802.11b
Wireless LAN
PC Card

Reference Guide

Federal Communication Commission Interference 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. End users must follow the specific operating instructions for satisfying RF exposure compliance.

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

TABLE OF CONTENT

Introduction

The 802.11b Wireless LAN PC Card helps you create a wireless network for sharing your broadband cable or DLS Internet access among multiple PCs in and around your home or office. It is designed for notebook computers running Microsoft Windows 98SE, Millennium, 2000 and XP. It is a 32-bit CardBus Card compatible and works in any available CardBus slot. Its auto-sensing capability allows packet transfer in 11Mbps for maximum throughput, or speed reduction to the lower 1Mbps speed for distance or working in a noisy environment.

Features

- 11 Mbps High-Speed Transfer Rate
- Interoperable with IEEE 802.11b(DSSS) 2.4GHz-compliant Equipment
- Plug-and-Play Operation Provides Easy Setup
- Utilizes Realtek RTL8180 and Philips RF plus PA
- Advanced Power Management Features Conserve Valuable Notebook PC Battery Life, on the sleep mode for lowest power consumption
- Direct Sequence Spread Spectrum Compatible to Prevent Lost Connections
- Rugged Metal Design with Integrated Antenna
- Wired Equivalent Privacy (WEP) 64/128-bit data encryption
- Driver Supports Windows 98SE, Millennium, 2000 and XP

Connect the 802.11b Wireless LAN PC Card to Your Notebook PC

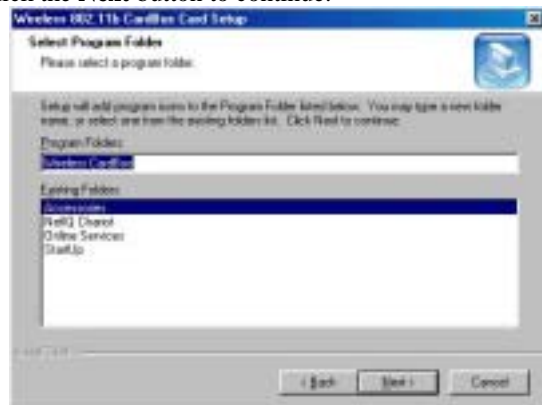## Installation Steps

1. Driver and Utility Installation

■ Insert the driver CD into your CD drive and execute the SETUP under Windows 98SE, Millennium, 2000 and XP

1-1 Under Windows 98SE and Millennium

■ Click the **Next** button to continue

■ Make sure the **Accessories** in the existing folder is selected. Click the **Next** button to continue.

■ Windows is installing the utility and driver now.

■ Windows has now completed installing the driver and utility. Click the **Finish** button to close the InstallShield Wizard.
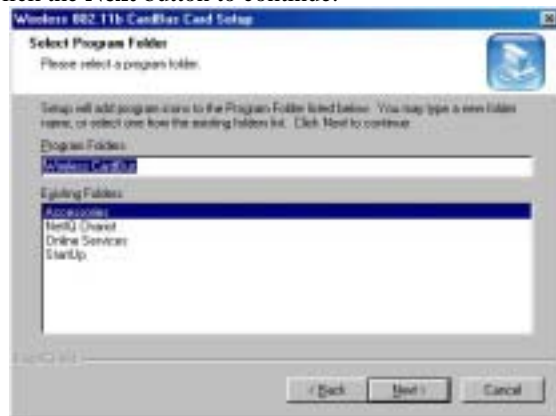
1-2   Under Windows 2000
■   Click the **Next** button to continue

■   Make sure the **Accessories** in the existing folder is selected. Click the **Next** button to continue.

■   The "Digital Signature Not Found" screen is a notification by Windows 2000.   However, this does not mean that there is a problem.   Click the **Yes** button to continue.

■   Windows is installing the utility and driver now.

■   Windows has now completed installing the driver and utility. Click the **Finish** button to close the InstallShield Wizard.

1-3   Under Windows XP
■   Click the **Next** button to continue.

■   Make sure the **Accessories** in the existing folder is selected. Click the **Next** button to continue.

■   Windows will notify you that it has not passed Windows Logo testing to verify its compatibility with Whistler. Click the **Continue Anyway** button to continue.

■ Windows is installing the utility and driver now.

■ Windows has now completed installing the driver and utility. Click the **Finish** button to close the InstallShield Wizard.

2. Hardware installation
■ Plug in the 802.11b Wireless LAN PC Card to your Notebook PC.
■ With the Wireless PC Card's 68-pin connector facing the CardBus slot and the "**802.11b Wireless LAN PC Card"** label facing up**,** slide the PC Card completely into the CardBus slot.

2-1 Under Windows 98SE and Millennium
■ The "Found New Hardware Wizard" is automatically completed by Windows.

2-2 Under Windows 2000
■ Windows automatically execute the "Found New Hardware Wizard"
■ The "Digital Signature Not Found" screen is a notification by Windows 2000. However, this does not mean that there is a problem. Click the **Yes** button to continue and complete the "Found New Hardware Wizard".

2-3 Under Windows XP
■ Select **Install the software automatically [Recommended]** and click the **Next** button to continue.

■ Windows will notify you that it has not passed Windows Logo testing to verify its compatibility with Whistler. Click the **Continue Anyway** button to continue.

■ Windows is installing the utility and driver now.

■ Windows has now completed installing the Wireless PC Card. Click the **Finish** button to close the "Found New Hardware Wizard".

Configure the Configuration Utility

STATUS

The Status screen provides information about the current link between the wireless PC Card and the wireless Access Point.

The **Connected** field shows BSSID which the wireless PC Card connects with.

The **Network** fields show the wireless LAN service set current operational architecture mode.

The **Transmit Rate** field shows the transfer rate in megabits per second when data transmission on current channel.

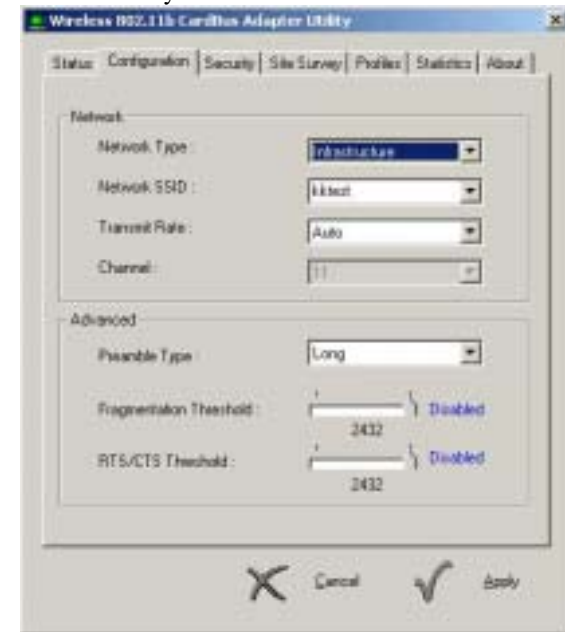The **Channel** field shows the current operational used Channel #.

The **Encryption** field shows the current data encrypt status.

The **Link Quality and Signal Strength** fields will be displayed by the strength of the block when applicable.
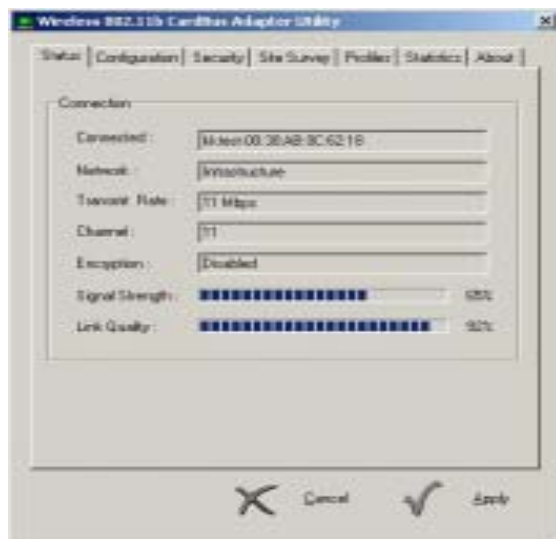
CONFIGURATION

The Configuration screen allows you to customize the settings for the wireless PC Card and your wireless network.

The **Network Type** setting determines the architecture of your wireless network. Select **802.11 Ad-Hoc mode** or **Infrastructure** mode depending on your network type. The **802.11 Ad-Hoc** mode is used for a simple Ad-hoc network and allows the sharing of local resources only between wireless PC Cards without needing a wireless Access Point. The **Infrastructure** mode allows a wireless network to be integrated into an existed, wired network through an Access Point. Infrastructure networks permit roaming between Access Points while maintaining a connection to all network resources and provide additional features, such as WEP security, power saving and extended range.

The **Network SSID** is the unique name shared among all points in a wireless network. The Network SSID must be identical for all points in the network. It is case sensitive and must not exceed 32 characters.

The **Transmit Rate** field shows the current transfer rate for the wireless PC Card. To optimize performance and range, the Transmit Rate should be set to **Fully automatic (Auto)**, which will automatically adjust the transfer speed for best performance and longest range.

Advanced setting box

The **Preamble Type** can be set by the user as Long Preamble or Short Preamble. Preamble is used by synchronizing the data transmitted and received in wireless data transmission when the transmitting and receiving data speed is in their data rate.

The **Fragmentation Threshold** field may be set by user, the higher data (2432 bytes) fragmented will cause the higher transmitted/received data speed, but when link quality/signal strength is lower, you may try lower threshold data size for transmitted/received data. (Recommended a minor reduction the value)

The **RTS/CTS Threshold** field may be set by user, the higher threshold value may easier associate with Access Point when client on the far side from AP, but when link quality/signal strength is lower you may set a lower value to associate with AP. (Recommended a minor reduction the value)

SECURITY

The Security screen allows data encrypted and decrypted during data transmission, the WEP keys can be generated from a user-defined passphrase or manual entry in alphanumeric format in 4 different key settings.
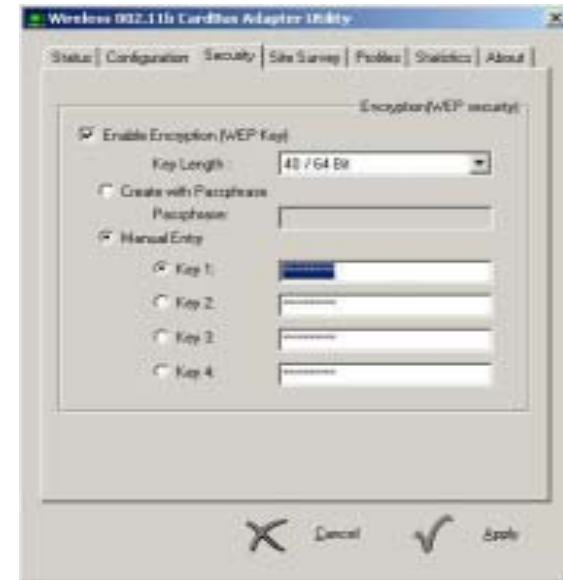
WEP must be enabled in order to set the 64/128-bit key. To generate an encryption key, you may tick the **Enable Encryption (WEP Key).** Select the **Key Length** in 40/64-bit or 104/128-bit for Passphase and Manual Entry Keys.

The **Create with Passphrase** box field ticked
Passphase field can be filled any text string with a maximum of 127 characters by user. Type exactly the same case sensitive PassPhrase in the PassPhrase field, then press **Apply** to generate a sets WEP key.

Manual Entry of the Keys (Key1, Key2, Key3, Key4):
As example of Keys settings: you may enter 10 alphanumeric characters (when selected 40/64-bit key length) will transfer the 5 characters to ASCII code.., you also may select 26 alphanumeric characters (when selected 104/128-bit key length) will transfer 13 characters to ASCII code.

SITE SURVEY

The Selected Site Survey provides real-time displays of signal strength, signal quality and link speed, you should always try to perform the survey signal strength of the area during mobile station at the transient places.
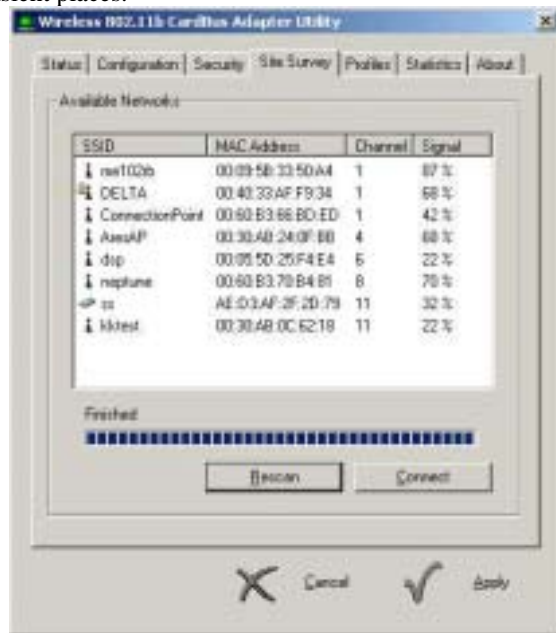
Available Networks

Show a list of available devices in the current RF coverage.

Connect

Show you the status of the Access point of the link strength and quality information for the selected access point.

Rescan

Selected an Access Point which you may access through it, then press Rescan to scan the signal strength and link quality again, it shows on Finished Bar scan chart.

PROFILE

The Profile screen allows user to recall the previous networks configuration setting from the saved files.
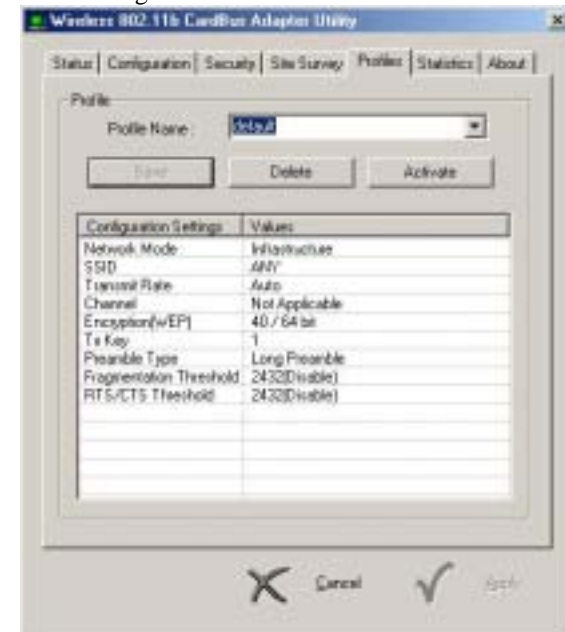
Profile Name field allow you to recall the network configuration settings from previous saved file name or you may from drag down manual to select the file if you have ever saved the configuration profile.

Save:

Recommend to rescans and connect from **Site Survey** screen.

Press save will save the profile name which you type on the **Profile Name** box and the current network configuration settings showing on the configuration settings with values will be saved.

Delete: Delete a saved profile name

Activate:

The selected profile name shows on the configuration settings with value will be activated on current network configuration environments.

STATISTICS

The Statistics screen shows a Current Packets Transmit and Received packets status showing on the screen for the relative chart of the current Tx/Rx and its   maximum Tx/Rx size.

Transmit/Receive Statistics:
  Tx Packets show the statistic transmitted packets amounts.
  Rx Packets show the statistic received packets amounts.

ABOUT

The **About** screen shows the release information for the Configuration Utility.