

Sprint Mobile Broadband Card by Sierra Wireless AirCard[®] 597E



www.sprint.com

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Table of Contents

Welc	ome to Sprint	i
Intro	duction	ii
Section	on 1: Basics of Your Card	1
1A.	Introducing the Sprint Mobile Broadband Card	3
	Your Sprint Mobile Broadband Card	. 4
	CDMA Networks	
	TRU-Install	. 5
	One Touch Activation	. 5
	Package Contents	. 6
	Care and Maintenance	. 6
	About This Guide	. 7
1B.	Getting Started With Your Card	8
	Installation Overview	. 9
	System Requirements (Windows)	. 9
	System Requirements (Mac)	11
	Included Software	11
	Attaching an External Antenna	12
1C.	Getting Help	.13
	Visiting the Sprint Web Site	14
	Contacting Sprint Customer Service	14
	Troubleshooting	14
Section	on 2: Installing the Card	.15
2A.	Installing the Software on a Windows Computer	.17
	Installing the Software on a Windows Computer	18
2B.	Installing the Software on a Mac Computer	.21
	Installing the Software and Drivers on a Mac	22
2C.	Inserting and Removing the Card	.26
	Inserting the Card	27
	Removing the Card (Windows)	
	Removing the Card (Mac)	30

2D.	Setting Up Service (Windows)	.31
	Activating and Using Sprint Service	32
	Preactivated Card	32
	Non-preactivated Card: One Touch Activation	33
	Non-preactivated Card: Activation Wizard	33
	Data Provisioning (IOTA)	35
2E.	Setting Up Service (Mac)	.36
	Activating and Using Sprint Service	37
	Activating Your Card	37
Section	on 3: Using the Card on a Windows Computer	.41
3A.	Your Card: The Basics (Windows)	.43
	Sprint Connection Manager	44
	Starting Sprint Connection Manager	44
	Starting Sprint Connection Manager Automatically	45
	Sprint Connection Manager Window	45
	Connection States (Mobile Broadband Window)	50
	GPS Status (GPS Receiver Window)	53
	System Tray Connection States	54
	Determining the Type of Coverage	55
	Sprint Location Services	55
	Powering the Card On and Off	57
	Controlling the Sprint Connection Manager Window	58
	Launching a Sprint Power Vision or Sprint Vision Connection	62
	Viewing the Amount of Data Transferred	65
	Ending a Connection	66
	Online Help	66
	Displaying Your Phone Number	67
	Security	67
	Accessing Links	70
	Uninstalling the Sprint Connection Manager Software	71
3B.	Menu Options (Windows)	.72
	Sprint Connection Manager Menu	73
	System Tray Menu	75

3C.	Changing Sprint Connection Manager Settings (Windows)	76
	Settings Window	77
	General Settings	78
	Sprint Mobile Broadband Settings	80
	Sprint Location Services Settings	83
3D.	Tools (Windows)	86
	Viewing the Connection History	87
	Viewing Alerts	88
	Running Diagnostics	89
	Updating the Software	91
	About Sprint Mobile Broadband	92
3E.	Frequently Asked Questions (Windows)	93
	Questions about My Account	94
	Questions about Sprint Connection Manager	94
	Questions about GPS and Sprint Location Services	94
	Other Questions	100
3F.	Troubleshooting Tips (Windows)	102
	Problems, Causes, and Solutions	103
	GO Button Is Unavailable	104
	Searching for Service	104
	Cannot Connect to the Network	105
	Sprint Location Services Aren't Working or Don't Seem to Be Available	
	Could Not Prepare Data Services	
	Unable to Prepare Data Services	
	Sprint Connection Manager Stops Working After Upgrading Windows	107
Section	on 4: Using the Card on a Mac	109
4A.	Your Card: The Basics (Mac)	110
	Watcher Lite	111
	Starting Watcher Lite	111
	Watcher Lite Window	111
	Connection States	112
	Determining the Type of Coverage	115
	Powering the Card Off	
	Launching a Sprint Power Vision or Sprint Vision Connection	116

	Viewing the Amount of Data Transferred	. 117
	Ending a Connection	. 117
	Displaying Your Phone Number and ESN	. 118
	Security	. 118
	Uninstalling the Watcher Lite Software	.120
4B.	Menu Options (Mac)	124
	Watcher Lite Menu Options	.125
4C.	Frequently Asked Questions (Mac)	126
	Questions about My Account	.127
	Questions about Watcher Lite	.127
	Questions about GPS and Sprint Location Services	.127
	Other Questions	.128
4D.	Troubleshooting Tips (Mac)	129
	Problems, Causes, and Solutions	.130
	Connect Button Is Unavailable	.130
	Searching for Service	.131
Secti	on 5: Technical Specifications and Regulatory Information	133
5A.	Technical Specifications	135
	LED Operation	.136
	Radio Frequency and Electrical Specifications	.138
	Software Specifications	.139
	Environmental Specifications	.140
	Mechanical Specifications	.140
5B.	Regulatory Information	141
	Regulatory Notices	.142
	Patents	. 145
	Trademarks	.145
	Copyright	. 145
	Limitation of Liability	.146
	Additional Information and Updates	.146
Secti	on 6: Safety Information and Terms & Conditions	147
6A.	Safety and Notices	149
	Important Notice	150

Safety and Hazards	
6B. Warranty and Terms and Conditions	151
Warranty	152
Subscriber Agreement/General Terms and Conditions of Services	152
Section 7: Glossary and Index	169
7A. Glossary	171
7B. Index	176

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 card 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[™] software with enhanced Local Search (for Windows computers), Watcher[®] Lite software (for Mac computers), and your new Sprint Mobile Broadband card 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 card. It's divided into seven sections:

- Section 1: Basics of Your Card
- Section 2: Installing the Card
- Section 3: Using the Card on a Windows Computer
- Section 4: Using the Card on a Mac
- Section 5: Technical Specifications and Regulatory Information
- Section 6: Safety Information and Terms & Conditions
- Section 7: 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 ExpressCard modem and services.

The Table of Contents and Index will help you locate specific information quickly. The Sprint Connection Manager software (for Windows) 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 card 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 card 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 Card



Introducing the Sprint Mobile Broadband Card

In This Section

- Your Sprint Mobile Broadband Card
- CDMA Networks
- TRU-Install
- One Touch Activation
- Package Contents
- Care and Maintenance
- About This Guide

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

Your Sprint Mobile Broadband Card

The Sierra Wireless AirCard[®] 597E ExpressCard is a dual-band wireless ExpressCard modem. It enhances the functionality of your mobile computing devices by adding wireless data.

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

- Easily activate your account (One Touch Activation)
- Connect to the Internet, VPNs, and corporate networks
- Send and receive large email messages
- Use Sprint Location Services (Windows[®] only)
- Conduct Internet-based videoconferencing
- Access streaming real-time media
- Play games online

Your card fits into an ExpressCard/34 slot, ExpressCard/54 slot (available on newer notebook computers), or PC Card slot (when used with the included ExpressCard to PC Card adapter) available on older notebook computers.

CDMA Networks

The card operates over a type of wireless network called CDMA (Code Division Multiple Access).

To use the card, 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 14).

There are CDMA networks that operate in the frequency bands supported by the card throughout North America. 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 VisionSM) 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. Average data rates are 40-80 kbps.

Tip: More information about CDMA networks is available on the CDMA Development Group Web site, <u>www.cdg.org</u>.

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 101.

TRU-Install

TRU-Install is a Sierra Wireless feature that installs the necessary software and drivers the first time you insert the card into your Windows or Mac computer. An installation CD is not required.

One Touch Activation

Where supported by the network, One Touch Activation (IOTA 2.4) lets you easily activate your card. When prompted, you simply click "**Yes**" to indicate that you'd like the network to autoprogram your card. If this is successful, you are ready to connect to the network.

Package Contents

Your Sprint Mobile Broadband card package contains the following components:

- Sprint Mobile Broadband card by Sierra Wireless (Model AirCard 597E)
- ExpressCard to PC Card adapter (needed only if your computer doesn't have an ExpressCard slot)
- Getting Started guide

Care and Maintenance

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

- The card should fit easily into your ExpressCard slot or ExpressCard to PC Card adapter. Forcing the card into the slot or adapter may damage the connector pins.
- Protect the card from liquids, dust, and excessive heat.
- When not installed in your computer, store the card in a safe place.
- Remove the card before storing or transporting your computer.
- When inserting or removing the card, always grip it by the sides rather than the end, as this prevents damage to the card (see diagrams on page 29).
- Do not use the card with a handheld computer; it is designed only for notebook computers running Windows Vista, Windows XP, Windows 2000, or Mac OS X.
- Do not handle or operate the card 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.

About This Guide

This user's guide is designed to provide you with all the information you need to install and use your card by Sierra Wireless (AirCard 597E).

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

- Section 1 (which you are reading) gives you an overview of the card (AirCard 597E).
- Section 2 provides step-by-step instructions for installing the card and software on a Windows or Mac computer (page 15).
- Section 3 provides step-by-step instructions on using the card on a Windows computer (page 41).
- Section 4 provides step-by-step instructions for using the card on a Mac computer (page 109).
- Section 5 provides electrical, radio frequency, and other parameters of the card for those who require technical information, as well as regulatory information (page 133).
- Section 6 provides important safety and liability information and the Terms and Conditions of use for the Sprint Mobile Broadband card (page 147).
- Section 7 include a glossary (page 171) and index (page 176).

Getting Started With Your Card

In This Section

- Installation Overview
- System Requirements (Windows)
- System Requirements (Mac)
- Included Software
- Attaching an External Antenna

This section describes the basics of getting started with your card, and how to look after your card.

Installation Overview

Before you begin using your card, you must install the card's software and configure the card for your computer. The installation process consists of:

- Ensuring that your computer meets the system requirements.
- Inserting the card into your computer and installing the drivers for the card and the Sprint Connection Manager software (for Windows) or Watcher Lite software (for the Mac).
- Starting the software.
- Activating your Sprint account and configuring the card to use your account (unless the card has been preactivated).

To install the drivers and software, you do not need an installation CD. Your card uses the Sierra Wireless TRU-Install feature—the drivers and software are installed when you insert the card into your computer. (To get the latest drivers and software, you can always go to <u>www.sprint.com/downloads</u>.)

System Requirements (Windows)

The Sprint Mobile Broadband card is supported on:

- Windows Vista.
- Windows XP with Service Pack 2.
- Windows 2000 with Service Pack 4 and high encryption support. (See "High Encryption Requirements (Windows)" on page 10.)

To install and run the card and accompanying Sprint Connection Manager software on a Windows computer, you will need the minimum system resources shown in the following table.

Slots	One ExpressCard/34 or ExpressCard/54 slot; alternatively, a Type II PC Card slot (when used with the ExpressCard to PC Card adapter [included in your package]).
Memory	32 MB
Disk space	32 MB

Note:

High Encryption Requirements (Windows)

Depending on your configuration, an IOTA (Internet Over The Air) session may automatically start as part of the installation 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 35.)

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

 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 (<u>www.microsoft.com/windows/ie/downloads</u>).

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.

 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.

System Requirements (Mac)

Note: The Mac software (Watcher Lite) currently does not support Sprint Location Services.

The Sprint Mobile Broadband card is supported on a MacBook[™] Pro or PowerBook[®] G4 computer running Mac OS X version 10.4 or newer.

To check your version, from the Apple menu () choose **About This Mac**. If your version is earlier than 10.4, then you must upgrade to version 10.4 or newer; contact an Apple reseller, an Apple retail store, or visit <u>www.apple.com/store</u>.

If your card has not been activated, you may also need access to a telephone.

For technical support issues, please contact Apple. If you can't recall your lock code, contact Sprint Customer Service.

Included Software

The Sprint Mobile Broadband card comes with the following software:

- Sprint Connection Manager, which allows you to manage the card's actions and monitor your connections on a Windows computer
- Watcher Lite, which allows you to manage the card's actions and monitor your connections on a Mac computer
- The driver software that forms the interface between the card and your Windows or Mac operating system

The appropriate software is installed the first time you insert the card into your computer.

Detailed instructions are provided beginning on page 17 (for Windows) and page 21 (for Mac).

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 card if it is inserted in your computer (page 28).
- 2. Remove the rubber cap (located on the thick end of the card).
- **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 card.

Section 1C

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 might encounter.

Visiting the Sprint Web Site

Stop by <u>www.sprint.com</u> 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 <u>www.sprint.com</u>.
- Calling us toll-free at 1-888-788-4727 (business use) or 1-888-715-4588 (personal use).
- Writing to us at Sprint Customer Service, P.O. Box 8077, London, KY 40742.

Troubleshooting

The Online Help for Sprint Connection Manager on your Windows computer (see page 66) includes descriptions of most common error messages. Look in the Contents under Troubleshooting.

For help with other problems:

- See "Troubleshooting Tips (Windows)" on page 102 or "Troubleshooting Tips (Mac)" on page 116.
- Consult the Sierra Wireless Web site at <u>www.sierrawireless.com</u>, 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.

Installing the Card



Installing the Software on a Windows Computer

In This Section

• Installing the Software on a Windows Computer

This section explains how to install your Sprint Connection Manager software and Sprint Mobile Broadband card on a Windows computer.

The process may vary, depending on the version of Windows that you are running.

(If you're using your card on a Mac computer, see "Installing the Software on a Mac Computer" on page 21.)

Installing the Software on a Windows Computer

Note:

For comprehensive instructions on installing the Sprint Connection Manager software and activating the card, see the Getting Started guide.

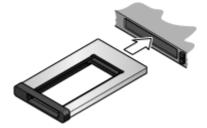
Before you can use your card, you must first install the card's software and configure the card for your computer. The installation process consists of:

- **Card insertion** Inserting the card, which automatically installs the drivers and the Sprint Connection Manager software on your computer (described in this section).
- **Card activation and provisioning** Activating your Sprint account and configuring the card to use your account. (See "Setting Up Service [Windows]" on page 31.)

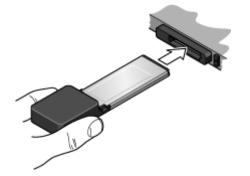
Note:	Windows Vista and Windows 2000 users: You must log in with administrative privileges to install the software and drivers. Windows XP users: You may need to log in with administrative privileges, depending on your Windows configuration.
	Before beginning the installation process, it is recommended that you close all open applications.

To install the software and drivers on your computer:

- **1.** If your card has not yet been activated, ensure you are in the network coverage area (not roaming).
- 2. If your computer does not have an ExpressCard slot, ensure the ExpressCard to PC Card adapter (included in your package) is label side down, and insert the adapter into your computer's PC Card slot.



3. With the picture label facing up, insert the card into your computer.



Windows detects the card and installs the drivers for it. This may take a few minutes. Once completed, the system tray may display "Your devices are ready to use" or "Your new hardware is installed and ready to use."

🄃 Found New Hardware	×
Your new hardware is installed and ready to u	ise.
ê 🛋 🖪	F.

The $(^{1})$ LED is lit (blue, or blinking amber).

- **4.** If the Software Installation Wizard has not started automatically, in Explorer browse to the Store entry, and run **AppLaunch.exe** or, if you're running Windows Vista, in the "AutoPlay" window click **Sprint Connection Manager Installation**. This starts the wizard.
- 5. In the installation window, click Next.
- 6. Read the license agreement and select I accept the terms in the license agreement to indicate your acceptance of the terms. Click Next. (A series of dialog boxes guides you through the installation.)
- 7. Use the Next and Back buttons to navigate through the wizard.
- 8. When the "Installation Complete!" window is displayed, click Finish.
- **9.** If you're running Windows Vista or Windows XP, wait until the system tray displays "Your devices are ready to use" or "Your new hardware is installed and ready to use."



10. Run Sprint Connection Manager.

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

- **11.** If your card is preactivated or if you have activated it at the time of purchase, Sprint Connection Manager displays "Device locked" or "Disconnected;" proceed to "Preactivated Card" on page 32.
- **12.** Proceed to "Non-preactivated Card: One Touch Activation" on page 33 if your card has not been activated.

Installing the Software on a Mac Computer

In This Section

• Installing the Software and Drivers on a Mac

This section explains how to install your Watcher Lite software and Sprint Mobile Broadband card on a Mac computer.

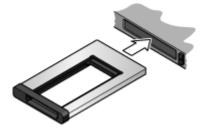
Installing the Software and Drivers on a Mac

Note:

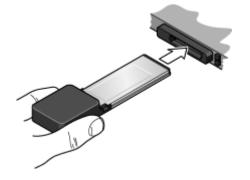
As part of the installation process you will be prompted to restart your computer; save any open documents.

To install the Watcher Lite software and drivers on your Mac computer:

- **1.** If your card has not yet been activated, ensure you are in the network coverage area (not roaming).
- 2. If your computer does not have an ExpressCard slot, ensure the ExpressCard to PC Card adapter (included in your package) is label side down, and insert the adapter into your computer's PC Card slot.

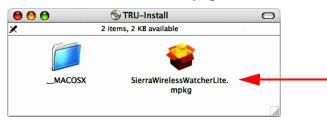


3. With the picture label facing up, insert the card into your computer.



The "TRU-Install" Finder™ window is displayed.

4. In the "TRU-Install" Finder window, double-click SierraWirelessWatcherLite.mpkg.



5. In the "Welcome to the Sierra Wireless Watcher Lite Installer" window, click **Continue**.

	Welcome to the Sierra Wireless Watcher Lite Installer		
Introduction	Welcome to the Mac OS X Installation Program. You will be guided through the steps necessary to install this software.		
Select Destination	Version Information for SIPC 1001 and SI Version 0003		
Installation Type	WatcherLite 1.1.3 SierraSupport 1.4.4		
Install	SierraSwitch 1.1.1 SierraSWoCTool 1.1.0		
Finish Up			

6. In the "Select a Destination" window, choose a destination volume. A green vertical arrow indicates which volume(s) you can install the software onto. If more than one volume has a green vertical arrow, select the volume that has the active operating system.

	Select a Destination
€ Introduction	Select a destination volume to install the Sierra Wireless Watcher Lite software.
 Select Destination Installation Type Install 	
Finish Up	TIGER Untitled 91.0GB (53.7GB Free) 20.5GB (17.1GB Free)
	Installing this software requires 2.1MB of space.
	You have chosen to install this software in the folder "Applications" on the volume "TIGER."
	You can choose the folder to install into. Destination folder: Applications Choose

7. Click Continue.

8. In the "Easy Install on ..." window, click Install.

E	asy Install on "TIGER"
 Introduction Select Destination Installation Type 	Click Install to perform a basic installation of this software package on the volume "TIGER."
InstallFinish Up	

9. If the "Authenticate" window appears, enter your Mac user name and password, and then click **OK**.

		Authenticate
	Installer re	equires that you type your password.
	Name:	robert lee
	Password:	•••••
Details		
?		Cancel OK

10. In the window with the message that you will have to restart your computer, click **Continue Installation**.

000	🤪 Install Sierra Wireless Watcher Lite
θ Introduct on θ Select De tination	Installing this software requires you to restart your computer when the installation is done. Are you sure you want to install the software now?
 Installation Type Install 	Cancel Continue Installation

11. Click Restart.

 Introduction Select Destination 	Serra Wireless Watcher Lite
⊖ Installation Type ⊖ Install ⊖ Finish Up	
	Click Restart to finish installing the software.
	Go Back Restart

 After your computer restarts, run Watcher Lite: in Finder, choose Go > Applications, and then double-click Sierra Wireless Watcher.

Watcher Lite should start:

OOO Sierra Wire	less Watcher Lit	e
Disconne	ected	
SIERRA WIRELESS	Connect	

Watcher Lite displays a status message or the "Device Not Activated" window.

Proceed to "Setting Up Service (Mac)" on page 36.

Inserting and Removing the Card

In This Section

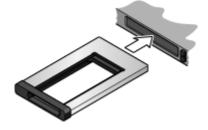
- Inserting the Card
- Removing the Card (Windows)
- Removing the Card (Mac)

This section describes how to properly insert the card and remove it from your computer.

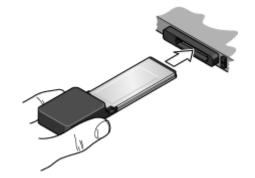
Inserting the Card

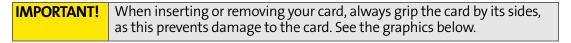
To insert the card into a notebook computer:

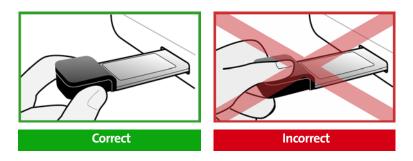
1. If your computer does not have an ExpressCard slot, ensure the ExpressCard to PC Card adapter (included in your package) is label side down, and insert the adapter into your computer's PC Card slot.



2. With the picture label facing up, insert the card into your computer.







When you insert the card into a Windows computer, the following should occur:

- The first time the card is inserted, Windows detects the card 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 the GO button in the Mobile Broadband window.
- If sound effects are enabled, the computer beeps.
- The Unplug and Eject Hardware icon appears in the system tray, if it is not already displayed for another card (and unless the feature has been disabled).
 Windows Vista Windows XP Windows 2000



The card is powered as soon as you insert it.

Removing the Card (Windows)

IMPORTANT! When inserting or removing your card, always grip the card by its sides, as this prevents damage to the card.

To remove the card from your Windows computer:

- 1. Exit Sprint Connection Manager if it is open (page 61).
- **2.** Click the Unplug and Eject Hardware icon in the system tray:

Windows Vista Windows XP Windows 2000

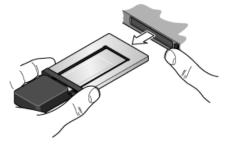


3. Click the entry for "NEC PCI to USB Open Host Controller" or "Standard Enhanced PCI to USB Host Controller."

5

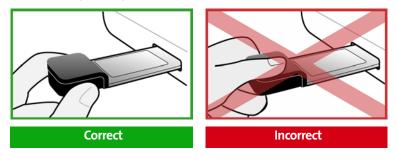
- **4.** If a dialog box appears notifying you that it is safe to remove the card, click **OK**, or click the Close button (**X**).
- **5.** Use your computer's ExpressCard or PC Card ejector to eject the card from the slot.

6. If you're using your card (with the ExpressCard to PC Card adapter) in a PC Card slot, remove the card and adapter from your computer's slot by gripping both sides of the adapter and pulling straight out.



– or –

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

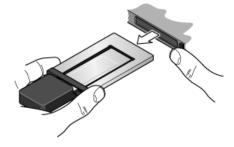


Removing the Card (Mac)

IMPORTANT! When inserting or removing your card, always grip the card by its sides, as this prevents damage to the card.

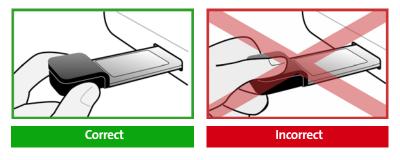
To remove the card from your Mac:

- **1.** End your network connection (in Watcher Lite, click **Disconnect**).
- **2.** Eject the card from the slot.
- **3.** If you're using your card (with the ExpressCard to PC Card adapter) in a PC Card slot, remove the card and adapter from your computer's slot by gripping both sides of the adapter and pulling straight out.



– or –

Eject the card from the slot, and remove the card from your computer's slot by gripping both sides of the card and pulling straight out.



Setting Up Service (Windows)

In This Section

- Activating and Using Sprint Service
- Preactivated Card
- Non-preactivated Card: One Touch Activation
- Non-preactivated Card: Activation Wizard
- Data Provisioning (IOTA)

This section walks you through setting up service for your Sprint Mobile Broadband card after you have inserted the card and installed the Sprint Connection Manager software (page 18).

Activating and Using Sprint Service

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

When the card is inserted and Sprint Connection Manager is started, it will detect whether the card has been configured with an account ("preactivated"). If it has not, the "One Touch Activation" window or the Activation Wizard starts automatically.

Preactivated Card

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

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

To unlock your card:

Tip:

- **1.** Click the **b** icon. (If is not visible, in the **Mobile Broadband** window 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.

If you can't recall your lock code, try using the last four digits of your card's phone number (MDN). If this doesn't work, call Sprint Customer Service at 1-888-788-4727 (business use) or 1-888-715-4588 (personal use).

After unlocking your preactivated card, it is ready for use. See "Using the Card on a Windows Computer" on page 41.

Non-preactivated Card: One Touch Activation

If the "One Touch Activation" window appears, click **Yes** to indicate that you'd like to have the network autoprogram your card.



Sprint Connection Manager will display "Updating User Profile."

If One Touch Activation is successful, Sprint Connection Manager will then display "Disconnected," after which you are ready to connect to the network. (Click the **GO** button in Sprint Connection Manager.) To learn about using the software, see "Using the Card on a Windows Computer" on page 41.

If One Touch Activation was not successful, a message window is displayed. To activate your card, use the Activation Wizard (see the next section).

Non-preactivated Card: Activation Wizard

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

Note: If you successfully activated your card through the "One Touch Activation" window (page 33), skip these steps and go directly to "Using the Card on a Windows Computer" on page 41.

The Activation Wizard will guide you through the activation process.

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

Before you call Sprint, have these things ready:

- A phone
- Your card
- The city and state where the card 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.

Section 2D: Setting Up Service (Windows)

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 card's activation code (gives you access to configure the account)
- Your card's phone number (MDN)
- Your card'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:

- Ensure the card 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 card (page 69).
- **3.** If Sprint Connection Manager displays "Device powered off," power the card on (page 52).
- 4. Start the Activation Wizard: select MENU > Settings > Sprint Mobile Broadband -Sierra Wireless > Activation Wizard.

Once the Activation Wizard is running:

- **1.** To begin activation of the card, click **Next**.
- 2. Call Sprint at the appropriate 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.

 Wait a few moments for the card to automatically reset. Depending on your configuration, an IOTA session may automatically start. (See "Data Provisioning [IOTA]" on page 35.)

After Sprint sets up your account on the network, your card should be configured and ready for use. To learn about using the software, see "Using the Card on a Windows Computer" on page 41.

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 card. To make this secure connection, IOTA requires that your computer support 128-bit encryption. (See "High Encryption Requirements (Windows)" on page 10.)

Depending on your configuration, the first time Sprint Connection Manager detects the activated card, 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 card. If this is needed:

- 1. In the "Device Info & Diagnostics" window (page 89), click Update Data Profile. (If this button is not displayed, remove and reinsert the card.)
- 2. In the "IOTA Provisioning" window, click Yes.

Your card 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. To learn about using the software, see "Using the Card on a Windows Computer" on page 41.

Section 2E

Setting Up Service (Mac)

In This Section

- Activating and Using Sprint Service
- Activating Your Card

This section walks you through setting up service for your Sprint Mobile Broadband card, after you have inserted the card into your Mac computer and installed the Watcher Lite software (page 22).

Activating and Using Sprint Service

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

Activating Your Card

After you have inserted the card into your computer and started Watcher Lite, Watcher Lite will detect whether the card has been configured with an account ("preactivated"). If it has not, Watcher Lite displays a message ("Not activated") or the "Device Not Activated" window. Use the following table to determine your next actions:

Text/window displayed	Description/next action
"Disconnected"	Your card is preactivated. You are ready to connect to the network. (Click the Connect button in Watcher Lite.) Proceed to "Your Card: The Basics (Mac)" on page 110.
"Device is Locked"	 Your card is preactivated. Unlock the card: 1. If the "Unlock Device" window is not displayed: from the Extras item on the Sierra Wireless Watcher menu, choose Unlock Device. 2. In the "Unlock Device" window, enter the lock code (PIN), and click OK. If you can't recall your lock code, try using the last four digits of your card's phone number. If this doesn't work, call Sprint Customer Service at 1-888-788-4727 (business use) or 1-888-715-4588 (personal use).
	3. Proceed to "Your Card: The Basics (Mac)" on page 110.

Text/window displayed	Description/next action
"Device Not Activated" window	Your card is not activated. ▶ Click Yes to indicate that you'd like to activate your card. Watcher Lite will display "Updating User Profile."
	If provisioning is successful, Watcher Lite displays "Disconnected," after which you are ready to connect to the network. (Click the Connect button in Watcher Lite.) Proceed to "Your Card: The Basics (Mac)" on page 110.
	- or -
	If the "Data Provisioning" window displays "Provisioning failed," use the Activation Assistant (below).
"Not activated"	Your card is not activated.
	Use the Activation Assistant (below).

Activation Assistant

The Activation Assistant will guide you through the activation process if your card is not preactivated.

Note: If you close the Activation Assistant before finishing the card activation, you can start the Activation Assistant later. (From the **Extras** item on the Sierra Wireless Watcher menu, choose **Activation**.)

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

Before you call Sprint, have these things ready:

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

To activate your card and account:

- 1. From the Extras item on the Sierra Wireless Watcher menu, choose Activation.
- 2. In the "Activation Assistant" window, click Continue.

	Activation Assistant
$\overline{\mathbf{A}}$	If you continue the device will attempt activation. This may take a few moments.
	Cancel Continue

- **3.** Call Sprint at the appropriate number displayed in the Activation Assistant.
- **4.** Follow the instructions of the account representative to activate your card.
- **5.** To complete the activation process, enter the information (from the account representative) into the fields on the screen.
- 6. Continue through the Activation Assistant, until the "Success!" window is displayed. Click Finish.

After Sprint sets up your account on the network, your card is activated.

- **7.** From the **Extras** item on the Sierra Wireless Watcher menu, choose **Data Provisioning**.
- 8. In the "Data Provisioning" window, click OK.

The card then retrieves the updates to your account. Watcher Lite will display "Updating User Profile," then "Disconnected," after which you are ready to connect to the network. (Click the **Connect** button in Watcher Lite.) Proceed to "Your Card: The Basics (Mac)" on page 110.

Using the Card on a Windows Computer



Your Card: The Basics (Windows)

In This Section

- Sprint Connection Manager
- Starting Sprint Connection Manager
- Starting Sprint Connection Manager Automatically
- Sprint Connection Manager Window
- Connection States (Mobile Broadband Window)
- GPS Status (GPS Receiver Window)
- System Tray Connection States
- Determining the Type of Coverage
- Sprint Location Services
- Powering the Card 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

Sprint Connection Manager

Sprint Connection Manager is an application that allows you to manage and monitor the high-speed Sprint Power Vision (1xEV-DO) and Sprint Vision (1X) connections using your Windows computer. Use Sprint Connection Manager to:

- Determine your signal strength and other network connection parameters (page 45).
- Initiate data calls (page 62).
- Access Sprint Location Services (page 55).
- View call statistics (page 87) and messages (page 50).
- Customize features and options (page 77).

Tip: Without running Sprint Connection Manager, you can make a data connection or, if your device supports GPS, use NMEA output simply by starting whatever application you want to use (such as your Web browser, email, or mapping application). Prerequisites: you must have previously selected, in Sprint Connection Manager, **Enable Network Adapter (NDIS)** (page 81) and, if using NMEA output, **Auto Start GPS on connect** (page 84). However, to make use of other features of the card, you must run Sprint Connection Manager.

Starting Sprint Connection Manager

To start Sprint Connection Manager:

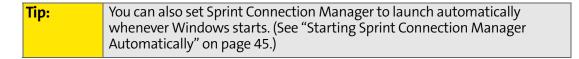
- **1.** Ensure the card is inserted into your computer's ExpressCard or PC Card slot, with the Sprint label facing up.
- Double-click the program's icon (
) on your desktop, or, from the Start menu on your Windows desktop, select: (Windows Vista or Windows XP) All Programs > Sprint > Sprint Mobile Broadband

(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. If Sprint Location Services are

supported and enabled, then a second icon ()) is displayed in the system tray. (See page 54.)



Starting Sprint Connection Manager Automatically

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

From the General option in the "Settings" window (page 78), 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 81.) These settings provide an "always-on" connection, as long as you have network coverage.	

Sprint Connection Manager Window

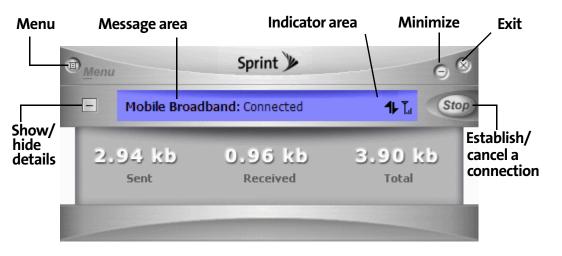
If Sprint Location Services and the **GPS Receiver** window are not supported or not enabled (page 84), then only the **Mobile Broadband** window is displayed:



If Sprint Location Services and the **GPS Receiver** window are supported and enabled, then the **GPS Receiver** window is additionally shown below the **Mobile Broadband** window:



Mobile Broadband Window



The text and icons in the Mobile Broadband window indicate the connection state

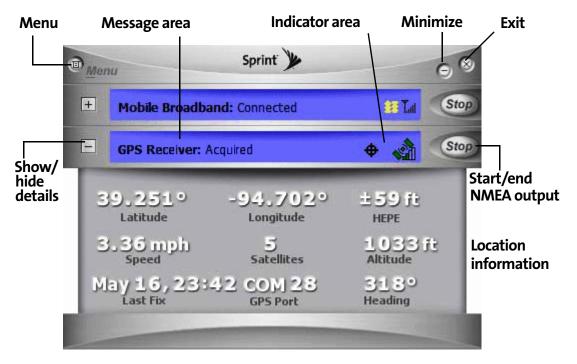
(page 50), and, when disconnected, whether the card is locked 🚨 or unlocked 🎦 (page 67).

The **Mobile Broadband** window may display, depending on the connection state, some of the following icons:

T.il	CDMA network signal strength, indicated by the number of bars.	
	The ToolTip indicates the type of coverage you have (for example, 1X or	
	1xEV-DO), and the signal strength, in dBm.	
	You are roaming. Roaming charges may apply.	
	Note: Sprint Location Services may not be available when roaming.	
	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 Mobile Broadband "Settings" window; page 80).	
^ *	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.	

ŧ₹	1xEV-DO Rev. 0 transmit/receive icon: a data connection is active.	
	The up arrow is animated (for example: 호호) when data is being transmitted to the network.	
	The down arrow is animated (for example: ॾऺऀॾॆ) 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.	
1	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.	
16	1X transmit/receive icon: the data connection is dormant. The up and down arrows are gray.	

GPS Receiver Window



The text and icons in the **GPS Receiver** window indicate the following (described in the table that follows):

- GPS status
- GPS/Privacy status
- Satellite status
- Location information (when the GPS Receiver window is expanded)

The **GPS Receiver** window may display, depending on the GPS/Privacy status and satellite status, some of the following icons and text. The icons' ToolTips in Sprint Connection Manager provides more information.

*	Privacy is on (you have not accepted the Privacy Consent Agreement). Sprint Location Services are not available.
	To use Sprint Location Services, in the Sprint Location Services "Settings" window, select Enable Location Services .
	Privacy is off. GPS is available. For the status of GPS, see the satellite status icon (described below).
- Câi	GPS is available, but off. The satellite and the vertical bars are not colored.
	To use GPS, click the GO button in the GPS Receiver window.
	GPS is on, but not usable (searching for satellites). The vertical bars are not colored.
	The ToolTip indicates the number of satellites.
	GPS is on and is usable, but with lower accuracy. The vertical bars are colored.
	The ToolTip indicates the number of satellites acquired.
4	GPS is on and is usable, with better accuracy. The vertical bars are colored.
	The ToolTip indicates the number of satellites acquired.
Latitude	Latitude, in decimal degrees. For example, -17.123°
Longitude	Longitude, in decimal degrees. For example, 23.023°
HEPE	Accuracy (horizontal/vertical precision), in feet.
Speed	Current speed, in miles per hour.

Satellites	Number of satellites used in the current GPS fix.	
Altitude	Altitude, in feet.	
Last fix	Date/time that the GPS values were last acquired.	
GPS Port	The current NMEA port. (For information on NMEA, see "What is NMEA?" on page 99.)	
	This information is useful when configuring a GPS application to use your GPS-capable device (page 99).	
Heading	Current direction, in degrees.	

Common items

Sprint Connection Manager may display, depending on the settings of your card, the following buttons and text:

- **Menu** or the 🔟 button Displays the Sprint Connection Manager menu (page 73).
- — (upper right corner of the window) Minimizes Sprint Connection Manager (page 61).
- Exits Sprint Connection Manager (page 61).
- [+] (Mobile Broadband window) Expands the Mobile Broadband window (page 58) and displays the amount of data transferred (when Connected), or,

when disconnected, the lock status of your card (locked 🕒 or unlocked 🎦).

- [-] (Displayed when the **Mobile Broadband** window is expanded) Hides the amount of data transferred and the lock status of your card (page 58).
- GO (Mobile Broadband window) Starts the Sprint Power Vision or Sprint Vision connection (page 62).
- **Stop** (**Mobile Broadband** window) Ends the data connection (visible when a connection is established; page 66); also ends the NMEA output.
- [+] (GPS Receiver window) Expands the GPS Receiver window (page 58) and displays location information.
- [-] (Displayed when the **GPS Receiver** window is expanded) Hides the location information.

- GO (GPS Receiver window) Starts the NMEA output (page 100).
- Stop (GPS Receiver window) Ends the NMEA output.

Connection States (Mobile Broadband Window)

The **Mobile Broadband** window can display various connection and interaction states, including:

- No device
- Initializing
- Updating User Profile... (See "Data Provisioning [IOTA]" on page 35.)
- Searching for service...
- Disconnected
- Connecting
- Connected
- Connected to NDIS
- Device locked
- Device powered off

Note: The system tray icon also indicates the connection state (page 43).

No device

Sprint Connection Manager did not detect the card. The GO button is unavailable.



Insert the card. If it is already inserted, remove and reinsert it; wait a few moments. If this message is still displayed, uninstall (page 71) and reinstall Sprint Connection Manager, or contact Sprint (page 14).

Initializing

Sprint Connection Manager is attempting to establish communication with the card.

Searching for service...

Sprint Connection Manager is determining whether 1X or 1xEV-DO service is available. If this message persists, see page 104.

Disconnected

Sprint Connection Manager is ready to make a connection to the network or to use Sprint Location Services. The **GO** button is available; the signal strength icon

 $(\mathbf{T}_{\mathbf{I}})$ and the roaming icon (Δ) (if you're roaming) are visible. If the **Mobile**

Broadband window is expanded, the lock icon (🕒 or 🎦) is visible.

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



Connecting

Sprint Connection Manager is establishing a connection to the network.

Connected

The connection is established. In addition to the signal strength icon $(\mathbf{T}_{\mathbf{III}})$ and the roaming icon (Δ) (if you're roaming), the transmit/receive icon ($\stackrel{\texttt{ss}}{\texttt{ss}}$ for 1xEV-DO

Rev. A; 🗄 for 1xEV-DO Rev. 0; **1** for 1X) is also displayed.

If you expand the **Mobile Broadband** window (+), the amount of data transferred is shown. (See note on page 65.)

To end the connection, click **Stop**.

		Sprint 🎾		98	
	-	Mobile Broad	Iband: Connected	1. La Stop	
	2.	94 kb _{Sent}	0.96 kb Received	3.90 kb Total	

Connected to NDIS

This message applies only if **Enable Network Adapter (NDIS)** (page 81) has been selected. For a description, see "Connected" (page 51).

Device locked

The card is locked, so that others cannot use the card and your account. To use most of the features, you must unlock the card (page 69).



Device powered off

The card has been powered off (through **Menu > Power Off Modem**). To use the card, select **Menu > Power On Modem**.



For more information, see "Powering the Card On and Off" on page 57.

GPS Status (GPS Receiver Window)

The GPS Receiver window displays the GPS status:

- OFF
- Validating
- Searching
- Acquired

OFF

GPS is not available or is turned off.

To use GPS:

- 1. Ensure the card is turned on and the GPS Receiver window is displayed.
- If the GPS Receiver window is not displayed, in Sprint Connection Manager select MENU > Settings > Sprint Location Services, and then select Enable Location Services and Display GPS Receiver. (If Privacy Consent Agreements are displayed, you must read and accept them.)
- 2. Click the GO button in the GPS Receiver window.

Tip: You can turn off the display of the Privacy Consent Agreements (from the Sprint Location Services "Settings" window; page 83).

If the **GPS Receiver** window still displays "OFF," ensure **Network Mode** (page 81) is set to **Automatic** or **1X Only**, and (subject to change) ensure that you are in the network coverage area (not roaming).

Validating

The network is authenticating your wireless or GPS subscription.

Searching

Sprint Connection Manager is searching for satellites.

Acquired

Satellites have been acquired and location coordinates are available for use (and displayed in the **GPS Receiver** window [page 48]).

NMEA output is being generated. (For information on NMEA, see "What is NMEA?" on page 99.)

System Tray Connection States

Sprint Connection Manager has an associated icon (¹) that appears in the system tray. The icon reflects the connection state.

\$	Sprint Connection Manager is not ready to connect to the network. Your card is either locked ("Device locked"; page 52), not detected ("No device"; page 50), or powered off ("Device powered off"; page 52).
•	Disconnected — Sprint Connection Manager is ready to make a connection to the network (page 51), or Connecting — Sprint Connection Manager is making a connection to the network (page 51).
•	Connected — Connection is established to the network; data transfer is in progress (page 51).
*	Dormant — Connection is established, but no data transfer is taking place.

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

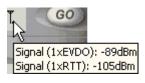
Right-clicking the icon displays the shortcut menu (page 75).

Close Sprint Mobile Broadband		
Help About Sprint Mobile Broadband		
Exit		<u>×</u>
Note 🛛 🐟 Sprint Mobile Br 🤇	00	3:31 PM

If Sprint Location Services are supported and enabled, then a second icon (ﷺ) is displayed in the system tray. The ToolTip indicates GPS and satellite status.

Determining the Type of Coverage

The ToolTip over the signal strength indicator (T_{III}) 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 90).

Sprint Location Services

Sprint Location 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).

For limitations related to Sprint Location Services, see "Location-Based Services limitations" on page 97.

To use Sprint Location Services:

- Ensure that, in the settings for Sprint Location Services (page 83), you have selected Enable Location Services and, if you will be using GPS applications, Display GPS Receiver, and you have accepted the Privacy Consent Agreement(s).
- 2. In Sprint Connection Manager, click Menu > Location & Search Services.

Note: If the menus and windows (page 55 and page 83) related to Sprint Location Services are unavailable in Sprint Connection Manager, see "Sprint Location Services Aren't Working or Don't Seem to Be Available" on page 105. If you have not made a data connection within the last 30 days, ensure you have a data subscription, and click **Connect Now** in the window that is displayed.

Confirm Vision Subscription	
GPS/LBS access requires a have a Sprint Vision subscrip confirm subscription before u	tion please connect to
[]	Connect Later

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 card, and the time that the location information was acquired.



3. From the "Sprint Nextel Location & Search" window, enter or select the type of item you want to find. If you've previously entered search items, a drop-down list displays the last five items you've entered. 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 your computer's default Web browser to display the results of Sprint Location Services.

Your Web browser 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 "Sprint Nextel Location & Search" window, you can submit additional searches.

From the "Settings" window, you can specify the settings for Sprint Location Services (page 83).

Powering the Card On and Off

If you are using your card in an aircraft, hospital, or other environment where the card may cause interference, you can power the card off (without removing it from your computer's slot), and still use other functions of your computer.

This also allows you to conserve your notebook computer's battery.

To power the card off:

- 1. Close any active data connection (page 66).
- 2. Select MENU > Power Off Modem.

When the card is powered off, the menu option switches to **Power On Modem**, the **Mobile Broadband** window displays the message "Device powered off," and the **GPS Receiver** window displays "OFF."



To power the card on:

Select MENU > Power On Modem.

Controlling the Sprint Connection Manager Window

Expanding Sprint Connection Manager

The **Mobile Broadband** window and, if supported and enabled (page 84), the **GPS Receiver** window each have two views: compact and expanded.

To expand Sprint Connection Manager, click + in the appropriate window.

To change back to the compact view, click 📃 .

Mobile Broadband Window

Compact view:



Expanded view:

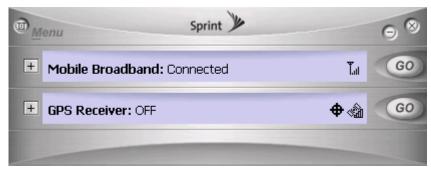
	าน	Sprint 🎾	98
=	Mobile Broadba	nd: Disconnected	T _a Go
	0 kb Sent	0 kb Received	C kb Total

When expanded, the **Mobile Broadband** window also displays the amount of data transferred during the current connection, and (only when disconnected) the lock

state of the card (locked 🕒 or unlocked 🎦).

GPS Receiver Window

Compact view:



■ Mer	ıu	Sprint 🎾		08
+	Mobile Broadba	and: Connected	\$\$ Tal	Stop
-	GPS Receiver: /	Acquired	+ 🎝	Stop
3	9.251 ° Latitude .36 mph Speed ay 16, 23:	-94.702° Longitude 5 Satellites 42 COM 28 GPS Port	±59 ft HEPE 1033 f Altitude 313° Heading	t

When expanded, the **GPS Receiver** window displays location information (described in the table on page 48.)

60

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 💽 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 54).

```
        Tip:
        You can set Sprint Connection Manager to start minimized. (See "Start in system tray" on page 79.)
```

You can prevent Sprint Connection Manager being covered up by other windows, by setting **Always on top** (page 79).

Restoring Sprint Connection Manager

To restore Sprint Connection Manager when it is minimized:

Click the Sprint Connection Manager icon 2 in the system tray.

– or –

Tip:

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 ⊠ button.

– or –

Right-click the Sprint Connection Manager icon **N** in the system tray and select **Exit** from the shortcut menu.

If **Enable Network Adapter (NDIS)** (page 81) 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 icons disappear from the system tray.

Note: If **Enable Network Adapter (NDIS)** (page 81) 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:

Click the GO button in the Mobile Broadband window. (If the GO button is unavailable, see "GO Button Is Unavailable" on page 104.)

Note:	A connection is automatically established if you select Menu >	
	Location & Search Services or click the GO button in the GPS Receiver	
	window.	

When the connection is successfully established, the network welcome screen appears (unless you have turned off the welcome screen display; see "Always show Welcome Screens" on page 81).



The **Mobile Broadband** window displays "Connected" or "Connected to NDIS" (page 51).

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

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." When you resume data traffic, the connection becomes active.

To monitor the status of the connection, you can use the text (page 50) and icons (page 45) in the **Mobile Broadband** window, and the icon in the system tray (page 54). You can also view the amount of data transferred (page 65).

Тір:	You can optionally specify which application to automatically launch when the connection is established. (See "Auto-launch upon Network Connection" on page 64.) You can also set the connection to launch automatically whenever available. (See " GO automatically when ready " on page 81.) If the connection is lost, it is restarted automatically. If you also set Sprint Connection Manager to launch automatically (see " Launch when Windows starts " on page 79), 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 Network Adapter (NDIS) (page 81). However, Sprint Connection Manager and its icon in the system tray won't be available for you to monitor the status of the connection.
------	--

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 warning message window, 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 Mobile Broadband option in the "Settings" window; page 80).	

To turn on the Roam Guard feature:

- **1.** From the Sprint Mobile Broadband option in the "Settings" window, ensure **Roam Mode** is set to **Automatic**.
- 2. From the Roam Guard drop-down list, select Always Ask.

To permanently turn off the Roam Guard feature:

From the **Roam Guard** drop-down list, select **Never Ask**.

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 68).
- 2. Ensure that your card is not powered off (page 52).
- 3. Select MENU > Settings > Sprint Mobile Broadband 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 select the VPN connection from the drop-down list.
 - Application (VPN client, etc.) Auto-launch an installed VPN program, or any other program. Enter the program path in the field, 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.

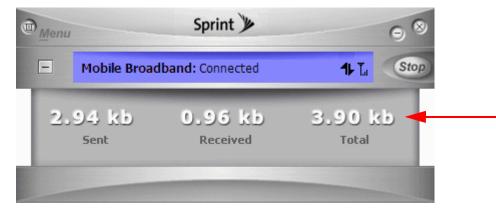
Viewing the Amount of Data Transferred

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 Network Adapter (NDIS) (page 81) 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 and received during the current connection:

▶ If the **Mobile Broadband** window is not expanded, click the 🕂 button.

The number of bytes sent and received during the current connection is displayed to three significant digits (for example, 581 kb, 1.23 Mb, or 1.81 Mb).



Once you end the connection, all numbers reset to zero.

To hide this information, click the 📃 button in the **Mobile Broadband** window.

Ending a Connection

To end a connection:

In the Mobile Broadband window, click Stop.

This ends your data connection, and also your GPS connection, if it is open.

Note: The **Stop** button in the **GPS Receiver** window ends only your GPS connection; data may still be transferred.

If **Enable Network Adapter (NDIS)** (page 81) has not been selected and you exit Sprint Connection Manager while a connection is in progress, a window opens asking whether you want to disconnect the call. Click **Yes** to end the connection and exit Sprint Connection Manager. (See "Exiting Sprint Connection Manager" on page 61.)

If **Enable Network Adapter (NDIS)** has been selected, manually disconnecting will leave the card disconnected. It will not reconnect until you remove and reinsert the card.

If **GO automatically when ready** (page 81) has been selected, manually disconnecting will leave the card 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 Sprint Location Services (page 55)
- 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 card.

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

- Press <F1> when Sprint Connection Manager is the active window.
- From Sprint Connection Manager, select MENU > Help.
- Right-click the system tray icon (💽) and select Help.

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 card so that others cannot use it to access your account. A four-digit lock code is needed to unlock the card.

You can set the card to lock:

- Whenever Sprint Connection Manager is started (page 68).
 - or –
- Immediately (without restarting Sprint Connection Manager) useful if you are lending your card and computer or leaving your computer for a short time (page 68).

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 14).

Configurations that use the Activation Wizard or IOTA 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 70) from the initial value to any four-digit code you choose.

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.

When the Card Is Locked

When the card is locked, you can:

- Unlock the card (page 69).
- Power off the card (page 57).

When the card is locked, you cannot:

- Make data connections (the GO button is unavailable).
- Use Sprint Location Services.
- Run the Activation Wizard.

Locking the Card

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

To lock the card immediately:

- **1.** End any active connection. (You can lock the card only when it is disconnected; page 51.)
- 2. If the Mobile Broadband window is not expanded, click + to expand it.
- 3. Click the Ъ icon.
- 4. In the "Enter User Lock Code" window, enter the lock code, and click OK.

When the card is locked, the **Mobile Broadband** window displays "Device locked," and the lock icon is now . The **GO** button is unavailable.

You can also set the card to be locked upon startup of Sprint Connection Manager, as described next.

Locking upon Sprint Connection Manager Startup

To set the card to lock as soon as Sprint Connection Manager starts up:

- **1.** End any active connection. (You can lock the card only when disconnected; see page 51.)
- 2. If the Mobile Broadband window is not expanded, click + to expand it.
- 3. Click the lock icon () or), depending on the current lock status).

Tip:

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



This setting takes effect only after you exit and restart Sprint Connection Manager.

Unlocking the Card

When the card is locked, the **Mobile Broadband** window displays "Device locked," and the lock icon is

To unlock the card:

1. If the **Mobile Broadband** window 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 card is unlocked, the Mobile Broadband window 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 card until you receive assistance from Sprint.

To change the lock code:

1. In the Sprint Mobile Broadband "Settings" window (page 80), click User Lock Change.

The "Change User Lock Code" window is displayed:

🗟 Change User L	ock Code 🛛 🛛 🔀
Current Code	
New Code Re-enter	
<u>O</u> K	<u>C</u> ancel

- **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.



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 61).
- 2. Remove the card. (See "Removing the Card (Windows)" on page 28.)
- 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 (Windows)

In This Section

- Sprint Connection Manager Menu
- System Tray Menu

This chapter describes each menu option you may encounter while using your card and the Sprint Connection Manager software on your Windows computer.

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.

	Links	+ >>	08
-	Power Off <u>M</u> odem L <u>o</u> cation & Search Services	ted	T.al GO
1	Alert Log Connection History Device Info & Diagnostics		_
	Software Updates	- kb	0 kb
J	<u>H</u> elp <u>A</u> bout Sprint Mobile Broadband	ed	Total
_	<u>S</u> ettings E <u>x</u> it		

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 the i 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
Links	Access links to Sprint products and services.
	See "Accessing Links" on page 70.
Power Off	Power off your card.
Modem	See "Powering the Card On and Off" on page 57.
Location & Search	Query the network for information on points of interest that are near your current location.
Services	See "Sprint Location Services" on page 55.

Menu Item	Description
Alert Log	View a record of all alerts (for example, connection errors) that have been received while establishing and maintaining connections.
	See "Viewing Alerts" on page 88.
Connection History	View a record of connections established using your card (unavailable if the Connection History is empty, or if Keep Connection History [page 79] is not selected).
	See "Viewing the Connection History" on page 87.
Device Info &	View information about your card and run diagnostic tests.
Diagnostics	See "Running Diagnostics" on page 89.
Software Updates	Retrieve updates for Sprint Connection Manager and your card.
	See "Updating the Software" on page 91.
Help	Display the online Help, which has operating hints and step- by-step instructions for getting the most from your card.
	See "Online Help" on page 66.
About Sprint Mobile Broadband	Display brief information about the Sprint Connection Manager software. To close the window, click anywhere inside it.
	See "About Sprint Mobile Broadband" on page 92.
Settings	Change the settings for Sprint Connection Manager. Contains submenu items:
	 General: See "General Settings" on page 78.
	 Sprint Mobile Broadband - Sierra Wireless: See "Sprint Mobile Broadband Settings" on page 80.
	 Sprint Location Services: See "Sprint Location Services Settings" on page 83.
Exit	Exits Sprint Connection Manager.

System Tray Menu

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

Close Sprint Mobile Broadband	
Help About Sprint Mobile Broadband	
Exit	<u>×</u>
Note 🧟 Sprint Mobile Br	3:31 PM

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 Sprint Connection Manager Settings (Windows)

In This Section

- Settings Window
- General Settings
- Sprint Mobile Broadband Settings
- Sprint Location Services Settings

This chapter describes you can change to customize Sprint Connection Manager.

Settings Window

Note: This feature is temporarily unavailable if you have powered off the card (page 57).

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; page 78)
 - Sprint Mobile Broadband Sierra Wireless (behavior of your Sprint Power Vision or Sprint Vision connection; page 80)
 - Sprint Location Services (page 83)
- **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 87): click **File > Settings**.

General Settings

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

Settings	X
General	
General	
These settings affect general behavior.	
I Play sound effects	
Always on top	
☐ <u>S</u> tart in system tray	
☑ Keep Connection History	
Launch when Windows starts	
Software Updates From time to time, Sprint may release updates for your Sprint Mobile Broadband software. These updates might add new features or improve network performance. Check for updates once per month Check Now	
OK Cancel <u>Apply</u>	

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 61.)
Keep Connection History	Have Sprint Connection Manager keep a log of your data connections (page 87).
Launch when Windows	Have Sprint Connection Manager start automatically when Windows starts.
starts	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 81). These settings provide an "always-on" connection, as long as you have network coverage.
Check for	Have Sprint Connection Manager automatically check for
updates once per month	software updates (page 91).
Check Now	Check for software updates immediately.
	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	
	restart Windows. Changes to the setting Start in system tray apply only after
	you exit and restart Sprint Connection Manager.

Sprint Mobile Broadband Settings

From the Sprint Mobile Broadband option in the "Settings" window, you can change the behavior of your Sprint Power Vision or Sprint Vision connection.

Settings	×
Sprint Mobile Broadband - Sierra Wireless 🛛 💌	
Sprint Mobile Broadband - Sierra Wireless	
These settings affect the behavior of your Sprint Mobile Broadband Device.	
Always show Welcome Screen	
☐ <u>G</u> O automatically when ready	
Enable Network Adapter (NDIS)	
Network Mode • Auto <u>m</u> atic © 1xEV-DO Only © 1 <u>X</u> Only	
Roam Mode C Sprint	
Sprint Mobile Broadband Device Use the options below to alter the settings on your device. Activation Wizard will change your device's phone number or prepare a new device for use. Device LED Enabled	
Activation <u>W</u> izard User Lock Change Auto Launch	
OK Cancel Apply	

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.	
	To select GO automatically when ready , ensure that Enable Network Adapter (NDIS) (below) is not selected.	
	Tip: You can also set Sprint Connection Manager to start automatically (see " Launch when Windows starts " on page 79). These settings provide an "always-on" connection, as long as you have network coverage.	
	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 Network Adapter (NDIS) (below).	
Enable Network Adapter (NDIS)	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).	
	To select Enable Network Adapter (NDIS) , ensure that GO automatically when ready (above) is not selected.	
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. Note: Sprint Location Services may not be supported. When in an area that has only Sprint Vision (1X) coverage, you won't be able to connect to the network.	
Network Mode: 1X Only	Attempt only a Sprint Vision (1X) connection (even when you have Sprint Power Vision [1xEV-DO] coverage, which provides faster data transmission speeds).	
	Note: When in an area that has only Sprint Power Vision (1xEV-DO) coverage, you won't be able to connect to the network.	

Menu Item	Description	
Roam Mode: Sprint	Disable roaming when you are not in the network coverage area. You will be able to connect only when you are in the network coverage area.	
Roam Mode: Automatic	Allow roaming when you are not in the network coverage area. Note: Roaming rates may apply. Roam Guard (page 63) can remind you of this.	
Roam Mode: Roam Only	Allow only roaming. Note: Roaming rates may apply. Roam Guard (page 63) can remind you of this. Sprint Location Services may not be available.	
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 63. Available only if Roam Mode is set to Automatic (page 82). Note: If you proceed with the data connection, roaming rates may apply.	
Device LED Enabled	Enable or disable the LED of your card. For a description of the LED states, see "LED Operation" on page 136.	
Activation Wizard	Used only when activating a card, or when changing your card's phone number (page 33).	
User Lock Change	Change the security lock code of the card (page 70).	
Auto Launch	Optionally specify which application to automatically launch when a connection is established. See "Auto-launch upon Network Connection" on page 64.	

Sprint Location Services Settings

From the Sprint Location Services option in the "Settings" window, you can change the behavior of Sprint Location Services. (For more information on Sprint Location Services, see page 55.)

🖻 Settings 🛛 🔀
Sprint Location Services
Sprint Location Services
These settings affect the behavior of your device and GPS service.
These settings direct the behavior of your device and of 5 service.
☑ Enable Location Services ☑ Display GPS Receiver
Display GPS Welcome Auto Start GPS on connect Display 'Location & Search Services' on the menu
Privacy Consent
Do not show <u>N</u> MEA Privacy Consent
☑ Do not show Privacy Consent for 'Location & Search Services'
Mapping & Search Service
C Microsoft Live C MapQuest C Yahoo! Maps C Google Maps
GPS Mode
GPS Testing
Number of Satellites: 8 HEPE: +/- 352.14 ft.
Latitude: 33.122138
Longitude: -117.269509 Elevation: 200 ft.
Test GPS Acquired: Jun 12, 2007 15:29:38
OK Cancel <u>A</u> pply

The following table describes the options:

Menu Item	Description	
Enable	Turn on support (by your card) for Sprint Location Services.	
Location Services	Note: To use Sprint Location Services, your account must also be configured appropriately. If you are unable to use Sprint Location Services, see "Sprint Location Services Aren't Working or Don't Seem to Be Available" on page 105 or contact Sprint Customer Service (page 14).	
Display GPS Receiver	Show or hide the GPS Receiver window (page 58).	
Display GPS Welcome	Display a welcome window whenever you initiate Sprint Location Services.	
Auto StartStart an NMEA output stream whenever your card connectGPS onthe network. (For more information on NMEA, see "WhatconnectNMEA?" on page 99 and "When do I need to use NMEA?"page 99.)		
	For this option to have effect, either Enable Network Adapter (NDIS) (page 81) must be selected, or Launch when Windows starts (page 79) and GO automatically when ready (page 81) must be selected.	
	Note: Use this option only if you're using NMEA output all the time. This option results in slower device data performance.	
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 "Sprint Location Services" on page 55.	
Do not show NMEA Privacy Consent	Prevent a "Privacy Consent Agreement" window from appearing every time you use NMEA. For more information, see "What is NMEA?" on page 99 and "When do I need to use NMEA?" on page 99.	

Menu Item	Description	
Do not show Privacy Consent for 'Location & Search Services'	Prevent a "Privacy Consent Agreement" window from appearing every time you use the Location & Search Services menu.	
Microsoft Live MapQuest Yahoo! Maps Google Maps	Specify which mapping and search service (for example, Microsoft® Live, or Google™ Maps) your Web browser uses for Sprint Location Services. Some mapping and search services may have data that is more current or accurate than that of other mapping and search services.	
Test GPS	 Verify that your card is able to obtain data for Sprint Location Services: 1. Ensure that Network Mode (from the Sprint Mobile Broadband "Settings" window; page 80) is set to Automatic or 1X Only. (Sprint Location Services may not be available if Network Mode is set to 1xEV-DO Only.) 2. Ensure you are in the network coverage area (not roaming). 3. Click Test GPS. 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: 8 HEPE: +/- 352.14 ft. Latitude: 33.122138 Longitude: -117.269509 Elevation: 200 ft. Acquired: Jun 12, 2007 15:29:38 	

Section 3D

Tools (Windows)

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 card and the Sprint Connection Manager software on your Windows computer.

Viewing the Connection History

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

	Connection History			
E	jile <u>E</u> dit <u>S</u> ort			
	Date/Time 🔻	Connection Name	Туре	
	5/24/2007 2:18:25 PM	airprimehost1@sprintpcs.com	Sprint Mobile Broadband	
			Clear	Close

From this window you can also access the "Settings" window (page 77) (File > Settings).

Note:	For connections to be recorded, Keep Connection History must be enabled
	(page 79).

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 entries:

- **1.** Select the entries. (Click a single entry, or hold down CTRL or SHIFT and 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 entries:

- **1.** Select the entries. (Click a single entry, or hold down CTRL or SHIFT and 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.

1	Alert Log				×
E	<u>ile E</u> dit <u>S</u> ort				
	Date/Time 🔻	Alert	Connection Name	Туре	
	5/9/2007 10:49:07 AM 5/9/2007 10:22:48 AM	Connection Fa Connection Fa	Sprint Mobile Broadband - Sierra Wireless Sprint Mobile Broadband - Sierra Wireless	Sprint Mobile Broadband Sprint Mobile Broadband	
	5/9/2007 10:17:32 AM		Sprint Mobile Broadband - Sierra Wireless	Sprint Mobile Broadband	
				<u>Cl</u> ear <u>C</u> lose	

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 entries:

- **1.** Select the entries. (Click a single entry, or hold down CTRL or SHIFT and 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 entries:

- **1.** Select the entries. (Click a single entry, or hold down CTRL or SHIFT and 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 card is inserted.
- 2. In Sprint Connection Manager, click Menu.
- 3. Select Device Info & Diagnostics.

The tests automatically start when the window opens.

Device Info & Diagnostics			×
You can use this window to ge Select a Sprint network device		nt network devices.	
Sprint network devices:			
Sierra Wireless AirCard 597E	Modem Device		
Manufacturer: Sierra Wireless Model: AirCard 597E ESN: 0000000(00000000000 Firmware Version: p2102500 Phone number: 000000168 Active Vision User Name: Not)) PRL: 20224 MSID: 000000016	8	
	Result 🔤	All Tests Passed	
	COM30 115200,N,8,1 Initialized Data Configuration set. Status N/A		
Update Data Profile	System Information	<u>R</u> efresh	<u>C</u> lose

From the "Device Info & Diagnostics" window, you can view system information (page 91) and save the system information to an RTF (Rich Text Format) file.

From the "Device Info & Diagnostics" window, you can also update parameters in your card:

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

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 card (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 card. 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 in the "Settings" window (page 77), 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 –
```

Tip:

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

To close this window, click anywhere inside it.

To display more information, you can run diagnostics (page 89).

Frequently Asked Questions (Windows)

In This Section

- Questions about My Account
- Questions about Sprint Connection Manager
- Questions about GPS and Sprint Location Services
- Other Questions

Questions about My Account

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.

Questions about Sprint Connection Manager

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.

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.

Questions about GPS and Sprint Location Services

What is LBS?

LBS (Location-Based Services) is used to provide enhanced Local Search functionality via internet mapping services. For more information, see "What is enhanced Local Search?" on page 95.

What is GPS?

GPS stands for Global Positioning System, which is a system that uses a series of 24 geosynchronous satellites to provide location data.

GPS satellites transmit signals to equipment on the ground. GPS receivers passively receive satellite signals, but do not transmit.

Various GPS standards exist for the User Plane and Control Plane. For more information, see "What is GPS User Plane?" and "What is GPS Control Plane?" on page 96.

What is enhanced Local Search?

Enhanced Local Search is a quick, easy method to run, via Sprint Connection Manager, local search queries to find locations and directions to locations and businesses.

The enhanced Local Search feature uses LBS and allows you to search for Sprint Nextel stores, restaurants, banks, hotels, and so on, outdoors and (with GPS Premium) indoors. For more information, see "What is GPS Premium?" on page 98.

How do I get the enhanced Local Search feature?

The 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.

Note: Sprint Location Services may not be supported if **Network Mode** is set to **1xEV-DO Only**. To use Sprint Location Services, ensure **Network Mode** is set to **Automatic** or **1X Only**. Sprint Location Services are not supported if you're roaming (subject to change).

Where do I find the enhanced Local Search feature?

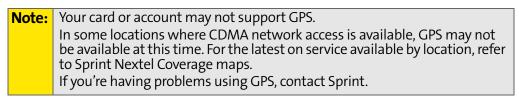
In Sprint Connection Manager, select Menu > Location & Search Services.

How do I use the 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; if you've previously entered search items, a drop-down list displays the last five items you've entered.

Where can I use GPS?

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



What is GPS User Plane?

GPS User Plane is the ability to execute GPS requests at the subscriber level on the card. In other words, the User Plane allows you to submit location-related queries to the network.

Compare to GPS Control Plane (see below).

What is GPS Control Plane?

GPS Control Plane is the ability to execute GPS requests at the network (server) level.

Compare to GPS User Plane (see above).

How do I enable/disable GPS?

By default, Sprint Location Services are disabled.

To enable Sprint Location Services:

- **1.** In the Sprint Location Services "Settings" window, select **Enable Location Services**.
- 2. If you will be using the GPS Receiver window (page 47), select Display GPS Receiver.

Tip: To prevent Privacy Consent Agreements from appearing every time you use NMEA or the Location & Search Services menu, select **Do not show NMEA Privacy Consent** and **Do not show Privacy Consent for 'Location & Search Services'**.

Will GPS work when Privacy is set to ON?

No. Setting Privacy to ON [by not accepting the Consent Privacy Agreement(s)] means you do not want your card to be discoverable; thus, GPS is not enabled/ started on the card.

Tip: An icon in the **GPS Receiver** window indicates the GPS/Privacy status (page 48).

Can I use Sprint Location Services if I have enabled NDIS?

Yes. Sprint Location Services/GPS services are supported, whether or not you have selected **Enable Network Adapter (NDIS)**.

Do I need a GPS subscription to use GPS?

For GPS Basic, you do not need a GPS subscription.

For GPS Premium, you need a GPS subscription.

For more information on GPS Basic and GPS Premium, see "What is GPS Basic?" and "What is GPS Premium?" on page 98.

Location-Based Services limitations

To acquire a location fix, you must be connected to the Sprint network, (subject to change) not roaming, and, for the initial fix, in 1X coverage.

Weather conditions may affect your ability to get a clear view of the satellites and thus to acquire a GPS fix.

If you're outside with a clear view of the sky, the card uses MS-Based position location technology. MS-Based GPS (Basic) is for outdoor use only. If the MS-Based location fix fails, then a standalone location fix is attempted, and a window is displayed (to turn off this window, select **Do not ask me again**).

	ently unavailable in your area. empt is in progress which may
take several minutes.	····p····
Г <u>D</u> o not ask me again	
Continue	Cancel

Note: Location-Based Services use Advanced Forward Link Trilateration (AFLT). AFLT is a type of device-based position location technology. Unlike A-GPS, AFLT does not use GPS satellites to determine location. Instead, the device takes measurements of signals from nearby cellular base stations (towers) and reports the time/distance readings back to the network; the readings are then used to triangulate an approximate location of the device. In general, at least three surrounding base stations are required to get an optimal position fix.

AFLT accuracy may vary, depending on the geometry of the cell towers in your location.

What GPS mode options are supported?

GPS on a Sprint data card works like any other GPS device. Sprint provides two types of GPS mode: GPS Basic, and GPS Premium.

For more information, see "What is GPS Basic?" and "What is GPS Premium?" on page 98.

Note: Sprint Location Services may not be supported if **Network Mode** is set to **1xEV-DO Only** or (subject to change) if you are roaming. To use Sprint Location Services, ensure **Network Mode** is set to **Automatic** or **1X Only**, and ensure that you are in the network coverage area (not roaming).

What is GPS Basic?

Sprint GPS Basic supports GPS outdoors. Your card requires an unobstructed view of GPS satellites (in the sky), and, like any other GPS device, might not perform well within forested areas or near tall buildings.

Sprint GPS Basic is based on GPSOne[™] standards and uses Location-Based Services for the first, fast, GPS fix. GPS coordinate values are made available to applications via a local GPS NMEA Com port.

See also "What is NMEA?" on page 99 and "What is the difference between GPS Basic and GPS Premium?" on page 98.

What is GPS Premium?

Note: At the time of this software release, this GPS mode option is not yet available.

GPS Premium supports GPS outdoors (as does GPS Basic) and additionally indoors (where no GPS satellites are available).

To use GPS Premium, you need a GPS subscription.

What is the difference between GPS Basic and GPS Premium?

GPS Basic is for outdoor use — similar to the capability of a regular GPS device.

GPS Premium is an enhanced GPS capability that allows GPS to be used indoors and outdoors. To use GPS Premium, you need a GPS subscription.

What is a GPS application?

A GPS application is an application that uses NMEA data to get regular location coordinate updates and values typically displayed in an application. (For more information on NMEA, see "What is NMEA?" [below].)

Examples of GPS applications are Microsoft Streets & Trips, and Microsoft MapPoint.

What is NMEA?

NMEA stands for "National Marine Electronics Association."

NMEA 0183 is a standard protocol used by GPS devices to send and receive data.

NMEA output is composed of various strings. Sprint GPS data cards support the following strings:

- \$GPGGA
- \$GPRMC
- \$GPGSA
- \$GPGSV

See also "When do I need to use NMEA?", "How do I start and stop NMEA?", and "How do I configure my NMEA port?", starting on page 99.

How do I configure a GPS application to use my GPS-capable device?

To configure a GPS application to use your GPS-capable device:

- 1. Start GPS NMEA (page 100).
- 2. Note the "GPS Port" value displayed in the expanded GPS Receiver window (page 47).
- **3.** Configure your GPS application to use the same port. For help, see the documentation of the GPS application.

When do I need to use NMEA?

You need to use NMEA only when using a GPS application that uses an NMEA output stream. For more information, see "What is a GPS application?" on page 99 and "How do I start and stop NMEA?" on page 100.

Note: To ensure the best data performance of your card, it's recommended that you not activate the NMEA stream unless you are going to use it.

How do I start and stop NMEA?

Note: To ensure the best data performance of your card, it's recommended that you not activate the NMEA stream unless you are going to use it.

To start NMEA output:

- 1. Click the GO button in the GPS Receiver window (page 47).
- 2. Read and accept the Privacy Consent Agreement.

Tip:You can turn off the display of the NMEA Privacy Consent Agreement (from the
Sprint Location Services "Settings" window).You can also set your card to start an NMEA output stream whenever the card
connects to the network (Auto Start GPS on connect; page 84).

To stop NMEA output, you have several options:

- In the GPS Receiver window, click Stop.
- In the Mobile Broadband window, click Stop.
- Exit Sprint Connection Manager.
- If you have started the GPS application before you started NMEA output: exit the GPS application.

How do I configure my NMEA port?

At the time of this software release, you cannot specify which port Windows uses for NMEA output. Windows automatically uses the next available port.

You can, however, configure the GPS application to use the NMEA Com port that Windows is using (page 99).

Other Questions

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 user name 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?

Ensure Auto Start GPS on connect (page 84) is not enabled.

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, see the user documentation of your email client.

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

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

Troubleshooting Tips (Windows)

In This Section

- Problems, Causes, and Solutions
- GO Button Is Unavailable
- Searching for Service
- Cannot Connect to the Network
- Sprint Location Services Aren't Working or 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 card and the Sprint Connection Manager software on a Windows computer.

Problems, Causes, and Solutions

When properly installed, the Sprint Mobile Broadband card 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 80], 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 ExpressCard slot, PC Card slot, or with the ExpressCard to PC Card adapter.
- System resources required by the card are being used by other devices.

Tips when troubleshooting problems with your card and software:

- Ensure your card is inserted, not locked (page 68), and not powered off (page 52).
- If the data performance of your card is not optimal, ensure **Auto Start GPS on connect** (page 84) is not enabled.
- Check the status of the LEDs; to interpret their status, see "LED Operation" on page 136. If the LEDs are not lit, ensure that **Device LED Enabled** (page 82) is selected.
- To determine the connection status, use the icons in the system tray (page 54), and icons in the **Mobile Broadband** window (page 46) and **GPS Receiver** window (page 48), and messages in the **Mobile Broadband** window (page 50) and **GPS Receiver** window (page 53).
- The alert log might indicate the nature of the problem (page 88).
- Run diagnostic tools supplied with Sprint Connection Manager (page 89).
- Check the Frequently Asked Questions (Windows) (page 93).
- Use the resources listed in "Getting Help" (page 13).
- If Sprint Connection Manager stopped working after you've upgraded to a different version of Windows, see "Sprint Connection Manager Stops Working After Upgrading Windows" on page 107.

If, after reading this section, you are unable to resolve a problem, please visit <u>www.sprint.com</u> or contact Sprint Customer Service. (See "Getting Help" on page 13.)

GO Button Is Unavailable

Ensure the card is properly inserted, not locked (page 68), and not powered off (page 52).

If the **Mobile Broadband** window 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 in the network coverage area (not roaming), or change the setting (page 82). (You may be subject to roaming rates.)

Searching for Service

If the **Mobile Broadband** window displays "Searching for service" for a long period of time (for example, several minutes), try one of the following:

- Try reorienting your computer.
- 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. Note: With the setting 1xEV-DO Only, Sprint Location Services may not be supported.
- 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 card 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:

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 Mobile Broadband 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.

Sprint Location Services Aren't Working or Don't Seem to Be Available

If Sprint Location Services aren't working or don't seem to be available, check whether you have, in the "Settings" window (page 77), a **Sprint Location Services** option in the drop-down list.

- If the drop-down list does not have the Sprint Location Services option, then your account, your card, or both are not configured to support Sprint Location Services; contact Sprint Customer Service (page 14).
 - or –
- 1. Select the Sprint Location Services option from the drop-down list and ensure that Enable Location Services and Display 'Location & Search Services' on the menu are selected. (If a Privacy Consent Agreement is displayed, you must read and accept it.)

- **2.** If you will be using NMEA, select **Display GPS Receiver**. (For more information on NMEA, see "What is NMEA?" on page 99.)
- **3.** Ensure that **Network Mode** (in the Sprint Mobile Broadband "Settings" window) is set to **Automatic** or **1X Only**. (Sprint Location Services may not be available if **Network Mode** is set to **1xEV-DO Only**.)
- **4.** Ensure you are in the network coverage area (not roaming). For the initial fix, you must be in 1X coverage.
- **5.** To verify that your card is able to obtain data for Sprint Location Services, in the Sprint Location Services "Settings" window, click **Test GPS**.
- 6. If the results show the number of satellites and valid latitude, longitude, and elevation information, then check that the GPS application (for example, street mapping application) is configured to use the correct port. (The port number that the GPS application should use is displayed in the GPS Receiver window [page 47].)

For help on checking which port the GPS application is configured to use, see the documentation of the GPS application.

7. If the GPS application is configured to use the correct port, but the application doesn't seem to be reporting correct results, then there may be a problem with the GPS application.

Could Not Prepare Data Services

See "Unable to Prepare Data Services" (below).

Unable to Prepare Data Services

Note:

The message may appear as "Could not prepare data services. Please contact..."

The card 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 104).
- Contact Sprint for assistance (page 14).

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 [Windows]" on page 10.)

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 71).
- 2. Reinstall Sprint Connection Manager (page 17).

Using the Card on a Mac



Your Card: The Basics (Mac)

In This Section

- Starting Watcher Lite
- Watcher Lite Window
- Connection States
- Determining the Type of Coverage
- Powering the Card Off
- Launching a Sprint Power Vision or Sprint Vision Connection
- Viewing the Amount of Data Transferred
- Ending a Connection
- Displaying Your Phone Number and ESN
- Security
- Uninstalling the Watcher Lite Software

Watcher Lite

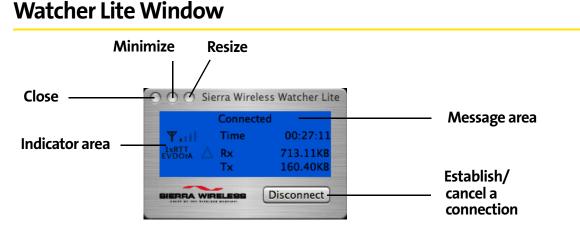
Watcher Lite is an application that allows you to manage and monitor the high-speed Sprint Power Vision (1xEV-DO) and Sprint Vision (1X) connections on your Mac computer. Use Watcher Lite to:

- Determine your signal strength and other network connection parameters (page 111).
- Initiate data calls (page 116).

Starting Watcher Lite

To start Watcher Lite:

- **1.** Ensure the card is inserted into your computer's ExpressCard or PC Card slot, with the Sprint label facing up.
- 2. In Finder, choose Go > Applications > Sierra Wireless Watcher.



The "Sierra Wireless Watcher Lite" window may display, depending on the coverage and connection state, some of the following icons and text:

₹. I	CDMA network signal strength, indicated by the number of bars.
1xRTT EVDOr0	You are not in a network coverage area.
1xRTT EVDOr0	You have 1X and 1xEV-DO Rev. 0 coverage.
1xRTT EVDOrA	You have 1X and 1xEV-DO Rev. A coverage.
1xRTT EVDOr0	You have 1X coverage.

Section 4A: Your Card: The Basics (Mac)

EVDO r0	You have 1xEV-DO Rev. 0 coverage.	
1×RTT EVDOrA	You have 1xEV-DO Rev. A coverage.	
Δ	You are roaming. Roaming charges may apply.	
\triangle	You are in the network coverage area (not roaming).	
Rx	Amount of data received from the network.	
Тх	Amount of data transmitted to the network.	

Connection States

The "Watcher Lite" window can display various connection and interaction states, including:

- No device detected
- Not activated
- Updating User Profile...
- Disconnected
- Connecting
- Connected
- Device is Locked

No device detected

Watcher Lite did not detect the card. The **Connect** button is unavailable.



Insert the card. If it is already inserted, remove and reinsert it; wait a few moments. If this message is still displayed, uninstall (page 120) and reinstall Watcher Lite.

Not activated

To use your card, you must activate it. Use the Activation Assistant (page 38).



Updating User Profile

Watcher Lite is performing account setup for you by making a connection to the CDMA network and using a secure Internet connection to download account parameters to your card.



Disconnected

Watcher Lite is ready to make a connection to the network. The **Connect** button is available; the signal strength icon (Υ_{III}), coverage indicator (${}_{EVDOTA}^{III}$), and the roaming icon (Δ) are visible.

To connect to the network, click the **Connect** button.



Section 4A: Your Card: The Basics (Mac)

Connecting

Watcher Lite is establishing a connection to the network.



Connected

The connection is established. In addition to the signal strength icon (\P_{III}),

coverage indicator ($_{EVDOTA}^{A}$), and roaming icon (Δ), the amount of time you've been connected and the amount of data received (Rx) and transmitted (Tx) are also displayed. (See the note on page 117.)

To end the connection, click **Disconnect**.



Device is Locked

The card is locked, so that others cannot use the card and your account. To use most of the features, you must unlock the card (page 120).



Determining the Type of Coverage

An icon in Watcher Lite (EVDORA) indicates the type of coverage you have (for example, 1X [synonym of 1xRTT] or 1xEV-DO). See the table on page 111.

Powering the Card Off

If you are using your card in an aircraft, hospital, or other environment where the card may cause interference, you can power the card off (without removing it from your ExpressCard or PC Card slot), and still use other functions of your computer.

This also allows you to conserve your notebook computer's battery.

To power the card off:

- **1.** Close any active data connection (page 117).
- 2. From the Extras item on the Sierra Wireless Watcher menu, select Turn Sprint Device Off.

When the card is powered off, Watcher Lite displays the message "No device detected."



To power the card on:

Remove the card (page 30) and reinsert it.

Exiting Watcher Lite

To exit Watcher Lite:

Click the button in the upper left corner of the "Watcher Lite" window.

	Connecte	ed
T.	Time	00:27:11
VDOrA	Rx	713.11KB
	Tx	160.40KB

Launching a Sprint Power Vision or Sprint Vision Connection

Closes the "Watcher Lite" window

To launch a connection:

Click the Connect button in the "Watcher Lite" window. (If the Connect button is unavailable, see "Connect Button Is Unavailable" on page 130.)

Once you're connected to the network, Watcher Lite displays "Connected," the amount of time you've been connected, and the amount of data received (Rx) and transmitted (Tx).



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

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.**

Once you're connected to the network, Watcher Lite shows the amount of data received (Rx) and transmitted (Tx).

	Connecte	ed
Ψ.iil	Time	00:27:11
1xRTT EVDOrA	🛆 Rx	713.11KB
	Tx	160.40KB
-		Disconnect

Once you end the connection, all numbers reset to zero.

Ending a Connection

To end your network connection:

Click Disconnect in Watcher Lite.

Displaying Your Phone Number and ESN

You can view your phone number ("Directory Number") and ESN in the "About Sprint Device" window.

😝 🔿 🔿 About Sprint	Device
BIERRA WIR	ELESS
Directory Number:	(000) 000-6138
Serial Number (ESN):	6044423A
PRL Version:	60610
HW Version:	AC597E Rev 1.0
Modem SW Version:	p2110004
Host SW Version:	1.1.3
Sprint	>>>
Copyright © 2001 – 2006 All rights res	
www.sierrawirel	ess.com

To display the "About Sprint Device" window:

From the Extras item on the Sierra Wireless Watcher menu, select About Sprint Device.

Security

When it is disconnected, you can lock your card so that others cannot use the card and your account. A four-digit lock code is needed to unlock the card.

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 14).

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

Note:

The security lock code is reset to the last four digits of the phone number whenever an account is activated.

Warning Regarding the Lock Code

If you lock the card and forget the lock code, you will not be able to use the card until you receive assistance from Sprint.

When the Card Is Locked

When the card is locked, you can:

- Unlock the card (page 120).
- Power off the card (page 115).

When the card is locked, you cannot:

- Make data connections (the **Connect** button is unavailable).
- Run the Activation Assistant.

Locking the Card

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

To lock the card:

- **1.** End any active connection. (You can lock the card only when it is disconnected; page 113.)
- 2. From the Extras item on the Sierra Wireless Watcher menu, choose Lock Device.
- 3. In the "Lock Device" window, enter the lock code, and click OK.



When the card is locked, Watcher Lite displays "Device is Locked." The **Connect** button is unavailable.

Unlocking the Card

When the card is locked, Watcher Lite displays "Device is Locked."

To unlock the card:

- If the "Unlock Device" window is not displayed: from the Extras item on the Sierra Wireless Watcher menu, choose Unlock Device.
- 2. In the "Unlock Device" window, enter the lock code (PIN) and click OK.
- If you can't recall your lock code, try using the last four digits of your card's phone number. If this doesn't work, call Sprint Customer Service at 1-888-788-4727 (business use) or 1-888-715-4588 (personal use).

When the card is unlocked, Watcher Lite no longer displays "Device is Locked."

Uninstalling the Watcher Lite Software

Note:

As part of the software removal process you will be prompted to restart your computer; save any open documents.

To remove the Watcher Lite software from your computer:

- 1. Exit Watcher Lite (page 116).
- 2. Remove the card. (See "Removing the Card [Mac]" on page 30.)
- 3. On your Mac desktop, double-click SierraUninstall.pkg:



4. In the "Welcome to the Sierra Wireless Remove Installer" window, click **Continue**.

	Welcome to the Sierra Wireless Remove Installer		
Introduction	Welcome to the Mac OS X Installation Program. You will be guided through the steps necessary to install this software.		
Select Destination			
Installation Type			
Install			
Finish Up			
	Go Back Continue		

5. In the "Select a Destination" window, choose the volume onto which you had installed the Watcher Lite software, and then click **Continue**.

0 0	🥪 Install Sierra Wireless Remove
	Select a Destination
Introduction	Select a destination volume to install the Sierra Wireless Remove software.
Select Destination	
Installation Type	
Install	
Finish Up	TIGER Untitled
	91.0GB (36.2GB Free) 20.5GB (17.1GB Free)
	You have chosen to install this software on the volume "TIGER."
	Go Back Continue
	Go Back Continue

6. In the "Easy Install on ..." window, click Upgrade.

● ⊖ ⊖	😜 Install Sierra Wireless Remove	
Easy Install on "TIGER"		
Introduction		
Select Destination	Click Upgrade to perform a basic installation of this software package on the volume "TICER."	
🖯 Installation Type	this software package on the volume Track.	
Install		
Finish Up		
	Customize Go Back Upgrade	

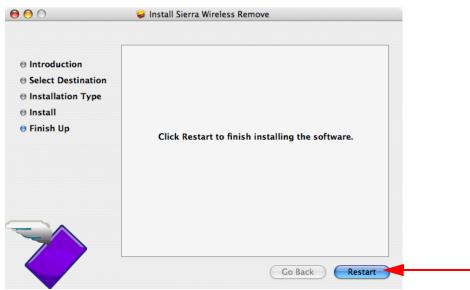
7. If the "Authenticate" window appears, enter your Mac user name and password, and then click **OK**.

		Authenticate	
	Installer re	equires that you type your password.	
	Name:	robert lee]
	Password:	•••••	
Details			
?		Cancel OK	3

8. In the window with the message that you will have to restart your computer, click **Continue Installation**.

 Installing this software requires you to restart your computer when the installation is done. Are you sure you want to install the software now?
O Select De O Installation O Installation Cancel Continue Installation

9. Click Restart.



Menu Options (Mac)

In This Section

• Watcher Lite Menu Options

This chapter describes each menu option you may encounter while using your card and the Watcher Lite software on your Mac computer.

Watcher Lite Menu Options



The following table describes the menu options available from the **Extras** item on the Sierra Wireless Watcher menu.

Menu Item	Description
Turn Sprint	Power off your card.
Device Off	See "Powering the Card Off" on page 115.
Activation	Activate your card.
	See "Activation Assistant" on page 38.
Data	Provision your card, after you've activated it.
Provisioning	See step 7 on page 39.
Lock Device /	Lock your card so that others cannot use it to access your
Unlock Device	account; unlock your card so that you can use it.
Device	See "Locking the Card" on page 119, or "Unlocking the Card" on page 120.
About Sprint	View information about the card.
Device	See "Displaying Your Phone Number and ESN" on page 118.
Open	View, configure, and use the data and VPN connections
Internet Connect	available on your computer (for example, WWAN).

Frequently Asked Questions (Mac)

In This Section

- Questions about My Account
- Questions about Watcher Lite
- Questions about GPS and Sprint Location Services
- Other Questions

Questions about My Account

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.

Questions about Watcher Lite

What is Watcher Lite?

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

How fast is the connection with Watcher Lite?

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.

Questions about GPS and Sprint Location Services

Does the Watcher Lite software support GPS and Sprint Location Services?

No. The Watcher Lite software does not support GPS and Sprint Location Services.

Other Questions

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 user name 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, see the user documentation of your email client.

Troubleshooting Tips (Mac)

In This Section

- Problems, Causes, and Solutions
- Connect Button Is Unavailable
- Searching for Service

This section helps you diagnose and solve common problems you may experience while using your Sprint Mobile Broadband card and the Watcher Lite software on a Mac computer.

Problems, Causes, and Solutions

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

Most problems are caused by one of these issues:

- Network coverage is not available (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 ExpressCard slot, PC Card slot, or the ExpressCard to PC Card adapter.
- System resources required by the card are being used by other devices.

Tips when troubleshooting problems with your card and software:

- Ensure your card is inserted, not locked (page 114), and not powered off (page 115).
- Ensure the 🖰 LED is amber (blinking) or blue.
- To determine the connection status, use the icons (page 111), and messages (page 112) in the "Watcher Lite" window.
- Check the Frequently Asked Questions (page 126).
- Use the resources listed in "Getting Help" (page 13).

Connect Button Is Unavailable

Note: In some cases, the **Connect** button can establish a connection to the network, even if the button seems unavailable.

If nothing seems to happen when you click the button, ensure that the card is properly inserted, not locked (page 114), and not powered off (page 115).

If Watcher Lite displays "Device is Locked," see page 114.

Searching for Service

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

- Try reorienting your computer.
- If you are inside a building or near a structure that may be blocking the signal, change the position or location of your computer.
- Check with Sprint a network or account problem may be preventing the card from obtaining service.

Technical Specifications and Regulatory Information



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 card.

LED Operation

Your card has two LED light bars near the antenna end of the card. The LED light bars operate as follows:

LED	State of LED	Indicates
	Off	The card has no power. The card may not be completely inserted into the computer, the computer may be turned off or in suspend mode (Windows) or sleep mode (Mac), which powers down the card, or you have powered the card off (for Windows, see page 57; for Mac, see page 115).
	Blue, not blinking	The card has power and is working properly.
	Blue, blinking	The card's firmware is being updated. Do not remove the card.
	Amber, blinking	The card is searching for service. If this LED state persists, see "Searching for Service" on page 104 (Windows) or page 117 (Mac).
	Amber, not blinking	An error has occurred. Eject the card (for Windows, see page 28; for Mac, see page 115) and reinsert it.
T.I	Off	No service is available. See "Searching for Service" on page 104 (Windows) or page 131 (Mac).
	Amber, blinking	Sprint Vision (1X) coverage is detected. Ready to connect to the network; to connect, click the GO button (Windows) or the Connect button (Mac).
	Amber, not blinking	The card is connected to the Sprint Vision (1X) network, and can send or receive data.

LED	State of LED	Indicates
	Blue, blinking	Sprint Power Vision (1xEV-DO) coverage is detected. Ready to connect to the network; to connect, click the GO button (Windows) or the Connect button (Mac).
	Blue, not blinking	The card is connected to the Sprint Power Vision (1xEV-DO) network, and can send or receive data.

Radio Frequency and Electrical Specifications

Approvals	Compliant with:	
	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	
	FCC (ID: N7NAC597E)	
	Industry Canada (ID: 2417C-AC597E)	
Voltage	+3.3 Vdc from ExpressCard slot	
Current	Maximum: 1 A	
	Typical data call current (talk mode):	
	370 mA (1X)	
	420 mA (1xEV-DO)	
	Standby: 50 mA (1xEV-DO/IS-2000 hybrid mode)	
Transmitter power	200 mW (+23 dBm)	
Transmit	PCS: 1805 to 1870 MHz	
	Cellular: 824 to 849 MHz	
Receive	PCS: 1715 to 1780 MHz	
	Cellular: 868 to 894 MHz	
	GPS: 1575.42 MHz	
Channel spacing	1.25 MHz	
Frequency stability	±150 Hz	

Software Specifications

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

Environmental Specifications

Operating temperature	-30 to +60°C (ambient, outside PCMCIA enclosure)
Storage temperature	-20 to +85°C
Humidity	95%, non-condensing
Vibration	147 m/s² (15 G) sinusoidal vibration, 10 to 2000 Hz, 20 minute sweep, 12 cycles per axis, 3 axes for 36 cycles. (12 hours total test time [non-operating])
Drop	30" (76.2 cm) onto vinyl-covered concrete

Mechanical Specifications

Dimensions (W x L x H)	34 mm x 134.6 mm x 5 mm (14 mm - ExpressCard extension)
Power button	Not supported
Headset jack	Not supported
LED	Amber/blue

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 card, and also patent and other information.

Regulatory Notices

The design of the AirCard 597E ExpressCard 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: N7NAC597E

CAUTION: The AirCard 597E ExpressCard has been tested for compliance with FCC/ IC RF exposure limits in the laptop computer(s) configurations with the side loading ExpressCard slot and can be used in laptop computers with substantially similar physical dimensions, construction, and electrical and RF characteristics. This ExpressCard 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 ExpressCard 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 following two conditions:

- 1. This device may not cause harmful interference, and
- **2.** This device must accept any interference received, including interference that may cause undesirable operation.

FCC guidelines stipulate that the antenna should be more than 1.8 cm from the user.

The highest reported SAR values of the AirCard 597E ExpressCard by Sierra Wireless are:

1. Separation distance of at least 1.8 cm needs to be maintained to user's lap with the AirCard 597E ExpressCard inserted into the bottom ExpressCard slot of the laptop computer (1.0 mW/g).

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.

Information pertaining to OEM customers

The AirCard 597E ExpressCard has been granted modular approval for mobile applications. Integrators may use the AirCard 597E ExpressCard in their final products without additional FCC/IC certification if they meet the following conditions. Otherwise, additional FCC/IC approvals must be obtained.

- **1.** At least 20 cm separation distance between the antenna and the user's body must be maintained at all times.
- **2.** To comply with FCC/IC regulations limiting both maximum RF output power and human exposure to RF radiation, the maximum antenna gain must not exceed 5.55 dBi in the Cellular band and 4.95 dBi in the PCS band.
- **3.** The AirCard 597E ExpressCard and its antenna must not be colocated with any other transmitter or antenna within a host device.
- **4.** A label must be affixed to the outside of the end product into which the AirCard 597E ExpressCard is embedded, with a statement similar to the following:

This device contains TX FCC ID: N7NAC597E.

This equipment contains equipment certified under IC: 2417C-AC597E.

5. A user manual with the end product must clearly indicate the operating requirements and conditions that must be observed to ensure compliance with current FCC/IC RF exposure guidelines.

The end product with an embedded AirCard 597E ExpressCard must pass the unintentional emission testing and properly authorized per FCC Part 15 requirements.

Note: If this ExpressCard is intended for use in a portable device, you are responsible for separate approval to satisfy the SAR requirements of FCC Part 2.1093 and IC RSS-102.

Patents

This product may contain technology developed by or for Sierra Wireless Inc.

This product includes technology licensed from QUALCOMM[®] 3G.

This product is manufactured or sold by Sierra Wireless Inc. or its affiliates under one or more patents licensed from InterDigital Group.

Trademarks

SPRINT and other trademarks are trademarks of Sprint Nextel.

AirCard[®] and "Heart of the Wireless Machine[®]" are registered trademarks of Sierra Wireless. Watcher[®] is a trademark of Sierra Wireless, registered in the European Community.

Sierra Wireless, the Sierra Wireless logo, and the red wave design are trademarks of Sierra Wireless.

ExpressCard is a trademark of PCMCIA.

Windows[®] is a registered trademark of Microsoft Corporation.

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

QUALCOMM[®] is a registered trademark of QUALCOMM Incorporated.

All other trademarks are property of their respective owners.

Copyright

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Limitation of Liability

The information in this manual is subject to change without notice and does not represent a commitment on the part of Sierra Wireless. SIERRA WIRELESS AND ITS AFFILIATES SPECIFICALLY DISCLAIM LIABILITY FOR ANY AND ALL DIRECT, INDIRECT, SPECIAL, GENERAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUE OR ANTICIPATED PROFITS OR REVENUE ARISING OUT OF THE USE OR INABILITY TO USE ANY SIERRA WIRELESS PRODUCT, EVEN IF SIERRA WIRELESS AND/OR ITS AFFILIATES HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR THEY ARE FORESEEABLE OR FOR CLAIMS BY ANY THIRD PARTY.

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



Section 6A

Safety and Notices

In This Section

- Important Notice
- Safety and Hazards

This section describes important guidelines regarding your Sprint Mobile Broadband card.

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 card by Sierra Wireless (AirCard 597E ExpressCard) 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 card by Sierra Wireless (AirCard 597E ExpressCard) CDMA modem, or for failure of the Sprint Mobile Broadband card by Sierra Wireless (AirCard 597E ExpressCard) to transmit or receive such data.

Safety and Hazards

Do not operate the Sprint Mobile Broadband card by Sierra Wireless (AirCard 597E ExpressCard) 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 card by Sierra Wireless (AirCard 597E ExpressCard) **MUST BE POWERED OFF.** It can transmit signals that could interfere with this equipment.

Do not operate the Sprint Mobile Broadband card by Sierra Wireless (AirCard 597E ExpressCard) in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the Sprint Mobile Broadband card by Sierra Wireless (AirCard 597E ExpressCard) **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 card by Sierra Wireless (AirCard 597E ExpressCard) 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.

Warranty and Terms and Conditions

In This Section

- Warranty
- Subscriber Agreement/General Terms and Conditions of Services

This section describes how to access the Sierra Wireless warranty and contains the terms and conditions of service for your Sprint Mobile Broadband card.

Warranty

To view the Sierra Wireless warranty for your AirCard 597E ExpressCard:

In Windows Vista or Windows XP, select
 Start > All Programs > Sprint > Sierra Wireless Device Warranty.
 or –
 In Windows 2000, select Start > Programs > Sprint > Sierra Wireless Device

Warranty.

– or –

On your Mac desktop, double-click AirCard 59x Warranty.pdf.

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 www.sprint.com.

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 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 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

Section 6B: Warranty and Terms and Conditions

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 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 <u>www.adrforum.com</u>.

(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

Section 6B: Warranty and Terms and Conditions

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.

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Glossary and Index



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.

The data connection may also go dormant while a GPS fix is being acquired.

ESN

Electronic Serial Number—The unique serial number assigned to the card for cellular network use. Either the ESN or MEID is on the label on the card, and is also displayed in the "Device Info & Diagnostics" window (Windows; page 89) or "About Sprint Device" window (Mac; page 118). See also MEID.

ExpressCard[™]

Add-in memory and communications cards for portable computers. ExpressCard is a trademark of the PCMCIA.

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 <u>www.fcc.gov</u>.

firmware

Software stored in ROM or EEPROM memory; essential programs that remain even when the system is turned off. Firmware is easier to change than hardware but more permanent than software stored on disk.

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.

HEPE

Horizontal Estimated Position Error — Relates to GPS accuracy.

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 card for cellular network use. Either the MEID or ESN is on the label on the card, and is also displayed in the "Device Info & Diagnostics" window (Windows; page 89) or "About Sprint Device" window (Mac; page 118). Compare to ESN.

MHz

megahertz—One million cycles per second

PC Card™

Add-in memory and communications cards for portable computers. PC Card is a trademark of the PCMCIA.

PCMCIA

Personal Computer Memory Card International Association—The organization that standardizes ExpressCards and PC Cards.

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. This may be subject to roaming charges. Sprint Location Services may not be available.

Sprint Connection Manager

Software that allows you to manage the Sprint Mobile Broadband card's actions and monitor your connections on a Windows computer.

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 54). If you right-click the icon, a shortcut menu is displayed (page 75):

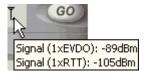
Close Sprint Mobile Broadband	
Help About Sprint Mobile Broadband	
Exit	×
Note 🚭 Sprint Mobile Br	🔨 🔂 🙆 🛃 3:31 PM 👘

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 <u>www.tiaonline.org</u>.

ToolTip

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



TRU-Install

A Sierra Wireless feature that installs the necessary software and drivers the first time you insert the card into your Windows or Mac computer. An installation CD is not required.

VPN

Virtual Private Network

WAN

Wide Area Network

Watcher Lite

Software that allows you to manage the Sprint Mobile Broadband card's actions and monitor your connections on a Mac computer.

Index

\$GPGGA, 99 \$GPGSA, 99 \$GPGSV, 99 \$GPRMC, 99 Numerics 1-888-715-4588 (Sprint Customer Service), 14 1-888-788-4727 (Sprint Customer Service), 14 1X Only (Network Mode) (Windows), 81 1X, 1xEV-DO description, 5 amount of data transferred (Mac), 112, 117 amount of data transferred (Windows), 65 application to automatically launch upon network connection (Windows), 64 automatically connecting when ready (Windows), 81 cannot connect (Windows), 105 connecting (Mac), 116 connecting (Windows), 62 coverage, determining (Mac), 111 coverage, determining (Windows), 55 dormant indicator (Windows), 47 ending a connection (Mac), 117 ending a connection (Windows), 66 icons (Mac), 111 icons (Windows), 46 roaming indicator (Mac), 112 roaming indicator (Windows), 46 transmit/receive indicator (Windows), 47 warning when roaming (Windows), 63 1xEV-DO Only (Network Mode) (Windows), 81 2000, Windows, 9 3G. See 1X, 1xEV-DO.

A

About Sprint Mobile Broadband, 92 accessibility, 139 accessories, 14 account accessing, 14 charges, 159 setting up (Mac), 37

setting up (Windows), 32 Account Spending Limits (ASL), 155 accuracy, GPS (Windows only), 48 "Acquired" message (Windows only), 53 activating the device Mac. 37 Windows, 32 activation Mac, 37 Windows, 32 Activation Assistant (Mac), 38 activation code Mac, 39 Windows, 34 Activation Wizard (Windows) overview, 32 Activation Wizard button, 82 Activation, One Touch, 5, 33 adapter for PC Card slot included in package, 6 inserting into computer, 27 removing from computer, 29 Advanced Forward Link Trilateration (AFLT) (Windows only), 97 AFLT (Advanced Forward Link Trilateration) (Windows only), 97 agreement, subscriber, 152 aircraft hazards warning, 150 powering the card off in (Mac), 115 powering the card off in (Windows), 57 Alert Log (Windows), 88 alerts (Windows), 88 altitude (Windows only), 49 Always Ask (Roam Guard) (Windows), 64 always on billing, 94, 127 set (Windows), 45 Always on top (Windows), 79 Always show Welcome screens (Windows), 81 Always-on connection (Windows), 63 amount of data transferred Mac, 112, 117 Windows, 65 antenna, external, attaching, 12 AOL, 94, 127 application, GPS (Windows only) configuring, 99 definition, 99

approvals, 138 arbitration of disputes, 165 ASL (Account Spending Limits), 155 assistance online Help (Windows only), 66 Sprint Customer Service, 14 Sprint Web site, 14 authentication, 139 Auto Start GPS on connect, 84 auto-launch Sprint Connection Manager, 45 Auto-launch upon network connection (Windows), 64 Automatic (Network Mode) (Windows), 81 Automatic (roaming option) (Windows), 82 automatically connecting to network (Windows), 81 automatically starting Sprint Connection Manager, 45 AutoPreview, 101, 128

B

behavior when the card is locked Mac, 119 Windows, 68 bill, 160 billing, and always on, 94, 127 blasting — hazards warning, 150 bookmarks (Windows), 70 business usage (Windows), 87

C

call duration Mac. 116. 117 Windows, 87 cannot connect to the network (Windows), 105 card, powering off Mac, 115 Windows, 57 care and maintenance, 6 caution, 142 CDMA networks.4 roaming - description, 4 signal strength indicator (Mac), 111 signal strength indicator (Windows), 46 specification, 139 changing the lock code (Windows), 70 channel spacing, 138 charges

disputing, 161 possible charges, 158 Check for updates once per month (Windows), 79 Check Now button (Windows), 79 Clear Log (Windows), 88 Close Sprint Connection Manager, 61 Close Sprint Mobile Broadband (Windows), 61 close Watcher Lite, 116 compact view (Windows) GPS Receiver window, 60 Mobile Broadband window, 59 conditions and terms of service, 151 Connect button (Mac) unavailable, 130 usage, 116 "Connected" message Mac. 114 Windows, 51 connected icon (Windows), 54 "Connected to NDIS" message (Windows), 52 "Connecting" message Mac, 114 Windows, 51 connecting icon (Windows), 54 connecting to the network (Mac), 116 connecting to the network (Windows) automatically, 81 manually, 62 connection (Mac) amount of data transferred, 112, 117 ending, 117 launching, 116 states, 112 connection (Windows) 1X or 1xEV-DO (Network Mode), 81 alert log, 88 Always-on, 63 amount of data transferred, 65 application to automatically launch upon network connection, 64 automatically connecting when ready, 81 cannot connect, 105 diagnostics, 89 ending, 66 history, 87 issues. 88 launching, 62

Network Mode, 81 states (GPS Receiver window), 53 states (Mobile Broadband window), 50 states (system tray), 54 warning when roaming, 63 Connection History (Windows), 87 **Connection Manager** Mac. See Watcher Lite. Windows. See Sprint Connection Manager. connection states (Mac), 112 connection states (Windows) GPS Receiver window, 53 Mobile Broadband window, 50 system tray, 54 Consent Agreement (Windows), 85 content, data, 158 contents of package, 6 Control Plane, GPS (Windows only), 96 "Could not prepare data services" message (Windows), 106 coverage disclaimer, 157 LED, 136 maps, 14 type, determining (Mac), 111 type, determining (Windows), 55 Create Report (Windows), 91 current direction (Windows only), 49 current speed (Windows only), 48 current, electrical, 138 customer support, 14

D

data content, 158 data profile Mac ("Updating User Profile"), 113 Windows, 35 data provisioning Mac, 125 Windows, 35 data speeds, 94, 127 data transferred, amount of Mac, 112, 117 Windows, 65 data usage, charges, 159 default connection (Windows), 62 definitions, glossary, 171 deleting Sprint Connection Manager, 71 deleting Watcher Lite, 120

deposits, 156 Device Info & Diagnostics (Windows), 89 Device LED Enabled, 82 "Device is Locked" message (Mac), 114 "Device Locked" message (Windows), 52 "Device Not Activated" window (Mac), 38 "Device powered off" message (Windows only), 52 diagnostics (Windows), 89 dial-up account, 94, 127 dimensions, 140 direction, current (Windows only), 49 disclaimer network coverage, 157 Sprint Location Services (Windows only), 162 warranties, 163 Disconnect button (Mac), 117 "Disconnected" message Mac, 37, 113 Windows, 51 disconnected icon (Windows), 54 disconnecting Mac, 117 Windows, 66 disk space required (Windows), 9 Display GPS Receiver (Windows only), 84 Display GPS Welcome (Windows only), 84 Display Location & Search Services on the menu (Windows only), 84 dispute resolution, 165 disputing charges, 161 Do not show NMEA Privacy Consent (Windows only), 84 Do not show Privacy Consent for Location & Search Services (Windows only), 85 document number, 145 dormant icon (Windows) Mobile Broadband window, 47 system tray, 54 drop test, 140 dropped connection (Windows), 105

E

E911, 139 early termination fee, 153 editing (Windows) Sprint Connection Manager settings, 77 Sprint Power Vision/Sprint Vision connection, 80 electrical specifications, 138 electromagnetic emissions warning Canada, 143 USA (FCC), 142 electronic serial number (ESN) Mac. 118 Windows, 34 elevation information (Windows only), 85 **EMI** warning Canada, 143 USA (FCC), 142 emissions, electromagnetic, warning Canada, 143 USA (FCC), 142 Enable Location Services (Windows only), 84 Enable Network Adapter (NDIS) (Windows), 81 encryption - required for IOTA (Windows), 10 ending a connection Mac, 117 Windows, 66 ending NMEA (Windows only), 100 enhanced Local Search (Windows only) definition, 95 obtaining this feature, 95 environmental specifications, 140 error messages - viewing (Windows), 88 error, position (HEPE) (Windows only), 48 ESN (Electronic Serial Number) Mac. 118 Windows, 34 EV-DO. See 1X, 1xEV-DO. exiting Sprint Connection Manager, 61 exiting Watcher Lite, 116 expanded view (Windows) GPS Receiver window, 60 Mobile Broadband window, 59 expanding Sprint Connection Manager, 58 ExpressCard to PC Card adapter included in package, 6 inserting into computer, 27 removing from computer, 29 ExpressCard/34adapter.SeeExpressCardto PC Card adapter. external antenna, attaching, 12

F

FAQ (Frequently Asked Questions) Mac, 126

Windows, 93 favorites (Windows), 70 fax. 139 FCC compliance, 142 EMI warning, 142 ID, 142 fees early termination, 153 government, 161 late, 160 firmware upgrades, 146 fix, last (Windows only), 49 forgot the lock code Mac. 119 Windows, 68 frequencies, transmit and receive, 138 frequency stability, 138 Frequently Asked Questions (FAQ) Mac, 126 Windows, 93

G

General options in "Settings" window (Windows), 78 general terms and conditions of services, 152 global positioning system (GPS) (Windows only). See GPS, Sprint Location Services, and also the FAQ chapter (Windows). glossary, 171 GO automatically when ready (Windows), 81 GO button (Windows) GPS Receiver window, 50 Mobile Broadband window, 62 unavailable, 104 Google Maps (Windows), 85 government fees, 161 \$GPGGA, 99 \$GPGSA, 99 \$GPGSV, 99 \$GPRMC, 99 GPS (Windows only) See also Sprint Location Services, and also the FAQ chapter (Windows). accuracy, 48 application, 99 Auto Start GPS on connect, 84 Control Plane, 96

definition, 95 disclaimer, 162 enable/disable, 84, 96 GPS Basic, 98 GPS Premium, 98 GPS Receiver window, 47 icon in system tray, 54 limitations, 97 Privacy, 96 subscription, 97 Test GPS, 85 User Plane, 96 where can I use it?, 96 GPS Basic (Windows only), 98 GPS Control Plane (Windows only), 96 GPS Port (Windows only), 49 GPS Premium (Windows only), 98 **GPS** Receiver window compact view, 60 diagram with callouts, 47 expanded view, 60 icons, 48 show/hide, 84 text displayed in, 53 GPS status (Windows only) icons. 48 text, 53 GPS Testing (Windows only), 85 GPS User Plane (Windows only), 96 GPSOne (Windows only), 98

Н

hard drive space required (Windows), 9 hardware requirements Mac, 11 Windows.9 hazards. 150 heading (Windows only), 49 headset jack, 140 Help overview, 14 alert log (Windows), 88 contact number, 14 device info and diagnostics (Windows), 89 diagnostics (Windows), 89 frequently asked questions (FAQ) (Mac), 126 frequently asked questions (FAQ) (Windows), 93 menu options (Mac), 125 menu options (Windows), 72

online Help (Windows only), 66 Sprint Customer Service, 14 Sprint.com, 14 tests (Windows), 89 troubleshooting (Mac), 129 troubleshooting (Windows), 102 HEPE (Horizontal Estimated Position Error) (Windows only), 48 hibernation mode (Windows), 101 high encryption (Windows), 10 history, connection (Windows), 87 Horizontal Estimated Position Error (HEPE) (Windows only), 48 hospital, powering the card off in Mac, 115 Windows, 57 humidity, 140

.

icons (Mac), 111 icons (Windows) GPS Receiver window, 48 Mobile Broadband window, 46 system tray, 54 indemnification, 167 indicators (Mac), 111 indicators (Windows) GPS Receiver window. 48 Mobile Broadband window, 46 system tray (Windows), 54 information, system (Windows), 89 initial lock code Mac. 118 Windows, 67 "Initializing" message (Windows), 50 inserting the card, 27 installation overview.8 installed files (Windows), 91 Mac, 22 Windows, 9 integrators, information for, 144 interference Mac, 115 Windows, 57 Internet Explorer, auto-launch (Windows), 64 Internet Over The Air (Windows), 35 invoice, requesting a copy of, 14 IOTA 2.4 (One Touch Activation), 5, 33

IOTA (Internet Over The Air) (Windows) description, 35 "IOTA Provisioning" window, 35 One Touch Activation (IOTA 2.4), 5, 33 "Unable to prepare data services" message, 106

K

Keep Connection History (Windows), 79 knowledge base, 14

L

last fix (Windows only), 49 late fees, 160 latitude (Windows only), 48, 85 Launch when Windows starts, 79 LBS (Location-Based Services) (Windows only). See Sprint Location Services. LEDs (lights), 82, 136 liability, limitation of, 146 life support equipment — hazards warning, 150 lights (LEDs), 82, 136 Limitation of Liability, 146 limitations, Sprint Location Services (Windows only), 97 links, access (Windows), 70 Location & Search Services. See Sprint Location Services. Location information (Windows only), 48 Location-Based Services (LBS) (Windows only). See Sprint Location Services. lock card (Mac), 119 lock card (Windows) immediately, 68 upon startup, 68 lock code - warning Mac, 119 Windows, 68 lock code (Mac) overview, 118 initial lock code, 118 warning, 119 lock code (Windows) overview, 67 changing, 70 initial lock code, 67 locked card (Mac) behavior when the card is locked, 119 initial lock code, 118

unlocking the card, 120 locked card (Windows) behavior when the card is locked, 68 changing the lock code, 70 initial lock code, 67 unlocking the card, 69 log (Windows) alert, 88 connection, 87 longitude (Windows only), 48, 85 lost device, 163

Μ

Mac OS X system requirements, 11 See also Watcher Lite. maintenance, 6 making a connection (Mac) connecting to the network, 116 amount of data transferred, 112, 117 making a connection (Windows) 1X or 1xEV-DO (Network Mode), 81 always on, 81 amount of data transferred, 65 application to automatically launch upon network connection, 64 automatically, 81 cannot connect. 105 connecting to the network, 62 Network Mode, 81 map services (Windows only), 85 Mapping and Search Service (Windows only), 85 MapQuest (Windows), 85 maps, coverage, 14 mechanical specifications, 140 medical equipment — hazards warning, 150 MEID (Mobile Equipment IDentifier) (Windows), 34 memory required (Windows), 9 Menu (Mac) all options, 125 Menu (Windows) all options, 72 About Sprint Mobile Broadband, 92 Alert Log, 88 Connection History, 87 Device Info & Diagnostics, 89 Exit, 66 Links, 70

Index

Location & Search Services, 55 Menu button, 49 Settings, 77 Software Updates, 91 system tray menu, 75 Menu button (Windows only), 49 menu options (Mac), 125 menu options (Windows) Location & Search Services menu, 55 Sprint Connection Manager menu, 72 system tray menu, 75 messages - viewing (Windows), 88 messaging, text (SMS), 139 Microsoft Live (Windows), 85 Microsoft VPN (PPTP) Connection (Windows), 64 minimizing Sprint Connection Manager immediately, 61 on startup, 79 minimum separation distance, 143 minus sign (-) in Sprint Connection Manager, 58 miscellaneous charges, 158 Mobile Broadband window description of icons, 46 diagram with callouts, 46 expanded view, 59 Mobile Equipment IDentifier (MEID) (Windows), 34 Mobile IP, 139 Mobile System ID (MSID) Mac. 39 Windows, 34 MS-Based position location technology (Windows only), 97, 139 MSID (Mobile System ID) Mac, 39 Windows, 34

Ν

NAM, 139 NDIS (Windows) "Connected to NDIS" message, 52 Enable Network Adapter (NDIS), 81 network See Sprint network. network adapter (NDIS) (Windows), 81 Network Mode (Windows), 81 Never Ask (Roam Guard) (Windows), 64 NMEA (Windows only)

configuring the port, 100 definition, 99 starting, 100 starting automatically ("Auto Start GPS on connect"), 84 stopping, 100 when to use, 99 "No device" message (Windows), 50 "No device detected" message (Mac), 112 non-preactivated card Mac, 38 Windows, 33 non-preferred roaming area (Windows), 46 "Not activated" message (Mac), 38, 113 notices regulatory, 142 safety, 149 number of satellites (Windows only), 85

0

OEM customers, 144 "OFF" message (Windows only), 53 on top, always (Windows), 79 One Touch Activation (IOTA 2.4), 5, 33 online Help (Windows only), 66 Open Internet Connect menu option, 125 operating systems supported, 9 operating temperature, 140 optimizing performance, 101, 128 OTAPA, 139 OTASP, 139

Ρ

package contents, 6 patents, 145 payments, 160 PC Card adapter included in package, 6 inserting into computer, 27 removing from computer, 29 PC Card slot, using the ExpressCard in, 9 PCMCIA (PC Card) slot, using the ExpressCard in, 9 performance, improving, 101, 128 personal usage (Windows), 87 phone number Mac, 118 transferring, 157 Windows, 67 Windows (during Activation Wizard), 34 planes hazards warning, 150 powering the card off in (Mac), 115 powering the card off in (Windows), 57 Play sound effects (Windows), 79 plus sign (+) in Sprint Connection Manager, 58 port configuration (Windows), 89 porting/transferring phone numbers, 157 position error (HEPE) (Windows only), 48 position location (Windows only), 139 See also Sprint Location Services, and also the FAQ chapter (Windows). power button, 140 power LED, 136 Power Vision, Sprint (1xEV-DO). See 1X, 1xEV-DO. power, transmitter, 138 powering the card on and off Mac, 115 Windows, 57 PPTP - Microsoft VPN (PPTP) Connection (Windows), 64 preactivated card Mac, 37 Windows, 32 preferred roaming list (PRL), 139 Preview Pane, 101, 128 privacy (Windows) Consent Agreement (Sprint Location Services), 85 GPS not available, 96 icon (GPS Receiver window), 48 privacy, terms, 162 PRL (Preferred Roaming List), 139 problems Mac, 129 Windows, 102 products, Sprint (Windows), 70 profile - data Mac ("Updating User Profile"), 113 Windows, 35 properties of connection, changing (Windows), 80 pro-rating charges, 159 provisioning Mac, 37, 125 Windows, 32, 35 "Provisioning failed" message (Mac), 38

Q

questions. See troubleshooting.

R

radio frequency (RF) specifications, 138 receive frequencies, 138 Receiver, GPS (Windows) compact view, 60 diagram with callouts, 47 expanded view, 60 icons, 48 show/hide, 84 text displayed in, 53 records of connection history (Windows), 87 regulatory information, 141 notices, 142 Relock modern when program exits (Windows), 68 removing hardware (Mac), 30 hardware (Windows), 28 software (Mac), 120 software (Windows), 71 report lost or stolen device, 163 report of system information (Windows), 91 requirements, system Mac. 11 Windows, 9 resolution of disputes, 165 restoring Sprint Connection Manager, 61 restrictions on using services, 156 returning deposits, 156 RF (radio frequency) specifications, 138 Roam Guard (Windows), 63 Roam Mode (Windows), 82 Roam Only (roaming option) (Windows), 82 roaming description, 4 display warning message (Windows), 63 indicator (Mac), 112 indicator (Windows), 46 PRL (Preferred Roaming List), 139 settings (Windows), 82 RSSI (signal strength) Mac, 111 Windows, 46, 89 Running Diagnostics (Windows), 89

S

Safety and Hazards, 150

satellites (Windows only) number of, 48, 85 status. 48 Search Services (Windows only). See Sprint Location Services. "Searching for service" message Mac, 131 Windows, 51, 104 security (Mac) overview of user lock, 118 warning, 119 behavior when the card is locked, 119 lock card immediately, 119 unlocking the card, 120 security (Windows) overview of user lock, 67 warning, 68 behavior when the card is locked, 68 changing the lock code, 70 high encryption - required for IOTA, 10 IOTA - high encryption requirement, 10 lock card immediately, 68 lock card upon startup, 68 unlocking the card, 69 separation distance, minimum, 143 service conditions of, 151 coverage, determining (Mac), 111 coverage, determining (Windows), 55 LED, 136 restrictions on using, 156 roaming indicator (Mac), 112 roaming indicator (Windows), 46 "Searching for service" message (Mac), 131 "Searching for service" message (Windows), 104 service charges, 159 Service Packs, Windows, 9 service plan, adding options, 14 services, Sprint (Windows), 70 "Settings" window (Windows) overview, 77 General, 78 Sprint Location Services, 83 Sprint Mobile Broadband, 80 short text messaging (SMS), 139 shortcut menu (Windows), 75 show Welcome screens (Windows), 81 Sierra Wireless warranty, 152 signal strength

diagnostic tests (Windows), 89 indicator (Mac), 111 indicator (Windows), 46 SMS, 139 software (Mac) components, 11 icons, 111 installing, 21 lock card immediately, 119 menu options, 125 removing, 120 uninstalling, 120 unlocking the card, 120 user lock, 118 software (Windows) components, 11 installing, 17 lock card immediately, 68 lock card upon startup, 68 menu options, 72 minimizing, 61 minimizing on startup, 79 removing, 71 restore minimized, 61 uninstalling, 71 unlocking the card, 69 updating, 91 upgrading Windows, 107 user lock, 67 version information, 92 Windows, upgrading, 107 software specifications, 139 Software Updates (Windows), 91 sound effects, play (Windows), 79 specifications environmental. 140 mechanical. 140 radio frequency and electrical, 138 software, 139 speed, current (Sprint Location Services) (Windows only), 48 speeds, data transmission, 94, 127 Sprint (roaming option) (Windows), 82 Sprint Connection Manager overview, 44 1X or 1xEV-DO connection (Network Mode), 81 About Sprint Mobile Broadband, 92 amount of data transferred, 65 application to automatically launch upon network connection, 64

automatically connecting when ready, 81 cannot connect, 105 closing, 61 configuring, 77 expanding Sprint Connection Manager, 58 frequently asked questions (FAQ), 93 GPS Receiver window, 47 icons. 46 icons (GPS Receiver window), 48 icons (Mobile Broadband window), 46 icons (system tray), 54 links, 70 menu options, 72 minimizing, 61 minimizing on startup, 79 Mobile Broadband windowr, 46 Network Mode, 81 removing, 71 restoring, 61 security features, 67 settings, 77 Sprint Location Services, 55 starting, 44 starting automatically, 45 stopped working after Windows upgrade, 107 system tray menu, 75 uninstalling, 71 updating, 91 upgrading Windows, 107 version information, 92 window overview, 45 Windows upgrade, 107 Sprint Connection Manager settings 1X or 1xEV-DO connection (Network Mode), 81 changing, 77 General, 78 Sprint Location Services, 83 Sprint Mobile Broadband, 80 Sprint Connection Manager stopped working after I've upgraded to a different version of Windows, 107 Sprint Customer Service, 14 Sprint Location Services (Windows only) See also GPS, and also the FAO chapter (Windows). Auto Start GPS on connect, 84 definition of LBS (Location-Based Services), 94 disclaimer, 162

display Location & Search Services on the menu, 84 enable/disable, 84, 96 frequently asked questions, 95 GPS Receiver window, 47 icon in system tray, 54 icons, 48 limitations, 97 Location & Search Services menu, 55 Privacy, 96 settings, 83 subscription, 97 Test GPS, 85 text in GPS Receiver window, 53 troubleshooting, 105 using, 55 Sprint Mobile Broadband card inserting, 27 phone number (Mac), 118 phone number (Windows), 67 removing (Mac), 30 removing (Windows), 28 Sprint network 1X or 1xEV-DO connection (Network Mode) (Windows), 81 always on connection (Windows), 81 amount of data transferred (Mac), 112, 117 amount of data transferred (Windows), 65 application to automatically launch upon network connection (Windows), 64 automatically connecting when ready (Windows), 81 availability status (Windows), 89 cannot connect (Windows), 105 CDMA wireless network, description, 4 connecting (Mac), 116 connecting (Windows), 62 coverage, determining (Mac), 111 coverage, determining (Windows), 55 coverage, disclaimer, 157 frequently asked questions (FAQ) (Mac), 126 frequently asked questions (FAQ) (Windows), 93 LED (coverage detected), 136 roaming indicator (Mac), 112 roaming indicator (Windows), 46 roaming options (Windows), 82 signal strength indicator (Mac), 111 signal strength indicator (Windows), 46

Sprint Location Services (Windows only), 55 Sprint Power Vision (1xEV-DO). See 1X, 1xEV-DO. Sprint products and services (Windows), 70 Sprint roaming (Windows), 82 Sprint Vision 1X or 1xEV-DO connection (Network Mode) (Windows), 81 Always show Welcome screens (Windows), 81 amount of data transferred (Mac), 112, 117 amount of data transferred (Windows), 65 application to automatically launch upon network connection (Windows), 64 automatically connecting when ready (Windows), 81 cannot connect (Windows), 105 connecting (Mac), 116 connecting (Windows), 62 coverage, determining (Mac), 111 coverage, determining (Windows), 55 disconnecting (Mac), 117 disconnecting (Windows), 66 ending a connection (Mac), 117 ending a connection (Windows), 66 Network Mode (Windows), 81 settings (Windows), 80 warning when roaming (Windows), 63 See also 1X, 1xEV-DO. Sprint Web site, 14 Sprint, contacting, 14 sprint.com, 14 standby current, 138 Start in system tray (Windows), 79 starting a connection (Mac), 116 starting a connection (Windows) application to automatically launch upon network connection, 64 automatically connecting when ready, 81 immediately, 62 specify 1X or 1xEV-DO connection (Network Mode), 81 warning when roaming, 63 starting NMEA (Windows only), 100 starting Sprint Connection Manager automatically, 45 manually, 44 starting Watcher Lite, 111

status information (Windows), 89 status of connection (Mac), 112 status of connection (Windows) GPS Receiver window, 53 Mobile Broadband window, 50 system tray, 54 stolen device, 163 Stop button (Windows) GPS Receiver window, 50 Mobile Broadband window, 66 stopping NMEA (Windows only), 100 storage temperature, 140 subscriber agreement, 152 subscription, GPS (Windows only), 97 support, 14 surcharges, 161 suspend mode, 136 system information (Windows), 89, 91 System Parameters (Windows), 91 system requirements Mac, 11 Windows.9 system tray (Windows) connection states, 54 icons, 54 menu, 75 shortcut menu, 75 start in, 79

т

taskbar icon (Windows) shortcut menu, 61 taxes, 161 technical specifications, 135 technical support, 14 telephone number of card Mac, 118 Windows, 67 temperature (operating, and storage), 140 termination fee, 153 Terms and Conditions, 151 terms and definitions (glossary), 171 Test GPS (Windows only), 85 tests, diagnostic (Windows), 89 text messaging (SMS), 139 trademarks, 145 transferred data, amount of Mac, 112, 117 Windows, 65 transferring phone numbers, 157

transmission speeds, 94, 127 transmit frequencies, 138 transmit/receive icon (Windows), 46, 47 transmitter power, 138 trilateration (Windows only), 97 troubleshooting (Mac) common causes of problems, 130 Connect button is unavailable, 130 contact information, 14 frequently asked questions (FAQ), 126 "Searching for service" message, 131 troubleshooting (Windows) common causes of problems, 103 alert log, 88 cannot connect, 105 contact information, 14 "Could not prepare data services" message, 106 frequently asked questions (FAQ), 93 GO button is unavailable, 104 run diagnostic tests, 89 "Searching for service" message, 104 Sprint Connection Manager stopped working after Windows upgrade, 107 Sprint Location Services, 105 Troubleshooting wizard, 14 "Unable to prepare data services" message, 106 wizard, 14 Troubleshooting wizard (Windows), 14 TRU-Install, 5 TTY, 139 type of coverage, determining Mac, 111 Windows, 55

U

uninstalling Sprint Connection Manager, 71 uninstalling Watcher Lite, 120 unlocking the card (Mac) initial lock code, 118 instructions, 120 unlocking the card (Windows) initial lock code, 67 instructions, 69 Update Data Profile (Windows), 35 updates, checking for latest, 146 updating the software (Windows), 91 "Updating User Profile..." message Mac, 38, 39, 113 Windows, 35

upgrading Windows, 107 URL to automatically launch upon network connection (Windows), 64 URLs - favorites (Windows), 70 USB port (Windows), 89 user lock (Mac) overview, 118 warning, 119 lock card immediately, 119 unlocking the card, 120 user lock (Windows) overview. 67 warning, 68 changing the lock code, 70 lock card immediately, 68 lock card upon startup, 68 unlocking the card, 69 User Lock Change button (Windows), 82 User Plane, GPS (Windows only), 96

V

"Validating" message (Windows), 53 vehicle, operating hazards warning, 150 version information Mac ("About Sprint Device" window), 118 Windows, 92 version of this document, 145 vibration, 140 views of Sprint Connection Manager, 58 Vision. See Sprint Vision, and 1X, 1xEV-DO. Vista, Windows, 9 voice support, 139 voltage, 138 VPN (Mac) accessing your corporate network through a VPN, 128 VPN (Windows) accessing your corporate network through a VPN, 100 specifying a VPN program to automatically launch upon network connection, 64

W

warning electromagnetic emissions (EMI) — Canada, 143 electromagnetic emissions (EMI) — USA (FCC), 142 lock code, regarding (Mac), 119

Index

lock code, regarding (Windows), 68 roaming, display message (Windows), 63 warranties, disclaimer of, 163 Warranty and Terms and Conditions, 151 Watcher Lite overview, 111 amount of data transferred, 117 closing, 116 diagram with callouts, 111 frequently asked questions (FAQ), 126 icons, 111 installing, 21 menu options, 125 removing, 120 security features, 118 starting, 111 uninstalling, 120 weak signal Mac, 131 Windows, 104 Web site - Sprint.com, 14 Web site (Windows) automatically launch upon network connection, 64 favorites. 70 Welcome screen, always show (Windows), 81 Windows auto-launch Sprint Connection Manager, 79 upgrading, 107 versions supported, 9 Wireless Local Number Portability (WLNP) Mac, 39 Windows, 34 wizard (Mac) - Activation Assistant, 37, 38 wizard (Windows) Activation Wizard, 32 Troubleshooting, 14 WLNP (Wireless Local Number Portability) Mac, 39 Windows, 34 www.sprint.com, 14

Х

XP, Windows, 9

Y

Yahoo! Maps (Windows), 85