

## Wireless PCMCIA card

# Installation Guide

For OEM integrator

### **Federal Communications Commission (FCC) Compliance Notice: Radio Frequency Notice**

This device, Wireless PCMCIA Card (LM-WP210RB), must be installed and used in strict accordance with the manufacture's instructions as described in the user documentation that comes with the product.

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.

Note: 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 or more of the following measures: (1) Reorient or relocate the receiving antenna, (2) Increase the separation between the equipment and receiver, (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected, (4) Consult the dealer or an experienced radio/TV technician for help.

**Warning:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.



**CAUTION:**

This device is intended only for OEM integrators under the following conditions:

1. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna (installed to end product) shall not be less than 20 cm (8 inches) during normal operation.
2. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

As long as the 2 conditions above are met, further transmitter testing will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emission, PC peripheral requirements, etc.).

Additional Information that Must be Provided to OEM Integrators:

The end user should NOT be provided any instructions on how to remove or install the device.

**IMPORTANT NOTE.**

1) In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

2) To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."

**End Product Labeling**

This transmitter module is authorized only for use in devices where the antenna may be installed such that 20 cm may be maintained between the antenna and users (for example access points, routers, wireless ASDL modems, and similar equipment). The final end product must be labeled in a visible area with the following: "Contains TX FCC ID:

**PD5LMWP210RB**

**Technical Support**

DELTA PRODUCTS CORPORATION

5105 Davis Dr. • P.O. Box 12173

Research Triangle Park, NC 27709

Internet: <http://www.deltaww.com>

Tel: 919-767-3905

Fax: 919-767-2405

E-mail: [yjhuang@deltartp.com](mailto:yjhuang@deltartp.com)

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## Introduction

The Wireless PC card helps you create a wireless network for sharing your broadband cable or DSL internet access among multiple PCs in and around your home or office. It is designed for notebook computers running Microsoft Windows 98, 2000, NT, Millennium and XP. It is 16-bit PCMCIA and 32-bit CardBus compatible and works in any available PCMCIA or 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 Intersil Prism2.5 chip sets
- Advanced Power Management Features Conserve Valuable Notebook PC Battery Life
- 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 98, Millennium, NT v.4, 2000 and XP

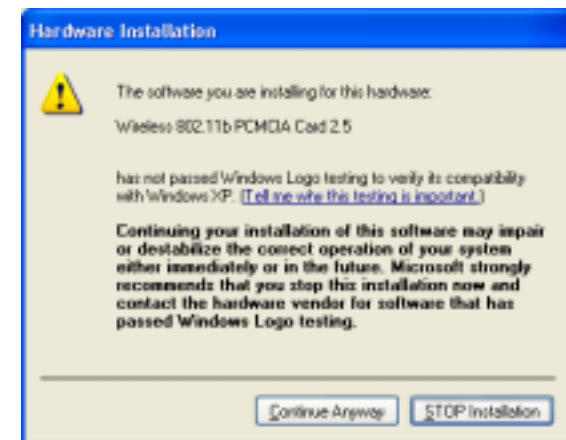
## Driver Installation

### Install Driver Under Windows XP

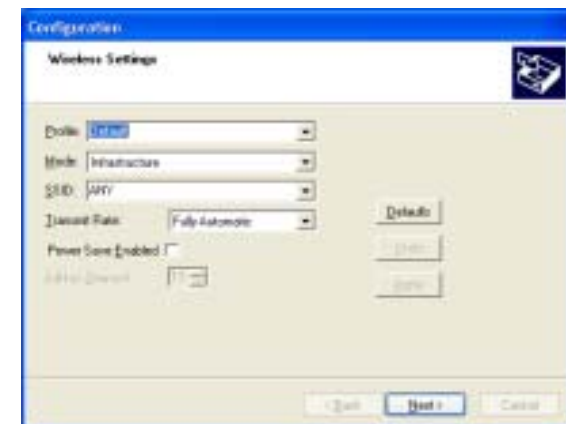
1. Connect the Wireless PC card into your Notebook PC. Windows XP will automatically recognize a new **Wireless 802.11b PCMCIA Card 2.5**. Select **Install the software automatically [Recommended]** and click the **Next** button to proceed.



2. 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.



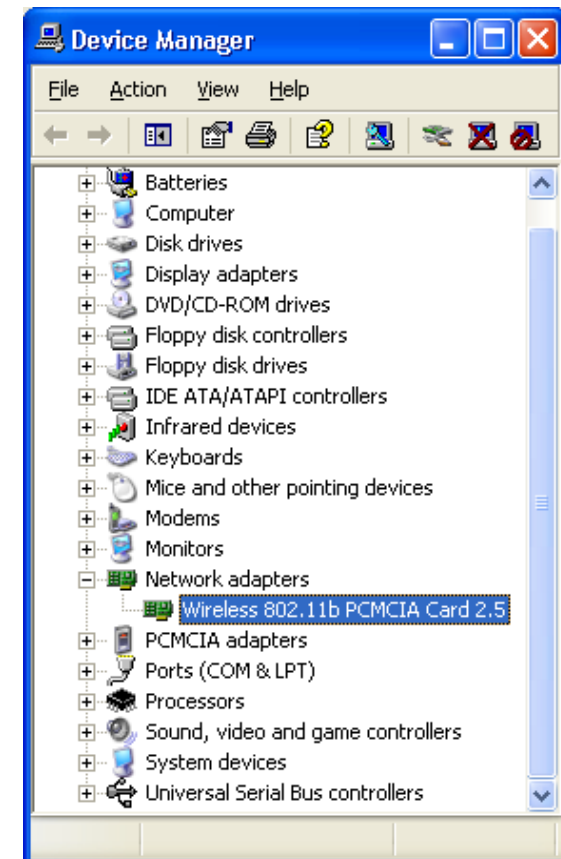
3. At this point, the **Configuration** screen appears. Configure the PCMCIA card and then click the **OK** button.



4. On the Encryption screen, set the WEP. Windows has now completed installing the network. Click the **Finish** button to continue.

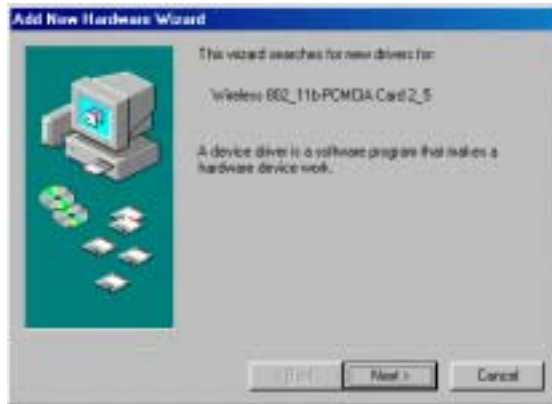


5. Click right on **My computer** and select **properties**. Select **Device Manager** and click on the **Network adapters**. You will find the **Wireless 802.11b PCMCIA Card 2.5** if it is installed successfully. The PC card adapter driver installation is finished.



## Install Driver Under Windows 98

1. Connect the Wireless PC card into your Notebook PC. Windows 98 will automatically recognize a new **Wireless 802\_11b-PCMCIA Card 2\_5**. Click the **Next** button to proceed.



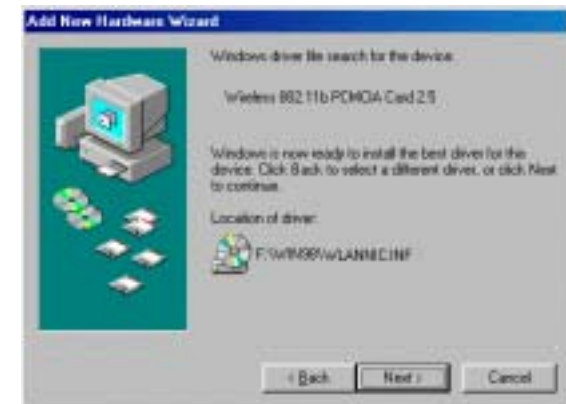
2. Make sure **Search for the best driver for your device** is selected and click the **Next** button.



3. Make sure the **Specify a location** is selected and click the **Browse** button. At this point, Windows will ask you to browse for the folder. Simply select the folder in which the driver is located and click the **OK** button.



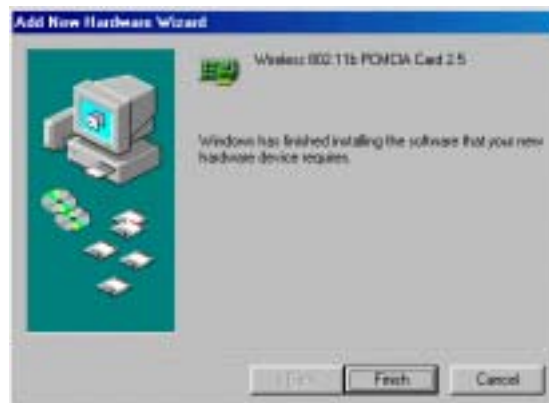
4. Windows is now ready to install the driver. Click the **Next** button to continue.



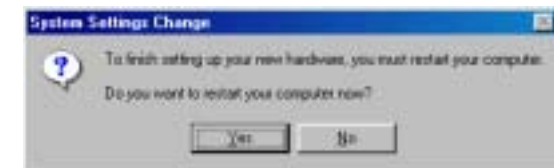
5. At this point, the Properties screen appears. Configure the PCMCIA card and then click the **OK** button.



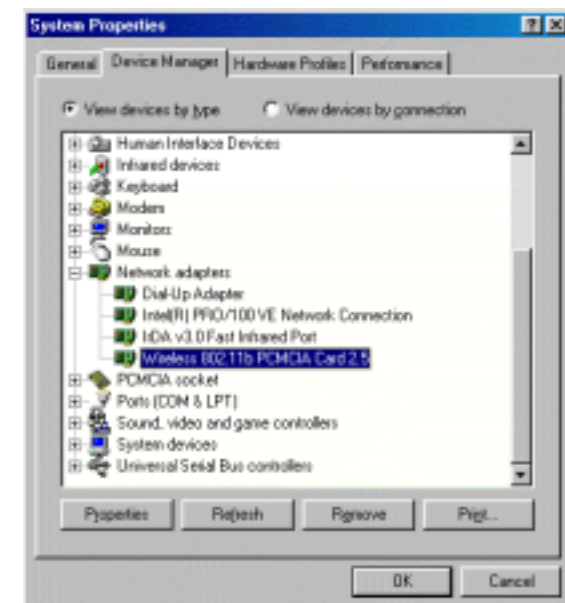
6. Windows has now completed installing the network. Click the **Finish** button to continue.



7. After installing the drivers, the **System Setting Change** screen will show you that installation is complete. Click the **Yes** button to finish.



8. Click right on **My computer** and select **properties**. Select **Device Manager** and click on the **Network adapters**. You will find the **Wireless 802.11b PCMCIA Card 2.5** if it is installed successfully. The PC card adapter driver installation is finished.



## Install Driver Under Windows ME

1. Windows automatically recognizes a new PC Card added. Select **Automatic search for a better driver [Recommended]** and click the **Next** button to proceed.



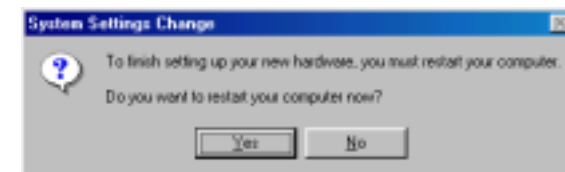
2. At this point, the Properties screen appears. Configure the PCMCIA card and then click the **OK** button.



3. Windows will notify that installing has been completed. Click the **Finish** button to continue.

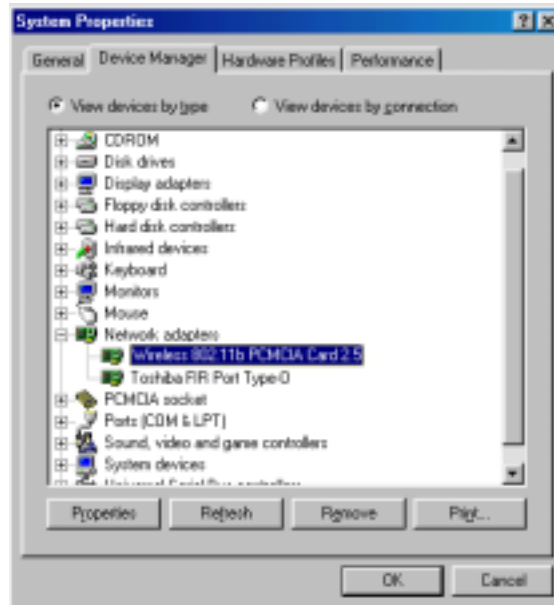


4. Windows will now ask you to restart your computer. Click the **Yes** button to restart.





5. To verify the driver installation, Move cursor on “**My computer**” icon and click the right button of the mouse. Select the **properties**. The System Properties windows shows. Click the **Network adapters** on the Device Manager folder. **Wireless 802.11b PCMCIA Card 2.5** will be found if the driver installation is successful.

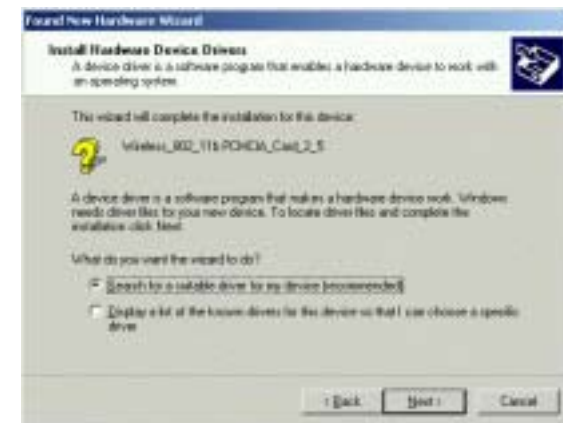


## Install Driver Under Windows 2000

1. Windows 2000 will automatically recognize the PC Card, once it is connected to the PC, and prompt you to install the necessary driver. Click the **Next** button to proceed.



2. Select **Search for a suitable drive** and click the **Next** button. This will search for the Windows 2000 driver.



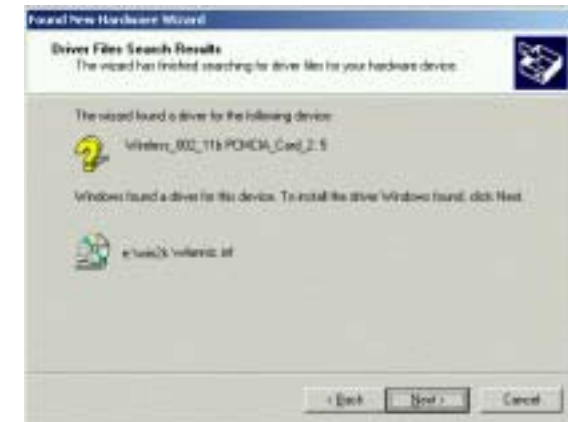
3. Select **Specify a location** and click the **Next** button.



4. In the field, type the folder in which the driver files are located and then click the **Next** button.



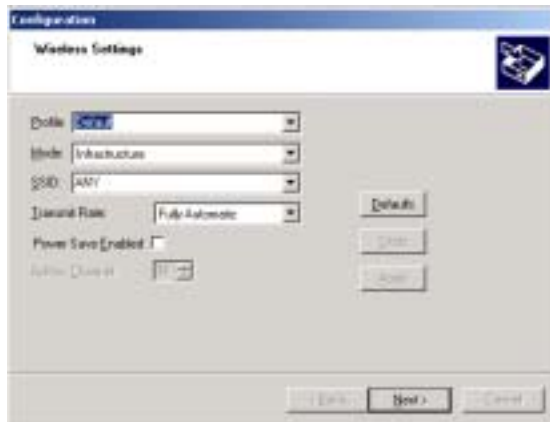
5. Windows will now search for the driver. After Windows acknowledges finding the driver, click the **Next** button.



6. 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.



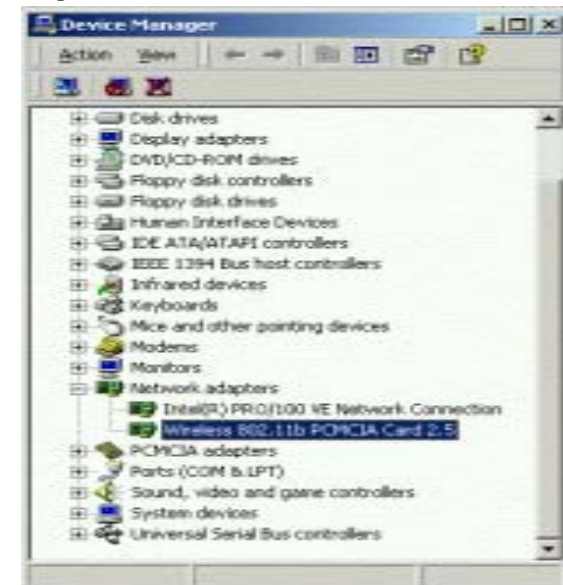
6. The Configuration screen appears. Configure the PCMCIA card and then click the **OK** button.



7. Set the WEP on the Encryption screen. Windows will now install the driver files. Click the **Finish** button when completed.



8. Click right on **My computer** and select **properties**. Select **Hardware** and select **Device Manager** and click on the **Network adapters**. You will find the **Wireless 802.11b PCMCIA Card 2.5** if it is installed successfully. The PC card adapter driver installation is finished.



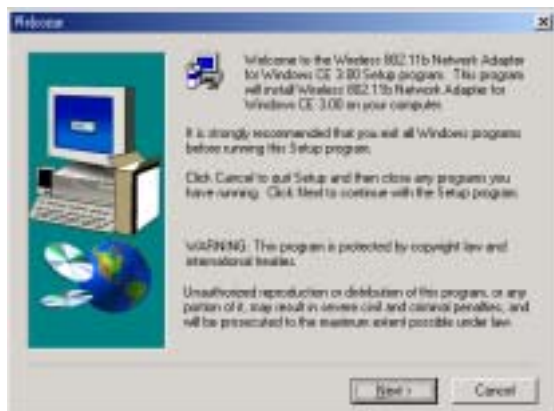
## Install Driver Under Windows CE

The PCMCIA card driver is installed with configuration utility automatically while the PCMCIA card is installed on your PDA.

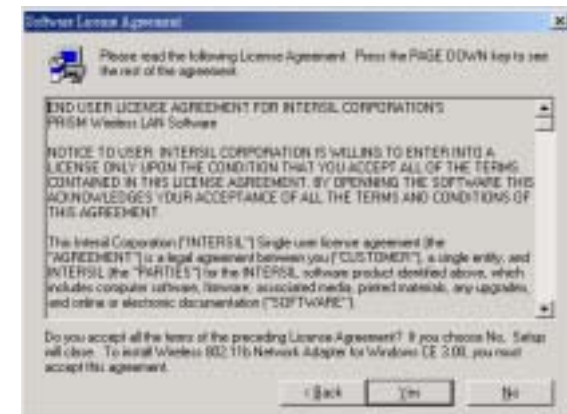
1. With the PCMCIA card inserted into your PDA while your PDA is connected to your PC, insert the Setup CD into your CD-ROM drive. Execute the Setup.exe file of the CD-ROM drive. Wireless 802.11b Network Adapter Driver for Windows CE 3.00 – InstallShield Wizard screen appears. Click the **Next** button to proceed.



2. The following screen will indicate that Windows is ready to continue the installation. Click the **Next** button.



3. Software License Agreement screen appears. Read the entire agreement by clicking the **Page Down** button on your keyboard. Click the **Yes** button if you agree, or **No** if you disagree. Clicking **No** will terminate the installation. If you click **Yes**, the installation will continue.



4. Click the **Yes** button to use the default application install directory.



5. Check your PDA and then click the **Yes** button.



6. Once the installation wizard is complete, click the **Finish** button.



## Configure the Configuration Utility

### STATUS

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

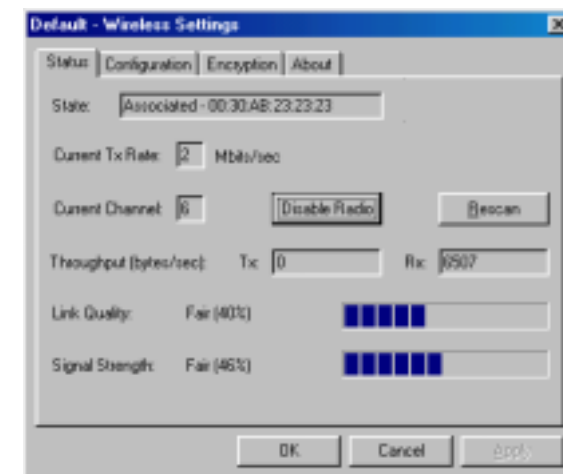
The **Current Channel** field shows to what channel the PC Card is set.

The **Current Tx Rate** field shows the transfer rate in megabits per second.

The **Throughput** fields show the rate at which data is transferred and received in Bytes per second.

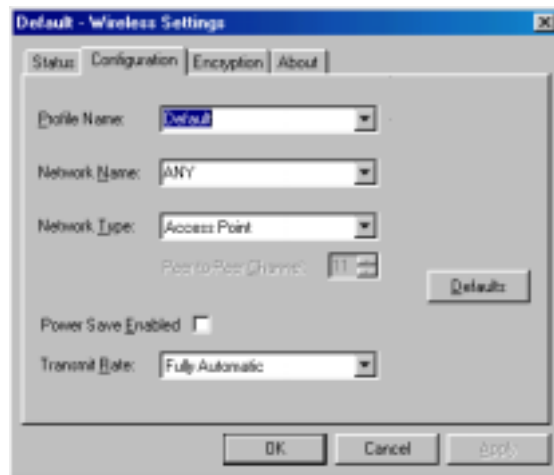
The **Link Quality and Signal Strength** fields will be displayed by the strength of the block when applicable.

The **Disable Radio** button is to disable the Radio signal.



## CONFIGURATION

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



The **Network Type** setting determines the architecture of your wireless network. Select **Peer-to-Peer** or **Access Point** mode depending on your network type. The **Peer-to-Peer** mode is used for a simple Ad-hoc network and allows the sharing of local resources only between PC Cards without needing a wireless Access Point. The **Access Point** 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 Name** is the unique name shared among all points in a wireless network. The Network Name must be identical for all points in the network. It is case sensitive and must not exceed 32 characters.

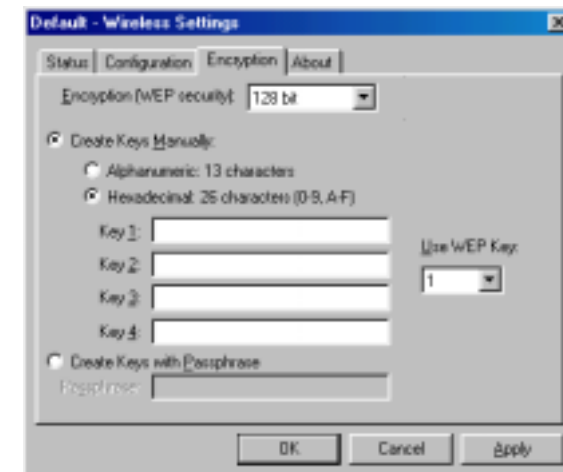
The **Transmit Rate** field shows the current transfer rate for the PC Card. To optimize performance and range, the Transmit Rate should be set to **Fully automatic**, which will automatically adjust the transfer speed for best performance and longest range.

**Power Saving Enabled**, enables or disables the power saving features of your PC Card. This setting can only be enabled or disabled in Infrastructure mode.

The **Peer-to-Peer Channel** setting specifies the channel used in wireless communication in AdHoc mode and should be set to the same channel as the other points in the wireless network.

## ENCRYPTION

The 64/128-bit WEP keys can be generated from a user-defined passphrase.



The **Passphrase** can be any text string with a maximum of 127

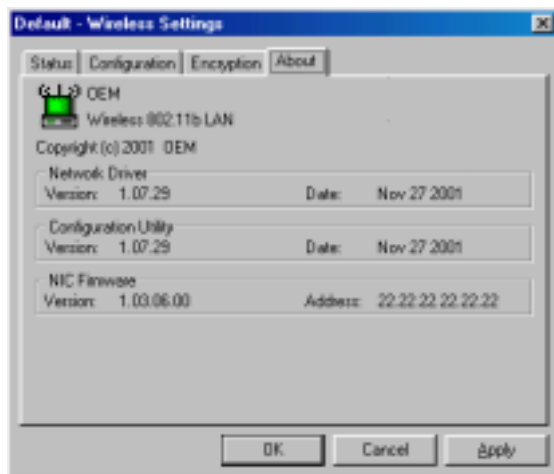
characters.

WEP must be enabled from the Configuration screen in order to set the 64/128-bit key. To generate an encryption key:

1. Type exactly the same case sensitive PassPhrase in the PassPhrase field.
2. **Alphanumeric** will transfer the 5 characters to ASCII code.
3. Click the **Apply** button to create the encryption key. The Passphrase generates four unique keys.
4. Make sure that the Default Key is the same for each point on the network.

## ABOUT

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



## Installation for Access Point Manufacturer

Align the wireless LAN card toward the PCMCIA slot of Access Point. Push evenly and steadily until it is seated.

