

*** USER'S MANUAL ***

FCC ID : SYC0B390C02

The Federal Communication Commission 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 instruction, may cause harmful interference to radio communication. 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 of 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.**

Use only shielded cables to connect I/O devices to this equipment. You are cautioned that change or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

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 INTERFERECE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE D OPERATION.

1. This device may not cause harmful interference and
2. This device must accept any interference received, including interference that may cause undesired operation.

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Introduction

Thank you for ordering the USB 2.0 wireless-G LAN DOCK. The USB 2.0 wireless-G LAN DOCK is an intelligent expansion module, which connects to a PC or notebook via Universal Serial Bus (USB) port, providing one high-speed RS-232 serial port, one printer port, one PS/2 keyboard & mouse, IEEE 802.11g LAN adapter and 3 downstream USB ports. The USB 2.0 wireless-G LAN DOCK features easy connectivity for traditional serial devices, keyboards, mice and other USB devices and provides up to 480Mbps USB2.0 High Speed capability.

The **Wireless-G USB Adapter** (hereafter called USB adapter), compliant with IEEE 802.11b/g, is a high-efficiency wireless adapter for wireless networking at home, in office, or in public places. This USB adapter connects directly to any USB-ready desktop/notebook computers, so that you can share files, printers, and high-speed access to the Internet over your existing wireless network easily, without disassembling your computer.

The USB adapter has a data rate of up to 54Mbps, and can auto-negotiate to 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1Mbps to be compatible with any IEEE 802.11b/g device.

The USB adapter is compatible with Windows 98SE/ME/2000/XP and can be used in either **Ad-hoc mode** (computer-to-computer, without a wireless router) or **Infrastructure mode** (computer-to-wireless router, a wireless router is required).

By simply plugging in a USB 2.0 wireless-G LAN DOCK, you will:

- Add one high-speed serial port, one printer port, one PS/2 keyboard & mouse, IEEE 802.11g LAN adapter and 3 downstream USB ports to your PC or notebook in seconds.
- Three USB High Speed downstream ports .
- Improve the inconvenience of configuring old PC solutions like card extension solutions, which require adjusting IRQ or jumper settings and the incompatibility of various brands of docking solutions or bus repeaters.
- Avoid the hassle of removing your PC case, or rebooting the operating system during installation.
- With the IEEE 802.11g 2.4GHz (OFDM) standard, high data transfer rate-up to 54Mbps.
- Supports 64/128/256-bit WEP and WPA data encryption security.
- Supports peer-to-peer communication among any wireless users, no Access Point

required.

- Automatic fallback increase data security and reliability.

System Requirements

- A PC with a minimum of a 75MHz Pentium, or equivalent
- A minimum of 16M bytes of RAM.
- One available USB type A downstream port. (UHCI, OHCI, or EHCI)
- Windows 98SE/Me/2000/XP

Package Contents

The product you purchased should contain the equipment and accessories shown as follows:

- USB 2.0 wireless-G LAN DOCK
- One 6' USB AB type cable
- One 2A switching power adapter (optional)
- One driver and User's manual CD

Connectors

- One DB-9 RS-232 serial interface connector supports baud rates from 4800 to 115.2K.
- One DB-25 parallel connector supports IEEE-1284 bi-directional printer port.
- One Mini-din for PS/2 keyboard, mouse.
- Three USB receptacle type A downstream ports.
- One USB type B upstream connector.

USB 2.0 wireless-G LAN DOCK Functions

The available functions of USB 2.0 wireless-G LAN DOCK depend on the status of power supplied:

- Bus powered
 1. Connect USB cable to PC to provide bus power.
 2. When you provide bus power only, the PS/2 mouse & keyboard, RS232, wireless-g LAN adapter and printer functions will be enabled.
However, the USB Downstream Ports can also work under low power mode.
- Externally powered
 1. Connect power adapter to provide external power.
 2. When you provide external power, the USB Downstream Ports can support all USB devices, and you can use all the functions of USB 2.0 wireless-G LAN DOCK.

LED Indicator

- Power Indicator

The Power Indicator will turn **RED** when bus power is supplied, and will turn **GREEN** when external power is supplied.

- USB Indicators

There are three USB and one WLAN indicators to show if the USB Downstream Ports and WLAN are ready for use.

1. If the WLAN is not ready for use, the WLAN Indicators will turn **OFF**, and the Wireless LAN feature cannot be used.
2. If the WLAN is ready for use, the WLAN Indicators will turn **ON**, and you can use all the functions of the Wireless LAN.
3. If over-current happens for certain USB Downstream Ports, the corresponding USB Indicator will turn **OFF** to indicate that this port is not working now.
4. When over-current situation is resolved, the USB Indicator will turn **ON** again.

Installing wireless-G LAN Software

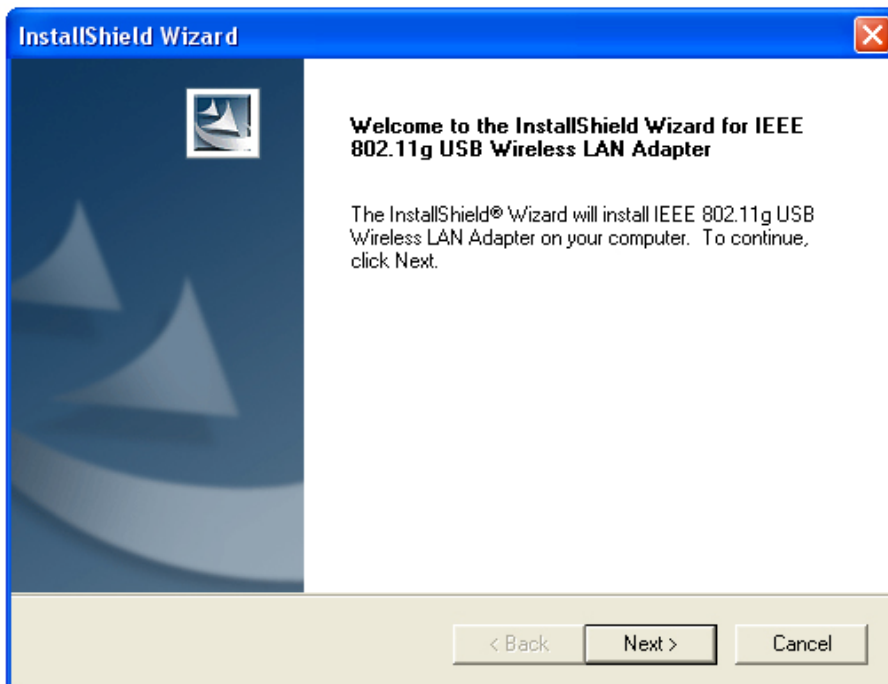
Step 1. Insert the provided Driver and Utility CD into your CD drive.

Step 2. Install WLAN Software from the CD firstly.

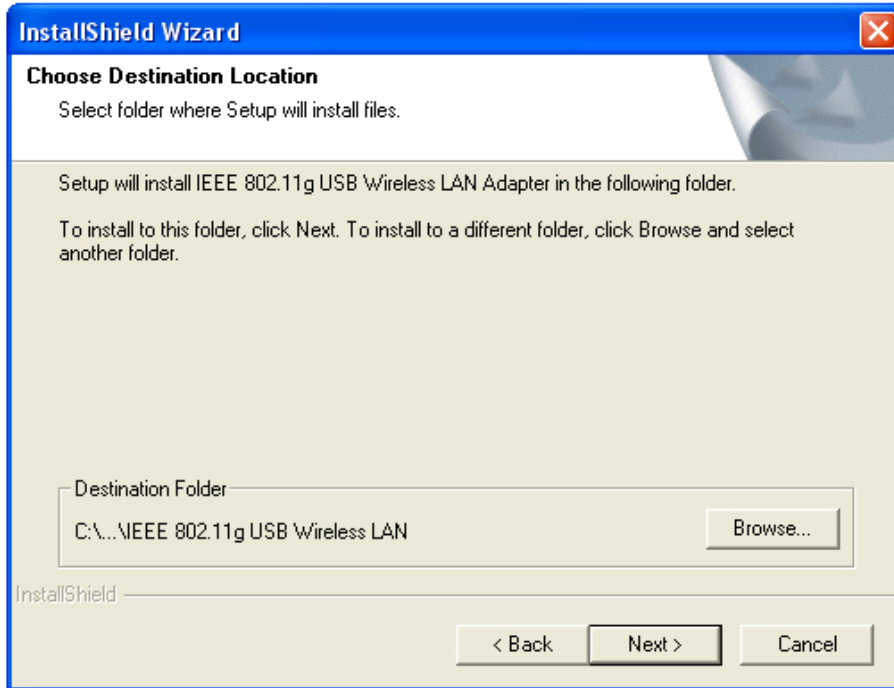
Note1: Before installing the utility software, **DO NOT** insert the WLAN Dock into your computer. If the WLAN Dock is inserted already, Windows will detect the WLAN Dock and request for a driver. Click **Cancel** to quit the wizard and remove the WLAN Dock from your computer.

Note2: If you have installed the WLAN Dock driver & utility already, please uninstall the old version first.

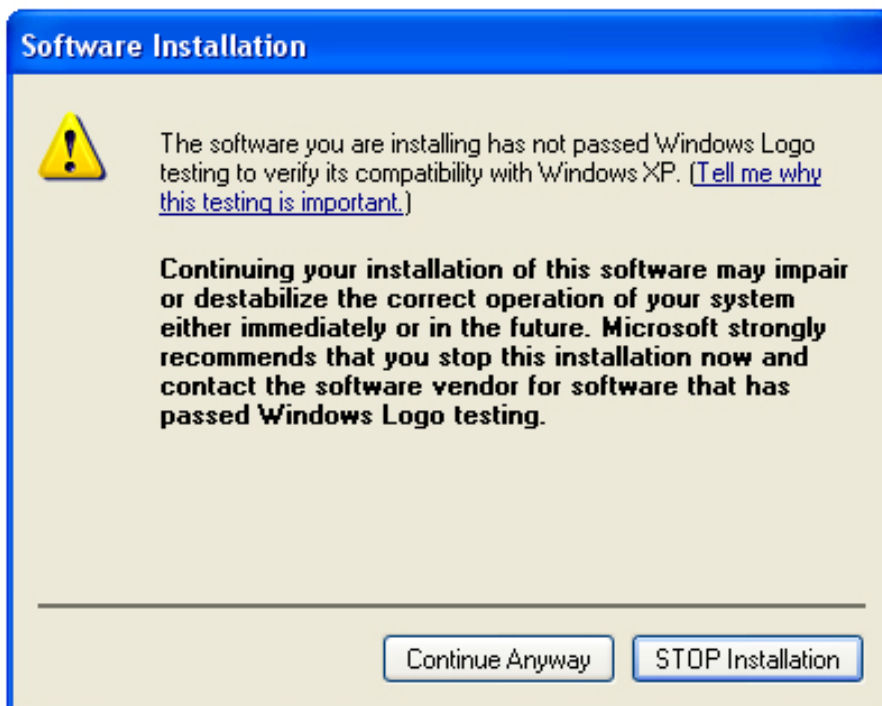
Step 3. When the welcome screen appears, click **Next**.



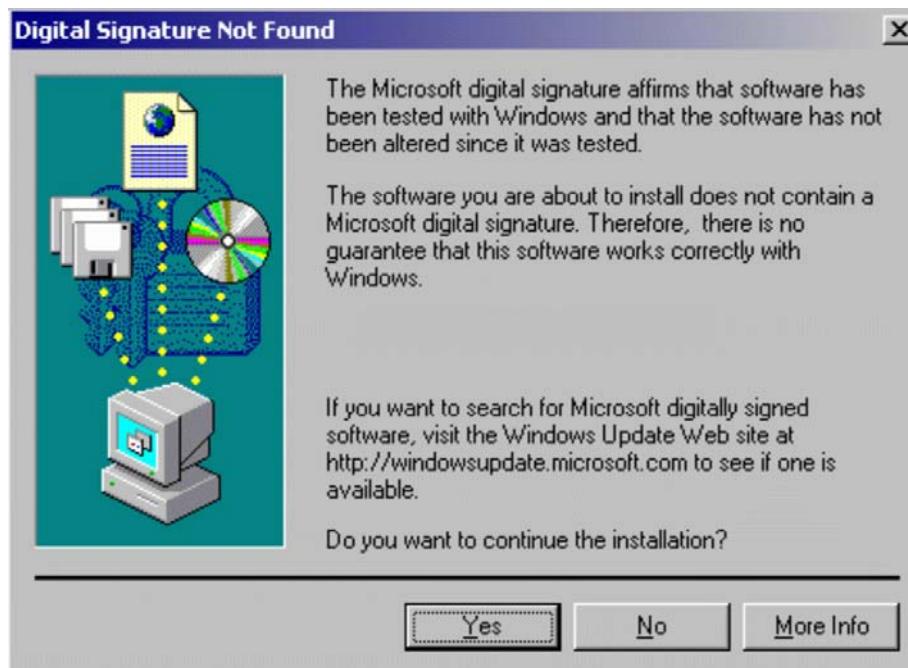
Step 4. Click **Next** to accept the default destination folder for the software or click **Browse** to manually select a different destination folder.



Step 5. For Windows XP, click **Continue Anyway** at the Windows Logo Compatibility screen.



For Windows 2000, click **Yes** at the Digital Signature screen.



Installing USB 2.0 wireless-G LAN Dock procedures .

Step 1. Connect the USB cable into the USB 2.0 wireless-G LAN Dock and the USB port of your PC.

Step 2. Please **DO NOT** remove the driver from CD drive.

Step 3. Windows will start detecting USB devices. Please follow the related sections to install your USB 2.0 wireless-G LAN Dock.

Win98/98SE/Me Driver Installation

The driver installation is divided into 5 steps. For **Win98/98SE** installation should include all 5 steps (A-E). For **Win Me** installation should only need to perform Step B and D.

Please install USB 2.0 wireless-G LAN DOCK step by step by following the instructions.

Step A: USB Hub Installation (This step for Windows 98 only)

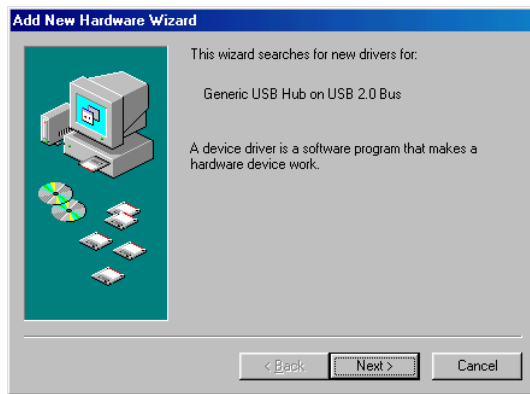


Figure A-1

A1. Click “Next” to Continue installing the USB2.0 Hub (Ref Figure A-1)



Figure A-2

A2. Click “Next” to initiate a search for the best driver for your device (Ref Figure A-2)



Figure A-3

A3. Please insert the “Windows 98” CD into CD-ROM. Click “Next” to continue (Ref Figure A-3)



Figure A-4

A4. Click “Next” to continue
(Ref Figure A-4)



Figure A-5

A5. Click “Finish”, Windows has finished installing USB 2.0 Hub driver
(Ref Figure A-5)

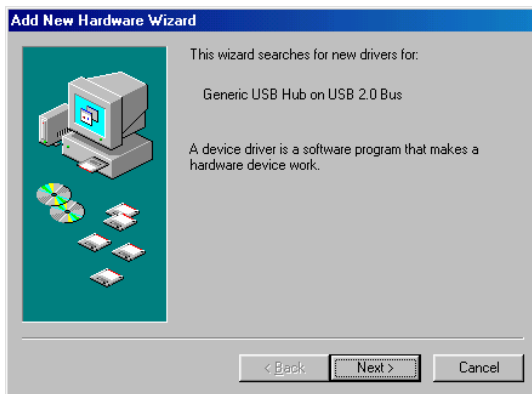


Figure A-6

A6. Click “Next” to continue installing a USB Hub
(Ref Figure A-6)



Figure A-7

A7. Click “Next” to continue
(Ref Figure A-5)



Figure A-8

A8. Click “Next” to continue
(Ref Figure A-5)



Figure A-9

A9. Click “Next” to continue
(Ref Figure A-5)



Figure A-10

A10. Click “Finish”, Windows
has finished installing USB Hub
(Ref Figure A-10)

Step B: Serial Converter Installation (Required for 98/98SE/Me Windows System)

To install the USB to serial port driver of the USB 2.0 wireless-G LAN DOCK, please make sure the driver diskette is inserted:

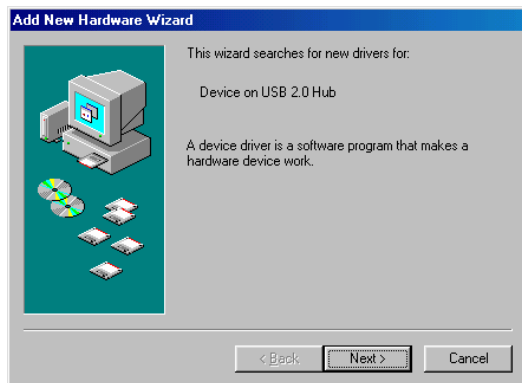


Figure B-1

B1. Insert the “USB 2.0 DOCK driver CD” into CD ROM. Click “Next” to continue
(Ref Figure B-1)



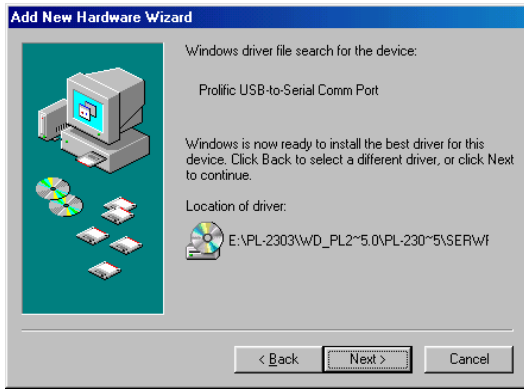
Figure B-2

B2. Click “Next” to initiate the search for the best driver for your device
(Ref Figure B-2).



Figure B-3

B3. Select “Specify a location” and the location of the USB 2.0 DOCK driver CD.
Click “Next” to start and search.
(Ref Figure B-3).



B4. Click “Next” to continue
(Ref Figure B-4)

Figure B-4



B5. Click “Finish”. Windows has finished installing RS-232 Serial port driver
(Ref Figure B-5)

Figure B-5

Step C. USB Composite Device for PS/2 keyboard & mouse Installation (This section for Windows98/98SE only)

To install the USB Composite Device driver of USB 2.0 wireless-G LAN DOCK:



Figure C-1

C1. Click “Next” to continue
(Ref Figure C-1)



Figure C-2

C2. Click “Next” to initiate search
for the best driver for your device
(Ref Figure C-2)



Figure C-3

C3. Click “Next” to continue
(Ref Figure C-3)



Figure C-4

C4. Click “Next” to continue
(Ref Figure C-4)



Figure C-5

C5. Click “Finish”. Windows has finished installing the USB Composite device driver for PS/2 keyboard & mouse.
(Ref Figure C-5)

Step D: Printer Adapter Installation (This section for Windows98/98SE/Me)

To install the software for USB to Printer Converter of the wireless-G LAN DOCK:

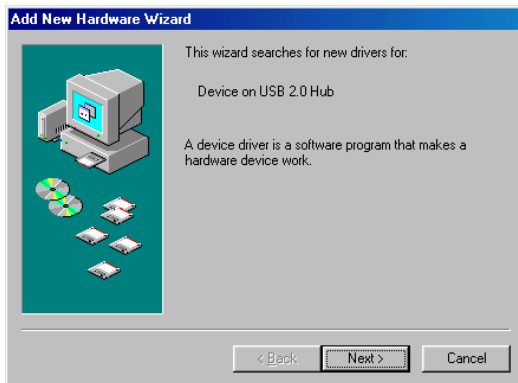


Figure D-1

D1. Click “Next” to continue
(Ref Figure D-1)

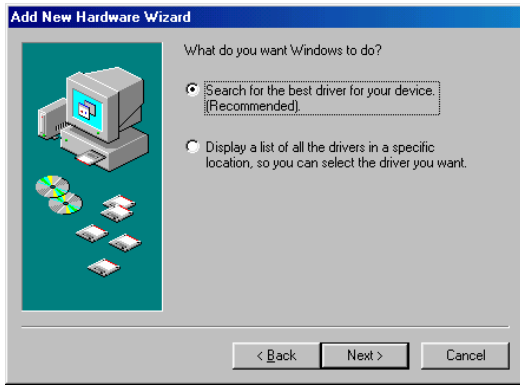


Figure D-2

D2. Click “Next” to initiate a search for the best driver for your device
(Ref Figure D-2)



Figure D-3

D3. Select “Specify a location” and the location of the USB 2.0 DOCK driver CD.
Click “Next” to start and search.
(Ref Figure D-3)



Figure D-4

D4. Click “Next” to continue
(Ref Figure D-4)



D5. Click “Finish”. Windows has finished installing the printer driver (Ref Figure D-5)

Figure D-5

Before connecting the printer on the parallel port of USB 2.0 wireless-G LAN DOCK, the printer driver must be installed in advance, or it might print unknown format of characters.

Please refer to "Setting Up the Printer Device" section to connect your printer to the USB 2.0 wireless-G LAN DOCK.

Step E. USB HID Device for PS/2 keyboard & mouse Installation
(This section for Windows98/98SE only)

To install the USB HID device PS/2 keyboard & mouse driver of USB 2.0 wireless-G LAN DOCK:



E1. Click “Next” to continue (Ref Figure E-1)

Figure E-1



Figure E-2

E2. Click “Next” to initiate search for the best driver for your device (Ref Figure E-2)



Figure E-3

E3. Click “Next” to continue (Ref Figure E-3)



Figure E-4

E4. Click “Next” to continue (Ref Figure E-4)

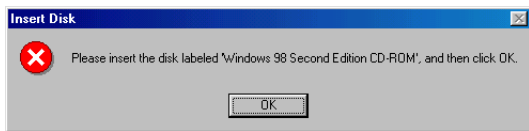


Figure E-5

E5. A warning message window will show up. Please insert the Windows 98 CD and Click “OK” to continue or specify the location of the 98 system installation files. (Ref Figure E-5)



Figure E-5

E5. Click “Finish”. Windows has finished installing the USB HID driver for PS/2 keyboard & mouse.
(Ref Figure E-5)

Win2000 Driver Installation

After you installed the Wireless-G driver and software, please connected the W-G LAN Dock to your computer by USB cable. And make sure the driver CD-ROM is still in the CD-ROM driver.

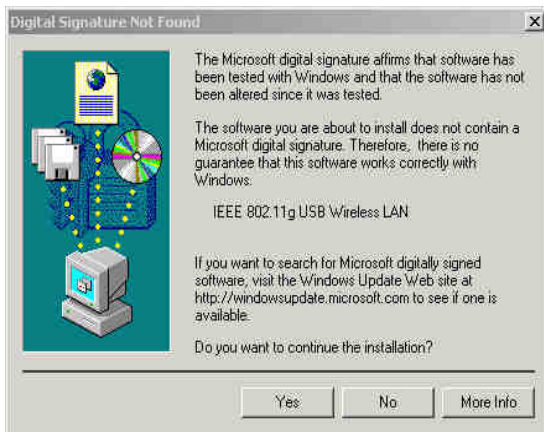


Figure Win2k-1

Step1. Click “Yes” to continue
(Ref Figure Win2k -1)



Figure Win2k -2

Step2. Click “Next” to continue
(Ref Figure Win2k -2)



Figure Win2k -3

Step3. Click “Next” to initiate search for the best driver for your device (Ref Figure Win2k -3)

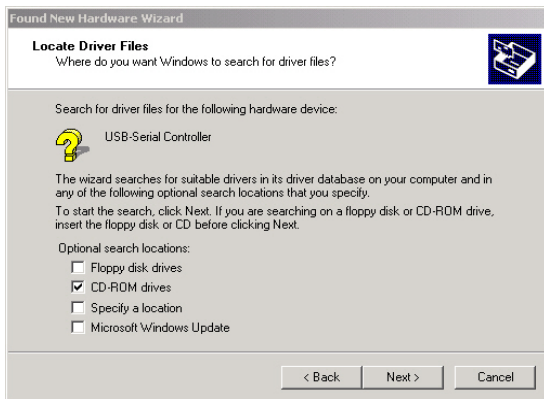
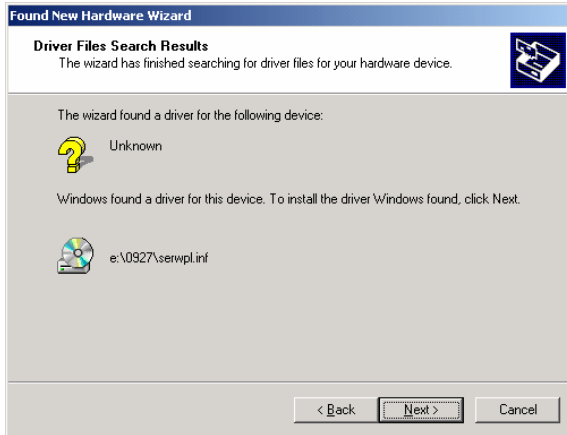


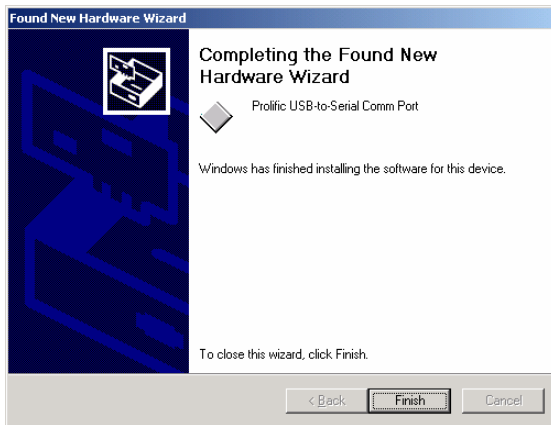
Figure Win2k -4

Step4. Please insert the driver CD into CD-ROM. Click , then press “Next” to continue (Ref Figure Win2k -4)



Step4. Click “Next” to continue
(Ref Figure Win2k -5)

Figure Win2k -5



Step5. Click “Finish”,
Windows has finished
installing Serial port driver.
(Ref Figure Win2k -6)

Figure Win2k -6

- Before connecting the modem on the serial port of USB 2.0 wireless-G LAN DOCK, the modem driver must be installed in advance. Otherwise it might operate unexpectedly.
- Please refer to "Setting Up the HyperTerminal with USB to serial port" section as an example of routing your COM port setting.

WinXP Driver Installation

To install the USB to serial port driver of the USB 2.0 wireless-G LAN DOCK, please make sure the driver diskette/CD is inserted:

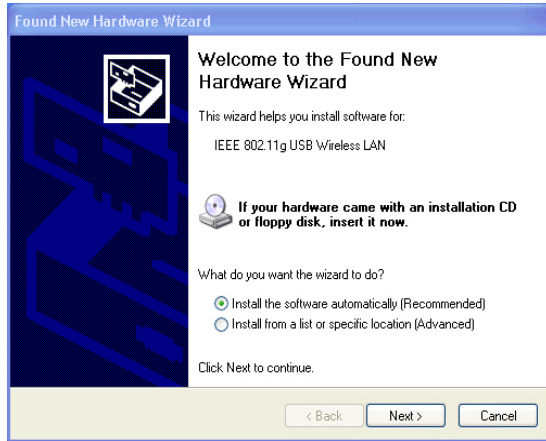


Figure WinXP-1

Step1. Click “Next” to continue
(Ref Figure WinXP-1)



Figure WinXP-2

Step1. Click “Continue Anyway” to continue
(Ref Figure WinXP-2)

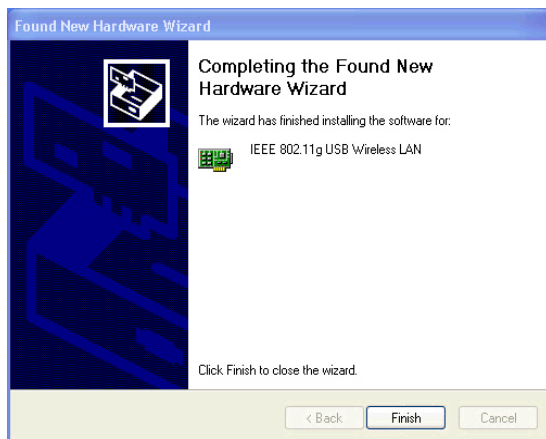


Figure WinXP-3

Step1. Click “Finish” to continue
(Ref Figure WinXP-3)



Figure WinXP-4

Step1. Click “Next” to continue
(Ref Figure WinXP-4)

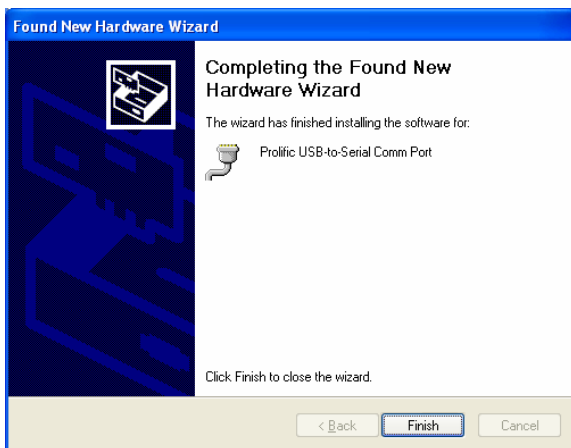


Figure WinXP-5

Step2. Click “Finish”,
Windows has finished
installing Serial port driver.
(Ref Figure WinXP-2)

- Before connecting the modem on the serial port of USB 2.0 wireless-G LAN DOCK, the modem driver must be installed in advance. Otherwise it might operate unexpectedly.
- Please refer to "Setting Up the HyperTerminal with USB to serial port" section as an example of routing your COM port setting.

Congratulations!! You have finished installing USB 2.0 wireless-G LAN DOCK.

Please click on **Start**>> **Settings**>> **Control Panel**, and double click **System**, and **Device Manager**. Please double check the Human Interface Devices, Keyboard, Mouse, Ports, and Universal serial bus controller of the dialog box to see if they work properly.

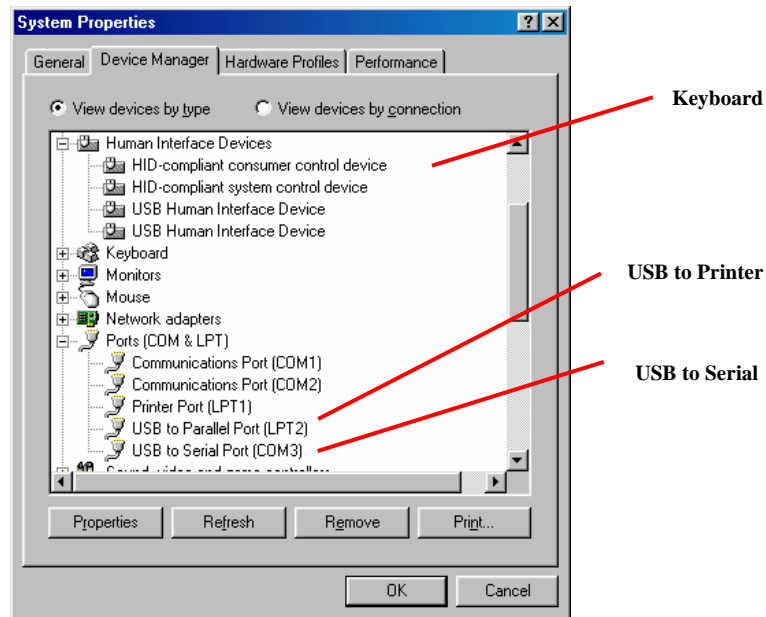


Figure 3

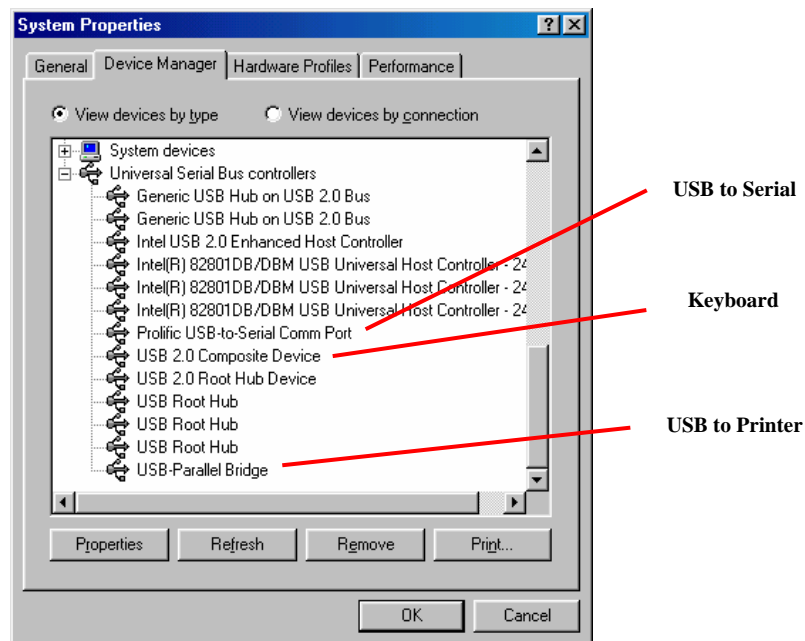


Figure 4

Set Up the Printer Device

Follow the steps below to connect your printer to the USB 2.0 wireless-G LAN DOCK with your PC:

For Windows 98/98SE and Me:

1. Turn off your printer. Plug in the cable to connect USB 2.0 wireless-G LAN DOCK parallel port and printer. Turn on the printer afterwards.
2. Turn on your computer and plug in the USB cable to connect the USB 2.0 wireless-G LAN DOCK and the USB port of PC.
3. Please click on **Start, Settings, Control Panel**, double click **System**, and click on **Device Manager**. Check which printer port is located by USB to parallel port. The following example is located as LPT2.

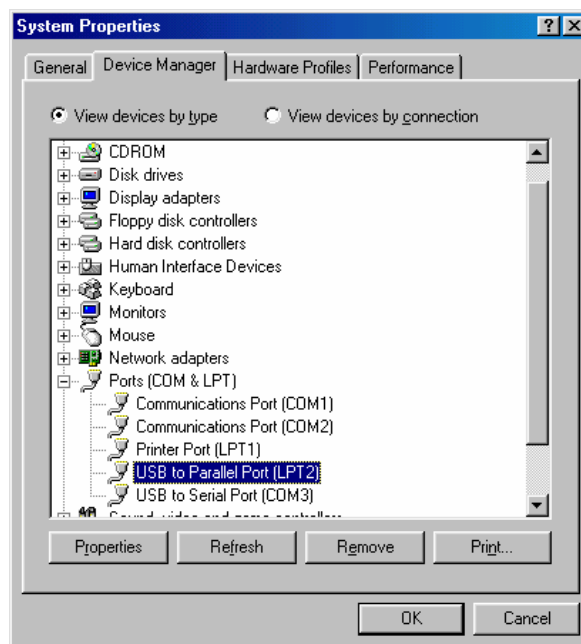


Figure 5

4. If you have installed a printer device before, click **Start, Settings, Printers**. Right-click the default installed printer and click on **Properties**. The Properties dialog box of the installed printer will appear on your screen.
5. Click the **Details** folder tab and change the printer port to **LPT2: (USB to Parallel Port)**.

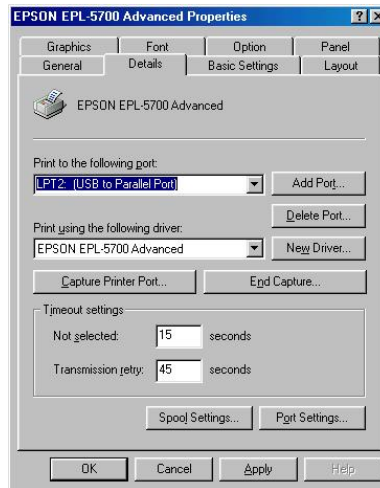


Figure 6

6. If you do not have a printer installed yet, click on **Start, Settings, Printers, Add Printer**. The **Add Printer Wizard** will start and assist you in installing a new printer device. Select the printer manufacturer and model name from the list provided by the wizard or use the printer driver diskette supplied by your printer.
7. When prompted which port the printer will use, click on **LPT2: USB to Parallel Port**.

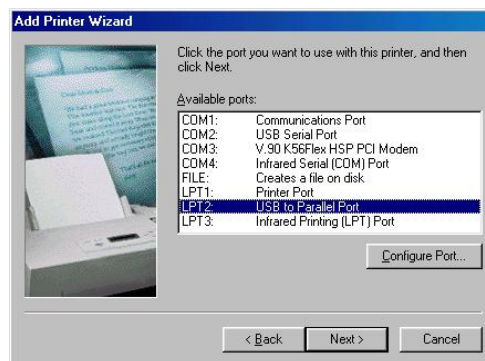


Figure 7

8. Follow the succeeding instructions to complete the installation and run **Print Test Page** to see if it can print without problems.

For WINDOWS 2000 and XP:

1. Turn off your printer. Plug in the cable to connect USB 2.0 wireless-G LAN DOCK parallel port and printer. Turn on the printer afterwards.
2. Turn on your computer and plug in the USB cable to connect the USB 2.0 wireless-G LAN Dock and the USB port of PC.
3. If you have installed a printer device before, click **Start, Settings, Printers**. Right-click the default installed printer and click on **Properties**. The Properties dialog box of the installed printer will appear on your screen.
4. Click the **Ports** tab and change the printer port to **USB001 (Virtual printer port to USB)**.

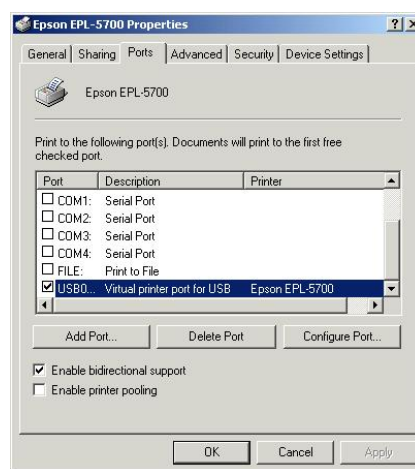


Figure 17

5. If you do not have a printer installed yet, click on **Start, Settings, Printers, Add Printer**. The **Add Printer Wizard** will start and assist you in installing a new printer device. Select the printer manufacturer and model name from the list provided by the wizard or use the printer driver diskette supplied by your printer.
6. When prompted which port the printer will use, click on **USB001 (Virtual printer port to USB)**.

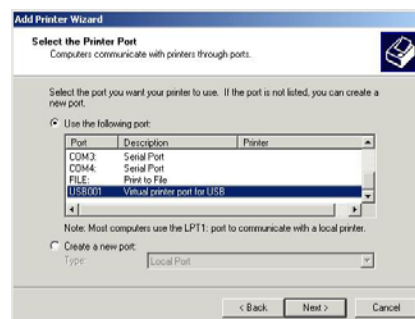


Figure 18

Set up the HyperTerminal with USB to serial port

Follow the steps below to configure your HyperTerminal with USB to serial COM port setting:

1. Make sure that HyperTerminal is installed in your system. If not, please click **Start, Settings, Control Panel**, double click **Add/Remove Programs**, choose **Windows Setup** page, **Communications**, click **Details** button, enable **HyperTerminal** to install the program to your Windows system.
2. Please click on **Start, Settings, Control Panel**, double click **System**, and click on **Device Manager**. Check which COM port is located by USB to serial port.

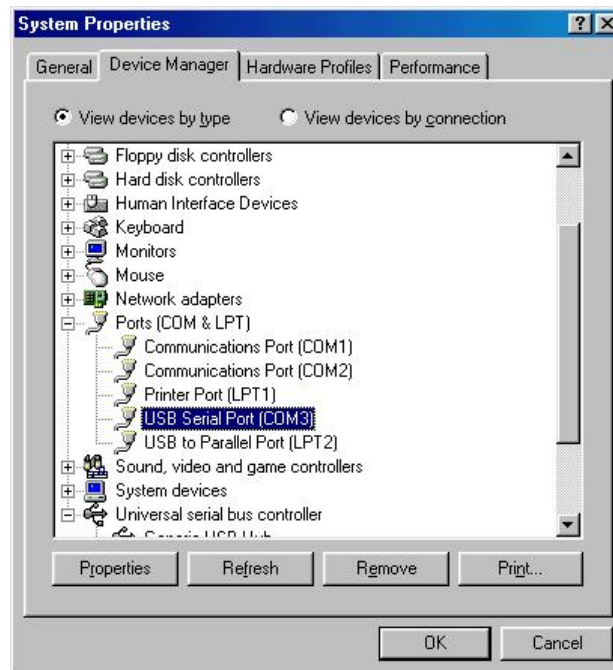


Figure 8

3. If you have setup HyperTerminal before, please run **Start, Programs, Accessories, Communications, HyperTerminal, HyperTrm.exe**. Click **File, Properties**. The Properties dialog page will appear on your screen. If it is your first time to setup HyperTerminal, you will see this page during the setup procedure.

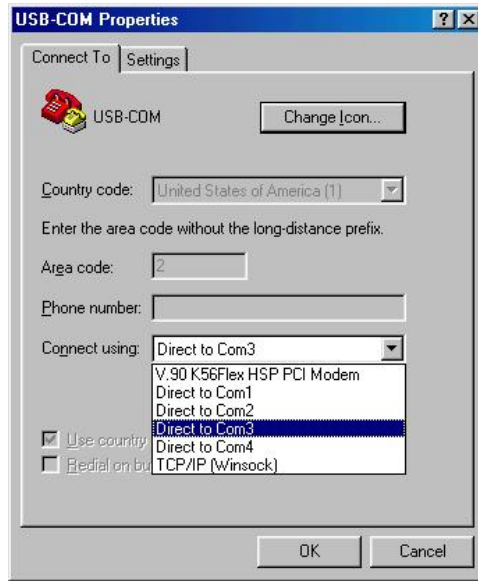


Figure 9

4. Click the "**Connect using**" item to indicate the proper COM port which appeared in step 1, and follow the succeeding instructions to complete the setup.

Install wireless-G LAN adapter Driver

Note: In most cases, Windows will automatically install the driver after the computer is restarted. If the Found New Hardware Wizard appears, follow the instructions below. The Found New Hardware Wizard will look different depending on your operating system. Follow the on-screen instructions to complete the installation. For Windows 98SE and ME users, you may be prompted to insert the Windows 98SE or ME CD during the driver installation. Be sure to have your Windows 98SE or ME CD ready.

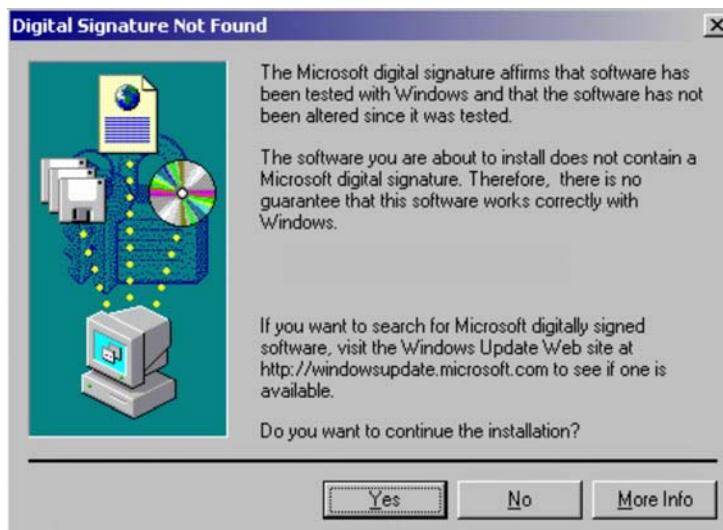
Step 1. Select **Install the software automatically** and click **Next**.



Step 2. For Windows XP, click **Continue Anyway** at the Windows Logo Compatibility screen.



For Windows 2000, click **Yes** at the Digital Signature screen.



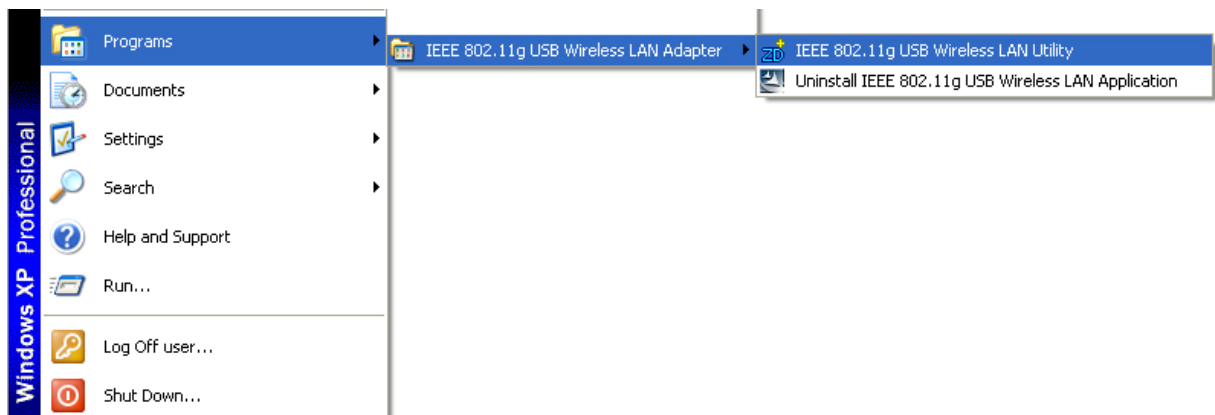
For Windows 98SE or ME, insert the Windows 98SE or ME CD if prompted to do so and click **OK**.

Step 3. Click **Finish**. Restart the computer if you are prompted to do so.

Configuring USB Adapter as a Wireless Client

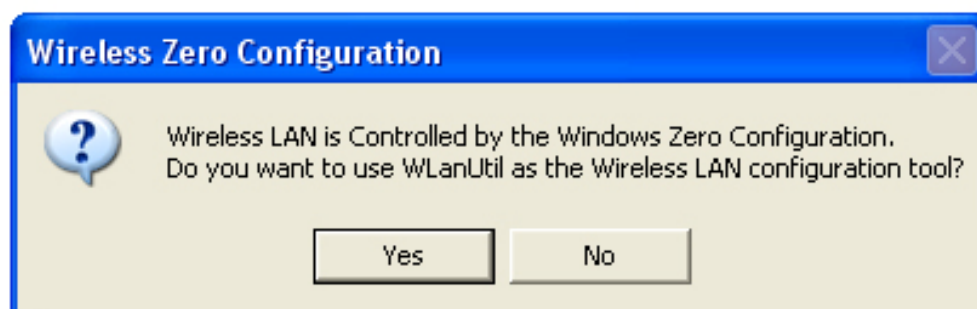
The USB adapter can be set to either **Station** or **Access Point** Mode from the **Mode** drop-down menu. **Station** mode is the default selection and should be selected if you want to connect to a wireless router/access point or conduct peer-to-peer networking.

To open the utility, go to **Start, (All) Programs, IEEE 802.11g USB Wireless LAN Adapter, IEEE 802.11g USB Wireless LAN Utility**.

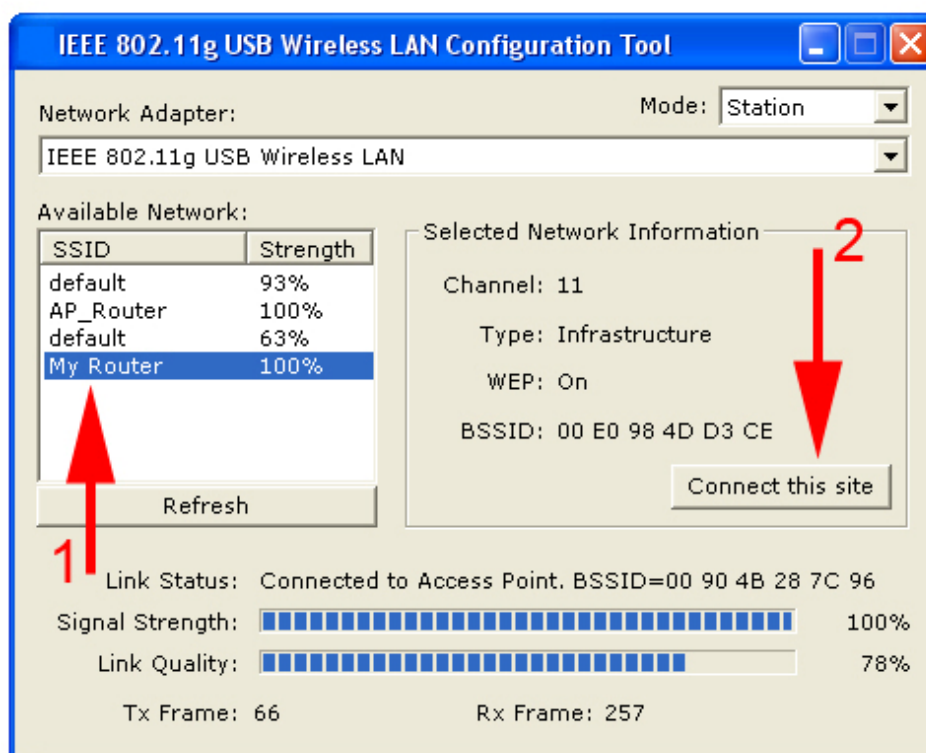


Note to Windows XP Users:

If you encounter the Wireless Zero Configuration dialog box, click **Yes** to enable the Wireless LAN Utility to configure your USB adapter.



Step 1. Select the **SSID** of your wireless router/access point from the Available Network list and click on the **Connect this site** button.



Step 2. Verify that the adapter has adequate **Signal Strength** and **Link Quality** and then restart the computer.

Mode: Select from **Station** or **Access Point**. For more information regarding Access Point, please refer to the next section, **4. Configuring USB Adapter as an Access Point**.

Network Adapter: Displays the name of the USB adapter.

Available Network: Lists all the available wireless router/access point in your area. You can click on the **Refresh** button to update the list.

Selected Network Information: Displays the network information for the currently selected SSID. (An SSID must be highlighted first).

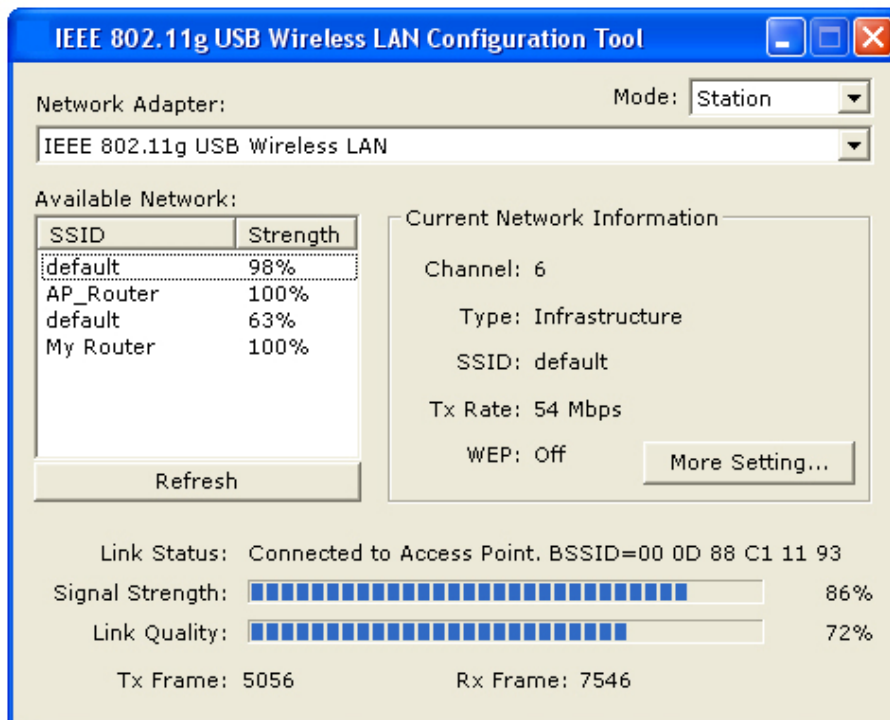
Link Status: Displays the current link status.

Signal Strength: Displays the current signal strength.

Link Quality: Displays the current link quality.

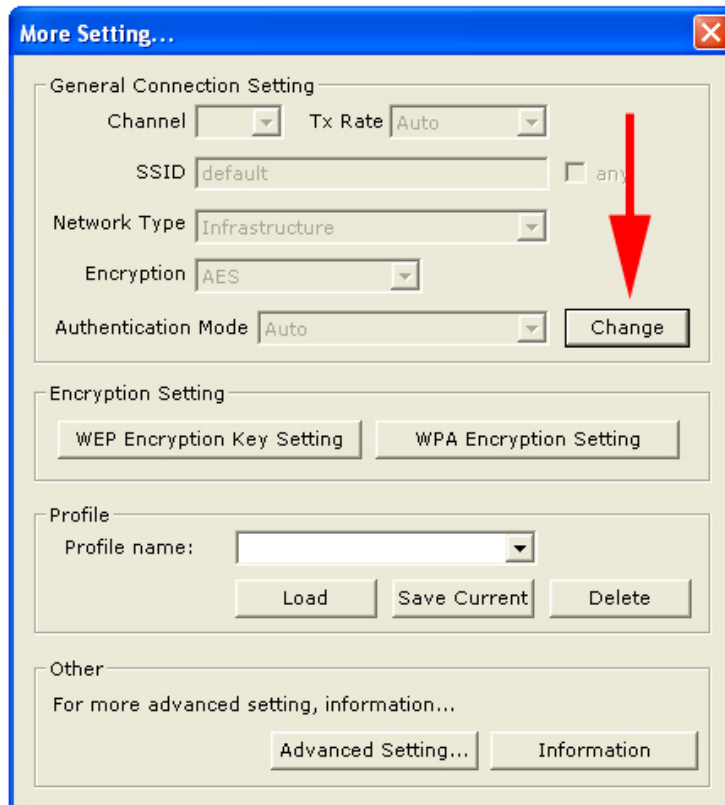
Tx Frame: Displays the number of frames transmitted.

Rx Frame: Displays the number of frames received.



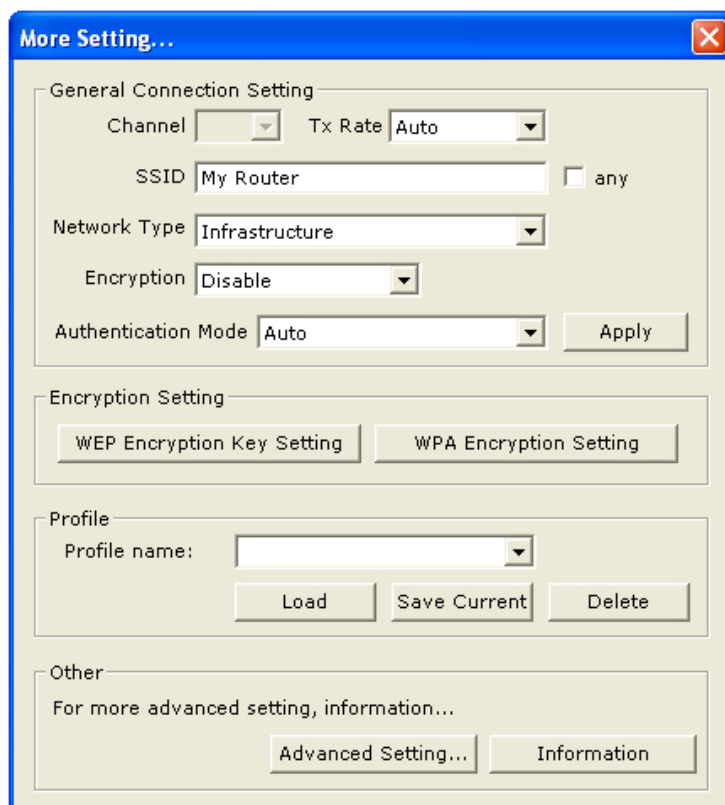
Current Network Information: Displays the network information of the wireless router/access point that the USB adapter is currently connected to.

More Setting: Click on this button to access the USB adapter's configuration settings, including WEP and WPA encryption settings.



Configuring General Settings

Click **Change** to configure the adapter's **General Connection Setting**.



Channel: This setting is for **Access Point Mode** only.

Tx Rate: Select the desired transmission rate, or leave the default setting of **Auto** to allow the adapter to automatically select the optimum rate.

SSID: You can manually enter the SSID of the wireless router/access point you wish to connect to.

Any (check box): Allows you to connect to any available wireless router/access point. (Check this box if you're trying to connect to a public hot spot and don't know the SSID).

Network Type: Choose from **Infrastructure** (for connecting to a wireless router/access point) or **Ad-Hoc** (for computer-to-computer networking, bypassing the wireless router/access point).

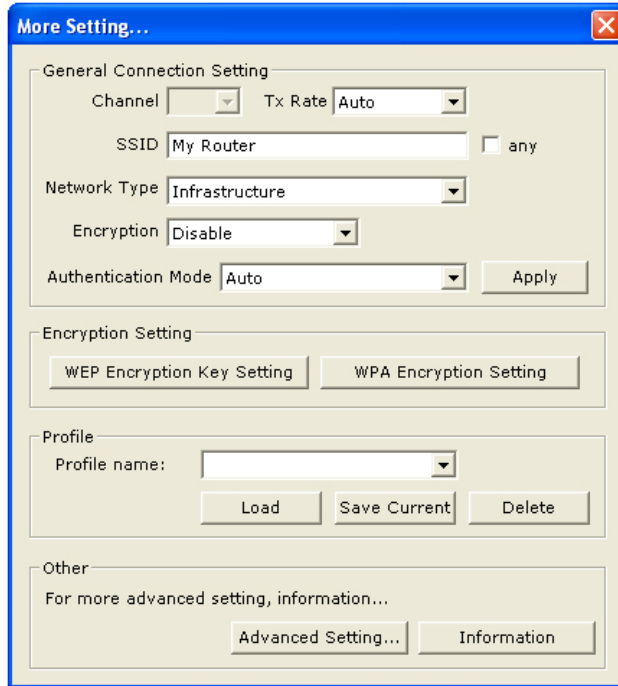
Encryption: Choose from **Disable WEP**, or **Enable WEP**.

Authentication Mode: Choose from **Auto** (recommended), **Open System**, **Shared Key**, **WPA** or **WPA PSK**.

Click **Apply** to save the changes.

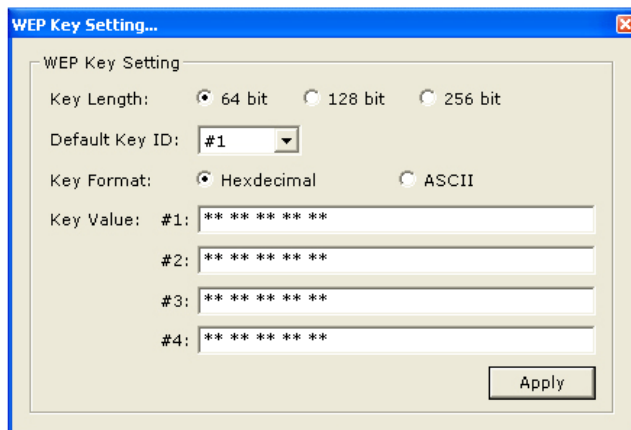
Configuring Encryption Security

Click **WEP Encryption Key Setting** to configure the WEP settings.



Click **Change** to configure the WEP Key Setting and then click **Apply** to save the settings.

Note: The WEP Key settings must be identical to the WEP settings of the wireless router/access point you wish to connect to.



Key Length: Select the appropriate encryption key length.

Default Key ID: Select which of the four Key Value you want to use.

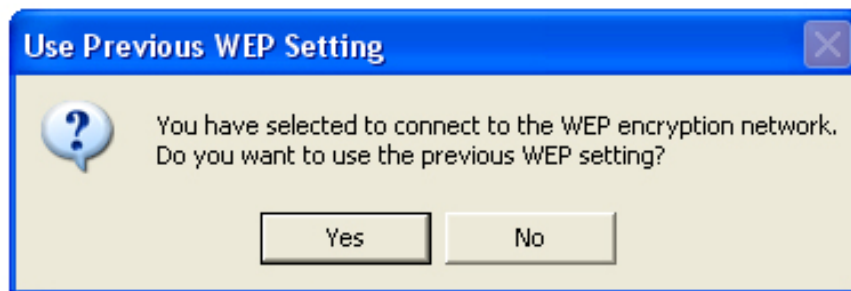
Key Format: Select either Hexadecimal (0-9, A-F) or ASCII (any number or letter).

Key Value: Enter the applicable key values. Up to four key values may be entered. Note the following rules when entering Key values:

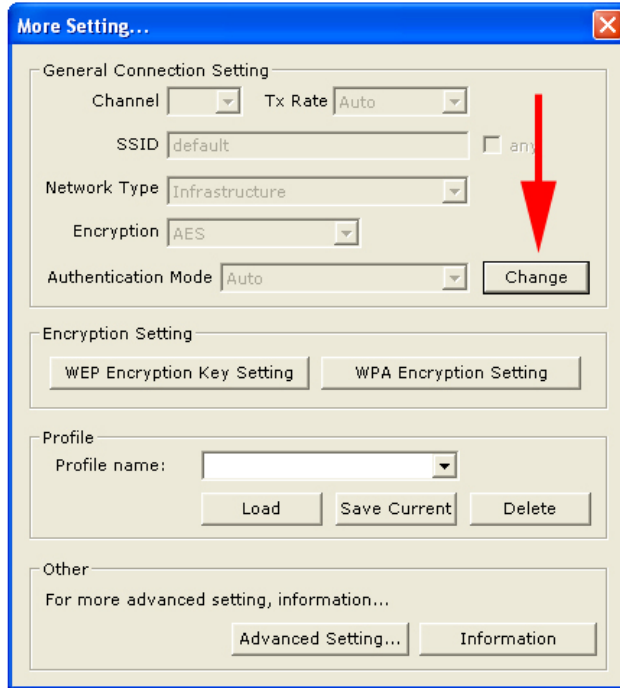
- **64-bit** key length requires **10** Hexadecimal characters (0-9, A-F) or **5** ASCII characters (any number or letter).
- **128-bit** key length requires **26** Hexadecimal characters (0-9, A-F) or **13** ASCII characters (any number or letter).
- **256-bit** key length requires **58** Hexadecimal characters (0-9, A-F) or **19** ASCII characters (any number or letter).

After you have applied the changes, return to the utility's main screen and select the wireless router/access point you wish to connect to.

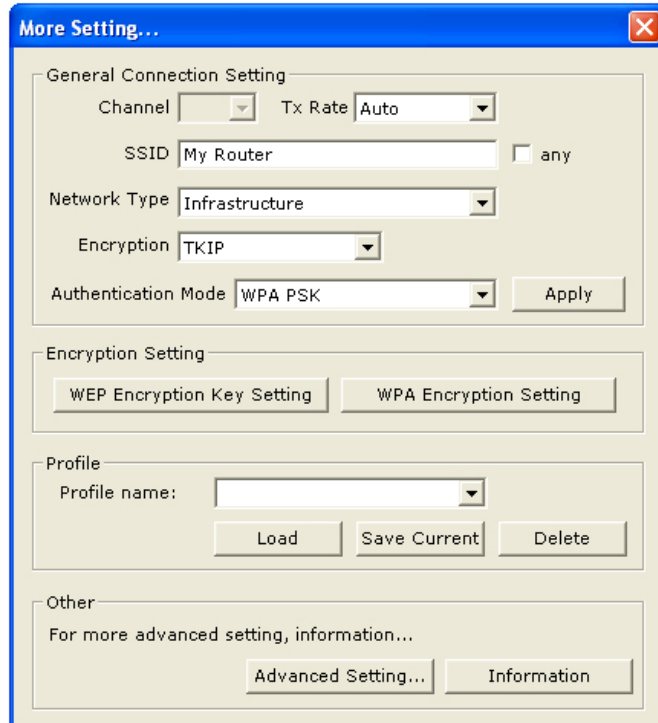
Click **Yes** at the **Use Previous WEP Setting** dialog box to connect to the encrypted wireless router/access point.



If you want to use WPA encryption, click on **Change** in the General Connection Setting.



1. Select **TKIP** for Encryption, **WPA PSK** for Authentication Mode, and click **Apply**.



2. Click on **WPA Encryption Setting** and click **Change**.

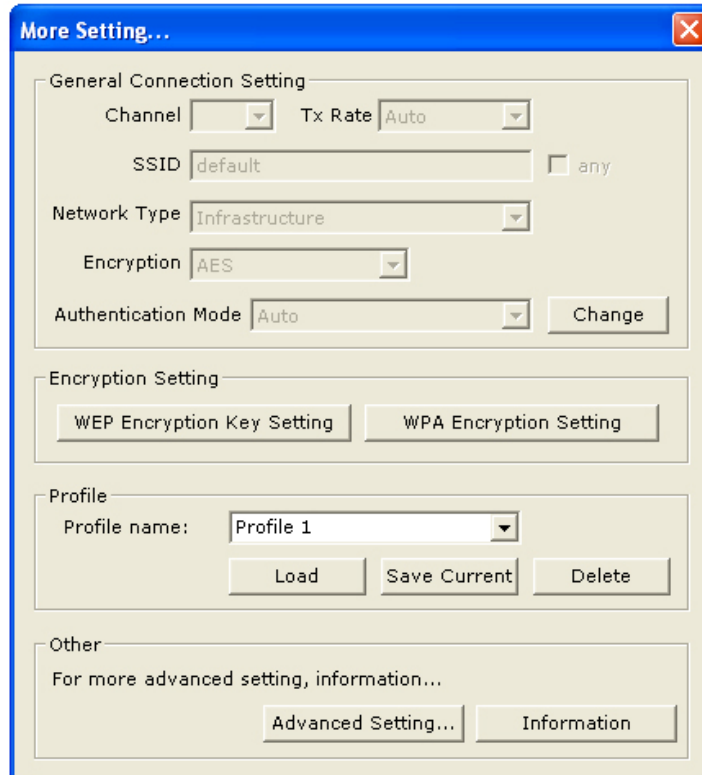
3. Enter the appropriate passphrase in the **Passphrase** field under the **Pre-shared Key** section and click **Apply**. (The passphrase must be identical to the passphrase set on your wireless router/access point and it has to be between 8 to 63 ASCII characters long).

The image shows a 'WPA Setting...' dialog box with the following fields and options:

- Connect Information:**
 - Protocol: TLS (dropdown menu)
 - User Name: (text input field)
 - Password: (text input field)
- Pre-shared Key:**
 - Passphrase: (text input field)
 - (ASCII format, the length must be in 8..63)
- Certificate:**
 - User -issued by User (dropdown menu)
- WEP Key:**
 - WEP KEY SETTING (button)

An 'Apply' button is located at the bottom right of the dialog.

Configuring Profile



After you have configured all the settings, you can save your settings as a profile so you don't have to re-configure them the next time.

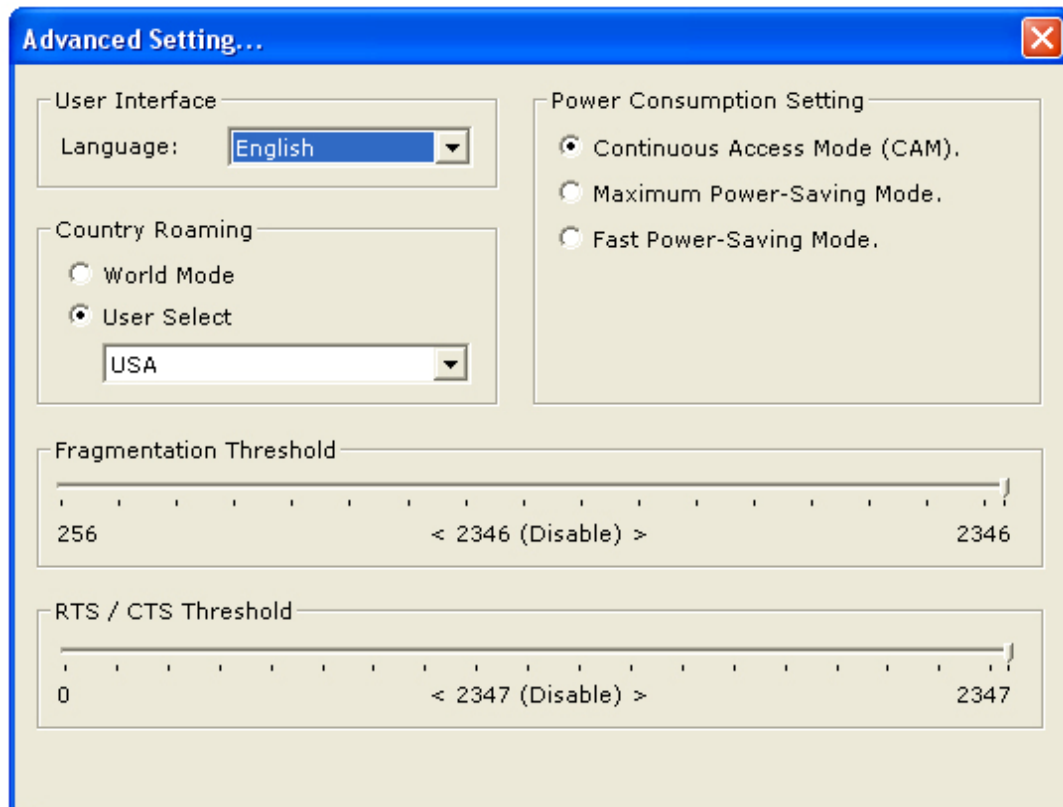
Type in a name for the profile in the **Profile name** field and click **Save Current**.

To load a profile, select the profile from the drop-down menu and click **Load**.

To delete a profile, select the profile from the drop-down menu and click **Delete**.

Advanced Settings

Click on **Advanced Setting** from the **More Setting** window to configure the adapter's advanced settings.



User Interface: select the language for the adapter's user interface.

Power Consumption Setting:

- **Continuous Access Mode:** provides the best signal throughput but least power save.
- **Maximum Power-Saving Mode:** provides the best power save but least throughput.
- **Fast Power-Saving Mode:** provides average power save and throughput.

Country Roaming: select the country you are in.

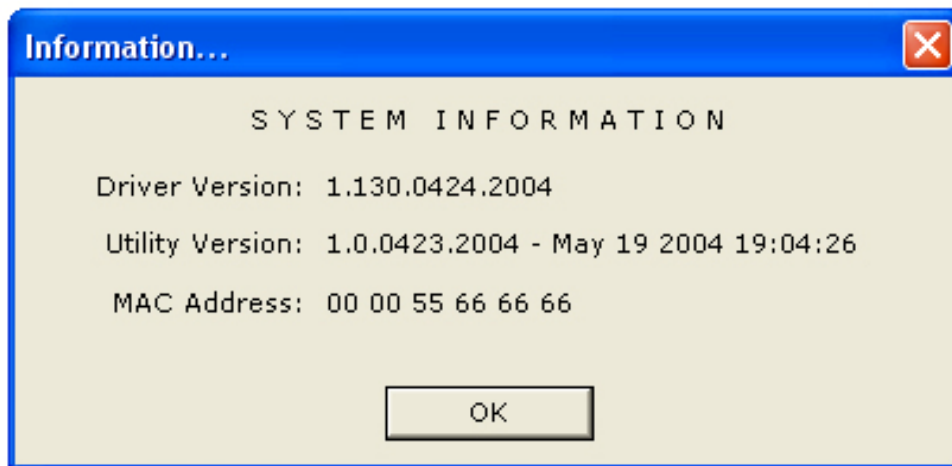
- **World Mode:** the adapter will get its country setting from the access point.
- **User Select:** choose your country.

Fragmentation Threshold: choose from 256 to 2346 bytes.

RTS/CTS Threshold: choose from 0 to 2347 bytes.

Information

Click on **Information** from the **More Setting** window to view the driver and utility's information.



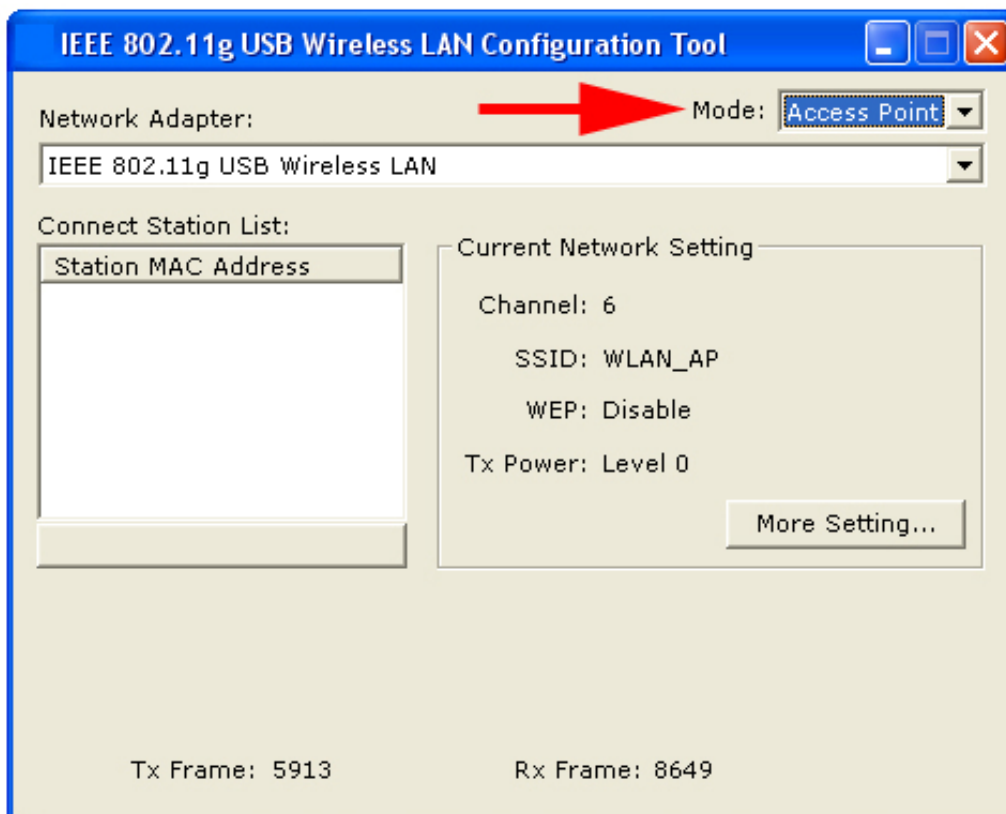
Configuring USB Adapter as an Access Point

Configuring Access Point

You can configure the USB Adapter as an access point for other wireless clients on your network.

Note: You will not be able to access the Internet if you configure the USB adapter as an access point. To allow other wireless clients to access the Internet, you will need to configure your computer as a router and a DHCP server. The vendor will not provide any technical support in regards to the USB adapter functioning as an access point.

Select **Access Point** from the Mode drop-down menu.



The default settings for the access point are as follows:

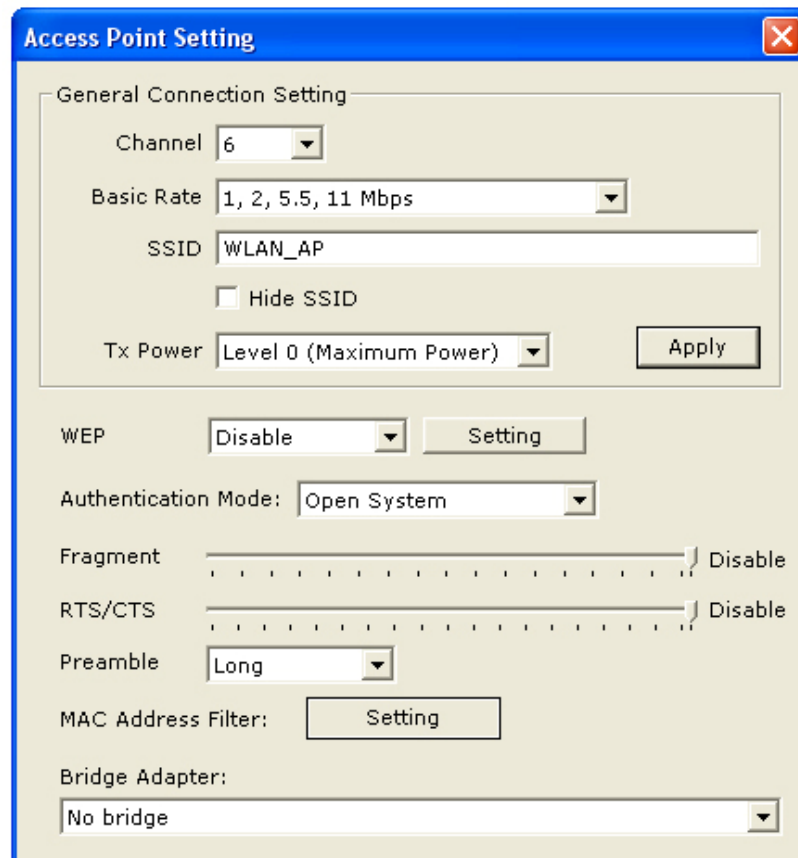
Channel: 6

SSID: WLAN_AP

WEP: Disable

Tx Power: Level 0

To configure the access point, click on **More Setting**.



Click on **Change** to configure the settings.

Channel: select the channel you want to use.

Basic Rate: select the applicable transfer rate.

Tx Rate: select from Auto to 54 Mbps.

SSID: enter the desired SSID for the access point.

Hide SSID (check box): check to disable the broadcast of SSID.

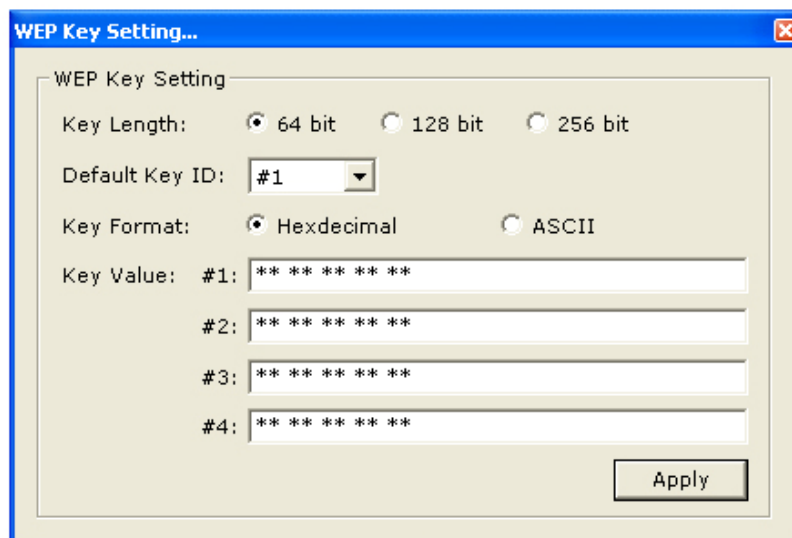
Tx Power: select the transmission signal power.

Click **Apply** to submit the changes.

Bridge Adapter: If you have another Ethernet card installed in your computer, you can select the other Ethernet card as the bridge adapter. This will allow any wireless client that is connected to the access point to be bridged to the wired network that the other Ethernet card is connected to.

Configuring Encryption Security

Select **Enable** from the WEP drop-down menu and click **Setting**.



Key Length: Select the appropriate encryption key length.

Default Key ID: Select which of the four Key Value you want to use.

Key Format: Select either Hexadecimal (0-9, A-F) or ASCII (any number or letter).

Key Value: Enter the applicable key values. Up to four key values may be entered.

Note the following rules when entering Key values:

- **64-bit** key length requires **10** Hexadecimal characters (0-9, A-F) or **5** ASCII characters (any number or letter).
- **128-bit** key length requires **26** Hexadecimal characters (0-9, A-F) or **13** ASCII characters (any number or letter).
- **256-bit** key length requires **58** Hexadecimal characters (0-9, A-F) or **19** ASCII

characters (any number of letter).

Authentication Mode: select from **Open System** or **Shared Key**.

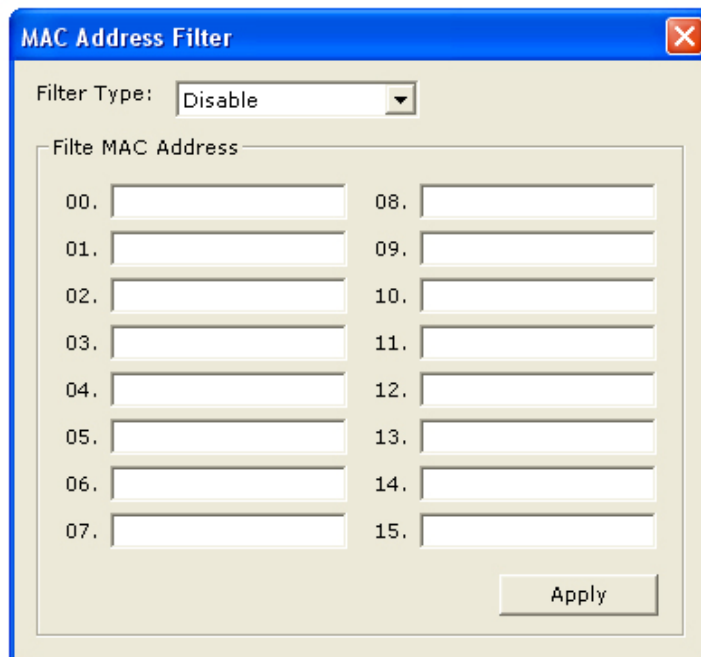
Fragmentation Threshold: choose from 256 to 2346 bytes.

RTS/CTS Threshold: choose from 0 to 2347 bytes.

Preamble: select **Long** or **Short**.

MAC Address Filter: click **Setting**.

Configuring MAC Address Filter



The screenshot shows a window titled "MAC Address Filter" with a blue title bar and a close button. Inside the window, there is a "Filter Type:" label followed by a dropdown menu currently set to "Disable". Below this is a section labeled "Filter MAC Address" which contains 16 input fields, numbered 00 through 15, arranged in two columns. At the bottom right of the window is an "Apply" button.

Filter Type:

Disable: disables MAC address filter.

Accept: only accepts connection from the MAC address listed. (Connection attempts from MAC address not in the list will be rejected).

Reject: only rejects connection from the MAC address listed. (Connection attempts

from MAC address not in the list will be accepted, provided the client matches the encryption settings as well).

Click **Apply** to submit the changes.

Appendix

Specifications

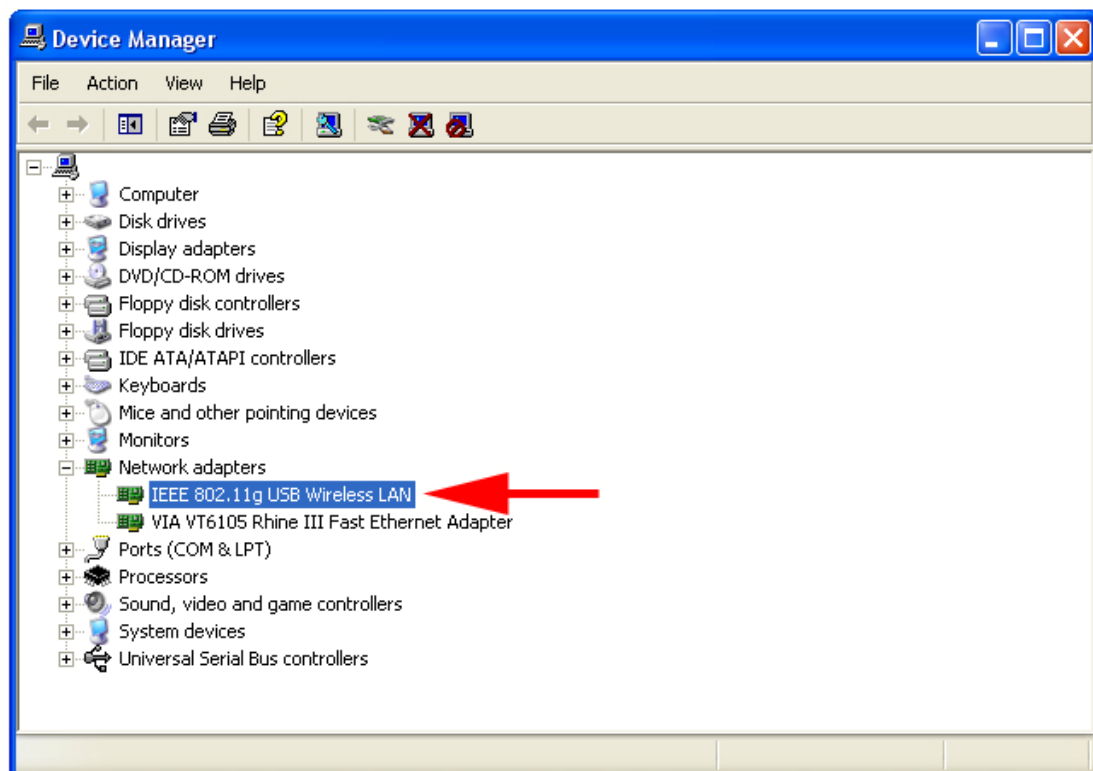
Dimensions(LxWxH)	120x65x26 mm
Unit Weight	150 g
Cable Length	USB A/B type cable 1.8 M
Connect Ports	USB, PS/2, PS-232, Printer and IEEE802.11g
USB Upstream port	x 1
USB Downstream port	USB2.0 x 3
Mini PS/2 port	x 2 (Keyboard, Mouse)
RS-232 port (DB-9)	x 1
IEEE-1284 Printer port (DB-25)	x 1
IEEE802.11g port with antenna	x 1
Compliant with USB version	USB 1.0 / USB1.1 / USB 2.0
Compliant with HID version	USB HID 1.1
Over-Current protection	Yes
Bus-Power limit current protection	500 mA (When external adaptor applied)
Power & Access LED indicator	Yes
Power	By host or external adaptor
Power Adaptor	DC 5V / 2A (Optional)
OS Complies	Windows 98/SE/ME/2000/XP

Electrical Specifications	
Standards Conformance	IEEE 802.11 / 802.11b / 802.11g, ARIB STD-T66 compliant
Data Transfer Rate	IEEE 802.11b : 1 / 2 / 5.5 / 11Mbps (auto sensing) IEEE 802.11g : 6 / 9 / 12 / 18 / 24 / 36 / 48 / 54Mbps (auto sensing)
Access Method	Infrastructure Mode, Ad-Hoc Mode (802.11 Ad-Hoc), Roaming
Security	WEP 64/128/256-bit, TKIP, WPA
Frequency Range	IEEE 802.11b : 2.4 to 2.497GHz IEEE 802.11g : 2.4 to 2.4835GHz
Wireless Medium	OFDM & DSSS (with Barker coding and CCK for backward compatibility with 802.11b)
Modulation Method	IEEE 802.11b : DBPSK (1Mbps), DQPSK (2Mbps), CCK (5.5/11Mbps) IEEE 802.11g : BPSK (6/9Mbps), QPSK (12/18Mbps), 16-QAM (24/36Mbps), 64QAM (48/54Mbps)
Operating Channels	1~11 (U.S. & Canada), 1~13 (channel availability depends on local regulations)
Transmit Power	15 dBm (OFDM) / 17 dBm (CCK)
Operating Range	Wireless-802.11g up to 100 meters (328 feet) transmit and receive
Wireless-G Receiver Sensitivity	1 Mbps : -93dBm 2 Mbps : -91dBm 5.5 Mbps : -88dBm 11 Mbps : -85dBm 12 Mbps : -88dBm 24 Mbps : -83dBm 36 Mbps : -79dBm 54 Mbps : -72dBm
LED Indicators	Power / Link / USB
Power Consumption	350mA
Downstream port over current protection:	500mA
Operating systems	Windows 98SE / ME / 2000 / XP
Environmental & Mechanical Characteristics	
Operating Temperature	32 °F ~ 131 °F (0 °C ~ 55 °C)
Storage Temperature	-13 °F ~ 158 °F (-20 °C ~ 70 °C)
Operating Humidity	10% to 80% Non-Condensing
Storage Humidity	5% to 90% Non-Condensing
Dimensions	91 (H) x 135 (W) x 34 (L) mm

Troubleshooting

A. If the utility cannot be opened or it reports that the adapter is not found, uninstall the driver and utility and try installing again. You can also verify if the driver is installed properly in the Device Manager.

To access the Device Manager, right-click on **My Computer** on your desktop, select **Properties**. Go to the **Device Manager** tab. (For Windows 2000/XP, go to the **Hardware** tab first then click on the **Device Manager** button).



Expand **Network adapters** and you should see **IEEE 802.11g Wireless LAN**. If there is no yellow question mark or exclamation mark, the driver is installed properly.

B. If you do not see your wireless router/access point in the Available Network list, reset your wireless router/access point and click on **Refresh**.

C. If WEP is ON, it means that the wireless router/access point has encryption enabled. Be sure to set the identical encryption settings on the USB adapter's utility as

well.

D. If the adapter has adequate signal strength and link quality, but cannot access the Internet, verify that you are able to obtain an IP address from your wireless router/access point.

For Windows 98SE/ME

Step 1. Go to **Start, Run**, type **winipcfg** and click **OK**.

Step 2. Select the adapter from the drop-down menu and click **Release**.

Step 3. After the IP address is released, click **Renew**. You should get an IP address like **192.168.x.y** (where **x** and **y** are unique numbers assigned by your wireless router/access point). If you don't get an IP address, reset the wireless router/access point and then try **Renew** again.

For Windows 2000/XP

Step 1. Go to **Start, Run**, type **cmd** and click **OK**.

Step 2. At the command prompt, type **ipconfig/release** and press **Enter**.

Step 3. After the IP address is released, type **ipconfig/renew** and press **Enter**. You should get an IP address like **192.168.x.y** (where **x** and **y** are unique numbers assigned by your wireless router/access point). If you don't get an IP address, reset the wireless router/access point and then try **ipconfig/renew** again.

E. You must have USB 2.0 compatible hardware and install the latest USB 2.0 driver from Microsoft in order to reach the data transfer rate of 54 Mbps. If your hardware is not USB 2.0 compatible or you don't have the latest USB 2.0 driver installed, you will not reach 54 Mbps.

F. Installed the driver for **USB 2.0 wireless-G LAN Dock** under **Windows XP** operation system, there is **no Pinter Port** available in the device manager , but the other Ports (**Serial ,Mouse, Keyboard and USB**) are **OK** .

The driver for USB to Printer converter on Windows 2000 and XP is not required. Microsoft supports USB Printer class in both OS. The related driver will be loaded

Automatically by Microsoft when you plug in the USB to Printer device. It will be created a message “**printer support device**” in the device manager and also a “ virtual printer port for USB “ in the port selection of printer setting. You may just check this item and it will work on both system.

This is different for Windows 98 and ME. There won't be any LPT port generated by system as like in 98/ME . Please also refer to the user's manual “Set up the Printer Device “ >> for Windows 2000 and XP .

Frequently Asked Question

1. What is the IEEE 802.11g standard?

The IEEE 802.11g Wireless LAN standard subcommittee which formulates the standard for the industry. The objective is to enable wireless LAN hardware from different manufactures to communicate.

2. What does IEEE 802.11 feature support?

The product supports the following IEEE 802.11 functions :

- CSMA/CA plus Acknowledge Protocol
- Multi-Channel Roaming
- Automatic Rate Selection
- RTS/CTS Feature
- Fragmentation
- Power Management

3. What is Ad-hoc?

An Ad-hoc integrated wireless LAN is a group of computers, each has a Wireless LAN adapter, Connected as an independent wireless LAN. Ad hoc wireless LAN is applicable at a departmental scale for a branch or SOHO operation.

4. What is Infrastructure?

An integrated wireless and wired LAN is called an Infrastructure configuration. Infrastructure is applicable to enterprise scale for wireless access to central database,

or wireless application for mobile workers.

5. What is BSS ID?

A specific Ad hoc LAN is called a Basic Service Set (BSS). Computers in a BSS must be configured with the same BSS ID.

7. Can Wireless products support printer sharing ?

Wireless products perform the same function as LAN products. Therefore, Wireless products can work with Netware, Windows 2000, or other LAN operating systems to support printer or file sharing.

8. Would the information be intercepted while transmitting on air?

WLAN features two-fold protection in security. On the hardware side, as with Direct Sequence Spread Spectrum technology, it has the inherent security feature of scrambling. On the software side, WLAN series offer the encryption function (WEP) to enhance security and Access Control. Users can set it up depending upon their needs.

APPLICATION NOTE

1. USB 2.0 wireless-G LAN DOCK normally derives its own power from PC Host. When system power plugged in to the USB port of PC or notebook, the Large LED will turn green, and the serial, parallel, keyboard, mouse, WLAN and 3 downstream ports can operate without the switching adapter.
2. Please note that the 3 downstream ports may not function normally if no external power applied and heavy power consumption USB device connected. An external power will be highly recommended. You may use the external power by connecting an external 5 voltage, 2A DC power that is UL, CE, T-mark or locally approved. For Polarity, see the following:



3. **Unknown Device:**
If the installation process has been completed and some of the devices still don't work, please go to: My Computer/Property/Device Manager/USB, check COM port, printer, keyboard, mouse or Hub to see if "Unknown device" appears on the screen. You need to "Remove" and "Refresh", and start the installation processes again. After trying the processes mentioned above and your device still cannot work, please contact technical support at your local distributor.

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FCC Statement

This device generates and uses radio frequency and may cause interference to radio and television reception if not installed and used properly. This has been tested and found to comply with the limits of a Class B computing device in accordance with the specifications in Part 15 of the FCC Rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by plugging the device in and out, the user can try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the computer 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.