



# QP-W24HPUSB

**WINDOWS 7**  
**Wireless LAN USB Adaptor**

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# USING THIS DOCUMENT

This document provides detailed user guidelines for Wireless LAN USB Adapter operation and setting-up. Though every effort has been made to ensure that this document is up-to-date and accurate, more information may have become available subsequent to the production of this guide.

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# Chapter 1 Introduction

Thank you for purchasing Wireless LAN USB Adapter. Wireless LAN USB Adapter is a perfect combination of both performance and cost-effective product introduced. It is sincerely hoped that you can enjoy the wireless world through this solidly profiled wireless adapter.

It provides a full solution of all the IEEE 802.11 b/g protocols that pass the Wi-Fi tests and are compatible with all the wireless products with Wi-Fi logo. If you have a Wireless LAN USB Adapter on hand, it means you can connect to the wireless world without any difficulty.

It also provides all the data rates in the IEEE 802.11 b/g standards, with both short and long preambles to ensure the compatibility of legacy wireless products and new ones, saving the panic works for end users to find compatible products.

Since the security issue has become one of the most important one in the wireless society, it provides you with the full security coverage from the 64/128bits WEP encryptions, second generation WPA-PSK encryption, to the most advanced WPA2-AES encryption. WPA2 is the latest security standard currently approved by Wi-Fi standards.

## Chapter 2 Specifications

### Host system connections

Interface	USB 2.0 and UPnP
USB data transfer rate	USB high speed (480Mbps), and full speed (12Mbps)

### Wireless LAN (WLAN) environment connections

WLAN Interface	Multimode features
	Fully complies with IEEE 802.11 b/g specifications
WLAN transfer rate	802.11g: 54, 48, 36, 24, 18, 12, 9 & 6Mbps
	802.11b: 11, 5.5, 2 and 1 Mbps with auto-rate fall back
WLAN Frequency Band	2.400GHz ~ 2.484 GHz
Operation Channel	2.412~2.462GHz (Canada, FCC) / 11 Channels 2.412~2.484GHz (Japan, TELEC) / 14 Channels 2.412~2.472GHz (Euro, ETSI) / 13 Channels
Coverage Area	Indoors:100ft with straight path
Compatibility	Fully compatible to IEEE 802.11 b/g devices
Security	64/128bit WEP WPA(TKIP with IEEE 802.1x) WPA2(AES with IEEE 802.1x)
Antenna	One detachable 5dbi antenna (SMA connector)
LED present (Green/Red light)	On: link is on
	Off: link is off
	Quick blinking: data transition
	Slow blinking with 5 times: scan wireless nodes

### SYSTEM REQUIREMENTS

Windows System: Windows 2000, XP 32/64 bit, Vista 32/64 bit, WIN7 32/64  
PCs must have a device driver installed. It allows you to communicate with WLAN Mini USB Adapter.

### PACKAGE CONTENTS

1. Wireless LAN USB Adapter
2. Installation Software CD
3. User Manual
4. 5dbi Antenna
5. USB Cable

## Chapter 3 Installation/ Uninstallation

Warning! Do not cover or block the airflow to the adapter. The adapter will reach a high temperature during use.

### 3.1 Installation

Before you proceed with the installation, please notice the following descriptions.

Note1: The following installation was operated under Windows Win7. (Procedures are similar for Windows 98SE/Me/2000/XP/Vista.)

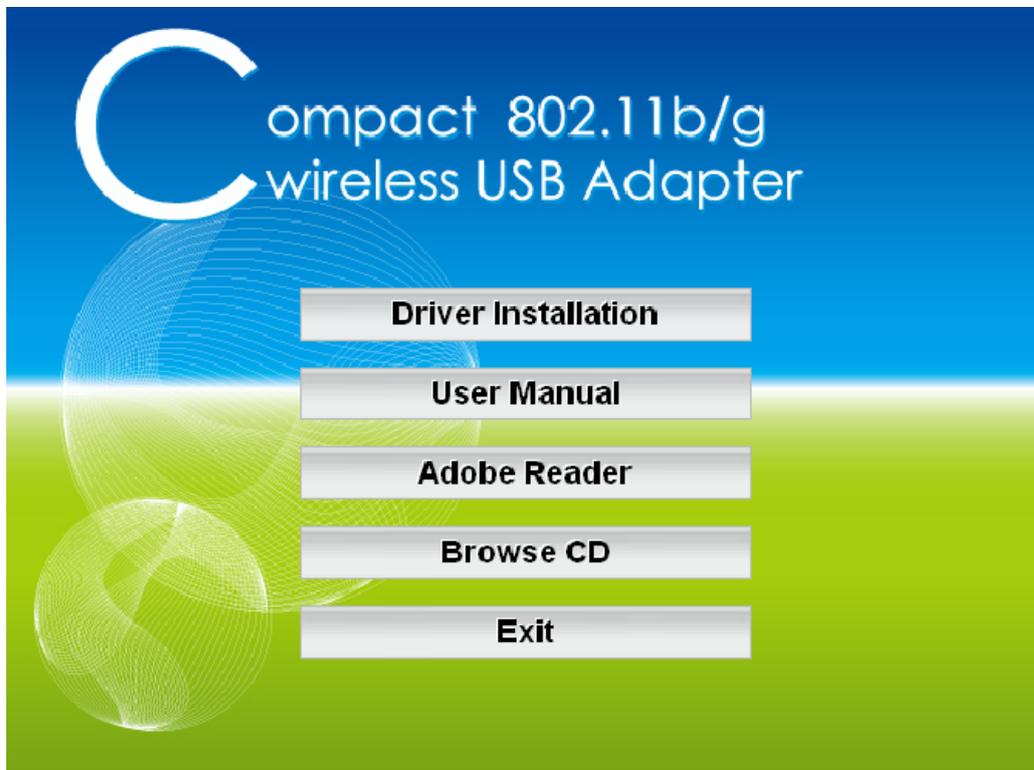
Note2: If you have installed the WLAN USB driver & utility before, please uninstall the old version first.

1. Do not plug the wireless LAN USB adapter into your computer USB port before installing the software program. Insert the software program CD , then auto installation window pops up on following:

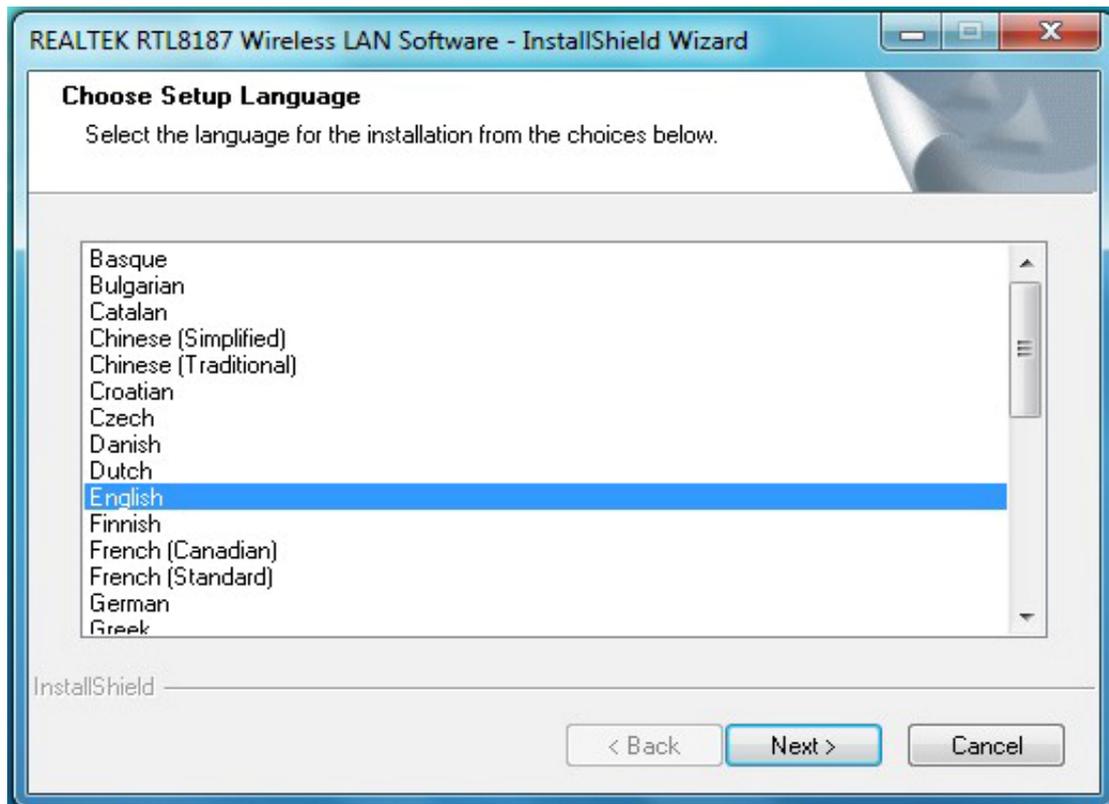
2. While the following screen pops out, click Driver Installation



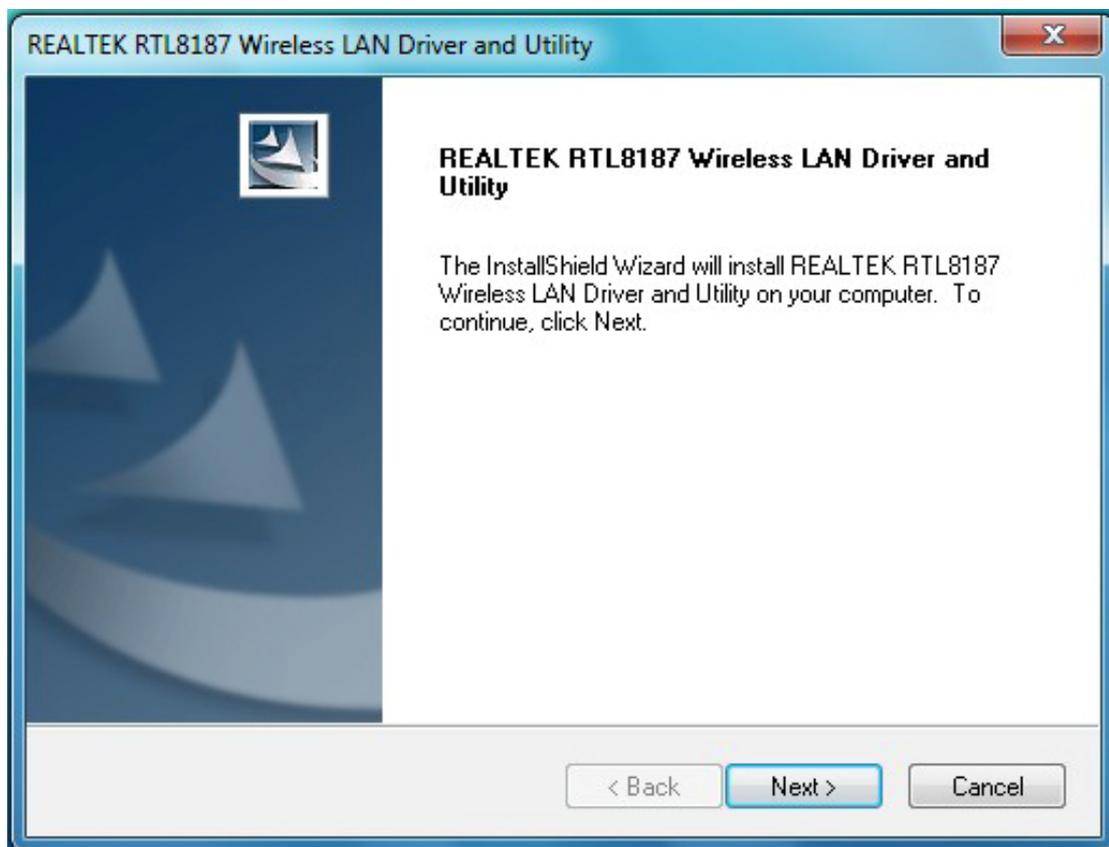
3. Click Driver Installation



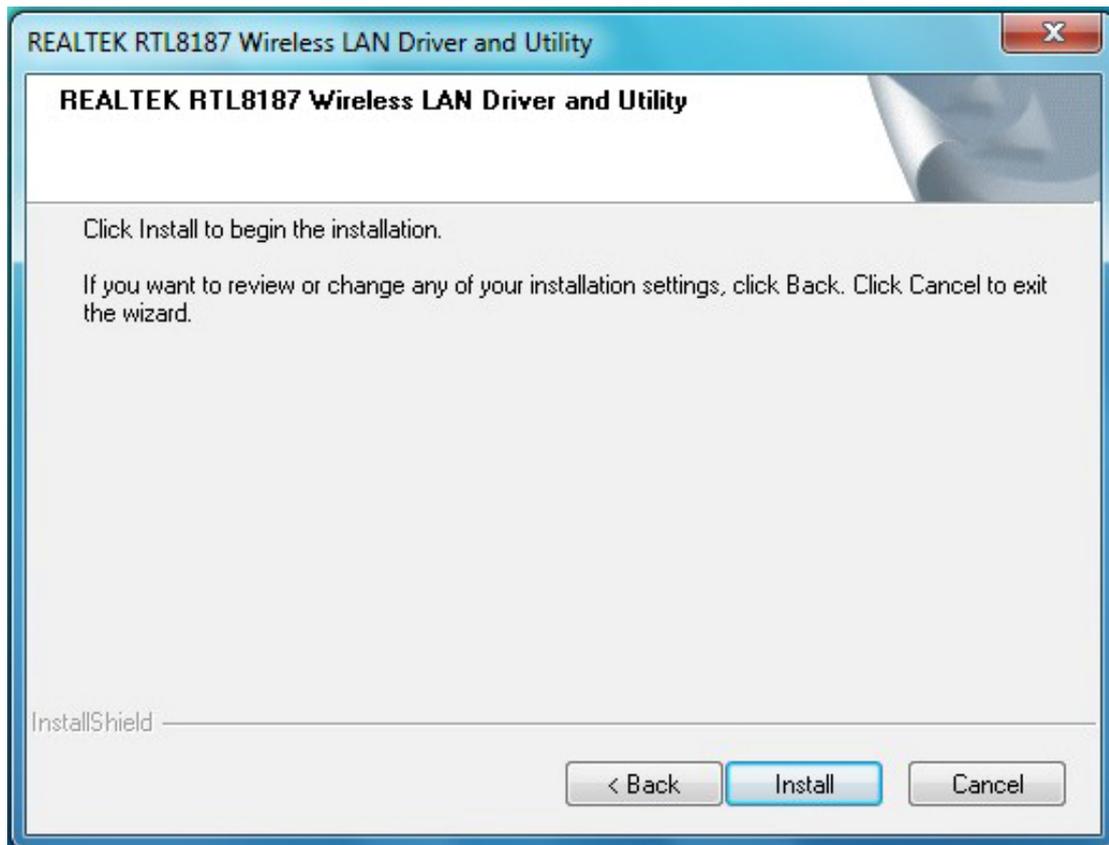
4. Choose a set up language. Click Next to process the installation.



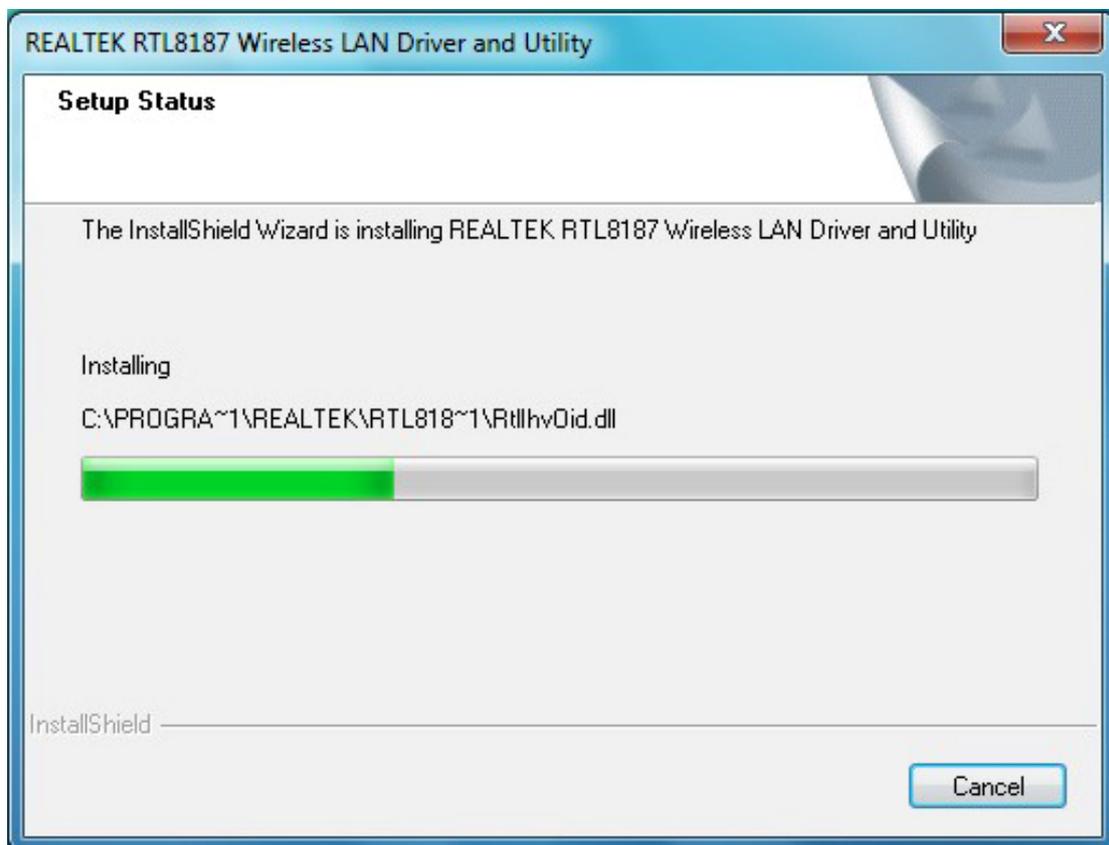
5. Click Next



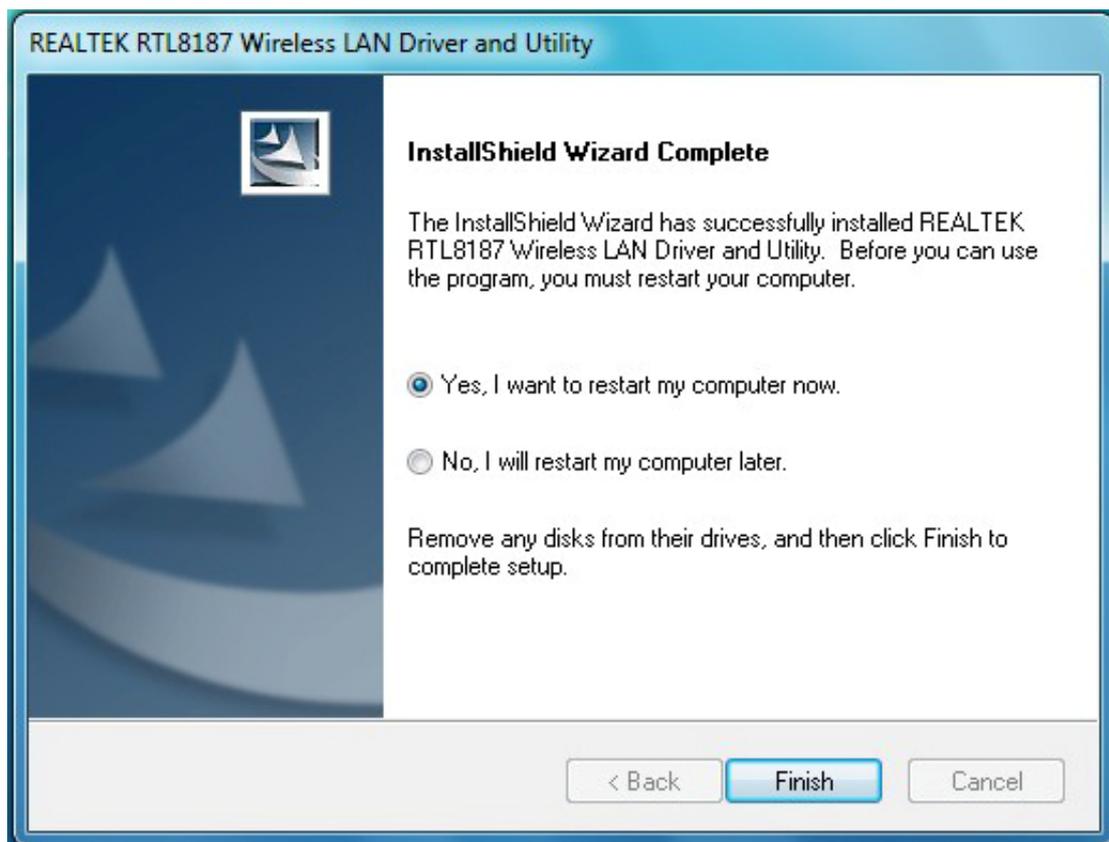
6. Click **Install**



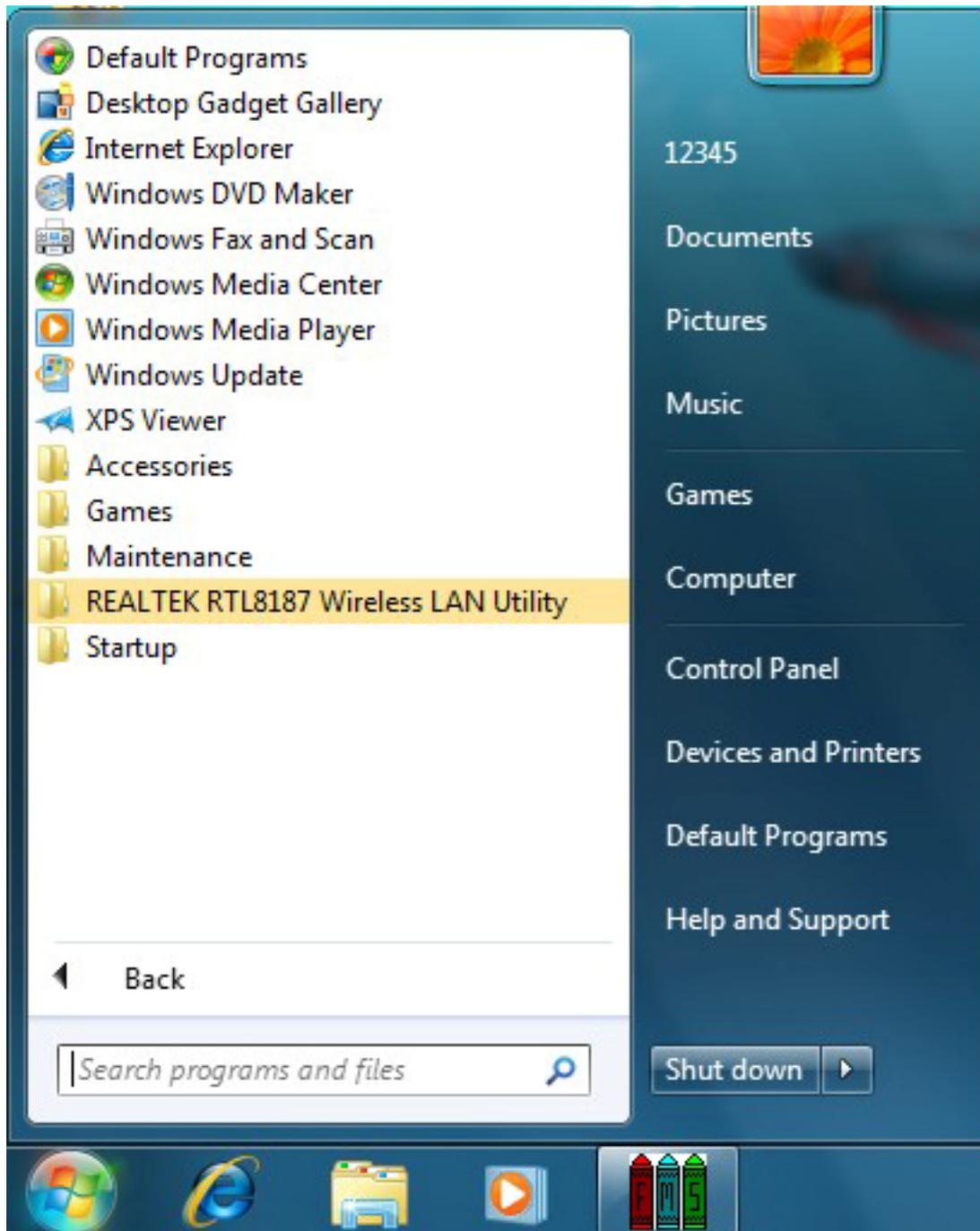
7. The system starts software installation of the WLAN USB adapter.



8. Click **Finish** to complete the installation



9. After clicking **Finish** to complete the installation, under Windows Win7 <ALL Programs> menu, REALTEK USB wireless LAN Utility program installed.

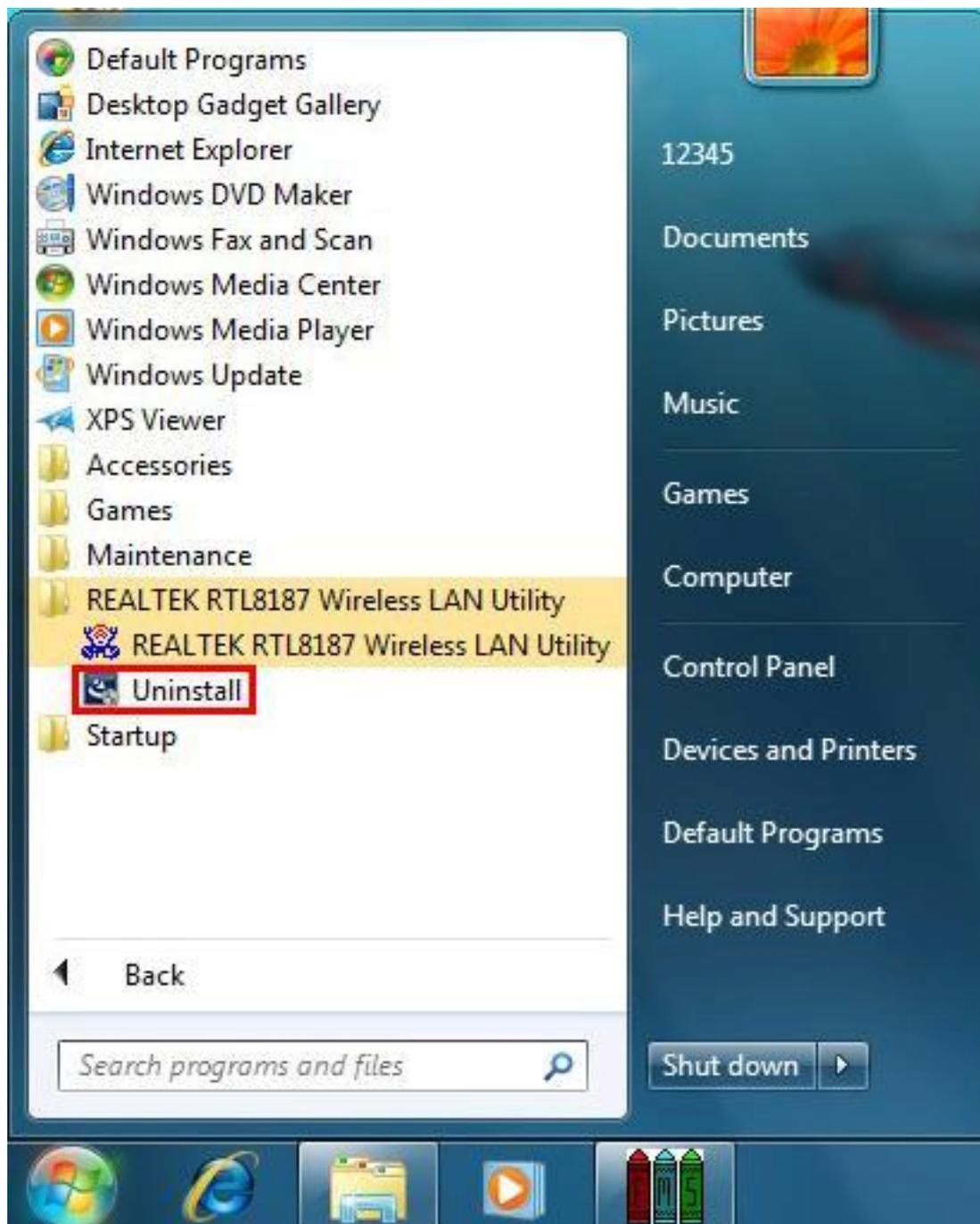


10. Insert the wireless LAN USB adapter into your computer USB port, the computer detected and active the wireless LAN USB adapter automatically.

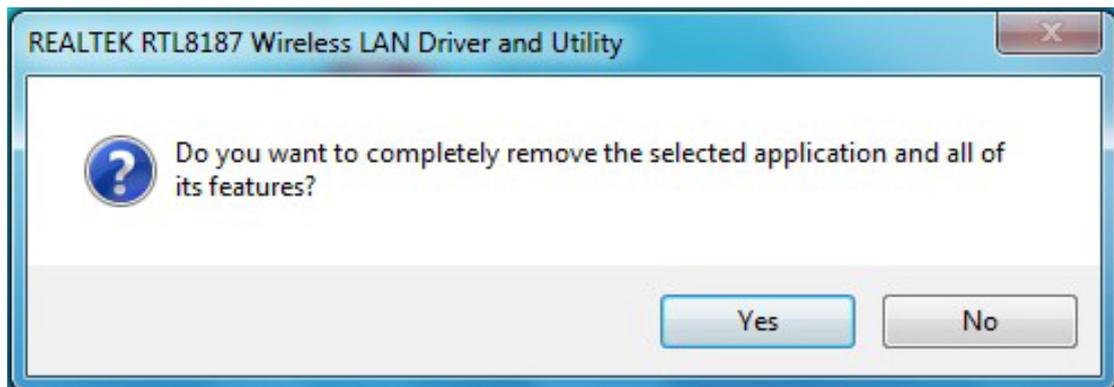
## 3.2 Uninstallation

From “Wireless Network Driver and Utility” or “Control Panel” ”Change or Remove Programs”.

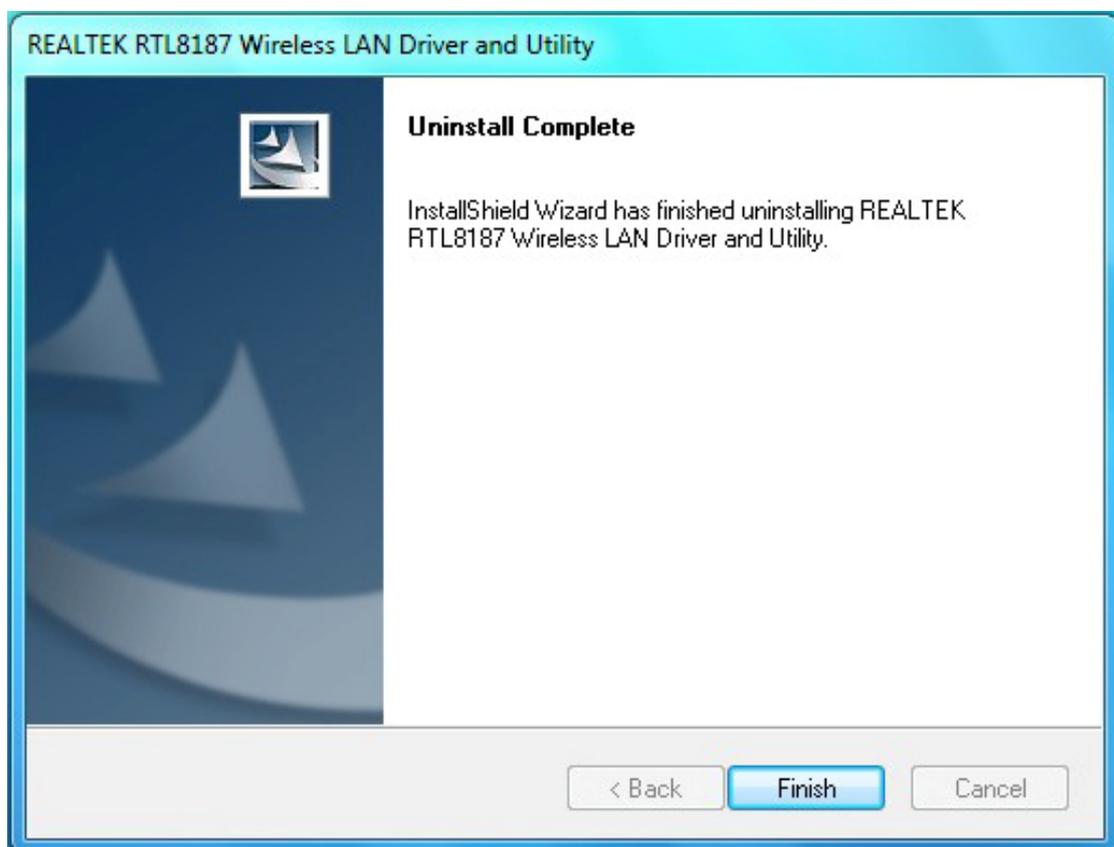
- A. Uninstall the WLAN USB Adapter Driver from “Start” “All Programs” Click “Uninstall”(or “Change/Remove”) to remove Wireless LAN USB Adapter driver.



B. Click “**Yes**” if you want to remove Wireless LAN USB Adapter Driver.

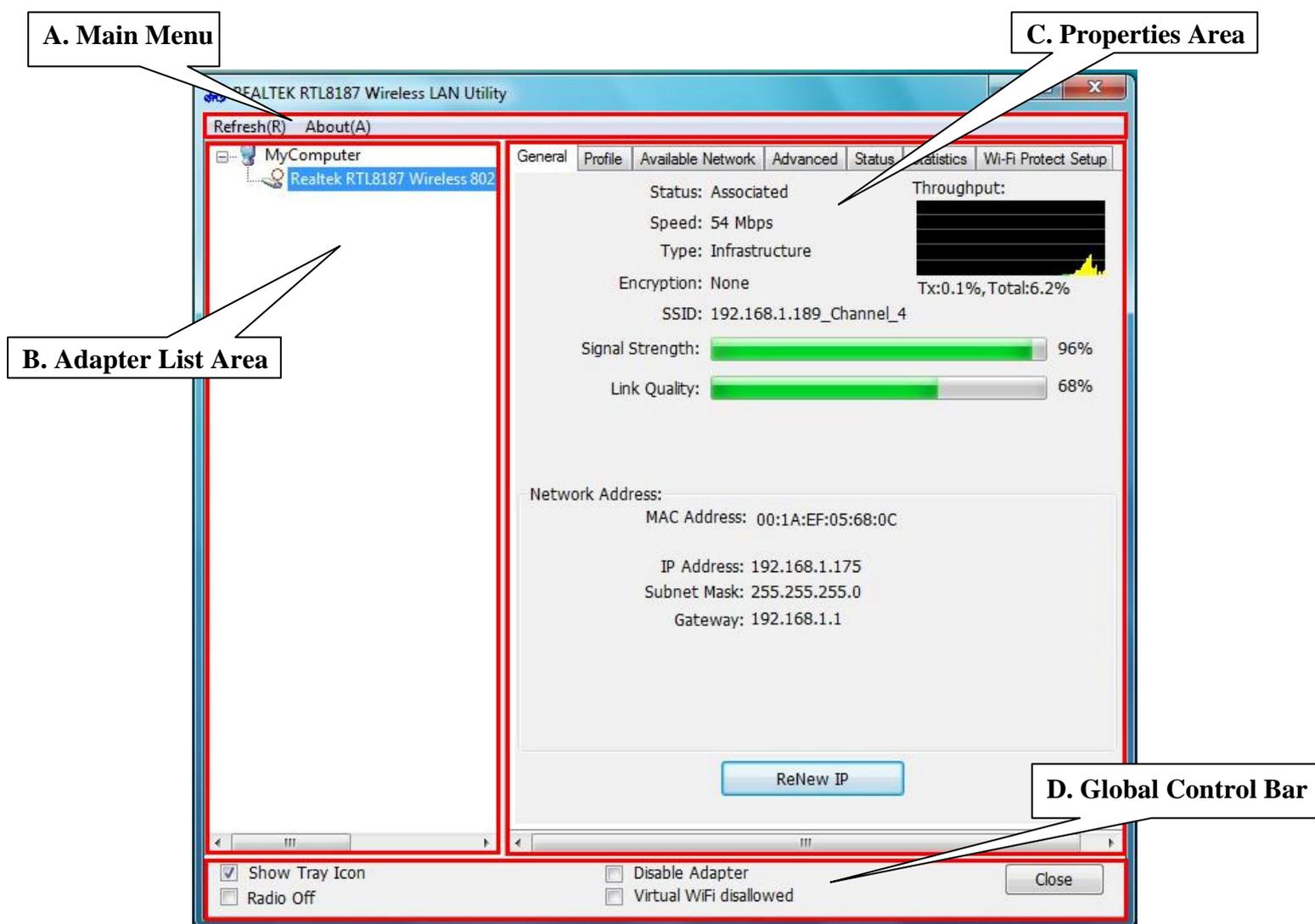


C. Click “**Finish**” to complete the uninstallation



# Chapter 4 Rt WLAN: Wireless LAN Management GUI

## 4.1 Introduction of Main Window



### A. Main Menu

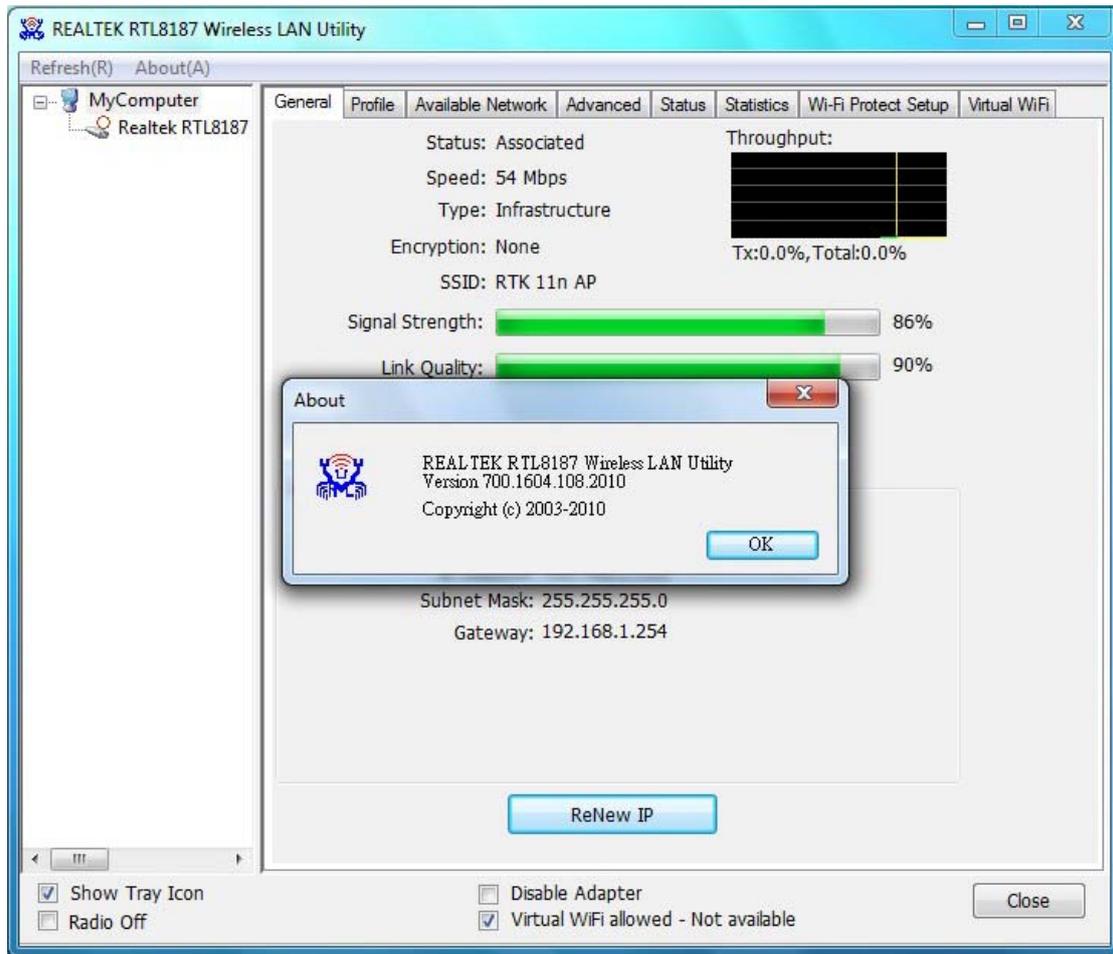
The main menu includes two submenus.

#### 1. Refresh(R)

When clicking the refresh menu, you can update and re-enumerate the contents of adapter list area.

## 2.About(A)

Click the “About” to show the about dialog. The application version and license information are shown in the about dialog.



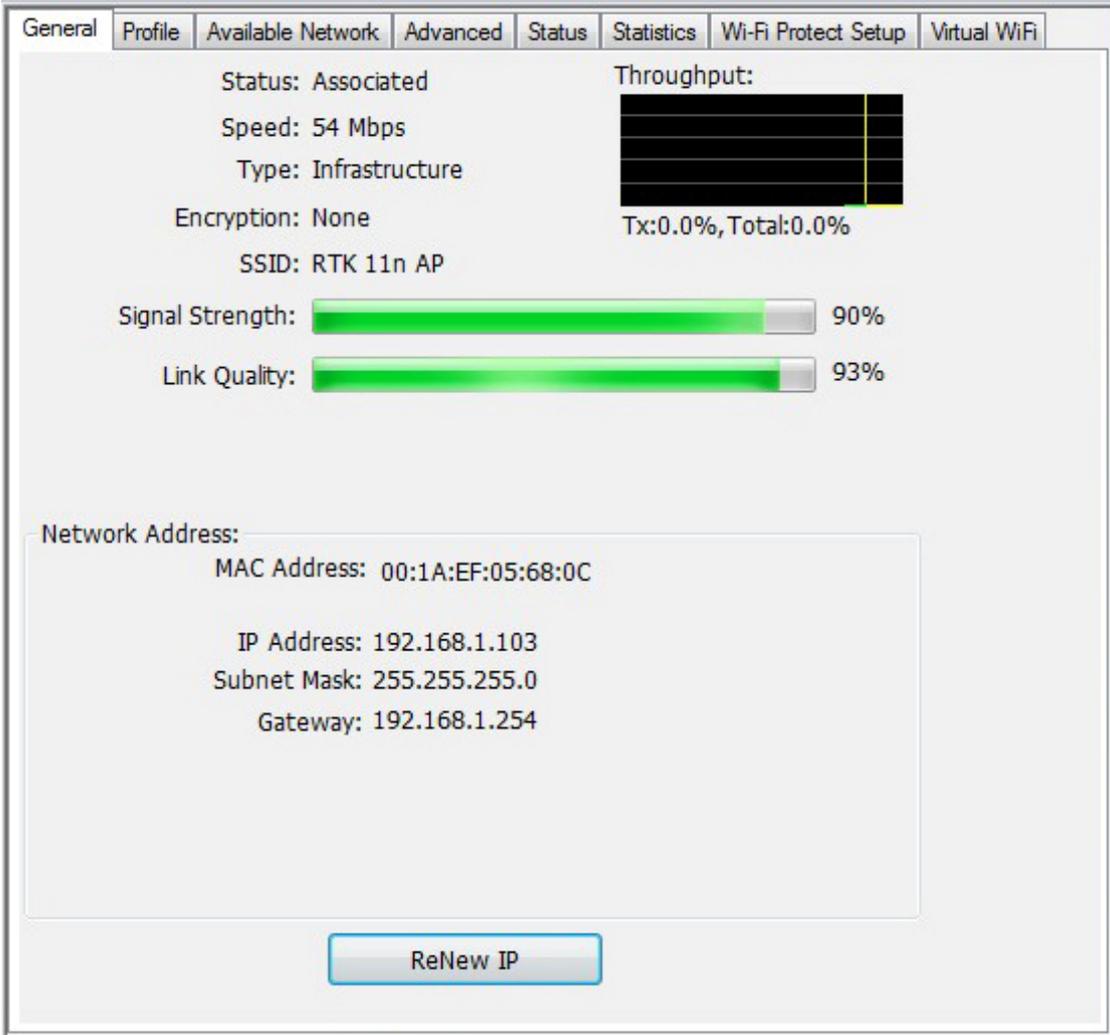
## B. Adapter List Area

All connected adapters on this system with multiple adapter installations are displayed in this area. It is easy for users to change the selected adapter by one click. The contents of properties area are dependant on wireless configuration that the selected adapter is set up. If only single adapter is installed on the system, only one adapter is always selected.



## C. Properties Area

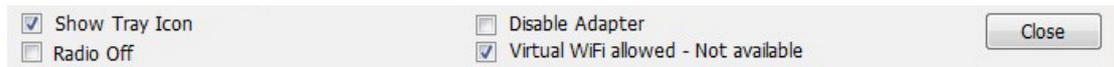
The contents of this area are dependent on current wireless configuration. The more detailed contents in 4.2 Properties Area



The screenshot shows the 'General' tab of the Windows Network Properties dialog box. The status is 'Associated' with a speed of 54 Mbps and infrastructure type. Signal strength is 90% and link quality is 93%. Network address information includes MAC address 00:1A:EF:05:68:0C, IP address 192.168.1.103, subnet mask 255.255.255.0, and gateway 192.168.1.254. A 'ReNew IP' button is visible at the bottom.

Property	Value
Status	Associated
Speed	54 Mbps
Type	Infrastructure
Encryption	None
SSID	RTK 11n AP
Signal Strength	90%
Link Quality	93%
MAC Address	00:1A:EF:05:68:0C
IP Address	192.168.1.103
Subnet Mask	255.255.255.0
Gateway	192.168.1.254

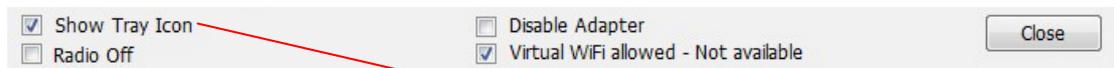
## D. Global Control Bar



Each control item on this bar affects the adapter or management GUI directly.

### Show Tray Icon

Checking "Show Tray Icon" and clicking "Close" button, the management GUI will be minimized and stay on the tray icon located at the right bottom corner of Windows. If not, management GUI will shut down while clicking "Close" button with unchecked condition

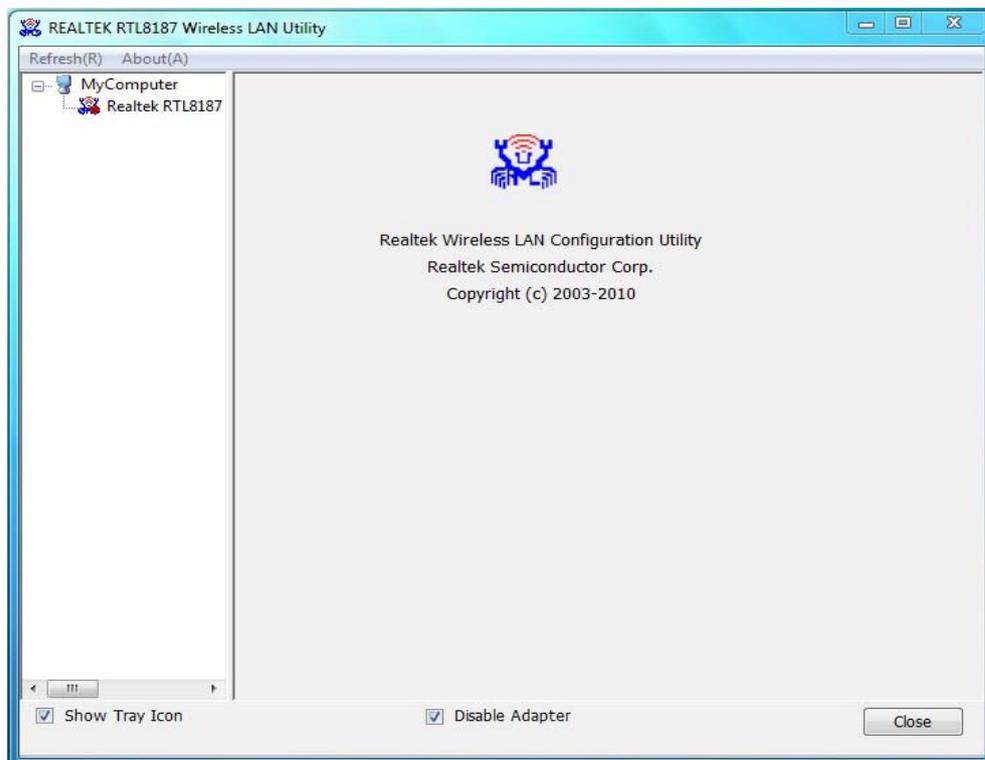


### Radio Off

Turn off the radio to save power. While the radio is off, the links with other wireless network nodes are disconnected. User should be aware that while the wireless configuration is in AP mode. The radio off will cause the sub network belonging to the AP to be disconnected with internet/intranet.

### Disable Adapter

Stop wireless USB device.



## Virtual Wi-Fi allowed

The screenshot shows the Windows Network Status window for a Wi-Fi connection. The window has several tabs: General, Profile, Available Network, Advanced, Status, Statistics, and Wi-Fi Protect Setup. The 'Status' tab is selected, displaying the following information:

- Status: Associated
- Speed: 54 Mbps
- Type: Infrastructure
- Encryption: None
- SSID: RTK 11n AP
- Throughput: Tx:0.0%, Total:0.1%
- Signal Strength: 90%
- Link Quality: 88%

Below the status information, the Network Address section is displayed:

- MAC Address: 00:1A:EF:05:68:0C
- IP Address: 192.168.1.103
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.1.254

A 'ReNew IP' button is located below the network address information. At the bottom of the window, there are two checkboxes: 'Disable Adapter' and 'Virtual WiFi disallowed', both of which are unchecked. A 'Close' button is also present in the bottom right corner.

## 4.2 Properties Area

### A. General Page

This page represents the general information of this adapter.

The screenshot displays the 'General' tab of a network adapter's properties window. It shows the following information:

- Status:** Associated
- Speed:** 54 Mbps
- Type:** Infrastructure
- Encryption:** None
- SSID:** RTK 11n AP
- Throughput:** Tx:0.0%, Total:0.0%
- Signal Strength:** 90%
- Link Quality:** 93%
- Network Address:**
  - MAC Address: 00:1A:EF:05:68:0C
  - IP Address: 192.168.1.103
  - Subnet Mask: 255.255.255.0
  - Gateway: 192.168.1.254

A 'ReNew IP' button is located at the bottom of the window.

#### 1. Status

The status of station connection to AP.

#### 2. Speed

Current transition speed in Mbps (Mega-Bits-Per-Second).

#### 3. Type

Current wireless LAN configuration type.

#### 4. Encryption

Current encryption mode used.

#### 5. SSID

Name of wireless network.

#### 6. Signal Strength

The average signal quality of packets received from wireless network.

We recommend connecting AP with over 70% signal strength.

#### 7. Throughput Diagram

Current throughput, including transmission (Tx) and total traffic (Total).

#### 8. Network Address

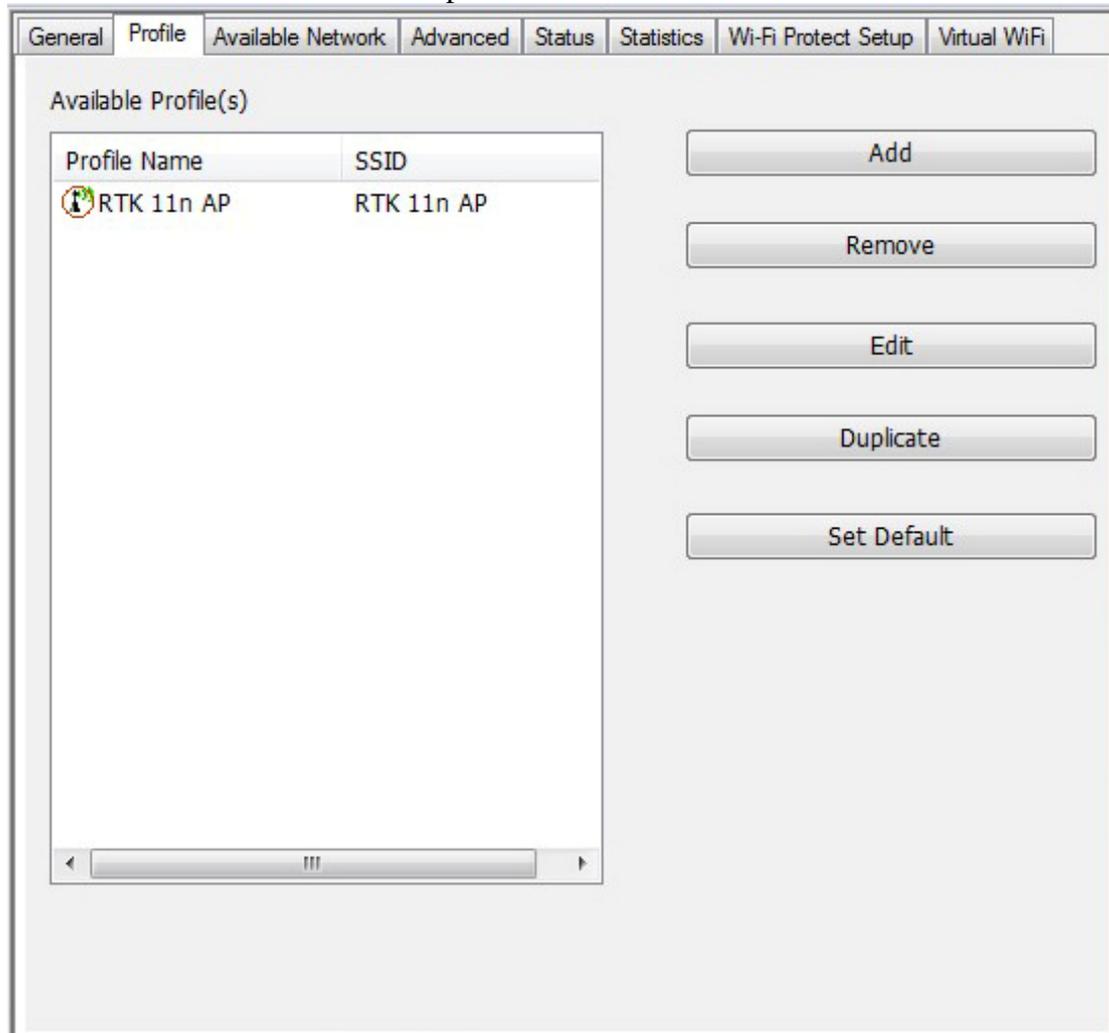
- Mac Address: six two-digital number of this Wireless LAN USB adapter
- IP Address: assigned network address by DHCP server or self-definition in four three-digital number format.
- Subnet Mask: the only valid value is 255.255.255.0
- Gateway: It comes from connected AP. Your system can not connect internet with this field empty.

## B. Profile Page

This page provides profiles management such as add, remove, edit and duplicate just by pressing the respected button.

### Available Profile(s)

The list box shows all the created profiles.



#### 1. Add

Add a new profile for AP or IBSS (Ad-Hoc mode).

#### 2. Remove

Remove the selected profile.

#### 3. Edit

Edit contents of selected profile.

#### 4. Duplicate

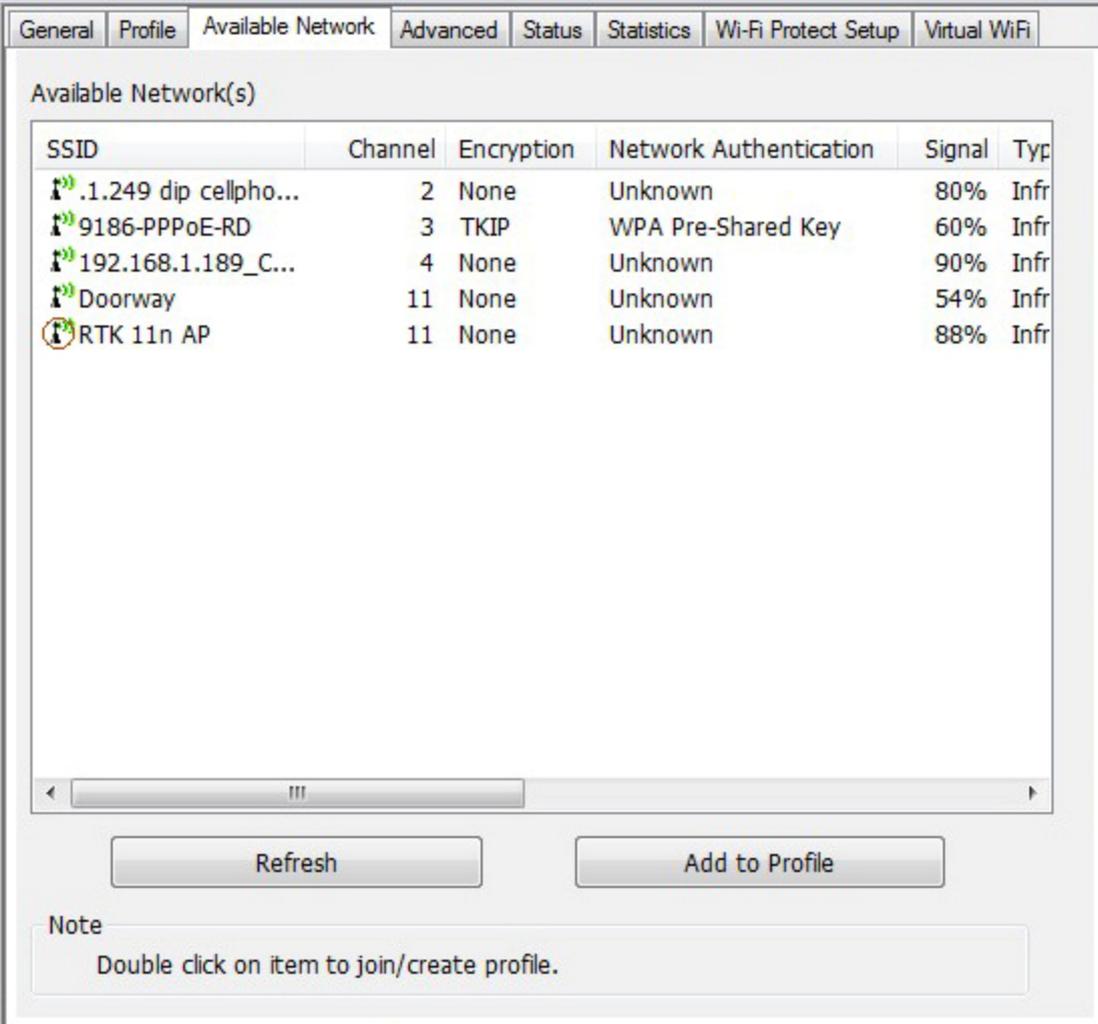
Make copy of selected profile.

#### 5. Set Default

Set the selected profile as default selection.

### C. Available Network Page

This page presents all BSS, including AP and IBSS, around this system. You can pick any one of these network connections



Available Network(s)

SSID	Channel	Encryption	Network Authentication	Signal	Type
1.249 dip cellpho...	2	None	Unknown	80%	Infr
9186-PPPoE-RD	3	TKIP	WPA Pre-Shared Key	60%	Infr
192.168.1.189_C...	4	None	Unknown	90%	Infr
Doorway	11	None	Unknown	54%	Infr
RTK 11n AP	11	None	Unknown	88%	Infr

Refresh Add to Profile

Note  
Double click on item to join/create profile.

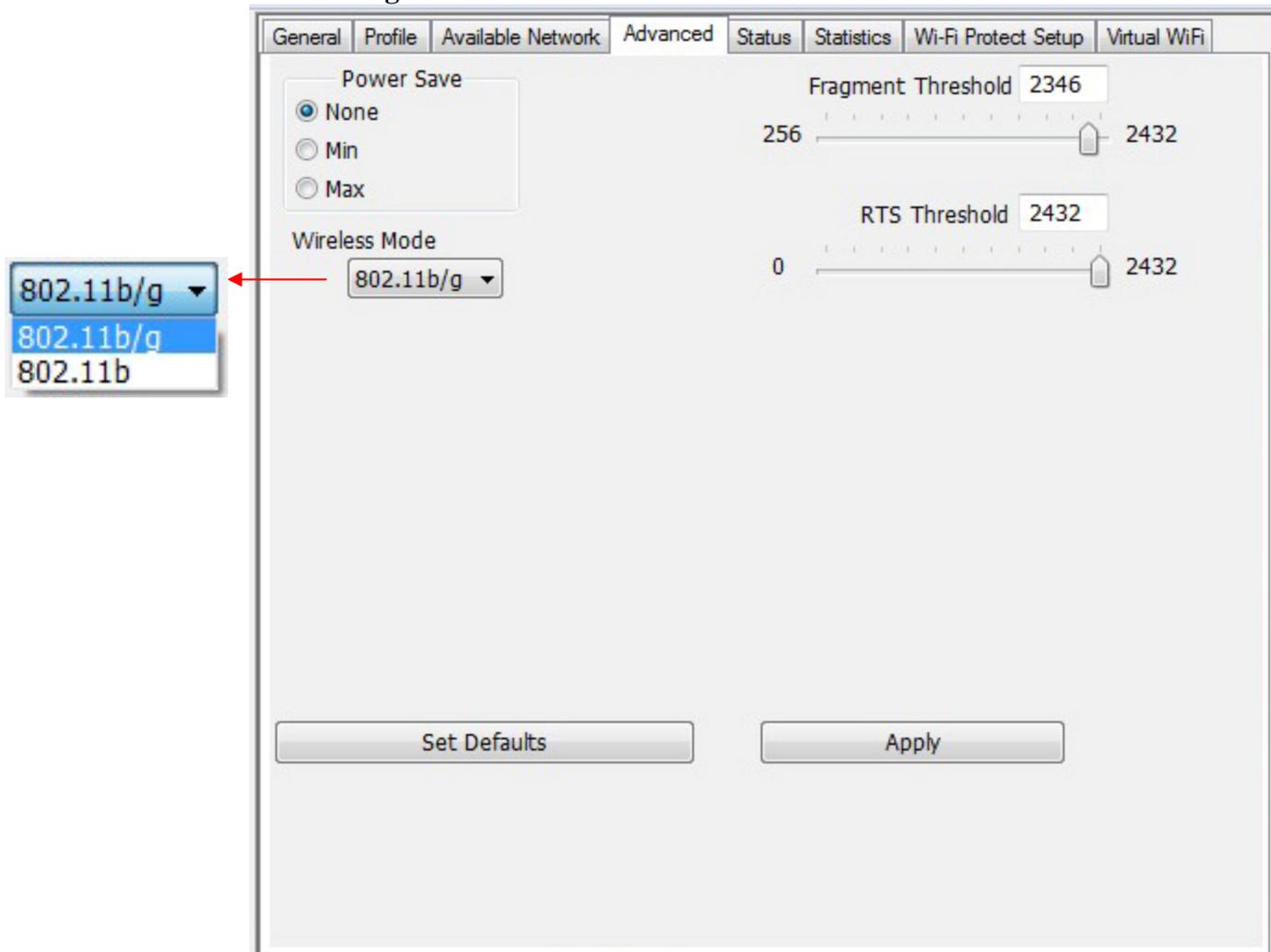
#### 1. Refresh

Rescan network connection around this system.

#### 2. Add to Profile

Create profile for selected network connection and add it to profile list.

## D. Advanced Page



### 1. Power Save

**None:** without power save function.

Min: wake up more frequently to receive packets.

Max: wake up less frequently to receive packets.

### 2. Wireless Mode

802.11b

802.11b/g

### 3. Fragment Threshold

The threshold of fragment length. Higher threshold increase data transition performance with good signal quality. However, in a poor signal quality environment, data throughput might be worse on high fragment threshold than low fragment threshold.

### 4. RTS Threshold

Threshold of Request To Send mechanism. The RTS frame will not send out until the packet size over threshold.

### 5. Set Defaults

Restore the default value to be current settings.

### 6. Apply

Apply the current settings to GUI.

## E. Status Page

General	Profile	Available Network	Advanced	Status	Statistics	Wi-Fi Protect Setup	Virtual WiFi	
Manufacturer								Realtek
NDIS Driver Version								6.1316.1209.2009
Short Radio Header								Yes
Encryption								Disabled
Authenticate								Open System
Channel Set								ETSI
MAC Address								00:1A:EF:05:68:0C
Data Rate (AUTO)								54 Mbps
Channel (Frequency)								11 (2462 MHz)
Status								Associated
SSID								RTK 11n AP
Network Type								Infrastructure
Power Save Mode								None
Associated AP MAC								00:1A:EF:0A:15:3B
Up Time (hh:mm:ss)								0:01:51

### 1. NDIS Driver Version

Driver version

### 2. Short Radio Header

Yes

### 3. Encryption

Current encryption mode.

### 4. Authenticate

Authentication state

### 5. Channel Set

Selected channel plan currently.

### 6. MAC Address

MAC address of this adapter.

### 7. Data Rate

Wireless LAN transition speed

### 8. Channel(Frequency)

Current channel number

### 9. Status

Wireless network status

### 10. SSID: name of connecting AP

### 11. Network Type

Indicate current network configuration type

### 12. Power Save Mode

Current setting power save mode

### 13. Associated AP MAC

MAC address of connecting AP

### 14. Up Time

Total connection time

## F. Statistics Page

You could watch the Tx/Rx status of current wireless connection. This page shows a statistic analysis of packet transition.

Counter Name	Value
Tx OK	374
Tx Error	0
Rx OK	84
Rx Packet Count	84
Rx Retry	9
Rx ICV Error	0

Reset

## G. Wi-Fi Protect Setup Page

General	Profile	Available Network	Advanced	Status	Statistics	Wi-Fi Protect Setup	Virtual WiFi
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### Wi-Fi Protected Setup (WPS)

**An easy and secure setup solution for Wi-Fi network**

Pin Input Config (PIN)  
After pushing the PIN button.Please enter the PIN code into your AP.

Input PIN from AP    **PIN Code : 85852624**

Pin Input Config (PIN)

Push Button  
After pushing the PBC button.Please push the physical button on your AP or visual button on the WPS config page.

Push Button Config (PBC)