

# Wireless PC Card

## User Manual

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

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.

#### 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.

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

- 1) The antenna must be installed such that 20 cm is maintained between the antenna and users,
- 2) The transmitter module may not be co-located with any other transmitter or antenna.

As long as 2 conditions above are met, further transmitter test 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 emissions, PC peripheral requirements, etc.).

**IMPORTANT NOTE:** 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.

#### End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users (for example access points, routers, wireless ADSL modems, and similar equipment). The final end product must be labeled in a visible area with the following: "Contains TX FCC ID: PD5LMWP200A."

#### Manual Information That Must be Included

The users manual for end users must include the following information in a prominent location " **IMPORTANT NOTE:** 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."

## TABLE OF CONTENT

|   |           |
|---|-----------|
| <b>INTRODUCTION .....</b>                                       | <b>1</b>  |
| <b>CONNECT THE NETWORK PC CARD TO YOUR<br/>NOTEBOOK PC.....</b> | <b>2</b>  |
| HARDWARE INSTALLATION .....                                     | 2         |
| <b>DRIVER INSTALLATION.....</b>                                 | <b>2</b>  |
| INSTALL DRIVER UNDER WINDOWS XP .....                           | 2         |
| INSTALL DRIVER UNDER WINDOWS 98 .....                           | 5         |
| INSTALL DRIVER UNDER WINDOWS ME .....                           | 9         |
| INSTALL DRIVER UNDER WINDOWS 2000 .....                         | 11        |
| INSTALL DRIVER UNDER WINDOWS NT .....                           | 15        |
| <b>CONFIGURATION UTILITY .....</b>                              | <b>30</b> |
| INSTALL THE CONFIGURATION UTILITY .....                         | 30        |
| CONFIGURE THE CONFIGURATION UTILITY .....                       | 33        |

## 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 HFA3841/HFA3842 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) 40-bit data encryption  
Driver Supports Windows 98, Millennium, NT v.4, 2000 and XP

## Connect the Network PC Card to Your Notebook PC

### Hardware Installation

- Locate an available Type II PCMCIA slot on your notebook computer.
- With the PCMCIA adapter's 68-pin connector facing the PCMCIA slot and the "Network PC Card" label facing up, slide the PCMCIA adapter completely into the PCMCIA slot.
- Insert the driver CD into your CD drive.
- The Hardware Installation is complete.

## Driver Installation

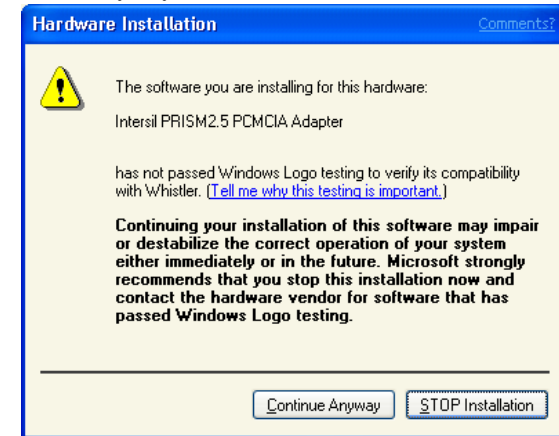
### Install Driver Under Windows XP

1. Connect the Wireless PC card into your Notebook PC. Windows XP will automatically recognize a new **Intersil PRISM\_2\_5\_PCMCIA\_ADAPTER**. Select **Install the software automatically [Recommended]** and click the **Next** button to proceed.

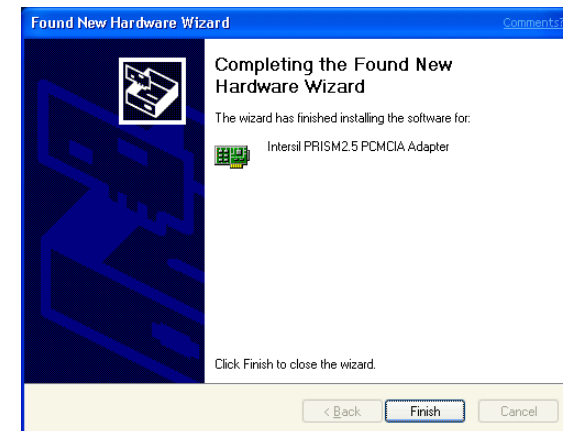


2

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.

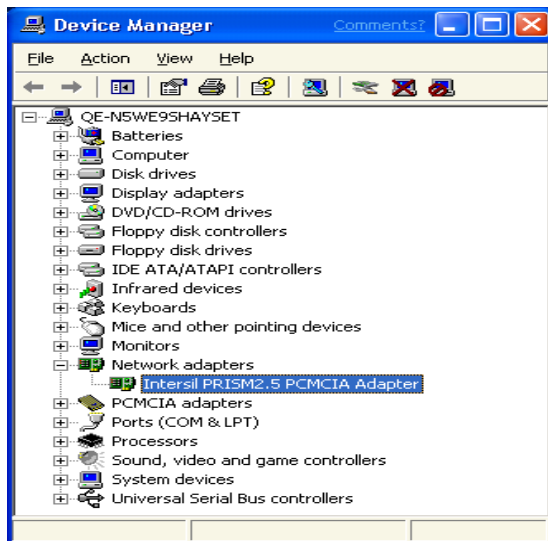


3. Windows has now completed installing the network. Click the **Finish** button to continue.



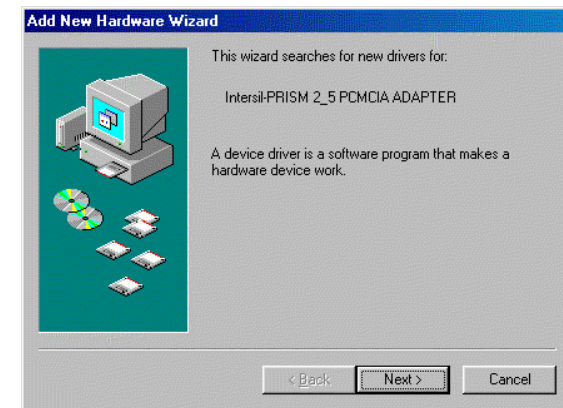
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- Click right on **My computer** and select **properties**. Select **Device Manager** and click on the **Network adapters**. You will find the **Intersil PRISM2.5 PCMCIA Adapter** if it is installed successfully. The PC card adapter driver installation is finished.

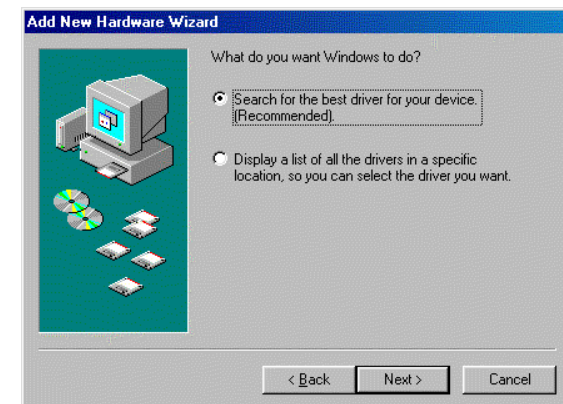


## Install Driver Under Windows 98

- Connect the Wireless PC card into your Notebook PC. Windows 98 will automatically recognize a new **Intersil-PRISM 2\_5 PCMCIA ADAPTER**. Click the **Next** button to proceed.



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



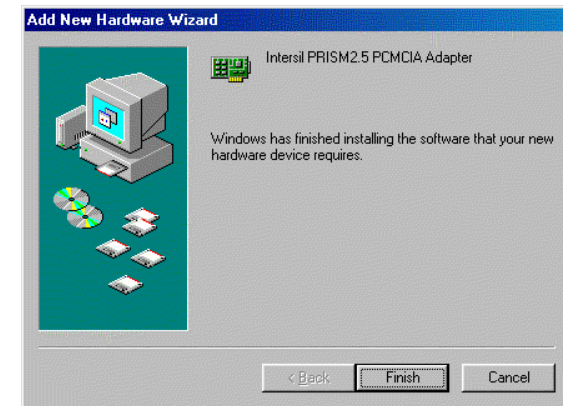
- Make sure the **Specify a location** is selected and click the **Browse** button. At this point, Windows will ask you to browse for the folder. Simply select the folder in which the driver is located and click the **OK** button.



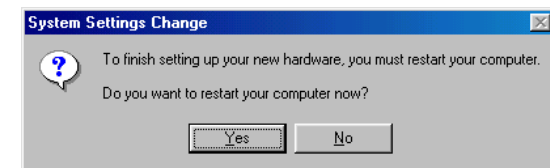
- Windows is now ready to install the driver. Click the **Next** button to continue.



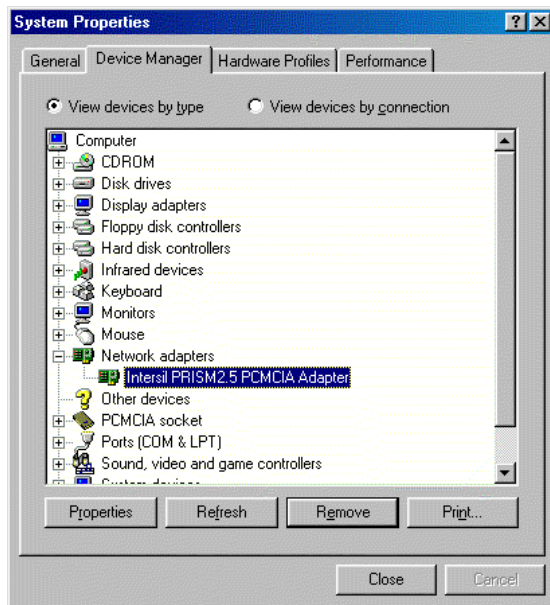
- Windows has now completed installing the network. Click the **Finish** button to continue.



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



- Click right on **My computer** and select **properties**. Select **Device Manager** and click on the **Network adapters**. You will find the **Intersil PRISM2.5 PCMCIA Adapter** if it is installed successfully. The PC card adapter driver installation is finished.



## Install Driver Under Windows ME

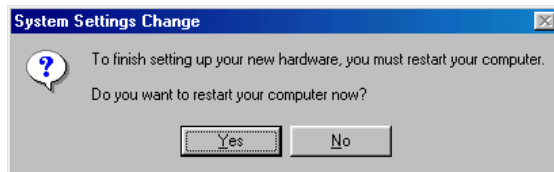
- Windows automatically recognizes a new PC Card added. Select **Automatic search for a better driver [Recommended]** and click the **Next** button to proceed.



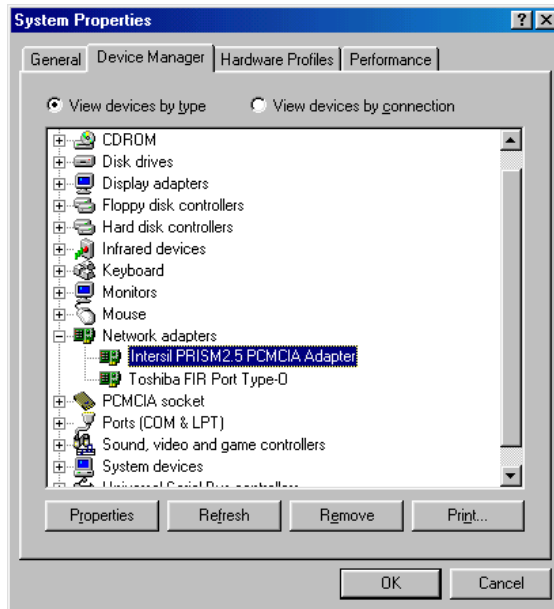
- Windows will notify that installing has been completed. Click the **Finish** button to continue.



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



- 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. **Intersil PRISM2.5 PCMCIA Adapter** will be found if the driver installation is successful.

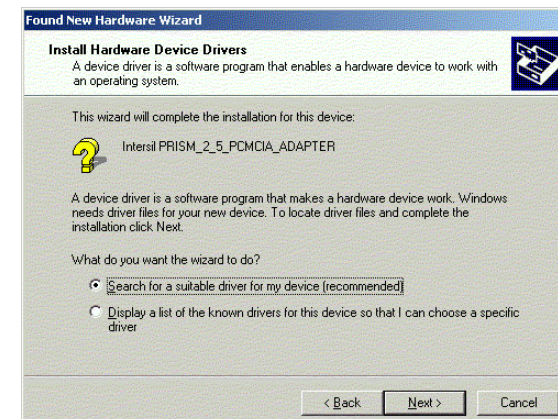


## Install Driver Under Windows 2000

- 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.

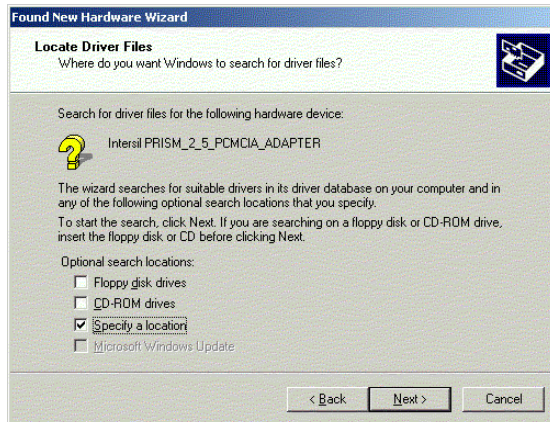


- Select **Search for a suitable drive** and click the **Next** button. This will search for the Windows 2000 driver.





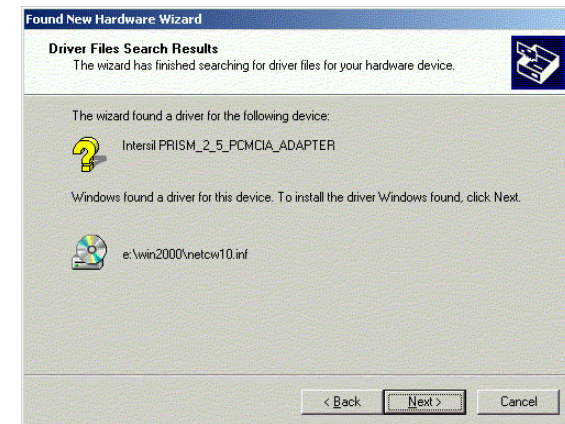
3. Select **Specify a location** and click the **Next** button.



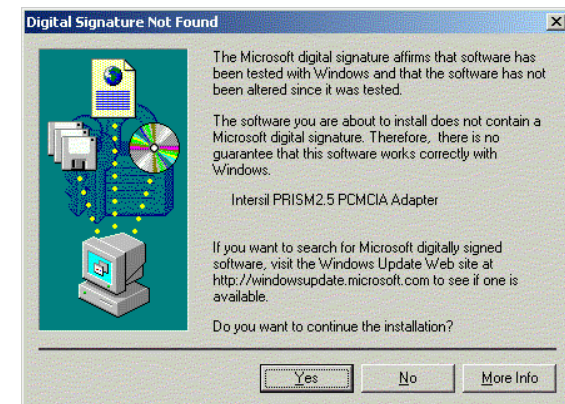
4. In the field, type the folder in which the driver files are located and click the **Next** button.



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.

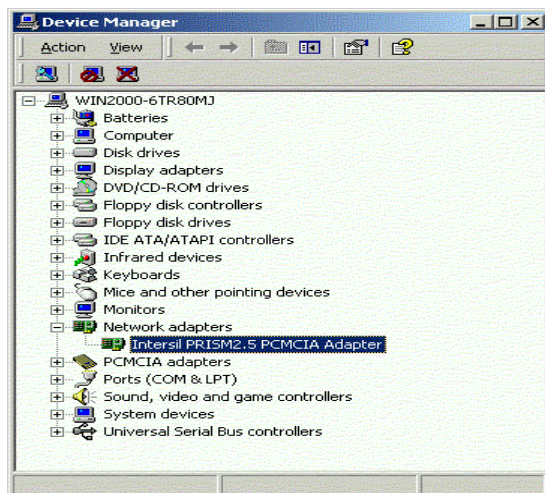




7. Windows will now install the driver files. Click the **Finish** button when completed.



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 **Intersil PRISM2.5 PCMCIA Adapter** if it is installed successfully. The PC card adapter driver installation is finished.

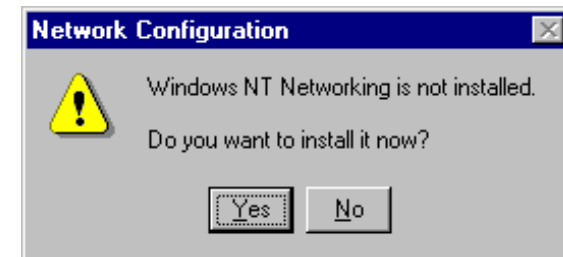


## Install Driver Under Windows NT

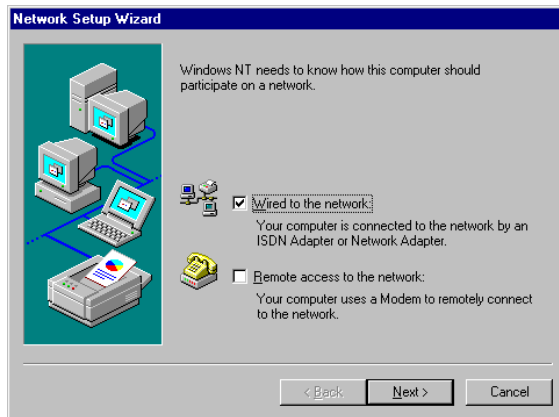
Windows NT will setup the PC Card differently depending upon whether you've previously installed network hardware or not. Please follow the instructions appropriate for you.

### If You Have Never Installed Network Hardware:

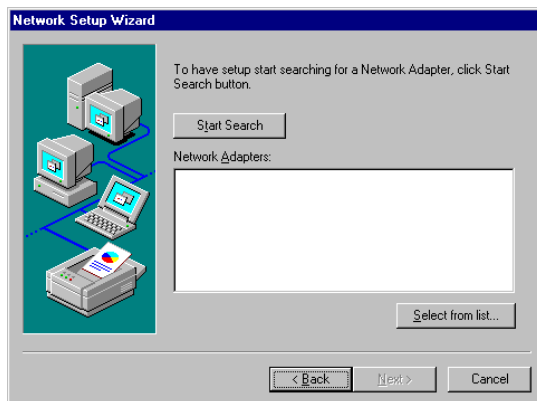
1. Windows NT is not a Plug-and-Play Operating System and will not automatically identify the Network PC Card. To begin setup, select **Settings** from the **Start Menu** and bring up the **Control Panel**. Then double-click on the **Network** icon.
2. Windows will notify you that Networking is not installed. Click the **Yes** button to continue.



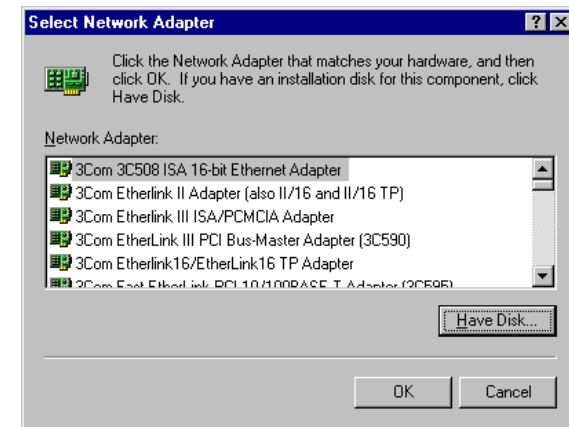
- Installation will begin and you will reach the screen shown below. You will want to select the box that reads **Wired to the network** since you are adding network hardware. Then, click the **Next** button to continue.



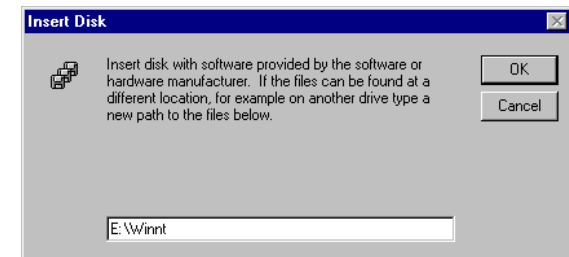
- The next screen will not show any Network Adapters installed on your system, which signifies that no network hardware has been previously installed. You will want to click the **Select from list** button to continue.



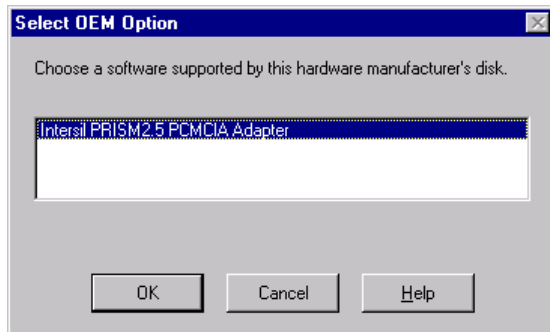
- A list of adapters will appear on the next screen. You will not want to select one of these, however, as your installation CD has all of the appropriate drivers. Click the **Have Disk** button to continue.



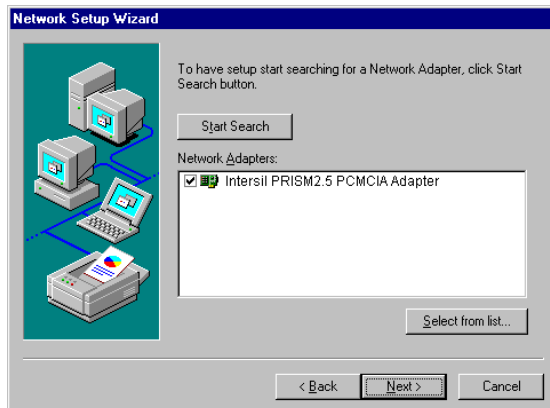
- On the Insert Disk screen, type "E:\Winnt" in the field provided. Then, click the **OK** button to continue.



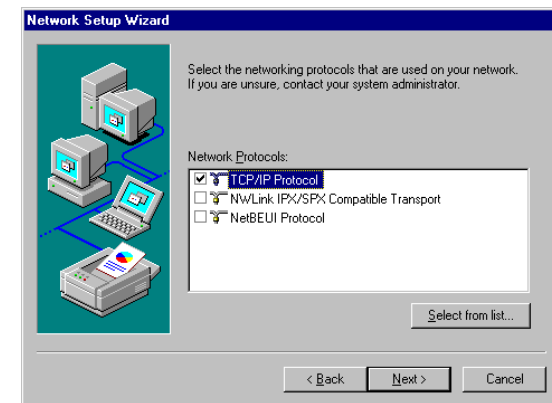
7. The **Select OEM Option** screen will show the **Intersil PRISM2.5 PCMCIA Adapter**. Click the **OK** button to continue.



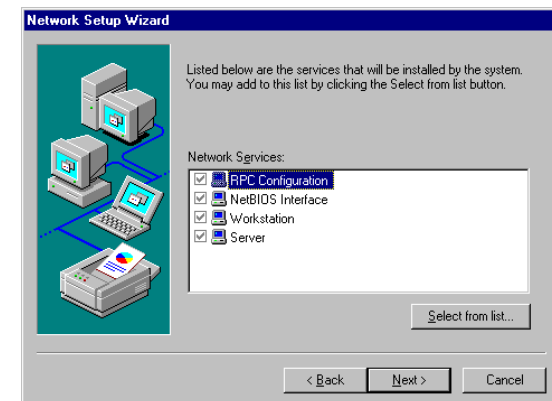
8. On the next screen, make sure there is a check mark in the box beside **Intersil PRISM2.5 PCMCIA Adapter**, and click the **Next** button to continue.



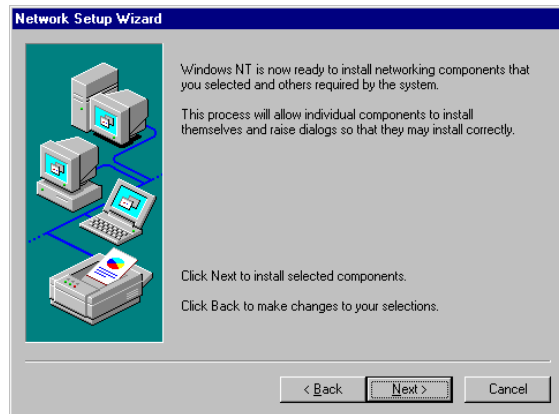
9. The next screen will show a list of network protocols. While the **TCP/IP Protocol** is already selected by default, you should check with your network administrator before installing any network protocols. Click the **Next** button to continue.



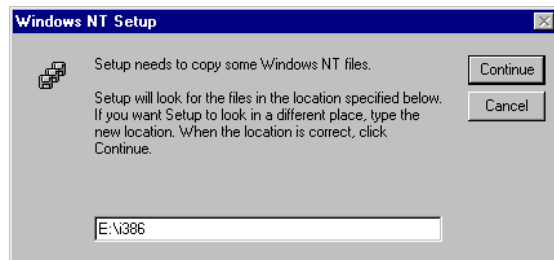
10. On the screen showing Network Services, the selections are automatically made. Simply, click the **Next** button to continue.



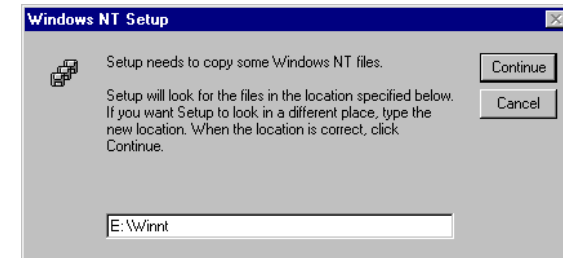
11. At this point, Windows NT will be ready to start installing Networking Components. Click the **Next** button to continue.



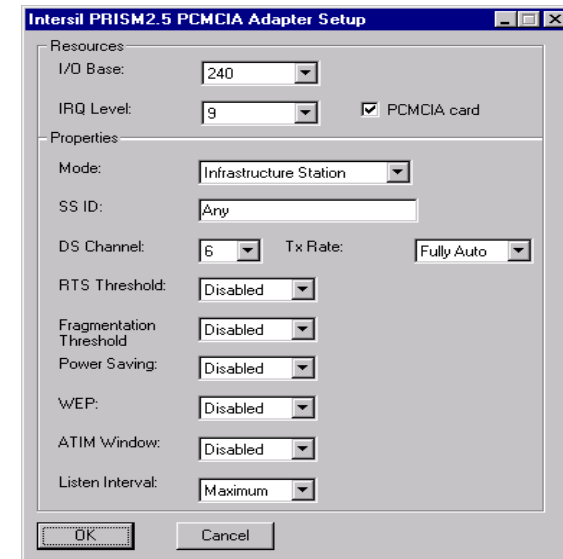
12. Windows NT may request further files at this point. Insert the Windows NT CD into your CD-Rom drive. Type the path in the field and click the **Continue** button.



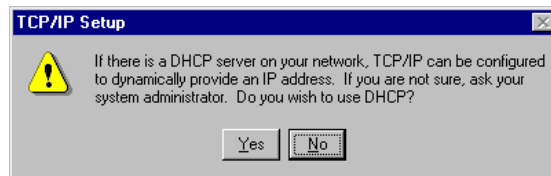
13. If files are still requested, insert your Driver CD into your CD-Rom drive and type the path. Then, click the **Continue** button.



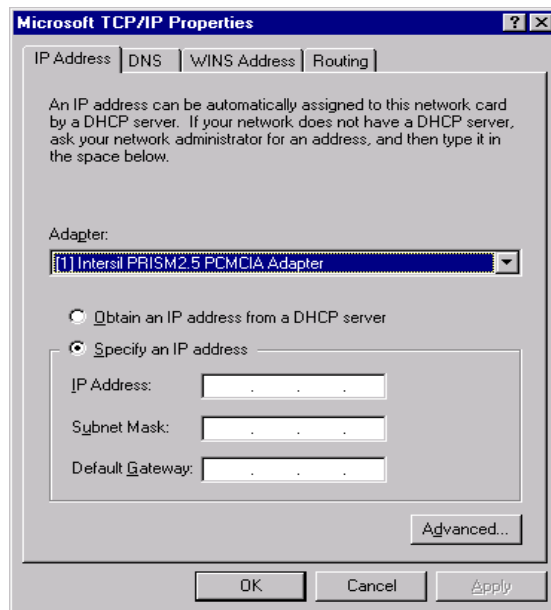
14. You will now reach the screen shown below. This is called the **Resources & Properties** screen. Setting the fields on this screen is covered at the end of this section under the heading **Setting Resource & Properties Fields**. Adjust the settings as appropriate. Insert the Windows NT CD into your CD-Rom drive again and then click the **Continue** button to continue.



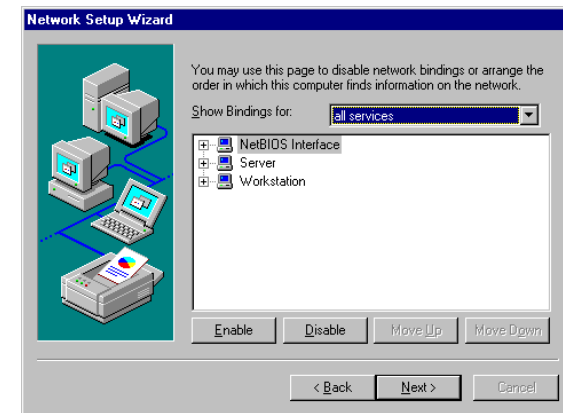
15. After setting the **Resource and Properties** fields, Windows NT will begin installing the network components you previously selected. You may be asked if you would like to configure the protocols with a DHCP server on your network. If this screen comes up, check with your Network Administrator before clicking the **Yes** or **No** button to continue.



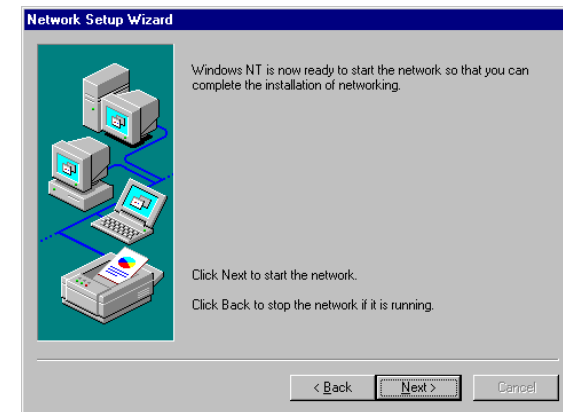
16. Windows will bring you to the **Microsoft TCP/IP Properties** screen. Setting the fields on this screen and then click the **OK** button.



17. Now, the network components will finish installing. You may then see a screen similar to that shown here asking you if you'd like to disable any network bindings. Be sure to check with your network administrator before making **ANY** changes and then click the **Next** button to continue.

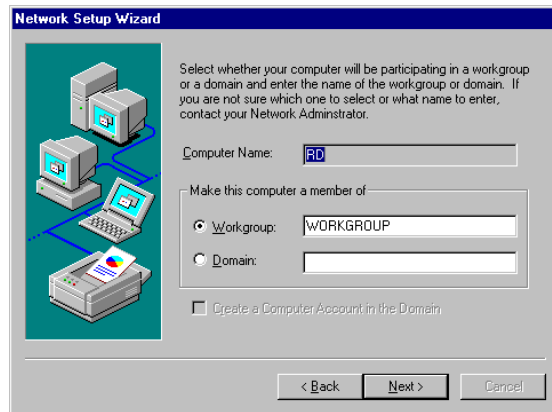


18. At this point, Windows NT will let you know that it is ready to start the network. If you'd like to stop the procedure, click the **Back** button. To continue, click the **Next** button.

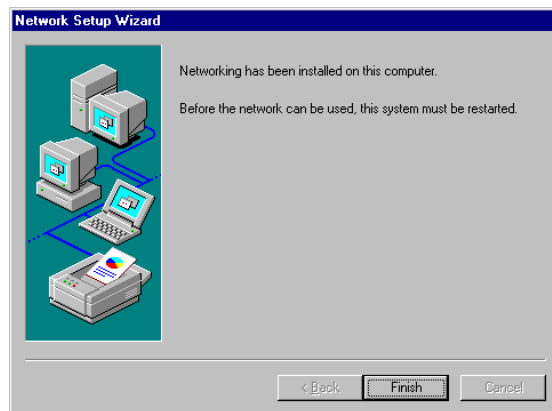




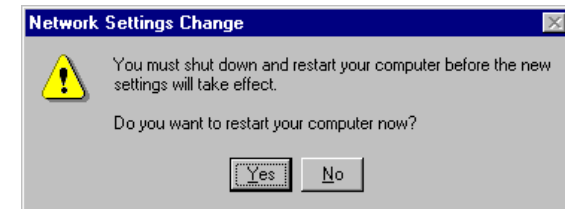
19. At this point, Windows NT will let you know that it is ready to start the network. If you'd like to stop the procedure, click the **Back** button. To continue, click the **Next** button.



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

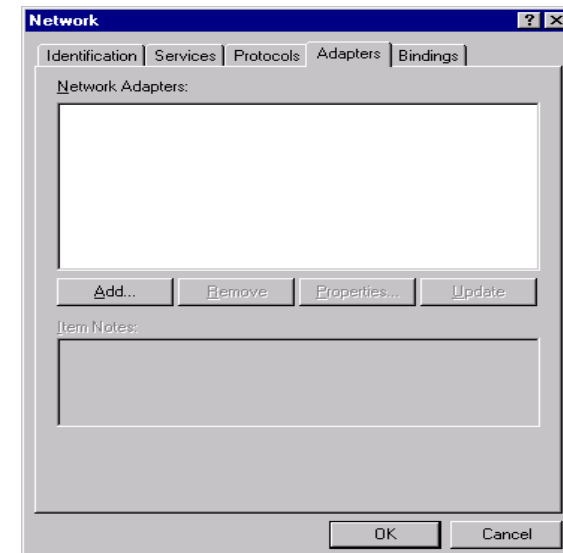


21. Windows will now ask you to restart your computer. Click the **Yes** button to restart.

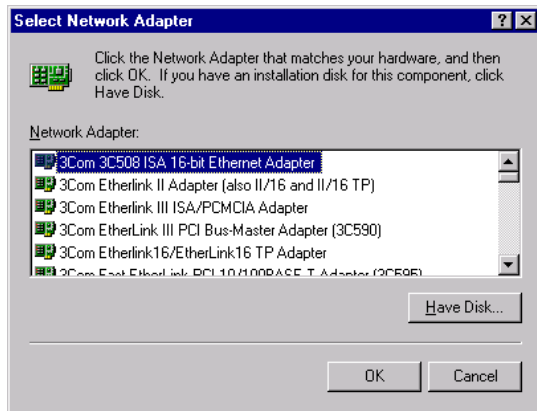


#### If you Have Installed Network Hardware Before:

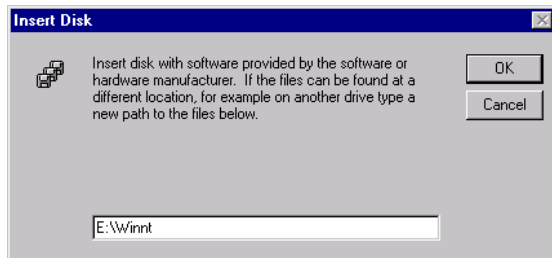
1. Windows NT is not a Plug-and-Play Operating System and will not automatically recognize the PC Card. To begin setup, select **Setting** from the **Start** Menu and Bring up the **Control Panel**. Then double-click on the **Network** icon.
2. To add the Network PC Card, you will want to click the **Adapters** tab and then click the **Add** button to continue.



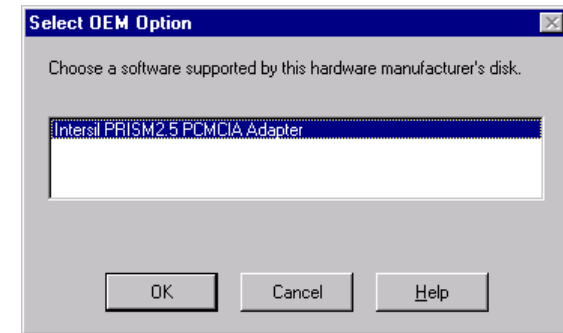
- A list of adapters will appear on the next screen. You will not want to select one of these, however, as your installation CD has all of the appropriate drivers. Click the **Have Disk** button to continue.



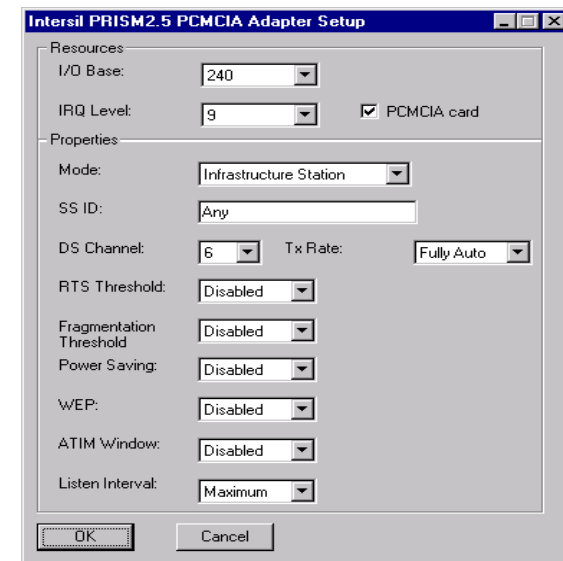
- On the Insert Disk screen, type the path in the field. Then click the **OK** button to continue.



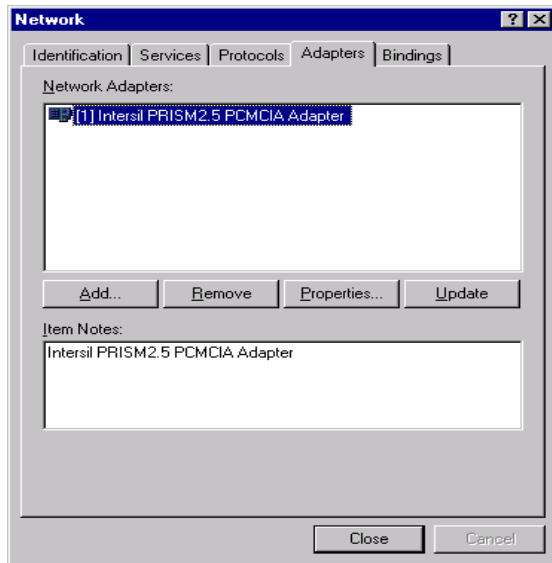
- The select OEM Option screen will show the Intersil PRISM2.5 PCMCIA Adapter. Click the **OK** button to continue.



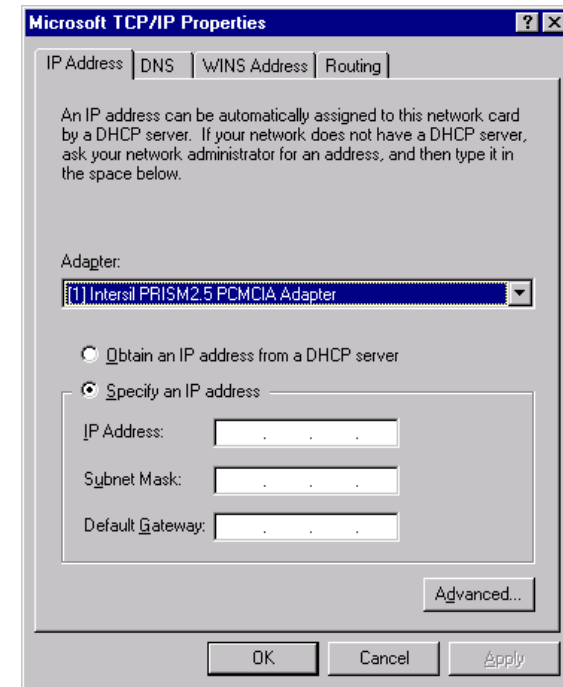
- You will now reach the screen shown below. This is called the **Resources & Properties** screen. Setting the fields on this screen is covered at the end of this section under the heading **setting Resource & Properties** Fields. Adjust the settings as appropriate and click the **Continue** button.



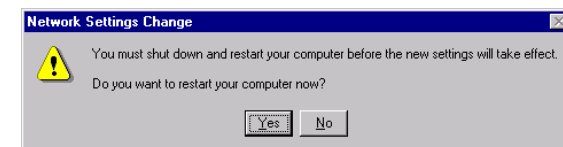
7. The PC Card has now been installed. You will see it added onto this screen. Click the **Close** button to continue.



8. Windows will bring you to the **TCP/IP Properties** screen. Set the fields on this screen and then click the **OK** button.



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

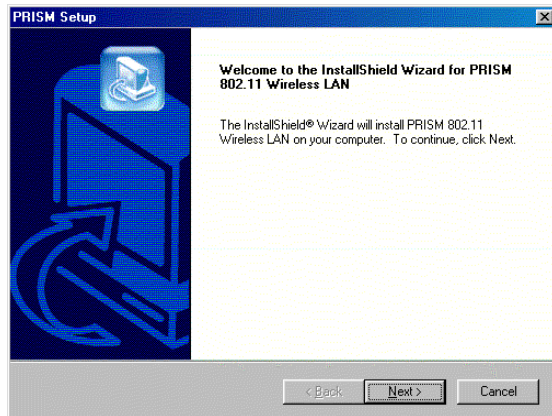


## Configuration Utility

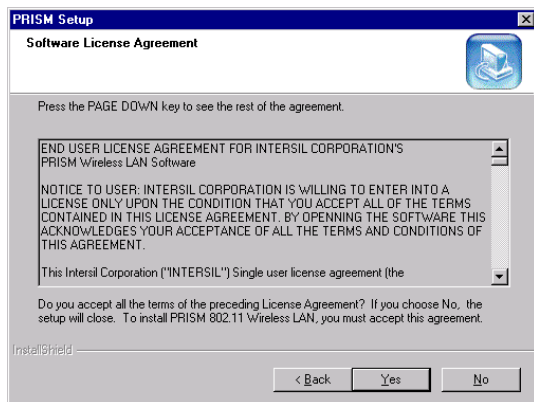
The **Configuration Utility** is provided to allow you further customization of the PC Card adapter and your wireless network.

### Install the Configuration Utility

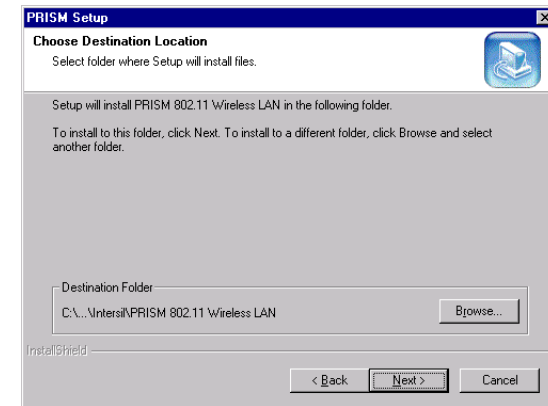
1. Execute the Sepup.exe file of Utility. Windows will bring you to the InstallShield Wizard screen. Click the **Next** button to proceed.



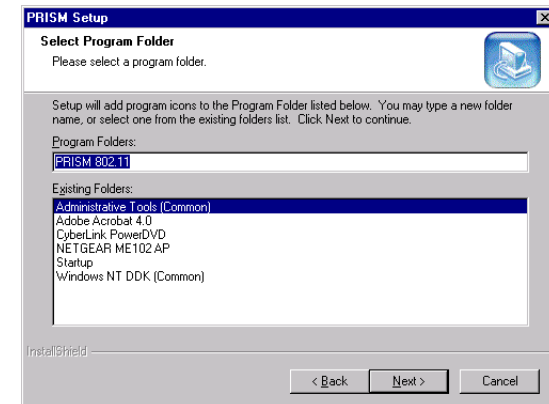
2. Windows will ask you for the Software License Agreement. Click the **Yes** button to continue.



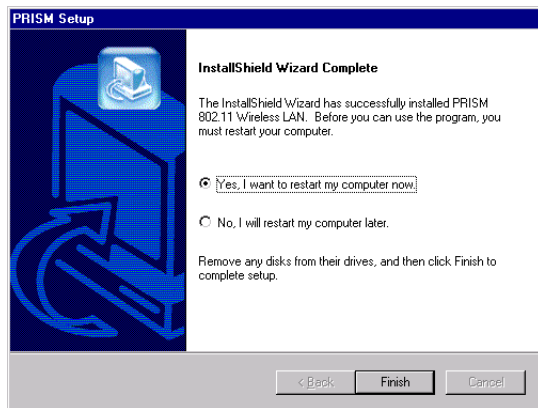
3. At this point, Windows will ask for the destination folder. Click the **Next** button to continue.



4. Windows will ask for program folder, click the **Next** button to proceed.



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



6. After installing the utility's software, installation will be complete. From the **Start** menu, select **PRISM 802.11** and then click **Configuration Utility**. Windows will bring you to the **Wireless LAN Configuration Utility** screen. This Utility is divided into four parts: **Link Info**, **Configuration**, **Encryption**, **About**.

## Configure the Configuration Utility

### LINK INFO

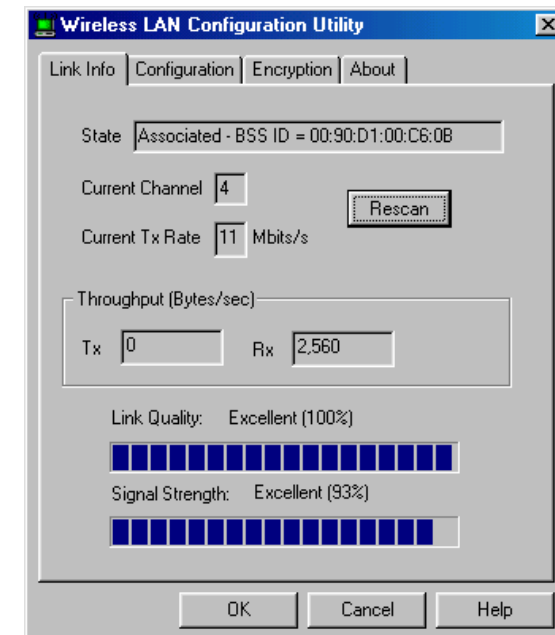
The Link Info screen provides information about the current link between the PC Card and the wireless Access Point.

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.





## CONFIGURATION

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

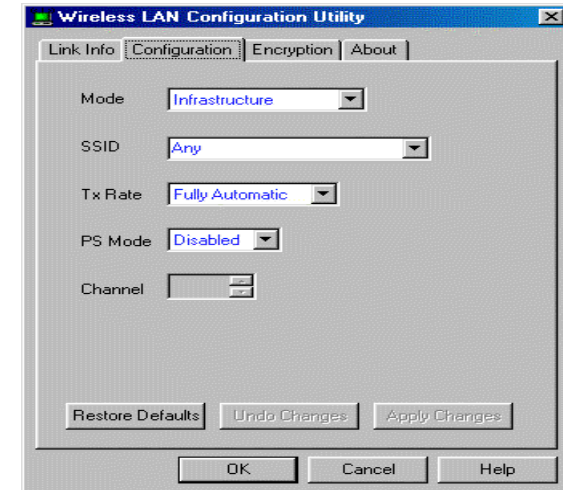
The **Mode** setting determines the architecture of your wireless network. Select **Ad-Hoc** or **Infrastructure** Mode depending on your network type. The Ad-Hoc mode is used for a simple peer-to-peer network and allows the sharing of local resources only between PC Cards without needing a wireless 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 acronym for **S**ervice **S**et **I**dentifier, **SSID** is the unique name shared among all points in a wireless network. The SSID must be identical for all points in the network. It is case sensitive and must not exceed 32 characters.

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

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

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



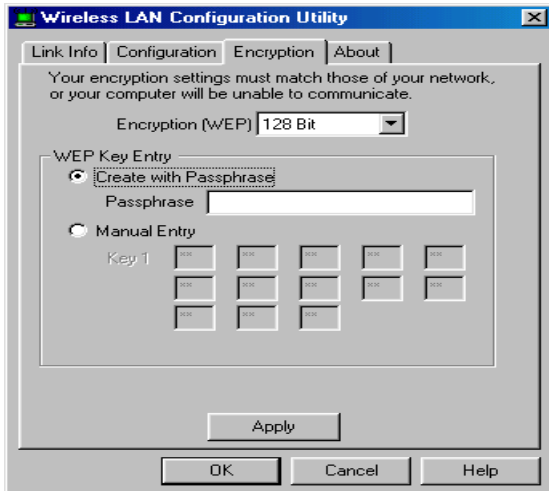
## ENCRYPTION

The 40-bit WEP keys can be generated from a user-defined passphrase.

The **Passphrase** can be any text string with a maximum of 32 characters.

WEP must be enabled from the Configuration screen in order to set the 40-bit key. To generate an encryption key:

1. Type exactly the same case sensitive PassPhrase in the PassPhrase field.
2. Click the **Apply** button to create the encryption key. The Passphrase generates four unique keys.
3. 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.

