

**802.11b/g/n 1T1R Combo Card**

**MT7630E**

**User's Manual**

## **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.

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.

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.

### **IMPORTANT NOTE:**

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 5mm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IEEE 802.11b or 802.11g operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

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

- 1) The antenna must be installed such that 5mm is maintained between the antenna and users, and
- 2) The transmitter module may not be co-located with any other transmitter or antenna,
- 3) For all products market in US, OEM has to limit the operation channels in CH1 to CH11 for 2.4G band by supplied firmware programming tool. OEM shall not supply any tool or info to the end-user regarding to Regulatory Domain change.

As long as 3 conditions 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 (for example, digital device emissions, PC peripheral requirements, etc.).

**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**

This transmitter module is authorized only for use in device where the antenna may be installed such that 5mm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: "Contains [FCC ID: RAS-MT7630E](#)

**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.

## 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

This device has been designed to operate with an antenna having a maximum gain of 3.17dBi. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the EIRP is not more than required for successful communication.

### **IMPORTANT NOTE:**

#### **IC Radiation Exposure Statement:**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 5mm between the radiator & your body.

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

1. The antenna must be installed such that 5mm is maintained between the antenna and users, and
2. The transmitter module may not be co-located with any other transmitter or antenna,
3. For all products market in CANADA, OEM has to limit the operation channels in CH1 to CH11 for 2.4GHz band by supplied firmware programming tool. OEM shall not supply any tool or info to the end-user regarding to Regulatory Domain change.

As long as 3 conditions 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 (for example, digital device emissions, PC peripheral requirements, etc.).

**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 IC authorization is no longer considered valid and the IC 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 IC authorization.

#### **End Product Labeling**

The final end product must be labeled in a visible area with the following: "Contains TX IC : [10627A-MT7630E](#)".

**Manual Information That Must be Included**

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.

## Europe Statement

## 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。

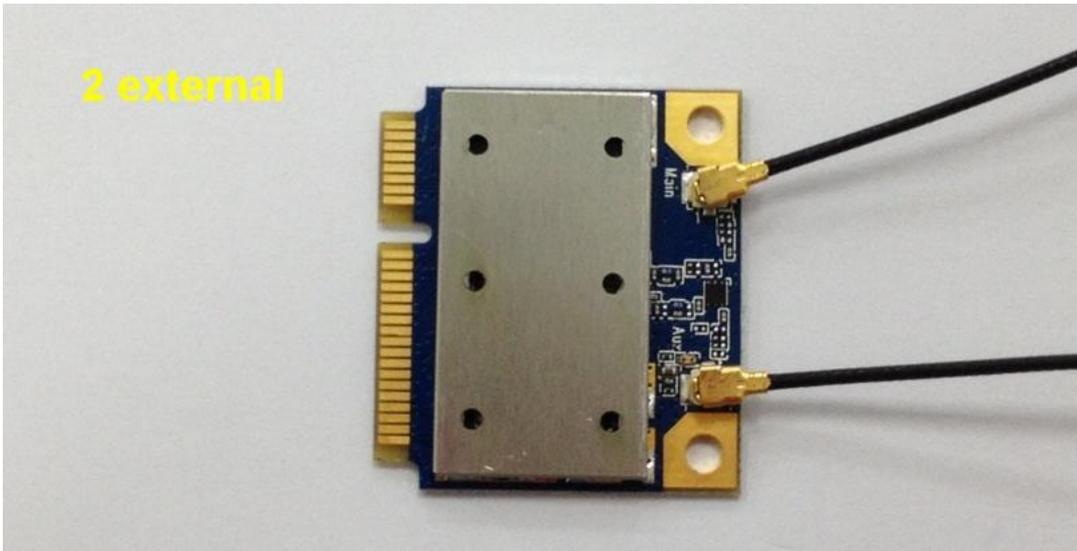
低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

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」

## Hardware Quick Installation Guide

Installing the **802.11b/g/n Combo Card (Wireless PCI Express Minicard Module)**

1. Power down the computer.
2. Plug the **802.11b/g/n Combo Card** to motherboard minicard slot
3. Connect 2 external antennas used I-PEX connector for WiFi antenna.
4. Power on the computer.



Un-installing the **802.11b/g/n Combo Card (Wireless PCI Express Minicard Module)**

1. Power down the computer
2. Removed 2 external WiFi antennas from the **802.11b/g/n Combo Card**
3. Carefully removed the **802.11b/g/n Combo Card** from the motherboard minicard slot.
4. Power on the computer.

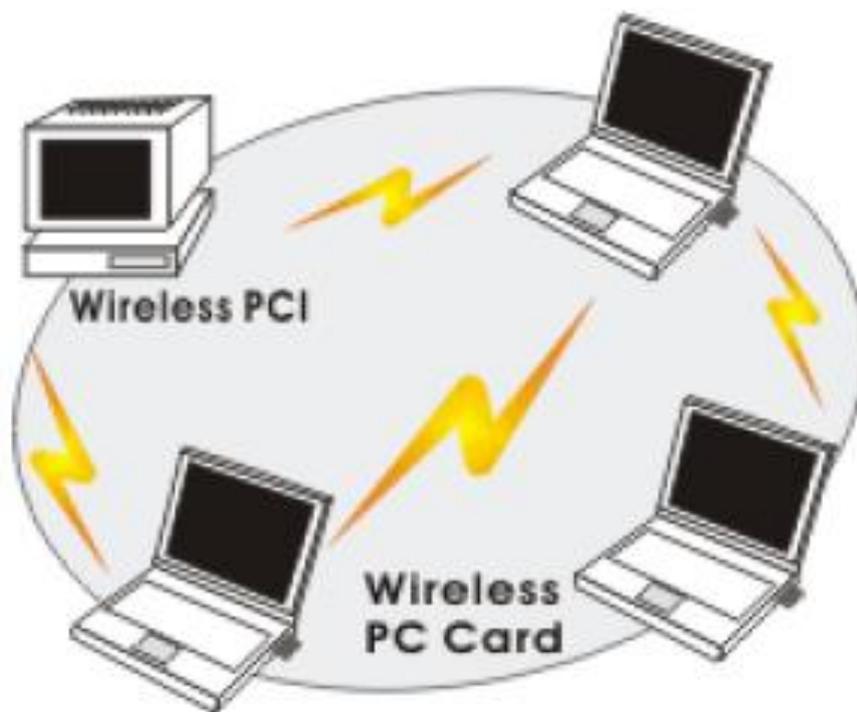
## INTRODUCTION

The **802.11b/g/n 1T1R Combo 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.

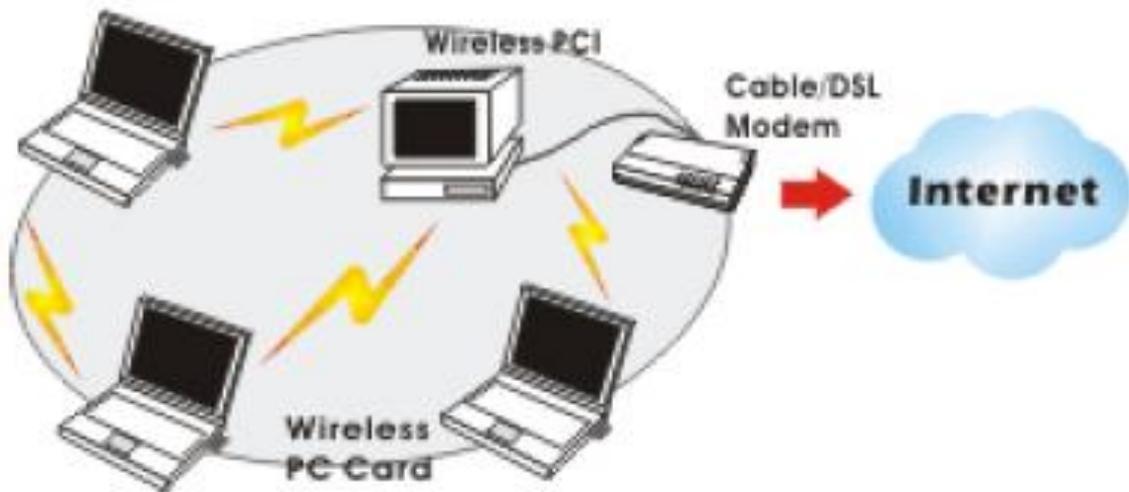
### Wireless Network Options

#### The Peer-to-Peer Network

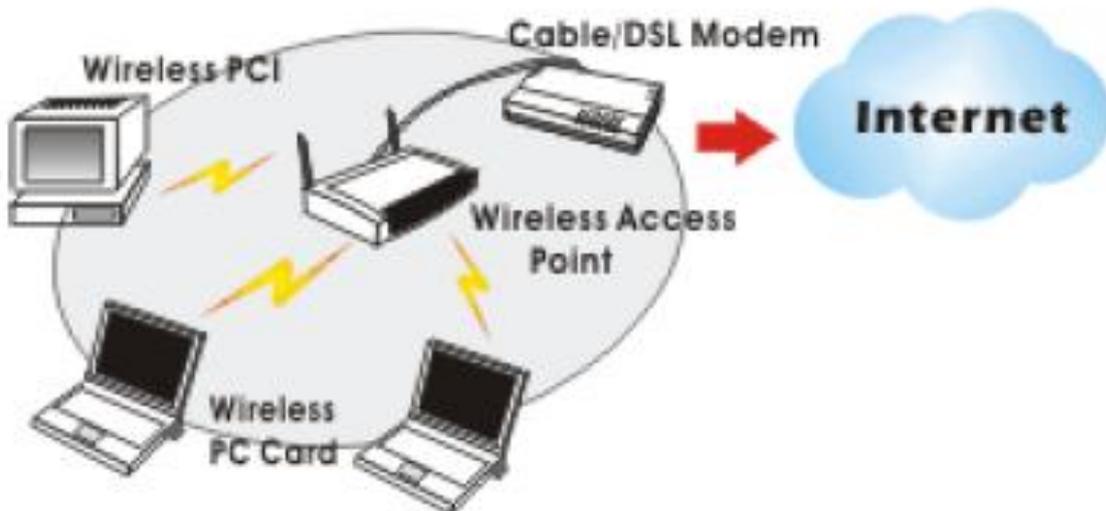
This network installation lets you set a small wireless workgroup easily and quickly. Equipped with wireless PC Cards or wireless PCI, you can share files and printers between each PC and laptop.



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.



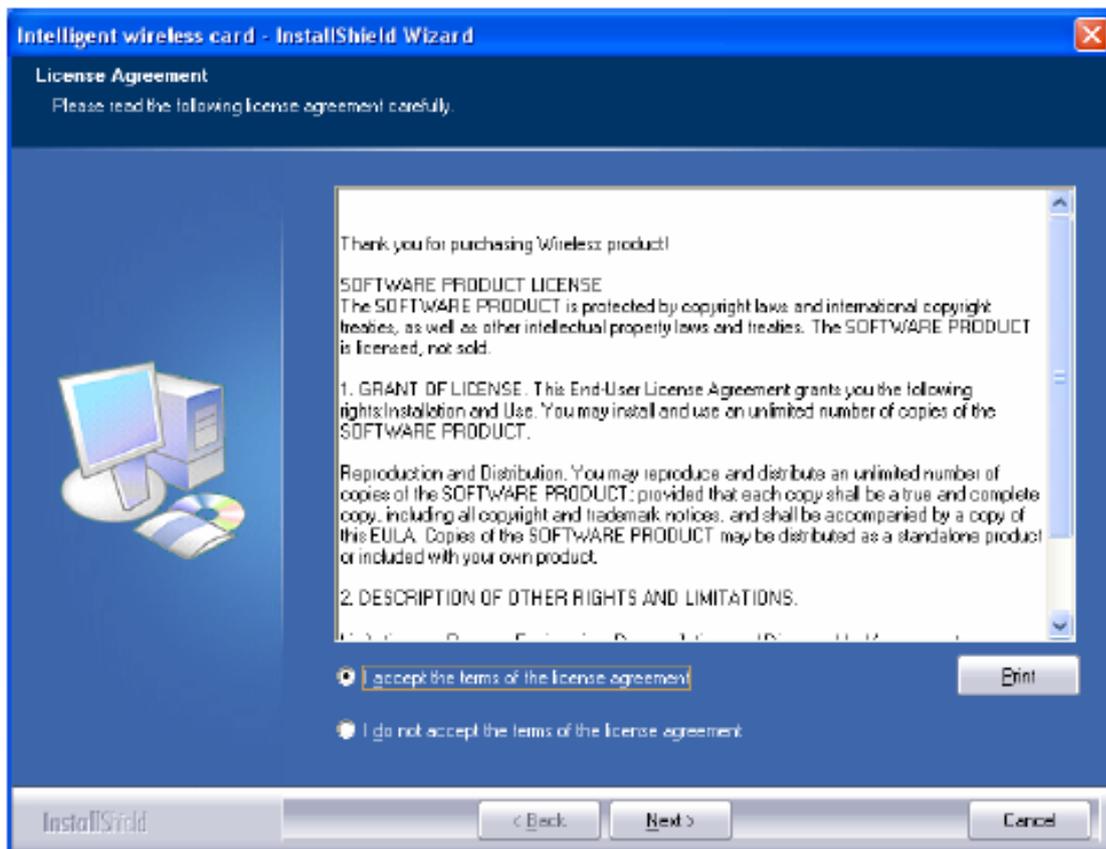
## SOFTWARE INSTALLATION

### Install the device

1. Make sure the computer is turned off. Remove the expansion slot cover from the computer.
2. Carefully slide the [802.11b/g/n 1T1R Combo 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.

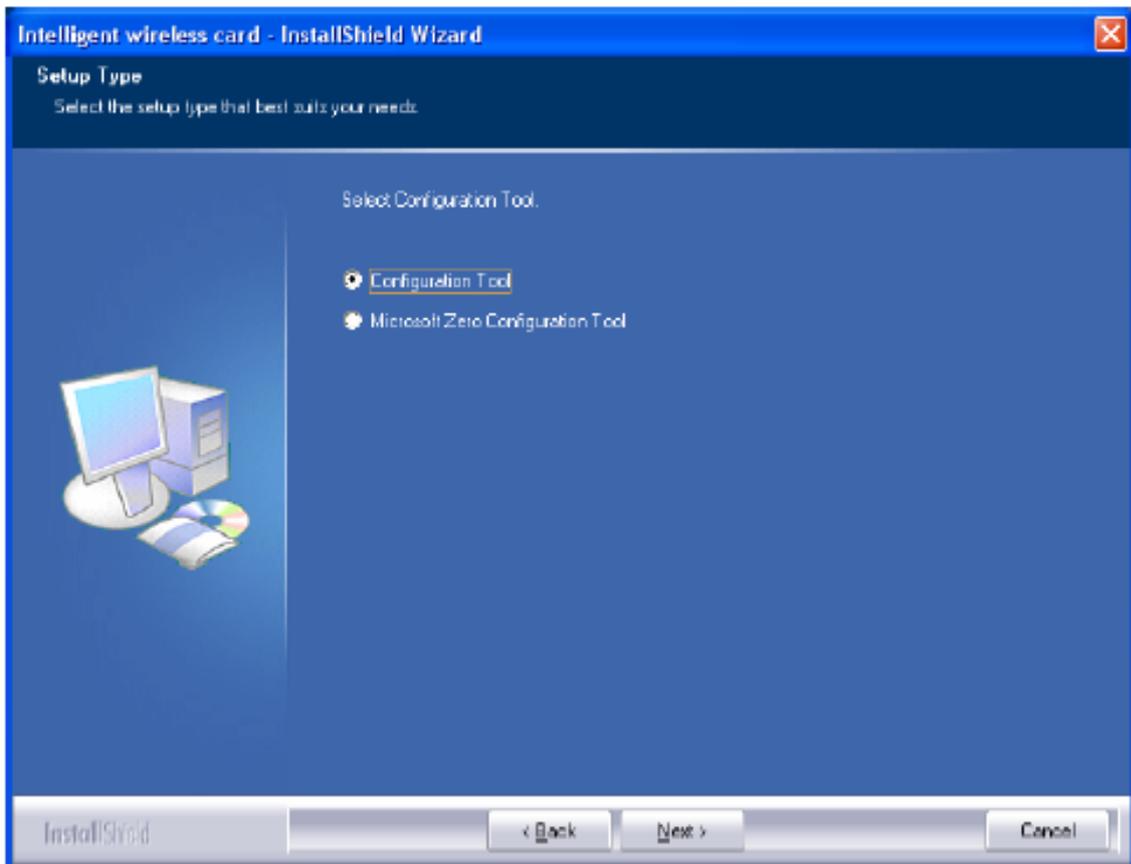
### Install the Driver & Utility

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.

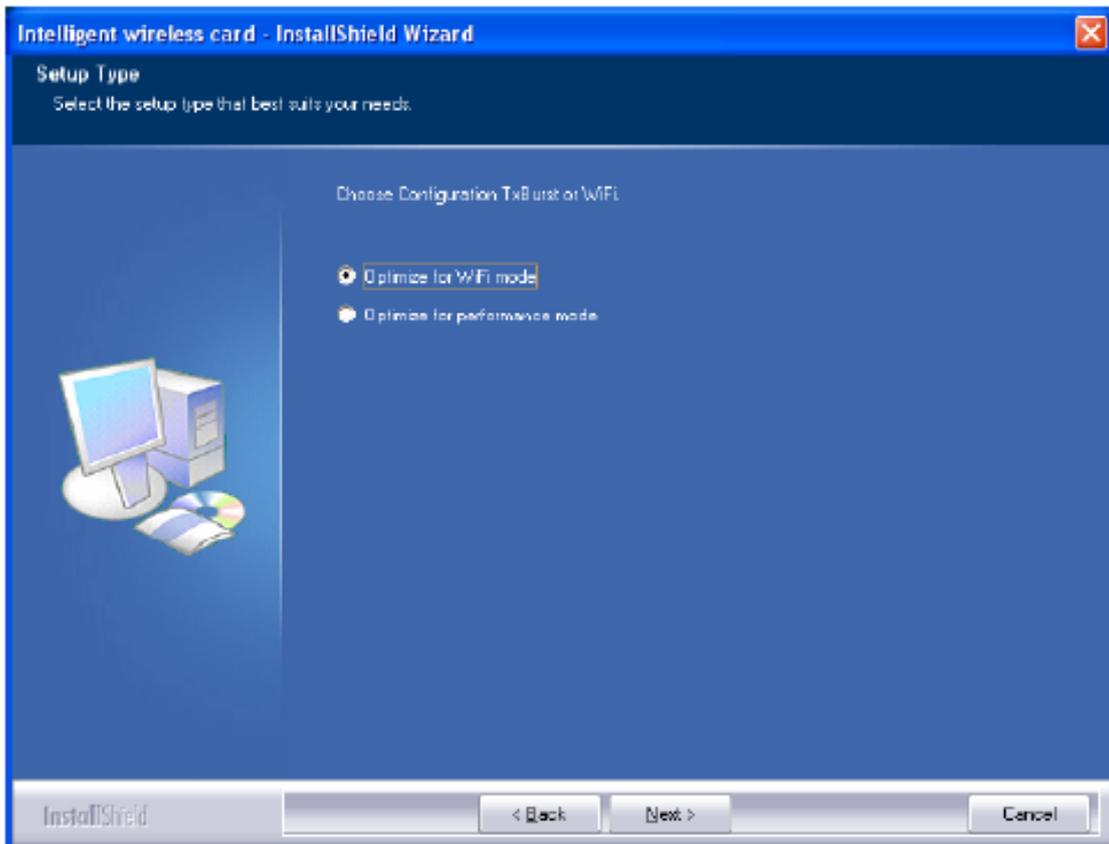


3. Select the check box to choose a Configuration Tool from the listed two choices.
  - Configuration Tool: Choose to use our configuration utility.
  - Microsoft Zero Configuration Tool: Choose to use Windows XP's built-in Zero Configuration Utility (ZCU).

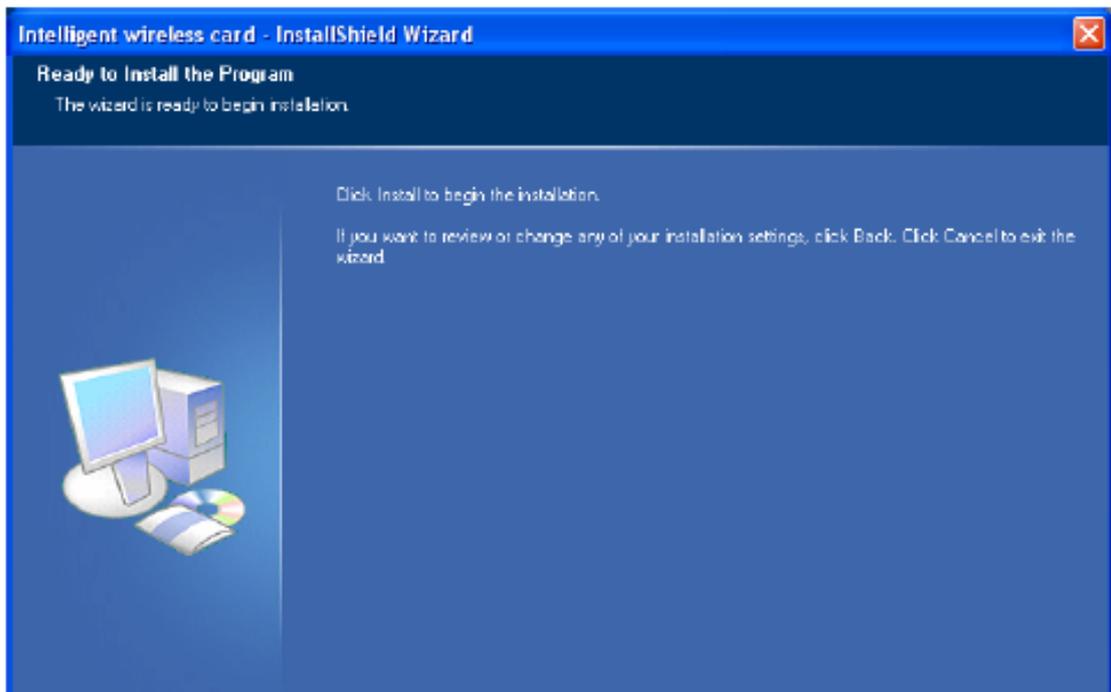
Click Next to continue.



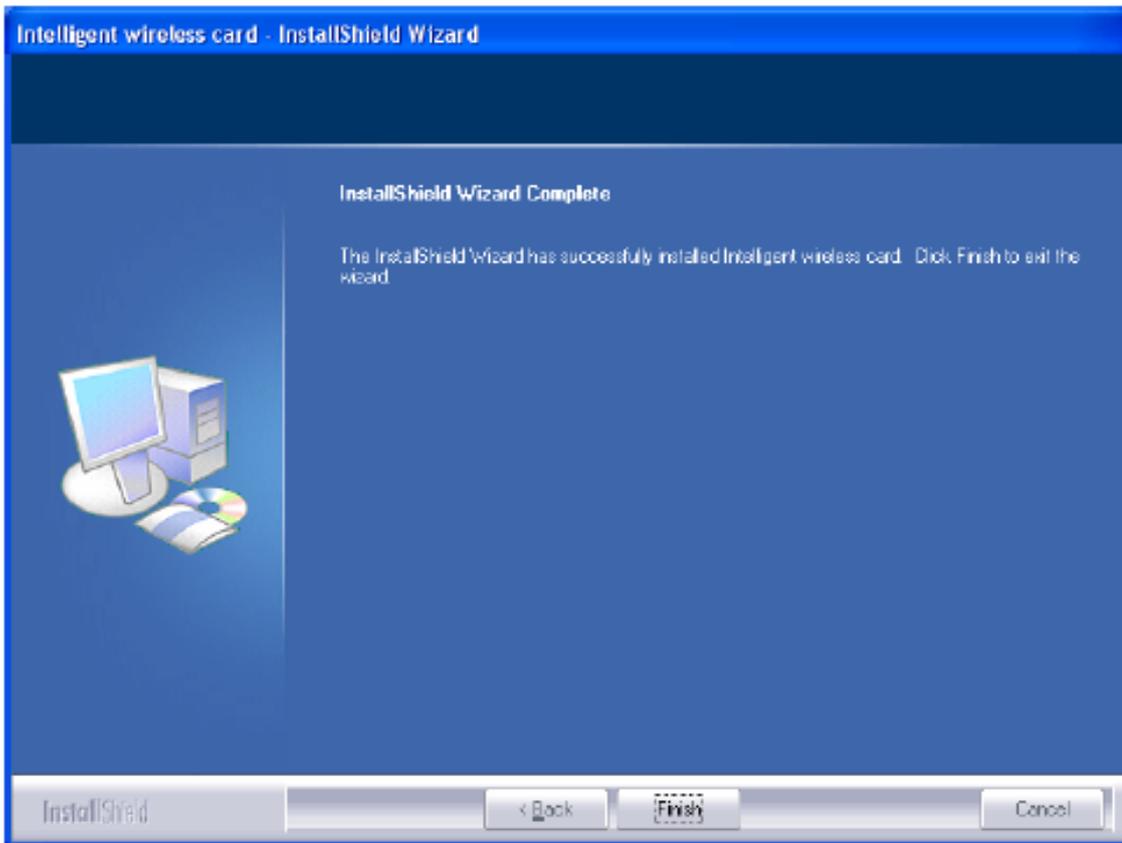
4. There are two modes for you to choose in this screen, either choose WiFi mode or performance mode (TxBurst mode). This mode selection screen is set for the default mode shown in the utility screen, you can still change its mode later in the utility screen. Click Next to continue.



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.

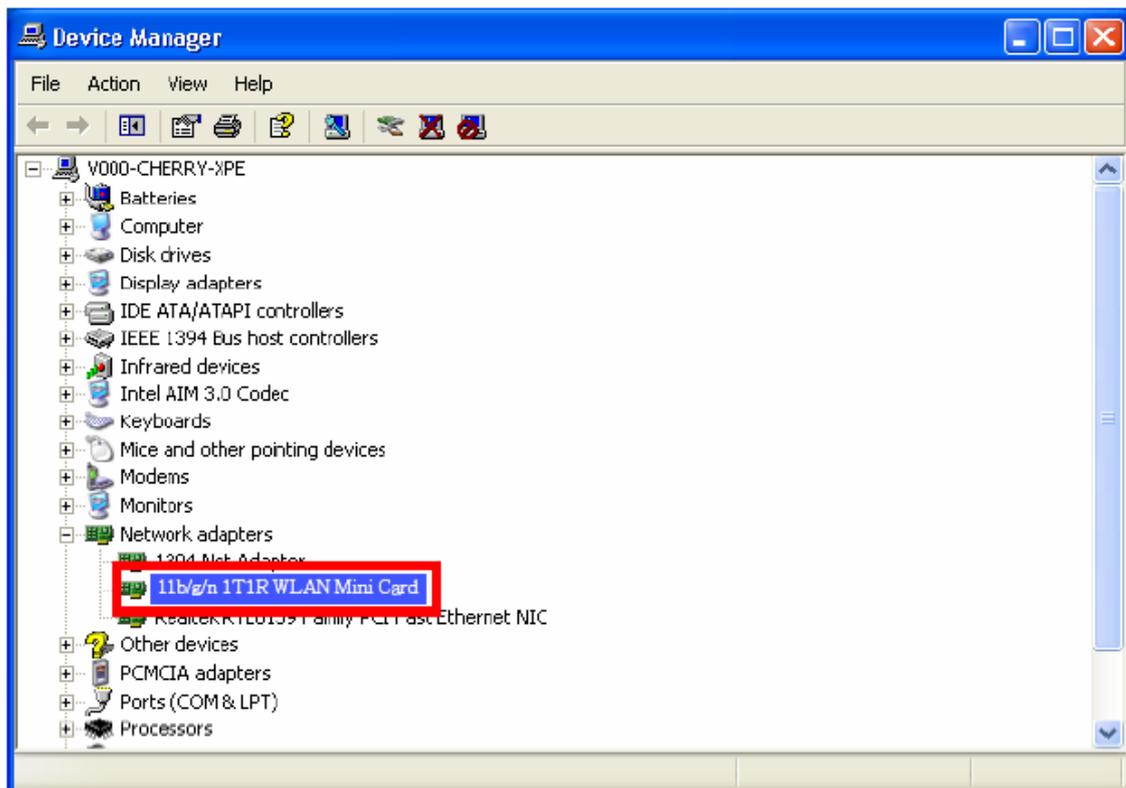


## HARDWARE INSTALLATION

### 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 Card is listed here, it means that your device is properly installed and enabled.

Mediatek MT7630E 802.11bgn Wi-Fi Adapter

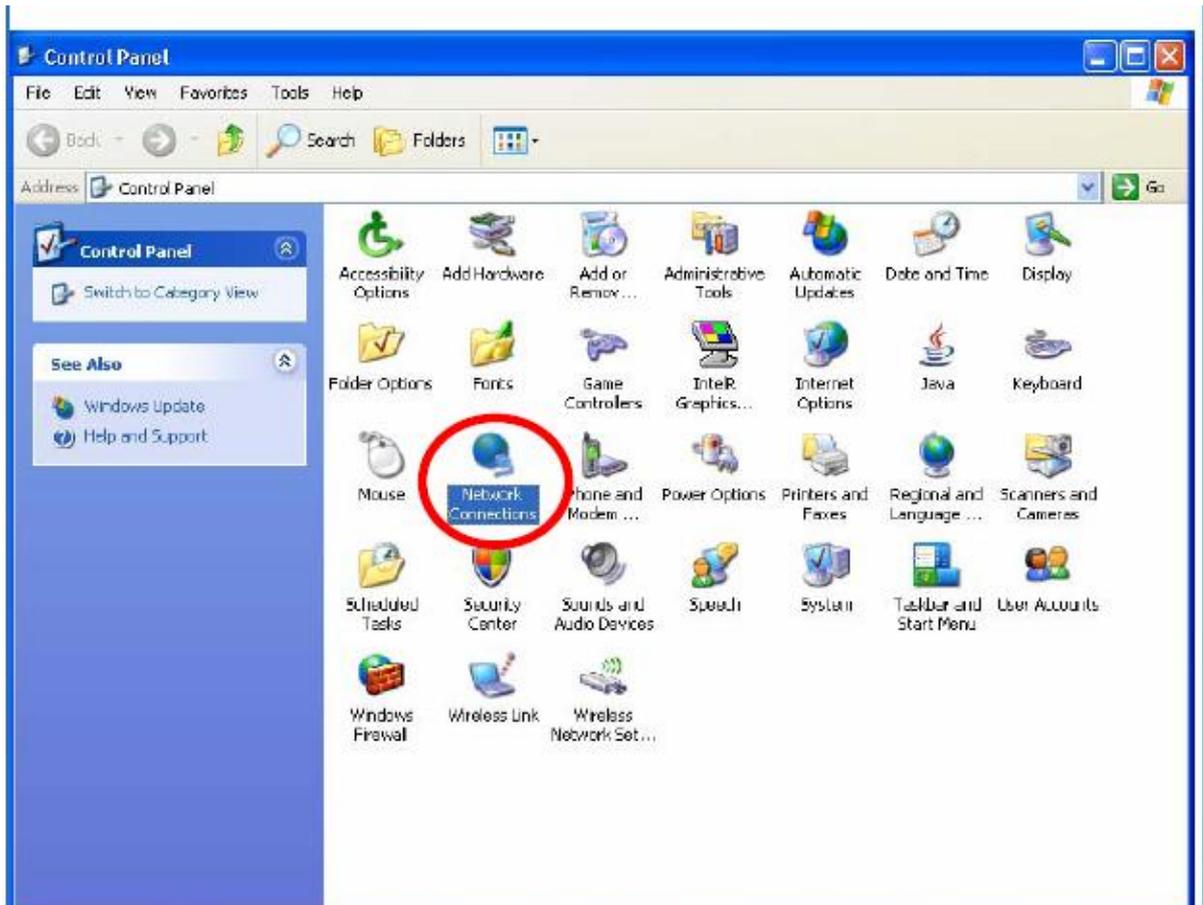


## NETWORK CONNECTION

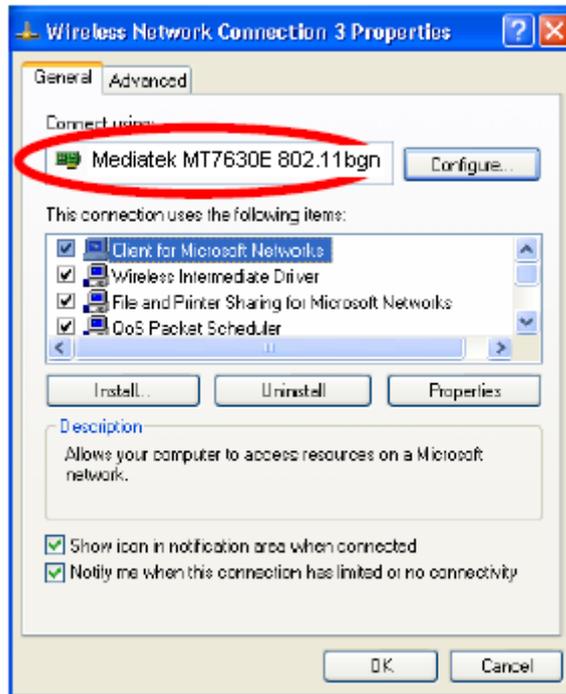
Once the device driver is well installed, a network setting described in the following should be also established.

### In Windows 2000/ XP

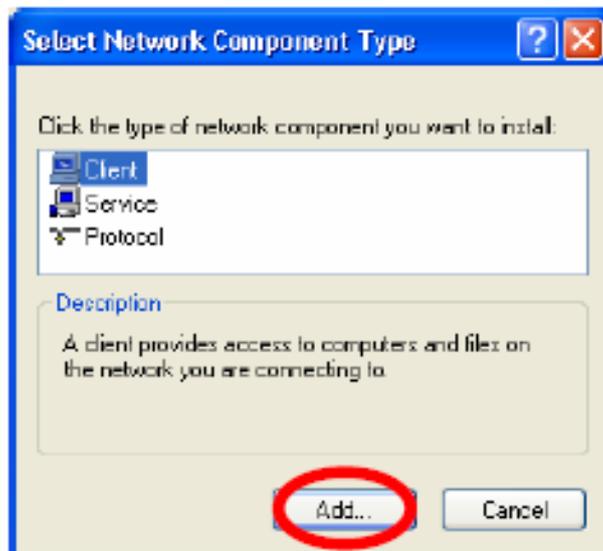
1. (In Windows 2000) Go to Start → Settings → Control Panel → Network and Dial-up Connections  
Local Area Connection → Properties.  
(In Windows XP) Go to Start → Control Panel → Network and Internet Connections → Network  
Connections → Wireless Network Connection → Properties.



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.

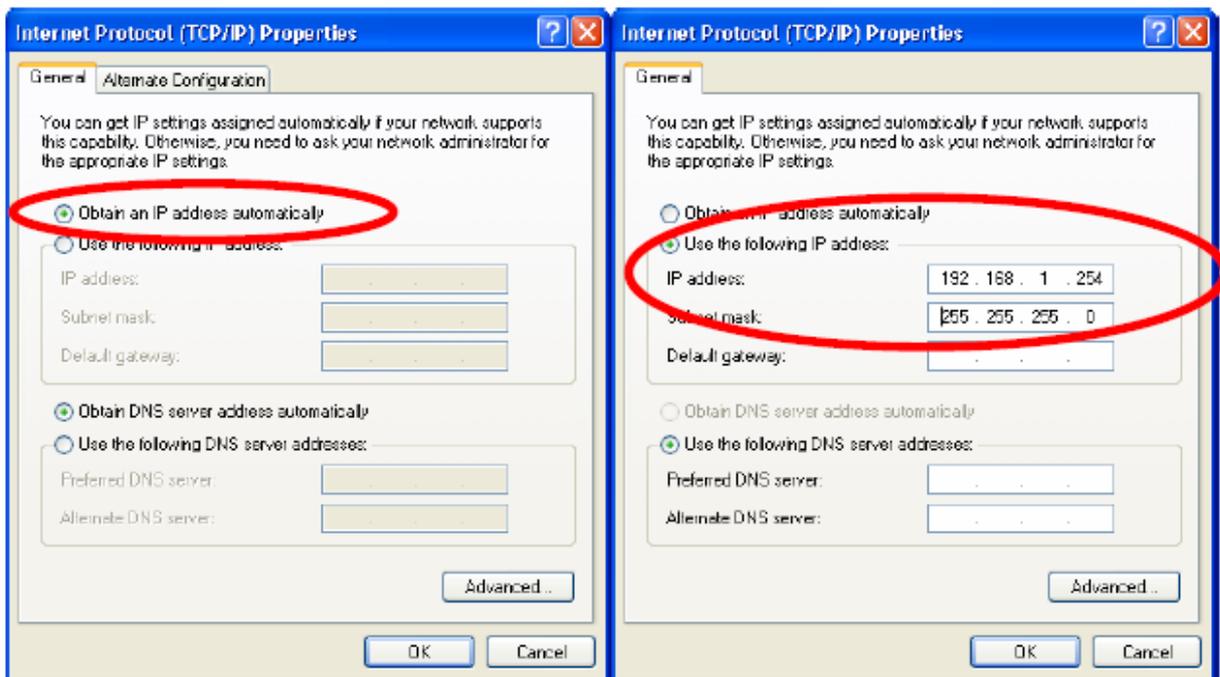


4. For making your computer visible on the network, make sure you have installed File and Printer Sharing for Microsoft Networks.

## 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.

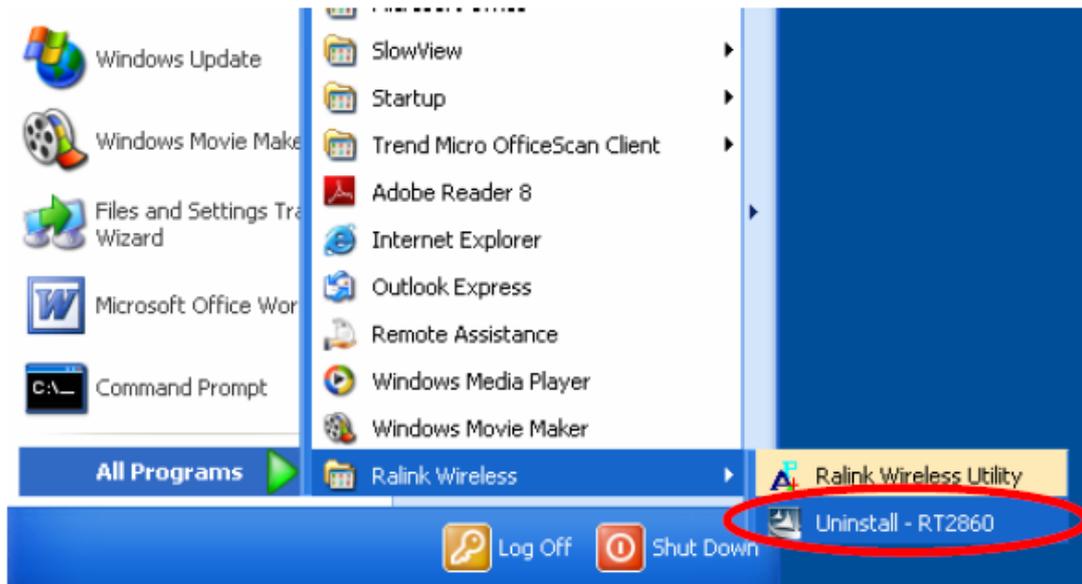
1. To configure a dynamic IP address (i.e. if your broadband Router has the DHCP technology), check the Obtain an IP Address Automatically option.
2. To configure a fixed IP address (if you broadband Router is not DHCP supported, or when you need to assign a static IP address), check the Use the following 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.



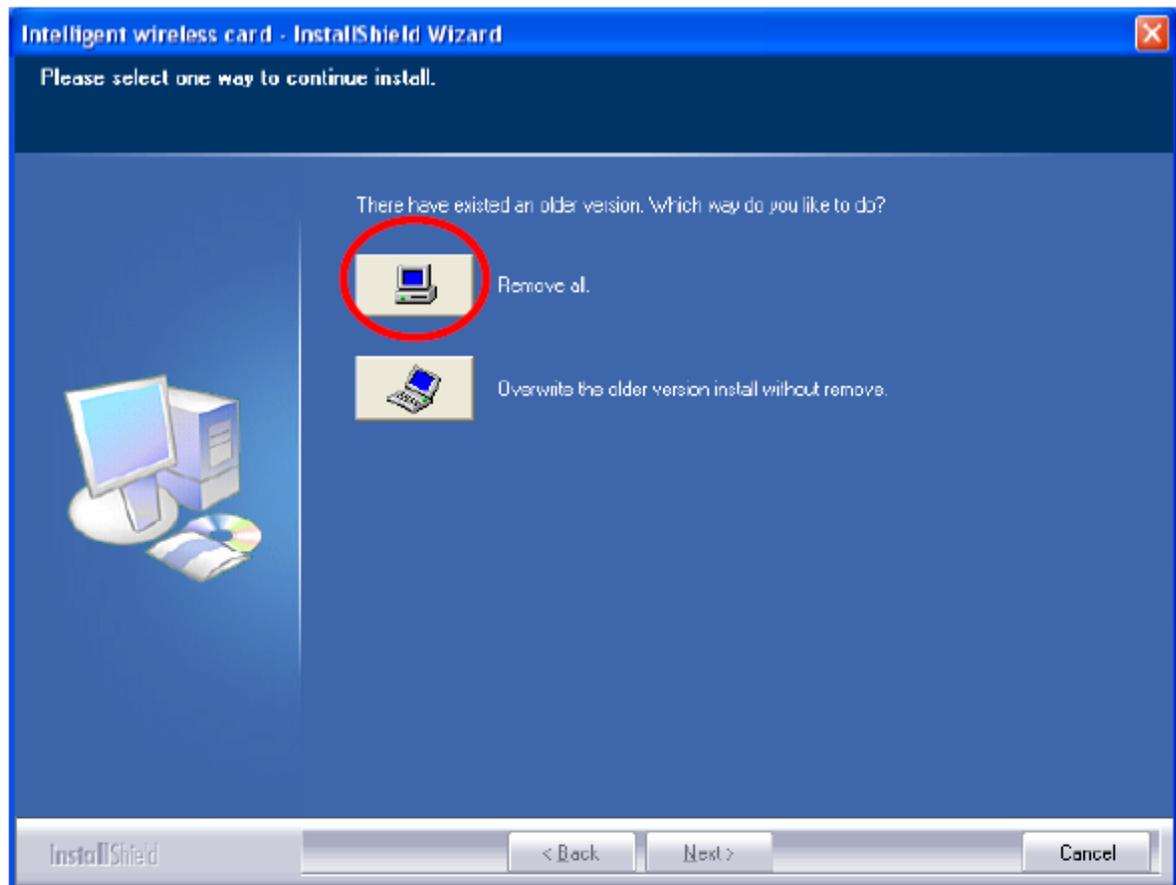
# UNINSTALLATION

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.

