WL571UAM Wireless USB Adapter User Manual (Referred)

Draft, 2006/09/08

FCC Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. this device may not cause harmful interference, and
- 2. this device must accept any interference received; including interference that may cause undesired operation. Federal Communications Commission (FCC) Statement.

This Equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC RF Radiation Exposure Statement:

- 1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- 2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Introduction

The 802.11g wireless USB adapter, USB 2.0 compatible, allows you to connect to your wireless networking. It provides more throughput rate on data communication than traditional 802.11g wireless adapters. With the built advanced wireless configuration utility, it let it more easily for you to surf your wireless LAN.

Features and Benefits

System

- Standard: IEEE 802.11b/g.
- Host Interface: USB 2.0 standard.
- Data rate: 1, 2, 5.5, 11Mbps for 802.11b; 6, 9, 12, 18, 24, 36, 48, 54Mbps for 802.11g.
- Operating range: Indoor, 30-100m; outdoor, 100-400m (depends on surrounding environment).

RF

- Frequency band: 2.400 ~ 2.4835 GHz (subject to local regulation).
- Modulation: OFDM(Orthogonal Frequency Division Multiplexing) for 802.11g; DSSS(Direct Sequence Spread Spectrum) for 802.11b.
- RF radiated output power: 14dBm for 802.11g; 17dBm for 802.11b. (±1dBm).

Software

- Driver: Microsoft Windows 98, ME, 2000, XP, and XP64.
- Operation mode: Infrastructure mode (Seamless roaming supported), Ad-Hoc mode (peer to peer connection).
- Security: 64/128 bit WEP encryption, WPA, WPA-PSK, WPA2, WPA2-PSK, and 802.1x.

LEDs and Physical connections

- Link: Always on, Green, after linked up to remote wireless.
- Activity: Blinking, Green, for data communication.
- Antenna: Embedded.

Package Contents

- USB wireless adapter.
- Manual
- Quick installation guide
- CD: includes adapter drivers, manual, and quick installation guide.

** If any of the above items are missing, please contact your reseller.

System Requirements

Before installing the adapter and related software, make sure your system meets the minimum requirements described below.

IBM compatible desktop or notebook PC with available USB slot.

- CPU level: no restricted.
- Memory size: no restricted.
- CDROM drive: no restricted.
- USB Host: USB 2.0 suggested. USB 1.0/1.1 leads low data communication rate.
- Operation system: Microsoft Windows 98, ME, 2000, XP, or XP64.

Installation

- Insert the Product CD into the CD-ROM drive.
- Execute "Setup.exe" in the root directory of the CD, it will guide you to install the Driver and Utility.
- Insert the wireless adapter into the USB slot.

Management

Load up utility

After the installation, one utility will be run and minimized on Windows system tray bar. Yet, the utility won't be shown on tray bar if the wireless adapter was not detected.



: Indicate wireless adapter detected, and connected to one site.



: Indicated not connected to one site.

You may double click it to bring up the main window. You may also use mouse right button to display or to close it.



"Open Utility Window": To display the utility window.

"Exit": To close the utility.

Main Window



Adapter:

This field lists the available wireless adapters on your PC. You can choice the specific adapter to configure if you have more than one adapter.

Available Network:

All the sensed wireless APs and stations (Ad-Hoc) will be listed with their SSID signatures. And, the corresponding wireless signal strength is also listed.

- SSID: Name of BSS or IBSS network.
- Strength: Wireless received signal strength of the specified network.
- "Refresh": You can update the sensed list by click this button.

When utility first ran, it will select the best AP to connect automatically. It is available to connect to other site by double click the intended item.

Current Network Information

This group shows some wireless information of the selected AP/station list.

- Channel: Working channel of the APs or stations(Ad-Hoc).
- Type: Network type in use. "Infrastructure" for BSS, "Ad-Hoc" for IBSS network.
- SSID: Name of BSS or IBSS network.
- Tx Rate: Wireless transmit rate of the network.
- Encrypt: Encryption algorithm used within BSS or IBSS. Valid value includes WEP, TKIP, AES, and not use(None).
- "More Setting": Click this button to setup or to manage the current selected network.

Link Status Information

This group shows the current linked information of the network.

- Link Status: Shows the linked status of the current working network.
- Signal Strength: Shows the received signal strength of the current working network. (percentage by one specified level)
- Link Quality: Shows the link quality of the current working network. (percentage by one specified level)
- Tx Frame: Shows the counter of transmitted packets.
- Rx Frame: Shows the counter of received packets.

More Setting Window

| More Setting | | | | | |
|--|-------------------|--------|--|--|--|
| General Connection Setting | | | | | |
| WirelessMode | 2.4GHz(802.11b+g) | | | | |
| Channel | 1 💌 Tx Rate Auto | | | | |
| SSID | AP_Storage any | | | | |
| Network Type | Infrastructure | | | | |
| Authentication | Auto | | | | |
| Encryption | Disable | Change | | | |
| Encryption Setting WEP Encryption Key Setting WPA Encryption Setting | | | | | |
| Profile Profile Name Load Save Current Delete | | | | | |
| Other For more advanced setting, information Advanced Setting Information | | | | | |

General Connection Setting

This group shows the basic current connection parameters. They can be modified by click "Change" button.

- Wireless Mode: list the current working wireless mode.
- Channel: list the current working channel for infrastructure mode. It can be selected for Ad-Hoc mode.
- SSID: Name of BSS or IBSS network.
- Network Type: Network type for use. "Infrastructure" for BSS, "Ad-Hoc" for IBSS network.
- Authentication: Authentication mode used within the network, including Open System, Shared Key, Auto, WPA, WPA PSK, WPA2 and WPA2 PSK.
- Encrypt: Encryption algorithm used within BSS or IBSS. Valid value includes WEP, TKIP, AES, and not use(Disable).

If you have clicked "Change" button, the button will show as "Apply". You can then click it if you confirmed the setting.

WEP Encryption Key Setting

The setting will be worked if the connection encryption was WEP. To launch the setting, click the "WEP Encryption

Key Setting" button and the setting dialog will be pop-up as below.

| WEP Key Setting 🛛 | | |
|---|--|--|
| WEP Key Setting | | |
| Key Length: 💿 64 bit 🔿 128 bit | | |
| Default Key ID: #1 🗸 | | |
| Key Format: 🔿 Hexadecimal 💿 ASCII | | |
| Key Value: #1: ***** | | |
| #2: **** | | |
| #3: **** | | |
| #4: **** | | |
| The key is provided via 802.1× authentication Apply | | |

- Key Length: support 64bit and 128bit mode.
- Default Key ID: the working ID of the key value list for using.
- Key Format: the denoted format (ASCII or Hexadecimal) of the key.
- Key Value: support 4 entry of keys.
 - -- 64 bit, Hexadecimal : 10 Hex characters.
 - -- 128 bit, Hexadecimal : 26Hex characters.
 - -- 64 bit, ASCII : 5 ASCII characters.
 - -- 128 bit, ASCII : 13 ASCII characters.
- "The key is provided via 802.1x authentication": check this button to support IEEE 802.1x authentication.
- "Change/Apply": click this button to change the listed setting, or to apply the setting immediately.

WPA Encryption Setting

The setting will be worked if the connection encryption was WEP. To launch the setting, click the "WPA Encryption Setting" button and the setting dialog will be pop-up as below.

| WPA Setting | | | X |
|--|-------------|---------------|---|
| Connect Informatio | n | | |
| Protocol: | TLS | ~ | |
| User Name: | test2@forwi | fi.no-ip.com | |
| Password: | | | |
| Phase2Auth: | | V | |
| Pre-shared Key | | | |
| Passphrase: | | | |
| Key Format: | ⊙ ascii | ◯ Hexadecimal | |
| Certificate | | | |
| test2 -issued by 2006 | | | |
| | | | |
| | | Apply | |

Connect Information

Pre-shared Key

Certificate

Profile

This section enables you to manage the connection setting by saving it, loading it, or deleting it.

- Profile Name: list all the saved profile ID.
- "Load": load the connection setting for the selected profile name.
- "Save Current": save the connection setting to the selected/input profile name.
- "Delete": delete the connection setting for the selected profile name.

Advanced Setting

| Advanced Setting | | | | |
|---|---|--|--|--|
| Country Roaming World Mode User Select USA | Power Consumption Setting Continuous Access Mode (CAM). Maximum Power-Saving Mode. Fast Power-Saving Mode. PSP XLink Mode WMM Qos Mode | | | |
| 256 < 2346 (Disable) > 2346 | | | | |
| RTS / CTS Threshold 0 < 2347 (Disable) > 2347 | | | | |
| | | | | |

Country Roaming

World Mode: enable your wireless to work on full channels. Thus, you can roam through all of the world. User Select: enable you to choose which country you sit.

Power Consumption Setting

Power saving mode: support Continueous Access, Maximum, and Fast mode.

PSP XLink Mode

This function enables you to turn on off the PSP XLink support.

WMM QoS Mode

This function enables you to turn on/off the wireless WMM feature.

Fragmentation Threshold

The threshold when the packet will be fragmented. You can adjust the RTS threshold number by sliding the bar. The default value is 2346.

RTS/CTS Threshold

The threshold when RTS/CTS will be worked. You can adjust the RTS threshold number by sliding the bar or key in the value directly. The default value is 2347.

Information

This window shows the driver version, utility version, and MAC address of the wireless adapter.

