AirCard[®] 555 Wireless Network Card

User Guide



2130142 Rev 3.3





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 Sierra Wireless network card are used in a normal manner with a well-constructed network, the Sierra Wireless network card 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. Sierra Wireless, Inc. accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the Sierra Wireless network card, or for failure of the Sierra Wireless network card to transmit or receive such data.

Safety and Hazards

Do not operate the Sierra Wireless AirCard[®] 555 wireless network card 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 Sierra Wireless network card MUST BE POWERED OFF. The Sierra Wireless network card can transmit signals that could interfere with this equipment.

Do not operate the Sierra Wireless network card in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the Sierra Wireless network card **MUST BE POWERED OFF.** When operating, the Sierra Wireless network card can transmit signals that could interfere with various onboard systems.

Note: Some airlines may permit the use of cellular phones while the aircraft is on the ground and the door is open. Sierra Wireless network cards may be used at this time.

The driver or operator of any vehicle should not operate the Sierra Wireless network card while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some states and provinces, operating such communications devices while in control of a vehicle is an offence.

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, Inc. SIERRA WIRELESS, INC. SPECIFICALLY DISCLAIMS LIABILITY FOR ANY AND ALL DIRECT, INDIRECT, SPECIAL, GENERAL, INCIDENTAL, CONSE-

QUENTIAL, 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, INC. PRODUCT, EVEN IF SIERRA WIRELESS, INC. HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR THEY ARE FORESEEABLE OR FOR CLAIMS BY ANY THIRD PARTY.

Patents

Portions of this product are covered by some or all of the following US patents: 5515013, 5617106, 5629960, 5682602, 5748449, 5845216, 5847553, 5878234, 5890057, 5929815, 6169884, 6191741, 6199168, D367062, D372248, D372701, D416857, D442170 and other patents pending.

QUALCOMM[®] 3G CDMA

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

| 4901307 | 5490165 | 5056109 | 5504773 |
|---------|---------|---------|---------|
| 5101501 | 5506865 | 5109390 | 5511073 |
| 5228054 | 5535239 | 5267261 | 5544196 |
| 5267262 | 5568483 | 5337338 | 5600754 |
| 5414796 | 5657420 | 5416797 | 5659569 |
| 5710784 | 5778338 | 6339405 | D452495 |
| D452496 | | | |

Copyright

©2002 Sierra Wireless, Inc. All rights reserved.

Trademarks

Sierra Wireless and the Red Wave design, Watcher, the redtipped antenna are trademarks of Sierra Wireless, Inc. Heart of the Wireless Machine[®] and AirCard[®] are registered trademarks of Sierra Wireless, Inc. Quick 2 NetSM is a service mark of Verizon Wireless Communications. Other trademarks are the property of the respective owners. All product specifications are subject to change without notice.

Comments

Your comments and suggestions on improving this documentation are welcome and appreciated. Please e-mail your feedback to documentation@sierrawireless.com. Thank you.

Consult our web site for up-to-date product descriptions, documentation, application notes, firmware upgrades, trouble-shooting tips, and press releases:

www.sierrawireless.com

4 \/ \/ 2130142

| | Technical Support | For technical support of this product, contact Verizon Wireless at 1-800-922-0204. |
|---|-------------------|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | \wedge | \wedge |
| _ | Rev. 3.3 02 | |

AirCard 555 Network Card User Guide

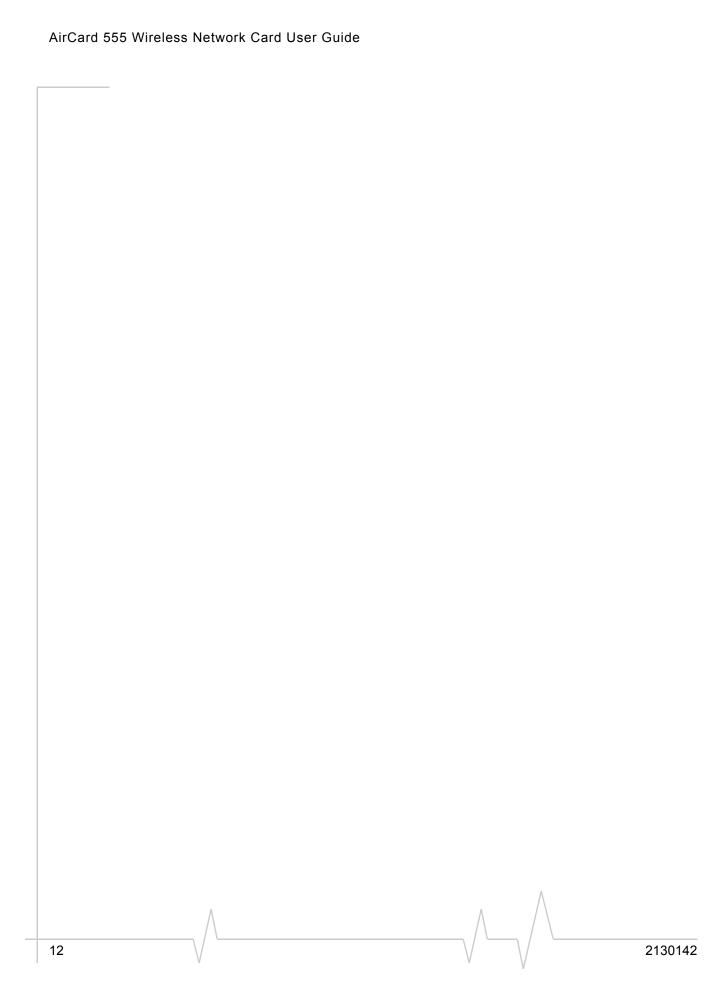


| The Minimize, Toggle Full/Compact, and Close Buttons |
|--|
| Connection Status Area 40 |
| Call Status Box |
| Indicator Area |
| Taskbar Icons |
| Data Connections |
| Dial-Up Connections 48 |
| Incoming Data Calls49 |
| Quick 2 Net Connections |
| Express Network Connections |
| Voice Connections |
| The Dial Pad 52 |
| The Scratch Pad 53 |
| Outgoing Calls54 |
| Incoming Calls54 |
| The Watcher Menu Options 57 |
| The View Menu |
| Always On Top 57 |
| Docking 57 |
| Toggle Full/Compact 58 |
| The Tools Menu59 |
| Mobile Messenger |
| Phone Book |
| Call Log |
| Dial-Up Manager |
| KeyGuard 73 Activation Wizard 73 |
| Options |
| |

| The Help Menu 9 |
|---|
| Help Topics |
| About Watcher 9 |
| The Network Adapter Manager 9 |
| Windows 95, 98, NT and Me |
| Switching Primary Cards9 |
| Windows 2000 and XP 9 |
| On-Line Help and Version Information |
| Closing the Network Adapter Manager9 |
| Troubleshooting Tips |
| Problem Causes and Suggestions |
| Reinstalling the AirCard Driver10 |
| Windows 95/98 10 |
| Windows 2000 |
| Windows Me10 |
| Windows XP 10 |
| Resolving Resource Conflicts |
| Windows 95/98 |
| Windows 2000 |
| Windows Me 11 |
| Windows XP |
| Installation and Use on Handheld/Pocket PCs11 |
| Installation on Handheld and Pocket PCs |
| System Requirements |
| Software Installation Procedures |
| |
| Card Insertion and Removal |
| Inserting the AirCard 12 |

| Removing the AirCard 121 |
|--|
| Account Configuration Procedures |
| The Watcher Window and Indicators |
| Components of the Watcher Window |
| The Menu Bar 125 |
| Connection Status Area125 |
| Call Status Box 127 |
| Indicator Area |
| The Minimize, Toggle Full/Compact, and Close Boxes |
| Taskbar Icons 129 |
| Data Connections |
| Dial-Up Connections |
| Incoming Data Calls133 |
| Quick 2 Net Connections133 |
| Express Network Connections |
| Voice Connections |
| The Dial Pad |
| The Scratch Pad |
| Outgoing Calls |
| Incoming Calls |
| The Watcher Menu Options 141 |
| The View Menu (Handheld PCs)141 |
| Always On Top141 |
| Docking 141 |
| Toggle Full/Compact 142 |
| The Tools Menu |

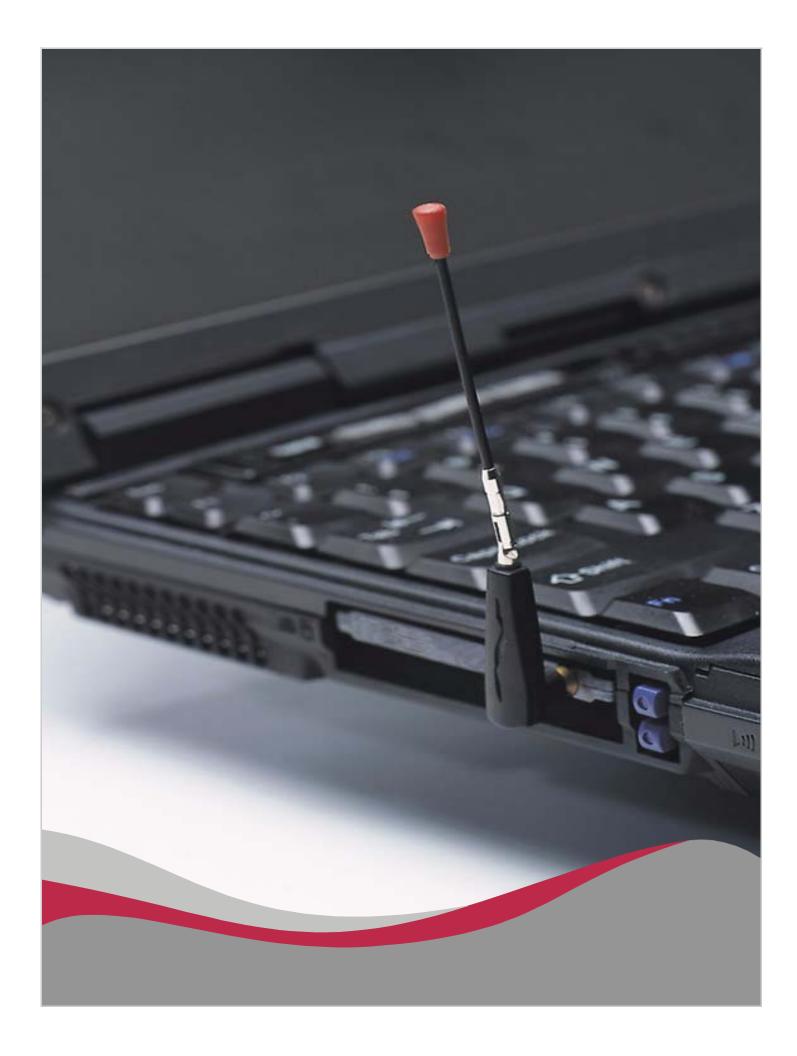
| Mobile Messenger | 143 |
|---|-----|
| Phone Book | 150 |
| Call Log | 151 |
| Dial-Up Manager | 153 |
| KeyGuard | 156 |
| Activation Wizard | 156 |
| Options | 156 |
| The Admin Menu (Pocket PCs) | 176 |
| About Watcher | 176 |
| Administration > Activation Wizard | 177 |
| The Help Menu (Handhelds PC) | 178 |
| Help Topics | |
| About Watcher | 178 |
| Troubleshooting Tips | 181 |
| Problem Causes and Suggestions | 181 |
| Uninstalling the AirCard Software | 183 |
| Technical Specifications | 185 |
| Technical Specifications | 187 |
| LED Operation | 187 |
| Radio Frequency and Electrical Specifications | 188 |
| Environmental Specifications | |
| Regulatory Information | 189 |
| | |
| Regulatory Information | 191 |
| Index | 193 |



>>> | AirCard 555 Basics









1: Introducing the AirCard® 555 **Network Card**

- A Network Card, a Modem, and a Phone
- Package Contents
- · About this Guide

Note: Do not insert the AirCard into your PC Card slot prior to installing the software. It is important to install the software and driver in the correct order. See Chapter 3 (notebook PCs) or Chapter 10 (Handheld and Pocket PCs) for detailed procedures.

Note: The Venturi compression software that allows for dial-up data transmission speeds of 56 kbps is available for notebook PCs running Windows 95, 98, NT, 2000, and Me only.

The AirCard® 555 wireless network card fits into a standard Type II PC Card slot (available on most notebook PCs) and functions as a wireless network card, a modem, and a mobile phone. This card allows you to connect to the Internet, send and receive e-mail, connect to a corporate network, and make phone calls, without the need of a network cable or phone line.

The AirCard 555 functions in notebook PCs with these Windows® operating systems: 95, 98, NT, 2000, Me, and XP. The AirCard 555 also functions in Handheld and Pocket PCs with the Windows CE 3.0 operating system.

The AirCard 555 operates over a type of wireless network called CDMA (Code Division Multiple Access). This network technology has many features beyond providing a wireless link, including:

- SMS (Short Message Service), which allows you to send and receive short messages using the AirCard
- Quick 2 Net, which provides a direct Internet connection

Use of the AirCard 555 requires that you have an account that gives you access to a CDMA network.

Every CDMA network operates on one of three radio frequency bands. As a dual band product, the AirCard 555 operates on two of these bands, providing a wide coverage area.

The AirCard operates on the original CDMA network (IS-95A) that provides data transmission speeds of up to 14.4 kbps (kilobits per second) or 56 kbps where Venturi compression is in use. The AirCard also runs on the newer 1xRTT network technology that provides data transmission speeds up to 144 kbps. The AirCard 555 provides all the advantages of 1xRTT where it is available while allowing you to use the older CDMA IS-95A standard where 1xRTT has not yet been implemented. The benefits to you are that you can use the AirCard in any area that has coverage (assuming there are no account restrictions) and you will be able to take advantage of the fastest possible data transmission speed.

Rev 3.3 May.02 15 Note: More information about CDMA networks is available on the CDMA Development Group web site, www.cdg.org.

A Network Card, a Modem, and a Phone

On notebook PCs, during 1xRTT connections, the AirCard 555 is a true network card, functioning just like the network cards familiar to most corporate computer users. Once installed and configured, the AirCard connects instantly to the CDMA network with a few mouse clicks. You can just insert the AirCard 555, click a few buttons, launch your Internet browser, and you're ready to web surf.

As a modem, the AirCard 555 allows you to dial up any other modem, or send and receive faxes. You can also connect a headset to the AirCard 555 and use it as a phone.

Package Contents

Your AirCard 555 package contains the following components:

- AirCard 555 wireless network card
- Antenna
- Installation CD containing the AirCard software and this user guide
- Quick reference card

If you want to use the AirCard as a phone, a headset is necessary. See the Sierra Wireless web site, www.sierrawireless.com, for a listing of approved headsets that will work with the AirCard.

About This Guide

This user guide is designed to provide you with all the information you need to install and use your network card.

- Section 1 (which you are reading) gives you an overview of the AirCard 555, providing the background information that is the basis for understanding the following sections.
- Section 2 provides step-by-step instructions on installing, configuring, and using the AirCard 555 on notebook PCs.
- Section 3 provides step-by-step instructions on installing, configuring, and using the AirCard 555 on Handheld and Pocket PCs.
- Section 4 provides electrical, radio frequency, and other parameters of the AirCard 555 for those who require technical information.
- Section 5 provides regulatory information.

16 \/ 2130142

>> 2: Getting Started

- The AirCard 555 Software
- Account Activation and Configuration
- · Care and Maintenance

Before you can begin using the AirCard 555 wireless network card, you must:

- 1. Install the AirCard 555 software.
- **2.** Activate an account and configure the AirCard to use your account, unless the AirCard has been pre-activated.

This section provides an overview of this process.

The AirCard 555 Software

The AirCard comes with this software:

- An application called Watcher™ that you use to manage the AirCard and monitor your connections
- An application called the Network Adapter Manager that allows you to switch between the AirCard 555 and other network cards (for notebook PCs only)
- The driver software that forms the interface between the network card and your Windows operating system
- Venturi compression software that increases data throughput, effectively increasing the data transmission speed (for notebook PCs only)

Note: When you have the Venturi software installed and enabled, the compression will automatically be used where it is available on the network. In areas where the Venturi server is implemented, you should notice an increase in the speed of your dial-up data connections.

The Watcher software (and on notebook PCs, the Network Adapter Manager) should be installed before you insert the AirCard 555 for the first time. The Venturi software should only be installed after the driver is installed. Detailed instructions are provided in Chapter 3.

Account Activation and Configuration

Companies that operate CDMA networks and provide access to these networks are called *service providers*. You must have an account with a CDMA service provider to use the AirCard 555. The process of setting up an account is called *activation*.

Rev 3.3 May.02 \/ \/ \/

Note: Most service providers have coverage maps on their web sites.

Note: The fee for service is usually higher when you are roaming (connecting to a network other than the one belonging to your service provider).

If you purchased the AirCard from a service provider, you may already have an account. (That is, your network card is pre-activated.) Otherwise, you can refer to the Sierra Wireless web site, www.sierrawireless.com, for a list of service providers.

When selecting a service provider, it is important to consider the following:

Coverage

There are CDMA networks, that operate in the frequency bands supported by the AirCard 555, throughout North America and parts of Latin America, Asia, New Zealand, and Australia. However, each service provider operates a network that covers a limited geographical area within the overall CDMA coverage area. Most service providers have "roaming" agreements with other service providers, so that they can offer service outside of the coverage area of their own networks. For example, assuming you live in Vancouver and travel frequently to Seattle, you can obtain an account with a Vancouver service provider that has a roaming agreement with a service provider in Seattle. You would then have local service in Vancouver, and roaming service in Seattle. (Most service providers charge more for roaming service than local service.)

Select a service provider that gives you network coverage in all areas you intend to use the AirCard 555.

Pricing

Each service provider has its own pricing options. There are flat rate accounts which provide you a maximum number of minutes of network usage for a fixed monthly fee. There are accounts for which you are charged for network usage by the minute or by the amount of data transmitted. You may want to shop around to find the best value.

Your service provider will activate your account. To do so your service provider requires from you:

- The billing information used to collect payment for your network usage
- The ESN (electronic serial number) assigned to your modem during the manufacturing process. (This number is printed on a label on the AirCard and can be displayed in Watcher.)

18 \/ 2130142

Note: You can use the Lock Code feature to prevent others from using your account should your AirCard be stolen. See page 84 (notebook PCs) or page 168 (Handheld and Pocket PCs) for instructions on using this feature. You require from your service provider:

- A phone number for your AirCard
- An activation code that gives you access to the window in which the phone number is entered
- A SID (System Identifier) that identifies your home network area and is used in conjunction with your phone number to identify your account when you connect to the CDMA network

Unless your AirCard has been pre-activated, Watcher will automatically detect that no account has been configured when you run it for the first time. Watcher will then run the Activation Wizard to guide you through the activation and configuration process.

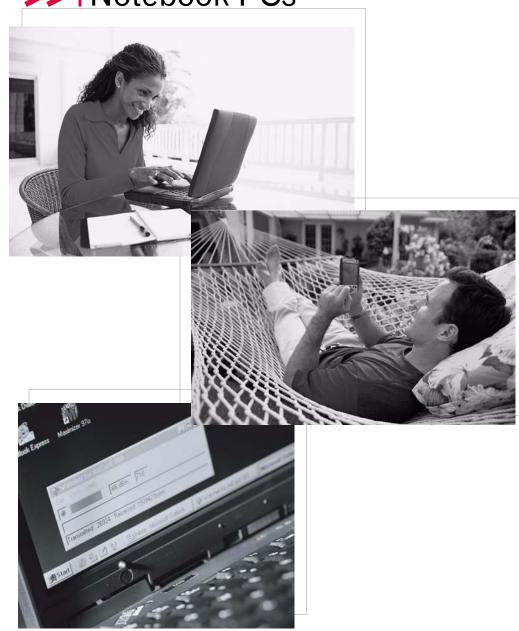
Care and Maintenance of Your AirCard 555 Wireless Network Card

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

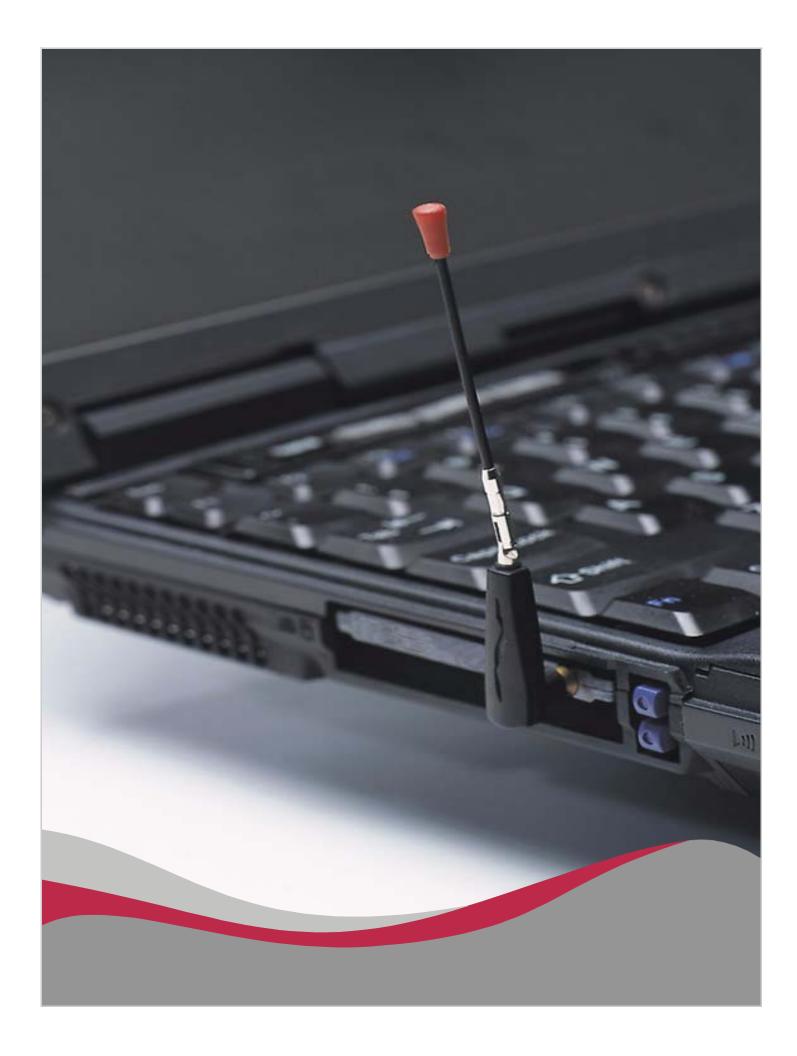
- Do not apply adhesive labels to the AirCard. This may cause the AirCard to become jammed inside the card slot.
- Optimal signal strength is usually obtained when the antenna is perpendicular to the modem. The antenna should bend easily at the hinge. Do not forcefully bend the antenna.
- When storing or transporting your PC in a case (such as a notebook case), remove the AirCard antenna and store it in a compartment where it cannot be crushed or broken.
- The AirCard should fit easily into your PC slot. Forcing the AirCard into a slot may damage connector pins.
- Protect the card from liquids, dust, and excessive heat.
- When not installed in your computer, store the AirCard in a safe place.

AirCard 555 Network Card User Guide

Installation and Use on Notebook PCs







>> 3: Installation on Notebook PCs

- System Requirements
- AirCard Software Installation Procedures
- Venturi Software Installation Procedures
- Card Insertion and Removal
- Account Configuration Procedures

Note: Do not insert the AirCard into your PC Card slot before installing the software. This chapter guides you through the steps necessary to making the AirCard operational on a notebook PC. The basic steps are:

- Insert the AirCard installation CD into your CD-ROM drive and install Watcher and the Network Adapter Manager.
- Insert the AirCard into the PC Card slot and install the AirCard driver from the CD.
- **3.** Install the Venturi software from the AirCard installation CD.
- **4.** If the AirCard has not been pre-activated, use the Activation Wizard to configure the AirCard.

Before you begin the installation process, ensure your PC is running a supported operating system and meets the hardware requirements described below.

System Requirements

The AirCard 555 wireless network card is supported on:

- Windows 95 OSR2 and higher
- Windows 98 / 98 SE
- Windows 2000 with Service Pack 1
- Windows NT 4.0 with Service Pack 6a
- Windows Me
- Windows XP (Home and Professional versions)

To install the AirCard, you require these system resources:

Table 3-1: System Resource Requirements

| Card Slots | 1 Type II PCMCIA (PC Card) Slot |
|----------------------|---------------------------------|
| Communications Ports | 1 Available |
| Disk Drive | CD-ROM |

Note: Dial-up Networking and Winsock are components of the Windows operating system required by the AirCard 555. The versions of these components shipped with Windows 95 OSR2 do not meet the AirCard 555 requirements. If you are using Windows 95 OSR2 and have not vet upgraded to Winsock2 and Dial-up Networking version 1.2 or later, you must do so before installing the AirCard. The required versions can be downloaded from the Microsoft web site, www.microsoft.com.

Rev 3.3 May.02 \/ \/ \/ \/ 23

Table 3-1: System Resource Requirements

| I/O Resources | 1 IRQ, 40 bytes I/O Space |
|---------------|---------------------------|
| Memory | 32 MB |
| Disk Space | 7 MB |

AirCard Software Installation Procedures

This section provides detailed installation instructions. Proceed to the heading that corresponds to your operating system.

Windows 95 Pre-Installation Procedures

Note: Windows system files may be required to complete installation of the AirCard 555 driver. These files are located on the Windows CD and may be stored on your hard drive in CAB files. Ensure you have your Windows CD, or know the location of the .CAB files before proceeding.

Depending on how Windows 95 was installed on your PC and what devices have since been installed, your PC Card (PCMCIA) slots may or may not have been enabled and the TCP/IP stack may or may not be installed. Since the AirCard requires these, this section guides you through these steps:

- 1. Verifying that the PC Card slots are enabled
- 2. Verifying that TCP/IP is installed

Verifying That the PC Card Slots Are Enabled

- Open the Control Panel by selecting Start > Settings > Control Panel.
- 2. Double click the PC Card icon.
- **3.** If the PC Card (PCMCIA) Properties window is displayed, the slots are enabled and you can proceed to the section "Verifying That TCP/IP Is Installed".
- **4.** If the PC Card (PCMCIA) Wizard is displayed, the slots are not yet enabled, and the wizard guides you through the enabling process. (Generally it is sufficient to click **Next** at each window.) Click **Finish** on the final window and click **Yes** when prompted to restart the PC.

24 \ \ \ \ \ \ \ \ \ 2130142

Verifying That TCP/IP Is Installed

- If the Control Panel is not already open, select Start > Settings > Control Panel to open it.
- **2.** Double click the Network icon.
- **3.** Look for "TCP/IP" next to any listing on the Configuration tab. If TCP/IP is listed, you can close the window and proceed to the section "Installing Procedures for Windows 95, 98, Me, and 2000".
- **4.** If TCP/IP is not listed, click the **Add...** button to open the Select Component Type window.
- **5.** Select **Protocol** in the component type list and click the **Add...** button to open the Select Network Protocol window.
- Select Microsoft under Manufacturers and TCP/IP under Network Protocols, then click the OK button.
- **7.** Verify that a listing for TCP/IP appears in the Network window and then click the **OK** button to close the window.
- **8.** If you are prompted that your network is not complete, make the selections appropriate to your network configuration.
- **9.** If you are prompted for the Windows CD, replace the AirCard installation CD with the Windows 95 CD, or enter the path to the .CAB files.
- **10.** Click **Yes** at the prompt to restart your PC. Once the PC has restarted, proceed to the next section.

Installation Procedures for Windows 95, 98, Me, and 2000

Follow these steps to install Watcher, the Network Adapter Manager, and the AirCard driver.

- **1.** If the AirCard CD is not already in your CD-ROM drive, insert it. The CD should auto-start and display a menu.
- If the CD does not auto-start, select Start > Run and enter d:\launch.exe where d is the drive letter of your CD-ROM drive.
- **3.** From the CD start-up window, select **notebook installation and documentation** and then **notebook software installation** to launch the InstallShield Wizard.
- **4.** Use the **Next** and **Back** buttons to navigate through the wizard noting the following:
 - You must click Yes to indicate your acceptance of the terms of the license agreement to proceed with the installation.

Note: A driver is software that forms the interface between a device (such as the AirCard) and the operating system on your PC (such as Windows 98).

Note: Users of Windows 2000 must be logged in with administrative privileges to install the AirCard software.

Note: Do not forcefully connect the antenna, or forcefully insert the AirCard. This may damage connector pins. See page 34 for instructions on removing the AirCard.

- Using the default settings for the Destination Location and Program Folder is recommended unless you have special requirements and an advanced understanding of PC configuration. (The Destination Location dictates where the software is installed. The Program Folder dictates the name assigned to the software in the Add/ Remove Programs in the Control Panel.)
- A check box allows you to choose to display release notes. The release notes list known issues in the software and are displayed in the Windows Notepad. (If you choose to display them, when you are finished reading, use the close box in the upper right corner of the window to close the Notepad.)
- A check box allows you to choose to have a desktop shortcut for Watcher. This gives you the option of launching Watcher by double clicking an icon on your desktop (as well as from the Start menu).
- · Click **Finish** to close the last screen of the wizard.
- 5. If your operating system is Windows 2000, you are prompted that the driver files will be copied to your notebook. Click **OK**. Click **Yes** on the Digital Signature Not Found window each time it appears.
- **6.** Click **OK** when you are prompted to insert the AirCard. Attach the antenna and insert the AirCard into your PC Card slot.
- 7. Click **OK** when you are notified that the installation is complete. If your operating system is Windows 95, Windows 98, or Windows Me, restart your PC from the **Start** menu.

On completion of this step, Watcher, the Network Adapter Manager, and the AirCard driver are installed and you can proceed to install the Venturi compression software. This is described in the "Venturi Software Installation" section on page 33.

26 \ \ 2130142

Note: Users of Windows NT must be logged in with administrative privileges to install the AirCard software. Users of Windows XP may require administrative privileges, depending on the XP installation.

Installation Procedures for Windows XP and NT

Follow these steps to install Watcher and the Network Adapter Manager.

- 1. If the AirCard CD is not already in your CD-ROM drive, insert it. The CD should auto-start and display a menu.
- If the CD does not auto-start, select Start > Run and enter d:\launch.exe where d is the drive letter of your CD-ROM drive.
- From the CD start-up window, select notebook installation and documentation and then notebook software installation to launch the InstallShield Wizard.
- 4. Use the **Next** and **Back** buttons to navigate through the wizard noting the following:
 - You must click Yes to indicate your acceptance of the terms of the license agreement to proceed with the installation.
 - Using the default settings for the Destination Location and Program Folder is recommended unless you have special requirements and an advanced understanding of PC configuration. (The Destination Location dictates where the software is installed. The Program Folder dictates the name assigned to the software in the Add/ Remove Programs in the Control Panel.)
 - A check box allows you to choose to display release notes. The release notes list known issues in the software and are displayed in the Windows Notepad. (If you choose to display them, when you are finished reading, use the close box in the upper right corner of the window to close the Notepad.)
 - A check box allows you to choose to have a desktop shortcut for Watcher. This gives you the option of launching Watcher by double clicking an icon on your desktop (as well as from the Start menu).
 - Click Finish to close the last screen of the wizard.
- 5. If you are running Windows XP, a window indicates that the driver files will be copied to your notebook. Click OK and click Continue Anyway on the Software Installation window each time it appears. A window prompts you to insert your AirCard 555 to install the drivers. Click OK.

Follow the driver installation instructions for your operating system.

Rev 3.3 May.02 \ \ \ \ \ \ \ \ \ \ \ 27

Note: Do not forcefully connect the antenna, or forcefully insert the AirCard. This may damage connector pins. See page 34 for instructions on removing the AirCard.

Windows XP Driver Installation

- Attach the antenna to the AirCard and, with the label facing up, carefully insert the AirCard into your PC Card slot. Windows should detect that a new device has been inserted and launch the wizard that guides you through the driver installation.
- Select Install from a list or specific location (Advanced) on the first window of the Found New Hardware Wizard and click Next to proceed.
- 3. Select the Search for the best driver in these locations radio button, and the Include this location in the search check box, then enter d:\Drivers\WinXP where d is the drive letter of your CD-ROM drive. Click Next to proceed to the next window.
- **4.** If a warning appears stating that AirCard 555 has not passed Windows Logo testing, click **Continue Anyway**.
- **5.** Click **Finish** and repeat steps 1 to 4 as prompted.
- **6.** Click **OK** when prompted that the AirCard 555 has been successfully installed.

On completion of this step, the driver is installed and you can proceed to install the Venturi software. This is described in the "Venturi Software Installation" section on page 33.

Windows NT Driver Installation

Since Windows NT does not have the "Plug and Play" feature included in other Windows operating systems, installing the AirCard driver requires more steps. Installation involves:

- Verifying that your PC Card slots are enabled
- Checking whether Networking is installed
- Installing the network card driver (procedures depend on whether or not Networking is already installed)
- Installing the modem driver
- Verifying that RAS (Remote Access Service) is installed

Note: You must re-install the Windows NT Service Pack after you install the AirCard driver. Ensure you have your Service Pack CD before you begin. (Version 6a is supported.)

28 \/ 2130142

Windows NT Users: Your PC must be off whenever you insert or eject the AirCard.

Note: Windows system files may also be required to complete the installation. These files are located on the Windows NT CD and may also be stored as CAB files on your hard drive. If the .CAB files are not available to you, the recommendation is to copy the Windows NT driver from the AirCard CD to a directory on your hard drive. The Windows NT driver is located on the AirCard installation CD in the directory \Drivers\WinNT.

- **1.** If your PC is on, close any Windows programs that are running and shut down the PC.
- 2. Attach the antenna to the AirCard, and with the label facing up, carefully insert the AirCard into your PC Card slot. Turn on your PC.
- **3.** If the AirCard installation CD is not already in your CD-ROM drive, insert it.
- **4.** If the CD start-up menu is displayed, use the **exit** option in the lower left corner of the screen to exit the menu.

Verifying That the PC Card Slots Are Enabled:

- Open the Control Panel by selecting Start > Settings > Control Panel from the taskbar.
- **6.** Double click the PC Card icon.
- If a window titled PC Card (PCMCIA) Properties appears, the slots are already enabled. Close this window and proceed to the next section.
- **8.** If the PC Card (PCMCIA) Wizard appears, the slots are not yet enabled, and the wizard guides you through the installation process. (Generally it is sufficient to click **Next** at each window.) Click **Finish** on the final window and you should be prompted to restart your PC. Click **Yes** and allow the PC to shut down. Then restart it.

Determining Whether Networking is Installed:

- If the Control Panel is not open, select Start > Settings > Control Panel.
- 2. Double click the Network icon.
- If the Network window opens, networking is already installed. Proceed to the section "Installing the Network Card Driver When Networking Is Already Installed" on page 31.
- 4. If a dialog box appears, prompting you to install Networking, the component has not yet been installed. Proceed to the section "Installing the Network Card Driver When Networking Has Not Been Installed" that follows.

Installing the Network Card Driver When Networking Has Not Been Installed:

- 1. Click **Yes** at the prompt, "Do you want to install it now?" to launch the wizard that installs Networking.
- Click the check boxes on the first window of the wizard so that Wired to the network: is checked and Remote access to the network: is NOT checked. Click Next to proceed.
- **3.** Click the **Select from list...** button to open the Select Network Adapter window.
- Click the Have Disk... button to open the Insert Disk window.
- **5.** If you have copied the driver from the AirCard installation CD to your hard drive, enter the path to the driver and click **OK** to open the Select OEM Option window.
- **6.** If you are installing the driver from the AirCard installation CD, enter **d:\Drivers\WinNT** where **d** is the drive letter for your CD-ROM drive and click **OK** to open the Select OEM Option window.
- 7. If Sierra Wireless AirCard 555 is highlighted, click **OK**. The Sierra Wireless AirCard 555 should appear in the Network Setup Wizard under Network Adapters. Otherwise click Cancel and repeat the previous two steps.
- **8.** Click **Next** to display a list of network protocols.
- **9.** Ensure **TCP/IP Protocol** is checked (as well as any other protocols appropriate to your network configuration) and click **Next** to display a list of network services.
- 10. Select the services appropriate to your network configuration and click Next. (For the purpose of installing the AirCard 555, it does not matter what selections you make in this window.)
- 11. Click Next.
- **12.** If the Windows NT Setup window appears, system files are required to install the components you checked. Either insert the Windows NT CD and enter your CD-ROM drive letter, or enter the path to the .CAB files. Click **Continue**.
- **13.** Use the drop down menus to select an I/O Port, Interrupt, Memory, and Com Port, noting that the AirCard 555 requires 1 IRQ and 40 bytes of I/O Space. Click **Continue**.
- **14.** If the Windows NT Setup window appears again, enter the path to your CD-ROM drive or the CAB files.
- **15.** Click **Yes** at the DHCP prompt to proceed to a display of network bindings. (DHCP or Dynamic Host Configuration Protocol is required by the AirCard 555 regardless of your network configuration.)

Note: Use the Windows NT Diagnostics window to locate an available IRQ and I/O space. Make note of the Com Port that you use to install the network card driver. You must enter the same Com Port when installing the modem driver.

- **16.** Click **Next** to start the Network component.
- **17.** Click **Next** to proceed to the window in which you enter a Computer Name and Workgroup or Domain.
- Enter the information appropriate to your network configuration and click Next.
- 19. Click Finish on the final window of the wizard.
- **20.** Click **Yes** at the prompt to restart your PC. (You must restart your PC to complete the driver installation.)
- **21.** When the PC restarts, reinstall your Service Pack.

On completion of this step, the network card driver is installed and you can proceed to install the modem driver. Follow the instructions in the section, "Installing the Modem Driver" on page 31.

Installing the Network Card Driver When Networking Is Already Installed:

- 1. Click the Adapters tab in the Network window.
- Click the Add... button to open the Select Network Adapter window.
- Click the Have Disk... button to open the Insert Disk window.
- **4.** If you have copied the driver from the AirCard CD to your hard drive, enter the path to the driver and click **OK** to open the Select OEM Option window.
- 5. If you are installing the driver from the AirCard CD, enter d:\Drivers\WinNT where d is the drive letter for your CD-ROM drive and click OK to open the Select OEM Option window.
- **6.** If Sierra Wireless AirCard 555 is highlighted, click **OK**. The Sierra Wireless AirCard 555 should appear under Network Adapters in the Network Setup Wizard. Otherwise, click Cancel and repeat the previous two steps.
- **7.** Use the drop-down menus to select an I/O Port, Interrupt, Memory, and Com Port, noting that the AirCard 555 requires 1 IRQ and 40 bytes of I/O Space. Click **Continue**.
- **8.** Select the **Obtain an IP address from a DHCP Server** radio button and click the **Close** button.
- 9. Click **Yes** to confirm that you want to use DHCP.
- **10.** Click **No** if prompted to restart your PC. (You must restart your PC after the modem driver installation.)

On completion of this step, the network card driver is installed and you can proceed to install the modem driver. Follow the instructions in the next section.

Note: Use the Windows NT
Diagnostics window to locate an
available IRQ and I/O space.
Make note of the Com Port that
you use to install the network
card driver. You must enter the
same Com Port when installing
the modem driver.

Rev 3.3 May.02 \ \ \ \ \ \ \ \ \ \ \ 31

Installing the Modem Driver

- **1.** In the Control Panel, double click the Modem icon to open the Modem Properties window.
- Click the Add button to open the Install New Modem wizard.
- Select Don't detect my modem, I will select it from a list and click Next.
- 4. Select the **Have Disk** button.
- **5.** Enter **d:\Drivers\WinNT\mdmac555** where **d** is the drive letter for your CD-ROM drive and click **Open**.
- 6. Click OK.
- Verify that Sierra Wireless AirCard 555 Modem is displayed and click Next.
- Select the Selected Ports radio button and select the same communications port you selected when you installed the network card driver. Click Next.
- 9. Click Finish.
- **10.** If you are prompted that Dial-Up Networking needs to be configured, click **Yes**.
- **11.** Click **Add** in the Remote Access Setup window.
- **12.** Select the AirCard 555 listing under RAS Capable Devices and click **OK**.
- **13.** If you are prompted to restart your PC, click **Yes**. Otherwise restart your PC from the Start menu.
- **14.** When the PC restarts, re-install your Service Pack.

On completion of this step, the modem driver is installed. Verify that Remote Access Service is installed before proceeding to install the Venturi software.

Verifying that RAS is Installed:

- **1.** In the Control Panel, double click the **Network** icon to open the Network window.
- 2. Click the **Services** tab.
- **3.** If **Remote Access Service** is listed under Network Services, the component is installed and you can skip to the next section. Otherwise, proceed to step 4.
- 4. Click to select **Computer Browser**.
- **5.** Click the **Add...**button to open the Select Network Service.
- 6. Select Remote Access Service and click OK.
- 7. If the Windows NT Setup window appears, either insert the Windows NT CD and enter your CD-ROM drive letter, or enter the path to the .CAB files. Click **Continue**.

32 \ \ 2130142

- **8.** Select **COMx Sierra Wireless AirCard 555...** (where **x** is the letter of the Com Port you assigned to the AirCard 555) from the drop-down menu and click **OK**.
- **9.** Verify that **Sierra Wireless AirCard 555...** is displayed in the Remote Access Setup window and click **Continue**.
- 10. Restart your PC if prompted.

On completion of this step, the driver is installed and you can proceed to install the Venturi software. This is described in the next section.

Venturi Software Installation

Follow these steps to install the Venturi compression software.

- 1. If the AirCard CD is already in your CD-ROM drive, select **Start > Run** and enter **d:\launch.exe** (where **d** is the drive letter of your CD-ROM drive) to display the startup menu. Otherwise, insert the CD in your CD-ROM drive. (The CD should auto-start and display the menu.)
- 2. From the CD start-up window, select **notebook installation** and documentation, then **Venturi installation** and documentation, then **Venturi software installation**, to launch the InstallShield Wizard.
- **3.** Use the **Next** and **Back** buttons to navigate through the wizard noting the following:
 - You must click Yes to indicate your acceptance of the terms of the license agreement to proceed with the installation.
 - Using the default settings for the Destination Location and Program Folder is recommended unless you have special requirements and an advanced understanding of PC configuration. (The Destination Location dictates where the software is installed. The Program Folder dictates the name assigned to the software in the Add/ Remove Programs in the Control Panel.)
 - A check box allows you to choose to display release notes. The release notes list known issues in the software and are displayed in the Windows Notepad. (If you choose to display them, when you are finished reading, use the close box in the upper right corner of the window to close the Notepad.)
 - Radio buttons on the final window of the wizard allow you to choose to restart your PC now or later. You must restart your PC before you can use the software. Select a

Note: Users of Windows 2000 and Windows NT must be logged in with administrative privileges to install the Venturi software. Users of Windows XP may require administrative privileges, depending on the XP installation.

Rev 3.3 May.02 \ \ \ \ \ \ \ \ \ \ \ 33

radio button and click **Finish** to close the last screen of the wizard.

• Use the **exit** option in the lower left corner of the window to close the CD start-up menu.

On completion of this step, the Venturi software is installed and you can proceed to configure the AirCard to use your account (if it was not pre-activated). See the section "Account Configuration Procedures" on page 35.

Card Insertion and Removal

Inserting the AirCard

The AirCard should be inserted into the PC Card slot with the label facing up.

Note: If you are using Windows NT, you must restart your PC whenever you insert or eject the AirCard.

Note: If you also use the AirCard 300 with your computer, eject the AirCard 300 before you use the AirCard 555. In Windows 95, 98, 2000, Me, and XP, when you insert the AirCard, the following should occur:

- If sound effects are enabled, the PC beeps.
- The PC Card icon appears in the status area, if it is not already displayed for another card, (and unless the feature has been disabled).
- Watcher launches (unless the auto-launch feature has been disabled).

The AirCard is powered as soon as you insert it.

Removing the AirCard

To remove the AirCard (Windows 95, 98, 2000, Me, or XP):

- 1. Close Watcher if it is open.
- **2.** Click the PC Card icon in the status area to display the option to stop the card.
- 3. Click "Stop Sierra Wireless AirCard 555 PC Card Parent" (Windows 95, 98, 2000, or Me) or "Safely remove Sierra Wireless AirCard 555 PC Card Parent" (Windows XP).
- **4.** If a dialog box appears notifying you that it is safe to remove the card, click **OK**.
- **5.** Use the ejector to remove the AirCard from the slot.

Note: See Chapter 2 "Getting Started" for an overview of account activation and configuration.

Note: Keep a written record of your activation code, phone number, and SID in a secure place. You will need this information if you need to reactivate the AirCard.

Account Configuration Procedures

The final step to making the AirCard operational is configuring it to use your account.

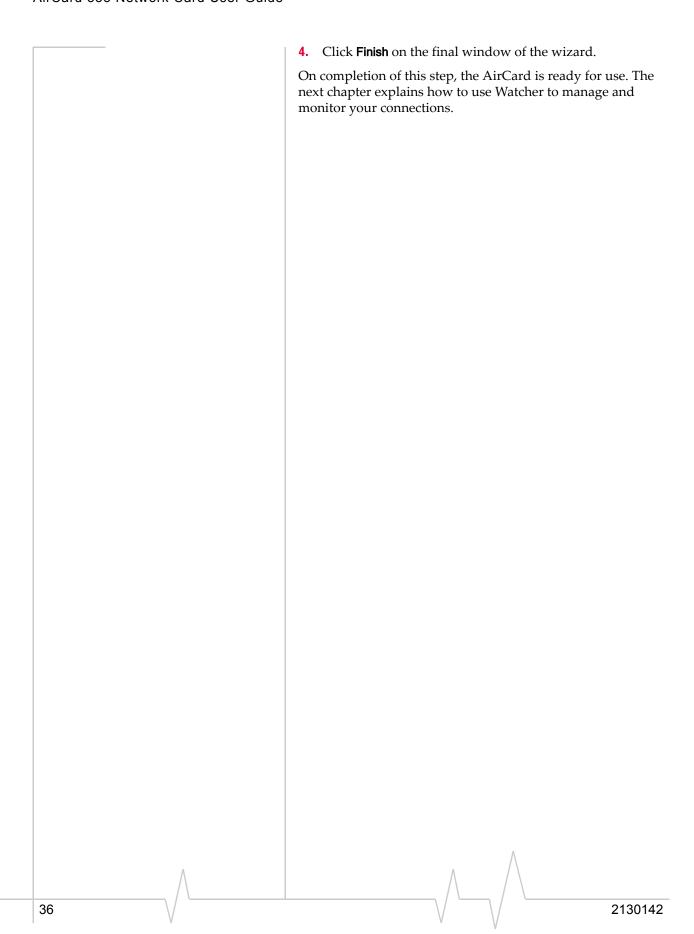
If you purchased a pre-activated AirCard, this step is not necessary. Once the application software and driver are installed, the AirCard is ready for use.

Otherwise, you must use the Activation Wizard to activate and configure your account. Future releases of the AirCard software will allow for Manual Activation and Voice-Assisted Activation but only Manual Activation is available in this release. Manual Activation involves phoning a service provider, exchanging information, and entering your account information into the appropriate fields in the wizard. You require a phone, other than the AirCard, to use this method.

If you have not yet selected a service provider, refer to the Sierra Wireless web site, (www.sierrawireless.com) for a listing of service providers.

To activate an account and configure your AirCard:

- 1. Insert the AirCard into your PC Card slot, if it is not already inserted.
- If the Activation Wizard does not auto-launch, run Watcher (by selecting Start > Programs > Sierra Wireless > AirCard 555 for Verizon Wireless) and in Watcher select Tools > Administration > Activation Wizard.
- **3.** Use the **Next** and **Back** buttons to navigate through the Activation Wizard, noting the following:
 - Use the radio button to select Manual Activation as the method of activation you want to use.
 - Obtain the billing information listed on the second window of the wizard before phoning the service provider or proceeding to the next window.
 - Contact your service provider. The representative will request your ESN (electronic serial number). This is displayed in the Activation Wizard (and is printed on the AirCard box and on the label on the back of the AirCard).
 - The representative will tell you your activation code, phone number, and SID (System ID). Enter these values into the appropriate fields in the Activation Wizard.



>> 4: The Watcher Window and Indicators

- Components of the Watcher Window
- The Menu Bar
- The Minimize, Toggle Full/Compact, and Close Buttons
- Connection Status Area
- Call Status Box
- Indicator Area
- Taskbar Icons

Watcher is the application that allows you to manage and monitor the connection between the AirCard 555 network card and the CDMA network. You use Watcher to:

- Determine your signal strength, roaming status, 1xRTT availability, and other network connection parameters
- Initiate voice and data calls
- View call statistics and SMS messages
- Enable and disable features like Always On Top (that allows you to set the Watcher window to display in front of other application windows), and KeyGuard (that prevents accidental dialing)
- Set options related to SMS messages, sounds played, voice calls, and the lock code security feature (that you can use to prevent others from using your AirCard)

Anytime you use the AirCard you must run Watcher.

Depending on your settings in the Options window, Watcher launches automatically anytime you insert the AirCard 555. You can also launch Watcher by:

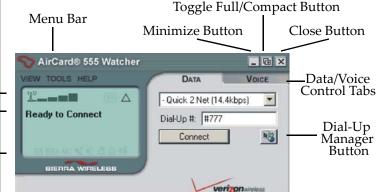
- Double clicking the Watcher icon on your desktop
- Selecting Start > Programs > Sierra Wireless > AirCard 555 > Watcher 555 for Verizon Wireless

Note: Help is available in most windows by pressing F1. Also, in any window that has a ? next to the close button, you can click the ? button, then click any field in the window, to display a description of the field. Fully indexed help is also available from the Help menu.

Components of the Watcher Window

The Watcher window has these components:

- A menu bar on the upper left side of the window
- The Minimize, Toggle Full/Compact, and Close buttons in the top right corner
- The Data and Voice tabs on the upper right side of the window
- A section of the window that resembles an LCD screen (beneath the menu bar) that includes these areas:
 - · The connection status area at the top
 - · The call status box in the middle
 - · The indicator area at the bottom



Connection Status Area

Call Status Area

Indicator Area -

The Menu Bar

VIEW TOOLS HELP

Chapter 7 gives a detailed description of each option in each of Watcher's three menus: View, Tools, and Help.

38 / 2130142

The Minimize, Toggle Full/ Compact, and Close Buttons

- The Minimize button closes the Watcher window but leaves the application running. When Watcher is minimized, the Watcher icon in the status area can be used to determine the AirCard status. (See page 44.)
 - Once minimized, you can redisplay the Watcher window by double clicking the desktop shortcut or launching Watcher from the Start menu. (See page 37.) You can also click the Watcher icon in the status area. (The icons are shown in the section "Taskbar Icons" on page 44.)
- The **Toggle Full/Compact** button is used to switch between the full Watcher window and the compact view:



The compact view allows you to see connection status information while you use other applications.

The Close button is used to exit Watcher.

Rev 3.3 May.02

Note: Optimal signal strength is obtained when the antenna is perpendicular to the AirCard.

Connection Status Area



The Connection Status area uses these icons:

Table 4-1: Connection Status Area Icons

| lcon | Meaning |
|---------------|--|
| <u>4"</u> ——— | The Signal Strength indicator uses bars to show the intensity of the radio signal. The number of bars increases as signal strength increases to a maximum of five bars. |
| Ø | When the bars are dimmed and the antenna icon is crossed out, no connection is possible for one of these reasons: No antenna is attached You are outside the CDMA network coverage area The signal strength is too weak A network or account problem is preventing the AirCard 555 from obtaining service |
| ηx | The 1x indicator shows whether 1xRTT is available in this area. Where 1xRTT packet service is available, you can make high speed Express Network data connections, if your billing plan allows for it. (Depending on your billing plan, there may be a surcharge for 1xRTT data connections.) Note that this indicator does not distinguish between voice service and packet service. If you are in an area where 1xRTT voice service is available, this indicator may be on although packet service is not available. |

Table 4-1: Connection Status Area Icons

| Icon | Meaning |
|----------|--|
| \wedge | The Roaming Status indicator shows whether you are roaming onto the network of a service provider other than your own. |
| | When the indicator is off (gray), you are within the local coverage area of your service provider. When the indicator is on (solid black), you are in a "preferred" roaming area. When the indicator is blinking, you are within the coverage area of a CDMA network but not in a "preferred" roaming area. |
| | Your coverage area and billing charges depend upon your service provider and the type of account you have. There may be surcharges for roaming service that vary based on whether you are in a preferred roaming area or a non-preferred roaming area. If there is no roaming agreement between your service provider and the local carrier, you may be unable to complete calls in non-preferred roaming areas. |
| | ows whether a call is in progress. No icon is Card is idle. Otherwise, one of these icons is |
| • | When the In Use indicator is a handset, a voice call is in progress. |
| ø | When the In Use indicator is a modem, a data call is in progress. |
| 1X | When the In Use indicator is a modem labelled "1X", an Express Network (1xRTT) data call is in progress. (For a description of 1xRTT data calls, see page 49.) |
| × | When the In Use indicator is a large "X", a fatal error has occurred and the AirCard is inoperable. (This may be resolved by closing Watcher and restarting your PC.) |

Rev 3.3 May.02

Call Status Box

The Call Status Box displays one of these messages:

- *Ready to Connect* indicates that you have a network connection but there is no call in progress.
- *Dialing* indicates that the AirCard is attempting to connect to a phone number.
- Time ... the name of the person with whom you are connected (or "Unknown" if the name is not obtainable), and the phone number indicates that a voice call is in progress. The time shown is the duration of the call.
- *Time...Rx...Tx...* indicates that a data call is in progress. The time shown is the duration of the call. Rx shows the number of bytes of data received. Tx shows the number of bytes of data transmitted.
- *Voice Call From...* indicates that an incoming voice call is in progress.
- Roam Call From ... indicates that an incoming voice call is in progress and you are roaming.
- Data Call From ... indicates that an incoming data call is in progress.
- Fax Call From ... indicates that an incoming fax call is in progress.
- … New Missed Call(s) indicates that you received a call (or calls) that you failed to answer. (Depending on your settings in the Options window, a record of these calls is maintained in the call log which is described on page 68.)

Note: Watcher begins timing outgoing calls from the time the call is initiated—not from the time the call is answered.

Indicator Area

The Indicator area displays icons that notify you when you receive messages and indicate whether certain options and features are enabled. The icons are black when "on" and gray when "off".

Table 4-2: Indicator Area Icons

| lcon | Meaning |
|------------|---|
| ⋈ | The SMS message indicator shows whether you have unread messages. A blinking SMS message icon indicates that there are one or more urgent or important unread messages. To display the SMS Manager window (in which the messages are displayed) select Tools > Mobile Messenger or double click the icon. See page 60 for instructions on reading SMS messages. |
| ⊠) | The voice mail indicator shows whether you have unheard voice messages. To hear the messages, you must connect to your voice messaging system. Double click this icon to dial your voice messaging system. (The phone number for your voice messaging system can be changed in the Options window. See page 91.) |
| MC | The missed call indicator appears if you failed to answer an incoming call. To view the phone number(s) of any missed calls, double click the icon to display the call log. (See page 68 for instructions on using the call log.) |
| · · | The auto-answer indicator shows whether Watcher is set to automatically answer incoming calls. You can enable and disable this feature under Tools > Options . |
| € | The headset indicator shows whether a headset is connected to the AirCard. |
| Æ | This indicator shows whether the silent ringer feature is enabled. When enabled, no sound is played when an incoming call is received. You can enable and disable this feature under Tools > Options . |

Table 4-2: Indicator Area Icons

| Icon | Meaning |
|------|---|
| ≙ | The privacy indicator shows whether encryption is in use on voice calls. (Encryption prevents your calls from being monitored.) The AirCard uses encryption where it is available on the network. |
| €\$ | The compression indicator shows whether V.42bis compression is in use. (V.42 compression is not supported in this release.) |

Taskbar Icons

Watcher displays an icon in the status area (which is usually located in the lower right corner of your screen). The status area icon indicates your connection status or notifies you when you have voice mail or SMS messages, or when you have missed a call.

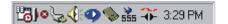
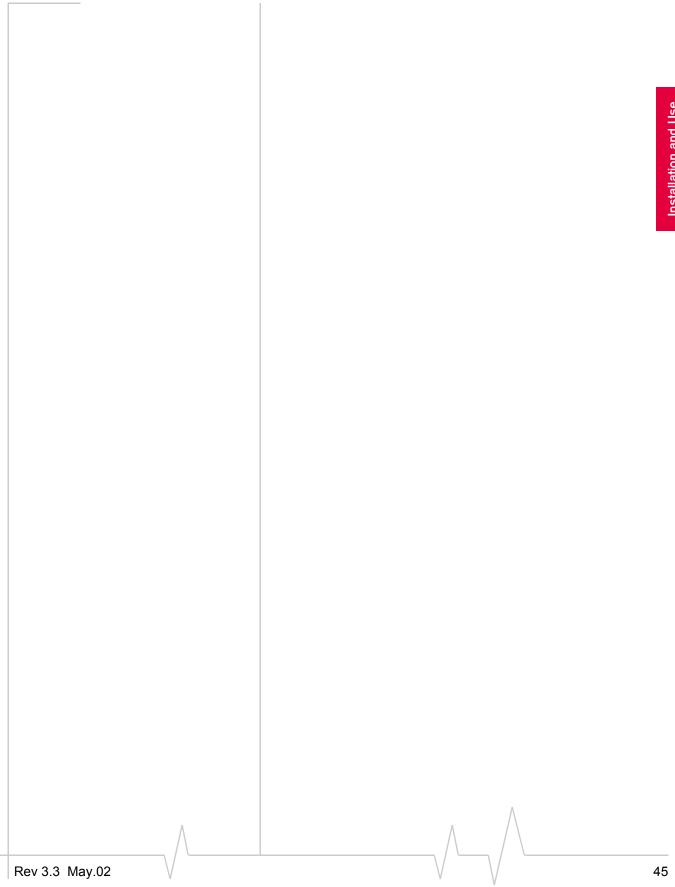


Table 4-3: Status Area Icons

| Icon | Meaning |
|----------|--|
| ₹ | You are in service on the CDMA network but have no active voice or data connection. |
| ₹ | You have an active voice or data connection. |
| T | You missed (failed to answer) an incoming call. You can view the number of the caller in the call log. |
| °≥ | You have unread SMS message(s). |
| ≥ | You have voice mail. |

44 \/ \/ \/ 2130142



>> 5: Data Connections

- Dial-Up Connections
- Quick 2 Net Connections
- Express Network Connections

Note: You cannot have a data and a voice connection at the same time. If you have a data connection when an incoming call occurs, your caller will get a busy signal or be put through to your voice mail box.

Note: Depending on your billing plan, there may be a surcharge for 1xRTT calls.

The Data tab on the main Watcher window is used to make data connections for any of these purposes:

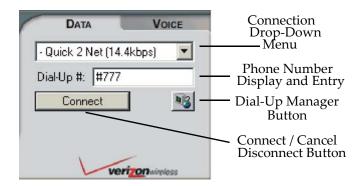
- Browsing the Internet
- Sending and receiving e-mail
- Dialing into your corporate network
- Sending and receiving faxes

The AirCard 555 network card offers three types of data connections:

- **Dial-up connection** in this type of connection, the AirCard 555 functions as a modem. You provide the phone number and the AirCard dials the number. Using this type of connection, you can connect to any other modem and receive faxes. The maximum speed of this type of connection is 14.4 kbps, or 56 kbps if Venturi compression software is used to increase the throughput.
- Quick 2 Net connection in this type of connection, the AirCard makes a direct Internet connection. The data transmission speed for this type of Internet connection is the same as for a dial-up connection but the time required to initiate the connection is shorter. Quick 2 Net availability is dependent on your service provider. (This type of connection is sometimes called Quick Net Connect or QNC.)
- Express Network connection in this type of connection, the AirCard functions as a network card. The AirCard establishes a high-speed Internet connection to the CDMA network. (You do not need to provide a phone number and there is no dialing involved.) The maximum speed of this connection is 144 kbps but it is only available in areas where 1xRTT has been implemented.

The Express Network connection provides access to the Internet. Once the connection is established, you can open your browser and connect to any web site that is accessible through the Internet, or access other Internet services (such as e-mail).

Rev 3.3 May.02 \/ \/ \/



If you also use the AirCard 300 with your computer, eject the AirCard 300 before you use the AirCard 555. Under some operating systems, if both AirCards are inserted, then the path that the IP (Internet Protocol) traffic will take is not predictable. If the data gets routed through the AirCard 300, you will experience slower data transfer rates.

Dial-Up Connections

These steps are required to make a dial-up connection:

- Set up the number in the Dial-Up Manager. (This step is only necessary the first time you dial the number.) The Dial-Up Manager is displayed by selecting Tools > Dial-Up Manager, or by clicking the Dial-Up Manager button to the right of the Connect button. See page 71 for detailed instructions on using the Dial-Up Manager.
- 2. Select the connection name from the pull-down menu on the Data tab of the main Watcher window. The number is then displayed in the **Dial-Up #** field.
- **3.** If necessary, change the phone number in the **Dial-Up #** field. (For example, depending on your location, you may need to add or remove the area code.)
- **4.** Click the **Connect** button.

Watcher then initiates the connection. Progress is shown in the call status area. Once the connection is established, the call statistics (duration, bytes transmitted, and bytes received) are displayed.

During dial-up data connections, the In Use indicator is a modem.

Note: Changing the phone number in the Dial-Up # field does not change the record in the Dial-Up Manager. (That is, the next time you select the connection, the phone number will revert to the number stored in the Dial-Up Manager.) For instructions on changing the record in the Dial-Up Manager, see page 72.

To terminate a call:

 Click the Cancel button (during the connection process) or the Disconnect button (once the connection is established).

Incoming Data Calls

By default the AirCard is set to answer all calls as voice calls. To receive a fax or data call, you must set the AirCard to answer appropriately. This setting is in the Options window (**Tools > Options**) on the **General** tab. See page 74 for a detailed explanation.

To terminate an incoming call:

 Click the Cancel button (during the connection process) or the Disconnect button (once the connection is established).

Quick 2 Net Connections

The Quick 2 Net connection is set up for you when Watcher is installed. All you need to do to make the connection is:

- Select Quick 2 Net (14.4 kbps) from the drop-down menu on the Data tab of the main Watcher window.
- 2. Click the Connect button.

Once connected you can use any Internet application (such as Internet Explorer, Netscape Navigator, or your e-mail application).

During Quick 2 Net connections, the In Use indicator is a modem.

To terminate a Quick 2 Net connection:

 Click the Cancel button (during the connection process) or the Disconnect button (once the connection is established).

Express Network Connections

An Express Network connection can be established only in areas where 1xRTT packet service has been implemented. To make an Express Network connection:

- 1. Select **Express Network (1xRTT)** from the drop-down menu on the Data tab of the main Watcher window.
- **2.** Click the **Connect** button. (No phone number or dialing is required.)

Note: 1x The 1xRTT indicator only shows that 1xRTT service is available; it does not indicate whether voice or packet service is available.

Note: Depending on a setting in the Options window, a message warning you of a possible surcharge for 1xRTT service may be displayed whenever you establish a 1xRTT connection. This warning message can be disabled in the Options window. See page 81. If you are running Windows 2000 or Windows XP and having problems establishing a connection, see page 102.

Once the connection is established, you can use any Internet application (such as Internet Explorer, Netscape Navigator, or your e-mail application).

To terminate an Express Network connection:

- **1.** Click the **Cancel** button (during the connection process) or the **Disconnect** button (once the connection is established).
- During Express Network connections, the In Use indicator is a modem labeled "1X".

>> 6: Voice Connections

- · The Dial Pad
- · The Scratch Pad
- Outgoing Calls
- Incoming Calls

Note: The headset connects to the circular connector on the end of the AirCard next to the antenna.

Note: Many voice features are configured in the Options window. See page 88.

You can use your AirCard 555 network card as a mobile phone simply by connecting a headset. Use only approved headsets with the AirCard 555. (See the Sierra Wireless web site, www.sierrawireless.com for a listing of approved headsets.)

The AirCard 555 has several voice features:

- The volume controls allow you to adjust the loudness of what you hear.
- The mute button allows you to turn off the microphone so that you cannot be heard.
- The SEND button allows you to redial the previously dialed number.
- The Any-Key Answer feature allows you to answer an incoming call by pressing any button on the dial pad except END, CLR, or the volume controls.
- The Auto-Answer feature can be enabled to automatically answer incoming calls within a specified number of rings.
- The KeyGuard feature prevents accidental dialing.
- The Silent Ringer feature prevents any sound from occurring when you receive calls.
- The Missed Call indicator notifies you of any incoming calls that were not answered.
- A scratch pad provides an easily accessible place to record very brief notes.
- The phone book allows you to keep a record of commonly used phone numbers and to dial a number simply by double clicking it.
- The call log records details about all incoming and outgoing calls, providing useful information such as the phone numbers of missed calls.
- If your billing plan with your service provider includes Conference Calling (Three-Way Calling), Voice Mail, Call Alert, or Caller-ID, they are supported by the AirCard.

Rev 3.3 May.02 \/ \/ \/ \/ 51

Note: You can store commonly used phone numbers in the phone book and dial directly from the PhoneBook window instead of entering the number on the dial pad. See page 66.

The Dial Pad

The dial pad for the AirCard is in Watcher and is displayed when you click the Voice tab. This performs the same functions as the dial pad on a mobile phone.

When KeyGuard is on, clicking the buttons on the dial pad has no effect. For information on KeyGuard, see page 73.



Table 6-1: The Watcher Dial Pad

| Dial Pad Buttons | Function | |
|--|--|--|
| 0-9, #, * (or the same keys on your keyboard) | Use these buttons to enter the digits (and other characters) you want to dial. The numbers are displayed in the call status area until you press SEND , END , or CLR , or you receive an incoming call. | |
| | Any of these buttons can be used to answer an incoming call if the Any-Key Answer feature is enabled. | |
| | If you click (or press) these buttons during a call, the AirCard beeps and the characters are displayed in the call status area. | |
| SEND | Use this button to dial and to answer incoming calls. When you are not receiving an incoming | |
| (<enter> on your keyboard)</enter> | call, clicking SEND dials the numbers in the call status area. If no numbers are displayed, Watcher re-dials the last number you dialed. | |

Table 6-1: The Watcher Dial Pad

| Dial Pad Buttons | Function | |
|--|---|--|
| END (<esc> on your keyboard)</esc> | Use this button to hang-up or end a call, or to clear all the digits and characters in the call status area (i.e. to cancel a call that you've started to enter). This button also clears most status messages. | |
| CLR (<backspace> on your keyboard)</backspace> | Use this button to clear the last number you've entered. If you hold this button down for one second, it has the same effect as the END key. This button can also be used to hang-up or end a call. | |
| Volume Buttons (Up Arrow and Down Arrow) | Use the Up Arrow to increase the headset volume you hear. Use the Down Arrow to decrease the volume. When there is no call in progress, use these buttons to adjust the volume of the beep that occurs when you click the dial pad buttons. | |
| Mute Button | Use this key during a call to prevent the caller from hearing what you say. When no call is in progress, this key enables and disables the Silent Ringer feature. | |

The Scratch Pad



The scratch pad gives you a place to record very brief notes (such as a name and phone number).

Display the scratch pad by clicking the Scratch Pad button on the right side of the Watcher window.



Rev 3.3 May.02 \ \ \ \ \ \ \ \ \ \ \ \ 53

Note: The standard function keys for copy (CTRL+C), cut (CTRL+X), and paste (CTRL+V) can be used to move text from the scratch pad to another application (such as the Windows Notepad).

Note: You cannot make a phone call when there is a dial-up data connection, a Quick 2 Net connection, or a 1xRTT connection.

Note: If you click the **SEND** button without entering a number, the AirCard redials the last number you dialed.

Note: The Options window, displayed when you select **Tools > Options**, allows you to customize the sound played when you receive an incoming call and to enable and disable the Silent Ringer feature.

Note: If an incoming call occurs while you have a data connection, your caller will get a busy signal or be put through to your voice mail box.

To enter text:

1. Type the text from your keyboard.

To erase all the text in the scratch pad:

1. Click the **clear** button.

To close the scratch pad (saving any text in it):

1. Click the **ok** button.

Outgoing Calls

To initiate a call:

- 1. Connect a headset to the AirCard, if one is not already connected.
- **2.** Enter the number you want to dial by either clicking the number buttons on the dial pad or typing the numbers on your keyboard.
- **3.** Click the **SEND** button.

As the call is being dialed, Watcher displays "Dialing" and the phone number.

You can also dial a number from the phone book (see page 66) and from the call log (see page 68).

Incoming Calls

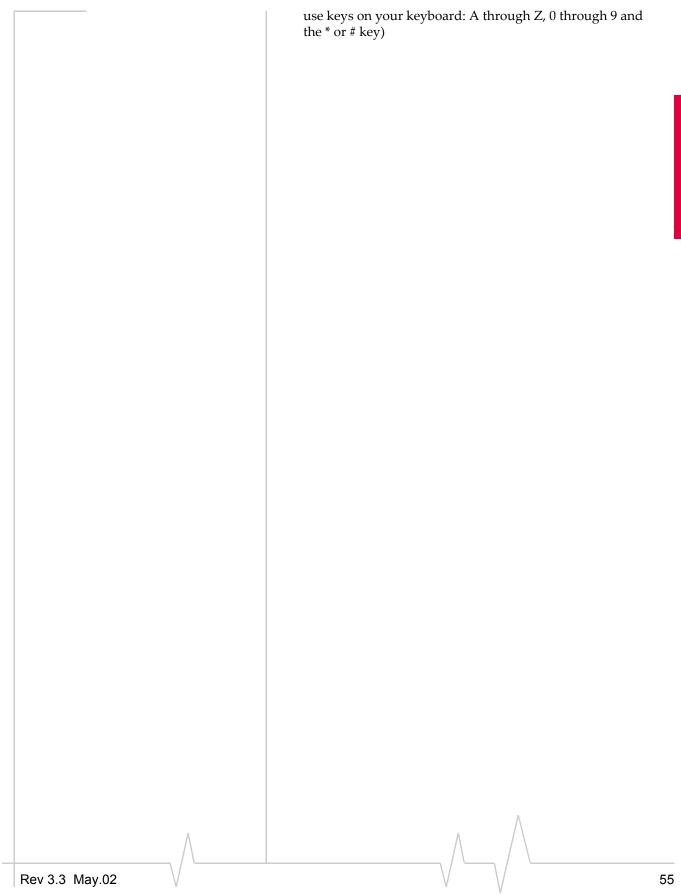
Depending on how certain features are configured, when you receive an incoming call the following occurs:

- A sound is played, unless the Silent Ringer feature is enabled.
- If Watcher is in compact view when you receive the call, the Watcher window maximizes.

To answer a call:

- Connect a headset to the AirCard, if one is not already connected.
- **2.** Click the **SEND** button (or, if the Any-Key Answer feature is enabled, click any key except **END** or **CLR**. You can also

54 \ \ \ \ \ \ 2130142



>> 7: The Watcher Menu Options

- The View Menu
- · The Tools Menu
- · The Help Menu

This chapter describes each option in each of the Watcher menus.

The View Menu



The options under the View menu allow you to:

- Set the Watcher window to always display on top of other application windows.
- Set the Watcher window to jump to the edge of the screen (dock) when you reposition the window.
- Switch between the compact version of the Watcher window and the full version.

Always On Top

When Always On Top is enabled, the Watcher window displays in front of all other application windows, even when you position another window over Watcher. This allows you to view connection status indicators while using another application, such as your Internet browser.

To enable or disable Always On Top:

1. Select Always On Top from the View menu.

A check mark next to the option indicates that it is enabled.

Docking

When Docking is enabled, the Watcher window jumps to the edge of your screen when the window is dragged close to an edge. This allows you to easily position the window to a corner of your screen.

Rev 3.3 May.02 \/ \/ \/

To enable or disable Docking:

1. Select **Docking** from the **View** menu.

A check mark next to the option indicates that it is enabled.

Toggle Full/Compact

The Watcher window has two sizes:

The Full Window



The Compact Window



The full window is required to initiate data connections and make voice calls, but if all you require from Watcher is status information, you can use the compact view.

To switch from the full window to the compact window:

- Select Toggle Full/Compact from the View menu.
 Or
- 1. Click the Toggle Full/Compact button (next to the **Close** button in the upper right corner of the Watcher window).

To switch from the compact window to the full window:

- **1.** Click the Toggle Full/Compact button. *Or*
- 1. Right click on the Watcher window.

Note: The Watcher window switches to full view automatically when you receive an incoming call.

2. Select **Toggle Full/Compact** from the shortcut menu.



The Tools Menu



The options under the Tools menu allow you to:

- Send and receive SMS messages. (See page 60.)
- Maintain the phone book. (See page 66.)
- View the call log that lists the phone numbers and other details of voice and data calls you've made and received. (See page 68.)
- Maintain the Dial-Up Manager in which you enter the phone numbers and details required to make data calls. (See page 71.)
- Enable and disable features like KeyGuard, Auto-Answer, Any-Key Answer, the Lock Code, and certain alerts and warning messages.
- Configure options related to SMS messages, the call log, the location of the Watcher window on your screen, and sounds used to notify you of incoming calls and messages.

Note: Check with your service provider for information about SMS service subscription. Additional charges may apply.

Mobile Messenger

The Mobile Messenger window is used to display SMS messages you receive and to send SMS messages.

SMS (Short Message Service) is a feature that some service providers offer, that allows you to send and receive short messages (up to 160 characters) through the CDMA network. Depending on your service provider, one or more of these methods of sending SMS messages may be available to you:

- Some wireless service providers have web pages on which anyone can enter a message and direct it to your phone number. In this case, anyone who has access to the Internet can send you a message, provided he or she knows your phone number and can locate the appropriate web page.
- Some service providers allow SMS messages to be sent through Internet e-mail applications. Your phone number is then used as an e-mail address (example: 6045553993@serviceprovider.com).
- Some products, such as the AirCard 555, have software that allows you to send messages to other subscribers, using their phone numbers to direct the message.

The **Mobile Messenger...** option in the **Tools** menu allows you to read, create and send SMS messages.

Reading SMS Messages: The Inbox

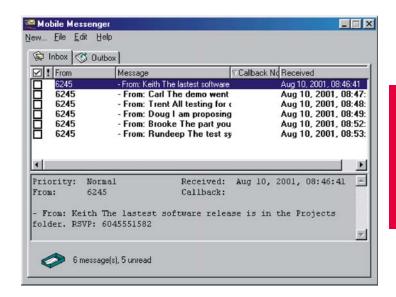
Incoming messages are stored in the Inbox until you delete them or until they expire (depending on your settings in the Options window).

The SMS indicator notifies you when new messages are received by displaying an envelope icon. The ToolTip (displayed when you position the mouse pointer on top of the icon) identifies how many unread messages you have.

If the icon is flashing, one or more of the messages is tagged as urgent.

To read messages:

- Double click the SMS icon, or select Tools > Mobile Messenger... to display the Mobile Messenger window.
- **2.** Click the **Inbox** tab if it is not already selected.



Note: Unread messages are displayed in bold.

The message header is displayed in the top of the window, showing the address or phone number from which the message was sent, the beginning of the message, and the call back number.

Click the message header to display the message in the lower section of the window.

Messages marked with an exclamation mark (!) have been tagged by the sender as being urgent or important.

To delete messages:

- 1. Use the check boxes to the left of the messages to select the messages you want to delete.
- 2. Select Edit > Delete.
- Confirm that you want to delete the messages by clicking Yes.

To delete all messages:

- 1. Select Edit > Delete All.
- 2. Confirm that you want to delete the messages by clicking Yes.

Watcher also has a feature that allows you set an expiry period after which messages are automatically deleted. This is set in the Options window. (Select **Tools > Options** to display the window, and then select the **SMS** tab. This is described in the "Options" section on page 81.)

Note: The **Delete All** menu option deletes all messages, whether or not the messages have been read. The message expiry feature deletes only messages that have been read.

Note: The **Reply to Sender** menu option is only available if the e-mail address of the person who sent you the message is included in the message. This may not be available if, for example, the message was sent from a web site.

Note: The **Call back Sender** menu option is only available if the message includes a valid call back number. To forward a message:

- 1. Select the message header.
- Select File > Forward Message... to open the Message window.
- **3.** In the Message window you can edit the message, append text to the message, and send it.

To reply to a message:

- 1. Select the message header.
- 2. Select **File > Reply to Sender...**to open the Message window.
- **3.** In the Message window create the message and send it.

To phone the sender of a message:

- 1. Select the message header.
- 2. Select File > Call back sender.

Watcher then dials and attempts to connect to the call back number.

To add the sender of a message to your phone book:

- 1. Select the message header.
- 2. Select Edit > Add Contact to Phonebook or right-click the message header and select Add Contact to Phonebook.
 If the message you received has a call back number, then you can add the number to a new or existing contact.
 If the message doesn't have a call back number, then you can add the e-mail address of the sender to a new or existing contact.

To exit the Mobile Messenger window:

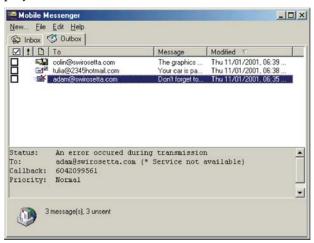
 Select File > Close or click the close box in the upper right corner.

62 \ 2130142

Note: In the Options window you can enable and disable the option to save outgoing messages to the Outbox.

Sending SMS Messages: The Outbox

The Outbox is the place where your outgoing messages are stored. Click the Outbox tab in the Mobile Messenger window to display the Outbox contents:



The third column from the left indicates the status of each message in the Outbox:

Table 7-1: Outgoing Message Status Icons

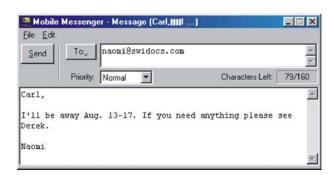
| Icon | Meaning | |
|------------|---|--|
| ≅ H | Saved The message has been saved in the Outbox but not yet sent. | |
| ⊒⊠ | Sent The message has been sent successfully to the CDMA network but has not yet been delivered to the recipient(s). | |
| Ç ≅ | Delivered The message has been delivered to the recipient(s)' mail box(es). | |

Table 7-1: Outgoing Message Status Icons

| Icon | Meaning | | |
|----------|--|--|--|
| | Partially Sent The message has been sent to the network but the network did not respond. (This may indicate a network problem.) | | |
| ≚ | Not Sent The message was sent to the network and the network responded with an error. The error message is shown in the Status field when you display the message. | | |
| | Some possible reasons for a failure to send are: You do not have a subscription to a service that allows you to send SMS messages. The e-mail address in the To field is not valid. The message exceeded the maximum length for SMS messages. There is a network problem or a problem with your account. | | |

To send a message from the Mobile Messenger window:

1. Click New... in the menu bar, or select File > New Message



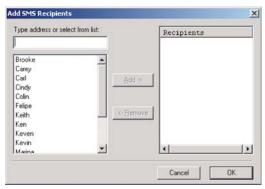
Note: A message can have up to 10 recipients.

2. Enter the recipients for the message by typing e-mail addresses, separating each address with a comma (,) or semicolon (;).

64 \ \ \ \ \ \ \ \ \ 2130142

Or

To retrieve an address or addresses from the phone book, click the **To** button to display the Add SMS Recipients window.



On the left side of the Add SMS Recipients window all the names in the phone book are displayed. (See page 66 for instructions on maintaining the phone book.) To create a recipient list:

- **a.** Select a name to which you want to send this message. This causes the phone numbers and e-mail addresses for the person to appear.
- **b.** Select the person's e-mail address.
- c. Click Add -> to include the address in the recipient list on the right side of the window.
- **d.** Repeat steps a to c to include up to 10 recipients.
- **e.** If you want to remove a recipient, click the person's name in the recipient list and click **<- Remove**.
- f. Click **OK**.
- **3.** If you want to send a message that is tagged as urgent or important, select **High** from the **Priority** drop-down menu.
- **4.** Type the message in the lower portion of the window.
- **5.** If you want to save the message in the Outbox and send it later, select **File > Save**.
- **6.** If you want to send the message immediately, click the **SEND** button, or select **File > Send**.

To erase a message and start again:

1. Select Edit > Clear.

To open a message that is saved in the Outbox:

1. Double click the message header to open the message in the Message window.

You can then edit the message and change or add recipients.

Exiting the Mobile Messenger Window

To exit from the Mobile Messenger window and return to the main Watcher window:

1. Select File > Close.

Or

Click the **Close** box in the upper right corner of the window.

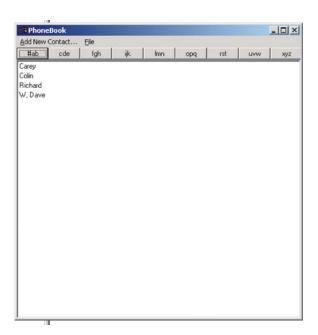
If there are any unsaved messages, Watcher prompts you to indicate whether you want to save them.

Phone Book

The phone book provides a place to store the phone numbers and e-mail addresses of people you contact. The benefit of using the phone book is that it saves you having to enter the phone numbers and e-mail addresses of people you regularly contact each time you make a call or send a message.

To open the phone book:

1. Select Tools > Phone Book.



To add a record to the phone book:

 Select Add New Contact in the PhoneBook window, or rightclick any existing record and select Add New Contact.

Note: Use the tabs at the top of the PhoneBook window to jump to the name in the listing beginning with a particular letter. That is, click the fgh tab to select the first name in the phone book that begins with the letter "F".

- **2.** Enter the person's name and any phone numbers and/or e-mail addresses in the Contact Properties window.
- 3. Click Save.

You can also add a record from an SMS message you have received (SMS Inbox, page 62) or a call you have received or made (call log, page 70).

To change a record:

- 1. Select the record in the PhoneBook window.
- Select File > Edit Contact, or right-click the record and select Edit Contact.
- **3.** Make any changes in the Contact Properties window and click **Save** to keep the changes or **Cancel** to exit without saving the changes.

To delete a record:

- 1. Select the record in the PhoneBook window.
- Select File > Delete, or right-click the record and select Delete Contact.

To dial a phone number in the phone book:

- 1. Select the record in the PhoneBook window.
- **2.** Double-click the phone number



or click the phone number and select **File > Dial**, or right-click the phone number and select **Dial**.

To manually synchronize your phone book entries and Outlook:

- 1. Ensure you are online (in terms of Outlook).
- From the Phone Book window of Watcher, click File > Synchronize with Outlook, or right-click a record and select Synchronize with Outlook.

If, since the last synchronization, you have made changes to the same entry in both the phone book and in Outlook, then a window will appear, showing you the differences between the two entries. Select which entry to keep.

To set your phone book to automatically synchronize with Outlook:

- **1.** Ensure you are online (in terms of Outlook).
- 2. From the General tab of the Options window of Watcher, select the "Outlook Synchronization (Contacts only)" check box.

3. Click **OK** to synchronize the phone book and Outlook.

The following table describes the circumstances under which Outlook and your phone book will be synchronized.

Table 7-2: Synchronization of Outlook and Your Phone Book

| If the "Outlook Synchronization (Contacts only)" checkbox is | And you change | When you are | Then Outlook and your phone book become synchronized: |
|---|--|-----------------|--|
| Selected | Phone book in Watcher | Online | Automatically, immediately. |
| Selected | Contacts in Outlook | Online | When one of the following occurs: you restart Watcher, change the phone book in Watcher, or manually synchronize the phone book. |
| Selected | Contacts in Outlook, or phone book in Watcher | Offline | Once you become online and one of the following occurs: you restart Watcher, change the phone book in Watcher, or manually synchronize the phone book. |
| Cleared | Contacts in Outlook, or Phone book in Watcher | Online | Only if you manually synchronize the phone book. |
| Cleared | Contacts in Outlook, or Phone book in Watcher | Offline | Only if you manually synchronize the phone book, once you become online. |

Call Log

The call log maintains a record of your outgoing and incoming calls. In the Options window (displayed when you select **Tools** > **Options**) on the **General** tab, you can choose to keep a record of:

- None of your calls
- All of your calls
- The last 50 calls
- The last 100 calls

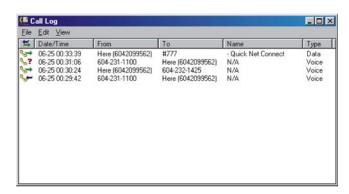
This option is described on page 75.

68 \/ \/ \/ \/ 2130142

Note: You can also open the call log by double clicking the missed call indicator MC on the main Watcher window. When you do this the only calls displayed in the log are voice calls that you did not answer.

To display the call log:

1. Select Tools > Call Log



For each message, the call log displays:

- The call direction (see below)
- The phone number of the caller (for incoming calls), or the phone number that you dialed (for outgoing calls)
- The date and time the call was made or received
- The name of the caller (for incoming calls), or the name of the person called (for outgoing calls), if available
- The type of call (data, voice, or fax)

Table 7-3: Call Direction Icons

| Icon | Meaning | |
|----------------|---|--|
| % | Incoming Call This is a call that you answered. | |
| & → | Outgoing Call This is a call that you made. | |
| <i>€</i> 3 | Missed Call This is a call you received but did not answer. | |

To phone a number contained in one of the call records:

1. Double click the record.

Or

- 1. Select the number.
- 2. Select File > Dial.

Note: The **Dial** option in the **File** menu can be used to establish a voice call to any number in the From or To column.

This can be used to place voice calls only.

To save the information in the call log to a text file:

- 1. Select File > Save As....
- **2.** Use the Save As dialog box to select a location and name for the file and click **Save**.

To add an entry to the phone book:

- **1.** Select the record.
- 2. Select Edit > Add Number to Phonebook.

Select a radio button to specify whether to add the information to a new or existing contact.

To copy a phone number to the Windows Clipboard:

- 1. Select the record.
- 2. Select Edit > Copy Phone Number.

You can then paste the number into another window (in most cases, using CTRL+V). The phone number that is copied is the number in the **From** column for incoming calls, and the number in the **To** column for outgoing calls.

To delete a record:

- **1.** Select the record.
- 2. Select Edit > Delete.

To delete all records in the call log:

- 1. Select Edit > Delete All
- **2.** Tap **Yes** to confirm the deletion.

To select which call records are displayed:

 Use the View menu to select the call type (Incoming, Outgoing, Missed) and call logs (Fax Logs, Voice Logs, Data Logs) to be displayed.

The call log displays only messages that correspond to the type and log that are checked in the View menu. For example, if only **Incoming** and **Voice Logs** are checked, only incoming voice calls are displayed.

To sort the calls:

- Click any column heading to sort by that column in ascending order.
- 2. Click the same column heading again to sort by the same column in descending order.

Note: Clicking **All Types** in the **View** menu causes all incoming, outgoing, and missed calls to be displayed. Clicking **All Logs** in the **View** menu causes all fax, voice, and data calls to be displayed.

For example, to sort the calls by name, click the Name column heading. This sorts the records from A to Z. If you click the Name column heading again, the records will be sorted from Z to A.

Dial-Up Manager

The Dial-Up Manager is where dial-up data connections are set up. (See Chapter 5 for a description of the types of data connections.)

In the Dial-Up Manager you can:

- Add new records for phone numbers to which you want to connect.
- Change and delete existing records.
- Set the default connection.
- Select and establish a connection.

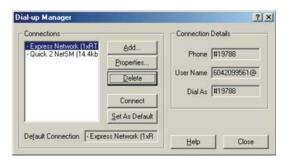
To add a phone number to the Dial-Up Manager:

Open the Dial-Up Manager window by,

Clicking the Dial-Up Manager button on the Data tab of the main Watcher window.

Or

Selecting Tools > Dial-Up Manager.



Note: The default connection is the one established if you click the **Connect** button on the main Watcher window without making a selection from the drop-down menu.

Connection Properties

Connection Name Work

Phone 55553483

Area Code

Area Code

Use 1

Use area gode

Logon Information

User Name Colin

Password

Save password

2. Click the **Add...** button to open the Connection Properties window.

- **3.** Enter a name for the connection and complete the remaining fields noting the following:
 - If the phone number must be preceded with an area code, click the Use area code check box and enter the area code. Click the Use 1 check box if the phone number must be prefixed with a 1.
 - Enter a user name if it is required. If you want to store a
 password so that it is not necessary to enter it each time
 you connect, click the Save password check box and enter
 your password.
- **4.** Click **OK** to close the window and save the information you entered, or **Cancel** to close the window without saving.

To change an existing record in the Dial-Up Manager window:

- 1. Click the connection to select it and click the **Properties...** button to open the Connection Properties window.
- **2.** Enter the new information in the appropriate fields. (The **Connection Name** cannot be changed.)
- **3.** Click **OK** to close the window and save the information you entered, or **Cancel** to close the window without saving.

To delete a record in the Dial-Up Manager window:

- 1. Click the connection to select it and click the **Delete** button.
- **2.** When prompted to confirm the deletion, click **Yes**.

To connect to a number in the Dial-Up Manager window:

 Click the connection to select it and click the Connect button.

The AirCard then attempts a connection to the phone number you selected.

72 \ \ \ \ \ \ \ 2130142

To set a number as the default in the Dial-Up Manager window:

 Click the connection to select it and click the Set as Default button.

KeyGuard

Note: Use the KeyGuard feature

might inadvertently press SEND

(except 911) can be dialed while

and dial a number. No number

KeyGuard is enabled.

if you are concerned that you

The KeyGuard feature is designed to prevent accidental dialing. When the feature is enabled, clicking the **SEND** button, or any other button on the dial pad, has no effect.

To enable or disable KeyGuard:

1. Select **KeyGuard** from the **Tools** menu.

A check mark next to the option indicates that it is enabled.

Activation Wizard...

The Activation Wizard is used to configure the AirCard to use your account. An overview of this process is provided on page 17. Specific instructions on using the Activation Wizard begin on page 35.

Options...

The Options window allows you to configure Watcher and the AirCard 555 to your preferences. In the Options window you can:

- Enable and disable several features, including: Auto-Answer, Any-Key Answer, the Inactivity Time-Out, Auto-Connect, SMS Message Expiry, and the Lock Code.
- Select whether certain warning messages are displayed to warn you of circumstances such as your data connection being lost.
- Configure options related to call logging, the Watcher window, the call back number in SMS messaging, sounds that notify you of incoming calls, new SMS messages, and new voice mail.

Use of the Options Window

In the Options window, buttons, drop-down menus, and check boxes are provided to allow you to select your preferences.

Use **OK** to exit the Options window, saving any changes you've made, or **Cancel** to exit without saving.

Rev 3.3 May.02 \ \ 73

The **Restore Defaults** button causes all the fields on all the tabs to revert to the settings they had at installation.

General Tab

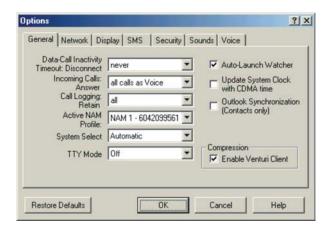


Table 7-4: General Tab Options

| Field | Description |
|---|---|
| Data Call Inactivity Timeout: Disconnect | The Inactivity Timeout terminates your data connection automatically when the AirCard is inactive for the amount of time you specify here. (The AirCard is inactive when no data transmission is occurring.) Select Never to disable the feature. Otherwise, select the number of minutes after which you want to automatically disconnect. |
| Incoming Calls Answer | By default the AirCard is set to answer all calls as voice calls. To receive a fax or data call, you must set this field appropriately, before the call is answered. This means that anyone wanting to send a fax, or establish a data connection with the AirCard, must notify you in advance so that you can change this field before the call is made. |
| | If you select "next call as Fax" or "next call as Data", the AirCard maintains the setting for one call, or until Watcher is restarted. If you select "all calls as Fax" or "all calls as Data", the AirCard maintains the setting until you select another option. |

74 \/ \/ \/ 2130142

| Table 7-4: General Tab Option | Table 7-4: | General | Tab | Options |
|-------------------------------|-------------------|---------|-----|---------|
|-------------------------------|-------------------|---------|-----|---------|

| Field | Description |
|------------------------|--|
| Call Logging Retain | You have the option of maintaining records of your outgoing and incoming calls in the call log. (The call log is displayed when you select Tools > Call Log , and is described above.) |
| | This field allows you to specify the number of calls retained. Select none , all , last 50 calls , or last 100 calls from the drop-down menu. |
| Active NAM* Profile | The AirCard allows you to configure and use up to two accounts (with two different phone numbers). This may be useful to users who want, for example, to have one account for business calls and one for personal calls. |
| | This drop-down menu lists these items: Auto-Select, NAM 1, and NAM 2. If one account has been activated, NAM 1 has a phone number next to it, and if two accounts have been activated, NAM 1 and NAM 2 have phone numbers. |
| | When Auto-Select is in effect, the AirCard uses the account most appropriate to your location, based on the coverage of your accounts. |
| | To configure a second account (where only one account has been activated): |
| | Select the option NAM 2 from this drop-down menu and click OK. |
| | 2. The Activation Wizard should launch. You can then configure a second account. |
| | If two accounts are configured, both phone numbers should be displayed in this dropdown menu. To switch from one account to the other: |
| | Select the phone number from the drop-down menu. |
| | * NAM stands for Number Assignment Module and is information stored in the flash memory of the AirCard. The information includes your phone number and parameters specific to your service provider. |

Table 7-4: General Tab Options

| able 7-4: General lab Options | | |
|-------------------------------|--|--|
| Field | Description | |
| System Select | This field allows you to prevent the AirCard from roaming or limit roaming to specific channels. (The term "roaming" is explained on page 18.) | |
| | CDMA networks use designated radio frequency channels. In every cellular market, the channels are divided into two sets: the A side channels and the B side channels. CDMA network carriers (or service providers) are assigned either the A side or the B side channels in each market by the regulatory agencies that oversee radio transmissions. | |
| | The options in this field are: | |
| | Home Only—prevents the AirCard from roaming | |
| | Automatic—allows the AirCard to roam on networks of "preferred" service providers. | |
| | Automatic A—allows the AirCard to roam on networks of "preferred" service providers as well as "non- preferred" A side service providers. | |
| | Automatic B—allows the AirCard to roam on networks of "preferred" service providers as well as "non- preferred" B side service providers. | |
| | Based on the SID (System Identifier) assigned to your account during activation (see page 19), the default in this field is either Automatic A or Automatic B. It is recommended that you leave the default, unless you are advised to change this field by technical support. | |

76 / 2130142

Table 7-4: General Tab Options

| Field | Description |
|------------------------|--|
| TTY Mode | A TTY (TeleTYpewriter) is a device for people with hearing and speech impairments. The device allows people to communicate over phone systems using a typewriter-like keyboard. When TTY Mode is set to any value besides Off, you can attach a TTY device to the headset connector and use a TTY device with the AirCard. The options in this field are: Off—you don't use a TTY device for communicating. On (Full)—you use the TTY device for receiving and sending messages. On (Talk Only)—you use the TTY device to read the other person's message. You speak to convey your message. On (Hear Only)—you use the TTY device to type your message. You listen to the other person's message. |
| Auto-Launch Watcher | This field determines whether Watcher launches automatically when you insert the AirCard 555 into a PC Card slot. If this feature is enabled, Watcher autolaunches when you insert the AirCard. When disabled, you must launch Watcher from the desktop shortcut or from the Start menu. Use the check box to enable and disable the feature. (The feature is enabled when checked.) |

Table 7-4: General Tab Options

| Field | Description |
|--|---|
| Update System Clock with CDMA time during start- up | All PCs have an internal clock called the system clock. Depending on your configuration, the time according to this clock is usually displayed in the status area, in the lower right corner of your screen. |
| | Generally you would use the Windows Control Panel to change the time on the system clock. This field gives you the option of setting the time of your system clock automatically from the CDMA network each time you connect. This might be useful to you if you frequently change time zones. Use the check box to enable and disable this feature. (It is enabled when checked.) |
| Outlook Synchronization (Contacts only) | Set Watcher to automatically synchronize your phone book entries with your Contacts entries in Microsoft® Outlook®. |
| | If you do not select this check box, then changes you make to the phone book will not be reflected in Outlook. To synchronize the two: once online, from the Phone Book, click File > Synchronize with Outlook . |
| Enable Venturi Client | Venturi Client is compression software that increases data throughput between the CDMA network and the AirCard, effectively increasing the data transmission speed. This compression can only be used where it is available on the network. The Venturi Client software necessary to using this compression, is normally installed when you install Watcher and the Network Adapter Manager |
| | When this option is enabled (assuming the Venturi Client software is installed) Venturi compression is used where available to increase throughput. When disabled, Venturi compression is not used even when it is available on the network. |
| | Use the check box to enable and disable support for Venturi compression. |

78 / 2130142

Network Tab

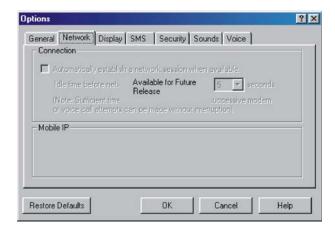


Table 7-5: Network Tab Options

| Field | Description |
|---|---|
| Automatically establish a network session when available | In future releases the AirCard will have a feature to allow for an immediate 1xRTT connection whenever the AirCard is inserted, where 1xRTT service is available. (See Chapter 5 for a description of 1xRTT connections.) This option is not yet available. |

Display Tab

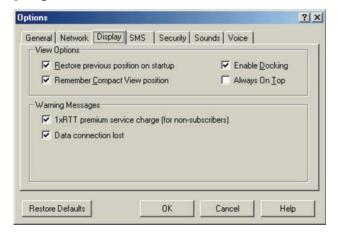


Table 7-6: Display Tab Options

| Field | Description |
|--------------------------------------|--|
| Restore previous position on startup | This field determines where the full Watcher window appears when launched. (The full and compact views of the Watcher window are shown on page 58.) |
| | If this feature is disabled, Watcher always opens in the center of your screen. |
| | If you enable this feature and move the Watcher window, the window will re-appear in its new position if you close and re-open it, or change the view to compact and then full again. |
| | Use the check box to enable and disable the feature. (The feature is enabled when checked.) |
| Remember Compact View | This field determines where the compact Watcher window appears. |
| position | If this feature is enabled, when you switch from the full view to the compact view, the Watcher window remains in the same place. |
| | If this feature is disabled, when you switch from the full view to the compact view, the Watcher window displays in the position it last occupied. |
| | Use the check box to enable and disable this feature. (The feature is enabled when checked.) |
| Enable Docking | When Docking is enabled, the Watcher window jumps to the edge of your screen when the window is dragged close to an edge. This allows you to easily position the window in a corner or to the side of your screen. |
| | Use the check box to enable and disable this feature. (The feature is enabled when checked.) You can also enable and disable this feature by selecting View > Docking . |

80 / 2130142

Table 7-6: Display Tab Options

| Field | Description |
|--|--|
| Always on Top | When Always On Top is enabled, the Watcher window displays in front of all other application windows, even when you position another window over Watcher. This allows you to view connection status indicators while using another application, such as your Internet browser. Use the check box to enable and disable this feature. (The feature is enabled when checked.) You can also enable and disable this feature by selecting View > Always on Top. |
| 1xRTT premium service charge (for non- subscribers) | When this feature is enabled, a warning message is displayed any time you initiate an Express Network (1xRTT) connection, to remind you that you may be charged extra for this service. (Depending on your billing plan, your service provider may apply a surcharge to 1xRTT service.) Use the check box to enable and disable this feature. (The feature is enabled when checked.) |
| Data connection lost | When this feature is enabled, a warning message is displayed any time you lose your connection to the CDMA network. Use the check box to enable and disable this feature. (The feature is enabled when checked.) |

SMS Tab

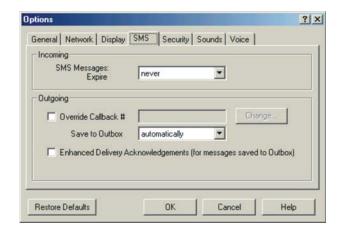


Table 7-7: SMS Tab Options

| Field | Description |
|-------------------------|---|
| SMS Messages: Expire | This feature allows for the automatic deletion of SMS messages that have been in your Inbox for a specified amount of time. The SMS messaging feature is described in detail beginning on page 60. To disable automatic deletion of messages, select Never from the drop-down menu. To enable automatic deletion of messages, select a number of days from the drop-down menu. |
| | Only messages that have been "read" (displayed in the Mobile Messenger window) are deleted by this feature. Manual deletion of messages is covered on page 61. |
| Override Callback # | When you send SMS messages, your call back number is automatically attached to the message so that the message recipient will know how to reach you. By default, your call back number is your AirCard phone number. This feature allows you to use a different number than the AirCard phone number. |
| | To set a new call back number: |
| | Click the Override Callback # check box. |
| | 2. Click the Change button to open the Callback No dialog box. |
| | 3. Enter the phone number (digits only) you want to use as the call back number and click OK . |
| | To disable the feature (and use the AirCard phone number as your call back number), click the check box so that it is not checked. |

82 / 2130142

Table 7-7: SMS Tab Options

| Field | Description |
|--|---|
| Save to Outbox | You have the option of retaining, in the Outbox, a copy of messages that you send. See the "Mobile Messenger" section on page 63 for details about the Outbox. |
| | This feature allows you to specify whether outgoing messages are saved in the Outbox. If you do not want to save any messages, select never . If you want to be prompted as you send each message, as to whether you want to retain a copy, select ask first . If you want to retain a copy of all messages you send, select automatically . |
| | Note that if you do not save messages to the outbox you do not receive status messages, such as the one that notifies you of a successful delivery. |
| Enhanced Delivery Acknowledgements (for messages saved to Outbox) | You can set Watcher to display a message window with the delivery status (failed or succeeded) and network timestamp of an SMS message you send. |
| | Note: The message window displays only if the message is saved to the Outbox (this is determined by the setting in the "Save to Outbox" drop-down list. |

Security Tab



Note: Locking the AirCard 555 does not prevent you from dialing 911.

Table 7-8: Security Tab Options

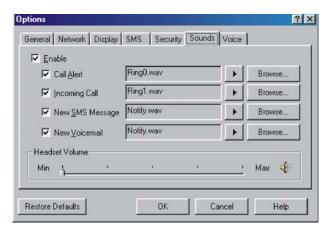
| Field | Description |
|----------------|---|
| Lock modem | The Lock Code feature can be used to prevent others from using your AirCard and your account. When the Lock Code is enabled, you are prompted to enter a code any time Watcher is launched, and if the wrong code is entered, Watcher closes. (This makes it impossible to use the AirCard without knowing the lock code.) By default the lock code is the last four digits of your phone number. |
| | To disable the feature, select never from the drop-down menu. To enable the feature, so that you are prompted for a lock code the next time you launch Watcher, select on power up from the drop-down menu. (The Lock Code feature will then remain enabled until you disable it by selecting never in this field.) |
| Lock Modem Now | This field allows you to enable the Lock Code feature immediately. (If you select on power up in the previously described dropdown menu, you need to close Watcher before the lock code comes into effect.) |
| | When you click the button, Watcher prompts, "Lock the modem now?". Click Yes at this prompt to lock the AirCard. |

84 \ \ \ \ \ \ \ \ \ \ \ 2130142

Table 7-8: Security Tab Options

| Field | Description | | |
|---------------------|---|--|--|
| Change Lock Code | This button allows you to set a new lock code. | | |
| | To change the lock code: | | |
| | 1. Tap the Change Lock Code button. | | |
| | 2. Enter your existing lock code (the last four digits of your phone number unless you have changed it) at the prompt and tap OK . | | |
| | 3. Enter a new lock code and tap OK . | | |
| | Enter your new lock code again for confirmation and tap OK. | | |
| | 5. Tap OK . | | |

Sounds Tab



Rev 3.3 May.02 \ \ \ \ \ \ \ \ \ \ 85

Table 7-9: Sounds Tab Options

| Field | Description | | |
|------------|--|--|--|
| Enable | This field allows you to enable and disable all sounds. | | |
| | When this box is checked, you have the option of individually enabling and disabling the Call Alert, Incoming Call, New SMS Message, and New Voice mail sounds. | | |
| | When the box is not checked, there are no sounds to notify you of any of these events. | | |
| | Use the check box to indicate whether you want all sounds enabled or disabled. | | |
| Call Alert | Depending on your billing plan, you may have a feature called Call Alert. When you are on a call, this feature notifies you when you have another incoming call. You can then ignore the new incoming call or put your current caller on hold and answer the new call. (Contact your service provider if you require more information about Call Alert.) | | |
| | If you have Call Alert, you can use this field to select whether a sound is played to notify you of another incoming call when you are already on a voice call. | | |
| | Use the check box to enable and disable the sound assigned to Call Alert. The play button (with the arrow head on it) allows you to hear the sound assigned to this feature. If you have another sound file you would prefer to play for call alerts, you can use the Browse button to select it. (Any *.wav file can be used.) | | |

86 / 2130142

Table 7-9: Sounds Tab Options

| Field | Description | |
|--------------------|---|--|
| Incoming Call | This field allows you to select whether a sound is played when you receive a call. | |
| | When this is disabled, the Silent Ringer icon is displayed in the indicator area of the main Watcher window. The only notification you will then have of an incoming voice call is the "Voice Call From" or "Roam Call From" message displayed in the call status area. | |
| | Use the check box to enable or disable the sound. The play button (with the arrow on it) allows you to hear the sound assigned to incoming calls. If you have another sound file you would prefer to use, you can use the Browse button to select it. (Any *.wav file can be used.) | |
| New SMS Message | This field allows you to select whether a sound is played when your receive a new SMS message. | |
| | When this is enabled, a sound is played each time a message arrives. When disabled no sound is played. | |
| | Use the check box to enable or disable the sound. The play button (with the arrow on it) allows you to hear the sound assigned to new SMS messages. If you have another sound file you would prefer to use, you can use the Browse button to select it. (Any *.wav file can be used.) | |
| New Voice mail | This field allows you to select whether a sound is played when a new voice mail message arrives. | |
| | When this is enabled, a sound is played when voice mail arrives. When disabled, no sound is played. | |
| | Use the check box to enable or disable the sound. The play button (with the arrow head on it) allows you to hear the sound assigned to new voice mail. If you have another sound file you would prefer to use, you can use the Browse button to select it. (Any *.wav file can be used.) | |

Table 7-9: Sounds Tab Options

| Field | Description |
|----------------|--|
| Headset Volume | This slider allows you to adjust the volume of the ear piece on your headset. This affects only the volume of what you hear. (That is, it does not adjust the volume of the speaker.) This performs the same function as the volume controls on the main Watcher window. |
| | To increase the volume, drag the slider to the right. To decrease the volume, drag the slider to the left. |

Voice Tab



Table 7-10: Voice Tab Options

| Field | Description |
|-------------------------------|---|
| Auto-Answer Incoming Calls | This field allows you to enable and disable the Auto-Answer feature, and when enabled to select the number of rings after which a voice call is answered. To disable the feature, select off from the drop-down menu. To enable the feature, from the drop-down menu select the number of rings after which Watcher automatically answers the call. |

88 \/ \/ \/ \/ 2130142

Table 7-10: Voice Tab Options

| Field | Description |
|----------------------|--|
| Auto-Retry | This field allows you to enable and disable the Auto-Retry feature, and when enabled to select the interval between retrys. |
| | At times when a large number of users are connected to a single base station on the CDMA network, you may be unable to make a network connection on your first attempt. When enabled, Auto-Retry attempts the connection up to five times at the interval you select. When disabled, the AirCard does not retry. |
| | To disable the feature, select off . Otherwise, select the interval at which you want automatic retrys to occur. |
| Any-Key Answer | This field allows you to enable and disable the Any-Key Answer feature. |
| | When enabled, you can answer an incoming call by clicking any button on the dial pad except END and CLR . You can also use keys on your keyboard: A through Z, 0 through 9 and the * or # key. |
| | When disabled, you must click the SEND key to answer incoming calls. |
| | Use the check box to enable and disable the feature. (The feature is enabled when checked.) |
| Auto- Hyphenation | This field allows you to enable and disable the Auto-Hyphenation feature. |
| | When enabled, a hyphen is automatically inserted after the area code, and between the first three and last four digits of a phone number, as you enter the number. (This has no affect on what is dialed.) When disabled, no hyphen is inserted as you enter a phone number. |
| | Use the check box to enable and disable the feature. (The feature is enabled when checked.) |

Table 7-10: Voice Tab Options

| Field | Description | | |
|--------------|--|--|--|
| Tone Length | DTMF (Dual Tone Multi-Frequency) is the system used by touch tone phones under which a specific frequency or tone is assigned to each key. There is a standard length for these tones. However, some voice mail systems require a shorter or longer than normal length tone. | | |
| | This field allows you to set the AirCard to use a shorter or longer tone for systems that require it. | | |
| | The recommendation is to select normal unless your service provider indicates that a different tone length is required. | | |
| Level | This field allows you to adjust the volume of the beep that occurs when you click buttons on the dial pad. | | |
| | From the drop-down list, select a number. A higher number will give a louder beep. | | |
| Mute | When DTMF mute is enabled, there is no audible tone while the AirCard dials. | | |
| | Use the check box to enable and disable the feature. (The feature is enabled when checked.) | | |
| Minute Alert | This field allows you to enable and disable the Minute Alert feature. | | |
| | When enabled, the AirCard beeps at one minute intervals while you are on voice calls. This allows you to keep track of the duration of your call. | | |
| | Use the check box to enable and disable the feature. (The feature is enabled when checked.) | | |

90 / 2130142

Table 7-10: Voice Tab Options

| Field | Description | | | |
|----------------------|--|--|--|--|
| Service Alert | The field allows you to enable and disable the Service Alert feature. | | | |
| | When enabled, the AirCard emits a tone whenever a change occurs in the 1xRTT coverage or roaming status. | | | |
| | A tone is emitted whenever the AirCard: Goes from being out of 1xRTT coverage Goes from being in 1xRTT coverage Goes from being in 1xRTT coverage to being out of 1xRTT coverage Leaves the local coverage area of your service provider Enters the local coverage area of your service provider | | | |
| | Use the check box to enable and disable the feature. (The feature is enabled when checked.) | | | |
| Voice Mail Change | Depending on your billing plan, you may have a Voice Mail feature that allows callers to leave you a message when you don't answer a call. If you have this feature, then you access your voice messages by dialing a number specific to your service provider. | | | |
| | When the AirCard is configured, the phone number your service provider uses for voice mail is automatically set up for you. If this number should change, you can change the number here. To change the number: | | | |
| | 1. Click Change | | | |
| | 2. Enter the new phone number in the window that appears. | | | |
| | 3. Click OK. | | | |

The Help Menu



Use the on-line help

• Display version information

The options in the Help menu allow you to:

Help Topics...

The AirCard 555 network card comes with complete online help. To get help on any topic:

1. Select Help > Help Topics....

If the topic you want to display has a link on the main window, click the link.

If you do not see the topic you want to display, use the **Index**, **Find**, or **Help Topics** buttons to display the corresponding window:

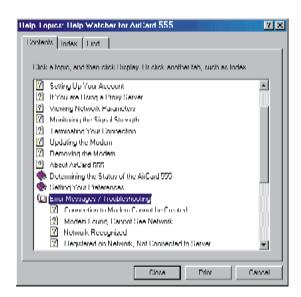
In the **Index** window, a list of topics is displayed in the lower portion of the window. Search for an index entry by either typing the first few letters in the field at the top, or use the scroll bars to scan the list of entries. When you locate an entry you want to display, click the entry and click **Display**.



In the **Help Topics** (Contents) window, use the scroll bar to locate a topic of interest. Topics that have a book icon next to them can be expanded by double clicking the icon. Double click a topic to display its window.

Note: Help is available in most Watcher windows by clicking the **Help** button or by pressing <F1>.

92 \/ 2130142



In the **Find** window, select a radio button to generate a database. Then use the word matching options to locate the help section you want to display.

About Watcher...

The About window displays version information.



The information displayed in this window is:

- The phone number of your account
- The Electronic Serial Number (ESN), a number assigned to each AirCard 555 by the manufacturer
- The version of Watcher (Software) in use

- The version of the AirCard driver (software that forms the interface between the AirCard and your operating system) in use
- The version of the PRL (Preferred Roaming List which specifies the radio frequency channels that the AirCard is permitted to use)
- The hardware version
- The version of firmware (software that resides in the flash memory of the AirCard) in use
- The version of the bootloader (a component of the firmware) in use

If you have an Internet connection, you can go to the Sierra Wireless web site by clicking the **www.sierrawireless.com** button

>> 8: The Network Adapter Manager

- Windows 95, 98, NT and Me
- Windows 2000 and XP
- On-Line Help and Version Information
- Closing the Network Adapter Manager

Note: The Network Adapter Manager launches automatically whenever Windows is started. Unless you manually exit the application, it remains running from the time you start Windows until you shut down. Generally, the status area icon is the only evidence that the Network Adapter Manager is running.

Note: The tooltip, displayed when you position the pointer over the Network Adapter Manager icon in the status area, identifies the primary card.



The AirCard 555 wireless network card comes with an application, called the Network Adapter Manager, that is designed to manage multiple network interface cards.

To understand the purpose of the Network Adapter Manager, it is necessary to understand that the AirCard behaves differently for each type of connection. The AirCard 555 behaves as:

- A modem during dial-up data connections
- A phone during voice connections
- A network interface card during Express Network (1xRTT) connections

It is only while the AirCard 555 is behaving as a network interface card (when there is an active 1xRTT connection) that the Network Adapter Manager is of use.

When you have more than one network interface card inserted, Windows routes the data traffic through only one of the cards. This means that when you have a 1xRTT connection with the AirCard 555, and you have another network interface card (such as an Ethernet or Token Ring LAN card) inserted, data traffic is routed through either the AirCard 555 or the LAN card — not both. The card through which data traffic is being routed is the "primary" card. The Network Adapter Manager shows you which card is primary by displaying an icon in the status area (usually located in the lower right corner of your screen).



Depending on which card is primary, the Network Adapter Manager displays one of these icons.

- AirCard 300 is the primary network card
- AirCard 400 is the primary network card
- AirCard 555 is the primary network card
- ightharpoonup LAN card is the primary network card
- X No network card is inserted (This icon is always displayed in Windows 2000, except during 1xRTT connections.)

Rev 3.3 May.02 \/ \/ \/

Note: Switching between cards while using a network application is NOT recommended. For example, if you use the Network Adapter Manager to switch from using your LAN card to the AirCard while an e-mail application is running, the e-mail application may behave unpredictably. The recommendation is to close network applications, switch cards, and launch the applications again.

Windows 95, 98, NT and Me

In Windows 95, 98, NT, and Me, the Network Adapter Manager can be used to switch between the AirCard 555 and other network interface cards.

Switching Primary Cards

If you initiate a 1xRTT connection with the AirCard 555 while a LAN card is primary, the Network Adapter Manager automatically makes the AirCard the primary card. That is, making a 1xRTT connection while a LAN card is in use has the effect of rerouting data traffic from the LAN card to the AirCard 555.

The Network Adapter Manager also has a menu through which you can switch primary cards. To switch cards:

- 1. Right click the Network Adapter Manager icon in the status area to display the shortcut menu.
- Select the card you want to use as the primary card from the menu.



Or

Select **Show Options** from the menu. In the window that appears, use the radio buttons to select the card you want to use as the primary card and click **OK**.



96 \/ 2130142

Windows 2000 and XP

Windows 2000 and XP have more advanced device handling capabilities than Windows 95, 98, NT, and Me. If more than one network card is detected, Windows 2000/XP automatically routes network traffic through the card that provides the highest transmission speed.

Generally a wireline LAN card (such as an Ethernet card) provides faster transmission speed than a wireless card (such as the AirCard). If, for example, you have an AirCard and an Ethernet card installed and active on your laptop, Windows routes network traffic through the Ethernet card because it offers the higher transmission speed. If you then want to take the computer to another location, you can stop the Ethernet card (see below), disconnect the cable to the Ethernet card, and Windows 2000/XP automatically begins routing network traffic through the AirCard.

Since Windows 2000/XP has this enhanced method of handling multiple PC cards, the Network Adapter Manager does not allow you to switch cards from the shortcut menu in this operating system.

In Windows 2000/XP you can control which card is the primary card by stopping the cards you do not want to use.

To stop a card:

- 1. Click the PC Card icon in the status area.
- 2. A listing of active cards is displayed.



Windows 2000

Safely remove Sierra Wireless AirCard 555 PC Card Parent Safely remove FE574B-3Com 10/100 LAN PCCard-Fast Ethernet

Windows XP

3. Click the card you want to stop.

On-Line Help and Version Information

To display on-line help for the Network Adapter Manager:

- 1. Right click the Network Adapter Manager status area icon.
- **2.** Select **Help** from the shortcut menu.

To display version information for the Network Adapter Manager:

- 1. Right click the Network Adapter Manager status area icon.
- 2. Select About Network Adapter Manager from the menu.

Closing the Network Adapter Manager

To close the Network Adapter Manager:

- 1. Right click the Network Adapter Manager status area icon.
- **2.** Select **Exit** from the shortcut menu.

>> 9: Troubleshooting Tips

- Problem Causes and Solutions
- Reinstalling the AirCard Driver
- Resolving Resource Conflicts

This section provides assistance in dealing with any problems you may experience with the AirCard 555 wireless network card.

Problem Causes and Suggestions

When properly installed, the AirCard 555 wireless network card is a highly reliable product. Most problems are caused by one of these issues:

- The wrong driver has been installed.
- System resources required by the AirCard are in use by other devices.
- Network coverage is not available (either because you are outside the coverage area, or because of an account or network problem).

This section describes how to diagnose and solve these and other problems. If, after reading this section, you are unable to resolve a problem, contact Verizon Wireless technical support at 1-800-922-0204.

Table 9-1: Problem Causes and Suggestions

| Problem | Possible Causes | Suggestions |
|--|---|---|
| Watcher displays this message in the LCD area of the Watcher window, "Searching for AirCard 555 modem" | a. The AirCard is not completely inserted into the PC Card slot. b. The wrong driver is installed for the AirCard. c. There is a resource conflict. | a. Eject and reinsert the AirCard. b. See the section "Reinstalling the AirCard Driver" in this chapter. c. See the section "Resolving Resource Conflicts" in this chapter. |
| The Watcher splash screen is frozen. | a. If you are unable to resolve this problem by restarting your PC, you may have a resouce conflict. | a. See the section "Resolving Resource Conflicts" in this chapter. |

Rev 3.3 May.02 \/ \/ \/

Table 9-1: Problem Causes and Suggestions

| Problem | Possible Causes | Suggestions | | |
|---|---|--|--|--|
| When clicking the dial pad buttons, nothing happens. | a. KeyGuard is on. | a. Turn KeyGuard off. See page 73. | | |
| Windows 2000: The drop-down list of connections in the main Watcher window is empty. Dial-Up Networking does not show the Express Network and Quick 2 Net connections. | a. Dial-Up Networking needs to be refreshed. | a. Close Watcher. Access Dial-Up Networking (My Computer > Dial-Up Networking). Enter information as requested. Restart Watcher. | | |
| The error "read socket in use" occurs. | This error occurs in Windows 98 and Windows Me if you install the AirCard driver after you install Venturi. (The reason for the error is that Venturi installs a software layer that is effectively removed during driver installation.) | Uninstall the Venturi software and reinstall it from the AirCard CD. To uninstall Venturi: 1. Open the Control Panel (by selecting Start > Settings > Control Panel). 2. Double click the Add/Remove Programs icon. 3. Select Venturi Personal Client and click the Add/Remove button. 4. Confirm that you want to remove the software by clicking OK. Install the Venturi software using the instructions on page 33. | | |
| Watcher displays the message, "Not in service", in the LCD area of the Watcher window and the antenna icon is crossed out. | Inadequate signal strength may occur for any of these reasons: a. You are outside the network coverage area. b. Your antenna is not attached or is pointed in the wrong direction. c. You may be inside a building or near a structure that is causing radio interference. | a. Ensure your antenna is properly attached and is perpendicular to the AirCard. b. Verify that you are within the coverage area of your service provider. Coverage maps are available from the Sierra Wireless web site, www.sierrawireless.com. c. Try changing your location or reorienting your antenna. | | |

100 ' 2130142

| Table 9-1: | Problem | Causes | and | Suggestions |
|------------|---------|--------|-----|--------------------|
|------------|---------|--------|-----|--------------------|

| Problem | Possible Causes | Suggestions | | |
|---|---|---|--|--|
| When attempting a dial-up data connection, Watcher displays the message, "There is no answer" in the LCD area of the Watcher window. | a. You have an account problem or the network is overloaded with calls. b. The phone number is incorrectly set up in the Dial-Up Manager. | a. Determine whether the problem is due to an AirCard / Dial-Up Manager setup issue or an account / network issue by making a call to a local number. If you are able to complete this call, the problem is likely in the way that the connection is set up. Otherwise, contact your service provider. | | |
| | | b. Verify that the number you want to dial is set up properly in the Dial-Up Manager. See page 71 for instructions on using the Dial-Up Manager. Verify that the phone number is entered correctly, and that the Use 1 and Use Area Code check boxes are appropriately set. If the area code is required, ensure it is entered correctly. | | |
| When attempting to add a connection to the Dial-Up Manager, Watcher displays the message, "You already have a connection with the name Please choose a different name." | Watcher interfaces with a Windows component called Dial-Up Networking so that when you create a connection in Watcher, the connection is concurrently created in Dial-Up Networking. All connections in Dial-Up Networking must have a unique name regardless of whether the connection was created directly in Dial-Up Networking or through another application such as Watcher. The message, "You already have a connection with the name" indicates that the name has already been assigned to a connection in Watcher or Dial-Up Networking. | Choose a different name for your connection. To see what connections have been created in Dial-Up Networking: 1. Double click My Computer on your desktop. 2. Double click the Dial-Up Networking icon (Windows 95/98) or Click the Dial-Up Networking link (Windows Me) or Click the Network and Dial-Up Connections link (Windows 2000) or Click My Network Places > View network connections (Windows XP). All connection names are displayed in this window. Note that you can create a connection with the same phone number and other variables as an existing connection, provided you give it a different name. | | |
| When you have an AirCard 300 and AirCard 555 in your computer, the data connection seems quite slow. | Under some operating systems, if both AirCards are inserted, then the path that the IP (Internet Protocol) traffic will take is not predictable. If the data gets routed through the AirCard 300, you will experience slower data transfer rates. | a. Eject the AirCard 300 from your computer before you use the AirCard 555. | | |

Table 9-1: Problem Causes and Suggestions

| Problem | Possible Causes | | Suggestions |
|--|--|----|---|
| Windows 2000 and XP: When attempting an Express Network connection, the connection gets dropped as soon as it is established (when you click Connect, the status goes from "Authenticating" and "Authenticated" back to "Ready to Connect"). | The connection properties are not optimal. | 1. | Windows XP: Click Start > Connect To > Express Network (1xRTT). Windows 2000: Click Start > Settings > Network and Dial-Up Connections > Express Network (1xRTT). |
| | | 2. | In the window that appears, click Properties . |
| | | 3. | Click the Networking tab. |
| | | 4. | Click Settings . |
| | | 5. | Ensure that Enable LCP Extensions and Negotiate multi-link for single link connections are not selected. |
| | | 6. | Click OK . |

__ | __ Th

Note: You must have the AirCard installation CD to complete this procedure.

Reinstalling the AirCard Driver

There is an AirCard driver for each supported Windows operating system. Unless the appropriate driver for your version of Windows is installed, you will not be able to establish a network connection with the AirCard. This section provides instructions on verifying that you have the correct AirCard driver installed.

Windows 95/98

To verify that the correct driver is installed:

- Locate the existing driver
- Replace the driver with the Windows 95 or Windows 98 driver from the AirCard installation CD.

Locating the Existing Driver

- 1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Contol Panel**.
- **2.** Double click the **System** icon.
- **3.** Click the **Device Manager** tab.
- **4.** Locate the AirCard entries by using the "+" signs to expand the listings. (I.e. to see all the installed modems, click the "+" sign to the left of **Modems**.) The AirCard should have 3 entries:
 - 1 The AirCard should display under Multifunction adapters as Sierra Wireless AirCard 555 PC Card Parent.

102 \/ 2130142

- 2 The AirCard should display under **Modems** as **Sierra** Wireless AirCard 555 Modem.
- **3** The AirCard should display under **Network adapters** as **Sierra Wireless AirCard 555 Adapter**.

If the listings above do not appear, identify the listing for the AirCard by ejecting the AirCard. This causes the driver listing for the AirCard to disappear from the list. Reinsert the AirCard again to cause the driver listing to reappear. You can identify the entries for the AirCard by observing which entries are affected when you eject and reinsert the AirCard.

Replacing the Driver

- 1. If the installation CD is not already in your CD-ROM drive, insert it. If the CD start-up menu appears, use the **exit** option in the lower left corner of the screen to exit the menu.
- 2. Under Network adapters, click the AirCard entry.
- **3.** Click the **Properties** button.
- 4. Click the **Driver** tab.
- Click the Update Driver... button to launch the Update Device Driver Wizard.
- 6. Click Next.
- 7. Select Display a list of all the drivers in a specific location, so you can select the one you want and click Next.
- Click the Have Disk... button to open the Install From Disk window.
- **9.** Enter **d:\Drivers\Win95** (if you are running Windows 95) or **d:\Drivers\Win98** (if you are running Windows 98) where **d** is the drive letter for your CD-ROM drive. Click **OK**.
- **10.** Click **OK**.
- 11. Click Next.
- 12. Click Finish.
- 13. Click No when prompted to restart your PC.
- **14.** In the Control Panel Device Manager window, select the AirCard listing under **Modem**.
- **15.** Repeat steps 3 to 12.
- **16.** Restart your PC.

The correct driver should then be installed.

Windows 2000

To verify that the correct driver is installed:

- Locate the existing driver
- Update the driver

Locating the Driver

- 1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Contol Panel**.
- **2.** If the AirCard is not already inserted into your PC Card slot, insert it.
- **3.** Double click the **System** icon.
- 4. Click the **Hardware** tab.
- 5. Click the **Device Manager...** button.
- **6.** Locate the AirCard entries by using the "+" signs to expand the listings. (I.e. to see all the installed modems, click the "+" sign to the left of **Modems**.) The AirCard should have 3 entries:
 - 1 The AirCard should display under **Multifunction adapters** as **Sierra Wireless AirCard 555 PC Card Parent**.
 - 2 The AirCard should display under **Modems** as **Sierra** Wireless AirCard 555 Modem.
 - 3 The AirCard should display under **Network adapters** as **Sierra Wireless AirCard 555 Adapter**.
 - If the listings above do not appear, identify the listing for the AirCard by ejecting the AirCard. This causes the driver listing for the AirCard to disappear from the list. Reinsert the AirCard again to cause the driver listing to reappear. You can identify the entries for the AirCard by observing which entries are affected when you eject and reinsert the AirCard.

Updating the Driver

- 1. If the installation CD is not already in your CD-ROM drive, insert it. If the CD start-up menu appears, use the exit option in the lower left corner of the screen to exit the menu.
- Right click Sierra Wireless AirCard 555 PC Card Parent (or the AirCard listing under Multifunction adapters) to display a pop up menu.
- **3.** Select **Properties** in the pop up menu to open the Properties window.
- 4. Click the **Driver** tab.
- **5.** Click the **Update Driver...** button to open the Upgrade Device Driver Wizard.
- **6.** Click **Next** on the first window of the Found New Hardware Wizard to proceed to the next window.

104 ' 2130142

- Select Display a list of the known drivers for this device so that I can choose a specific driver and Next.
- **8.** Click the **Have Disk...** button.
- **9.** Enter **d**:\Drivers\Win2k, where **d** is the drive letter for your CD-ROM drive, and click **OK** to proceed.
- 10. Click Next.
- **11.** If the Digital Signature Not Found window displays, click **Yes**.
- **12.** Click **Finish** to proceed. Repeat steps 6 to 12 as prompted.

If you are prompted to restart your PC, click **Yes**. Otherwise, restart your PC from the Start menu. (You must restart your PC to complete the driver installation.)The correct driver is then installed.

Windows Me

To verify that the correct driver is installed:

- Locate the existing driver
- Replace the driver with the Windows Me driver from the AirCard installation CD.

Locating the Existing Driver

- Open the Control Panel by selecting Start > Settings > Control Panel.
- 2. If the System icon is not in the window, view all Control Panel options.
- **3.** Double click the **System** icon.
- **4.** Click the **Device Manager** tab.
- 5. Locate the AirCard entries by using the "+" signs to expand the listings. (I.e. to see all the installed modems, click the "+" sign to the left of Modems.) The AirCard should have 3 entries:
 - 1 The AirCard should display under Multifunction adapters as Sierra Wireless AirCard 555 PC Card Parent.
 - 2 The AirCard should display under **Modems** as **Sierra** Wireless AirCard 555 Modem.
 - **3** The AirCard should display under **Network adapters** as **Sierra Wireless AirCard 555 Adapter**.

If the listings above do not appear, identify the listing for the AirCard by ejecting the AirCard. This causes the driver listing for the AirCard to disappear from the list. Reinsert the AirCard again to cause the driver listing to reappear. You can identify the entries for the AirCard by observing which entries are affected when you eject and reinsert the AirCard.

Replacing the AirCard Driver

- If the installation CD is not already in your CD-ROM drive, insert it. If the CD start-up menu appears, use the exit option in the lower left corner of the screen to exit the menu.
- Click to select Sierra Wireless AirCard 555 PC Card Parent (or the AirCard listing under Multi-function adapters).
- 3. Click the **Properties** button.
- 4. Click the **Driver** tab.
- **5.** Click the **Update Driver** button to launch the **Update Device** Driver Wizard.
- **6.** Select the **Specify the location of the driver (Advanced)** radio button, and click **Next** to proceed to the next window.
- 7. Select the Search for a better driver than the one your device is using now. (Recommended) radio button. Click the check boxes so that the Removable Media check box is NOT checked and Specify a location IS checked. Enter d:\Drivers\WinMe where d is the driver letter for your CD-ROM drive and click Next.
- **8.** If a window appears stating that you are already using the best driver for this device, click the **Install one of the other drivers** radio button and click the **View List...** button.
- **9.** Ensure the line selected in the Select Other Drivers window is **d:\DRIVERS\WINME\...** (where **d** is your CD-ROM drive letter) and click **OK**.
- 10. Click Next.
- 11. Click **Finish** and repeat steps 6 to 11 as prompted.
- **12.** If you are prompted to restart you computer, click **Yes**. Otherwise restart your PC from the Start menu.

The correct driver is then installed.

Windows XP

To verify that the correct driver is installed:

- Uninstall the existing driver
- Install the Windows XP driver from the AirCard installation CD.

Uninstalling the Existing Driver

- 1. Open the Control Panel by selecting **Start > Control Panel**.
- If "Pick a category" is displayed, select Switch to Classic View.
- **3.** Double click the **System** icon.

106 \/ ' \/ \/ 2130142

- 4. Click the **Hardware** tab.
- 5. Click the **Device Manager** button.
- **6.** Locate the AirCard entries by using the "+" signs to expand the listings. (I.e. to see all the installed modems, click the "+" sign to the left of **Modems**.) The AirCard should have 3 entries:
 - 1 The AirCard should display under Multifunction adapters as Sierra Wireless AirCard 555 PC Card Parent.
 - 2 The AirCard should display under **Modems** as **Sierra** Wireless AirCard 555 Modem.
 - **3** The AirCard should display under **Network adapters** as **Sierra Wireless AirCard 555 Adapter**.

If the listings above do not appear, identify the listing for the AirCard by ejecting the AirCard. This causes the driver listing for the AirCard to disappear from the list. Reinsert the AirCard again to cause the driver listing to reappear. You can identify the entries for the AirCard by observing which entries are affected when you eject and reinsert the AirCard. Right click **Sierra Wireless AirCard 555 PC Card Parent** (or the AirCard listing under **Multifunction adapters**) to display a pop up menu.

- 7. Select **Uninstall** in the pop up menu.
- **8.** Confirm that you want to uninstall the device by clicking **OK**.

The AirCard listings should be removed.

Installing the Windows XP AirCard Driver

- If the installation CD is not already in your CD-ROM drive, insert it. If the CD start-up menu appears, use the exit option in the lower left corner of the screen to exit the menu.
- Eject and reinsert the AirCard to launch the Found New Hardware Wizard.
- **3.** Select **Install from a list or specific location (Advanced)** on the first window of the Found New Hardware Wizard and click **Next** to proceed.
- 4. Select the Search for the best driver in these locations radio button, and the Include this location in the search check box, then enter d:\Drivers\WinXP where d is the drive letter of your CD-ROM drive. Click Next to proceed to the next window.
- **5.** If a warning appears stating that AirCard 555 has not passed Windows Logo testing, click **Continue Anyway**.
- **6.** Click **Finish** and repeat steps 1 to 6 as prompted.

The correct driver is then installed.

Note: You require your AirCard installation CD to complete this procedure.

Resolving Resource Conflicts

The AirCard requires these system resources:

- 1 IRO
- 40 bytes of I/O space
- 1 communications port

If these resources are not available to the AirCard, you have a resource conflict. If another PC card is installed, you may be able to free the necessary resources simply by ejecting the other card. Otherwise, you may need to disable another device (such as an internal modem, infrared device, or network card) to resolve the resource conflict. This section explains how to disable other devices.

Windows 95/98

To resolve a resource conflict in Windows 95/98:

- Disable a device (internal modem, infrared device, or network card)
- Uninstall and reinstall the AirCard driver

Disabling an Internal Modem, Infrared Device, or Network Card

- 1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Contol Panel**.
- 2. Double click the **System** icon.
- 3. Click the **Device Manager** tab.
- **4.** Locate the device that you want to disable:
 - If you want to disable an internal modem, expand the Modem tree by clicking the "+" sign to its left. Double click the internal modem that you wish to disable.
 - If you want to disable an infrared device, expand the Infrared Devices tree by clicking the "+" sign to its left.
 Double click the infrared device that you wish to disable.
 - If you want to disable a network card, expand the Network Adapters tree by clicking the "+" sign to its left. Double click the network card you wish to disable.
- **5.** In the window that appears, in the Device Usage section, click the check box labeled **Disable in this hardware profile** so that the box is checked, and click **OK**.

Uninstalling and Reinstalling the AirCard Driver

1. If the installation CD is not already in your CD-ROM drive, insert it. If the CD start-up menu appears, use the

- **exit** option in the lower left corner of the screen to exit the menu.
- If the AirCard is not already inserted into a PC Card slot, insert it.
- **3.** In the Control Panel Device Manager window, open the **Multifunction Adapters** tree by clicking the "+" sign to its left.
- 4. Highlight the Sierra Wireless AirCard 555 PC Card Parent.
- **5.** Click the **Remove** button.
- **6.** Confirm that you want to remove the driver by clicking **OK**.
- **7.** Reinsert the AirCard into your PC Card slot.

Windows should then reinstall the driver for your AirCard. If the Update Device Driver Wizard (Windows 95) or Add New Hardware Wizard (Windows 98) is launched, follow the installation below.

Windows 95:

- 1. Click **Next** on the first window of the Update Device Driver Wizard to proceed to the next window.
- Click the Other Locations... button to open the Select Other Location window.
- **3.** Enter **d:\Drivers\Win95** where **d** is the drive letter for your CD-ROM drive and click **OK**. The wizard should search for and find the Windows 95 AirCard driver on the CD-ROM drive.
- **4.** Click **Finish** and repeat steps 4 to 7 as prompted.
- **5.** If you are prompted to insert the Windows CD, replace the AirCard installation CD with the Windows 95 CD.
- **6.** If you are prompted to restart your PC, click **Yes**. Otherwise, restart your PC from the Start menu. You must restart your PC to complete the driver installation.

Windows 98:

- 1. Click **Next** on the first window of the Add New Hardware Wizard to proceed to the next window.
- 2. Select Search for the best driver for your device (Recommended) and click **Next** to proceed to the next window.
- Ensure that Specify a location is the only check box selected, enter d:\Drivers\Win98 where d is the drive letter for your CD-ROM drive, and click Next to proceed.
- **4.** Click **Next** on the window that displays the file name.
- **5.** Click **Finish** and repeat steps 1 to 4 as prompted.

6. If you are prompted to restart your PC, click **Yes**. Otherwise, restart your PC from the Start menu. (You must restart your PC to complete the driver installation.)

Windows 2000

To resolve a resource conflict in Windows 2000:

- Disable a device (internal modem, infrared device, or network card
- Uninstall and reinstall the AirCard driver

Disabling an Internal Modem, Infrared Device, or Network Card

- 1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Contol Panel**.
- 2. Double click the **System** icon.
- **3.** Click the **Hardware** tab.
- 4. Click the **Device Manager** button.
- **5.** Locate the device that you want to disable:
 - If you want to disable an internal modem, expand the Modem tree by clicking the "+" sign to its left.
 - If you want to disable an infrared device, expand the Infrared Devices tree by clicking the "+" sign to its left.
 - If you want to disable a network card, expand the Network Adapters tree by clicking the "+" sign to its left.
- **6.** Right click the device you want to disable, choose **Disable** from the pop up menu that appears and click **OK**.

Updating the Driver

- If the installation CD is not already in your CD-ROM drive, insert it. If the CD start-up menu appears, use the exit option in the lower left corner of the screen to exit the menu.
- **2.** If the AirCard is not already inserted into your PC Card slot, insert it.
- **3.** In the Control Panel Device Manager window, expand the Multifunction adapters tree by clicking the "+" sign to its left.
- 4. Right click Sierra Wireless AirCard 555 PC Card Parent.
- Select Properties in the pop up menu to open the Properties window.
- **6.** Click the **Driver** tab.
- 7. Click the **Update Driver...** button to open the Upgrade Device Driver Wizard.

- **8.** Click **Next** on the first window of the Found New Hardware Wizard to proceed to the next window.
- 9. Select Display a list of the known drivers for this device so that I can choose a specific driver and click Next.
- **10.** Click the **Have Disk...** button.
- **11.** Enter **d:\Drivers\Win2k**, where **d** is the drive letter for your CD-ROM drive, and click **OK** to proceed.
- 12. Click Next.
- **13.** If the Digital Signature Not Found window appears, click **Yes**.
- **14.** Click **Finish** to proceed. Repeat steps 8 to 14 as prompted.

If you are prompted to restart your PC, click **Yes**. Otherwise, restart your PC from the Start menu. (You must restart your PC to complete the driver installation and reassign the resources.)

Windows Me

To resolve a resource conflict in Windows Me:

- Disable a device (internal modem, infrared device, or network card
- Uninstall and reinstall the AirCard driver

Disabling an Internal Modem, Infrared Device, or Network Card

- 1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Contol Panel**.
- 2. If the System icon is not in the window, click **view all Control Panel options**.
- **3.** Double click the **System** icon.
- 4. Click the **Device Manager** button.
- **5.** Locate the device that you want to disable:
 - If you want to disable an internal modem, expand the Modem tree by clicking the "+" sign to its left.
 - If you want to disable an infrared device, expand the Infrared Devices tree by clicking the "+" sign to its left.
 - If you want to disable a network card, expand the Network Adapters tree by clicking the "+" sign to its left.
- **6.** Click to select the device you want to disable, and the **Properties** button.
- 7. Click to check the **Disable in this hardware profile** check box in the Device usage section of the window and click the **OK** button.

Uninstalling and Reinstalling the AirCard Driver

- If the installation CD is not already in your CD-ROM drive, insert it. If the CD start-up menu appears, use the exit option in the lower left corner of the screen to exit the menu.
- If the AirCard is not already inserted into a PC Card slot, insert it.
- **3.** In the Control Panel Device Manager window, expand the **Multi-function Adapters** tree by clicking the "+" sign to its left.
- **4.** Click the **Sierra Wireless AirCard 555 PC Card Parent** and click the **Remove** button.
- Confirm that you want to remove the device by clicking OK
- 6. Close all windows and restart your PC.
- 7. If you are prompted for a file when the PC restarts, enter d:\Drivers\WinMe where d is the drive letter of your CD-ROM drive and click OK to proceed.
- **8.** If the Add New Hardware Wizard appears, follow these instructions:
 - Click Specify the location of the driver (Advanced) on the first window of the Add New Hardware Wizard and click Next to proceed.
 - Select the Search for the best driver for your device radio button, and the Specify a location check box, then enter d:\Drivers\WinMe where d is the drive letter of your CD-ROM drive. Click Next to proceed to the next window.
 - If prompted, "What would you like to install?", select The updated software (Recommended) and click Next.
 - · Click **Next** on the window that displays a file name.
 - · Click **Finish** and repeat steps 1 to 4 as prompted.
 - If you are prompted to restart your PC, click Yes.
 Otherwise, restart your PC from the Start menu. (You must restart your PC to complete the driver installation.)

112 ' 2130142

Windows XP

To resolve a resource conflict in Windows XP:

- Disable a device (internal modem, infrared device, or network card)
- Uninstall and reinstall the AirCard driver

Disabling an Internal Modem, Infrared Device, or Network Card

- 1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Contol Panel**.
- 2. Double click the **System** icon.
- 3. Click the **Hardware** tab.
- 4. Click the **Device Manager** button.
- **5.** Locate the device that you want to disable:
 - If you want to disable an internal modem, expand the Modem tree by clicking the "+" sign to its left.
 - If you want to disable an infrared device, expand the **Infrared Devices** tree by clicking the "+" sign to its left.
 - If you want to disable a network card, expand the Network Adapters tree by clicking the "+" sign to its left.
- **6.** Right click the device you want to disable, choose **Disable** from the pop up menu that appears and click **OK**.

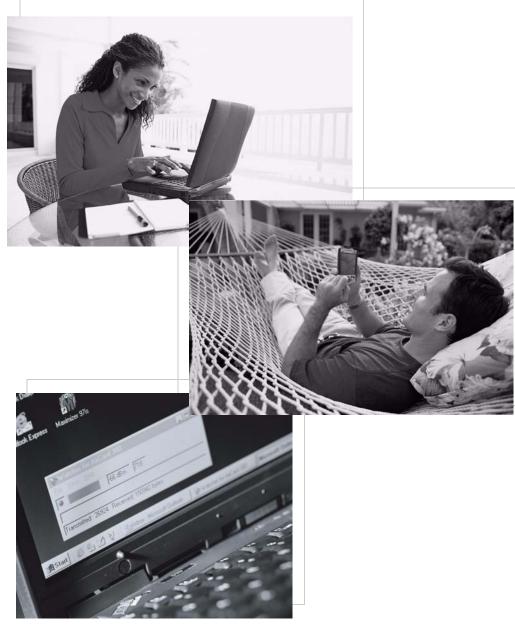
Uninstalling and Reinstalling the AirCard Driver

- If the installation CD is not already in your CD-ROM drive, insert it. If the CD start-up menu appears, use the exit option in the lower left corner of the screen to exit the menu.
- If the AirCard is not already inserted into a PC Card slot, insert it.
- **3.** In the Control Panel Device Manager window, expand the **Multifunction Adapters** tree by clicking the "+" sign to its left.
- 4. Right click the Sierra Wireless AirCard 555 PC Card Parent...
- **5.** Click **Uninstall** from the pop up menu and click **OK**.
- **6.** Eject and reinsert the AirCard to launch the Found New Hardware Wizard.
- Select Install from a list or specific location (Advanced) and click Next.
- 8. Select the Search for the best driver in these locations radio button, and the Include this location in the search check box, then enter d:\Drivers\WinXP where d is the drive letter of your CD-ROM drive. Click Next to proceed to the next window.

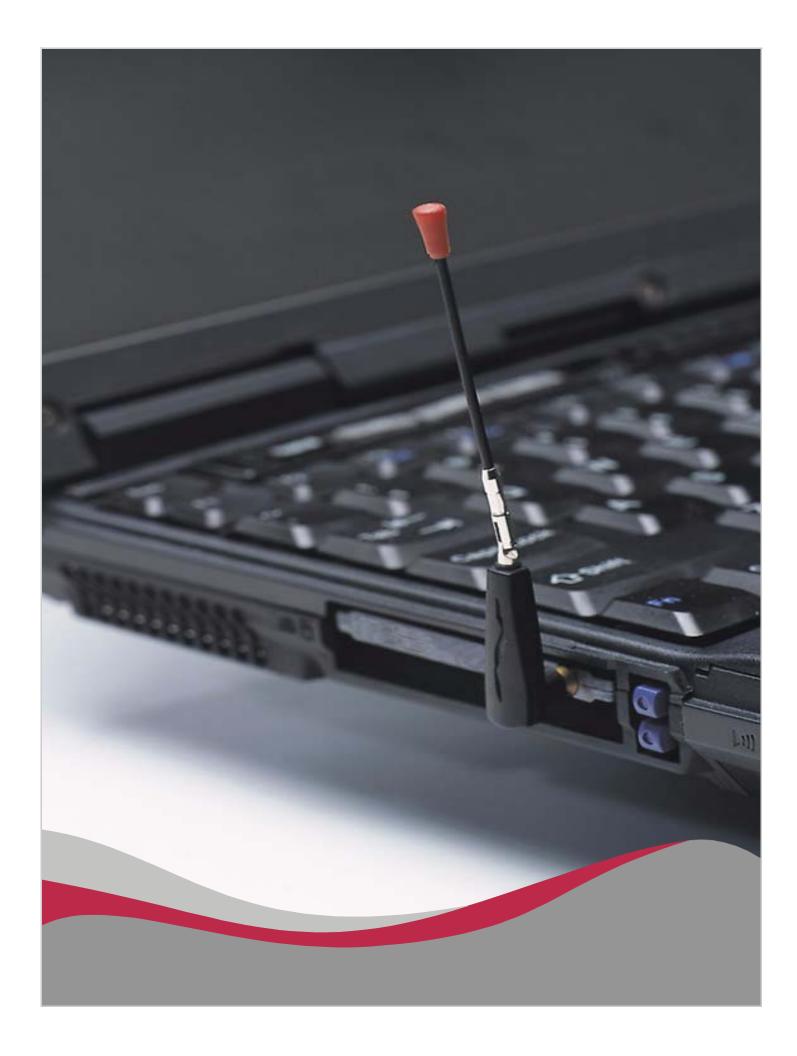
- **9.** If a window appears prompting you to select the best match for your hardware from a list, select the listing that shows, in the Location column, **d:\drivers\winxp\netac555.inf** (where **d** is your CD-ROM driver letter). Click **Next**.
- **10.** If a warning appears stating that the AirCard 555 has not passed Windows Logo testing, click **Continue Anyway**.
- **11.** Click **Finish** and repeat steps 7 to 11 as prompted.
- **12.** If you are prompted to restart your PC, click **Yes**. Otherwise, restart your PC from the Start menu. (You must restart your PC to complete the driver installation and reassign the resources.)

The driver should then be reinstalled, and the resource conflict resolved.

Installation and Use on Handheld/Pocket PCs







>> 10: Installation on Handheld and Pocket PCs

- System Requirements
- Software Installation Procedures
- Card Insertion and Removal
- Account Configuration Procedures

This chapter guides you through the steps necessary to making the AirCard wireless network card operational on a Handheld or Pocket PC. This requires that you install the AirCard software and activate and configure your account (unless the AirCard is pre-activated).

Since software cannot be installed directly to a Handheld/ Pocket PC, you require a desktop or notebook computer to function as a "host". The installation, activation, and configuration process has these steps:

- 1. Install the software to the host.
- Connect the Handheld/Pocket PC to the host and download the software from the host to the Handheld/ Pocket PC. (You can connect the Handheld/Pocket PC to the host before or after you install the software to the host.)
- **3.** If the AirCard has not been pre-activated, use the Activation Wizard to configure the AirCard.

Before you begin the installation, ensure you have the necessary hardware, software, and system resources described in the next section.

System Requirements



On Pocket PCs, your operating system must be:

- Windows CE 3.0 MS Pocket PC, or
- Windows CE 3.0 Pocket PC 2002

If you do not know what version of Windows CE you are using select **Start > Settings**, tap the **System** tab, and tap the **About** icon. If the second line on the screen reads, "Windows 3.0.9348 (Build...)", your operating system is Windows CE 3.0 MS Pocket PC. If the second line reads, "Windows 3.0.11171 (Build...)", your operating system is Windows CE 3.0 Pocket PC 2002.

Your Pocket PC must have:



- 900k of storage memory
- The PCMCIA jacket accessory (with a single PC Card slot)
- A method of connecting to a host computer, using either a serial autosync cable, USB autosync cable, or infrared ports

On Handheld PCs, your operating system must be:

Windows CE 3.0 Handheld PC 2000

Your Handheld PC must have:

- 900k of storage memory
- A PC Card slot
- A method of connecting to a host computer, using either a serial autosync cable or infrared ports

Whether you are using a Handheld or Pocket PC, you require a desktop or notebook computer to function as the host that:

- Has the necessary port (serial, USB, or infrared) to connect to the Handheld/Pocket PC
- Has a CD-ROM drive
- Is running Windows 95, 98, NT, or 2000
- Has ActiveSync version 3.1 or 3.5 installed (ActiveSync 3.5 is required if you are using Windows CE 3.0 Pocket PC 2002)

Note: ActiveSync is made by Microsoft and is included with all Handheld/Pocket PCs running Windows CE 3.0.

Software Installation Procedures

To install the software, you can either:

 Connect the host and the Handheld/Pocket PC before you install the software to the host. (In this case, you are prompted to initiate the download as soon as the software installation is complete.)

Or

• Install the software to the host and then connect the host and the Handheld/Pocket PC, as described here.

This process installs Watcher and the AirCard drivers.

To install the software on the host:

- 1. Close any Windows programs that are running and insert the AirCard installation CD in your CD-ROM drive. The CD should auto-start and display a menu.
- If the CD does not auto-start, select Start > Run and enter d:\launch.exe where d is the drive letter of your CD-ROM drive.

Note: A driver is software that forms the interface between a device (such as the AirCard) and the operating system on your PC (such as Windows CE).

118 \/ 2130142

- **3.** From the CD start-up window, select:
 - Pocket PC installation and documentation then Pocket PC software installation (if you have a Pocket PC running Windows CE 3.0 MS Pocket PC), or
 - Pocket PC 2002 installation and documentation then Pocket PC 2002 software installation (if you have a Pocket PC running Windows CE 3.0 Pocket PC 2002), or
 - Handheld PC 2000 installation and documentation then Handheld PC 2000 software installation (if you have a Handheld PC running Windows CE 3.0)

This launches the InstallShield Wizard that installs the software to the host.

- **4.** Use the **Next** and **Back** buttons to navigate through the wizard noting the following:
 - You must indicate your acceptance of the terms of the license agreement by clicking Yes to proceed with the installation.
 - Using the default settings for the Destination Location and Program Folder is recommended unless you have special requirements and an advanced understanding of PC configuration. (The Destination Location dictates where the software is installed. The Program Folder dictates the name assigned to the software in the Add/ Remove Programs in the Control Panel.)
 - A dialog box displays this message, "On the next mobile device connection, the installed application will be downloaded to the device." Click **OK**.
 - A check box allows you to choose to display release notes. The release notes list known issues in the software and are displayed in the Windows Notepad. (If you choose to display them, when you are finished reading, use the close box in the upper right corner of the window to close the Notepad.)
 - Click Finish to close the last screen of the wizard.
 - Use the exit option in the lower left corner of the window to close the CD start-up menu.

To download the software to the Handheld/Pocket PC:

1. Connect the Handheld/Pocket PC to the host in one of these ways:

Pocket PCs:

 Connect one end of the serial cable to the bottom of the Pocket PC and the other end to a serial port on your host PC, or





Note: If you are unable to establish a connection, launch ActiveSync from the Start menu and use the online help in ActiveSync.

- Place your Pocket PC in its cradle and connect the USB cable on the cradle to a USB port on your host PC, or
- Align the infrared port on your Pocket PC with an infrared port on your host PC.

Handheld PCs:

- Place your Handheld PC in its docking cradle and connect the serial cable on the cradle to a serial port on your host PC, or
- Align the infrared port on your Handheld PC with an infrared port on your host PC.

ActiveSync should launch automatically when the host and Handheld/Pocket PC are connected.

- 2. If you are prompted to indicate whether you want to set up a partnership, click Yes or No and click Next. (For the purpose of downloading the AirCard software, it does not matter whether you have a partnership.) You should then be prompted that there is software to download.
- **3.** Click **Yes** to start the download. When complete, you will be prompted to check your mobile device screen to see if additional steps are required.
- 4. Click OK.
- 5. Reset your Handheld/Pocket PC by inserting the stylus into the reset button. (The reset button is usually a circular indentation that may be on the keyboard of the Handheld PC or the bottom of the Pocket PC. Consult the documentation that came with your PC if you do not know how to reset the device.)

On completion of this step, the software and driver are installed and you can proceed to configure the AirCard to use your account (if it was not pre-activated). This is described in the "Account Configuration Procedures" section on page 121.

Card Insertion and Removal

Inserting the AirCard



To insert the AirCard 555 into a Pocket PC:

- 1. If the PCMCIA jacket accessory is not already attached, slide the Pocket PC bottom first into the jacket. It should click into place.
- **2.** Attach the antenna to the circular copper connector on the end of the AirCard. DO NOT FORCE.

Note: If you also use the AirCard 300 and a dual-card PCMCIA jacket accessory with your Pocket PC, eject the AirCard 300 before you use the AirCard 555.

Note: On Pocket PCs, anytime you eject and re-insert the AirCard, restart your PC by turning it off and on again. This step is necessary to ensure the communication port detects the card.

Note: See Chapter 2 "Getting Started" for an overview of account activation and configuration. **3.** With the label facing towards the front of the Pocket PC, insert the network card into the slot at the top of the jacket.

To insert the AirCard 555 into a Handheld PC:

- **1.** Attach the antenna to the circular copper connector on the end of the AirCard. DO NOT FORCE.
- 2. With the label facing towards the top of the Handheld PC, insert the network card into the slot.

The AirCard is powered as soon as you insert it.

Removing the AirCard

To remove the AirCard:

 Use the ejector to release the AirCard and remove it from the slot.

Account Configuration Procedures

The final step to making the AirCard operational is configuring it to use your account.

If you purchased a pre-activated AirCard, this step is not necessary. Once the software and driver are installed, the AirCard is ready for use.

Otherwise, you must use the Activation Wizard to activate and configure your account. Future releases of the AirCard software will allow for Manual Activation and Voice-Assisted Activation but only Manual Activation is available in this release. Manual Activation involves phoning a service provider, exchanging information, and entering your account information into the appropriate fields in the wizard. You require a phone, other than the AirCard, to use this method.

If you have not yet selected a service provider, refer to the Sierra Wireless web site, (www.sierrawireless.com) for a listing of service providers.

To activate an account and configure your AirCard:

1. Insert the AirCard into your PC Card slot, if it is not already inserted.

Note: Keep a written record of your activation code, phone number, and SID in a secure place. You will need this information if you need to reactivate the AirCard.

- If the Activation Wizard does not auto-launch, run Watcher (by selecting Start > Programs > AirCard 555 Watcher for Verizon Wireless). In Watcher select Admin > Activation Wizard... (Pocket PCs) or Tools > Activation Wizard... (Handheld PCs).
- **3.** Use the **Next** and **Back** buttons to navigate through the Activation Wizard, noting the following:
 - Use the radio button to select **Manual Activation** as the method of activation you want to use.
 - Obtain the billing information listed in the third screen of the wizard before phoning the service provider or proceeding to the next window.
 - Contact your service provider. The representative will request your ESN (electronic serial number). This is displayed in the Activation Wizard (and is printed on the AirCard box and on the label on the back of the AirCard).
 - The representative will tell you your activation code, phone number, and SID (System ID). Enter these values into the appropriate fields in the Activation Wizard.
- **4.** Tap **Finish** on the final window of the wizard.

On completion of this step, the AirCard is ready for use. The next chapter explains how to use Watcher to manage and monitor your connections.

122 \/ 2130142

>> 11: The Watcher Window and Indicators

- Components of the Watcher Window
- The Menu Bar
- Connection Status Area
- Call Status Box
- Indicator Area
- The Minimize, Toggle Full/Compact, and Close Boxes (Handheld PCs)
- The Taskbar Icons (Handheld PCs)

Watcher is the application that allows you to manage and monitor the connection between the AirCard 555 network card and the CDMA network. You use Watcher to:

- Determine your signal strength, roaming status, 1xRTT availability, and other network connection parameters
- Initiate voice and data calls
- View call statistics and SMS messages
- Enable and disable features like KeyGuard (that prevents accidental dialing)
- Set options related to SMS messages, sounds played, voice calls, and the lock code security feature (that you can use to prevent others from using your AirCard)

Anytime you use the AirCard you must run Watcher.

To launch Watcher:

Note: On Pocket PCs, you can display help by selecting Help from the Start menu (in the upper left corner of the screen). On Handheld PCs, help is available in most windows by tapping the? button, and is also available from the Help menu.

Select Start > Programs > Wireless

AirCard 555 Watcher for Verizon

Once you make a connection in Watcher, you can launch whatever application you want to use (such as your web browser or e-mail application).

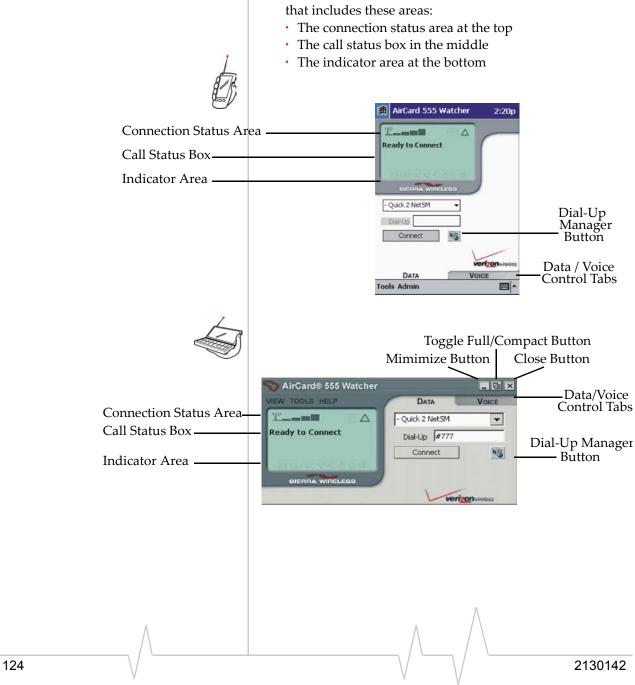
On Pocket PCs, when you open another application from the Start menu, Watcher remains running although it is not visible. Windows CE manages your applications, shutting down applications that are not being used in order to save memory. It should not be necessary to close Watcher, but you can close Watcher by tapping CTRL + Q on the soft keyboard.

On Handheld PCs, use the close box in the upper right corner to exit. See page 129.

Components of the Watcher Window

The Watcher window has these components:

- A menu bar
- The Data and Voice tabs
- A section of the window that resembles an LCD screen that includes these areas:





The Menu Bar





VIEW TOOLS HELP

Chapter 14 gives a detailed description of each option in Watcher's menus: Tools and Admin (on Pocket PCs) and View, Tools, and Help (on Handheld PCs).

Connection Status Area



The Connection Status area uses these icons:

Table 11-1: Connection Status Area Icons

| Icon | Meaning |
|----------|---|
| <u>4</u> | The Signal Strength indicator uses bars to show the intensity of the radio signal. The number of bars increases as signal strength increases to a maximum of five bars. |
| | When the bars are dimmed and the antenna icon is crossed out, no connection is possible for one of these reasons: No antenna is attached You are outside the CDMA network coverage area The signal strength is too weak A network or account problem is preventing the AirCard 555 from obtaining service |

Table 11-1: Connection Status Area Icons

| Table 11-1: Connection Status Area Icons | | |
|--|--|--|
| lcon | Meaning | |
| (1X) | The 1x indicator shows whether 1xRTT is available in this area. | |
| | Where 1xRTT packet service is available, you can make high speed Express Network data connections, if your billing plan allows for it. (Depending on your billing plan, there may be a surcharge for Express Network connections.) | |
| | Note that this indicator does not distinguish between voice service and packet service. If you are in an area where 1xRTT voice service is available, this indicator may be on although packet service is not available. | |
| \triangle | The Roaming Status indicator shows whether you are roaming onto the network of a service provider other than your own. | |
| | When the indicator is off (gray), you are within the local coverage area of your service provider. When the indicator is on (solid black), you are in a "preferred" roaming area. When the indicator is blinking, you are within the coverage area of a CDMA network but not in a "preferred" roaming area. | |
| | Your coverage area and billing charges depend upon your service provider and the type of account you have. There may be surcharges for roaming service that vary based on whether you are in a preferred roaming area or a non-preferred roaming area. If there is no roaming agreement between your service provider and the local carrier, you may be unable to complete calls in non-preferred roaming areas. | |
| The In Use indicator shows whether a call is in progress. No icon is displayed when the AirCard is idle. Otherwise, one of these icons is displayed: | | |
| • | When the In Use indicator is a handset, a voice call is in progress. | |
| a | When the In Use indicator is a modem, a data call is in progress. | |

126 / 2130142

Table 11-1: Connection Status Area Icons

| Icon | Meaning |
|------|--|
| 1X | When the In Use indicator is a modem labelled "1X", an Express Network data call is in progress. (For a description of Express Network data calls, see page 134.) |
| × | When the In Use indicator is a large "X", an error has occurred and the AirCard is inoperable. (This may be resolved by closing Watcher and turning your PC off and on.) |

Call Status Box



The Call Status Box displays one of these messages:

- Ready to Connect indicates that you have a network connection but there is no call in progress.
- *Dialing* indicates that the AirCard is attempting to connect to a phone number.
- Time ... the name of the person with whom you are connected (or "Unknown" if the name is not obtainable), and the phone number indicates that a voice call is in progress. The time shown is the duration of the call.
- *Time...Rx...Tx...* indicates that a data call is in progress. The time shown is the duration of the call. Rx shows the number of bytes of data received. Tx shows the number of bytes of data transmitted.
- *Voice call from...* indicates that an incoming voice call is in progress.
- Roam Call From ... indicates that an incoming voice call is in progress and you are roaming.
- Data Call From ... indicates that an incoming data call is in progress.
- Fax Call From ... indicates that an incoming fax call is in progress.
- … New Missed Call(s) indicates that you received a call (or calls) that you failed to answer. (Depending on your settings in the Options window, a record of these calls is maintained in the call log which is described on page 68.)

Note: Watcher begins timing outgoing calls from the time the call is initiated—not from the time the call is answered.

Indicator Area

The Indicator area displays icons that notify you when you receive messages and indicate whether certain options and features are enabled. The icons are black when "on" and gray when "off".

Table 11-2: Indicator Area Icons

| Icon | Meaning |
|------------|---|
| ⋈ | The SMS message indicator shows whether you have unread messages. A blinking SMS message icon indicates that there are one or more urgent or important unread messages. To display the SMS Manager window (in which the messages are displayed) select Tools > Mobile Messenger or tap the icon. See page 143 for instructions on reading SMS messages. |
| ⊠) | The voice mail indicator shows whether you have unheard voice messages. To hear the messages, you must connect to your voice messaging system. Tap this icon to dial your voice messaging system. (The phone number for your voice messaging system can be changed in the Options window. See page 170.) |
| MC | The missed call indicator appears if you failed to answer an incoming call. To view the phone number(s) of any missed calls, tap the icon to display the call log. (See page 151 for instructions on using the call log.) |
| · · | The auto-answer indicator shows whether Watcher is set to automatically answer incoming calls. You can enable and disable this feature under Tools > Options . |
| € | The headset indicator shows whether a headset is connected to the AirCard. |
| ₹ | This indicator shows whether the silent ringer feature is enabled. When enabled, no sound is played when an incoming call is received. You can enable and disable this feature under Tools > Options . |

128 \ \ \ \ \ \ \ \ \ \ 2130142

| Table 11-2: | Indicator | r Area | lcons |
|-------------|-----------|--------|-------|
| | | | |

| Icon | Meaning |
|------|---|
| ≙ | The privacy indicator shows whether encryption is in use on voice calls. (Encryption prevents your calls from being monitored.) The AirCard uses encryption where it is available on the network. |
| €\$ | The compression indicator shows whether V.42bis compression is in use. (V.42 compression is not supported in this release.) |



The Minimize, Toggle Full/Compact, and Close Boxes

Handheld PCs Only

The diagram on page 124 shows the location of the minimize, toggle full/compact, and close boxes.

- The **Minimize** button closes the Watcher window but leaves the application running. When Watcher is minimized, the Watcher icon in the status area can be used to determine the AirCard status. (The status area icons are described in the next section.)
- The **Toggle Full/Compact** button is used to switch between the full Watcher window and the compact view:



The compact view allows you to see connection status information while you use other applications. (More information is provided on page 142.)

• The **Close** button is used to exit Watcher.



Taskbar Icons

Watcher displays an icon in the status area (which is usually located in the lower right corner of your screen). The status area icon indicates your connection status or notifies you when you have voice mail or SMS messages, or when you have missed a call.

Handheld PCs Only



Table 11-3: Status Area Icons

| lcon | Meaning |
|--------------|--|
| ₹ | You are in service on the CDMA network but have no active voice or data connection. |
| * | You have an active voice or data connection. |
| Ũ | You missed (failed to answer) an incoming call. You can view the number of the caller in the call log. |
| : <u>⊠</u> | You have unread SMS message(s). |
| ≥ > | You have voice mail. |

130 / 2130142

>> 12: Data Connections

- Dial-Up Connections
- Quick 2 Net Connections
- Express Network Connections

Note: You cannot have a data and a voice connection at the same time. If you have a data connection when an incoming call occurs, your caller will get a busy signal or be put through to your voice mail box.

Note: Depending on your billing plan, there may be a surcharge for 1xRTT calls The Data tab on the main Watcher window is used to make data connections for any of these purposes:

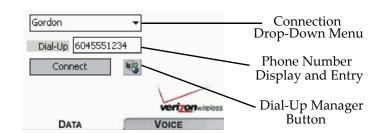
- Browsing the Internet
- Sending and receiving e-mail
- Dialing into your corporate network
- Sending and receiving faxes

The AirCard 555 network card offers three types of data connections:

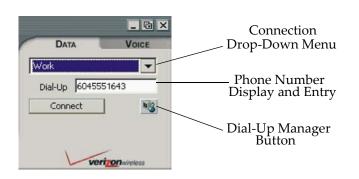
- **Dial-up connection** in this type of connection, you provide the phone number and the AirCard dials the number. Using this type of connection, you can connect to any other modem and receive faxes. The maximum speed of this type of connection is 14.4 kbps.
- Quick 2 Net connection in this type of connection, the AirCard makes a direct Internet connection. The data transmission speed for this type of Internet connection is the same as for a dial-up connection but the time required to initiate the connection is shorter. Quick 2 Net availability is dependent on your service provider. (This type of connection is sometimes called Quick Net Connect or QNC.)
- Express Network (1xRTT) connection in this type of connection, the AirCard establishes a high-speed Internet connection to the CDMA network. (You do not need to provide a phone number and there is no dialing involved.) The maximum speed of this connection is 144 kbps but it is only available in areas where 1xRTT has been implemented.

The Express Network connection provides access to the Internet. Once the connection is established, you can open your browser and connect to any web site that is accessible through the Internet, or access other Internet services (such as e-mail).











If you also use the AirCard 300 and a dual-card PCMCIA jacket accessory with your Pocket PC, eject the AirCard 300 before you use the AirCard 555. Under some operating systems, if both AirCards are inserted, then the path that the IP (Internet Protocol) traffic will take is not predictable. If the data gets routed through the AirCard 300, you will experience slower data transfer rates.

Dial-Up Connections

These steps are required to make a dial-up connection:

- Set up the number in the Dial-Up Manager. (This step is only necessary the first time you dial the number.) The Dial-Up Manager is displayed by selecting Tools > Dial-Up Manager..., or by tapping the Dial-Up Manager button to the right of the Connect button. See page 153 for detailed instructions on using the Dial-Up Manager.
- 2. Select the connection name from the pull-down menu on the Data tab of the main Watcher window. The number is then displayed in the **Dial-Up** field.

132 \/ 2130142

Note: Changing the phone number in the Dial-Up field does not change the record in the Dial-Up Manager. (That is, the next time you select the connection, the phone number reverts to the number stored in the Dial-Up Manager.) For instructions on changing the record in the Dial-Up Manager, see page 153.

- **3.** If necessary, change the phone number in the **Dial-Up** field. (For example, depending on your location, you may need to add or remove the area code.)
- **4.** Tap the **Connect** button.

Watcher then initiates the connection. Progress is shown in the call status area. Once the connection is established, the call statistics (duration, bytes transmitted, and bytes received) are displayed.

During dial-up data connections, the In Use indicator is a modem.

To terminate a call:

1. Tap the **Cancel** button (during the connection process) or the **Disconnect** button (once the connection is established).

Incoming Data Calls

By default the AirCard is set to answer all calls as voice calls. To receive a fax or data call, you must set the AirCard to answer appropriately. This setting is in the Options window (**Tools > Options**) on the **General** tab. See page 158 for a detailed explanation.

To terminate an incoming call:

1. Tap the **Cancel** button (during the connection process) or the **Disconnect** button (once the connection is established).

Quick 2 Net Connections

The Quick 2 Net connection is set up for you when Watcher is installed. All you need to do to make a Quick 2 Net connection is:

- Select Quick 2 Net from the drop-down menu on the Data tab of the main Watcher window.
- 2. Tap the Connect button.

During Quick 2 Net connections, the In Use indicator is a modem.

Once connected you can use any Internet application (such as Internet Explorer, Netscape Navigator, or your e-mail application).

To terminate a Quick 2 Net connection:

 Tap the Cancel button (during the connection process) or the Disconnect button (once the connection is established).

Note: The 1xRTT indicator only shows that 1xRTT service is available; it does not indicate whether voice or packet service is available.

Note: Depending on a setting in the Options window, a message warning you of a surcharge for 1xRTT service may be displayed whenever you establish a 1xRTT connection. This warning message can be disabled in the Options screen. See page 164.

Express Network Connections

- An Express Network high speed connection can be established only in areas where 1xRTT packet service has been implemented. To make an Express Network connection:
- **1.** Select **Express Network** from the drop-down menu on the Data tab of the main Watcher window.
- **2.** Tap the **Connect** button. (No phone number or dialing is required.)

Once the connection is established, you can use any Internet application (such as Internet Explorer, Netscape Navigator, or your e-mail application).

To terminate an Express Network connection:

1. Tap the **Cancel** button (during the connection process) or the **Disconnect** button (once the connection is established).

134 \ \ 2130142

>> 13: Voice Connections

- The Dial Pad
- · The Scratch Pad
- Outgoing Calls
- Incoming Calls

Note: The headset connects to the circular connector on the end of the AirCard next to the antenna.

Note: Many voice features are configured in the Options window. See page 156.

You can use your AirCard 555 network card as a mobile phone simply by connecting a headset. Use only approved headsets with the AirCard 555. (See the Sierra Wireless web site, www.sierrawireless.com for a listing of approved headsets.)

The AirCard 555 has several voice features:

- The volume controls allow you to adjust the loudness of what you hear.
- The mute button allows you to turn off the microphone so that you cannot be heard.
- The **SEND** button allows you to redial the previously dialed number.
- The Any-Key Answer feature allows you to answer an incoming call by pressing any button on the dial pad except END, CLR, or the volume controls. On the Pocket PC, you can also use any of the four application buttons.
- The Auto-Answer feature can be enabled to automatically answer incoming calls within a specified number of rings.
- The KeyGuard feature prevents accidental dialing.
- The Silent Ringer feature prevents any sound from occurring when you receive calls.
- The Missed Call indicator notifies you of any incoming calls that were not answered.
- A scratch pad provides an easily accessible place to record very brief notes.
- The phone book allows you to dial one of the numbers stored as a contact in Outlook simply by double clicking it.
- The call log records details about all incoming and outgoing calls, providing useful information such as the phone numbers of missed calls.
- If your billing plan with your service provider includes Conference Calling (Three-Way Calling), Voice Mail, Call Alert, or Caller-ID, they are supported by the AirCard.

Rev 3.3 May.02 \/ \/ \/

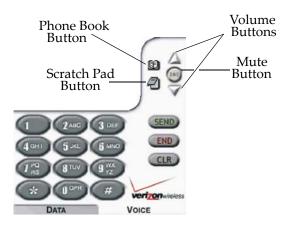
Note: You can dial directly from the PhoneBook screen instead of entering the number on the dial pad. See page 150.

The Dial Pad

The dial pad for the AirCard is in Watcher and is displayed when you tap the Voice tab. This performs the same functions as the dial pad on a mobile phone.

When KeyGuard is on, clicking the buttons on the dial pad has no effect. For information on KeyGuard, see page 156.







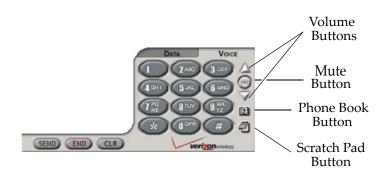


Table 13-1: The Watcher Dial-Pad

| Dial Pad Buttons | Function |
|---|---|
| 0-9, #, * | Use these buttons to enter the digits (and other characters) you want to dial. The numbers are displayed in the call status area until you tap SEND, END, or CLR, or you receive an incoming call. |
| | Any of these buttons can be used to answer an incoming call if the Any-Key Answer feature is enabled. |
| | If you tap these buttons during a call, the AirCard beeps and the characters are displayed in the call status area. |
| SEND | Use this button to dial and to answer incoming calls. When you are not receiving an incoming call, tapping SEND dials the numbers in the call status area. If no numbers are displayed, Watcher re-dials the last number you dialed. |
| END | Use this button to hang-up or end a call, or to clear all the digits and characters in the call status area (i.e. to cancel a call that you've started to enter). This button also clears status messages. |
| CLR | Use this button to clear the last number you've entered. If you hold this button down for one second, it has the same effect as the END key. This button can also be used to hang-up or end a call. |
| Volume Buttons (Up Arrow and Down Arrow) | Use the Up Arrow to increase the headset volume you hear. Use the Down Arrow to decrease the volume. When there is no call in progress, use these buttons to adjust the volume of the beep that occurs when you tap the dial pad buttons. |
| Mute Button | Use this key during a call to prevent the caller from hearing what you say. When no call is in progress, this key enables and disables the Silent Ringer feature. |

The Scratch Pad

The scratch pad gives you a place to record very brief notes (such as a name and phone number).

Display the scratch pad by tapping the Scratch Pad button on the right side of the Watcher window.

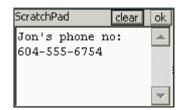




On Pocket PCs, use the soft keyboard or character recognizer to enter text.







On Handheld PCs, use the keyboard to enter text.

To erase all the text in the scratch pad:

1. Tap the **clear** button.

To close the scratch pad (saving any text in it):

1. Tap the **ok** button.

138 \ 2130142

Note: You cannot make a phone call when there is a data connection.

Note: If you tap the **SEND** button without entering a number, the AirCard redials the last number you dialed.

Note: The Options window, displayed when you select Tools > Options, allows you to customize the sound played when you receive an incoming call and to enable and disable the Silent Ringer feature.

Note: If an incoming call occurs while you have a data connection, your caller will get a busy signal or be put through to your voice mail box.

Outgoing Calls

To initiate a call:

- 1. Connect a headset to the AirCard, if one is not already connected.
- **2.** Enter the number you want to dial by tapping the number buttons on the dial pad.
- Tap the SEND button.

As the call is being dialed, Watcher displays "Dialing" and the phone number.

You can also dial a number from the phone book (see page 150) and from the call log (see page 151).

Incoming Calls

Depending on how certain features are configured, when you receive an incoming call the following occurs:

- On Handheld PCs, if Watcher is in compact view, it switches to full view.
- A sound is played, unless the Silent Ringer feature is enabled.
- If you have Caller ID, the phone number and, if available, the name of the caller are displayed.
- If the Data tab is displayed, Watcher switches the display to the Voice tab.

To answer a call:

- Connect the headset, if it is not already connected, and put it on.
- 2. Tap the **SEND** button. (Or, if the Any-Key Answer feature is enabled, tap any key except **END** or **CLR**. On the Pocket PC, you can also use any of the four application buttons. On the Handheld PC, you can also use keys on your keyboard: A through Z, 0 through 9 and the * or # key)

>> 14: The Watcher Menu Options

- The View Menu (Handheld PCs)
- The Tools Menu
- The Admin Menu (Pocket PCs)
- The Help Menu (Handheld PCs)



Handheld PCs Only

This chapter describes each option in the Watcher menus.

The View Menu (Handheld PCs)



The options under the View menu allow you to:

- Set the Watcher window to always display on top of other application windows.
- Set the Watcher window to jump to the edge of the screen (dock) when you reposition the window.
- Switch between the compact version of the Watcher window and the full version.

Always On Top

When Always On Top is enabled, the Watcher window displays in front of all other application windows, even when you position another window over Watcher. This allows you to view connection status indicators while using another application, such as your Internet browser.

To enable or disable Always On Top:

1. Select Always On Top from the View menu.

A check mark next to the option indicates that it is enabled.

Docking

When Docking is enabled, the Watcher window jumps to the edge of your screen when the window is dragged close to an edge. This allows you to easily position the window to a corner or side of your screen.

Rev 3.3 May.02 \/ \/ \/ \/ \/ \/

To enable or disable Docking:

1. Select **Docking** from the **View** menu.

A check mark next to the option indicates that it is enabled.

Toggle Full/Compact

The Watcher window has two sizes:

The Full Window



The Compact Window



Note: The Watcher window switches to full view automatically when you receive an incoming call. The full window is required to initiate data connections and make voice calls, but if all you require from Watcher is status information, you can use the compact view.

To switch from the full window to the compact window:

- Select Toggle Full/Compact from the View menu.
 Or
- **1.** Tap the Toggle Full/Compact button.

To switch from the compact window to the full window:

1. Tap the Toggle Full/Compact button.

142 \/ 2130142

Installation and Use on Handheld/Pocket PCs

The Tools Menu









The options under the Tools menu allow you to:

- Send and receive SMS messages. (See the next section.)
- Maintain the phone book.
- View the call log that lists the phone numbers and other details of voice and data calls you've made and received.
- Maintain the Dial-Up Manager in which you enter the phone numbers and details required to make data calls.
- Enable and disable features like KeyGuard, Auto-Answer, Any-Key Answer, the Lock Code, and certain alerts and warning messages.
- Configure options related to SMS messages, the call log, the location of the Watcher window on your screen, and sounds used to notify you of incoming calls and messages.

Mobile Messenger

The Mobile Messenger window is used to display SMS messages you receive and to send SMS messages.

SMS (Short Message Service) is a feature that some service providers offer, that allows you to send and receive short messages (up to 160 characters) through the CDMA network. Depending on your service provider, one or more of these methods of sending SMS messages may be available to you:

Note: Check with your service provider for information about SMS service subscription. Additional charges may apply.

- Some wireless service providers have web pages on which anyone can enter a message and direct it to your phone number. In this case, anyone who has access to the Internet can send you a message, provided he or she knows your phone number and can locate the appropriate web page.
- Some service providers allow SMS messages to be sent through Internet e-mail applications. Your phone number is then used as an e-mail address (example: 6045553993@serviceprovider.com).
- Some products, such as the AirCard 555, have software that allows you to send messages to other subscribers, using their phone numbers to direct the message.

The **Mobile Messenger...** option in the **Tools** menu allows you to read, create and send SMS messages.

Reading SMS Messages: The Inbox

Incoming messages are stored in the Inbox until you delete them or until they expire (depending on your settings in the Options window).

The SMS indicator notifies you when new messages are received by displaying the icon below.



If the icon is flashing, one or more of the messages is tagged as urgent.

To read messages:

- **1.** Tap (Pocket PCs) or double tap (Handheld PCs) the SMS icon, or select **Tools > Mobile Messenger...** to display the Mobile Messenger window.
- **2.** Tap the **Inbox** tab if it is not already selected.



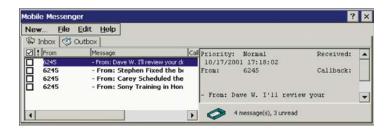


144 \/ 2130142



Note: Unread messages are displayed in bold.

Note: The **Delete All** menu option deletes all messages, whether or not the messages have been read. The message expiry feature deletes only messages that have been read.



The message header is displayed at the top of the screen (Pocket PCs) or on the left side of the window (Handheld PCs). The header shows the address or phone number from which the message was sent, the beginning of the message, and the call back number, if available. (Scroll to the right to view the call back number.)

3. Tap the message header to display the message in the bottom of the screen (Pocket PCs) or on the right side of the window (Handheld PCs). (You may need to scroll down to view the message.)

Messages marked with an exclamation mark (!) have been tagged by the sender as being urgent or important.

To delete messages:

- 1. Use the check boxes to the left of the messages to select the messages you want to delete.
- 2. Select Edit > Delete.
- Confirm that you want to delete the messages by tapping Yes

To delete all messages:

- 1. Select Edit > Delete All.
- 2. Confirm that you want to delete the messages by tapping Yes.

Watcher also has a feature that allows you to set an expiry period after which messages are automatically deleted. This is set in the Options window. (From the main Watcher window, select **Tools > Options** to display the Options window, and tap the **SMS** tab. This is described in the "Options" section on page 165.)

Note: The **Reply to Sender** menu option is only available if the e-mail address of the person who sent you the message is included in the message. This may not be available if, for example, the message was sent from a web site.

Note: The **Call back Sender** menu option is only available if the message includes a valid call back number.

Note: In the Options window you can enable and disable the option to save outgoing messages to the Outbox.

To forward a message:

- 1. Select the message header.
- 2. Select **File > Forward Message...** to open the Message window.
- **3.** In the Message window you can edit the message, append text to the message, and send it.

To reply to a message:

- 1. Select the message header.
- 2. Select File > Reply to Sender...to open the Message window.
- 3. In the Message window create the message and send it.

To phone the sender of a message:

- 1. Select the message header.
- 2. Select File > Call back Sender.

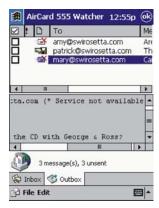
Watcher then dials and attempts to connect to the call back number.

To exit the Mobile Messenger window:

- Select File > Close.
 Or
- **1.** Tap **ok** (Pocket PCs), or the close box (Handheld PCs), in the upper right corner.

Sending SMS Messages: The Outbox

The Outbox is the place where your outgoing messages are stored. Tap the Outbox tab in the Mobile Messenger window to display the Outbox contents:



146 \/ 2130142





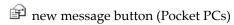
The third column from the left indicates the status of each message in the Outbox:

Table 14-1: Outgoing Message Status Icons

| | Magning | | |
|------------|---|--|--|
| Icon | Meaning | | |
| ≅ ₽ | Saved The message has been saved in the Outbox but not yet sent. | | |
| ⊒⊠ | Sent The message has been sent successfully to the CDMA network but has not yet been delivered to the recipient(s). | | |
| © ≅ | Delivered The message has been delivered to the recipient(s)' mail box(es). | | |
| | Partially Sent The message has been sent to the network but the network did not respond. (This may indicate a network problem.) | | |
| ≊ | Not Sent The message was sent to the network and the network responded with an error. The error message is shown in the Status field when you display the message. | | |
| | the CD with George & Ross? The e-mail address in the To field is not valid. The message exceeded the maximum length for SMS messages. There is a network problem or a problem with your account. | | |

To send a message from the Mobile Messenger window:

1. Select New... (Handheld PCs) or tap the



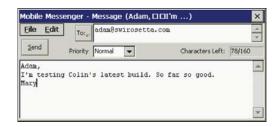
Or

Select **File > New Message** to open the Message screen:









Note: A message can have up to 10 recipients.

2. Enter the recipients' addresses, separating each address with a comma (,) or a semicolon (;). (On Pocket PCs, use the soft keyboard or character recognizer, in the lower right corner, to enter the addresses.)

Or

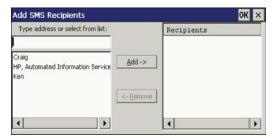
To retrieve an address or addresses from the phone book, tap the **To** button to display the Add SMS Recipients window:

148 \/ 2130142









On the left side of the Add SMS Recipients window all the names in the phone book are displayed. (See page 150 for information about the phone book.) To create a recipient list:

- a. Select a name to which you want to send this message. This causes the phone numbers and e-mail addresses for the person to appear.
- **b.** Select the person's e-mail address.
- **c.** Tap **Add** to include the address in the recipient list on the right side of the window.
- **d.** Repeat steps a to c to include up to 10 recipients.
- **e.** If you want to remove a recipient, tap the person's name in the recipient list and tap **Remove**.
- **f.** Tap **OK**.
- **3.** If you want to send a message that is tagged as urgent or important, select **High** from the **Priority** drop-down menu.
- **4.** Type the message in the lower portion of the window.
- **5.** If you want to save the message in the Outbox and send it later, select **File > Save**.
- **6.** If you want to send the message immediately, tap the **SEND** button, or select **File > Send**.

To cut, copy, paste, or delete text:

- 1. Highlight the text in the message using your stylus.
- 2. Select Edit > Cut, Edit > Copy, Edit > Paste, or Edit > Delete.

To undo your last operation:

Select Edit > Undo.

To open a message that is saved in the Outbox:

1. Select the message header and select File > Edit Message

You can then edit the message and change or add recipients.

Exiting the Mobile Messenger Window

To exit from the Mobile Messenger window and return to the main Watcher window:

1. Tap **ok** (Pocket PCs) or the close box (Handheld PCs) in the upper right corner of the screen.

If there are any unsaved messages, Watcher prompts you to indicate whether you want to save them.

Phone Book

The phone book is an interface to the Contacts screen of the Pocket Outlook program. Any contact information you enter in Outlook is accessible through the phone book in Watcher. (You cannot add contact information directly to Watcher's phone book.)

The benefit of the phone book is that it saves you having to enter phone numbers of the people you regularly call each time you make a call.

To open the phone book:

1. Select Tools > Phone Book.



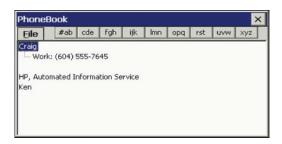




Note: If you add new information to Outlook, it does not appear in the Watcher phone book until Watcher is restarted or you refresh the phone book. To refresh the phone book, select File > Refresh.

Note: You can also open the call log by double-tapping the missed call indicator MC on the main Watcher screen. When you do this the only calls displayed in the log are voice calls that you did not answer.





To dial a phone number in the phone book:

- 1. Select the record on the PhoneBook screen.
- **2.** Select the phone number for the record.



3. Select File > Dial.

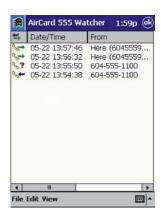
Call Log

The call log maintains a record of your outgoing and incoming calls. In the Options window (displayed when you select **Tools** > **Options**) on the **General** tab, you can choose to keep a record of:

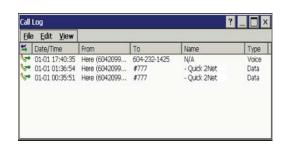
- None of your calls
- All of your calls
- The last 50 calls
- The last 100 calls

To display the call log:

1. Select Tools > Call Log







For each message, the call log displays:

- The call direction (see below)
- The phone number of the caller (for incoming calls), or the phone number that you dialed (for outgoing calls)
- The date and time the call was made or received
- The name of the caller (for incoming calls), or the name of the person called (for outgoing calls), if available
- The type of call (data, voice, or fax)

Table 14-2: Call Direction Icons

| Icon | Meaning |
|----------------|---|
| % | Incoming Call This is a call that you answered. |
| & → | Outgoing Call This is a call that you made. |
| 63 | Missed Call This is a call you received but did not answer. |

To phone a number contained in one of the call records:

- 1. Select the record.
- 2. Select File > Dial.

This can be used to place voice calls only (not data calls).

To save the information in the call log to a text file:

- Select File > Save As...
- **2.** Use the Save As screen to select a location and name for the file and tap **OK**.

Note: The **Dial** option in the **File** menu can be used to establish a voice call to any number in the From or To column.

152 \ \ 2130142

Note: The Add to PhoneBook menu option will be available in future versions.

Note: Clicking **All Types** in the **View** menu causes all incoming, outgoing, and missed calls to be displayed. Clicking **All Logs** in the **View** menu causes all fax, voice, and data calls to be displayed.

To delete a record:

- 1. Select the record.
- 2. Select Edit > Delete.

To delete all records in the call log:

- Select Edit > Delete All
- **2.** Tap **Yes** to confirm the deletion.

To copy a phone number to the Windows Clipboard:

- 1. Select the record.
- 2. Select Edit > Copy Phone Number.

You can then paste the number into another window (in most cases, using CTRL+V). The phone number that is copied is the number in the **From** column for incoming calls, and the number in the **To** column for outgoing calls.

To select what type of calls are displayed:

- 1. Use the **View** menu to select a call type:
 - Voice logs to display all voice calls
 - Data logs to display all dial-up data calls
 - Fax logs to display all fax calls

To sort the calls:

- Tap any column heading to sort by that column in ascending order.
- **2.** Tap the same column heading again to sort by the same column in descending order.

For example, to sort the calls by name, tap the Name column heading. This sorts the records from A to Z. If you tap the Name column heading again, the records will be sorted from Z to A.

Dial-Up Manager

The Dial-Up Manager is where dial-up data connections are set up. (See Chapter 11 for a description of the types of data connections.)

In the Dial-Up Manager you can:

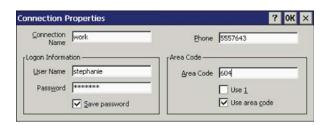
- Add new records for phone numbers to which you want to connect.
- Change existing records.
- Set the default connection.
- Select and establish a connection.

To add a phone number to the Dial-Up Manager:

154

1. Select **Tools > Dial-Up Manager...** to open the Dial-Up Manager window. AirCard 555 Watcher 2:10p 0k - Express Netwo - Quick 2 Net5M Properties. Delete Connect Set As Default Default Connection - Quick 2 NetSM Connection Details Phone #777 User Name 6042099561@vzw3g Dial As #777 **=** Dial-up Manager ? × Add.. Phone #777 User Name 6042099561@ Properties. Dial As #777 Delete Connect Default Connection - Quick 2 NetSM Set As Default **2.** Tap the **Add...** button to open the Connection Properties screen. AirCard 555 Watcher 4:47p @k Connection Name Phone 5551212 Area Code Use 1
Use area code User Name Save password Save Cancel -





- **3.** Enter a name for the connection and complete the remaining fields noting the following:
 - If the phone number must be preceded with an area code, tap the **Use area code** check box and enter the area code. Tap the **Use 1** check box if the phone number must be prefixed with a 1.
 - Enter a user name if it is required. If you want to store a
 password so that it is not necessary to enter it each time
 you connect, tap the Save password check box and enter
 your password.
- **4.** Tap **Save** (Pocket PCs) or **OK** (Handheld PCs) to close the window and save the information you entered, or **Cancel** (Pocket PCs) or the close button (Handheld PCs) to close the window without saving.

To change an existing record in the Dial-Up Manager window:

- **1.** Tap the connection to select it and tap the **Properties...** button to open the Connection Properties window.
- **2.** Enter the new information in the appropriate fields. (The **Connection Name** cannot be changed.)
- **3.** Tap **Save** (Pocket PCs) or **OK** (Handheld PCs) to close the window and save the information you entered, or **Cancel** (Pocket PCs) or the close button (Handheld PCs) to close the window without saving.

To delete a record in the Dial-Up Manager window:

- **1.** Tap the connection to select it and tap the **Delete** button.
- **2.** When prompted to confirm the deletion, tap **Yes**.

To connect to a number in the Dial-Up Manager window:

1. Tap the connection to select it and tap the **Connect** button.

The AirCard then attempts a connection to the phone number you selected.

Note: The default connection is the one established if you tap the **Connect** button on the main Watcher screen without making a selection from the drop-down menu.

Note: Use the KeyGuard feature if you are concerned that you might inadvertently press **SEND** and dial a number. No number (except 911) can be dialed while KeyGuard is enabled.

Note: On Handheld PCs, the Activation Wizard appears in the Tools menu. On Pocket PCs, the Activation Wizard appears in the Admin menu. To set a number as the default in the Dial-Up Manager window:

 Tap the connection to select it and tap the Set as Default button.

KeyGuard

The KeyGuard feature is designed to prevent accidental dialing. When the feature is enabled, tapping the **SEND** button, or any other button on the dial pad, has no effect.

To enable or disable KeyGuard:

Select KeyGuard from the Tools menu.

A check mark next to the option indicates that it is enabled.

Activation Wizard

The Activation Wizard is used to configure the AirCard to use your account. An overview of this process is provided on page 17. Specific instructions on using the Activation Wizard begin on page 121.

Options...

The Options window allows you to configure Watcher and the AirCard 555 to your preferences. In the Options window you can:

- Enable and disable several features, including: Auto-Answer, Any-Key Answer, the Inactivity Time-Out, Auto-Connect, SMS Message Expiry, and the Lock Code.
- Select whether certain warning messages are displayed to warn you of circumstances such as your data connection being lost.
- Configure options related to call logging, the Watcher window, the call back number in SMS messaging, sounds that notify you of incoming calls, new SMS messages, and new voice mail.

Use of the Options Screen

In the Options window, buttons, drop-down menus, and check boxes are provided to allow you to select your preferences.

156 \/ 2130142

Use the **Save** button (Pocket PCs) or **OK** button (Handheld PCs) to exit the Options window, saving any changes you've made. Use the **Cancel** button to exit without saving.

The **Restore** button (Pocket PCs) or **Restore Defaults** button (Handheld PCs) causes all the fields on all the tabs to revert to the settings they had at installation.

There are seven tabs in the Options screen: General, Network, Display, SMS, Security, Sounds, and Voice. On Pocket PCs, use the left and right arrow buttons to scroll between tabs.

General Tab







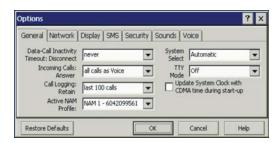


Table 14-3: General Tab Options

| Field | Description |
|--|---|
| Data Call Inactivity Timeout Disconnect | The Inactivity Timeout terminates your data connection automatically when the AirCard is inactive for the amount of time you specify here. (The AirCard is inactive when no data transmission is occurring.) Select Never to disable the feature. Otherwise, select the number of minutes after which you want to automatically disconnect. |
| Incoming Calls Answer | By default the AirCard is set to answer all calls as voice calls. To receive a fax or data call, you must set this field appropriately, before the call is answered. This means that anyone wanting to send a fax, or establish a data connection with the AirCard, must notify you in advance so that you can change this field before the call is made. |
| | If you select "next call as Fax" or "next call as Data", the AirCard maintains the setting for one call, or until Watcher is restarted. If you select "all calls as Fax" or "all calls as Data", the AirCard maintains the setting until you select another option. |
| Call Logging Retain | You have the option of maintaining records of your outgoing and incoming calls in the call log. (The call log is displayed when you select Tools > Call Log , and is described on page 151.) |
| | This field allows you to specify the number of calls retained. Select none , all , last 50 calls , or last 100 calls from the drop-down menu. |

158 / 2130142

Table 14-3: General Tab Options

| Field | Description |
|---------------|--|
| System Select | This field allows you to prevent the AirCard from roaming or limit roaming to specific channels. (The term "roaming" is explained on page 18.) |
| | CDMA networks use designated radio frequency channels. In every cellular market, the channels are divided into two sets: the A side channels and the B side channels. CDMA network carriers (or service providers) are assigned either the A side or the B side channels in each market by the regulatory agencies that oversee radio transmissions. |
| | The options in this field are: • Home Only—prevents the AirCard from roaming |
| | Automatic—allows the AirCard to roam on networks of "preferred" service providers. |
| | Automatic A—allows the AirCard to roam on networks of "preferred" service providers as well as "non- preferred" A side service providers. |
| | Automatic B—allows the AirCard to roam on networks of "preferred" service providers as well as "non- preferred" B side service providers. |
| | Based on the SID (System Identifier) assigned to your account during activation (see page 19), the default in this field is either Automatic A or Automatic B. It is recommended that you leave the default, unless you are advised to change this field by technical support. |

Table 14-3: General Tab Options

| Field | Description | |
|------------------------|--|--|
| Active NAM* Profile | The AirCard allows you to configure and use up to two accounts (with two different phone numbers). This may be useful to users who want, for example, to have one account for business calls and one for personal calls. | |
| | This drop-down menu lists these items: Auto-Select , NAM 1 , and NAM 2 . If one account has been activated, NAM 1 has a phone number next to it, and if two accounts have been activated, NAM 1 and NAM 2 have phone numbers. | |
| | When Auto-Select is in effect, the AirCard uses the account most appropriate to your location, based on the coverage of your accounts. | |
| | To configure a second account (where only one account has been activated): | |
| | Select the option NAM 2 from this drop-down menu and tap OK. | |
| | 2. The Activation Wizard should launch. You can then configure a second account. | |
| | If two accounts are configured, both phone numbers should be displayed in this dropdown menu. To switch from one account to the other: | |
| | Select the phone number from the drop-down menu. | |
| | *NAM stands for Number Assignment Module and is information stored in the flash memory of the AirCard. The information includes your phone number and parameters specific to your service provider. | |

160 / 2130142

| Table 14-3: | General | Tab | Options |
|--------------------|---------|-----|----------------|
|--------------------|---------|-----|----------------|

| Field | Description | |
|--|--|--|
| TTY Mode | A TTY (TeleTYpewriter) is a device for people with hearing and speech impairments. The device allows people to communicate over phone systems using a typewriter-like keyboard. | |
| | When TTY Mode is set to any value besides Off , you can attach a TTY device to the headset connector and use a TTY device with the AirCard. | |
| | The options in this field are: Off—you don't use a TTY device for communicating. | |
| | On (Full)—you use the TTY device for receiving and sending messages. On (Talk Only)—you use the TTY device to read the other person's message. You speak to convey your message. | |
| | On (Hear Only)—you use the TTY device to type your message. You listen to the other person's message. | |
| | This feature has not been tested in the current release. | |
| Update System Clock with CDMA time during start- up | All PCs have an internal clock called the system clock. Depending on your configuration, the time according to this clock is usually displayed: On the Today page, in the top right corner of your screen (Pocket PCs) In the status area in the lower right corner of the screen (Handheld PCs) | |
| | Generally you would use the Settings screen to change the time on the system clock. This field gives you the option of setting the time of your system clock automatically from the CDMA network each time you connect. This might be useful to you if you frequently change time zones. Use the check box to enable and disable this feature. (It is enabled when checked.) | |

Network Tab









Table 14-4: Network Tab Options

| Field | Description |
|--|---|
| Automatically establish a network session when available | In future releases the AirCard will have a feature to allow for an immediate 1xRTT connection whenever the AirCard is inserted, and where 1xRTT service is available. (See Chapter 5 for a description of 1xRTT connections.) This option is not yet available. |

162 \ \ \ \ \ \ \ 2130142

Display Tab







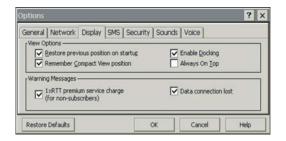


Table 14-5: Display Tab Options

| Field | Description |
|--------------------------------------|---|
| Restore previous position on startup | This field determines where the full Watcher window appears when launched. (The full and compact views of the Watcher window are shown on page 142.) |
| | If this feature is disabled, Watcher always opens in the center of your screen. |
| Handheld PCs Only | If you enable this feature and move the Watcher window, the window will re-appear in its new position if you close and re-open it, or change the view to compact and then full again. |
| | Use the check box to enable and disable the feature. (The feature is enabled when checked.) |

Table 14-5: Display Tab Options

| Table 14-5: Display | Description |
|--|---|
| | <u>-</u> |
| Remember Compact View position | This field determines where the compact Watcher window appears. |
| | If this feature is enabled, when you switch from the full view to the compact view, the Watcher window remains in the same place. |
| Handheld PCs Only | If this feature is disabled, when you switch from the full view to the compact view, the Watcher window displays in the position it last occupied. |
| | Use the check box to enable and disable this feature. (The feature is enabled when checked.) |
| Enable Docking Handheld PCs Only | When Docking is enabled, the Watcher window jumps to the edge of your screen when the window is dragged close to an edge. This allows you to easily position the window in a corner or to the side of your screen. |
| | Use the check box to enable and disable this feature. (The feature is enabled when checked.) You can also enable and disable this feature by selecting View > Docking . |
| Always on Top Handheld PCs Only | When Always On Top is enabled, the Watcher window displays in front of all other application windows, even when you position another window over Watcher. This allows you to view connection status indicators while using another application, such as your Internet browser. |
| | Use the check box to enable and disable this feature. (The feature is enabled when checked.) You can also enable and disable this feature by selecting View > Always on Top . |
| 1xRTT premium service charge (for non- subscribers) | When this feature is enabled, a warning message is displayed any time you initiate an Express Network (1xRTT) connection, to remind you that you may be charged extra for this service. (Depending on your billing plan, your service provider may apply a surcharge to 1xRTT service.) |
| | Use the check box to enable and disable this feature. (The feature is enabled when checked.) |

164 / 2130142

Table 14-5: Display Tab Options

| Field | Description |
|----------------------|---|
| Data connection lost | When this feature is enabled, a warning message is displayed any time you lose your connection to the CDMA network. Use the check box to enable and disable this feature. (The feature is enabled when checked.) |

SMS Tab







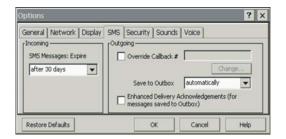


Table 14-6: SMS Tab Options

| Field | Description |
|-------------------------|--|
| SMS Messages: Expire | This feature allows for the automatic deletion of SMS messages that have been in your Inbox for a specified amount of time. The SMS messaging feature is described in detail beginning on page 143. To disable automatic deletion of messages, select Never from the drop-down menu. To enable automatic deletion of messages, select a number of days from the drop-down menu. Only messages that have been "read" (displayed in the Mobile Messenger window) are deleted by this feature. Manual deletion of messages is covered on |
| | page 145. |
| Override Callback # | When you send SMS messages, your call back number is automatically attached to the message so that the message recipient will know how to reach you. By default, your call back number is your AirCard phone number. This feature allows you to use a different number than the AirCard phone number. |
| | To set a new call back number, tap the check box to enable the feature and tap Change . Enter a new call back number. (Leave the field blank if you prefer to have no call back number on your messages.) |
| | To disable the feature (and use the AirCard phone number as your call back number), tap the check box so that it is not checked. |

166 / 2130142

Table 14-6: SMS Tab Options

| Field | Description |
|--|---|
| Save to Outbox | You have the option of retaining, in the Outbox, a copy of messages that you send. See the <i>Mobile Messenger</i> section for details about the Outbox. |
| | This feature allows you to specify whether outgoing messages are saved in the Outbox. If you do not want to save any messages, select never . If you want to be prompted as you send each message, as to whether you want to retain a copy, select ask first . If you want to retain a copy of all messages you send, select automatically . |
| | Note that if you do not save messages to the outbox you do not receive status messages, such as the one that notifies you of a successful delivery. |
| Enhanced Delivery Acknowledgements (for messages saved to Outbox) | You can set Watcher to display a message window with the delivery status (failed or succeeded) and network timestamp of an SMS message you send. |
| Handheld PCs Only | Note: The message window displays only if the message is saved to the Outbox (this is determined by the setting in the "Save to Outbox" drop-down list. |

Security Tab







Note: Locking the AirCard 555 does not prevent you from dialing 911.



Table 14-7: Security Tab Options

| Field | Description |
|---------------------|---|
| Lock modem | The Lock Code feature can be used to prevent others from using your AirCard and your account. When the Lock Code is enabled, you are prompted to enter a code any time Watcher is launched, and if the wrong code is entered, Watcher closes. (This makes it impossible to use the AirCard without knowing the lock code.) By default the lock code is the last four digits of your phone number. |
| | To disable the feature, select never from the drop-down menu. To enable the feature, so that you are prompted for a lock code the next time you launch Watcher, select on power up from the drop-down menu. (The Lock Code feature will then remain enabled until you disable it by selecting never in this field.) |
| Change Lock Code | This button allows you to set a new lock code. |
| | To change the lock code: |
| | 1. Tap the Change Lock Code button. |
| | Enter your existing lock code (the last four digits of your phone number unless you have changed it) in the field and tap OK. |
| | 3. Enter a new lock code and tap OK . |
| | Enter your new lock code again for confirmation and tap OK. |
| | 5. Tap OK . |

168 \ \ \ \ \ \ \ \ \ \ 2130142

Table 14-7: Security Tab Options

| Field | Description |
|----------------|---|
| Lock Modem Now | This field allows you to enable the Lock Code feature immediately. (If you select on power up in the previously described dropdown menu, you need to close Watcher before the lock code comes into effect.) When you tap the button, Watcher prompts, "Lock the modem now?". Tap Yes at this prompt to lock the AirCard. |

Sounds Tab







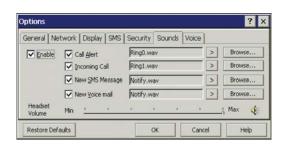


Table 14-8: Sounds Tab Options

| Table 14-6. Soulids Tab Options | |
|---------------------------------|--|
| Field | Description |
| Enable | This field allows you to enable and disable all sounds. |
| | When this box is checked, you have the option of individually enabling and disabling the Call Waiting Alert, Incoming Call, New SMS Message, and New Voice mail sounds. |
| | When the box is not checked, there are no sounds to notify you of any of these events. |
| | Use the check box to indicate whether you want all sounds enabled or disabled. |
| Call Waiting Alert | Depending on your billing plan, you may have a feature called Call Alert. When you are on a call, this feature notifies you when you have another incoming call. You can then ignore the new incoming call or put your current caller on hold and answer the new call. (Contact your service provider if you require more information about Call Alert.) |
| | If you have Call Alert, you can use this field to select whether a sound is played to notify you of another incoming call when you are already on a voice call. |
| | Use the check box to enable and disable the sound assigned to Call Alert. The play button (with the arrow head on it) allows you to hear the sound assigned to this feature. If you have another sound file you would prefer to play for call alerts, you can use the Browse button to select it. (Any *.wav file can be used.) |

170 / 2130142

Table 14-8: Sounds Tab Options

| Field | Description |
|--------------------|---|
| Incoming Call | This field allows you to select whether a sound is played when you receive a call. |
| | When this is disabled, the Silent Ringer icon is displayed in the indicator area of the main Watcher screen. The only notification you will then have of an incoming voice call is the "Voice Call From" or "Roam Call From" message displayed in the call status area. |
| | Use the check box to enable or disable the sound. The play button (with the arrow on it) allows you to hear the sound assigned to incoming calls. If you have another sound file you would prefer to use, you can use the Browse button to select it. (Any *.wav file can be used.) |
| New SMS Message | This field allows you to select whether a sound is played when your receive a new SMS message. |
| | When this is enabled, a sound is played each time a message arrives. When disabled no sound is played. |
| | Use the check box to enable or disable the sound. The play button (with the arrow on it) allows you to hear the sound assigned to new SMS messages. If you have another sound file you would prefer to use, you can use the Browse button to select it. (Any *.wav file can be used.) |
| New Voicemail | This field allows you to select whether a sound is played when a new voice mail message arrives. |
| | When this is enabled, a sound is played when voice mail arrives. When disabled, no sound is played. |
| | Use the check box to enable or disable the sound. The play button (with the arrow head on it) allows you to hear the sound assigned to new voice mail. If you have another sound file you would prefer to use, you can use the Browse button to select it. (Any *.wav file can be used.) |

Table 14-8: Sounds Tab Options

| Field | Description |
|----------------|--|
| Headset Volume | This slider allows you to adjust the volume of the ear piece on your headset. This affects only the volume of what you hear. (That is, it does not adjust the volume of the speaker.) This performs the same function as the volume controls on the main Watcher window. |
| | To increase the volume, drag the slider to the right. To decrease the volume, drag the slider to the left. |

Voice Tab









172 \ \ \ \ \ \ \ \ 2130142

Table 14-9: Voice Tab Options

| Field | Description |
|-------------------------------|--|
| Auto-Answer Incoming Calls | This field allows you to enable and disable the Auto-Answer feature, and when enabled to select the number of rings after which a voice call is answered. |
| | To disable the feature, select off from the drop-down menu. To enable the feature, select the number of rings after which Watcher automatically answers the call. |
| Auto-Retry | This field allows you to enable and disable the Auto-Retry feature, and when enabled to select the interval between retrys. |
| | At times when a large number of users are connected to a single base station on the CDMA network, you may be unable to make a network connection on your first attempt. When enabled, Auto-Retry attempts the connection up to five times at the interval you select. When disabled, the AirCard does not retry. |
| | To disable the feature, select off . Otherwise, select the interval at which you want automatic retrys to occur. |
| Auto- Hyphenation | This field allows you to enable and disable the Auto-Hyphenation feature. |
| | When enabled, a hyphen is automatically inserted after the area code, and between the first three and last four digits of a phone number, as you enter the number. (This has no effect on what is dialed.) When disabled, no hyphen is inserted as you enter a phone number. |
| | Use the check box to enable and disable the feature. (The feature is enabled when checked.) |

Table 14-9: Voice Tab Options

| Field | Description |
|----------------|---|
| Any-Key Answer | This field allows you to enable and disable the Any-Key Answer feature. |
| | When enabled, you can answer an incoming call by tapping any button on the dial pad except END and CLR . (On the Pocket PC, you can also use any of the four application buttons. On the Handheld PC, you can also use keys on your keyboard: A through Z, 0 through 9 and the * or # key.) |
| | When disabled, you must tap the SEND key to answer incoming calls. |
| | Use the check box to enable and disable the feature. (The feature is enabled when checked.) |
| Tone Length | DTMF (Dual Tone Multi-Frequency) is the system used by touch tone phones under which a specific frequency or tone is assigned to each key. There is a standard length for these tones. However, some voice mail systems require a shorter or longer than normal length tone. |
| | This field allows you to set the AirCard to use a shorter or longer tone for systems that require it. |
| | The recommendation is to select normal unless your service provider indicates that a different tone length is required. |
| Level | This field allows you to adjust the volume of the beep that occurs when you tap buttons on the dial pad. |
| | From the drop-down list, select a number. A higher number will give a louder beep. |
| Mute | When DTMF mute is enabled, there is no audible tone while the AirCard dials. |
| | Use the check box to enable and disable the feature. (The feature is enabled when checked.) |

174 / 2130142

Table 14-9: Voice Tab Options

| Field | Description |
|---------------|---|
| Minute Alert | This field allows you to enable and disable the Minute Alert feature. |
| | When enabled, the AirCard beeps at one minute intervals while you are on voice calls. This allows you to keep track of the duration of your call. |
| | Use the check box to enable and disable the feature. (The feature is enabled when checked.) |
| Service Alert | The field allows you to enable and disable the Service Alert feature. |
| | When enabled, the AirCard emits a tone whenever a change occurs in the 1xRTT coverage or roaming status. |
| | A tone is emitted whenever the AirCard: Goes from being out of 1xRTT coverage to being in 1xRTT coverage Goes from being in 1xRTT coverage to being out of 1xRTT coverage Leaves the local coverage area of your service provider Enters the local coverage area of your service provider |
| | When enabled, the AirCard emits a tone whenever it goes from being out of service to being in service, and whenever it goes from being in service to being out of service. |
| | Use the check box to enable and disable the feature. (The feature is enabled when checked.) |

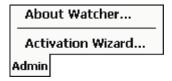
Pocket PCs Only

Table 14-9: Voice Tab Options

| Field | Description |
|----------------------|---|
| Voice Mail Change | Depending on your billing plan, you may have a Voice Mail feature that allows callers to leave you a message when you don't answer a call. If you have this feature, then you access your voice messages by dialing a number specific to your service provider. |
| | When the AirCard is configured, the phone number your service provider uses for voice mail is automatically set up for you. If this number should change, you can change the number here. To change the number: |
| | 1. Tap Change |
| | 2. Enter the new phone number in the window that appears. |
| | 3. Tap OK . |



The Admin Menu (Pocket PCs)



The options in the Admin menu allow you to:

- Activate and configure your account
- Display version information

About Watcher...

The About window displays version information.

176 \ \ \ \ \ \ \ \ 2130142

Handheld PCs Only



The information displayed in this window is:

- The phone number of your account
- The Electronic Serial Number (ESN), a number assigned to each AirCard 555 by the manufacturer
- The version of Watcher (Software) in use
- The hardware version
- The version of the PRL (Preferred Roaming List, which specifies the radio frequency channels that the AirCard is permitted to use)
- The version of the AirCard driver (software that forms the interface between the AirCard and your operating system) in use
- The version of firmware (software that resides in the flash memory of the AirCard) in use
- The version of the bootloader (a component of the firmware) in use

Administration > Activation Wizard...

The Activation Wizard is used to configure the AirCard to use your account. An overview of this process is provided on page 17. Specific instructions on using the Activation Wizard begin on page 121.



The Help Menu (Handhelds PC)



The options in the help menu allow you to:

- Use the on-line help
- Display version information

Help Topics

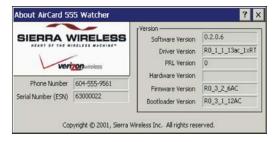
The AirCard 555 network card comes with complete online help. To get help on any topic:

1. Select Help > Help Topics.

Use the index to locate the topic you want to display.

About Watcher ...

The About window displays version information.



The information displayed in this window is:

- The phone number of your account
- The Electronic Serial Number (ESN), a number assigned to each AirCard 555 by the manufacturer
- The version of Watcher (Software) in use
- The version of the AirCard driver (software that forms the interface between the AirCard and your operating system) in use
- The version of the PRL (Preferred Roaming List, which specifies the radio frequency channels that the AirCard is permitted to use)
- The version of the hardware in use

Note: Help is available in most Watcher windows by tapping the ? button in the upper right corner of the window.

178 \/ 2130142

- The version of firmware (software that resides in the flash memory of the AirCard) in use
- The version of the bootloader (a component of the firmware) in use

Rev 3.3 May.02

AirCard 555 Network Card User Guide

>> 15: Troubleshooting Tips

- Problem Causes and Suggestions
- Uninstalling the AirCard software

This section provides assistance in dealing with any problems you may experience with the AirCard 555 wireless network card on Handheld and Pocket PCs.

Problem Causes and Suggestions

When properly installed, the AirCard 555 wireless network card is a highly reliable product. Most problems are caused by one of these issues:

- The wrong driver has been installed.
- Network coverage is not available (either because you are outside the coverage area, or because of an account or network problem).

This section describes how to diagnose and solve these and other problems. If, after reading this section, you are unable to resolve a problem, contact Verizon Wireless technical support at 1-800-922-0204.

Table 15-1: Problem Causes and Suggestions

| Problem | oblem Possible Causes Suggestions | | |
|--|---|---|--|
| You have installed the software to the host and connected the Handheld/Pocket PC to the host. ActiveSync launches but does NOT prompt that there is software to download so you are unable to complete the installation process. | There was a failure in the host installation process or ActiveSync has failed to detect that there is software to download. | Uninstall the software and start the installation process again. See the section, "Uninstalling the AirCard Software" for instructions. | |
| When tapping the dial pad buttons, nothing happens. | a. KeyGuard is on. | a. Turn KeyGuard off. See page 156. | |

Rev 3.3 May.02 \/ \/ \/ \/

Table 15-1: Problem Causes and Suggestions

| Problem | Possible Causes | Suggestions |
|--|---|--|
| Watcher displays this message in the LCD area of the Watcher window, "Searching for AirCard 555 modem" | b. The AirCard is not completely inserted into the PC Card slot. c. The wrong driver is installed for the AirCard. d. The battery of your Pocket PC or its expansion pack is low. | a. Eject and reinsert the AirCard. b. Uninstall the AirCard software and reinstall it. See the section, "Uninstalling the AirCard Software" for instructions on removing the software. Follow the instructions in Chapter 10 to reinstall the software. c. Ensure your Pocket PC and its expansion pack are fully charged. |
| Watcher displays the message, "Not in service", in the LCD area of the Watcher window and the antenna icon is crossed out. | Inadequate signal strength may occur for any of these reasons: a. You are outside the network coverage area. b. Your antenna is not attached or is pointed in the wrong direction. c. You may be inside a building or near a structure that is causing radio interference. | a. Ensure your antenna is properly attached. b. Verify that you are within the coverage area of your service provider. Coverage maps are available from the Sierra Wireless web site, www.sierrawireless.com. c. Try changing your location or reorienting your antenna. |
| When attempting a dial-up data connection, Watcher displays the message, "There is no answer" in the LCD area of the Watcher window. | a. You have an account problem or the network is overloaded with calls. b. The phone number is incorrectly set up in the Dial-Up Manager. | a. Determine whether the problem is due to an AirCard / Dial-Up Manager setup issue or an account / network issue by making a call to a local number. If you are able to complete this call, the problem is likely in the way that the connection is set up. Otherwise, contact your service provider. b. Verify that the number you want to dial is set up properly in the Dial-Up Manager. See page 153 for instructions on using the Dial-Up Manager. Verify that the phone number is entered correctly, and that the Use 1 and Use Area Code check boxes are appropriately set. If the area code is required, ensure it is entered correctly. |
| Pocket PCs only: When you have an AirCard 300 and AirCard 555 in your dual-card PCMCIA jacket accessory, the data connection seems quite slow. | If both AirCards are inserted, then the path that the IP (Internet Protocol) traffic will take is not predictable. If the data gets routed through the AirCard 300, you will experience slower data transfer rates. | a. Eject the AirCard 300 from your PCMCIA jacket accessory before you use the AirCard 555. |

Uninstalling the AirCard Software

To uninstall the AirCard software from the host PC:

- 1. If your Handheld/Pocket PC is connected to the host, disconnect it.
- 2. On the host, open the Control Panel by selecting **Start > Settings > Control Panel**.
- **3.** Double click the **Add/Remove Programs** icon to open the Add/Remove Programs window.
- 4. Click to select Sierra Wireless AirCard 555 Pocket PC....
- **5.** Double click the **Add/Remove** button.
- **6.** Confirm that you want to delete the program by clicking **OK**.
- 7. Click Finish.



To remove the software from a Pocket PC:

- 1. Eject the AirCard if it is inserted in your PCMCIA jacket (and the jacket is attached).
- 2. Tap Start > Settings.
- Tap the System tab.
- **4.** Tap the **Remove Programs** icon.
- 5. Tap Sierra Wireless Inc AirCard 555... and tap the Remove button
- **6.** Confirm that you want to remove the program by tapping **Yes**.



To remove the software from a Handheld PC:

- 1. Eject the AirCard if it is inserted in your PC Card slot.
- Open the Control Panel by selecting Start > Settings > Control Panel.
- **3.** Double tap the Remove Programs icon.
- Select Sierra Wireless Inc AirCard 555 Handheld and tap the Remove button.
- **5.** Confirm that you want to delete the software by tapping **Yes**.

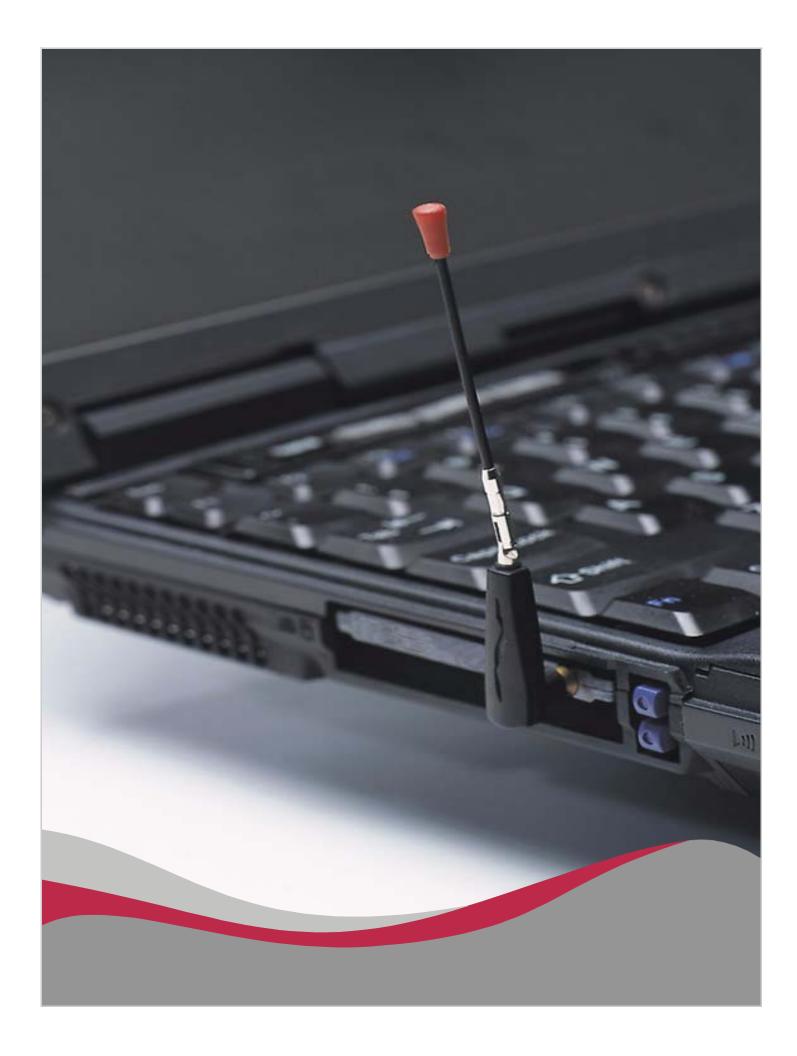
Follow the instructions starting on page 118 to reinstall the software.

AirCard 555 Network Card User Guide

>>> Technical Specifications







>> 16: Technical Specifications

- LED Operation
- Radio Frequency and Electrical Specifications
- Environmental Specifications

This chapter describes the function of the LED, and provides technical product data for the AirCard 555 wireless network

LED Operation

The AirCard 555 has a single red/green LED on the antenna end of the card. The LED operates as follows:

Table 16-1: LED Operation

| LED Behavior | Indicates |
|----------------|--|
| Solid amber* | The AirCard is powering up. |
| Blinking amber | The AirCard is searching for a channel. |
| Solid green | A call is in progress. |
| Blinking green | The AirCard has acquired a channel and is in idle mode (no call is in progress). |
| Solid red | An error has occurred. |

* Amber is used to describe the color of the LED when both red and green are lit.

Radio Frequency and Electrical Specifications

Table 16-2: Radio Frequency & Electrical Specifications

| Approvals | Compliant with: IS-95A, IS-95B, IS-98D, IS-707A, IS707A- 1, CDMA Developers Group FCC Industry Canada | | |
|----------------------|---|------------------------------------|--|
| Voltage | +5 Vdc from PCMCIA Slot | | |
| Current | Maximum: Typical: | | |
| Transmitter Power | 200 mW (+23 dBm) | | |
| Transmit | PCS: Cellular: | 1850 to 1910 MHz 824 to 849 MHz | |
| Receive | PCS: Cellular: | 1930 to 1990 MHz 869 to 894 MHz | |
| Channel Spacing | 1.25 MHz | | |
| Freq. Stability | ± 150 Hz | | |

Environmental Specifications

Table 16-3: Environmental Specifications

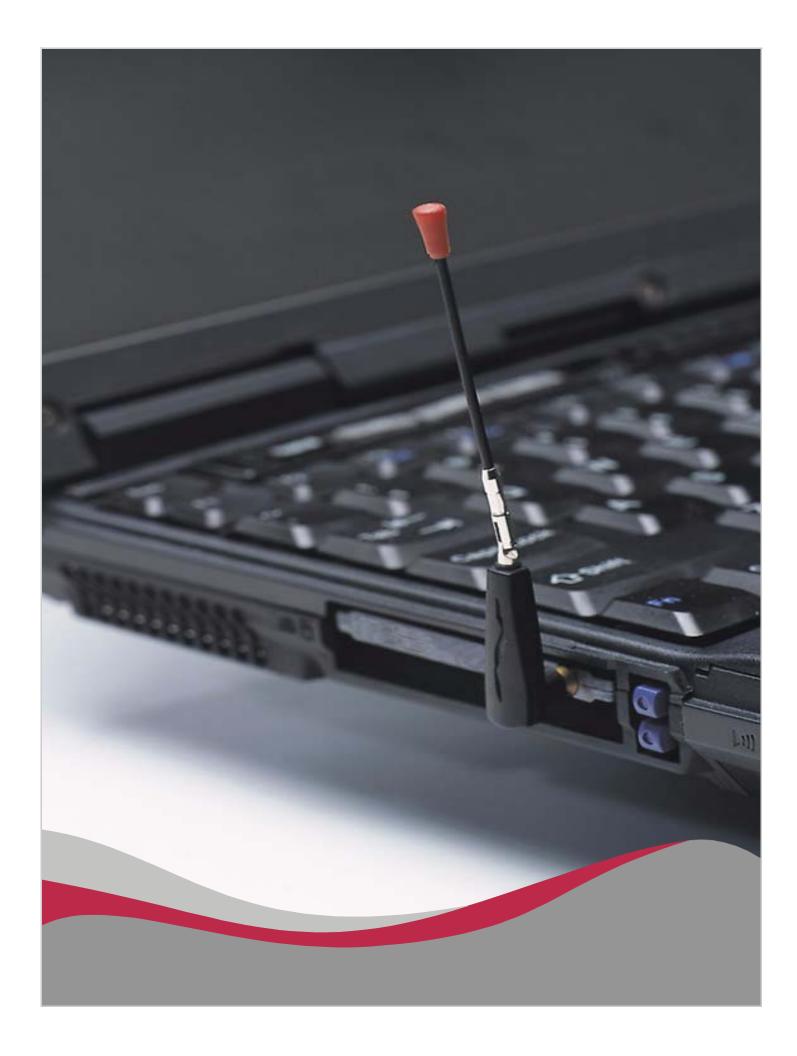
| Operating Temp. | -30 to +60 °C (ambient, outside PCMCIA enclosure) |
|-----------------|---|
| Storage Temp. | -30 to +85 °C |
| Humidity | 95%, non-condensing |
| Vibration | 15 g peak 10 to 2000 Hz (non-operating) |
| Drop | 30" (76.2 cm) on to vinyl covered concrete |

188 \/ \/ \/ \/ 2130142

>> Regulatory Information







>> 17: Regulatory Information

This device complies with Part 15 of the FCC Rules. Operation of this device is subject to the condition that this device does not cause harmful interference. FCC guidelines stipulate that the antenna should be more than 17mm (0.68") from all persons.

FCC ID: N7NACRD555

Where appropriate, the use of the equipment is subject to the following conditions:

CAUTION Unauthorized modifications or changes not expressly approved by Sierra Wireless, Inc. could void compliance with regulatory rules, and thereby your authority to use this equipment.

WARNING (EMI) – United States FCC Information – This equipment has been tested and found to comply with the limits pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in an appropriate 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

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.

Rev 3.3 May.02 \/ \/ \/ \/

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites 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.

192 / 2130142

>> Index

auto-answer

| Numerics | Handheld/Pocket PCs, 135, 173 notebook PCs, 51, 88 | | | |
|---|---|--|--|--|
| 1xRTT, 15 | indicator | | | |
| automatic connection | Handheld/Pocket PCs, 128 | | | |
| Handheld/Pocket PCs, 162 | notebook PCs, 43 | | | |
| notebook PCs, 79 | auto-hyphenation | | | |
| indicator | Handheld/Pocket PCs, 173 | | | |
| Handheld/Pocket PCs, 126 | notebook PCs, 89 | | | |
| notebook PCs, 40 | auto-retry | | | |
| warning message | Handheld/Pocket PCs, 173 | | | |
| Handheld/Pocket PCs, 164 | notebook PCs, 89 | | | |
| notebook PCs, 81 | | | | |
| See also Express Network | | | | |
| 911, 73, 84, 156, 168 | C | | | |
| 711, 73, 6 1 , 130, 100 | | | | |
| | CAB files, 24, 29 | | | |
| A | call alert | | | |
| | Handheld/Pocket PCs, 135 | | | |
| About window | notebook PCs, 51 | | | |
| Handheld PCs, 178-179 | sound | | | |
| notebook PCs, 93 | Handheld/Pocket PCs, 170 | | | |
| Pocket PCs, 176–177 | notebook PCs, 86 | | | |
| account, 17 | call back number | | | |
| account activation, 17 | Handheld/Pocket PCs, 166 | | | |
| multiple accounts | notebook PCs, 82 | | | |
| Handheld/Pocket PCs, 160 | call log | | | |
| notebook PCs, 75 | Handheld/Pocket PCs, 135, 151–153 | | | |
| account configuration | notebook PCs, 51, 68–71 | | | |
| Handheld/Pocket PCs, 121–122 | message retention | | | |
| notebook PCs, 35–36 | Handheld/Pocket PCs, 158 | | | |
| activation, 17 | notebook PCs, 75 | | | |
| manual | call status box | | | |
| Handheld/Pocket PCs, 121-122 | Handheld/Pocket PCs, 124, 127 | | | |
| notebook PCs, 35–36 | notebook PCs, 38, 42 | | | |
| voice-assisted | caller-ID | | | |
| Handheld/Pocket PCs, 121 | Handheld/Pocket PCs, 135 | | | |
| notebook PCs, 35 | notebook PCs, 51 | | | |
| wizard | care and maintenance, 19 | | | |
| Handheld PCs, 156 | CD contents, 16 | | | |
| notebook PCs, 35, 73 | CDMA network, 15 | | | |
| Pocket PCs, 177 | service providers, 17 | | | |
| Admin menu, 176–178 | updating system clock from | | | |
| AirCard 300, using with the AirCard 555 | Handheld/Pocket PCs, 161 | | | |
| notebook PCs, 101 | notebook PCs, 78 | | | |
| Pocket PCs, 182 | close button | | | |
| always on top | Handheld PCs, 129 | | | |
| Handheld PCs, 141, 164 | notebook PCs, 39 | | | |
| notebook PCs, 57, 81 | clr button | | | |
| antenna, 16 | Handheld/Pocket PCs, 137 | | | |
| care and maintenance, 19 | notebook PCs, 53 | | | |
| any-key answer | communications ports, 23 | | | |
| Handheld/Pocket PCs, 135, 174 | compression indicator | | | |
| notebook PCs, 51, 89 | Handheld/Pocket PCs, 129 | | | |
| auto-answer | notebook PCs, 44 | | | |

Rev 3.3 May.02 193

AirCard 555 Wireless Network Card User Guide

| conference calling | Pocket PCs, 177 |
|---|---------------------------------------|
| Handheld/Pocket PCs, 135 | DTMF mute |
| notebook PCs, 51 | Handheld/Pocket PCs, 174 |
| connection status | notebook PCs, 90 |
| Handheld PCs, 130 | DTMF tone |
| notebook PCs, 44 | Handheld/Pocket PCs, 174 |
| connection status area | notebook PCs, 90 |
| Handheld/Pocket PCs, 124, 125 | dual band, 15 |
| notebook PCs, 38, 40 | |
| copyright, 4 | E |
| coverage, 18 | E |
| | end button |
| D | Handheld/Pocket PCs, 137 |
| | notebook PCs, 53 |
| data connections | Enhanced Delivery Acknowledgements |
| Handheld/Pocket PCs, 131–134 | Handheld/Pocket PCs, 167 |
| notebook PCs, 47–50 | notebook PCs, 83 |
| warning message | ESN, 18 |
| Handheld/Pocket PCs, 165 | Express Network |
| notebook PCs, 81 | See also 1xRTT |
| See also dial-up data connections, Dial-Up Manag- | Handheld/Pocket PCs, 131 |
| er, Express Network, Quick 2 Net | notebook PCs, 47 |
| delivery acknowledgements for SMS messages | establishing a connection |
| Handheld/Pocket PCs, 167 | Handheld/Pocket PCs, 134 |
| notebook PCs, 83 | notebook PCs, 49 |
| destination location | Windows 2000 and XP - connection gets |
| Handheld/Pocket PCs, 119 | dropped, 102 |
| notebook PCs, 26, 27, 33 | |
| DHCP (Dynamic Host Configuration Protocol), 30 | F |
| dial pad | • |
| Handheld/Pocket PCs, 136 | fax |
| notebook PCs, 52 | Handheld/Pocket PCs, 133, 158 |
| dial-up data connections | notebook PCs, 49, 74 |
| Handheld/Pocket PCs, 131 | firmware version |
| notebook PCs, 47 | Handheld PCs, 179 |
| establishing Handhold/Pooket PCs 122 | notebook PCs, 94 |
| Handheld/Pocket PCs, 132 | Pocket PCs, 177 |
| notebook PCs, 48 incoming calls | |
| Handheld/Pocket PCs, 133 | Н |
| notebook PCs, 49 | •• |
| Dial-Up Manager | hardware version |
| Handheld/Pocket PCs, 153–156 | Handheld PCs, 178 |
| notebook PCs, 71–73 | notebook PCs, 94 |
| disk space, 24 | Pocket PCs, 177 |
| docking, 57 | headset, 16 |
| Handheld PCs, 164 | indicator |
| notebook PCs, 80 | Handheld/Pocket PCs, 128 |
| driver, 17 | notebook PCs, 43 |
| installation | volume |
| Windows 2000, 25 | Handheld/Pocket PCs, 172 |
| Windows 95, 25 | notebook PCs, 88 |
| Windows 98, 25 | help |
| Windows Me, 25 | Handheld/Pocket PCs, 123 |
| Windows NT, 28–33 | notebook PCs, 37 |
| Windows XP, 28–28 | Help menu |
| version | Handheld PCs, 178–179 |
| Handheld PCs, 178 | notebook PCs, 91–93 |
| notebook PCs, 94 | |
| | |

| I | M |
|------------------------------------|---|
| I/O space (input/output space), 24 | memory, 24 |
| in use indicator | Microsoft Outlook |
| Handheld/Pocket PCs, 126–127 | synchronize with phone book, 67 |
| notebook PCs, 41–41 | minimize button |
| inactivity timeout | Handheld PCs, 129 |
| | |
| Handheld/Pocket PCs, 158 | notebook PCs, 39 |
| notebook PCs, 74 | minute alert |
| incoming call | Handheld/Pocket PCs, 175 |
| answer as | notebook PCs, 90 |
| Handheld/Pocket PCs, 158 | missed call |
| notebook PCs, 74 | in call log |
| in call log | Handheld/Pocket PCs, 152 |
| Handheld/Pocket PCs, 152 | notebook PCs, 69 |
| notebook PCs, 69 | indicator |
| sound | Handheld PCs, 130 |
| Handheld/Pocket PCs, 171 | Handheld/Pocket PCs, 128 |
| notebook PCs, 87 | notebook PCs, 43, 44 |
| incoming calls | mobile messenger. <i>See</i> SMS messages |
| | mute |
| data | |
| Handheld/Pocket PCs, 133 | Handheld/Pocket PCs, 174 |
| notebook PCs, 49 | notebook PCs, 90 |
| voice | mute button |
| Handheld/Pocket PCs, 139 | Handheld/Pocket PCs, 135, 137 |
| notebook PCs, 54 | notebook PCs, 51, 53 |
| indicator area | |
| Handheld/Pocket PCs, 124, 128 | A1 |
| notebook PCs, 38, 43 | N |
| installation | |
| Handheld/Pocket PCs, 117–122 | NAM profile |
| notebook PCs, 23–36 | Handheld/Pocket PCs, 160 |
| Windows 2000, 25–26 | notebook PCs, 75 |
| • | Network Adapter Manager, 17 |
| Windows 95, 24–26 | Not in service |
| Windows 98, 25–26 | Handheld/Pocket PCs, 182 |
| Windows Me, 25–26 | notebook PCs, 100 |
| Windows NT, 27–33 | |
| Windows XP, 27–28 | |
| InstallShield | 0 |
| Handheld/Pocket PCs, 119 | |
| notebook PCs, 25, 27, 33 | Options window |
| Internet, 15, 47, 131 | Handheld/Pocket PCs, 156-176 |
| IRQ (interrupt request), 24 | notebook PCs, 73-91 |
| IS-95A, 15 | outgoing calls |
| , , | dial-up data |
| | Handheld/Pocket PCs, 132 |
| K | |
| | notebook PCs, 48 |
| keyGuard | in call log |
| Handheld PCs, 156 | Handheld/Pocket PCs, 152 |
| Handheld/Pocket PCs, 135 | notebook PCs, 69 |
| notebook PCs, 51, 73 | voice |
| 110tcb00k1 C3, 31, 75 | Handheld/Pocket PCs, 139 |
| | notebook PCs, 54 |
| L | Outlook |
| _ | synchronize with phone book, 67 |
| lock code | , , , |
| Handheld/Pocket PCs, 168–169 | _ |
| notebook PCs, 84–85 | Р |
| lock modem, 83, 167 | |
| IOCK INOUCHI, UU, 107 | PC Card slots, 23, 24, 29 |
| | \wedge |

| PC Card, insertion and removal | SID, 19 |
|--|--|
| Handheld/Pocket PCs, 120–121 | Sierra Wireless, Inc., 4 |
| notebook PCs, 34–35 | signal strength |
| phone book | Handheld/Pocket PCs, 125 |
| Handheld/Pocket PCs, 150 | notebook PCs, 40 |
| notebook PCs, 66 | obtaining optimal, 19 |
| synchronize with Outlook, 67 | silent ringer |
| pre-activation, 18 | Handheld/Pocket PCs, 135 |
| preferred roaming list | indicator |
| Handheld PCs, 177, 178 | Handheld/Pocket PCs, 128 |
| notebook PCs, 94 | notebook PCs, 43 |
| privacy indicator | notebook PCs, 51 |
| Handheld/Pocket PCs, 129 | SMS messages, 15 |
| notebook PCs, 44 | Handheld/Pocket PCs, 143–150 |
| orogram folder | notebook PCs, 60–66 |
| Handheld/Pocket PCs, 119 | enhanced delivery acknowledgements |
| notebook PCs, 26, 27, 33 | Handheld/Pocket PCs, 167 |
| 110tcb00k1 C5, 20, 27, 00 | notebook PCs, 83 |
| | expiry |
| Q | Handheld/Pocket PCs, 166 |
| | notebook PCs, 82 |
| QNC. See Quick 2 Net | indicator |
| Quick 2 Net, 15 | Handheld PCs, 130 |
| Handheld/Pocket PCs, 131 | Handheld/Pocket PCs, 128 |
| notebook PCs, 47 | notebook PCs, 43, 44 |
| establishing a connection | outbox |
| Handheld/Pocket PCs, 133 | Handheld/Pocket PCs, 167 |
| notebook PCs, 49 | |
| | notebook PCs, 83 |
| R | sound Handhold/Pogket PCc 171 |
| ĸ | Handheld/Pocket PCs, 171 |
| road coalcat in use 100 | notebook PCs, 87 |
| read socket in use, 100 | software installation |
| release notes | |
| Handheld/Pocket PCs, 119 | Handheld/Pocket PCs, 118–120 |
| notebook PCs, 26, 27, 33 | version |
| resource conflicts, resolving, 108–114 | Handheld PCs, 178 |
| restore defaults button | notebook PCs, 93 |
| Handheld/Pocket PCs, 157 | Pocket PCs, 177 |
| notebook PCs, 74 | sounds |
| roaming, 18 | Handheld/Pocket PCs, 170–172 |
| fees, 18 | notebook PCs, 86–88 |
| indicator | status area. See taskbar icons |
| Handheld/Pocket PCs, 126 | synchronize phone book with Outlook, 67 |
| notebook PCs, 41 | system clock |
| | Handheld/Pocket PCs, 161 |
| S | notebook PCs, 78 |
| J | system requirements |
| | Handheld/Pocket PCs, 117 |
| verately nad | Handierd/Focket FCs, 117 |
| | notebook PCs, 23 |
| Handheld/Pocket PCs, 138 | |
| Handheld/Pocket PCs, 138 notebook PCs, 53 | notebook PCs, 23 |
| Handheld/Pocket PCs,138 notebook PCs,53 Searching for AirCard 555 modem | notebook PCs, 23 system tray. <i>See</i> taskbar icons |
| Handheld/Pocket PCs, 138 notebook PCs, 53 Searching for AirCard 555 modem Handheld/Pocket PCs, 182 | notebook PCs, 23 |
| Handheld/Pocket PCs, 138 notebook PCs, 53 Searching for AirCard 555 modem Handheld/Pocket PCs, 182 notebook PCs, 99 | notebook PCs, 23 system tray. <i>See</i> taskbar icons |
| Handheld/Pocket PCs, 138 notebook PCs, 53 Searching for AirCard 555 modem Handheld/Pocket PCs, 182 notebook PCs, 99 send button | notebook PCs, 23 system tray. See taskbar icons T taskbar icons |
| Handheld/Pocket PCs, 138 notebook PCs, 53 Searching for AirCard 555 modem Handheld/Pocket PCs, 182 notebook PCs, 99 send button Handheld/Pocket PCs, 135, 137 | notebook PCs, 23 system tray. See taskbar icons |
| Handheld/Pocket PCs, 138 notebook PCs, 53 Searching for AirCard 555 modem Handheld/Pocket PCs, 182 notebook PCs, 99 send button Handheld/Pocket PCs, 135, 137 notebook PCs, 51, 52 | notebook PCs, 23 system tray. <i>See</i> taskbar icons T taskbar icons Handheld PCs, 129 notebook PCs, 44 |
| Handheld/Pocket PCs, 138 notebook PCs, 53 Searching for AirCard 555 modem Handheld/Pocket PCs, 182 notebook PCs, 99 send button Handheld/Pocket PCs, 135, 137 notebook PCs, 51, 52 service alert | notebook PCs, 23 system tray. See taskbar icons |
| notebook PCs, 53 Searching for AirCard 555 modem Handheld/Pocket PCs, 182 notebook PCs, 99 send button Handheld/Pocket PCs, 135, 137 | notebook PCs, 23 system tray. <i>See</i> taskbar icons T taskbar icons Handheld PCs, 129 notebook PCs, 44 |

Handheld/Pocket PCs, 128

