

Best Connectivity

LogiLink®

WL0084B

Wireless N 150Mbps USB Adapter



User Manual | **EN**

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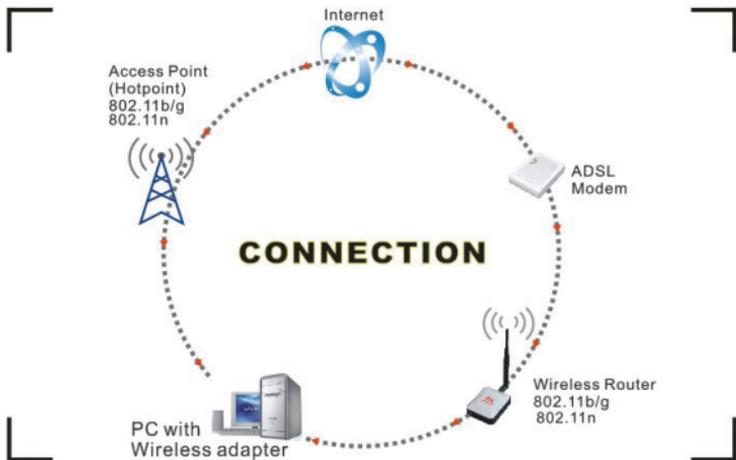


Do not throw the appliance away with the normal household waste at the end of its life, but hand it in at an official collection point for recycling. By doing this you will help to preserve the environment.

1.0 Welcome

Thank you for purchasing the WL0084B Wireless N USB Adapter. This Wireless Adapter is easy to use and easy to setup. If you have been tired of dealing with all those messy wires to connect a laptop or PC to office or home network, this Wireless adapter is an ideal access solution for wireless Internet connection

A typical Internet access application for the USB wireless adapter is shown as the following figure:



There are two different ways to access Internet:

1. With a wireless adaptor, receiving and transferring signal via a wireless router, then passed to an ADSL modem, then to local ISP (Internet service supplier) through a telephone line.
2. With a wireless adaptor, receiving and transferring signal via local AP (Access Point) or so called Hotpoint directly.

Tips: An 802.11 LAN is based on a cellular architecture where the system is subdivided into cells, where each cell (called Basic Service Set or BSS) is controlled by a Base Station (called Access Point, or in short AP).

2.0 Package Contents

The Wireless USB Adapter package includes the following.

- Wireless N 150Mbps USB Adapter
- Quick Installation Guide
- Autorun CD

3.0 Wireless USB Adapter Overview

Wireless USB Adapter has the USB interface and LED below.



Interface

USB Interface: Connect the USB Interface to a USB port on your computer.

LED Description

LED: The LED stays lighted to indicate WLAN link established and active.

4.0 Wireless USB Adapter Installation

The following instructions will guide you through the process of installing the Wireless USB Adapter.

4.1 Windows 7

Step 1:

Once USB dongle connected to computer and the following will appear on screen.



Step 2:

Please insert the AUTORUN CD into your CD-ROM drive. The CD should auto-start, displaying the following window. If it does not start, click on **Start – Run** and type in **CD:\autorun.exe** (where CD is the drive letter of your CD-ROM drive.) Click " **Driver Installation** ".

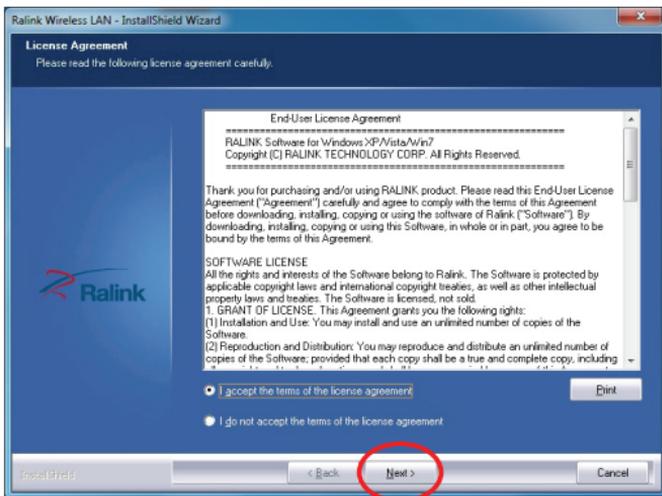


Step 3:

For Security reasons Windows 7 requires the installer program to have administrator privileges so the new policy called " **User Account Control** " has been introduced in Windows 7. If UAC is enabled Windows pops up a window " **User Account Control** " Windows need your permission to continue. User needs to Click " **Yes** " to proceed with the installation.

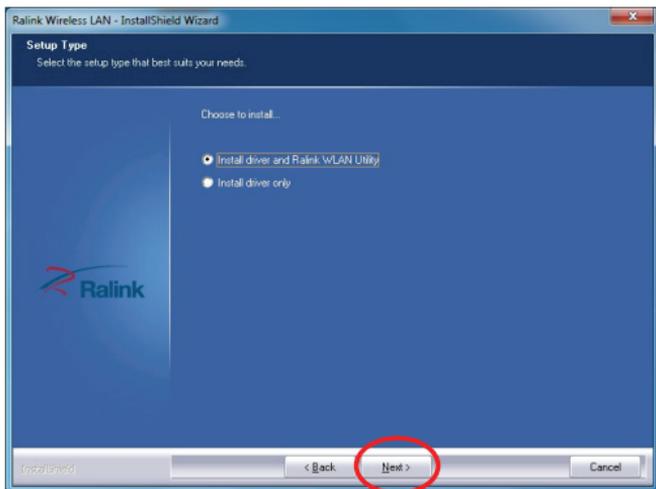
Step 4:

Click " **Next** ".



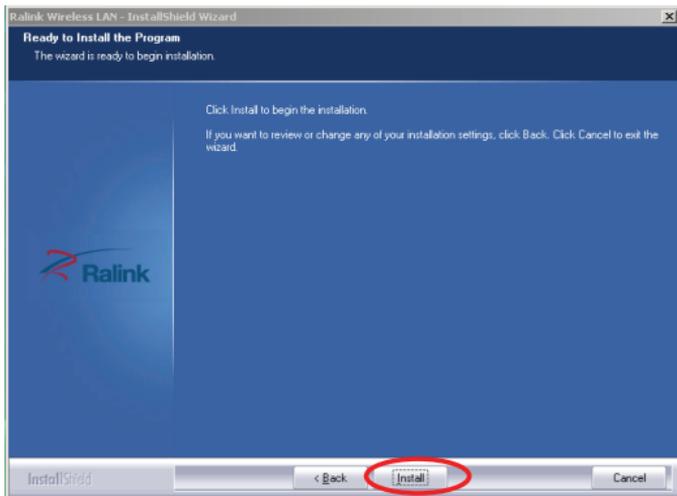
Step 5:

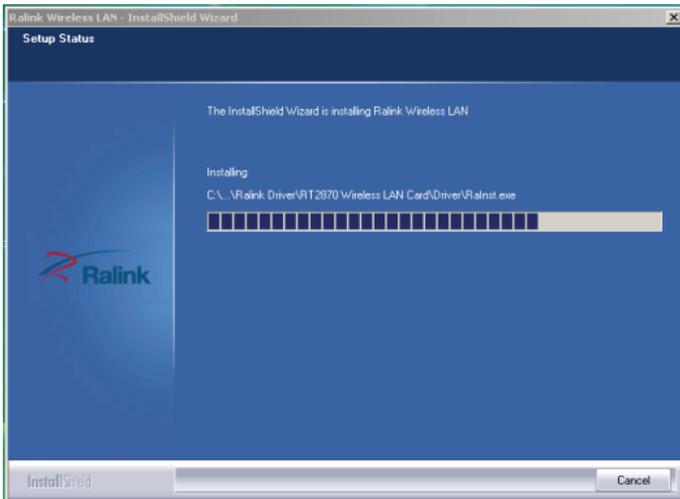
Click "Next".



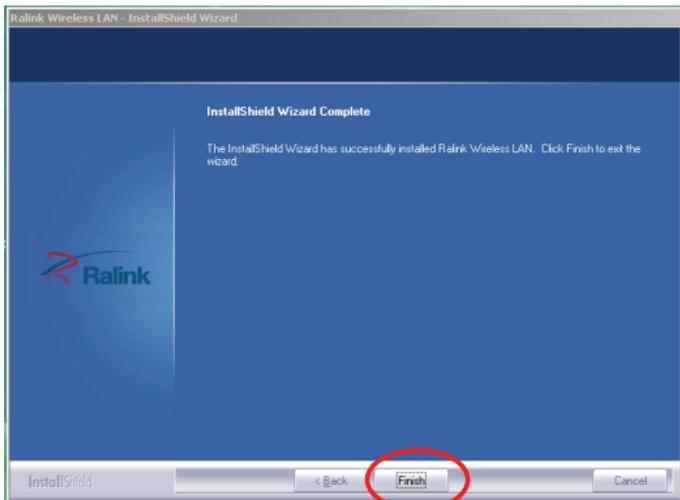
Step 6:

Click "Install".





Step 7:
Click **"Finish"**.



4.2 Windows XP

Step 1:

As Windows starts it will detect that new hardware has been added, and start the " **Found New Hardware Wizard** ". Click on " **Cancel** ".

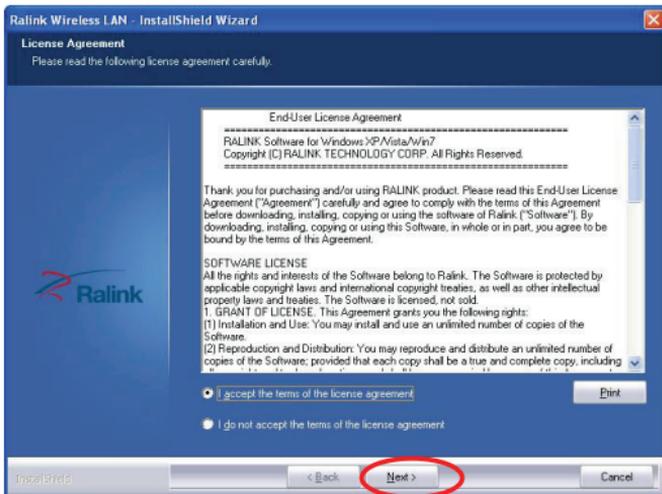
Step 2:

Please insert the AUTORUN CD into your CD-ROM drive. The CD should auto-start, displaying the following window. If it does not start, click on **Start – Run** and type in **CD: \autorun.exe** (where CD is the drive letter of your CD-ROM drive.) Click " **Driver Installation** ".



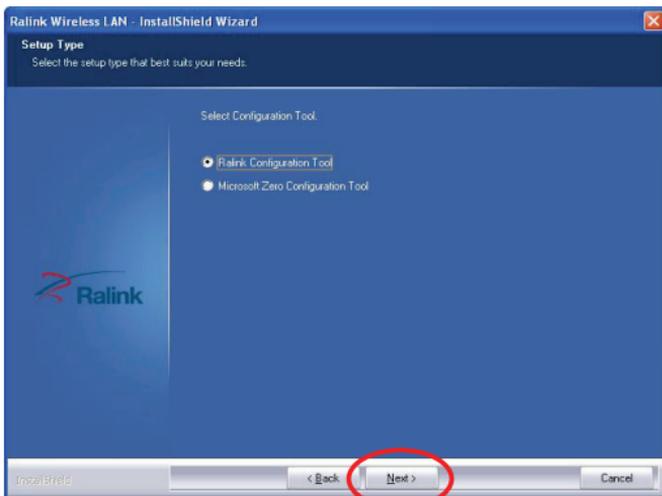
Step 3:

Click "Next".



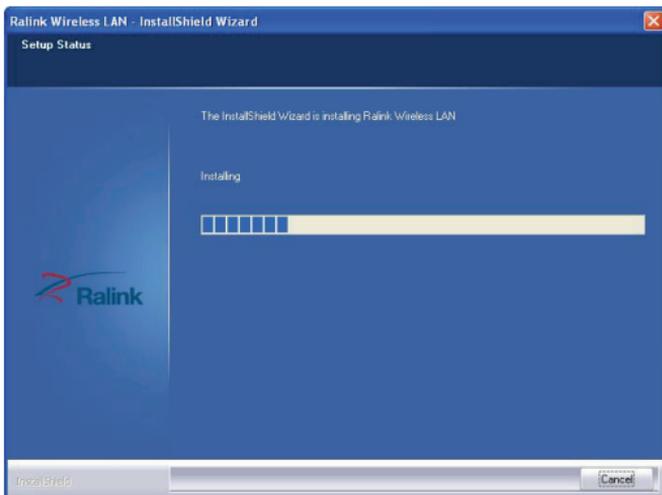
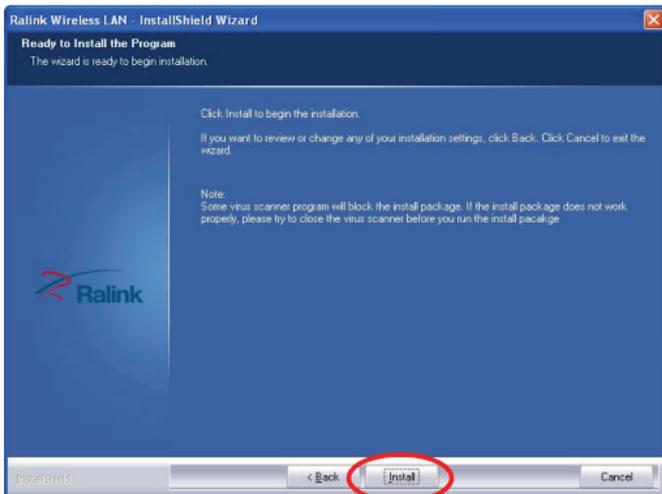
Step 4:

Click "Next".

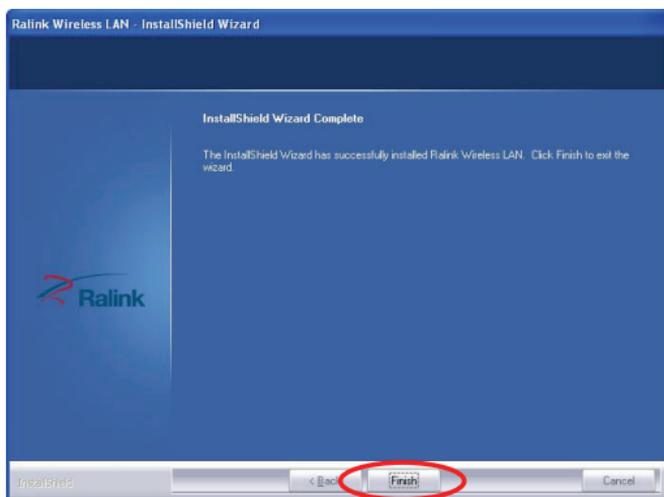


Step 5:

Click "Install".



Step 6:
Click **"Finish"**.

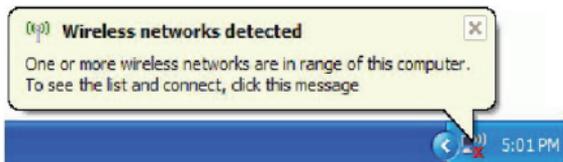


5.0 Making a Basic Wireless Network Connection

1. After finishing driver installation, insert the USB adapter to Notebook or PC that supports USB 2.0/1.1 interface.

Remarks: Make sure to connect the adapter to an USB port on your computer directly rather than an USB hub. Although it might work when connecting with an USB hub, the likelihood of configuration problems will be higher.

2. The system shows a wireless utility icon in the Windows system tray, which locates in the bottom-right corner of your computer screen, and pops up a message that indicates a new hardware is found and installed, something like this:



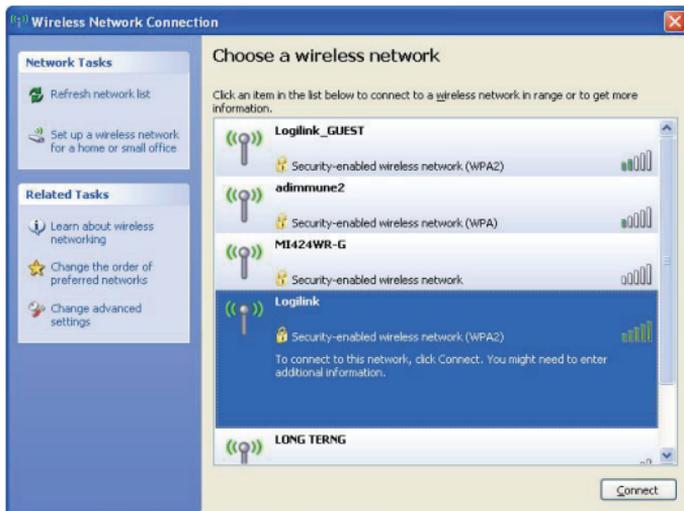
Should the service "Wireless Zero Configuration (WZC)" be applied.

3. Double-click the utility icon or right click the icon and then select "View Available Wireless Networks" to launch the utility, the Wireless Network Connection window appears and displays your wireless network listed with the SSID you chose.

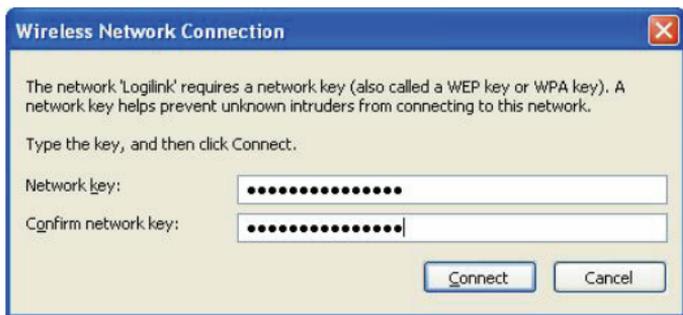


Notes: Before configuring your WiFi access, you need to have your network's SSID (service set identifier), security key and authentication type handy. Check the documentation coming with your router, ask your network administrator to get the information.

4. If you don't see your network, click "Refresh network list" in the upper left corner. If you are locating within the valid range of hotspots or wireless routers, all available networks will be recognized and listed automatically. Click your preferred network, and then click "Connect" in the lower right corner.



5. If the network security key hasn't been inputted before, Windows XP prompts you to enter the network's security key to access the wanted SSID. Type the encryption key that you wrote down earlier in both the Network key and Confirm network key boxes, and then click "Connect".



Tips: *If there are free hotspots, simply select the network you want from the list displayed, then click Connecting. It tries to launch your Internet browser—you should be connected to the Internet.*

If there is a pay hotspot, signing in or up will require either to enter your login information—if you're an existing customer, or to enter your credit card information for payment, it is just decided by you. Then clicking the Connecting, your default Internet browser will launch and take you to the service provider's login page. Most providers have very simple and step-by-step instructions for you to sign up and then to be connected. Another way to access the service provider's login page is to simply launch your Internet browser, if there's a pay network available, you'll be taken directly to the login page.

Should the service of Ralink wireless connection utility be applied.

After the installation of Ralink utility, the system shows a special wireless utility icon in the Windows system tray, *which* locates in the bottom-right corner of your computer screen:

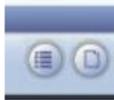


When an USB wireless adapter is inserted into an USB 2.0/1.1 port of Notebook or PC, the icon changes colors according to the wireless signal quality.

1. Double-click the icon or right click the icon and then select “Launch Config Utility” to launch the utility, the RaUI window appears like:



The Ralink wireless utility starts in compact mode as shown above, provides profile management, the available networks listing, a statistical counter display, Wi-Fi multimedia (WMM), protected Wi-Fi setup, Cisco compatible extensions (CCX), call admission control (CAC), radio controls, Ralink driver/utility information, and



help functions. Clicking the expanding icon can change to the full mode as shown below:

The screenshot displays two windows from the Ralink software interface. The left window shows network configuration and link information, while the right window shows a site survey of nearby access points.

Left Window: Network Status

- SSID: AP1
- Rate: 300.0 Mbps
- Channel: 7 (2442 MHz)
- IP Address: 192.168.2.101
- Mask: 255.255.255.0

Link Information

- Status: AP1 <-> 00-0E-2E-E1-98-2D
- Extra Info: Link is Up [Tx Power:100%]
- Authentication: WPA2-PSK
- Encryption: AES
- Network Type: Infrastructure
- Central Channel: 5

Right Window: Site Survey

AP Name	Channel	Mode	Auth	Enc	Signal	Percentage
118	2	B	G	0	Light	65%
118	2	B	G	0	Light	10%
SoftAP-33333	2	B	G	0	Light	70%
dirk-111	3	B	G	0	Light	81%
00160 ID314E4_G	5	B	G	0	Light	50%
wxxx	6	B	G	0	Light	39%
ExRegNW3135DB	6	B	G	0	Light	76%
Baron_Test	6	B	G	0	Light	96%
baldwin	6	B	G	0	Light	55%
_wien	6	B	G	0	Light	39%
RT305x_AP	6	B	G	0	Light	94%
Stitch	6	B	G	0	Light	94%
1STAP	6	B	G	0	Light	55%
_SMS-192	6	B	G	0	Light	0%
Cheetah	6	B	G	0	Light	44%

AP Information (Selected AP: 118)

- SSID: 118
- Authentication: WPA2-PSK
- MAC Address: 00-21-91-F7-A9-96
- Encryption: AES

6.0 Client Utility Interface

1. After the installation of Ralink utility, the system shows a special wireless utility icon in the Windows system tray, *which* locates in the bottom-right corner of your computer screen:



2. When an USB wireless adapter is inserted into an USB 2.0/1.1 port of Notebook or PC, the icon changes colors according to the wireless signal quality.
3. Double-click the icon or right click the icon and then select “Launch Config Utility” to launch the utility, the Ralink utility window appears like:



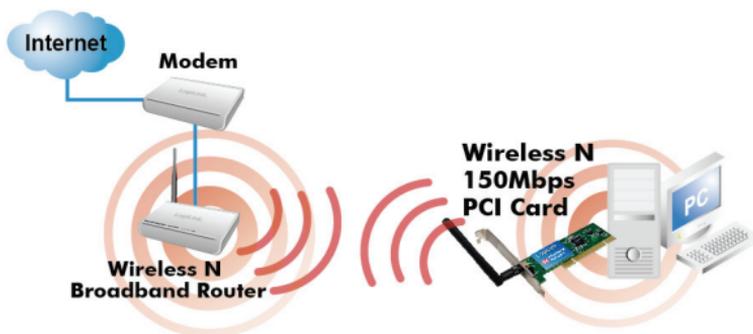
Note: In the Windows XP, you can select the included WL0084B Client Utility Interface or the Windows XP internal wireless application to configure the device.

There are two client utility applications in WL0084B: Station mode and AP mode.

Note: In this utility interface, Station Mode (Client Mode) is the default access way.

6.1 Station Mode

6.1.1 Station Mode Topology



In this mode, WL0084B serves as a client to receive the wireless signals to access the Internet.

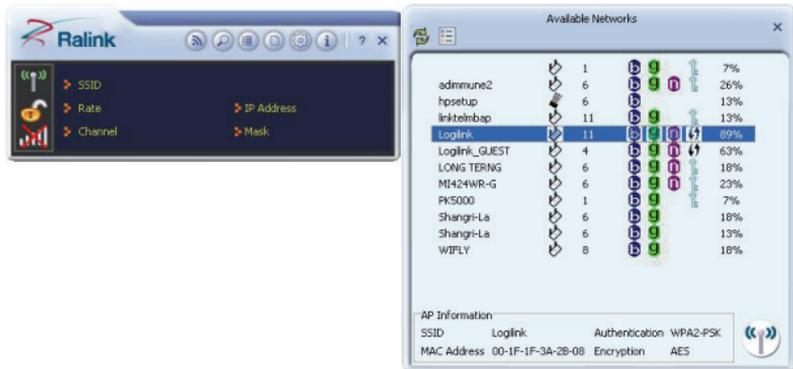
6.1.2 Status

In the Network Status window, it displays something on wireless adapter and wireless network status, including SSID, Authentication type, Encryption Type, IP address, subnet mask and gateway and so on.



6.1.3 Site Survey

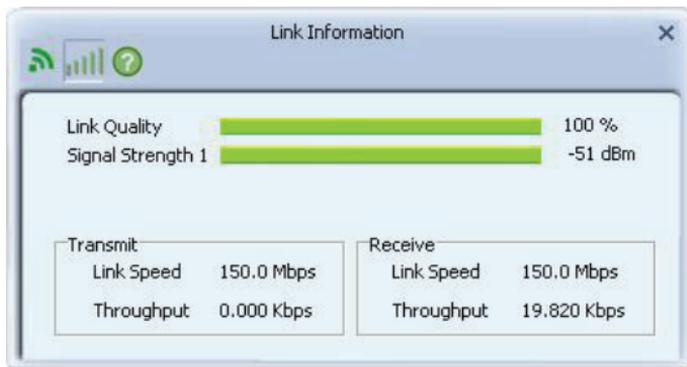
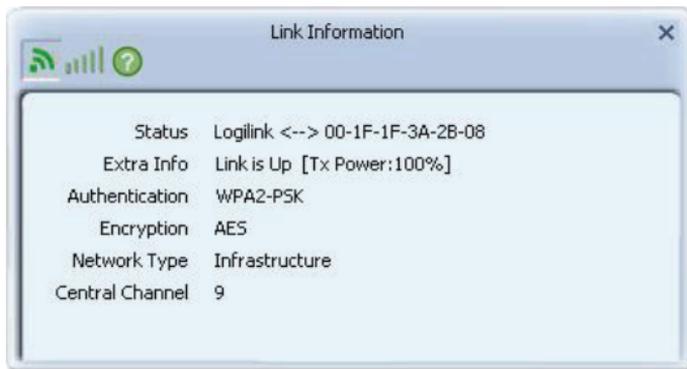
The Site Survey is used to scan the available wireless network around, showing the wireless network's signal strength and other information which provides the basis for you to access which wireless network.



- Connect:** select one entry in the wireless network list and click the button to connect the device with the selected network.
- Refresh:** rescan the wireless network around.

6.1.4 Link Information

Link Information is used to summarize Rx and Tx data packets, including the success and error packet amount.



a) Clear: Click this button to renew the statistics.

6.1.5 Profile List

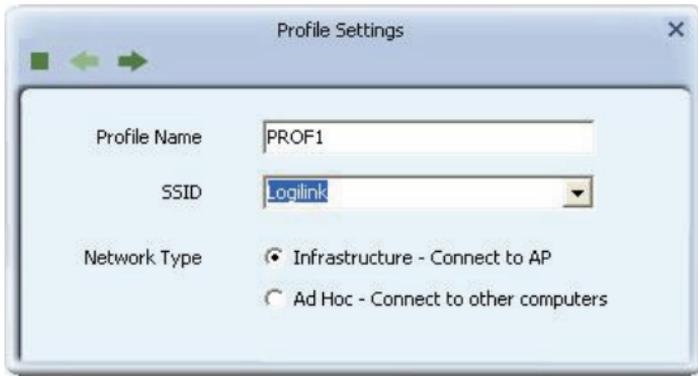
This window saves the general wireless parameters for different profiles, which is used to fast connect the wireless network you need.



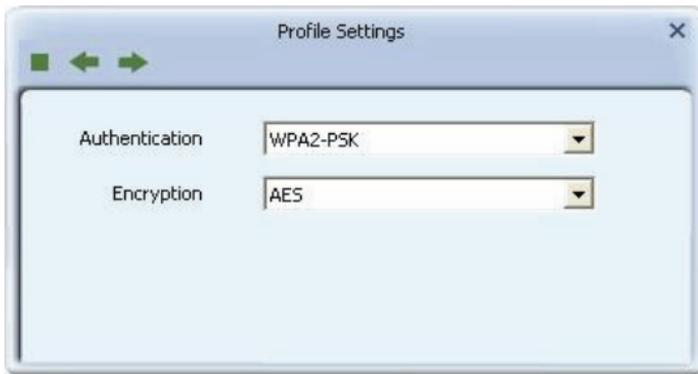
a) **Connect:** To activate one profile.

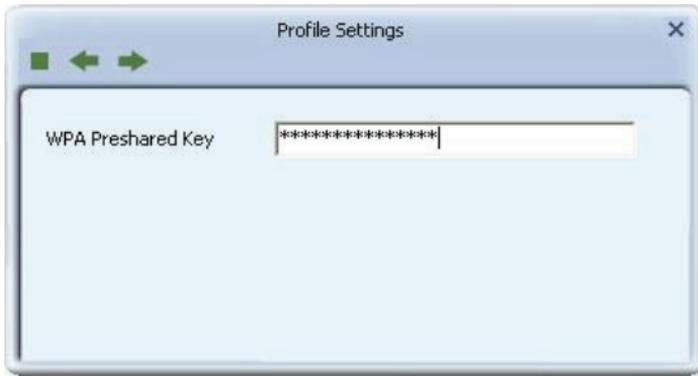
b) **New:** To create a new profile and configure the site status and security setting.

Site Status = For Entering a Profil Name, the SSID and the Network Type



Security Setting = For Entering the Authentication Type, the Encryption Type and the Key.





c) Modify: To modify one existing profile.

d) Delete: To delete one existing profile.

6.1.6 Advanced

Choose Advanced, there are “Wireless Mode” and “Select Your Country Region Code”.



6.1.7 About

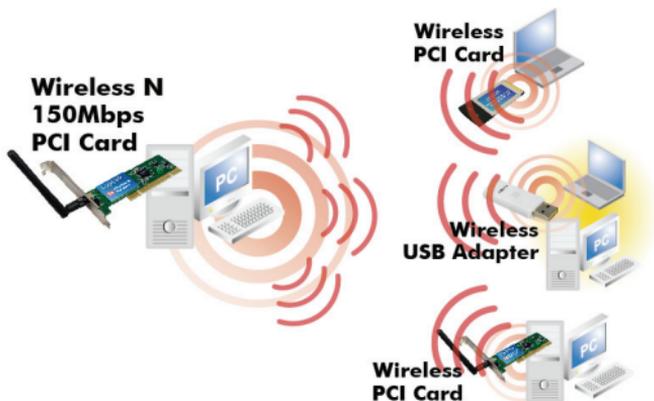
The “About” screen lists version numbers and other information about the card.



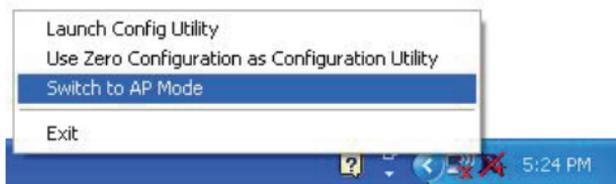
AP Mode

6.1.8 AP Mode Topology

The device also can serve as an access point to transmit wireless signals and create wireless network, allowing other wireless clients to access the network.

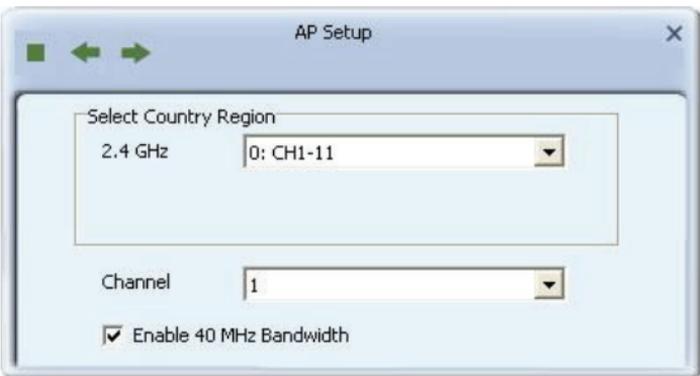
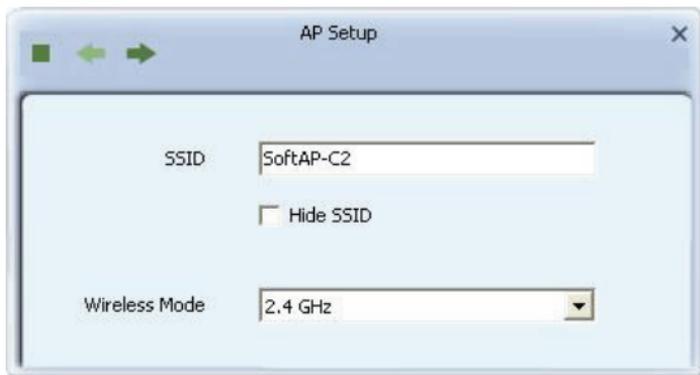


To switch to AP mode, right-click the Ralink utility icon and click “Switch to AP Mode”.



6.1.9 Config AP

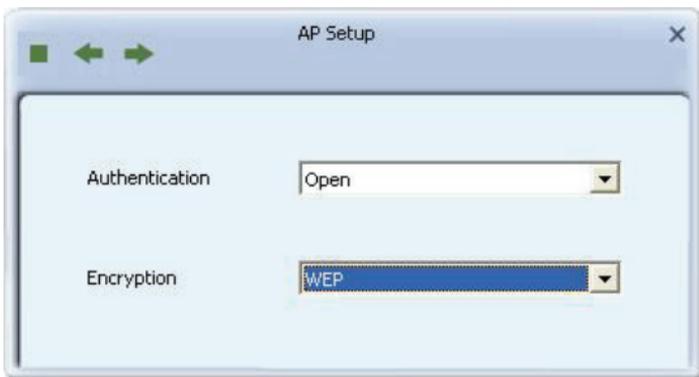
This window is used to configure the AP's basic parameters, including SSID, Wireless Mode and Channel.



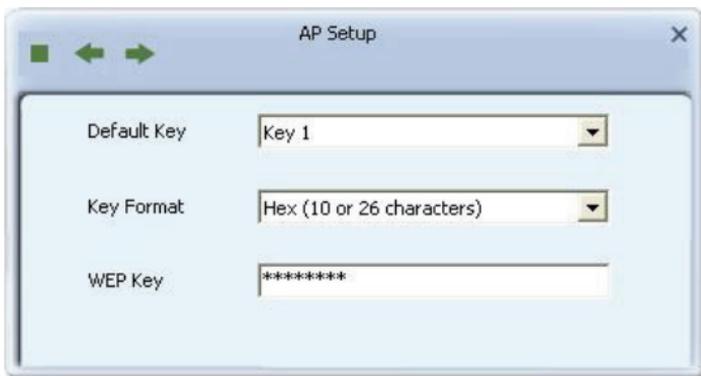
- a) **SSID:** Wireless network's ID name scanned by wireless adapter.
- b) **Wireless Mode:** 802.11b/802.11g/802.11b/g mixed.
- c) **Channel:** 1~11 channels provided.

Security Setting

This window is used to configure the wireless network's security authentication, providing WEP, WPA-PSK, WPA2-PSK, and WPA-PSK/WPA2-PSK encryption methods.



- d) **WEP:** 10/26 bits Hex or 5/13 ASCII support.
- e) **WPA-PSK:** 8~32 bits ASCII support.
- f) **WPA2-PSK:** 8~32 bits ASCII support.
- g) **WPA-PSK/WPA2-PSK:** 8~32 bits ASCII support.



Note:

1. The Hex characters include 0~9 numbers and a~f letters.
2. ASCII characters include any numbers/letters and characters.

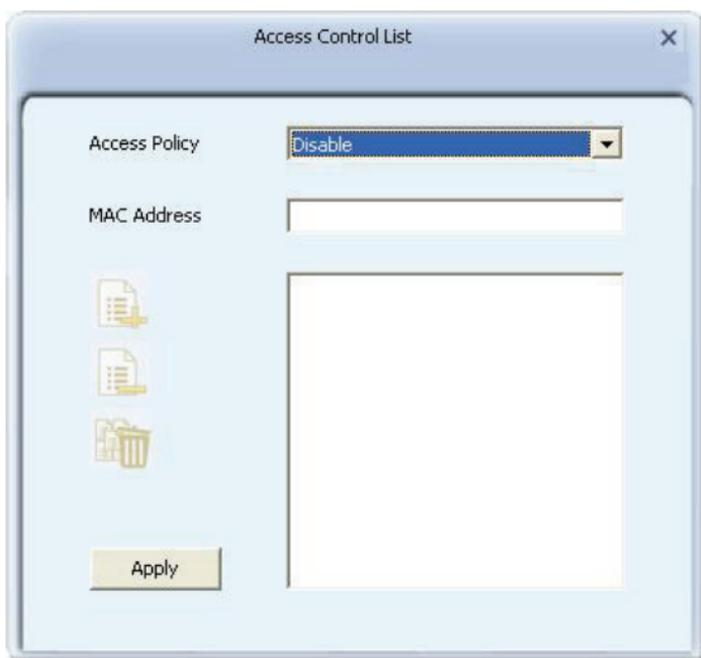
6.1.10 Advanced

The screenshot shows a window titled "Advanced" with a close button (X) in the top right corner. Inside the window, there is a checkbox labeled "No forwarding among wireless clients" which is currently unchecked. Below this are three configuration fields: "Beacon Interval (ms)" with a text input containing "100", "Tx Power" with a dropdown menu showing "100 %", and "Idle Time (60 - 3600) (s)" with a text input containing "300". At the bottom center of the window is a yellow "Apply" button.

- a) *No forwarding among wireless clients*: When selected, wireless clients won't be able to share data with each other.
- b) *Beacon Interval (ms)* : You can define the time interval that a beacon signal should be sent. The default value is 100.
NOTE: Do not modify this value unless you know what will be affected.
- c) *Tx Power* : Select a proper output power setting according to your actual needs.
For example, you may not need 100% of output power if other wireless clients are not far from you.
- d) *Idle Time*: Select the idle time for the wireless access point. The default value is 300.
NOTE: Do not modify this value unless you know what will be affected.

6.1.11 Access Control

Access Control is based on the MAC address to decide that the specified client connects to the wireless network, or disables it to access the wireless network.



a) Access Policy:

Disabled: to disable the filter function.

Allow All: to permit all clients in the list to access the wireless network.

Reject All: to refuse all clients in the list to access the wireless network.

b) MAC Address: to input the client's MAC address to implement the corresponding filter policy. For example:
b0000a8cd702

- c) **Add:** to add the entered MAC address into the list.
- d) **Delete:** to delete one existing MAC address in the list.
- e) **Remove All:** to delete all clients' MAC address in the list.
- f) **Apply:** to make the changes made take effect.

6.1.12 About

This window displays something about software version and wireless adapter.



Appendix One: Acronyms and Terms

WLAN	Wireless Local Area Network
802.11	A family of specifications developed by the IEEE for WLAN technology.
802.11a	An extension to 802.11 WLAN standard that provides up to 54 Mbps transmission in the 5 GHz UNI radio band.
802.11b	An extension to 802.11 WLAN standard that provides up to 11 Mbps transmission in the 2.4 GHz ISM radio band. 802.11b uses DSSS modulation.
802.11g	An extension to 802.11 WLAN standard that provides up to 54 Mbps transmission in the 2.4 GHz ISM radio band. 802.11g uses OFDM modulation and is backwards compatible with 802.11b.
Ad-Hoc	A group of computers each with wireless adapters, connected as an independent WLAN.
AES	Advanced Encryption Standard
BSSID	Basic Service Set ID
DHCP	Dynamic Host Configuration Protocol
DSSS	Direct Sequence Spread Spectrum. DSSS is one of two types of spread spectrum radio. The other is frequency-hopping spread spectrum (FHSS).
QoS	Quality of Service

OFDM	Orthogonal Frequency Division Multiplexing
RADIUS	Remote Authentication Dial In User Service
RTS	Request to Send
SSID	Service Set Identifier. A 32-character unique identifier attached to the header of packets sent over a WLAN that acts as a password when a mobile device tries to connect to the BSS.
TCP/IP	Transmission Control Protocol/Internet Protocol
TKIP	Temporal Key Integrity Protocol
WDS	Wireless Distribution System
WEP	Wired Equivalent



The CE mark confirmed that this product meets the main requirements of the Directive 1995/5/EC of the European Parliament and the Council of Europe concerning telecommunications and terminals regarding the Safety and health of users and of electro-magnetic interference compliance. The CE has been demonstrated. These statements are deposited by the manufacturer.