802.11b Wireless LAN PCMCIA Card

WN-110

User Manual

Version 1.0

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We assumes no responsibility for errors contained herein or for direct, indirect, special, incidental, or consequential damages with the furnishing, performance, or use of this manual or equipment supplied with it, even if the suppliers have been advised of the possibility of such damages.

Electronic Emission Notices

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.
(2)This device must accept any interference received, including interference that may cause undesired operation.

FCC INFORMATION

The Federal Communication Commission Radio Frequency Interference Statement includes the following paragraph:
The 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 instruction, may cause harmful interference to radio communication. However, there is no grantee that interference will not occur in a particular installation. If this equipment dose 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.
The equipment is for home or office use.

R&TTE Compliance Statement

This equipment complies with all the requirements of the Directive 1999/5/EC of the European parliament and the council of 9 March 1999 on radio equipment and telecommunication terminal Equipment and the mutual recognition of their conformity(R&TTE).

The R&TTE Directive repeals and replaces in the directive 98/13/EEC. As of April 8, 2000.

IMPORTANT NOTE

FCC RF Radiation Exposure Statement: This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the antenna and your body and must not be co-located or operating in conjunction with any other antenna or transmitter.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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Table of Figures

This document describes how to install your Wireless LAN PCMCIA Card., which aims to let your computer quickly and seamlessly communicate with 802.11b (at up to 11 Mbps) networks. Wireless LAN is local area networking without wires, which uses radio frequencies to transmit and receive data between PC's or other network devices. Additionally, wireless LAN is able to configure either independent networks, which is also known as peer-to-peer or ad-hoc network, or infrastructure networks. The former is suitable for small or temporary peer-to-peer configurations, and the later is offering fully distributed data connectivity via micro cells and roaming.

To obtain most benefits your 802.11b Wireless LAN PCMCIA Card, please read this manual carefully before using it.

1.1 Features

With 802.11b WLAN P3 PCMCIA Card, you can:
- □ establish a wireless connection without the hassles and cost of cabling
- □ operate Ad-Hoc or Infrastructure mode
- □ utilize up to 128-bit WEP encryption
- □ enjoy high-speed data transfer rate up to 11 Mbps
- □ employ automatic data rate switching which offers maximum reliability, throughput and connectivity
- □ possess the network's range up to 100 meters indoor and 300 meters outdoor
- □ monitor and configure the network via the supplied friendly-interfaced application – PRISM Configuration Utility

1.2 Product Package

Before starting the installation, please make sure the package you purchased includes the following items:
1. Wireless LAN PCMCIA Card.
2. One Quick Installation Guide
3. One Setup Wizard CD-ROM with User Manual

If any of the items above is missing or damaged, please contact your distributor.

1.3 System Requirements

To properly operate your Card, your computer should meet the following minimum requirements:
- □ Microsoft Windows 98/98 Second Edition/Me/2000 or Windows XP
- □ Minimum 5 Mbytes free disk space for installing the driver and the utility program

- □   32 MB RAM or above
- □   A CD-ROM drive
- □   300 MHz processor or higher

1.4 Safety Precaution

In order to let the device function properly, please use only the accessories attached with the device package. If you miss or damage the accessories, please contact your distributor.

INSTALLATION

This chapter describes the steps to install required drivers for 802.11b Wireless LAN PCMCIA Card. Note that the first-time installation of 802.11b Wireless LAN PCMCIA Card for your system contains three key steps as outlined below:

1. Install the software utility – **PRSIM Configuration Utility** using the supplied CD-ROM.
2. Gently insert the 802.11b Wireless LAN PCMCIA Card into PC's PCMCIA slot in the right direction.
3. The installation of hardware drivers will then be automatically processed after the Card has been inserted.

To properly install the Card, please refer to the appropriate section corresponding with operating system you are using and follow up the detailed procedures carefully.

Note: Prior to the installation, ensure the Card is not inserted into the PCMCIA slot of your computer.

2.1 Installation Procedures for Windows 98 Users

a) Insert the supplied Setup CD into your CD-ROM drive, the Setup Wizard will run automatically. If it does not, please manually execute **setup.exe**.

b) The **PRISM Driver for Windows –Welcome** dialog box will be prompted. Click **Finish** to continue.

Figure 2.1-1: The **PRISM Driver for Windows –Welcome** Dialog Box

c) Click **OK** when you see the Information message box appeared.
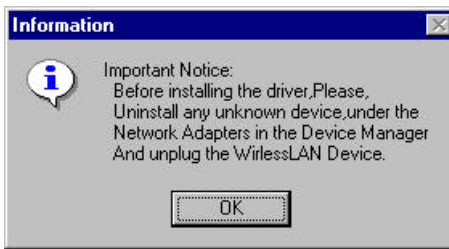
Figure 2.1-2: The **Information** Message Box

d) Click **Next** in the **Welcome** dialog box to proceed.

Figure 2.1-3: The **Welcome** Dialog Box

e) In the **Software License Agreement** dialog box, choose **Yes** to accept the agreement. Click **No** will stop the installation. To go back to the previous dialog box, choose **Back**.
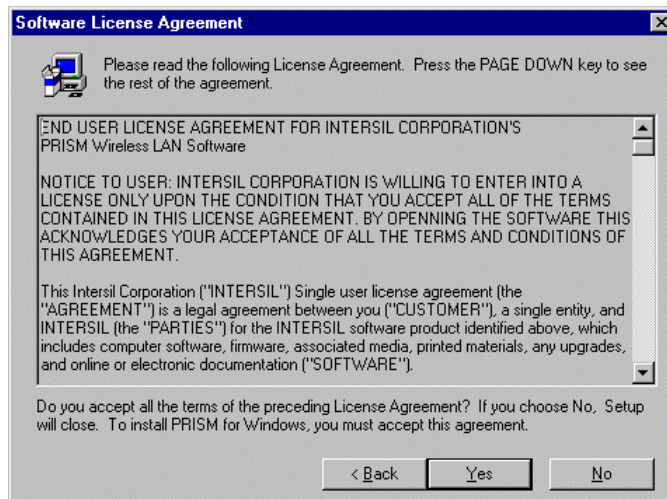
Figure 2.1-4: The **Software License Agreement** Dialog Box

f) Click **Finish** in the prompted **Setup Complete** dialog box.

Figure 2.1-5: The **Setup Complete** Dialog Box

g) Restart your computer then.

h) After rebooting, plug the 802.11b Wireless LAN PCMCIA Card into your PC's PCMCIA slot. Windows will automatically detect the input device and display the **New Hardware Found** message box. At the same time, you will be asked to insert the Windows 98 CD-ROM, please do so and click **OK** to proceed.
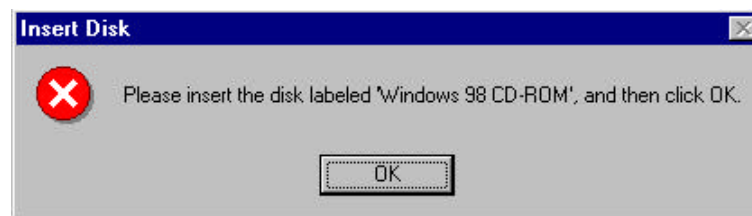
Figure 2.1-6: The **Insert Disk** Message Box

i) In the **Copying Files** dialog box, click **Browse** to indicate Windows to install the appropriate file from the folder named **WIN98** on the CD-ROM, and then click **OK**. In a few seconds, the installation is entirely complete.

To set configurations for the network connection, double-click the **PRISM Configuration Utility** icon, which is already displayed in the system tray. For more details about the application, please refer to **PRISM Configuration Utility Basics** in this manual.

2.2 Installation Procedures for Windows 98SE/Me Users

The installation under Windows Me is very similar to that under Windows 98SE. Please go through the instructions below if you are using Windows Me or Window 98 SE.

a) Insert the supplied Setup CD into your CD-ROM drive, the Setup Wizard will run automatically. If it does not, please manually execute **setup.exe**.

b) The **PRISM Driver for Windows –Welcome** dialog box will be prompted. Click **Finish** to continue.

Figure 2.2-1: The **PRISM Driver for Windows –Welcome** Dialog Box

c) Click **OK** when you see the **Information** message box as below.
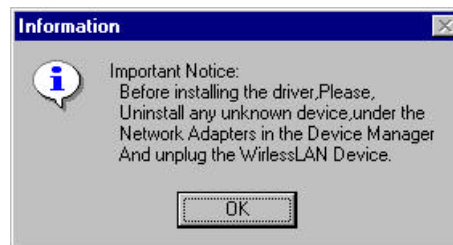
Figure 2.2-2: The **Information** Message Box

d) In the **Welcome** dialog box, click **Next** to proceed.

Figure 2.2-3: The **Welcome** Dialog Box

e) In the **Software License Agreement** dialog box, choose **Yes** to accept the agreement.

Click **No** will stop the installation.
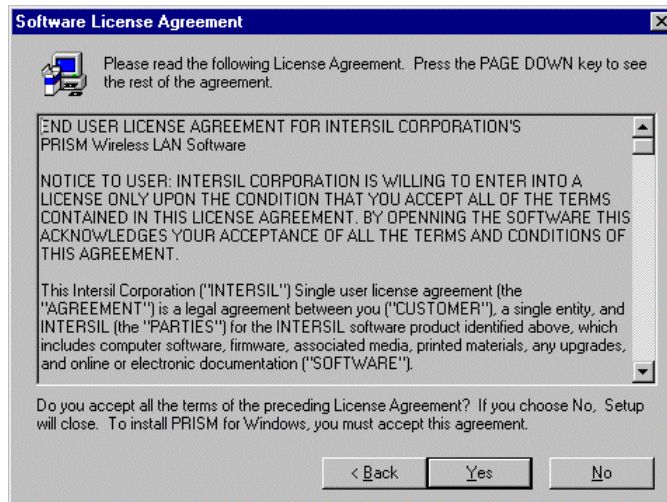
Figure 2.2-4: The **Software License Agreement** Dialog Box

f) When the **Setup Complete** dialog box is prompted, click **Finish**.
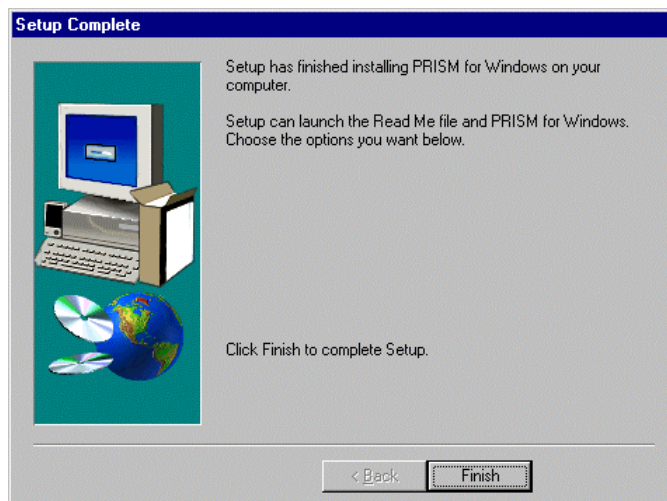
Figure 2.2-5: The **Setup Complete** Dialog Box

g) Restart your computer then.

h) After rebooting, plug the 802.11b Wireless LAN PCMCIA Card into your PC's PCMCIA slot. Windows will automatically detect the input device and display the **New Hardware Found** message box as below. Meanwhile, you will find the **PRISM Configuration Utility** icon appeared in the system tray.

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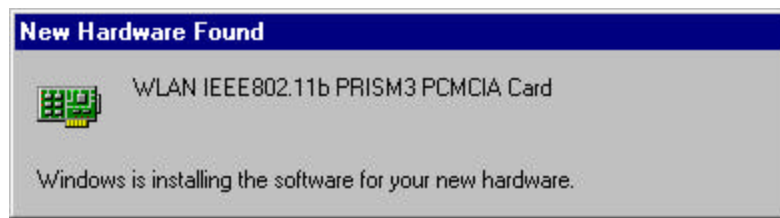
Figure 2.2-6: The **New Hardware Found** Message Box

Within a few seconds, windows will automatically finish installing the hardware drivers.

To configure the **PRISM Configuration Utility**, simply double-click the tray icon. The next chapter - **PRISM Configuration Utility Basics** offers you information on the application in detail.

2.3 Installation Procedures for Windows 2000 Users

a) Insert the supplied Setup CD into your CD-ROM drive, the Setup Wizard will run automatically. If it does not, please manually execute **setup.exe**.

b) The **PRISM Driver for Windows –Welcome** dialog box will pop up. Click **Finish** to continue.

Figure 2.3-1: The **PRISM Driver for Windows –Welcome** Dialog Box

c) Click **OK** in the **Information** window.

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Figure 2.3-2: The **Information** Message Box

d) In the opened **Welcome** dialog box, click **Next**. Choose **Cancel** will stop off the installation.

Figure 2.3-3: The **Welcome** Dialog Box

e) Choose **Yes** in the **Software License Agreement** dialog box to accept the agreement. If you click **No**, the setup will be interrupted. To go back to the previous dialog box, choose **Back**.

Figure 2.3-4: The **Software License Agreement** Dialog Box

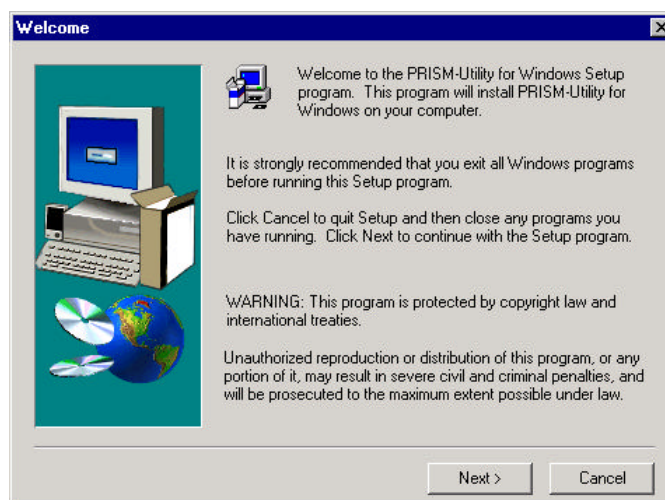f) Click **Finish** when the **Setup Complete** dialog box appears to complete installing the attached utility.
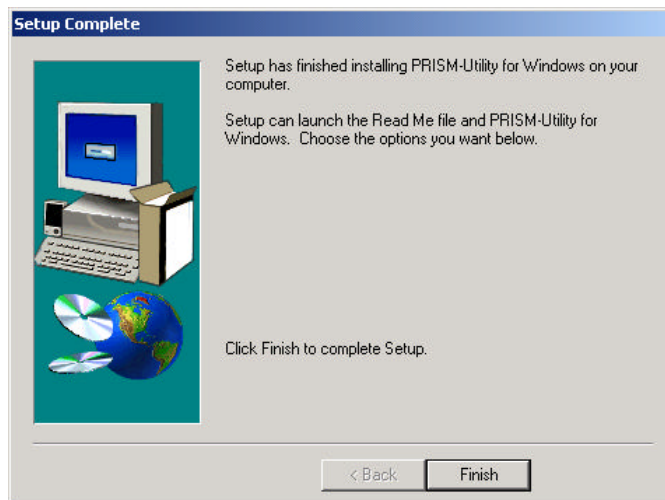
Figure 2.3-5: The **Setup Complete** Dialog Box

g) Plug the 802.11b Wireless LAN PCMCIA Card into your PC's PCMCIA slot, and Windows 2000 will automatically detect your 802.11b WLAN P3 PCMCIA Card and start up the installation with the appearance of the **Found New Hardware** message box.

h) Later, Windows will notify you that the driver has not passed Windows Logo testing. Because the input device has been tested to work with Windows 2000, click the **Yes** button in the **Digital Signature Not Found** dialog box.
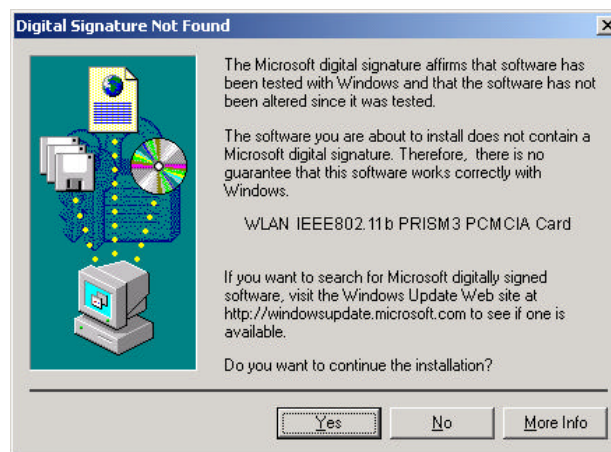
Figure 2.3-6: The **Digital Signature Not Found** Dialog Box

The installation is entirely finished afterwards. Double-click the **PRSIM Configuration Utility** tray icon on the right bottom of the screen to arrange more settings for the network connection. To learn more about the application, please refer to **PRISM Configuration Utility Basics** in this manual

2.4 Installation Procedures for Windows XP Users

    a) Insert the supplied Setup CD into your CD-ROM drive, the Setup Wizard will run automatically. If it does not, please manually execute **setup.exe**.

    b) The **PRISM Driver for Windows –Welcome** dialog box will be shown. Click **Finish** to continue.

Figure 2.4-1: The **PRISM Driver for Windows –Welcome** Dialog Box

    c) In the prompted **Information** window, click **OK**.
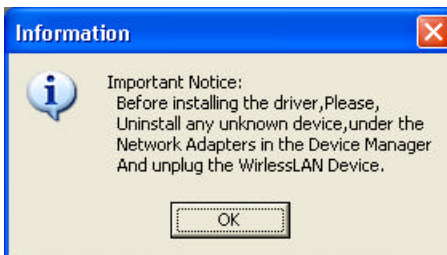
Figure 2.4-2: The **Information** Message Box

    d) Click **Next** in the **Welcome** dialog box. Choose **Cancel** will stop off the installation.

Figure 2.4-3: The **Welcome** Dialog Box

e) Choose **Yes** in the **Software License Agreement** dialog box to agree to it. If you click **No**, the setup will be interrupted. To go back to the previous dialog box, choose **Back**.
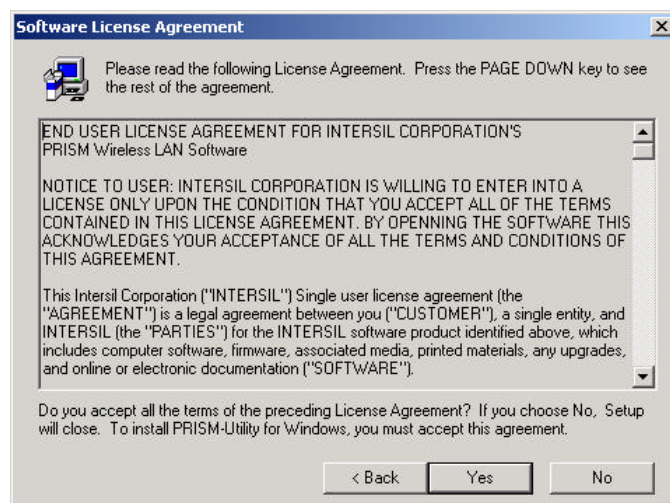
f) In the **Setup Complete** dialog box, click **Finish**.
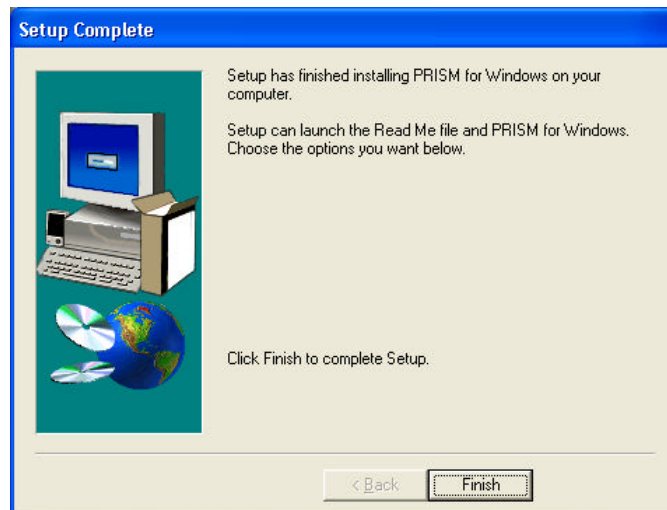
Figure 2.4-4: The **Setup Complete** Dialog Box

g) Insert the 802.11b Wireless LAN PCMCIA Card into your PC's PCMCIA slot. The **Found New Hardware Wizard** dialog box will appear and detect your 802.11b Wireless LAN PCMCIA Card.

h) Choose **Install the software automatically [Recommended]**, and then click **Next**.
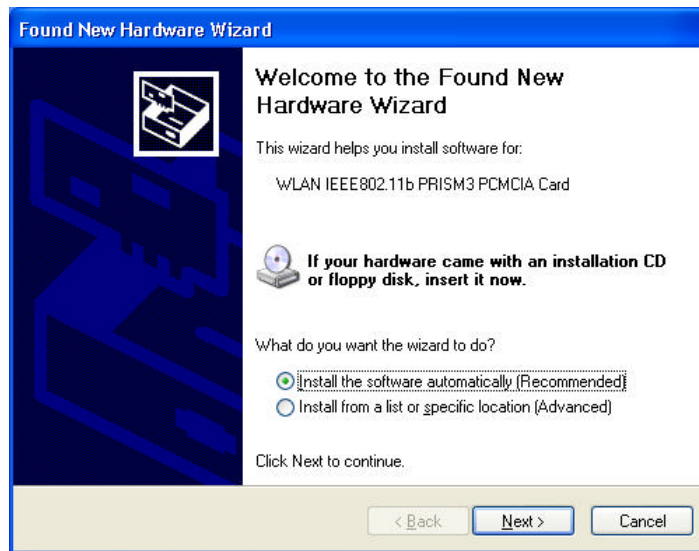
Figure 2.4-5: The **Found New Hardware Wizard** Dialog Box

i) When you see the following dialog box shown, your system is looking for the appropriate driver files. Then Windows XP will start copying the drivers found.
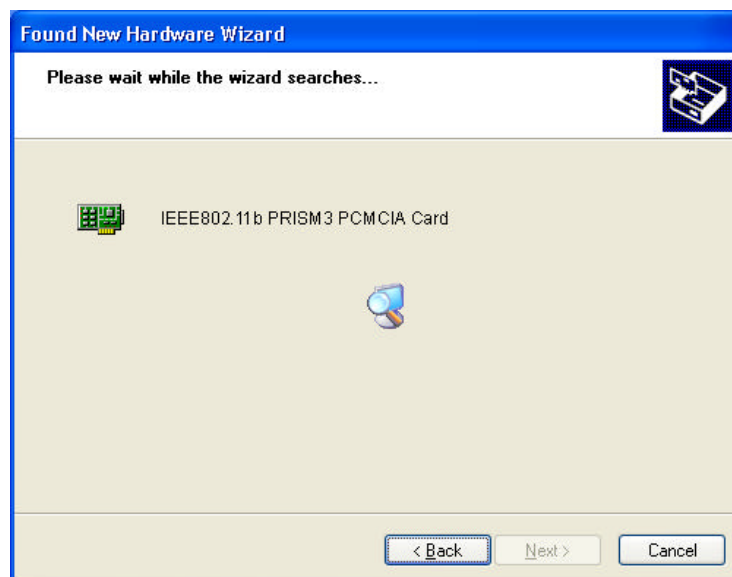
Figure 2.4-6: Looking for drivers

j) Windows will notify you that the driver has not passed Windows Logo testing. Because the Card has been tested to work with Windows XP, please choose **Continue Anyway**.
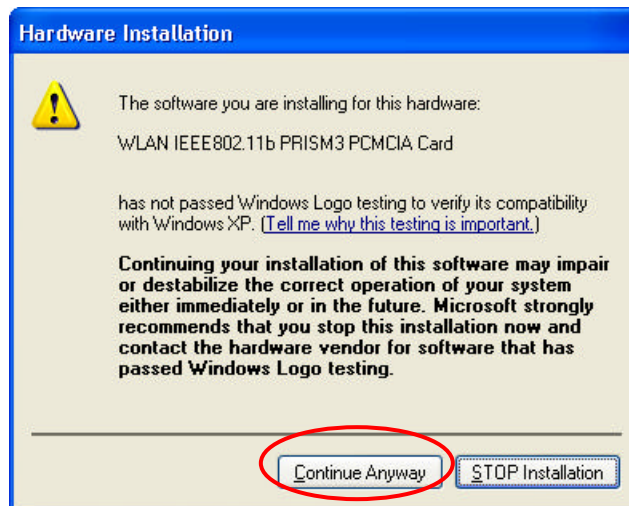
Figure 2.4-7: The **Hardware Installation** Dialog Box

k) Click the **Finish** button after seeing the **Completing the Found New Hardware Wizard** screen.
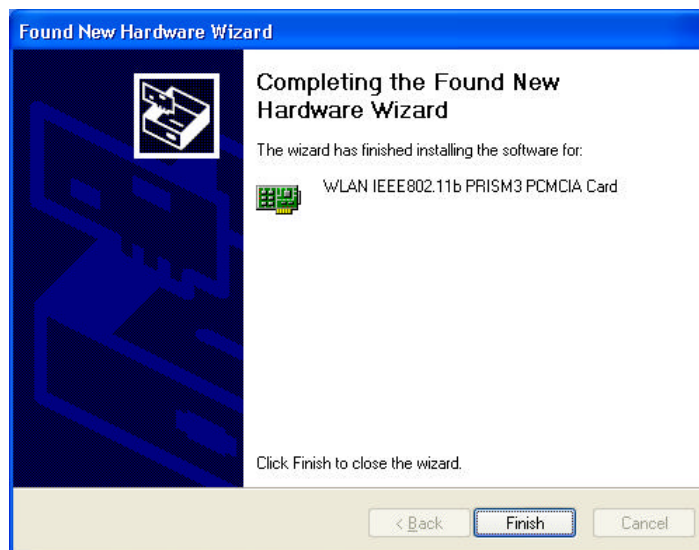
Figure 2.4-8: The **Complete** Screen

l) You will find the **PRISM Configuration Utility** icon appeared in the system tray. Double-click the icon to launch the application and open the **PRISM Wireless Settings** dialog box, in which two tabs are contained. However, normally, the dialog box should be consisted of four tabs. This is because Windows XP has its built-in configuration tools – **Windows XP Zero Configuration** to assist you in networking activities. It is recommended to utilize the attached **PRISM Configuration Utility** to enjoy more benefits it brings. Thus, to employ your **PRISM Configuration Utility** under Windows XP, please proceed to the next step to change the default settings of **Windows Zero Configuration**

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to **PRISM Configuration Utility**.
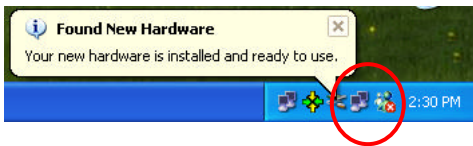
Figure 2.4-9: The **PRISM Configuration Utility** Tray Icon
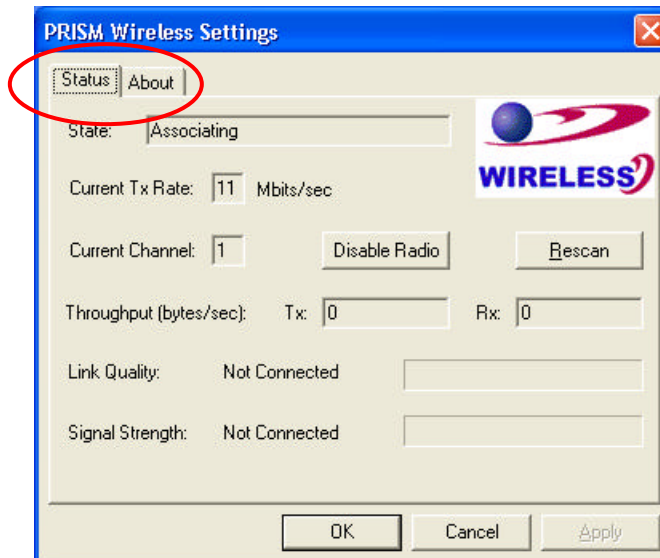
Figure 2.4-10: The **PRISM Wireless Settings** Dialog Box

m) Right-click the **Network Connections** icon at the task bar to open the **Wireless Network Connection Status** dialog box, and then select **Properties**.

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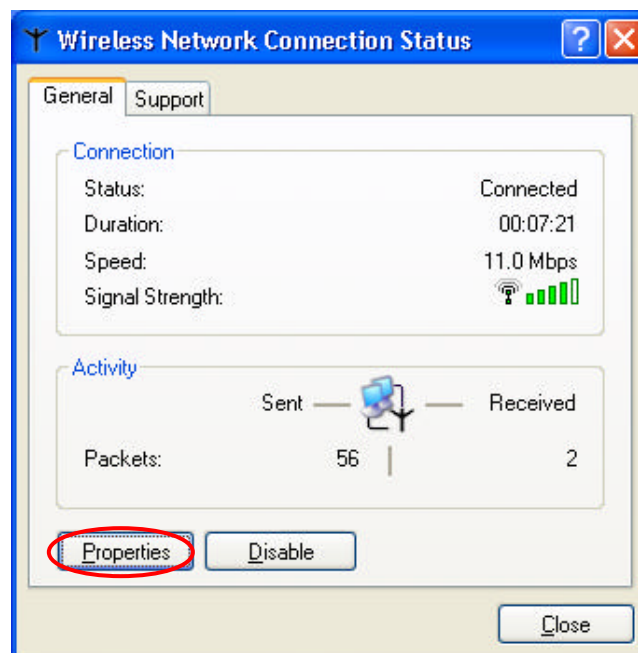
Figure 2.4-11: The **Wireless Network Connection Status** Dialog Box

n) Choose the **Wireless Networks** tab in the **Wireless Network Connection Properties** dialog box, and remove the tick in the **Use Windows to configure my wireless network settings** checkbox.
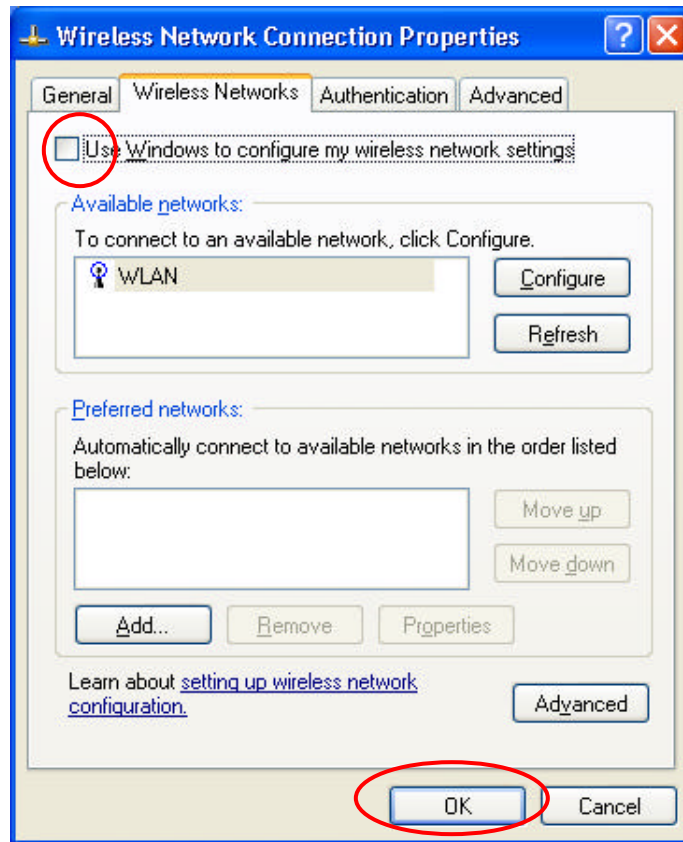
Figure 2.4-12: The **Wireless Network Connection Properties** Dialog Box

o) Click **OK**. Now, you have successfully removed the **Windows Zero Configuration**.

To monitor and configure the network via **PRISM Configuration Utility**, double-click its tray icon, and you should find four tabs contained in the popped up **PRISM Wireless Settings** dialog box at this time. For more details about the utility, please refer to **PRISM Configuration Utility Basics** below.

2.5 Verifying a Successful Installation

To confirm that your 802.11b WLAN P3 PCMCIA Card is properly installed, please go along with the procedures below.

1. Right-click the **My Computer** desktop icon, and choose **Properties** from the opened menu.

2. In the **System Properties** dialog box, choose **Device Manager** if you are under Windows

98 or Me. If you are operating Windows 2000 or XP, click the **Hardware** tab, and then choose the **Device Manager** button.

3. In the opened window, expanding **Network adapters** to find the input device - **802.11b WLAN P3 PCMCIA Card**. Right-click over the item and choose **Properties**.

4. From the opened dialog box, on the **General** tab, find the descriptions under the **Device Status** pane to learn if the card is working properly. However, if there's an error message shown, please choose **Uninstall** from the opened menu while right-clicking over the PCMCIA Card item, which is attached a red or yellow icon beside, in the **Device Manager** dialog box. Then restart your system and go through the installation procedures again.

The following picture indicates a successful installation of the 802.11b WLAN P3 PCMCIA Card.

Figure 2.5-1: The **Device Manager** Dialog Box

As soon as you insert the card, it can operate with the factory default settings. However, you may configure the desired settings by double-clicking the **PRISM Wireless Settings** icon, , at th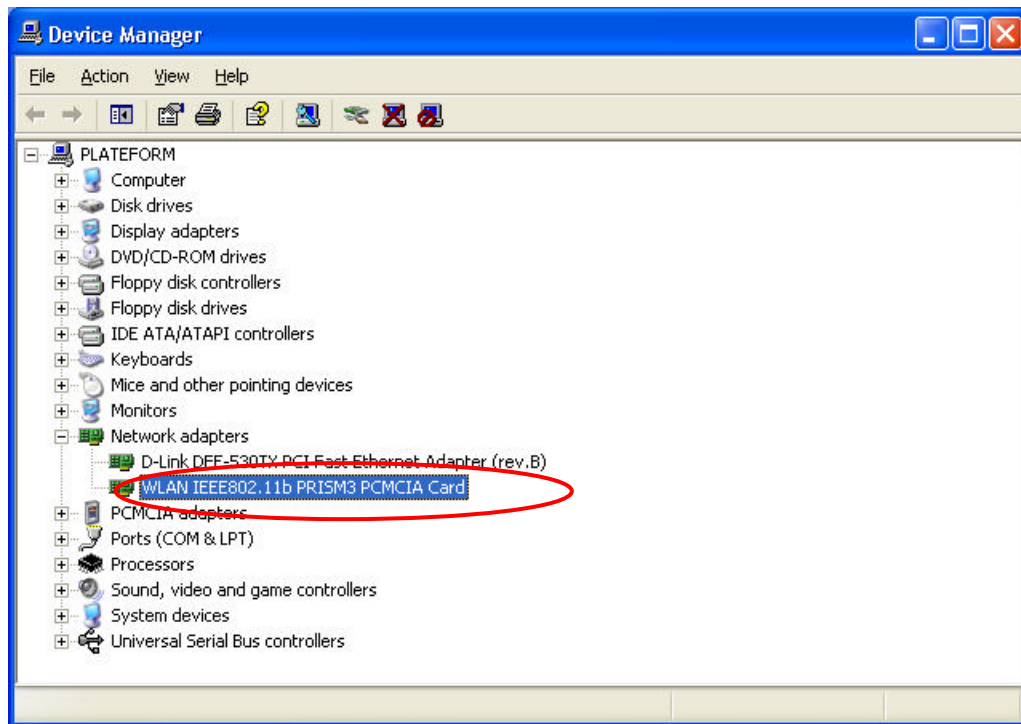e task bar. Then in the opened **PRISM Wireless Settings** dialog box, in which four tabs are contained, including **Status**, **Configuration**, **Encryption**, and **About**. Each of them proffers different functions to assist you in configuring the connection to the networks.

In this chapter, three topics are offered: Tray Icon, Right-click Menu of the Tray Icon, and The Utility Function. Please refer to the preferred topic to obtain more information and enjoy vast advantages **PRISM Configuration Utility** brings.

3.1 Tray Icon

As long as you finish installing **PRISM Configuration Utility** on your computer system, you will see the **PRISM Configuration Utility** icon, , shown at the right bottom corner of your screen. When you move the mouse cursor over it, the current link quality is provided in the tips.

Furthermore, the color of the icon varies with the current state of your network connection. Check the list below to learn the definition of each color.

Icon	Quality
	Excellent Link Quality 100%
	Data Frame Errors – Check WEP Settings
	Not Linked
	Radio Off

Note: The blue icon indicated that you might have entered incorrect WEP keys. To solve the problems, choose the **Configuration** tab in the **PRISM Wireless Settings** dialog box to correct the keys for encryption.

3.2 Right-click Menu of the Tray Icon

Right-click the **PRISM Configuration Utility** icon, , in the system tray will open a menu as the following picture:
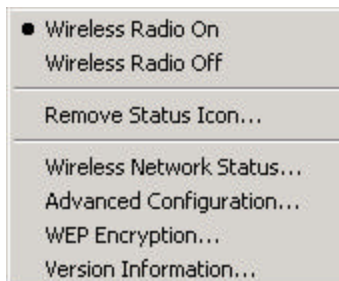
Figure 3.2-1: Right-click Menu of the Tray Icon

Check the descriptions below to obtain detailed information about each command in the menu.

Wireless Radio On

Choose the **Wireless Radio On** command to receive the radio frequency signal.

Wireless Radio Off

Choose **Wireless Radio Off** command will stop receiving the radio frequency signal.

Remove Status Icon

If you don't wish to have the **PRISM Configuration Utility** icon displayed in the system tray, choose this command to open the **Remove Wireless Status Icon** dialog box, and then choose **Yes** to have the icon disappeared. The icon will reappear next time when you restart the computer. If you intend to remove it permanently, put a tick in the checkbox next to the **Remove Status Icon Permanently** option. To launch the utility hereafter, click **Start** on the taskbar, choose **Program** from the menu, and then point to **PRISM Configuration Utility** from the submenu of **WLAN PRISM Utility**. Clicking **No** will undo the removal.

Figure 3.2-2: The **Remove Wireless Status Icon** Dialog Box

Wireless Network Status

Choose this command to launch the **Status** tab of the **PRISM Wireless Settings** dialog box. For more details about the tab, please refer to **The Status Tab** in **The Utility Function** section below.

Advanced Configuration

Choose this command to launch the **Configuration** tab of the **PRISM Wireless Settings** dialog box. Please refer to **The Configuration Tab** in **The Utility Function** section below to gain more information about the tab.

WEP Encryption

Choose this command to launch the **Encryption** tab of the **PRISM Wireless Settings** dialog box. This tab offers you various options to maintain the secure management in a wireless LAN environment. See the explanations in **The Encryption Tab** of **The Utility Function** section below for more details.

Version Information

Choose this command will launch the **About** tab of the **PRISM Wireless Settings** dialog box. The **About** tab reveals general information on your 802.11b WLAN P3 PCMCIA Card, including the release version of driver and the **PRISM Configuration Utility**, and the card's MAC Address.

3.3 The Utility Function

When you double-click the **PRISM Configuration Utility** tray icon, the **PRISM Wireless Settings** dialog box will be prompted as the picture shows below. The application is a window-based program, which is consisted of four tabs, including **Status**, **Configuration**, **Encryption**, and **About**.
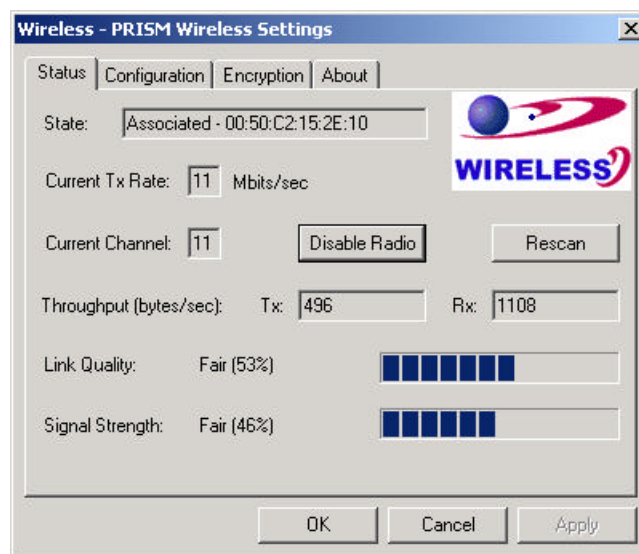
Figure 3.3-1: The **PRISM Wireless Settings** Dialog Box

Check the desired items below to obtain more details about them.

The Status Tab

In the **PRISM Wireless Settings** dialog box, click the **Status** tab, and you will see the following display. Here presents the status of your current connection. To close the window, click **OK**.

> **Note:** Choose the **Wireless Network Status** command from the right-click menu of **PRISM Configuration Utility** tray icon will launch this tab too.
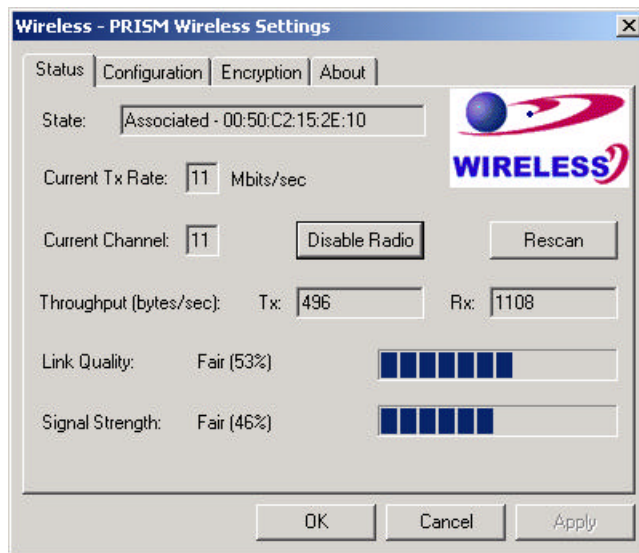
Figure 3.3-2: The **Status** Tab

From the window, the general information on the status of currently connected entry is presented. You may want to click the **Rescan** button to reinitiate the scanning process and update the status. Later the result of scanning will be renewed and displayed in the window afterwards. If you wish to stop the networking connection, click the **Disable Radio** button to stop scanning. However, if you are already in the disabled radio mode, you will find the **Enable Radio** button here instead. Click **Enable Radio** to regain the link then.

State

Here displays the MAC Address of the current associated entry, which could be a connected access point in the Infrastructure mode or computers joining in the Ad-Hoc network.

Current Tx Rate

This feature indicates the transmission rate of the current connection.

Current Channel

Here reveals the current channel operated in the wireless network. Note that the channel number differs as the radio scans any available channels in the Infrastructure mode.

Throughout (bytes/sec)

This feature indicates the rates of transmitting (**Tx**) and receiving (**Rx**) data package of your WLAN P3 PCMCIA Card within a short period of time; thus, the values vary on a time basis.

Link Quality

Link Quality is based on the percentage of successfully transmitted or received signal of the associated access point beacon within a limited period. The higher the percentage, the better the link quality. The bar graph beside also provides a visual interpretation of the current link quality. It is note that the **Link Quality** and **Signal Strength** features only apply to the infrastructure mode. They are inapplicable in the Ad-Hoc mode since data will be transferred from many different computers.

Signal Strength

You may learn the received signal strength of the baseband processor of the Beacon signal from the **Signal Strength** bar beside, and it's also presented in terms of percentage. As the signal gets stronger, you will see the signal percentage rate gets higher. It is noted that the **Signal Strength** and **Link Quality** features only apply to the Infrastructure mode. They are inapplicable in the Ad-Hoc mode since data will be transferred from many different computers.

The Configuration Tab

Click this tab to save different profiles for different network configurations. When finish changing the settings, please click **Apply** to perform the new configuration at last.

Note: Choose the **Advanced Configuration** command from the right-click menu of **PRISM Configuration Utility** tray icon will launch this tab too.
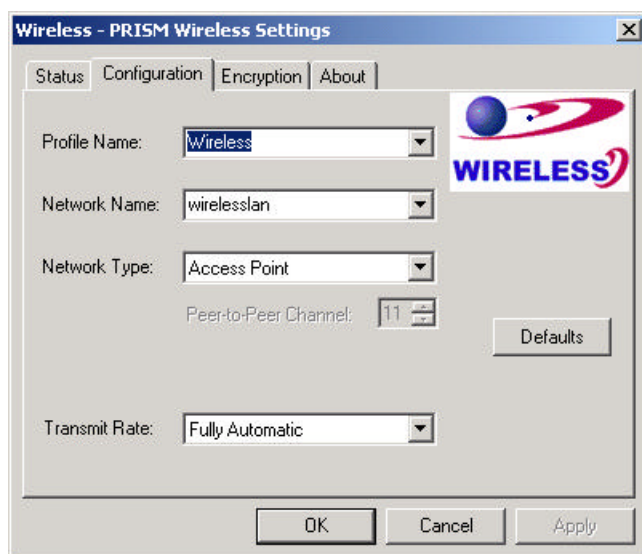

Figure 3.3-3: The **Configuration** Tab

Profile Name

Enter texts in the **Profile Name** field to identify a new profile. After defining the configurations below, click the **Apply** button to establish the profile. To switch between any existing profiles,

simply click the arrow button at the right of the **Profile Name** field to open the pull-down menu and then select the intended one from it.

Network Name

Network Name is also known as SSID, standing for Service Set Identifier, must be unique to distinguish itself as a particular wireless network, and all wireless points in this network area share the same SSID. Type the identical SSID in the **Network Name** field to associate with access points or stations within the specified wireless LAN. To change the **Network Name**, highlight the name in the box, edit a new SSID, and then click **Apply** to save the changes.

Network Type

Two network types are offered here: **Access Point** and **Peer-to-Peer**. Choose the intended type from the two options. The **Access Point** mode, which is also known as the Infrastructure mode, allows you to communicate with a wired network via an access point. If you attempt to operate this mode, you must indicate the identical **Network Name** to make a communication with the intended access point. On the other hand, the **Peer-to-Peer** mode provides you with the so-called Ad-Hoc communication, which means each wireless-equipped computers within a group is able to connect others as an independent wireless LAN without the use of an access point. Each station within this Ad-Hoc network has to define the same **Network Name** and **Peer-to-Peer Channel**.

Peer-to-Peer Channel

This command is only available while you are operating the **Peer-to-Peer** mode, the so-called Ad-Hoc mode. Specify the operating radio frequency channel from the pull-down menu. Note that the available channels differ from country to country, and the channel number must be the same between the entries/stations within the range, so that each can communicate with the others. While in the **Access Point** mode, the channel number would be the same as the associated access point. Thus, there's no need to manually set up the value.

Transmit Rate

This command allows you to indicate the rate of transferring the data packet from the associated access point or any nodes within the range. There are four options for you: **Auto 1 or 2 Mb**, **5.5 Mb**, **11 Mb**, and **Fully Automatic**. Specify the rate according to the speed of your wireless network from the provided options, or you may simply choose **Fully Automatic** to set the best available rate according to the received signal quality and the capabilities of the associated access point or station.

The Encryption Tab

Click the **Encryption** tab to define the encryption settings for a specific profile. It offers you various options concerning the so-called WEP (Wired Equivalent Privacy) to maintain the secure management in a wireless LAN environment. See the explanations below for more details, and before making an activation of any new settings, click **Apply**. To leave the window, click **OK**. To undo the new settings, select the **Cancel** button.

> **Note:** Choose the **WEP Encryption** command from the right-click menu of **PRISM Configuration Utility** tray icon will launch this tab too.
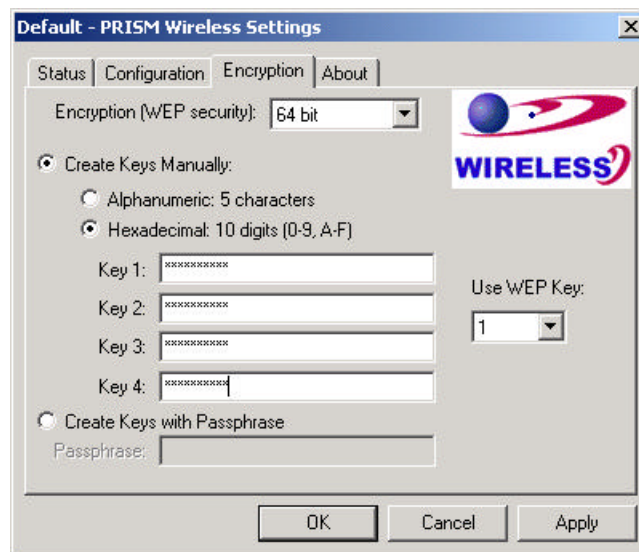
Figure 3.3-4: The **Encryption** Tab

Encryption (WEP security)

If you choose **Disabled** from the pull-down list, you will have the wireless LAN PCMCIA card communicated with all stations within the same networking community without any data encryption. Otherwise, two key lengths are offered: **64 bit** and **128 bit**. Specify a preferred one from the two, so that you may use the identical WEP key to make a communication with the chosen access point.

Create Key Manual

Once you set the **Encryption** type as **64 bit** or **128 bit**, you may choose to edit WEP keys manually or create them via the passphrase of your wireless network. If you choose the **Create Key Manual** option, you may directly enter up to 4 WEP keys for use in WEP encryption. To generate the WEP keys, please define the key entry method as **Alphanumeric** or **Hexadecimal** (for hexadecimal characters, only digits 0-9 and letters A-F are valid). Then edit the texts in the blank fields below, from **Key 1** to **Key 4**, as the encryption codes. Note that these codes/keys shall be identical between the wireless nodes within the range and the access point only. Check

the table below to see valid key length for each encryption type:

	64 bit	128 bit
Alphanumeric	5 characters	13 characters
Hexadecimal	10 digits	26 digits

Use WEP Key

Indicate which WEP key you intend to apply to activate the WEP encryption from the pull-down menu. Make sure that the intended access point on the wireless network shares the same keys. By default, **Key 1** will be used.

Create Keys with Passphrase

Choose this command when the associated wireless network uses a passphrase to create WEP keys. Enter the passphrase stings in the **Passphrase** filed to generate four encryption keys in the **Key** fields above. Note that only letters A-F are valid for the **Passphrase** feature.

After finish configuring the **Encryption** features, remember to click the **Apply** button to initiate the new settings.

The About Tab

This tab reveals general information on your 802.11b WLAN P3 PCMCIA Card, including the following items:

Figure 3.2-14: The **About** Tab

Network Driver

Displays the current version and released date of the 802.11b WLAN P3 PCMCIA Card's driver.

Configuration Utility

Displays the current version and released date of the **PRISM Configuration Utility** application.

NIC Firmware

Displays the current NIC card firmware version and the MAC (Media Access Control) address of your wireless card. It is consisted of 12-digit hexadecimal numbers (48 bits in length) to identify your computer's physical address on the local area network.

This section provides solutions to problems that you might encounter during the installation and operation of your 802.11b WLAN P3 PCMCIA Card. Please refer to the desired topics below and read the description to solve your problems.

Remove the 802.11b Wireless LAN P3 PCMCIA Card

Supposed you do not need the 802.11b WLAN P3 PCMCIA Card to establish the wireless connectivity for any reason, you can directly unplug and remove your 802.11b Wireless LAN P3 PCMCIA Card from the PCMCIA slot on your computer. Once the device is removed, the connection to the network stops. Thus, be sure that you have closed all the network applications before processing the removal.

Uninstall RRISM Configuration Utility and the Card's Driver

Prior to starting the uninstalling, please make sure that the utility is closed, and then go along with the procedures below to entirely uninstall **RRISM Configuration Utility** and the card driver.

1. Click on **Start** on the taskbar to select **Programs**.
2. From the **Programs** menu, find **RRISM Configuration Utility**, and then choose **Uninstall RRISM Configuration Utility** from the submenu.
3. Click **OK** to begin removing the driver files from your PC.
4. Follow the on-screen instructions to finish the removal of program.

The 802.11b WLAN P3 PCMCIA Card Does Not Work Properly

If this happens, follow the guidelines below.

- □ Unplug and replug the 802.11b WLAN P3 PCMCIA Card into your PC's PCMCIA slot.
- □ Right-click the **My Computer** desktop icon, and choose **Properties** to open the **System Properties** dialog box. If you are under Windows 98 or Me, choose the **Device Manager** tab, or if your system is Windows 2000 or XP, click the **Hardware** tab, and then choose the **Device Manager** button. In the opened window, find your PCMCIA Card to see if the installation is successful. If you see a yellow exclamation mark beside the item, please go along with the steps below to reinstall the drivers:

1. Uninstall the software and hardware drivers from your PC. (Please refer to the previous topic for details)
2. Restart your computer and repeat the installation procedures as this manual indicated in Chapter 2: Installation.

3.   When finished, open the **Device Manager** window again to verify if the installation is approved. The yellow exclamation mark shall be removed for this time.

If you are using Windows 98, during the installation process, you might be notified with the **Close Program** dialog box after indicating the Windows to install the required files on the Windows 98 CD-ROM.
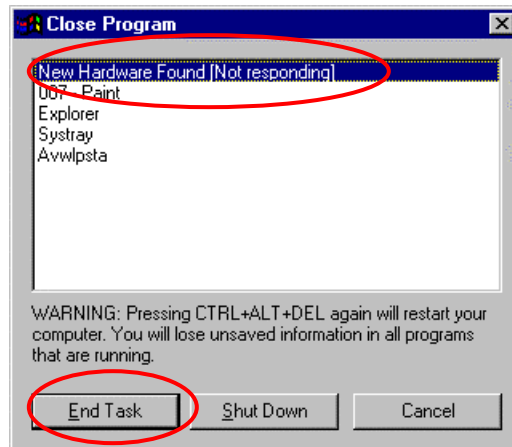

Figure 4-1: The **Close Program** Dialog Box

This is however normal. The dialog box displays a list of all presently active programs. Choose **New Hardware found [Not responding]**, and then click the **End Task** button. Then you can monitor and configure the network via **PRISM Client Utility** according to your needs.

Product Name	802.11b WLAN P3 PCMCIA Card
Model Name	WN-110
Host Interface	PCMCIA PC Card PRISM 3.0
Dimensions	113 x 54 x 5 mm
Weight	39g
Frequency Band	2.400 ~ 2.4835GHz (subject to local regulations)
Number of Channel	11 channels (US, Canada); 13 channels (ETSI); 14 channels (Japan)
Operating Voltage	3.3V ± 5%
Current Consumption	Typ. 240mA, Max. 300mA
Spreading	DSSS (Direct Sequence Spread Spectrum)
Data Rate	11Mbps, 5.5Mbps, 2Mbps, 1Mbps
Transmit Power	<25 mW @ Nominal Temperature Range
Receive Sensitivity	11 Mbps 10^{-5} BER @ -85 dBm, Typical
Modulation	11Mbps and 5.5Mbps CCK; 2Mbps: DQPSK; 1Mbps: DBPSK;
Security	64 bit WEP Encryption (Optional: 128 bit)
Antenna	Internal printed antenna supporting diversity
LED Indicator	RF activity
Supplied Driver	Windows 98/98SE/2K/Me/XP
Standards	IEEE 802.11b Wi-Fi compliant
Media Access Protocol	CSMA/CA with ACK
Warranty	1 year
Temperature Range	0~55°C (Operating), -20~70°C (Storage)
Humidity	Max. 95% Non-condensing
Operating Range	Open Space: 100 – 300m; Indoor: 30m – 100m The transmission speed varies in the surrounding environment.
Roaming	Full mobility and seamless roaming from cell to cell and across access points
Network Protocol	TCP/IP, IPX, NetBEUI
Management Utility	Link Configuration for network join and diagnostics
EMC certification	FCC part 15B, 15C; CE
CIS	Customer Define