

**NP01LM**  
**USB Wireless LAN Unit**  
**Installation Guide**

### **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.

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.

For operation within 5.15 ~ 5.25GHz frequency range, it is restricted to indoor environment.

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.

#### **IMPORTANT NOTE:**

##### **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with FCC RF exposure compliance requirements, please follow operation instruction as documented in this manual.

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

SAR compliance has been established in typical laptop computer(s) with USB slot, and product could be used in typical laptop computer with USB slot. Other application like handheld PC or similar device has not been verified and may not compliance with related RF exposure rule and such use shall be prohibited.

#### **Industry Canada Statement**

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions:

- 1) this device may not cause interference and
- 2) this device must accept any interference, including interference that may cause undesired operation of the device

#### **Caution:**

The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems.

Because high power radars are allocated as primary users (meaning they have priority) in 5250-5350 MHz and 5650-5850 MHz, these radars could cause interference and/or damage to license exempt LAN devices.

**IMPORTANT NOTE:**

**IC Radiation Exposure Statement:**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with IC RF exposure compliance requirements, please follow operation instruction as documented in this manual.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。  
取扱説明書に従って正しい取り扱いをして下さい。

**以下警語適用台灣地區:**

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。

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。

Outside packaging: 당해 무선설비는 운용 중 전파혼신 가능성이 있음 .

In the user manual, the following two statements are required: 당해 무선설비는 운용 중 전파혼신 가능성이 있음 and 당해 무선설비는 전파혼신 가능성이 있으므로

인명안전과 관련된 서비스는 할수 없음

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# 1. Introduction

NP01LM Series offers performance comparable to an Ethernet Local Area Network (LAN) system, without the limitations of network cables. It allows you to connect your computer to a Local Area Network from anywhere within the wireless coverage area. It also enables you to roam throughout the network while remaining connected to the LAN.

## Operating Requirements

Personal computer containing:

USB port:	USB2.0 Standard
Memory:	32 MB or greater
CPU:	300 MHz processor or higher

Supported OS:

- Microsoft Windows 2000 Professional
- Microsoft Windows XP Home Edition
- Microsoft Windows XP Professional

\* Windows is a registered trademark or trademark of Microsoft Corporation in the United States and other countries.

## 2. Windows XP

This chapter describes the Windows XP driver installation.

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**Caution** Windows XP operating systems require computer administrator privileges to install software. Be sure that you have such privileges before executing the Setup.exe file.

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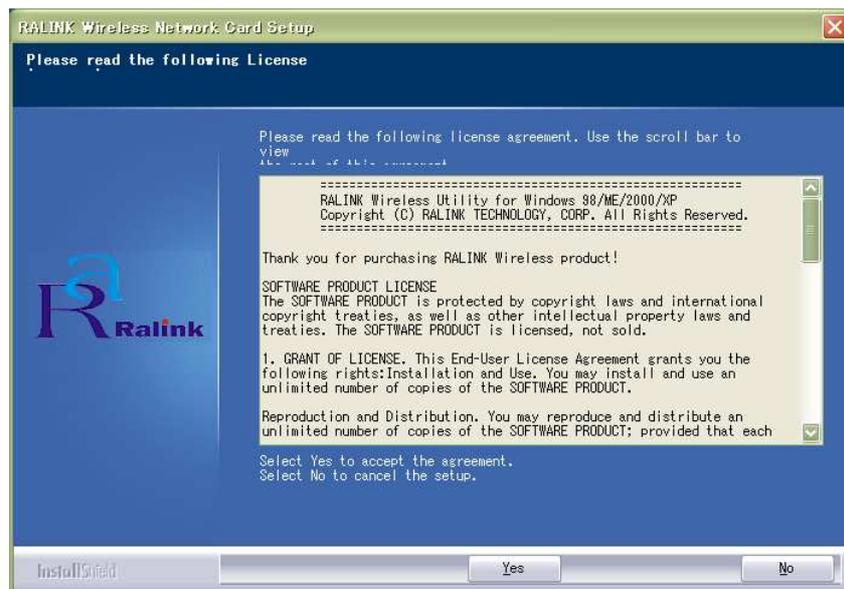
### Installation (First-Time Installation)

This section describes first-time installation of the driver and utility for Windows XP.

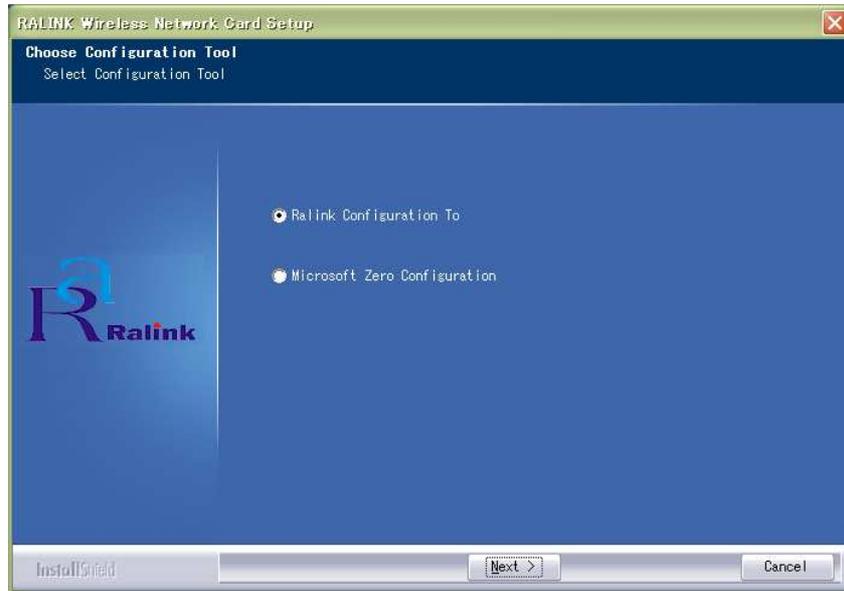
#### To install the Client Utility and driver (first-time installation)

For initial installation, the Setup.exe file should be run before the Wireless LAN Card is physically installed in your computer.

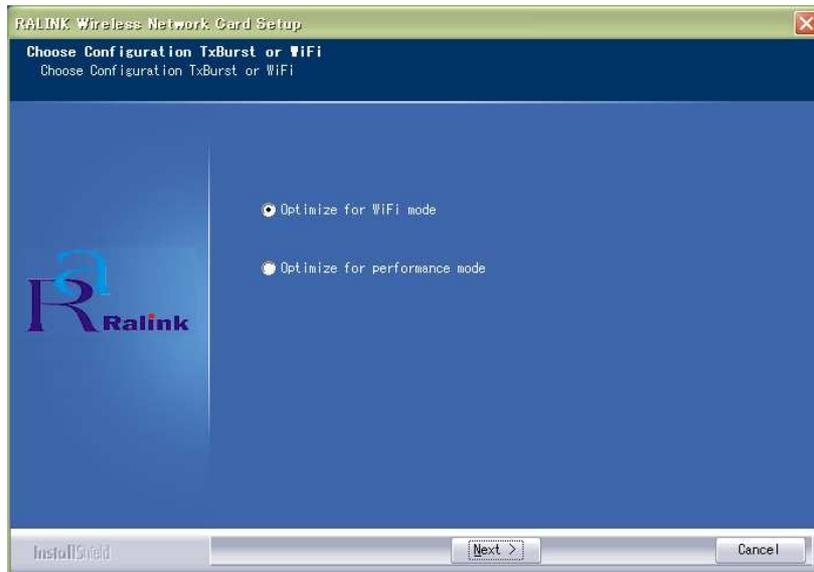
1. Open the Setup Wizard (**setup.exe**).
2. Click **Yes** to accept the License Agreement.



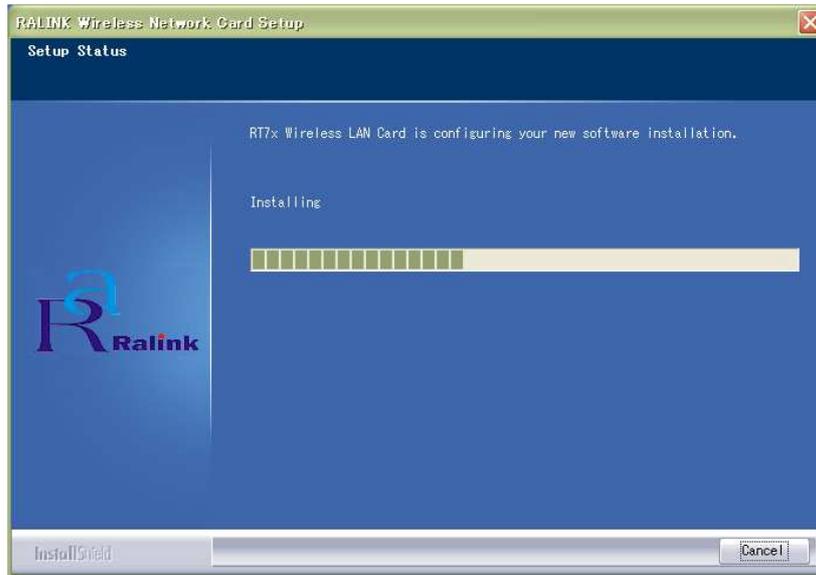
3. Choose "Ralink Configuration Tool [recommended]". Click [Next](#) to continue.



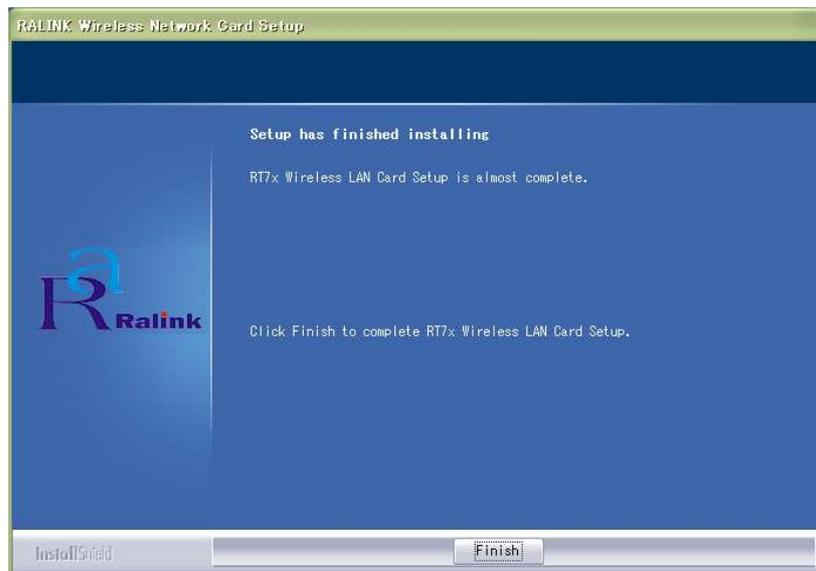
4. Choose the "Optimize for WiFi mode". Click [Next](#) to continue.



5. The setup process screen shows up



6. Click **Finish** when the setup Wizard is finished.



## To install USBWireless LAN Unit physically (first-time insertion)

Insert the USB Wireless LAN Unit into the USB slot of the personal computer and follow these steps to install the driver:

1. Wait for the Found New Hardware Wizard dialog box to display. With the Windows XP Service Pack 2 (SP2), the following dialog box is displayed. Choose “No, not this time” and click **Next** to continue.

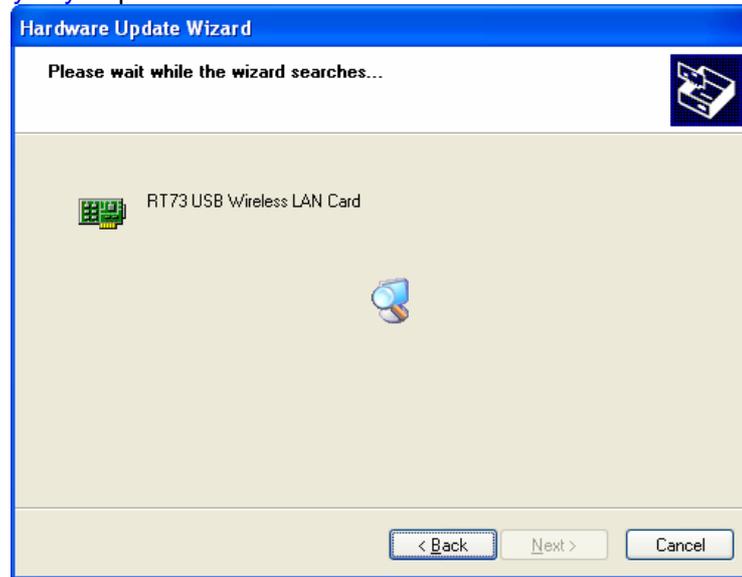


2. Choose “Install the software automatically [Recommended]” and click **Next** to continue.



3. The driver is installed.

Click [Continue Anyway](#) to proceed with driver installation.

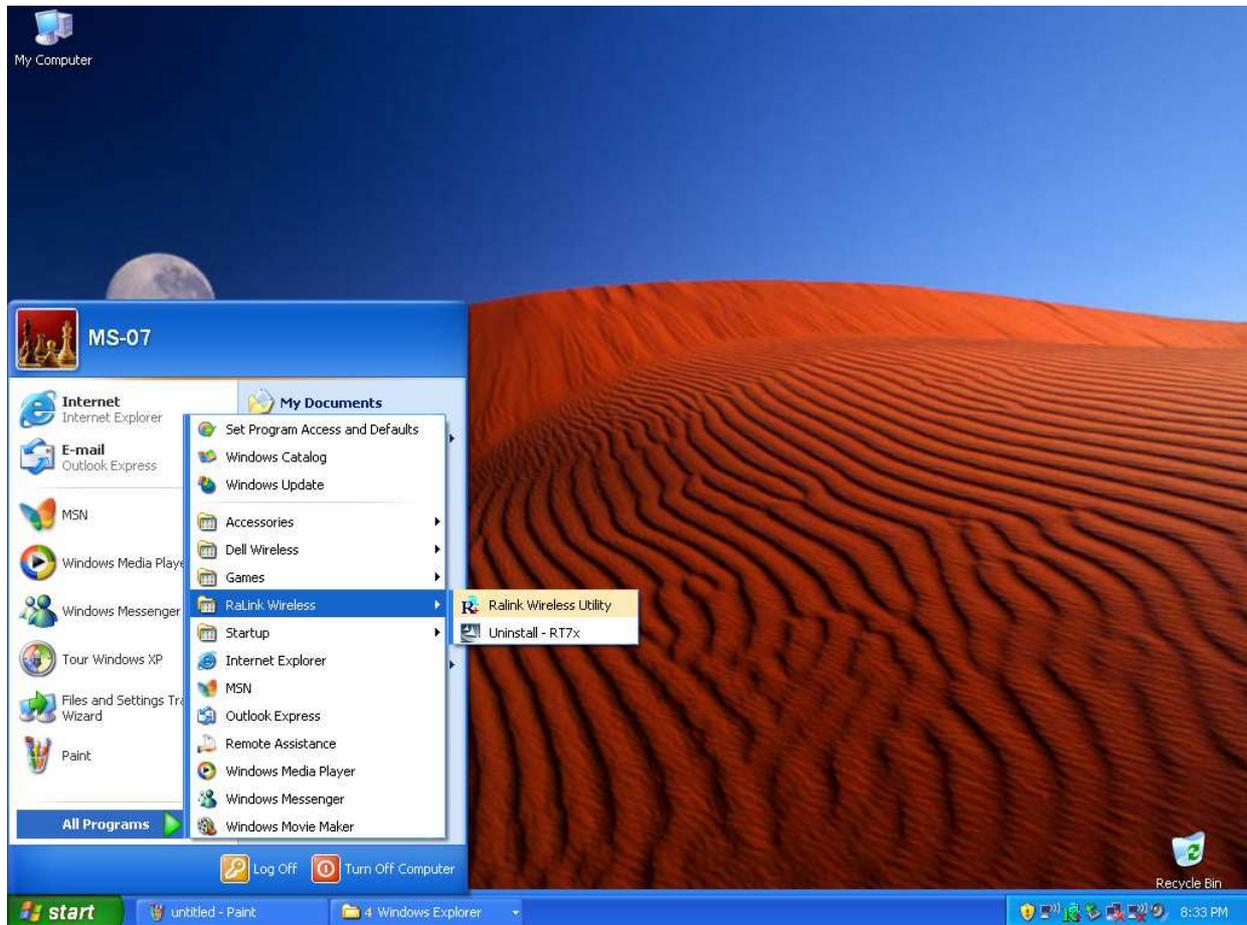


4. Click [Finish](#) to complete driver installation.



### 3. Using the configuration Utility

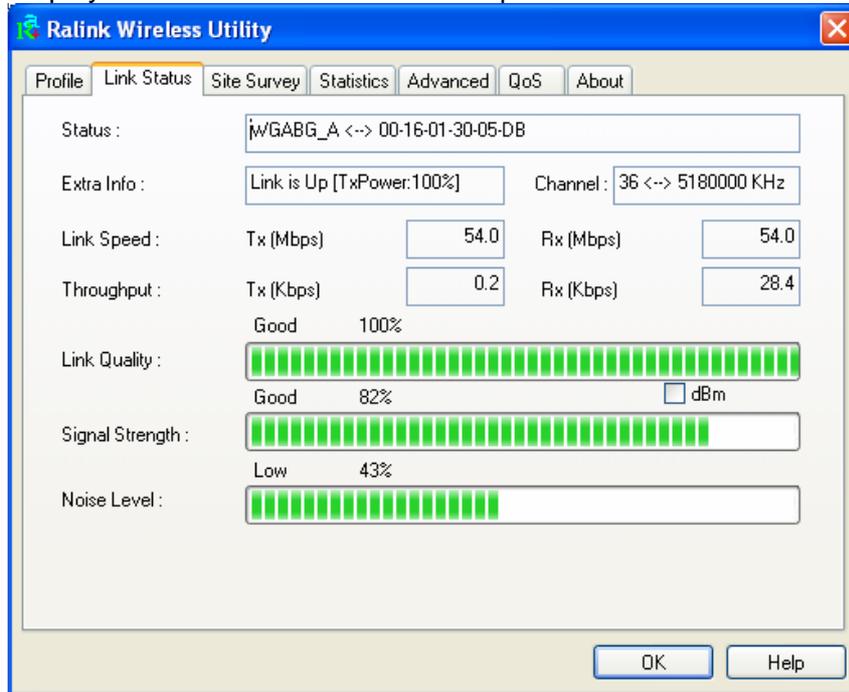
Use the Ralink Wireless Utility to configure the device driver. The Client Utility provides extensive online help to aid in configuring the device. To start the Ralink Wireless Utility is to click on Start->All Program->Ralink Wireless->Ralink Wireless Utility.



## Configurations

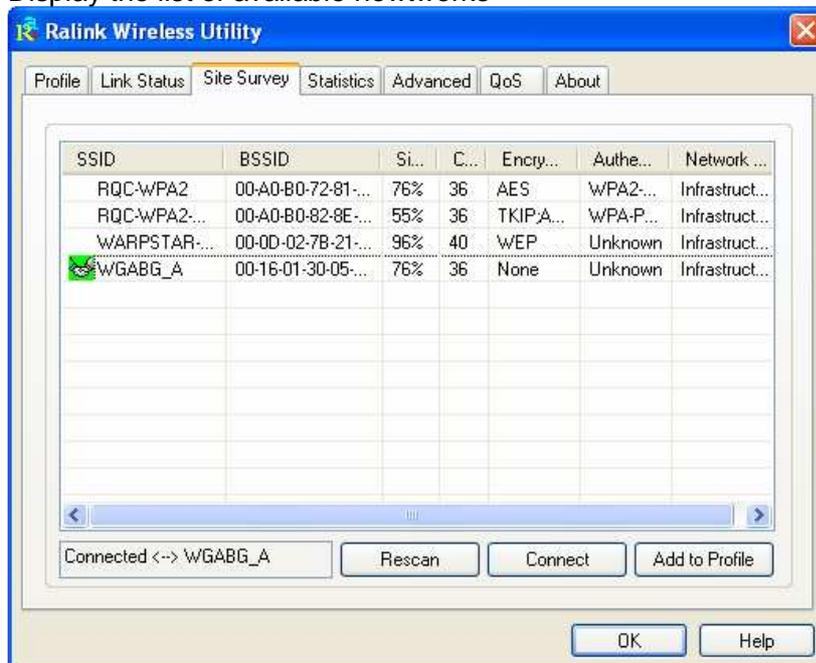
### Link Status

Displays the information of the access point to which Wireless LAN adapter is associated.



### Site survey

Display the list of available networks



## Statistics

Display the network connection information.

The screenshot shows the 'Ralink Wireless Utility' window with the 'Statistics' tab selected. The window displays network connection statistics, divided into 'Transmit Statistics' and 'Receive Statistics'. A 'Reset Counter' button is located below the statistics, and 'OK' and 'ヘルプ' buttons are at the bottom right.

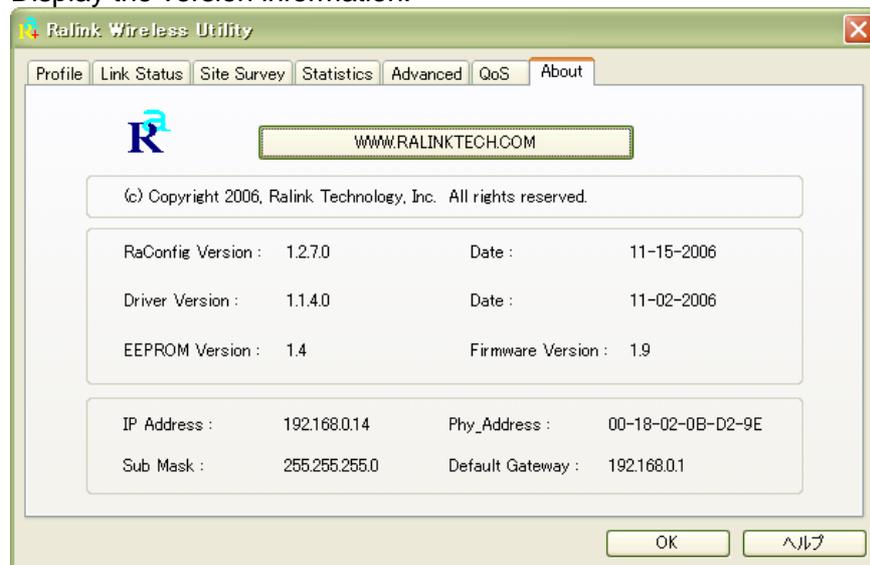
Transmit Statistics		
Frames Transmitted Successfully	=	824
Frames Transmitted Successfully Without Retry	=	816
Frames Transmitted Successfully After Retry(s)	=	8
Frames Fail To Receive ACK After All Retries	=	0
RTS Frames Successfully Receive CTS	=	0
RTS Frames Fail To Receive CTS	=	0

Receive Statistics		
Frames Received Successfully	=	108
Frames Received With CRC Error	=	1558
Frames Dropped Due To Out-of-Resource	=	0
Duplicate Frames Received	=	0

## About

Display the version information.



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### Cautions Cautions on security when using wireless LAN products

With a wireless LAN, radio waves are used instead of LAN cables for the exchange of data between the wireless access points (computers, etc.), offering the advantage that LAN connections can be made freely within the range of the radio waves.

On the other hand, the radio waves reach all points within this range, regardless of walls or other obstacles, possibly resulting in the problems described below if the proper security measures are not taken.

- **Contents of transmissions may be intercepted**  
Malicious third parties may purposely intercept the radio waves and steal information contained in the transmissions, including such personal information as ID numbers, passwords, credit card numbers, e-mail messages, etc.
- **Improper intrusions**  
Malicious third parties may without permission access the personal or company network and steal personal or confidential information, pretend to be someone else and leak incorrect information, rewrite information that has been intercepted, introduce computer viruses or otherwise damage data or the system, etc.

Wireless LAN cards and wireless access points generally include security measures for dealing with these problems. Making the proper security settings before using the products can reduce the risk of such problems arising.

We recommend that you fully understand the problems that can arise when using the products without making the security settings, then that you make the security settings based on your own decision and at your own discretion.

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# 4. Technical Specifications

1. Standard  
USB 2.0  
IEEE 802.11a, IEEE 802.11g, IEEE 802.11b
2. Bus Type  
USB 2.0
3. Temperature  
Operating 0 to 45°C(32 to 113°F)  
Storing -20 to 75°C(4 to 167°F)
4. Humidity  
80% maximum, non-condensing
5. Modulation Technology  
OFDM, CCK
6. Security  
64/128-bit WEP,  
WPA, WPA2 – WiFi Protected Access
7. Data Rates  
802 .11a/g: 54,48,36,24,18,12,9,6 Mbps per channel  
802 .11b: 11,5.5,2 1 Mbps per channel
8. Frequency Range  
2412 GHz to 2.462 GHz  
5.15GHz to 5.85 GHz
9. Range  
100 - 400m, depend on surrounding environment
10. Receiver Sensitivity  
54Mbps OFDM  
48Mbps OFDM  
36Mbps OFDM  
24Mbps OFDM  
18Mbps OFDM  
12Mbps OFDM  
11Mbps OFDM  
9Mbps OFDM  
6Mbps OFDM  
5.5Mbps CCK  
2Mbps QPSK  
1Mbps BPSK
11. Dimensions  
80 x 28 x 11 mm

12. Weight  
30g

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