

802.11g/b WLAN USB Stick

WN-250gi

Quick Start Guide

No part of this documentation may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from the copyright owner.

All the other trademarks and registered trademarks are the property of their respective owners.

Statement of Conditions

We may make improvements or changes in the product described in this documentation at any time. The information regarding to the product in this manual are subject to change without notice.

We assume no responsibility for errors contained herein or for direct, indirect, special, incidental, or consequential damages with the furnishing, performance, or use of this manual or equipment supplied with it, even if the suppliers have been advised of the possibility of such damages.

Electronic Emission Notices

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.

FCC INFORMATION

The Federal Communication Commission Radio Frequency Interference Statement includes the following paragraph:

The 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 overcome 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.

The equipment is for home or office use.

R&TTE Compliance Statement

This equipment complies with all the requirements of the Directive 1999/5/EC of the European parliament and the council of 9 March 1999 on radio equipment and telecommunication terminal Equipment and the mutual recognition of their conformity(R&TTE).

The R&TTE Directive repeals and replaces in the directive 98/13/EEC. As of April 8, 2000.

IMPORTANT NOTE

FCC RF Radiation Exposure Statement: This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. **This device has been tested for compliance with FCC RF Exposure (SAR) limits in typical laptop configurations** and This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



DGT Statement:

依據交通部電信總局低功率電波輻射性電機管理辦法；

第十四條

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十七條

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Table of Contents

Installation Procedures	6
Verifying a Successful Installation.....	11
Basics of the Attached Configuration Tool.....	12
Step 1: Advanced Tab.....	12
Step 2: Configuration Tab	12
Step 3: Security Tab	13
Other Tabs	14

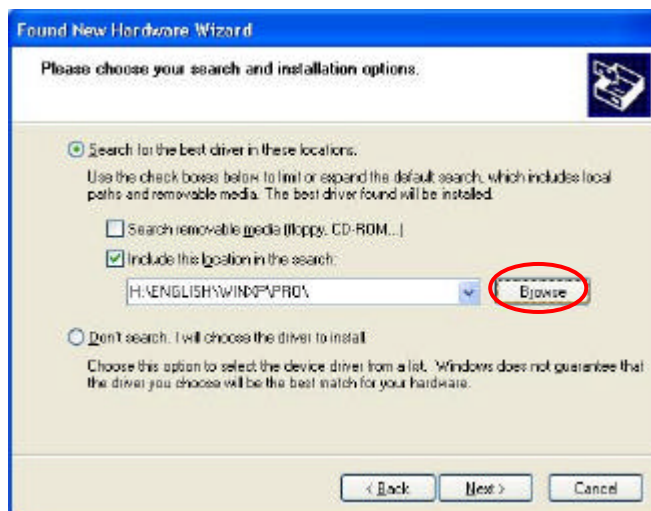
Installation Procedures

To have the 802.11g/b WLAN USB Stick operated appropriately, please read and go along with the instructions below carefully. Here we take Windows XP as an example.

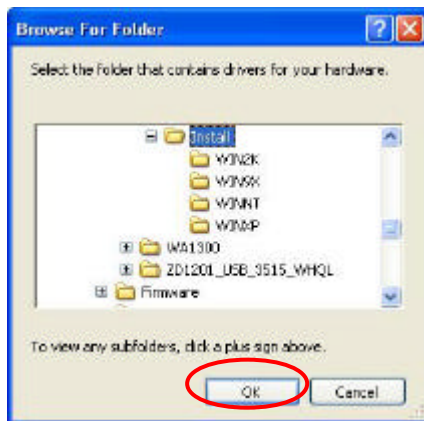
1. Plug your 802.11 g/b WLAN USB Stick into a USB 2.0 port on your PC.
2. Your system will detect the device, and the **Found New Hardware Wizard** dialog box will appear. Choose **Install from a list or specific location [Advanced]**, and then click **Next** to proceed.



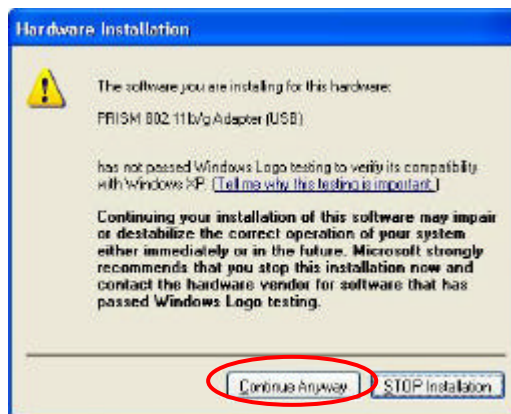
3. From the next dialog box, before choosing **Include this location in the search** under **Search for the best driver in these locations**, insert the supplied Setup CD into your CD-ROM drive. Then choose **Browse**.



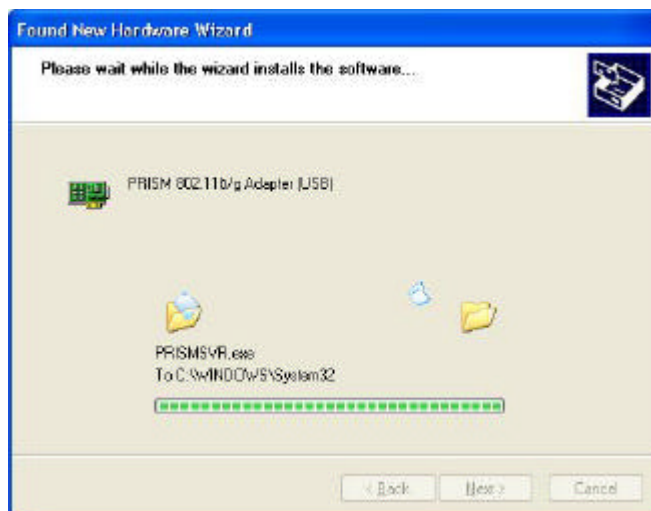
4. In the opened **Browse for Folder** dialog box, specify a directory named **Install** from the CD for the system. Then click **OK**.



5. When return to the **Found New Hardware Wizard** dialog box, please choose **Next** to continue the installation.
6. Choose **Continue Anyway** when the system displays the **Hardware Installation** dialog box.



7. Your system will start to copy the drivers found. This might take a couple of minutes. Then choose **Next** to proceed.

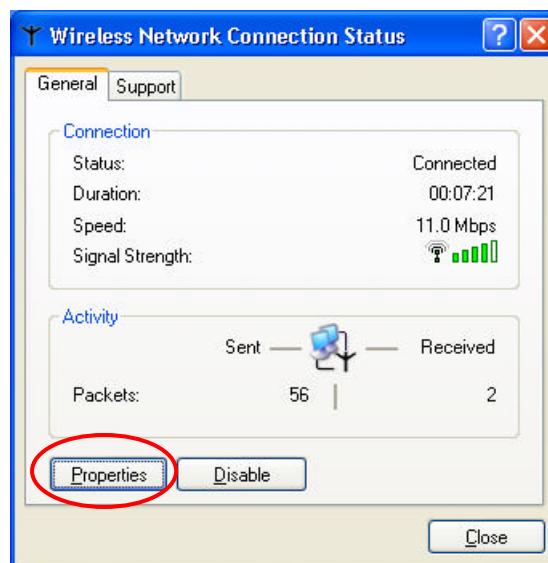


8. When the following dialog box appears, choose **Finish** to entirely complete the installation.

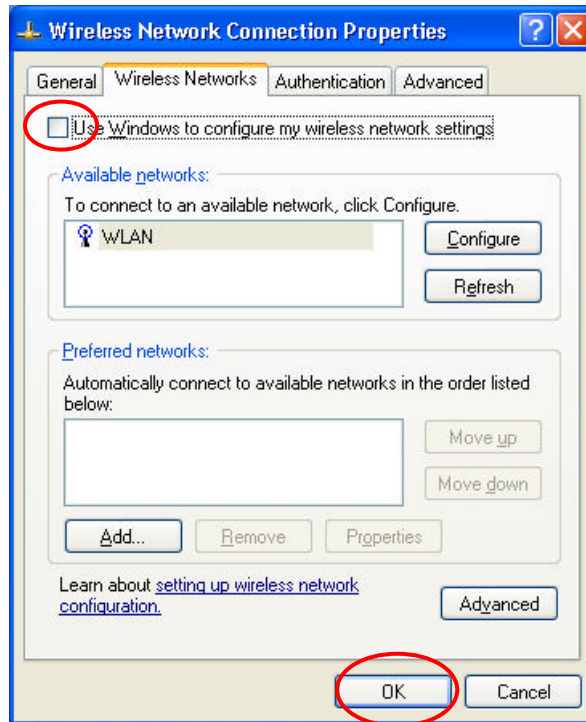


Windows XP has its built-in configuration tools – **Windows XP Zero Configuration** to assist you in networking activities, however, we recommend you to employ the attached software instead. Please proceed to the next step to change the default settings of **Windows Zero Configuration** to the attached configuration tool.

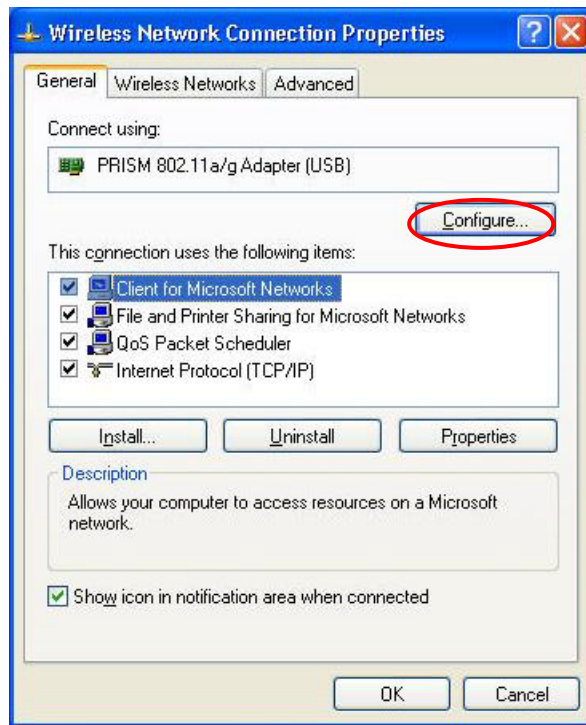
9. Right-click the **Network Connections** icon at the task bar to open the **Wireless Network Connection Status** dialog box, and then select **Properties**.



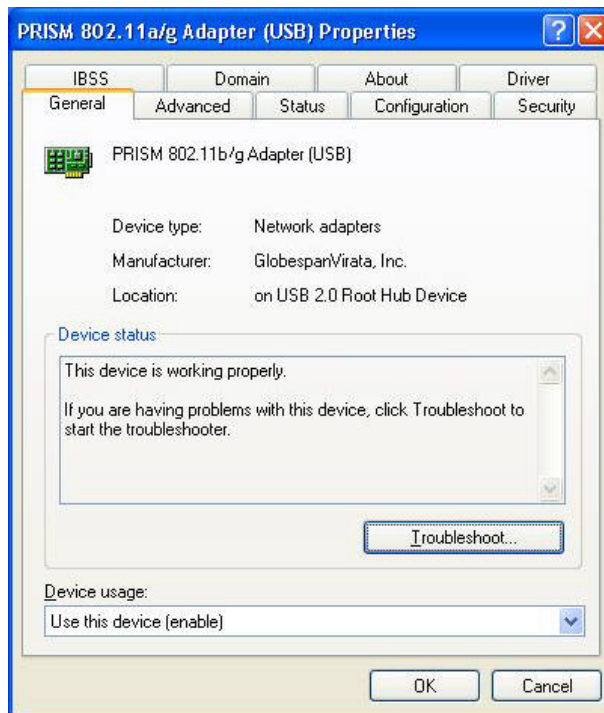
10. Choose the **Wireless Networks** tab in the **Wireless Network Connection Properties** dialog box, and remove the tick from the **Use Windows to configure my wireless network settings** checkbox.



11. Choose the **General** tab to display the following screen. Then click the **Configure** button.



12. In the prompted **PRISM 802.11 g/b Adapter (USB) Properties** dialog box, you may freely monitor and configure the network via the contained nine tabs.



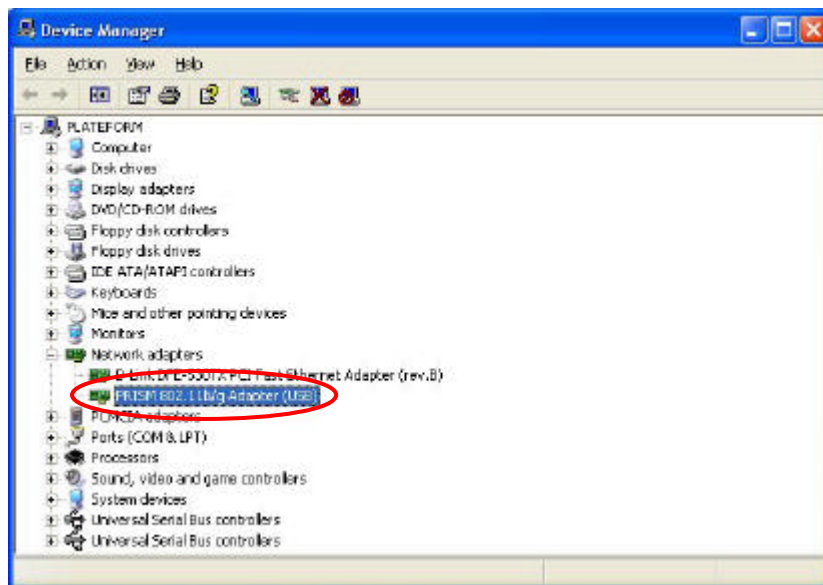
For more details on the configuration, please refer to the “*Basics of the Attached Configuration Tool*” in this manual.

Verifying a Successful Installation

To confirm that your 802.11 g/b WLAN USB Stick is properly installed, please go along with the procedures below.

1. Right-click the **My Computer** desktop icon and choose **Properties** from the opened menu.
2. In the **System Properties** dialog box, click the **Hardware** tab, and then choose the **Device Manager** button.
3. In the opened window, expand **Network adapters** to find the USB 802.11 g/b WLAN USB Stick – **PRISM 802.11 g/b Adapter (USB)**. Right-click over the item and choose **Properties**.
4. From the opened dialog box, on the **General** tab, find the descriptions under the **Device Status** pane to learn if the USB 802.11 g/b WLAN USB Stick is working properly. However, if there's an error message shown, please choose **Uninstall** from the opened menu while right-clicking the USB Adapter item, to which a red or yellow icon is attached beside, in the **Device Manager** dialog box. Then restart your system and go through the installation procedures again.

The following picture indicates a successful installation of the 802.11g/b WLAN USB Stick.



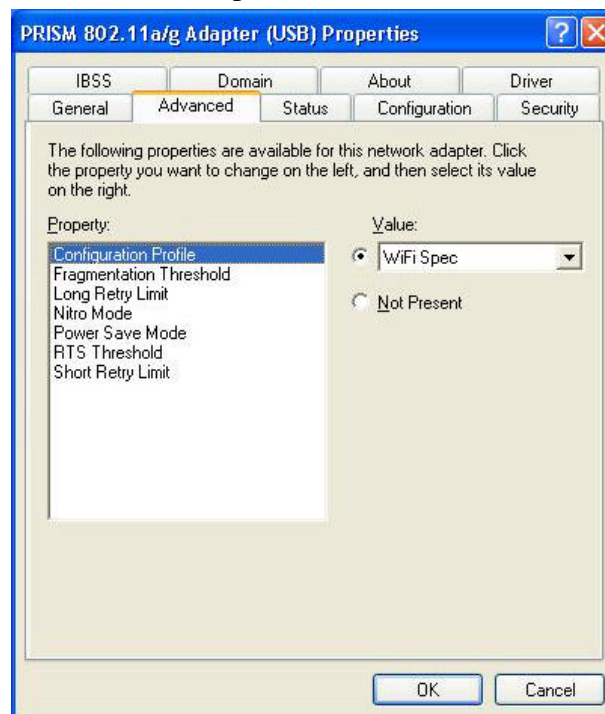
Basics of the Attached Configuration Tool

In the following section, you will be guided through the basic 3-step workflows of configuring your network via the prompted attached configuration tool. Please read carefully to start the task.

Step 1: Advanced Tab

Firstly, choose this tab to define the network standard you wish to use.

- a) On the **Advanced** tab, choose **Configuration Profile** from **Property**.
- b) Define which network standard you intend to operate from the **Value** drop-down menu. **WiFi Sepc** is the default value. To use both 802.11b and 802.11g network standards, please choose **Mixed**.

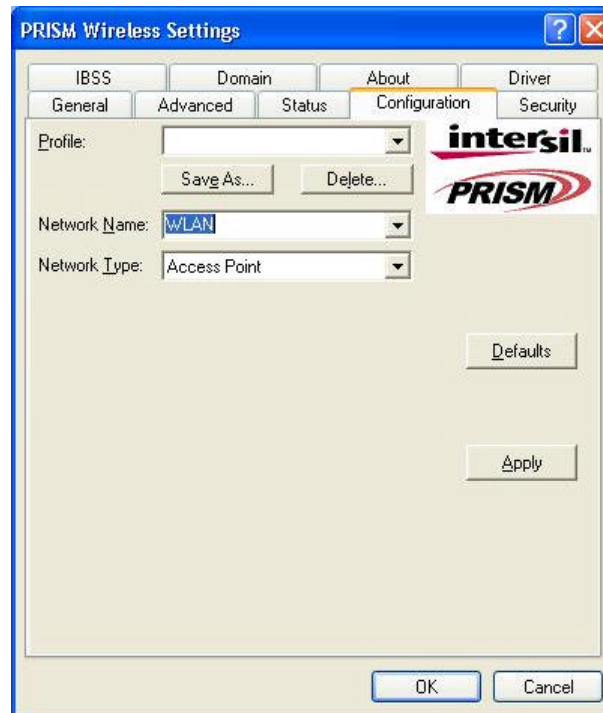


Step 2: Configuration Tab

Click this tab to edit different profiles for different network configurations.

- a) Specify the network types as **Access Point** and **Peer-to-Peer** from the **Network Type** area.
- b) Type the identical SSID in the **Network Name** field to associate with access points or stations within the specified wireless LAN.
- c) Click **Apply** to establish the connection.
- d) If you wish to create a new profile for the current association, please enter texts in the **Profile Name** field and then click **Save As** to identify a new profile. You may switch between any existing profiles by clicking the arrow button at the right of the **Profile Name** field to open the pull-down menu and

then select an intended one from it.



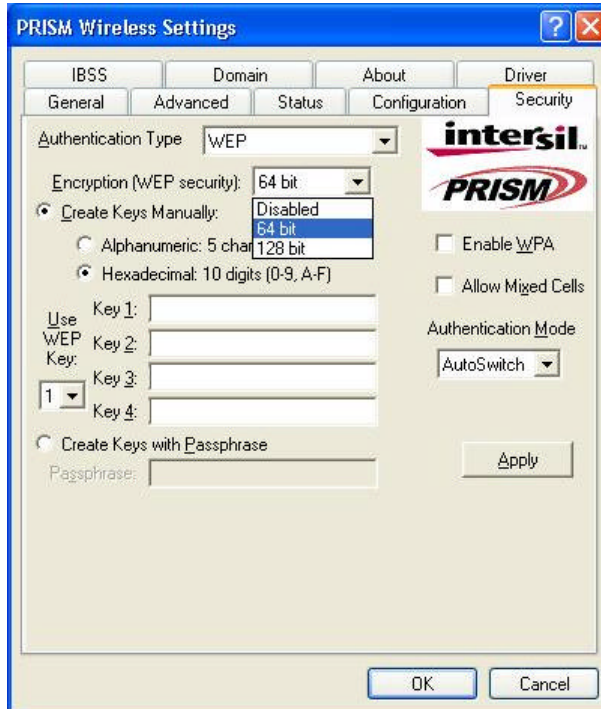
Tips: To obtain the general information on the status of currently connected entry, click the **Status** tab.

Step 3: Security Tab

To maintain the secure management in a wireless LAN environment, click the **Security** tab to define the encryption settings for a specific profile. This tab offers you various options concerning the so-called WEP (Wired Equivalent Privacy).

- Define the **Authentication Type** as **WEP**.
- Specify the key length from the two offered options: **64 bit** or **128 bit** from the **Encryption (WEP security)** drop-down menu.
- Now you may choose to edit WEP keys manually or create them via the passphrase of your wireless network. If you choose the **Create Keys Manually** option, you may directly enter up to 4 WEP keys for use in WEP encryption. To generate the WEP keys, please define the key entry method as **Alphanumeric** or **Hexadecimal** (for hexadecimal characters, only digits 0-9 and letters A-F are valid).
- Then edit the texts in the blank fields below, from **Key 1** to **Key 4**, as the encryption codes. Note that these codes/keys shall be identical between the wireless nodes within the range and the access point only.
- Indicate which WEP key you intend to apply to activate the WEP encryption from the **Use WEP Key** drop-down menu. Make sure that the intended access point on the wireless network shares the same keys.

- f) When the associated wireless network uses a passphrase to create WEP keys, you may select **Create Keys with Passphrase**, and then enter the passphrase string in the **Passphrase** field to generate four encryption keys in the **Key** fields above. Note that only letters A-F are valid for the **Passphrase** feature.
- g) Indicate the **Authentication Mode** as **Open**, **Shared**, or **AutoSwitch**. Note that the value shall be corresponding to the currently associated access point. The **Open** option allows any station in the WLAN to receive and transmit data via the access point. The **Shared** option allows only the stations that use identical keys to associate with the access point. While choosing **AutoSwitch**, any station can associate with the access point either with or without encryption keys.
- h) Click **Apply** to active all the settings when you are done.



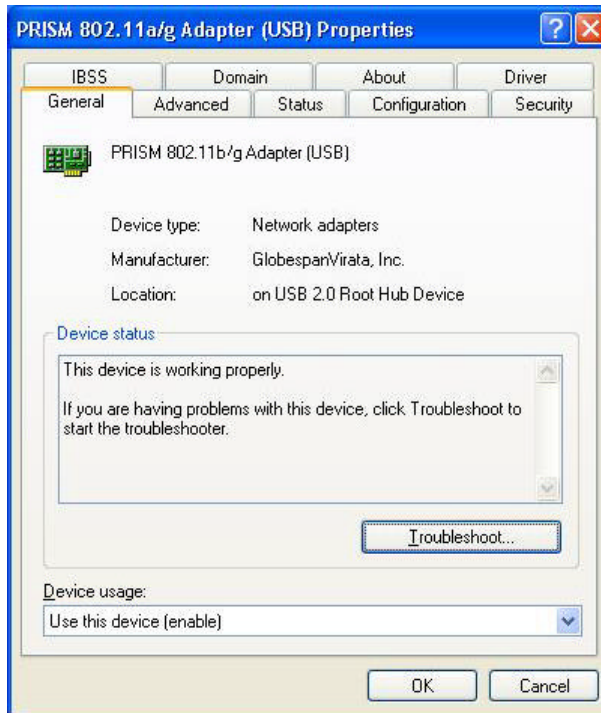
Tips: To obtain the general information on the status of currently connected entry, click the **Status** tab.

Other Tabs

Besides the three tabs mentioned above, there are other six tabs that also provide you versatile functions. Please read the explanations below to learn more about each tab.

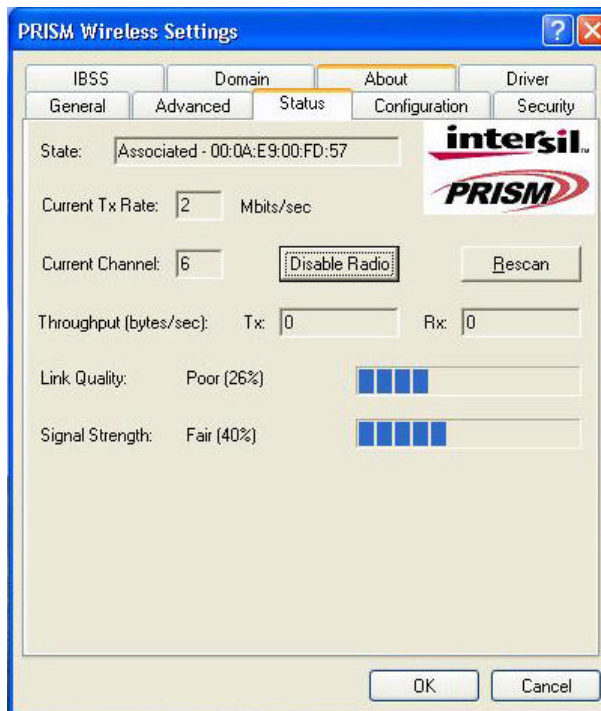
The General Tab

This tab reveals brief information on the 802.11 g/b WLAN USB Stick device itself.



The Status Tab

Click the **Status** tab to appear the following display.



From the window, the general information on the status of currently connected entry is presented. You may want to click the **Rescan** button to reinitiate the scanning process and update the status. Later the result of scanning will be renewed and displayed in the window. If you wish to stop the networking connection, click the **Disable Radio** button to stop scanning. However, if you are already in the disabled radio mode, you will find the **Enable Radio** button here instead. Click **Enable Radio**

to regain the link then.

State

Here displays the MAC Address of the current associated entry, which could be a connected access point in the Access Point mode or computers joining in the Peer-to-Peer network.

Current Tx Rate

This feature indicates the transmission rate of the current connection.

Current Channel

Here reveals the current channel operated in the wireless network. Note that the channel number differs as the radio scans any available channels in the Peer-to-Peer mode.

Throughput (bytes/sec)

This feature indicates the rates of transmitting (**Tx**) and receiving (**Rx**) data of your WLAN USB 802.11 g/b WLAN USB Stick within a short period of time; thus, the values vary on a time basis.

Link Quality

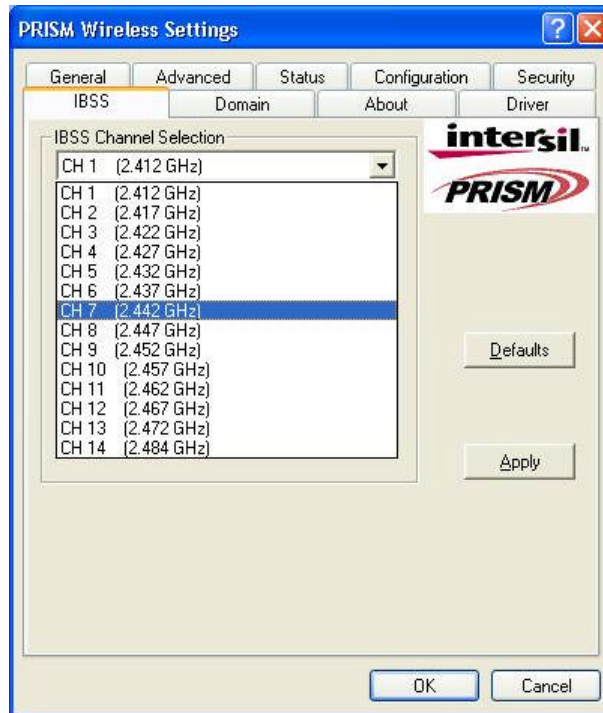
Link Quality is based on the percentage of successfully transmitted or received signal of the associated access point beacon within a limited period. The higher the percentage, the better the link quality. The bar graph beside also provides a visual interpretation of the current link quality. It is noted that the **Link Quality** and **Signal Strength** features only apply to the Infrastructure mode. They are inapplicable in the Peer-to-Peer mode since data will be transferred from many different computers.

Signal Strength

You may learn the received signal strength of the baseband processor of the beacon signal from the **Signal Strength** bar beside, and it's also presented in terms of percentage. As the signal gets stronger, the signal percentage rate gets higher. It is noted that the **Signal Strength** and **Link Quality** features only apply to the Access Point mode. They are inapplicable in the Peer-to-Peer mode since data will be transferred from many different computers.

The IBSS Tab

If you, as a creator of the wireless network, are communicating with other stations via the IBSS mode to form Peer-to-Peer networks, click the **IBSS (Independent Basic Service Set)** tab to specify an operating radio frequency channel from the pull-down list under the **IBSS Channel Selection** section.



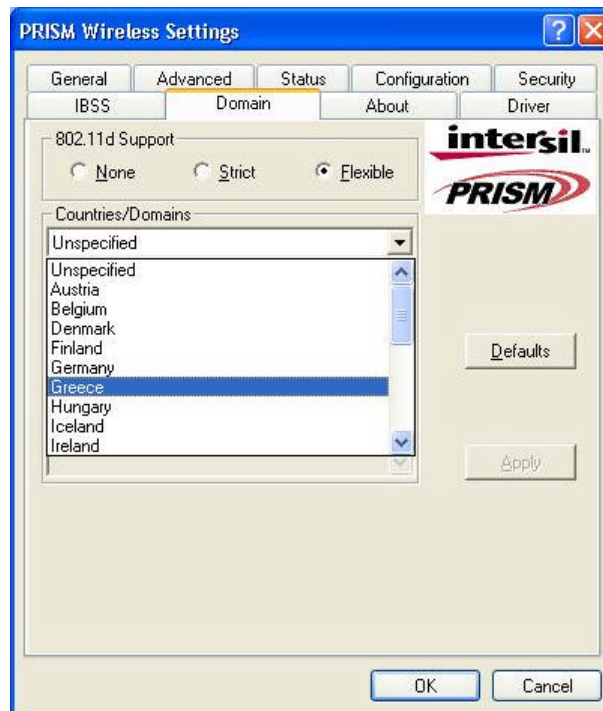
Note that the available channels differ from country to country, and the channel number must be the same between the entries/stations within the range, so that each can communicate with each other.

To let the new configuration take effect, please choose **Apply**.

On the other hand, while in the Access Point mode, you will find the channel number is the same as the associated access point. Thus, there's no need to manually set the value.

The Domain Tab

While in the 2.4GHz range, the network operation may differ from country to country, or domain to domain. This is because the 802.11d protocol was established. To have the operation normally processed, choose the **Domain** tab to change relevant settings.



802.11d Support

802.11d Support lets you operate multi-country roaming. To automatically adjust regulatory domain while operating network in different countries, choose either **Strict** or **Flexible** according to your need. If you choose **None**, the task will be terminated.

Countries/Domains

Define the regulatory domain from the drop-down menu of this command according to the country you are located in. More detailed information about the defined country/domain will be listed below afterwards.

When you are done, remember to click **Apply** to let the new settings take effect.

The About Tab

This tab reveals general information on your 802.11 g/b WLAN USB Stick, including the following items:



Network Driver

Displays the current version and released date of the 802.11 g/b WLAN USB Stick's driver.

Configuration Utility

Displays the current version and released date of the attached configuration tool.

NIC Firmware

Displays the current NIC card firmware version and the MAC (Media Access Control) address of your wireless card. It is consisted of 12-digit hexadecimal numbers (48 bits in length) to identify your computer's physical address on the local area network.

The Driver Tab

This tab provides you various commands used on the 802.11 g/b WLAN USB Stick's driver.

