Wireless USB Adapter

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 t he 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.

Federal Communications Commission (FCC) Radiation Exposure Sta tement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.

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Introduction

The Wireless USB Adapter solution overcomes the limitations of wired networks by providing fast, simple, mobile and reliable access. It is designed for desktop computers running Windows 98, 2000 and Millennium.

Features

- Complies with the IEEE 802.11b Direct Sequence Spread Spectrum
- Complies with USB specification 1.0
- Supports 1, 2, 5.5 and 11Mbps Data Rates
- Wired Equivalent Privacy (WEP) 40-bit data encryption
- Provides Firmware upgrade utility via USB port
- Use USB Bus power and no external power supply needed
- Dipole antenna
- Driver Supports Microsoft®Windows®98/2000, Millennium
- FCC Part 15, CE, C-tick, Telec & JATE

Connect the USB Adapter to Your Desktop PC

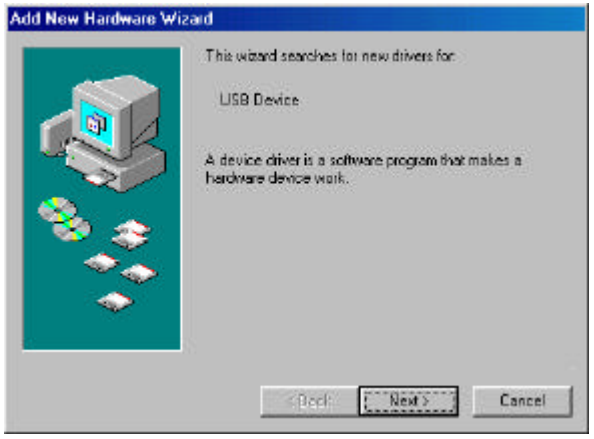
Hardware Installation

- Power on your desktop PC.
- Connect the USB Adapter to the USB port of a desktop PC.
- Insert the driver CD into your CD drive (F:\).
- The Hardware Installation is complete.

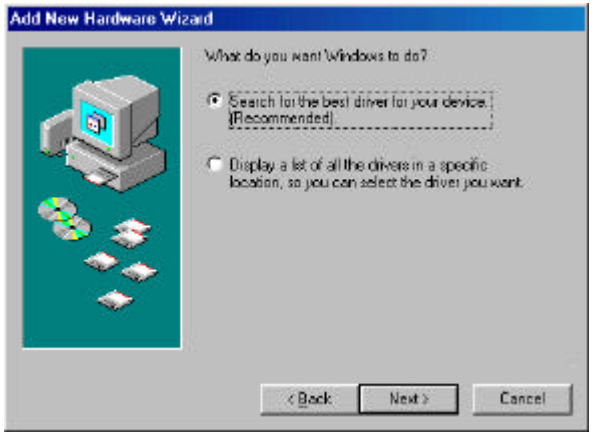
Driver Installation

Install Driver Under Windows 98

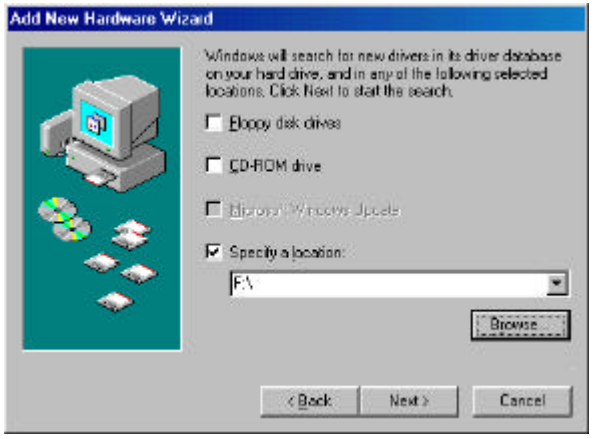
1. Connect the Wireless USB adapter into your PC. Windows 98 will automatically recognize a new USB dev ice. Click the **Next** button to proceed.



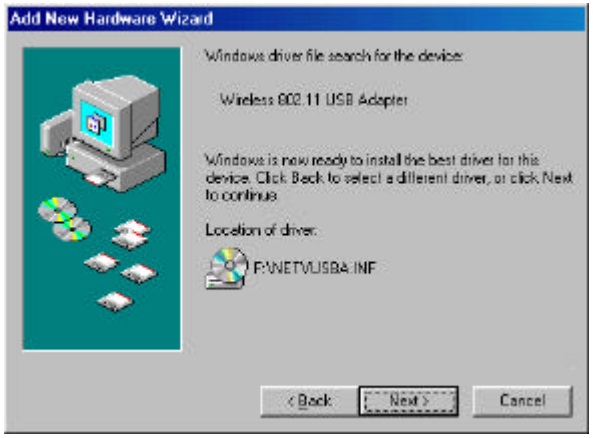
2. Select "Search for the best driver for your device" and click the **Next** button to continue.



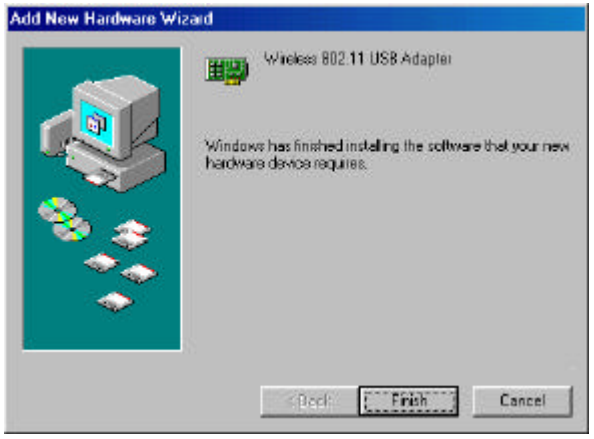
3. Make sure that **Specify a location** is selected and click the **Browse** button. At this point, Windows will ask you to browse for the folder. Simply select the folder in which the driver is located (F:\) and click the **Next** button..



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

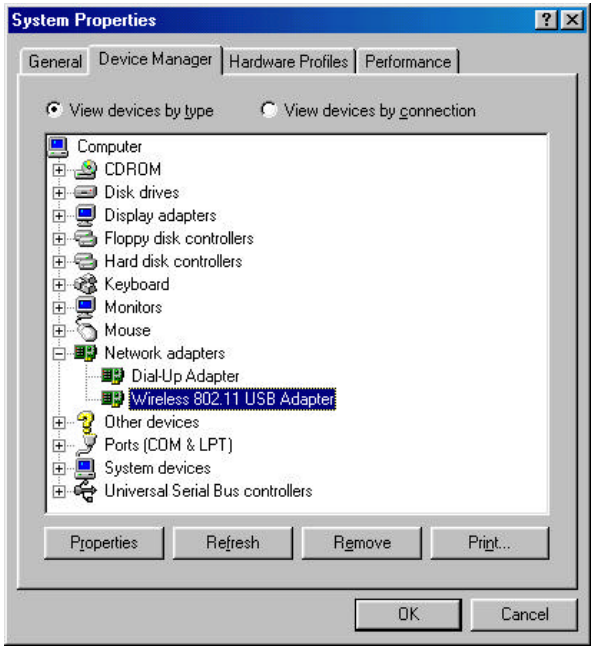


5. After Windows copies files from your CD, you will be notified that installation has been completed. Click the **Finish** button to continue.



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

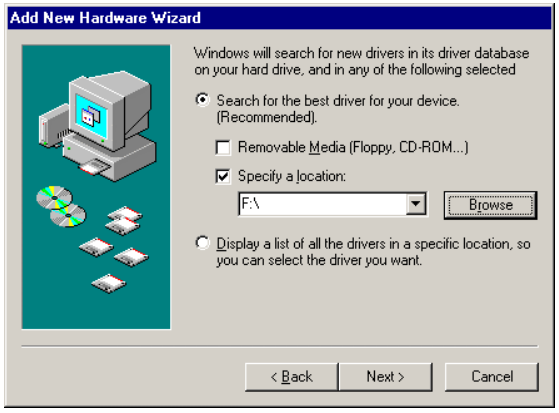
7. Click right on **My computer** and select **properties.** Select **Device Manager** and click on the **Network adapters.** You will find the **Wireless 802.11 USB Adapter if it is installed successfully.** The USB adapter driver installation is finished. You can continue on to Utility Installation.



Install Driver Under Windows ME

1. Windows automatically recognizes a new USB added. Select **Specify the location of the driver** and click the **Next** button proceed.

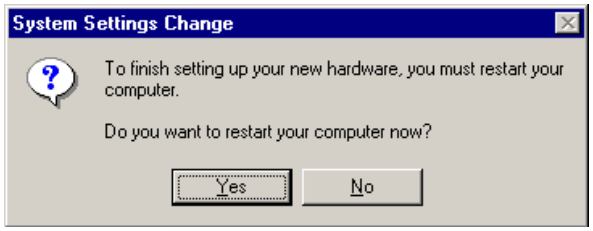
2. At this point, Windows will ask you for new drivers. Make sure **Search for the best driver for your device** and **Specify a location** are selected. Click the **Browse** button, simply select the folder in which the driver is located (F:\) and click the **Next** button to proceed.



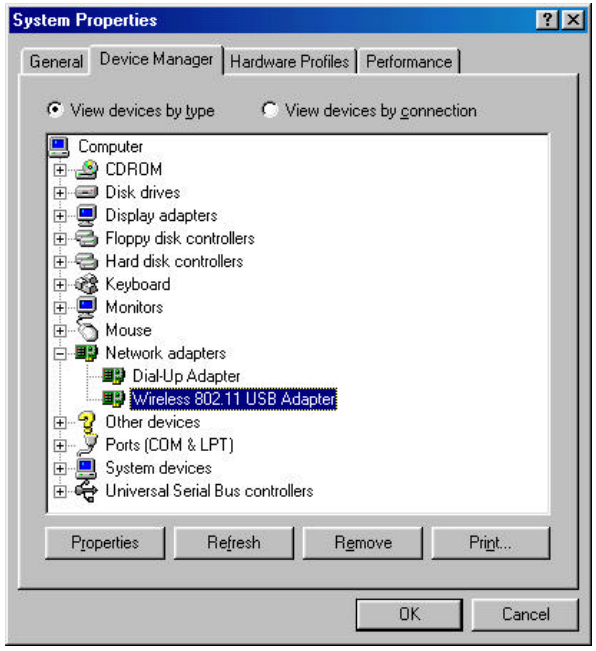
3. Windows is now ready to install the driver. Click the **Next** button to continue.

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

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



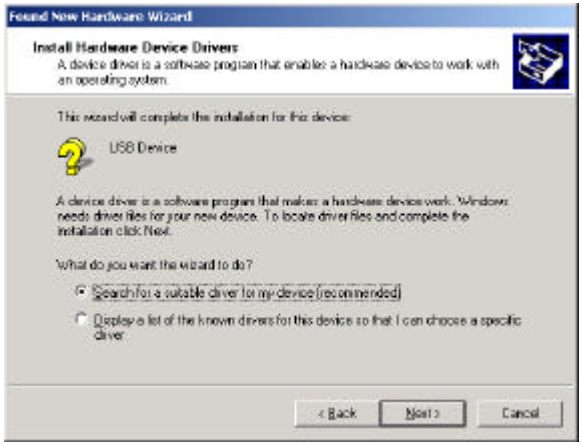
6. To verify the driver installation, Move cursor on "**My computer**" icon and click the right button of the mouse. Select the **properties**. The System Properties windows shows. Click the **Network adapters** on the Device Manager folder. Wireless 802.11b USB Adapter will be found if the driver installation is successful.



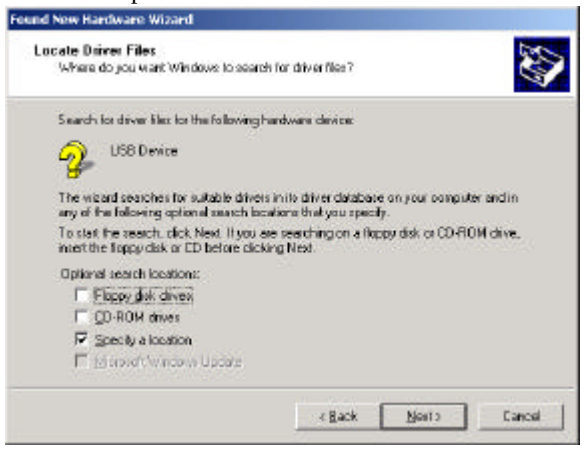
Install Driver Under Windows 2000

1. Install Wireless USB Adapter to your PC. Windows 2000 will automatically identify the USB Adapter. Click the **Next** button to proceed.

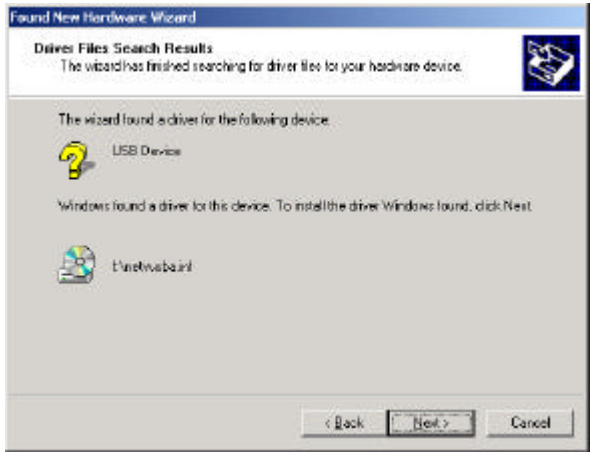
2. Select "Search for a suitable driver for my device" and click the **Next** button.



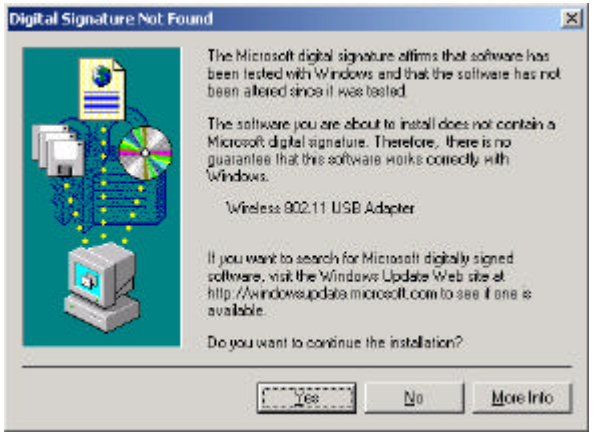
3. Make sure **Specify a location** is selected and click the **Next** button to proceed.



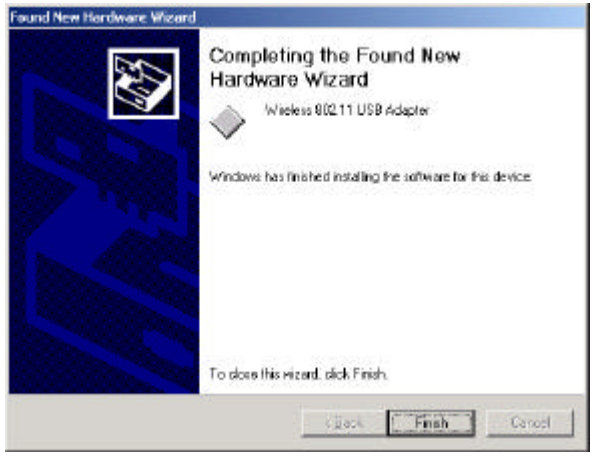
4. Windows is now to install the driver. Click the **Next** button to continue.



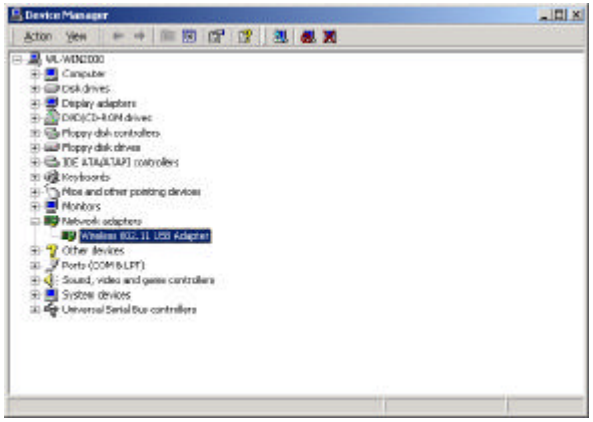
5. At this point, Windows will bring you to the **Digital Signature Not Found** screen. Click the **Yes** button to proceed.



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



7. Click right on **My computer** and select **properties**. Select **Hardware** and select **Device Manager** and click on the **Network adapters**. You will find the **Wireless 802.11 USB Adapter** if it is installed successfully. The USB adapter driver installation is finished.

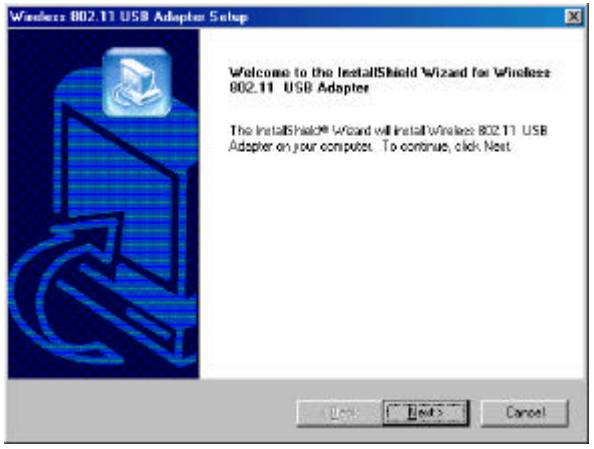


Configuration Utility

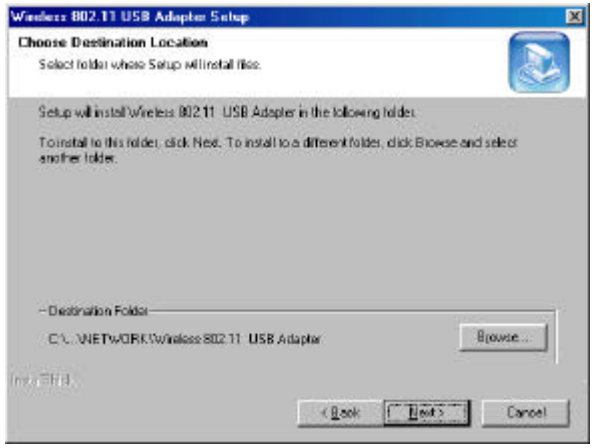
The **Configuration Utility** is provided to allow you further customization of the USB adapter and your wireless network.

Install the Configuration Utility

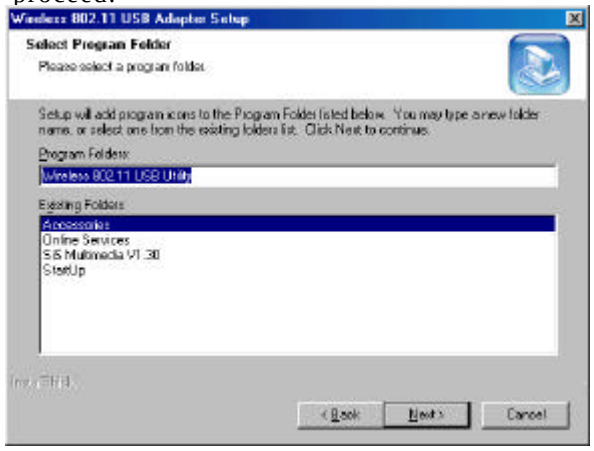
1. Execute the Sepup.exe file of F:\Utility\. Windows will bring you to the InstallShield Wizard screen. Click the Next button to proceed.



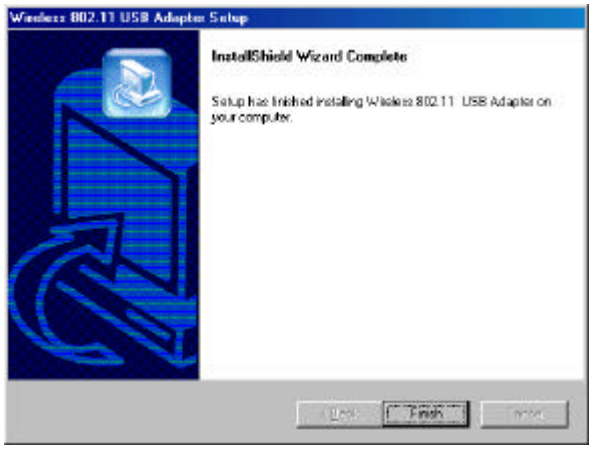
2. At this point, Windows will ask for the destination folder. Click **Next** button to continue.



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



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



5. After installing the utility' s software, installation will be complete. From the **Start** menu, select **Wireless802.11 USB Utility** and then click **Configuration & Monitor Utility.** There will be a **Wireless 802.11 LAN** icon at the corner. Click the icon. Windows will bring you to the **Wireless 802.11 LAN Monitor Utility** screen. This Utility is divided into six parts: **Monitor, Statistics, Site Survey, Encryption, Advanced and Version.**

Configure the Configuration Utility

MONITOR

The Monitor screen provides the information about the current link between the USB adapter and the wireless Access Point.

The **MAC Address** field shows the MAC Address of the USB adapter. The **Status** field shows the status between USB adapter and Access Point. The **Signal Strength** and **Link Quality** fields will be displayed by the strength of the block when applicable.

The Monitor screen also allows you to customize the settings for the USB adapter and your wireless network.

The **Operation 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 USB adapters 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.

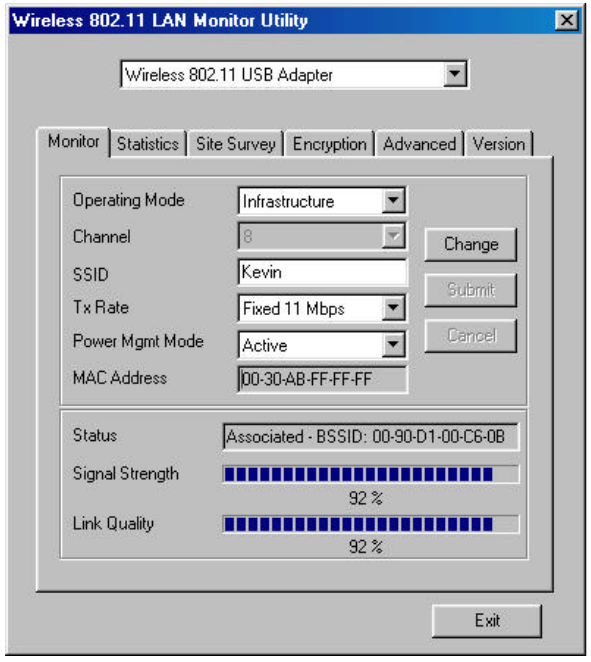
The **Channel** setting specifies the channel used in wireless communication and should be set to the same channel as the other points in the wireless network.

An 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 USB adapter.

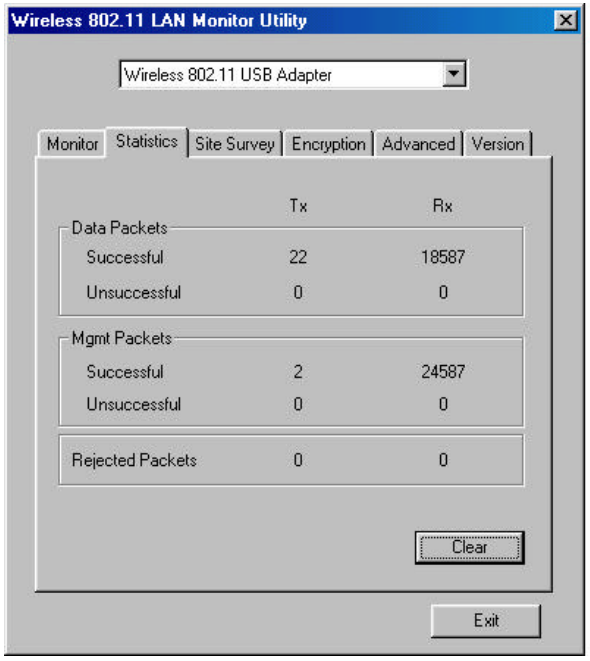
There are four fixed rates,**1 Mbps, 2 Mbps, 5.5Mbps** and **11 Mbps**. Beside, to optimize performance and range, the Tx Rate should be set to **Auto** rate, which will automatically adjust the transfer speed for best performance and longest range.

The **Power Mgmt Mode** field shows the power management mode for adapter. **Power Save** mode enables the power saving features of your USB adapter. And Power Save mode can only be set in Infrastructure mode.



STATISTICS

Statistics screen provide the Packet number of Tx and Rx that are successful or unsuccessful. The packets are divided into Data, Mgmt and Rejected packets.

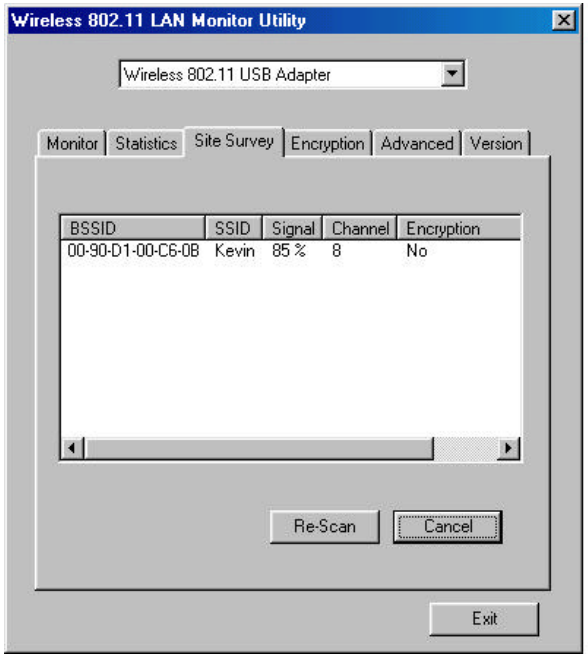


SITE SURVEY

The **Site Survey** screen shows all the points in the network.

An acronym for **B**asic **S**ervice **S**et **I**dentification, **BSSID** is a 48-bit field of the same format as an IEEE 802 MAC address. This field uniquely identified among all points in a wireless network.

The **Signal** field shows the signal strength of the point.
The **Channel** field shows to what channel the point is set.
The **Encryption** field shows the encryption of the point is enable or disable.



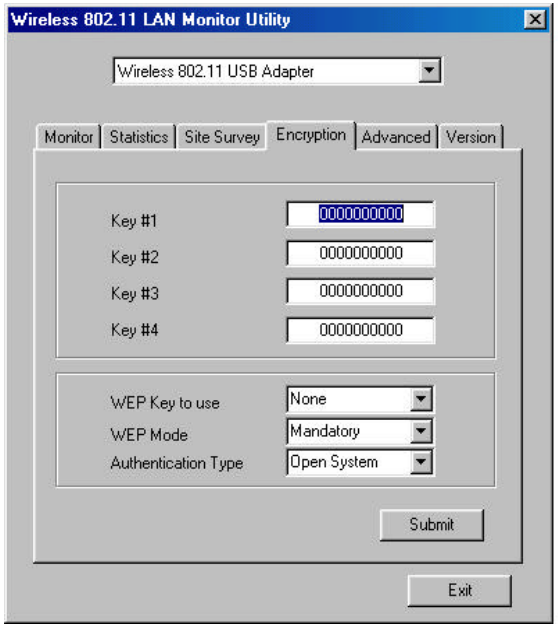
ENCRYPTION

The 40-bit WEP keys can be set for four different keys : **Key #1, Key #2, Key #3 and Key #4**.

Make sure that **WEP Key to use** is the same for each point on the network. The **None** mode is to disable the WEP.

The **WEP Mode** field is set the WEP mode of the point being searched.
The **Mandatory** mode is set that the point must enable WEP. The **Optional** mode is set that the point needn't enable WEP.

The **Authentication Type** field is set the type of authentication service. The **Open System** mode is for any USB adapter. The **Share Key** mode is for the USB adapter who knows a shared secret key.



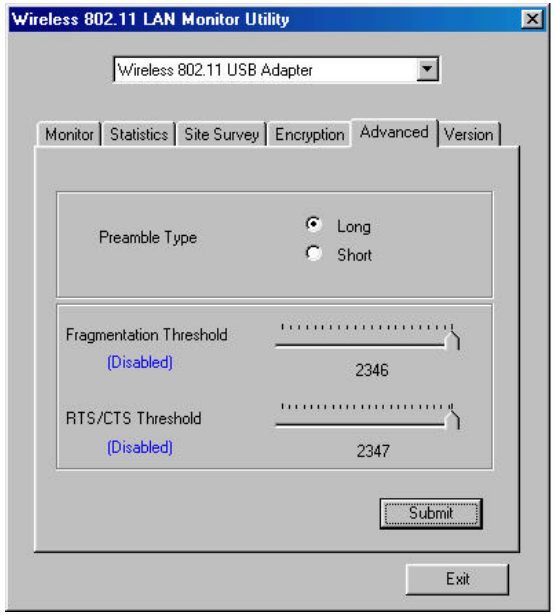
ADVANCED

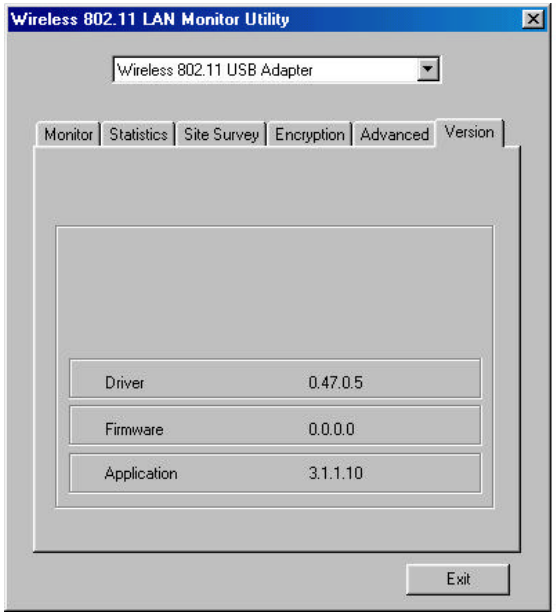
The **Advanced** screen allows you to set the **Preamble Type, Fragmentation Threshold and RTS/CTS Threshold.**

The **Preamble Type** field is set for the length of preamble. The **Long** mode is set for 128 bits. The **Short** mode is set for

The **Fragmentation Threshold** field is set for the length of the fragment. Each fragment is a frame no larger than the Fragmentation Threshold.

The **RTS/CTS Threshold** field is set for the length threshold. A USB adapter shall use an RTS/CTS exchange for directed frames only when the length of the MPDU is greater than the length threshold.



VERSION

The **Version** screen shows the release information for the Configuration Utility.