User Manual

WU210P

USB Adaptor

Version 1.0—July 2001

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FCC Certifications

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

Shielded interface cables must be used in order to comply with emission limits. You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void your authority to operate the equipment

FCC RF Radiation Exposure Statement

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.

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.

Contents

1. Introduction

Thank you for purchasing USB Wireless LAN Adaptor-WU210P from Remotek Corp.. This quick start manual will assist you with the installation procedure.

The package you have received should contain the following items:

- WU210P USB WLAN Adaptor
- USB to Mini USB Cable
- User manual
- CD ROM containing Wireless LAN Management utility and drivers

Note: if anything is missing, please contact your vendor.

2. Installation Overview

Here are some steps you will perform in establishing your wireless network connection:

- Install the Access Point at first. AP is needed in case of infrastructure network mode.
- Install the software using the Installation CD-ROM.
- Insert the Wireless LAN adaptor (WU210P).
- Install the driver of USB WLAN adaptor.
- Install the network protocols required to communicate on your network. Most likely you will need the TCP/IP protocol.
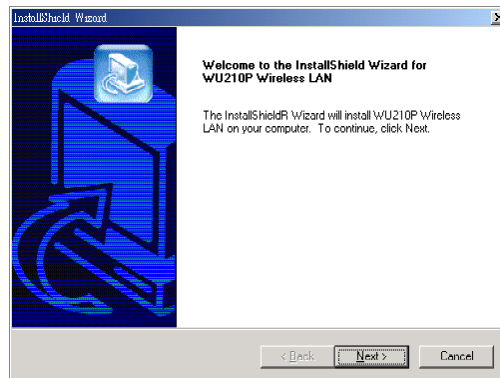
3. Installation Procedure of WU210P

Please follow the following steps one by one in order to install the USB WLAN Adaptor successfully.
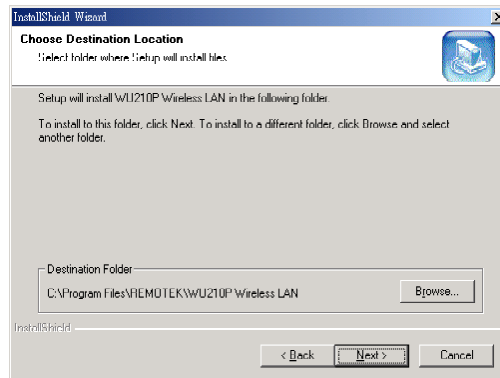
Step 1. Power on your computer and allow **Window 95/98/2000** to load fully.

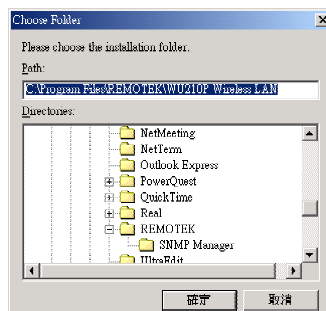**Step 2.** Be sure that there is no USB adaptor inserted yet.

Step 3. Insert the given Installation CD-ROM and then click on the setup.exe.

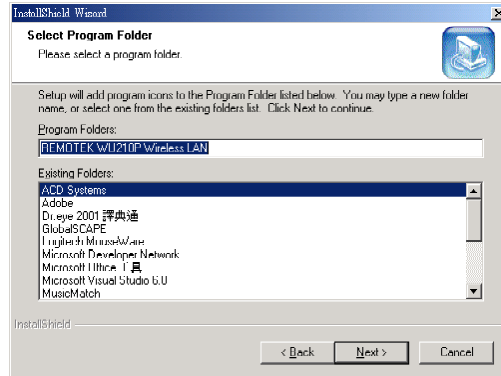**Step 4.** Give the path of the destination folder.

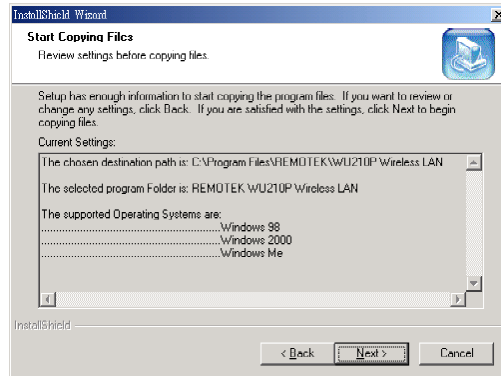To change the path of the destination folder click on Browse
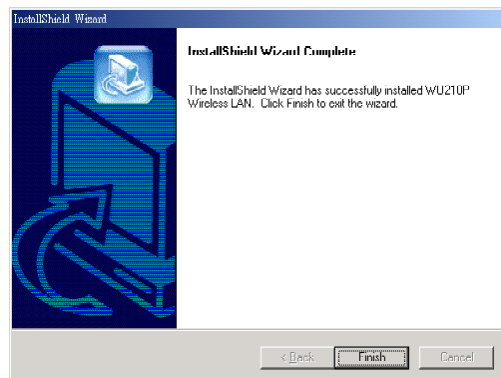

After all, click Next to continue.
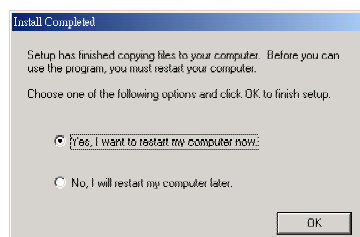
Step 5. Type the program folder name.

Step 6. Last check before install the program.

Step 7. It takes a few seconds for copying the utility files and then click on Finish to complete the installation

Step 8. Message that notifies you to restart your computer may pop up. Select Yes. It will shut down your computer and restart.
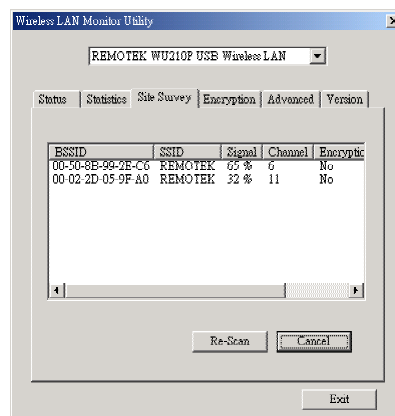
Step 9. Insert the WU210P - USB WLAN Adaptor into USB slot, windows will install the driver automatically.

Step 10. If the Configuration & Monitor Utility icon is not on system tray, it shows the installation is not successful. Select Uninstall WLAN Monitor Utility in program folder to remove. Restart your computer after uninstalling the driver to make the changes effective.

Step 11. If you find the Red sign on system tray, which means your Wireless LAN Adaptor haven't connected to an Access Point Successfully. Please double-click on the red sign on system tray to open Configuration & Monitor Utility. Select Site Survey tab, and click Re-Scan to find all site nearby. You may double-click on the site that
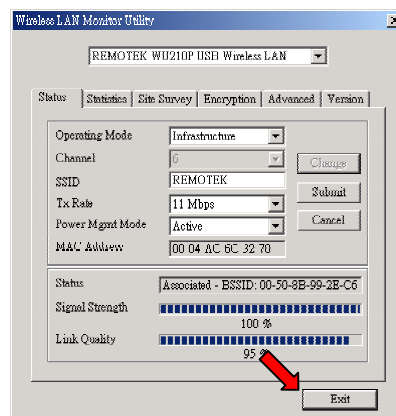

you want to connect to.

Step 12. Modify TCP/IP settings of Windows. You can select either Static or DHCP setting. If you use the static IP setup then enter the IP value, Subnet masking, DNS, and Gateway Address values. After setting these parameters appropriately, click OK to make the settings available. If you are operating on Windows 95/98, message that notifies you to restart your computer should pop up. Select Yes. It will shut down your computer and restart to make settings available.
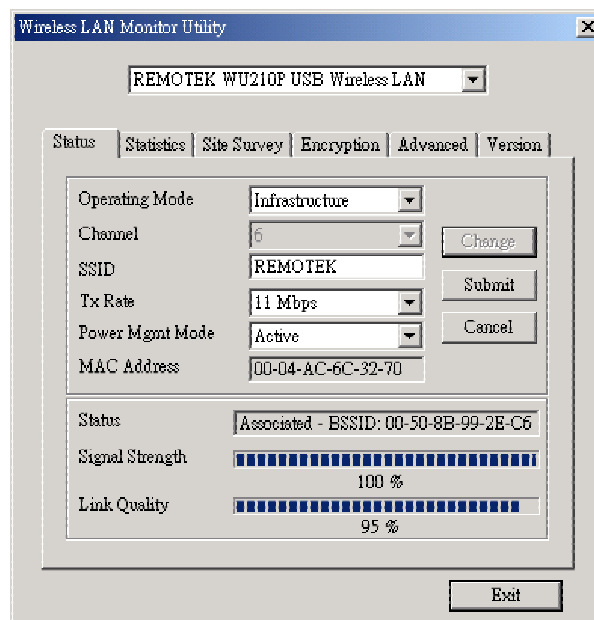
4. Configuration Utility

The Configuration Utility is a powerful application that helps you to configure the WU-210P and monitor the statistics of the communication. Please keep on mind that this utility can be used to change the following configuration parameters when the cards are active. The Configuration Utility appears as icon on the system tray of Windows every time the card is running. You can open it by double-clicking on the icon.

Users can navigate through sheets. "**Exit**" button will exit application. Here we explain the use and meanings of the various screen messages.

4.1. "Status" tab

You can change the configuration by clicking on the "**Change**", and click "**Submit**" after the configuration has been changed.

Operation mode: shows one of these network modes:

- **Infrastructure** – This mode of operation requires the presence of an 802.11 Access Point. All communication is done via the Access Point.
- **Ad-Hoc** – This mode is for the 802.11 peer-to-peer operation. All communication is done from client to client without the use of an Access Point. The user should switch to the channel that he wants to approach. The first method is to set the clients with the same channel.

Channel: shows radio channel number used for networking. Only Access Points and Ad-Hoc nodes can create a BSSID therefore this parameters is not active if the mode is infrastructure. Infrastructure client nodes will always go the same channel as their AP.

SSID: shows the SSID of the BSS that you want to join.

Tx Rate: shows the transfer rate. There are 1 Mbps, 2M bps, 5.5 Mbps, 11 Mbps, and auto mode. If you select auto mode, the card will select the most suitable rate automatically.
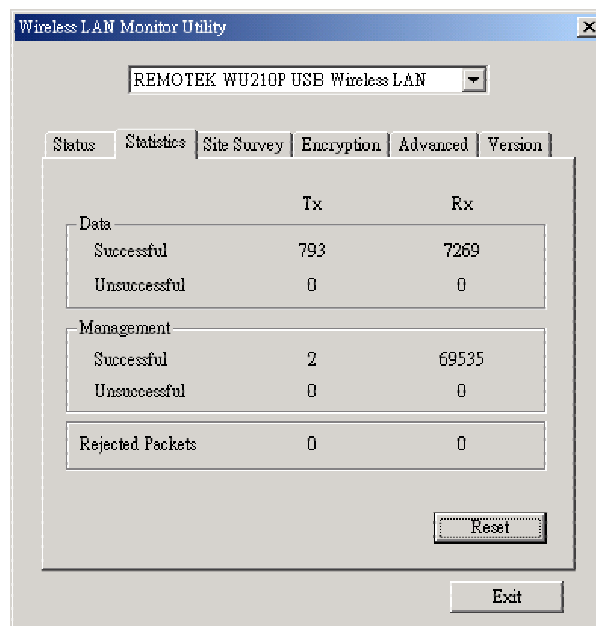
Power Mgmt Mode: shows Power Management modes:

- **Active** – Adaptor will always be in active mode.
- **Power Save** – Adaptor will save power when it is idle.

Signal strength: This bar shows signal strength level. The higher the blue bar is, the more power of radio signal received by Remotek USB WLAN adaptor is. This indicator helps to find the most comfortable antenna/workstation position for quality network operation.

Link quality: The measured signal level gives the overall Link Quality and Connection Status.
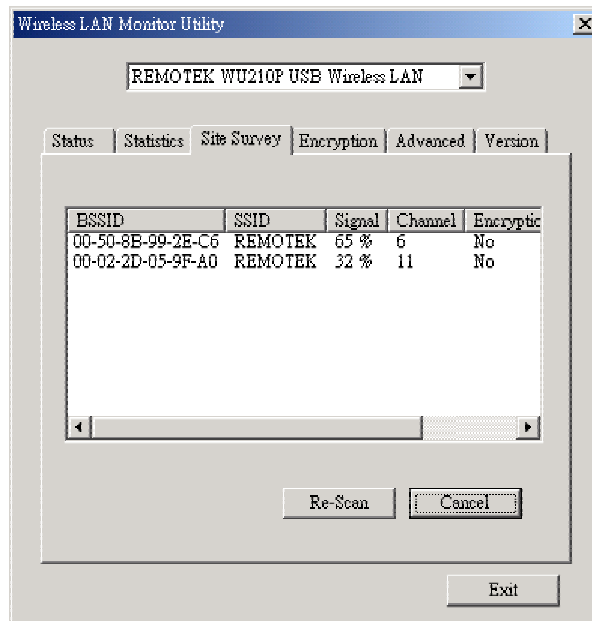
4.2. "Statistics" tab

It shows all amounts of packets that received or transmitted by the adaptor.

Data Field: shows the amounts of data packets transmitted or received by the adaptor. And also shows how many data packets are transmitted or received successfully or not.

Management Field: shows the amounts of management packets transmitted or received by the adaptor. And also shows how many management packets are transmitted or received successfully or not.
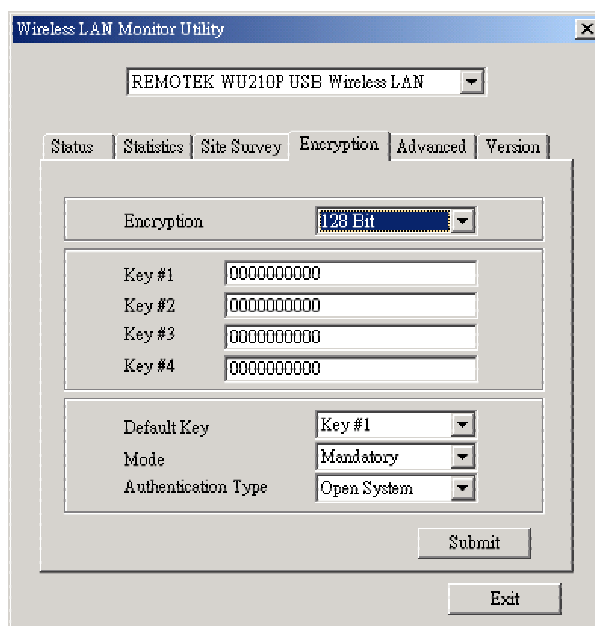
Rejected Packets Field: shows the amounts of rejected packets transmitted or received by the adaptor.

4.3. "Site Survey" tab

It shows all APs or adaptors in Ad-Hoc mode nearby. You may click **Re-Scan** to collect the wireless device information to know the BSSID and Ch(Channel). If you want to connect to any device on the list, double-click on the device. The adaptor will connect to the device you have selected.
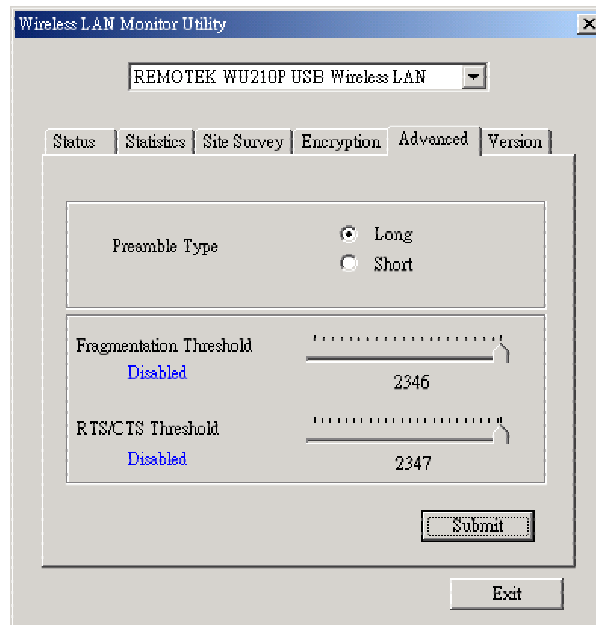
4.4. "Encryption" tab

You may desire an additional measure of security on your wireless network, which can be achieved by using WEP(Wired Equivalent Privacy) encryption. WEP encrypts each frame transmitted from the radio using one of the keys entered from this panel. When an encrypted frame is received it will only be accepted if it decrypts correctly. This will only happen if the receiver has the WEP key used by the transmitter.

This panel allows the entry of four keys, which can then be written to the driver and registry. Each key must consist of 10 digits. If entered incorrectly, program will not write keys to driver. Key1-Key4: These four fields must be used to enter the keys.

Submit- this button updates the driver with the four keys displayed in Key1 through Key4. The keys are also written to the registry for permanent storage.
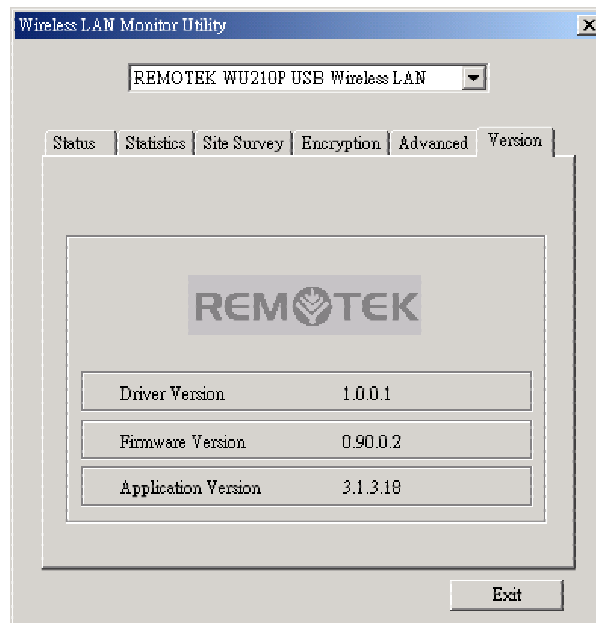
Encryption- this checkbox enables or disables encryption operation. When it is checked through 64 bits and 128 bits, encryption is enabled. When disabled is checked, encryption is hidden.

4.5. "Advanced" tab

We can find and change some advance settings here. They are **Preamble Type**, **Fragmentation Threshold**, and **RTS/CTS Threshold**. Note that the adaptor has a feature to select the preamble type from AP automatically.

4.6. "Version" tab

It shows **Driver Version**, **Firmware Version**, and **Application Version**.

5. Technical specifications of WU210P

Model No	WU210USB
Standard	IEEE802.11b
Card Type	USB 1.0
Transmission range	Outdoor: 100~300M, Indoor: 30~100M
Radio Type	Direct Sequence Spread Spectrum
Data Rate	1,2,5.5,11Mbps per Channel
Frequency band	USA & Canada:2.400 GHz ~2.4835GHz Europe: 2.4000~2.4835GHz
Compatibility	Windows 98/2000/ME
Certification	FCC, CE
LED Indicators	PWR, TX, RX
Power consumption	5V DC
Dimensions	100x65x14mm
Weight	29g
Operating Temperature	0℃ to 55℃, 32℉ to 131℉
Storage Temperature	-20℃ to 55℃, -4℉ to 158℉
Operating Humidity	0% to 70% Non-Condensing
Storage Humidity	0% to 95% Non-condensing
Data Encryption	64 bit or 128 bit KEY WEP Encryption
Software	Configuration Utility software
USB Cable	1M