802.11b/g/n 1T1R WLAN Mini Card

RT5390

User's Manual

Federal Communication Commission Interference Statement

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.

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.

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

Radiation Exposure Statement:

The product comply with the FCC portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

This device is intended only for OEM integrators under the following conditions:

1) The transmitter module may not be co-located with any other transmitter or antenna.

2) Except specific SAR evaluated portable platform/configuration listed below. The antenna must be installed to keep at least 20cm from the end user to comply with the FCC RF exposure rule.

SAR approved platform A:

	Platform (Notebook)
NB name	Copley
NB model	Copley: TPN-P102
NB Size	14

Applicable antennas

Antenna set1

Ant.	Brand name	Model name	Peak Gain (Included Cable loss) (dBi)	Antenna Type	Connector Type
Chain (0)	WNC	1415-023C000	-1.57	PIFA	U.FL
Chain (1)	WNC	1415-023C000	-2.83	PIFA	U.FL

Antenna set2

Ant.	Brand name	Model name	Peak Gain (Included Cable loss) (dBi)	Antenna Type	Connector Type
Chain (0)	Yageo	CAN4313HP0661LLB1	1.61	PIFA	U.FL
Chain (1)	Yageo	CAN4313HP0661LLB1	2.85	PIFA	U.FL

SAR approved platform B:

	Platform (Notebook)
NB name	Goya/ Kroyer
NB model	Goya: TPN-W108 Kroyer: TPN-W106
NB Size	15

Applicable antennas

Antenna set1

Ant.	Brand name	Model name	Peak Gain (Included Cable loss) (dBi)	Antenna Type	Connector Type
Chain (0)	ACON	APP8P-700360	0.01	PIFA	U.FL
Chain (1)	ACON	APP8P-700361	1.94	PIFA	U.FL

Antenna set2

Ant.	Brand name	Model name	Peak Gain (Included Cable loss) (dBi)	Antenna Type	Connector Type
Chain (0)	WNC	25.90AAD.001	-2.34	PIFA	U.FL
Chain (1)	WNC	25.90AAC.001	-3.79	PIFA	U.FL

3) Other portable configuration(s) not listed above will need a separate class II permissive change approval.

As long as 3 condition above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

The final end product must be labeled in a visible area with the following: "Contains FCC ID: VQF-RT5390". The grantee's FCC ID can be used only when all FCC compliance requirements are met.

Manual Information To the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

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。

本模組於取得認證後將依規定於模組本體標示審合格籤，並要求平台上標示「本產品內含射頻模組：ID 編號」

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

- EN 60950-1:2006+A11: 2009

    Safety of Information Technology Equipment
- EN 62311: 2008

    Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz-300 GHz)

    (IEC 62311:2007 (Modified))
- EN 300 328 V1.7.1: (2006-10)
- Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive

    EN 301 489-1 V1.8.1: (2008-04)

    Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
- EN 301 489-17: V2.1.1

    Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment

This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 – 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.

C€0560①

cs Česky [Czech]	*[Jméno výrobce]* tímto prohlašuje, že tento *[typ zařízení]* je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
da Dansk [Danish]	Undertegnede *[fabrikantens navn]* erklærer herved, at følgende udstyr *[udstyrets typebetegnelse]* overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
de Deutsch [German]	Hiermit erklärt *[Name des Herstellers]*, dass sich das Gerät *[Gerätetyp]* in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
et Eesti [Estonian]	Käesolevaga kinnitab *[tootja nimi = name of manufacturer]* seadme *[seadme tüüp = type of equipment]* vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
en English	Hereby, *[name of manufacturer]*, declares that this *[type of equipment]* is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
es Español [Spanish]	Por medio de la presente *[nombre del fabricante]* declara que el *[clase de equipo]* cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
el Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ *[name of manufacturer]* ΔΗΛΩΝΕΙ ΟΤΙ *[type of equipment]* ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
fr Français [French]	Par la présente *[nom du fabricant]* déclare que l'appareil *[type d'appareil]* est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
it Italiano [Italian]	Con la presente *[nome del costruttore]* dichiara che questo *[tipo di apparecchio]* è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo *[name of manufacturer / izgatavotāja nosaukums]* deklarē, ka *[type of equipment / iekārtas tips]* atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo *[manufacturer name]* deklaruoja, kad šis *[equipment type]* atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
nl Nederlands	Hierbij verklaart *[naam van de fabrikant]* dat het toestel *[type van toestel]* in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van

[Dutch]	richtlijn 1999/5/EG.
Malti [Maltese]	Hawnhekk, *[isem tal-manifattur]*, jiddikjara li dan *[il-mudel tal-prodott]* jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
Magyar [Hungarian]	Alulírott, *[gyártó neve]* nyilatkozom, hogy a *[... típus]* megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EC irányelv egyéb elõírásainak.
Polski [Polish]	Niniejszym *[nazwa producenta]* oświadcza, że *[nazwa wyrobu]* jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	*[Nome do fabricante]* declara que este *[tipo de equipamento]* está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	*[Ime proizvajalca]* izjavlja, da je ta *[tip opreme]* v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	*[Meno výrobcu]* týmto vyhlasuje, že *[typ zariadenia]* spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Suomi [Finnish]	*[Valmistaja = manufacturer]* vakuuttaa täten että *[type of equipment = laitteen tyyppimerkintä]* tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar *[företag]* att denna *[utrustningstyp]* står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Hardware Quick Installation Guide

Installing the **Wireless Mini PCI Express Module**

1. Power down the computer.
2. Plug the **Wireless PCI Express Minicard Module** board to motherboard minicard slot
3. Connect 2 external antennas used I-PEX connector for WiFi antenna.
4. Power on the computer.

Un-installing the **Wireless Mini PCI Express Module**

1. Power down the computer
2. Removed 2 external WiFi antennas from the **Wireless Mini PCI Express Module**
3. Carefully removed the **Wireless PCI Express Minicard Module** from the motherboard minicard slot.
4. Power on the computer.

INTRODUCTION

The 11b/g/n 1T1R WLAN Mini Card is a device that allows you connect your computer to a wireless local area network (LAN). A wireless LAN allows your system to use wireless Radio Frequency (RF) technology to transmit and receive data without physically attaching to the network. The Wireless protocols that come with this product ensure data security and isolation from interference generated by other radio frequencies. This card also allows you to take full advantage of your computer's mobility with access to real-time information and online services anytime and anywhere. In addition, this device eliminates the bother of pulling cable through walls and under furniture. It even allows you to place your system in locations where cabling is impossible. Modifying and augmenting networks has never been so easy.

Wireless Network Options

The Peer-to-Peer Network

This network installation lets you set a small wireless workgroup easily and quickly.   Equipped with wireless PC Cards or wireless PCI, you can share files and printers between each PC and laptop.
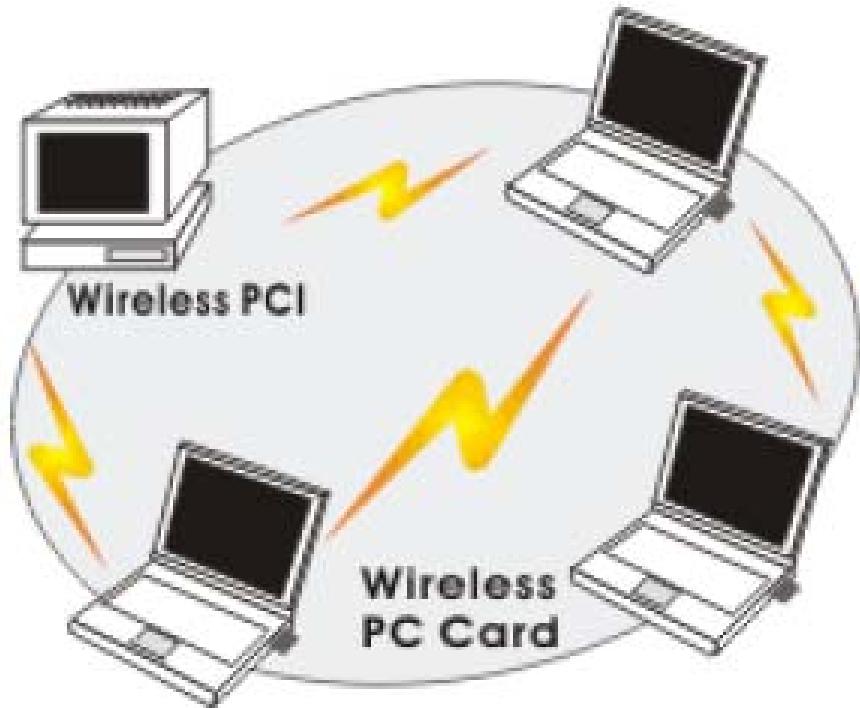
You can also use one computer as an Internet Server to connect to a wired global network and share files and information with other computers via a wireless LAN.
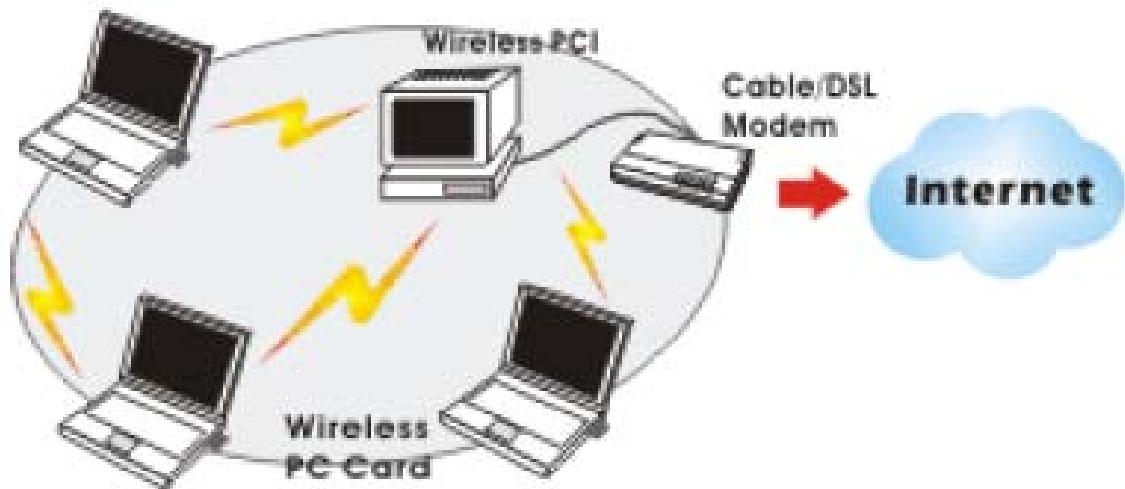
The Access Point Network The network installation allows you to share files, printers, and Internet access much more conveniently. With Wireless LAN Cards, you can connect wireless LAN to a wired global network via an Access Point.
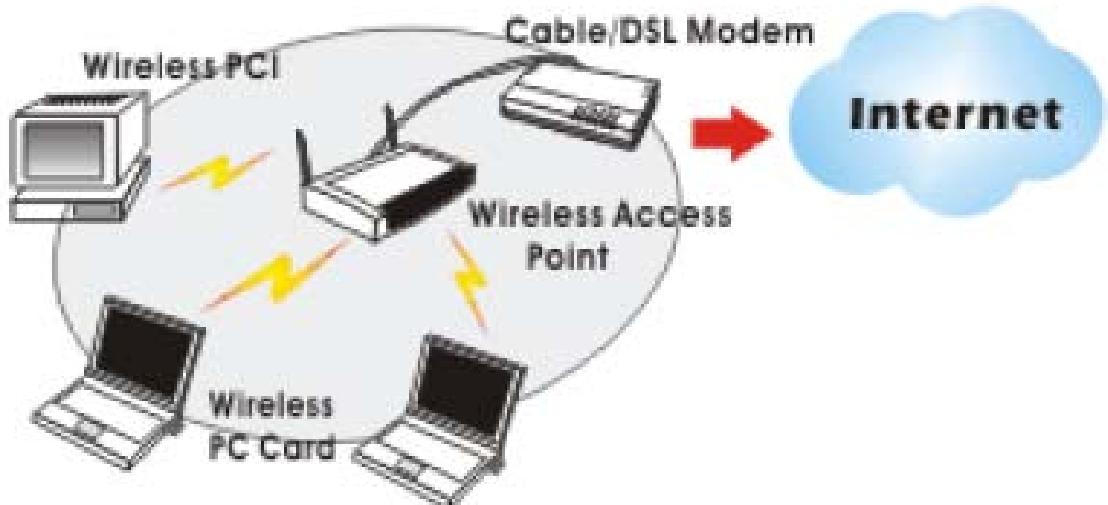
SOFTWARE INSTALLATION

Install the device

1. Make sure the computer is turned off. Remove the expansion slot cover from the computer.

2. Carefully slide the 11b/g/n 1T1R WLAN Mini Card into the mini PCI slot. Push evenly and slowly and ensure it is properly seated.

3. After the device has been connected to your computer, turn on your computer. Windows will detect the new hardware and then automatically copy all of the files needed for networking.

Install the Driver & Utility

1. Exit all Windows programs. Insert the included CD-ROM into your computer. The CD-ROM will run automatically.

2. When the License Agreement screen appears, please read the contents and select "I accept the terms of the license agreement " then click Next to continue.
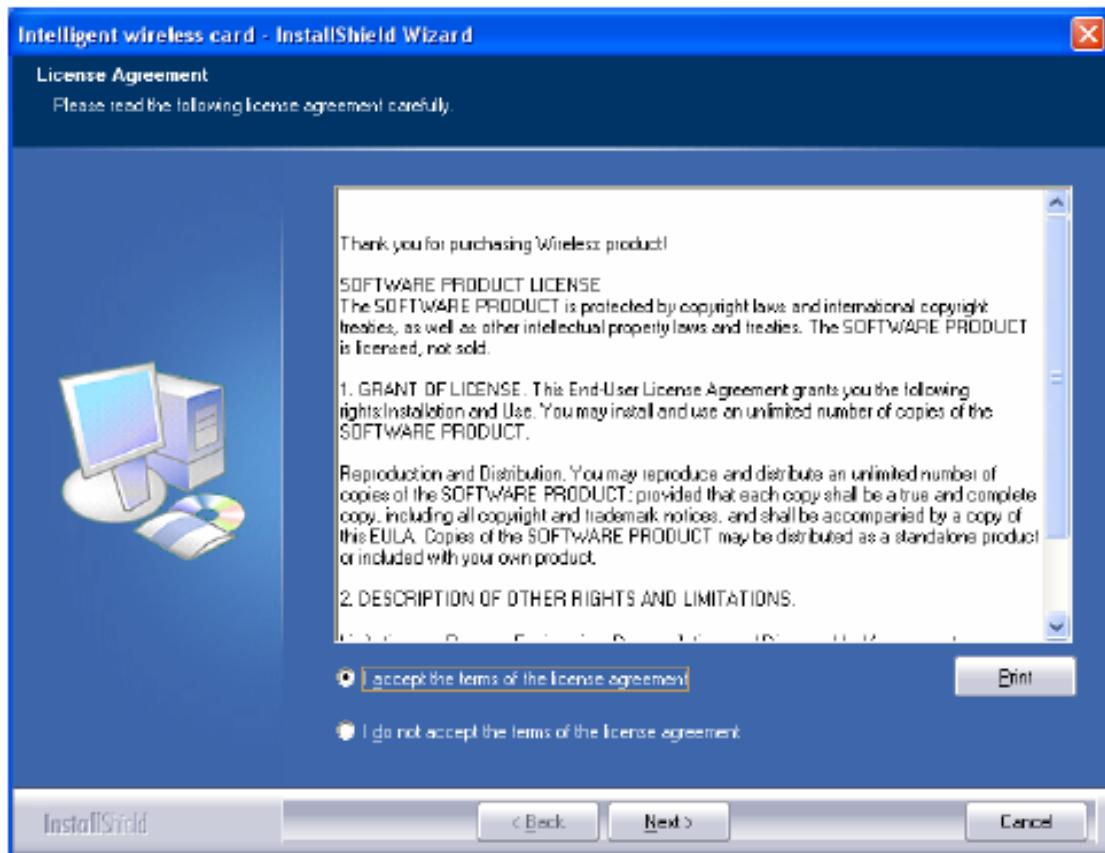
3.   Select the check box to choose a Configuration Tool from the listed two choices.

- Configuration Tool: Choose to use our configuration utility.

- Microsoft Zero Configuration Tool: Choose to use Windows XP's built-in Zero Configuration Utility (ZCU).

Click Next to continue.

Intelligent wireless card - InstallShield Wizard

Setup Type
Select the setup type that best suits your needs.

Select Configuration Tool.

- ○ Configuration Tool
- ● Microsoft Zero Configuration Tool

InstallShield

< Back   Next >   Cancel
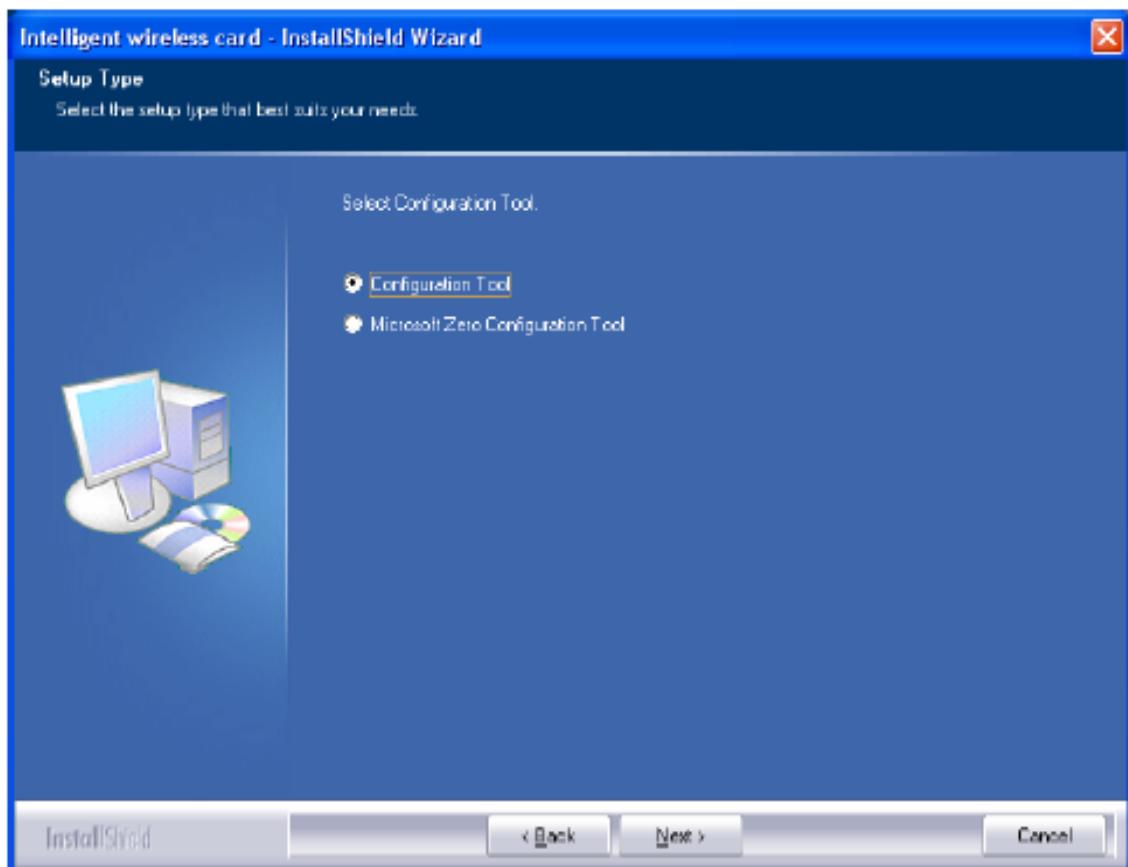
4. There are two modes for you to choose in this screen, either choose WiFi mode or performance mode (TxBurst mode). This mode selection screen is set for the default mode shown in the utility screen, you can still change its mode later in the utility screen. Click Next to continue.
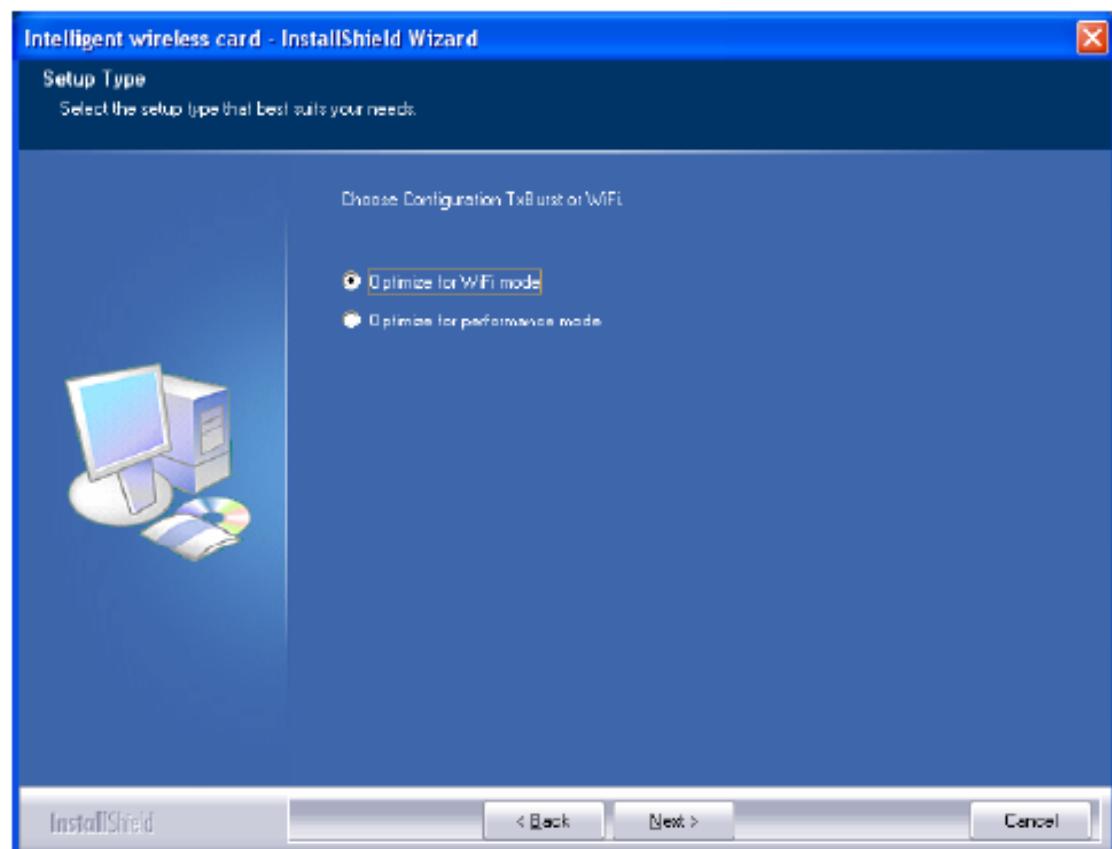
5.   When you are prompted the following message, please click Install to begin the installation.
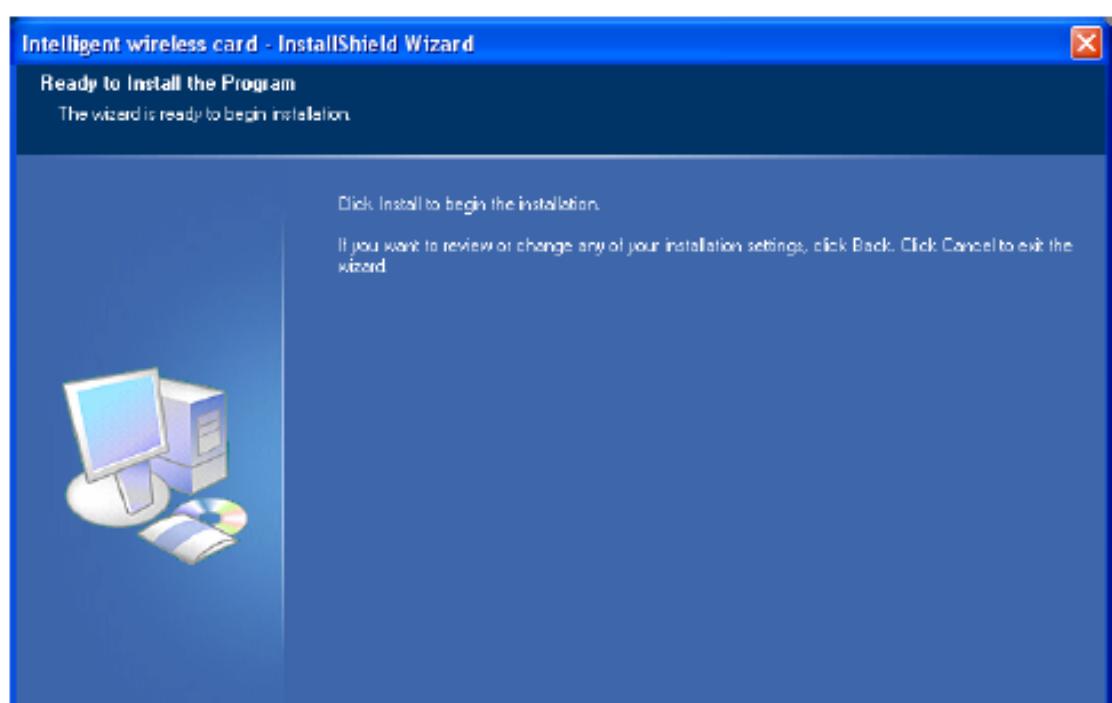
6. When the following screen appears, click Finish to complete the software installation.
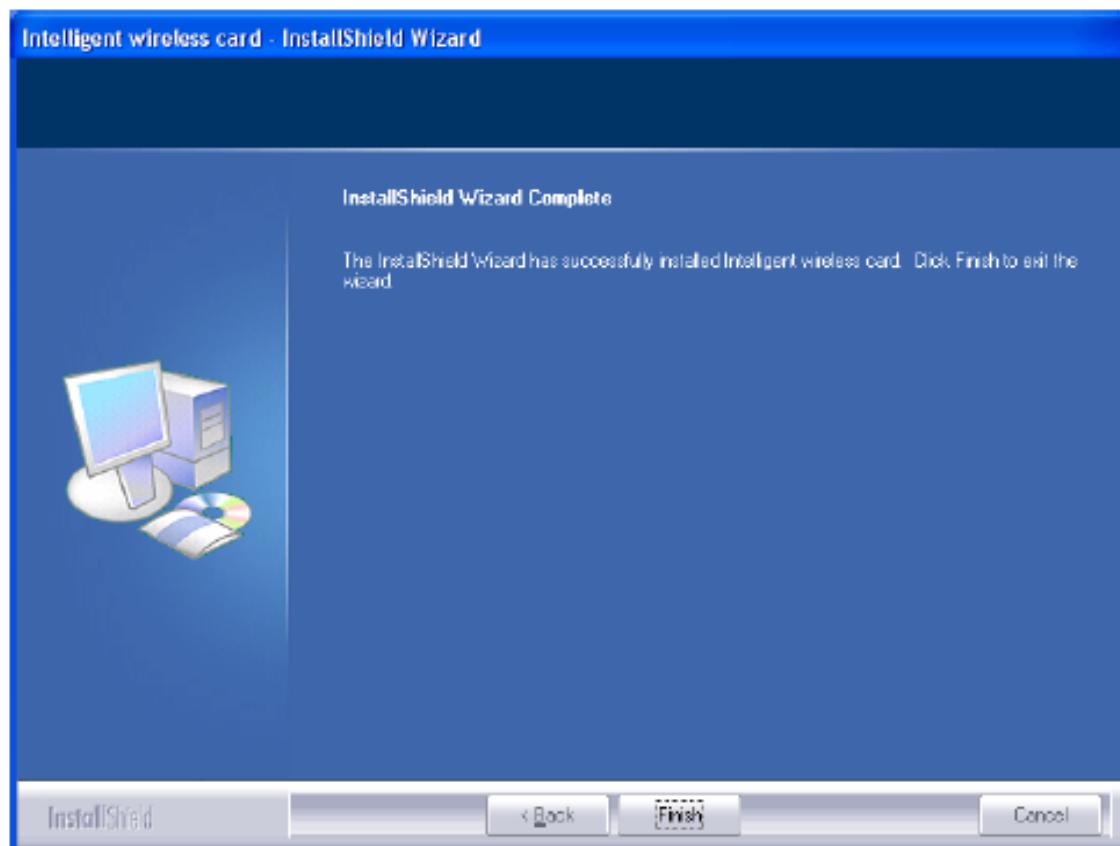
HARDWARE INSTALLATION

Verification

To verify if the device exists in your computer and is enabled, go to Start > Control Panel > System (> Hardware) > Device Manager. Expand the Network Adapters category. If the 11b/g/n 1T1R WLAN Half Mini Cardis listed here, it means that your device is properly installed and enabled.
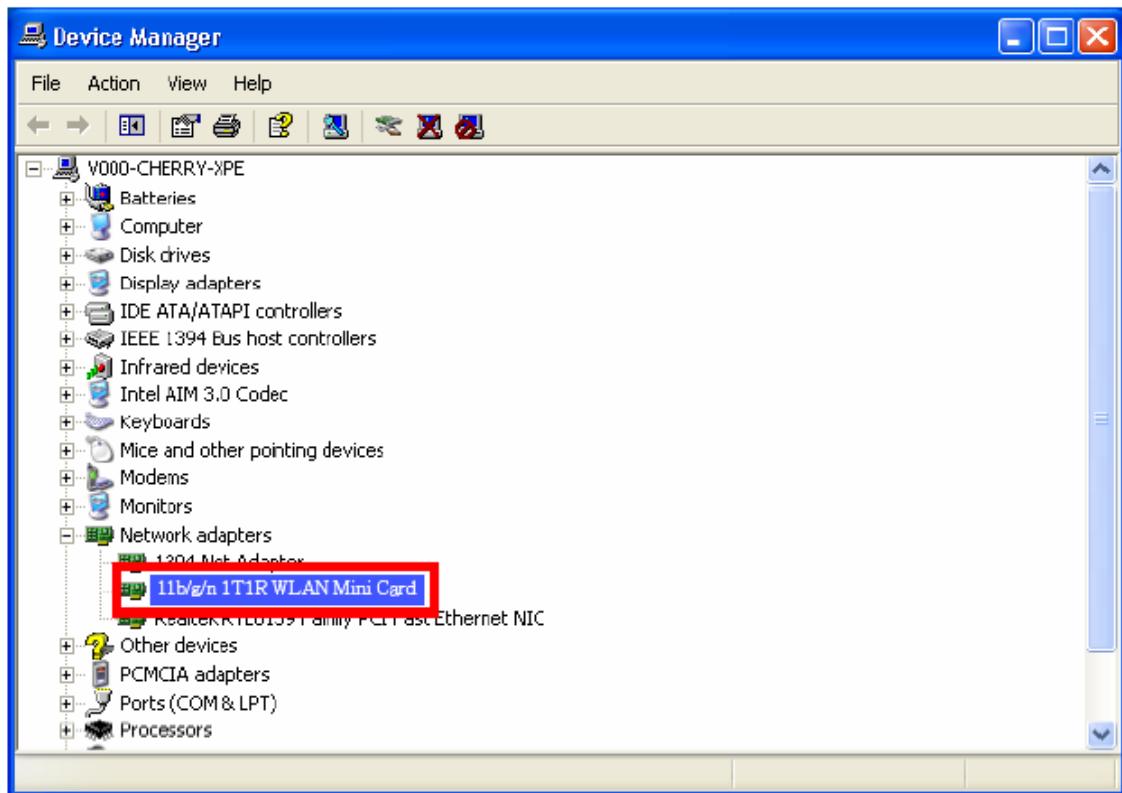
NETWORK CONNECTION

Once the device driver is well installed, a network setting described in the following should be also established.

In Windows 2000/ XP

1. (In Windows 2000) Go to Start → Settings → Control Panel → Network and Dial-up Connections Local Area Connection → Properties.

    (In Windows XP)   Go to Start → Control Panel → Network and Internet Connections → Network Connections → Wireless Network Connection → Properties.
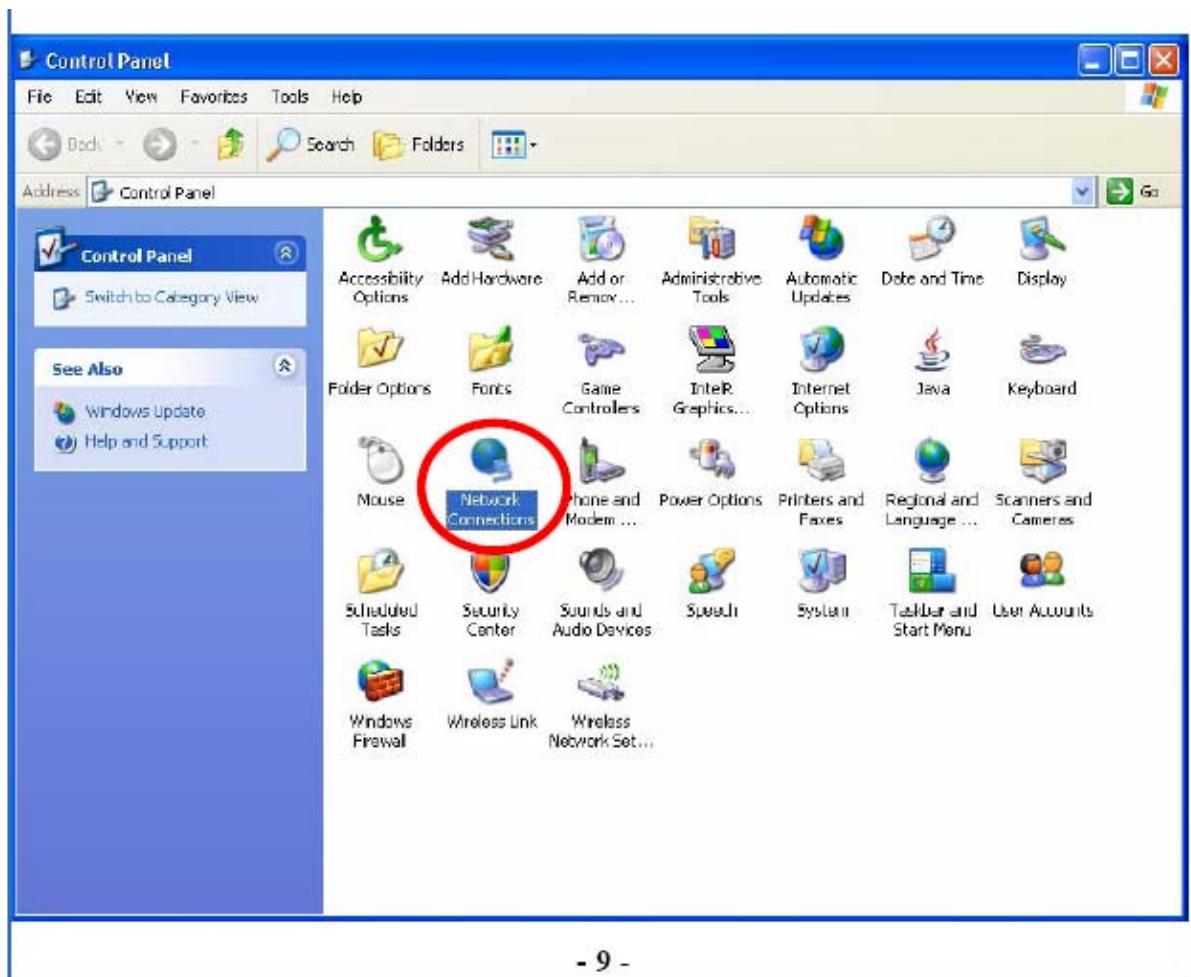
2.   Make sure that all the required components are installed.
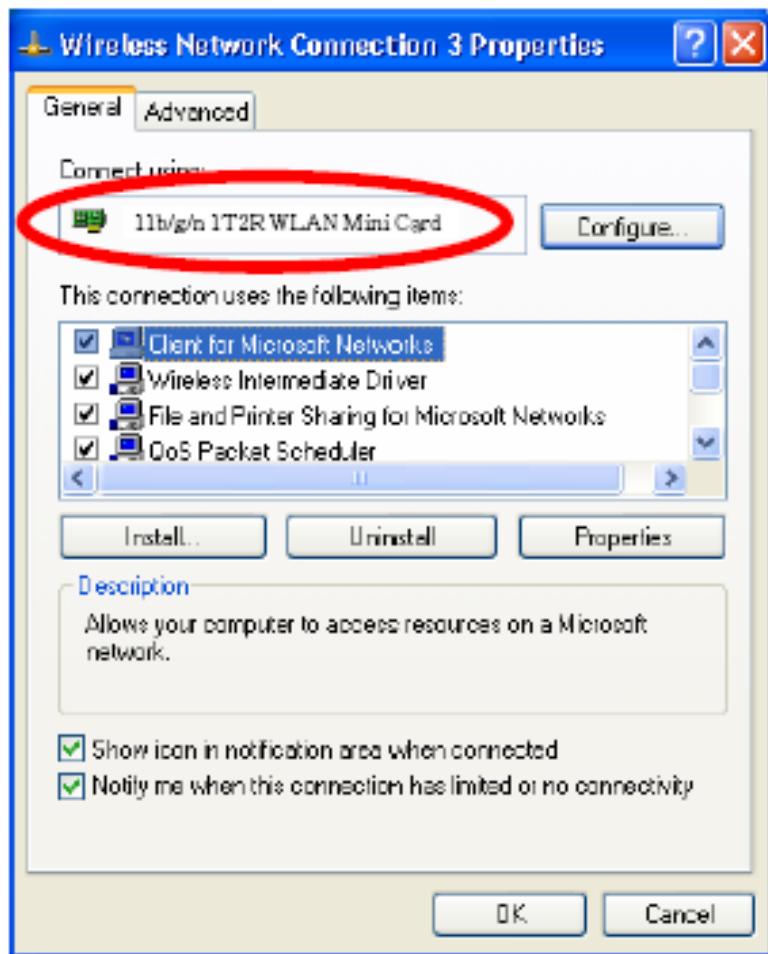
3.   If any components are missing, click on the Install… button to select the Client/Service/Protocol required. After selecting the component you need, click Add… to add it in.
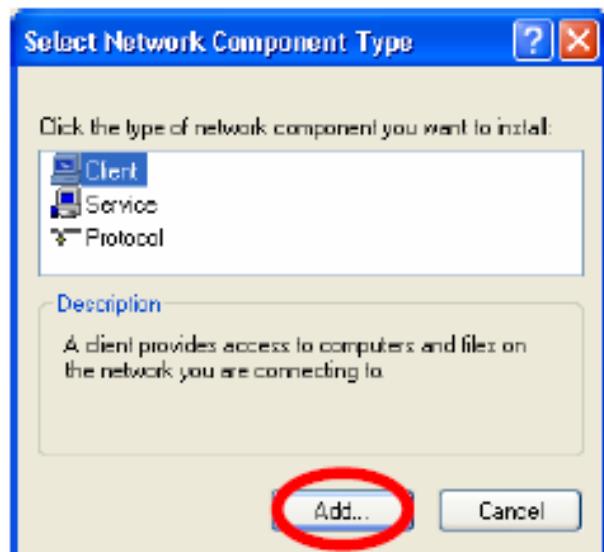
4.   For making your computer visible on the network, make sure you have installed File and Printer Sharing for Microsoft Networks.

IP Address

Note: When assigning IP Addresses to the computers on the network, remember to have the IP address for each computer set on the same subnet mask. If your Broadband Router use DHCP technology, however, it won't be necessary for you to assign Static IP Address for your computer.

1. To configure a dynamic IP address (i.e. if your broadband Router has the DHCP technology), check the Obtain an IP Address Automatically option.

2. To configure a fixed IP address (if you broadband Router is not DHCP supported, or when you need to assign a static IP address), check the Use the following IP address option. Then, enter an IP address into the empty field; for example, enter 192.168.1.254 in the IP address field, and 255.255.255.0 for the Subnet Mask.
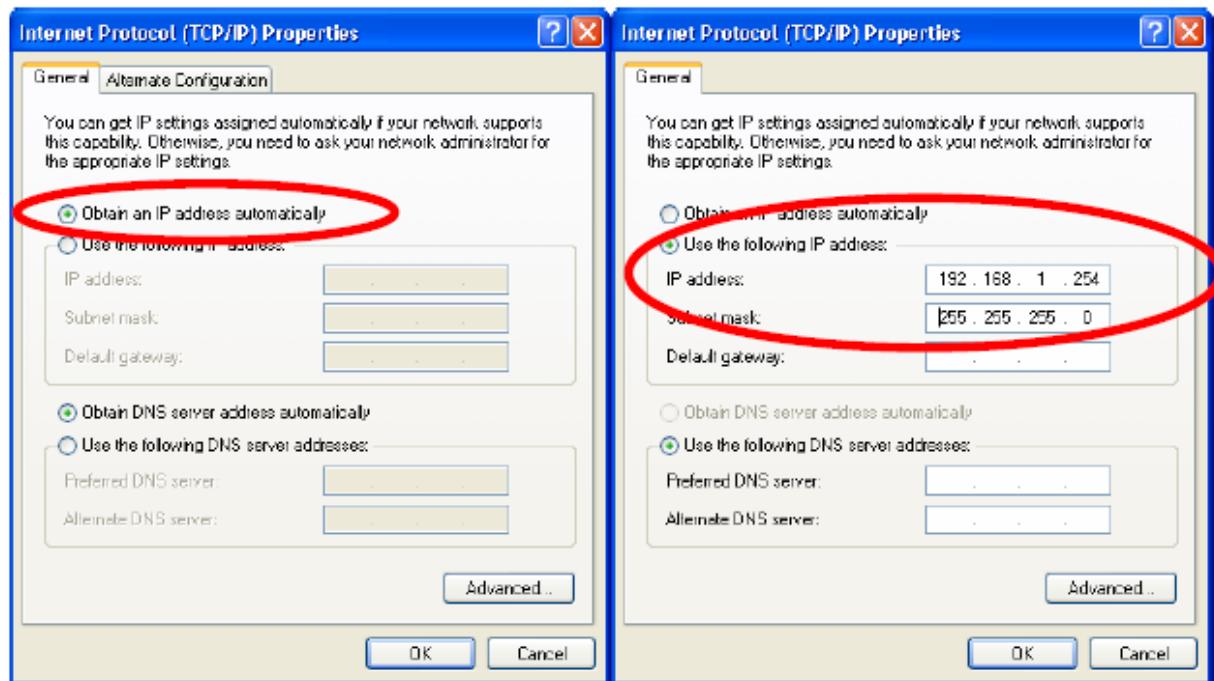
CONFIGURATION UTILITY

After the Wireless adapter has been successfully installed, users can use the included Configuration Utility to set their preference. Go to Start→ (All) Programs→ Ralink Wireless →Ralink Wireless Utility.
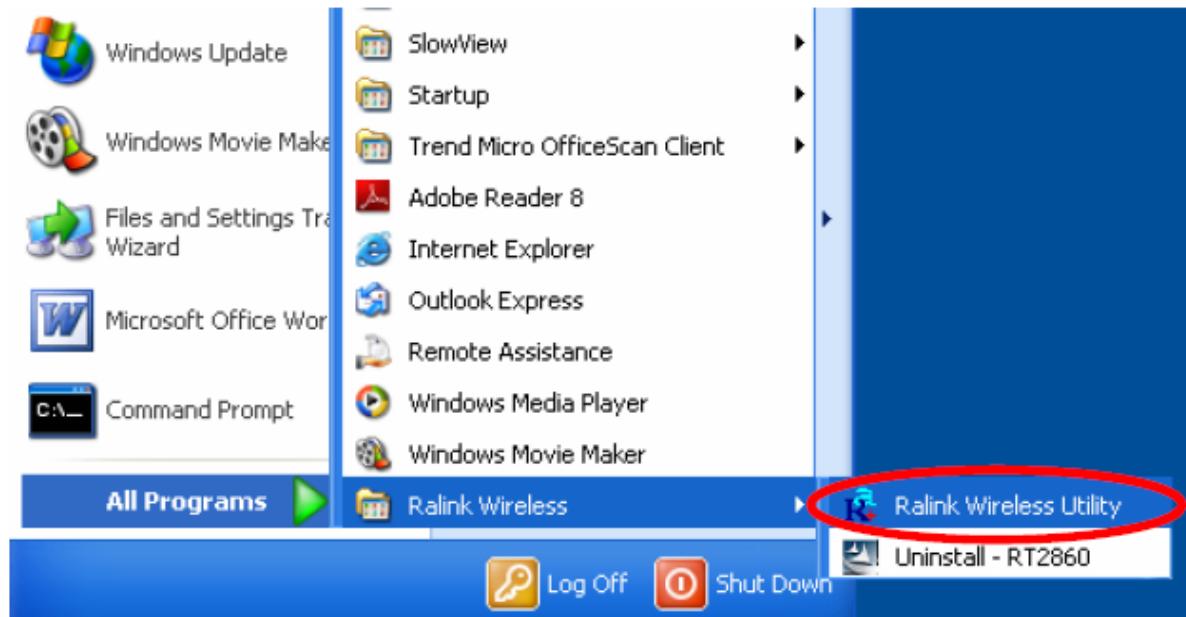
You can also open the Configuration Utility by double clicking the icon or right clicking to select Launch Config Utilities.
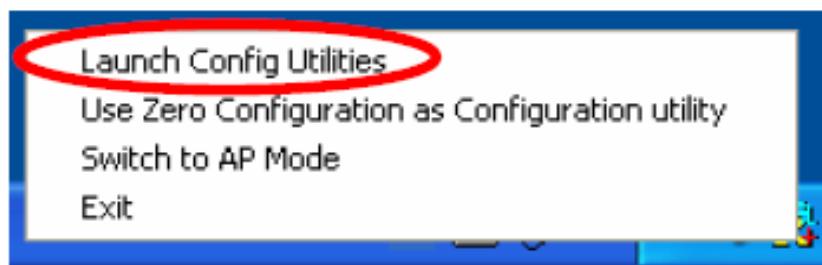
Profile

Profile can book keeping your favorite wireless setting among your home, office, and other public hot-spot. You may save multiple profiles, and activate the correct one at your preference. The Profile manager enables you to Add, Edit, Delete and Activate profiles.
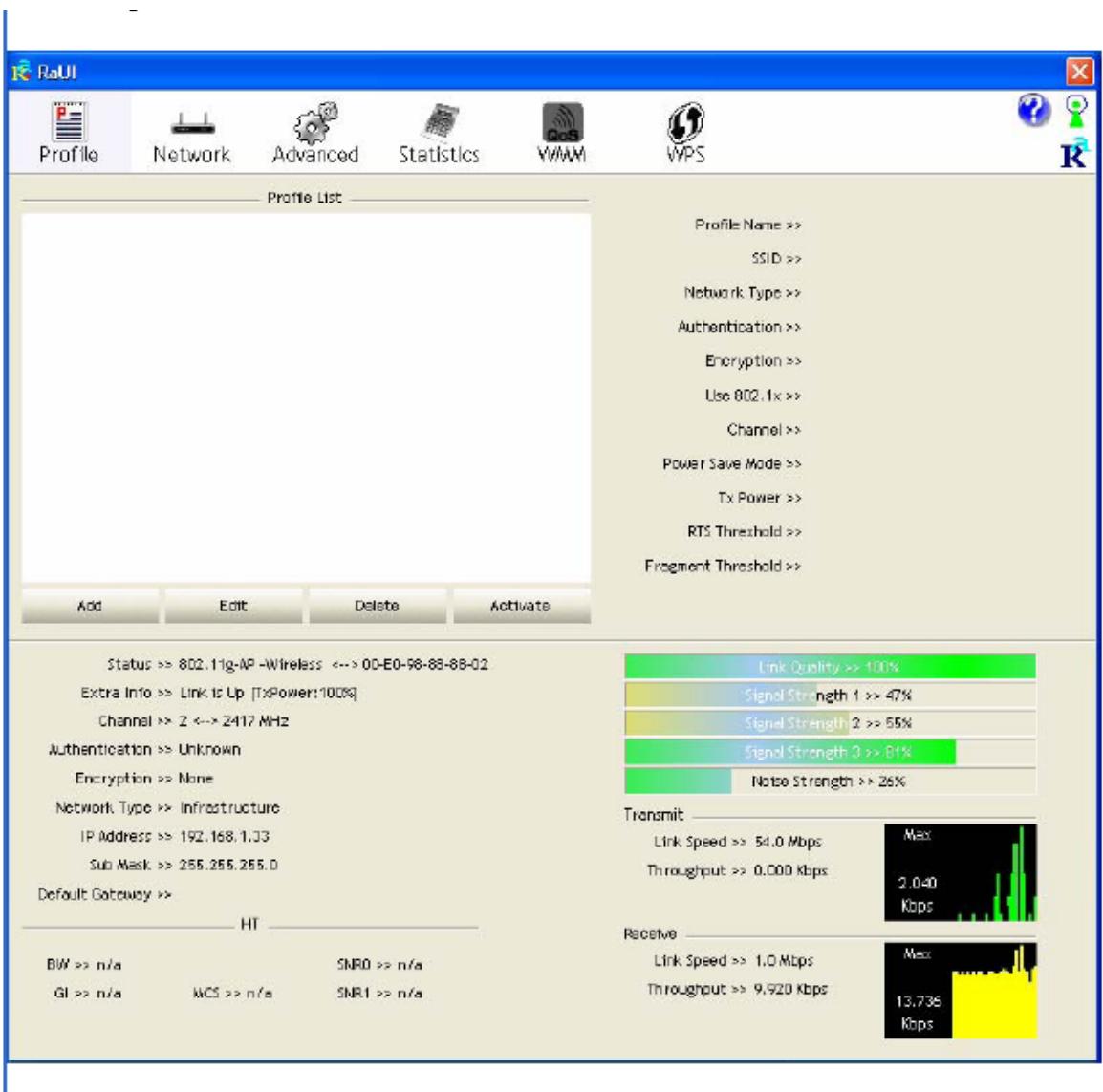
Profile Tab

Profile Name	You may enter a distinctive name of profile in this column. The default is PROF# (# 1, #2, #3....)
SSID	The **SSID** is the unique name shared among all points in your wireless network.
Network Type	Shows the network type of the device, including infrastructure.
Authentication	Shows the authentication mode.
Encryption	Shows the encryption type.
Use 802.1x	Whether or not use 802.1x feature.
Channel	Shows the selected channel that is currently in use. (There are 13 channels available, depending on the country.)
Power Save Mode	Choose from CAM (Constantly Awake Mode) or Power Saving Mode.
Tx Power	Transmit power, the amount of power used by a radio transceiver to send the signal out.
RTS Threshold	Shows the RTS Threshold of the device.
Fragment Threshold	Shows the Fragment Threshold of the device.
Add	Click to add a profile from the drop-down screen. **System Configuration tab:**

Network   The Network page displays the information of surrounding APs from last scan result. The tab lists the information including SSID, Network type, Channel, Wireless mode, Security-Enabled and Signal.
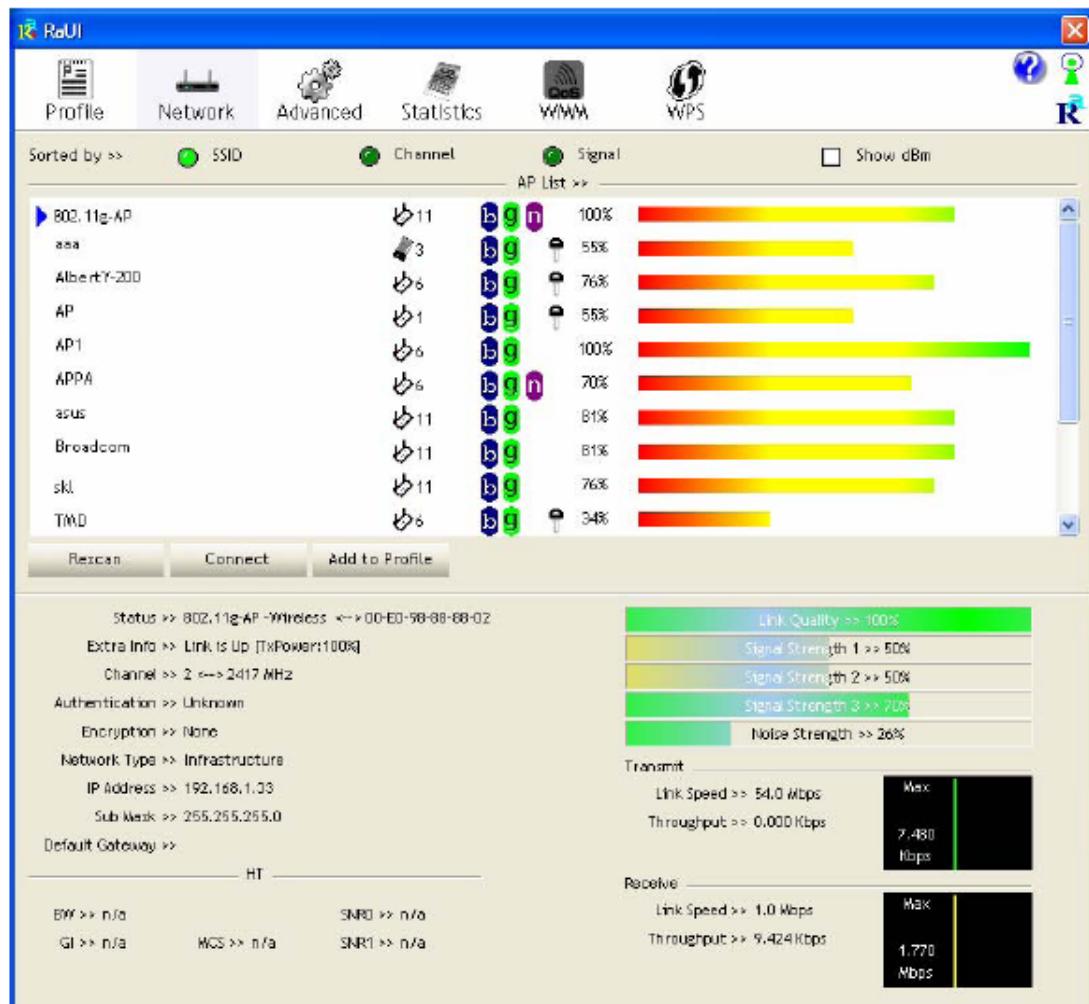
Network Tab	
Sorted by	Indicate that AP list are sorted by SSID, Channel or Signal.
Show dBm	Check the box to show the dBm of the AP list.
SSID	Shows the name of BSS network.
Network Type	Network type in use, Infrastructure for BSS.
Channel	Shows the currently used channel.
Wireless mode	AP support wireless mode. It may support 802.11a, 802.11b, 802.11g or 802.11n wireless mode.

Encryption	Shows the encryption type currently in use. Valid value includes WEP, TKIP, AES, and Not Use.
Signal	Shows the receiving signal strength of specified network.
Rescan	Click to refresh the AP list.
Connect	Select an item on the list and then click to make a connection.
Add to Profile	Select an item on the list and then click to add it into the profile list.
Link status	
Status	Shows the current connection status. If there is no connection existing, it will show Disconnected.
Extra Info	Shows the link status.
Channel	Shows the current channel in use.
Authentication	Authentication mode used within the network, including Unknown, WPA-PSK, WPA2-PSK, WPA and WPA2.
Encryption	Shows the encryption type currently in use. Valid value includes WEP, TKIP, AES, and Not Use.
Network Type	Network type in use, Infrastructure for BSS.
IP Address	Shows the IP address information.
Sub Mask	Shows the Sub Mask information.
Default Gateway	Shows the default gateway information.
Link Quality	Shows the connection quality based on signal strength and

	TX/RX packet error rate.
Signal Strength 1, 2 and 3	Shows the Receiving signal strength, you can choose to display as percentage or dBm format.
Noise Strength	Shows the noise signal strength.
Transmit	Shows the current Link Speed and Throughput of the transmit rate.
Receive	Shows the current Link Speed and Throughput of receive rate.
Link Speed	Shows the current transmitting rate and receiving rate.
Throughput	Shows the transmitting and receiving throughput in the unit of K bits/sec.

AP information

When you double click on the intended AP, you can see AP's detail information that divides into three parts. They are General, WPS, CCX information. The introduction is as following:

General	
	General information contain AP's SSID, MAC address, Authentication Type, Encryption Type, Channel, Network Type, Beacon Interval, Signal Strength and Supported Rates.
	OK: Click this button to exit the information screen.

WPS	

WPS information contains Authentication Type, Encryption Type, Config Methods, Device Password ID, Selected Registrar, State, Version, AP Setup Locked, UUID-E and RF Bands.

Authentication Type: There are four types of authentication modes supported by RaConfig. They are open, Shared, WPA-PSK and WPA system.

Encryption Type: For open and shared authentication mode, the selection of encryption type are None and WEP. For WPA, WPA2, WPA-PSK and WPA2-PSK authentication mode, the encryption type supports both TKIP and AES.

Config Methods: Correspond to the methods the AP supports as an Enrollee for adding external Registrars.

Device Password ID: Indicate the method or identifies the specific password that the selected Registrar intends to use.

Selected Registrar: Indicate if the user has recently activated a Registrar to add an Enrollee. The values are "TRUE" and "FALSE".

State: The current configuration state on AP. The values are "Unconfigured" and "Configured".

Version: WPS specified version.

AP Setup Locked: Indicate if AP has entered a setup locked state.

UUID-E: The universally unique identifier (UUID) element generated by the Enrollee. There is a value. It is 16 bytes.

RF Bands: Indicate all RF bands available on the AP. A dual-band AP must provide it. The values are "2.4GHz" and "5GHz".

OK: Click this button to exit the information screen.

CXX	
	CCX information contains CCKM, Cmic and Ckip information.
	OK: Click this button to exit the information screen.

Advanced

This Advanced page provides advanced and detailed settings for your wireless network.
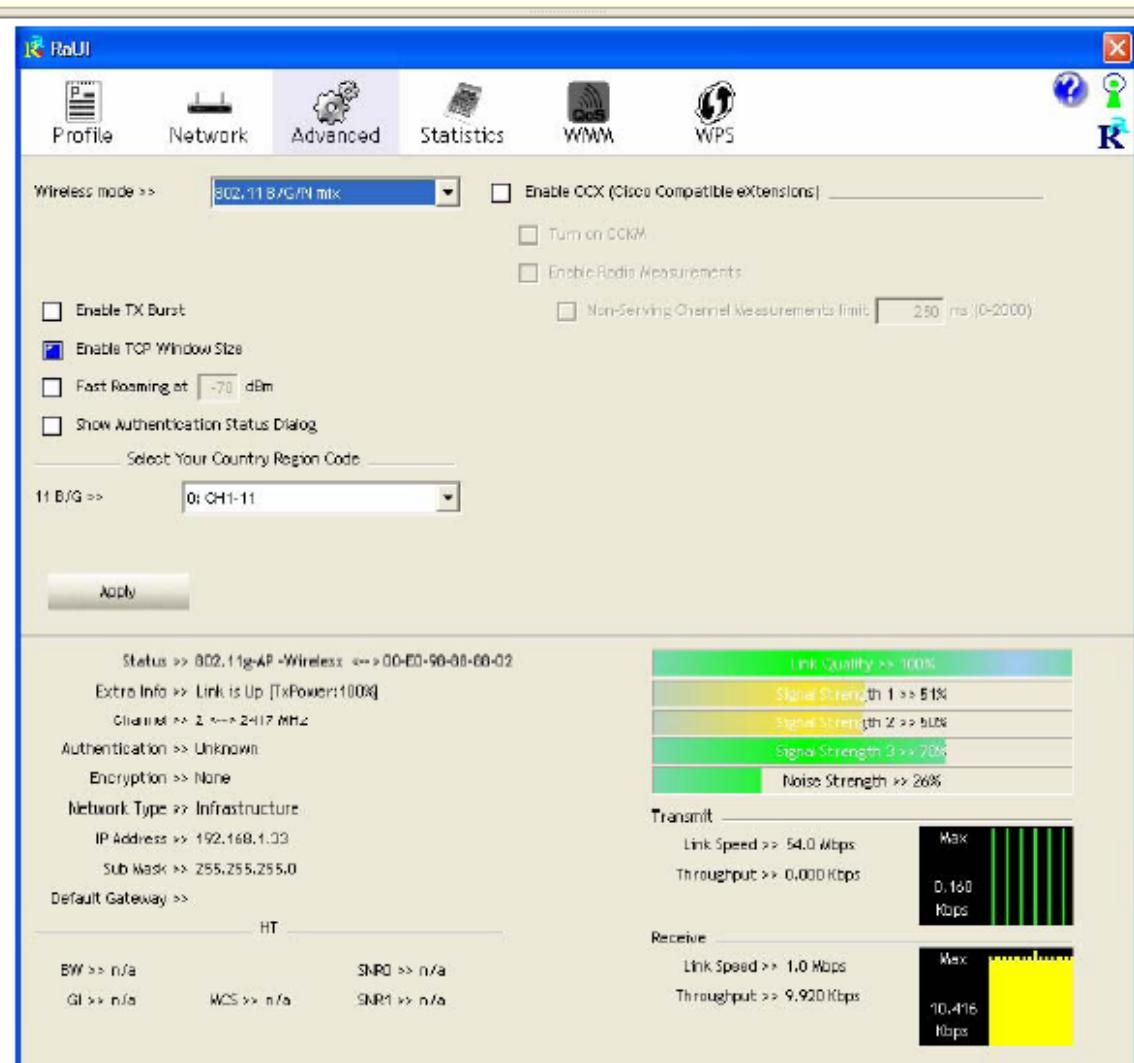
Advanced Tab

Wireless mode	Select wireless mode. There are 802.11b/g/n mixed, 802.11b only and 802.11b/g mixed modes are supported. Default mode is 802.11b/g/n mixed.
Enable Tx Burst	Check to enable the burst mode.
Enable TCP Window Size	Check to increase the transmission quality.
Fast Roaming at	Check to set the roaming interval, fast to roaming, setup by transmits power.
Show	When you connect AP with authentication, choose

Authentication Status Dialog	whether show "Authentication Status Dialog" or not. Authentication Status Dialog displays the process about 802.1x authentications.
Enable CCX (Cisco Compatible extensions)	Check to enable the CCX function. • Turn on CCKM • Enable Radio Measurements: Check to enable the Radio measurement function. • Non-Serving Measurements limit: User can set channel measurement every 0~2000 milliseconds. Default is set to 250 milliseconds.
Apply	Click to apply above settings.

Statistics

The Statistics screen displays the statistics on your current network settings.
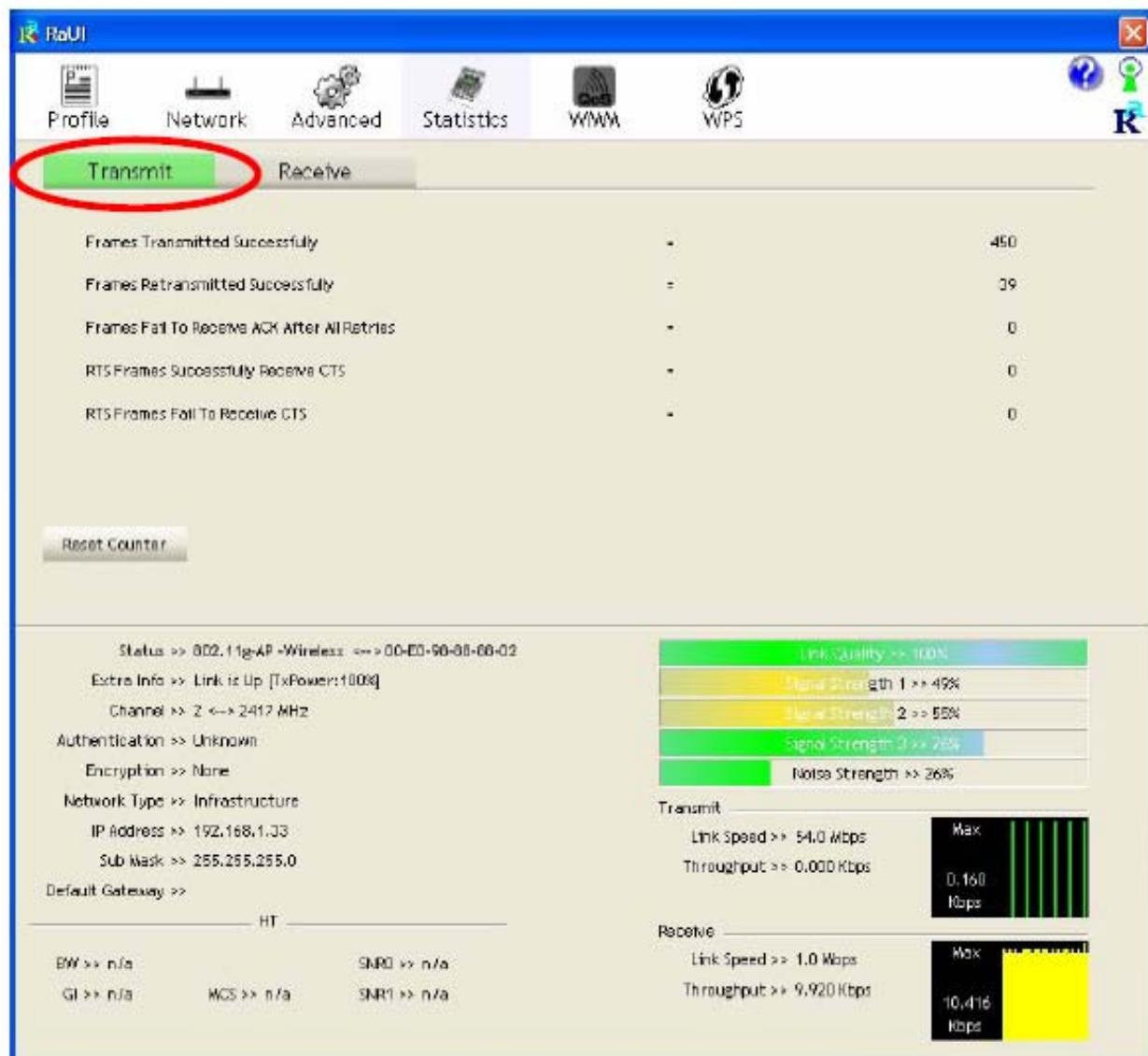
| Transmit	
Frames Transmitted Successfully	Shows information of frames successfully sent.
Frames Retransmitted Successfully	Shows information of frames successfully sent with one or more reties.
Frames Fail To Receive ACK After All Retries	Shows information of frames failed transmit after hitting retry limit.
RTS Frames Successfully Receive CTS	Shows information of successfully receive CTS after sending RTS frame

RTS Frames Fail To Receive CTS	Shows information of failed to receive CTS after sending RTS.
Reset Counter	Click this button to reset counters to zero.
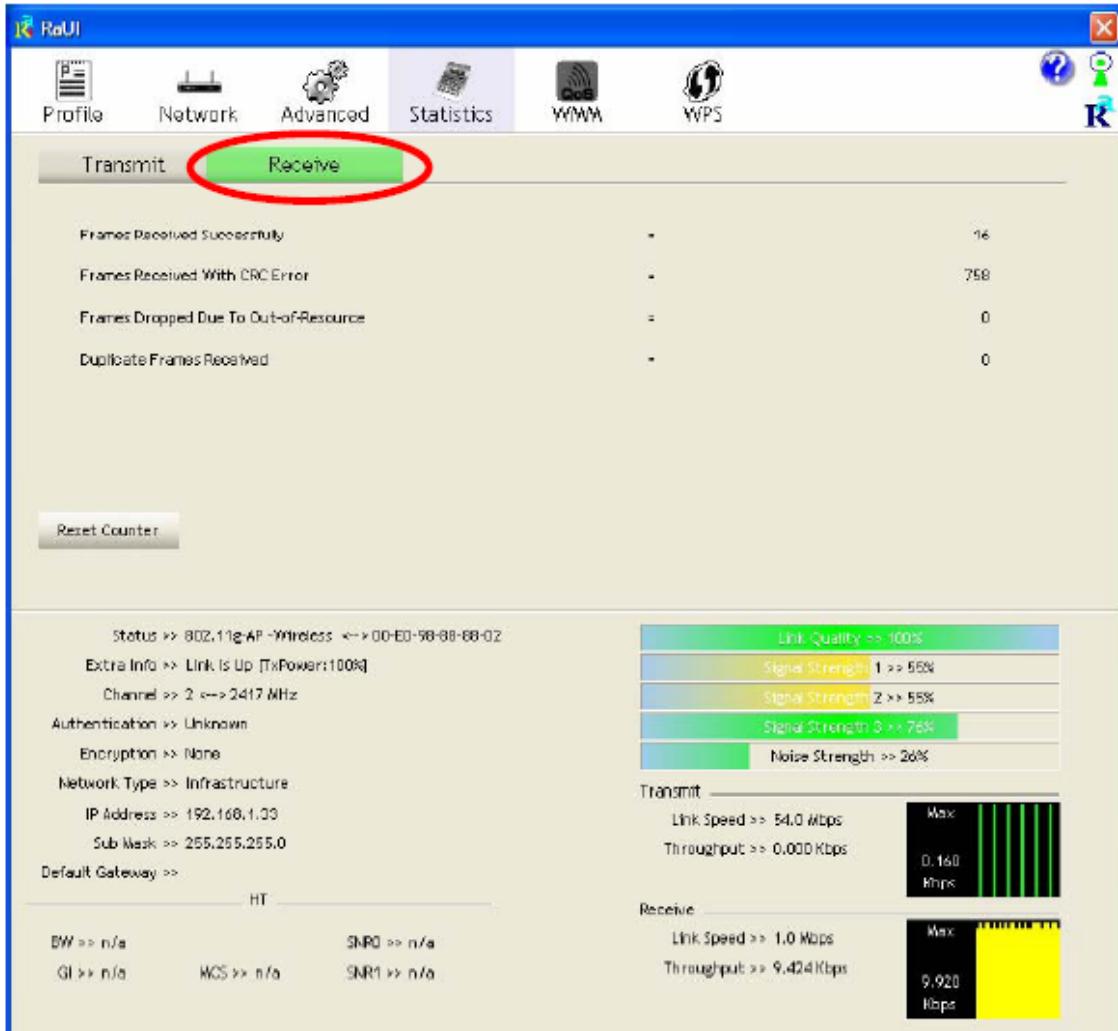
Receive Statistics	
Frames Received Successfully	Shows information of frames Received Successfully.
Frames Received With CRC Error	Shows information of frames received with

	CRC error.
Frames Dropped Due To Out-of-Resource	Shows information of frames dropped due to resource issue.
Duplicate Frames Received	Shows information of duplicate received frames.
Reset Counter	Click this button to reset counters to zero.

WMM / QoS

The WMM page shows the Wi-Fi Multi-Media power save function and Direct Link Setup that ensure your wireless network quality.

WMM Enable	Check the box to enable Wi-Fi Multi-Media function.
WMM- Power Save Enable	Select which ACs you want to enable.
Direct Link Setup Enable	Check the box to enable Direct Link Setup.
MAC Address	The setting of DLS indicates as follow : Fill in the blanks of Direct Link with MAC Address of STA, and the STA must conform to two conditions: • Connecting with the same AP that supports DLS feature. • DSL enabled.
Timeout Value	Timeout Value represents that it disconnect automatically after few seconds. The value is integer that must be between 0~65535. It represents that it always connects if the value is zero. Default value of Timeout Value is 60 seconds.
Apply	Click this button to apply the settings.
Tear Down	Select a direct link STA, then click "Tear Down" button to disconnect the STA.

WPS

The primary goal of Wi-Fi Protected Setup (Wi-Fi Simple Configuration) is to simplify the security setup and management of Wi-Fi networks. The STA as an Enrollee or external Registrar supports the configuration setup using PIN (Personal Identification Number) configuration method or PBC (Push Button Configuration) method through an internal or external Registrar.

Radio On/Off


 Click this icon to turn on radio function.

 Click this icon to turn off radio function.

About

 Click this button to show the information of the wireless card including,
RaConfig Version/ Date, Driver Version/ Date, EEPROM Version, Firmware
Version and Phy_Address.

RaConfig Version >> 2.0.2.0   Date >> 05-15-2007

Driver Version >> 1.0.3.0   Date >> 05-07-2007

EEPROM Version >> 1.1

Firmware Version >> 0.7

Phy_Address >> 00-12-0E-00-00-12

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Status >> 802.11g-AP -Wireless <--> 00-E0-98-88-88-02
Extra Info >> Link is Up [TxPower:100%]
Channel >> 2 <--> 2417 MHz
Authentication >> Unknown
Encryption >> None
Network Type >> Infrastructure
IP Address >> 192.168.1.33
Sub Mask >> 255.255.255.0
Default Gateway >>

_____ HT _____

BW >> n/a   SNR0 >> n/a

GI >> n/a   MCS >> n/a   SNR1 >> n/a

Link Quality >> 100%
Signal Strength 1 >> 45%
Signal Strength 2 >> 50%
Signal Strength 3 >> 70%
Noise Strength >> 26%

Transmit
Link Speed >> 54.0 Mbps
Throughput >> 0.000 Kbps

Max
0.160 Kbps

Receive
Link Speed >> 1.0 Mbps
Throughput >> 9.424 Kbps

Max
10.416 Kbps

UNINSTALLATION

In case you need to uninstall the utility and driver, please refer to below steps. (As you uninstall the utility, the driver will be uninstalled as well.)

1.   Go to **Start → Programs →Ralink Wireless → Uninstall.**
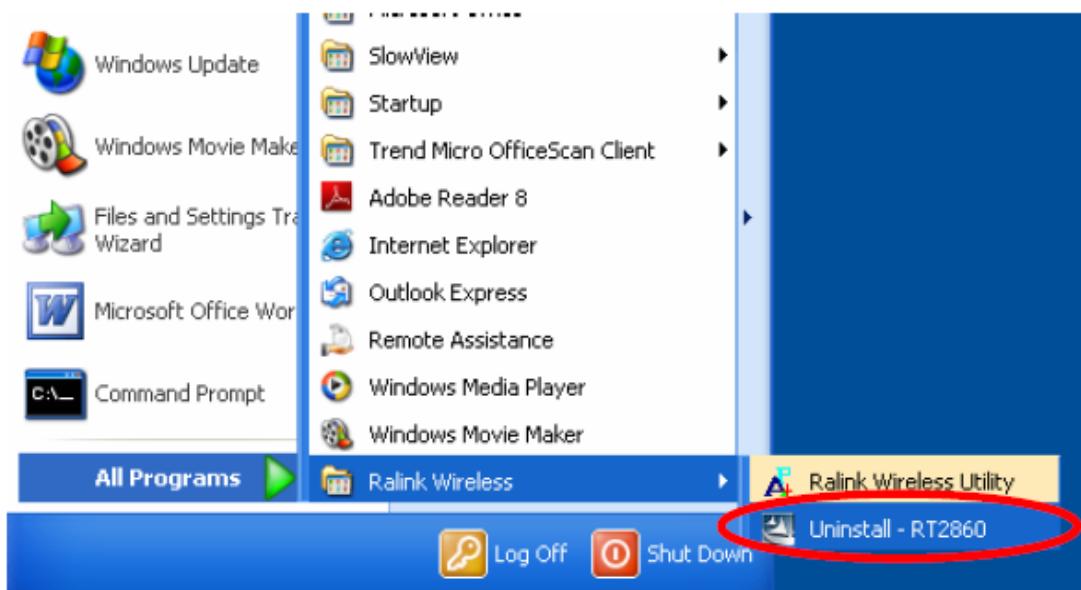
2. Select **Remove all** button and click **Next** to start uninstalling.
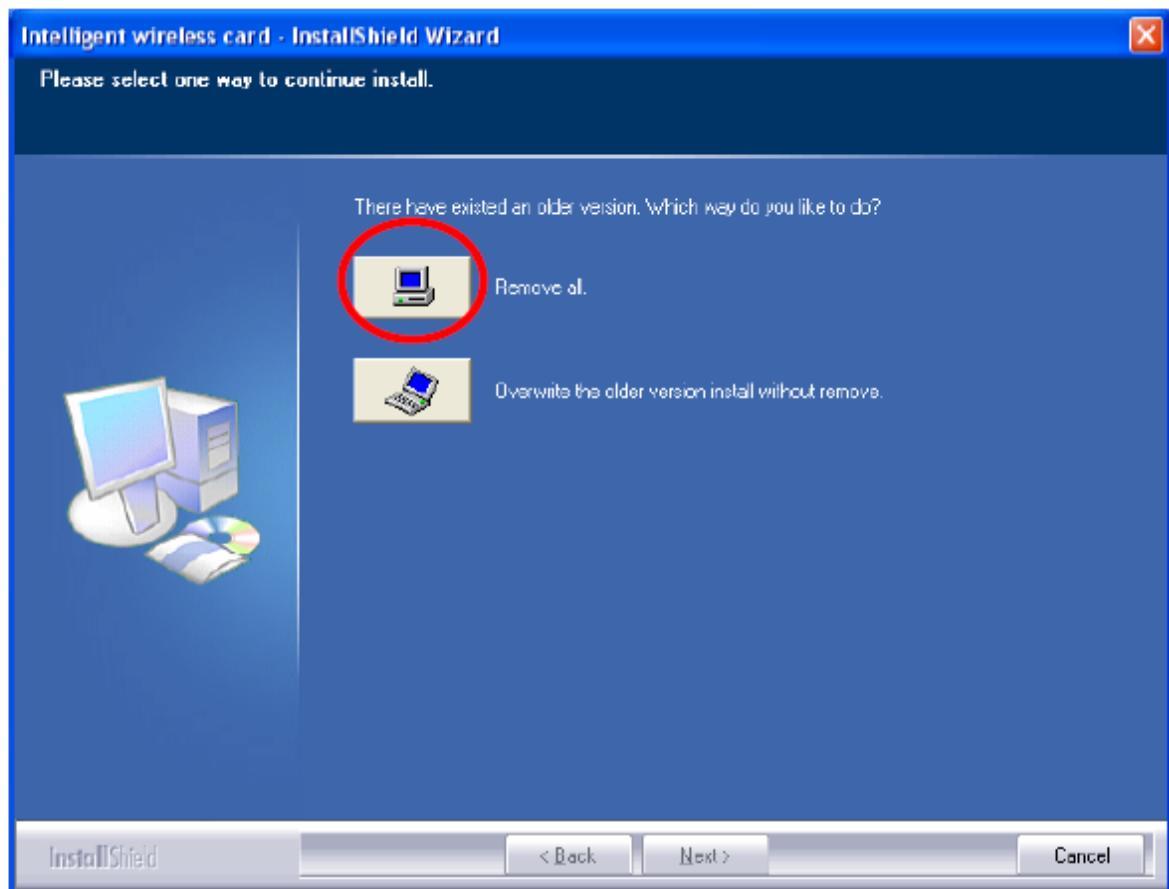
3. Click **Yes** to complete remove the selected application and all of its features.

4. Select **"Yes, I want to restart my computer now"** and then click **Finish** to complete the uninstallation.