

# 802.11g Wireless LAN PCI Adapter

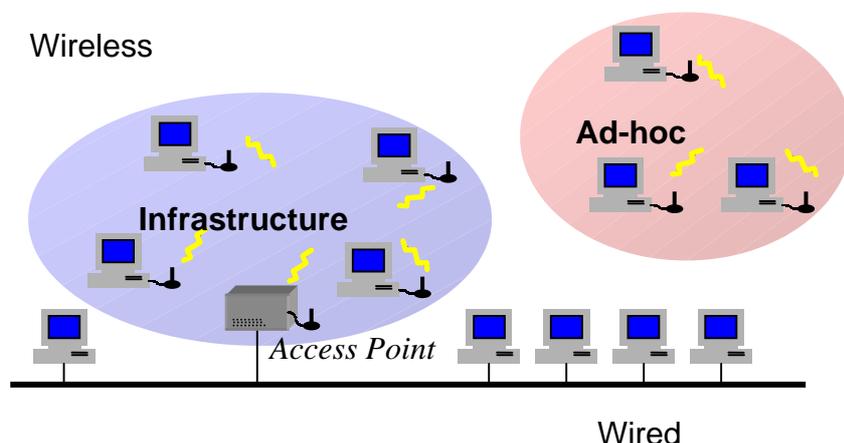
## Quick Installation Guide

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### Network Configuration

802.11g Wireless LAN PCI Adapter is an IEEE802.11g-compliant PCI Type DSSS wireless LAN PCI adapter. It fully supports wireless networking under Windows 98SE/ME/2000/XP.

802.11g Wireless LAN PCI Adapter can be operated in Ad-Hoc or Infrastructure network configurations. *Ad-Hoc mode* allows 802.11g Wireless LAN PCI Adapter users to join a Basic Service Set (i.e., peer-to-peer mode, without access point). *Infrastructure mode* allows 802.11g Wireless LAN PCI Adapter users to join an Extended Basic Service Set (i.e., connect to an Access Point)



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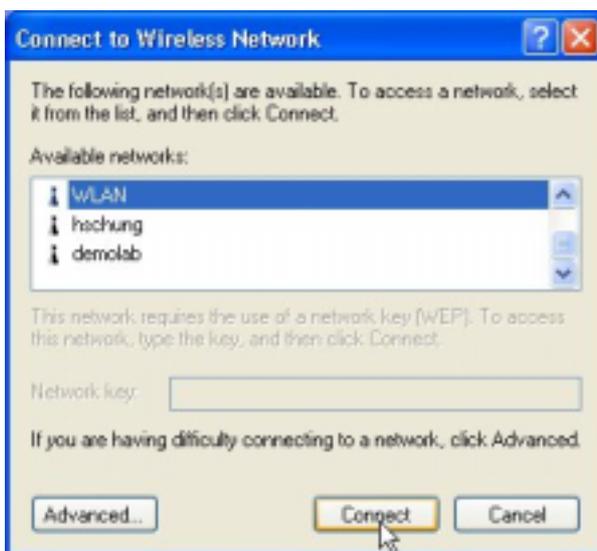
### Installation of the 802.11g Wireless LAN PCI Adapter under Windows XP

1. Insert the 802.11g Wireless LAN PCI Adapter into the PCI slot on your notebook and start Windows. Windows will auto-detect the Wireless LAN PCI Adapter and a “**Found New Hardware Wizard**” window will show up.
2. Select “**Install from a list of specific location (Advanced)**” and insert the Product CD-ROM into the appropriate drive. Click on **Next** to install the driver.
3. Select “Search removable media (floppy, CD-ROM...)”, click on **Next** to install the driver.
4. The Windows XP compatibility screen will show up. Please click **Continue Anyway** button to continue.
5. Click **Finish** to complete the installation.

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

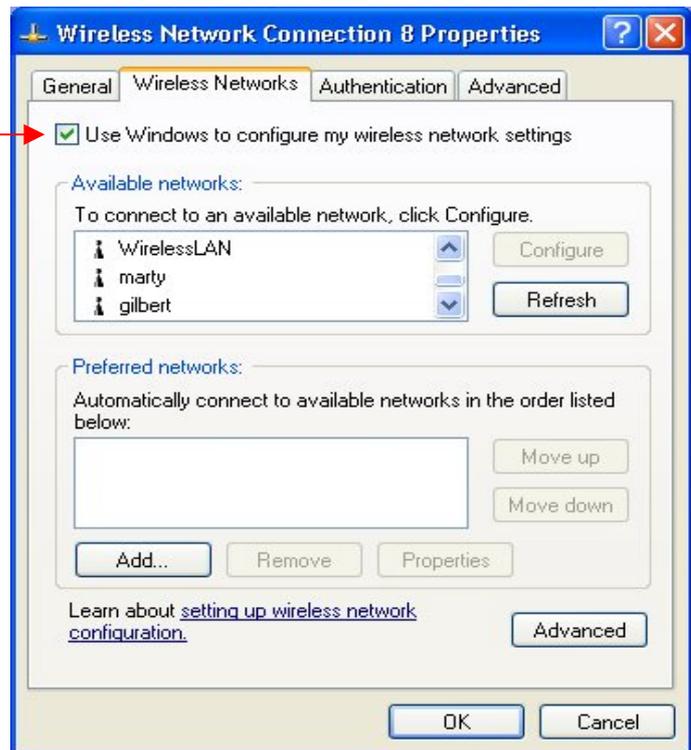


Click on the message and the “Automatic Wireless Network Configuration” will then appear automatically. You may click on **Connect** button to allow users to connect to an available wireless infrastructure network (Access Point), shown as follows:



You may click the **Advanced** button to perform advanced configuration for the 802.11g Wireless LAN PCI Adapter, shown as below.

**Warning:** You must choose one way to configure Wireless LAN PCI Adapter either of using our WLAN Utility by unchecking this check box or using Windows XP *Automatic Wireless Network Configuration* first by checking this check box.



For more information on using the Automatic Wireless Network Configuration please refer to Windows XP **Help** file.

However, the WLAN Utility, which came with the Wireless LAN PCI Adapter, provides you more tools to configure the 802.11g Wireless LAN PCI Adapter and to monitor the wireless connection. For more information on installing and using the WLAN Utility, please refer to the following sections “*Installation of the Wireless LAN Utility*” and “*Usage of the WLAN Utility*”.



**Note:** To use the WLAN 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 802.11g Wireless LAN PCI Adapter under Windows 2000**

1. Insert the 802.11g Wireless LAN PCI Adapter into the PCI slot on your notebook and start Windows. Windows will auto-detect the Wireless LAN PCMCIA Card and a “**Found New Hard Wizard**” window will show up. Click **Continue** to continue.
2. Select “**Search for a suitable driver for my device (recommended)**”. Insert the Product CD-ROM into the appropriate drive. Click on **Next** to install the driver.
3. The windows will find “**Wireless LAN 802.11g PCI Adapter (3V)**”. Click on **Next** to continue.
4. Click **Finish** to complete the installation

## Installation of the 802.11g Wireless LAN PCI Adapter under Windows 98SE/ME

1. Insert the 802.11g Wireless LAN PCI Adapter into the PCI 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 into the CD-ROM drive. Specify the location where the driver is placed. Click on **Next** to install the driver.
3. The Windows will find “**Wireless LAN 802.11g PCI Adapter**”. Click on **Next** to continue.
4. Once the [Please insert the disk labeled “Windows 98SE/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.

## Installation of the Wireless LAN Utility

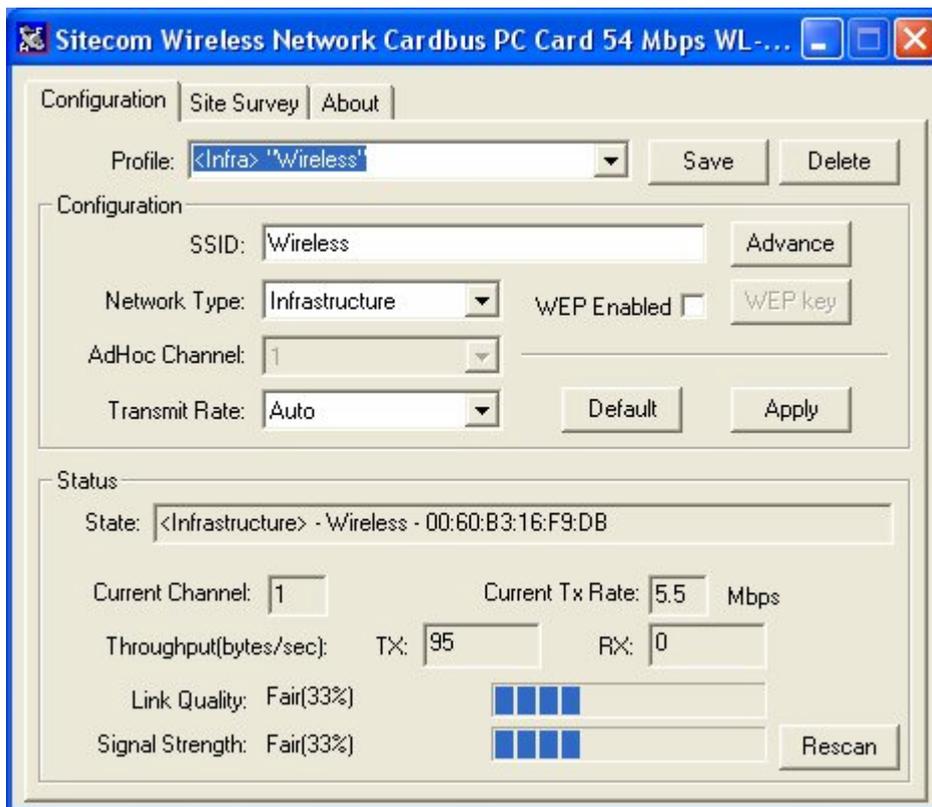
1. Insert the Product CD-ROM into the appropriate drive. Go to the utility folder and click **setup.exe**. The following screen will show up. Click **Continue** to continue.
2. Follow the on-screen instructions to install the Wireless LAN Utility. The next screen will indicate that Windows start and continue the installation. Click **Next**.
3. 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.

## Usage of the WLAN Utility

The WLAN Utility consists of window with 3 items for you to monitor and configure the 802.11g Wireless LAN PCI Adapter: **Configuration**, **Site Survey** and **About**.

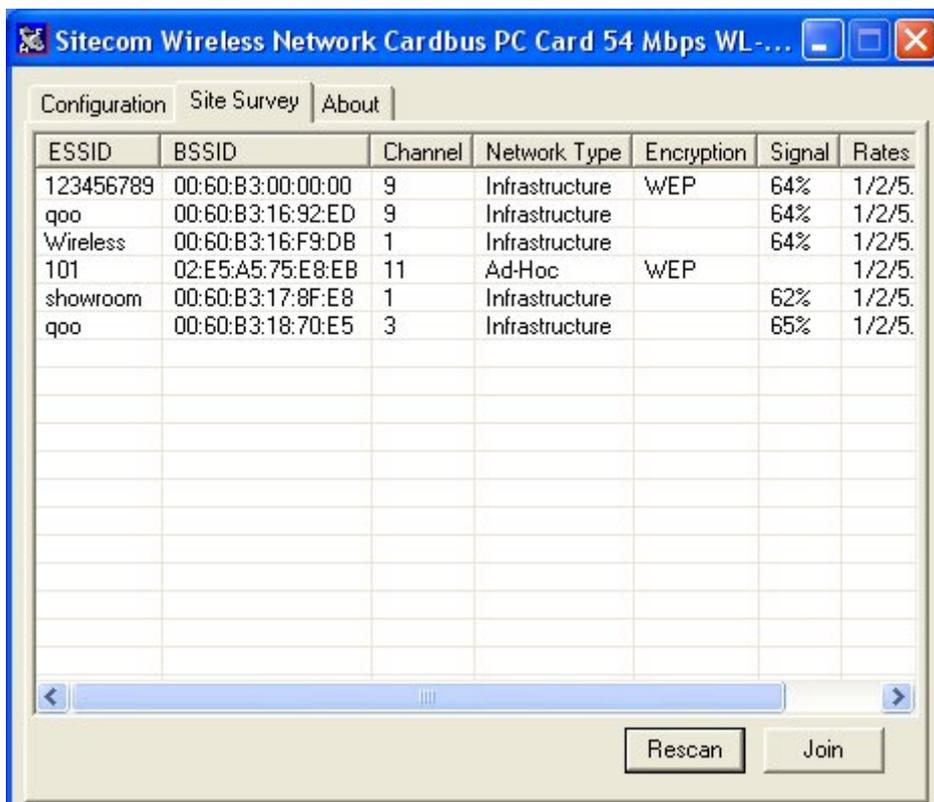
### *Configuration:*

The **Configuration** item allows you to modify the configuration parameters for the 802.11g Wireless LAN PCI Adapter such as **Profile**, **SSID**, **Network Type**, **AdHoc Channel**, **Transmit Rate**, **WEP**, **RTS**, **Fragment Threshold** and **Power Save** mode. Furthermore, you may monitor the current status of the Wireless LAN PCI Adapter as **State**, **Current Channel**, **Current Tx Rate**, **Throughput**, **Link Quality** and **Signal Strength**.



**Site Survey:**

By clicking the **Rescan** button, the Site Survey can display Access Points around the working environment. Besides showing the ESSID of each Access Point, it also displays BSSID, Channel, Network Type, Encryption, Signal, and Rates. To join any of the displayed Access Points, highlight the Access Point you desire to connect and then click the **Join**.



**About:**

The **About** item shows the versions of the WLAN Utility, driver, firmware of the 802.11g Wireless LAN PCI Adapter. Also, the MAC address and frequency domain are displayed.



**Quick Tips to Configure the Wireless LAN PCMCIA Card**

This Quick Start Guide covers the basic features needed to use the 802.11g Wireless LAN PCI Adapter. Follow these steps to configure network settings.



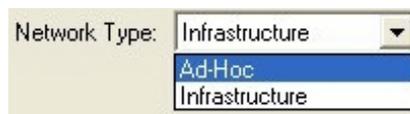
**Set the Profile (Optional)**

The **Profile** field allows you to set values for all parameters by selecting a previously defined profile. To create the profile, go to the **Profile** field, type a profile name and set the corresponding parameters. After changing parameters, save the profile and click the **Apply** button to take effect. You can have multiple profiles and modify the profile at any time.



### ***Set the Network Type***

From the Main Menu, click the **Configuration** tab, go to **Network Type** and click the down arrow at the right of the **Network Type** field. You will then see 2 network types for the 802.11g Wireless LAN PC Card to operate. If you need to access company network or Internet via Access Point, select “**Infrastructure**”. If standard “**802.11 Ad Hoc**” is selected, you need to set wireless stations with the same SS ID.



### ***Set the SSID***

The SSID is the unique ID used by Access Points and stations to identify a wireless LAN. Wireless clients associating to any Access Point must have the same SSID. The default setting is ANY, which allows your Wireless LAN PC Card to automatically associate to any Access Point (Infrastructure mode) in the vicinity of your wireless adapter. The SSID can be set up to *32 characters* and is case sensitive.



### ***Set the Channel (for Ad-Hoc network)***

To form AdHoc network, the same channel is required. Before choosing a channel, it is advised to use the **Site Survey** tool to check the quality of each channel. Afterwards, go to the **Channel** field and choose a clear channel for your wireless LAN stations. Click the **Apply** button to make the change take effect.

### ***Set the Encryption:***

To prevent unauthorized wireless stations from accessing data transmitted over the network, the Wireless LAN Card offers highly secure data encryption, known as WEP (Wired Equivalent Privacy). The Encryption tab allows you enable encryption and set the encryption keys, making your data transmission over the air more secure. To activate the WEP Encryption, go to the **Configuration** tab and check the **WEP Enabled** check box. An Encryption window will then appear. The instructions are as follows:

From the WEP encryption item, pull down the menu and it will list two methods to set the WEP keys, as described below:

#### **Create Encryption Keys by Using a Passphrase**

To create encryption keys by using a passphrase, click the **Create Key with Passphrase** check

box and type a character string in the **Passphrase** field. As you type, the utility uses an algorithm to generate 4 keys automatically. Select either the **64bit** or **128bit** encryption first and type a string in the **Create Key with Passphrase** field. Select one key from the 4 WEP keys and click **OK**. Then click the **Apply** button on the **Configuration** tab to make the setting take effect.

**Warning:** When *Create Key with Passphrase* is enabled, the wireless device's Key with PassPhrase must match the Key with PassPhrase used by the access point with which wireless device are planning to communicate.



Create Encryption Keys Using a Passphrase (128-bit)

### Create Encryption Keys Manually

You can also create up to 4 encryption keys manually by clicking the **Create Keys Manually** check box.

For 64bit encryption you may choose:

- **Alphanumeric: 5 characters** (case sensitive) ranging from “a-z”, “A-Z” and “0-9” (e.g. MyKey)
- **Hexadecimal: 10 hexadecimal digits** in the range of “A-F”, “a-f” and “0-9” (e.g. 11AA22BB33)

For 128bit encryption you may choose:

- **Alphanumeric: 13 characters** (case sensitive) ranging from “a-z”, “A-Z” and “0-9” (e.g. MyKey12345678)
- **Hexadecimal: 26 hexadecimal digits** in the range of “A-F”, “a-f” and “0-9” (e.g. 00112233445566778899AABBCC).

After entering the WEP keys in the key field, select one key as active key, click the **OK** button and then click the **Apply** button to make setting take effect.



### 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 802.11g Wireless LAN PC Card, please contact the supplier for support.

## FCC Caution

1. The 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.
2. FCC RF Radiation Exposure Statement: The 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.
3. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
4. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

This card cannot be used in laptop computers or other portable configurations and 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."