



Concurrent 11AC WiFi Repeater/AP/Router



Quick Installation Guide
DN-70184

Open Source Code

This product includes software codes developed by third parties. These software codes are subject to either the GNU General Public License (GPL), Version 2, June 1991 or the GNU Lesser General Public License (LGPL), Version 2.1, February 1999. You can copy, distribute, and/or modify in accordance with the terms and conditions of GPL or LGPL.

The source code should be complete, if you think our need to provide any additional source code files under GNU General Public License (GPL), please contact us. We are committed to meeting the requirements of the GNU General Public License (GPL).

You are welcome to contact us local office to get the corresponding software and licenses. Please inform us your contact details and the product code. We will send you a CD with the software and license for free.

Please refer to the GNU GPL Web site for further information.

<http://www.gnu.org/licenses/licenses.en.html>.

Introduction

The AC AP/Router is mainly used for providing free Wi-Fi service in big area such as factory, community, street or etc. The AP/Router 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. It has External 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 Wi-Fi AP/Router
1 x RJ-45 Networking Cable
1 x Quick Installation

Hardware Overview



1. Power LED
2. LAN LED
3. WAN/LAN LED
4. WPS LED
5. 3 x Wi-Fi Single
6. WPS Button
7. Mode Selector
8. POWER On/Off
9. LAN Port
10. WAN/LAN Port
11. Reset Button: **3** seconds

Default Parameters

Default IP: **192.168.10.1**
 URL: <http://ap.setup>
 Login Name: **admin**
 Password: **admin**

2.4G SSID: **Wireless-N**
 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
WPS	Flashing: WPS connection is established or WPS signal of another device is expected

Wi-Fi Single

Mode				Description
AP/Router	ON	ON	ON	Wi-Fi Single output power 100%
Repeater Client	ON	ON	ON	Excellent reception signal strength 50% to 100%
	ON	ON	OFF	Good reception signal strength 25% to 50%
	ON	OFF	OFF	Weak reception signal strength below 25%
	Flashing	OFF	OFF	Disconnected

Getting Started

Setting up a Wireless Infrastructure Network

For a typical wireless setup at home (as shown below), please do the following:
Press MODE Switch Button for AP/ Repeater / Router MODE.

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 "**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 Wi-Fi/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.

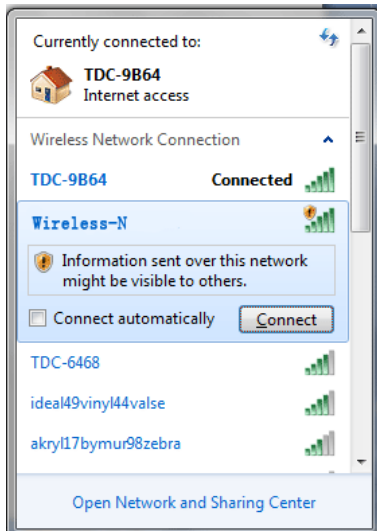
The AP/Router can be accessed via the SSID and the wireless key of your wireless router.

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 “**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**. Click on ‘**Connect**’ then wait for a few seconds.

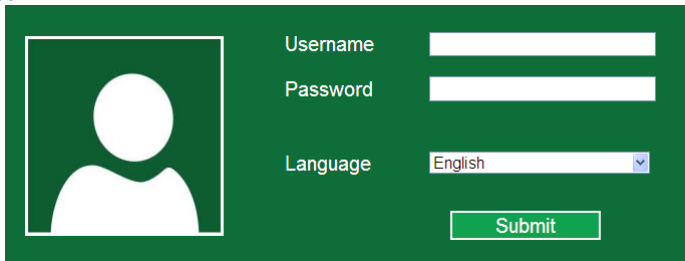


A3. Open web browser and type **http://192.168.10.1** or **http://ap.setup** in the browser address box. This number is the default IP address for this device.



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 **3** 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”**.




Username

Password

Language

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



WI FI MANAGEMENT **Wireless-AC** LOG OUT REBOOT

More Range for Dual Band Wireless Network

Repeater Wizard

User This Device AP/Router Internet

Repeater Status

2.4G SSID	Wireless-N
AC SSID	Wireless-AC
Clients	0
Connect to	No Connection
Status	Disconnected
Internet	Disconnected

LAN Settings

IP Address	192.168.10.1
Gateway	
MAC Address	00:00:00:00:00:10
DHCP Mode	Auto

Wi Fi

- Basic Settings
- 2.4G Advanced Settings
- AC Advanced Settings
- WPS Settings

Settings

- Password Settings
- Time Zone Settings
- Save/Reload Settings
- Upgrade Firmware

Information

Firmware Version

RPTA3-71W.M4300.01.GD.2015JUL8

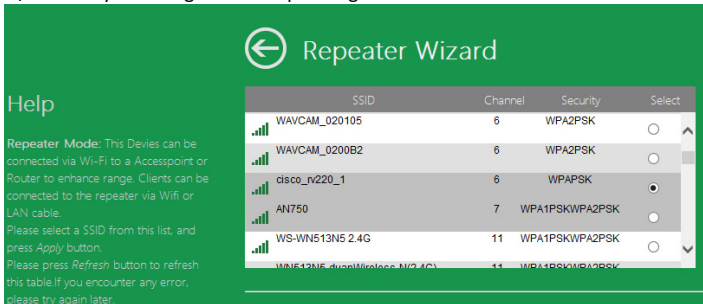
Build Time

09:21:58 Jul 8 2015

Up Time

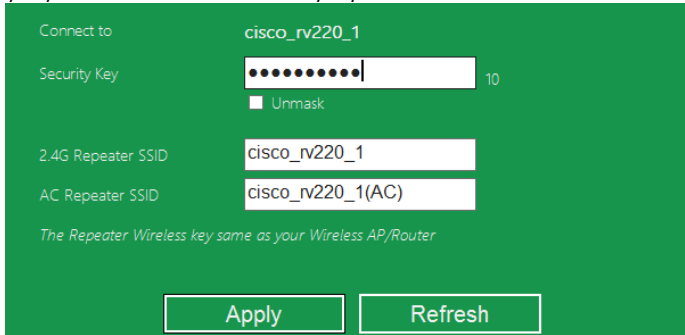
0 day, 0 hour, 0 min, 55 secs

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.



SSID	Channel	Security	Select
WAVCAM_020105	6	WPA2PSK	<input type="radio"/>
WAVCAM_0200B2	6	WPA2PSK	<input type="radio"/>
cisco_rv220_1	6	WPAPSK	<input checked="" type="radio"/>
AN750	7	WPA1PSKWPA2PSK	<input type="radio"/>
WS-WN513N5 2.4G	11	WPA1PSKWPA2PSK	<input type="radio"/>
WN513N5 dual Wireless N (AC)	11	WPA1PSKWPA2PSK	<input type="radio"/>

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



Connect to: cisco_rv220_1

Security Key: [Masked] 10
 Unmask

2.4G Repeater SSID: cisco_rv220_1

AC Repeater SSID: cisco_rv220_1(AC)

The Repeater Wireless key same as your Wireless AP/Router

Apply Refresh

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" 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 Wizard" button.



Wireless-AC

More Range for Dual Band Wireless Network



<p>AP Wizard</p>	<p>User This Device AP/Router Internet</p>	<p>AP Status 2.4G SSID Wireless-N AC SSID Wireless-AC Clients 0 Channel 11 / 48 Security OPEN Internet Disconnected</p>
<p>Wi-Fi Basic Settings 2.4G Advanced Settings AC Advanced Settings WPS Settings</p>	<p>LAN Settings IP Address 192.168.10.1 Gateway MAC Address 00:0C:43:E1:00:00 DHCP Mode Auto</p>	
<p>Settings Password Settings Time Zone Settings Save/Reload Settings Upgrade Firmware</p>	<p>Information Firmware Version RPTA3-71W.M4300.01.GD.2015Jul8 Build Time 09:21:58 Jul 8 2015 Up Time 0 day, 0 hour, 1 min, 59 secs</p>	

The following message will be displayed on your web browser:

Help

Wireless AP Mode: The repeater will be connected to a router via LAN cable. The client can be connected to the repeater via Wifi.

SSID: The SSID for your Wireless Network.

Security type: Recommended to use WPA2 encryption or WPA/WPA2 mixed type.

2.4G SSID:

AC SSID:

Security Type:

Security Key: 10

Unmask

SSID	Wireless SSID of the AP/Router
Security type	Setup the wireless security and encryption to prevent from unauthorized access and monitoring. Supports 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.



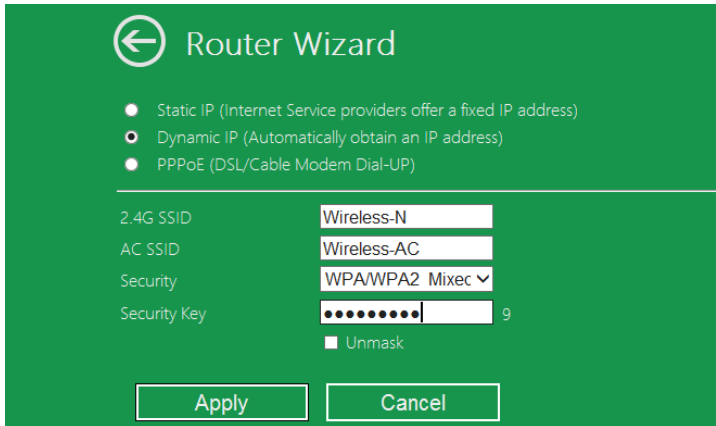
1. The mode selector must be set to the **"Router"** position for Router Mode.
2. Plug the AP/Router into a wall socket
3. Connect your DSL Modem with the AP/Router with RJ45 Cable
4. Follow process **A3 to A4**.
5. After logging in, you will see the web page below:
Click on the **"Router Wizard"** button.

The screenshot shows the web management interface for a wireless router. At the top, there is a navigation bar with 'WI-FI MANAGEMENT' and 'Wireless-AC' logos, and 'LOG OUT' and 'REBOOT' buttons. Below the navigation bar, there is a status bar that reads 'More Range for Dual Band Wireless Network'. The main content area is divided into several sections:

- Router Wizard**: A button highlighted with a red box, located in the top-left section.
- User**: A section with icons for 'User', 'This Device', 'Modem', and 'Internet'.
- Router Status**: A section displaying the following information:
 - 2.4G SSID: Wireless-N
 - AC SSID: Wireless-AC
 - Clients: 0
 - Channel: 11 / 48
 - WAN Type: DHCP
 - Internet: **Disconnected**
- Basic Settings**: A section with a 'Wi-Fi' icon and the following options:
 - Basic Settings
 - 2.4G Advanced Settings
 - AC Advanced Settings
 - WPS Settings
- WAN Settings**: A section with a network diagram icon and the following information:
 - IP Address: Disconnected
 - Connection Type: DHCP
- LAN Settings**: A section with a network diagram icon and the following information:
 - IP Address: 192.168.10.1
 - MAC Address: 00:0C:43:61:00:00
- Password Settings**: A section with a gear icon and the following options:
 - Password Settings
 - Time Zone Settings
 - Save/Reload Settings
 - Upgrade Firmware
- Firmware Version**: A section with an information icon and the following information:
 - Firmware Version: RPTA3-7TW_M4300.01.GD.2015108
 - Build Time: 09:21:58 Jul 8 2015
 - Up Time: 0 day, 0 hour, 0 min, 35 sec

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.



The image shows a green-themed configuration screen titled "Router Wizard" with a back arrow icon. It lists three connection options: Static IP, Dynamic IP (selected), and PPPoE. Below the options are fields for wireless settings: 2.4G SSID (Wireless-N), AC SSID (Wireless-AC), Security (WPA/WPA2 Mixed), and Security Key (9 characters, masked with dots). An "Unmask" checkbox is present. At the bottom are "Apply" and "Cancel" buttons.

Router Wizard

- Static IP (Internet Service providers offer a fixed IP address)
- Dynamic IP (Automatically obtain an IP address)
- PPPoE (DSL/Cable Modem Dial-UP)

2.4G SSID: Wireless-N

AC SSID: Wireless-AC

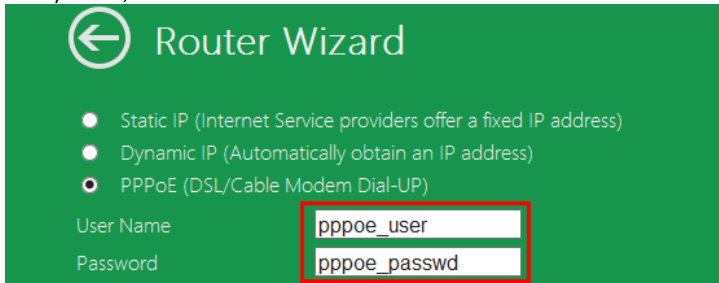
Security: WPA/WPA2 Mixed

Security Key: ●●●●●●●● 9

Unmask

Apply Cancel

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



The image shows a green-themed configuration screen titled "Router Wizard" with a back arrow icon. It lists three connection options: Static IP, Dynamic IP, and PPPoE (selected). Below the options are fields for PPPoE settings: User Name (pppoe_user) and Password (pppoe_passwd). The input fields are highlighted with a red border.

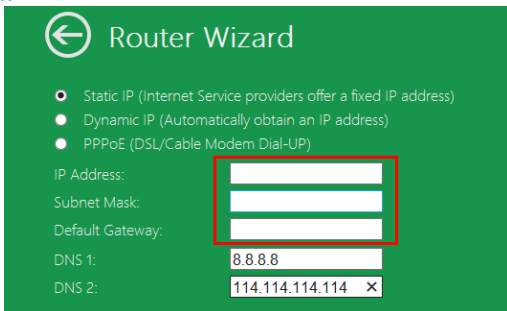
Router Wizard

- Static IP (Internet Service providers offer a fixed IP address)
- Dynamic IP (Automatically obtain an IP address)
- PPPoE (DSL/Cable Modem Dial-UP)

User Name: pppoe_user

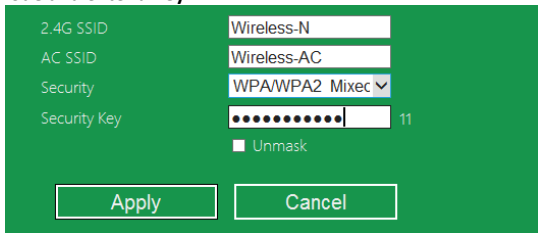
Password: pppoe_passwd

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



The image shows a green 'Router Wizard' configuration screen. At the top left is a back arrow icon. Below it are three radio button options: 'Static IP (Internet Service providers offer a fixed IP address)', 'Dynamic IP (Automatically obtain an IP address)', and 'PPPoE (DSL/Cable Modem Dial-UP)'. The 'Static IP' option is selected. Below these are input fields for 'IP Address', 'Subnet Mask', and 'Default Gateway', which are grouped together in a red rectangular box. Below these are 'DNS 1:' with the value '8.8.8.8' and 'DNS 2:' with the value '114.114.114.114' and a close icon.

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



The image shows a green wireless configuration screen. It has four rows of settings: '2.4G SSID' with the value 'Wireless-N', 'AC SSID' with the value 'Wireless-AC', 'Security' with a dropdown menu showing 'WPA/WPA2 Mixec', and 'Security Key' with a masked password field containing 11 dots and a length indicator '11'. Below the 'Security Key' field is an 'Unmask' checkbox. At the bottom are two buttons: 'Apply' and 'Cancel'.

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 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.

← **Wireless Settings**

[Basic Settings](#)
[2.4G Advanced Settings](#)
[AC Advanced Settings](#)
[WPS Settings](#)

? **Help**

SSID: Less than 32-bit characters
Channel:Wireless data transmission channel. If you select Automatic, AP will automatically select the best channel!

Basic Settings

	Wi-Fi 2.4G	Wi-Fi 5G / AC
Wireless ON/OFF	<input checked="" type="radio"/> ON <input type="radio"/> OFF	<input checked="" type="radio"/> ON <input type="radio"/> OFF
SSID	<input type="text" value="AirLink3G2g"/>	<input type="text" value="AirLink3G(AC)"/>
Security Type	<input type="text" value="WPA/WPA2 Mix (Strongly Recommend)"/>	
Wi-Fi Key	<input type="password" value="••••••"/>	<input type="password" value="••••••"/>
Wi-Fi Channel	<input type="text" value="1"/>	<input type="text" value="40"/>

Wireless Enable	Wireless On/Off
SSID	Wireless SSID of the AP/Router
Channel	Wireless data transmission channel
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

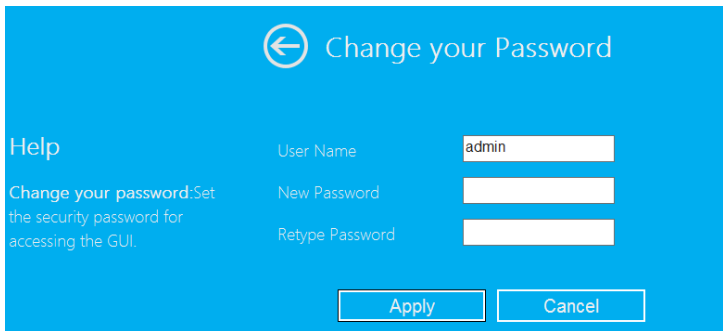
Click '**Apply**' button, The AP/Router will restart.

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

Help

Change your password: Set the security password for accessing the GUI.

User Name

New Password

Retype Password

Apply Cancel

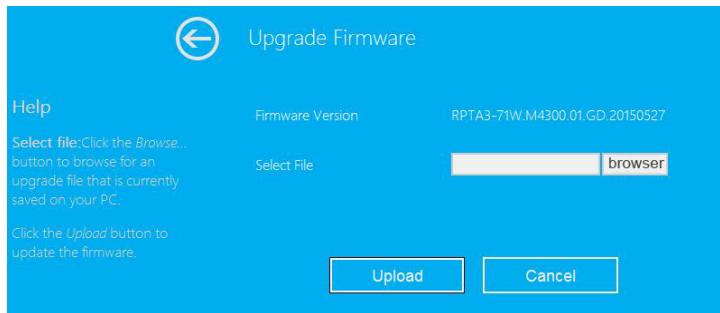
If you want to keep original password unchanged, click ‘**Cancel**’.

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

Help

Select file: Click the *Browse...* button to browse for an upgrade file that is currently saved on your PC.

Click the *Upload* button to update the firmware.

Firmware Version RPTA3-71W.M4300.01.GD.20150527

Select File

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/Reload Setting

Help

Save Setting: You may save your current configuration in case you need to reset the router back to its factory default setting.

Click the **Save** button to save your current configuration.

Load Setting: Click the **Browse...** button to browse for a configuration file that is currently saved on your PC.

Save Setting





Load Setting browser

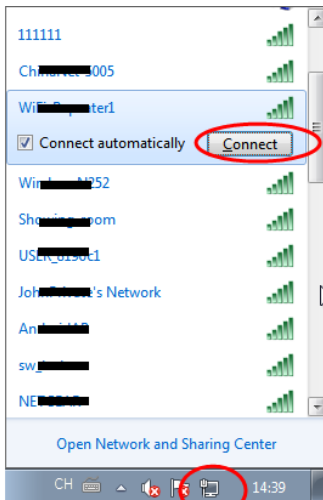
Reset Setting


Save Settings	Press ' Save... ' button, you can 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 load default 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 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:

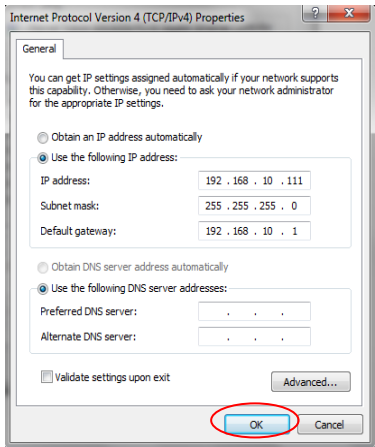
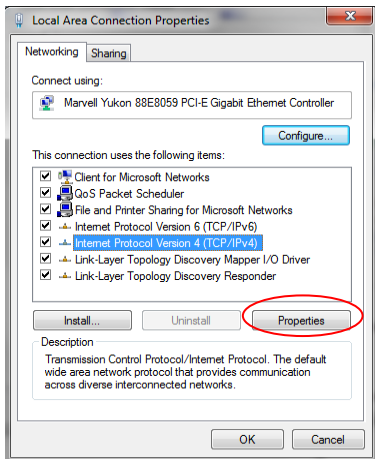
<http://windows.microsoft.com/en-US/windows7/Add-a-device-or-computer-to-a-network>

<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.



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

