802.11b Wireless PCI Card

Quick Installation

REGULATORY STATEMENTS

FCC Certification

The United States Federal Communication Commission (FCC) and the Canadian Department of Communications have established certain rules governing the use of electronic equipment.

Part15, Class B

This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions:

1) This device may not cause harmful interface, and

2) This device must accept any interface received, including interface that may cause undesired operation. 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 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 distance between the equipment and receiver.
   ◗ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

CAUTION:

1) To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons.

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

INSTALLATION

> **Caution:** Do not insert the **Wireless PCI Card** into your computer until the procedures in "**Install the Driver & Utility**" has been performed.

Install the Driver & Utility

1. Exit all Windows programs. Insert the CD-ROM into the CD-ROM drive of your computer.

    If the CD-ROM is not launched automatically, go to your CD-ROM drive (e.g. drive D) and double-click on **Setup.exe.**

2. The main screen of the CD-ROM opens. Click **Driver & Utility** to start the installation.


3. Click the **Windows Version** to install the **Driver & Utility**. (There are some slight

differences in the installation process between the different Windows operating systems.)

4. When the Welcome screen appears, click **Next** to continue.

5. The **Choose Destination Location** screen will show you the default destination chosen by the utility. Click **Next** to continue.

6. Follow the instruction to select the program folder. Click **Next** to continue.
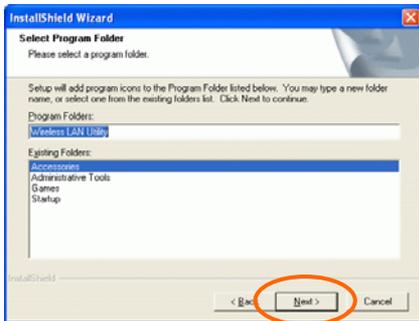
7. In **Start Copying Files**, click **Next** to continue.

8. Select **Yes, I want to restart my computer now**. Click **Finish**.
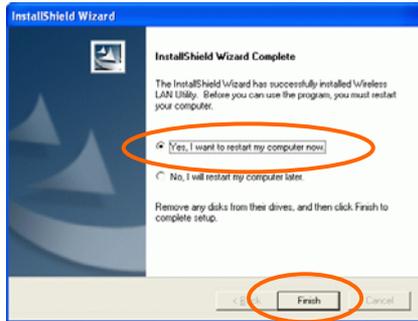
Install the Device

Note: Make sure the procedures in "**Install the Driver & Utility**" has been performed.

1. Before installing the device, make sure the computer is turned off.

2. Remove the expansion slot cover from the computer.

3. Carefully slide the Wireless PCI Card into the PCI slot. Push evenly and slowly and ensure it is screwed securely in place using the mounting screw.

4. Once the device has been connected to your computer, Windows will detect the new hardware and then automatically copy all of the files needed for networking.
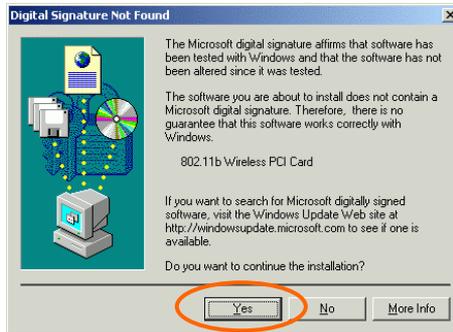
Note for Windows 98 users:

Before installation of the device, make sure you have your operating system CD-ROM at hand. You may be asked to insert the OS CD-ROM in order to download specific drivers.

Note for Windows 2000 users:

When the **Digital Signature Not Found** message appears, click **Yes** to continue.
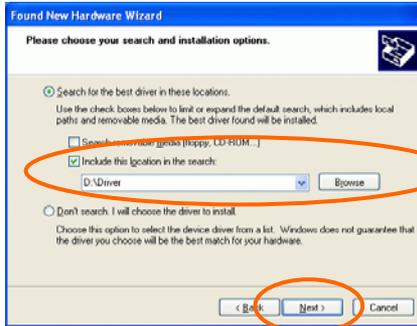

Note for Windows XP users:

1. Select **Install from a list or specific location (Advanced)** and click **Next.**

2. Select **Include this location in the search:** and click **Browse** to provide the appropriate path (e.g. **D:\Driver**). Click **Next**.

3. Click **Continue Anyway.**

Hardware Installation

⚠ The software you are installing for this hardware:

802.11b Wireless PCI Card

has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)

Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.

[Continue Anyway] [STOP Installation]

4. Click **Finish** to complete the installation.

Verify Device Installation

To verify that the device has been properly installed in your computer and is enabled, go to **Start → Settings → Control Panel → System (→ Hardware) → Device Manager**. Expand the **Network adapters** item. If the **802.11b Wireless PCI Card** is listed, it means that your device is properly installed and enabled.
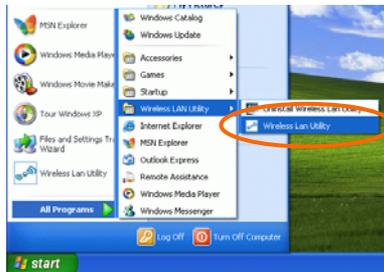
CONFIGURATION

After successful installation of the Wireless PCI Card's driver, a **Network Status** icon will display in the task bar. You will be able to access the Configuration Utility through the Network Status icon.

If the icon doesn't appear automatically, go to **Start → Programs → Wireless LAN Utility → Wireless LAN Utility**, it will appear in the task bar.
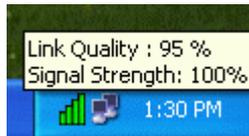

The Network Status Icon

The **Network Status Icon** will display on the task bar of your desktop and show the current network connection status of your system.

Icon	Link Status
	Access Point mode. **(Green)** (Please refer to below table for the exact link quality)
	Peer-to-Peer mode. (**White**)
	No connection. **(Red)**

Icon	Signal Strength
	Excellent link quality.
	Good link quality.
	Fair link quality.
	Poor link quality.

Drag your cursor to the network status icon, you will see the link status.

Accessing the Configuration Utility

The Configuration Utility is accessed by double-clicking on the **Network Status Icon**.

All settings are categorized into 6 Tabs:
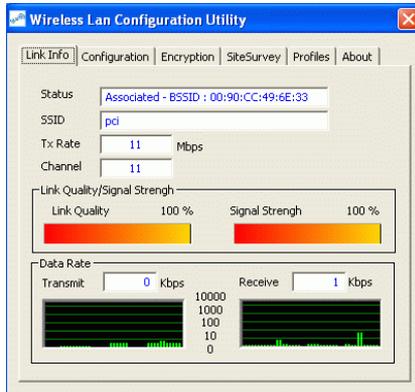
Link Info Tab

Configuration Tab

Encryption Tab

Site Survey Tab

Profiles Tab

About Tab

Link Info Tab

The **Link Info** tab displays the current status of the Wireless Network Adapter.

Item	Description
Status	Displays the information about the status of the communication (the BSSID of the Access Point to which the card is associated).
SSID	The **SSID** is the unique name shared among all points in your wireless network. The name must be identical for all devices and points attempting to connect to the same network. It shows the current SSID setting of the Wireless Network Adapter.
Tx Rate	Shows the current transfer rate. (**1, 2, 5.5, or 11Mbps** or **Auto**)
Channel	Shows the selected channel that is currently used. (There are 14 channels available, depends on the country.)
Link Quality	Displays the link quality of the connection between the Wireless Network Adapter and the Access Point it connects.
Signal Strength	Displays the signal strength of the connection between the Wireless Network Adapter and the Access Point it connects.
Data Rate	Displays the current transmitting and receiving rate.

Configuration Tab

The **Configuration** Tab allows you to change advanced configuration settings, such as the **SSID, Operation Mode, Tx Rate, Preamble Type** and **Radio**.
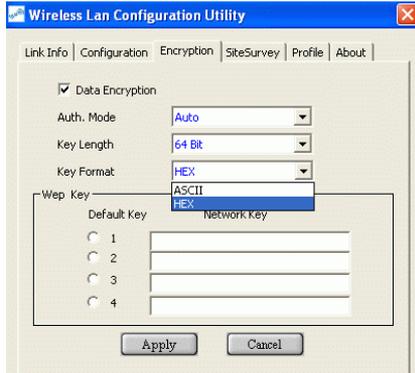

Item	Description
SSID	**SSID** is the unique name shared among all points in your wireless network. It must be identical for all points in the network. It is case-sensitive and must not exceed 32 characters. Make sure that all points in the network are set the same SSID.
Operating Mode	Displays the current operating mode. (**Access Point** or **Peer-to -Peer**).
Channel	Select the appropriate channel from the list provided to correspond with your network settings. All devices in the wireless LAN must be configured to

Item	Description
	share the same radio channel in order to function properly. **Channel button is enabled only in Peer-to-Peer mode.** (There are 14 channels available, depending on the country.)
Tx Rate	Select (**1**, **2**, **5.5**, or **11Mbps** or **Auto**) from the pull-down list to change the current transfer rate.
Preamble	A preamble is a signal used in wireless environment to synchronize the transmitting timing including Synchronization and Start frame delimiter. (**Note**: If you want to change the Preamble type into **Long** or **Short**, please check the setting of AP. Some Access Points do not support **Auto** Preamble.)
⊙ **Auto**	Select **Auto** for the Network adapter to select the Preamble type automatically depending on the Access Point Preamble type.
⊙ **Long Preamble**	In a "noisy" network environment, the Preamble Type should be set to **Long Preamble**.
⊙ **Short Preamble**	The **Short Preamble** is intended for applications where minimum overhead and maximum performance is desired. In a "noisy" network environment, the performance will be decreased, if **Short Preamble** is used.
Radio	Select **On/Off** from the pull-down list to **enable/disable** the Radio Module function of the Wireless Network Adapter.

Encryption Tab

Use the **Encryption** Tab to configure your WEP settings. **WEP (Wired Equivalent Privacy)** encryption can be used to ensure the security of your wireless network.
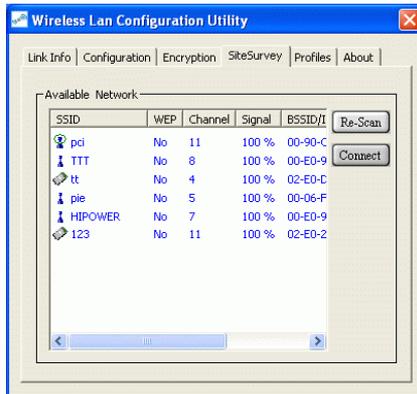

Item	Description
Data Encryption	WEP is a data security mechanism based on a 64 Bit/128 Bit shared key algorithm. Check this box to enable WEP encryption.
Auth. Mode	The authentication mode defines configuration options for the sharing of wireless networks to verify identity and access privileges of roaming wireless network cards. You may choose between **Open Authentication**, **Shared Authentication**, and **Auto**.

| Open Authentication	If the Access Point is using "**Open Authentication**", then the wireless adapter will need to be set to the same authentication mode.
Shared Authentication	**Shared Authentication** is when both the sender and the recipient share a secret key.
Auto	Select **Auto** for the network adapter to select the Authentication mode automatically depending on the Access Point Authentication mode.
Key Length	**64 Bit** or **128 Bit**.
Key Format	Select **HEX** if you are using hexadecimal numbers (**0-9, or A-F**). Select **ASCII** if you are using ASCII characters (**case-sensitive**). **Ten hexadecimal digits** or **five ASCII characters** are needed if **64-bit WEP** is used; **26 hexadecimal digits** or **13 ASCII characters** are needed if **128-bit WEP** is used.
Default Key ○ **1** ○ **2** ○ **3** ○ **4**	This setting is the configuration key used in accessing the wireless network via WEP encryption. Select one **default key** then fill in the appropriate value/phrase in **Network Key** field. (Please refer to the **Key Format** description for the limitations on the **Network Key**.) *Note: You must*

	*use the same **Default key** and **Network Key** settings for the both sides of the wireless network to connect.*
Apply	Click **Apply** to save the changes.
Cancel	Click **Cancel** to exit the application.

Site Survey Tab

The **Site Survey** tab shows all the available Access Points/Peer-to-Peer Modes and their features.

Item	Description
SSID	Displays the current SSID setting of the Wireless Network Adapter.
WEP	Displays the status of WEP Encryption.
Channel	Displays the selected channel that is currently in use.

Item	Description
Signal	Displays the signal strength of the connection between the Wireless Network Adapter and the Access Point it connects to.
BSSID /IBSSID	A set of wireless stations is referred to as a Basic Service Set (BSS). Computers in a BSS must be configured with the same BSS ID.
Type	Displays the type of Basic Service Set. (**Access Point** or **Peer-to-Peer**)
Re-Scan	Searches for all available networks. Clicking on the button, the device will start to rescan and list all available sites.
Connect	Highlight one of SSIDs from the "**Available Network**" list and press the Connect button to access it. You may also change the configuration parameters such as **Tx Rate**, **Preamble type**, **Auth. Mode** and **Data Encryption**.
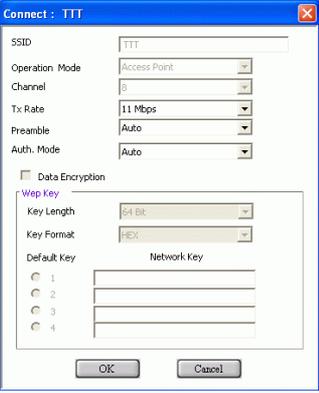
Profiles Tab

The **Profiles** tab allows you to save any of your configuration settings by setting up a Profile.

Item	Description
Connect	Select one item from the available profiles to connect.
Add	Add the selected item to Profiles. Click **OK** to save the new profile. Click **Cancel** to ignore adding the profile.
Delete	Click **Delete** to delete the selected profile.
Properties	Click **Properties** to view/change the configuration parameters. After changing the configuration parameters, click **OK** to save the changes. Click **Cancel** to ignore changing the profile.

About Tab

Click on the **About** tab to view basic version information about the **Driver** and **Configuration Utility**.

Note for Windows XP users

If you want to use **Windows XP's built-in Wireless Configuration Utility** to configure the device, right-click the Network Status Icon appeared on the task bar. Click **Exit** to disable **Manufacturer's Wireless LAN Configuration Utility**.