, or use Ctrl-click or Shift-click to select multiple entries; to select all entries, select **Edit > Select All**.)

2. Select **Edit > Copy**.

3. Paste the entries (for example, into a text file or email message).
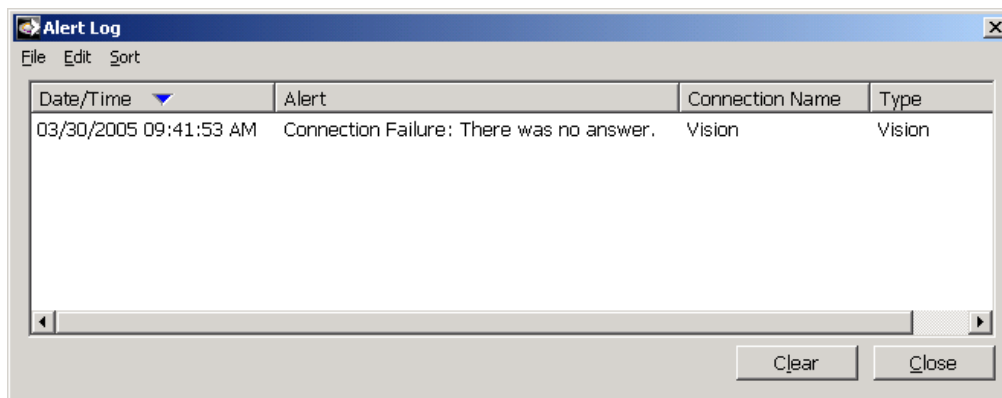
**To delete all entries:**

▶ Click the **Clear** button.

**To delete one or more entry:**

1. Select the entries. (Click a single entry, or use Ctrl-click or Shift-click to select multiple entries.)

2. Select **Edit > Delete**.

# Viewing Alerts

The Alert Log displays a record of all alerts (for example, connection errors) that have been received while establishing and maintaining connections. You can use the Alert Log to help isolate and resolve connection issues.



**To view the Alert Log:**

1. In Sprint Connection Manager, click **Menu**.

2. Select **Alert Log**. (This menu option is unavailable if the alert log is empty.)

**To sort the entries:**

▶ Click the button that contains the title of the column you want to sort by. (You can reverse the sort order by clicking the button again.)

 – or –

Click an option under the **Sort** menu.

**To export the entries to a text file:**

1. Select **File > Export**.

2. Specify a file name and path.

3. Click **Save**.

**To copy one or more entry:**

1. Select the entries. (Click a single entry, or use Ctrl-click or Shift-click to select multiple entries; to select all entries, select **Edit > Select All**.)

2. Select **Edit > Copy**.

3. Paste the entries (for example, into a text file or email message).

**To delete all entries:**

▶ Click the **Clear** button.

**To delete one or more entry:**

1. Select the entries. (Click a single entry, or use Ctrl-click or Shift-click to select multiple entries.)

2. Select **Edit > Delete**.

# Running Diagnostics

To identify problems when connecting to the network, use the Device Info & Diagnostics window. Device Info & Diagnostics evaluates issues with your USB port, port configuration, network signal strength, Sprint Connection Manager, and more. Once the program runs a diagnostics check, it recommends solutions.

The program also displays information such as your phone number.

Results of the diagnostics can be shared with a Sprint Customer Service Specialist, to assist that person with troubleshooting.

**To access the Device Info & Diagnostics window:**

1. Ensure the Sprint Mobile Broadband USB modem is inserted.

2. In Sprint Connection Manager, click **Menu**.

3. Select **Device Info & Diagnostics**.

The tests automatically start when the window opens.
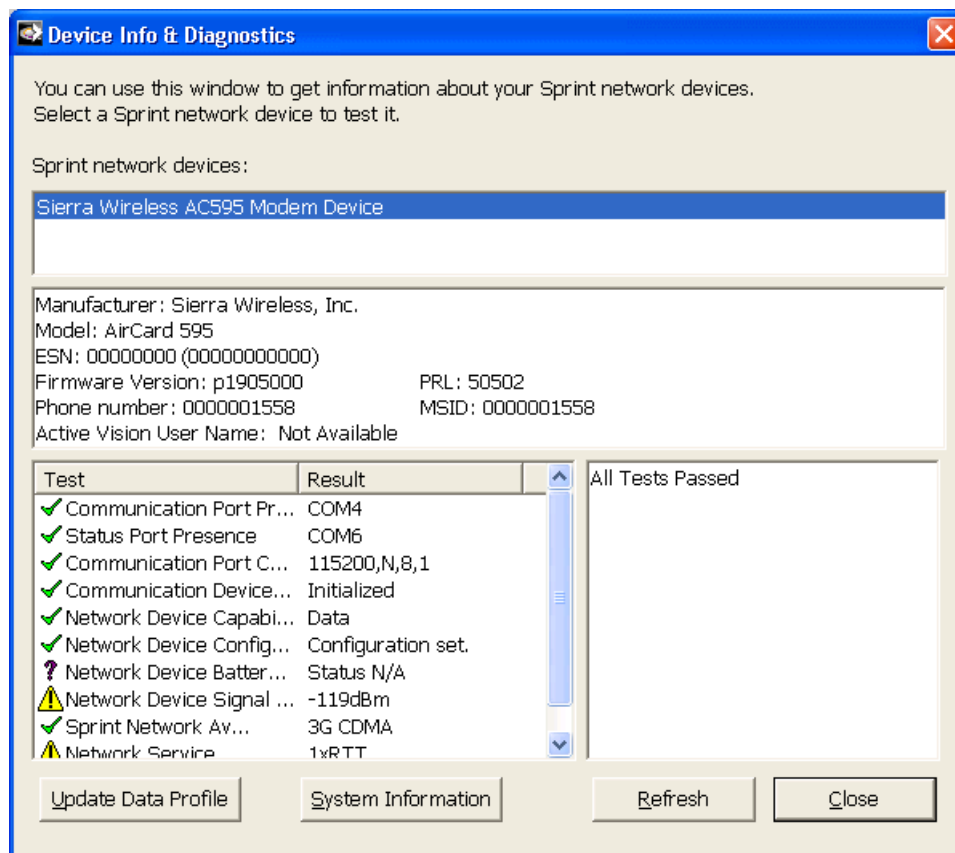


From the Device Info & Diagnostics window, you can view system information (page 74) and save the system information to an RTF file.

From the Device Info & Diagnostics window, you can also update parameters in your Sprint Mobile Broadband USB modem:

▶ Click **Update Data Profile**. (If this button is not displayed, remove and reinsert the device.)

## Displaying System Information

The System Information window displays:

- **System Parameters:** Information about your computer hardware and software.
- **Installed Files**: Files related to Sprint Connection Manager.
- **Device Info & Diagnostics**: Information about the Sprint Mobile Broadband USB modem (including its phone number), and results of various tests.

**To display system information:**

1. Select **Menu > Device Info & Diagnostics**.
2. In the Device Info & Diagnostics window, click **System Information**.

**To save the information to a file (for example, if you are requested to send the report to your service provider representative):**

1. In the System Information window, click **Create Report**.
2. Specify a file name and path.
3. Click **Save**.

# Updating the Software

From time to time, Sprint may release updates for Sprint Connection Manager and your Sprint Mobile Broadband USB modem. These updates may add features or improve network performance.

| **Note:** | During the software update, Sprint Connection Manager will close. Before you initiate the software update, finish any Web browsing, data transfers, and so on. |
| --- | --- |

**To update the software:**

1. Ensure you have a network connection.
2. In Sprint Connection Manager, click **Menu**. Select **Software Updates**.

   – or –

   From the General option of the Settings window (page 60), click **Check Now**.

**You can also set the software to automatically check for updates once a month:**

1. In Sprint Connection Manager, click **Menu** and then select **Settings**.
2. Select **Check for updates once per month**.

# About Sprint Mobile Broadband

The About Sprint Mobile Broadband window displays information about the Sprint Connection Manager software.

**To display this window:**

▶ In Sprint Connection Manager, click **Menu** and then select **About Sprint Mobile Broadband**.

– or –

Right-click the Sprint Connection Manager icon () in the system tray and, from the shortcut menu, select **About Sprint Mobile Broadband**.

To close this window, click anywhere inside it.

| **Tip:** | To display more information, you can run diagnostics (page 72). |
|----------|----------------------------------------------------------------|

# Frequently Asked Questions

## In This Section

♦ **What is Sprint Connection Manager?**

♦ **If the connection is "always on," am I always being billed?**

♦ **How fast is the connection with Sprint Connection Manager?**

♦ **Can I connect to a dial-up account like AOL or EarthLink?**

♦ **How do I get the location-enhanced Local Search feature?**

♦ **Where do I find the location-enhanced Local Search feature?**

♦ **How do I use the location-enhanced Local Search feature?**

♦ **Where can I use GPS?**

♦ **Once I connect to the network, how do I access my corporate network through a VPN?**

♦ **How can I optimize my settings to achieve the fastest speeds and conserve data when accessing my corporate network?**

♦ **Why won't my laptop go into hibernation mode when using my Sprint Mobile Broadband USB Modem?**

## What is Sprint Connection Manager?

Sprint Connection Manager is software that lets you connect to the Sprint Power Vision or Sprint Vision network. Sprint Connection Manager takes advantage of the increased data speeds offered by the Sprint Mobile Broadband Network.

## If the connection is "always on," am I always being billed?

No. The connection to the network goes dormant after a period of inactivity, but the connection can be re-established faster than having to reconnect. Billing occurs only when data is passed across the network.

## How fast is the connection with Sprint Connection Manager?

The Sprint Mobile Broadband Network allows you to connect to the Internet at speeds of up to 3.1 Mbps (1xEV-DO Rev. A), 2.4 Mbps (1xEV-DO Rev. 0), or 144 kbps (1X). Average connection speeds are:
For 1xEV-DO Rev. A: between 600 kbps and 1.4 Mbps downlink from the network, and between 350 and 500 kbps uplink to the network;
For 1xEV-DO Rev. 0: between 400 and 700 kbps downlink from the network, and between 40 and 80 kbps uplink to the network;
For 1X: between 40 and 80 kbps.

These speeds are faster than dial-up connection speeds.

## Can I connect to a dial-up account like AOL or EarthLink?

No. The software does not support dial-up connections.

## How do I get the location-enhanced Local Search feature?

The location-enhanced Local Search feature works only with GPS-capable data cards and the latest version of Sprint Connection Manager. The feature is available at no additional charge in the latest version of Sprint Connection Manager.

# Where do I find the location-enhanced Local Search feature?

In Sprint Connection Manager, select **Menu > Location & Search Services**.

# How do I use the location-enhanced Local Search feature?

When running Sprint Connection Manager, select **Menu > Location & Search Services**. Some predefined, most frequently used queries are listed. There is also an option to run your own custom query.

# Where can I use GPS?

GPS works wherever there is both Sprint CDMA network access and GPS access.

| **Note:** | In some locations where CDMA network access is available, GPS may not be available at this time. For the latest on service available by location, refer to Sprint Nextel Coverage maps. |
|---|---|

# Once I connect to the network, how do I access my corporate network through a VPN?

Once you complete a wireless connection, you may need to launch an extranet client provided by your company and supply the appropriate username and password to gain access. For support, contact your company help desk.

## How can I optimize my settings to achieve the fastest speeds and conserve data when accessing my corporate network?

Depending on your corporate email client, you can optimize your settings by doing the following:

- Work in "offline" mode, and connect only when you need to send or receive email.
- Remove the Preview Pane, or use the AutoPreview for headers only.
- Save attachments to a desktop folder and then open from that folder, rather than opening the attachment directly from the message.

For more information, access the Microsoft white paper at: www.microsoft.com/office/outlook/evaluation/perform.doc.

## Why won't my laptop go into hibernation mode when using my Sprint Mobile Broadband USB Modem?

If you're using Windows 2000, you need to upgrade to Service Pack 4 from www.microsoft.com.

# Troubleshooting Tips

## In This Section

⬥ **Problems, Causes, and Solutions**

⬥ **GO Button Is Unavailable**

⬥ **Searching for Service**

⬥ **Cannot Connect to the Network**

⬥ **PWR LED Goes Off and On, and Then Stays Red**

⬥ **Location-Based Services Don't Seem To Be Available**

⬥ **Could Not Prepare Data Services**

⬥ **Unable To Prepare Data Services**

⬥ **Sprint Connection Manager Stops Working After Upgrading Windows**

This section helps you diagnose and solve common problems you may experience while using your Sprint Mobile Broadband USB modem and the Sprint Connection Manager software.

# Problems, Causes, and Solutions

When properly installed, the Sprint Mobile Broadband USB modem is a highly reliable product.

Most problems are caused by one of these issues:

- Network coverage is not available (because of your "Network Mode" settings [page 63], or because you are outside the network, or because of an account or network problem).

- The drivers were not properly installed because of a problem with your computer's USB slot.

- System resources required by the device are being used by other devices.

Tips when troubleshooting problems with your Sprint Mobile Broadband USB modem and software:

- Ensure your device is inserted, not locked (page 51), and not powered off (page 38).

- Ensure the PWR LED is green.

- To determine the connection status, use the icons in the system tray (page 39), and icons and messages in Sprint Connection Manager (page 33 and page 35).

- The alert log might indicate the nature of the problem (page 71).

- Run diagnostic tools supplied with Sprint Connection Manager (page 72).

- Check the Frequently Asked Questions (page 76).

- Use the resources listed in "Getting Help" (page 27).

- Has Sprint Connection Manager stopped working after you've upgraded to a different version of Windows (page 85)?

If, after reading this section, you are unable to resolve a problem, please visit www.sprint.com or contact Sprint Customer Service. (See "Getting Help" on page 27.)

# GO Button Is Unavailable

Ensure the Sprint Mobile Broadband USB modem is properly inserted, not locked (page 51), and not powered off (page 38).

If Sprint Connection Manager displays "Searching for service" for a long period of time (for example, several minutes), see "Searching for Service" below.

If **Roam Mode** is set to **Sprint**, ensure you are not roaming, or change the setting (page 65). (You may be subject to roaming rates.)

# Searching for Service

If Sprint Connection Manager displays "Searching for service" for a long period of time (for example, several minutes), try one of the following:

- Try reorienting your computer, or try adjusting the angle of the device's USB connector (see the picture on page 18).

- If you are inside a building or near a structure that may be blocking the signal, change the position or location of your computer.

- If **Roam Mode** is set to **Sprint**, ensure you are within the network coverage area, or change the Roam Mode setting. (You may be subject to roaming rates.)

- If **Roam Mode** is set to **Roam Only**, ensure you are roaming, or change the Roam Mode setting.

- If **Network Mode** is set to **1X Only**, and only 1xEV-DO coverage is available, either move to an area that has 1X coverage, or change the setting to **Automatic** or **1xEV-DO Only**.

- If **Network Mode** is set to **1xEV-DO Only**, and only 1X coverage is available, either move to an area that has 1xEV-DO coverage, or change the setting to **Automatic** or **1X Only**.

- Check with Sprint — a network or account problem may be preventing the Sprint Mobile Broadband USB modem from obtaining service.

# Cannot Connect to the Network

If you're having problems connecting, or there's no Sprint Power Vision (1x-EVDO) coverage in your area, set **Network Mode** to **1X Only**, and try to establish a connection.

If the connection is dropped as soon as it is established:

▶ Charge the battery for at least 30 minutes if the PWR LED is red. (If the connection still gets dropped as soon as it is established, continue with the following steps.)

– or –

1. Select:

   (Windows Vista) **Start > Control Panel > Network and Sharing Center > Manage Network Connections**
   (Windows XP) **Start > Control Panel > Network Connections**

   (Windows 2000) **Start > Settings > Control Panel > Network and Dial-Up Connections**

2. Right-click **Sprint Vision - Sierra Wireless**, and select **Properties**.

3. Select:

   (Windows Vista) **Options**, and select **PPP Settings**.
   (Windows XP) **Networking** tab, and select **Settings**.

4. Ensure that "Enable LCP Extensions" is selected and "Negotiate multi-link for single link connections" is **not** selected.

5. Click **OK**.

# PWR LED Goes Off and On, and Then Stays Red

This situation may occur under extreme usage conditions when you're transmitting data in a coverage area with a weak signal.

1. Wait until the PWR LED turns green.

2. Resume your connection.

▶ If the PWR LED still goes off, and then comes on again and stays red, charge the battery for at least 30 minutes.

# Location-Based Services Don't Seem To Be Available

If the menus or windows related to Location-Based Services are unavailable in Sprint Connection Manager:

▶ In the Settings window (page 60), check whether the drop-down list has a **Sprint Location Services** option.

If the drop-down list does not have the **Sprint Location Services** option, then your account, your device, or both are not configured to support Location-Based Services; contact Sprint Customer Service (page 28).

If the drop-down list has the **Sprint Location Services** option, select it and ensure that **Enable Location on Device** and **Display 'Location & Search Services' on the menu** are selected.

# Could Not Prepare Data Services

See "Unable To Prepare Data Services" (page 84).

# Unable To Prepare Data Services

| Note: | The message may appear as **"Could not prepare data services. Please contact…"** |
| --- | --- |

The Sprint Mobile Broadband USB modem was unable to access the IOTA server to obtain data account parameters for you. This may be because the signal strength is poor or because the IOTA server is not responding.

● Confirm you have sufficient signal strength. Try the actions listed for "Searching for Service" (page 82).

● Contact Sprint for assistance (page 28).

This message may indicate that your system does not support 128-bit encryption for high-security access to data provisioning. You will not be able to complete the activation of data services until you upgrade your system's security. (See "High Encryption Requirements" on page 9.)

# Sprint Connection Manager Stops Working After Upgrading Windows

| Note: | After the following steps, any changes you made to Sprint Connection Manager settings will be lost; you will have to reapply the changes. |
|---|---|

If you've upgraded Windows, and Sprint Connection Manager stopped working:

1. Uninstall Sprint Connection Manager (page 54).
2. Reinstall Sprint Connection Manager (page 15).

# Technical Specifications and Regulatory Information

Sprint®

# Technical Specifications

## In This Section

- **LED Operation**
- **Radio Frequency and Electrical Specifications**
- **Software Specifications**
- **Environmental Specifications**
- **Mechanical Specifications**

This section describes the LED and various specifications of your Sprint Mobile Broadband USB modem.

# LED Operation

Your device has two LED lights. The LEDs operate as follows:

| LED | State | Indicates |
|---|---|---|
| **Data** | Off | The device has no power. The device may not be completely inserted into the computer, the computer may be in suspend mode (which powers down the device), or you have powered the device off (page 42). |
| | Solid green | The device has power, has found a signal, and is ready to connect. |
| | Green, blinking slowly | The device is powering up, or no service is available. See "Searching for Service" on page 82. |
| | Green, blinking rapidly | The device is sending or receiving data. |
| **PWR** | Off | The device has no power. The device may not be completely inserted into the computer, the computer may be in suspend mode (which powers down the device), or you have powered the device off (page 42). |
| | Red | The device has power; the battery is low. Charge the battery by inserting the device into the USB slot of your computer. Alternatively, insert the device into the docking station, and attach the docking station to your computer. |
| | Green | The device has power; the battery is charged. |

# Radio Frequency and Electrical Specifications

| | |
|---|---|
| **Approvals** | Compliant with:<br><br>IS-2000 Release 1.0 (CDMA (1X), IS-707-A Data, IS-856 (CDMA 1xEV-DO), IS-866, IS-878, IS-890, CDMA Development Group<br><br>FCC (ID: N7N-MC5725U)<br><br>Industry Canada (ID: 2417C-MC5725U) |
| **Voltage** | +5.0 Vdc from USB slot |
| **Current** | Maximum:   500 mA (from USB port)<br><br>Typical data call current (talk mode), at 3.3 V:<br><br>        285 mA (1X)<br>        295 mA (1xEV-DO)<br><br>Standby:     2.75 mA (1xEV-DO/IS-2000 hybrid mode), at 3.3 V |
| **Transmitter power** | 200 mW (+23 dBm) |
| **Transmit** | PCS:       1805 to 1870 MHz<br>Cellular:  824 to 849 MHz |
| **Receive** | PCS:       1715 to 1780 MHz<br>Cellular:  868 to 894 MHz<br>GPS:        1575.42 MHz |
| **Channel spacing** | 1.25 MHz |
| **Frequency stability** | ±150 Hz |

# Software Specifications

| | |
|---|---|
| **CDMA specification** | IS-2000 Release 0 |
| **Data service** | IS-707A |
| **SMS (IS-637)** | Not supported |
| **FAX** | Not supported |
| **IOTA** | Supported |
| **OTASP (IS-683A, IS-683B, IS-683C)** | Supported |
| **OTAPA** | Supported |
| **PRL (preferred roaming list)** | Supported |
| **Authentication** | Supported |
| **Voice** | Not supported |
| **NAM** | Single |
| **E911** | Not supported |
| **Position Location** | Supported (Mobile Station based) |
| **TTY/Accessibility** | Not supported |
| **Mobile IP** | Supported |

# Environmental Specifications

| | |
|---|---|
| **Operating temperature** | -10 to +60°C |
| **Storage temperature** | -20 to +85°C |
| **Humidity** | 85%, non-condensing |
| **Vibration** | Random vibration, 10 to 1000 Hz, nominal 6G RMS in each of 3 mutually perpendicular axes.<br><br>Test duration of 60 minutes for each axis, for a total test time of 3 hours (non-operating). |
| **Drop** | 1 m on concrete on each of 6 faces, 2 times |

# Mechanical Specifications

| | |
|---|---|
| **Dimensions (W x L x H)** | 39 mm x 93 mm x 20 mm |
| **Power button** | Not supported |
| **Headset jack** | Not supported |
| **LED** | Red/green |

# Regulatory Information

## In This Section

◆ **Regulatory Notices**

◆ **Patents**

◆ **Trademarks**

◆ **Copyright**

◆ **Limitation of Liability**

◆ **Additional Information and Updates**

This section contains important regulatory notices about your Sprint Mobile Broadband USB modem, and also patent and other information.

# Regulatory Notices

The design of the AirCard 595U USB modem complies with U.S. Federal Communications Commission (FCC) and Industry Canada (IC) guidelines respecting safety levels of radio frequency (RF) exposure for portable devices, which in turn are consistent with the following safety standards previously set by Canadian, U.S. and international standards bodies:

- ANSI / IEEE C95.1-1999, *IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3kHz to 300 GHz*

- National Council on Radiation Protection and Measurements (NCRP) Report 86, 1986, *Biological Effects and Exposure Criteria for Radio Frequency Electromagnetic Fields*

- Health Canada, Safety Code 6, 1999, *Limits of Human Exposure to Radio frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz*

- International Commission on Non-Ionising Radiation Protection (ICNIRP) 1998, *Guidelines for limiting exposure to time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz)*

**FCC ID:** N7N-MC5725U

**CAUTION:** The AirCard 595U USB modem has been tested for compliance with FCC/IC RF exposure limits in the laptop computer(s) configurations with a horizontal USB slot and can be used in laptop computers with substantially similar physical dimensions, construction, and electrical and RF characteristics. This USB modem must not be colocated or operated in conjunction with any other antenna or transmitter. Use of this device in any other configuration may exceed the FCC RF Exposure compliance limit. **Note:** If this USB modem is intended for use in any other portable device, you are responsible for separate approval to satisfy the SAR requirements of Part 2.1093 of FCC rules.

**WARNING (EMI) - United States FCC Information** - This equipment has been tested and found to comply with the limits for a class B computing device peripheral, pursuant to Parts 15, 22, and 24 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

● Reorient or relocate the receiving antenna

● Increase the separation between the equipment and receiver

● Connect the equipment into an outlet on a circuit different from that to which the receiver is connected

● Consult the dealer or an experienced radio/TV technician for help

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

**CAUTION:** Any changes or modifications not expressly approved by Sprint Communications Company L.P. could void the user's authority to use the equipment.

**WARNING (EMI) - Canada:** This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference causing equipment standard entitled "Digital Apparatus," ICES-003 of the Department of Communications.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B préscrites dans la norme sur le matériel brouilleur: "Appareils Numériques," NMB-003 édictée par le ministre des Communications.

If you have purchased this product under a United States Government contract, it shall be subject to restrictions as set forth in subparagraph (c)(1)(ii) of Defense Federal Acquisitions Regulations (DFARs) Section 252.227-7013 for Department of Defense contracts, and as set forth in Federal Acquisitions Regulations (FARs) Section 52.227-19 for civilian agency contracts or any successor regulations. If further government regulations apply, it is your responsibility to ensure compliance with such regulations.

# Patents

Portions of this product are covered by some or all of the following US patents:

| | | | | |
|---|---|---|---|---|
| 5,515,013 | 5,629,960 | 5,845,216 | 5,847,553 | 5,878,234 |
| 5,890,057 | 5,929,815 | 6,169,884 | 6,191,741 | 6,199,168 |
| 6,339,405 | 6,359,591 | 6,400,336 | 6,516,204 | 6,561,851 |
| 6,643,501 | 6,653,979 | 6,697,030 | 6,785,830 | 6,845,249 |
| 6,847,830 | 6,876,697 | 6,879,585 | 6,886,049 | 6,986,171 |
| 6,985,757 | 7,023,878 | 7,053,843 | 7,106,569 | D442,170 |
| D459,303 | | | | |

and other patents pending.

Licensed by QUALCOMM Incorporated under one or more of the following United States patents and/or their counterparts in other nations:

QUALCOMM®
3G CDMA

| | | | | |
|---|---|---|---|---|
| 4901307 | 5056109 | 5101501 | 5109390 | 5228054 |
| 5267261 | 5267262 | 5337338 | 5414796 | 5416797 |
| 5490165 | 5504773 | 5506865 | 5511073 | 5535239 |
| 5544196 | 5568483 | 5600754 | 5657420 | 5659569 |
| 5710784 | 5778338 | | | |

Manufactured or sold by Sierra Wireless or its licensees under one or more patents licensed from InterDigital Group.

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Mac OS is a trademark of Apple Inc., registered in the U.S. and other countries.

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Document 2130751 Revision 2.1

## Limitation of Liability

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Notwithstanding the foregoing, in no event shall Sierra Wireless and/or its affiliates aggregate liability arising under or in connection with the Sierra Wireless product, regardless of the number of events, occurrences, or claims giving rise to liability, be in excess of the price paid by the purchaser for the Sierra Wireless product.

## Additional Information and Updates

For up-to-date product descriptions, documentation, application notes, firmware upgrades, troubleshooting tips, and press releases, visit:

www.sierrawireless.com

# Safety Information and Terms & Conditions

**Sprint** ®

# Safety and Notices

## In This Section

◆ **Important Notice**

◆ **Safety and Hazards**

This section describes important guidelines regarding your Sprint Mobile Broadband USB modem.

# Important Notice

Because of the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or be totally lost. Although significant delays or losses of data are rare when wireless devices such as the Sprint Mobile Broadband USB modem by Sierra Wireless (AirCard 595U) CDMA modem are used in a normal manner with a well-constructed network, they should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. SPRINT SPECTRUM L.P. accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the Sprint Mobile Broadband USB modem by Sierra Wireless (AirCard 595U) CDMA modem, or for failure of the Sprint Mobile Broadband USB modem by Sierra Wireless (AirCard 595U) to transmit or receive such data.

# Safety and Hazards

Do not operate the Sprint Mobile Broadband USB modem by Sierra Wireless (AirCard 595U) in areas where blasting is in progress, where explosive atmospheres may be present, near medical equipment, life support equipment, or any equipment which may be susceptible to any form of radio interference. In such areas, the Sprint Mobile Broadband USB modem by Sierra Wireless (AirCard 595U) **MUST BE POWERED OFF**. It can transmit signals that could interfere with this equipment.

Do not operate the Sprint Mobile Broadband USB modem by Sierra Wireless (AirCard 595U) in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the Sprint Mobile Broadband USB modem by Sierra Wireless (AirCard 595U) **MUST BE POWERED OFF**. When operating, it can transmit signals that could interfere with various onboard systems.

The driver or operator of any vehicle should not operate the Sprint Mobile Broadband USB modem by Sierra Wireless (AirCard 595U) while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some jurisdictions, operating such communications devices while in control of a vehicle is an offense.

To avoid the risk of explosion, use the same battery model when replacing the battery. Properly dispose of the used battery.

# Terms and Conditions

## In This Section

◆ **Subscriber Agreement/General Terms and Conditions of Services**

This section contains the terms and conditions of service for your Sprint Mobile Broadband USB modem.

# Subscriber Agreement
# General Terms and Conditions of Services

Please note these terms may not be the most current version. A current version of the terms is available at our Web site or upon request.

Para solicitar esta literatura en español, por favor visitar a <u>www.sprint.com</u>.

## Basic Definitions

In this document: (1) "we," "us," "our" mean Sprint Solutions, Inc. and its affiliates doing business as Sprint or Sprint PCS; (2) "you," "your," "customer," and "user" mean an account holder or user with us; (3) "Device" means any phone, device, accessory or other product we sell to you or that is active on your account with us; and (4) "Service" means our offers, rate plans, options, wireless services or Devices on your account with us.

## The Subscriber Agreement

The Subscriber Agreement ("Agreement") is a contract under which we provide and you accept our Services. In addition to these Terms and Conditions of Service ("Ts&Cs"), there are several parts to the Agreement, including, but not limited to, the detailed plan or other information on Services we provide or refer you to during the sales transaction, and any confirmation materials we may provide you. It is important that you carefully read all of the terms of the Agreement.

## Services Covered By These Ts&Cs & Additional Terms

These Ts&Cs apply to our standard wireless Services and any other Service we offer you that references these Ts&Cs. Different terms will apply to most business accounts. Additional terms will apply when you use certain Services, typically those you can access online (for example, picture/video Services, online forums, etc.). Additional terms will also apply if you activate Services as part of a bundle with another company's services (for example, cable services, home phone services, etc.). The additional terms for bundled Services may either modify or replace certain provisions in these Ts&Cs, including terms relating to activation, invoicing/payment, and disputing charges. Also, a different dispute resolution provision may apply to services provided by another company (the dispute resolution provisions in this Agreement still apply to our Services). You will be provided details on any additional terms with your selection of any bundled Service.

## Our Policies

Services are subject to our business policies, practices and procedures ("Policies"), including, but not limited to, our Privacy Policy and Acceptable Use Policy and Visitor Agreement – both available at our Web site. You agree to all of our Policies when you use our Services. Our Policies are subject to change at anytime with or without notice.

## When You Accept The Agreement

You must have the legal capacity to accept the Agreement. You accept the Agreement when you do any of the following: (a) sign a contract with us on paper or electronically; (b) accept Agreement through an oral or electronic statement; (c) attempt to or in any way use the Services; (d) pay for the Services; or (e) open any package or start any program that says you are accepting the Agreement when doing so. **If you don't want to accept the Agreement, don't do any of these things.**

## Term Commitments & Early Termination Fees

Many of the Services (for example, rate plans and Device discounts) that we offer require you to maintain certain Services with us for a minimum term, usually 1 or 2 years ("Term Commitment"). **You will be charged a fee ("Early Termination Fee") for each line of Service that you terminate early (i.e., prior to satisfying the Term Commitment) or for each line of Service that we terminate early for good reason (for example, violating the payment or other terms of the Agreement).** Early Termination Fees are a part of our rates. Your exact Term Commitment and Early Termination Fee may vary based on the Services you select and will be disclosed to you during the sales transaction. **Carefully review any Term Commitment and Early Termination Fee requirements prior to selecting Services.** After you have satisfied your Term Commitment, your Services continue on a month-to-month basis without any Early Termination Fee, unless you agree to extend your Term Commitment or agree to a new Term Commitment – for example, by accepting a new rate plan or upgrading your Device. As explained directly below, there are instances when you will not be responsible for an Early Termination Fee for terminating Services early.

## When You Don't Have To Pay An Early Termination Fee

You aren't responsible for paying an Early Termination Fee when terminating Services: (a) provided on a month-to-month basis; (b) consistent with our published trial period return policy; or (c) in response to a materially adverse change we make to the Agreement as described directly below.

## Our Right To Change The Agreement & Your Related Rights

**We may change any part of the Agreement at any time, including, but not limited to, rates, charges, how we calculate charges, or your terms of Service. We will provide you notice of material changes, and may provide you notice of non-material changes, in a manner consistent with this Agreement (see "Providing Notice Under This Agreement" paragraph). Except as provided below, if a change we make to the Agreement is material and has a material adverse effect on you, you may terminate each line of Service materially affected without incurring an Early Termination Fee only if you: (a) call us within 30 days after the effective date of the change; and (b) specifically advise us that you wish to cancel Services because of a material change to the Agreement that we have made.** If you do not cancel Service within 30 days of the change, an Early Termination Fee will apply if you terminate Services before the end of any applicable Term Commitment.

## Our Right To Suspend Or Terminate Services

**We can, without notice, suspend or terminate any Service at any time for any reason,** including, but not limited to: (a) late payment; (b) exceeding an Account Spending Limit ("ASL"); (c) harassing/threatening our employees or agents; (d) providing false information; (e) interfering with our operations; (f) using/suspicion of using Services in any manner restricted by or inconsistent with the Agreement; (g) breaching the Agreement, including our Policies; (h) providing false, inaccurate, dated or unverifiable identification or credit information, or becoming insolvent or bankrupt; (i) modifying a Device from its manufacturer specifications; or (j) if we believe the action protects our interests, any customer's interests or our network.

## Your Ability To Change Services & When Changes Are Effective

You typically can change Services upon request. In some instances, changes may be conditioned on payment of an Early Termination Fee or certain other charges, or they may require you to accept a new Term Commitment. Changes to Services are usually effective at the start of your next full invoicing cycle. If the changes take place sooner, your invoice may reflect pro-rated charges for your old and new Services.

## Your Right To Terminate Services

You can terminate Services at any time by calling us and requesting that we deactivate all Services. You're responsible for all charges billed or incurred prior to deactivation. If Services are terminated before the end of your invoicing cycle, we

won't prorate charges to the date of termination and you won't receive a credit or refund for any unused Services. **Except as provided above, you must also pay us an Early Termination Fee for each line of Service that you terminate early.**

## Credit Checks & Credit Information

We agree to provide you Services on the condition you have and maintain satisfactory credit according to our standards and policies. You agree to provide information we may request or complete any applications we may provide you to facilitate our review. We rely on the credit information you furnish, credit bureau reports or other data available from commercial credit reference services, and other information (such as payment history with us) to determine whether to provide or continue to provide you Services. The Services we offer you can vary based on your credit history. We may at any time, based on your credit history, withdraw or change Services, or place limits or conditions on the use of our Services. You agree to provide us updated credit information upon request. We may provide your payment history and other account billing/charge information to any credit reporting agency or industry clearinghouse.

## Account Spending Limits ("ASL")

An ASL is a temporary or permanent limit (typically based on credit history, payment history, or to prevent fraud) we place on the amount of unpaid charges you can accumulate on your account, regardless of when payment on those charges is due. We reserve the right to determine which charges count towards an ASL. If you have an ASL, we may suspend your Services without prior notice if your account balance reaches the ASL, even if your account is not past due. We may impose or increase an ASL at any time with notice. An ASL is for our benefit only and should not be relied on by you to manage usage.

## Deposits & Returning Deposits

We may at any time require a deposit, as a guarantee of payment, for you to establish or maintain Service ("Deposit"). By providing us a Deposit, you grant us a security interest for all current or future amounts owed to us. We may change the Deposit at any time with notice. You can't use a Deposit to make or delay payments. The Deposit, the length of time we hold the Deposit, and changes to the Deposit are determined based on your credit history, payment history and other factors. Unless prohibited by law, we may mix Deposits with our other funds and it won't earn interest and we reserve the right to return the Deposit as a credit on your invoice at anytime. If your Services are terminated for any reason, we may keep and apply your Deposit to any outstanding charges. We'll send any

remaining portion of Deposit to your last known address within 90 days after your final invoice – if it is returned to us, we will forward it on to the appropriate state authorities to the extent required by law.

## Restrictions On Using Services

You can't use our Services: (a) to transmit content/messages that are, or in any manner that is, illegal, fraudulent, threatening, abusive, defamatory, or obscene; (b) in a way that could cause damage or adversely affect our customers, reputation, network, property or Services; (c) to communicate any unsolicited commercial voice, text, SMS, or other message; (d) to infringe on the copyright of another, or upload or transmit any "virus", "worm", or malicious code; or (e) in any way prohibited by the terms of our Services, the Agreement or our Policies.

## Your Device, Number & E-mail Address; Caller ID

We don't manufacture any Device we might sell to you or that is associated with our Services, and we aren't responsible for any defects, acts or omissions of the manufacturer. **The only warranties on your Device are the limited warranties given to you by the manufacturer directly or that we pass through.** Your Device is designed exclusively for use on our network and in other coverage areas we make available to you. It will not accept wireless service from another carrier. Except for any legal right you may have to port/transfer your phone number to another carrier, you have no and cannot gain any (for example, through publication, use, etc.) proprietary, ownership or other rights to any phone number, identification number, e-mail address or other identifier we assign to you, your Device or your account. We'll notify you if we decide to change or reassign them.

## Porting/Transferring Phone Numbers

We don't guarantee that number transfers to or from us will be successful. If you authorize another carrier to transfer a number away from us, that is considered a request by you to us to terminate all of the Services associated with that number. You're responsible for all charges billed or incurred prior to deactivation and for any applicable Early Termination Fees.

## Coverage; Where Your Device Will Work

Our coverage maps are available at our stores and at our Web site. The specific network coverage you get will depend on the radio transmissions your Device can pick up and Services you've chosen. **Our coverage maps provide high level estimates of our coverage areas when using Services outdoors under optimal conditions.**

**Coverage isn't available everywhere. Estimating wireless coverage and signal strength is not an exact science. There are gaps in coverage within our estimated coverage areas that, along with other factors both within and beyond our control (network problems, software, signal strength, your Device, structures, buildings, weather, geography, topography, etc.), may result in dropped and blocked connections, slower data speeds, or otherwise impact the quality of Service. Services that rely on location information, such as E911 and GPS navigation, depend on your Device's ability to acquire satellite signals (typically not available indoors) and network coverage.**

## Roaming

"Roaming" typically refers to coverage on another carrier's network that we make available to you based on our agreements with other carriers. These agreements may change from time to time and roaming coverage is subject to change. Your ability to receive roaming coverage depends on the radio transmissions your Device can pick up. You can pick up roaming coverage both within and outside our network coverage areas. Your Device will generally indicate when you're roaming. Depending on your Services, separate charges or limits on the amount of minutes used while roaming may apply. Certain Services may not be available or work the same when roaming (including data Services, voicemail, call waiting, etc.).

## About Data Services & Content

Our data Services and your Device may allow you to access the internet, text, pictures, video, games, graphics, music, email, sound and other materials ("Data Content") or send Data Content elsewhere. Some Data Content is available from us or our vendors, while other Data Content can be accessed from others (third party Web sites, games, ringers, etc.). We make absolutely no guarantees about the Data Content you access on your Device. **Data Content may be: (1) unsuitable for children/minors; (2) unreliable or inaccurate; or (3) offensive, indecent or objectionable. You're solely responsible for evaluating the Data Content accessed by you or anyone on your account. We strongly recommend you monitor data usage by children/minors.** Data Content from third parties may also harm your Device or its software. To protect our network, Services, or for other reasons, we may place restrictions on accessing certain Data Content (such as certain Web sites, applications, etc.), impose separate charges, limit throughput or the amount of data you can transfer, or otherwise limit or terminate Services. If we provide you storage for Data Content you have purchased, we may delete the Data Content with notice or place restrictions/limits on the use of storage areas. You may not be able to make or receive voice calls while using data Services.

## Specific Terms & Restrictions On Using Data Services

In addition to the rules for using all of our other Services, unless we identify the Service or Device you have selected as specifically intended for that purpose (for example, wireless routers, Data Link, etc.), you can't use our data Services: (1) with server devices or host computer applications, or other systems that drive continuous heavy traffic or data sessions; and (2) as a substitute or backup for private lines or frame relay connections. We reserve the right to limit or suspend any heavy, continuous data usage that adversely impacts our network performance or hinders access to our network. If your Services include unlimited Web or data access, you also can't use your Device as a modem for computers or other equipment, unless we identify the Service or Device you have selected as specifically intended for that purpose (for example, with "phone as modem" plans, Sprint Mobile Broadband card plans, wireless router plans, etc.).

## Activation & Miscellaneous Charges

Based on our Policies, we may charge activation, prepayment, reactivation, program or other fees to establish or maintain Services. Certain transactions may also be subject to a charge (for example, convenience payment, changing phone numbers, handset upgrades, etc.). You will be provided notice of these types of fees before we complete the requested transaction.

## Account & Service Charges; Pro-rating; Unused Minutes

**You are responsible for all charges associated with your account and the Services on your account, no matter who uses the Services.** Charges include, but are not limited to, the monthly recurring charges, usage charges, taxes, surcharges and fees associated with your Services. These charges are described or referred to during the sales transaction, in our marketing materials, and in confirmation materials we may send to you.

## How We Calculate Your Charges For Billing Purposes

**Regular Voice Calls:** We round up partial minutes of use to the next full minute. Time starts when you press "Talk" or your Device connects to the network and stops when you press "End" or the network connection otherwise breaks. You're charged for all calls that connect, even to answering machines. You won't be charged for unanswered calls or if you get a busy signal. For incoming calls answered, you're charged from the time shortly before the Device starts ringing until you press "End" or the network connection otherwise breaks. If charges vary depending on the time of day that you place or receive calls (e.g., Nights and

Weekend plans), you're charged for the entire call based on the rate that applies to the time period in which the call starts.

**iDEN Walkie-Talkie Charges:** Charges for walkie-talkie calls are billed to the person who starts the call and calculated by multiplying the duration of the call by the applicable rate and number of participants. You're charged at least 6 seconds of airtime for each call you start; subsequent communications in the same call are rounded up to and billed to the next second. Time begins when you press any button to start a walkie-talkie call and ends approximately 6 seconds after completion of a communication to which no participant responds – subsequent walkie-talkie communications are considered new calls. Depending on your plan, nationwide, international or group walkie-talkie calls may use the local walkie-talkie minutes in your plan and result in additional charges. Responses to call alert transmissions are treated as new walkie-talkie transmissions even when responding within 6 seconds of receiving the alert.

**Data Usage:** Unless we specifically tell you otherwise, data usage is measured in bytes, kilobytes and megabytes – not in minutes/time. 1024 bytes equals 1 kilobyte ("KB"), and 1024 KB equals 1 megabyte. Bytes are rounded up to kilobytes, so you will be charged at least 1 KB for each data usage session ("data session"). Rounding occurs at the end of each data session, and sometimes during a data session. Depending on your data Services, usage may be charged against an allowance or on a fixed price per KB. If you are charged on a fixed price per KB, any fractional cents will be rounded up to the next cent. You are charged for all data directed to your Device's internet address, including data sessions you did not initiate and for incomplete transfers. As long as your Device is connected to our data network, you may incur data charges. Examples of data you will be charged for includes the size of a requested file or Data Content (game, ringer, etc.), Web page graphics (logos, pictures, banners, advertisement, etc.), additional data used in accessing, transporting and routing the file on our network, data from partial or interrupted downloads, re-sent data, and data associated with unsuccessful attempts to reach Web sites or use applications. These data charges are in addition to any charges for the Data Content itself (game, ringer, etc.). Data used and charged to you will vary widely, even between identical actions or data sessions. Estimates of data usage – for example, the size of downloadable files – are not reliable predictors of actual usage. Your bill won't separately list the number of KB attributed to a specific action/data session.

## Your Bill

Your bill provides you notice of your charges. It reflects monthly recurring charges (usually billed one bill cycle in advance) and usage/transaction specific charges (usually billed in the bill cycle in which they're incurred). Some usage charges, such as those that depend on usage information from a third party, may be billed in subsequent bill cycles and result in higher than expected charges for that month. Bill cycles and dates may change from time to time. **Your bill may also include other important notices (for example, changes to this Agreement, to your Service, legal notices, etc.).** Your paper bill may not include individual call detail. Your call detail is available online. Paper bills with call detail may be subject to an additional charge. If you choose internet billing, you will not receive paper bills.

## Your Payments; Late Fees

Payment is due in full as stated on your bill. If we do not receive payment in full by the date specified on your bill, a late payment charge, which may be charged at the highest rate permissible by law, may be applied to the total unpaid balance. We may also charge you any costs we pay to a collection agency to collect unpaid balances from you. If we bill you for amounts on behalf of a third party, payments received are first applied to our charges. You may be charged additional fees for certain methods of payment. We may charge you, up to the highest amount permitted by law, for returned checks or other payments paid by you and denied for any reason by a financial institution. Acceptance of payments (even if marked "paid in full") does not waive our right to collect all amounts that you owe us. We may restrict your payment methods to cashier's check, money order, or other similar secure form of payment at any time for good reason.

## Taxes & Government Fees

You agree to pay all federal, state and local taxes, fees and other assessments that we're required by law to collect on the Services we provide you and remit to the government. These charges may change from time to time without advance notice. If you're claiming any tax exemption, you must provide us with a valid exemption certificate. Tax exemptions generally won't be applied retroactively.

## Surcharges

You agree to pay the surcharges, fees and other charges that we assess to recoup our government costs or costs of complying with certain government programs ("Surcharges"). **Surcharges aren't taxes or government mandated charges; they're charges we choose to collect from you. Surcharges are subject to change, sometimes on**

**a monthly or quarterly basis.** Examples of Surcharges include, but are not limited to: Universal Service Fund, E911, Federal Programs Cost Recovery, Federal Wireless Number Pooling and Portability, and gross receipts charges. We will make efforts to provide you notice of any changes to Surcharges in a manner consistent with this Agreement (see "Providing Notice Under This Agreement" paragraph). However, since most Surcharges are based on amounts set by the government or based on government formulas, it will not always be possible to provide advance notice of new Surcharges or changes in the amount of existing Surcharges. Information on Surcharges is provided during the sales transaction and is available at our Web site.

## Disputing Charges - You Must Still Pay Undisputed Charges

Any dispute to a charge on your bill must be made within 60 days of the date of the bill that initially contained the charge. Disputes can only be made by calling or writing us as directed on your invoice or elsewhere. You accept all charges not properly disputed within the above time period – undisputed charges must still be paid as stated on your bill.

## Protecting Our Network & Services

We can take any action to: (1) protect our network, our rights and interests, or the rights of others; or (2) optimize or improve the overall use of our network and Services. Some of these actions may interrupt or prevent legitimate communications and usage – for example, message filtering/blocking software to prevent SPAM or viruses, limiting throughput, limiting access to certain Web sites, applications or other Data Content, etc. For additional information on what we do to protect our customers, network, Services and equipment, see our Acceptable Use Policy and Visitor Agreement at our Web site.

## Your Privacy

You agree to the terms of our Privacy Policy, available at our Web site, when you use our Services. This policy may change from time to time, so review this policy with regularity and care. Among other things, the policy includes important information on what information we collect about you, how we use that information, and with whom we share that information (for example, to provide you certain Services, to protect our rights and interests, to respond to legal process, to facilitate a merger, etc.). Also, to ensure the quality of our Services and for other lawful purposes, we may also monitor or record calls between us (for example, your conversations with our customer service or sales departments).

If you do not agree with the terms of our Privacy Policy, do not purchase or use our Services.

## Location Based Services

Our network generally knows the location of your Device when it is outdoors and turned on. By using various technologies to locate your Device, we can provide enhanced emergency 911 services, and optional location-sensitive services provided by us or a third party. Environmental factors (such as structures, buildings, weather, geography, landscape, and topography) can significantly impact the ability to access your Device's location information and use of location-sensitive services. The terms and conditions of any location-sensitive service that you purchase from us may provide more information about how location information is used and disclosed. Use of some of location-sensitive services may require network coverage. **If any Device on your account uses a location-sensitive service, you (the accountholder) must clearly and regularly notify the actual user of your Device that their location may be tracked or discovered.** For additional information on location-sensitive services, see our Privacy Policy at our Web site.

## 911 Or Other Emergency Calls

**Public Safety Officials advise that when making 911 or other emergency calls, you should always be prepared to provide your location information.** Unlike traditional wireline phones, depending on a number of factors (e.g., whether your Device is GPS enabled, where you are, whether local emergency service providers have upgraded their equipment, etc.), 911 operators may not know your phone number, your location or the location of your Device. In certain circumstances, an emergency call may be routed to a state patrol dispatcher or alternative location set by local emergency service providers. Enhanced 911 service ("E911"), where enabled by local emergency authorities, uses GPS technology to provide location information. Even when available, however, E911 does not always provide accurate location information. If your Device is indoors or for some other reason cannot acquire a satellite signal, you may not be located. Some Devices have a safety feature that prevents use of the keypad after dialing 911 – you should follow voice prompts when interacting with emergency service providers employing IVR systems to screen calls.

## If Your Device Is Lost or Stolen

Call us immediately if your Device is lost or stolen because you may be responsible for usage charges before you notify us of the alleged loss or theft. You agree to

cooperate if we choose to investigate the matter (provide facts, sworn statements, etc.). We may not waive any Early Termination Fees if you choose to terminate Services as a result of loss or theft of your Device.

## Disclaimer of Warranties

WE MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING (TO THE EXTENT ALLOWED BY LAW) ANY IMPLIED WARRANTY OF MERCHANTABILITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE CONCERNING YOUR SERVICES (INCLUDING YOUR DEVICE). WE DON'T PROMISE UNINTERRUPTED OR ERROR-FREE SERVICES AND DON'T AUTHORIZE ANYONE TO MAKE WARRANTIES ON OUR BEHALF.

## You Agree We Are Not Responsible For Certain Problems

You agree that neither we nor our vendors, suppliers or licensors are responsible for any damages resulting from: (a) anything done or not done by someone else; (b) providing or failing to provide Services, including, but not limited to, deficiencies or problems with a Device or network coverage (for example, dropped, blocked, interrupted calls/messages, etc.); (c) traffic or other accidents, or any health-related claims relating to our Services; (d) Data Content or information accessed while using our Services; (e) an interruption or failure in accessing or attempting to access emergency services from a Device, including through 911, Enhanced 911 or otherwise; (f) interrupted, failed, or inaccurate location information services, (g) information or communication that is blocked by a spam filter, or (h) things beyond our control, including acts of God (for example, weather-related phenomena, fire, earthquake, hurricane, etc.), riot, strike, war, terrorism or government orders or acts.

## You Agree Our Liability Is Limited - No Consequential Damages.

TO THE EXTENT ALLOWED BY LAW, OUR LIABILITY FOR MONETARY DAMAGES FOR ANY CLAIMS YOU MAY HAVE AGAINST US IS LIMITED TO NO MORE THAN THE PROPORTIONATE AMOUNT OF THE SERVICE CHARGES ATTRIBUTABLE TO THE AFFECTED PERIOD. UNDER NO CIRCUMSTANCES ARE WE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES OF ANY NATURE WHATSOEVER ARISING OUT OF OR RELATED TO PROVIDING OR FAILING TO PROVIDE SERVICES IN CONNECTION WITH A DEVICE, INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, LOSS OF BUSINESS, OR COST OF REPLACEMENT PRODUCTS AND SERVICES.

# DISPUTE RESOLUTION

### We Agree To First Contact Each Other With Any Disputes

We each agree to first contact each other with any disputes and provide a written description of the problem, all relevant documents/information and the proposed resolution. You agree to contact us with disputes by calling or writing us as instructed on your invoice. We will contact you by letter to your billing address or on your Device.

### Instead Of Suing In Court, We Each Agree To Arbitrate Disputes

We each agree to finally settle all disputes (as defined and subject to any specific exceptions below) only by arbitration. In arbitration, there's no judge or jury and review is limited. However, just as a court would, the arbitrator must honor the terms and limitations in the Agreement and can award the same damages and relief, including any attorney's fees authorized by law. The arbitrator's decision and award is final and binding, with some exceptions under the Federal Arbitration Act ("FAA"), and judgment on the award may be entered in any court with jurisdiction. We each also agree as follows:

(1) **"Disputes" are any claims or controversies against each other related in any way to our Services or the Agreement, including, but not limited to, coverage, Devices, privacy, or advertising, even if it arises after Services have terminated** – this includes claims you bring against our employees, agents, affiliates or other representatives, or that we bring against you.

(2) If either of us wants to arbitrate a dispute, we agree to send written notice to the other providing a description of the dispute, previous efforts to resolve the dispute, all supporting documents/information, and the proposed resolution. Notice to you will be sent to your billing address and notice to us will be sent to: General Counsel; Arbitration Office; 2001 Edmund Halley Drive VARESP0513-502; Reston, Virginia 20191. We agree to make attempts to resolve the dispute. If we cannot resolve the dispute within forty-five (45) days of receipt of the notice to arbitrate, then we may submit the dispute to formal arbitration.

(3) The FAA applies to this Agreement and arbitration provision. We each agree the FAA's provisions, not state law, govern all questions of whether a dispute is subject to arbitration.

(4) The arbitration will be administered by the National Arbitration Forum ("NAF") under its arbitration rules. If any NAF rule conflicts with the terms of the Agreement, the terms of the Agreement apply. You can obtain procedures, rules, and fee information from the NAF at 1-800-474-2371 or www.adrforum.com.

(5) Unless we each agree otherwise, the Arbitration will be conducted by a single neutral arbitrator and will take place in the county of your last billing address. The federal or state law that applies to the Agreement will also apply during the arbitration.

(6) **We each agree not to pursue arbitration on a classwide basis. We each agree that any arbitration will be solely between you and us (not brought on behalf of or together with another individual's claim). If for any reason any court or arbitrator holds that this restriction is unconscionable or unenforceable, then our agreement to arbitrate doesn't apply and the dispute must be brought in court.**

(7) We each are responsible for our respective costs relating to counsel, experts, and witnesses, as well as any other costs relating to the arbitration. However, we will cover any arbitration administrative or filing fees above: (a) $25 if you are seeking less than $1,000 from us; or (b) the equivalent court filing fees for a court action in the appropriate jurisdiction if you are seeking $1,000 or more from us.

## Exceptions To Our Agreement To Arbitrate Disputes

Either of us may bring qualifying claims in small claims court. In addition, this arbitration provision does not prevent you from filing your dispute with any federal, state or local government agency that can, if the law allows, seek relief against us on your behalf.

## No Class Actions

TO THE EXTENT ALLOWED BY LAW, WE EACH WAIVE ANY RIGHT TO PURSUE DISPUTES ON A CLASSWIDE BASIS; THAT IS, TO EITHER JOIN A CLAIM WITH THE CLAIM OF ANY OTHER PERSON OR ENTITY, OR ASSERT A CLAIM IN A REPRESENTATIVE CAPACITY ON BEHALF OF ANYONE ELSE IN ANY LAWSUIT, ARBITRATION OR OTHER PROCEEDING.

## No Trial By Jury

TO THE EXTENT ALLOWED BY LAW, WE EACH WAIVE ANY RIGHT TO TRIAL BY JURY IN ANY LAWSUIT, ARBITRATION OR OTHER PROCEEDING.

## Indemnification

You agree to indemnify, defend and hold us harmless from any claims arising out of your actions, including, but not limited to, failing to provide appropriate notices regarding location-sensitive services (see "Location Based Services" paragraph), or violating this Agreement, any applicable law or regulation or the rights of any third party.

## Providing Notice To Each Other Under The Agreement

Except as the Agreement specifically provides otherwise, you must provide us notice by calling or writing us as instructed on your invoice. We will provide you notice in your bill, correspondence to your last known billing address, to any fax number or e-mail address you've provided us, by calling you on your home phone or Device, by voice message on your Device or home phone, or by text message on your Device.

## Other Important Terms

Subject to federal law or unless the Agreement specifically provides otherwise, this Agreement is governed solely by the laws of the state encompassing the area code assigned to your Device, without regard to the conflicts of law rules of that state. If either of us waives or doesn't enforce a requirement under this Agreement in an instance, we don't waive our right to later enforce that requirement. Except as the Agreement specifically provides otherwise, if any part of the Agreement is held invalid or unenforceable, the rest of this Agreement remains in full force and effect. This Agreement isn't for the benefit of any 3rd party except our corporate parents, affiliates, subsidiaries, agents, and predecessors and successors in interest. You can't assign the Agreement or any of your rights or duties under it. We can assign the Agreement. The Agreement and

the documents it incorporates make up the entire agreement between us and replaces all prior written or spoken agreements – you can't rely on any contradictory documents or statements by sales or service representatives. The rights, obligations and commitments in the Agreement that, by their nature, would logically continue beyond the termination of Services (including, but not limited to, those relating to billing, payment, 911, dispute resolution, no class action, no jury trial), survive termination of Services.

# Glossary and Index

Sprint

# Glossary

### 1X

One Times Radio Transmission Technology (the "one times" refers to the frequency spectrum). Also known as Sprint Vision. Supports Internet connections with data rates up to 153 kbps. Actual speed depends on the network conditions. Compare to 1xEV-DO.

### 1xEV-DO

A high-speed standard for cellular packet data communications. Also known as Sprint Power Vision.

1xEV-DO Rev. A supports Internet connections with data rates up to 3.1 Mbps (downlink from the network) and 1.8 Mbps (uplink to the network). Average data rates are 600 kbps - 1.4 Mbps (downlink from the network) and 350-500 kbps (uplink to the network).

1xEV-DO Rev. 0 supports Internet connections with data rates up to 2.4 Mbps (downlink from the network) and 153 kbps (uplink to the network). Average data rates are 400-700 kbps (downlink from the network) and 40-80 kbps (uplink to the network)

Actual speed depends on the network conditions. Compare to 1X.

### bps

**bits per second**—The actual data speed over the transmission medium.

### broadband

High-speed wireless services optimized for data. Sprint Mobile Broadband is the next evolutionary step for the Sprint Power Vision Network.

### CDMA

**Code Division Multiple Access**—A wideband spread spectrum technique used in digital cellular, personal communications services, and other wireless networks. Wide channels (1.25 MHz) are obtained through spread spectrum transmissions, thus allowing many active users to share the same channel. Each user is assigned a unique digital code, which differentiates the individual conversations on the same channel.

### dBm

decibels relative to 1 milliwatt

## dormant

The network switches the data connection into dormant mode if there is no traffic on the connection for some time. When you resume data traffic, the high-speed data connection becomes active.

## ESN

Electronic Serial Number—The unique serial number assigned to the device for cellular network use. Either the ESN or MEID is on the label on the device (under the battery), and is also displayed in the Device Info & Diagnostics window (page 72). See also MEID.

## FCC

**Federal Communications Commission**—The U.S. federal agency that is responsible for interstate and foreign communications. The FCC regulates commercial and private radio spectrum management, sets rates for communications services, determines standards for equipment, and controls broadcast licensing. Consult www.fcc.gov.

## fix

GPS location information obtained from the network.

## GPS

**Global Positioning System**—A system that uses a series of 24 geosynchronous satellites to provide location data.

## IS

**Interim Standard**—After receiving industry consensus, the TIA forwards the standard to ANSI for approval.

## kbps

**kilobits per second**—Actually 1000, not 1024, as used in computer memory size measurements of kilobytes.

## LAN

Local Area Network

## LED

**Light Emitting Diode**—A semiconductor diode that emits visible or infrared light.

## Mbps

Megabits per second.

## MEID

**Mobile Equipment Identifier**—The unique second-generation serial number assigned to the Sprint Mobile Broadband USB modem for cellular network use. Either the MEID or ESN is on the label on the device (under the battery), and is also displayed in the Device Info & Diagnostics window (page 72). Compare to ESN.

## MHz

**megahertz**—One million cycles per second

## PCS

**Personal Communications Services**—A cellular communication infrastructure.

## roaming

A wireless subscriber is in an area where service is obtained from a wireless service provider other than Sprint.

## Sprint Connection Manager

Software that allows you to manage the Sprint Mobile Broadband USB modem's actions and monitor your connections.

## Sprint Mobile Broadband

High-speed wireless services optimized for data. Sprint Mobile Broadband is the next evolutionary step for the Sprint Power Vision Network.

## Sprint Power Vision

Sprint's advanced multimedia third generation services available on the network. See 1xEV-DO.

## Sprint Vision

Sprint's advanced multimedia third generation services available on the network. See 1X.

## system tray

Usually located in the bottom right of the screen (near the clock). When

Sprint Connection Manager is running, it places an icon  in this area, which you can use to monitor the connection state (page 39). If you right-click the icon, a shortcut menu is displayed (page 58):
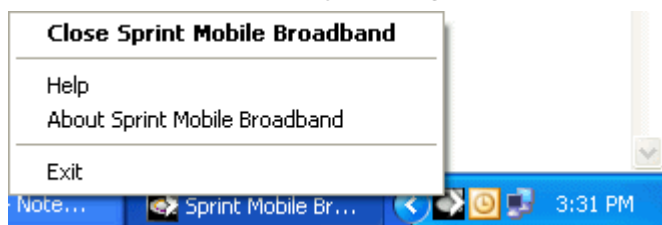


## TIA

**Telecommunications Industry Association**—A standards-setting trade organization, whose members provide communications and information technology products, systems, distribution services, and professional services in the United States and around the world. Consult www.tiaonline.org.

## ToolTip

Text that displays when you position the mouse pointer over an area of the screen (for example, over an indicator).
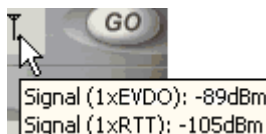


## VPN

Virtual Private Network

## WAN

Wide Area Network

# Index