



User Guide

www.wilinklat.com

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Contents

Chapter 1 Introduction.....	1
1.1 Package Contents	1
1.2 LED Indicator Description	1
1.3 Product Features.....	1
1.4 Product Usage.....	2
1.5 Before Installation	2
1.6 Disable other manufacturer's wireless network adapter.....	2
1.7 Product Maintenance	3
Chapter 2 Installation Guide.....	4
2.1 Hardware Install	4
2.2 Software Install	4
Chapter 3 Wilink Wireless Utility	8
3.1 Station mode (Client Mode)	8
3.1.1 Available Networks.....	8
3.1.2 Link Information.....	10
3.1.3 Profile Settings	11
3.1.4 Advanced	18
3.1.5 About	19
3.2 AP Mode (in Windows 7 OS).....	19
Appendix 1 Wi-Fi Connection	21
Windows 8.....	21
Windows 7.....	22
Windows XP.....	23
Appendix 2 How to Set WPS	25
Appendix 3 FAQ.....	30
Appendix 4 Safety and Emission Statement	32

Chapter 1 Introduction

Depending on the model you purchased, your Wireless USB Adapter has a 150Mbps or 300Mbps transmitting rate. It adopts the very latest wireless standard-IEEE802.11n, and is downward compatible with IEEE802.11g/b standards. It efficiently reduces the “dead spots” in your wireless area and widely multiplies your wireless coverage area.

Your Wireless USB Adapter is suitable for both notebook and desktop computers. Its transmitting rate can reach up to 300Mbps (depending on the model) so its transmitting time in your LAN will be greatly reduced when connected to your Wlink 11N wireless router. Its immediate and consistent response keeps your Internet connection smooth when web page searching, downloading, gaming, or watching videos on-line. All-in-all, your Wireless USB Adapter is a cost effective wireless network adapter with a robust signal, broad transmitting distance, and stable performance.

1.1 Package Contents

One Wireless network adapter (USB or PCI)

One Software CD (includes user guide)

The above list is for your reference only, the actual contents may differ according to the product you purchased.

1.2 LED Indicator Description

There is one status LED indicator on the wireless network adapter. The indicator will always remain ON when working correctly, and flashes when transferring data.

1.3 Product Features

- Supports 150Mbps or 300Mbps wireless receiving and transmitting rate, depending on the model.
- Supports soft AP feature
- Complies with the latest 802.11n and 802.11b/g standards
- Requires USB2.0
- Supports 20MHz/40MHz frequency width
- Detects wireless network and adjusts transmitting rate automatically
- Provides two working modes: Infrastructure and Ad-Hoc
- Supports 64/128-bit WEP and WPA/WPA2 encryption methods
- Supports WPS (Wi-Fi Protected Setup) encryption to secure wireless network strongly
- Complies with Windows®7/ Vista /XP/ 2000/
- Supports WMM to smooth out audio and video

1.4 Product Usage

The Wireless Network Adapter offers a fast, reliable and a cost-effective solution for wireless access. It is best used in the following circumstances:

1. Enables staff members, who require greater mobility in the office, to have access to the wireless network anywhere inside their company's network.
2. Enables wireless communication for companies or places which are not suitable for wired LAN installation because of budget or building environment restrictions, such as older buildings, rentals, or places of short-term usage.
3. Is appropriate for businesses or individuals who often change network topology.
4. Is appropriate for businesses or individuals who would like to avoid using expensive cables or renting lines etc.

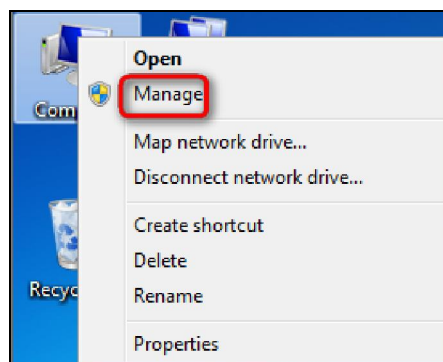
1.5 Before Installation

1. Please read this user guide thoroughly before you install and use the product.
2. Please close or uninstall the configuration programs of other wireless adapters before you install the configuration programs of the wireless USB adapter to avoid possible UI (User Interface) conflict.
3. To avoid possible network conflicts between this Wilink network adapter and those of other manufactures, we recommend that you first disable the network adapters of other manufacturers before installaing the driver.

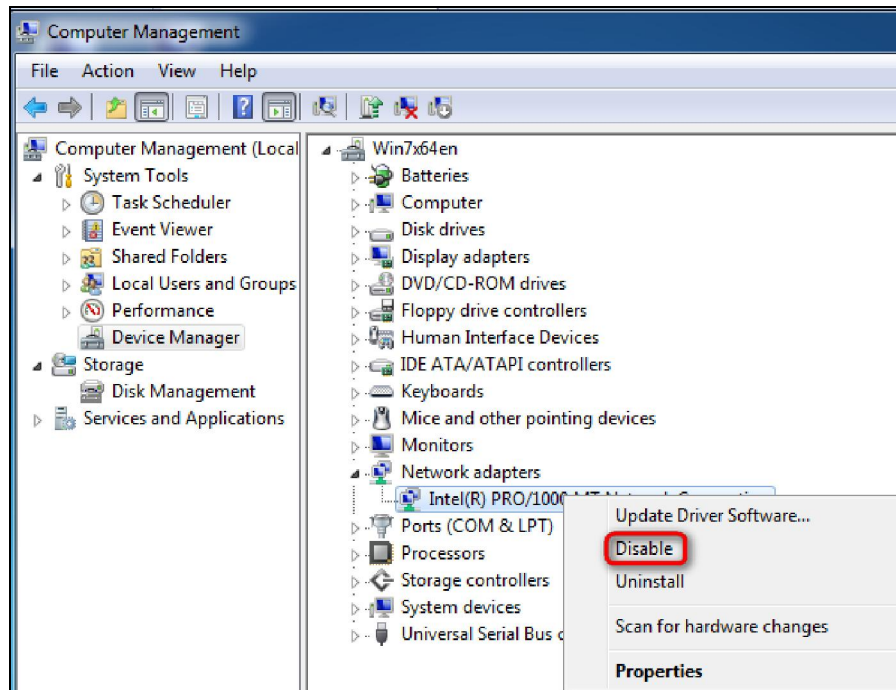
1.6 Disable other manufacturer's wireless network adapter

Note: The following steps are shown in Windows 7. Steps in other operation systems are similar.

1. Right click **Computer** and select **Manage**.



2. On the **Computer Management** screen ,select **Device Manager - Network adapters**, and right click the network adapter you want to disable and click **Disable**.



3. Click **Yes** on the dialogue box to disable the network adapter.



1.7 Product Maintenance

1. To guarantee normal performance please keep the wireless adpter away from water and exteremly humid environments.
2. Protect against corrosive substances (such as acids, alkalis etc).
3. Please keep the wireless adapter out of direct sunlight and do not expose to excessive heat.
4. Please contact Wilink technical support if any problems occur.

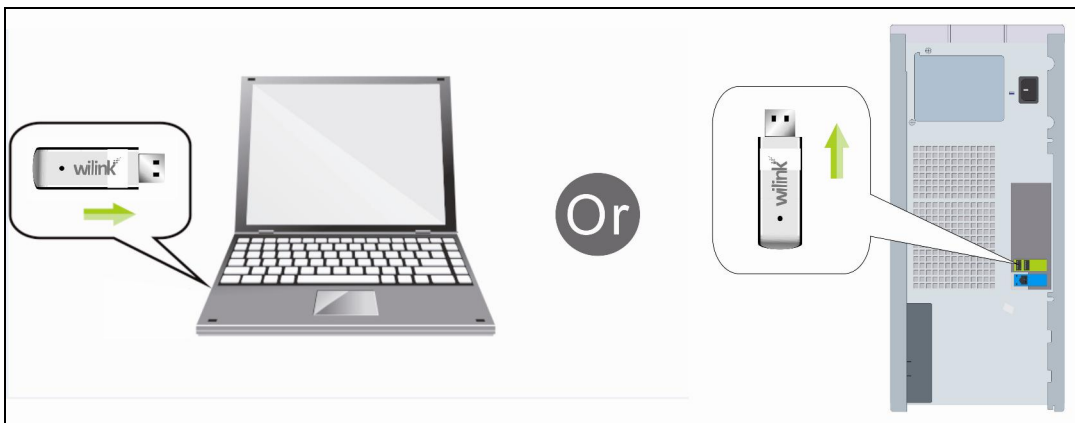
Chapter 2 Installation Guide

This chapter will assist you in installing the network adapter software using the included CD. The software has an integrated driver and configuration program, so when you are installing the driver the configuration software will automatically be installed as well.

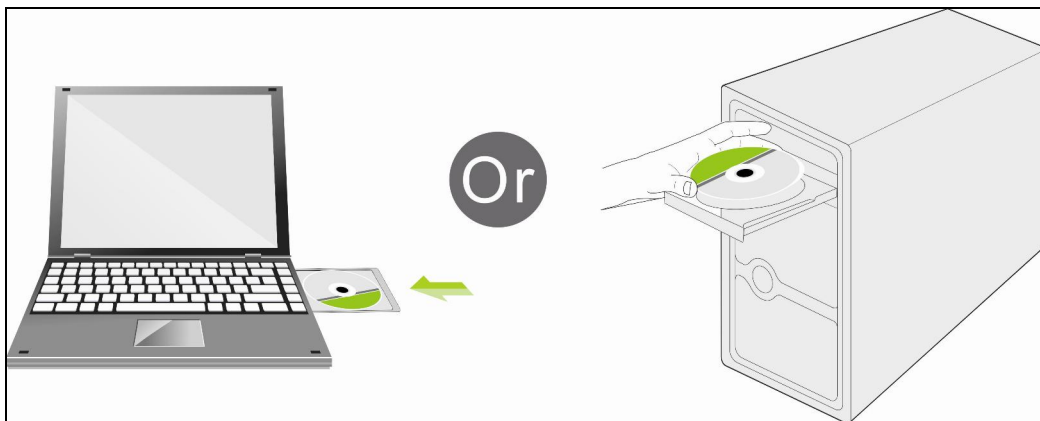
Software install and operation instructions are showed in Windows 8. If you have a different operating system, screenshots on your computer will look similar to the following examples.

2.1 Hardware Install

1. Turn on your computer and insert the Wilink adapter into an available USB port on your computer.



2. Insert the resource CD into the CD-ROM drive. If you do not have a CD-ROM, please go to www.wilinklat.com to download the latest Driver & Tool.



2.2 Software Install

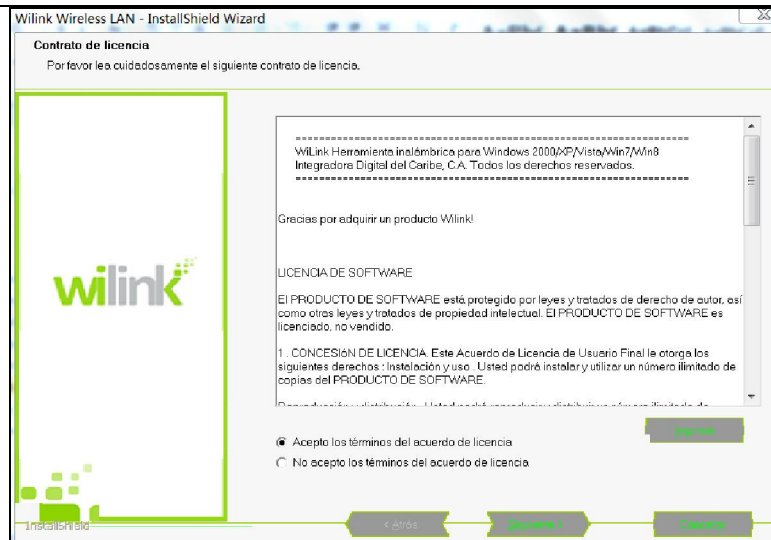
1. If the **Found New Hardware Wizard** appears, click **Cancel** and then use Resource CD to install the driver and software.



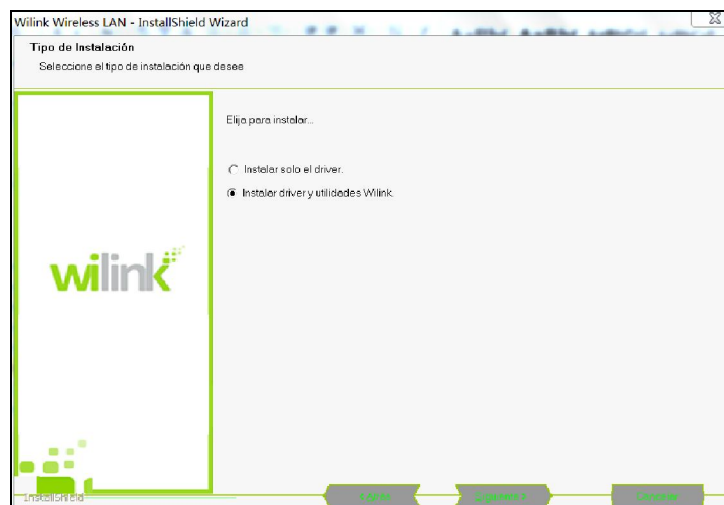
2. After inserting the included CD into the CD drive of your computer the auto-run program will initiate (if it doesn't auto-run, please open **Computer** and double click **Wilink.exe**). When the **Bienvenido** screen appears, click the **Ejecutar** button.



3. Select **Acepto los términos del acuerdo de licencia** and click **Siguiente**.

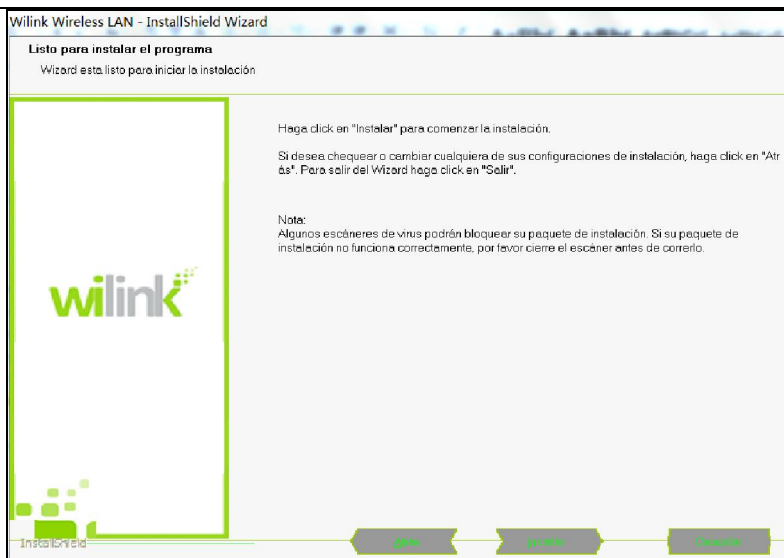


4. There are two installation selections: one is to install driver and the Wilink WLAN Config Tool and the other is to install the driver only . We recommend you to use the default installation method.

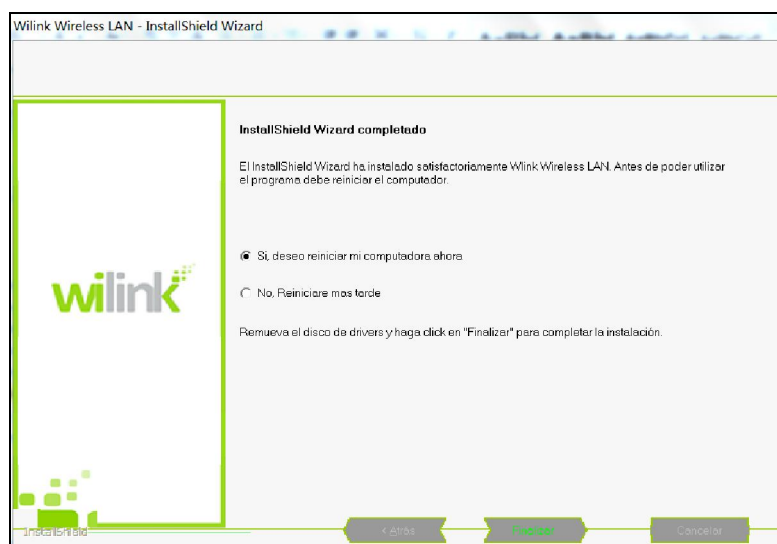


NOTE: The Wilink WLAN config tool must be installed to use the added features, such as AP mode and WPS security setup.

5. Click **Instalar** to install the driver and configuration software.



6. Click **Finalizar** to complete the driver and configuration.

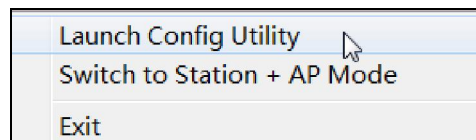


Chapter 3 Wilink Wireless Utility

When you are installing the driver, select **Instalar driver y utilidades Wilink** and the adapter driver and client utility will be installed. All functions of this adapter can be configured via Wilink's utility interface (in the following text it is abbreviated as UI).

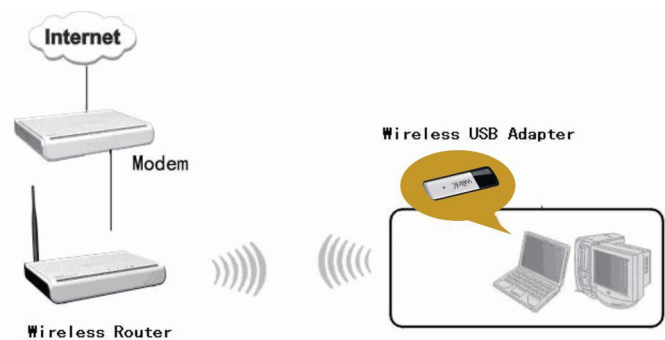
Select **Start > All Programs > Wilink Wireless > Wilink Wireless Utility**, or click the Wilink Wireless Utility shortcut on your PC's desktop to start the UI.

Click the Wilink UI icon located in the task bar to switch between the Wilink UI and Station + AP Mode UI, and to exit UI.



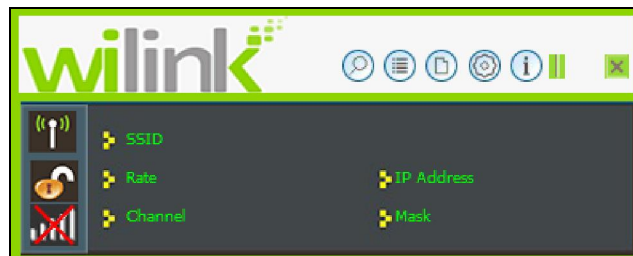
3.1 Station mode (Client Mode)

Station mode (Client Mode) Overview



This wireless network adapter is a common solution for client signal reception.

Main interface for station mode

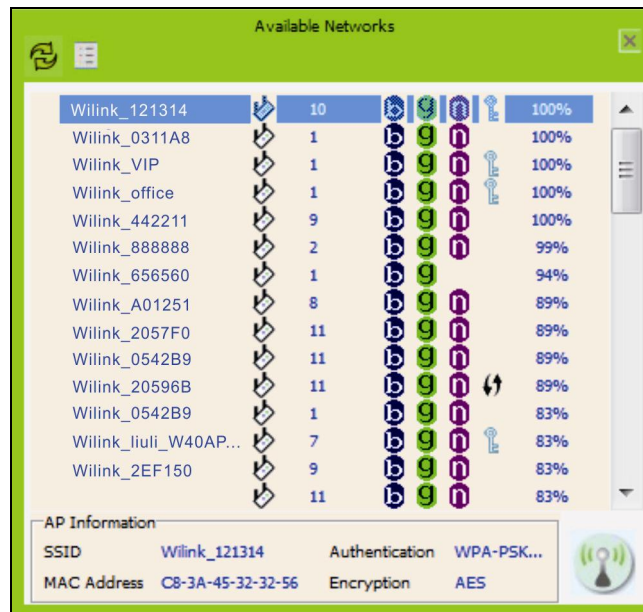


The function buttons on the top (From L to R) are: Available Networks, Link Information, Profile Settings, Advanced, and About. While the left column displays Turn On/Off RF, Security /No security, and Signal status.

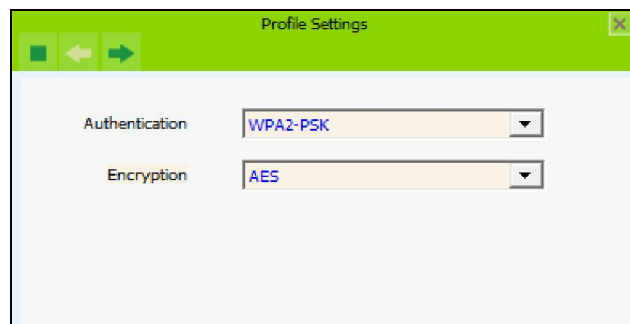
3.1.1 Available Networks

The Available Networks interface displays the available wireless networks in the area. When you select a wireless network name, the detailed information of this selected wireless network will be displayed.

Before you connect to a wireless network, please click the Rescan button to update the wireless network list and select the one you want to connect to, then click the Connect button .



For the networks that are not encrypted, you can directly click the Connect button . However, for the encrypted wireless networks, a **Profile Settings** dialog will pop up and you must select the corresponding authentication and encryption type, and then click the Next button to input the correct key. Please note that this type of connection will not create a profile, therefore the next time you connect to this network you will still need to select it manually.



The detailed explanations regarding authentication and encryption types are as follows:

WEP: Supports 10/26-bit Hex characters and 5/13-bit ASCII.

WPA-PSK: Supports 8-63-bit ASCII and 8-64-bit Hex characters.

WPA2-PSK: Supports 8-63-bit ASCII and 8-64-bit Hex characters.

WPA-PSK/WPA2-PSK: Supports 8-63-bit ASCII and 8-64-bit hex characters.

Note:

The Hex characters consist of numbers 0~9 and letters a-f.

ASCII characters consist of any Arabic digitals/letters and characters.

3.1.2 Link Information

After successfully connected to one wireless network, you can view its detailed information by clicking the **Link Information** icon on the main interface.

1. **Link Status** screen displays the detailed information of the connected AP including its SSID,MAC address, authentication type, encryption type, network type and channel.



2. **Throughput** screen displays the signal strength of each of the wireless adapter's link speed and the link quality.



3. **Statistics** screen is used to count the total Rx and Tx data packets, including transmitted,retransmitted and fail to receive ACK after all retries.You can click the Reset Counter button  to clear the count.



3.1.3 Profile Settings

You can also connect to the wireless network by adding a profile on the “Profile” screen. The Profile screen is used to save particular wireless network parameters. When the adapter is successfully connected to a network, the profile name of this network will automatically be added here, which helps the adapter to quickly connect to this wireless network again. However, there' is one exception, when you have set to the hidden SSID, the SSID that can not be scanned, then you must manually connect by adding the profile name. The main interface is as shown below.



Add: create a new profile

Delete: delete the existing profile

Edit: modify the existing profile

Add WPS Profile: WPS setting requires that the connecting wireless device supports the WPS function. WPS helps you to initiate wireless encryption and secure your wireless network quickly. For the detailed setup process please refer to [Appendix 2 How to Set WPS](#).

When adding a wireless adapter connection there are two network types to choose from when the Add button is selected: Infrastructure or Ad-Hoc.



Infrastructure is an application mode that integrates the wired and wireless LAN architectures. It is different from Ad-Hoc in that in this mode the computer installed with the wireless network adapter has to fulfill the wireless communication via AP or wireless router. It can be divided into two modes: wireless AP + wireless network adapter and wireless router + wireless network adapter.

Ad-Hoc is a special wireless mobile network application mode. All nodes in the network are equal. Usually it is used to share resources by connecting the opposing computer's wireless adapter.

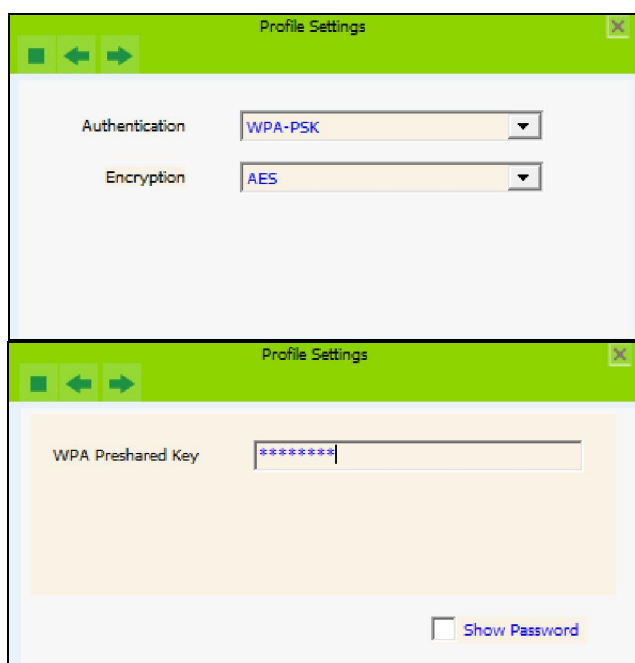
1. Infrastructure Profile Management

When you are connecting the wireless adapter to an AP or a wireless router, please select the Infrastructure mode.

Click the Add button and select the network type as **Infrastructure**, and enter the profile name and SSID or you can find the SSID you wish to connect from the drop-down list.



Click the next button to select the authentication type and encryption type such as WPA—PSK and AES, and then input the key and click next.



After a profile is successfully added, the profile name can be seen on the profile list, you can edit, import or export the profile, click the Active button to finish the connection, now you can also view the detailed connection status on the **Link Information** screen.





Note:

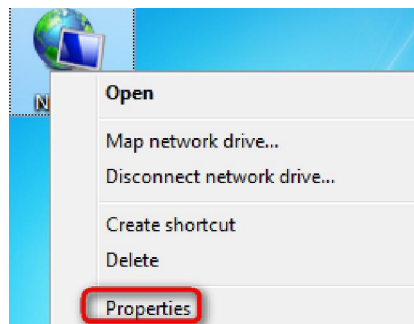
If the SSID broadcast function of the wireless router or AP you wish to connect is disabled, then the wireless adapter can not scan the SSID, thus you need to connect by creating the corresponding profile.

2.Ad-Hoc Profile management

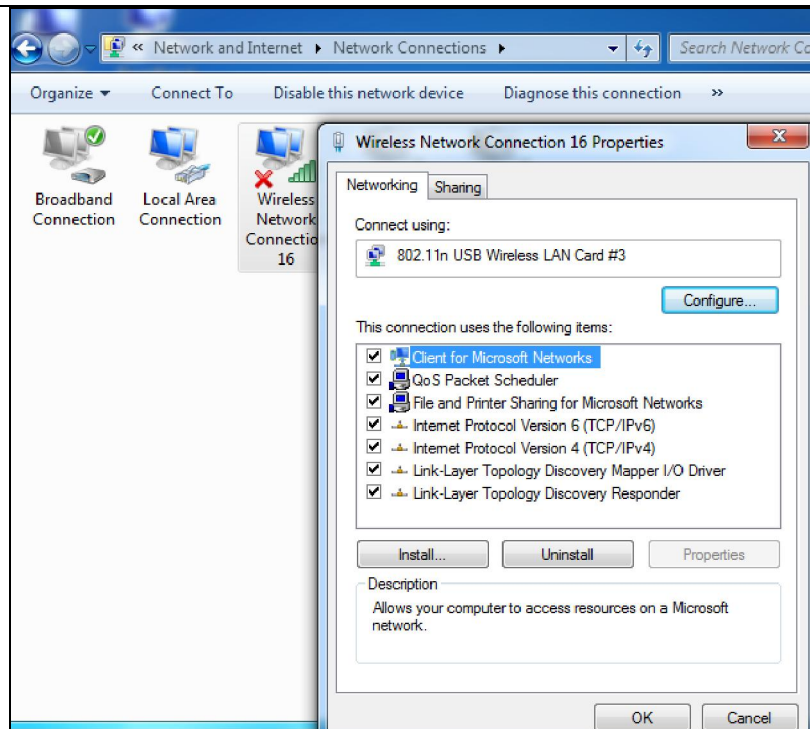
Using the Ad-hoc mode to establish a wireless network requires that each computer should be equipped with a wireless network adapter. By connecting these wireless adapters, computers are able to share the resources. The detailed setting steps are as follows:

1) You must allocate a static IP for each wireless adapter to be connected in Ad-hoc mode.

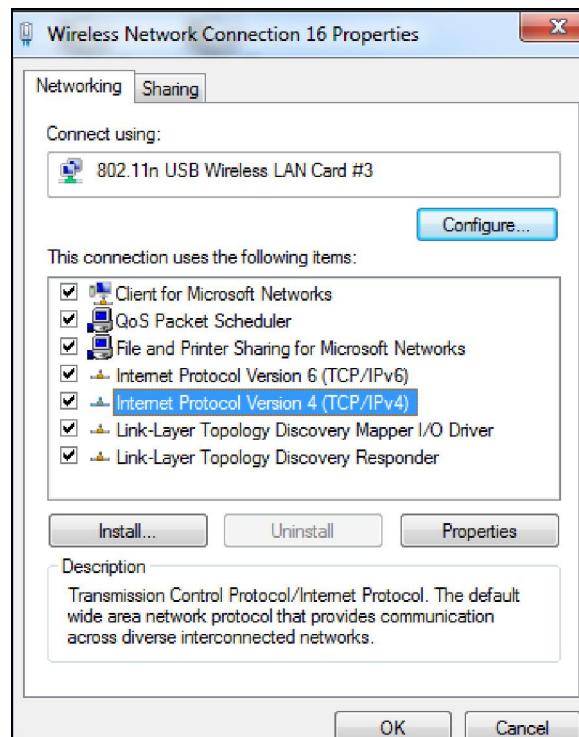
a. Right click **Network** on your computer's desktop and select **Properties**.



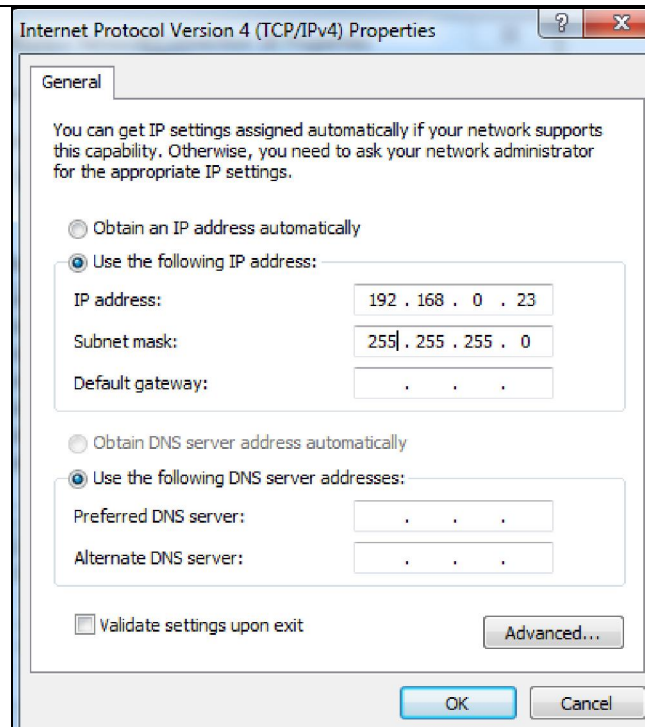
b. Click **Change adapter settings**, right click **Wireless Network Connection**, and select **Properties**.



c. Double click **Internet Protocol Version 4 (TCP/IPv4)**.

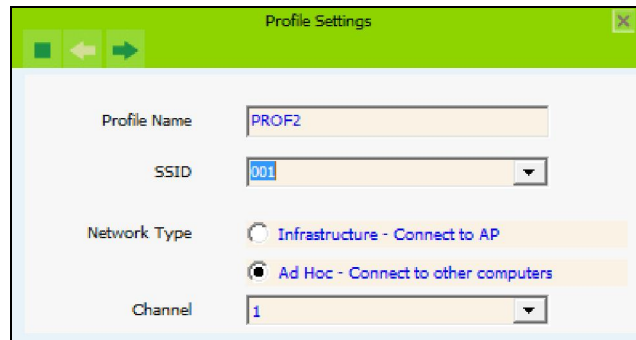


d. Enter the IP address and subnet mask (ensure that the IP address is not used by any other devices in the network). For example: if your wireless adapter's IP address is 192.168.0.1, then set other wireless adapters' IP addresses within the range of 192.168.0.2—192.168.0.254. Click **OK** to save the settings.

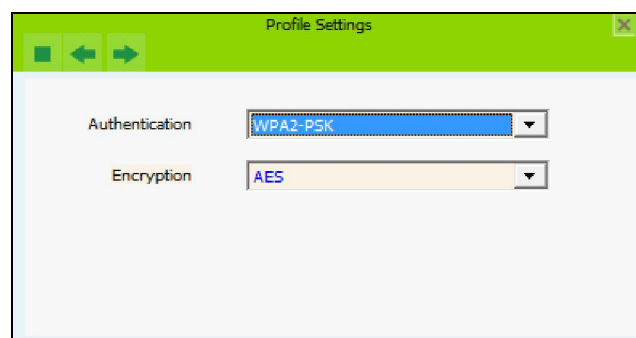


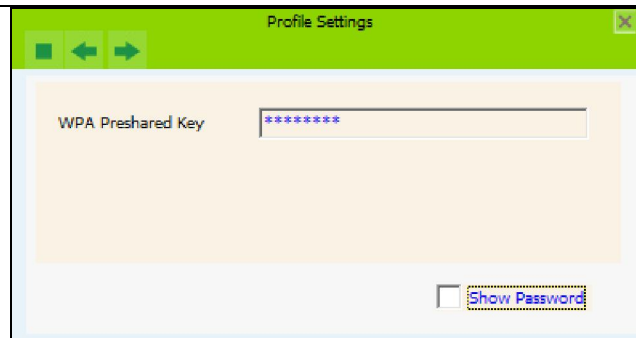
2) Create a new Ad-hoc profile

Click the Add button and enter the network name in the SSID field to identify the wireless network, and select **Ad-hoc** as the network type and then select the channel.



Click the Next button to select the authentication type and encryption type and then input the correct key and click the Next button.

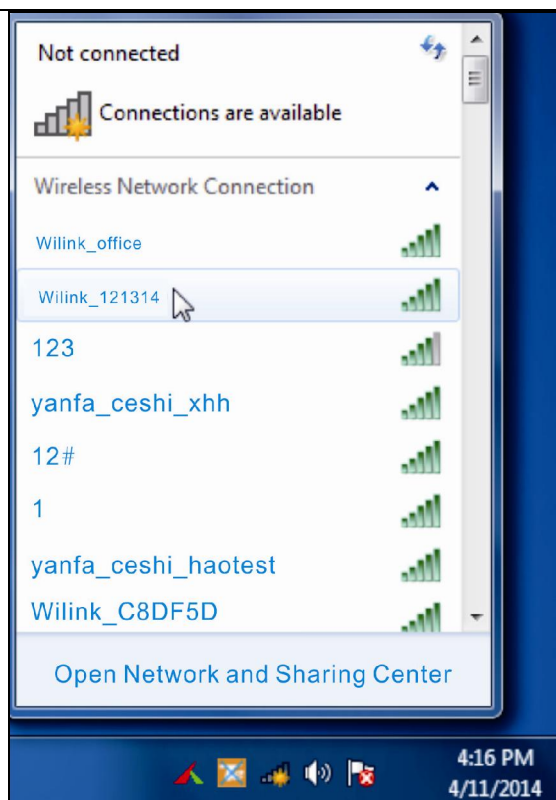




After a profile is successfully added, the profile can be seen on the profile list, select it and click the Active icon on the lower right corner.



And then search for the wireless network on other clients. Double click the wireless network you have configured and you'll be prompted for the key, after entering the key, click **Connect**.

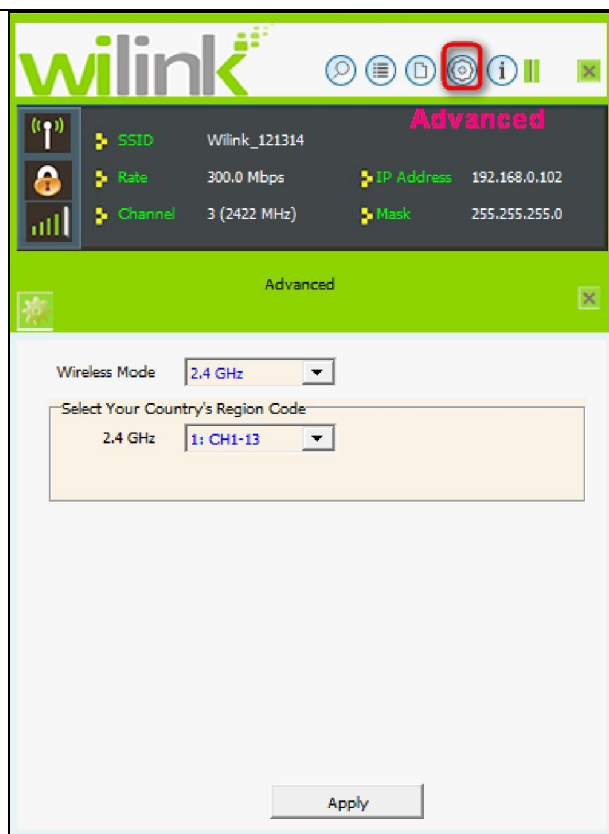


When the highlighted part shows **Connected**, the connection is successful.



3.1.4 Advanced

This section is used to set the wireless mode and country region code for the current wireless adapter.



3.1.5 About

This screen mainly displays the version information of the UI's different programs as well as Wilink's copyright statement.

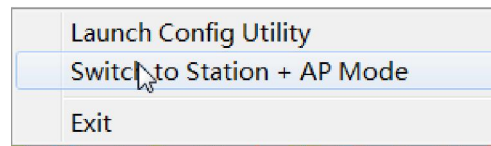


3.2 AP Mode (in Windows 7 OS)

AP Mode Overview

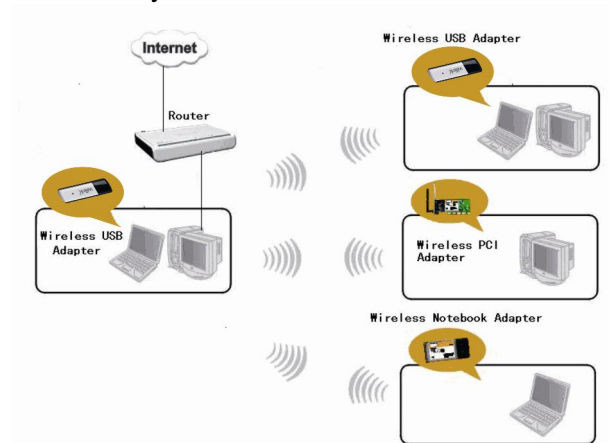
Wireless network adapter can also serve as an access point to transmit wireless signals and create a wireless network, allowing other wireless clients to access the network.

Please right click the UI icon on the taskbar of your computer desktop and select **Switch to Station + AP Mode**.

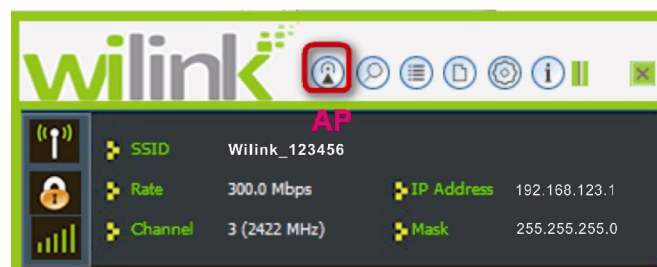


As shown in the diagram below: The PC in the left has already accessed to the Internet by using a wired network adapter, meanwhile, you install a Wilink wireless adapter (take a USB wireless adapter as an example) and its UI on this computer, and set the adapter to AP mode.

By using the wireless adapters to scan the AP'S SSID to connect, the computers in the right can also access to the Internet after successfully connected.



In this mode, the client utility differs from that in station mode, and the main interface is as shown below.



When it is switched to AP mode, the wireless adapter will automatically set its IP address as 192.168.123.1, and other clients that connected to this AP will automatically obtain the IP addresses of: 192.168.123.X (X is any integer from 2 to 254). The function buttons on the top (From L to R) are respectively AP, Available Networks, Link Information, Profile Settings, Advanced, and About, while the left column displays Turn On/Off RF, Security /No security, and AP mode icon.

You can change SSID in AP setting option and control the number of the connected clients by modifying the max number of peers. AP mode has only WPA2-AES encryption method as default and cannot be modified.

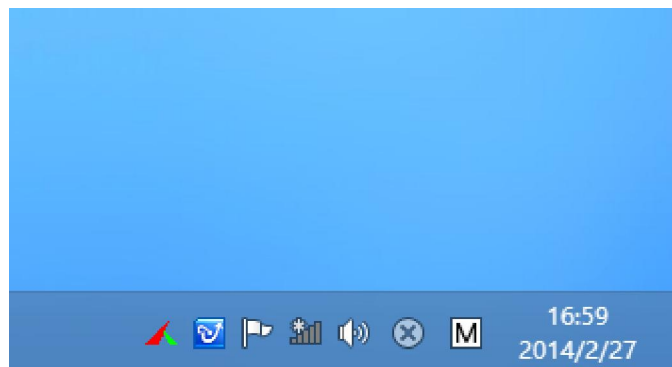
Appendix 1 Wi-Fi Connection

This chapter explains how to use Windows internal configuration program to connect to the wireless network for users who don't install Wilink configuration program.

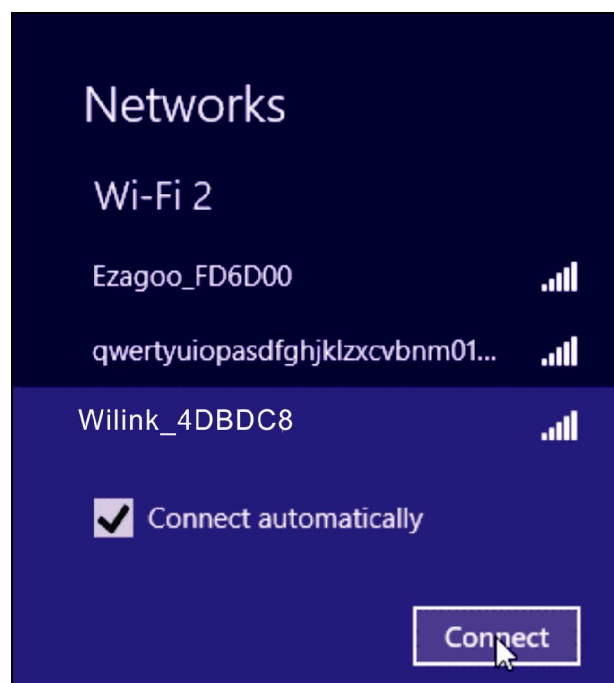
You must enable Windows Wireless Zero Configuration when using the internal wireless configuration program.

Windows 8

Step 1: Click the icon  on the bottom right corner of your desktop.



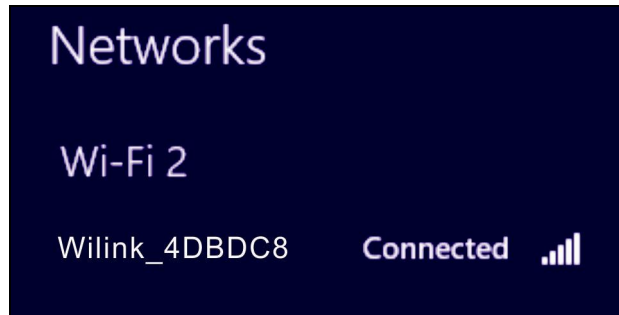
Step 2: Select your wireless network from the list, click **Connect** and then follow onscreen instructions.



Tip:

1. If you cannot find the icon , please move your mouse to the top right corner of your desktop, select **Settings -> Control Panel -> Network and Internet -> Network and Sharing Center -> Change adapter settings**, right click **Wi-Fi** and select **Connect/Disconnect**.
2. If you cannot find your wireless network from the list, ensure the Airplane Mode is not enabled on your PC.

Step 3: When your wireless network is connected successfully, the following screen will appear.



Windows 7

1. Click the icon  on the bottom right corner of your desktop.
2. Double click your SSID (wireless network name) and then follow onscreen instructions.



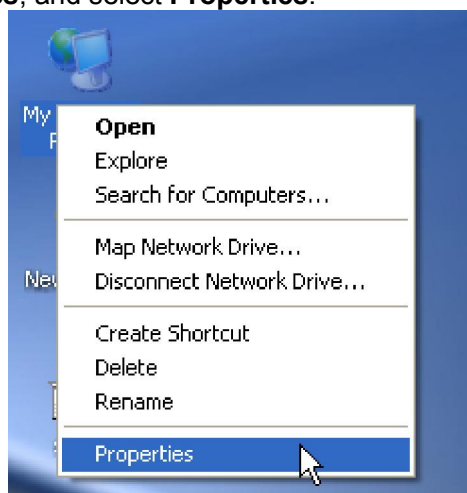
3. When your SSID (wireless network name) displays **Connected** as shown below, you've connected to

it for Internet access successfully.

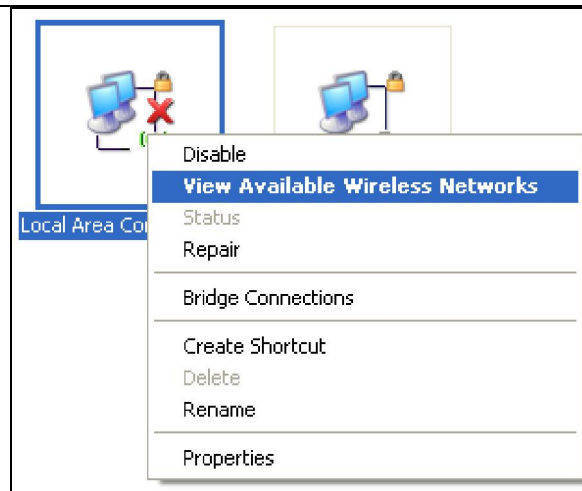


Windows XP

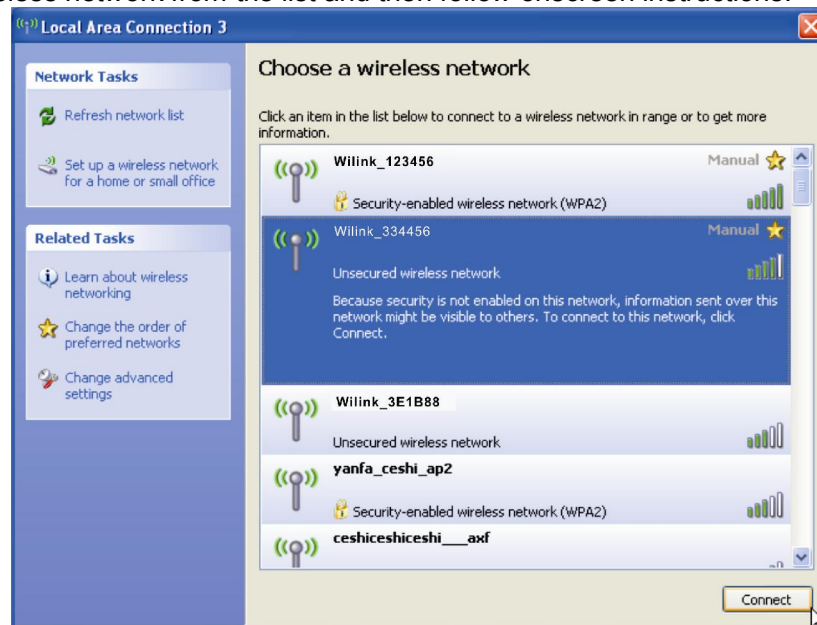
1. Right click **My Network Places**, and select **Properties**.



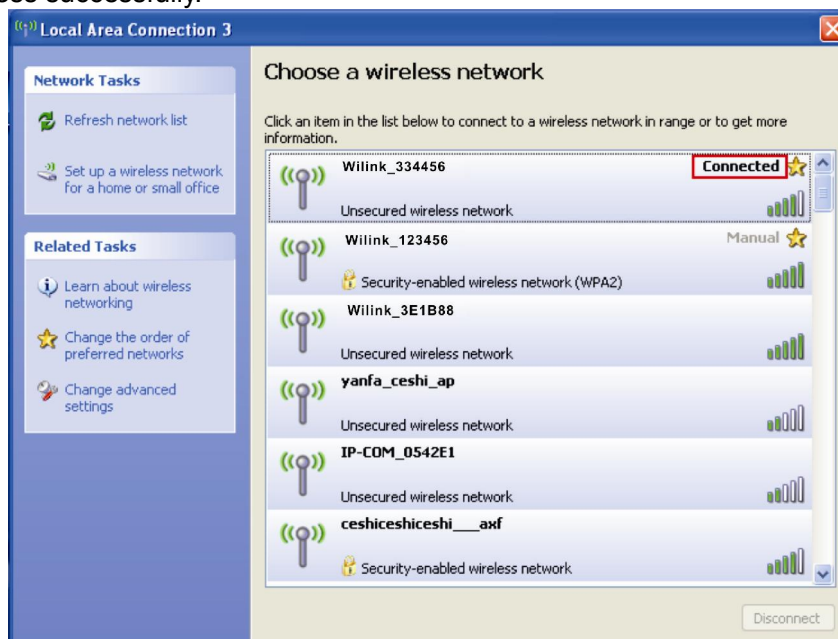
2. Right click **Local Area Connection**, and select **View Available Wireless Networks** from the pop-up submenu.



3. Select your wireless network from the list and then follow onscreen instructions.



4. When your SSID (wireless network name) displays **Connected** as shown below, you've connected to it for Internet access successfully.



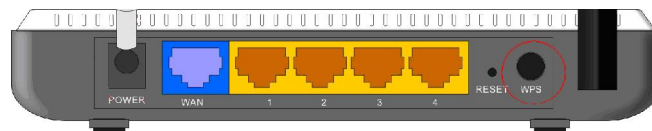
Appendix 2 How to Set WPS

WPS setting supports PBC and PIN code modes. The setting steps of the two modes will be introduced in detail.

1. Wireless Connection in PBC Mode

There are usually two ways of enabling PBC on Wireless router (please refer to the user guide of your wireless router).

1.1 Use WPS button on the router



If your wireless adapter provides a WPS button, you may use the button to perform PBC connection.

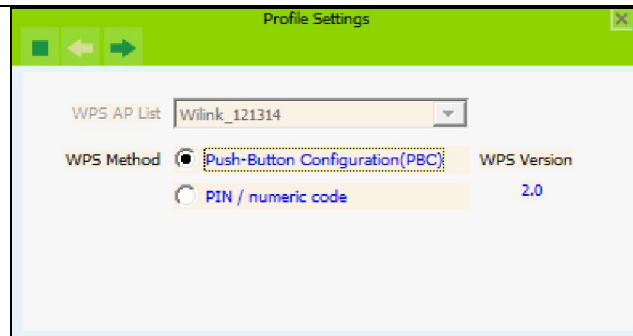
- Run the adapter's UI and switch to STATION mode
- Two minutes after the router's WPS-PBC is enabled, press the adapter's WPS button to connect in PBC mode.
- You may view the PBC connection process on the UI's PBC screen.

1.2 Perform PBC connection on the UI of the wireless adapter

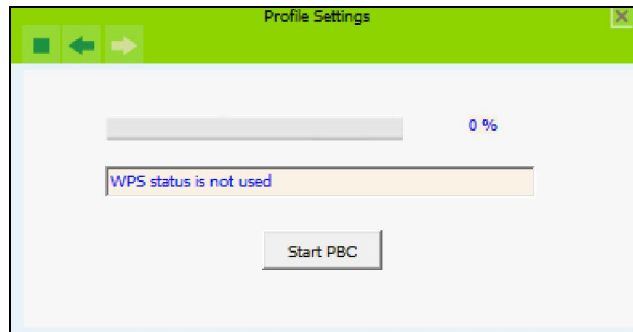
- On the main interface of Wilink's UI, click **Profile Settings > Add WPS Profile**.



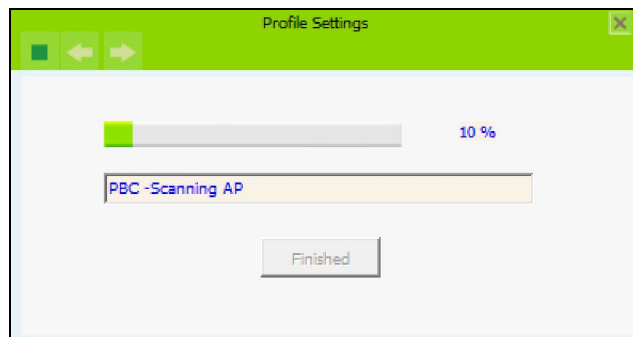
- On the Profile screen, select **Push-Button Configuration (PBC)** and then click the Next button, click **Start PBC** within two minutes after the router enables the WPS function. The connection is established when the negotiating process finishes.



Start PBC:



Negotiating process:

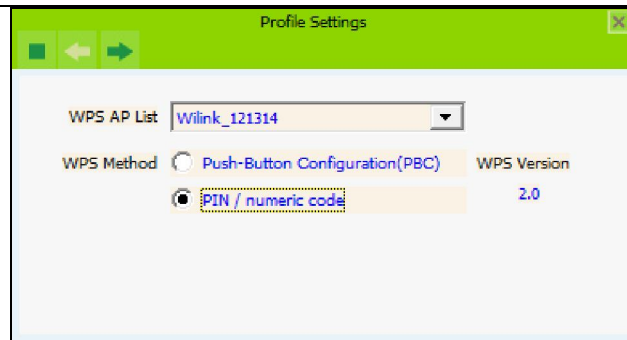


A profile forms automatically after the connection is successfully established.



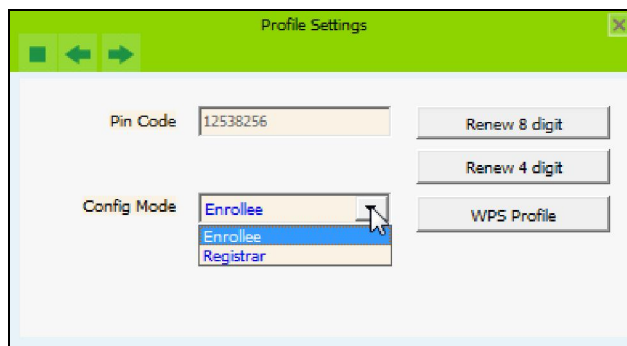
2. Wireless Connections in PIN Mode

On the **Add WPS Profile** screen, select **PIN** as the WPS Method. You may select the wireless AP to be connected in WPS mode on the WPS AP drop-down List, or select **Auto** and then click the next button.



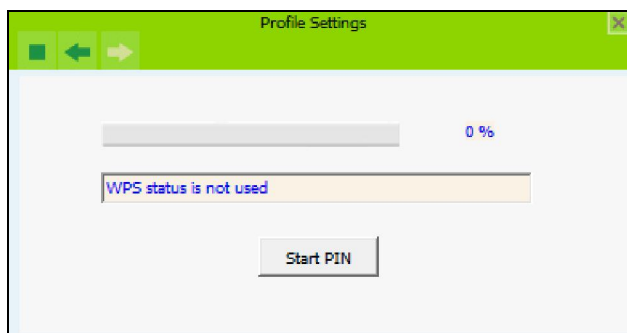
2.1 Enrollee Mode

1) The PIN code field lists the adapter's current PIN code, when you select **Enrollee** as the Config Mode, you need to copy this PIN code and input it in the PIN code field of the router's WPS setting screen.



2) Enter your wireless router's WPS configuration screen, enable WPS settings and select PIN for WPS mode, then input the PIN code field, and save your configurations.

3) Click the next button on the Profile screen and click **Start PIN** to start the PIN code negotiation.



2.2 Registrar Mode

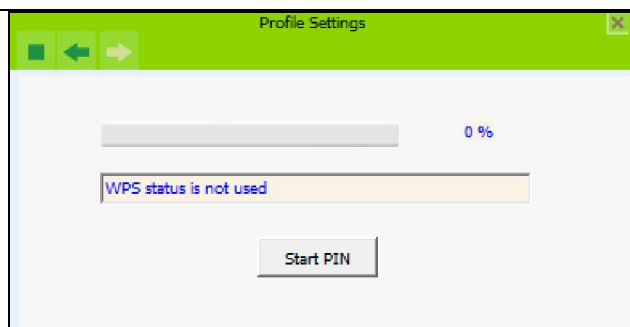
1) On the **Add WPS Profile** screen, select the SSID of the AP that needs to negotiate in WPS mode, select **PIN** as the WPS method and click the next button to display the following screen:

2) Select **Registrar** as the config mode and enter the router's PIN code that displays on the router's WPS screen, in the PIN code field here.

Now you can view the SSID, authentication type, and encryption type that need to be negotiated by the WPS in registrar mode. These values can be modified but we recommend using the default. Here we use the default setting and then click the next button.

You can view the negotiation key on the screen below, but you are not recommended to modify it, just click the next button.

Then click **Start PIN** on the screen below to perform WPS connection.



Note:

1. Under the WPS connection mode, when multiple routers simultaneously enable the WPS function, it may cause connection failure.
2. If the router connects to the adapter using the WPS, only one client can be connected at one time, and so if the router needs to connect to multiple clients through WPS, you should repeat the WPS operation.

Appendix 3 FAQ

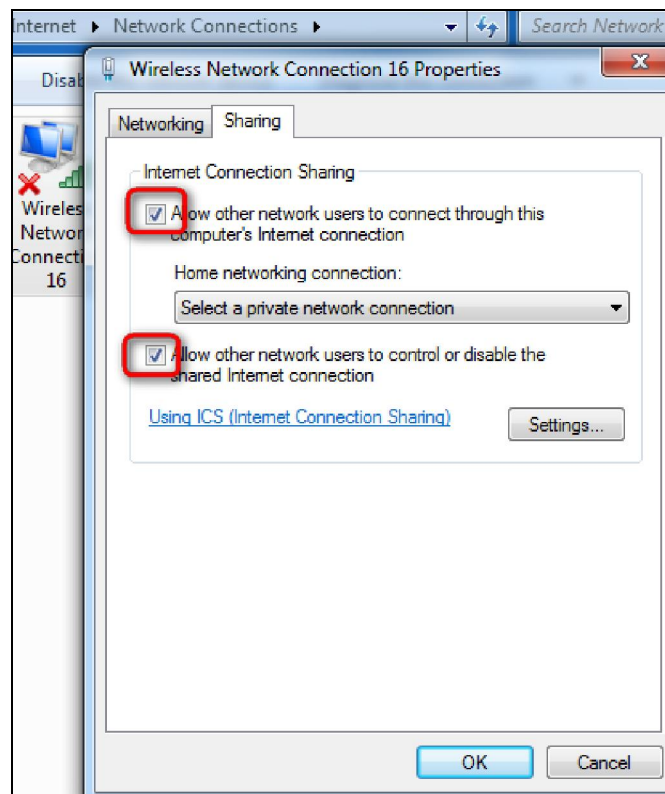
Q1: Microsoft ICS service is pending.

A1: If ICS service cannot be enabled after a long time, please re-switch from Station Mode to AP Mode, if not successful please go back to Station Mode ,then restart the computer.

Q2: ICS is already bound by another network device.

A2: Microsoft ICS service can only combine one group of WAN and LAN. This message indicates ICS may have been enabled by other network adapters.

Please manually cancel ICS and switch between Station and AP modes to reset adapter.

**Q3: I Fail to enable ICS. What should I do?**

A3: Microsoft ICS service can only combine one group of WAN and LAN. This message indicates ICS may have been enabled by other network adapters.

1. Please manually cancel or restart and cancel ICS, then switch between Station and AP modes to reset adapter.
2. This dialogue box appears because virtual wi-fi miniport adapter can only be used by one wireless network at a time. Please disable anyother non-Wilink wireless network adapter and switch between Station and AP modes to reset adapter.

Q4: Under Windows 7, when I switch from station mode to AP mode, the screen flashes “Disabling ICS, please wait.....” and immediately return to station screen.

A4: This is because you have disabled “Microsoft Virtual WiFi Miniport Adapter”,please re-enable it and

then switch to AP mode.

Q5: Client cannot obtain IP when connected to soft AP of the wireless network adapter.

A5: Manually set an IP address at the same net segment as that of AP and the gateway at the IP address of AP. And communication can be achieved.

Q6: Some function buttons on UI become grey and can not be used.

A6: This is because you have switched to Zero config mode, please right click the Wilink UI ON the right-down corner of your desktop. Operations can be done after you have switched to Wilink UI.

Appendix 4 Safety and Emission Statement



CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures. This device complies with EU 1999/5/EC.

NOTE: (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.



FCC 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. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

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 20cm between the radiator & your body.

NOTE: (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

(2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.