



MIMO XR™ 802.11g Cardbus Adapter

Model # AWLC5025

User's Manual

Ver. 1A

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1. Introduction

Thank you for purchasing the MIMO XR™ Cardbus Adapter. When used with other Airlink101™ MIMO XR™ wireless products, the wireless signal range extends farther than standard 802.11g products.

This Adapter supports 64/128-bit WEP data encryption that protects your wireless network from eavesdropping. It also supports WPA (Wi-Fi Protected Access) feature that combines IEEE 802.1x and TKIP (Temporal Key Integrity Protocol) technologies. Client users are required to authorize before accessing the APs or AP Routers, and the data transmitted through the network is encrypted/decrypted by a dynamically changing secret key.

1.1 Package Contents

Before you begin the installation, please check the items of your package. The package should include the following items:

- One MIMO XR™ Cardbus Adapter
- One Quick Installation Guide
- One Installation CD (Driver/Utility/Manual)

2. Installation

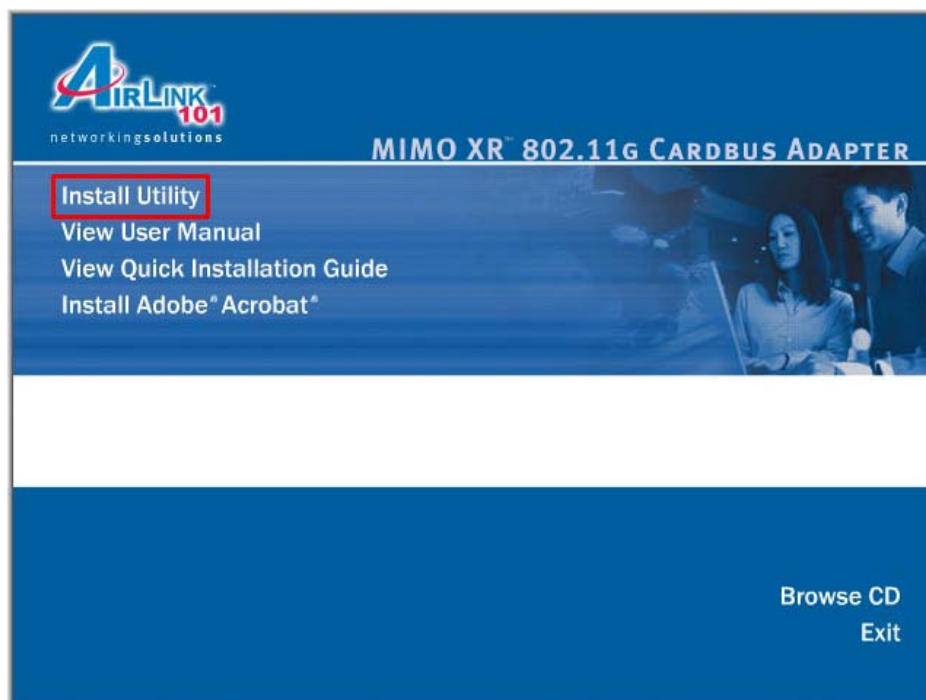
2.1 Install Driver & Utility

This section provides instructions on how to install the **MIMO XR™ Cardbus Adapter**. The driver is installed along with the utility.

Note: Do not insert the Cardbus Adapter until you have reached the appointed step.

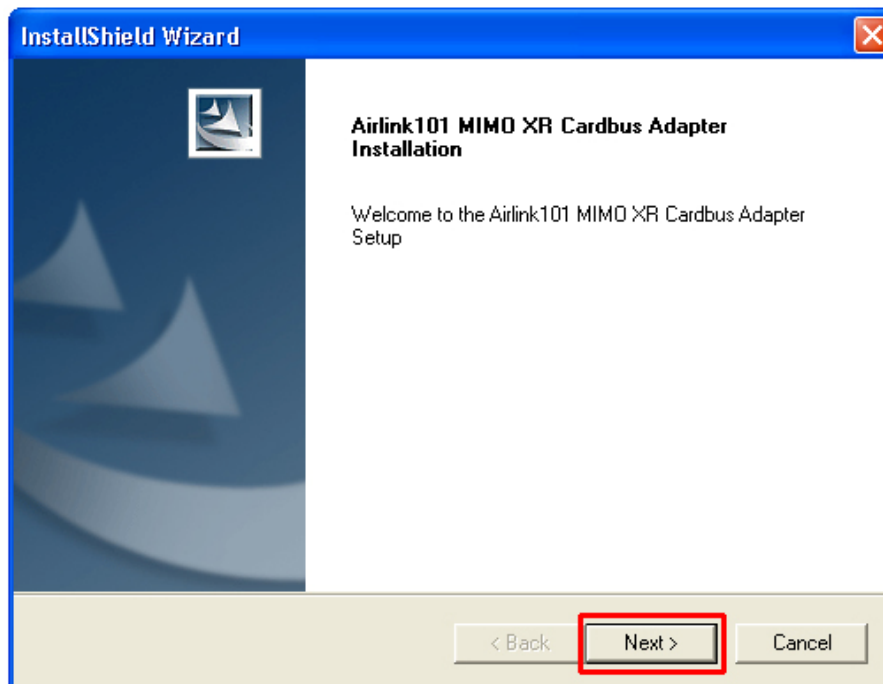
For Windows 98SE and ME users, you may be prompted to insert the Windows 98SE or ME CD during the driver installation. Be sure to have your Windows 98SE or ME CD ready.

Step 1 Insert the Driver & Utility CD into your CD drive and select **Install Utility** from the menu.

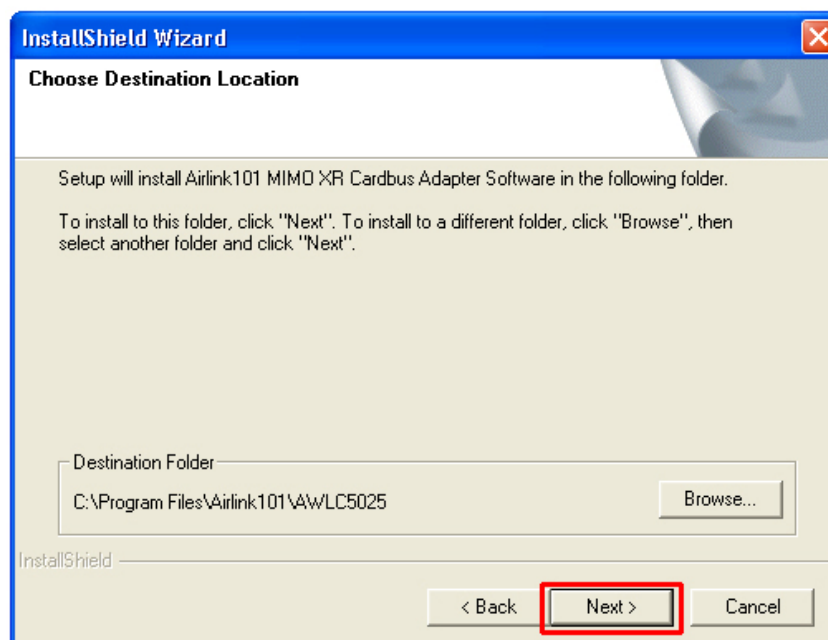


Note: If the Autorun screen doesn't appear automatically go to **Start, Run**, and type **D:\autorun.exe** (where **D** is the letter of your CD drive) and click **OK**.

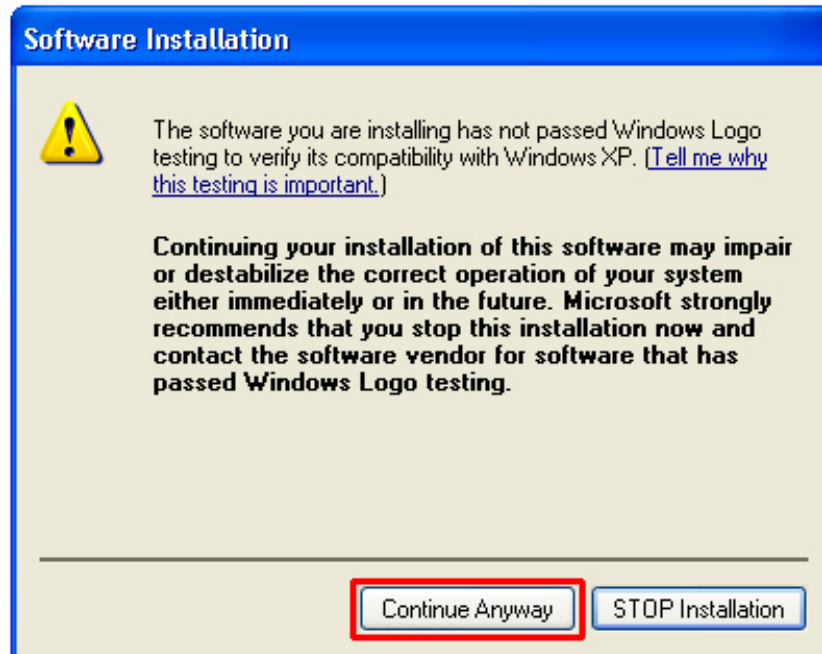
Step 2 Click **Next** at the welcome screen.



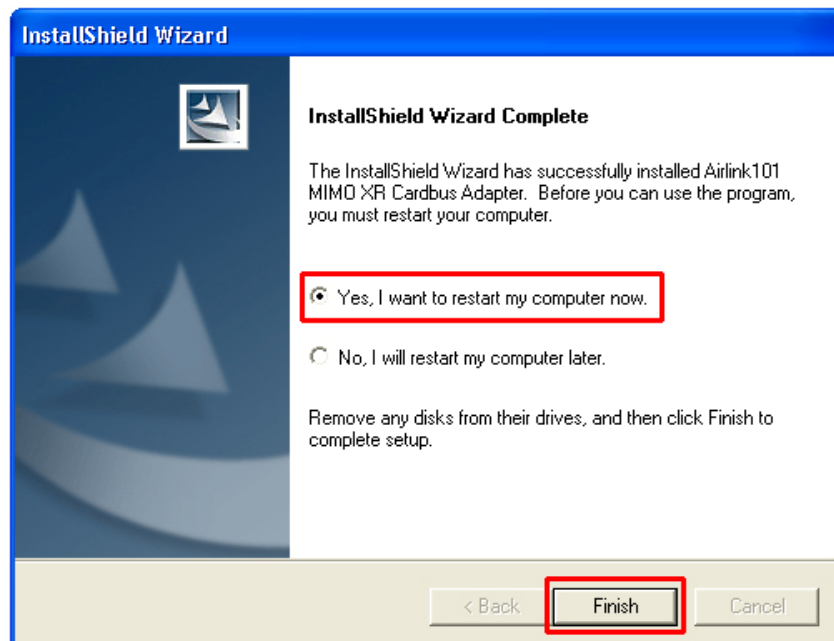
Step 3 Click **Next** to accept the default destination folder.



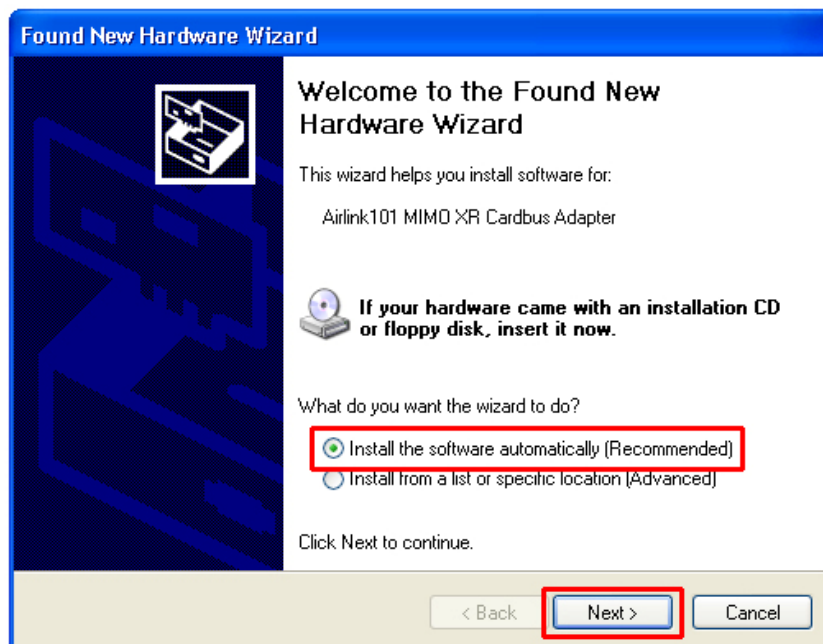
Step 4 Click **Continue Anyway** at the Windows Logo Screen.
(For Windows 2000, click **Yes** at the Digital Signature Not Found prompt).



Step 5 Verify **Yes, I want to restart my computer now** is selected and click **Finish** to restart your computer.



Step 6 After your computer is restarted, insert the Cardbus Adapter.



Step 7 Select **Install the software automatically** and click **Next**.

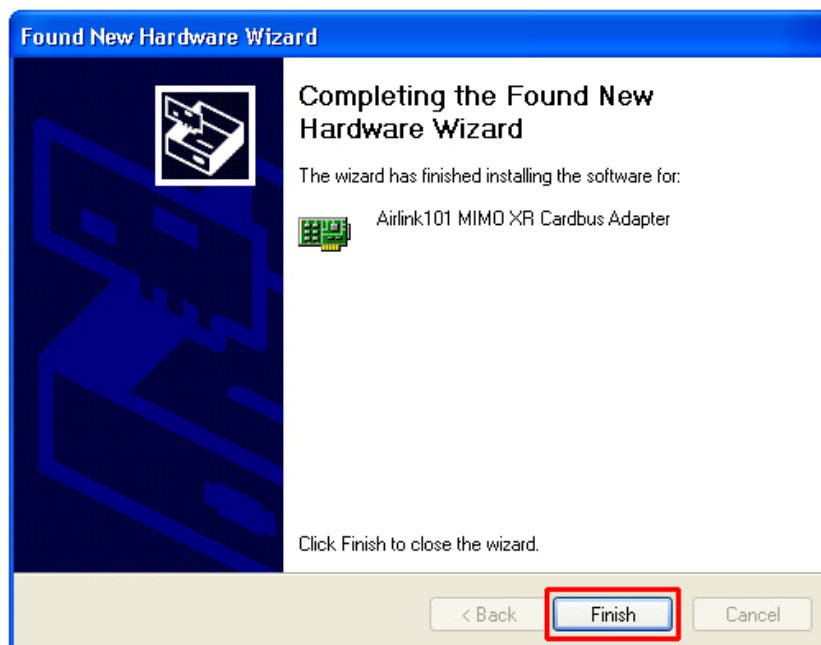


For Windows 98SE and ME, select **Search for the best driver for your device** and click **Next**. Verify all the check boxes are checked and click **Next**.

Step 8 Click **Continue Anyway** at the Windows Logo Screen.
(For Windows 2000, click **Yes** at the Digital Signature Not Found prompt).



Step 9 Click **Finish**. (Restart the computer for Windows 98SE and ME).

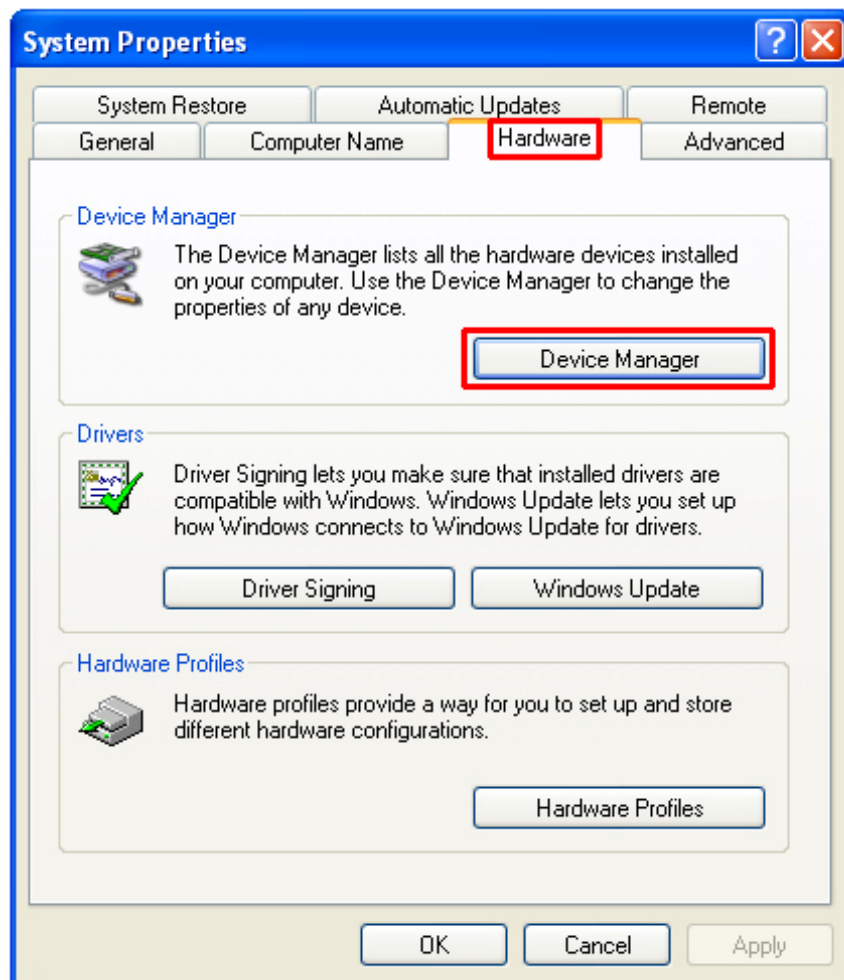


2.2 Verify Driver Installation

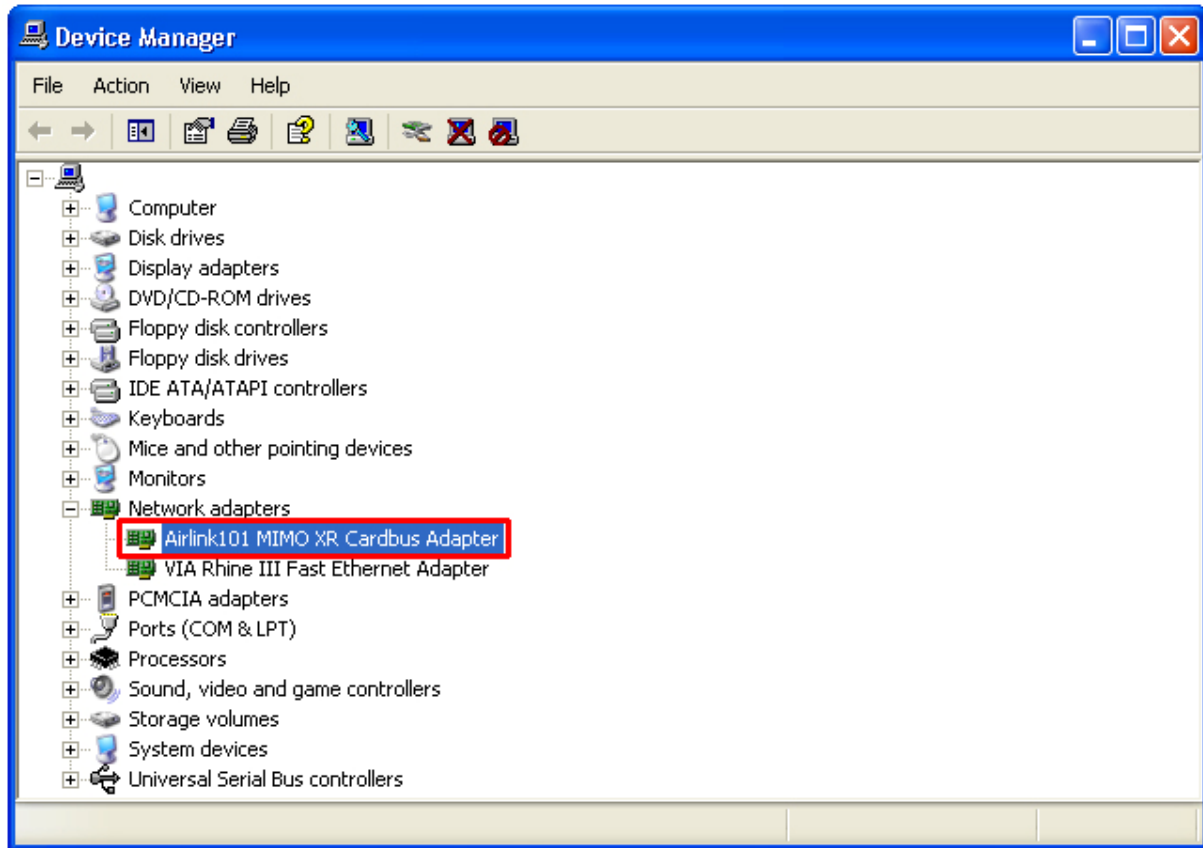
To verify if the driver has been installed successfully, please perform the following steps.

Step 1 Right-click on **My Computer** from your desktop and select **Properties**.

Step 2 Select the **Device Manager** tab. (For Windows 2000/XP, select the **Hardware** tab first then click on **Device Manager**).



Step 3 Expand **Network adapters** from the list and verify that **Airlink101 MIMO XR Cardbus Adapter** is listed and no yellow question mark is beside it.



If **Airlink101 MIMO XR Cardbus Adapter** is not listed, or you see a yellow question mark beside it, please re-install the driver again.

3. Configure the Cardbus Adapter

This section describes how to connect your **MIMO XR™ Cardbus Adapter** to a wireless network.

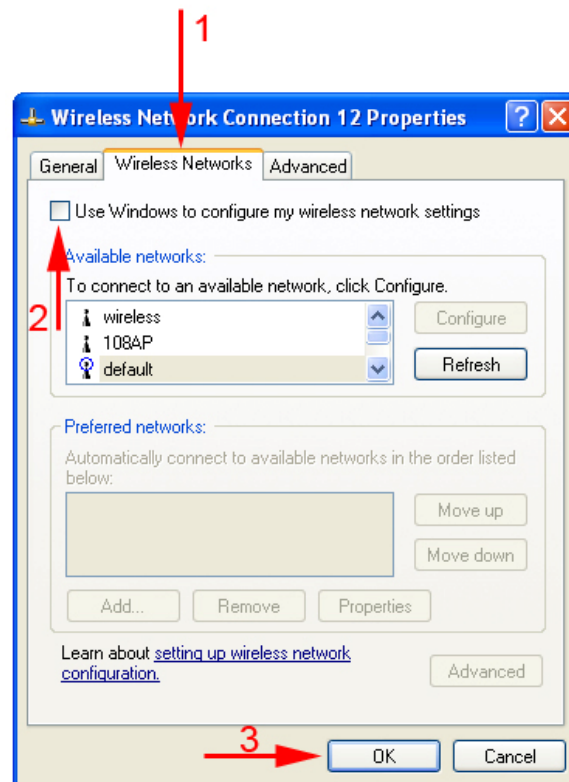
Note to Windows XP Users:

You must disable the Wireless Zero Configuration Utility in order to use the bundled Wireless Utility. Please follow the steps below to disable XP's wireless utility.

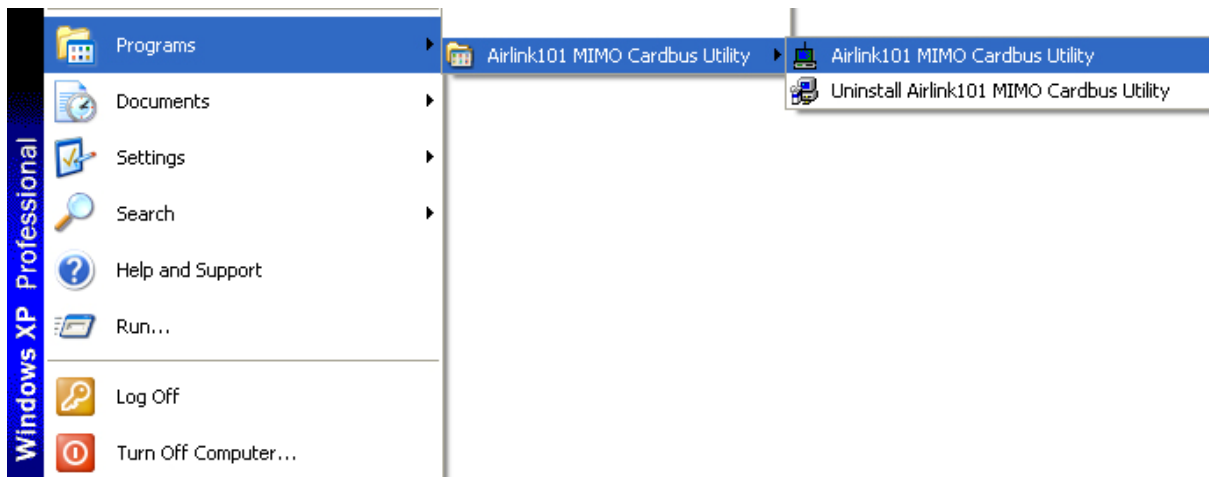
Step 1 Double-click on the **Wireless Network Connection Icon** in the system tray and then click on **Properties** or **Advanced**.



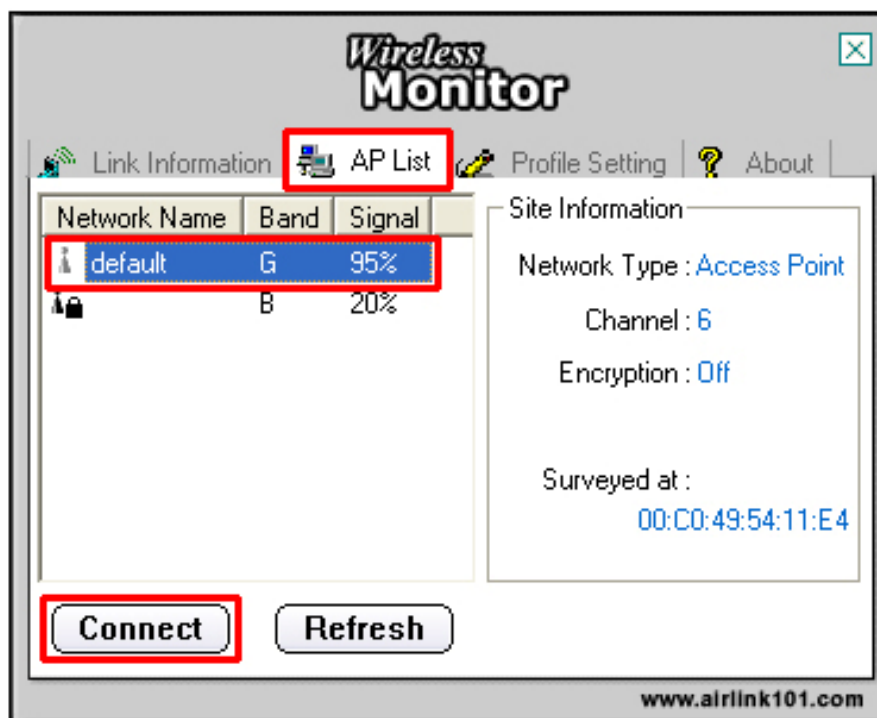
Step 2 Go to the **Wireless Networks** tab, uncheck the “**Use Windows to configure my wireless network settings**” check box and click **OK**.



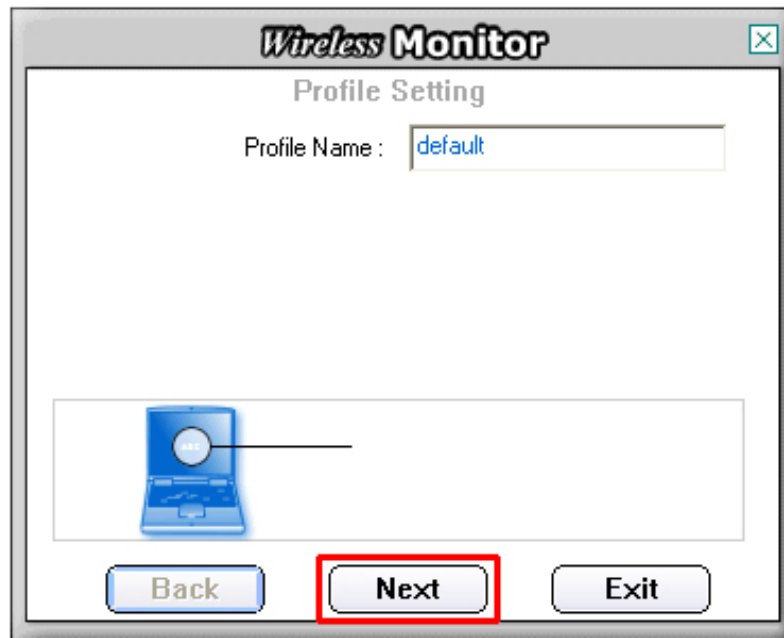
To open the Cardbus Adapter's utility go to **Start > (All) Programs > Airlink101 MIMO Cardbus Utility > Airlink101 MIMO Cardbus Utility**.



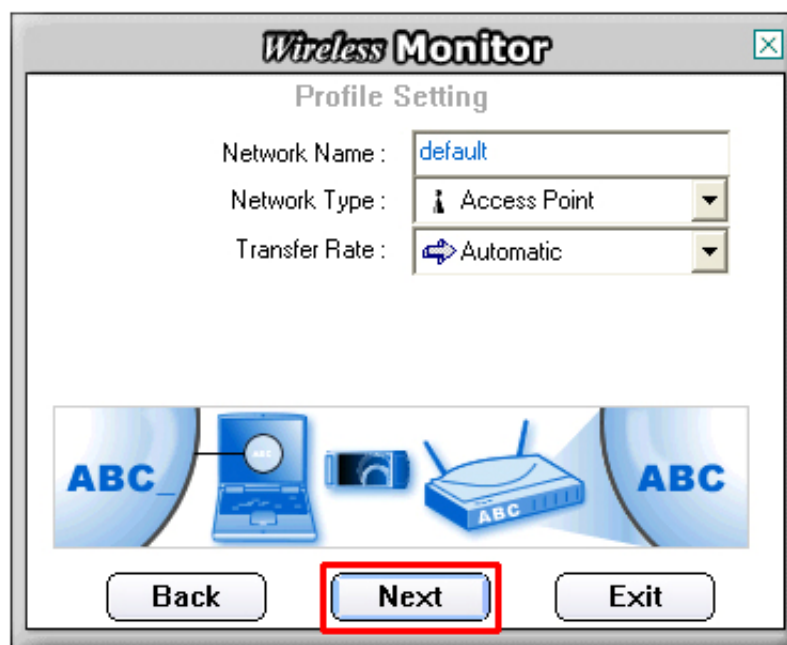
Step 1 Go to the **AP List** tab, select the **SSID** (Network Name) of the wireless network you wish to connect to, and click **Connect**.



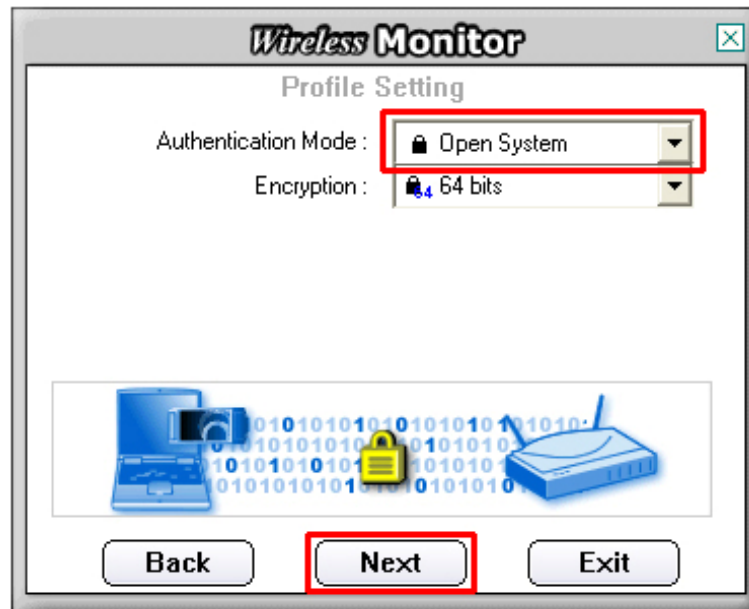
Step 2 If encryption is not enabled for the selected access point / router, skip to step 6. Otherwise, enter a **Profile Name** for your wireless setting and click **Next**.



Step 3 Verify that the **Network Name** matches the **SSID** of your wireless network and click **Next**.

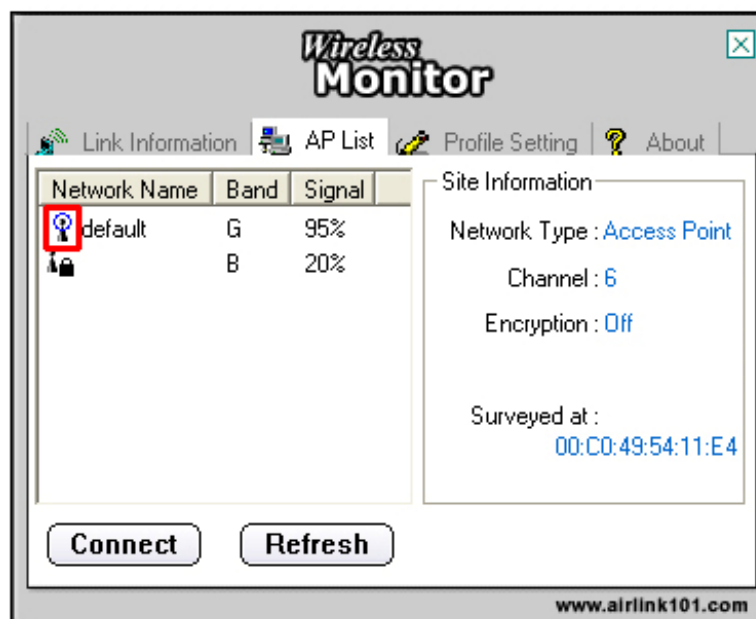


Step 4 Select the proper encryption setting for your wireless router or access point from the drop-down menu and click **Next**.



Step 5 Follow the on-screen instructions to complete the encryption settings. Click **Complete** when finished.

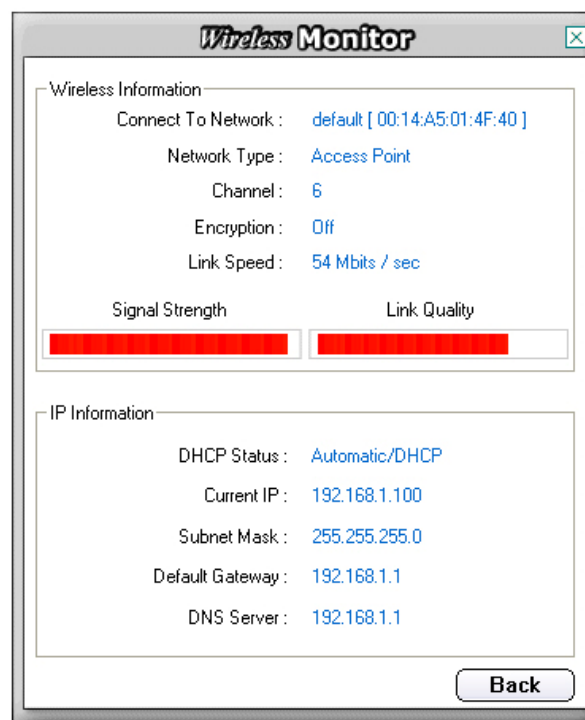
Step 6 You should see a blue circle around the antenna icon indicating a valid connection.



Step 7 Go to the **Link Information** tab and click on the **More** button.



Step 8 Verify that you are receiving adequate Signal Strength and Link Quality and that you have been assigned a valid IP address (instead of all 0's).



If you do not have adequate Signal Strength, try re-orienting the Access Point and/or the Cardbus Adapter to get a better reception.

4. Configure the Wireless Utility

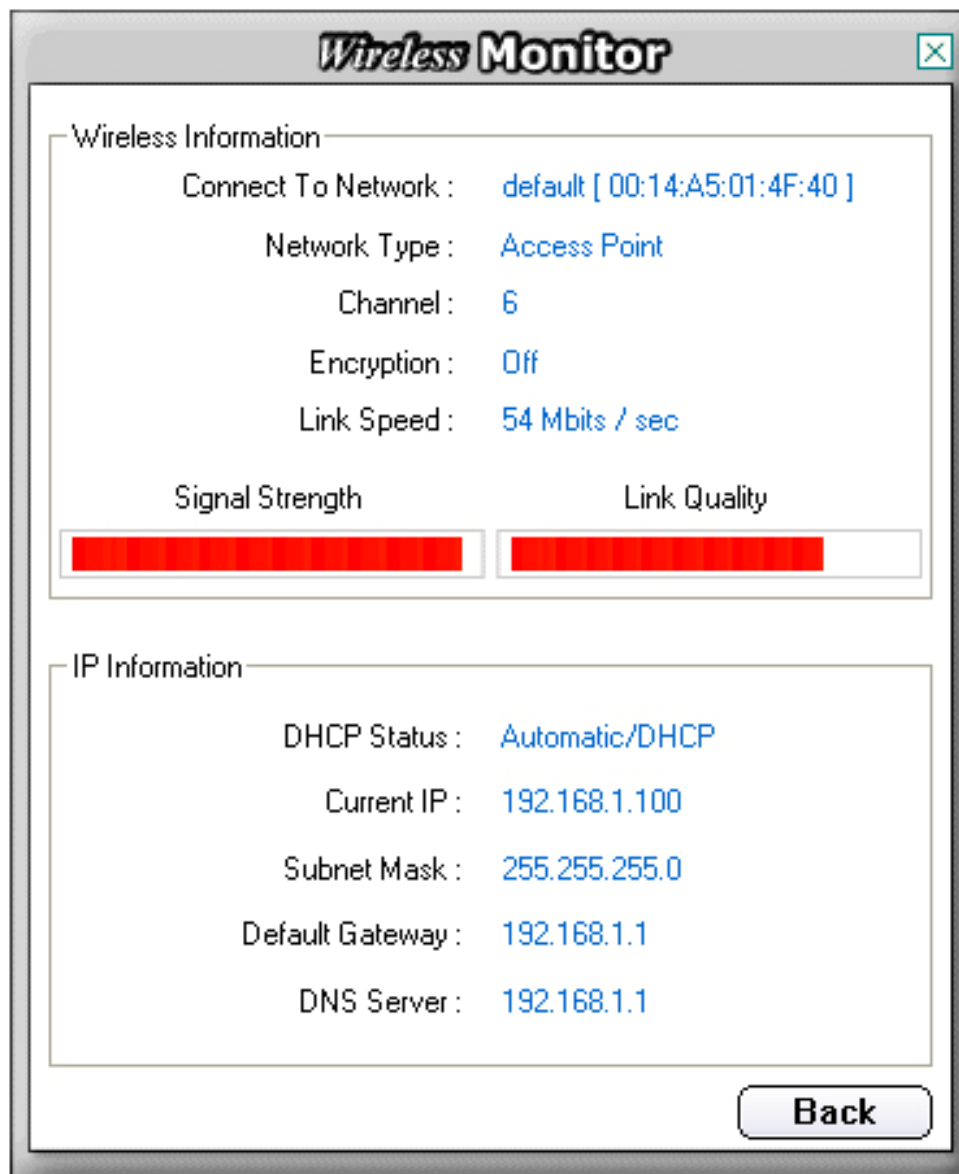
This section describes the various functions of the Wireless Utility that you can configure, including the settings of wireless encryption.

4.1 Link Information

The **Link Information** tab shows the current profile in use as well as details of the current network connection.



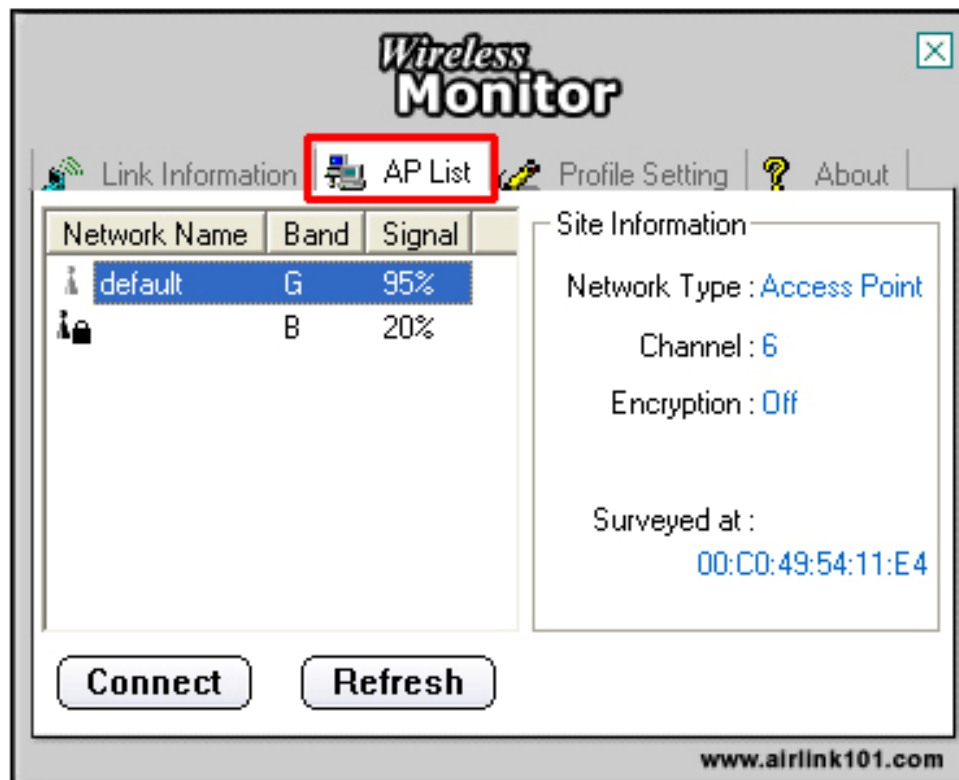
Click on the **More** button to see the details of the current network connection.



The Wireless Information displays the current wireless network you are connected to as well as various other statuses such as the Signal Strength and your assigned IP address.

4.2 AP List

The **AP List** tab displays all the available Access Points detected by the Cardbus Adapter. Simply select the desired Access Point you wish to connect to and click **Connect**.



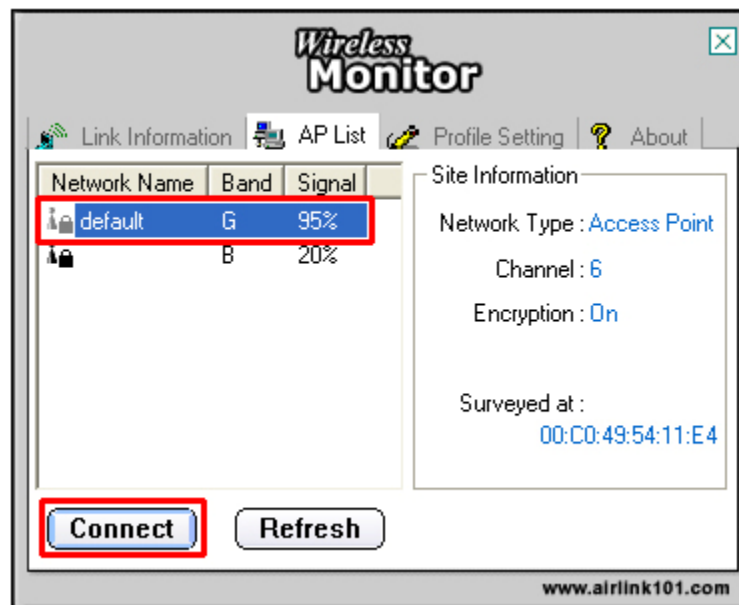
The **Site Information** displays a list of status for the selected AP, including the Channel number and the Encryption status.

4.3 Configure Encryption Settings

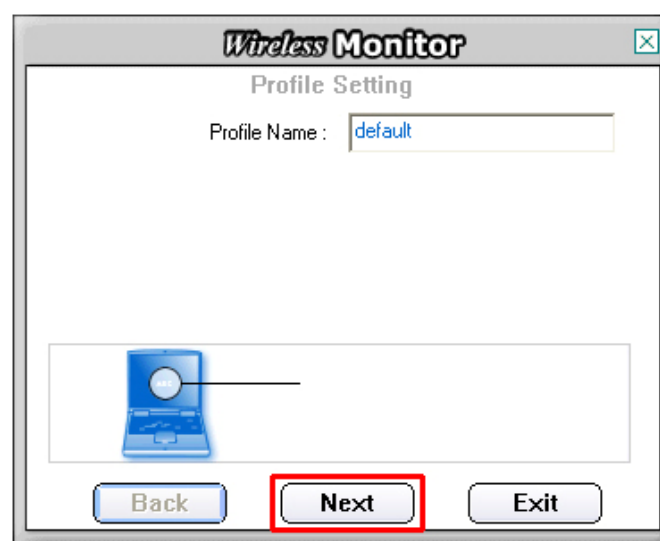
This section describes how to configure encryption settings for the **Cardbus Adapter**.

Note: The encryption settings you set for the Adapter must match the same settings of the Access Point/Wireless Router; otherwise, the encryption will not work properly.

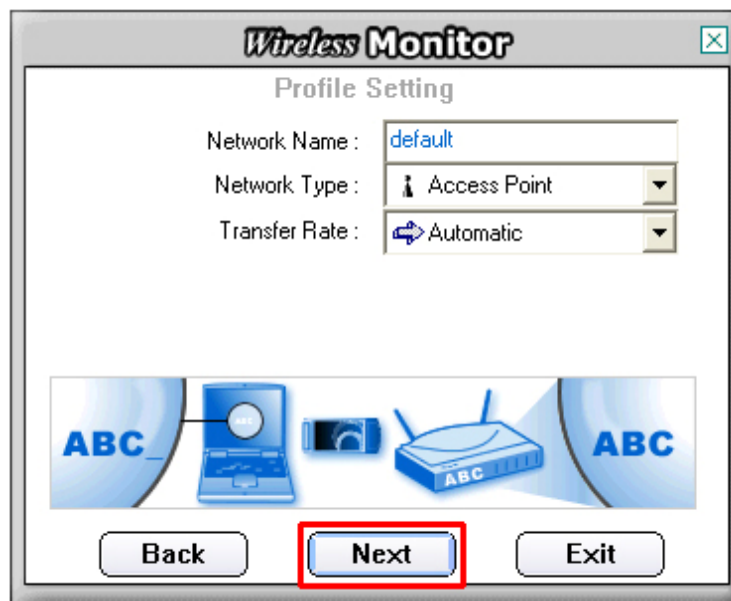
Step 1 From the **AP List** tab, select the Access Point/Wireless Router you want to connect to and click **Connect**.



Step 2 Verify the **Profile Name** is correct and click **Next**.

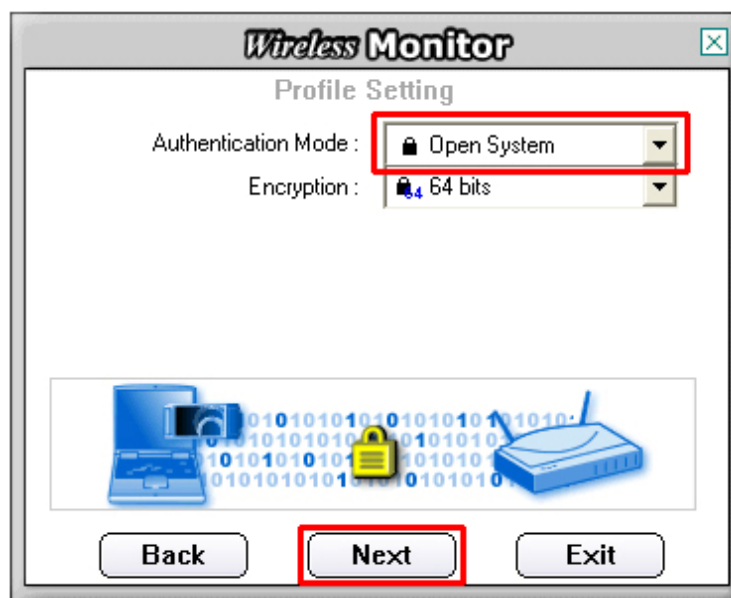


Step 3 Verify the **Network Name (SSID)** is correct and click **Next**.

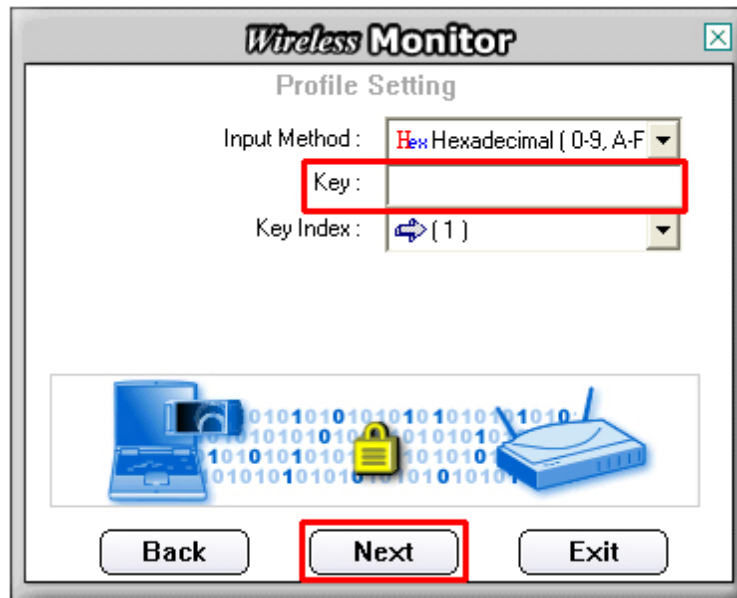


For WEP Settings:

WEP Step 4 Select the appropriate **Authentication Mode** and **Encryption** settings and click **Next**.

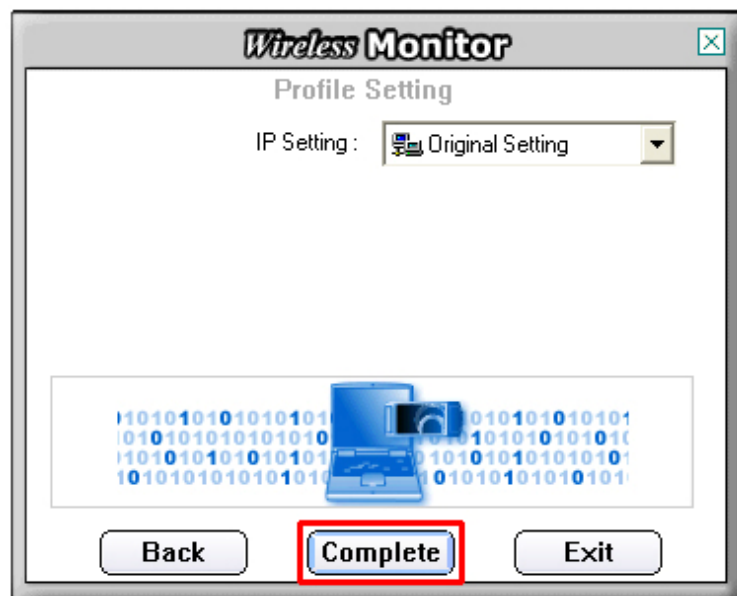


WEP Step 5 Select the appropriate **Input Method**, **Key** (password), **Key Index**, and click **Next**.



The dialog box is titled "Wireless Monitor" and contains a "Profile Setting" section. It has three input fields: "Input Method" set to "Hex Hexadecimal (0-9, A-F)", "Key" (which is empty and highlighted with a red rectangle), and "Key Index" set to "1". Below these fields is a decorative banner with icons of a laptop, a padlock, and a wireless router, surrounded by binary code. At the bottom are three buttons: "Back", "Next" (highlighted with a red rectangle), and "Exit".

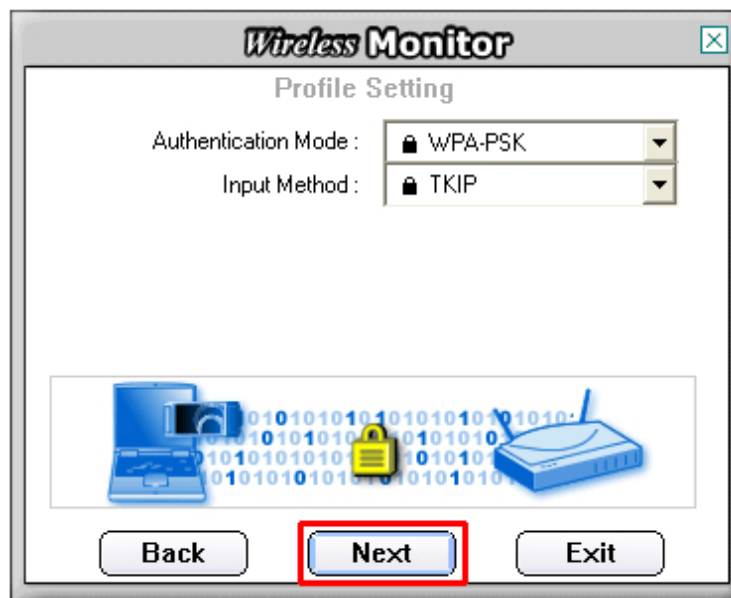
WEP Step 6 Click **Complete** to finish the settings.



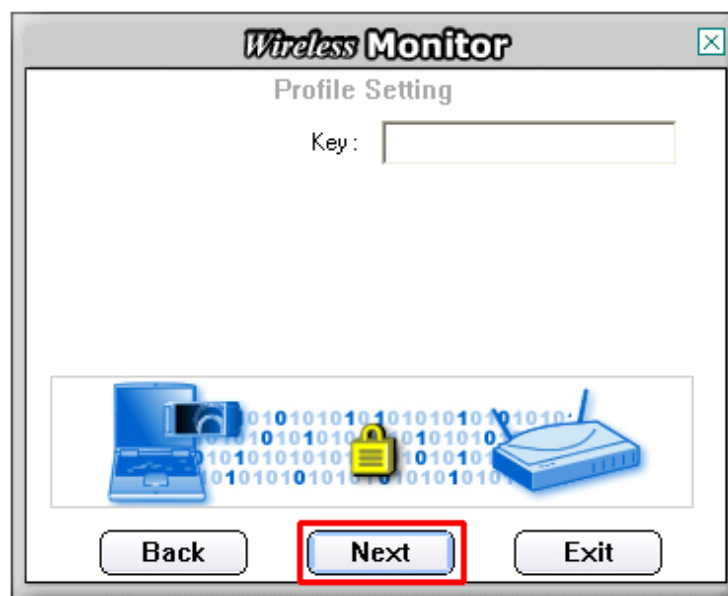
The dialog box is titled "Wireless Monitor" and contains a "Profile Setting" section. It has one input field: "IP Setting" set to "Original Setting". Below this field is a decorative banner with icons of a laptop and a wireless router, surrounded by binary code. At the bottom are three buttons: "Back", "Complete" (highlighted with a red rectangle), and "Exit".

For WPA Settings:

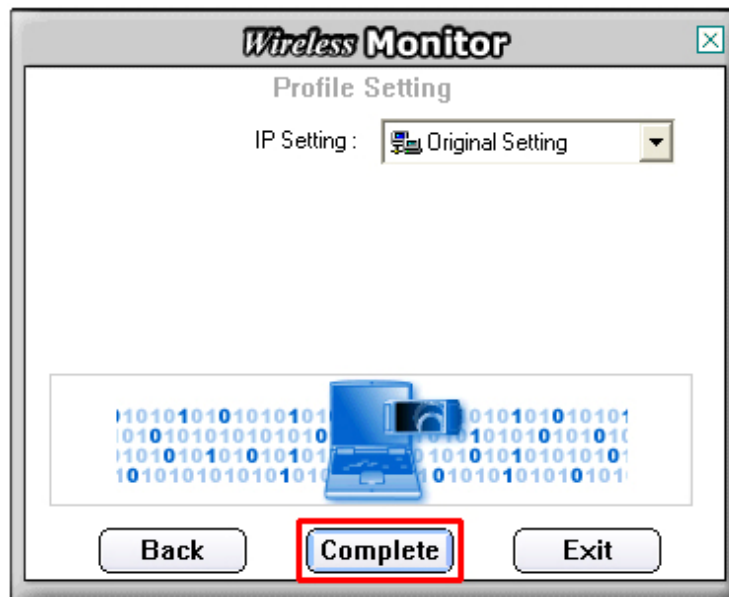
WPA Step 4 Select **WPA-PSK** and the appropriate **Input Method** and click **Next**.



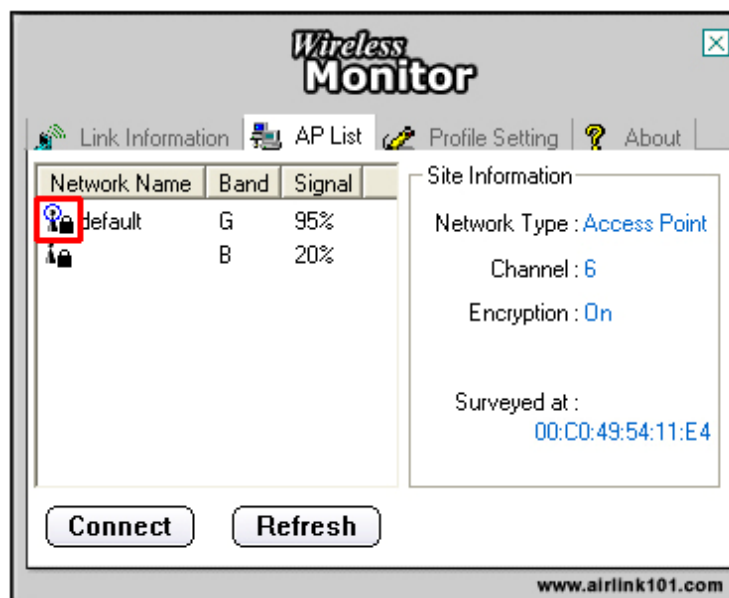
WPA Step 5 Enter the **WPA Key** (passphrase) and click **Next**.



WPA Step 6 Click **Complete** to finish the settings.

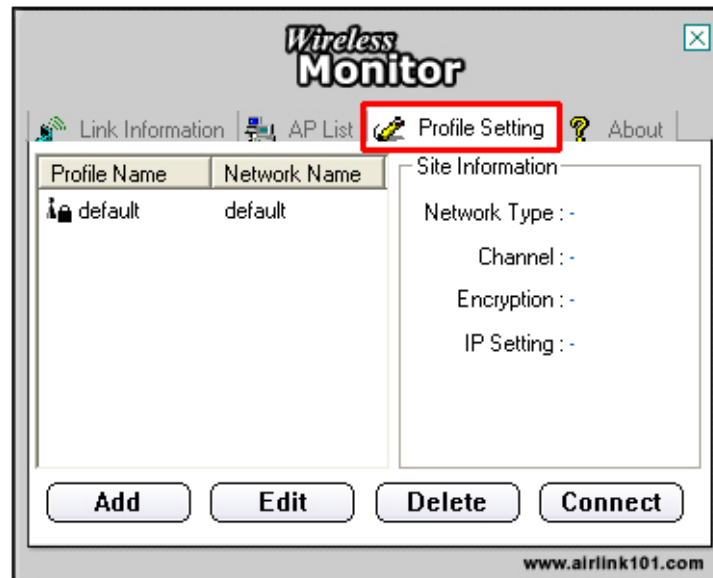


Step 7 You should see a blue circle around the antenna icon indicating a valid connection. A lock icon beside the antenna indicates the connection is encrypted.



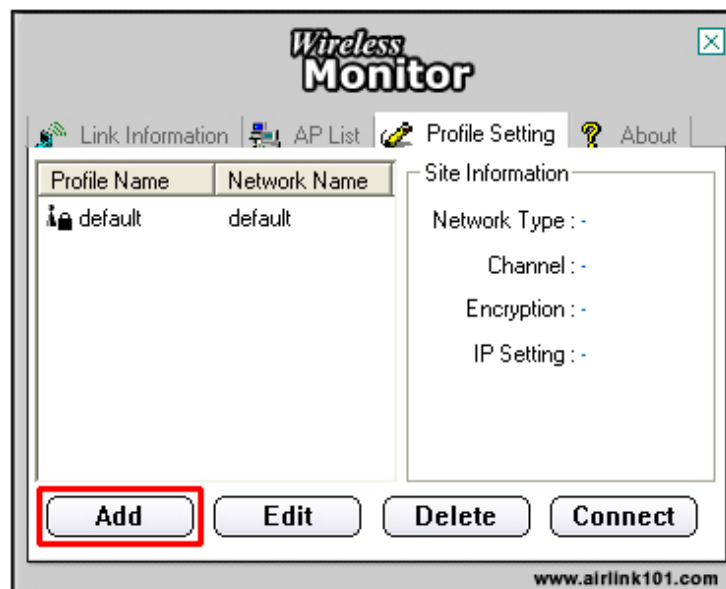
4.4 Profile Setting

The **Profile Setting** tab lists all the profiles you have created. You can create new profiles for different network environments.

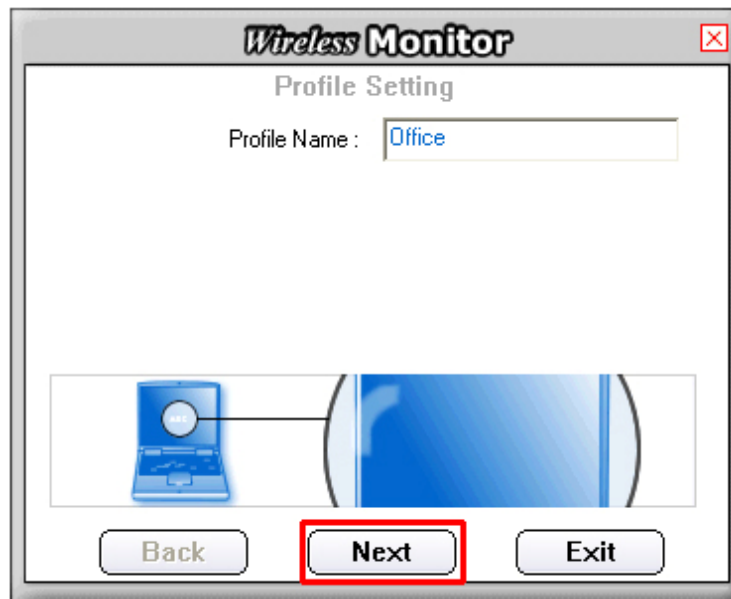


To add a new profile, follow the steps below:

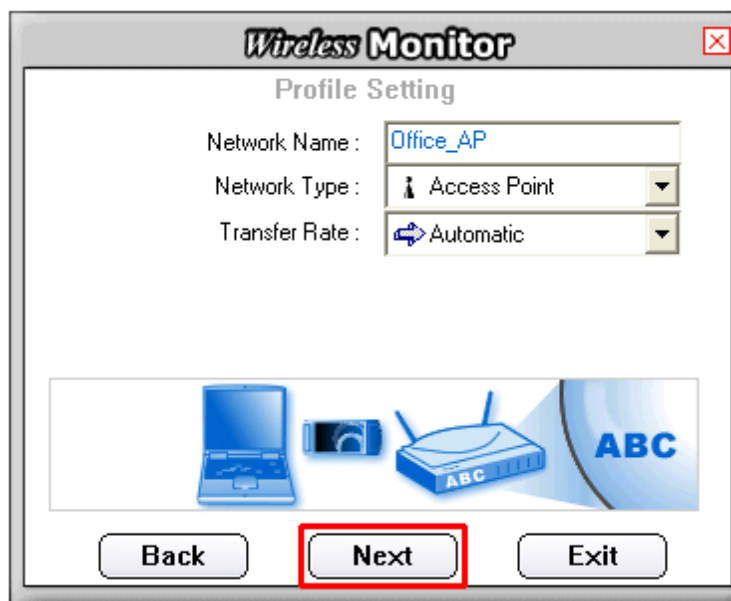
Step 1 Click on the **Add** button.



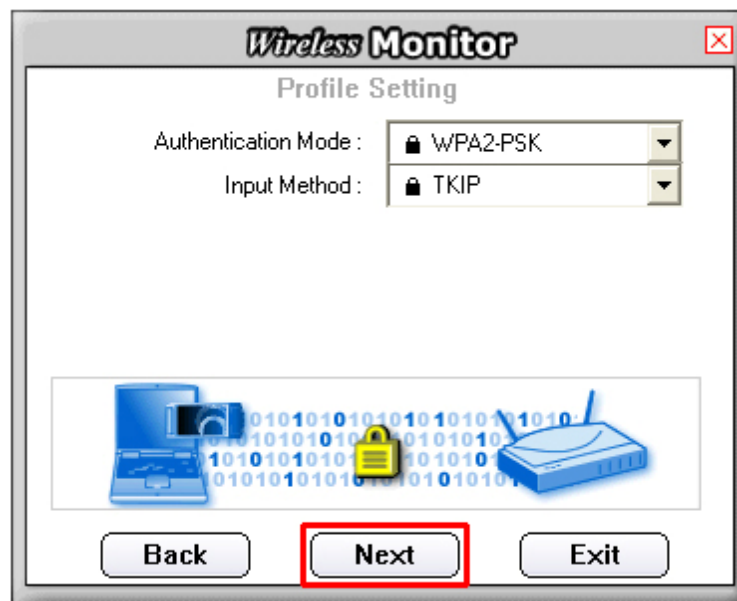
Step 2 Enter a name for your new profile and click **Next**.



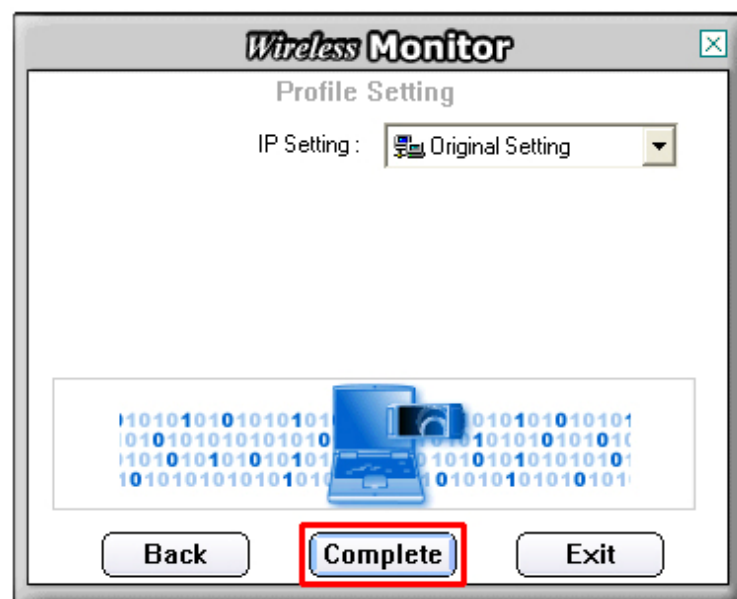
Step 3 Enter the SSID (Network Name) of the wireless network you want to connect to and click **Next**.



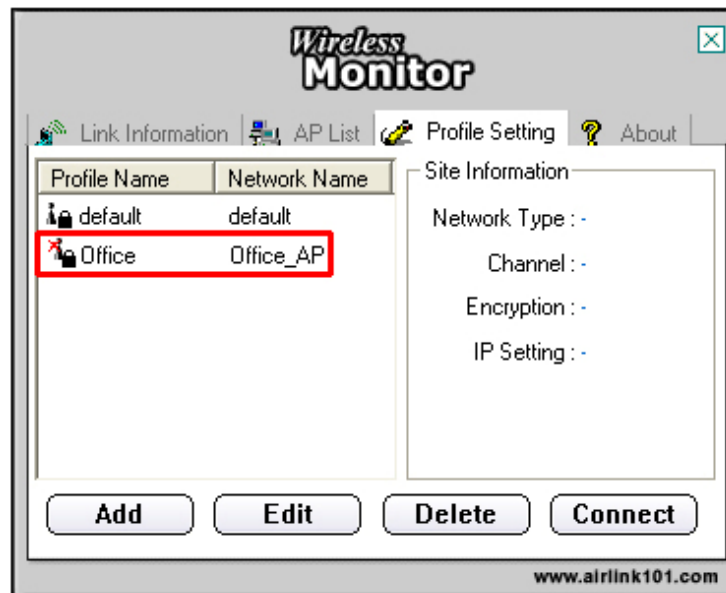
Step 4 Configure any encryption setting if required and click **Next**.



Step 5 Click **Complete** to finish the profile setting.



Step 6 Your new profile will be listed in the Profile List.



Step 7 You can quickly select which profile you want to use from the **Link Information** tab depending on your network environments without having to reconfigure the settings each time.



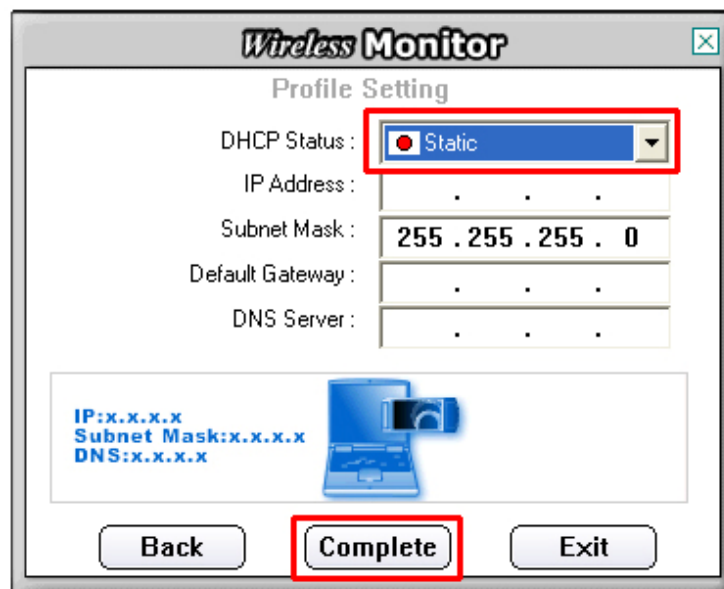
4.5 Static IP Setting

To change the IP address of the wireless adapter to Static IP, follow the steps below:

Step 1 On the last step of 4.4 *Profile Setting*, under IP setting, select **New Setting** and click **Next**.



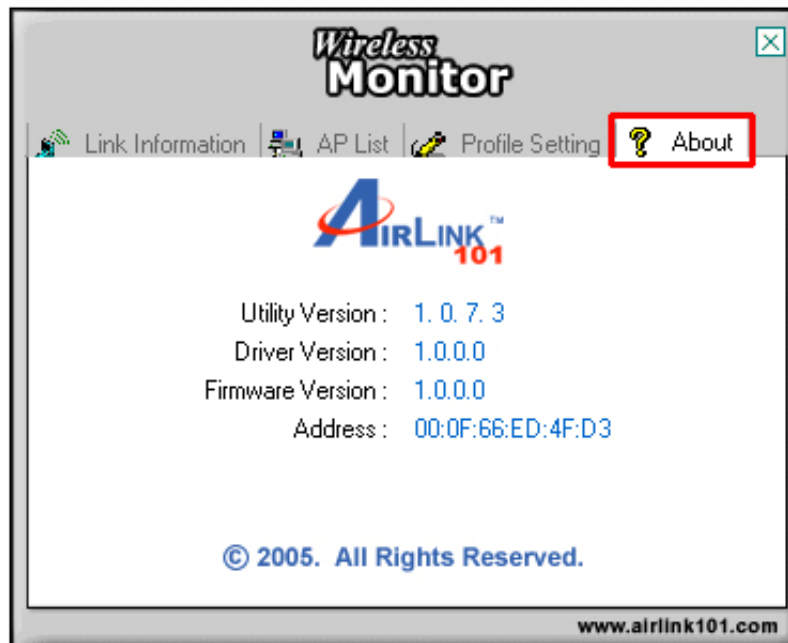
Step 2 Select **Static**.



Step 3 Enter in the information and click **Complete** to finish the setting.

4.6 About

The About tab shows the Utility, Driver, and Firmware version as well as the MAC address of the **MIMO XR™ Cardbus Adapter**.



Technical Support

E-mail: support@airlink101.com

Toll Free: 1-888-746-3238

Web Site: www.airlink101.com

*Theoretical maximum wireless signal rate based on IEEE standard 802.11g specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, mix of wireless products used, radio frequency interference (e.g., cordless telephones and microwaves) as well as network overhead lower actual data throughput rate.

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Federal Communication Commission Interference 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 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.

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.

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

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment has been tested for notebook lap-held configuration and complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure requirements, please do not use this device for other applications.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

AirLink 101 declares that AWLC5025 (FCC ID: MXF-C940711G) is limited in CH1~CH11 for 2.4 GHz by specified firmware controlled in U.S.A.

The Maximum average SAR (1g) is 0.225 W/Kg.