

# 150M Wireless USB Adaptor

## User Manual

**MT-WN715N**



REV: V1.0



**RECYCLABLE**

Certification  
FCC IC CE

## **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.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices)

This equipment 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.

**Industry Canada Notice:** This device complies with Industry Canada licence-exempt RSS standard(s). 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 undesirable operation. This Class B digital apparatus complies with Canadian ICES-003. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement. Cet appareil numérique de la classe B est conforme la norme NMB-003 du Canada.

## **Caution!**

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

### Package Contents

The following items should be found in your package:

- ▶ 150M USB Wireless Adapter
- ▶ Quick Installation Guide
- ▶ CD-Rom

Make sure that the package contains above items. If any of the above items is missing or damaged, please contact the store you bought this product from.

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# 1. Introduction

## 1.1. Product Overview

This USB Wireless adapter is a powerful USB 2.0 Adapter that installs quickly and easily with PCs. The Adapter can be used in ad hoc mode to connect directly with other wireless adapters for peer-to-peer file sharing, or in infrastructure mode to connect with a wireless access point or router. The adapter connects with 802.11n networks at up to 150Mbps, and is backwards compatible with 54Mbps 802.11g or 11Mbps 802.11b devices. In every mode, your wireless connection can be protected so your data stays secure.

## 1.2. Main Features

- ▶ Supports 150Mbps transmission rates
- ▶ Complies with IEEE 802.11b, 802.11g and 802.11n standards for 2.4GHz Wireless LAN
- ▶ USB 2.0
- ▶ Meets 64/128-bit WEP, WPA, and WPA2 security standards
- ▶ Compatible with Windows 2000/XP/Vista/7
- ▶ Low power consumption
- ▶ Easy to install and configure
- ▶ WPS enabled

## 1.3. Standards

- ▶ 802.11b/g/n
- ▶ 802.11i

## 1.4. Working Environment

Temperature:

- ▶ 0° to 40° C (operating)
- ▶ -20° to 70° C (storage)

Humidity:

- ▶ 10% to 90 % non-condensing (operating)
- ▶ 5% to 95% non-condensing (storage)

## **1.5. System Requirements**

- ▶ Available USB 1.1 or USB 2.0 slot
- ▶ 300 MHz processor and 32 MB of memory
- ▶ CD-ROM drive
- ▶ An 802.11b/g/n access point (for Infrastructure Mode) or another 802.11b/g/n wireless adapter (for Ad Hoc; Peer-to-Peer networking mode.)
- ▶ Microsoft® Windows® 7, Vista™, XP, 2000 SP4

## 2. Hardware and Driver Installation

### 2.1. Insert the Adapter

Plug the USB Wireless Adapter into an available USB port on your computer, and the Found New Hardware Wizard (windows 7) screen will appear; Close the wizard, then clicks the following steps to install;

### 2.2. Driver and Software Installation

Turn on the computer and insert the included CD in the CD-ROM drive. Click the Start button and choose Run and enter D:\drivers\windows\setup.exe (if 'D' is your CD-ROM drive);

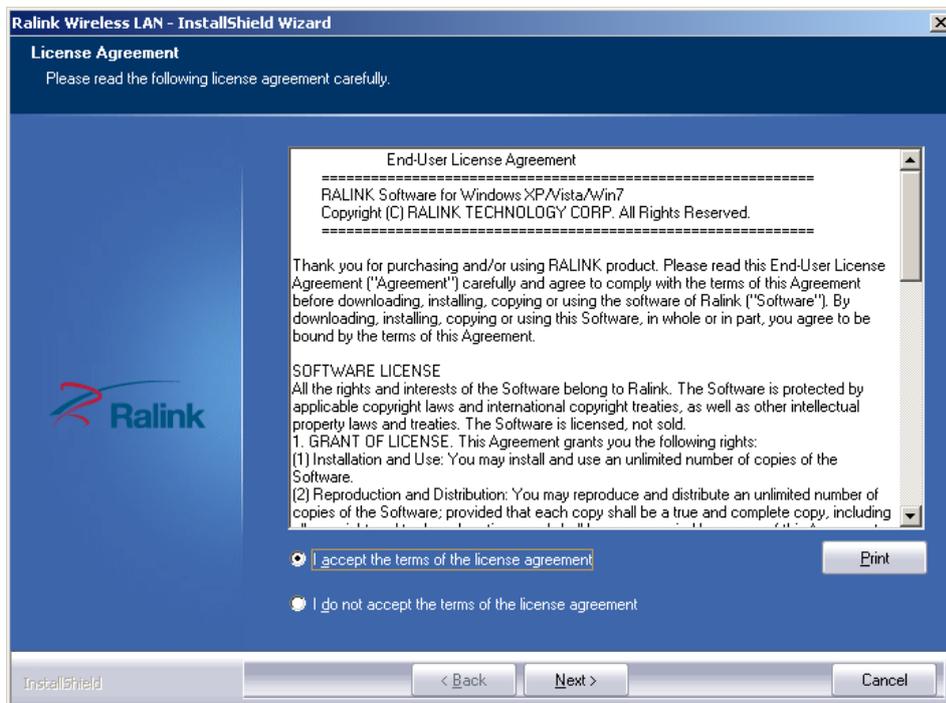
You can also access the optical disk D:\drivers\windows directory (if 'D' is your CD-ROM drive), double-click "setup. exe " for installation;



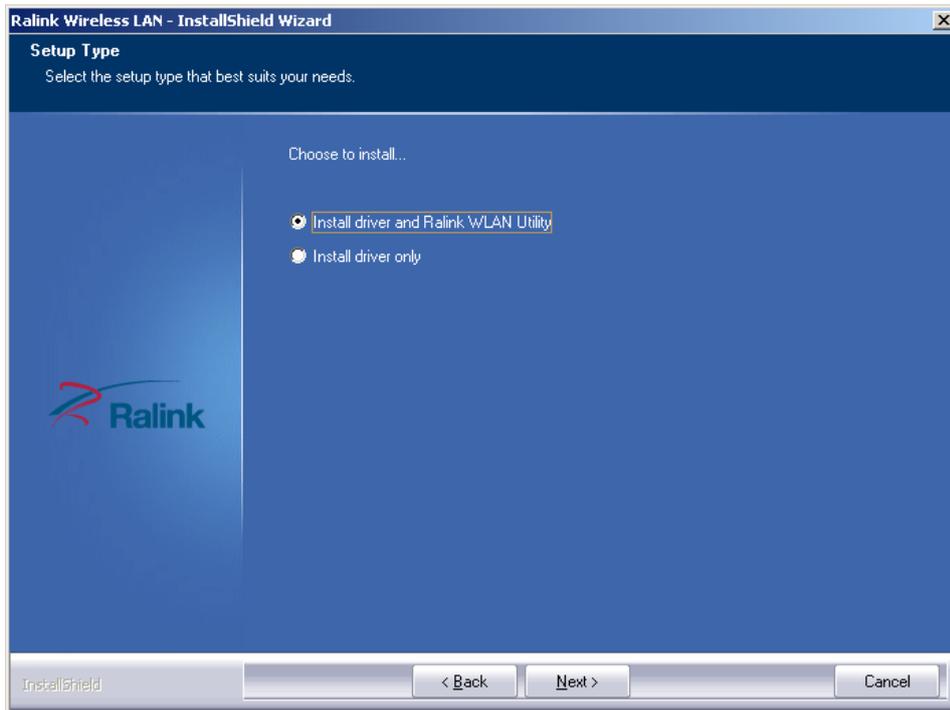
Setup. exe

The following is the step-by-step instructions in Windows 7. The steps and screens are similar for the other Windows operating systems

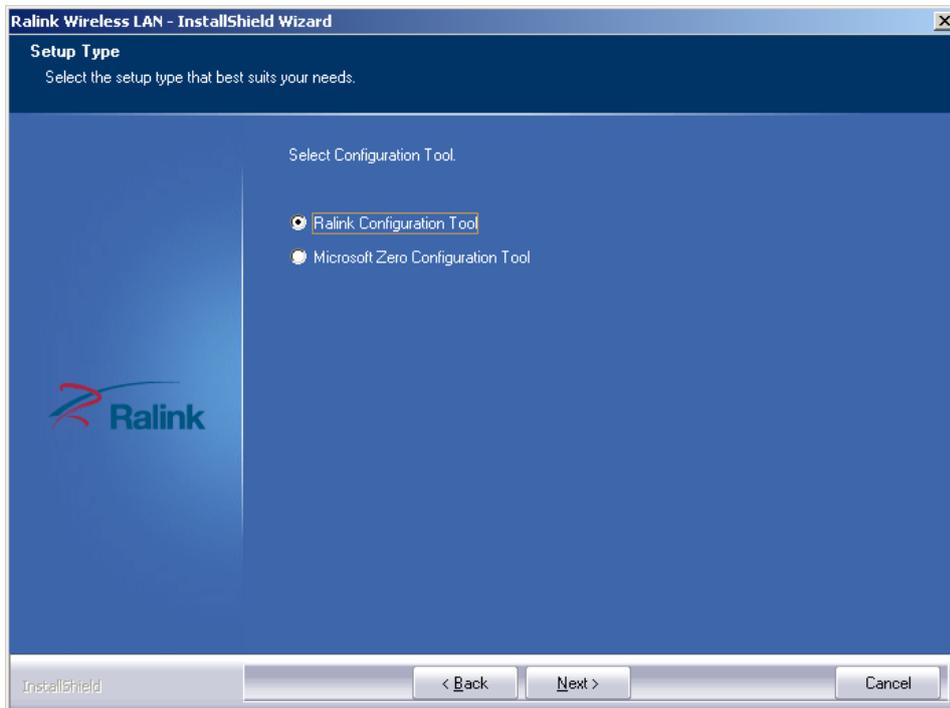
- Select "I accept the terms of the license agreement" and then click Next;



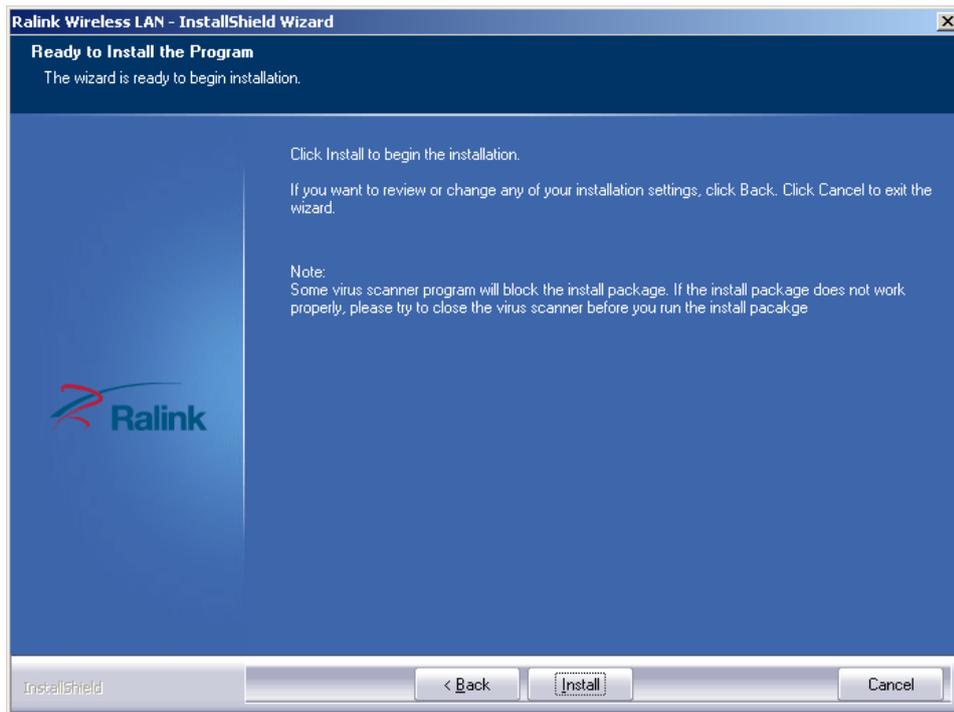
- Select "Install driver and Ralink WLAN Utility" and Click Next;



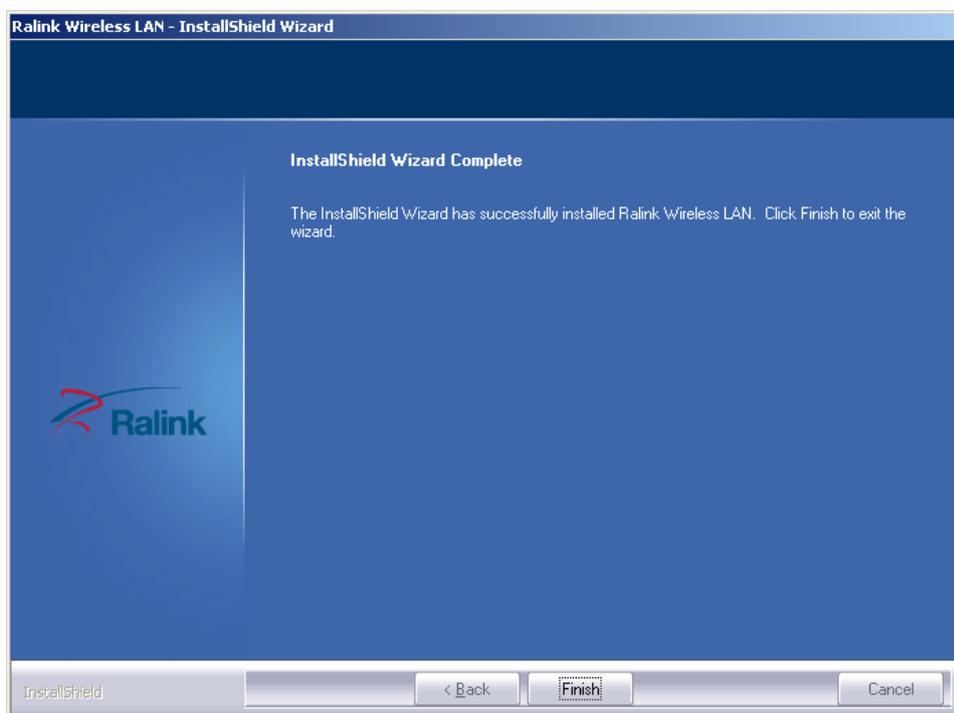
- Select “Ralink Configuration Tool” and Click Install;



- Click “Install”;



➤ Click "Finish" to finish the driver installation;



## 3. System configuration

The USB Wireless Adaptor provides two modes: Station mode and Access Point mode, the default is Station mode. You can select remote wireless AP to connect to Internet in station mode. But in the AP mode, the wireless USB adaptor act as a wireless access point which wireless client can connect to share an Internet connection with others.

Use the Ralink WLAN Utility to check the link information, search for available wireless networks, or create profiles that hold different configuration settings. You can double-click the icon on your desktop to run it. Another way to start the Configuration Utility is to click Start> All Programs> Ralink Wireless> Ralink Wireless Utility. If the utility is not selected to install, then you may use the utility your computer has (e.g. windows zero config)

### 3.1. General

The General tab displays current Wireless statistics.



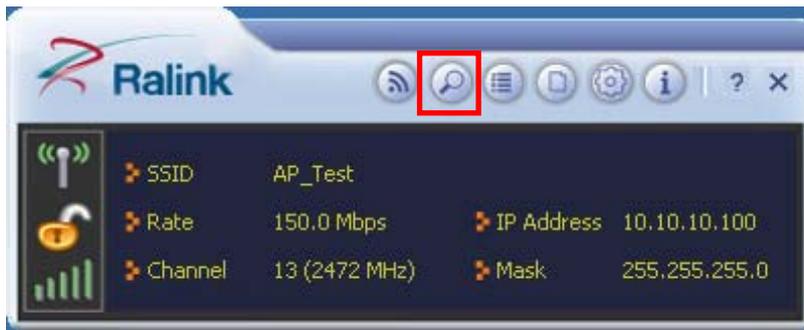
#### General Information

- SSID: The unique name of the wireless network.
- Rate: The data transfer rate of the current connection
- IP Address: The IP Address of the Adapter
- Mask: The Subnet Mask of the Adapter
- Channel: The channel of the current connection

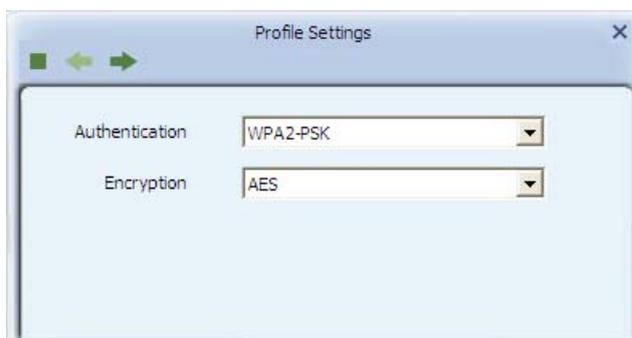
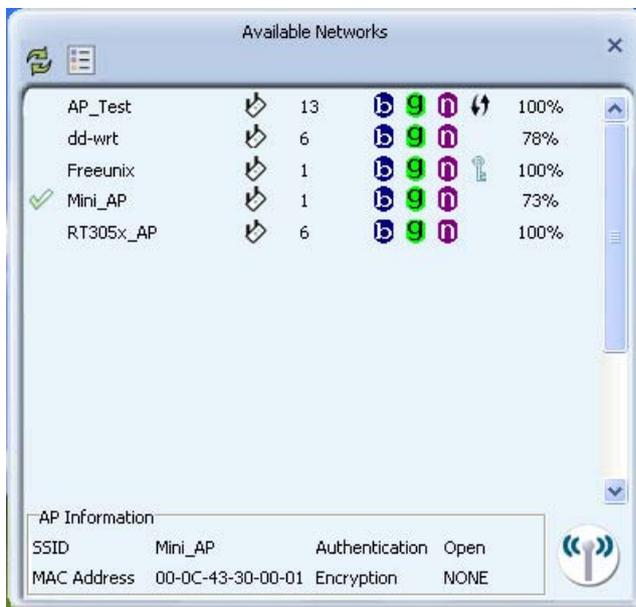
### 3.2. Profile

#### 3.2.1. Quick Connect

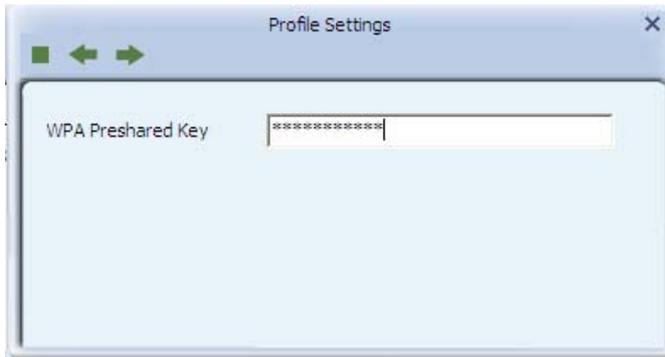
If you want your wireless computers to communicate with other computers on your wired network via a wireless access point.



Select Available Network tab and click Refresh button to refresh current available wireless network, you can double click it after highlighting a wireless network you want to connect, If it is encrypted, you need to enter Network Key and confirm it and it will be OK.(Note: profile will detect the Authentication and Encryption of current wireless network, you don't need to change it.)



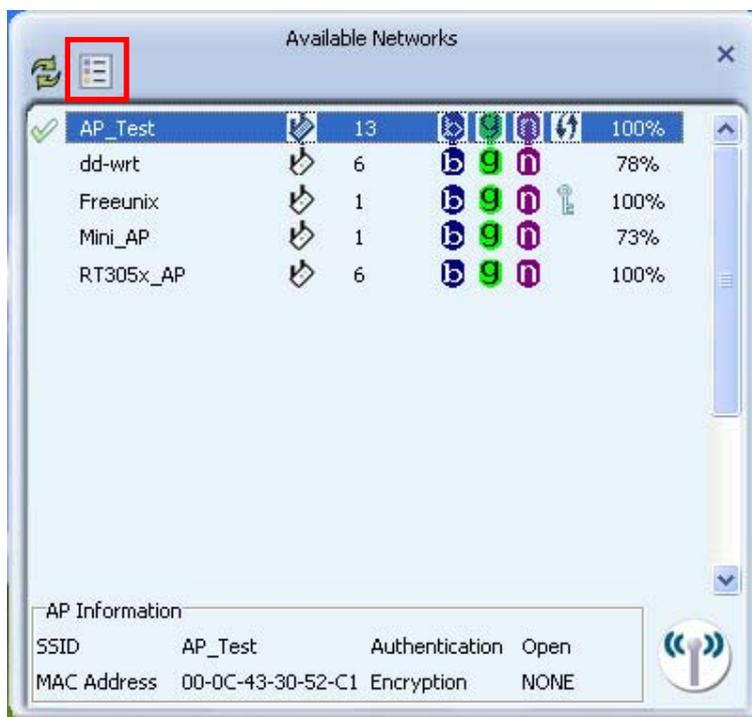
Click  to enter the encryption code.



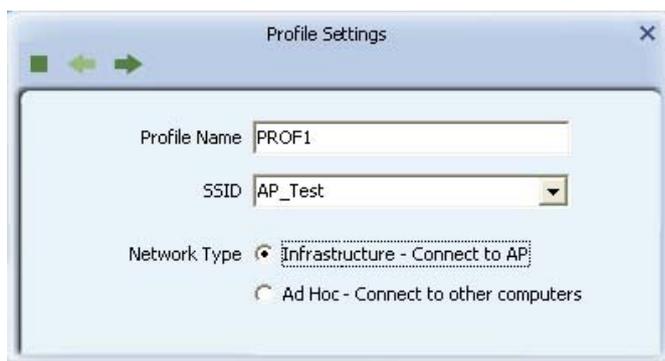
Click  to connect the wireless network.

### 3.2.2. Add to profile

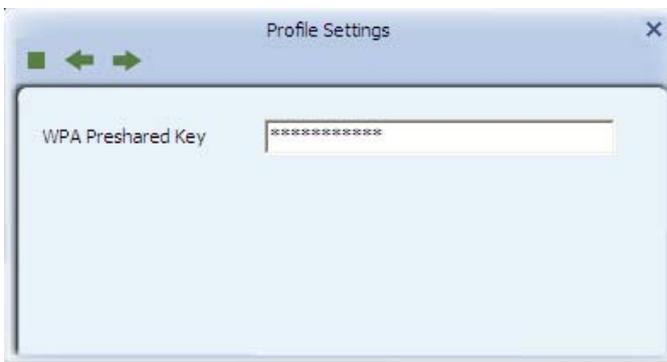
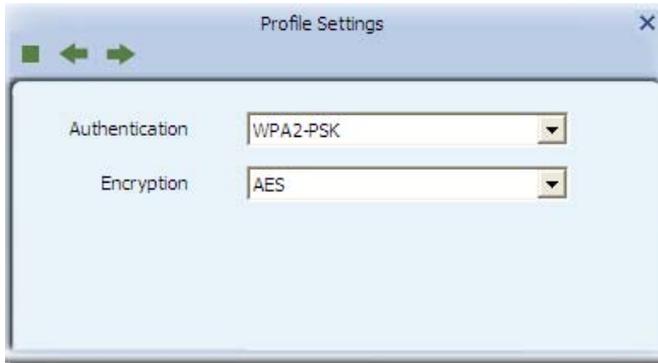
Select a wireless network and click the “red” button to create this profile (the following picture).



Input the profile name and select Network Type, you should select “Infrastructure-connection to AP”, then click .



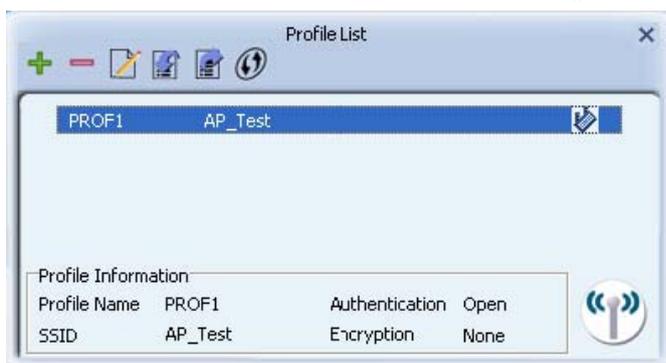
If it is encrypted, you need to enter Network Key to confirm it and then click next. (Note: profile will detect the Authentication and Encryption of current wireless network, you don't need to change it .)



You can select "Use Pre-logon Connection" and click .

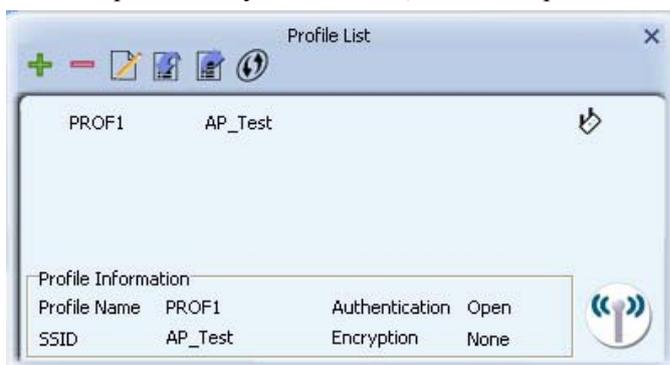


The wireless network connection be added to the profile list.

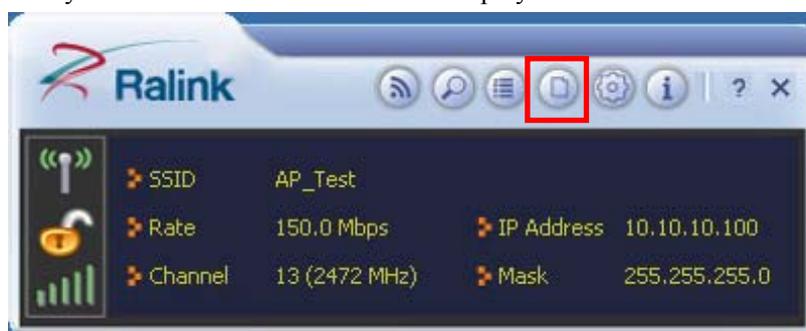


### 3.2.3. Profile Management

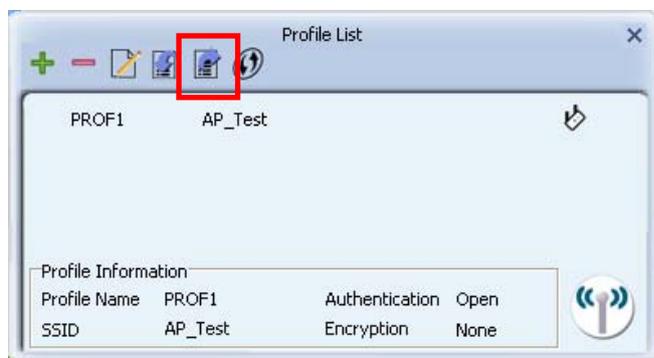
Select a profile and you can delete, edit and export to computer as a Wireless profile file.



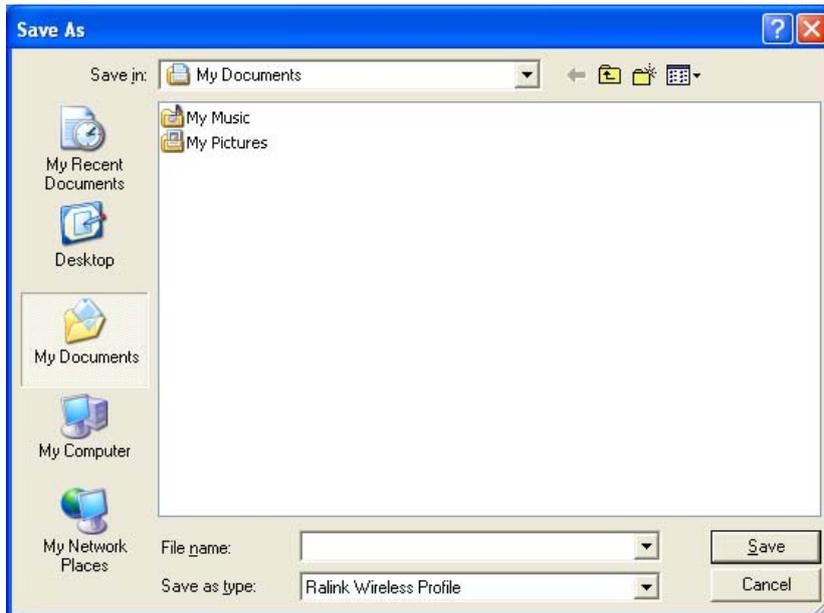
Also you can click the "Red" button to display the Profile list.



Select a profile and click the "red" button to save the current profile as a profile to your computer.



Give the saved profile file a name and click save.



### 3.2.4. Wi-Fi protect setup

Wi-Fi Protect Setup (WPS) function can let you create a safety network easily. You can through PIN Input Config (PIN) "or "Push Button (PBC)" to encrypt your network. You only need to push the WPS button in the router which support WPS function and click the functions in this adaptor, then the router will be encrypted to WPA2-AES mode automatically.

**Note:**

- The status of WPS in the router must be enabled
- If you have configured encryption mode in your router, then when you use this WPS function, please configure encryption mode to NONE, then it will be encrypted to WPA2-AES mode automatically. If you don't want to change your encryption mode, then when you use this function, the router will be encrypted to the mode that you have configured Click the "Red" button to add a WPS Profile in profile list;

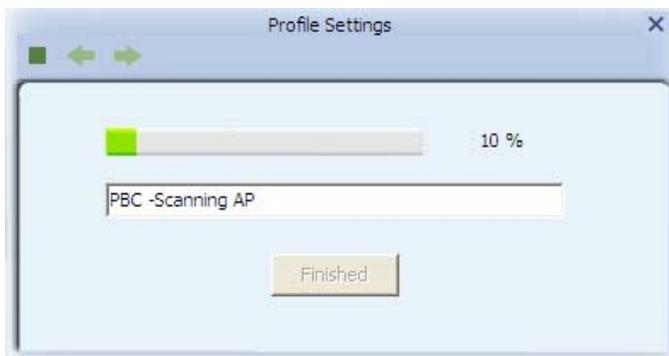


#### Method 1: PBC

Select "Push-Button" in WPS Method then click next.

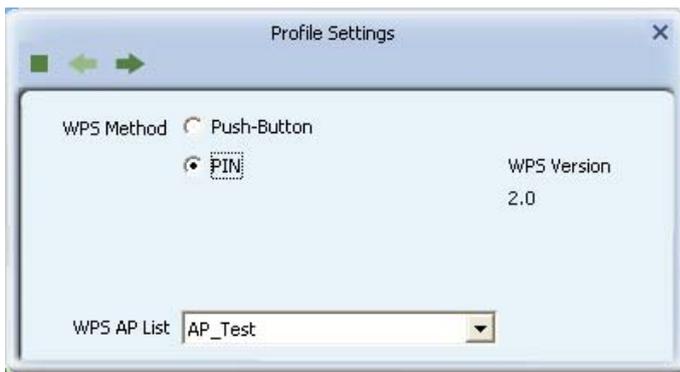


Click “Start PBC” and click the WPS button of your wireless router at the same time, Please wait a moment, the connection between the adaptor and the router will be established automatically.

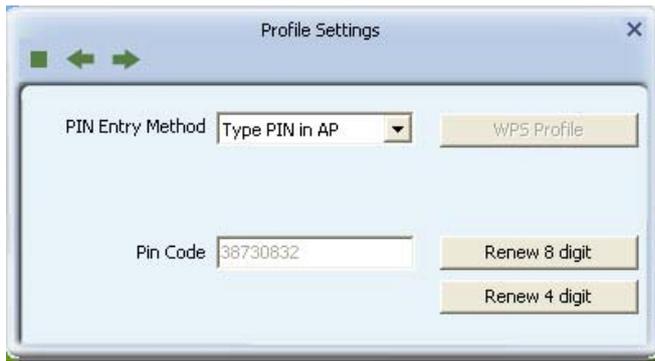


## Method 2: PIN

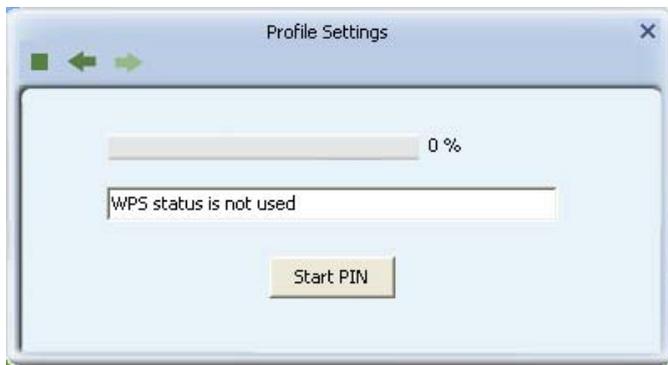
Select “PIN” in WPS Method then click next.



Select the appropriate configuration mode, and you will get a number in PIN Code, then click next.

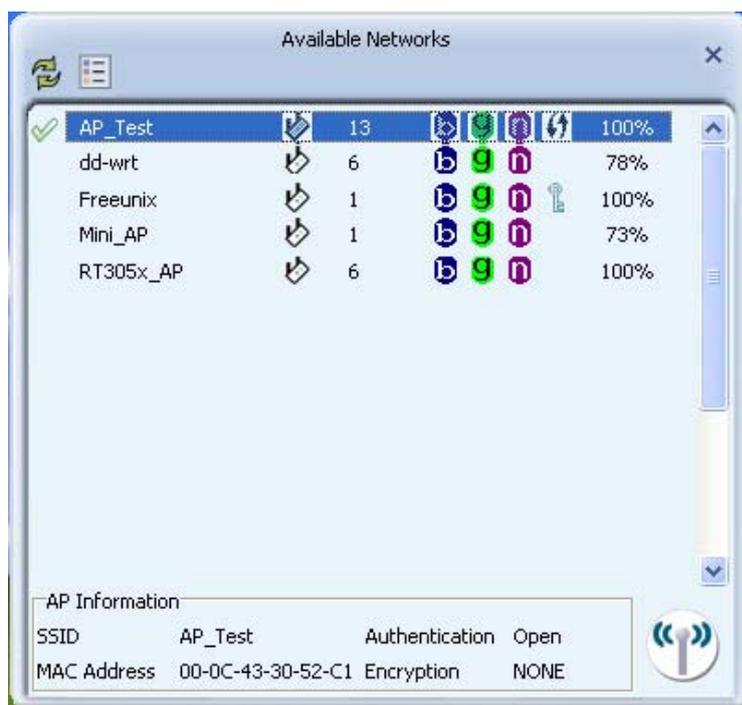


Click “Start PIN” button, then Input the PIN code of the adapter’s WPS page into the router’s WPS configure page, then click “connect”, please wait a moment, the connection between the adapter and the router will be established automatically.



### 3.2.5. Available Network

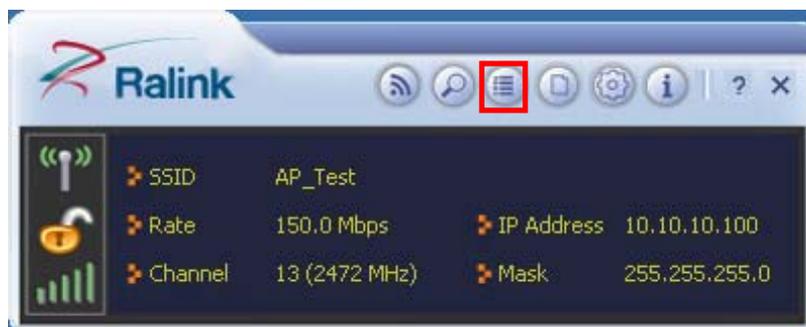
The Available Network tab, displays a list of infrastructure and ad-hoc networks available for connection.



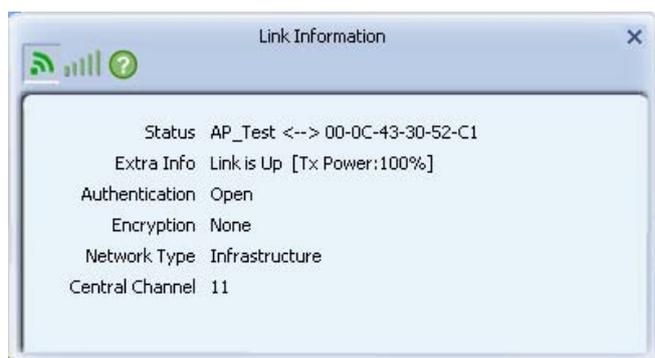
The section of the window displays the Available Networks. Double-click the network to which you wish to connect.

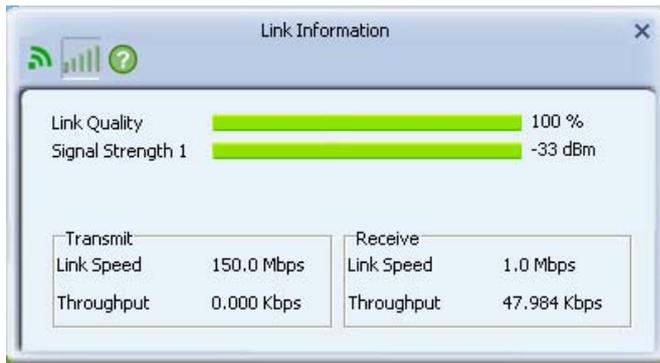
### 3.3. Link Information

Click the “Red” button to show the link information.



The Status tab displays the detailed information of current device and wireless connection.





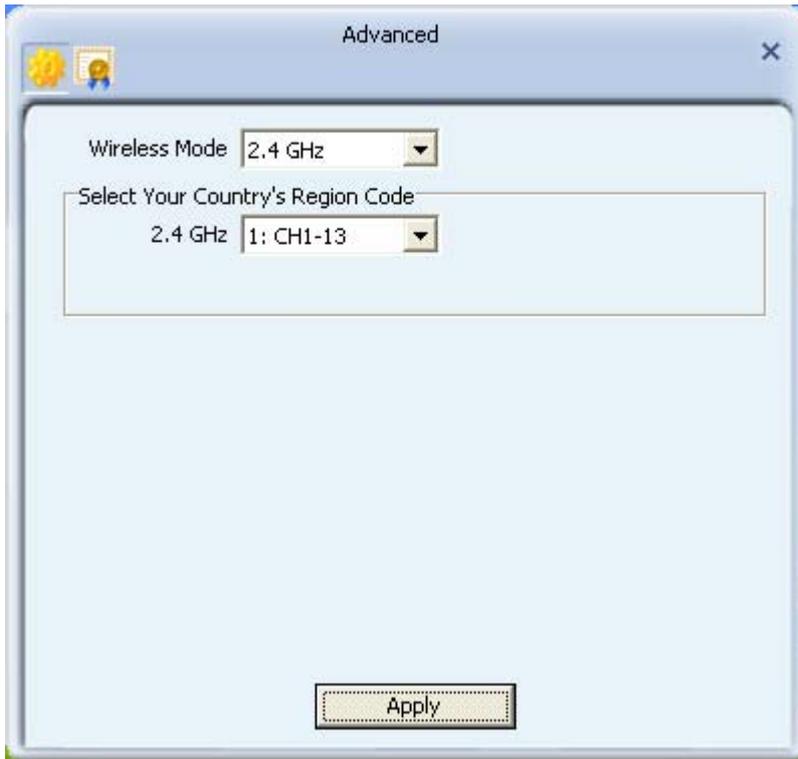
Click  to empty the statistics.

### 3.4. Advanced

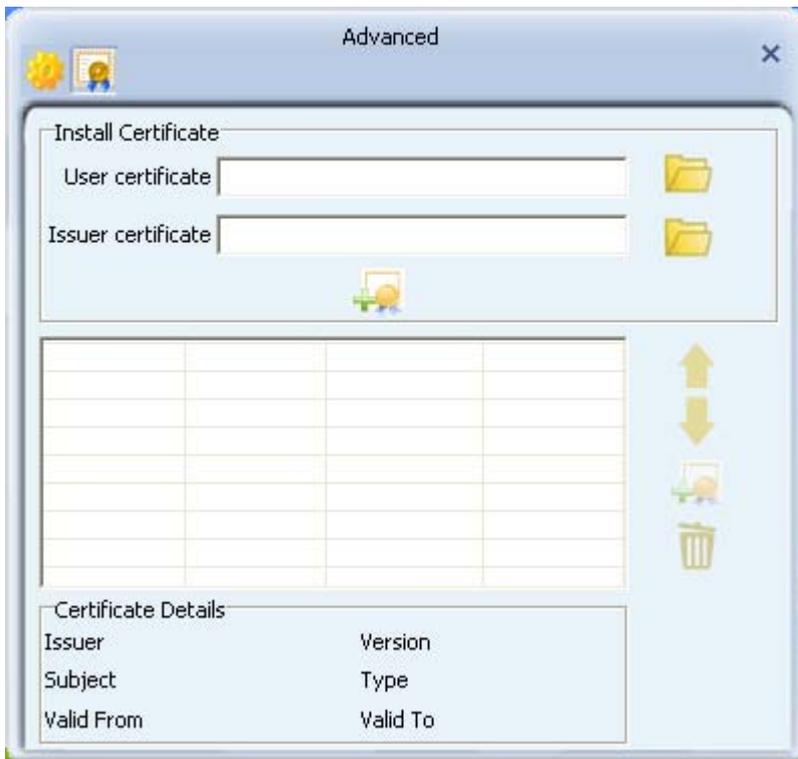
Click “Red” button to change the advanced configuration.



Here you can change “Wireless Mode” and select your country’s region code.(Country Code Selection feature is disabled by firmware - device marketed in the US and Canada is firmware limited to channel 1 ~11 )



Here you can install certificate, including “User certificate” and “Issuer certificate”. Click  button to select certificate file, and click  button to install.



## 4. Troubleshooting

This chapter provides solutions to problems that may occur during the installation and operation of the USB Wireless Adapter. Read the descriptions below to solve your problems.

### **1. The USB Wireless Adapter does not work properly?**

Reinsert the USB Wireless Adapter into your PC's USB slot. Right click My Computer and select Properties. Select the device manager and click on the Network Adapter. You will find the Adapter if it is installed successfully. If you see the yellow exclamation mark, the resources are conflicting. You will see the status of the Adapter. If there is a yellow question mark, please check the following:

Make sure that your PC has a free IRQ (Interrupt ReQuest, a hardware interrupt on a PC.)

Make sure that you have inserted the right adapter and installed the proper driver. If the Adapter does not function after attempting the above steps, remove the adapter and do the following:

Uninstall the driver software from your PC.

Restart your PC and repeat the hardware and software installation as specified in this User Guide.

### **2. I cannot communicate with the other computers linked via Ethernet in the Infrastructure Configuration?**

Make sure that the PC to which the Adapter is associated is powered on.

Make sure that your Adapter is configured on the same channel and with the same security options as with the other computers in the Infrastructure configuration.

### **3. What should I do when the computer with the Adapter installed is unable to connect to the wireless network and/or the Internet?**

Check that the LED indicators for the broadband modem are indicating normal activity. If not, there may be a problem with the broadband connection. Check that the LED indicators on the wireless router are functioning properly. If not, check that The AC power and Ethernet cables are firmly connected. Check that the IP address, subnet mask, gateway, and DNS settings are correctly entered for the network. In Infrastructure mode, make sure the same Service Set Identifier (SSID) is specified on the settings for the wireless clients and access points. In Ad-Hoc mode, both wireless clients will need to have the same SSID. Please note that it might be necessary to set up one client to establish a BSS (Basic Service Set) and wait briefly before setting up other clients. This prevents several clients from trying to establish a BSS at the same time, which can result in multiple singular BSSs being established, rather than a single BSS with multiple clients associated to it. Check that the Network Connection for the wireless client is configured properly. If Security is enabled, make sure that the correct encryption keys are entered on both the Adapter and the access point.