

11Mbps Wireless LAN Card

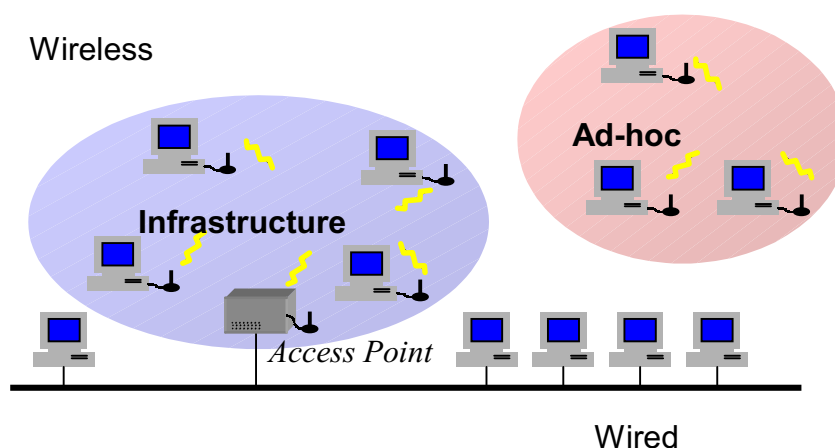
Quick Start Guide

Version 1.0.0

I. Network Configuration

The 11Mbps Wireless LAN Card is an IEEE802.11/802.11b-compliant PCMCIA Type II DSSS wireless LAN adapter. It fully supports wireless networking under Windows 98/ME/NT/2000/XP.

- 11Mbps Wireless LAN Card can be operated in Ad-Hoc or Infrastructure network configurations. *Ad-Hoc mode* allows 11Mbps Wireless PC Card users to join a Basic Service Set (i.e., peer-to-peer mode, without access point). *Infrastructure mode* allows 11Mbps Wireless PC Card users to join an Extended Basic Service Set (i.e., connect to an Access Point)



II. Package Content

11Mbps Wireless LAN Card	x 1
Quick Installation Guide.....	x 1
Product CD-ROM or floppy disk.....	x1

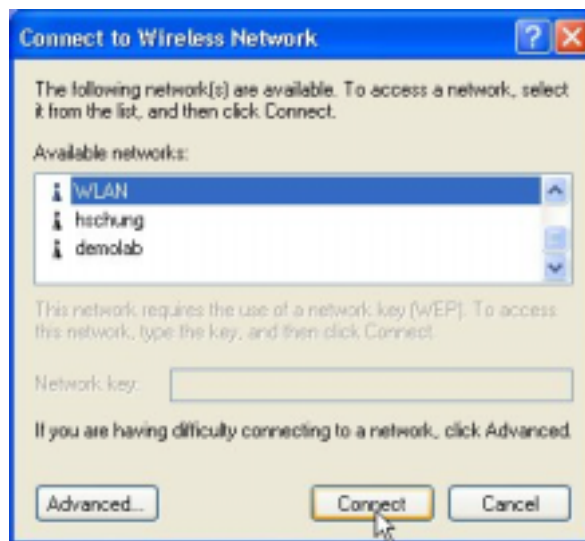
III. Installation of the Wireless LAN Card under Windows XP

1. Insert the 11Mbps Wireless LAN Card into the PCMCIA slot on your notebook and start Windows. Windows will auto-detect the Wireless LAN Card and a “**Found New Hardware Wizard**” window will show up.
2. Select “**Install from a list or specific (Advanced)**” and insert the Product CD-ROM or floppy disk into the appropriate drive. Specify the location where the driver is placed. Click on **Next** to install the driver.
3. The windows will find “**Wireless LAN Card**”. Click on **Next** to continue.
4. Click **Finish** to complete the installation.

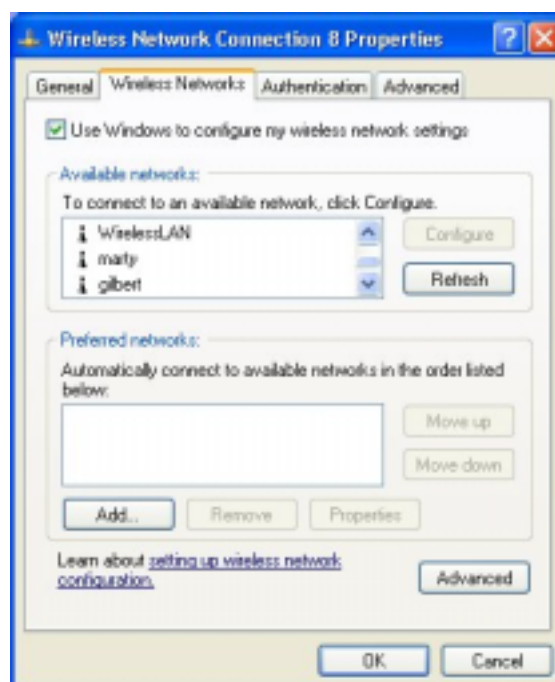
After installing the Wireless LAN Card, the Windows XP will display a “Wireless Network Connection # ” message.



Click on the message and the “*Automatic Wireless Network Configuration*” will then appear automatically and allow users to connect to an available wireless infrastructure network (Access Point), shown as the below figure. You may click the **Advanced** button to make advanced configuration for the 11Mbps Wireless LAN PC Card, shown as below.



For more information on using the automatic wireless network configuration please refer to Windows XP **Help** file.



However, the Wireless LAN Utility, which came with the Wireless LAN Card, provides you more tools to configure the 11Mbps Wireless LAN Card and to monitor the wireless connection. For more information on installing and using the Wireless LAN Utility, please refer to the following sections “*Installation of the Wireless LAN Utility*” and “*Usage of the Wireless LAN Utility*”.



Note: To use the Wireless LAN Utility under Windows XP, you need to disable the *Automatic Wireless Network Configuration* first. Steps are described as follows:

- Right click the **Network Connections** icon. Select **Properties**.
- Go to the **Wireless Networks** tab.
- Uncheck the “**Use Windows to configure my wireless network settings**” check box and click the **OK** button (see the above picture).

Installation of the 11Mbps Wireless LAN Card under Windows 2000

1. Insert the 11Mbps Wireless LAN Card into the PCMCIA slot on your notebook and start Windows. Windows will auto-detect the Wireless LAN Card and a “**Found New Hardware Wizard**” window will show up. Click **Next** to proceed.
2. Select “**Search for a suitable driver for my device (recommended)**”. Insert the Product CD-ROM or floppy disk into the appropriate drive. Specify the location where the driver is placed. Click on **Next** to install the driver.
3. The windows will find “**Wireless LAN Card**”. Click on **Next** to continue.
4. Click **Finish** to complete the installation.

Installation of the 11Mbps Wireless LAN Card under Windows NT

1. Insert the 11Mbps Wireless LAN Card into the PCMCIA slot on your notebook and start Windows.
2. From the desktop, select “**Control Panel**”, double-click **Network**, go to the **Adapters** tab, and then click the **Add** button.
3. Windows NT will present a list of all its supported adapters. Click **Have Disk** to continue.
4. Windows NT will ask for the path containing the 11Mbps Wireless LAN Card Windows NT drivers. Insert the Product CD-ROM or floppy diskette into the corresponding drive, and then choose the location where it is placed. Click **OK** to continue.
5. The Windows will find “**Wireless LAN Card**” and then copy the necessary files into the system. Click **OK** to finish the installation. Restart your PC.

Installation of the 11Mbps Wireless LAN Card under Windows 98/ME

1. Insert the 11Mbps Wireless LAN Card into the PCMCIA slot on your notebook and start Windows. Windows will auto-detect new hardware and will display an “**Add New Hardware Wizard**” window.
2. Select “**Search for the best driver for your device (recommended)**”. Insert the Product CD-ROM or floppy disk into the appropriate drive. Specify the location where the driver is placed. Click on **Next** to install the driver.
3. The Windows will find “**IEEE 802.11 Wireless LAN/PC Card**”. Click on **Next** to continue.
4. Once the [Please insert the disk labeled “Windows 98/ME CD-ROM”, and then click OK] window appears, enter the path corresponding to the appropriate drives and click **OK**. Usually these files can be found at C:Windows or C:Windows\system.
5. Click **Finish** to complete the installation. Restart Windows.

IV. Installation of the Wireless LAN Utility

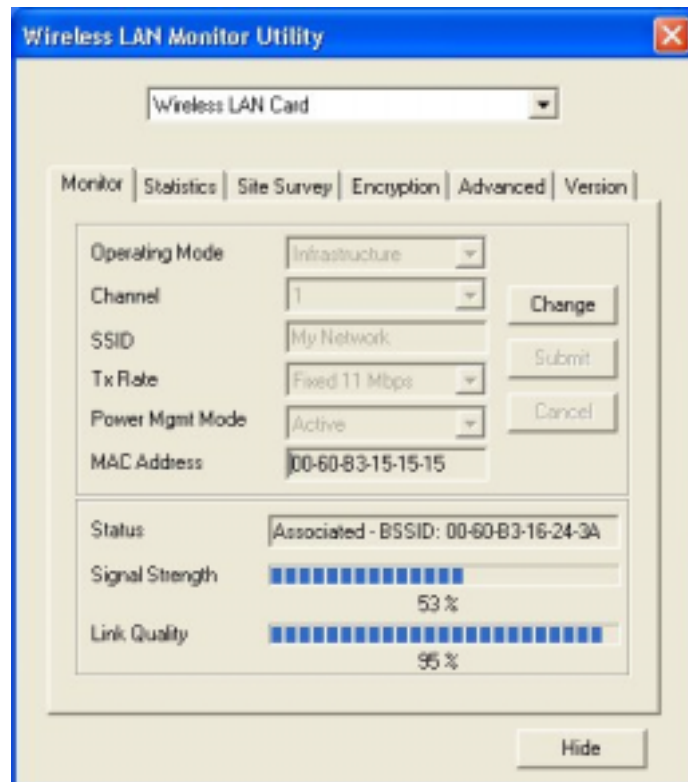
1. Insert the Product CD-ROM or floppy disk again.
2. Go to the **utility** folder and run **setup.exe**.
3. Follow the on-screen instructions to install the Wireless LAN Utility.
4. Upon completion, go to **Program Files** and run the Wireless LAN Utility. The utility interface will then appear and at the same time its icon appears in the **System Tray** in the bottom right corner of your task bar.

V. Usage of the Wireless LAN Utility

The Wireless LAN Utility consists of window with 6 items for you to monitor and configure the 11Mbps Wireless LAN Card: **Monitor**, **Statistics**, **Site Survey**, **Encryptions**, **Advanced** and **About**.

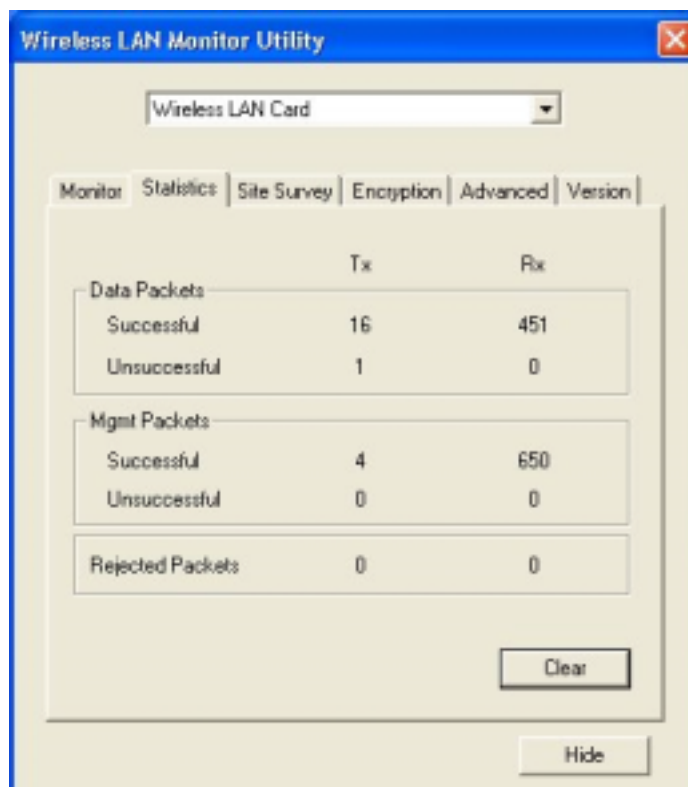
Monitor:

The **Monitor** tab allows you to modify the configuration parameters for the 11Mbps Wireless LAN PC Card such as **Operating Mode**, **Channel**, **SSID**, **Tx Rate**, and **Power Mgnt** mode. Click the **Change** button and you may change parameters for the Wireless LAN Card. After making the configuration, click the **Submit** button to make the changes take effect. Furthermore, you may monitor the basic information and current status of the Wireless LAN Card such as **MAC Address**, **Status** (displays the Access Point’s MAC address which the Wireless LAN Card connects to), **Signal Strength** and **Link Quality**.



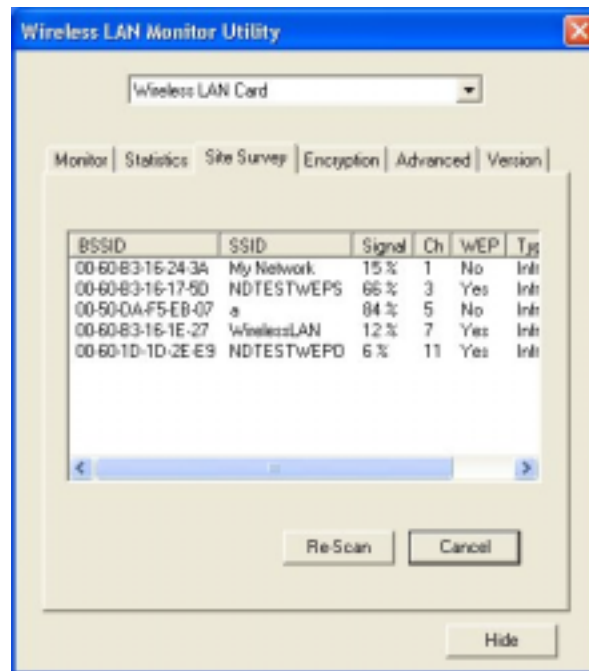
Statistics:

This tab displays the instantaneous wireless receive and transmit throughput of the Wireless LAN Card in byte per second.



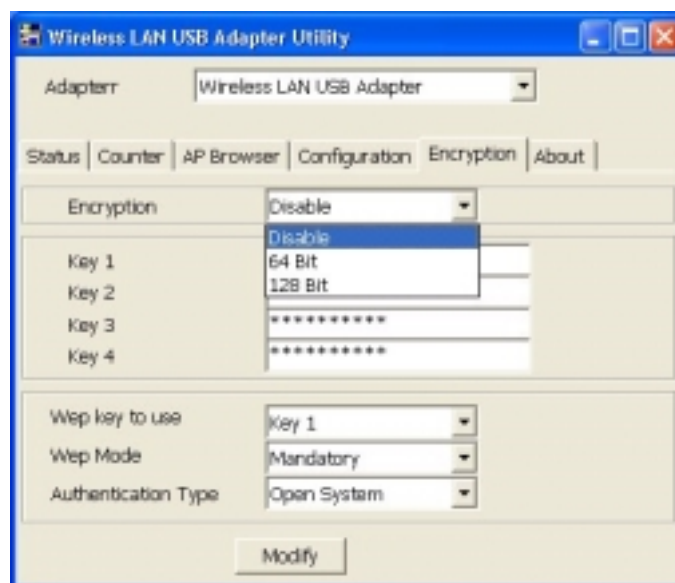
Site Survey:

By clicking the **Re-scan** button, the Site Survey can display Access Points around the working environment. Besides showing the ESSID of each Access Point, it also displays BSSID, Signal, Channel, WEP status, and Network Type. To join any of the displayed Access Point, click on the selected Access Point's MAC address and the Wireless LAN Card will be then associated to the selected Access Point.



Encryption:

To prevent unauthorized wireless stations from accessing data transmitted over the network, the 11Mbps Wireless LAN Card offers highly secure data encryption, known as WEP (Wired Equivalent Privacy). If you require high security in transmission, go to the **Encryption** tab and do the following.



From the WEP encryption item, pull down the menu and it will list three options:

Disable – Allows wireless adapters communicate with Access Points without any data encryption.

64 Bit – Requires wireless stations to use data encryption with 64 Bit algorithm when communicating with the Access Point.

128 Bit – Allows wireless clients to communicate with the Access Point with 128 Bit encryption algorithm.

The **Encryption** tab enables you to identify up to 4 different encryption keys and select one of them to encrypt your transmission data. The key value of your choice may either be:

For 64-bit encryption:

- 10 digit hexadecimal values in the range of “A-F” and “0-9” (e.g. 11AA22BB33).

For 128-bit encryption:

- 10 digit hexadecimal values in the range of “A-F” and “0-9” (e.g. 11AA22BB33123456789ABCDEFF)

You don’t need to enter all four keys because WEP will only use one key. Please go to “**WEP key to use**” and select one key as an active key to encrypt wireless data. In the **WEP Mode** item, you may choose either “**Mandatory**” or “**Optional**”. **Mandatory** required the Wireless LAN Card to communicate with other wireless stations with data encryption. **Optional** allows the Wireless LAN Card to communicate with other wireless stations regardless if WEP encryption is enabled or disabled in the other stations. The default setting for the WEP mode is **Mandatory**.

For **Authentication Type**, you may choose either **Open System** or **Shared Key** for authentication among wireless devices. The **Open System** and **Shared Key** are the identification methods defined in the IEEE802.11 standard. The difference is that the **Shared Key** requires the use of the WEP privacy mechanism. Simply put, if the **Shared Key** is selected, you need to set the WEP keys.

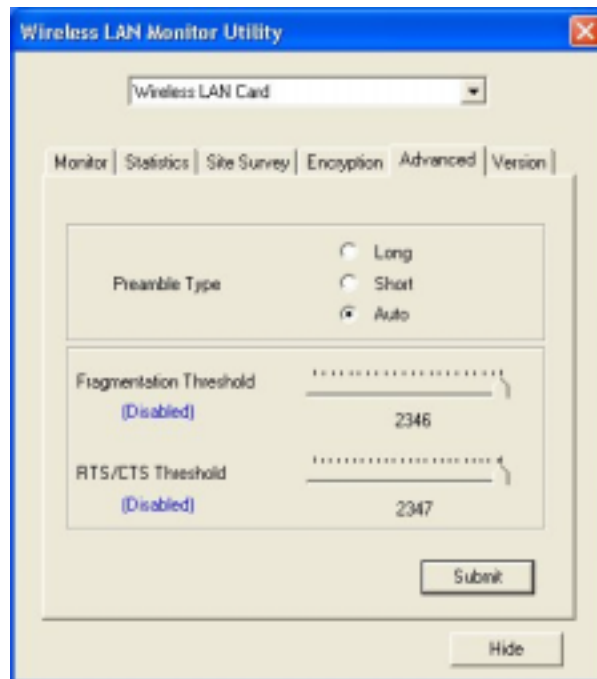
After entering all the fields described above and then click the **Submit** button to make the encryption take effect.



Note: To allow encrypted data communications, you must set the same encryption key values on all wireless stations and/or Access Points. For example, if you use Key 1 on your Wireless LAN Card, and the value is (e.g. MyCar), the same value must be assigned to Key 1 for all other client stations. The values you enter on the encryption tab, will only be visible the first time you enter the keys. After closing this tab, all key values will be displayed as “xxxxxxxxxx” every time the tab is displayed again.

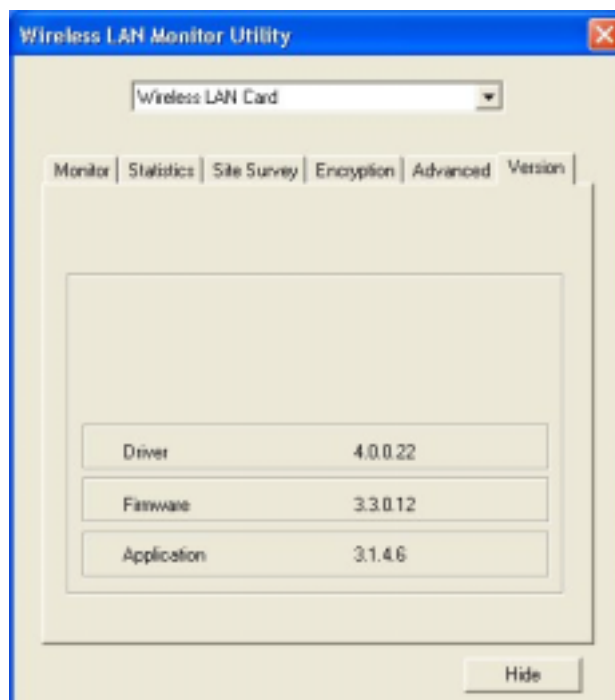
Advanced:

The Wireless LAN Utility also offers the advanced configuration for user to set the 11Mbps Wireless LAN PC Card under certain network environment. These advanced options include Preamble Type, Fragmentation Threshold and RTS/CTS Threshold. Click the Submit button after making the settings.



About:

The **About** item shows the versions of the driver, and firmware of the 11Mbps Wireless LAN Card.



FCC Information

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

Federal Communications Commission (FCC) Statement

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:

- 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.



FCC RF Radiation Exposure Statement:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. 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 20 centimeters between the radiator and your body.

Limited Warranty

This Warranty constitutes the sole and exclusive remedy of any buyer or reseller's equipment and the sole and exclusive liability of the supplier in connection with the products and is in lieu of all other warranties, express, implied or statutory, including, but not limited to, any implied warranty of merchantability of fitness for a particular use and all other obligations or liabilities of the supplier.

In no even will the supplier or any other party or person be liable to your or anyone else for any damages, including lost profits, lost savings or other incidental or consequential damages, or inability to use the software provided on the software media even if the supplier or the other party person has been advised of the possibility of such damages.

The following are special terms applicable to your hardware warranty as well as services you may use during part of the warranty period. Your formal Warranty Statement, including the warranty applicable to our Wireless LAN products, appears in the Quick Installation Guide which accompanies your products.

Duration of Hardware Warranty: One Year

Replacement, Repair or Refund Procedure for Hardware:

If your unit needs a repair or replacement, return it to your dealer/distributor in its original packaging. When returning a defective product for Warranty, always include the following documents:

- The Warranty Repair Card
- A copy of the invoice/proof of purchase, and
- The RMA Report Form (To receive a Return Materials Authorization form (RMA), please contact the party from whom you purchased the product).

Upon proof-of-purchase we shall, at its option, repair or replace the defective item at no cost to the buyer.

This warranty is contingent upon proper use in the application for which the products are intended and does not cover products which have been modified without the reseller's approval or which have been subjected to unusual physical or electrical demands or damaged in any way.

Please complete the information below and include it along with your products.

Name:	
Title:	
Company:	
Telephone:	
Fax:	
Email:	
City/State/Zipcode:	
Country:	
Product Name:	
Serial Number:	
MAC Address:	
Invoice Date:	
Product Description:	

Technical Support

You can find the most recent software and updated user documentation will be updated periodically on the supplier Web site. If you have difficulty resolving the problem while installing or using the 11Mbps Wireless LAN PC Card, please contact the supplier for support.