RE3001, RE3002

300Mbps Wi-Fi Range Extender

User Guide

Important Safety Instructions

1. Do not open this product or attempt to service it; it may expose you to dangerous high voltage or other risks.

2. Do not operate this product near water.

3. Do not place or operate this product near a radiator or a heat register.

4. Do not expose this product to dampness, dust or corrosive liquids.

5. Do not connect this product or disconnect it from a wall socket during a lightning or a thunderstorm.

6. Do not block the ventilation slots of this product, for insufficient airflow may harm it.

7. Do not put anything on this product.

8. Plug this product directly into a wall socket (100-240V~, 50/60Hz). Do not use an extension cord between this product and the AC power source.

9. When plugging this product into a wall socket, make sure that the electrical socket is not damaged, and that there is no gas leakage.

10. Place the connecting cables properly so that people won't stumble or walk on it.

11. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult the qualified technician.

12. Unplug this product from the mains and refer the product to qualified service personnel for the following conditions:

1) If liquid has been spilled on the product.

2) If the product has been exposed to rain or water.

13. Unplug this product from the wall socket before cleaning. Use a damp cloth for cleaning. Do not use liquid cleaners or aerosol cleaners.

14. The specification of the fuse is for RE3002 to avoid damage, please do not change the fuse.

15. The Operating temperature is 0℃~40℃ (32℉~104℉). The Storage temperature is -40℃~70℃ (-40℉~158℉).

Preface

Thank you for choosing MTC! Please read this user guide before you start! This user guide instructs you to install and configure your device. This user guide applies to RE3001\RE3002, the RE3001 is used as an example throughout this user guide. This user guide uses the following formats to highlight special messages:

ICON	Description
Note	This format is used to highlight information of importance or special interest. Ignoring this type of note may result in ineffective configurations, loss of data or damage to device.
Tip	This format is used to highlight a procedure that will save time or resources.
Knowledge Expansion	Description of fields on the device GUI.

Contents

Important Safety Instructions 2
Preface 3
Contents 4
Chapter 1 Introduction 6
1.1 Product Overview 6
1.2 Product Feature 6
Chapter 2 Connecting Mechanism 7
2.1 Appearance 7
2.1.1 The products front panel 7
2.1.2 The product rear panel 8
2.2 system requirement 9
2.3 Connection Instruction 9
2.3.1 Getting Prepared 9
2.3.2 Installment environment 9
Chapter 3 Configuring the Device Manually 17
3.1 Log in the Wi-Fi Range Extender 17
3.2 System Status 21
3.2.1 Network Status 21
3.2.2 System status 23
3.2.3 LAN Status 24
3.2.4 Wireless Status 25
3.3 Quick Setup 25
3.4 Network Settings 30
3.4.1 LAN Settings 30
3.4.2 DHCP Server 32
3.4.3 DHCP List & Binding 34
3.5 WLAN Settings 35
3.5.1 Basic Settings 35
3.5.2 Security Settings 37
3.5.3 Advanced Settings 40
3.5.4 Access Control 41
3.5.5 Connection Status 43
3.6 System Tools 43
3.6.1 Time Settings 43
3.6.2 Backup/Restore 45
3.6.3 Restore to Factory 45
3.6.4 Firmware Upgrade 47
3.6.5 Reboot 48
3.6.6 Change Password 48
3.6.7 System Log 49
Appendix 50

1 Configure PC TCP/IP Settings 50
Windows 7 50
Windows XP 56
2 Troubleshooting 58
3 Factory default settings 59
4 Remove Wireless Network from Your PC 60
Windows 7 60
Windows XP 61
5 Safety and Emission Statement 63

Chapter 1 Introduction

1.1 Product Overview

The Wi-Fi Range Extender is dedicated to Small Office Home Office (SOHO) wireless network solutions. It will extend your existing wireless network and mobility within your wireless network while also allowing you to connect a wired device to a wireless environment. Increased mobility and the absence of cabling will be beneficial for your network.

With using IEEE 802.11N wireless technology, this device can transmit wireless data at the rate of up to 300Mbps (2.4GHz) with multiple protection, including Wi-Fi protected Access (WPA2-PSK, WPA-PSK)，the Wi-Fi Range Extender delivers complete data privacy. It is also compatible with all IEEE 802.11n, IEEE 802.11b and IEEE 802.11g specification.

It supports an easy wireless connection to the up level router (equipped with WPS/QSS button) by pressing the RET/RE button on the side panel. It also supports an easy web-based setup for installation and management. Even though you may not be familiar with the Wi-Fi Range Extender, you can easily configure it with the help of this Guide. Before installing the Wi-Fi Range Extender, please look through this Guide to get the full information of the Wi-Fi Range Extender.

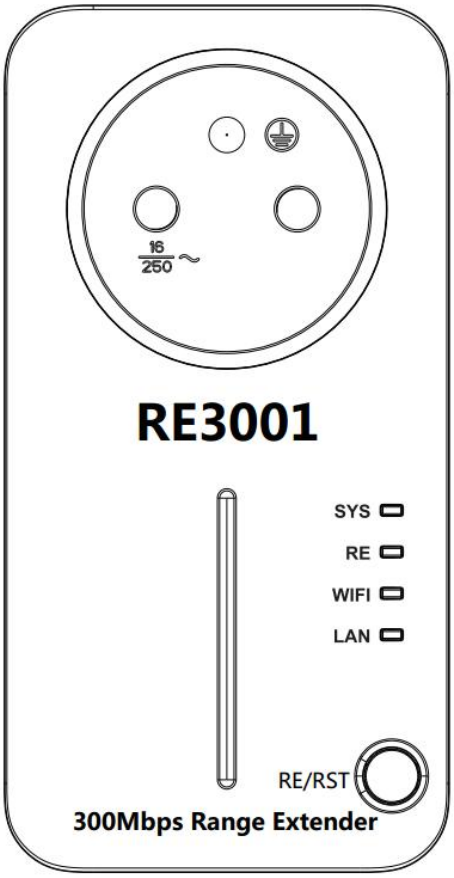
1.2 Product Feature

- Compatible with IEEE 802.11b/g/n.
- Provides multiple encryption security Types including WPA-PSKWPA2-PSK.
- Supports Built-in DHCP server.
- Supports Firmware Upgrade.
- Supports Web-based Management.

Chapter 2 Connecting Mechanism

2.1 Appearance

2.1.1 The products front panel



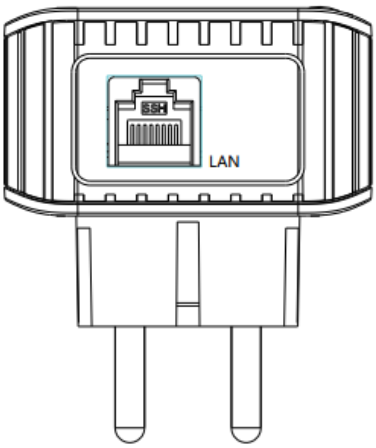
The LED indicator displays information about the Wi-Fi Range Extender's status.

Indicate	Status	Indication
SYS	On	The Wi-Fi Range Extender is on.
	OFF	The Wi-Fi Range Extender is off.
RE	Fast Flashing	WPS connection in progress. It may take up to 2 minutes.
	Slow flashing	The Wi-Fi Range Extender has established a secure connection, and the signal strength is adequate.

	OFF	No active connection.
WIFI	Flashing	WiFi Function is On
	OFF	WiFi Function is OFF (you can setting the WIFI function ON/OFF in the BASIC settings)
LAN	On	A device is connected to the ETHERNET port.
	OFF	No device is connected to the ETHERNET port.

- **RE/RST:**
  - Under the electricity situation, press and hold the button (about 6 seconds) until all the LEDs turn on momentarily, then release the button and wait the Wi-Fi Range Extender to reboot to its factory default setting. You can enter the Wi-Fi Range Extender use the default password(password: admin).
  - Under the Universal Repeater mode, press the RE/RST button on the Wi-Fi Range Extender upper panel with the up level router's WPS/QSS button at the same time about 1-3s, the Wi-Fi Range Extender will automatically connect with the up level router.

2.1.2 The product rear panel



Button and Interface description

- **LAN Port:** LAN jack (RJ45), used to connect LAN in hub, switch or installed network card computer.

2.2 system requirement

- Every PC Ethernet connection device (wired internet card or wireless internet card and Ethernet cable).
- TCP/IP network software (compatible with Window XP/Window 7/Window 8).
- Internet Explorer 8 or higher versions or Firefox.

2.3 Connection Instruction

2.3.1 Getting Prepared

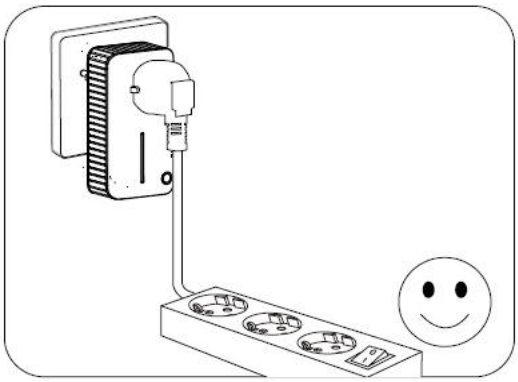
Before you start the installation process, you need to prepare the following things:

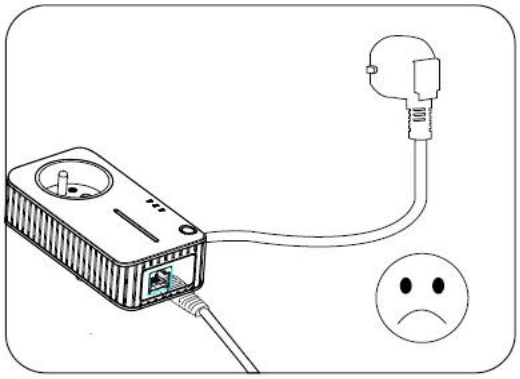
Item	Description
Range Extender	Find it in your package
PC	Should have installed IE8 or higher browser
Gather ISP Information	AP mode: 1.Internet connection information provided by the up level router 2. Ethernet Cable: This can be found in the product package. You will need it to connect your PC to this device
	Universal Repeater mode: 1. Up level router's SSID, MAC address, security mode, cipher type and security key 2. Internet connection information provided by the up level router 3. Ethernet Cable: This can be found in the product package. You will need it to connect your PC to this device

2.3.2 Installment environment

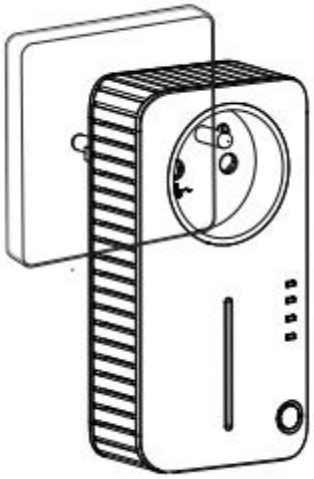
To ensure the optimum performance of the ranger extender and significantly improve the transmission capacity of the network, we recommend that you comply with the following

connection rules:

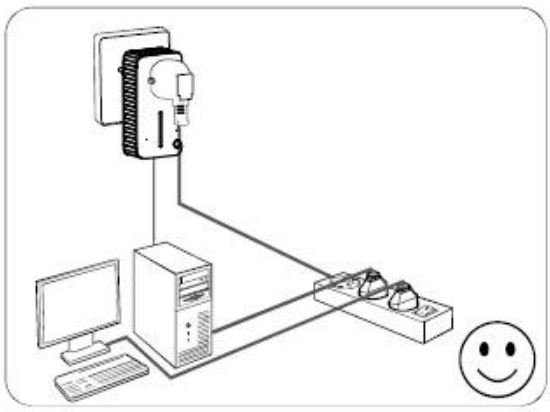


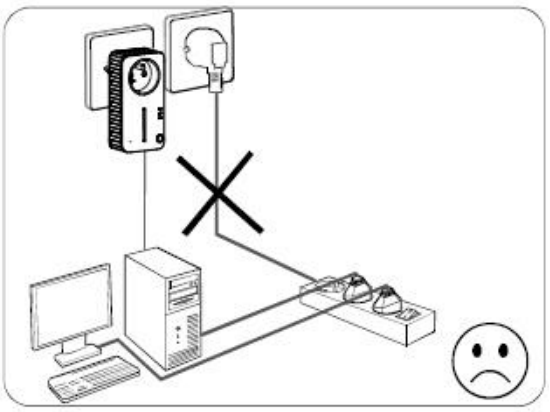


1. Plug the ranger extender directly into a wall socket but not the multiple sockets.



2. To take full advantage of the filter function of the Repeater and to improve data transmission in the network, always plug the multiple sockets into the integrated electrical socket of the Repeater.





Note

- Environmental factor will have influence on the distance of wireless transmission.
- Please connect the device correctly based on the picture as shown above. Do not place the left and right side radiating grooves of the device facedown, in order to avoid damage to the device.

2.3.3 Hardware Connection

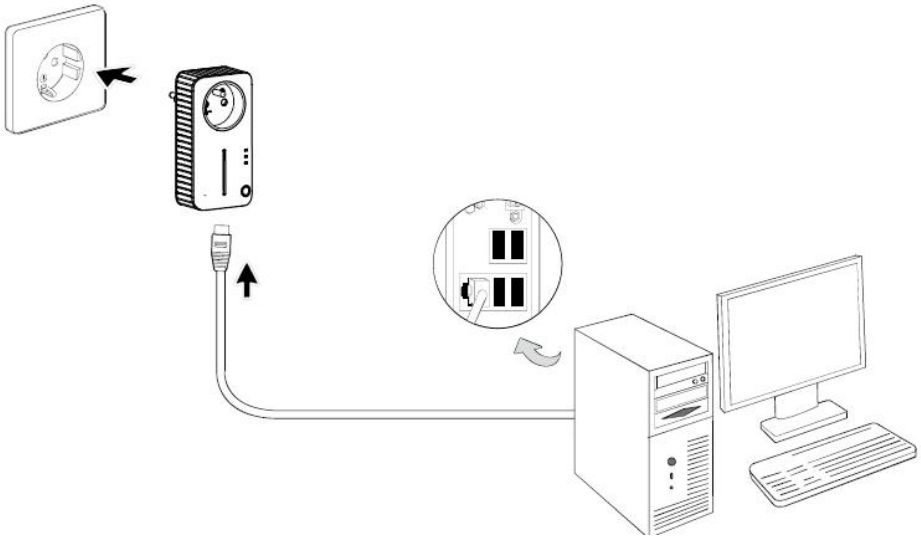
Note

- Before connecting, please make sure that you can surf the internet in your computer to use the reticle provided by ISP.

Before you begin, please read this User Guide carefully before installing and using the equipment. The operating range of your wireless connection can vary significantly depending on the physical position of the wireless devices. The environment Factors such as metal appliances or obstructions, and walls can weaken the wireless signal. Typical ranges vary based on the types of materials and ambient RF (radio frequency) noise in your home or office.

In order to optimize the performance of the Wi-Fi Range Extender, please follow the instructions below to achieve an ideal location (please make sure it is always within the wireless coverage of the wireless router).

1) Half-way Between - Generally, the ideal location for the Wi-Fi Range Extender is half-way between the up level router and wireless client. If the wireless signal is not satisfactory, you may place the Wi-Fi Range Extender somewhat nearer to the up level router. The hardware connection mechanism is shown below:



2) No Obstacles and Spacious - Clear obstacles in the way between the Wi-Fi Range Extender and the up level router. It's better to locate it in a spacious place, such as near the corridors.

3) No Interference - Keep the Wi-Fi Range Extender far away from wireless interference, which may come from electrical appliances that works in the same frequency band as the Wi-Fi Range Extender, such as Blue tooth devices, cordless phones, microwave ovens, etc.

Note

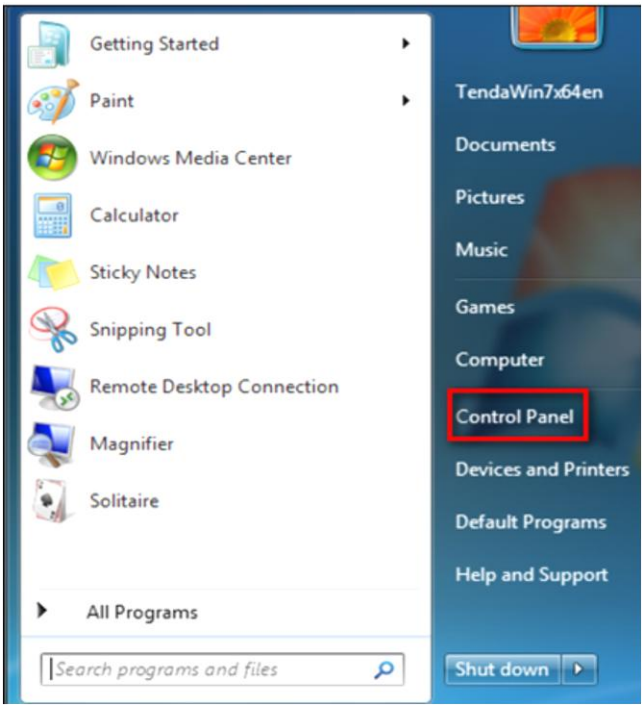
- We recommend that you connect to the Wi-Fi Range Extender when your home network connection is poor, or when you want a larger wireless coverage to eliminate "dead zones". As in compliance with the wireless transmission protocol, all the Wi-Fi Range Extender devices are set to work in half-duplex instead of full-duplex mode. In other words, the Wi-Fi Range Extender has to process one-way communication between your up level router or AP and to the terminal clients; so the transmission time will be double-increased, while the speed will be decreased.
- Please use the matched power adapter otherwise it will damage the device.

2.4 Configure local PC TCP/IP Settings

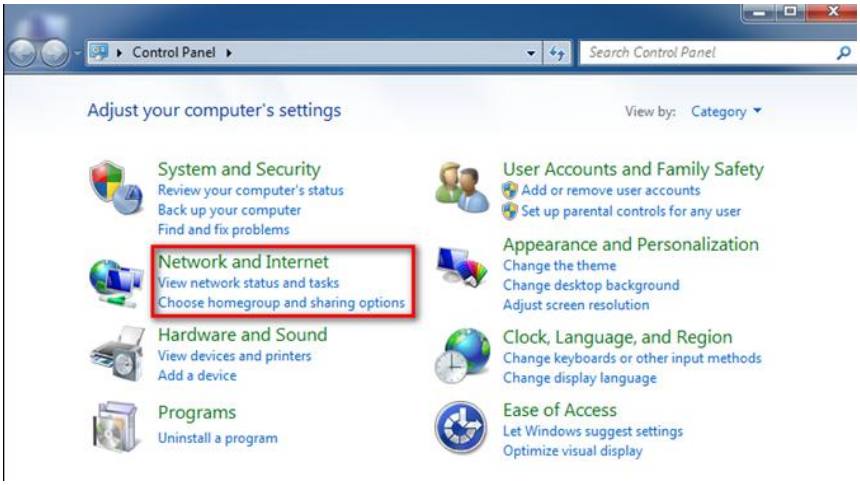
Before you log in to the device, please make sure your computer set to "Obtain an IP address

automatically” and “Obtain DNS server address automatically” from the device.

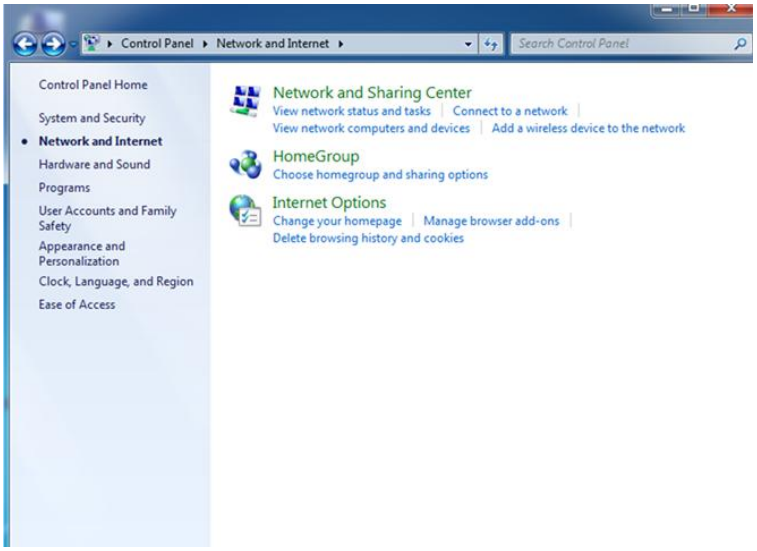
① Click **Start -> Control Panel**.



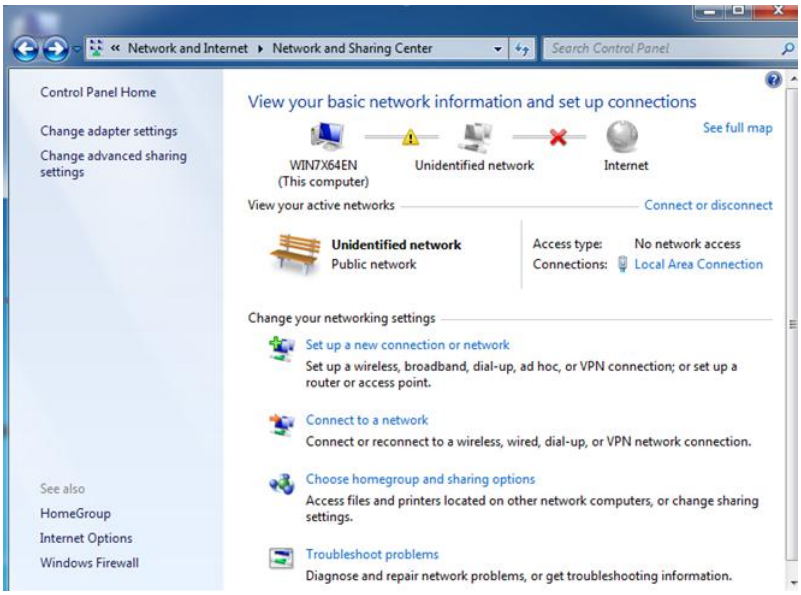
② Click **Network and Internet**.



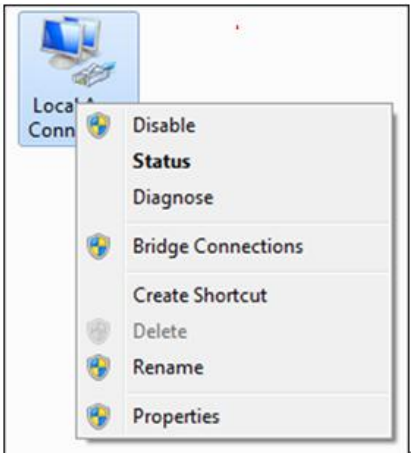
③ Click **Network and Sharing Center**.



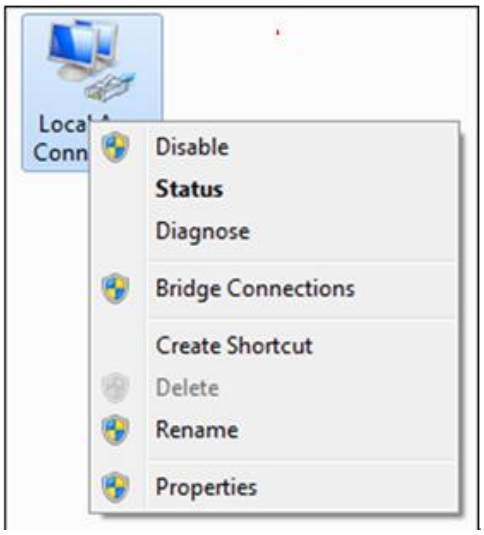
④ Click **Change adapter settings**.



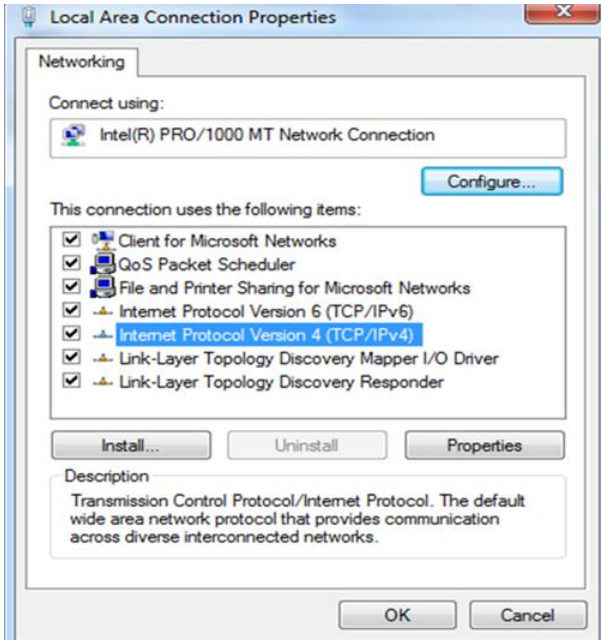
⑤ Click **Local Area Connection** and select **Properties**.



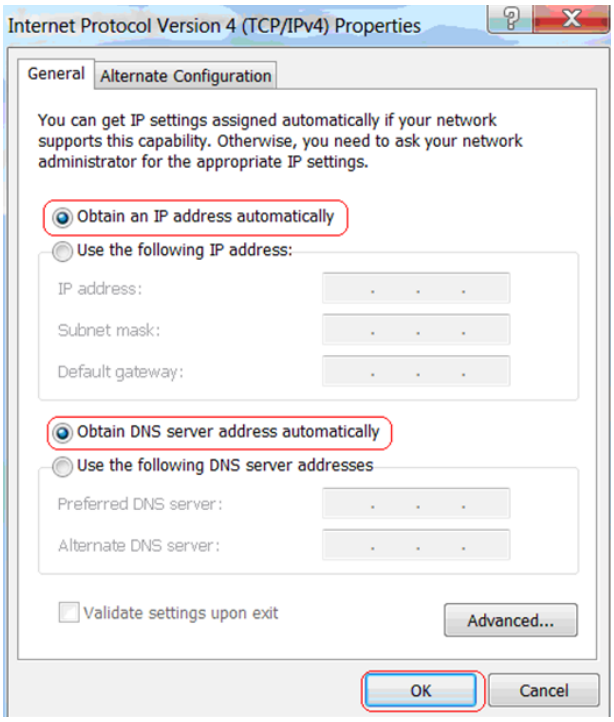
⑥ Select **Internet Protocol Version 4 (TCP/IPv4)** and click **Properties**.



⑦ Select **Obtain an IP address automatically** and click **OK**



⑧ Click **OK** on the **Local Area Connection Properties** window to save your settings



Note

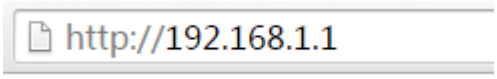
- If you need to configure the IP address manually, please set the PC's IP address and Wi-Fi Range Extender IP address in the same subnet, because the Wi-Fi Range Extender's default IP is 192.168.1.1, the subnet mask is 255.255.255.0, so your IP should set 192.168.1.XXX; XXX cannot be 1.

Chapter 3 Configuring the Device Manually

3.1 Log in the Wi-Fi Range Extender

1. To access the device's Web-based Utility, launch a web browser such as Internet Explorer or Firefox.

2. Enter "http://192.168.1.1". Press "**Enter**". (You can login to the device's page through the following two domains: "**mtc.setup.cn**" or "**re300x.setup.cn**")



Tips ----------

- RE3001 as a bridge device, avoid abnormal of IP conflict in the same LAN, after this device connected with up level router, it will adjust itself as follows:

1) If this device's LAN IP and the up level router's LAN IP at the same network segment, this device will change its LAN IP automatically. For example: the up level router's LAN IP is: 192.168.1.1, this device's LAN IP will become 192.168.10.1.

2) If they are not in the same network segment, this device's LAN IP will unchanged.

- After this device connected with up level router, this device will get an IP from up level through DHCP but this IP is unknown to the user (now this device has two IP addresses, 192.168.10.1 and the up level router assigned. both of them can login the web page.).
- Because of the unknown IP address, you can login the web page through two measures as below:
  1) Launch a web browser inter "**mtc.setup.cn**".
  2) Launch a web browser inter "**re300x.setup.cn**".

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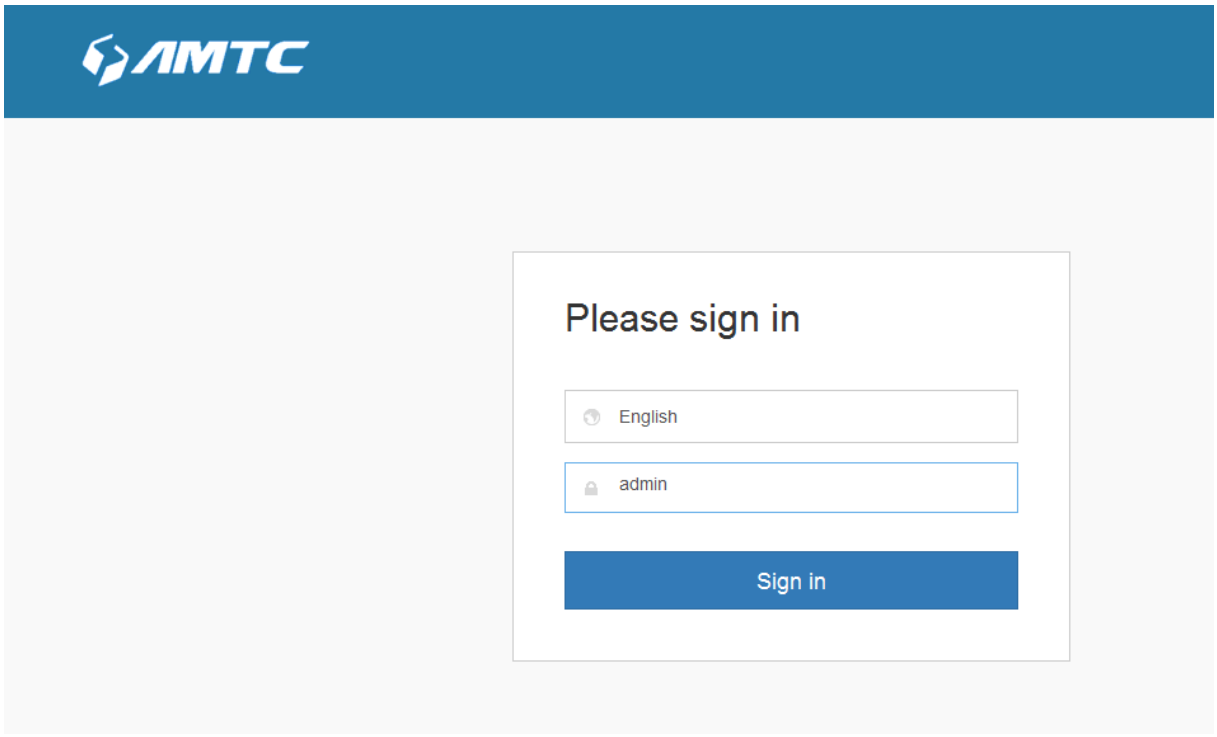
3. The system will automatically display the login page, please enter the correct password. Click the "**Sign in**" button or press "**Enter**" key.



Tips

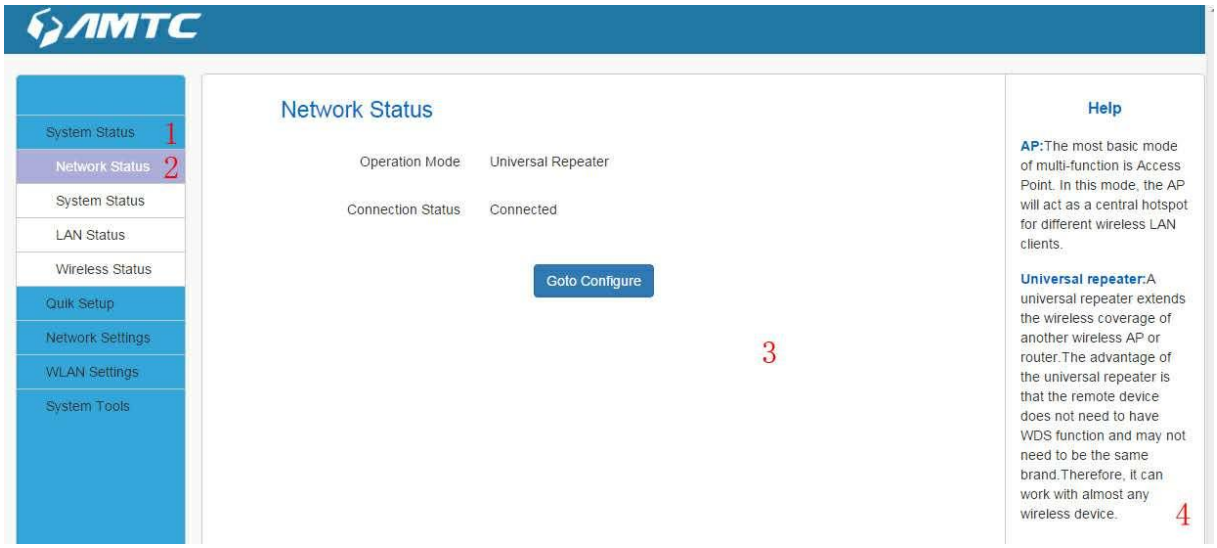
- Default Password is “**admin**”
- The default language is **French**. You can change the language between English and French.

➘ Web page layout

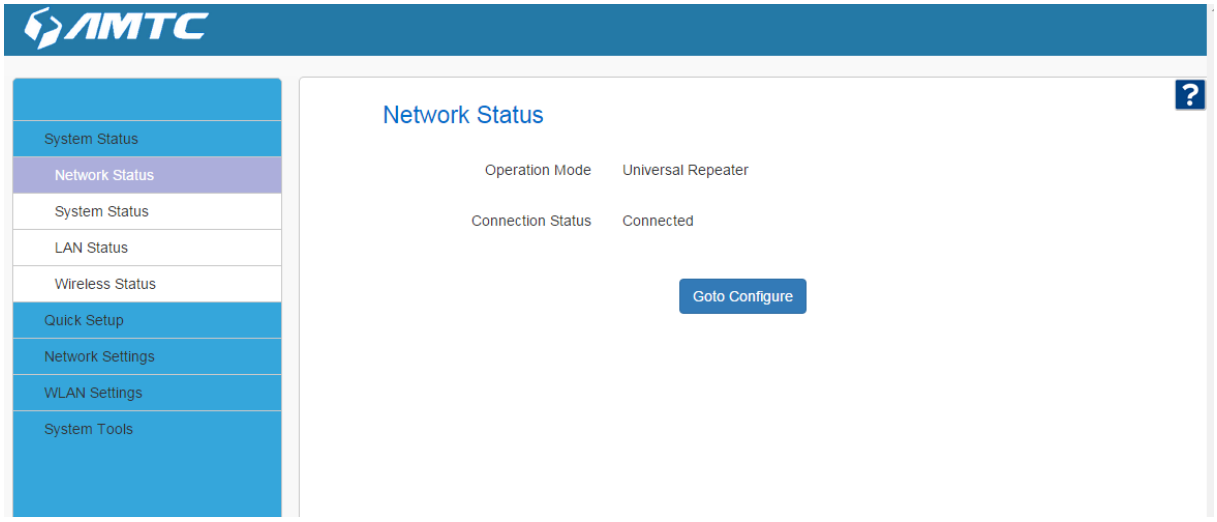
Web page have：Primary & Secondary navigation bar、Configuration zone、Help information zone four parts， as shown below.

Note

- Device does not support web page, function display will appear abnormal, please refer to the actual situation of equipment software.
- Different browsers and the same browsers but different version the web page may different in display.
- Web page displayed as gray features or parameters, display device does not support or immutable under the current configuration.

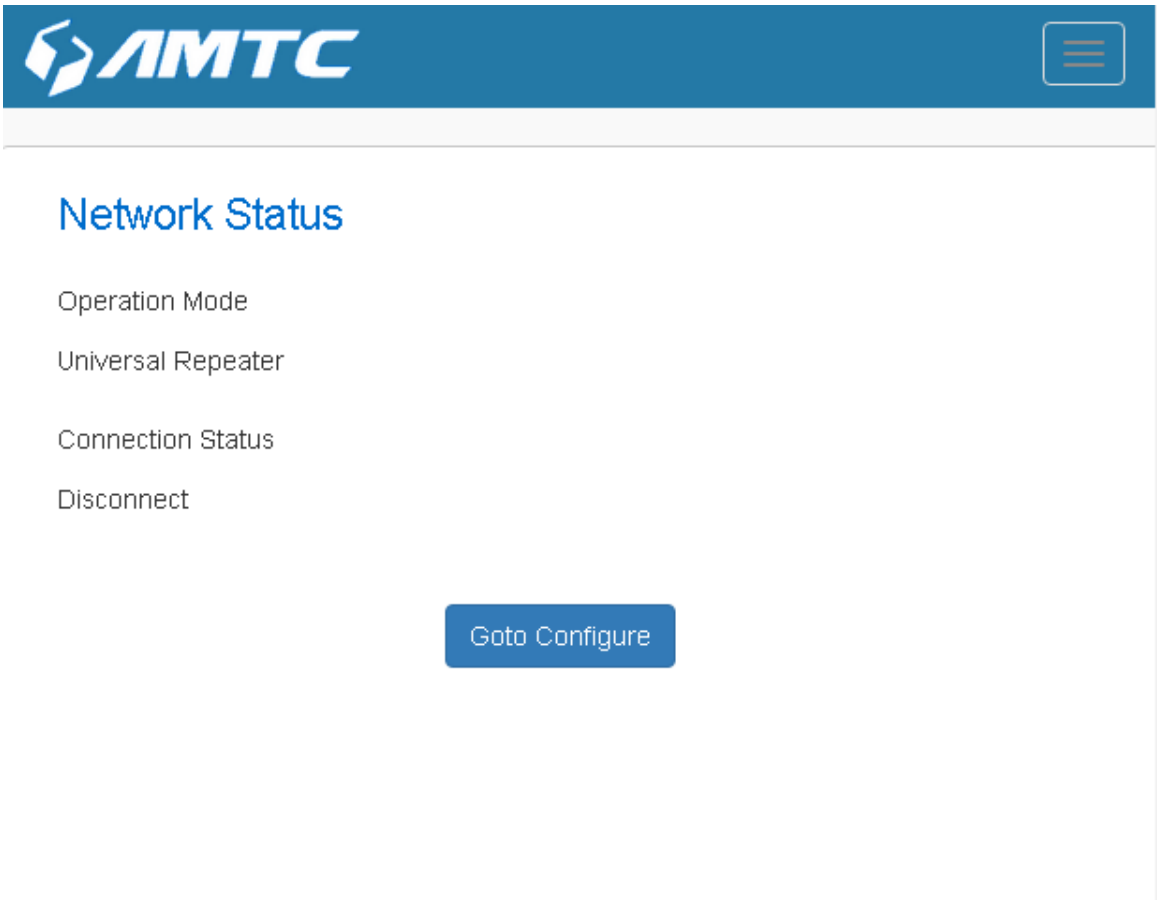


No	Name	Description
1	Primary	User can easily Select functions in the navigation bar menu, Select the results displayed in the configuration section
2	Secondary	
3	Configuration zone	Configure and view area.
4	Help information	The help information of current page



Note

Change the resolution of the screen the “help information” may become “ ? ” as above shown, if you want to refer the “Help information” please click the symbol.



Note

Change the resolution of the screen or login by small screen terminal, the “navigation bar menu” may become “ ” as above shown, if you want to refer the “navigation bar menu” please click the symbol.

➘ Commonly used web page elements description

Common elements	Description
Goto Configure	Goto the configure page directly
NEXT	Enter the next configure page
Open Scan	Scan the information automatically
Close Scan	Close the scan function
Back	Back to previous page

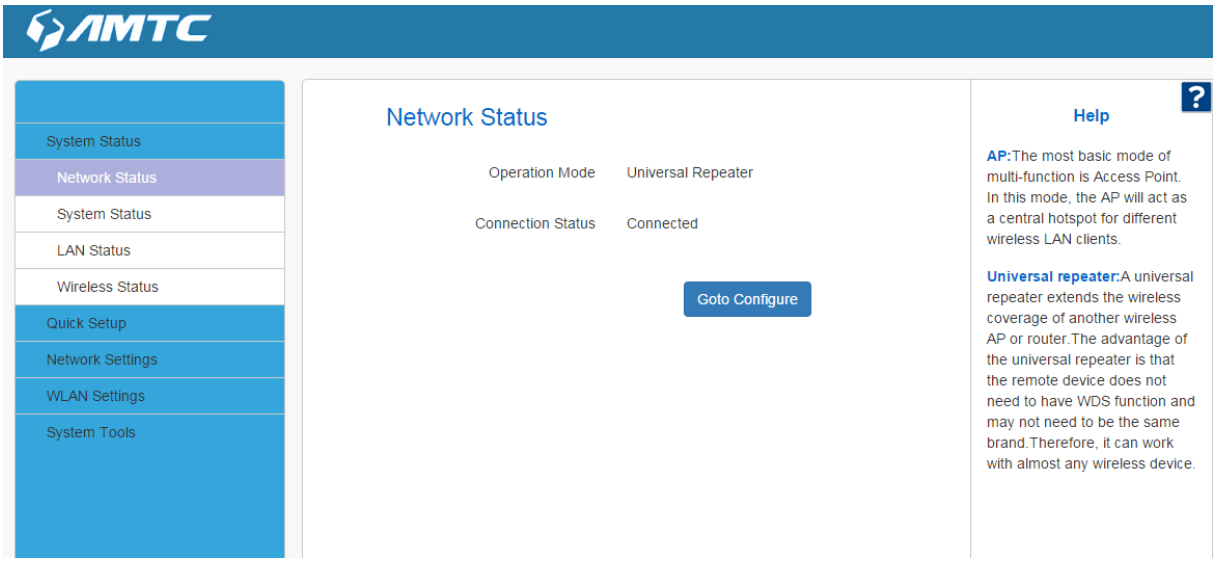
Apply	Application current page configuration
Cancel	Cancel current page configuration
Save	Save current page configuration
Refresh	Refresh current page configuration
Add	Add item
Delete	Delete item
resetOOB	resumed to not configured mode
Backup	Backup current information
Upgrade	Upgrade current information
Reboot	Reboot the device
Clear	Clear current page information
Connect	Allow connection
Disconnect	Disallow connection

3.2 System Status

Click “**System Status**”, enter the system status web page, in this page you can see the “**Network Status**”, “**System Status**”, “**LAN Status**”, “**Wireless Status**”.

3.2.1 Network Status

In this page displays the “Operation Mode” and “Connection Status”



Parameters specification:

- **Operation Mode:** displays the mode of operation.
- **Connection Status:** displays the status of connection.

Tips

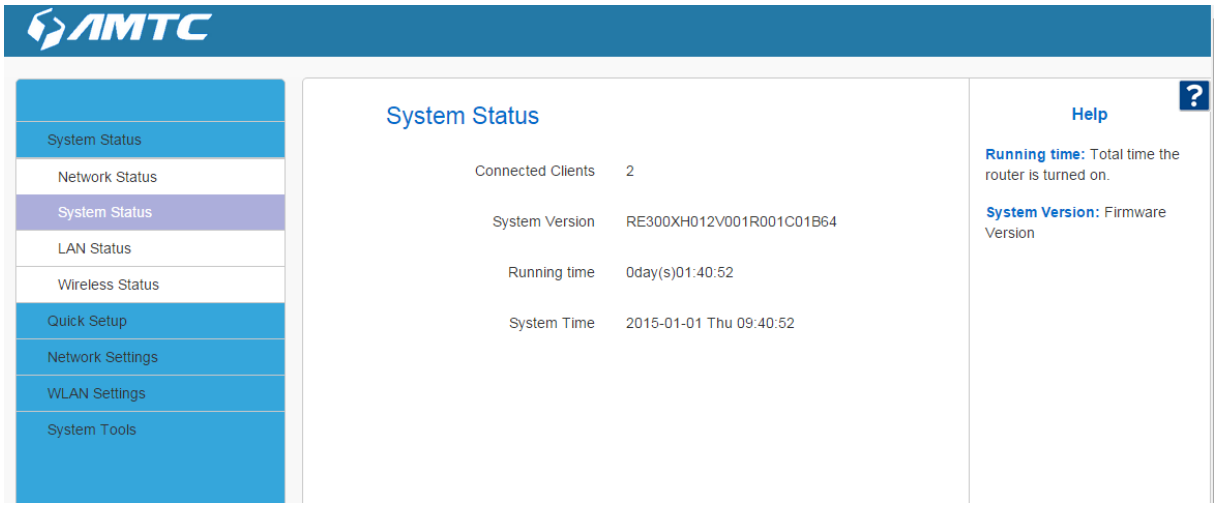
- Help information on the right page available.
- Click "**Goto Configure**" enter the configure page directly.

Knowledge Expansion

- **AP:** The most basic mode of multi-function is Access Point. In this mode, the AP will act as a central hotspot for different wireless LAN clients. In this mode, this device connect with up level router via Ethernet cable, and after connected, this device send wireless signal, you can surf the Internet through connection with the wireless signal.
- **Universal Repeater:** A universal repeater extends the wireless coverage of another wireless AP or router. The advantage of the universal repeater is that the up level router does not need to have WDS function and may not need to be the same brand. Therefore, it can work with almost any wireless device. In this mode, the Wi-Fi Range Extender can connect with up level via wireless signal or via Ethernet cable, after connected, the client device, can surf the internet through connect with the Wi-Fi Range Extender through wireless or through Ethernet cable.

3.2.2 System Status

This page displays “Connected Clients”, “System Version”, “Running Time”, “System Time”.



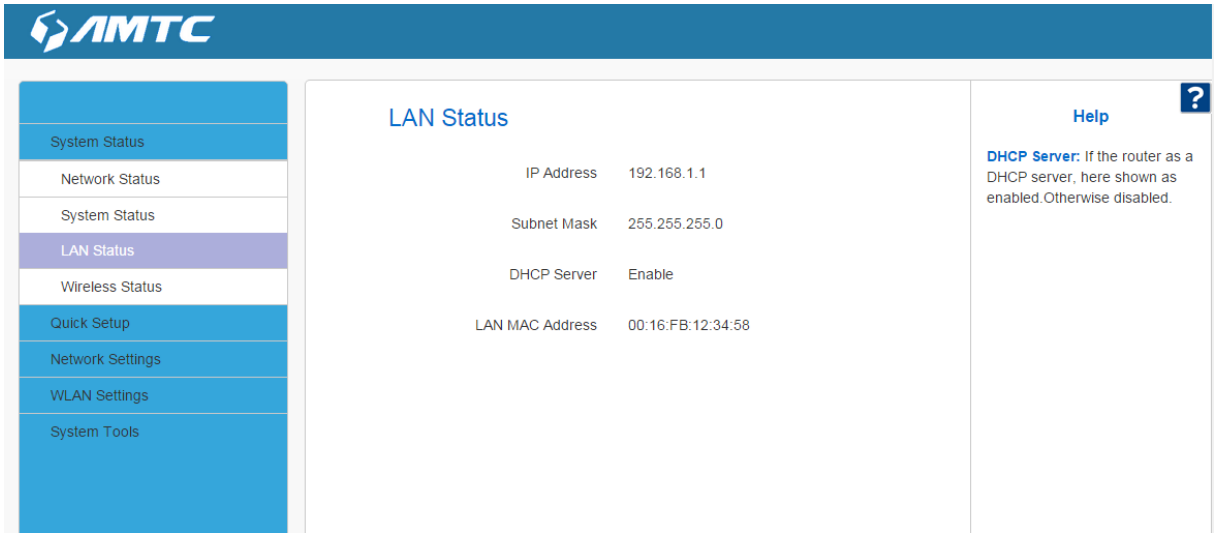
Parameters specification:

- **Connection Clients:** displays the number of connected clients.
- **System Version:** Firmware Version.
- **Running Time:** Displays the time duration indicating how long the device has been up since startup. Up time is recounted and renewed upon power off.
- **System Time:** Current system time on this device. The device automatically synchronizes the system time with Internet time servers.

Tips ----------

- Running time is total time the device is turned on.

3.2.3 LAN Status



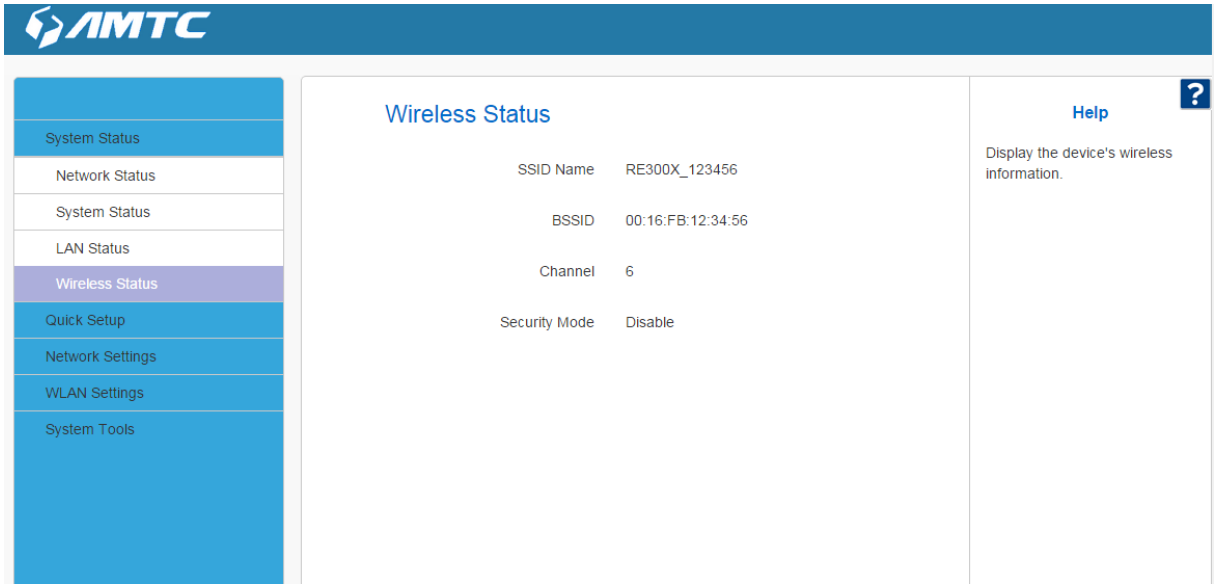
Parameters specification:

- **IP Address:** The device's LAN IP Address (not your PC's IP address).
- **Subnet Mask:** The device's LAN subnet mask.
- **DHCP Server:** the status of DHCP server.
- **LAN MAC Address:** The device's physical address.

Tips

- The default IP address is 192.168.1.1.
- The default Subnet Mask value is 255.255.255.0.
- If the device as a DHCP server, here shown as enabled. Otherwise disabled.

3.2.4 Wireless Status



Parameters specification:

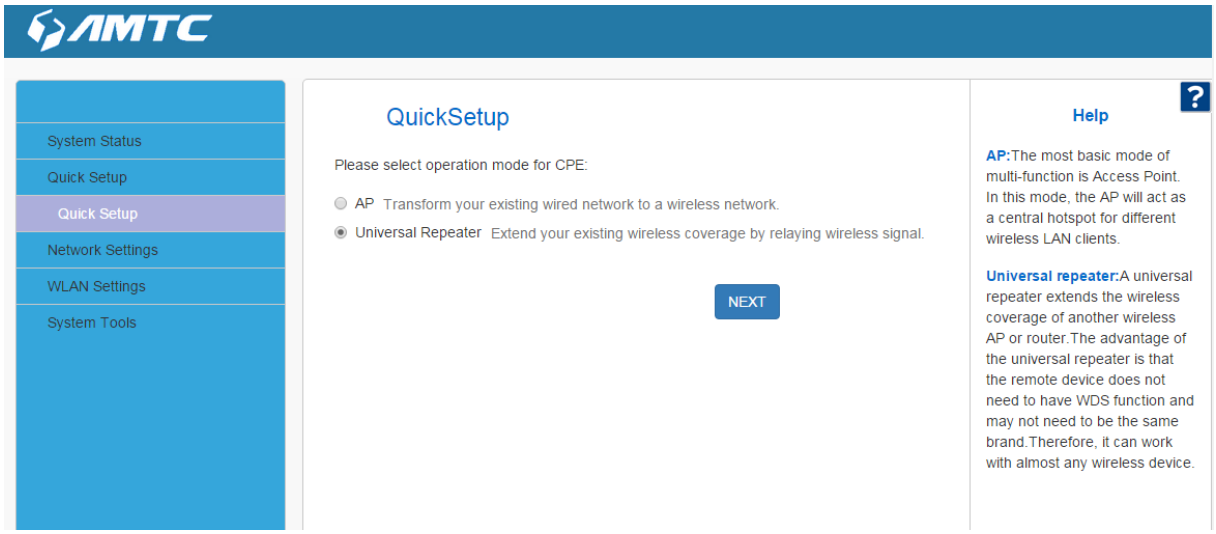
- **SSID Name：** The name of Wireless.
- **BSSID:** The MAC Address of Wireless.
- **Channel：** The Channel of Wireless.
- **Security Mode:** Encryption schemes.

Tips

- The default SSID is **RE300X_XXXXXX,** where XXXXXX is the last six characters in the device's MAC address. You can find it on the label attached on the bottom of the device.

3.3 Quick Setup

In this page you can configure the mode of operation.



Here are two modes AP and Universal Repeater:

1) AP mode configure :

Set steps:

① Select "**AP**" mode and click "**NEXT**" button.

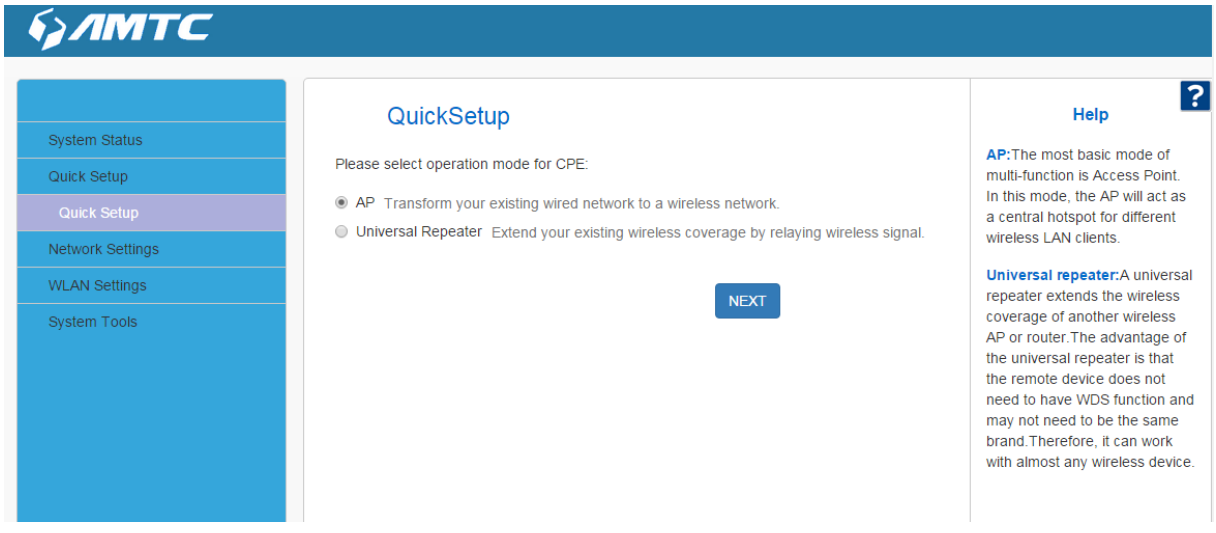
② Enter SSID, select channel

③ Select "**Security Mode**" and "**WPA Algorithms**"

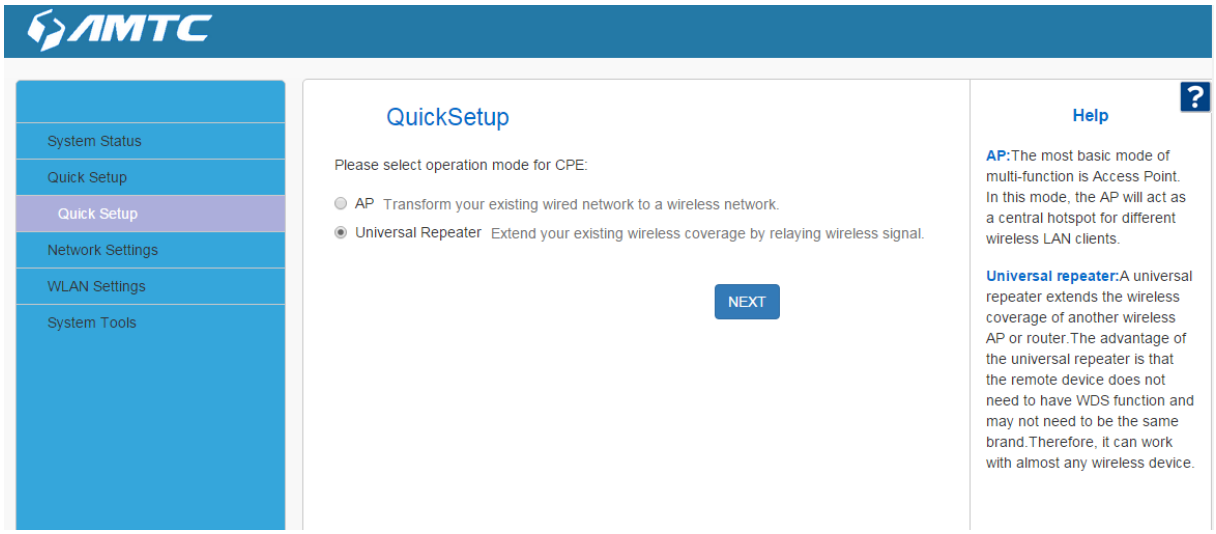
④ Enter the Pass Phrase.

⑤ Click **"NEXT**" enter the next page.

⑥ Click "**Save**" to confirm your settings.



2) Universal Repeater mode configure :

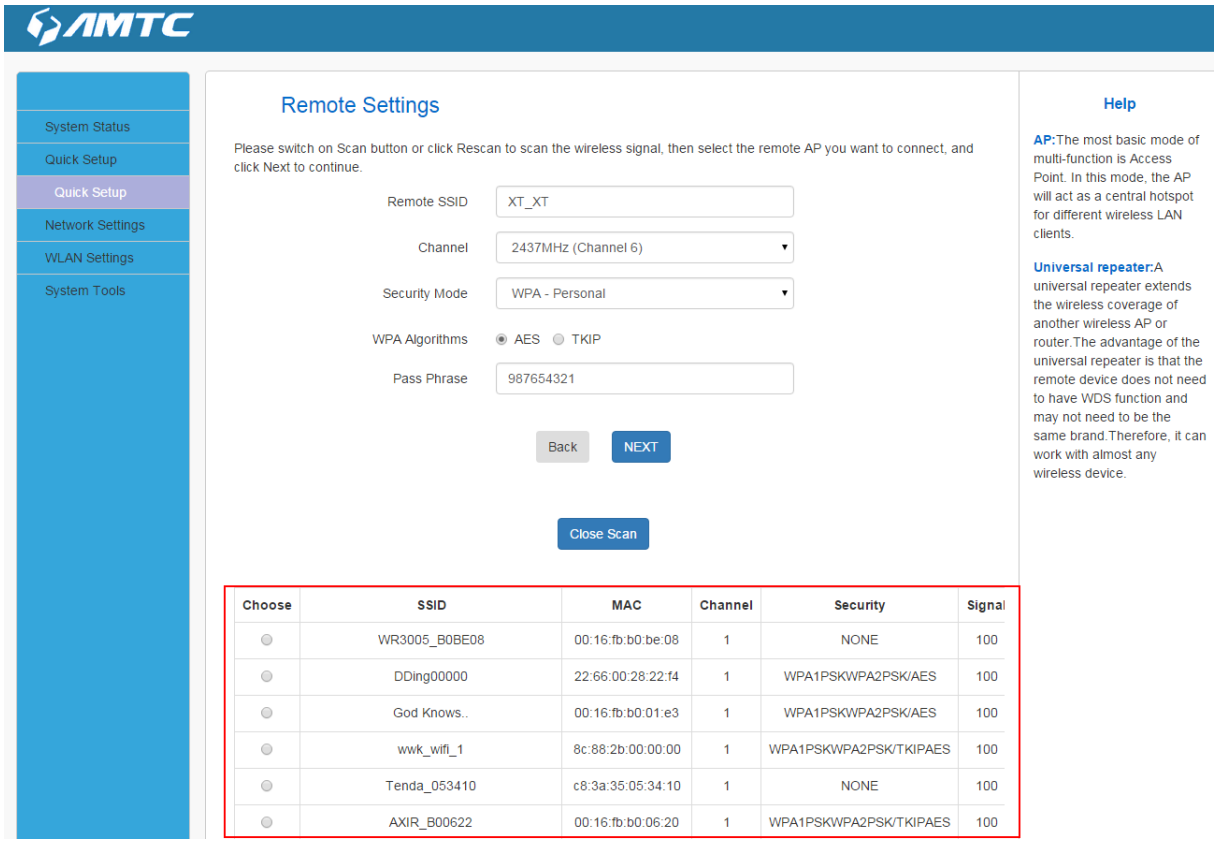


Set steps:

① Select “Universal Repeater” mode and click “NEXT” button.

② Enter Up level router’s SSID, select channel, Security Mode, WPA Algorithms and Pass Phrase (all of this accordance with the up level router’s wireless settings).

➢ Or you can click **“Open Scan”** search the wireless signal automatically.



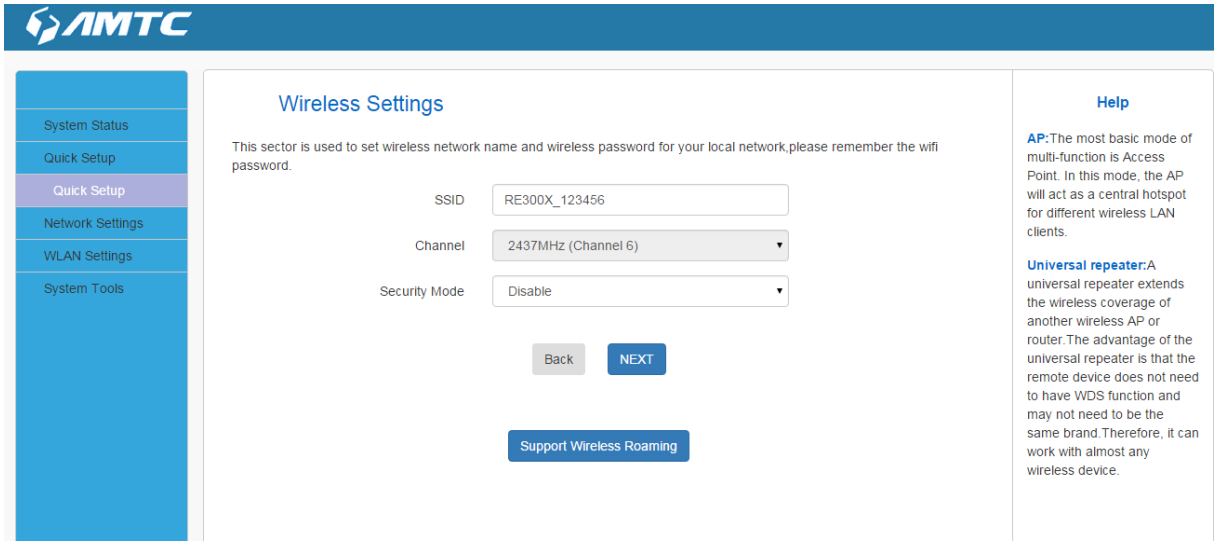
③ Click **“NEXT**” enter the next page.

④ Enter the SSID you want to, the default is RE300X_XXXXXX.

⑤ Select Security Mode and WPA Algorithms.

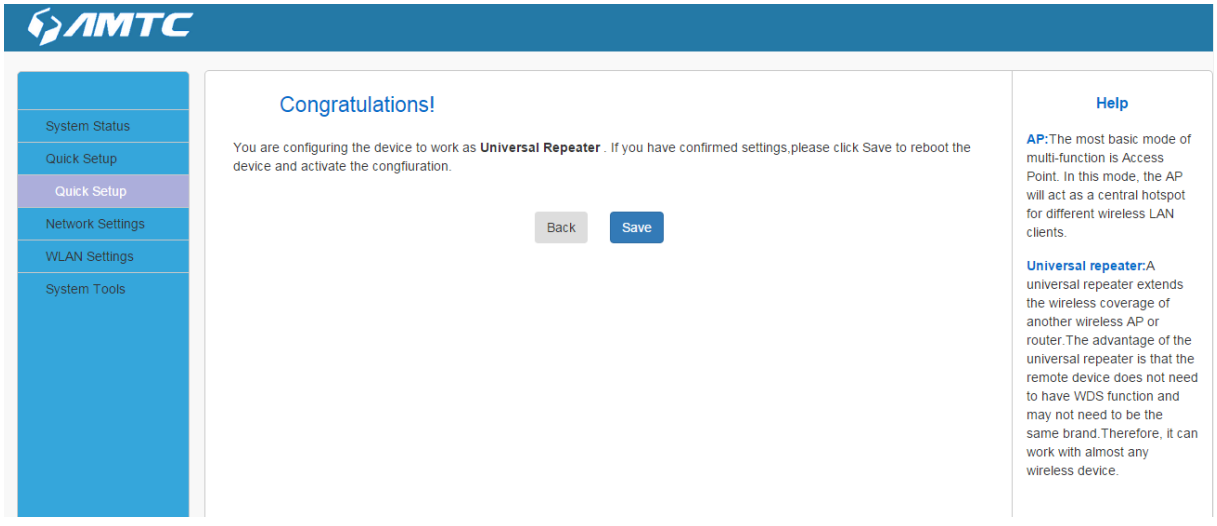
⑥ Enter the Pass Phrase.

➢ Or you can click **"Support Wireless Roaming"** button to extend the up level wireless signal.



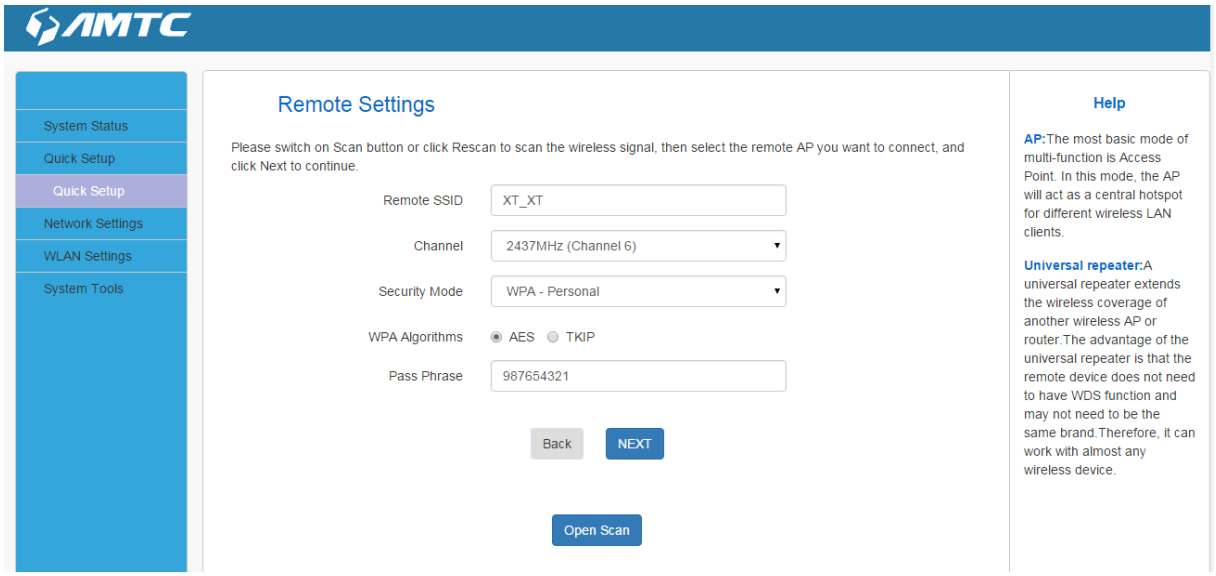
⑦ Click **"NEXT**" enter the next page.

⑧ Click "**Save**" to confirm your settings.

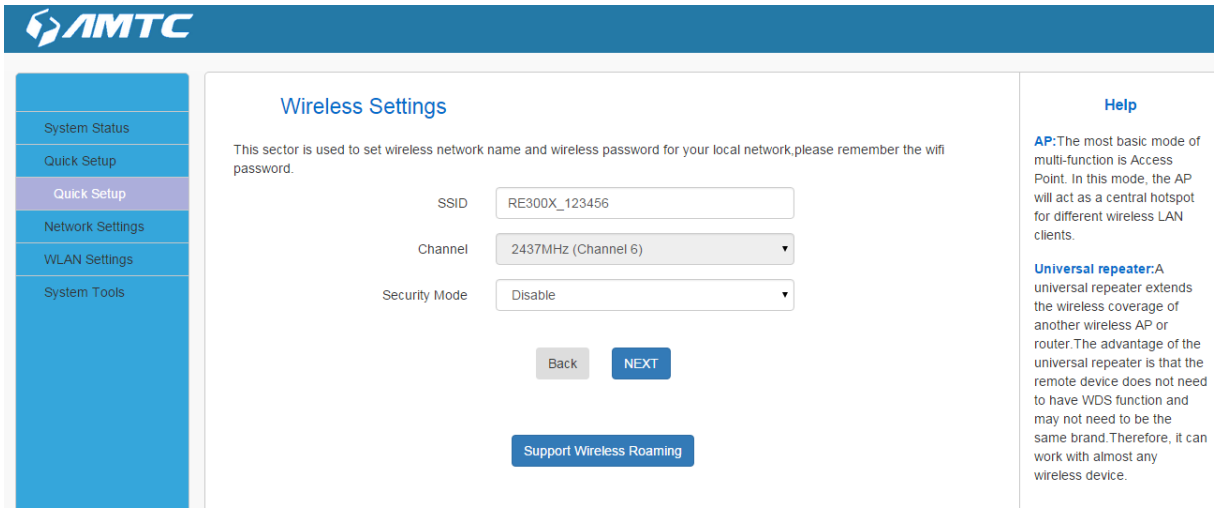


The Universal Repeater Mode Example:

Up level router's wireless information as shown in the picture below:



This Wi-Fi Range Extender's wireless information I configured in the picture as below:



- Click **"NEXT**" enter the next page.
- Click "**Save**" to confirm your settings.
- Use your smart phone or PC with wireless card, search the "**RE300X_123456**" signal, connect and enter the pass phrase you have configured above to surf the Internet.
- Connect you desktop and this device with cable. Make sure your desktop "**Internet protocol Version4 (TCP/IP) Properties**" is "**Obtain an IP address automatically**" to surf the Internet.

Tips

- Under the Universal Repeater mode, press the RE/RST button on the Wi-Fi Range Extender upper panel with the up level router's WPS/QSS button at the same time about 1-3s, the Wi-Fi Range Extender will automatically connect with the up level router.
- Under the Universal Repeater mode, after connected with up level router, if the up level router appear offline condition (such the up level router power off or reboot or change the channel and so on), the Wi-Fi Range Extender will test automatically and reconnect with the up level router again (If connect failed, please manual change the Wi-Fi Range Extender's channel and expended channel same as the up level router).

3.4 Network Settings

Click "**Network Settings**" enter the Network setup web page，in this page you can set "**LAN Settings**", "**DHCP Server**", "**DHCP List & Binding**".

3.4.1 LAN Settings

This page is to configure the basic parameters for LAN port. This IP address is to be used to access the Wi-Fi Range Extender's settings through a web browser. Be sure to make a note of any changes you apply to this page.

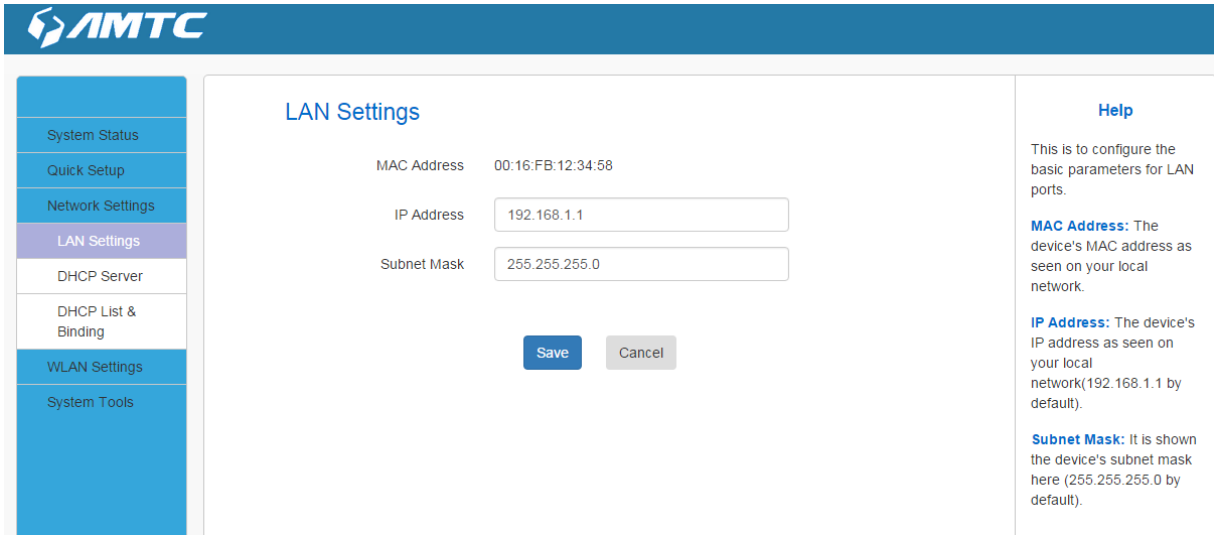
Set Steps：

① Click **"Network Settings"**.

② Select **"LAN Settings".**

③ Enter **IP Address，Subnet Mask.**

④ Click **"Save"** and wait for the device reboot automatically.



Parameters specification:：

- **MAC Address：** It displays the device's LAN MAC Address.
- **IP Address：** It displays the device's LAN IP Address.
- **Subnet Mask:** it displays the device's LAN Subnet Mask.

Tips

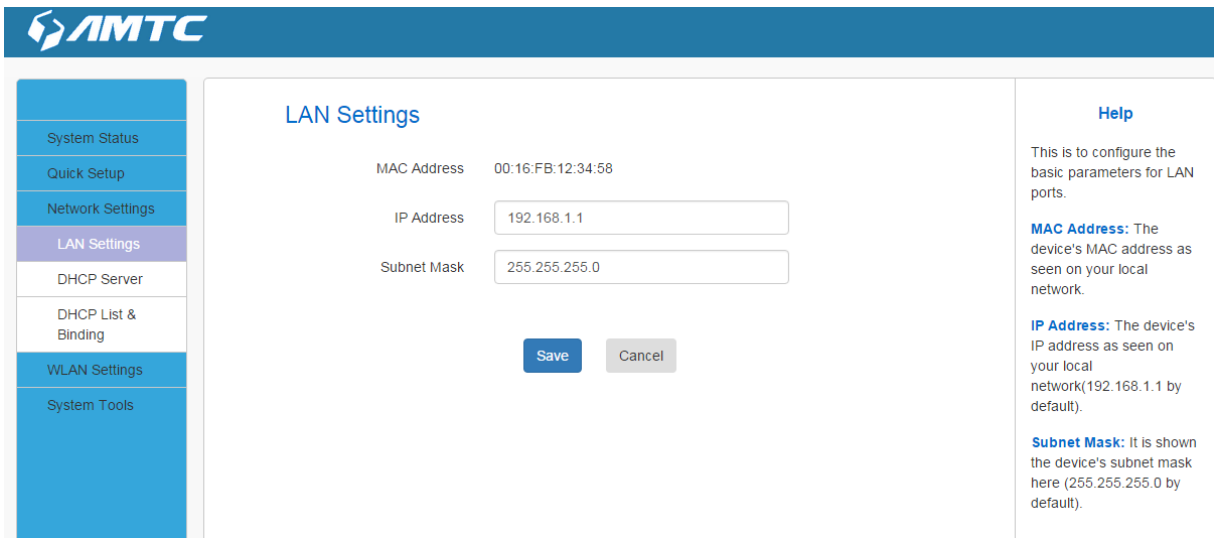
1. Default IP address and subnet mask are respectively 192.168.1.1 and 255.255.255.0.

2. Be sure to make a note of any changes you apply to this page. If you change the LAN IP address of the device, you have to open a new connection to the new IP address and login again.

3.Go to the "System Status" page to confirm whether it is success of the configuration.

LAN Setting Example:

I configured the Wi-Fi Range Extender's LAN IP as: 192.168.10.1, and Subnet Mask is: 255.255.255.0



- Click "**Save**" to confirm the settings
- Connect this device through Ethernet cable.
- Use your smart phone or PC with wireless card search the "RE3002_123456" signal and enter the pass phrase if you have configured.

3.4.2 DHCP Server

Click "**DHCP Server**" enter the DHCP Server page, here you can configure DHCP Server.

Set Steps：

① Click "**Network Settings**".

② Select "**DHCP Server**".

- **DHCP Server:** Select whether enable or disable the DHCP server feature.
- **Start IP Address and End IP Address:** You can specify the starting and ending address of the IP address pool here. These addresses should be part of the same IP address subnet as the device's LAN IP address.
- Enter the Lease Time.

Knowledge Expansion

- **DHCP** (Dynamic Host Configuration Protocol) assigns an IP address to each device on the LAN/private network.
- When you enable the DHCP Server, the DHCP Server will automatically allocate an unused IP address from the IP address pool specified in this screen to the requesting device as long as the device is set to "Obtain an IP Address Automatically".
- If you disable this feature, you have to manually configure the TCP/IP settings for all PCs on your LAN to access Internet.
- **Lease Time:** is the length of the IP address lease before it is refreshed.

Tips

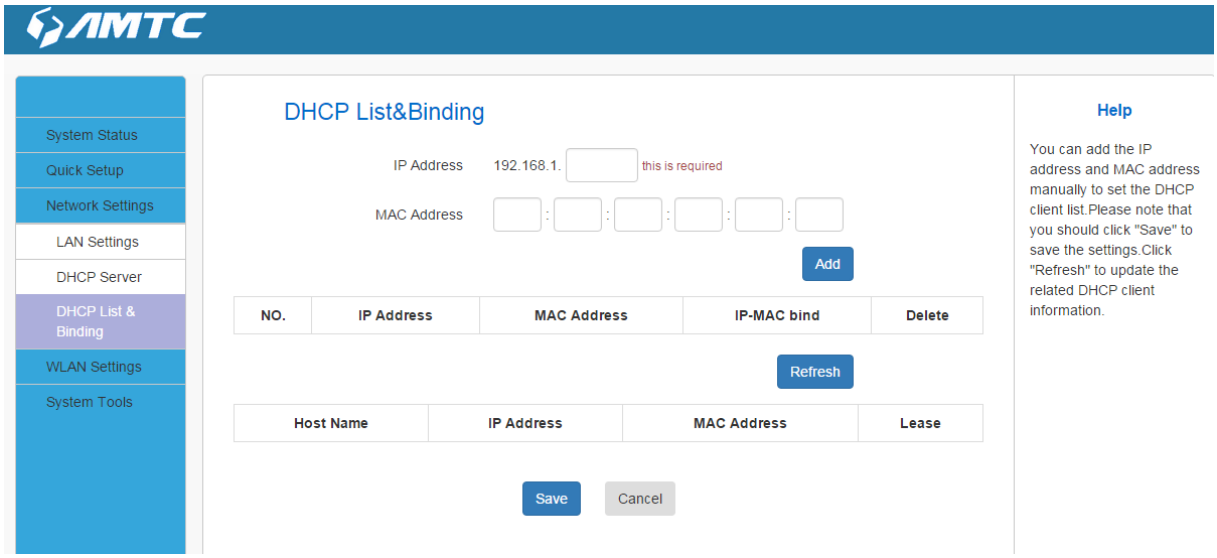
- By default, the device functions as a DHCP server. Do not disable the DHCP server feature unless you want to manually configure the TCP/IP settings for all PCs on your LAN.
  1. Lease time will be renewed automatically upon expiry. No additional configurations are needed.
  2. If you are not an advanced user, the default DHCP server settings are recommended.
- In order to use the function of the device's DHCP server, LAN in the computer's TCP/IP protocol must be set to "automatically obtain IP".
- After you connected with up level router successfully, the DHCP Server function will be closed automatically, the default is open and the default lease time is 45 seconds.

3.4.3 DHCP List & Binding

Set Steps：

① Click “**Network Settings**”.

② Select “**DHCP List & Binding**”.



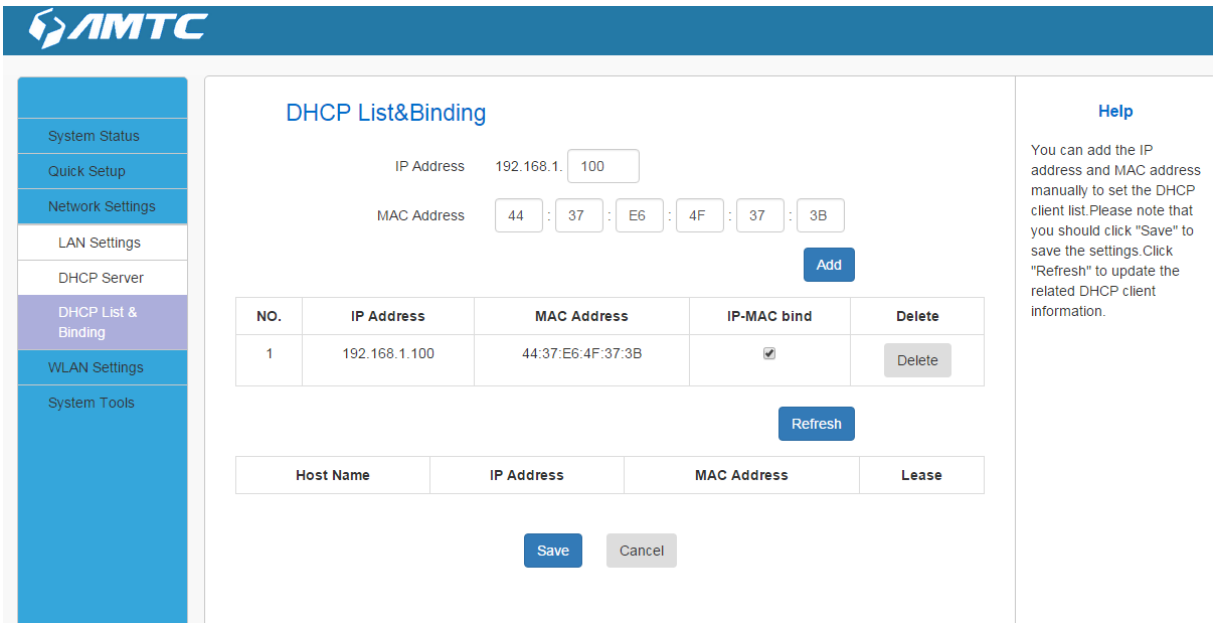
- Enter the IP Address and MAC Address.
- Click “**Add**” add to the DHCP list.
- Click “**Refresh**” to update the related DHCP client information.

Tips

- You can know whether there are unauthorized accesses by viewing the client list.
- Also, you can specify a reserved IP address for a PC in the LAN. That PC will always receive the same IP address each time when it accesses the DHCP server. Reserved IP addresses could be assigned to servers that require permanent IP settings.

Static Assignment Application Example:

To have a PC at the MAC address of 44:37:E6:4F:37:3B always receive the same IP address of 192.168.1.100.



- Enter the last number of the IP address you want to reserve, for example, 100.
- Enter the MAC address of 44:37:E6:4F:37:3B.
- Click “**Add**”.
- Click “**Save**” to save your settings.

Tips ----------

1. If the IP address you have reserved for your PC is currently used by another client, then you will not be able to obtain a new IP address from the device's DHCP server, instead, you must manually specify a different IP address for your PC to access Internet.
2. For PCs that has already obtained IP addresses, you may need to perform the Repair action to activate the configured static IP addresses

---

3.5 WLAN Settings

Click “**WLAN Settings**” enter the configure page , here you can configure “**Base Settings**”, “**Security Settings**”, “**Advanced Settings**”, “**Access Control**”, “**Connection Status**”.

3.5.1 Basic Settings

Here you can configure the basic wireless settings of the Wi-Fi Range Extender.

Set Steps：

① Click “**WLAN Settings**”

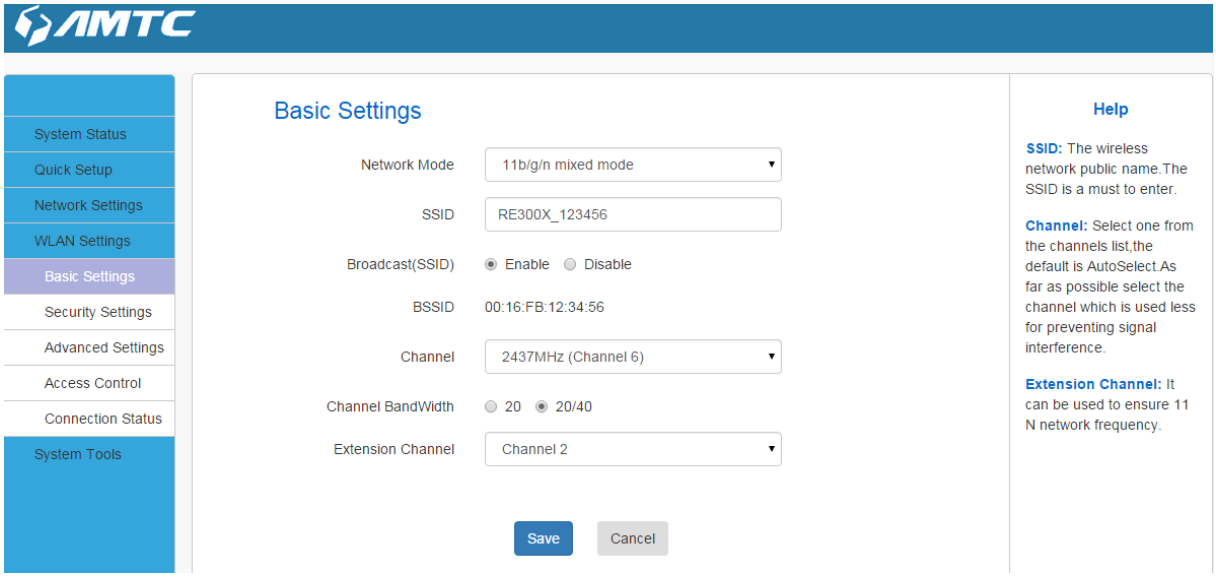
② Select “**Basic Settings**”

③ Select Network Mode

④ Enter **SSID** name (Default name is RE300X_XXXXXX)

⑤ Select “**Channel**”

⑥ Select “**Channel BandWidth**”



Parameters specification:

- **Network Mode**: The currently used network mode, the default is 11b/g/n mixed mode.
- **SSID:** It is the unique name of the wireless network and can be modified.
- **Broadcast (SSID):** Select “Enable” to enable the device’ SSID to be scanned by wireless devices. The default is enabled. If you disable it, the wireless devices must know the SSID for communication.
- **BSSID:** This is the MAC address of the device's wireless interface. A wireless signal corresponding to one unique BSSID.
- **Channel:** The currently used channel by the device. Select an effective channel of the wireless network. The default is AutoSelect.
- **Channel bandwidth:** Select a proper channel bandwidth to enhance wireless performance. This option is available only in 802.11b/g/n. Wireless speed in the channel bandwidth of 20/40 is 2 times in 20.

- **Extension Channel:** This is used to ensure N speeds for 802.11n devices on the network. This option is available only in 11b/g/n mixed mode with channel bandwidth of 20/40.

Note

- The wireless default is Enable.
- The SSID must be entered.

Knowledge Expansion

Network Mode (802.11 Mode): Select a correct mode according to your wireless clients.

- **11b:** This network mode delivers wireless speed up to 11Mbps and is only compatible with 11b wireless clients.
- **11g:** This network mode delivers wireless speed up to 54Mbps and is only compatible with 11g wireless clients.
- **11b/g mixed:** This network mode delivers wireless speed up to 54Mbps and is compatible with 11b/g wireless clients.
- **11b/g/n mixed:** This network mode delivers wireless speed up to 300Mbps and is compatible with 11b/g/n wireless clients
- **AutoSelect:** Under the “AutoSelect” mode the wireless signal will choice the user number is the least channel to improve the efficiency of the signal, it works for most cases.
- If you choice other channel mode, the channel will not change all the time not matter the channel is good or bad.

3.5.2 Security Settings

With the wireless security function, you can prevent others from connecting to your wireless network and using the network resources without your consent. Meanwhile, you can also block illegal users from intercepting or intruding your wireless network

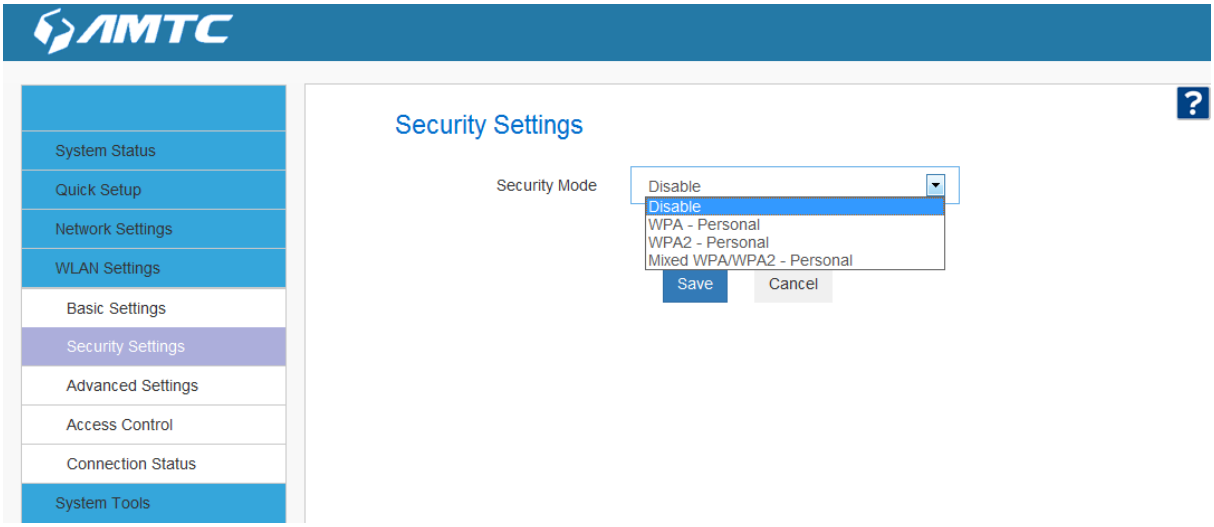
Set Steps：

① Click “**WLAN Settings**”.

② Select “**Security Settings**”.

③ Select “**Security Mode**”.

④ Click “**Save**” to save your settings.



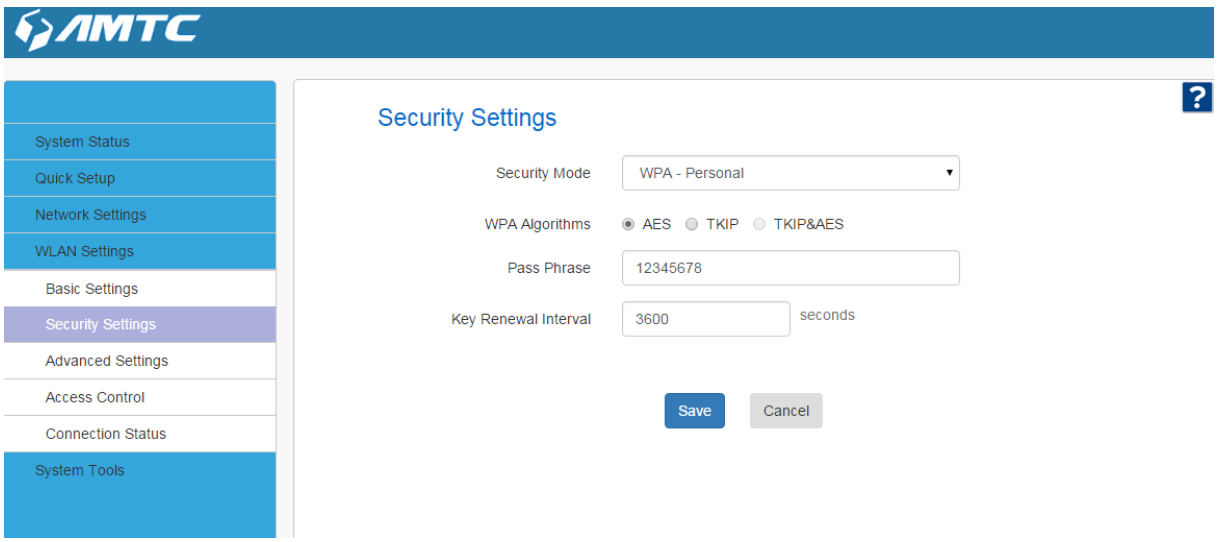
Parameters specification:

➢ **Security Mode:** WPA – Personal、WPA2 – Personal、Mixed WPA/WPA2 – Personal.

Security Mode	Instruction
Disable	Not open this function
WPA – Personal	Support AES and TKIP cipher types
WPA2 – Personal	Support AES, TKIP and TKIP+AES cipher types
Mixed WPA/WPA2 – Personal	Both WPA-Personal and WPA2-Personal secured wireless clients can join your wireless network.

Note

- **WPA/WPA2-Personal:** You can enable personal or mix mode, but you must make sure that the wireless client also supports the selected encryption method.



- **WPA Algorithms:** Wi-Fi Protected Access Algorithms.
- **Pass Phrase:** The default is 12345678.
- **Key Renewal Interval:** Key update interval.

Knowledge Expansion

1. **WEP:** (Wired Equivalent Privacy) is the wireless transmission of data between two devices for encryption, to prevent illegal users wiretapping or invade the wireless network.

2. **AES:** (Advanced encryption standard) is an iterative, symmetric key group password. If selected, wireless speed can reach up to300Mbps.

3. **TKIP:** (Temporal Key Integrity Protocol) Responsible for handling the wireless encryption part of security issues, TKIP is in WEP password outermost layer of the existing “shell” If selected, wireless speed can reach up to 54Mbps.

4. **TKIP+AES:** If Selected, both AES and TKIP secured wireless clients can join your wireless network.

5. **Key Renewal Interval:** Enter a valid time period for the key to be changed.

Tips

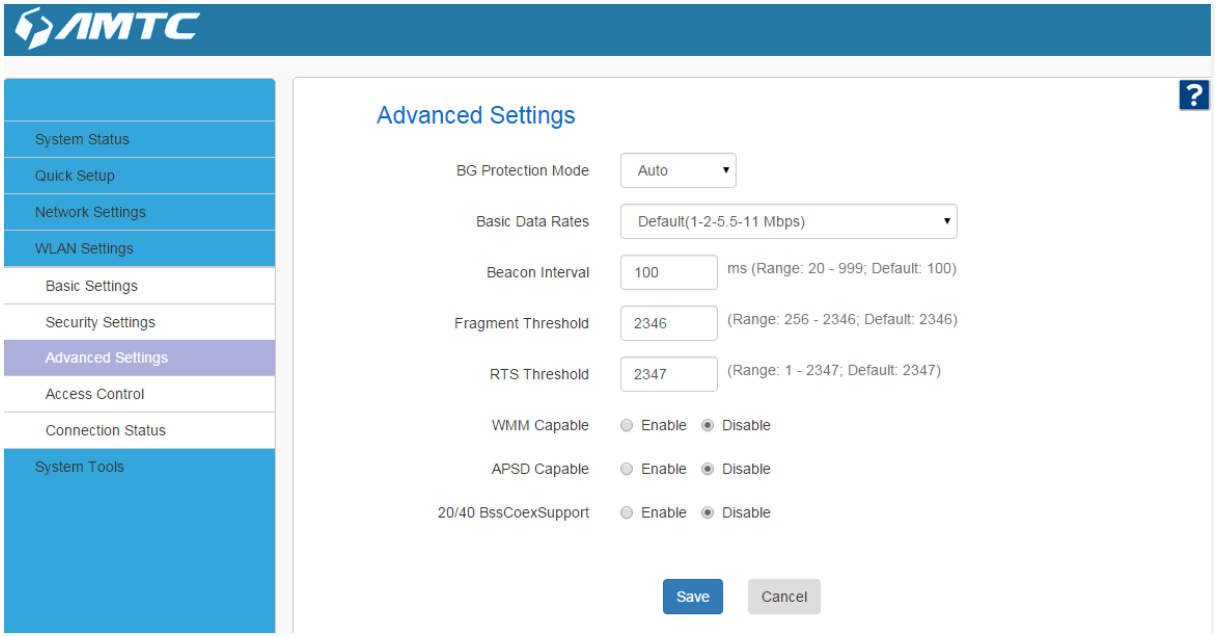
- Recommended that you choice “WPA-Personal” + ”AES” mode , make sure the wireless efficiency and ensure the security of wireless network. Meanwhile, avoid some kind of wireless network card does not support security mode cause cannot connect the wireless network.

3.5.3 Advanced Settings

In this section, you can configure the advanced wireless setting for the device. Including Beacon Interval, TX Power and Basic Data Rate and so on; if you have no idea how to configure these wireless rules; keeping its default value is advisable.

Note

- If you are not professional, not recommended for the page Settings, in order to avoid wireless performance becomes poor.



Parameters specification:

- **BG Protection Mode**: To 11b/g wireless client, under the complex mode can smoothly connected to 11n wireless network. The default is “Auto”.
- **Basic Data Rates:** According to actual needs, adjust the wireless basic transmission rate. The default value is 1-2-5. 5-11 MBPS. Suggest not change the default value.
- **Beacon Interval:** Regular broadcasts wireless SSID time interval. In general, the smaller the time Settings, the faster the client access to the device. The bigger the time set, the greater the wireless network data transmission efficiency. The value is between 20 and 999, the

default is 100.

- **Fragment Threshold:** Every packet fragmentation threshold. Once the data exceed the threshold, it will be divided into several segments. The value is between 256 and 2346, the default is 2346.
- **RTS Threshold:** Request-to-Send Threshold, use the RTS/CTS mechanism, reduce the possibility of conflict. The value is between1-2347, the default is 2347.
- **TX Power:** To improve the wireless transmission power, under the condition of long distance connection can promote wireless performance.
- **WMM (Wi-Fi Multimedia):** when WMM is enabled, the wireless multimedia data transmission will be improved greatly.
- **APSD:** it is used for auto power-saved service. The default is disabled.

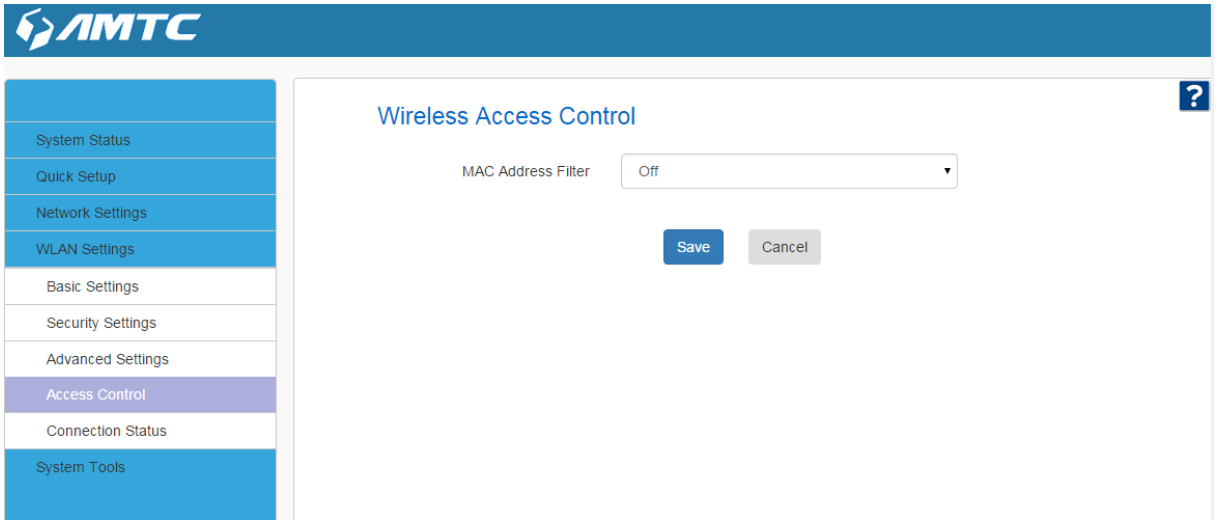
3.5.4 Access Control

Wireless access control is actually based on the MAC address to permit or forbid specified clients to access the wireless network.

Set Steps：

① Click "**WLAN Settings**"

② Select "**Access Control**"

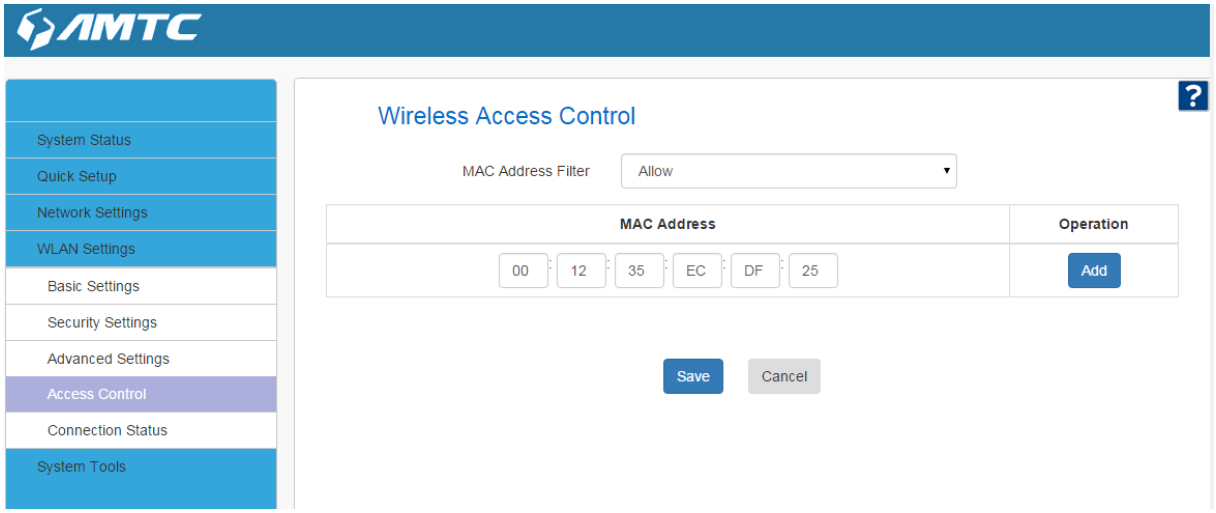


- The Wireless Access Control is based on the MAC address of the wireless adapter to determine whether it communicates with the device or not;

1. Select “**Off**” to allow all wireless clients to join your wireless network.
2. Select “**Allow**” **allow ONLY** the specified wireless clients to join your wireless network.
3. Select “**Block**” **disallow ONLY** the specified wireless clients to join your wireless network.

Wireless Access Control Application Example:

To only allow your own notebook at the MAC address of 00:12:35:EC:DF:25 to join your wireless network.



Set Steps：

- Select **Allow**.
- Enter the MAC address of the wireless device you want to restrict. Here in this example, enter 00:12:35:EC:DF:25.
- Click “**Add**” to add the MAC address to the MAC address list.
- Click “**Save**” to save your settings.

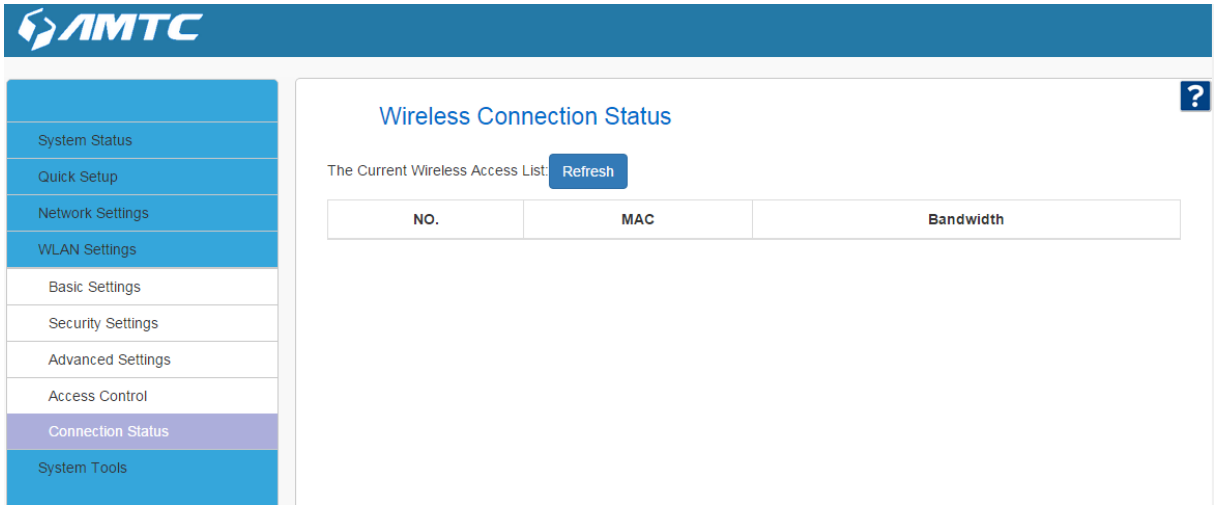
Tips

- Up to 10 wireless MAC addresses can be configured
- If you don't want to configure the complex wireless security settings and want to disallow others to join your wireless network, you can configure a wireless access control rule to allow only your own wireless device

3.5.5 Connection Status

This page shows the current wireless access list

Click “**Refresh**” to update.



Tips

- The bandwidth here refers to the channel bandwidth instead of wireless connection rate.
- You can know whether there are unauthorized accesses to your wireless network by viewing the wireless client list.

3.6 System Tools

Click “**System Tools**” enter the configure page ,here you can set “**Time Settings**”, “**Backup/Restore**”, “**Restore to Factory**”, “**Firmware Upgrade**”, “**Reboot**”, “**Change Password**”, “**System Log**”.

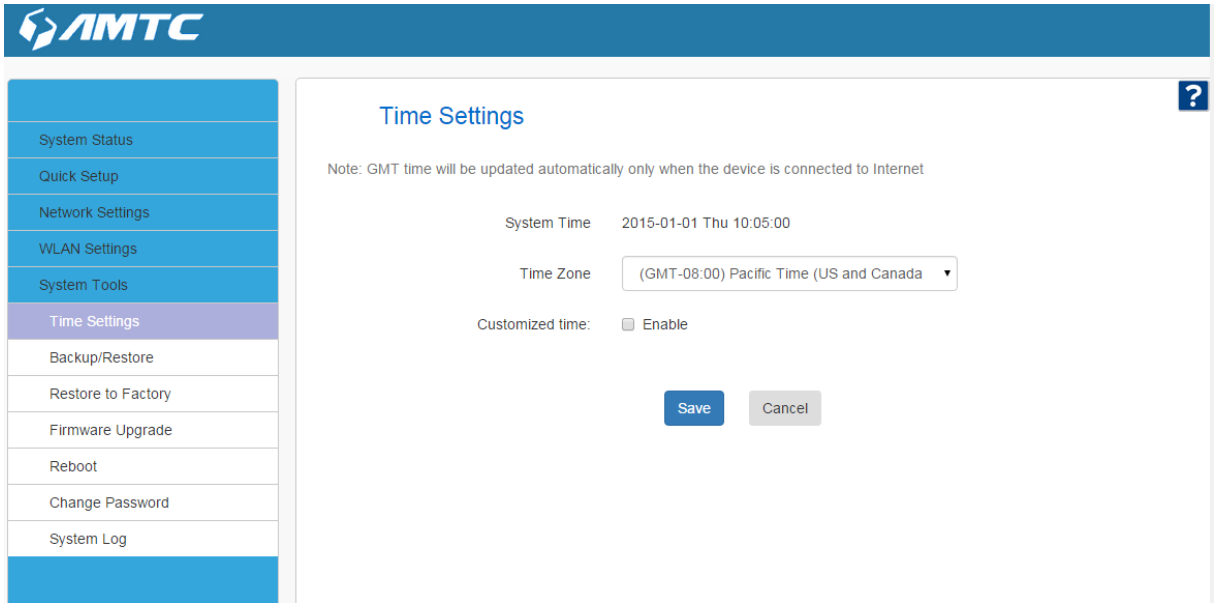
3.6.1 Time Settings

This section is to select the time zone for your location.

Tips

Configured time and date info will be lost if the device gets disconnected from power supply. However, it will be updated automatically when the device reconnects to Internet. To activate

time-based features (e.g. firewall), the time and date info shall be set correctly first, either manually or automatically.



Set Steps：

① Click “**System Tools**”.

② Select “**Time Settings**”.

③ Select Time Zone.

④ Enable “**Customized time**”.

⑤ You can enter the time and date manually or click “**Sync with your PC**”, synchronize automatically.

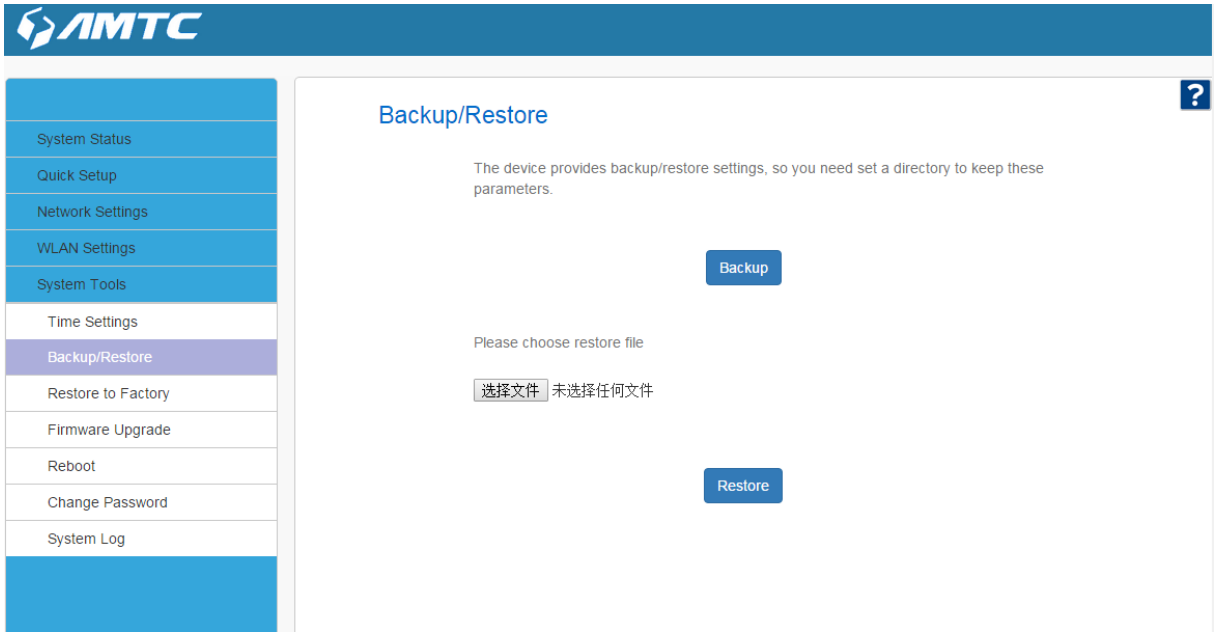
⑥ Click **Save** to save you settings.

➢ **Synchronize with your PC:** Specify a time interval for periodic update of time and date information from your host.

Tips

If the router connected to the Internet, the device’s time and network time synchronization by default.

3.6.2 Backup/Restore



Parameters specification:

- **Backup:** Click this button to back up the device's configurations.
- **Restore:** Click this button to restore the device's configurations.

Set Steps：

① Click "**System Tools**".

② Select "**Backup/Restore**".

③ "**Backup**" to keep parameters.

④ Click "**Browse**" to add an file

⑤ Click "**Save**"

Note

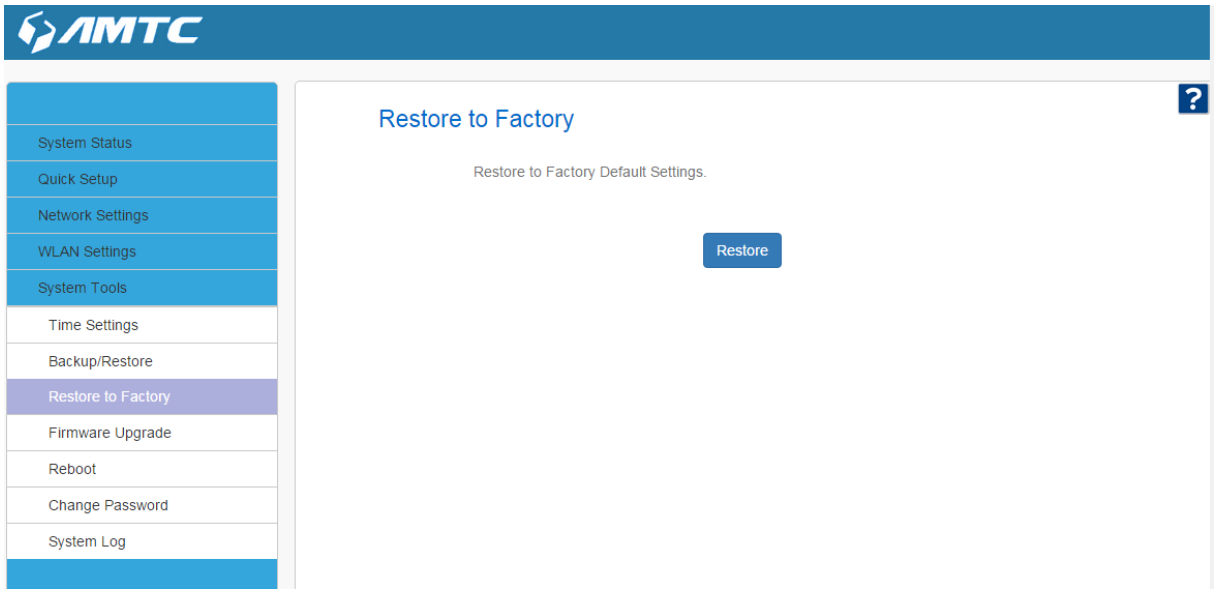
The default configuration file name is "RouterCfm.cfg". Do include the file name suffix of ".cfg" when renaming the file name to avoid problem.

3.6.3 Restore to Factory

Set Steps：

① Click “**System Tools**”.

② Select “**Restore to Factory**”.



Parameters specification:：

- This “**Restore**” button is to reset all configurations to the default values. It means the Range Extender will lose all the settings you have set. So please note down the related settings if necessary.
- **Default Password:** admin.
- **Subnet Mask:** 255.255.255.0.
- **Default IP:** 192.168.1.1.

Note

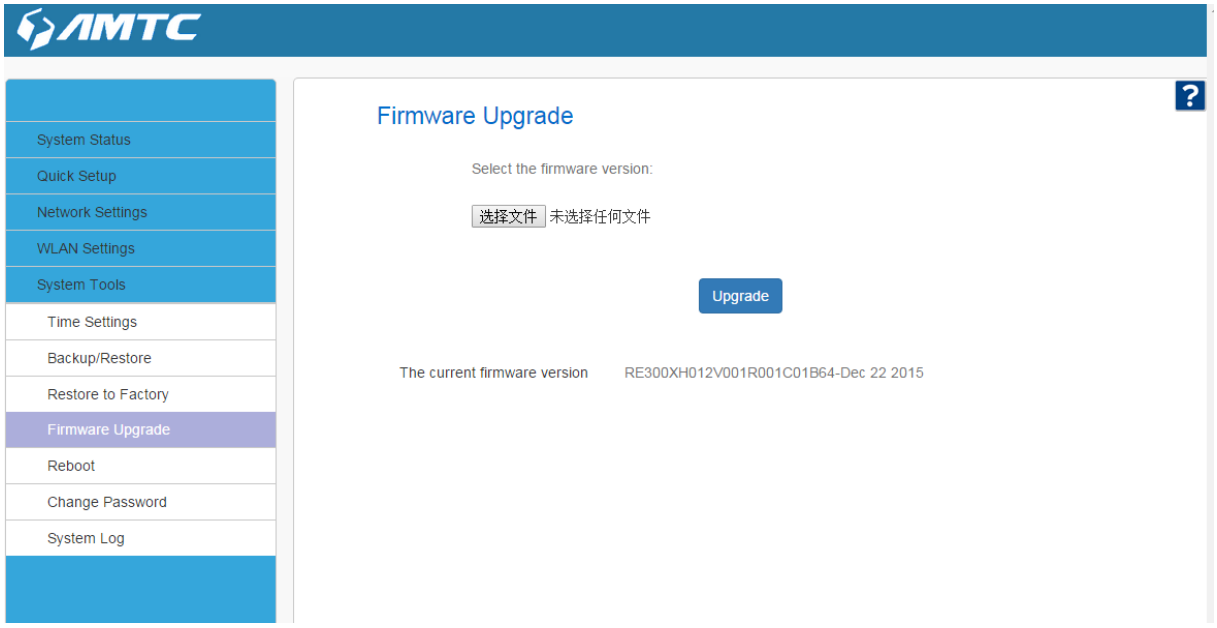
- If you enable this option, all current settings will be deleted and be restored to factory default values. You will have to reconfigure Internet connection settings and wireless settings.
- Do not restore factory default settings unless the following happens:

  1> You need to join a different network or unfortunately forget the login password.

  2> You cannot access Internet and your ISP or our technical support asks you to reset the device.
- DO NOT interrupt the power to the router when Restore to factory is in process otherwise the router may be permanently damaged.

3.6.4 Firmware Upgrade

The device provides the firmware upgrade by clicking the "**Upgrade**" after browsing for the firmware upgrade packet. After the upgrade is completed, the device will reboot automatically.



Set Steps：

① Click "**System Tools**".

② Select "**Firmware Upgrade**".

③ Click "**Browse**", select the upgrade file.

④ Click "**Upgrade**", and wait for it to complete.

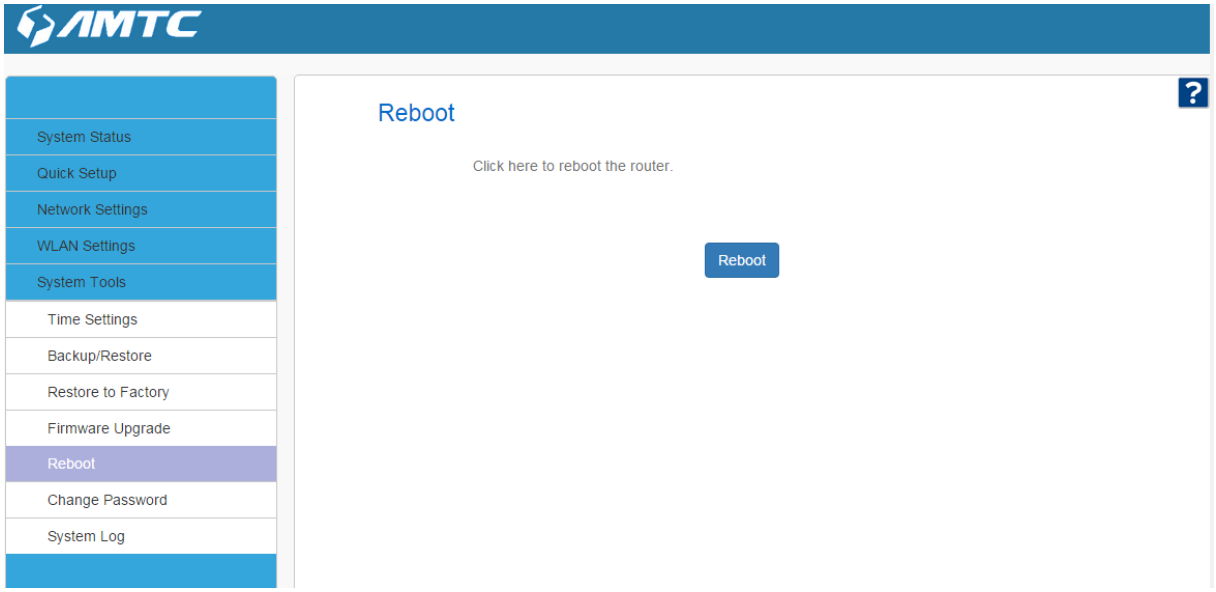
Note

1. Before you upgrade the firmware, make sure you are having a correct firmware. A wrong firmware may damage the device.

2. It is advisable that you upgrade the device's firmware over a wired connection. DO NOT interrupt the power to the device when the upgrade is in process otherwise the device may be permanently damaged.

3.6.5 Reboot

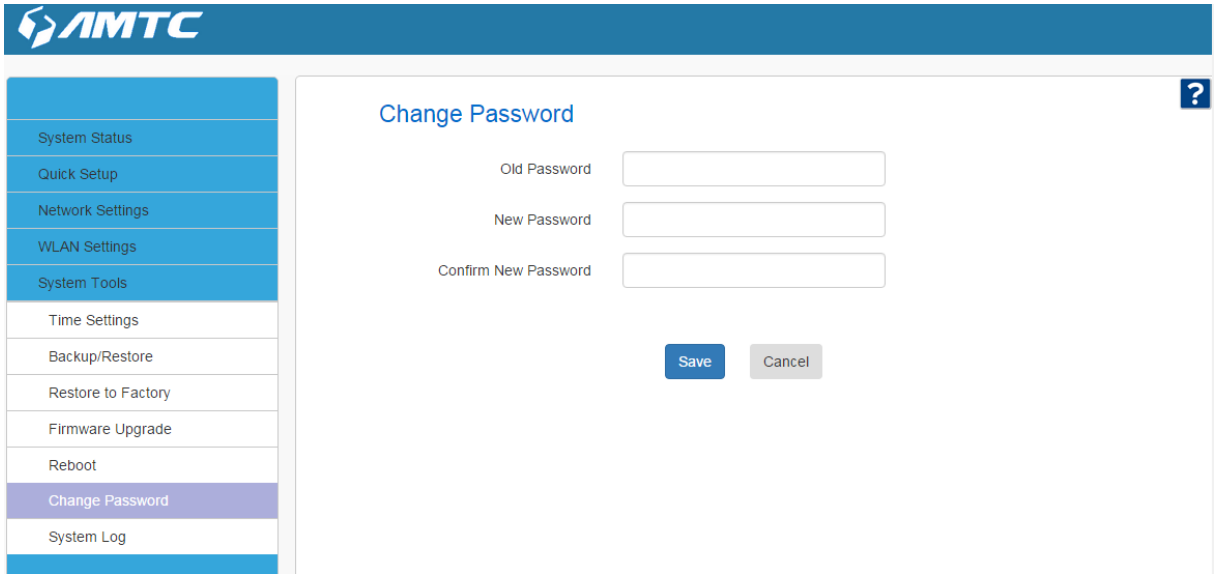
When a certain feature does not take effect or the device fails to function correctly, try rebooting the device.



- Rebooting the device is to make the settings configured go into effect or to set the device again if setting failure happens.

3.6.6 Change Password

You can change the password by this function.



Set Steps：

① Click “**System Tools**”.

② Select “**Change Password**”.

③ Enter “**Old Password**”.

④ Enter “**New Password**”, “**Confirm New Password**”.

⑤ Click “**Save**” to save you settings.

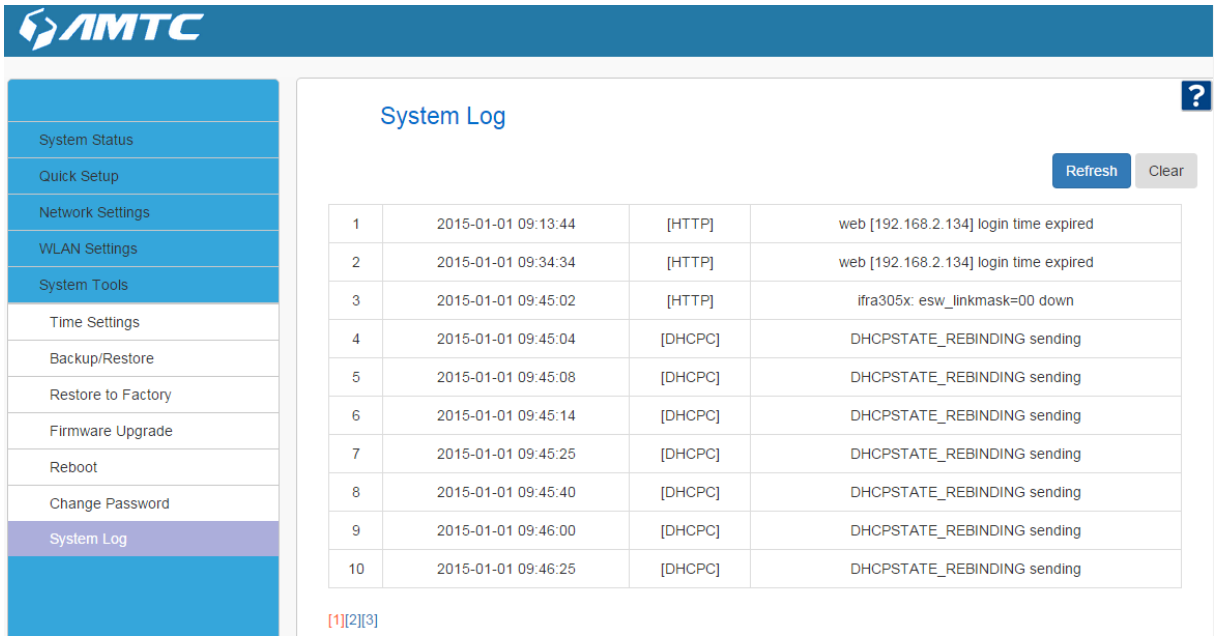
Tips

- The default login password is “**admin**”.
- The valid password must be between 3~12 characters and only include letters, numbers and underscore.

3.6.7 System Log

The section is to view the system log. Click the “**Refresh**” to update the log.

Click the “**Clear**” button to clear the screen.



Set Steps：

① Click “**System Tools**”

② Select “**System Log**”

③ Click “**Refresh**” to refresh the information

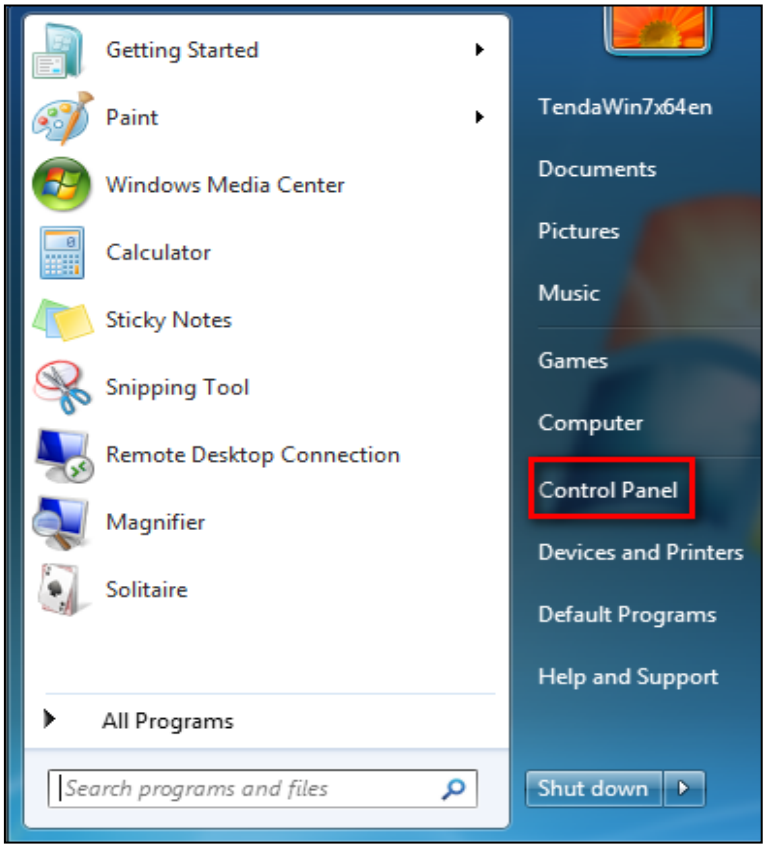
④ Click “**Clear**” to clear the information in the page

Appendix

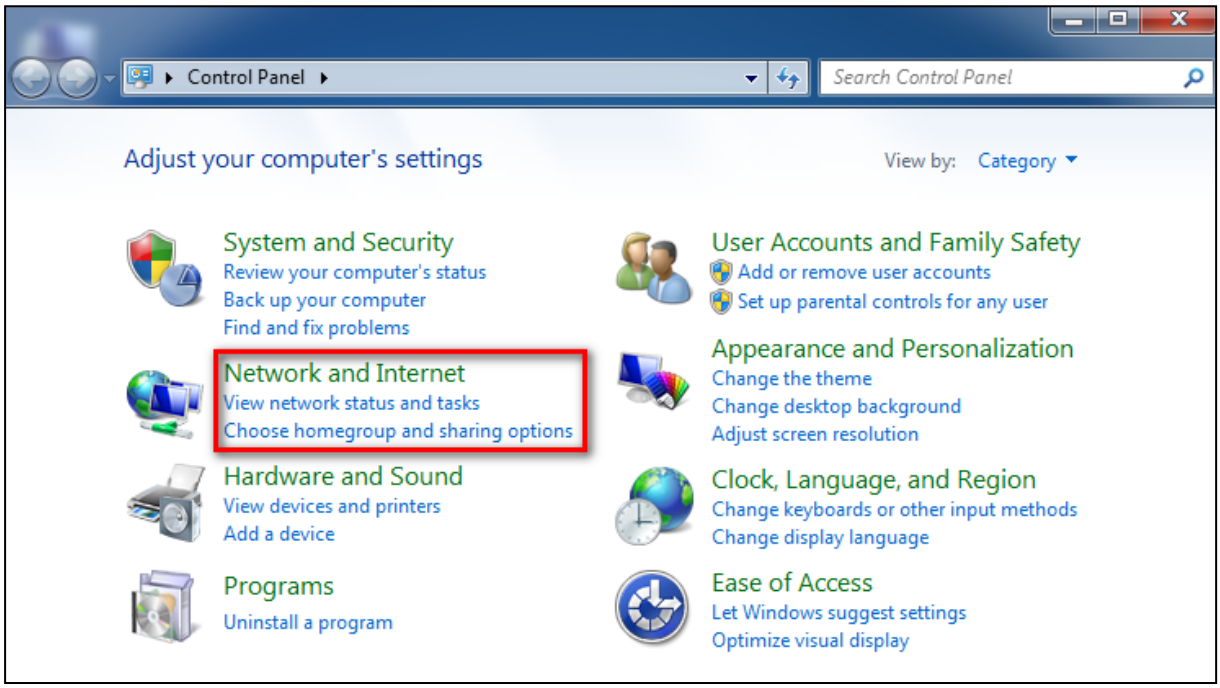
1 Configure PC TCP/IP Settings

Windows 7

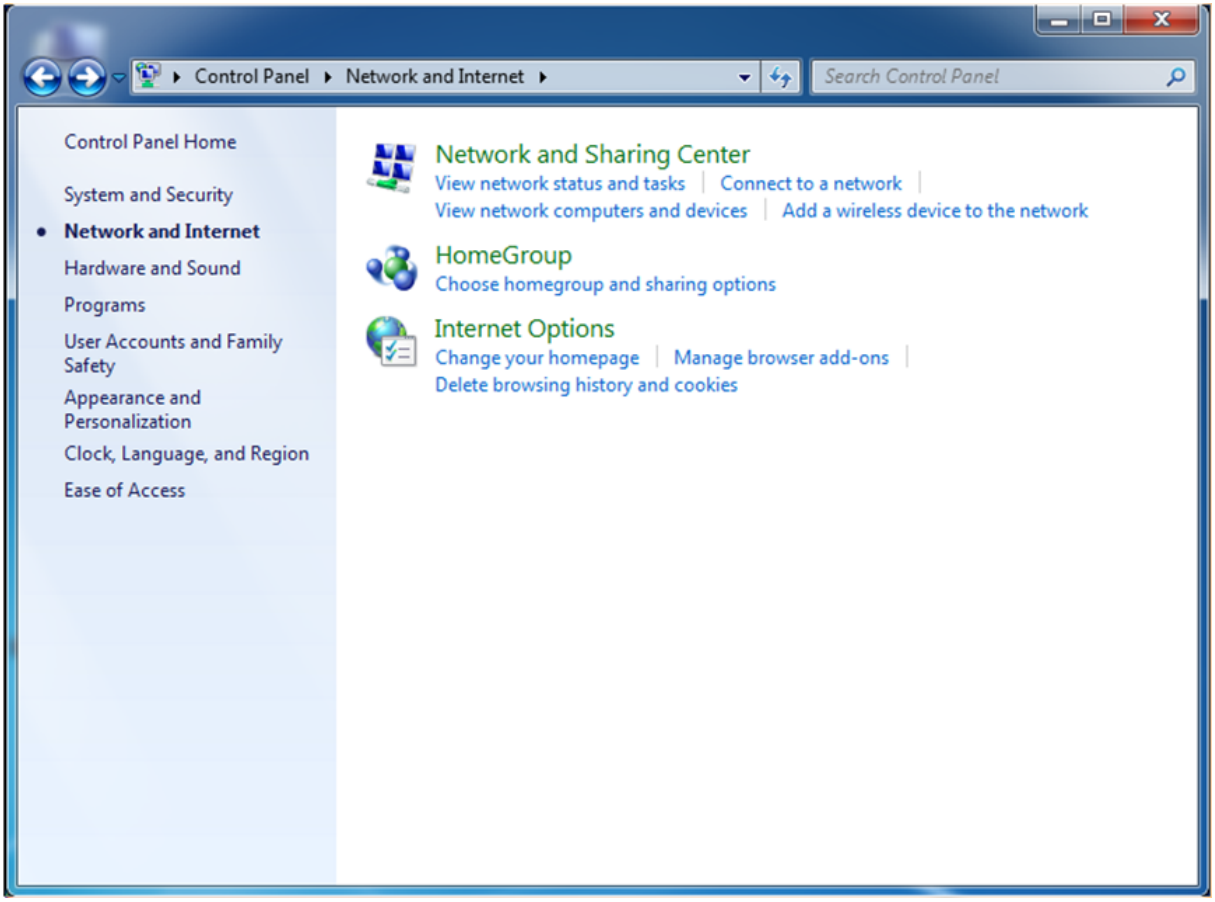
① Click **Start -> Control Panel**.



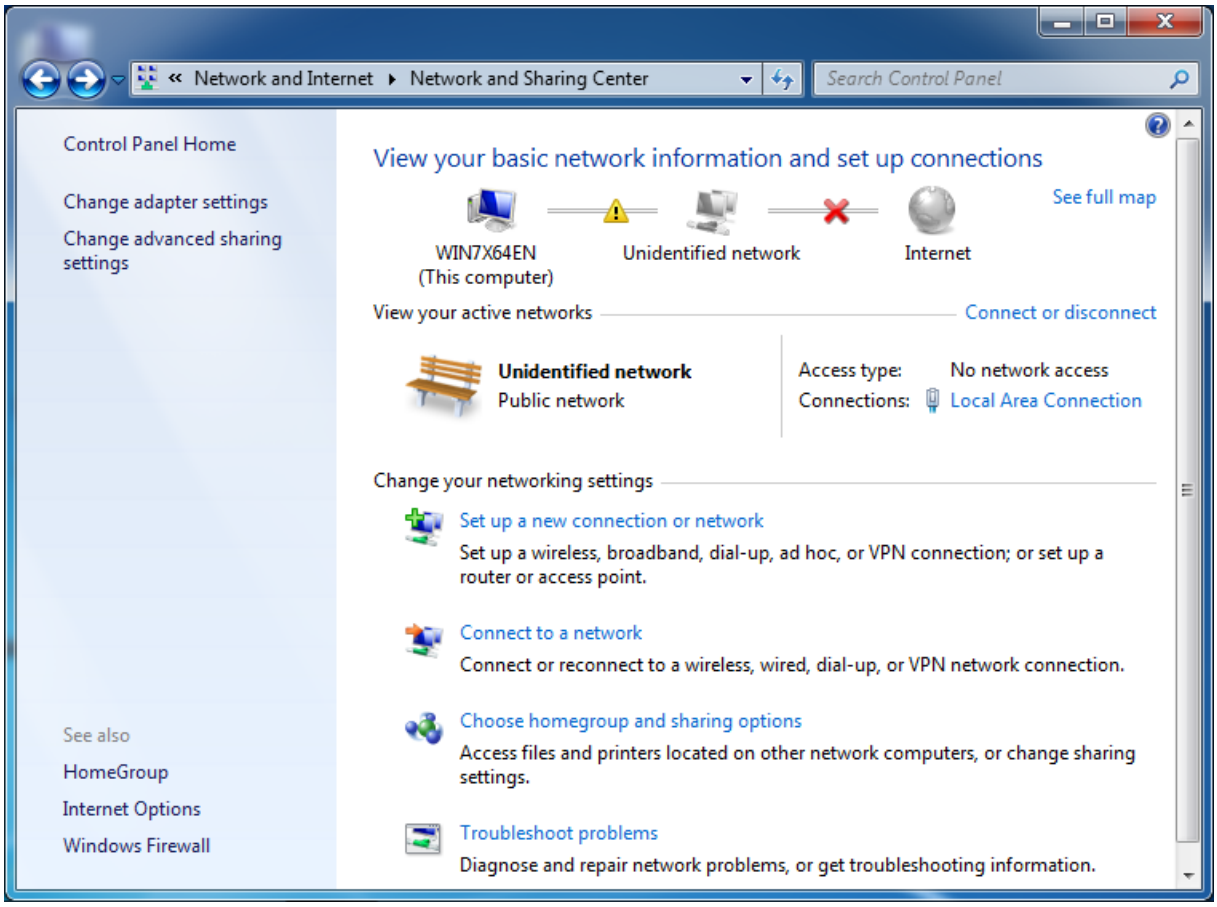
② Click **Network and Internet**.



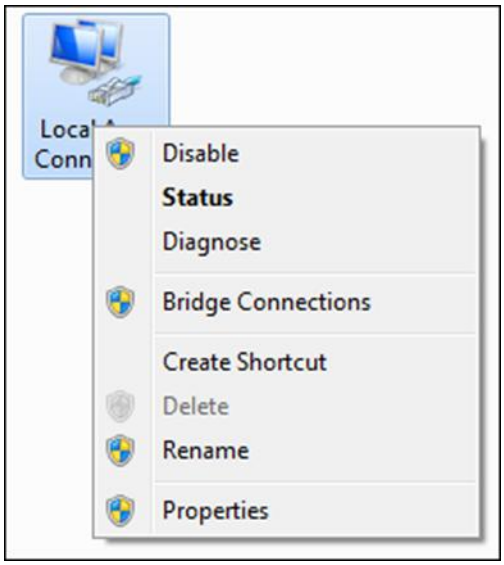
③ Click **Network and Sharing Center**.



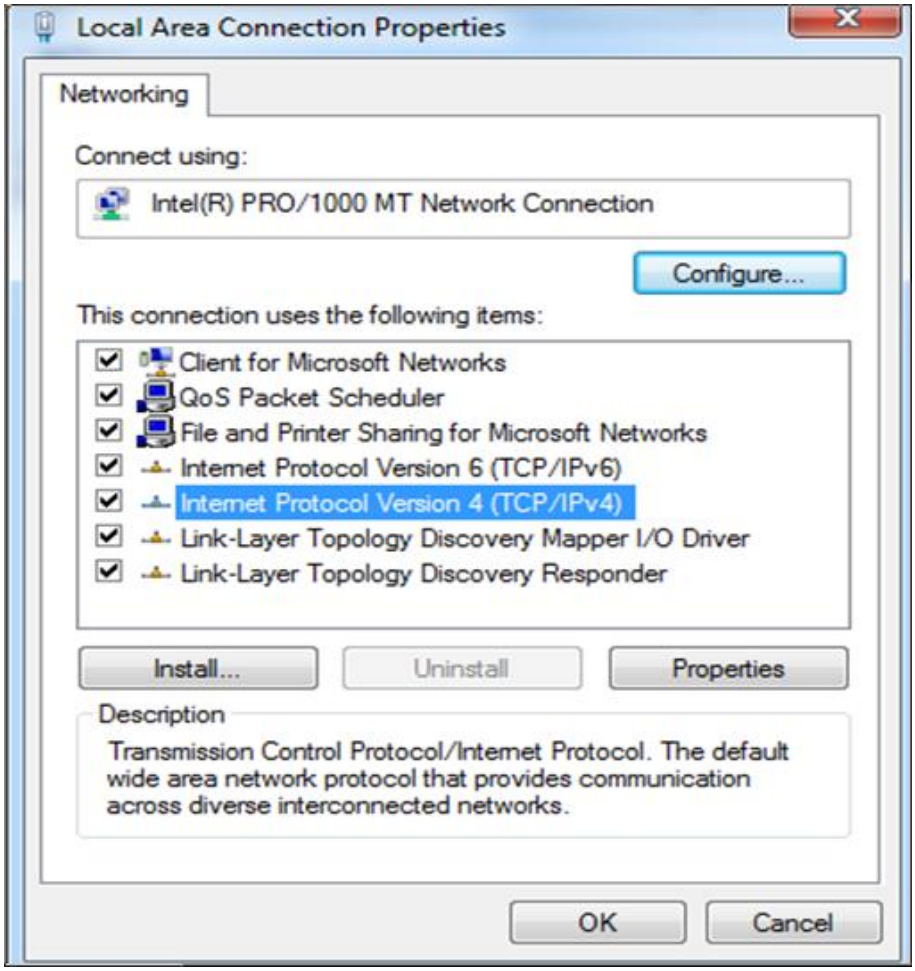
④ Click **Change adapter settings**.



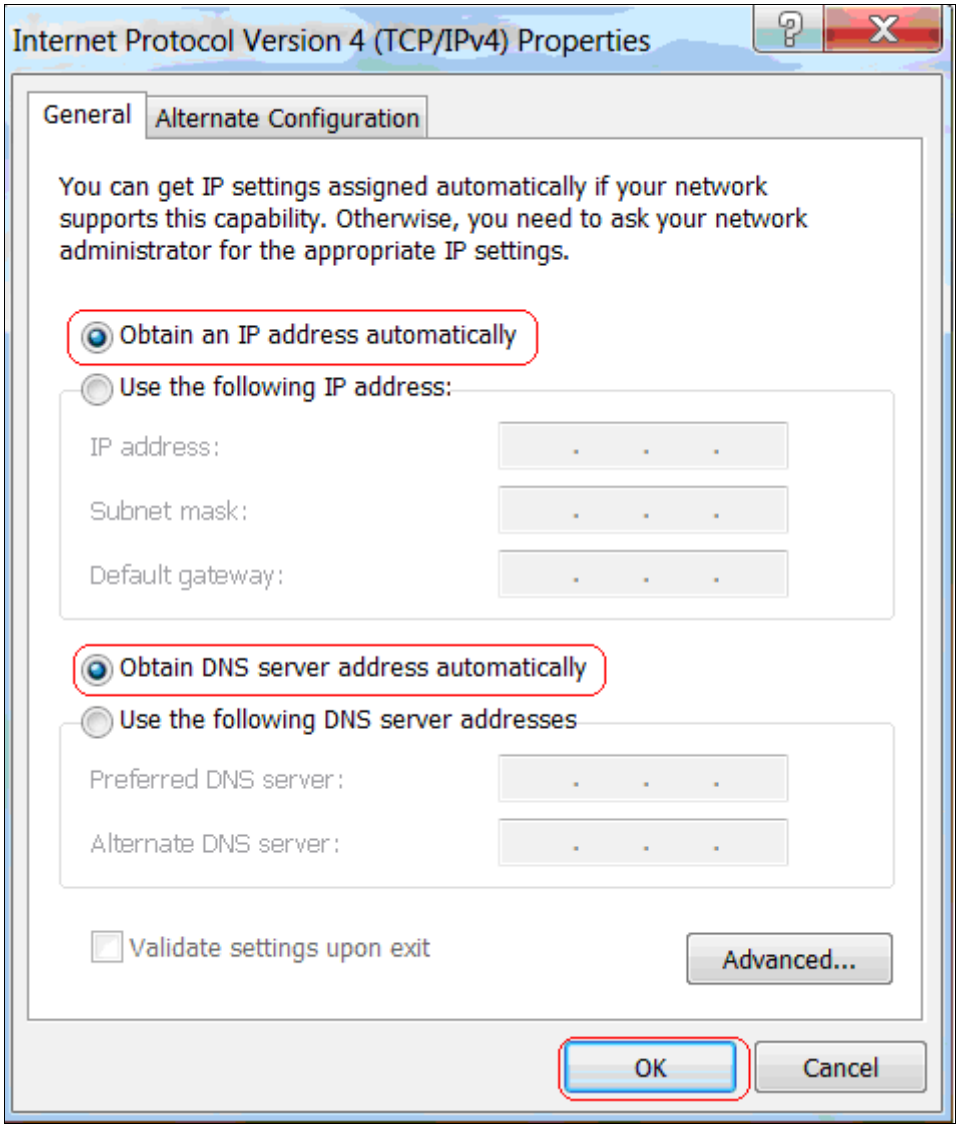
⑤ Click **Local Area Connection** and select **Properties**.



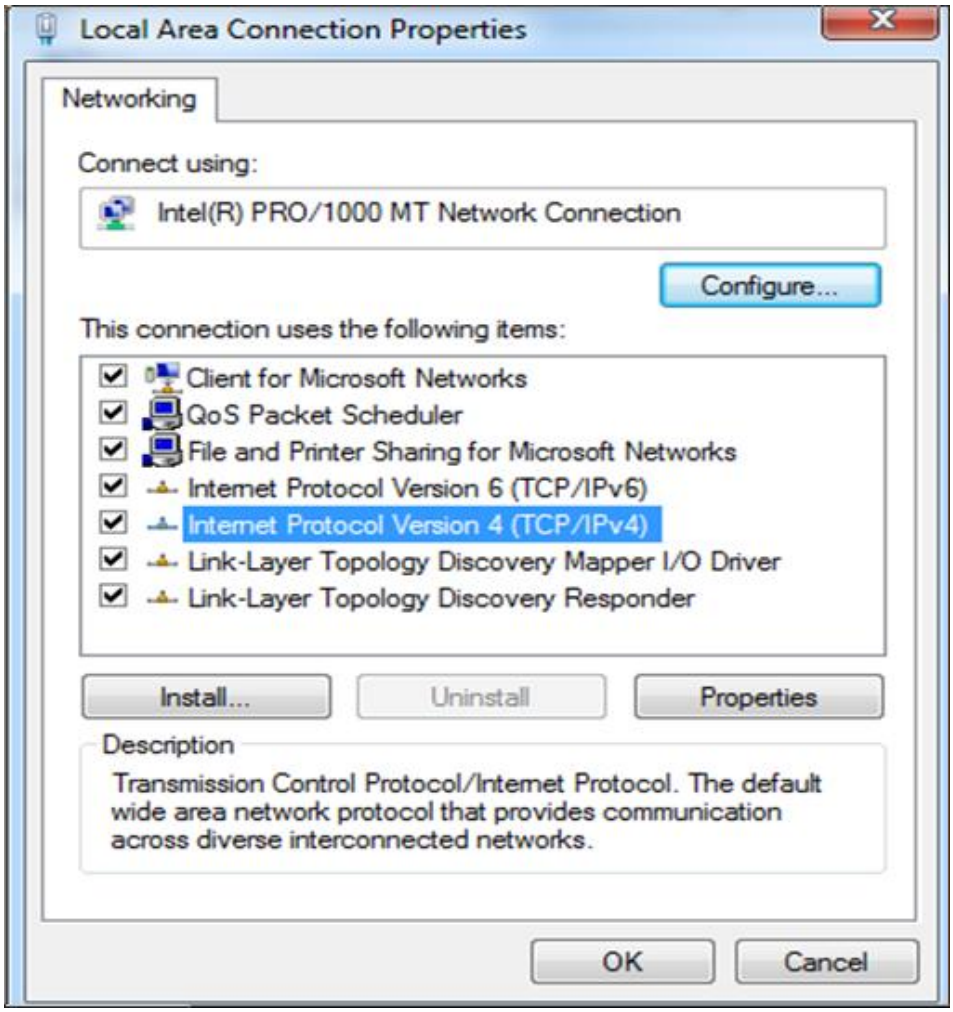
ⓖ Select **Internet Protocol Version 4 (TCP/IPv4)** and click **Properties**.



⑦ Select **Obtain an IP address automatically** and click **OK**.



ⓐ Click **OK** on the **Local Area Connection Properties** window to save your settings.

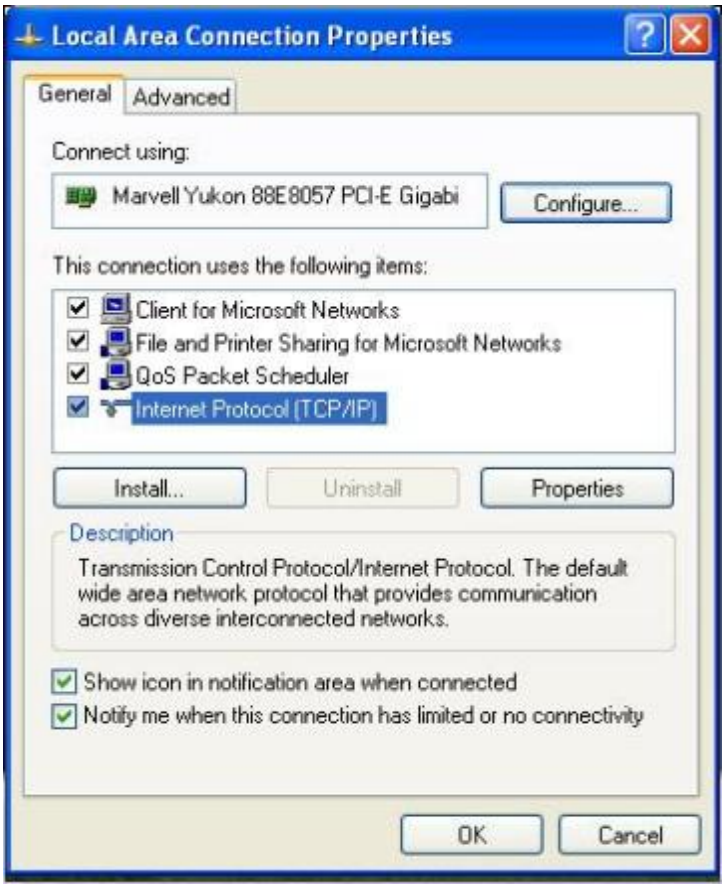


Windows XP

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

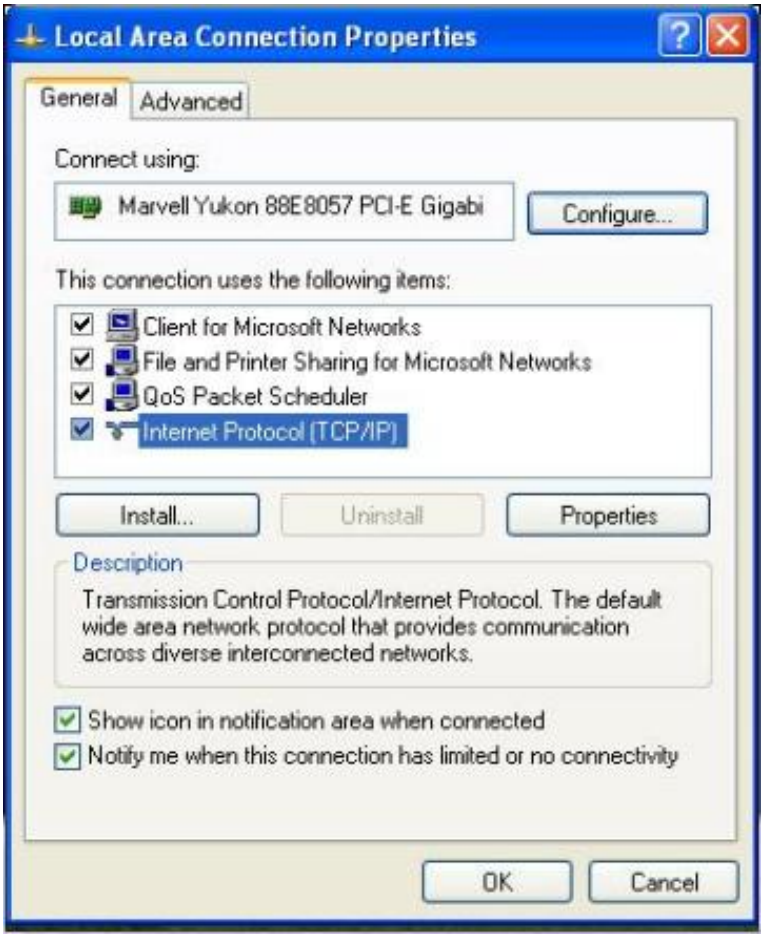
② Right click **Local Area Connection** and select **Properties**.

③ Select **Internet Protocol Version 4 (TCP/IPv4)** and click **Properties**.



④ Select **Obtain an IP address automatically** and click **OK**.

⑤ Click **OK** on the **Local Area Connection Properties** window to save your settings.



2 Troubleshooting

The Troubleshooting provides answers to common problems regarding the Device Adapter：

1. The Power LED does not light up.

Ans. Check the following:

a) Make sure that the Device Adapter is properly plugged into a power outlet.

b) Make sure the power outlet is active (working) by plugging another electric device into it.

c) Re-plug the Device Adapter to the power outlet. If the Power LED is still failed to light up, contact your local dealer for technical support.

2. The Ethernet LED does not light up.

Ans. Check the following:

a) Make sure that the Ethernet cable (RJ-45) is properly connected to the Device's Adapter's Ethernet port.

b) Make sure that the other end of the Ethernet cable (RJ-45) is properly connected to the computer LAN card or to you Cable/xDSL Ethernet port.

c) Make sure your computer LAN card is properly installed and configured.

d) Make sure your Cable/xDSL broadband access is working and configured correctly.

e) Contact your local dealer for technical support if the Ethernet LED is still failed to light up after the above procedures.

3. The Device's LED does not light up.

Ans. Check the following:

a) Try to plug a second Device Adapter into a nearby power outlet and check whether the Device LED lights up or not.

b) Contact your local dealer for technical support if the Device LED is still failed to light up after the above procedures.

3 Factory default settings

The table below lists the factory default settings of your device.

Item		Default settings
Login	Login IP Address	192.168.1.1
	Domain	**mtc.setup.cn/ re300x.setup.cn**
	Login Password	admin
LAN Settings	IP Address	192.168.1.1
	Subnet Mask	255.255.255.0
	DHCP Server	Enabled
	IP Pool	192.168.1.100~192.168.1.200
Wireless	Wireless	Enabled
	SSID	RE300x_XXXXXX(where XXXXXX is the last six characters in the device's MAC address)

		You can find it on the label attached to the device.
	Network Mode	11b/g/n mixed
	SSID Broadcast	Enabled
	Channel	AutoSelect
	Channel Bandwidth	20/40
	Extension Channel	AutoSelect
	Wireless Security	Disabled
	Wireless Access Control	Disabled

4 Remove Wireless Network from Your PC

If you change wireless settings on your wireless device, you must remove them accordingly from your PC; otherwise, you may not be able to wirelessly connect to this device. Below describes how to remove a wireless network from your PC.

Windows 7

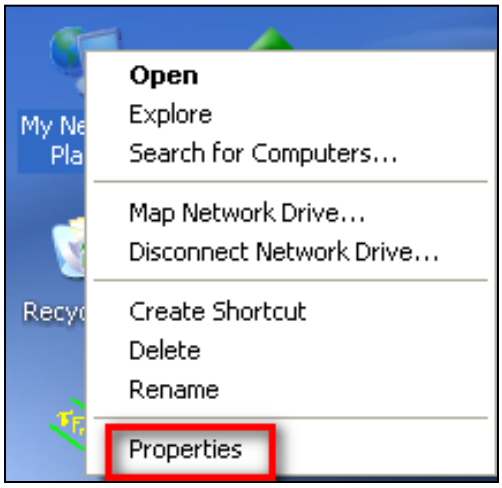
① Right-click the **Network** icon and select **Properties**.

② Select **Manage Wireless Networks**.

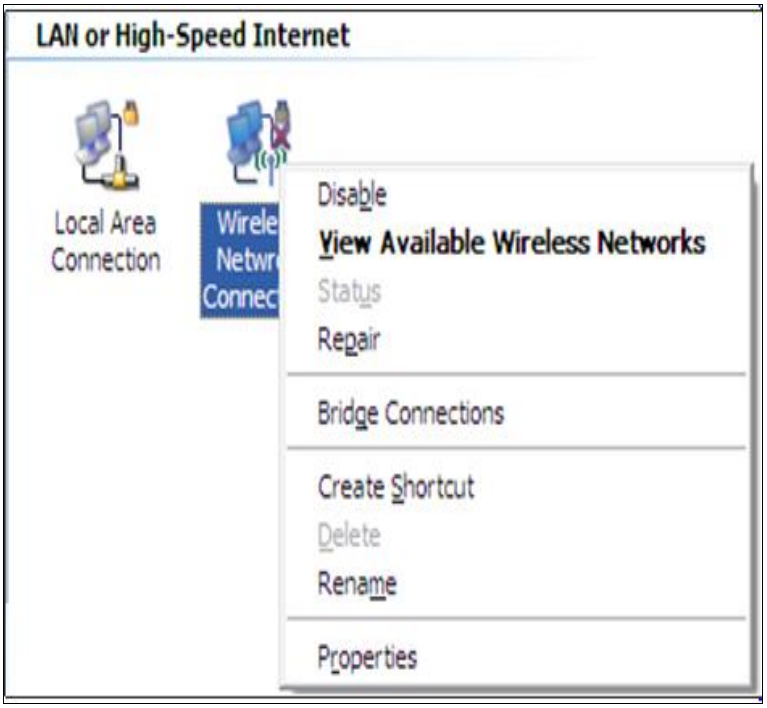
Select the wireless network and click **Remove network**.

Windows XP

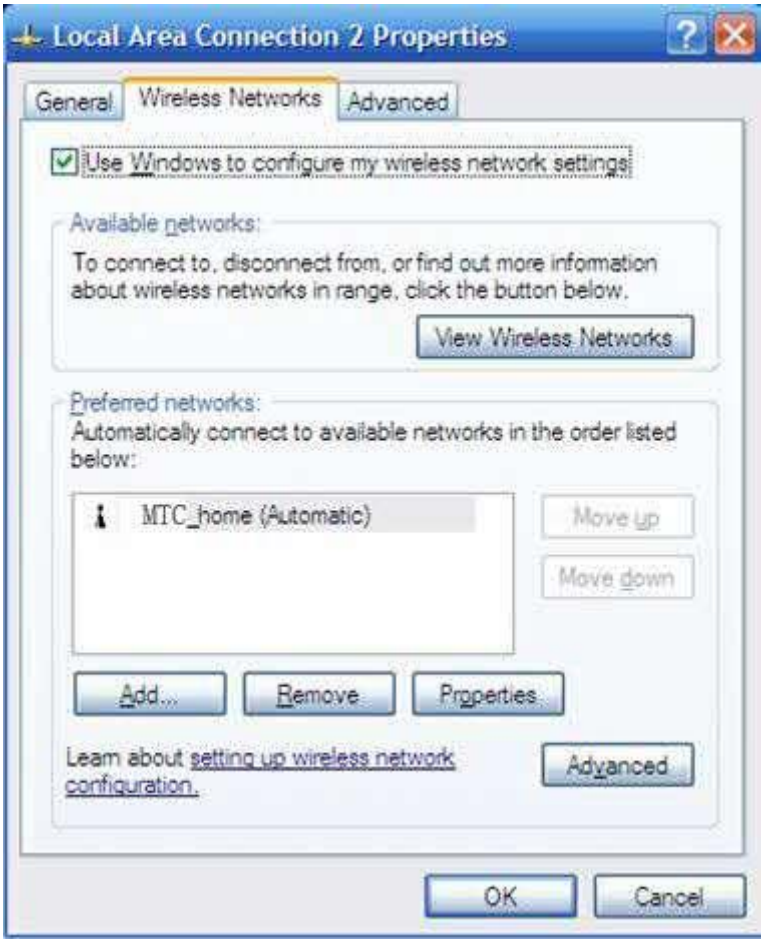
① Right-click **My Network Places** and select **Properties**.



② Right click **Wireless Network Connection** and then select **Properties**.



③ Click **Wireless Networks**, select the wireless network name under **Preferred networks** and then click the **Remove** button.



5 Safety and Emission Statement

FCC INFORMATION

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.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio

communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

FCC ID : 2AHVHRE3001

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.

2）This device must accept any interference received, including interference that may cause undesired operation.