



# Wireless 802.11b/g/n/a/ac USB Adapter



**User Manual**

DN-70566

# CHAPTER 1. Introduction

Thank you for purchasing the wireless 802.11b/g/n/a/ac USB adaptor! This adapter is mini size design and you are able to plug it into the USB port. Except the common wireless standards 802.11b/g/n, this wireless adaptor is also 802.11ac compatible - data transfer rate is 300/867Mbps.

## 1.1 Product Features

- Complies with IEEE 802.11ac , IEEE 802.11a,IEEE 802.11n, IEEE 802.11g and IEEE 802.11b standards
- Provides USB3.0 port
- Provides 300/867Mbps receiving rate and 300/867Mbps sending rate
- Supports 20MHz/40MHz/80MHz frequency width
- Auto-detects and changes the network transmission rate
- Provides two work modes: Infrastructure and Ad-Hoc
- Supports Soft AP to establish your wireless LAN networking
- Supports 64/128-bit WEP, WPA, WPA2 encryption methods and 802.1x security authentication standard
- Supports WPS (Wi-Fi Protected Setup) encryption method to free you from remembering long passwords
- Easy-to-install, plug and play
- Supports Windows XP/VISTA/Win7/Win8/Win8.1/Win10/Linux/Macintosh

## 1.2 Package contents

The following contents should be found in your box:

- One Wireless 802.11b/g/n/a/ac USB adapter
- One CD (include driver/utility/user manual)

**Note:** If any of the listed contents are damaged or missing, please contact the retailer from whom you purchased the product for assistance.

## 1.3 Indicator Description

There is a LED indicator blinking when data communication is going on.

## CHAPTER 2: Quick Installation Guide

### 2.1 Driver Installation

Please follow the following instructions to install your new wireless USB Adaptor:

#### 2.1.1

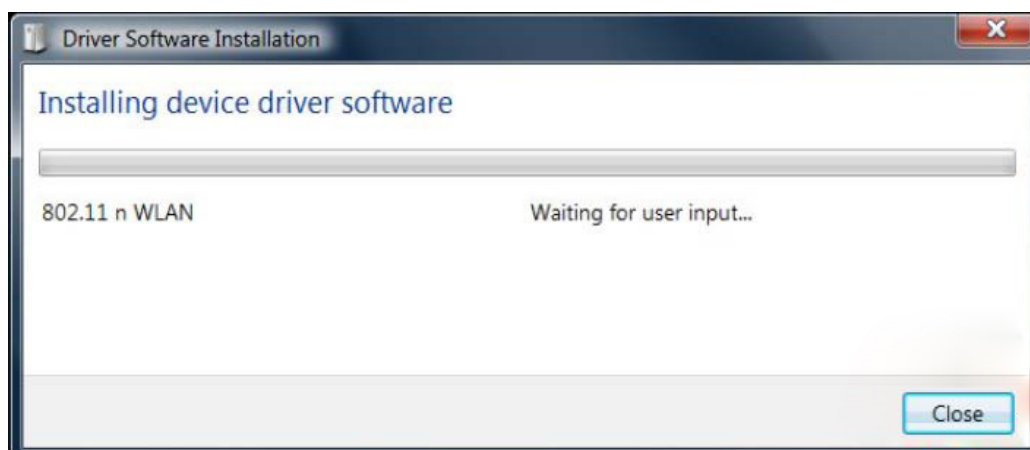
Insert the USB wireless network adaptor into an empty USB 3.0 port of your computer when computer is switched on. Never use force to insert the adaptor, if you feel it's stuck, flip the adaptor over and try again.

#### 2.1.2

The following message will appear on your computer, click '**Cancel / Close**'.  
**Under Windows XP**

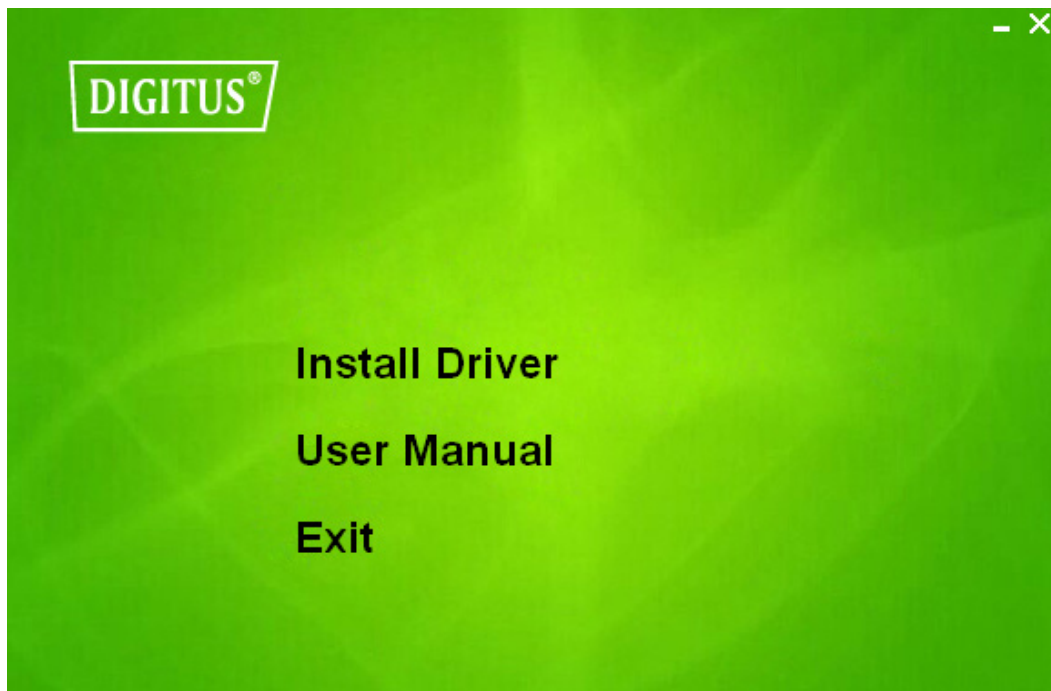


**Under Windows Vista and Windows 7**



### 2.1.3

Insert the driver CD into your CD-ROM. You can see autorun screen below. if not, you can double click '[autorun.exe](#)' on CD.



Click '[Install Driver](#)' to start the installation procedure

### 2.1.4

Installation descriptions shown. Click '[Next](#)' to continue



## 2.1.5

Once the installation is finished the computer will be asked to reboot. you can click '**Finish**' and reboot the computer to finish the installation of driver files.



## 2.1.6

A new icon will appear near the clock of system tray:



Left-click the icon will launch wireless network configuration utility, and you can right-click the icon to show the quick menu of configuration utility. This icon also uses different color to show the status of wireless connection:



Wireless connection is established, good signal reception.



Wireless connection is established, weak signal reception.



Connection is not established yet.



Wireless network adaptor is not detected.

For detailed instructions of wireless network configuration utility, please see next chapter.

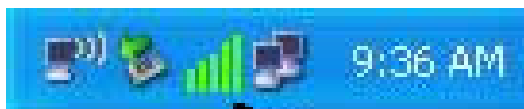
## 2.2 Connect to Wireless Access Point

To use wireless network, you have to connect to a wireless access point first. You can either use Client utility (comes with network card driver), or Windows Zero Config utility (comes with Windows operating system).

### 2.2.1 Using Client Utility

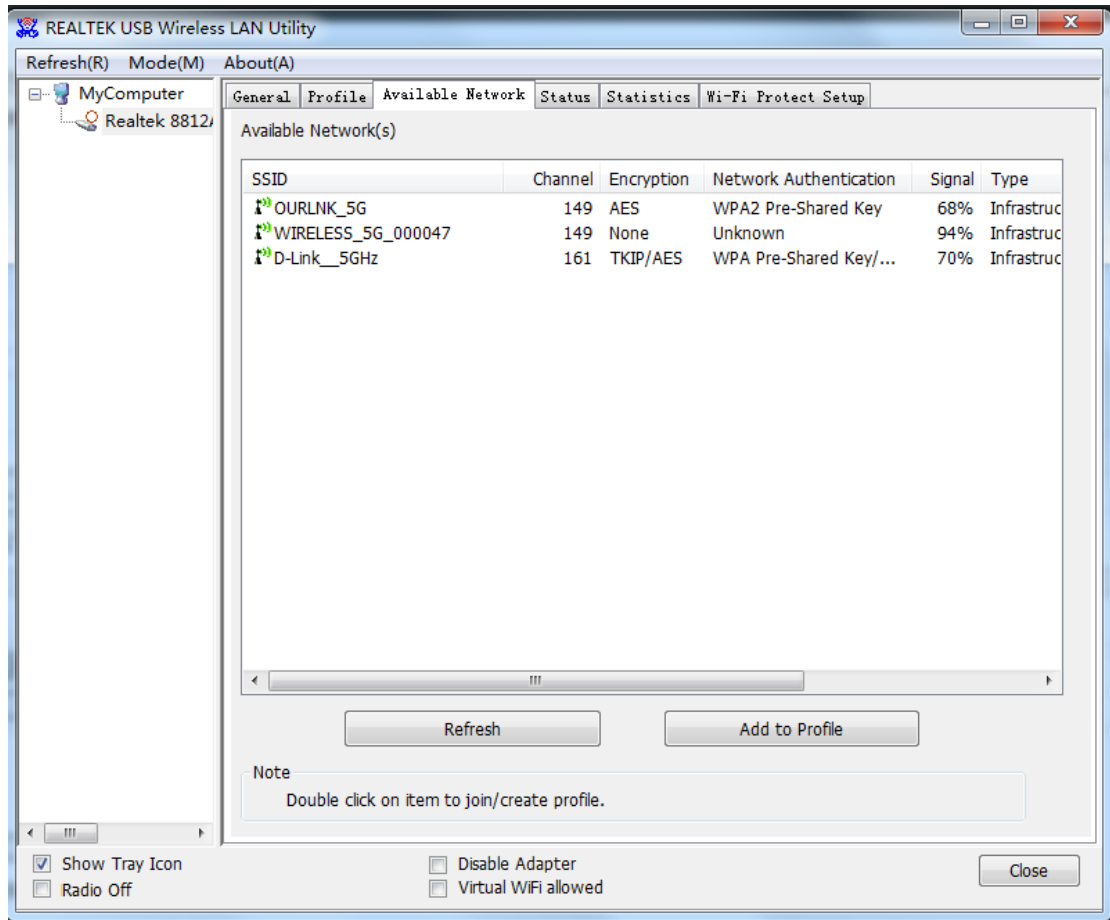
Please follow the following instructions to use Client configuration utility to connect to wireless access point.

1. Left-click the Client configuration utility icon located at lower-right corner of computer desktop, and configuration menu will appear:

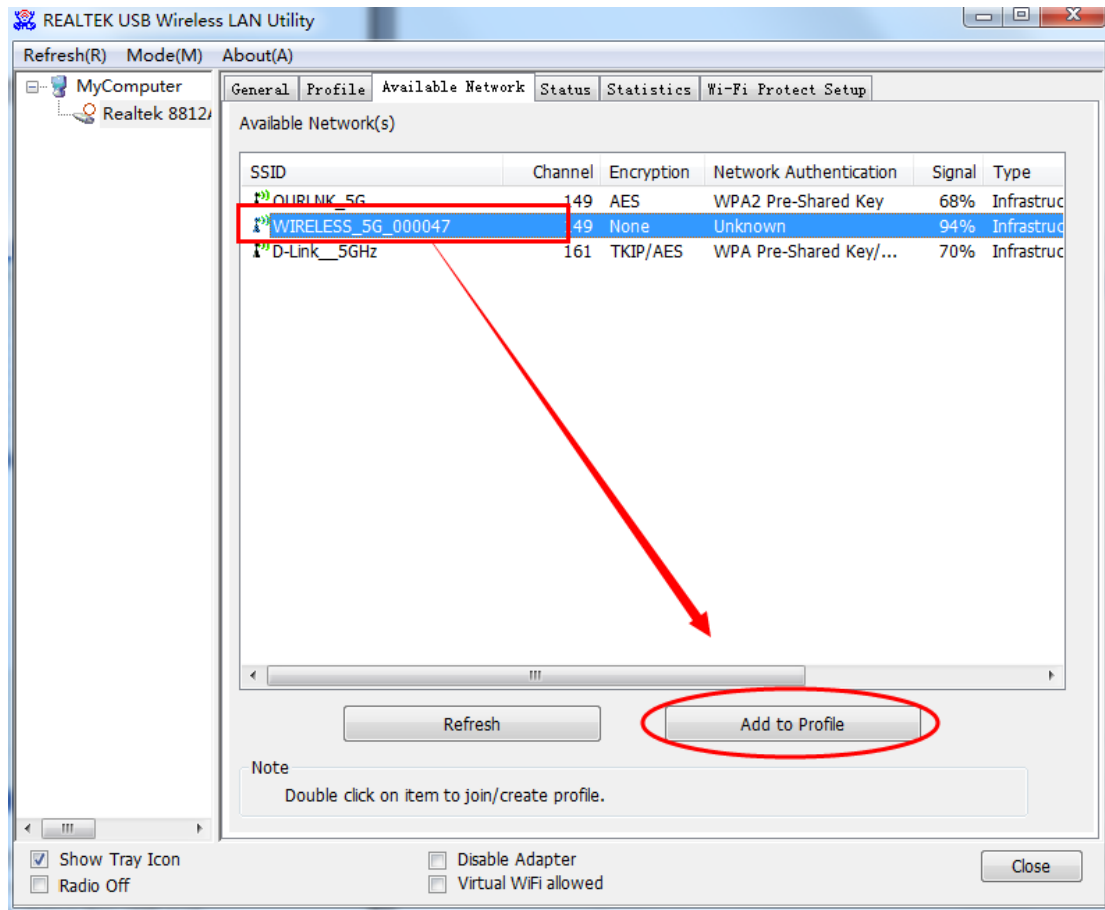


HERE!

2. Wireless utility will appear. Click '**Available Network**' menu to search for wireless access points nearby.



3. Please wait for a while, and all wireless access points which can be reached by this wireless network adaptor will be displayed here.



If the wireless access point you wish to connect does not appear here, you can click '**Refresh**' button to scan for wireless access points again; if the wireless access point you're looking for still not appear, try to move the computer closer.

When the access point you're looking for is on the list, left-click it and then double click it or click '**Add to Profile**'.



4. If a password (Network Key) is required to access the wireless access point, please input it in '**Network key**' (and input it again in '**Confirm network key**' for confirmation). Click '**OK**' when password is properly inputted.

**Wireless Network Properties:**

This is a computer-to-computer (ad hoc) network; wireless access points are not used.

Profile Name: WIRELESS\_5G\_000047

Network Name (SSID): WIRELESS\_5G\_000047

Channel: 149 (5745MH; ▾)

Wireless network security

This network requires a key for the following:

Network Authentication: WPA-PSK ▾

Data encryption: AES ▾

ASCII  PASSPHRASE

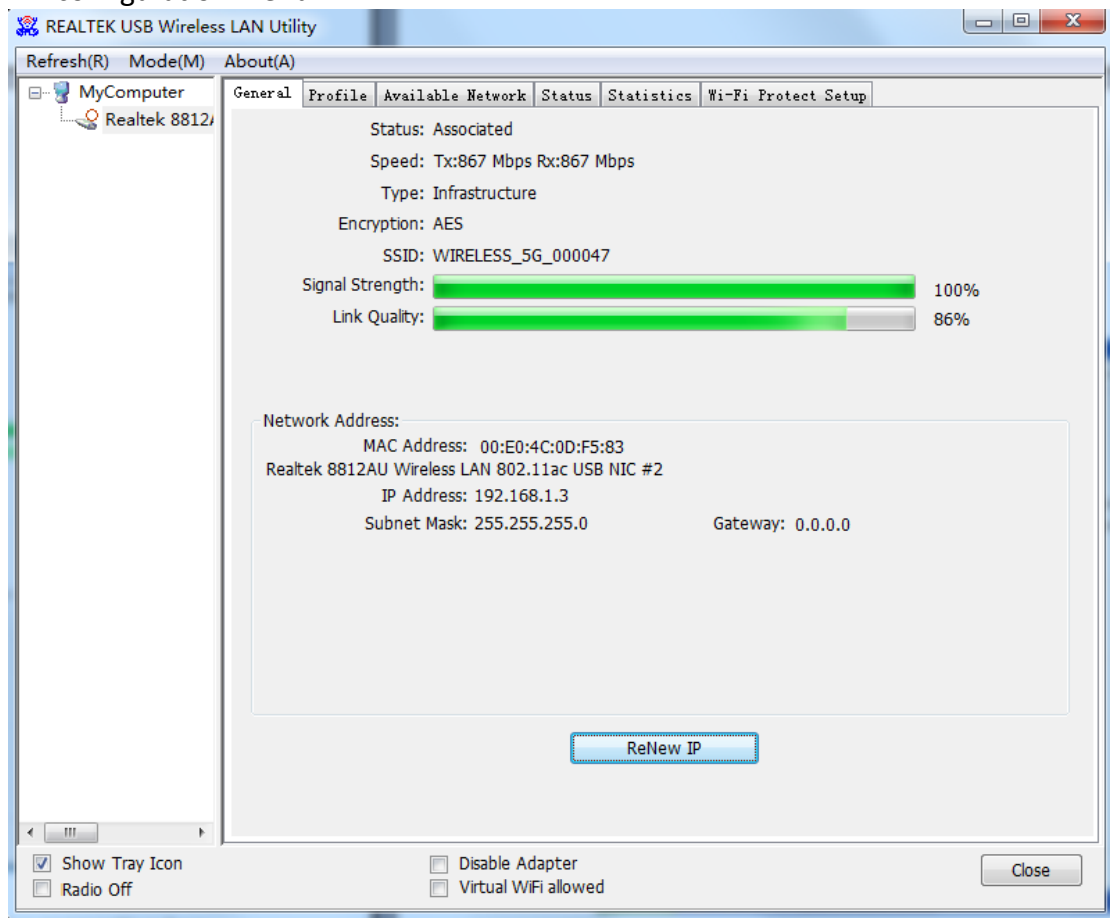
Key index (advanced): 1 ▾

Network key:  
\*\*\*\*\*

Confirm network key:  
\*\*\*\*\*

OK Cancel

5. Network card will attempt to connect to access point now, this may require few seconds to minutes, please be patient. When the '**Status**' become '**Associated**' , your computer is connected to access point you selected. Click '**Close**' to close configuration menu.



**NOTE:** If you connected to an access point but the connection has been dropped soon, please check security settings and re-check passway spelling.

## 2.2.2 Using WPS Connect

Wi-Fi Protected Setup (WPS) is the latest wireless network technology which allows wireless network setup to become very simple. If you have WPS-enabled wireless access point and you want to establish a secure connection to it, you don't have to configure the wireless access point and setup data encryption by yourself. All you have to do is go to the WPS setup page of this wireless card, click a button, and then press a specific button or enter a set of 8-digit code on the wireless access point you wish to establish a secure connection - just three simple steps!

For older wireless access points, it's possible to perform a firmware upgrade to become a WPS-enabled access point. Since they may not have a hardware button to press for WPS setup, you can use an alternative WPS setup method - input the pin code. Every WPS-compatible wireless network card support pin code configuration method; you can just input the code to wireless access point, and the wireless access point and wireless network card will do the rest for you.

This wireless network adaptor is compatible with WPS. To use this function, the wireless access point you wish to connect to must support WPS function too. Please follow the instructions to establish secure connection between WPS-enabled wireless access point and your wireless network card.

This wireless network card supports 2 kinds of WPS:

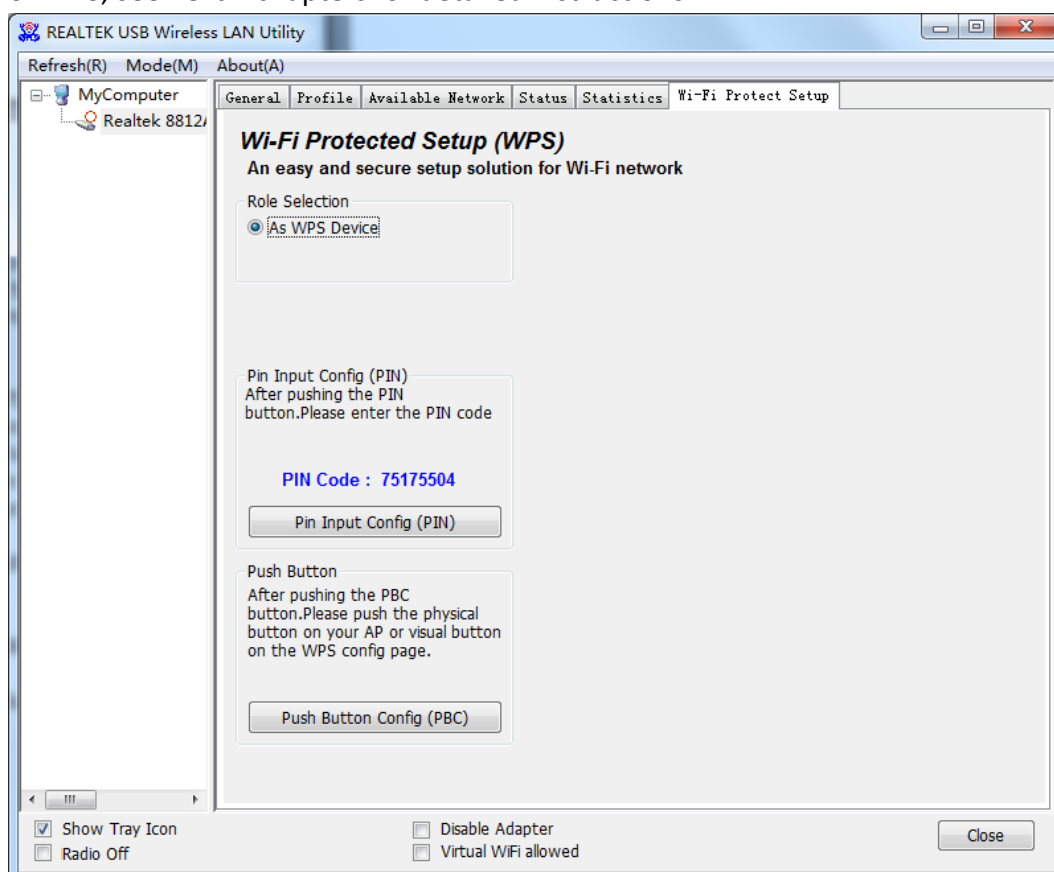
- **PIN code**
- **Push-Button.**

Please follow the following instructions to setup WPS:

1. Right-click Client configuration utility icon, and click '**Open Config Utility**'.

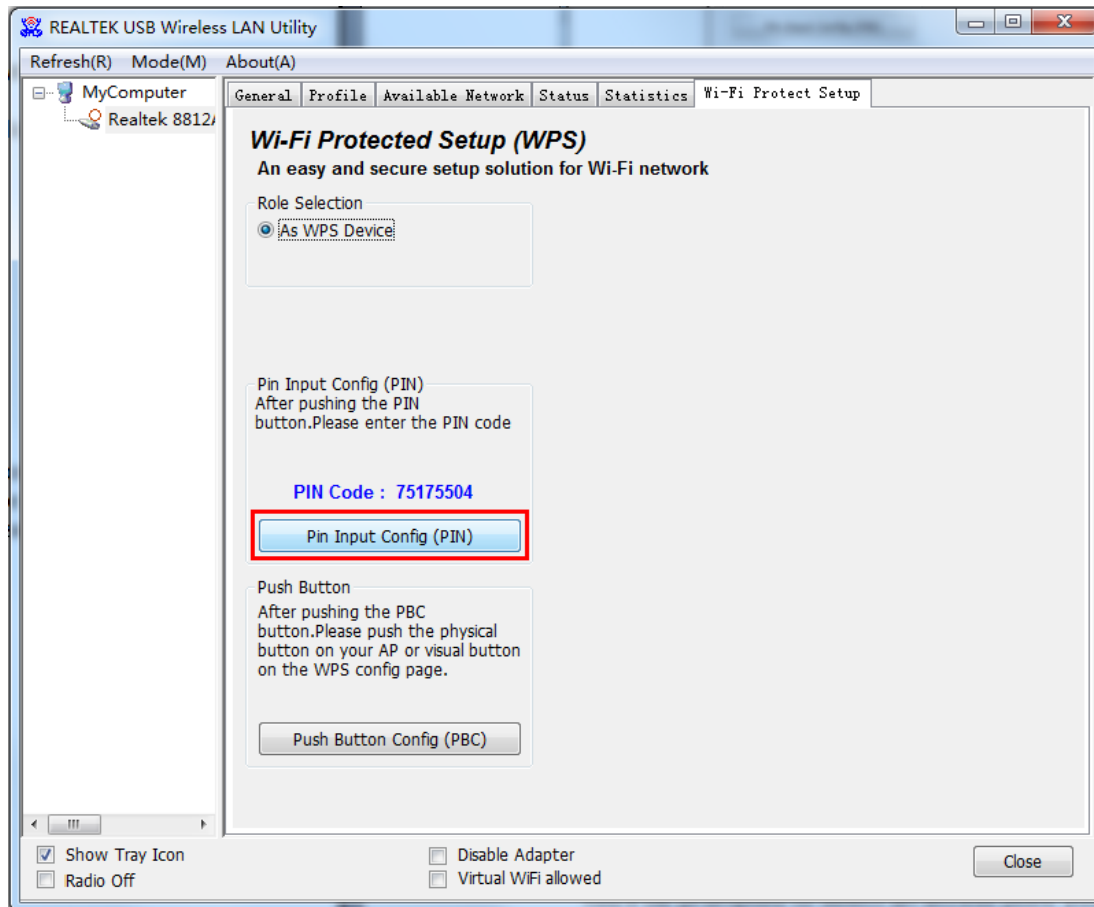


2. Click '**Wi-Fi Protect Setup**' menu.
3. You can use PIN code or Push-Button configuration, and WPS-compatible wireless access point must use the same type of WPS. For instructions on setup each type of WPS, see next 2 chapters for detailed instructions.

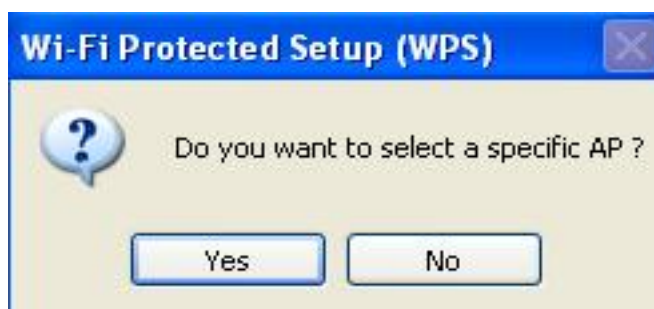


## PIN Code

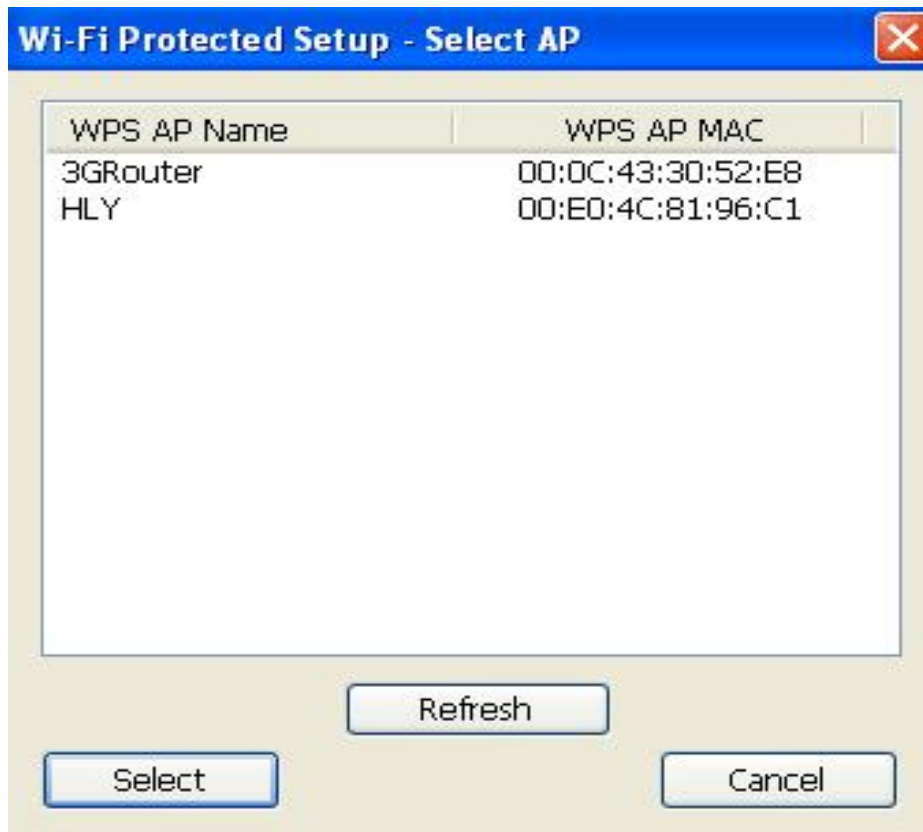
To use PIN Code, please click '**Pin Input Config (PIN)**' button:



You'll be prompted to select an access point you wish to connect. If you know its SSID, click '**Yes**', otherwise click '**No**'.



If you select '**Yes**', a list of all WPS-compatible AP nearby will be displayed; you can click '**Refresh**' to rescan, then select an AP and click '**Select**' button.



If you select '**No**', wireless network card will prompt you to enter 8-digit PIN code into your AP, without selecting an AP in advance.

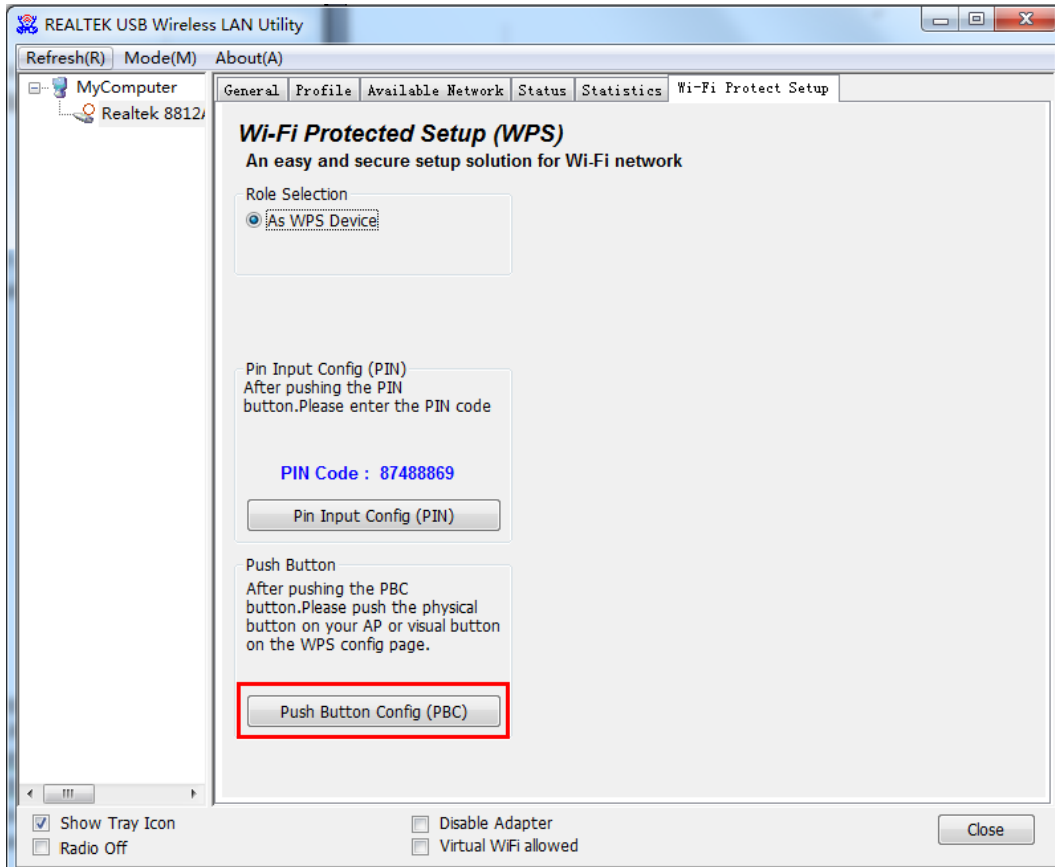
After select '**Yes**' or '**No**' in the previous step, network card will attempt to connect to WPS-compatible AP and an 8-digit number will appear. Please input this number to AP's configuration menu within 2 minutes, and network card will establish secure connection with AP automatically.

To stop this procedure before connection is established, click '**Cancel**'.

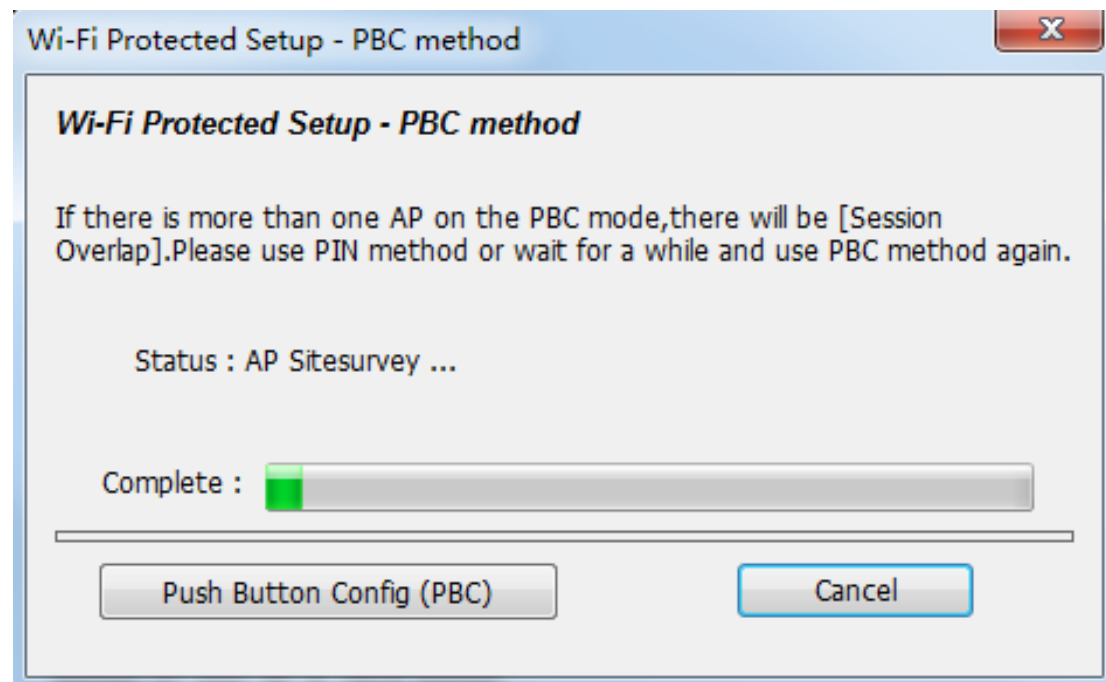


## Push Button

To use Push-Button WPS configuration, please click '**Push Button Config (PBC)**' button. This is the easiest way to establish secure connection by WPS. If there're more than one WPS-compatible AP using Push-Button config, please use PIN Code instead.



Click "**Push Button Config(PBC)**", a message box will appear:



Please activate Push-Button function on wireless access point now, and wireless network card will establish secure connection with access point within one minute.

## CHAPTER 3 Soft-AP Function

Excepting become a wireless client of other wireless access points, this wireless adapter can act as a wireless service provider also! You can switch this wireless adapter's operating mode to 'AP' mode to simulate the function of a real wireless access point by software, and all other computers and wireless devices can connect to your computer wirelessly, even share the internet connection you have!

Please follow the instructions in following chapters to use the AP function of your wireless adaptor.

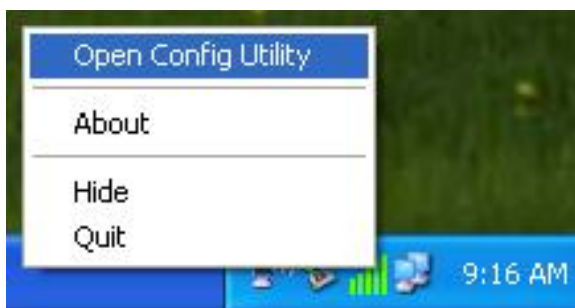
### 3.1 Switch to AP Mode and Station Mode

The operating mode of the wireless adaptor is 'Station Mode' (becoming a client of other wireless access points) by default.

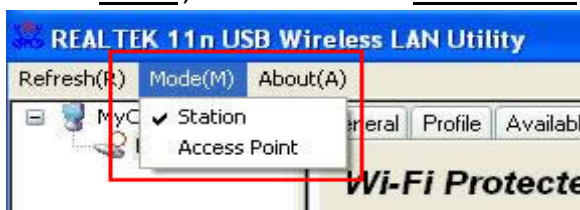


Please follow the following instructions to switch to AP mode:

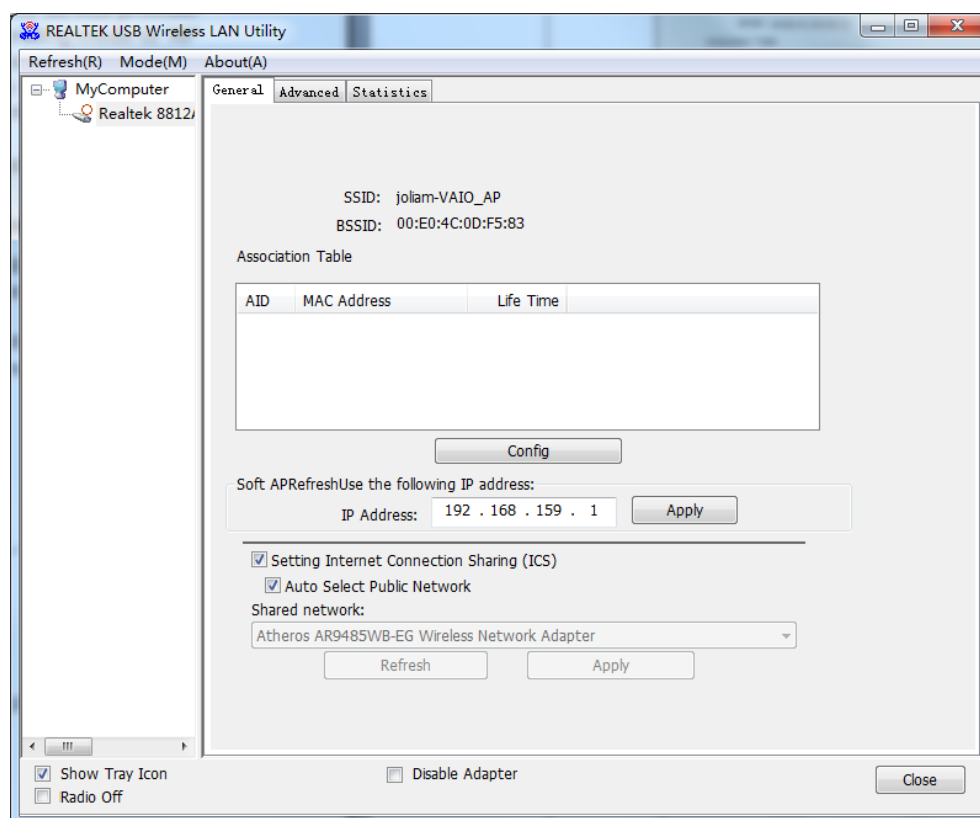
1. Right-click Client configuration utility icon, and click '**Open Config Utility**'.



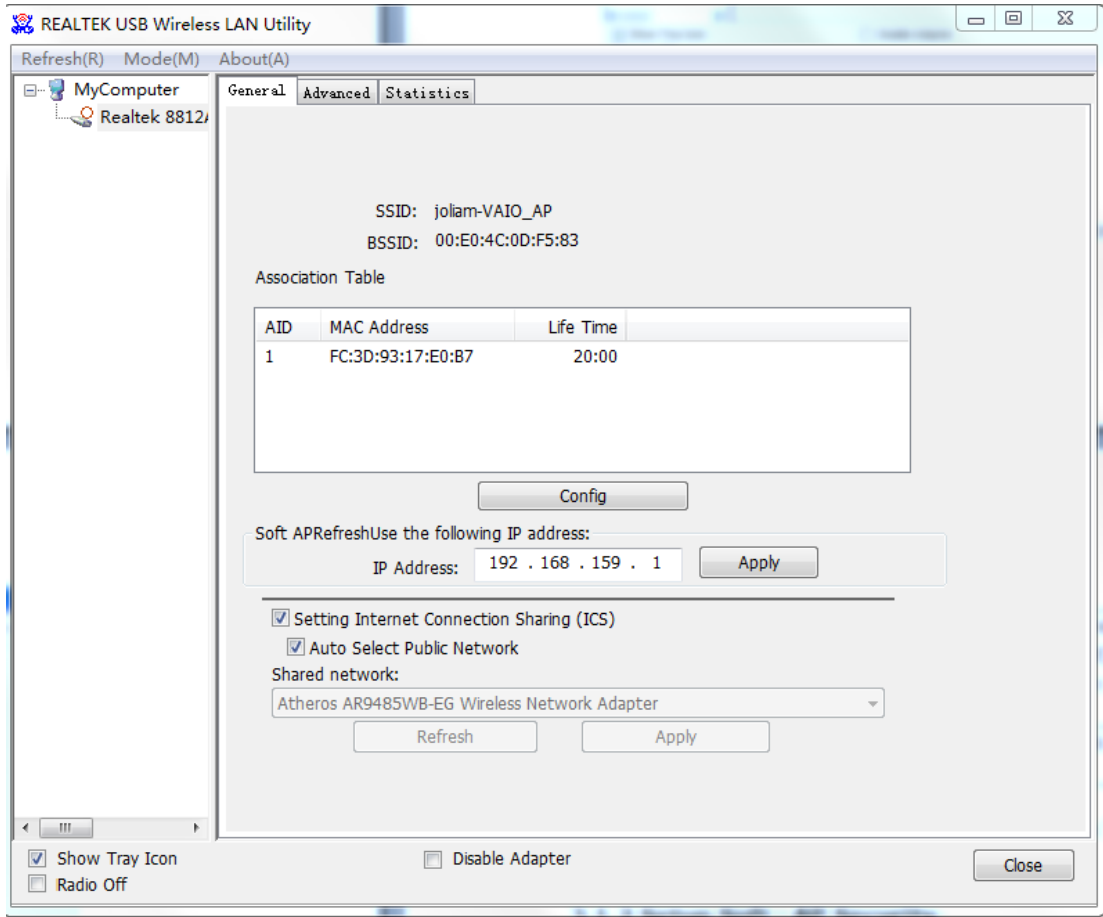
2. Select '**Mode**', and then select '**Access Point**'.



It requires few seconds to switch to AP mode, please be patient.



After mode switch is complete, you'll see general information of software AP, which shows AP's SSID and connected wireless clients.



Client mode icon:

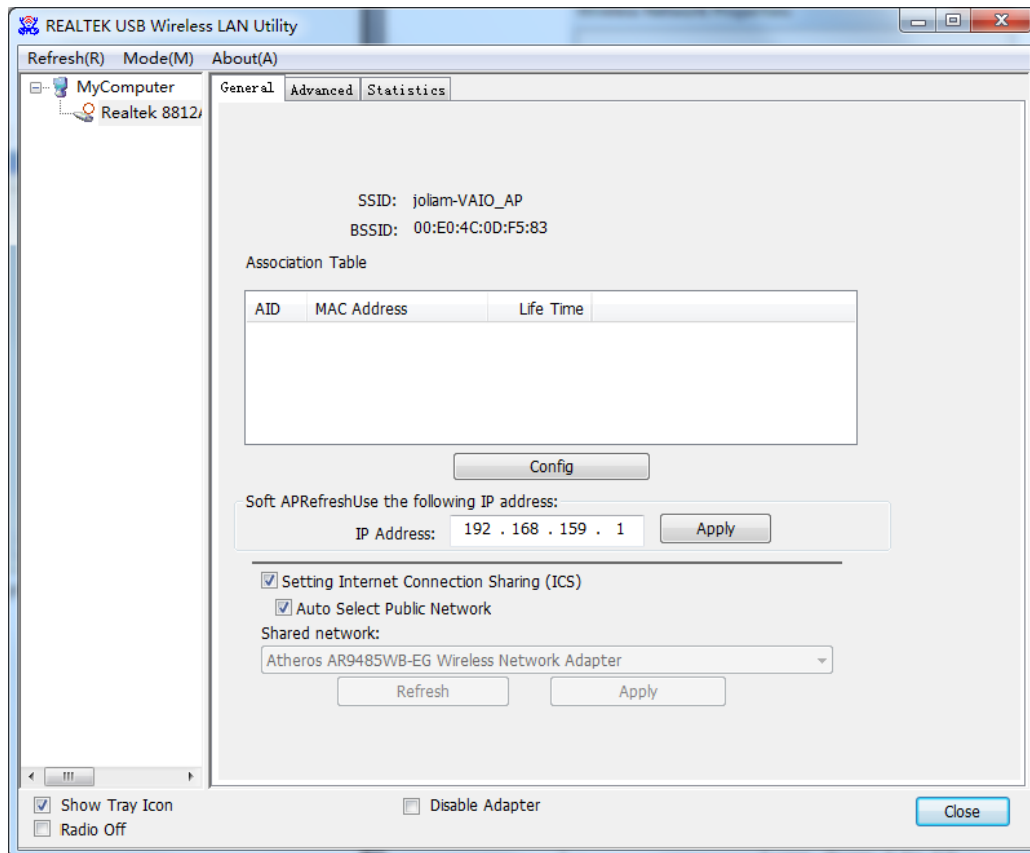


Software AP icon:

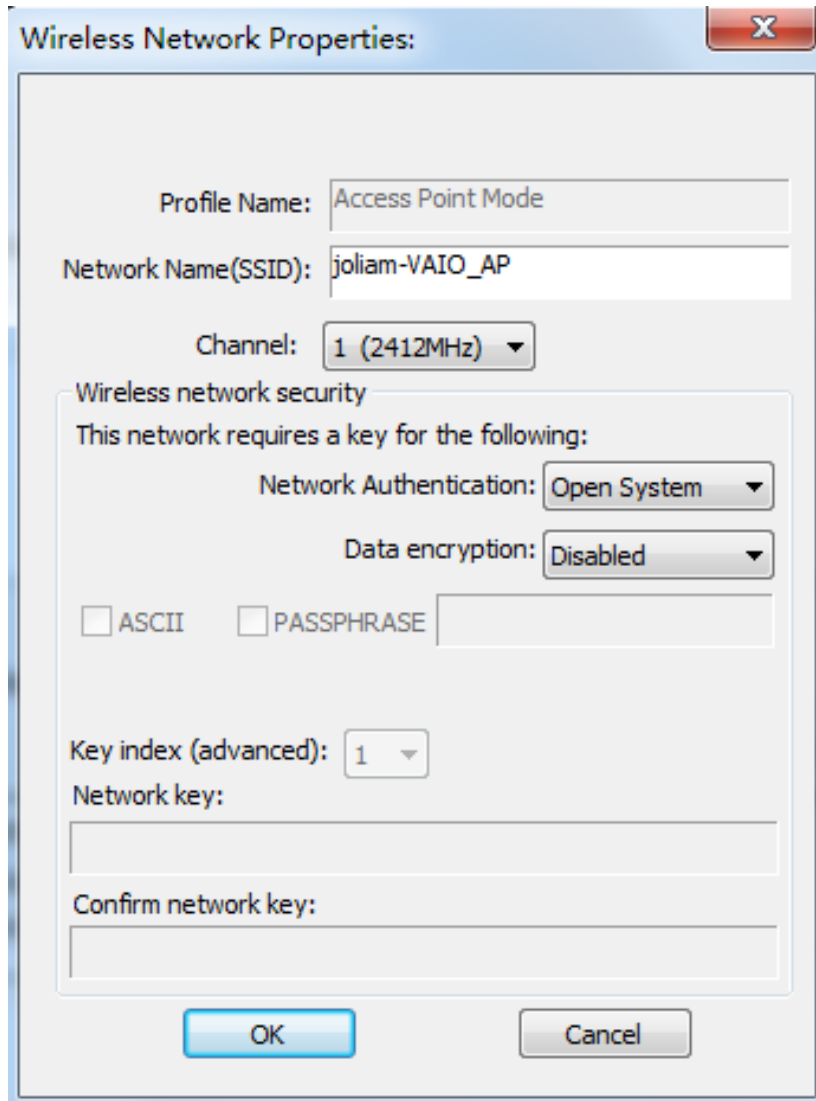


### 3.1.1 Configure SSID and Channel

To configure software AP, click '**Config**' button:



The '**Wireless Network Properties**' is displayed.



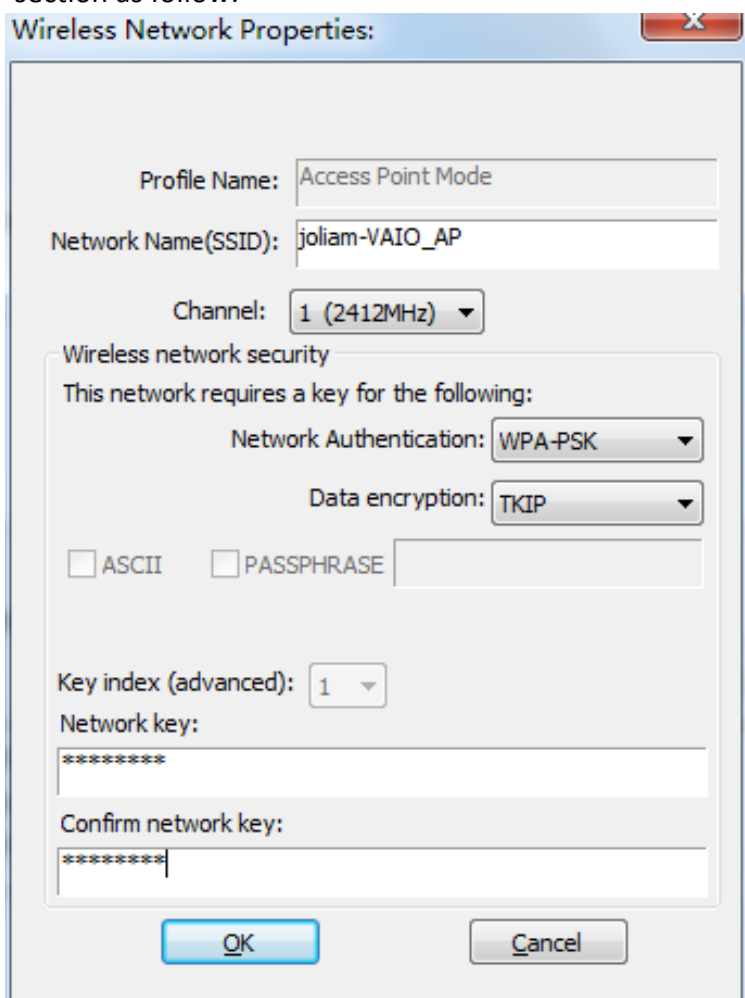
Please note that Ad-Hoc mode is not available when network adaptor is in AP mode. The description of major setup items are listed below:

Network Name (SSID)	Please input the SSID (the name used to identify this wireless access point) here. Up to 32 numerical characters can be accepted here, excepting space.
Channel	Please select the wireless channel you wish to use, from 1 to 13.

To save changes, click '**OK**'; otherwise click '**Cancel**' to leave this menu and keep settings untouched.

### 3.1.2 Setup Soft-AP Security

To setup security options for Soft-AP, configure 'Wireless Network Security' section as follow:



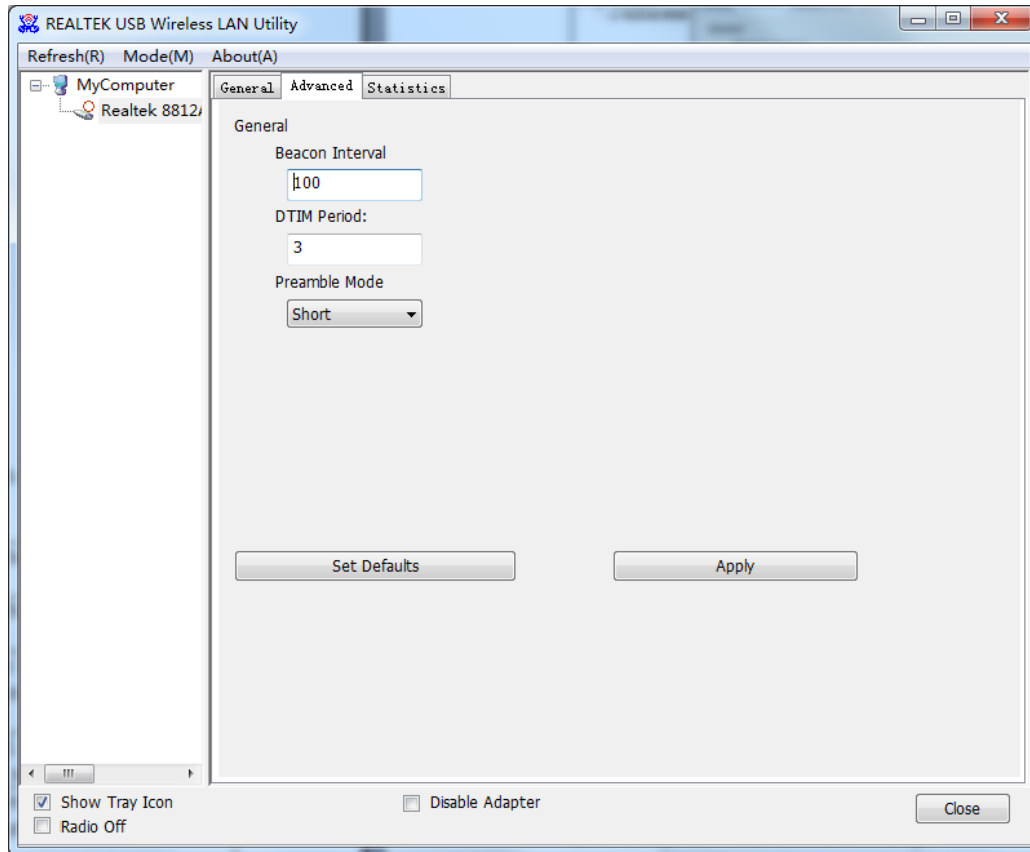
The description of setup items about wireless security are listed below:

Network Authentication	Select network authentication mode from dropdown menu.
Data Encryption	Select data encryption method from dropdown menu.
ASCII / PASSPHRASE	If the encryption method is WEP, check either 'ASCII' or 'PASSPHRASE' box and input it in the box as WEP passphrase.
Key Index	Select WEP key index (1-4). If you don't know which one you should use, select 1.
Network key / Confirm network key	IF network authentication mode is WPA, please input WPA passphrase in both box.

To save changes, click '**OK**'; otherwise click '**Cancel**' to leave this menu and keep settings untouched.

## 3.2 Advanced Settings

If you want to setup advanced settings of software access point, select '**Advanced**' menu. If you don't know the meaning and effects of these settings, keep them untouched.



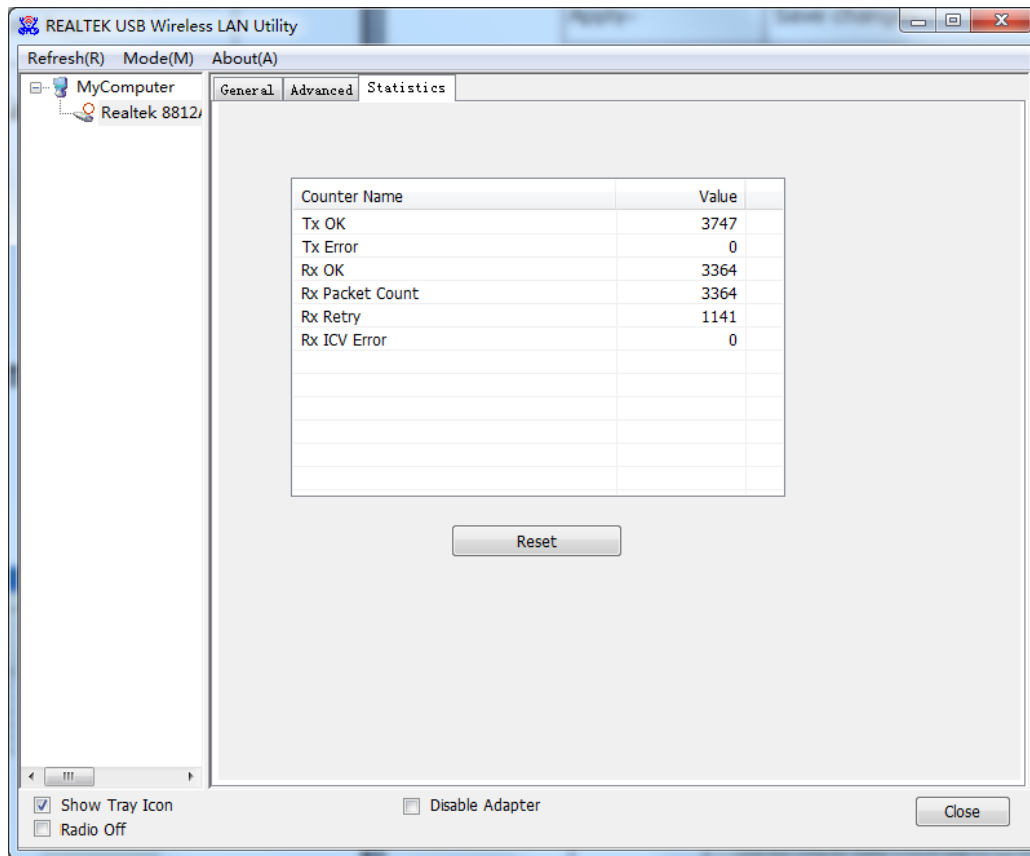
The description of all setup items are listed below:

Beacon Interval	Please input wireless beacon time interval here.
DTIM Period	Please input DTIM (Delivery Traffic Indication Message) here.
Preamble Mode	Select wireless frame preamble mode (long or short) from dropdown menu.
Set Defaults	Reset all settings back to factory default value.
Apply	Save changes.

If you changed any setting here and cause problem on communicating with wireless clients, click '**Set Defaults**' to reset all settings back to default setting.

### 3.3 Wireless Statistics

Select '**Statistics**' menu and the data statistics about software access point will be displayed.



Click '**Reset**' to reset the value of every item back to '0'.

## CHAPTER 4: Troubleshooting

If you encounter any problem when you're using this wireless network card, don't panic! Before you call your dealer of purchase for help, please check this troubleshooting table, the solution of your problem could be very simple, and you can solve the problem by yourself!

Scenario	Solution
I can't find any wireless access point / wireless device in ' <b>Site Survey</b> ' function.	<ol style="list-style-type: none"><li>1. Click '<b>Refresh</b>' for few more times and see if you can find any wireless access point or wireless device.</li><li>2. Please move closer to any known wireless access point.</li><li>3. Ad hoc' function must be enabled for the wireless device you wish to establish a direct wireless link.</li><li>4. Please adjust the position of network card (you may have to move your computer if you're using a notebook computer) and click '<b>Refresh</b>' button for few more times. If you can find the wireless access point or</li></ol>

	wireless device you want to connect by doing this, try to move closer to the place where the wireless access point or wireless device is located.
Nothing happens when I click <b>'Open Config Utility'</b>	<ol style="list-style-type: none"> <li>1. Please make sure the wireless network card is inserted into your computer's USB port.</li> <li>2. Reboot the computer and try again.</li> <li>3. Remove the card and insert it into another USB port.</li> <li>4. Remove the driver and re-install.</li> <li>5. Contact the dealer of purchase for help.</li> </ol>
I cannot establish connection with a certain wireless access point	<ol style="list-style-type: none"> <li>1. Click <b>'Add to Profile'</b> for few more times.</li> <li>2. If the SSID of access point you wish to connect is hidden (nothing displayed in 'SSID' field in <b>'Site Survey'</b> function), you have to input correct SSID of the access point you wish to connect. Please contact the owner of access point to ask for correct SSID.</li> <li>3. You have to input correct passphrase / security key to connect an access point with encryption. Please contact the owner of access point to ask for correct passphrase / security key.</li> <li>4. The access point you wish to connect only allows network cards with specific MAC address to establish connection. Please go to <b>'Status'</b> menu and write the value of <b>'MAC Address'</b> down, then present this value to the owner of access point so he / she can add the MAC address of your network card to his / her access point's list.</li> </ol>
The network is slow / having problem when transferring large files	<ol style="list-style-type: none"> <li>1. Move closer to the place where access point is located.</li> <li>2. There could be too much people using the same radio channel. Ask the owner of the access point to change the channel number.</li> </ol> <p>Please try one or more solutions listed above.</p>

Hereby ASSMANN Electronic GmbH, declares that this device is in compliance with the requirements of Directive 2014/53/EU and the Directive 2011/65/EU for RoHS compliance. The complete declaration of conformity can be requested by post under the below mentioned manufacturer address.

**Warning:**

This device is a class B product. This equipment may cause some radio interference in living environment. In this case, the user can be requested to undertake appropriate measures to prevent interference.

**www.assmann.com**  
Assmann Electronic GmbH  
Auf dem Schüffel 3  
58513 Lüdenscheid  
Germany

