

Wireless AC750 Dual-Band Range Extender



Model: **WS-WN566A2**

Quick Installation Guide (Q.I.G.)

REV 1.0

Open Source Code

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Introduction:

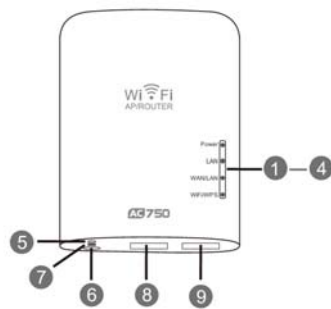
The **Wireless AC Range Extender** is mainly used for providing free Wi-Fi service in big area such as factory, community, street or etc. The device can take an existing 2.4GHz or 5GHz wireless signal, repeat and extend it to a longer range where it is too far away for the router or access point to reach. The AP/Router simultaneously supports 2.4G and 5G wireless network connection, and it can supports 2.4G and 5G transmission speeds of up to 733Mbps. It has 3 x Internal Antennas providing even better wireless performance, transmission rates, stability technology automatically avoids channel conflicts using its channel selection feature.

Package Contents

Before you starting to use this router, please check if there's anything missing in the package, and contact your dealer of purchase to claim for missing items:

1 x **Wireless AC Range Extender**
1 x RJ-45 Networking Cable
1 x Quick Installation

Hardware Overview



- Power LED
- LAN LED
- WAN/LAN LED
- WiFi/WPS LED
- WPS Button
- Mode Selector
- Reset button
- LAN Port
- WAN/LAN Port

Default Parameters

Default IP: **192.168.10.1**

URL: <http://ap.setup>

Login Name: admin

Password: admin

2.4G SSID: **Wireless-N(2.4G)**

5G/AC SSID: **Wireless-AC**

Wireless Key: no

LED indicators

| | |
|---------------|---|
| POWER | ON: The Device is power on OFF: The Device is not receiving electrical power. |
| LAN & LAN/WAN | ON: The Ethernet port is connected. OFF: The Ethernet port is disconnected. Flashing: Transferring data to/from a network device |
| WiFi/WPS | Fast Flashing: Wireless signal Slow Flashing: WPS connection is established or WPS signal of another device is expected |

Getting Started

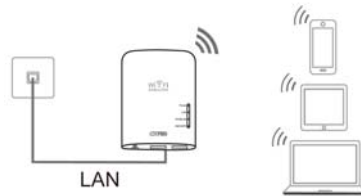
Setting up a Wireless Infrastructure Network

For a typical wireless setup at home (as shown below), please do the following:

Wireless AP Mode

The AP/Router is connected to a wired network-**then** transforms the wired Internet access into wireless so that multiple devices can share the Internet.

So this mode is fit for office, home and places where only wired network is available.

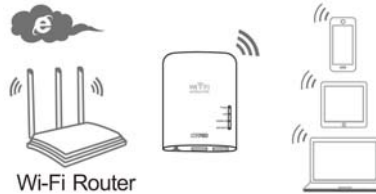


Wireless Repeater Mode

The AP/Router copies and reinforces the existing wireless signal to extend the coverage of the signal. **Don't change** the network's name (SSID) and password **yet**. This mode is especially useful for a large space to eliminate signal-blind corners.

So this mode is fit for large

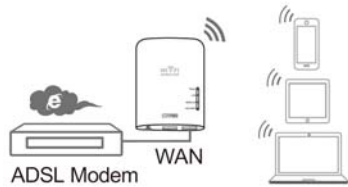
house, office, warehouse or other spaces where the existing signal is weak.



Router Mode

The AP/Router is connected to a DSL or cable modem and works as a regular wireless router.

So this mode is fit for the environment which Internet access from DSL or cable modem is available for one user but more users need to share the Internet.



Configure the Wi-Fi Repeater Mode



Configure the Wi-Fi Repeater Mode with WPS Button.

This is the easiest way to configure the AP/Router. First, check whether your wireless router supports WPS. For further details, please read the operating instructions for your wireless router.



1. The mode selector must be set to the "**AP/Repeater**" position for Repeater Mode.
2. Plug the AP/Router into a wall socket.
3. Press the WPS button on the AP/Router for at least **6** seconds. The WiFi/WPS LED now flashes for approx. 2 minutes.
4. Within these 2 minutes, please Press the WPS button of your Wireless AP/Router directly for **2 - 3** seconds. (For further details, please read the operating instructions for your wireless router.)



The AP/Router then automatically connects to your wireless router and copies wireless key of the settings.

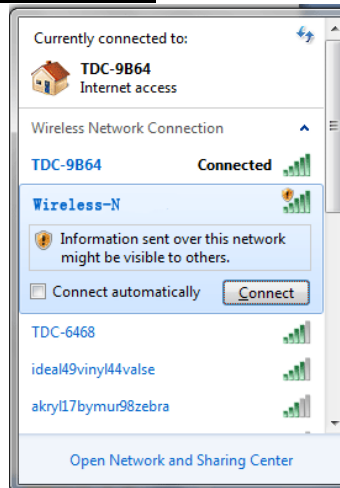
The AP/Router can be accessed via the SSID and the wireless key of your wireless router.

You can configure the Wi-Fi Repeater Mode by connecting it with your computer/laptop with enclosed RJ45 cable or wirelessly.

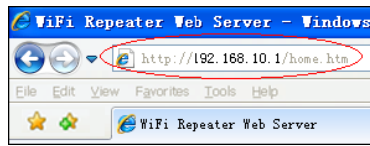
A. Configure the Wi-Fi Repeater Mode wirelessly.

A1. The mode selector must be set to the "AP/Repeater" position for Repeater Mode. Plug the AP/Router into a wall socket.

A2. Click on the network icon  or  on the right bottom of your desktop. You will find the signal from the **Wireless-AC** or **Wireless-N(2.4G)**. Click on 'Connect' then wait for a few seconds.

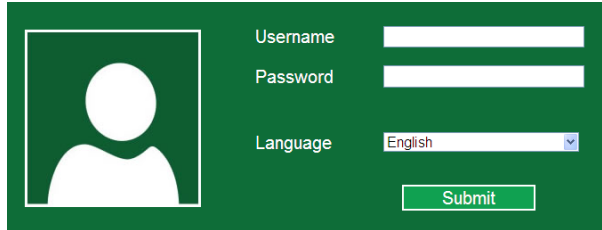


A3. Open web browser and type **http://192.168.10.1** or **http://ap.setup** in the browser address box. This number is the default IP address for this device.



Note: Please check whether the AP/Router accord with factory default settings once you can't entered **http://192.168.10.1**. If you are still not sure what reasons, you can reset the AP/Router, just need to press the **reset** button for **8** seconds, then try again.

A4. The login screen below will appear. Enter the User Name and Password then click “Submit” to login. The default User name is “admin” and Password is “admin”.



The login screen features a green background. On the left is a white silhouette of a person's head and shoulders. To the right of the silhouette are three input fields: 'Username', 'Password', and 'Language' (with a dropdown menu showing 'English'). Below these fields is a green 'Submit' button.

A5. After logging in, you will see the web page below:
Click on the **Repeater** button in the Wizard.



The Wizard web page is a dashboard with a green header. The header contains a 'Wizard' title and a navigation bar with icons for 'AP', 'User-PC', 'Repeater', 'Wi-Fi Router', and 'Internet'. The 'Repeater' icon is highlighted with a red circle. To the right of the navigation bar is a 'Wireless Info' panel with the following data:

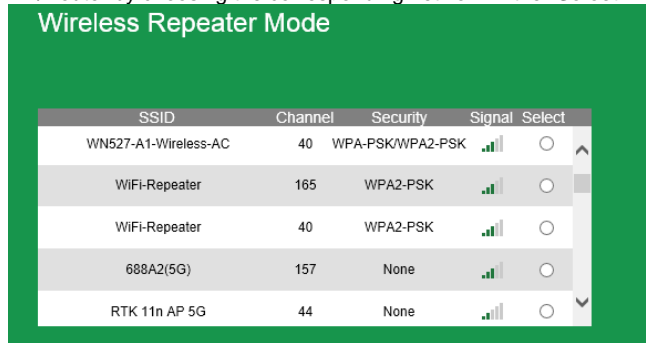
| Wireless Info | |
|---------------|------------------|
| 2.4G SSID | Wireless-N(2.4G) |
| Channel | 11 |
| Clients | 1 |
| 5G SSID | Wireless-AC |
| Channel | 44 |
| Clients | 0 |

Below the header are three main sections:

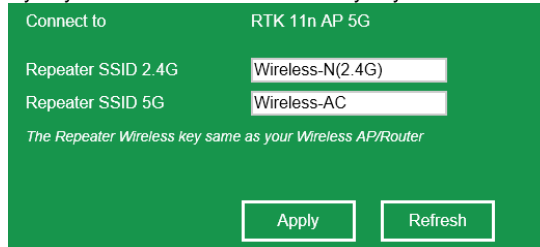
- 2.4G WPS:** A red section with '2.4G' and 'WPS' labels. It contains links for 'Basic Settings', 'Advanced', and 'Schedule' for both 2.4G and 5G.
- Network:** A green section with a '@' icon and 'Network' label. It displays: IP: 192.168.10.1, DHCP: Auto, MAC: 8c:88:2b:00:00:0c.
- Management:** A blue section with a gear icon and 'Management' label. It contains links for 'Password', 'Time zone settings', 'Save/Reload settings', 'Upgrade firmware', and 'Reboot Device'.

At the bottom right is a **Status** section with an 'i' icon and 'Status' label. It displays: Firmware version: ACRpt.3464.1.20140728, Uptime: 0day 0h. 1m. 15s, Build time: Mon Jul 28 16:55:34 CST 2014.

A6. From the list, select a wireless network with which you want to connect the AP/Router by choosing the corresponding network in the "**Select**" field.



A7. After having selected a wireless network, you must then specify the network key of your wireless router for Security key.



After completing the entry, click on the "**Apply**" button.
After the reboot has been completed, the AP/Router is accessible under the SSID and the Wireless key of your wireless router.

B. Configure the Wi-Fi Repeater Mode with RJ45 Cable.

1. Plug the AP/Router into a wall socket. Connect your computer / laptop with the AP/Router with RJ45 Cable.
2. Follow process **A3 to A7** to configure your AP/Router.

Configure the Wireless AP Mode.

Use the AP Mode to obtain a "wireless access point". The wireless end devices will connect to the AP/Router in this mode. You can also use this mode, for example, to make a formerly non-wireless-enabled router wireless-enabled.



1. The mode selector must be set to the **"AP/Repeater"** position for AP Mode.
2. Plug the AP/Router into a wall socket.
3. Follow process **A2 to A4**.
4. After logging in, you will see the web page below:
Click on the **AP** button in the Wizard.

The screenshot shows the router's configuration wizard. The 'Wizard' section at the top has 'AP' selected and circled in red, with 'Repeater' as an alternative option. Below this are sections for '2.4G' and '5G' settings, 'WPS', 'Network' information (IP: 192.168.10.1, DHCRAuto, MAC: 8c:88:2b:00:00:0c), 'Management' options (Password, Time zone settings, Save/Reload settings, Upgrade firmware, Reboot Device), and 'Status' information (Firmware version: ACRpt.3464.1.20140728, Uptime: 0day 0h 14m 25s, Build time: Mon Jul 28 16:55:34 CST 2014).

| Wizard | |
|-----------|---------------|
| AP | User-PC |
| Repeater | Repeater |
| | Router Switch |
| | Internet |

| Wireless Info | |
|---------------|------------------|
| 2.4G SSID | Wireless-N(2.4G) |
| Channel | 11 |
| Clients | 1 |
| 5G SSID | Wireless-AC |
| Channel | 44 |
| Clients | 0 |

| 2.4G | |
|----------------|----------------|
| Basic Settings | 5G |
| Advanced | Basic Settings |
| Schedule | Advanced |
| | Schedule |
| WPS | |

| Network | |
|---------|-------------------|
| IP | 192.168.10.1 |
| DHCP | Auto |
| MAC | 8c:88:2b:00:00:0c |

| Management | |
|----------------------|--|
| Password | |
| Time zone settings | |
| Save/Reload settings | |
| Upgrade firmware | |
| Reboot Device | |

| Status | |
|------------------|------------------------------|
| Firmware version | ACRpt.3464.1.20140728 |
| Uptime | 0day 0h 14m 25s |
| Build time | Mon Jul 28 16:55:34 CST 2014 |

The following message will be displayed on your web browser:

Wireless AP Mode

SSID 2.4G: Wireless-N(2.4G)

SSID 5G: Wireless-AC

Security Type: WPA2 PSK

Security key: 0

Unmask

Apply Cancel

| | |
|---------------|---|
| SSID | Wireless SSID of the AP/Router |
| Security type | Setup the wireless security and encryption to prevent from unauthorized access and monitoring. Supports 64/128-bit WEP, WPA, WPA2, WPA/WPA2 encryption methods. |
| Security key | The " Password " of the AP/Router |

Click on '**Apply**' button, The AP/Router will restart.

After the reboot has been completed, the AP/Router is accessible under the SSID and the Wireless key.

Configure the Wireless Router Mode

The AP/Router is connected to a DSL or cable modem and works as a regular wireless router.

Internet access from DSL or cable modem is available for one user but more users need to share the Internet.



1. The mode selector must be set to the "**Router**" position for Router Mode.
2. Plug the AP/Router into a wall socket
3. Connect your DSL Modem with the AP/Router with RJ45 Cable
4. Follow process **A3 to A4**.
5. After logging in, you will see the web page below:
click on the **Router** button in the Wizard.

The screenshot shows the router's configuration wizard interface. The 'Router' button is highlighted with a red circle. The interface is divided into several sections:

- Wizard:** A row of four buttons: 'Router' (highlighted), 'User-PC', 'Router', and 'Internet'.
- Wireless info:** A blue box containing the following information:

| | |
|-----------|------------------|
| 2.4G SSID | Wireless-N(2.4G) |
| Channel | 11 |
| Clients | 0 |
| AC SSID | Wireless-AC |
| Channel | 44 |
| Clients | 0 |
- 2.4G:** A red box with 'Basic Settings', 'Advanced', and 'Schedule' options, and a 'WPS' button.
- AC:** A red box with 'Basic Settings', 'Advanced', and 'Schedule' options.
- Lan:** A green box with the IP address '192.168.10.1' and a '@ Network' icon.
- Wan:** A green box with the text 'Getting IP from DHCP server...'.
- Management:** A blue box with a gear icon and options: 'Password', 'Time zone settings', 'Save/Reload settings', 'Upgrade firmware', and 'Reboot Device'.
- Status:** An orange box with an 'i' icon and information: 'Firmware version: ACRpt.3454.1.20140804', 'Uptime: 0day 0h:1m:1s', and 'Build time: Mon Aug 4 14:14:08 CST 2014'.

Choose your WAN Connection Type.

If **Dynamic IP** is selected, the Router gets the IP address automatically from the DHCP server or the ISP. No configuration should be set and you can go on with the wireless configuration.

Wireless Router Mode

- Internet service providers offer a fixed IP address (static IP)
- Automatically obtain an IP address (dynamic IP)
- ADSL Dial-up (PPPoE)

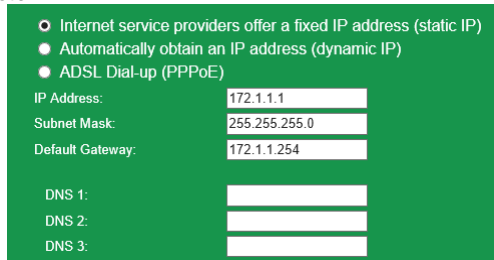
| | |
|---------------|------------------|
| SSID 2.4G | Wireless-N(2.4G) |
| SSID 5G | Wireless-AC |
| Channel | Auto |
| Security Mode | Disable |

If **ADSL Dial-up (PPPoE)** is selected, please enter the **User Name** and **Password** from your ISP, These fields are case-sensitive.

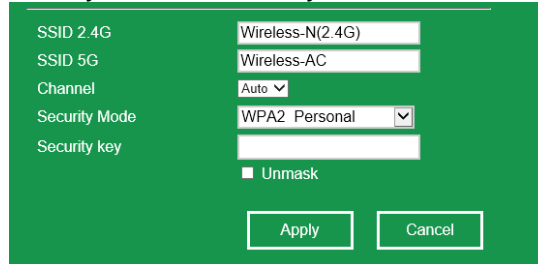
- Internet service providers offer a fixed IP address (static IP)
- Automatically obtain an IP address (dynamic IP)
- ADSL Dial-up (PPPoE)

| | |
|--------------|---------------------------------|
| User Name | <input type="text"/> |
| Password | <input type="password"/> |
| | <input type="checkbox"/> Unmask |
| Service Name | <input type="text"/> |

If **static IP** is selected, please enter the **IP Address, Subnet Mask, Default Gateway, etc.**



Set the wireless parameter. It's recommended that you rename an **SSID**, choose a **Security Mode** and enter a **Key**.



| | |
|---------------|--|
| SSID | The " SSID " of the AP/Router |
| Channel | Auto (recommend) |
| Security type | Setup the wireless security and encryption to prevent from unauthorized access and monitoring. Supports 64/128-bit WEP, WPA, WPA2, WPA/WPA2 encryption methods. |
| Security key | The " Password " of the AP/Router |

Click '**Apply**' button, It will restart.
Wait for a few seconds your AP/Router is ready for use.

Management via Web Browser

Wireless Base Configuration

Please follow the following instructions: Click “**Wi-Fi -> Basic Settings**” located at the web management interface, the following message will be displayed on your web browser:

You could configure the basic setting of Wireless settings for communication, such as Network Name (**SSID**) and Channel. The Access Point can be set simply with only the minimum setting items.

The screenshot shows the 'Wireless Settings AC' web interface. On the left, there is a navigation menu with 'Basic Settings' (Setup wireless basic configuration) highlighted in green, and other options: 'Advanced' (Wireless Advanced Configuration), 'Schedule' (Wireless Schedule), 'Back' (Back to home page), and 'Help'. The main content area is titled 'Basic Settings' and contains the following fields: 'Wireless Enable' with a green 'Enabled/Disable' button, 'SSID' with a text input field containing 'Wireless-AC', 'Channel' with a text input field containing '44', and 'Security Type' with a dropdown menu set to 'Disable'. A green 'Apply' button is located at the bottom right of the form.

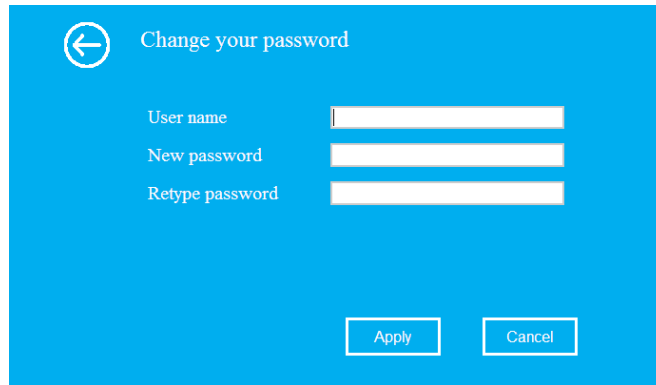
| | |
|-----------------|---|
| Wireless Enable | Wireless On/Off |
| SSID | Wireless SSID of the AP/Router |
| Channel | Auto (Recommend) |
| Security type | Setup the Wireless security and encryption to prevent from unauthorized access and monitoring. Supports 64/128-bit WEP, WPA, WPA2, WPA/WPA2 encryption methods. |
| Security key | The " Password " of the AP/Router |

Click '**Apply**' button, The AP/Router will restart.

Change Management password

Default password of Wireless Repeater is “**admin**”, and it's displayed on the login prompt when accessed from web browser. There's a security risk if you don't change the default password, since everyone can see it. This is very important when you have wireless function enabled.

To change password, please follow the following instructions:
Please click '**Management -> Password**' menu on the web management interface, the following message will be displayed on your web browser:



Change your password

User name

New password

Retype password

Apply Cancel

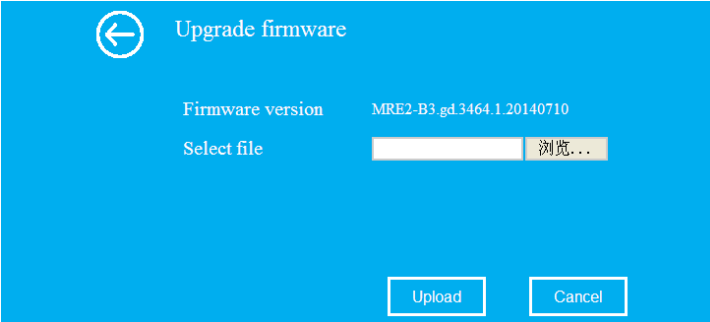
If you want to keep original password unchanged, click '**Cancel**'.

Click '**Apply**' button, The AP/Router will log off.

Firmware Upgrade

The system software used by this router is called '**firmware**', just like any applications on your computer, when you replace the old application with a new one, your computer will be equipped with new function. You can also use this firmware upgrade function to add new functions to your router, even fix the bugs of this router.

Please click '**Management-> Upgrade Firmware**' located at the web management interface, and then the following message will be displayed on your web browser:



Upgrade firmware

Firmware version MRE2-B3.gd.3464.1.20140710

Select file 浏览...

Upload Cancel

Click '**Browse...**' or '**Choose File**' button first; you'll be prompted to provide the filename of firmware upgrade file. Please download the latest firmware file from our website, and use it to upgrade your router.

After a firmware upgrade file is selected, click '**Upload**' button, and the router will start firmware upgrade procedure automatically. The procedure may take several minutes, please be patient.

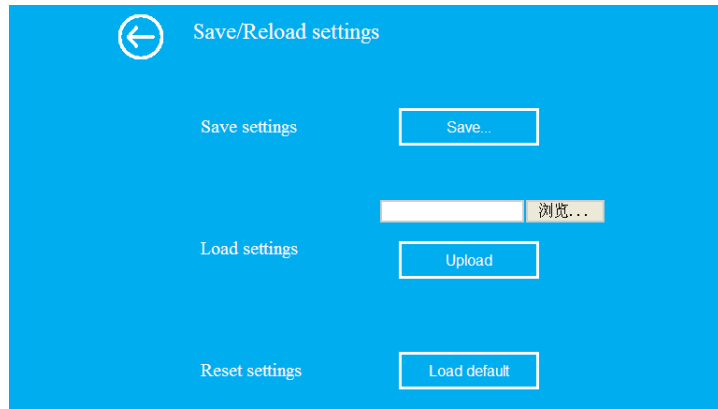
NOTE: Never interrupt the upgrade procedure by closing the web browser or physically disconnect your computer from router. If the firmware you uploaded is interrupt, the firmware upgrade will fail, and you may have to return this router to the dealer of purchase to ask for help.

(Warranty voids if you interrupted the upgrade procedure).

Factory Default and Settings Backup, Restore

You can backup all Setting of this router to a file, so you can make several copied of router configuration for security reason.





To backup or restore router setting, please follow the following instructions:
Please click '**Save/Reload setting**' located at the web management interface, then the following message will be displayed on your web browser:




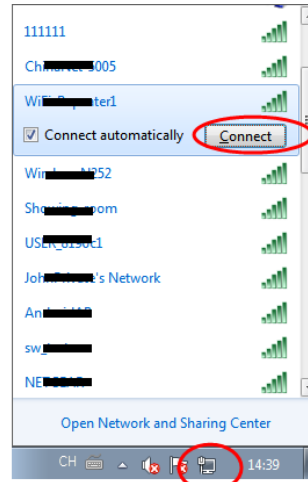
| | |
|----------------|---|
| Save Settings | Press ' Save... ' button, you can please save it as another filename for different versions, and keep it in a safe place. |
| Load Settings | Press ' Browse... ' to pick a previously-saved configuration file from your computer, and then click ' Upload... '. After the configuration is uploaded, the router's configuration will be replaced by the file you just uploaded. |
| Reset Settings | Click this ' Load default ' button to remove all settings |

How to connect your computer/laptop with the AP/Router

Adding a Wireless computers to the AP/Router

1. Log on to the computer.
2. Open Connect to a Network by right-clicking the network icon  or  in the notification area.
3. Choose the wireless network from the list that appears, and then click **Connect**.
4. Type the network security key or passphrase if you are asked to do so, and then click **OK**. You'll see a confirmation message when you are connected to the network.
5. To confirm that you added the computer, do the following:
Open Network by clicking the **Start** button , and then clicking **Control Panel**. In the search box, type **network**, and then, under Network and Sharing Center, click **View network computers and devices**. You should see icons  for the computer you added and for the other computers and devices that are part of the network.


Note: If you don't see icons  in the Network folder, then network discovery and file sharing might be turned off.





Adding a Wireless computers to the AP/Router with WPS Button

This is the easiest way to establish a connection to the AP. First, check whether your end device supports WPS. For further details, please read the operating instructions for your end device.

1. Log on to the computer.
2. Press the WPS button on the AP/Router for **3** seconds. The WIFI/WPS LED now flashes for approx. 2 minutes.
3. Within these 2 minutes, please press the connection button (WPS) on your end device. *(For further details, please read the operating instructions for your end device.)*

Your end device then automatically connects to your AP/Router and applies all of the settings. You should see icons  for the computer you added and for the other computers and devices that are part of the network.

Adding a wired (Ethernet) computer to the AP/Router

1. Plug the AP/Router to a socket. Connect your computer / laptop with the AP/Router with enclosed RJ45 Cable.
2. To Confirm that you added the computer, do the following:
Open Network by clicking the **Start** button , and then clicking **Control Panel**. In the search box, type **network**, and then, under Network and Sharing Center, click **View network computers and devices**. You should see icons  for the computer you added and for the other computers and devices that are part of the network.

For more information:

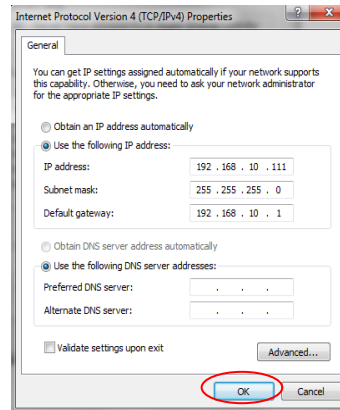
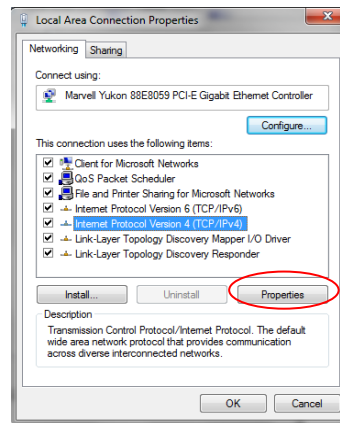
<http://windows.microsoft.com/en-US/windows7/Add-a-device-or-computer-to-a-network>

<http://windows.microsoft.com/en-US/windows7/Setting-up-a-wireless-network>

<http://windows.microsoft.com/en-US/windows-vista/Setting-up-a-wireless-network>

How to configure your computer/laptop with the Network IP Address

1. Log on to the computer.
2. Click the **"Start"** button (it should be located at the lower-left corner of your screen), then click **"Control Panel"**. Click **"View Network Status and Tasks"**, and then click **"Manage Network Connections"**. Right-click **"Local Area Network"**, then select **"Properties"**. When the **"Local Area Connection Properties"** window appears, select **"Internet Protocol Version 4 (TCP/IPv4)"** and then click **"Properties"**.
3. Setting IP address manually:
Type IP address is **192.168.10.x** (**x is from 2 to 254**), and Subnet mask is **255.255.255.0**. Type the Router's LAN IP address (the default IP is **192.168.10.1**) into the Default gateway field.



Warning:

1: For indoor use only.

2. The main plug is used as disconnect device, the socket-outlet should be near the appliance and it should be easily accessible.

3. This product must not be disposed together with the domestic waste. This product has to be disposed at an authorized place for recycling of electrical and electronic appliances.

By collecting and recycling waste, you help save natural resources, and make sure the product is disposed in an environmental friendly and healthy way.

FCC NOTE :

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.

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS OR CHANGE TO THIS EQUIPMENT. SUCH MODIFICATIONS OR CHANGE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.