Then you will see the Wireless LAN Utility icon in the Windows taskbar:

Using Wireless Utility In Windows XP

Wireless LAN Utility

There are two ways to configure PCI Wireless Network Adapter. One is Wireless LAN Utility; the other one is Windows Wireless Network Configuration.

Use Windows Wireless Network Configuration

1. Click the right key of the mouse and Exit Wireless LAN Utility.

2. Click Windows Wireless Network Configuration icon.

Windows Wireless Network Configuration

3. Click Advanced button.
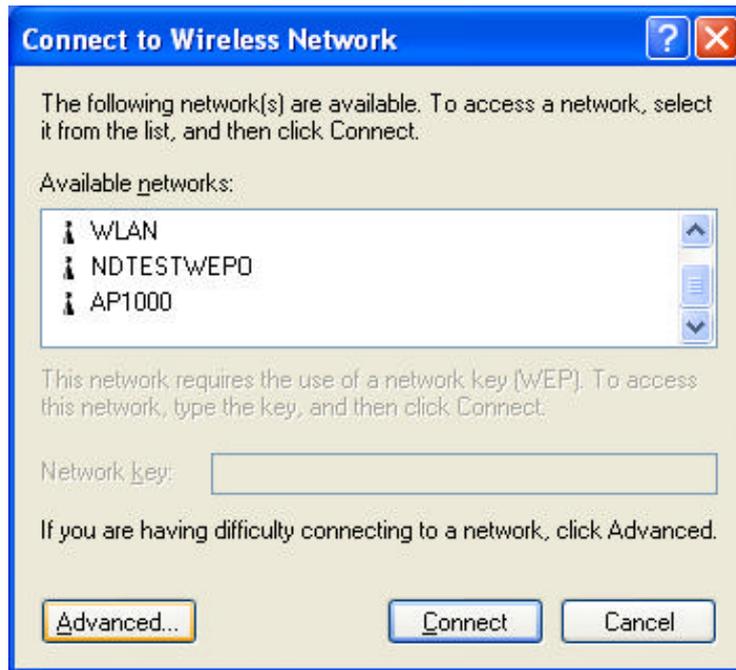
4.   Make sure "Use Windows to configure my wireless network settings" and click OK.
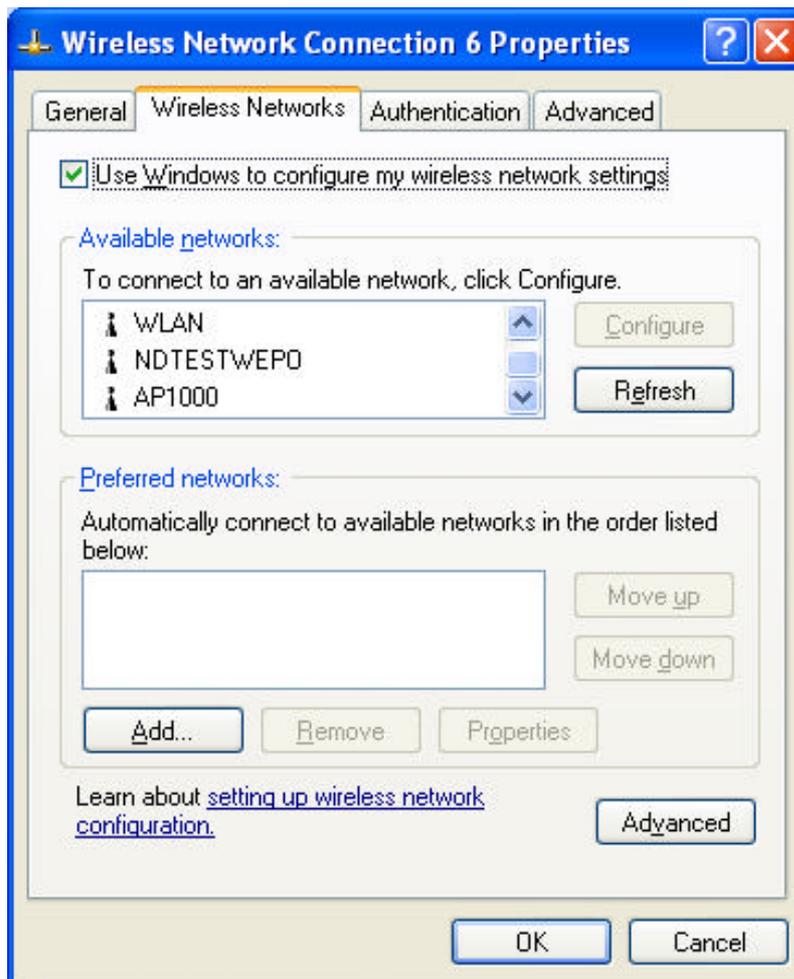
5. Click the Windows Wireless Network Configuration icon again to open the Windows Wireless Network Configuration.

Windows Wireless Network Configuration

6. Select an available network and click Connect button.
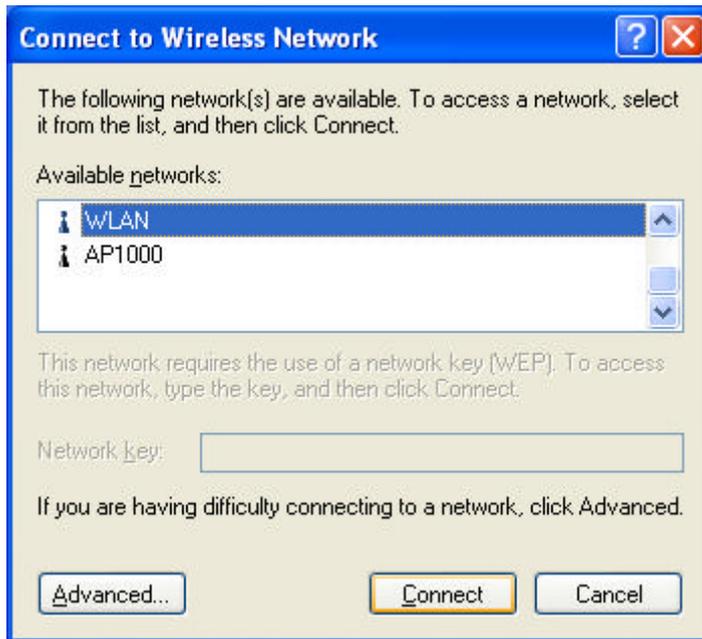
7. The Windows Wireless Network Configuration will be enabled. Click the Windows Wireless Configure icon.

Windows Wireless Network Configuration is enabled

8. Click Properties to start Windows Wireless Network Configuration.
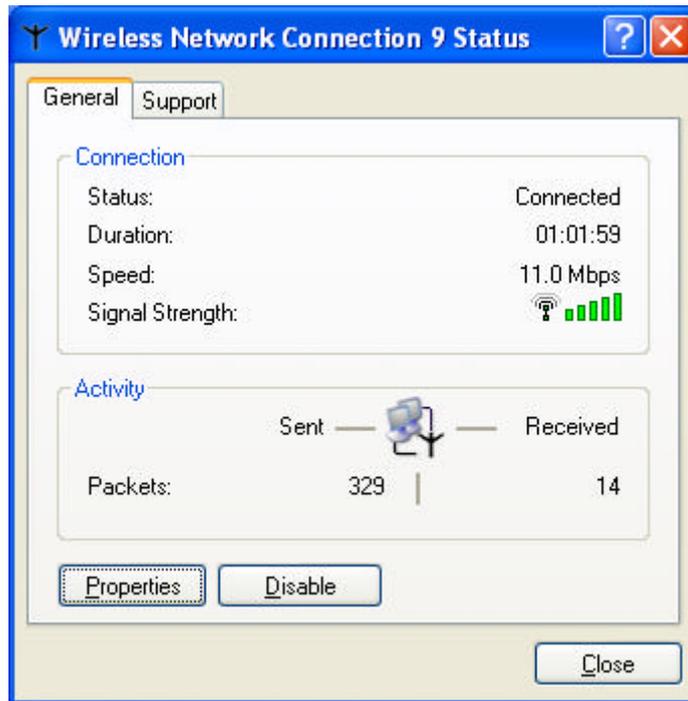
Use Wireless LAN Utility

1. Exit the Wireless LAN Utility.

2. Click Windows Wireless Network Configuration icon.

Windows Wireless Network Configuration

3. Click Advanced button.
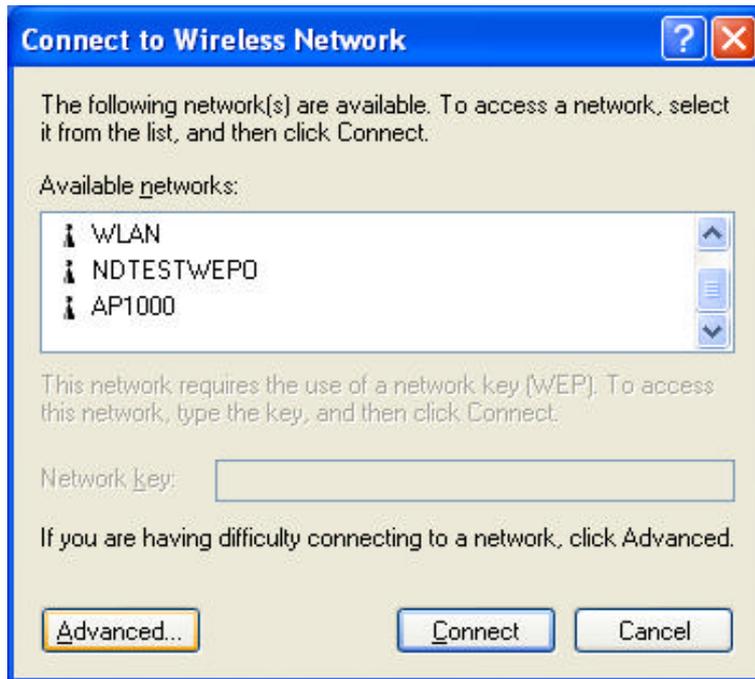
4. Don't select "Use Windows to configure my wireless network settings" and click OK button.
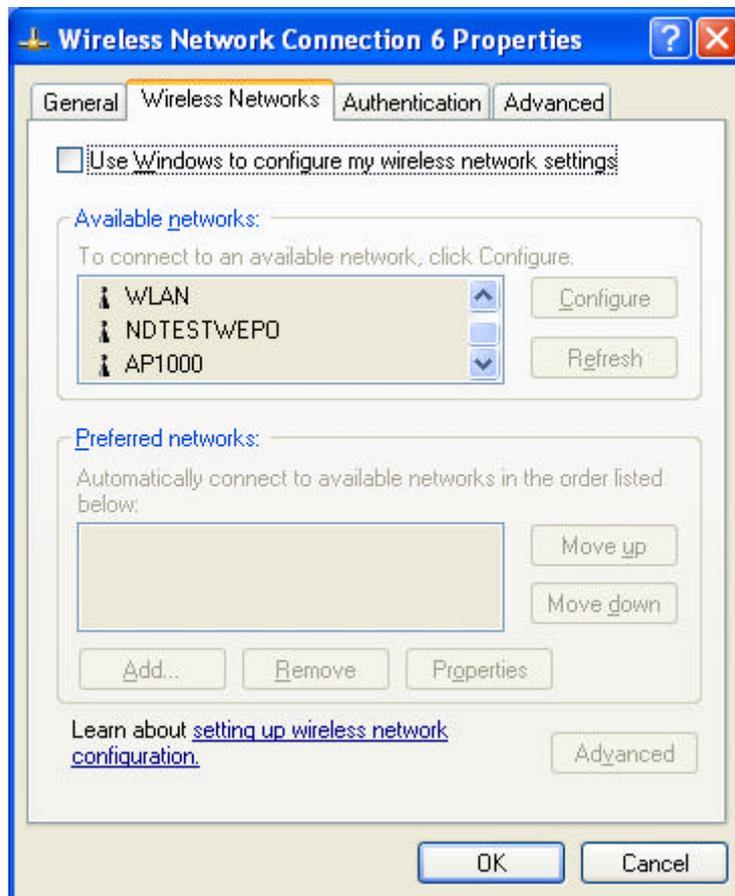
5. Click Start -> All Programs -> IEEE802.11b WLAN PCI Card then click IEEE802.11b WLAN PCI Card Utility to restart the Wireless LAN Utility.

6. The Wireless LAN Utility will appear, Double-click the icon to open the configuration utility.

Wireless LAN Utility

7. Click Re-Scan button to start Wireless LAN Utility. (Refer to Configuring the PCI Wireless Network Adapter.)
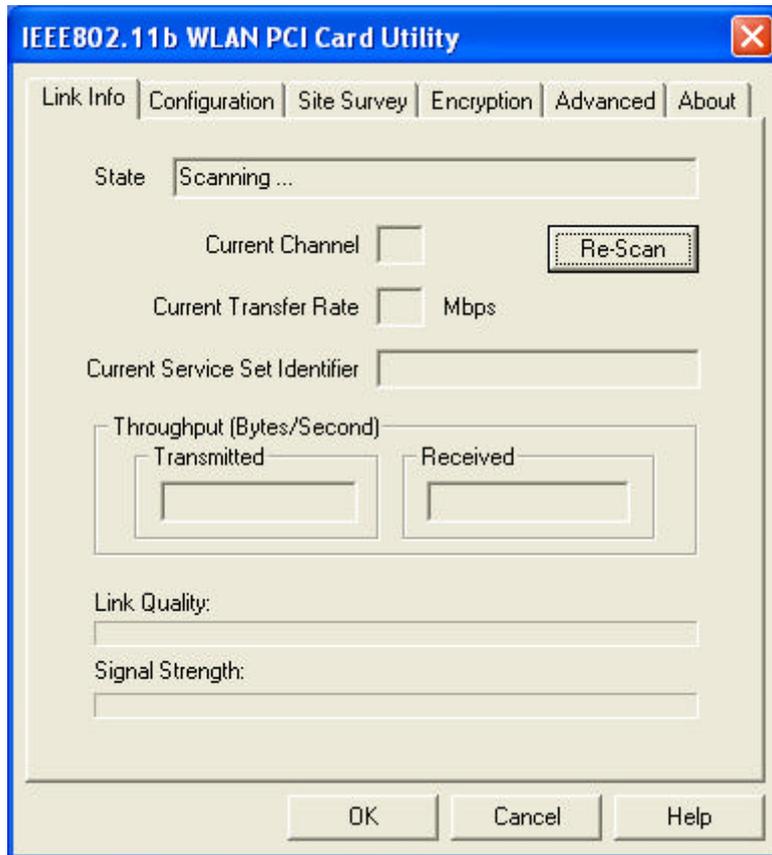
Use Wireless LAN Utility In Windows 95, 98, 2000, NT 4.0 and ME

Wireless LAN Utility icon

Icon	Meaning
	Green: indicates a connection is linked to a wireless network.
	Red: indicates that the wireless LAN card is looking for an available access point.

Double-click the icon to open the Wireless LAN Utility. (Refer to Configuring the PCI Wireless Network Adapter.)

Configuring the PCI Wireless Network Adapter

1. This screen shows you the status of your current connection. Click **Re-Scan** to search for wireless connection (the adapter will search for the connection automatically when it is activated).
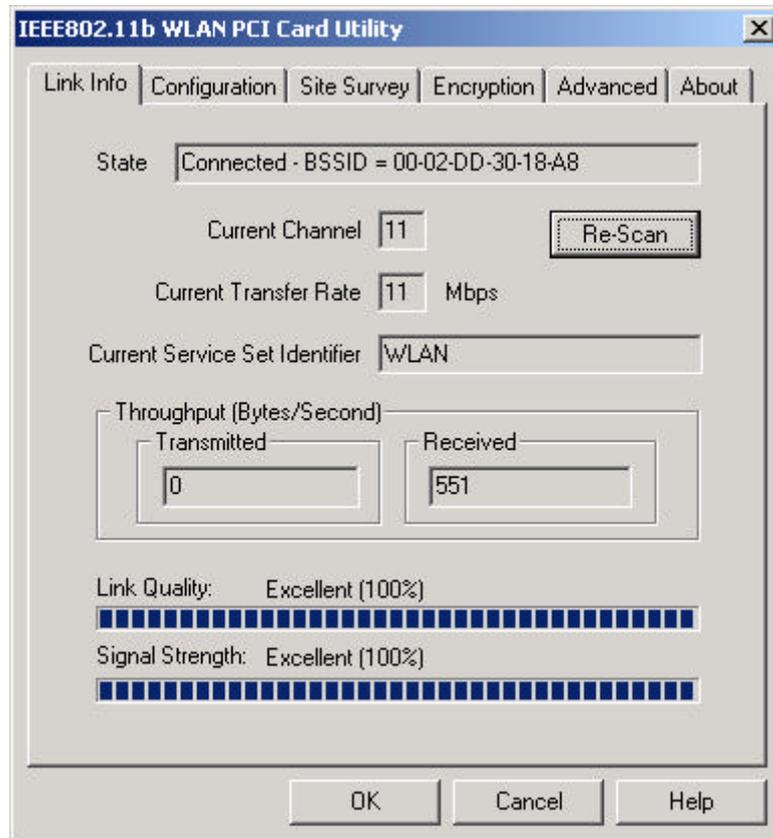
2. Select the "**Configuration**" tab. The **profile** setting allows you to save configurations in different profiles for different working environments. The default profile will contain the initial configuration setting when you install the Card. Under the **Operating Mode** drop-box, you may choose either Infrastructure or Ad-Hoc. The Infrastructure mode allows a wireless adapter to communicate with a wired network employing an Access Point, while the Ad-Hoc mode allows wireless-to-wireless, peer-to-peer communication. If you choose Infrastructure, the **SSID** should have the same name as the Access Point. If you choose **Ad-Hoc**, all clients should share the same **SSID** name. You may also select which **Transfer Rate** you wish to use: **1, 2, 5.5, 11Mbps** or **Auto Rate**. Under **Power Saving Mode**, you can select **Enabled** to allow your adapter to go to sleep mode while the adapter doesn't proceed the data transmission. Or select **Disabled** to make the adapter never go to sleep mode. Click **Apply** to save the settings.
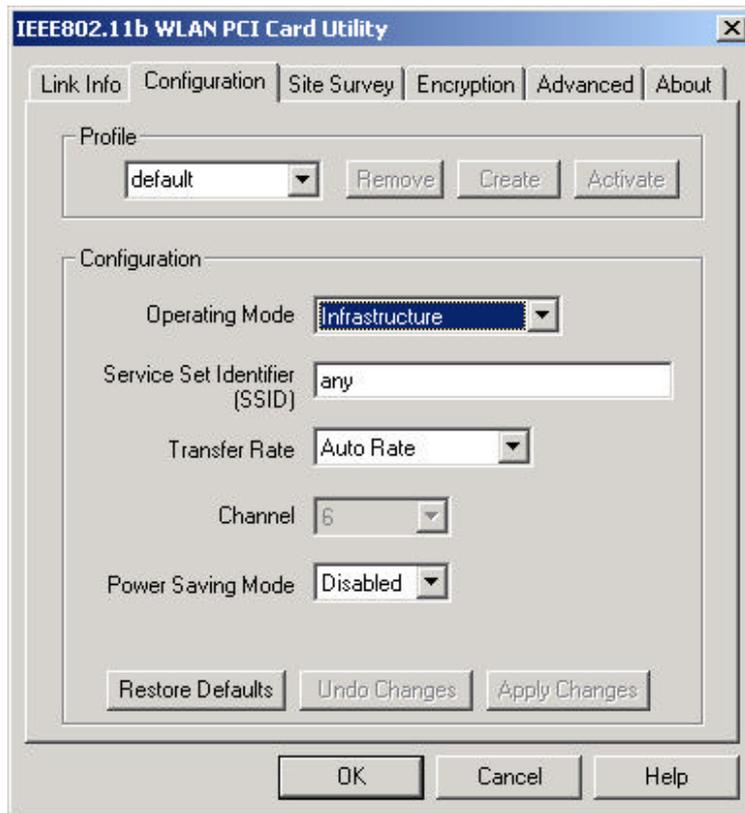
3. Select the "**Site Survey"** tab. The list on the adjacent screen shows you available Access Points and their features. Click on the desired Access Point, then click **Connect** to connect or **Search** to search for more Access Points. Click **OK** when you are finished.
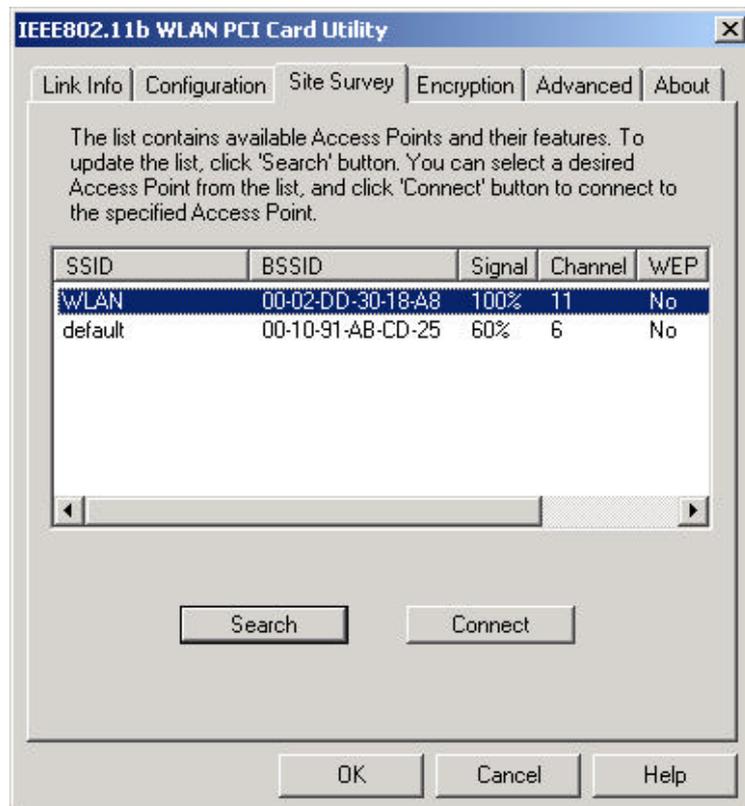
4. Click on the "**Encryption"** tab. Under the drop-box, you can choose to have WEP encryption **Disabled, 64-Bit, or 128-Bit.** Wired Equivalent Privacy (WEP) is an encryption scheme used to protect wireless data communication. The Disabled setting prevents the sharing of data with other computers on the WEP network. For data sharing to be enabled, select the level of encryption desired, either 64 or 128-bit.
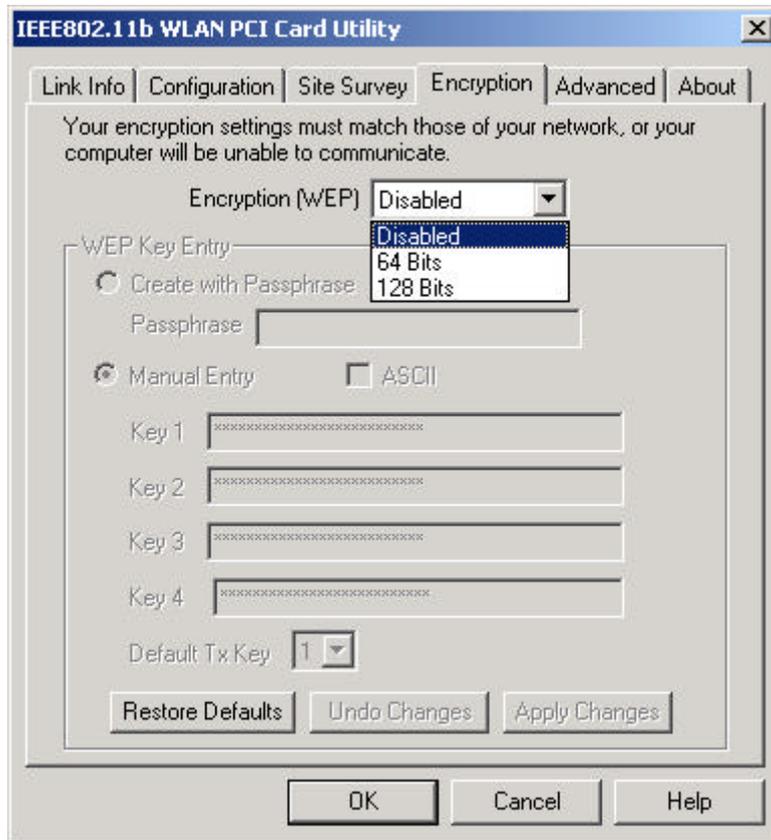
5. Select the "**Advanced**" tab. You can choose the **fragmentation threshold** to define the maximum data frame size your adapter will transmit. When the packet error rate is high, you may set the threshold value to transmit shorter frames. You may select **RTS/CTS threshold** to define when will your adapter send out RTS/CTS frames to reserve bandwidth for transmission. By using the RTS/CTS function, you may request bandwidth from AP to allow you have better chance to send out your data. For the **Security, i**t's only applicable while WEP is enabled. For the **Authentication Type,** the current supported algorithms are Open System, Shared Key, and Auto. The algorithm will be invoked when associated to Access Point. To associate to the desired Access Point you must set the same algorithm as the one of the desired Access Point. When select Auto mode, the driver can auto detect the Authentication Type of the Access Point you are going to associate. You can also select **Preamble Type**, which is for framing synchronization. The possible settings are Long and Short. The setting must be the same as the setting of the Access Point you are going to associate.
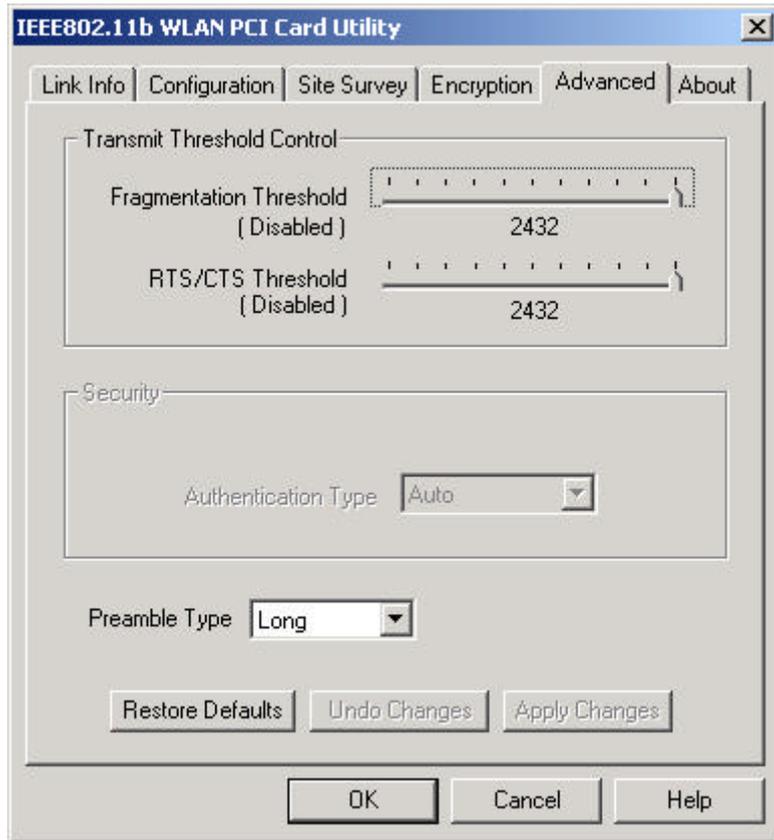
6. The **"About"** tab shows you copyright and version information about the driver, the configuration utility, and the firmware. Click **OK** to complete the configuration.
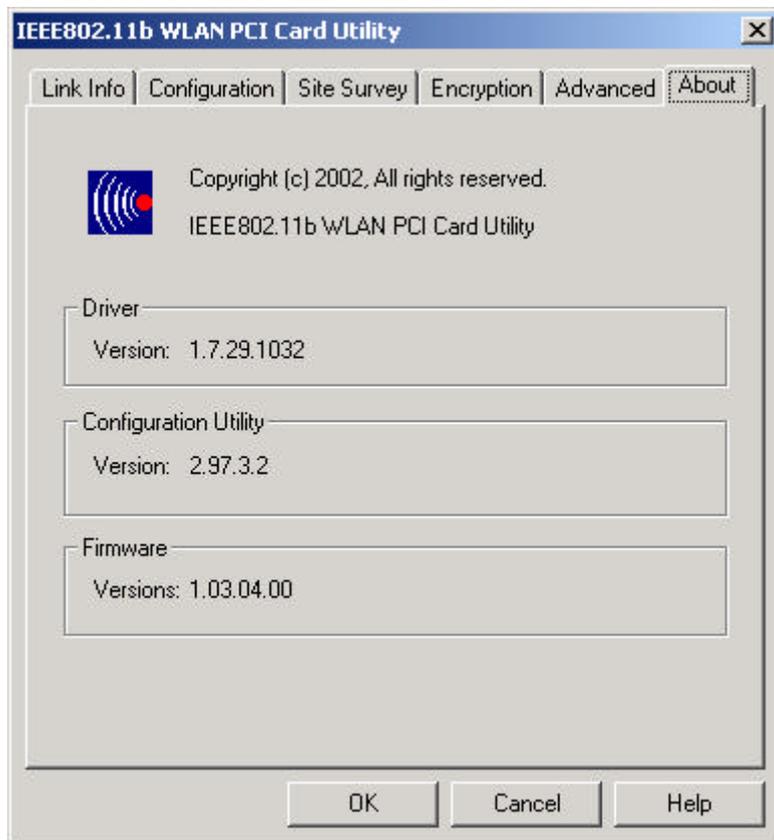
Chapter 5 – Installing Network Protocols

Protocols are necessary for computers to be recognized on your network. Windows 2000 users need to check their Windows User Guides for protocol installation.

Installing the Network Protocols for Windows 98 and Millennium

1. From the **Start** Menu, select **Settings** and bring up the **Control Pane**l. From the Control Panel, double-click on the **Network** icon.
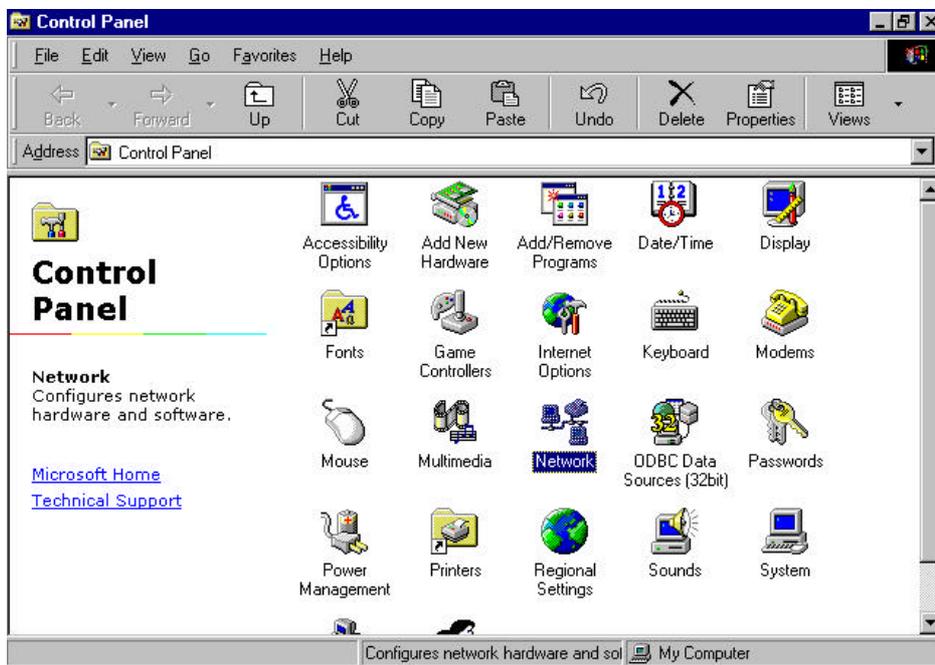
Note: Before adding any network protocols, verify that the protocol is not already installed. Never install duplicate protocols.

2. Select *IEEE802.11b WLAN PCI Card v2.5* from the list and click the **Add** button.
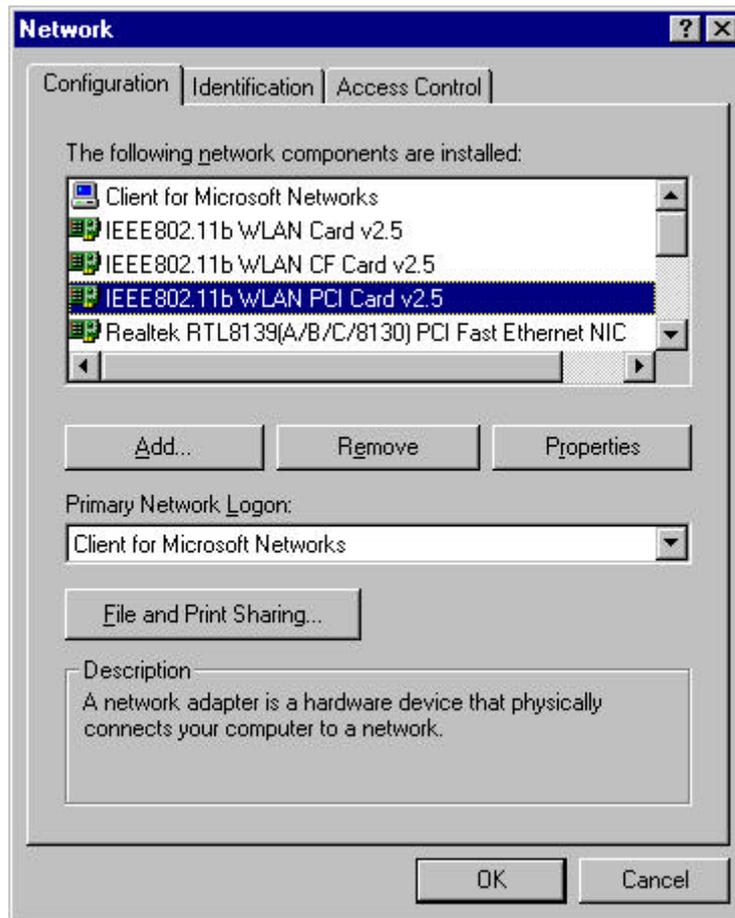
3. Highlight **Protocol** and click the **Add** button.
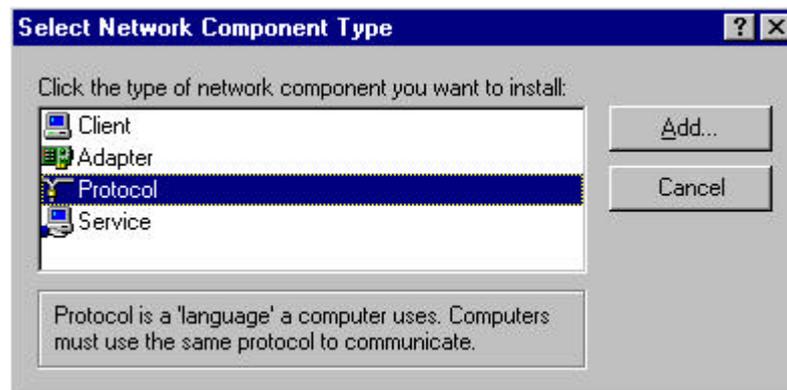
4. Select **Microsoft** from the list of "Manufacturers" and **TCP/IP** from the list of "Network" Protocols" and click the **OK** button to finish the installation.

Select Network Protocol

Click the Network Protocol that you want to install, then click OK. If you have an installation disk for this device, click Have Disk.

Manufacturers:
- Banyan
- IBM
- **Microsoft**
- Novell

Network Protocols:
- Microsoft 32-bit DLC
- Microsoft DLC
- NetBEUI
- **TCP/IP**
- WAN support for ATM
- Winsock2 ATM Service Provider

Have Disk...

OK   Cancel
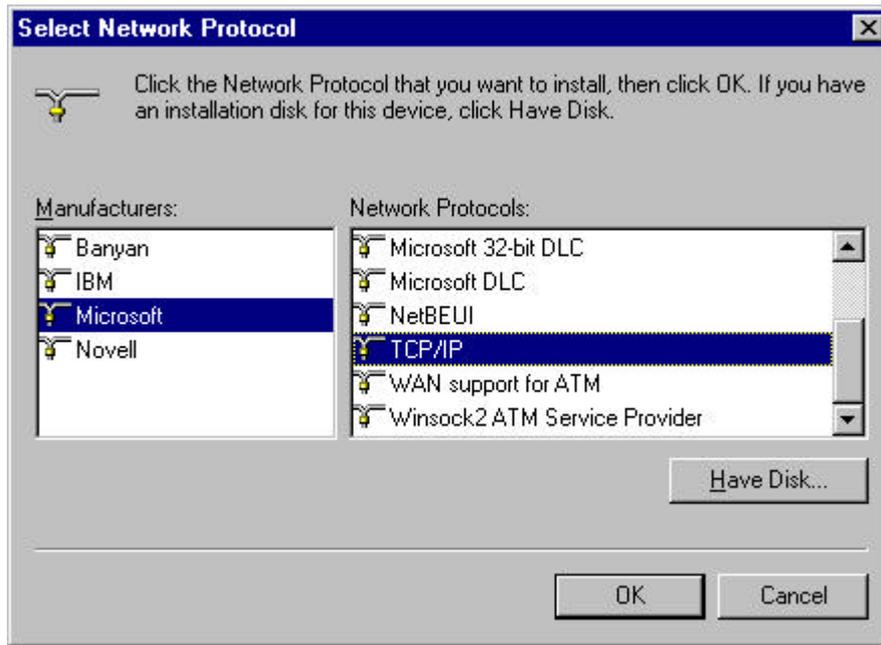
Appendix A – FAQ

1. **What is IEEE 802.11 standard?**

   ➢ The IEEE 802.11 is a wireless LAN industry standard, and the objective of IEEE 802.11 is to make sure that different manufactures' wireless LAN devices can communicate to each other.

2. **What is WEP?**

   ➢ As described in the IEEE 802.11 standard, WEP (Wired Equivalent Privacy) is a data privacy mechanism based on a 40 bit shared key algorithm.

3. **My desktop PC cannot recognize the Wireless Network PCI Adapter.**

   ➢ Please make sure that the Adapter is inserted into the PCI slot of your desktop PC properly (check this when the PC is powered off).
   ➢ And also make sure that the PCI controller is enabled in the BIOS of your desktop PC.
   ➢ Try installing the card in a different PCI slot.

4. **In Infrastructure mode, my desktop PC cannot communicate with the others PCs on the network.**

   ➢ First, make sure that the SSID is same as the others PC.
   ➢ Check if the WEP is enabled on the Access Point, if it is, set your Adapter's WEP the same as the Access Point.
   ➢ Also check the Access Point's Authentication Type and Preamble Type and match those settings.

5. **In ad-hoc mode, my desktop PC cannot communicate with the others PCs on the network.**

   ➢ Make sure the SSID and the Channel number are the same as other wireless stations.
   ➢ Check if WEP settings are the same in all wireless stations.
   ➢ Check the **Network Properties,** make sure proper protocol is installed and **File and Printer Sharing** is enabled.

Appendix B – Specifications

Standards:	IEEE 802.11b PCI Local Bus 2.1 Compliance
Channels:	11 Channels (US, Canada) 13 Channels (Europe) 14 Channels (Japan)
Antenna:	Dipole antenna with reversed SMA Connector
Frequency:	2.4 to 2.4835GHz (Industrial Scientific Medical Band)
Data Rate:	up to 11Mbps
Operating Ranges:	Indoor (varies depends on the environment): Up to 50M @ 11Mbps Up to 80M @ 5.5Mbps Outdoor (varies depends on the environment): Up to 150M @ 11Mbps Up to 300M @ 5.5Mbps
Temperature:	Operating: 0° ~ 55° C Storage: -25° ~ 70° C
Humidity:	10% to 90% (non-condensing)