



**Intermec**

September 16, 2004

**Intermec  
Technologies  
Corporation**

550 Second Street SE  
Cedar Rapids, IA 52401  
United States  
tel 319.389.3100  
fax 319.389.3453  
www.intermec.com

**Subject:** Application for FCC Grant of Authorization for ID: EHAWM600-AF and  
Industry Canada Technical Acceptance Certificate for IC: 1223A-WM600AF

**Reference:** CyberTAN's Manual for Radio Model WM600-AF

To Whom It May Concern:

Intermec Technologies Corporation acknowledges that the radio device approvals, referenced in the subject of this letter, based on the content of the CyberTAN manual for radio model WM600-AF, are for mobile applications (i.e., antenna clearance of at least 20 cm from any portion of the user's body).

Intermec Technologies Corporation will be responsible for subsequent applications, including submission of required SAR data, to the FCC and Industry Canada for approval to use the WM600-AF radio in portable devices (i.e., where antenna clearance would be less than 20 cm from any portion of the user's body).

Sincerely,



Stuart Adams  
Manager, Product Reliability and Compliance

Intermec Technologies Corporation  
550 Second Street SE  
Cedar Rapids, IA 52401  
USA



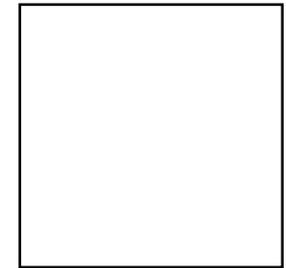
# Table of Contents

Chapter 1: Introduction	1
Welcome	1
What's in this Guide?	1
Chapter 2: Getting to Know the Wireless-G CompactFlash Card	3
The Front Panel	3
Chapter 3: Setting Up the PDA	5
Overview	5
Setup Wizard	5
Chapter 4: Installing the CompactFlash Card	8
Overview	8
Installing the Card	8
Chapter 5: Connecting to a Wireless Network	10
Overview	10
Connect to a Wireless Network	10
Chapter 6: Configuring the Wireless-G CompactFlash Card with the Wireless Network Monitor	16
Overview	16
Wireless Network Monitor	16

# List of Figures

Figure 2-1: Front Panel	3
Figure 3-1: PDA to PC Installation	5
Figure 3-2: Welcome	5
Figure 3-3: License Agreement	5
Figure 3-4: Click Yes	6
Figure 3-5: Application Being Installed	6
Figure 3-6: Mobile Device	7
Figure 3-7: Congratulations	7
Figure 4-1: Successful Installation	8
Figure 4-2: CompactFlash Installation into PDA	8
Figure 4-3: Start Screen	9
Figure 4-4: Wireless Network Monitor Icon	9
Figure 5-1: Wireless Network Monitor Icon	10
Figure 5-2: Status Screen	10
Figure 5-3: Configure Wireless Networks	11
Figure 5-4: Settings	11
Figure 5-5: Configure Network Authentication	12
Figure 5-6: PDA Connected	12
Figure 5-7: Configure Wireless Networks	13
Figure 5-8: Add/Edit Configuration	13
Figure 5-9: SSID	14
Figure 5-10: Wireless Security (WEP)	14
Figure 5-11: Power Management	15
Figure 5-12: Select Profile	15
Figure 6-1: Wireless Network Monitor Icon	16
Figure 6-2: Status Screen	16
Figure 6-3: Version Information Screen	17
Figure 6-4: Wireless Advanced Screen	17

Figure 6-5: Network Troubleshooting Screen	18
Figure 6-6: More Information Screen	18
Figure 6-7: Repair Screen	18
Figure 6-8: Contact Screen	19
Figure 6-9: Site Survey Screen	19
Figure 6-10: Link Test Screen	20



### FCC Statement

•This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. 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 of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

•This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

•FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

•IMPORTANT NOTE:

•FCC Radiation Exposure Statement:

•This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

•This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Intermec declared that WM600-AF is limited in CH1~11 by specified firmware controlled in USA.

### IC Statement

"Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

"To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing."

# Chapter 1: Introduction

## Welcome

Thank you for choosing the Wireless-G CompactFlash Card.

The Wireless-G CompactFlash Card installs directly into your Pocket PC using a CompactFlash Type II slot. The user-friendly software makes it a snap to set up, and you're ready to share data, printers, or high-speed Internet access over your existing wireless network at speeds up to 54Mbps. It's also compatible with Wireless-B (802.11b) wireless networks.

Use the Wireless CompactFlash Card to connect your PDA to wireless networks at the office, at home, or in any of the growing number of public wireless hotspot venues springing up in coffee shops, airport lounges, hotels and convention centers.

Use the instructions in this Guide to help you connect the CompactFlash Card, set it up, and configure it to communicate with your PDA and PC. These instructions should be all you need to get the most out of the CompactFlash Card.

## What's in this Guide?

This user guide covers the steps for setting up and using the Dual-Band Wireless A+G Notebook Adapter.

- Chapter 1: Introduction  
This chapter describes the Adapter's applications and this User Guide.
- Chapter 2: Getting to Know the Wireless-G CompactFlash Card  
This chapter describes the physical features of the Adapter.
- Chapter 3: Setting Up the PDA  
This chapter instructs you on how to use the Card's Setup Wizard.
- Chapter 4: Installing the CompactFlash Card  
This chapter shows you how to install CompactFlash Card into your PDA.
- Chapter 5: Connecting to a Wireless Network  
This chapter shows you how to connect the CompactFlash Card to a wireless network.

# Chapter 2: Getting to Know the Wireless-G CompactFlash Card

## The Front Panel

The CompactFlash Card's LEDs, where information about network activity is displayed, are located on the front panel.

**Power** Green. The **Power** LED lights up when the CompactFlash Card is powered on.

**Link** Green. If the **Link** LED is flickering, the CompactFlash Card is actively sending or receiving data to or from one of the devices on the network.

With these, and many other, Intermec products, your networking options are limitless. Go to the [www.intermec.com](http://www.intermec.com) website at [www.intermec.com](http://www.intermec.com) for more information about products that work with the CompactFlash Card.



**Figure 2-1: Front Panel**

# Chapter 3: Setting Up the PDA

## Overview

This Setup Wizard will take you through all the steps necessary to install the Card's software on your PC so it can communicate with the PDA. The role of this module is a mobile device. It should not operate within 20 cm human body.

Connect your PDA to your PC. Make sure you have the Microsoft ActiveSync software installed on your PC. Refer to your PDA's documentation for information on Microsoft ActiveSync software. The module is mainly for industrial devices.

## Setup Wizard

1. Insert the Setup Wizard CD into your PC's CD-ROM drive.
2. The Setup Wizard's Welcome screen should appear on your monitor. (If it does not, the autorun is not functioning. Start the Setup Wizard manually by clicking the Start button, selecting Run, and typing `d:\setup.exe` (where "D" is your PC's CD-ROM drive)).

Click the **Install** button to continue this Setup Wizard. Clicking the User Guide button opened this Guide. To exit this Setup Wizard, click the **Exit** button.

3. The following screen displays the License Agreement. Read the agreement, then if you agree, click **Next** to continue.

Click **Cancel** to return to the previous screen.



Figure 3-1: PDA to PC Installation

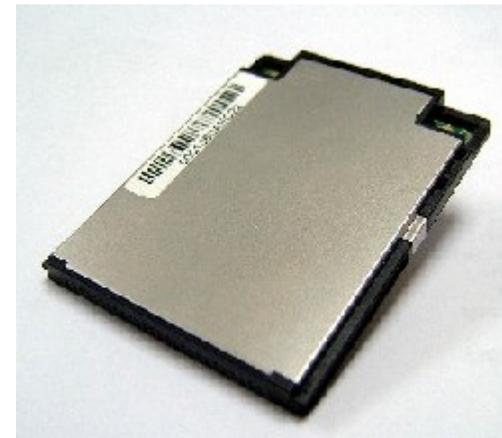


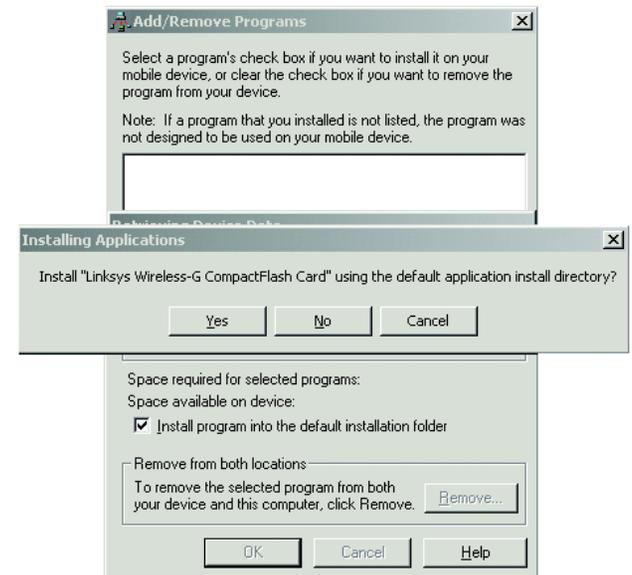
Figure 3-3: License Agreement

## Wireless-G CompactFlash Card

4. When asked if you want to install the Intermec Wireless-G CompactFlash Card using the default application install directory, click **Yes** to continue.

Click **Cancel** or **No** to return to the previous screen.

5. A screen will appear to show that the application is being installed. Do not cancel.



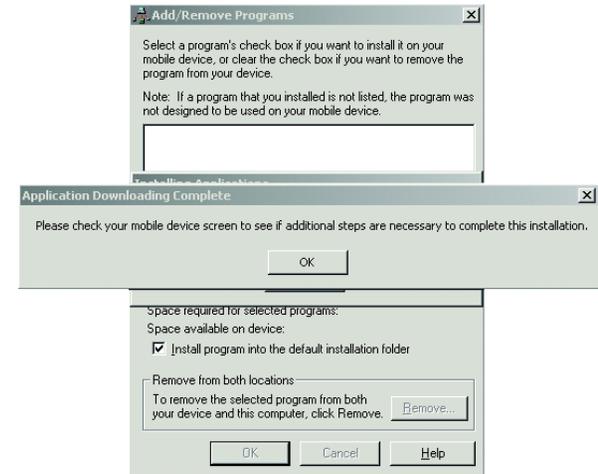
**Figure 3-4: Click Yes**



**Figure 3-5: Application Being Installed**

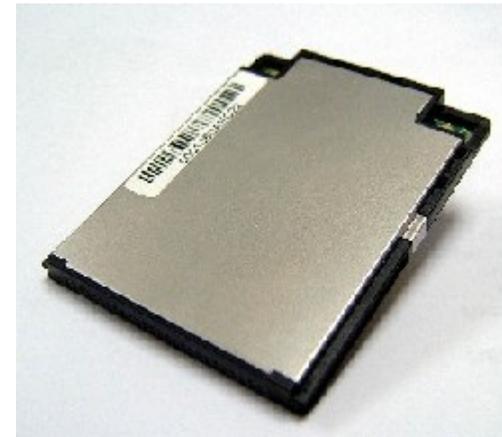
## Wireless-G CompactFlash Card

- When asked to check your mobile device screen to see if additional steps are necessary to complete this installation, click **OK**.



**Figure 3-6: Mobile Device**

- The Congratulations screen will appear when the installation is complete. Click **Exit** to exit the Setup Wizard.



**Figure 3-7: Congratulations**

# Chapter 4: Installing the CompactFlash Card

## Overview

This chapter explains the steps to install the CompactFlash Card. Make sure that you have installed the Setup Wizard software before installing the Card.



**IMPORTANT:** Make sure that the Setup Wizard software is installed before installing the Card.

## Installing the Card

1. After installing the Setup Wizard software, the *Installation has completed successfully* screen will appear on your PDA. Click **OK**.
2. Disconnect the PDA from your PC.
3. Insert the Wireless CompactFlash Card into your PDA.



Figure 4-1: Successful Installation



Figure 4-2: CompactFlash Installation into PDA

## Wireless-G CompactFlash Card

- The **Start** screen will appear for Pocket PC 2002 users. The default setting is *Use server-assigned IP address*. In most cases, you should keep the default setting. However, if you are using fixed IP addresses on your wireless network, then click the radio button next to *Use specific IP address*, and complete the IP address, Subnet mask, and Default gateway fields. Click the **OK** button to close the screen.



Figure 4-3: Start Screen

- The Wireless Network Monitor icon will appear on the desktop of your PDA.

Figure 4-4: Wireless Network Monitor Icon

# Chapter 5: Connecting to a Wireless Network

## Overview

This chapter explains how to connect your PDA to a wireless network.

## Connect to a Wireless Network

1. On your PDA's desktop, click the **Wireless Network Monitor icon** at the bottom of the desktop.
2. The Status screen will appear. Click **Configure Wireless Networks** near the bottom of the screen.
3. Continue to the section for the Pocket PC operating system that your PDA uses.



**Figure 5-2: Status Screen**

## Pocket PC 2003

1. Select your wireless network from the list and click **Connect**.

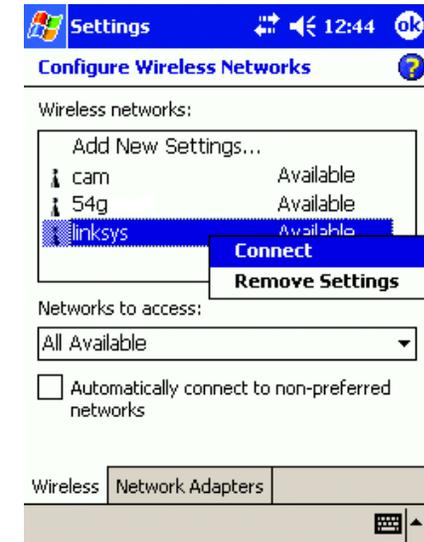


Figure 5-3: Configure Wireless Networks

2. On the Settings screen, if your wireless network does not have Wireless Security-WEP, click **OK**, then go to step D.

If your wireless network has Wireless Security-WEP, click **Authentication**.

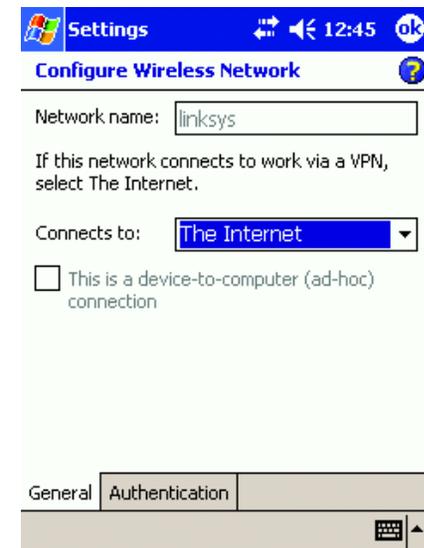


Figure 5-4: Settings

## Wireless-G CompactFlash Card

- When the *Configure Network Authentication* screen appears, Check the box for **Data encryption (WEP Enabled)** and uncheck the box for **The Key is provided for me automatically**. Enter the *Network key* in the field and click **OK**.

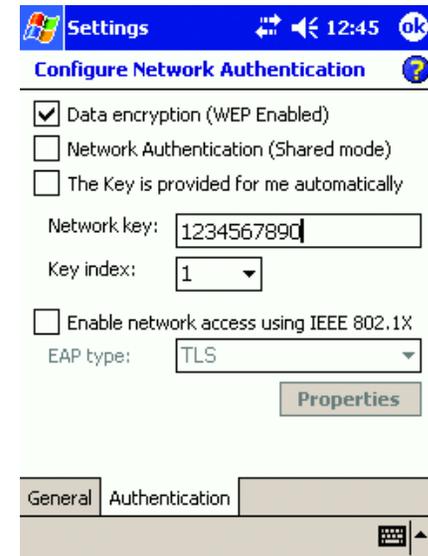


Figure 5-5: Configure Network Authentication

- The next screen will show that the PDA is connected to the wireless network. Click **OK**.

**The installation of the Wireless-G CompactFlash Card is complete.**

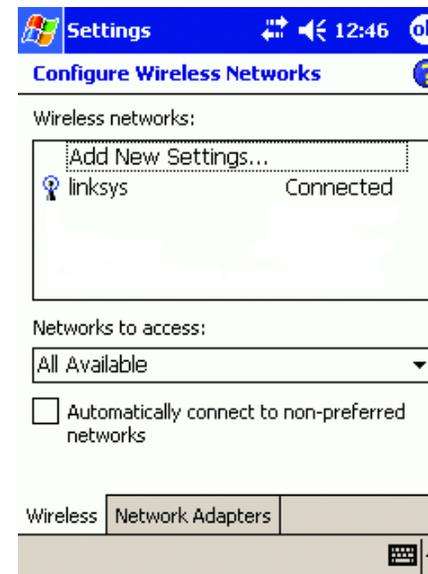


Figure 5-6: PDA Connected

## Pocket PC 2002

1. When the *Configure Wireless Networks* screen appears, select the **Default** profile and click **Edit**.

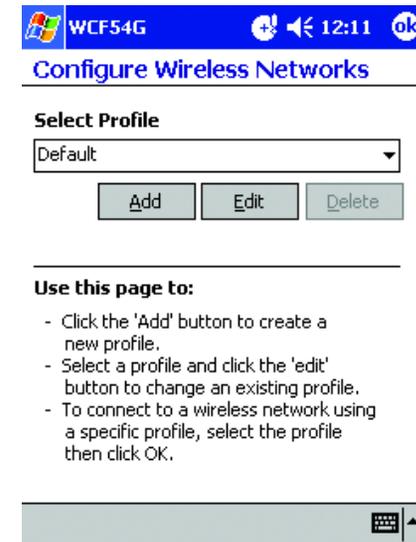


Figure 5-7: Configure Wireless Networks

2. On the *Add/Edit Configuration* screen, select **Access Point** from the drop-down menu for *Wireless Mode*. Click **Next**.

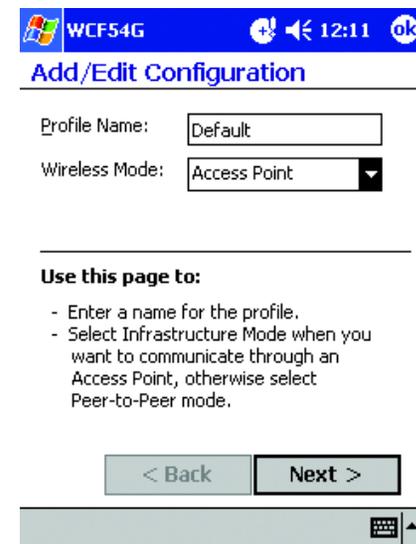


Figure 5-8: Add/Edit Configuration

## Wireless-G CompactFlash Card

3. On the next screen, enter the name of your wireless network in the *SSID* field. You can click **Scan** to search for an existing wireless network name. Click **Next**.

The screenshot shows the 'Add/Edit Configuration' screen for the WCF54G device. At the top, there is a status bar with the Windows logo, 'WCF54G', a signal strength indicator, a speaker icon, the time '12:12', and an 'ok' button. Below the status bar, the title 'Add/Edit Configuration' is displayed. The main content area has an 'SSID:' label followed by a text input field containing 'linksys'. To the right of the input field is a 'Scan' button. Below this, there is a section titled 'Use this page to:' with a bullet point: '- Identify the SSID (Network Name) of the wireless network to which you wish to connect.' At the bottom of the screen, there are two buttons: '< Back' and 'Next >'. A navigation bar at the very bottom contains a keyboard icon and an up arrow.

**Figure 5-9: SSID**

4. If your wireless network has Wireless Security-WEP, check **Wireless Security (WEP)**. Then select **Use Hexadecimal (0-9, A-F)** and enter the WEP key in a *Key* field. Click **Next**.

The screenshot shows the 'Add/Edit Configuration' screen for the WCF54G device, specifically the Wireless Security (WEP) section. The status bar at the top shows 'WCF54G', signal strength, speaker icon, time '12:13', and an 'ok' button. The title 'Add/Edit Configuration' is present. A checkbox labeled 'Wireless Security (WEP)' is checked. Below it are two radio button options: 'Use Hexadecimal (0-9, A-F)' (selected) and 'Use Alphanumeric Characters'. There are four 'Key' input fields: 'Key 1' contains '1234567890', 'Key 2', 'Key 3', and 'Key 4' are empty. Below the key fields is a dropdown menu with a list of numbers 1, 2, 3, and 4, where '1' is selected. At the bottom, there are '< Back' and 'Next >' buttons. A navigation bar at the very bottom contains a keyboard icon and an up arrow.

**Figure 5-10: Wireless Security (WEP)**

## Wireless-G CompactFlash Card

5. **Power Management** is a power saving mode. To enable Power Management, select **On**. To disable Power Management, select **Off**. Then, click **Finish**.

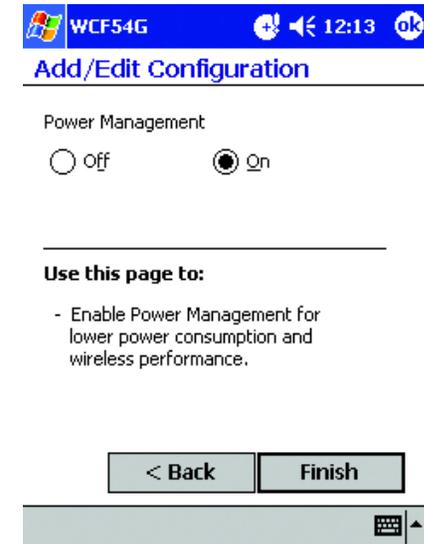


Figure 5-11: Power Management

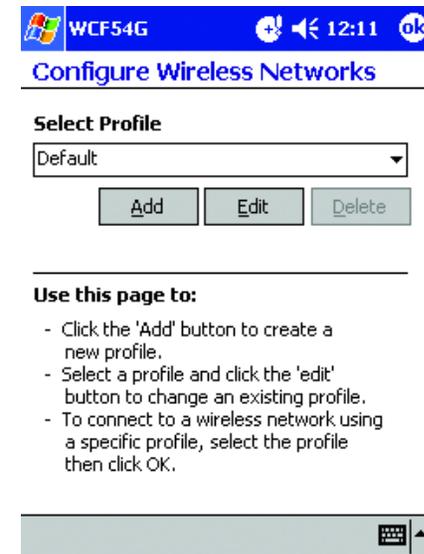


Figure 5-12: Select Profile

6. You will return to the *Select Profile* screen. Click **OK**.

**The installation of the Wireless-G CompactFlash Card is complete.**

# Chapter 6: Configuring the Wireless-G CompactFlash Card with the Wireless Network Monitor

## Overview

the CompactFlash Card can be configured with the Wireless Network Monitor. This chapter explains how to configure the CompactFlash Card in this manner.

On your PDA's desktop, click the **Wireless Network Monitor icon** at the bottom of the screen.

## Wireless Network Monitor

The *Status* screen appears first. It displays the status of your wireless connection, the SSID, the strength of the connection, the base station, the channel, and the encryption.

Two menu options are available: Tools and Advanced. The options are described below.

### Tools

There are many tools available for your use. They are described below.

Exit. Select **Exit** to exit the Wireless Network Monitor.

Turn Radio. Select **Turn Radio Off** to disable the wireless connection. Select **Turn Radio On** to enable the wireless connection.

Power Management. **Power Management** is a power saving mode. Select **On** to enable Power Management. Select **Off** to disable Power Management.

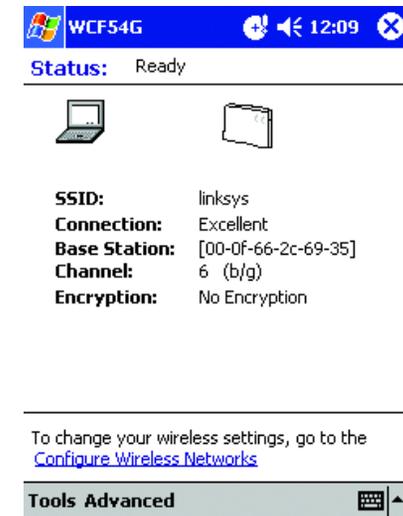
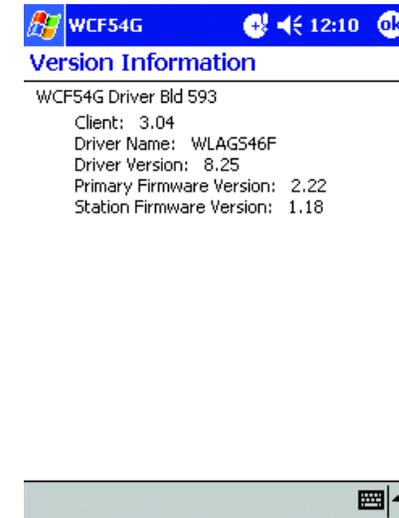


Figure 6-2: Status Screen

## Wireless-G CompactFlash Card

Version Information. Select **Version Information** to view information about the driver. Included is the Client, Driver Name, Driver Version, Primary Firmware Version, and Station Firmware Version.



**Figure 6-3: Version Information Screen**

Wireless Advanced. The advanced wireless settings are displayed on this screen.

Country

Power Mode

Cell Size

Tx Power

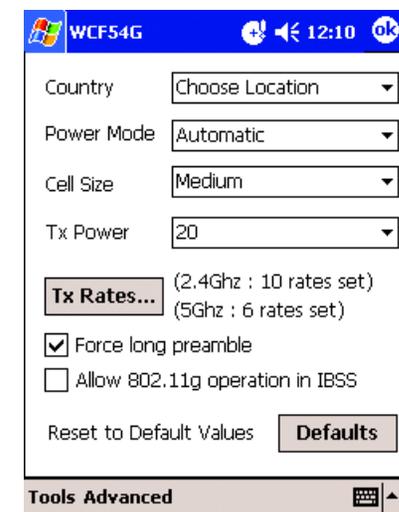
Tx Rates

Force long preamble

Allow 802.11g operation in IBSS

Reset to Default Values

Defaults



**Figure 6-4: Wireless Advanced Screen**

## Advanced

Three advanced options are offered: Network Troubleshooting, Site Survey, and Link Test. See below for descriptions.

Network Troubleshooting. The IP Address of the CompactFlash Card is displayed.

For information on the connection, click **More Info**. The *More Information* screen will appear. The MAC Address, IP Address, Subnet Mask, DHCP Server, Gateways, and DNS are displayed. The IP Forward Table displays the Destination, Mask, Interface, Next Hop, Policy, Type Protocol, Age, Next Hop AS, Metric 1, Metric 2, Metric 3, and Metric 4.

For repair information, click **Repair**. The *Repair* screen will appear.

You can check the connectivity by entering the IP Address into the field, then clicking **Contact**. The *Contact* screen will appear.

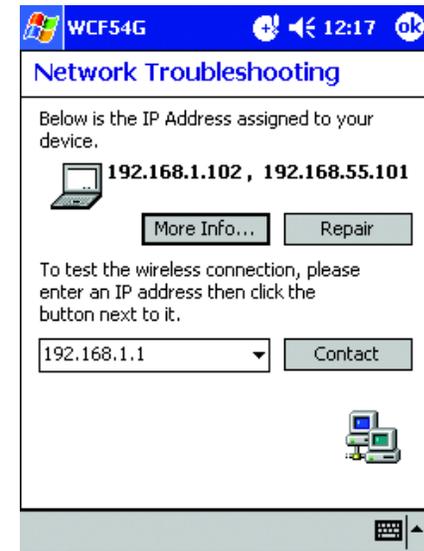


Figure 6-5: Network Troubleshooting Screen

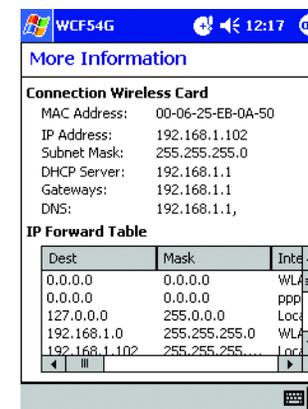


Figure 6-6: More Information Screen

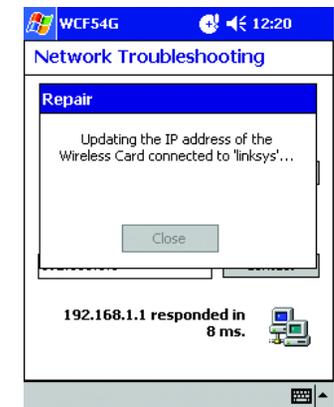
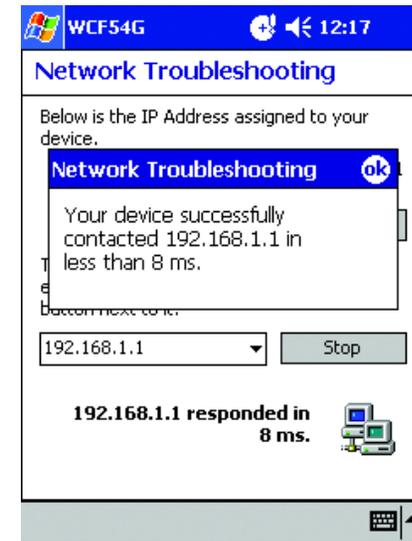
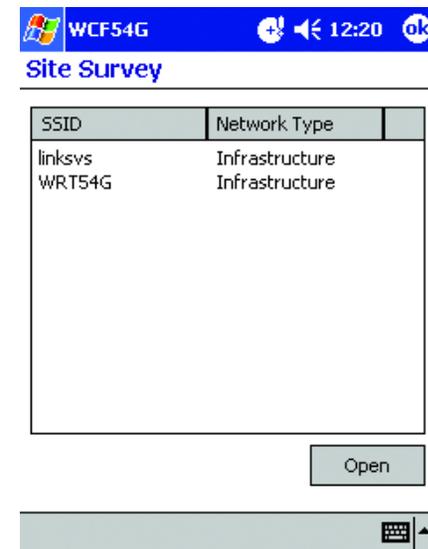


Figure 6-7: Repair Screen



**Figure 6-8: Contact Screen**

Site Survey. To find the MAC Address of the access point, click **Open**. The SNR, Signal Noise, Channel, and Privacy of the access point will be displayed.



**Figure 6-9: Site Survey Screen**

## Wireless-G CompactFlash Card

Link Test. To run a test, enter the IP Address in the field. The MAC Address and Transfer Rate will be displayed. The SNR, Signal, and Noise will be displayed for the Station and Device.

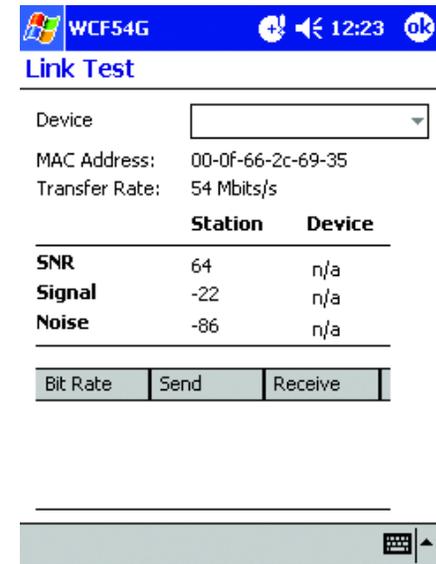


Figure 6-10: Link Test Screen