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# User's manual

150Mbps IEEE802.11b/g/n Adapter Wi-Fi W03

#### MARKINGS AND SIGNS

**R&TTE** Hereby Ferguson Sp. z o.o., declares that the device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. You can find the Declaration of Conformity on www.deklaracje.ferguson.pl

This product has been designed, tested and manufactured according the European R&TTE directive 1999/5/EC.



CE logo.

The logo informs that the device conforms to the terms and conditions of Directive 2004/108/EC concerning observance by Member States of provisions regulating electromagnetic compatibility, and to the terms and conditions of Directives 2006/95/EC concerning observance by Member States of provisions regulating low voltage electricity and safety with relation to the handling and operation of electrical equipment.



Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.

#### Introduction

Thank you for purchasing the IEEE 802.11b/g /n Wireless USB Adaptor. This Wireless Adaptor 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 adaptor is an ideal access solution for wireless Internet connection.

A typical Internet access application for the USB wireless adaptor 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.

# Package Contents:

- One IEEE 802.11b/g/n 150Mbps WiFi NANO USB Adaptor.
- Installation disc.
- User's Manual.

#### Installation

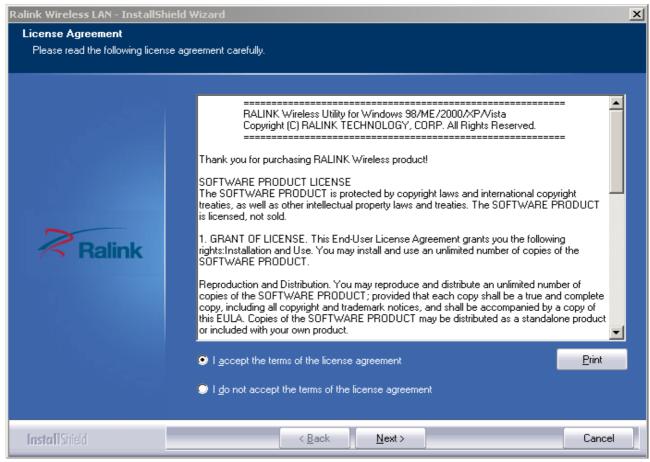
To install the driver of the USB adaptor, please use administrator user account to login before the following steps:

**Tips:** the latest original drivers can be down loaded from the website of Ralink chipset manufacturer <a href="http://www.ralinktech.com">http://www.ralinktech.com</a> or from the Ferguson side <a href="http://www.ferguson.pl">http://www.ferguson.pl</a>. To find a correct driver, please identify the chipset type applied in the adaptor you have.

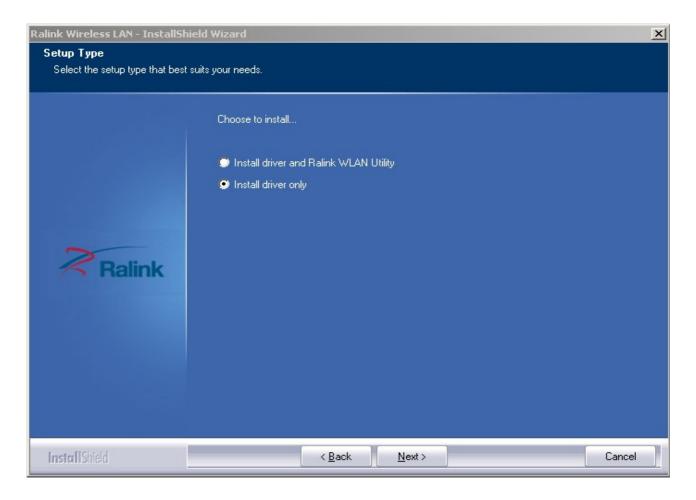
1. Double click Ralink\_\*\*\*.exe program, which is located in the driver folder in the installation disc. Such as: G:\WiFi Driver\Windows\ Ralink\_RT5370.exe.

**Notes:** Because the chipset manufacturer Ralink often updates software, the drivers contained in the disc might be changed without prior notice.

- 2. Follow the instructions and prompts of the "InstallShield Wizard" to finish the driver installation:
- a.) Select the "I accept the terms of the license agreements", then click the "Next".

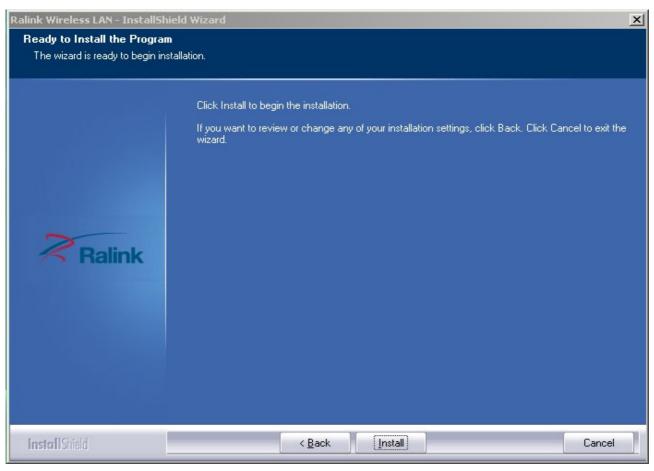


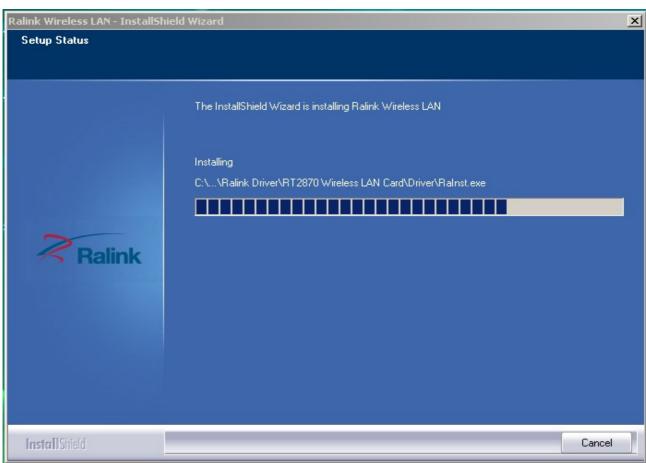
b.) There shows a setup type window, you can select "Install driver only" or "Install driver and Ralink WALN utility" and then click the "Next".



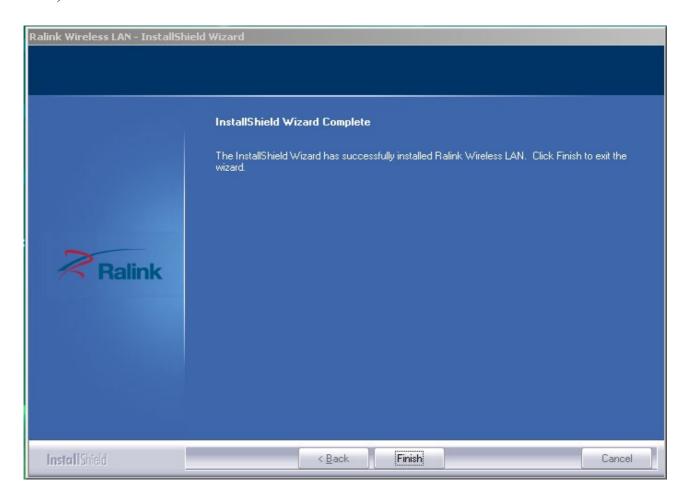
# Tips:

- \*The Windows XP utilizes a "Wireless Zero Configuration( WZC)" Service built into the operating system. Many wireless network adaptor cards utilize this service.
- \*\* Ralink- the chipset manufacturer has developed an utility for setting up wireless connection. If you select this item, you can switch between the Windows XP's WZC service and the Ralink WLAN utility service later.
- c.) Click the "Install" to confirm the installation, there shows the installation progress.





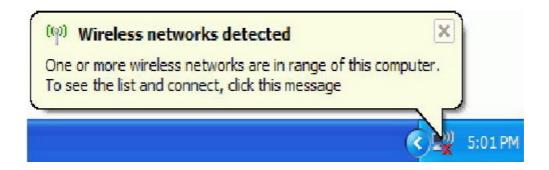
d.) Click "finish" to finish the driver installation.



#### Wireless Connection

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

Remarks: Make sure to connect the adaptor 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.



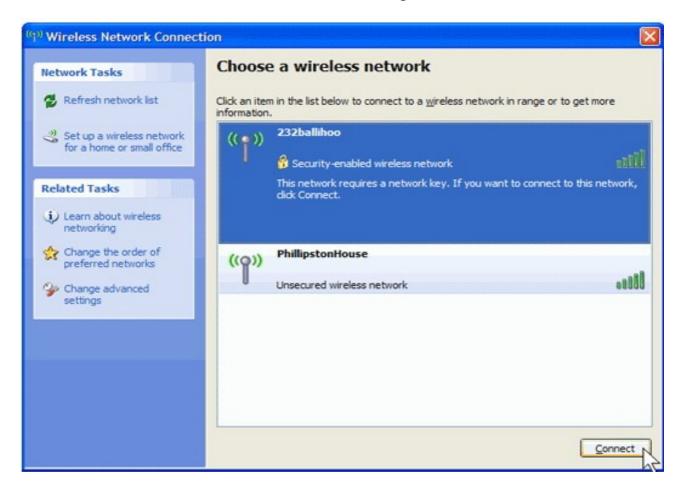
Should the service "Wireless Zero Configuration (WZC)"

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:



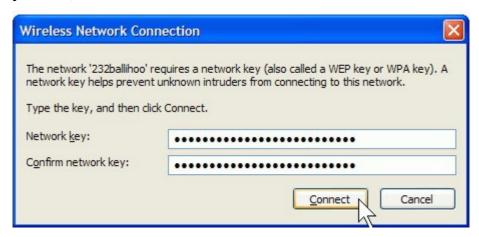
**Notes:** Before configuring your WiFi access, you need to have your network's SSID (service set identifier), security key and authentication type handy. Check the documentation coming with your router, ask your network administrator to get the information.

3. 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.



4. 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

After the installation of Ralink utility, the system shows a special wireless utility icon in the Windows system tray:

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.

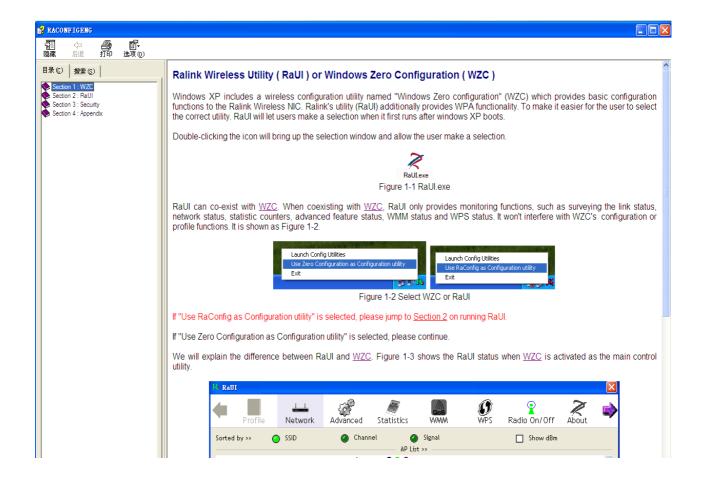
2. Clicking the expanding icon can change to the full mode as shown below::





For more details about the RaUI utility, please read the help information of the utility by clicking the tab:





# Tips for Wi-Fi users

With a Wi-Fi connection, you can roam about 150 m around the access point (depends on different environment), so find a spot where you can work without any interruption.

Wi-Fi offers greater speed and range than Bluetooth, but it drains your portable device batteries a lot faster than Bluetooth does. In fact, if you use a Wi-Fi connection regularly on your laptop PC, you'll undoubtedly notice that you need to recharge more often. If you need to conserve battery life — on a long trip for example — turn off your Wi-Fi connection when you don't actually need it.

# Security

Because wireless networks rely on radio signals to transmit data, they are not as secure as wire network. Wireless networks are susceptible to viruses and breaches like eavesdropping and need to be protected in order to be secure.

There are many security measures to safeguard wireless networks, protect the data, and keep unauthorized users out. Hotspots, on the other hand, are often free of standard security practices in an effort to make it easy for anyone to connect. It may be found that some pay hotspots administered by service providers offer have some level of security, however, when using a hotspot, it's always a good idea to be proactive and to employ security measures of your own.

# **Key terms**

Wi-Fi: Short for "wireless fidelity," a generic label that refers to wireless networks or networking.

Hotspot: A specific geographic location in which an access point provides public wireless broadband network services to mobile visitors through a WLAN.

Throughput: The amount of data transmitted in a set amount of time.

Bandwidth: the amount of data that can be carried from one point to another in a given time period (usually a second).

Chipset: A group of microchips that execute various functions (like memory) to support the CPU.

**Specification** (Typical):

Protocol and Standards	IEEE 802.11b/g/n, 1T1R mode
Interface	USB1.1, USB2.0
Frequency Band	2.412~2.4835GHz (Depends on different countries'
	regulation)
Data Rate	For 802.11b/g:
	Peak rate 54Mbps,
	Peak throughput: 27Mbps.
	For 802.11n
	Peak rate: 150Mbps,
	Peak throughput: 90Mbps
Transmit Power	802.11b: -86+/-1bBm; 802.11g:-74+/-1dBm
	802.11n (HT20)70+/-1dBm; 802.11n (HT40).
	-70+/-1dBm
Data Security	WEP, WPA, WPA2, WPAI, 802.1X
Power Consumption	5V DC input, 160mA
Transmission Distance	Indoor up to 100m, outdoor up to 300m (Standard
	transmission distance, it is affected depending on
	different environment).
Environment	Operating Temperature: -10°C~60°C
	Storage Temperature: -20~70°C
	Operating Humidity: 10%~95% non-condensing.
	Storage Humidity: 5%~95% non-condensing.
Operating System	It supports :
	Windows 2000/XP/Vista/7;
	Mac OS X;
	Linux 2.6.X