For Windows XP :

The system will detect a new hardware has been added, and start the "Found New Hardware Wizard".Click on "Cancle".

- 1) Please insert the disc into your CD-ROM drive. The disc should auto start ,displaying the flowing window ,if it does not start ,open the browser window ,find the autorun .exe file in your CD-ROM folder, click to run it.
- 2) Ralink has integrated all the150Mbps 802.11n drive into one file . Click to run the "Drive Installation".

Notes: Because Ralink often updates software, the drivers contained in the disc might be changed without prior notice.

- 1) Follow the instructions and prompts of the "**InstallShield Wizaed**" to finish the driver installation:
- a. Select the "I accept the terms of the license agreements", then click the "Next".

| Ralink Wireless LAN - Insta | llShield Wizard | × |
|---|---|------------|
| License Agreement Please read the following licen: | se agreement carefully. | |
| Ralink | End-User License Agreement ALINK Software for Windows XP/Vista/Win7/Win8 Copyright (C) BALINK TECHNOLOGY CORP. All Rights Reserved. Thank you for purchasing and/or using BALINK product. Please read this End-User Licens Agreement ("Agreement") carefully and agree to comply with the terms of this Agreement before downloading, installing, copying or using the software of Balink ("Software"). By downloading, installing, copying or using this Software, in whole or in part, you agree to be bound by the terms of this Agreement. SOFTWARE LICENSE All the rights and interests of the Software belong to Balink. The Software is protected by applicable copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The Software is licensed, not sold. I. BraNT OF LICENSE. This Agreement grants you the following rights: (1) Installation and Use: You may install and use an unlimited number of copies of the Software. (2) Reproduction and Distribution: You may reproduce and distribute an unlimited number of copies of the Software; provided that each copy shall be a true and complete copy, include (2) accept the terms of the license agreement (2) and accept the terms of the license agreement | se sing |
| | < <u>B</u> ack <u>N</u> ext > C | ancel |

b. There shows a setup type window, you can select "**install driver only**" or "**install driver and Ralink** WALN utility" and then click the "Next".

| Ralink Wireless LAN - Insta | allShield Wizard | |
|--|--|--------|
| Setup Type Select the setup type that be: | st suits your needs. | |
| | Choose to install | |
| | Install driver and Balink WLAN Utility | |
| | 🐡 Install driver only | |
| Ralink | | |
| | | |
| | | |
| InstallShield | < Back | Cancel |

Tips:

1). The Windows XP utilizes a 'Wireless Zero Configuration(WZC)'' Service built into the operating system. Many wireless network adapter cards utilize this service.

2). Ralink the chipset manufacturer has developed an utility for setting up wireless connection. If you select this item, you can switch between the Windows XP's WZC service and the Ralink WLAN utility service later.

c. Click the "Install" to confirm the installation, there shows the installation progress.

| Ralink Wireless LAN - Insta | IIShield Wizard | × |
|--|--|----|
| Ready to Install the Program The wizard is ready to begin in: | m stallation. | |
| | | |
| | Click Install to begin the installation. | |
| | If you want to review or change any of your installation settings, click Back. Click Cancel to exit th wizard. | ne |
| | Note: Some virus scanner program will block the install package. If the install package does not work properly, please try to close the virus scanner before you run the install pacakge | |
| | | |
| Ralink | | |
| | | |
| | | |
| | | |
| | | |
| InstellShield | < Back Install Cancel | 1 |
| | | |
| Ralink Wireless LAN - Instal Setup Status | IShield Wizard | × |
| | | |
| | The InstallShield Wizard is installing Ralink Wireless LAN | |
| | | |
| | Installing | |
| | | |
| | Please Wait | |
| Ralink | | |
| | | |
| | | |
| | | |
| | | |
| | Cancel | |

d. Click "**Finish**" to finish the driver installation.

| Ralink Wireless LAN - InstallShi | eld Wizard |
|----------------------------------|--|
| | |
| Attalyst | InstallShield Wizard Complete |
| | The InstallShield Wizard has successfully installed Ralink Wireless LAN. Click Finish to exit the wizard. |
| | |
| Ralink | |
| | |
| | |
| | |
| InstallShield | < Back Finish Cancel |

For Windows 7:

Once the wireless USB adapter be plugged into an USB port, the flowing message will appear on screen.



The following installation procedures are similar to those of Windows XP. Please refer to the installation steps for Windows XP.

For Windows 8:

The installation procedures are similar to those of Windows XP .Please refer to the installation steps for Windows XP.

4. Wireless Connection

For Windows XP :

1) After finishing driver installation, insert the USB adapter to Notebook or PC that supports USB

2.0/1.1 interface.

Remarks: Make sure to connect the adapter to an USB port on your computer directly rather than an USB hub. Although it might work when connecting with an USB hub, the likelihood of configuration problems will be higher.

2) The system shows a wireless utility icon in the Windows system tray, which locates in the bottom-right corner of your computer screen, and pops up a message that indicates a new hardware is found and installed, something like this:



Should the service "Wireless Zero Configuration (WZC)" be applied.

- 3) Before you begin, ensure WZC is enabled, by right-clicking on the Ralink icon **1** in the task bar in the bottom right corner of your screen.
- 4) In the menu that appears, select "Use Zero Configure as Configuration Utility" to use Windowns wireless management feature, Windows Zero Configure(WZC) helps to manage your Wireless Network Connection.

| Launch Config Utility | |
|---|----|
| Use Zero Configuration as Configuration Utility | Г |
| Switch to AP Mode | |
| E×it | |
| EN 🛃 👹 🦄 | R+ |

5) Right click the icon and then select "View Available Wireless Networks" to launch the utility, the Wireless Network Connection window appears and displays your wireless network listed with the SSID you choose.



Notes: Before configuring your WiFi access, you need to have your network's SSID (service set identifier), security key and authentication type handy. Check the documentation coming with your router, ask your network administrator to get the information.

6) If you don't check your network, click "Refresh network list" in the upper left corner. If you are locating within the valid range of hotspots or wireless routers, all available networks will be recognized and listed automatically. Click your preferred network, and then click "Connect" in the lower right corner.



7) If the network security key hasn't been inputted before, Windows XP prompts you to enter the network's security key to access the wanted SSID. Type the encryption key that you wrote down earlier in both the Network key and Confirm network key boxes, and then click "Connect".

| Wireless Network Con | nection |
|--|---|
| The network '232ballihoo'r network key helps prevent Type the key, and then di | requires a network key (also called a WEP key or WPA key). A t unknown intruders from connecting to this network. ck Connect. |
| Network key: | •••••• |
| Confirm network key: | •••••• |
| | Cancel Cancel |

Tips: If there are free hotspots, simply select the network you want from the list displayed, then click

"Connect". It tries to launch your Internet browser —you should be connected to the Internet.

If there is a pay hotspot, signing in or up will require either to enter your login information-if you're an existing customer, or to enter your credit card information for payment, it is just decided by you. Then clicking the Connecting, your default Internet browser will launch and take you to the service provider's login page. Most providers have very simple and step-by-step instructions for you to sign up and then to be connected. Another way to access the service provider's login page is to simply launch your Internet browser, if there's a pay network available, you'll be taken directly to the login page.

Should the service of Ralink wireless connection utility be applied.

1) After the installation of Ralink utility, the system shows a special wireless utility icon in the Windows system tray, *which* locates in the bottom-right corner of your computer screen:



2) when an USB wireless adapter is inserted into an USB 2.0/1.1 port of Notebook or PC, the icon changes colors according to the wireless signal quality.

3) Double-click the icon or right click the icon and then select "Launch Config Utility" to launch the utility, the RaUI window appears like:

| 2 | Ralink | | |)() ? × |
|--------------|---------|--------------|------------|---------------|
| " I " | SSID | AP1 | | |
| a | 🐓 Rate | 300.0 Mbps | IP Address | 192.168.2.101 |
| ull | Channel | 7 (2442 MHz) | Mask | 255.255.255.0 |

The Ralink wireless utility starts in compact mode as shown above, provides profile management, the available networks listing, a statistical counter display, Wi-Fi multimedia (WMM), protected Wi-Fi setup, Cisco compatible extensions (CCX), call admission control (CAC), radio controls, Ralink

driver/utility information, and help functions. Clicking the expanding icon change to the full mode as shown below:

| Ralink | 000(1) 7 × | Site Survey | × |
|---|---|---|-----|
| (*1*) | AP1 300.0 Mbps > IP Address 192.168.2.101 7 (2442 MHz) > Mask 255.255.255.0 | 118 2 9 7 65% 2 9 7 10% SoftAP-33333 2 9 7 10% dink-111 3 9 0 81% 001601D31484_G 5 5 9 7 50% wax 6 5 9 14 39% | * H |
| a 🔸 🖻 | Link Information X | ExRegNW313SD8 6 6 9 0 47 76% Baron_Test 6 9 0 96% baldwin 6 6 9 0 7 55% | |
| Status Extra Info Authentication | AP1 <> 00-0E-2E-E1-98-2D Link is Up [Tx Power: 100%] WPA2-PSK | RT305x_AP ℓ 6 0 0 94% Sttch ℓ 6 0 0 94% ISTAP ℓ 6 0 0 94% 1STAP ℓ 6 0 0 0 94% | |
| Encryption Network Type Central Channel | AES Infrastructure 5 | Cheetah 6 9 9 0 44% AP Information SSID 118 Authentication WPA2-PSK MAC Address 00-21-91-F7-A9-96 Encryption AES | |

In this utility, there are two applications can be selected : the Station mode and AP mode .

- Station mode (Client mode): it is the default access way, the USB wireless adapter services as a client to acess Internet through other router or AP.
- AP mode : it sets the USB wireless adapter as an AP, which allows the other users can connect to Internet through your computer. Before using the mode, it must be available that an existed Internet connection via wire Ethemet connection or by 3G wireless connection.

Tips: Point the cursor to the Ralink icon location on bottom-right corner of your computer screen, right click the mouse, from the pop up list, you can select the station mode or AP mode.

- 4) Below are the steps to connect to a wireless network using the Ralink Utility.
- a. Open the Ralink Utility by double-clicking on the Ralink Utility icon in the taskbar.
- **b.** The Ralink Utility appears ,by default connected to an available open wireless network. Check the name of the network to which you are connected. If this is the correct network, no father steps are required.

| 2 | Ralink | 6 | |)() ? × |
|--------------|---------|--------------|------------|---------------|
| " T " | > SSID | QA10 | | |
| 6 | 🕽 Rate | 121.5 Mbps | IP Address | 192.168.1.103 |
| att | Channel | 6 (2437 MHz) | > Mask | 255.255.255.0 |

c. To connect to an alternative network, click the Available Networks button.

| 2 | Ralink | 6 | |)() ? × |
|--------------|---------|--------------|------------|---------------|
| " i " | > SSID | QA10 | | |
| 6 | > Rate | 121.5 Mbps | IP Address | 192.168.1.103 |
| all | Channel | 6 (2437 MHz) | Mask | 255.255.255.0 |

d. In the Available Networks window that appears, select the name of the network to which you are

| ogemray_2012 | Į, | 4 | b 9 | 06 | 100% | |
|--------------|----|---|---------|-----|------------|--|
| QA10 | Š. | 6 | _ [2] 9 | | 100% | |
| QA5 OA8 | Ň | 9 | | 86 | 52% 99% | |
| Q.10 | ~ | | | • • | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

((-)) CO

| AP Informatio | n | | | _ |
|---------------|-------------------|----------------|---------|-------|
| 5SID | ogemray_2012 | Authentication | WPA-PSK | (()) |
| MAC Address | 5C-63-BF-E2-A8-24 | Encryption | AES | |

The Ralink Utility automatically detects and displays the security settings of the network to which e. you are connecting in the Profile Setting screens. If the Utility shows that WPA-PSK or WPA2-PSK security is detected as shown Below , click the right arrow to save your settings.

| Profile Setting | s X |
|---|-----|
| Authentication WPA2-P5K Encryption AES | • |

f. In the screen that displays, in the 'WPA Preshared Key' field ,type a security key, the same as that used by the AP or wireless router to which you are connecting. Click the right arrow to save your settings and connect to the network.

| = + + | Profile Settings | × |
|-------------------|--|---|
| WPA Preshared Key | ananananananananananananananananananan | _ |
| | | |
| | | |
| | | |

g. Once you are connected the Avaliable Networks shows the status of your connection.

| 2 | Ralink | | |)() ? × |
|--------------------|------------------|----------------------------|---------------|---------------|
| " <mark>1</mark> " | > SSID > Rate | ogemray_2012 150.0 Mbps | > IP Address | 192.168.1.103 |
| ull | > Channel | 4 (2427 MHz) | ≱ Mask | 255.255.255.0 |
| | | Available Netw | iorks | |
| 2 | | | 0115 | × |

For Windows 7:

Notes : Windows Zero Configuration (WZC) is not necessary in Windows Vista, Windowns 7 or higher version OS, you can use WZC and the Ralink Utility to manage the adapter simultaneously.

1) Click on the wireless networks icon in the task bar in the bottom right hard corner of your screen to diaplay the available wireless networks.

| Not connected | 4 ₂ |
|------------------------------|----------------|
| Connections are available | |
| Wireless Network Connection | ^ |
| ogemray_2012 * | lite. |
| QA10 | 3 11 |
| QA8 | * •1 |
| Fleetlink_test | -41 |
| QA5 | 50 |
| QA7 | 50 |
| | |
| Open Network and Sharing Cer | nter |

2) Click the "Connect" button to connect to the select network.



3) If your network has wireless security Configured, enter the required setting. The following is an example only, your network setting may differ.



4) The success of your connection is indicated by the wireless network icon.

| Currently conn | ected to: | • |
|----------------|--------------------------|---|
| internet | y_2012 access | |
| Wireless Netwo | rk Connection | ^ |
| ogemray_2012 | Connected | l |
| Fleetlink_test | Name: ogemray_2012 | 1 |
| QA10 | Security Type: WPA2-PSK | 1 |
| QA8 | SSID: ogemray_2012 | 1 |
| QA5 | 31 | đ |
| QA7 | 31 | 1 |
| | | |
| | | |
| Open Net | twork and Sharing Center | |

Notes :The steps of using the Ralink Utility to connect a wireless network is the same as those described in Windowns Xp .

In addition to station and AP mode, there is the Client + AP Mode to be selected in windows 7 as well. **Which means:** other wireless devices connect to -> Soft-AP of the adapter -> the adapter (Client mode with Internal ICS sharing)-> connect to other AP or Router -> Internet.

| | Launch Config Utility |
|----|----------------------------|
| | Switch to Client + AP Mode |
| | Switch to AP Mode |
| | Exit |
| GH | |

This mode lets you use the adapter both as a Soft-AP and client at the same time. Switch to this mode, you can let a wireless adapter be connect to a wireless (Soft-AP) with Internet connected, and let other adapter be indirectly connect to Internet via the Soft-AP wireless network.

For Windows 8:

1) Click on the networks icon in the task bar in the bottom right hard corner of your screen to diaplay the avaliable wireless networks.

| Networks | |
|--------------|-----|
| Wi-Fi | |
| ogemray_2012 | atl |
| RT5350_AP | Sal |
| QA 10 | Sal |
| QA 8 | Sal |
| dgssid | atl |
| QA5 | Sal |
| QA7 | Sal |

2) Click the "Connect" button to connect to the select network .

| Networks | |
|------------------|-------------|
| Wi-Fi | |
| ogemray_2012 | all |
| 🗸 Connect automa | tically |
| | Connect |
| QA 8 | % d |
| RT5350_AP | Sal. |
| QA7 | Sal |
| QA5 | % il |
| dgssid | atl |

3) If your network has wireless security Configured, enter the required setting. The following is an example only, your network setting may differ.



4) You can select turn on sharing or connect to device or not.

| ogemray_2012 | .al |
|--|-----------------|
| Do you want to turn | on sharing |
| between PCs and cor on this network? | nect to devices |
| between PCs and cor on this network? No, don't turn on s | nect to devices |

5) The success of your connection is indicated by the wireless network icon.

| Networks | |
|------------------------|-------------|
| Wi-Fi | |
| ogemray_2012 Connected | .atl |
| QA 8 | % # |
| RT5350_AP | % # |
| QA7 | Sal . |
| QA5 | S il |
| TP-LINK_2.4GHz_D7F770 | % 11 |
| Wireless DLNA [9csa] | % # |
| dgssid | atl |

Notes :The steps of using the Ralink Utility to connect a wireless network is the same as those described in Windowns Xp .

In addition to station and AP mode, there is the Client + AP Mode to be selected in windows 8 as well.

Which means: other wireless devices connect to -> Soft-AP of the adapter -> the adapter (Client mode with Internal ICS sharing)-> connect to other AP or router -> Internet.

| | Launch Config Utility |
|-----|----------------------------|
| | Switch to Client + AP Mode |
| | Switch to AP Mode |
| | Exit |
| CIT | |

This mode lets you use the adapter both as a Soft-AP and client at the same time. Switch to this mode, you can let a wireless adapter be connect to a wireless (Soft-AP) with Internet connected, and let others adapter be indirectly connect to Internet via the Soft-AP wireless network.

WPS SETTING

The WPS is equipped with PBC and PIN two kinds of connection mode. Make sure your router support WPS function,

1) PBC Mode

Enables the router's PBC mode. Press the WPS button on the router about 2 seconds , When the

router's WPS status indicator led starts to flash that router WPS is already enabled. You can also visit the router 's Web settings page to enable the PBC mode.



① Use Ralink Utility to connect.

a. Start-up Ralink Utility ,click the "Profile setting" icon and then select "add WPS Profile" button.

| 2 | Ralink | | ? X |
|--------------|-------------|-----------------|---------------|
| " i " | > SSID | | |
| 6 | 👂 Rate | IP Address | |
| X | Channel | > Mask | |
| + × | 22 | Profile List | × |
| | | add WPS Profile | |
| Profile | Information | | |
| Profile | Name | Authentication | (\approx) |
| SSID | | Encryption | |

b. Select "Push-Button" WPS Method.and then press to next.

| Profile Settings | | | |
|------------------|---------------|---|-------------|
| UDE Mathad | G Duch Button | | |
| WP5 Method | | V | /PS Version |
| | | 2 | .0 |
| | | | |
| WPS AP List | ExRegNW217685 | ¥ | |

c. When the router's WPS status indicator led starts to flash and then click "Start PBC" button in two minutes.

| = + | Profile Settings | × |
|-----|-------------------------------|---|
| | 0 % WPS status is not used | |
| | Start PBC | |
| | 40 % PBC -Sending M1 | |
| | 完成 | |

d. After a successful connection it creates a Profile.

| + × 🏹 | Prof | ile List | | > |
|-----------------|-------------|---------------------------------------|----------|----|
| V PROF1 | ExRegNW4134 | 4D8 | 1 | \$ |
| | | | | |
| | | | | |
| -Drofilo Inform | stice | | | _ |
| Profile Informa | PROF1 | Authentication | WPA2-PSK | |
| Prunie Name | | · · · · · · · · · · · · · · · · · · · | | |

② Use the WPS button on the wireless network adapter to connect.

a. When the router's WPS status LED indicator starts to blink and then press the WPS button on the wireless network adapter for about 3 seconds until the LED indicator of the adapter blinks..

b. After about 30 seconds, the connection will be successful ,then please view the connection information on the Ralink Utility. After a successful connection, it will be randomly assigned to a AP name and password for AP.

2). PIN Mode

a. Start-up Ralink Utility ,click the "Profile setting" icon and then select "add WPS button.

| 2 | Ralink | | |
|----------------------|---------|-----------------|--|
| " 1 " | SSID | | |
| 6 | 🕽 Rate | > IP Address | |
| X | Channel | ▶ Mask | |
| Profile List × | | | |
| | | add WPS Profile | |
| -Profile Information | | | |
| Profile | Name | Authentication | |
| SSID | | Encryption | |

b. Select "PIN" WPS Method.and then press to next.And select the router's SSID in the WPS AP List.

| Profile Settings | | | |
|------------------|---------------|-------------|--|
| | | | |
| WPS Method | 🔿 Push-Button | | |
| | PIN | WPS Version | |
| | | 2.0 | |
| | | | |
| | | | |
| | | | |
| WPS AP List | ExRegNW217685 | | |

① Type PIN in AP mode

a. Select "Type PIN in AP mode " in the PIN Entry Method.And then write the Pin Code to the router 's WPS Web settings page and save it.

| Profile Settings | | × |
|---------------------------------|---------------|---|
| PIN Entry Method Type PIN in AP | ▼ WPS Profile | |
| Pin Code 76760662 | 8 | |

×

- b. Press ito next then press "Start PIN". Profile Settings **+** • 0% WPS status is not used Start PIN
- c. After a successful connection it creates a Profile.

| ExRegNW4134 | 1 🔣 |
|-------------|------|
| | |
| | |
| | |
| | |
| | |
| ion | |
| ion | |

② Type PIN below mode

a. Select "Type below mode " in the PIN Entry Method.And write router 's PIN Code in the "Pin Code". You can view router 's PIN Code in the instructions of the router or the label on the back of the router.

| Profile Settings | × |
|---|---|
| PIN Entry Method Type PIN below WPS Profile | |
| Pin Code 59318910 | |

b. You can press "WPS Profile" to view WPS Profile.No change is reconmend

| = + + | Profile Settings X | < |
|---|---|---|
| SSID | ExRegNW4134D8 | |
| BSSID | 00-3A-35-43-15-68 | |
| Authentication | WPA2-PSK | |
| Encryption | AES | |
| | | |
| = + + | Profile Settings > | < |
| WPA Presh | ared Key ******************************** | |
| c. Press b to next the | n press "Start PIN". | |
| . * * | Profile Settings | |
| WPS statu | 0 % us is not used | |
| d. After a successful conne | ction it creates a Profile. | |
| Profile List 🕂 😫 📝 😭 | × | |
| PROF1 ExRegNW4134D8 Profile Information Profile Name PROF1 Authenti | cation WPA2-PSK | |

 $\overline{\mathbf{O}}$

AES

×

Note:

SSID

ExRegNW4134D8 Encryption

1. If there are multiple routers simultaneously open WPS function, it may cause the connection to fail.

2. When the router using WPS to connect ,you can only connect a client one time. When the router using WPS connection multiple clients, you need to repeat the WPS operation.

For more details about the RaUI utility, please read the help information of the utility



5. Tips for Wi-Fi users

With a Wi-Fi connection, you can roam about 150 m around the access point (depends on different environment), so find a spot where you can work without any interruption. Then see how much work you can do, such as:

- Easily and quickly receive and transmit files within your local network no problem for big files.
- Access your email and surf the web with the same speed as that connected with network cables.
- Synchronize data between devices.
- Take advantage of wireless printing send files directly from your laptop PC to a wireless printer over Wi-Fi connection.

6. Warning

Wi-Fi offers greater speed and range than Bluetooth, but it drains your portable device batteries a lot faster than Bluetooth does. In fact, if you use a Wi-Fi connection regularly on your laptop PC, you'll undoubtedly notice that you need to recharge more often. If you need to conserve battery life — on a long trip for example — turn off your Wi-Fi connection when you don't actually need it.