

Quick Installation Guide

AC1200 Wireless LAN Dual Band
Concurrent MU-MIMO Repeater
RE-7478RPC



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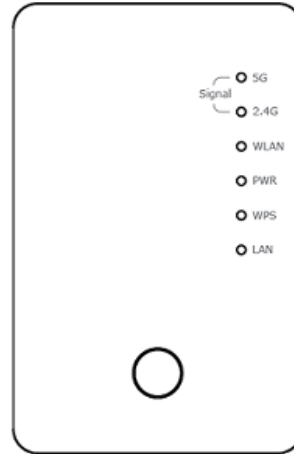
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Package Contents

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

- WiFi Repeater Unit (1 pcs)
- User Manual and Quick Installation Guide CD-ROM (1 pcs)



Build Network Connections

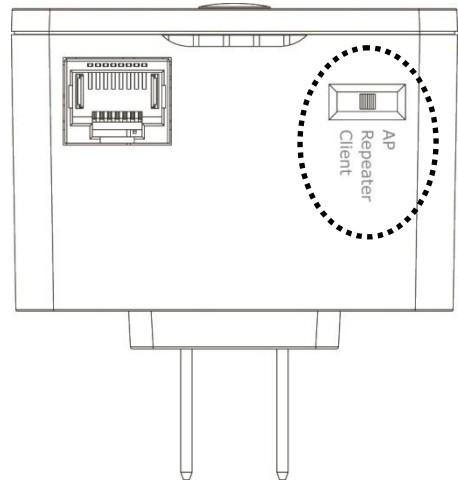
Please follow the following instructions to install this repeater:

1. Select working mode:

*AP: Work as wireless access point
(Serve wireless clients)*

*Repeater: Work as wireless repeater
(Extends wireless signal coverage)*

*Client: Work as wireless network client
(Become your computer's wireless network card)*



2. Place this repeater in an appropriate place after conducting a site survey.
3. Please check all LEDs on the front panel. 'PWR' LED should be steadily on. If 'PWR' LED is still off, please check if the power outlet you're using is working or contact your dealer of purchase for assistance.

Besides WPS hardware button setup, you can also login Firmware for more advanced settings. For detailed setup, see following pages.

Repeater mode Network Setup

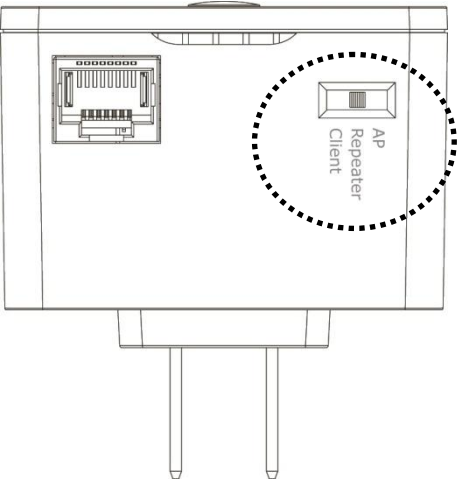
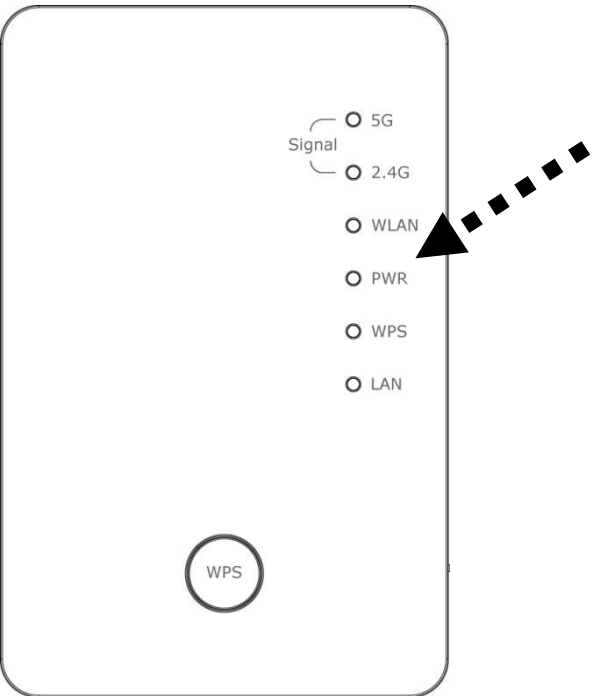
This repeater is your Wi-Fi range extender !

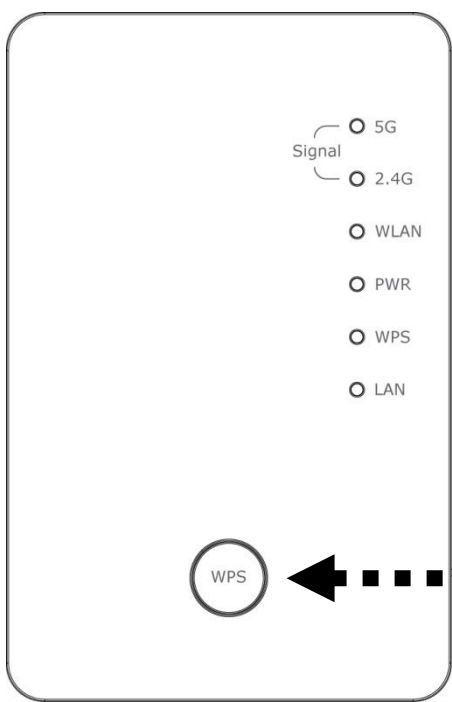
It can extend your wireless signal and coverage and help you to solve wireless dead zone problem.

For the first time setup, you can move repeater close to the access point you wish to connect, after installation done, you can move the repeater to the place you wish to use.

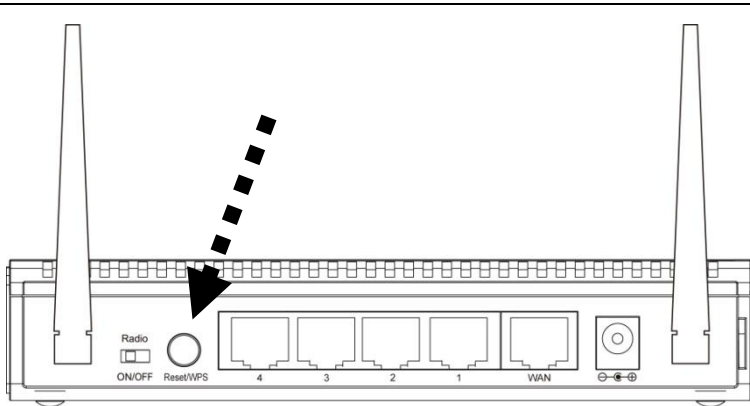
You can build wireless connection via 'Hardware WPS button' or 'Software web browser'. If your broadband router or access point also supports 'WPS button', we recommend you to use WPS button to establish connection, it is the fast and secure way without computer.

Using WPS button to build wireless connection:

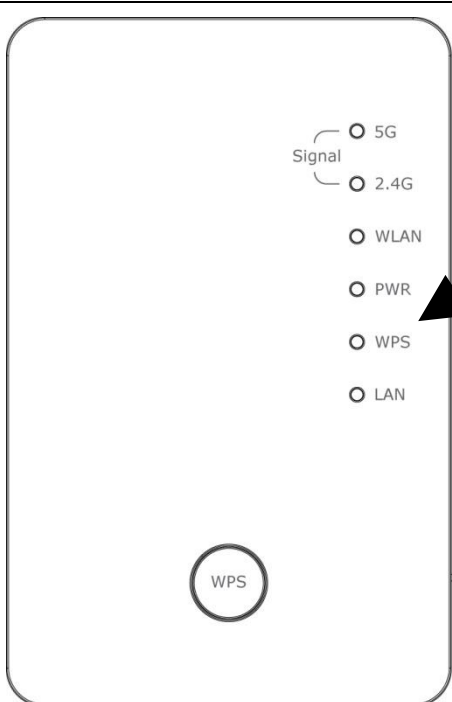
	<p>1. Switch mode selector to 'Repeater'.</p>
	<p>2. Insert wireless repeater into power outlet on the wall. You should see 'Power' LED light up in few seconds.</p> <p>If not, please check if the power outlet you're using is working.</p>



3. Press and hold **WPS button** on repeater for 2 seconds, ‘**WPS**’ LED will start flashing.



4. Press WPS button on the access point you wish to connect within 2 minutes. If the access point you wish to connect does not have hardware WPS button, you can also use its web configuration menu’s WPS function to establish connection. Or you can login this repeater web UI to have quick setup (detailed setup refers to following page)



5. If WPS connection is successfully established, the repeater will reboot immediately to make your setting effect ; if ‘**WPS**’ LED flashes fast, there’s something error, please wait for 2 minutes until ‘**WPS**’ LED off, and try from step(3) again.

When quick installation is successfully done, ‘**Signal**’ LED will turn on.

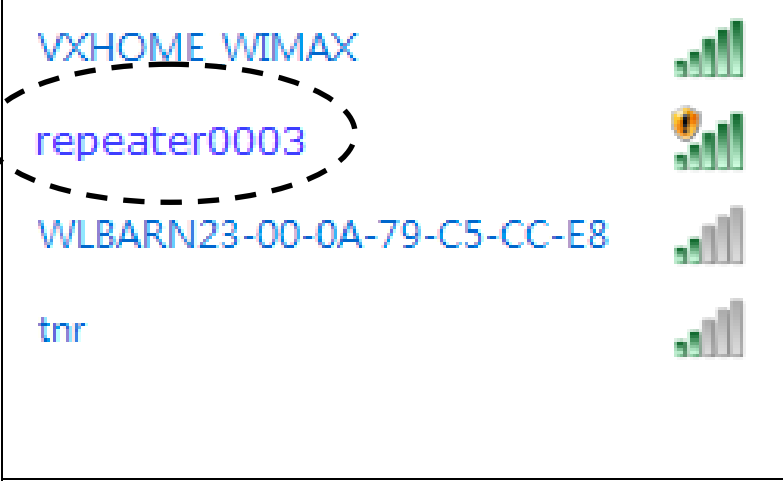
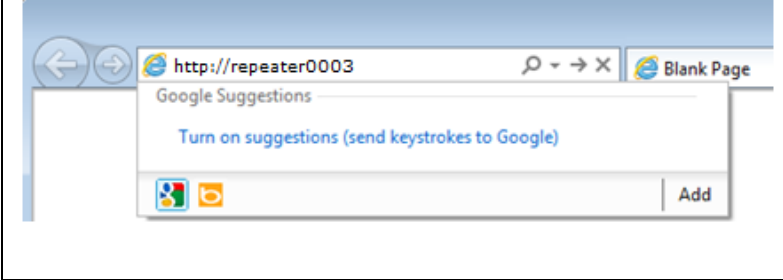
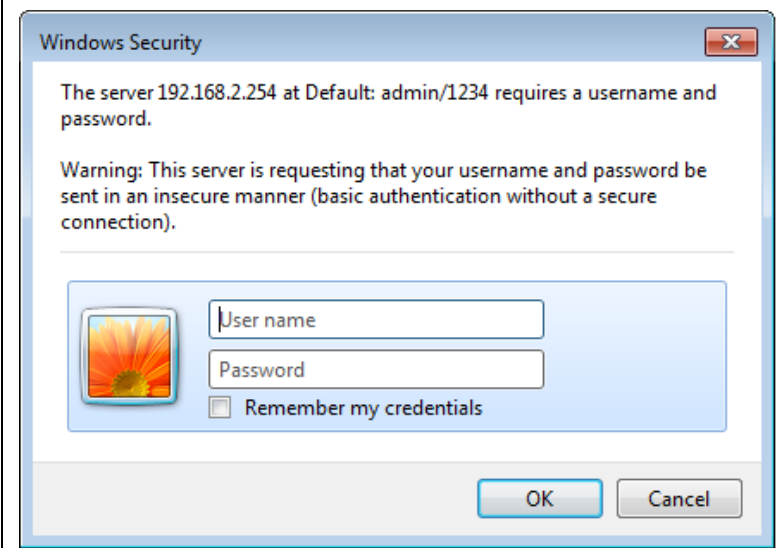
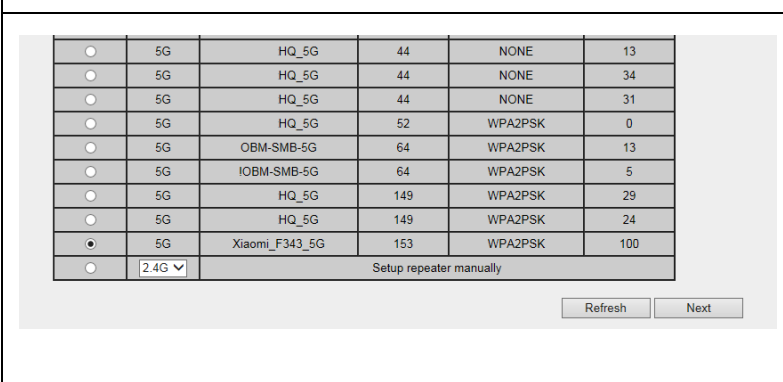
Please move repeater to the place you wish to use, you can check ‘**Signal**’ LED status to understand signal reception level. (Steady light: Excellent, Flash: Good, Fast flash: poor.)




Congratulations!

The setup is completely done, now you can start to enjoy wireless repeater.

Using Web browser to build wireless connection:

Following procedure is for establishing connection via login WEB UI. Please make sure your computer is DHCP client (obtain IP automatically from DHCP server)

	<ol style="list-style-type: none"> 1. Use Ethernet cable to connect your computer's Ethernet port and wireless repeater's Ethernet port or use your computer's wireless configuration utility to search for access point named 'repeater0003' and get connected. <p>Note: 0003 is an example, it's the last 4 digits of device MAC number, find it on each device label.</p>																																																												
	<ol style="list-style-type: none"> 2. Open web browser and input 'http://repeater0003' in address bar. <p>Note: 0003 is an example, it's the last 4 digits of device MAC number, find it on each device label.</p>																																																												
	<ol style="list-style-type: none"> 3. Wireless repeater will prompt you to input username and password. Default username is 'admin' and password is '1234'. Click 'OK' button to continue. 																																																												
 <table border="1"> <tbody> <tr><td><input type="radio"/></td><td>5G</td><td>HQ_5G</td><td>44</td><td>NONE</td><td>13</td></tr> <tr><td><input type="radio"/></td><td>5G</td><td>HQ_5G</td><td>44</td><td>NONE</td><td>34</td></tr> <tr><td><input type="radio"/></td><td>5G</td><td>HQ_5G</td><td>44</td><td>NONE</td><td>31</td></tr> <tr><td><input type="radio"/></td><td>5G</td><td>HQ_5G</td><td>52</td><td>WPA2PSK</td><td>0</td></tr> <tr><td><input type="radio"/></td><td>5G</td><td>OBM-SMB-5G</td><td>64</td><td>WPA2PSK</td><td>13</td></tr> <tr><td><input type="radio"/></td><td>5G</td><td>IOBM-SMB-5G</td><td>64</td><td>WPA2PSK</td><td>5</td></tr> <tr><td><input type="radio"/></td><td>5G</td><td>HQ_5G</td><td>149</td><td>WPA2PSK</td><td>29</td></tr> <tr><td><input type="radio"/></td><td>5G</td><td>HQ_5G</td><td>149</td><td>WPA2PSK</td><td>24</td></tr> <tr><td><input checked="" type="radio"/></td><td>5G</td><td>Xiaomi_F343_5G</td><td>153</td><td>WPA2PSK</td><td>100</td></tr> <tr><td><input type="radio"/></td><td>2.4G</td><td colspan="4">Setup repeater manually</td></tr> </tbody> </table>	<input type="radio"/>	5G	HQ_5G	44	NONE	13	<input type="radio"/>	5G	HQ_5G	44	NONE	34	<input type="radio"/>	5G	HQ_5G	44	NONE	31	<input type="radio"/>	5G	HQ_5G	52	WPA2PSK	0	<input type="radio"/>	5G	OBM-SMB-5G	64	WPA2PSK	13	<input type="radio"/>	5G	IOBM-SMB-5G	64	WPA2PSK	5	<input type="radio"/>	5G	HQ_5G	149	WPA2PSK	29	<input type="radio"/>	5G	HQ_5G	149	WPA2PSK	24	<input checked="" type="radio"/>	5G	Xiaomi_F343_5G	153	WPA2PSK	100	<input type="radio"/>	2.4G	Setup repeater manually				<ol style="list-style-type: none"> 4. All wireless access points nearby will be displayed on the list. Select it and click 'Next' button to continue. If the access point you wish to connect does not appear here, please click 'Refresh' until it appears on the list, or try to move wireless repeater closer to the access point you wish to connect.
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<input type="radio"/>	2.4G	Setup repeater manually																																																											

<p>Security</p> <p>Please input wireless security key of your connected Access Point.</p> <p>KEY : <input type="password" value="....."/></p> <p><input type="button" value="Next"/></p>	<p>5. You'll be prompted to input access point's wireless security key, input it in 'KEY' field and click 'Next' to continue.</p>
<p>Key is verifying, please wait for result within 20 seconds</p> 	<p>6. System will start to verify wireless key. It will show you result within 20 seconds.</p> <p>If key is wrong, please go back to check your key again.</p> <p>If key is correct, you can click 'Next' to continue.</p>
 <p>Success</p> <p>key is correct, you can click "Yes" button to setup the other Band setting, or click "No" button to finish setting.</p> <p><input type="button" value="No"/> <input type="button" value="Yes"/></p>	<p>7. When key is correct, this Range Extender will display the information for you, you can press "Yes" button to setup another band, or press "No" to the bridge setup.</p>
 <p>Success</p> <p>key is correct, please click "Next" button to continue.</p> <p><input type="button" value="NEXT"/></p>	<p>8. When you done to setup dual band success (or setup single band manually), you will see the page on the below, press "Next" to continue.</p>
<p>Save settings successfully!</p> <p>Please press APPLY button to restart the system to make the changes take effect.</p> <p>2.4G Setting Connected Access Point SSID : Xiaomi_F343 Device SSID : <input type="text" value="Xiaomi_F343_2.4Gre"/></p> <p>Security : WPA pre-shared key</p> <p>5G Setting Device SSID : <input type="text" value="Xiaomi_F343_5G_5Gre"/></p> <p>Security : WPA pre-shared key</p> <p>Bridge to 2.4G and 5G Wireless connection: Enabled</p> <p>Add the URL to your bookmark(my favorite list): http://repeater.setup <input type="button" value="Save"/></p> <p>(we recommend you to save it for quick access to the Web setting page next time)</p> <p>(Supports IE and Firefox only. Please add the access key to the bookmark manually if you use other browsers)</p> <p><input type="button" value="Back"/> <input type="button" value="APPLY"/></p>	<p>9. After settings successfully, wireless repeater will display the connection information for you. Please press "APPLY" to end the setting or press "Back" to return the setup page.</p>

System Restarting! Please wait for a while !

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10. Please wait for few seconds for wireless repeater to reboot. After reboot complete, use your computer to connect to wireless access point by the SSID you set in last step and start using network.

Congratulations!

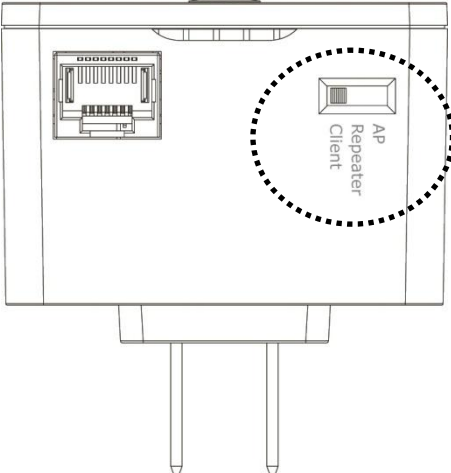
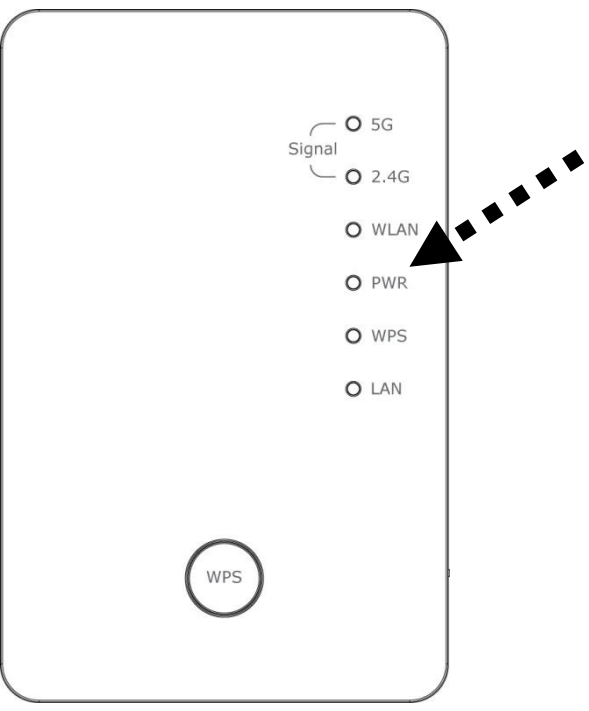
The Quick Setup is completely done, now you can start to enjoy wireless repeater.

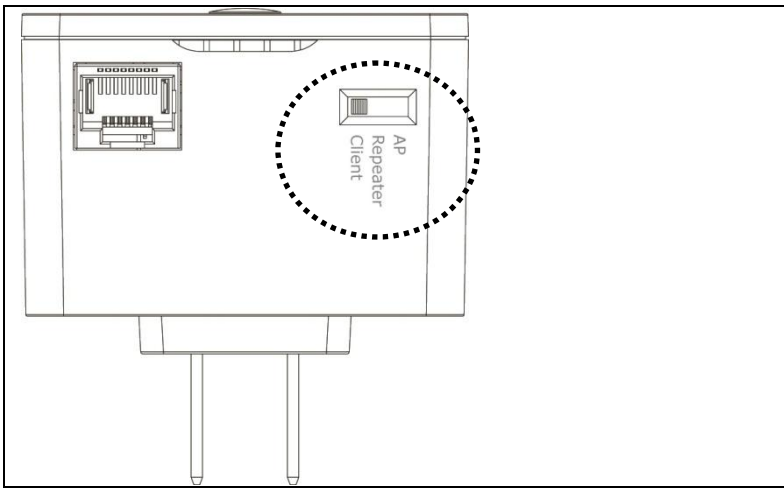
Note: If you hope to run Quick Setup again or had problem to login web UI, pls. hold on '**WPS**' button for 10 seconds until '**POWER**' LED blinking, device will start to reset to factory default.

Client mode Network Setup

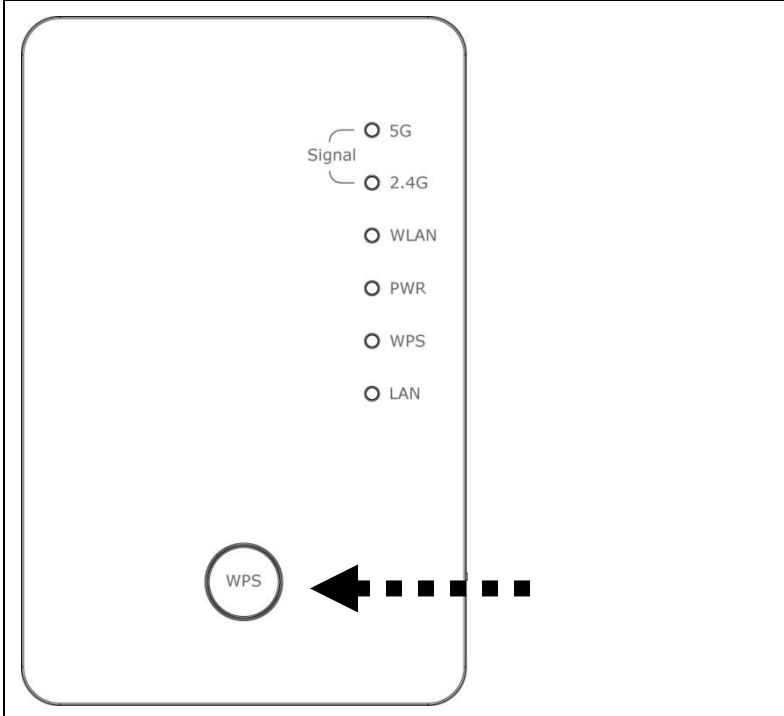
Client mode can let your networking device have wireless capability; it will become your networking device's wireless network card. You can connect this device to Ethernet port of your existing internet TV or DVD player or game console device with Ethernet cable.

Using WPS button to build wireless connection:

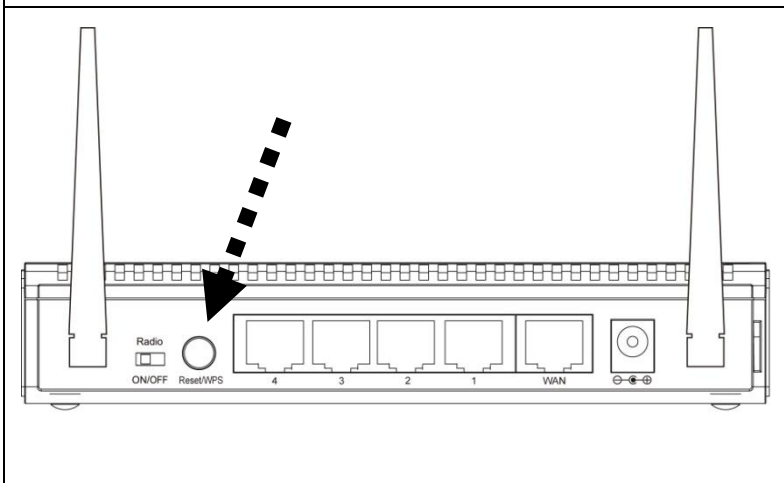
	<p>1. Switch mode selector to 'Client'.</p>
	<p>2. Insert wireless repeater into power outlet on the wall. You should see 'Power' LED light up in few seconds. If not, please check if the power outlet you're using is working.</p>



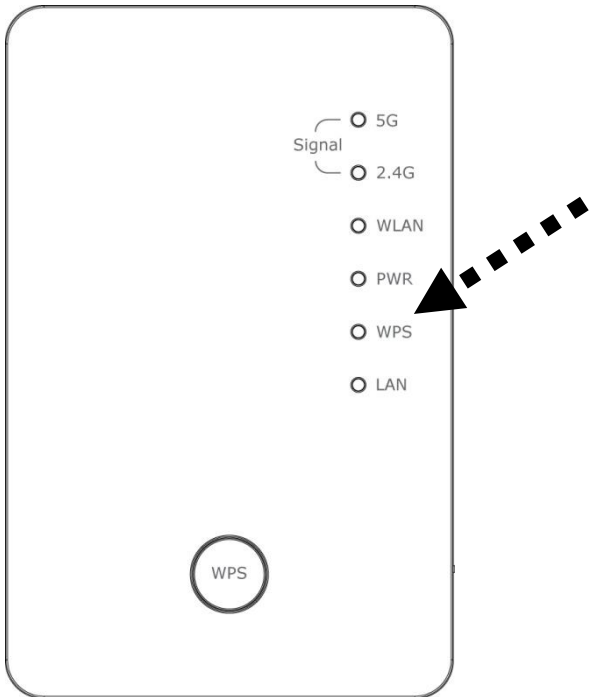
3. Connect your computer and wireless repeater by Ethernet cable.



4. Press and hold **WPS button** on repeater for 2 seconds, 'WPS' LED will start flashing.



5. Press **WPS button** on the access point you wish to connect within 2 minutes. If the access point you wish to connect does not have hardware WPS button, you can also use its web configuration menu's WPS function to establish connection. Or you can login this repeater web UI to have quick setup (detailed setup refers to following manual)

	<p>6. If WPS connection is successfully established, the repeater will reboot immediately to make your setting effect ; if ‘WPS’ LED flashes fast, there’s something error, please wait for 2 minutes until ‘WPS’ LED off, and try from step(3) again.</p> <p>Please move repeater to the place you wish to use, you can check ‘Signal’ LED status to understand signal reception level. (Steady light: Excellent, Flash: Good, Fast flash: poor.)</p>
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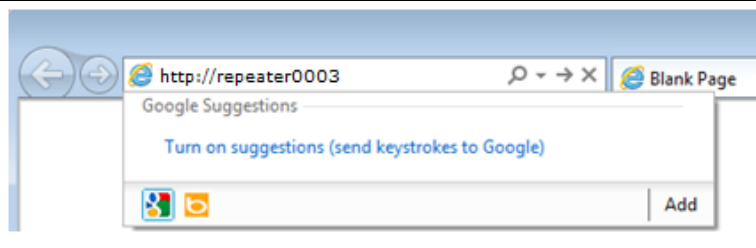
7. Congratulations! The setup is completely done, now you can start to enjoy wireless repeater.

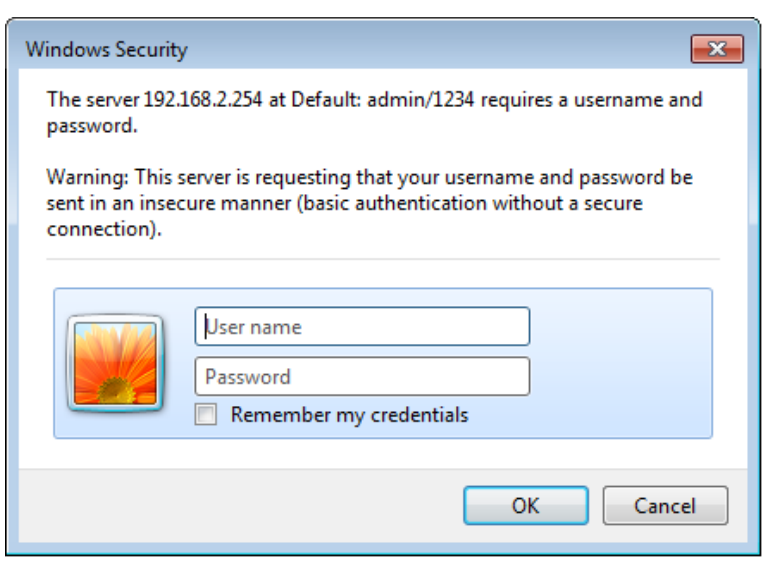
Note: If you hope to run Quick Setup again or had problem to login web UI, pls. hold on ‘WPS’ button for 10 seconds until ‘POWER’ LED blinking, device will start to reset to factory default.

Using Web browser to build wireless connection:

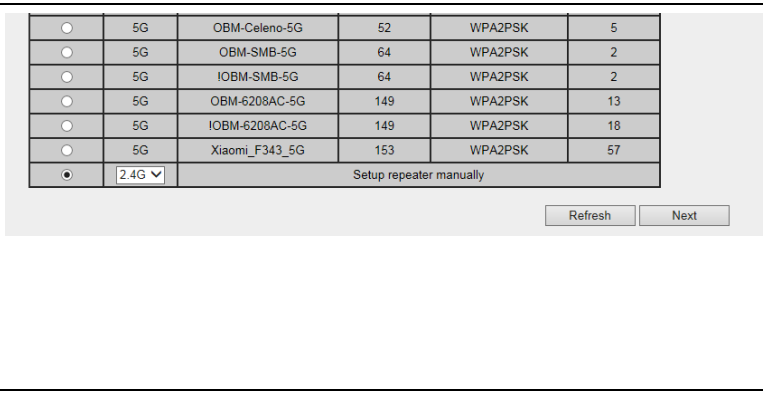
Following procedure is for establishing connection via login WEB UI:

NOTE: Please make sure your computer is DHCP client (obtain IP automatically from DHCP server)

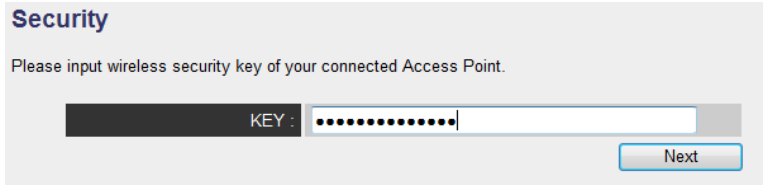
	<p>1. Open web browser and input ‘http://repeater0003’ in address bar.</p> <p>Note: 0003 is an example, it’s the last 4 digits of device MAC number, find it on each device label.</p>
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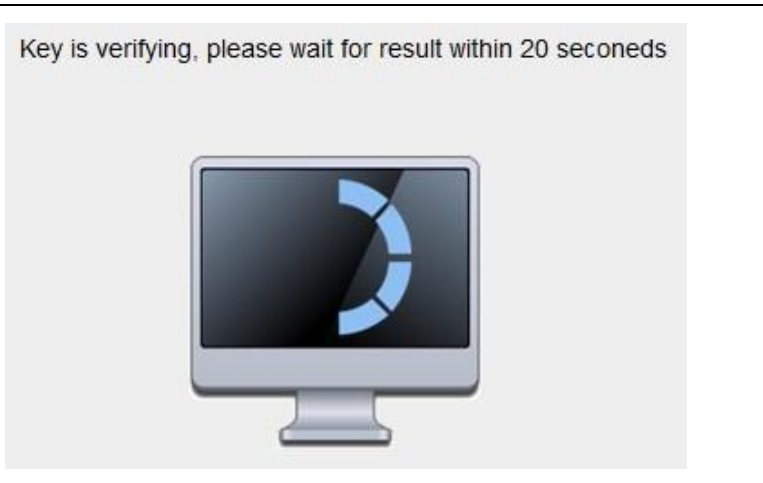
2. Wireless repeater will prompt you to input username and password. Default username is **'admin'** and password is **'1234'**. Click 'OK' button to continue.



3. All wireless access points nearby will be displayed on the list. Select it and click 'Next' button to continue. If the access point you wish to connect does not appear here, please click 'Refresh' until it appears on the list, or try to move wireless repeater closer to the access point you wish to connect.



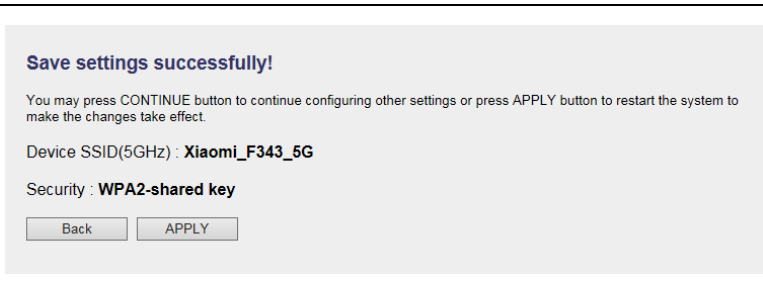
4. You'll be prompted to input access point's wireless security key, input it in 'KEY' field and click 'Next' to continue.



5. System will start to verify wireless key. It will show you result within 20 seconds.

If key is wrong, please go back to check your key again.

If key is correct, you can click 'Next' to continue.



6. Please recheck settings you made, and click 'Apply' to continue.

System Restarting! Please wait for a while !

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7. Please wait for few seconds for wireless repeater to reboot. After reboot complete, use your computer to connect to wireless access point by the SSID you set in last step and start using network.



8. Use Ethernet cable to connect it to Ethernet port of your networking device.

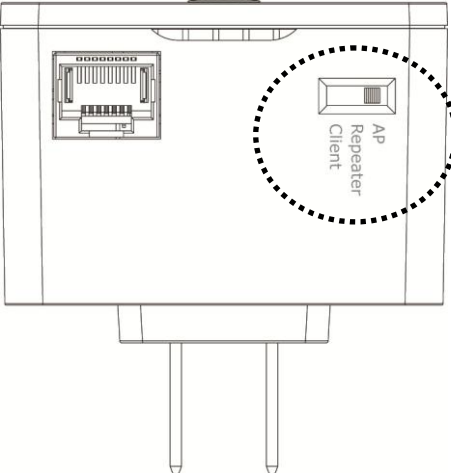
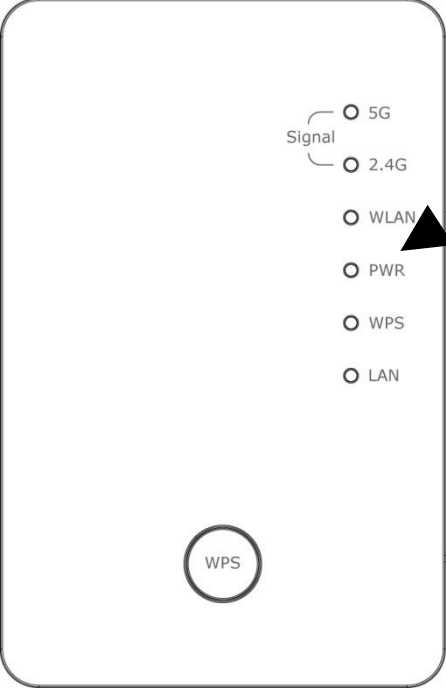
9. Congratulations! The Quick Setup is completely done, now you can start to enjoy wireless repeater.

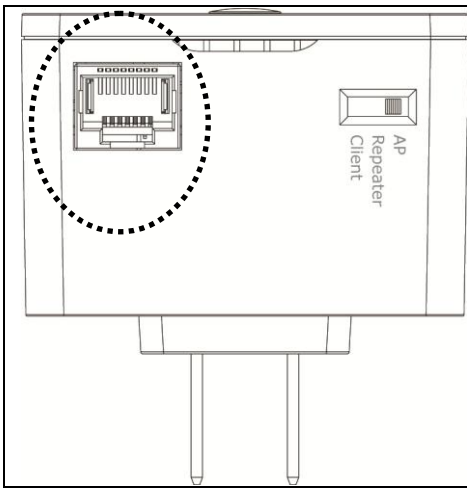
Note: If you hope to run Quick Setup again or had problem to login web UI, pls. hold on 'WPS' button for 10 seconds until 'POWER' LED blinking, device will start to reset to factory default.

AP mode Network Setup

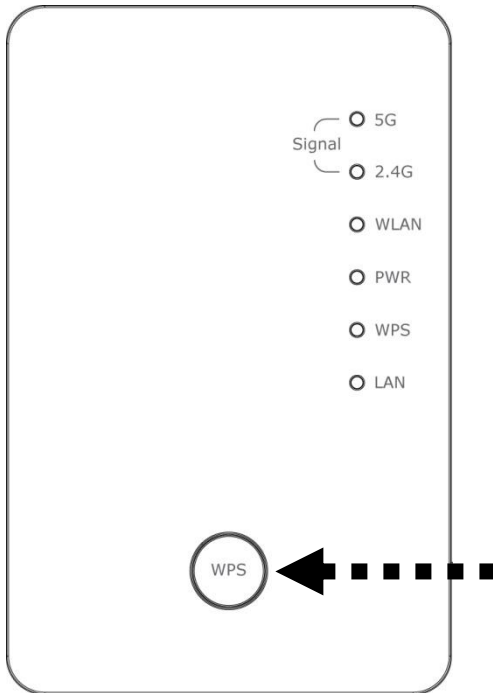
You can build a wireless networking environment, please switch this device to wireless access point mode and connect it to your wired router.

Using WPS button to build wireless connection:

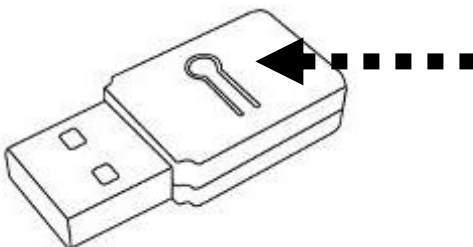
	<p>1. Switch mode selector to 'AP'.</p>
	<p>2. Insert wireless repeater into power outlet on the wall. You should see 'Power' LED light up in few seconds. If not, please check if the power outlet you're using is working.</p>



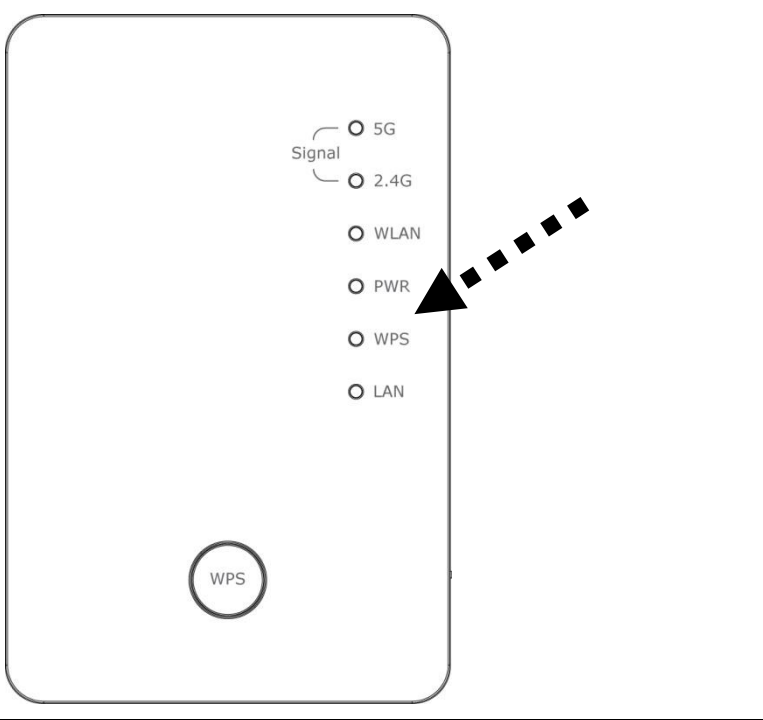
3. Connect the wireless repeater to ADSL modem, router, or switch/hub in your network through the LAN port of the wireless repeater by Ethernet cable.



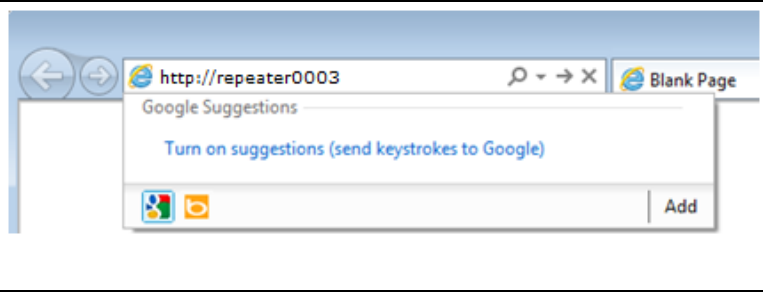
4. Press and hold **WPS button** on repeater for 2 seconds, 'WPS' LED will start flashing.



5. Press WPS button on the client device you wish to connect within 2 minutes.

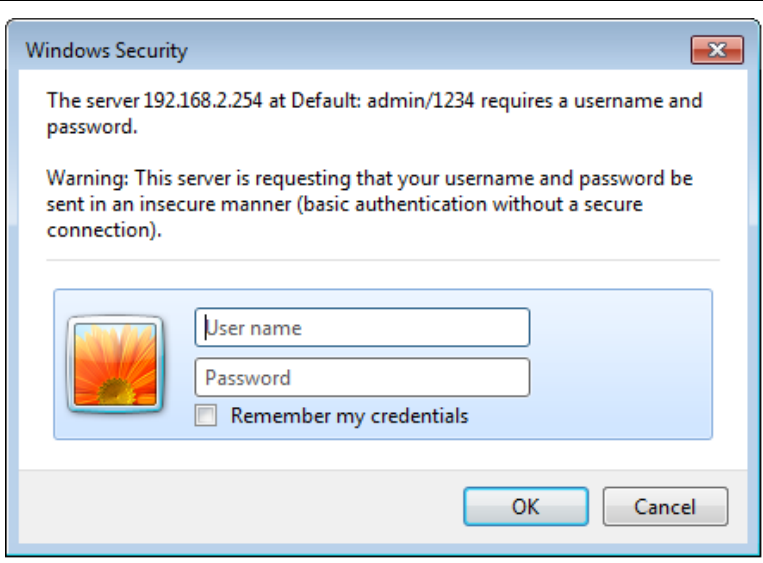


6. If WPS connection is successfully established, the repeater will reboot immediately to make your setting effect ; if ‘WPS’ LED flashes fast, there’s something error, please wait for 2 minutes until ‘WPS’ LED off, and try from step(3) again.

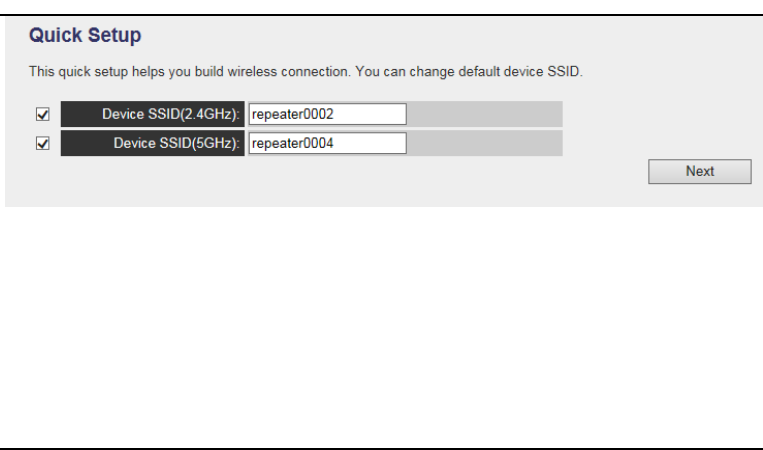


7. Open web browser and input ‘**http://repeater0003**’ in address bar.

Note: **0003** is an example, it’s the last 4 digits of device MAC number, find it on each device label.



8. Wireless repeater will prompt you to input username and password. Default username is ‘**admin**’ and password is ‘**1234**’. Click ‘OK’ button to continue.



9. Please input a SSID (a name used to identify this access point) in ‘**Device SSID**’ field, then click ‘Next’ button.

Default SSID is repeater0003.

Note: **0003** is an example, it’s the last 4 digits of device MAC number, find it on each device label.

2.4G Security

Please input wireless security key of your connected Access Point

Encryption : WPA pre-shared key ▾

WPA Unicast Cipher Suite : WPA(TKIP) WPA2(AES)

Pre-shared Key Format : Passphrase ▾

KEY :

Hidden SSID : NO ▾

Back Next

5G Security

Please input wireless security key of your connected Access Point

Encryption : WPA pre-shared key ▾

WPA Unicast Cipher Suite : WPA(TKIP) WPA2(AES)

Pre-shared Key Format : Passphrase ▾

KEY :

Hidden SSID : NO ▾

Back Next

Save settings successfully!

You may press CONTINUE button to continue configuring other settings or press APPLY button to restart the system to make the changes take effect.

Device SSID(2.4GHz) : **repeater0002**

Security : **Disable**

Device SSID(5GHz) : **repeater0004**

Security : **Disable**

Back APPLY

System Restarting! Please wait for a while !

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10. Select security type of wireless link include 2.4Ghz and 5Ghz : Disable (no security), WEP, WPA pre-shared key.

WEP encryption: Select key length (64 or 128bit), key format (Hex or ASCII characters), Default Tx Key (usually use ‘Key 1’), and input key characters (refer to ‘Key Format’ you selected for number of characters)

WPA pre-shared key: Select one WPA Unicast Cipher Suite (usually use default setting ‘WPA(TKIP)’), Pre-shared Key Format: Passphrase (alphanumeric characters) or Hex (64 Hex Characters), and input key characters in ‘KEY’ field.

11. Please recheck settings you made, and click ‘Apply’ to continue.

12. Please be patient while device restarting, and you can access this wireless repeater as wireless AP after reboot is complete.

13. Congratulations! The setup is completely done, now you can start to enjoy wireless repeater.

Note: If you hope to run Quick Setup again or had problem to login web UI, pls. hold on ‘WPS’ button for 10 seconds until ‘POWER’ LED blinking, device will start to reset to factory default.

To enable/disable LED lights:

After Quick Setup is done and wireless repeater is rebooted, you'll enter into wireless repeater's configuration menu for more settings that you wish to change.

Universal Repeater

- Home
- Quick Setup
- WPS Setting
- Advanced Settings**
 - Wireless Settings
 - MAC Filtering
 - System utility
 - Configuration

Advanced Settings

These settings are only for more technical users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your repeater device.

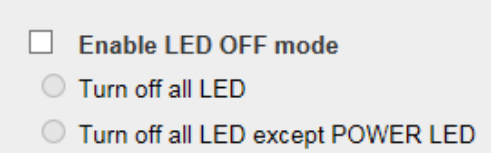
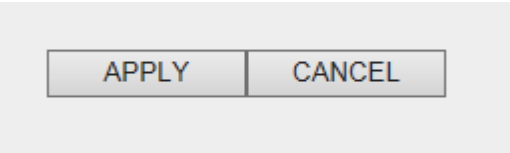
Fragment Threshold:	<input type="text" value="2346"/>	(256-2346)
RTS Threshold:	<input type="text" value="2347"/>	(0-2347)
Beacon Interval:	<input type="text" value="100"/>	(20-1024 ms)
DTIM Period:	<input type="text" value="3"/>	(1-10)
Data Rate:	<input type="text" value="Auto"/>	
N Data Rate:	<input type="text" value="Auto"/>	
Channel Width:	<input checked="" type="radio"/> Auto 20/40 MHz	<input type="radio"/> 20 MHz
Preamble Type:	<input checked="" type="radio"/> Short Preamble	<input type="radio"/> Long Preamble
Broadcast ESSID:	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
CTS Protect:	<input checked="" type="radio"/> Auto	<input type="radio"/> Always <input type="radio"/> None
TX Power:	<input type="text" value="100 %"/>	

Enable LED OFF mode

- Turn off all LED
- Turn off all LED except POWER LED

- Advanced Settings**
 - Wireless Settings
 - MAC Filtering
 - System utility
 - Configuration

1. Click '**Advanced Settings**' on the left.

 <p> <input type="checkbox"/> Enable LED OFF mode <input type="radio"/> Turn off all LED <input type="radio"/> Turn off all LED except POWER LED </p>	<p>2. Check 'Enable LED OFF' mode to setup LED behavior:</p> <p>Turn off all LED: disabled all LED lights</p> <p>Turn off all LED except POWER LED: all LED lights will be disabled, except 'POWER' LED.</p>
 <p> <input type="button" value="APPLY"/> <input type="button" value="CANCEL"/> </p>	<p>3. Click 'Apply' button to save changes.</p>

For advanced settings and other features of this wireless repeater, please refer to user manual enclosed in supplied CD-ROM.

Federal Communication Commission Interference Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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 or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio technician for help.

FCC Caution

This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter. 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.

Federal Communications Commission (FCC) Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

The equipment version marketed in US is restricted to usage of the channels 1-11 only.

This equipment is restricted to *indoor* use when operated in the 5.15 to 5.25 GHz frequency range.

Edimax Computer Company

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TEL : 408-496 1105 #103

FAX : 408-980 1530

RED Compliance Statement

This equipment compliance with Directive 2014/53/EU.

Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

EU Countries Intended for Use

The ETSI version of this device is intended for home and office use in Austria, Belgium, Bulgaria, Cyprus, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Turkey, and United Kingdom. The ETSI version of this device is also authorized for use in EFTA member states: Iceland, Liechtenstein, Norway, and Switzerland.

EU Countries Not Intended for Use

None



Specification

- ◆ SoC + RF: Realtek RTL8197FE + RTL8812BRH
- ◆ GbE PHY : Realtek RTL8211F
- ◆ Flash: 8MB
- ◆ SDRAM: 64MB
- ◆ LAN Port: 10/100/1000M UTP Port x 1
- ◆ Power: 5VDC, 1.5A Switching Power Module Inside
- ◆ AC Power Input: 100-240V, 0.25A, 50-60Hz
- ◆ Dimension: 59(W) x 91(H) x 40(D) mm excluding power plug
- ◆ Temperature: 32~104°F (0 ~ 40°C)
 - Operating: 32~104°F (0~40°C)
 - Storage: -4~140°F (-20~60°C)
- ◆ Humidity: 10-90% (NonCondensing)
 - Operating: 10~90% (NonCondensing)
 - Storage: Max. 95% (NonCondensing)

Certification: FCC, CE