AMTC

WR3011

300Mbps Wireless Router

User Guide

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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 WR3011 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 PW500X, The WR3011 is used as an example throughout this user guide.

This user guide uses the following formats to highlight special messages:

ICON	Description
![Note icon] 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 icon] Tip	This format is used to highlight a procedure that will save time or resources.
![Knowledge Expansion icon] Knowledge Expansion	Description of fields on the device GUI.

Contents

Chapter 1 Introduction

1.1 Product Overview

Congratulations on your purchase of this outstanding 300Mbps Wi-Fi router. This device is a 300Mbps Wi-Fi Access Point which creates a wireless network allowing for greater range and mobility.

As a Wi-Fi Access Point, it can transmit wireless data at the rate of up to 300Mbps. With multiple protection measures including SSID broadcast control, wireless LAN WEP encryption, and Wi-Fi Protected Access (WPA2- PSK, WPA-PSK), the device delivers complete data privacy.

Conventions

The device mentioned in this User Guide stands for WR3011 300Mbps Wi-Fi Router without any explanations. Parameters provided in the pictures are just references for setting up the product. They may differ from the actual situation.

1.2 Product Feature

- Support a 100Mbps three Ports, one WAN port, two LAN ports and support port adaptive.
- Support Wireless up to 300Mbps transfer rate.
- Support IEEE 802.11b/g/n, IEEE 802.3/802.3u, IEEE 802.1X protocol.
- Built-in DHCP Server and support static routing.
- Support web page filtering, timing control on the Internet.
- Support system log.
- Support remote and web management.

Chapter 2 Connecting Mechanism

2.1 Appearance

2.1.1 The products front panel
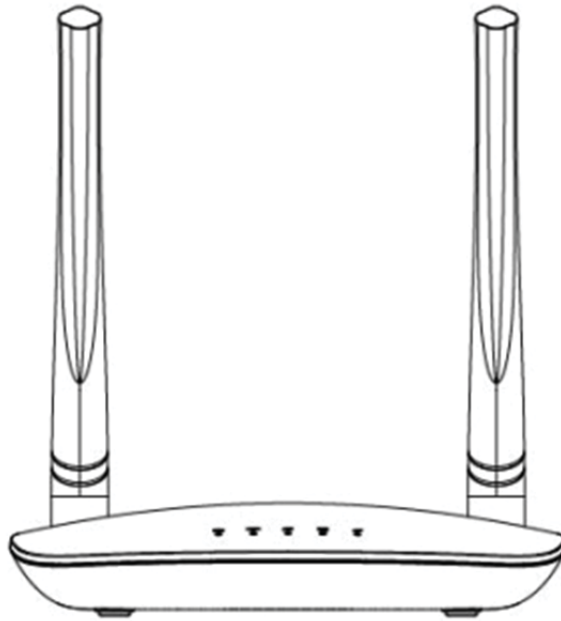
The LED indicator displays information about the device's status.

LED	Name	Status	Indication
	WPS LED	Off	WPS is disabled or connected
		Blinking	Negotiation is in progress through Wi-Fi Protected Setup.
	SYS LED	Solid	The device is powered on
		Off	The device is powered off or is down.
	WAN LED	Solid	WAN connection succeeds.
		Off	No WAN connection.
		Blinking	Data is being transmitted.
	Wi-Fi/ LED	Solid	The WLAN connection has been
		Off	The WLAN connection is not activated
		Blinking	Data is being transmitted.
	LAN LED	Off	No LAN connection.
		Blinking	Data is being transmitted.
		Solid	LAN connection succeeds.

2.1.2 The product rear panel

2.2 System Requirement

➢ Internet service (Internet access through Ethernet cable or via xDSL/Cable Mode).

➢ A modem with RJ45 port (use the Ethernet cable access directly do not need this equipment).

➢ Every PC Ethernet connection device (wired internet card or wireless internet card and Ethernet cable).

➢ TCP/IP network software is supported by Window XP/Window 7/Window 8 /Window 10

➢ 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
Router	Find it in your package.
Power adapter	Find it in your package.
PC	Should have installed IE8 or higher browser.
Gather ISP Information	DHCP, PPOE or Static IP Internet Connection Type: 1. Ethernet Cable from the incoming Internet side: This is provided by your ISP 2. ISP Information: Your Internet service provider (ISP) should have provided you with all of the information needed to connect to the Internet. If you cannot locate this information, ask your ISP to provide it If your ISP uses a PPOE Internet connection, you will need ISP login name and password ● If you use a DHCP Internet connection, no information is needed ● If your ISP gives you a fixed or static IP address for Internet connection, you will need to gather the following information: 1) IP Address 2) Subnet Mask 3) Gateway 4) DNS Server 5) Alternate DNS Server (Optional)
	WISP Internet Access: 1. Remote AP's SSID, MAC address, security mode, cipher type and security key 2. Internet connection information provided by the remote AP

![AMTC logo]

	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

Please follow these rules when install and use:
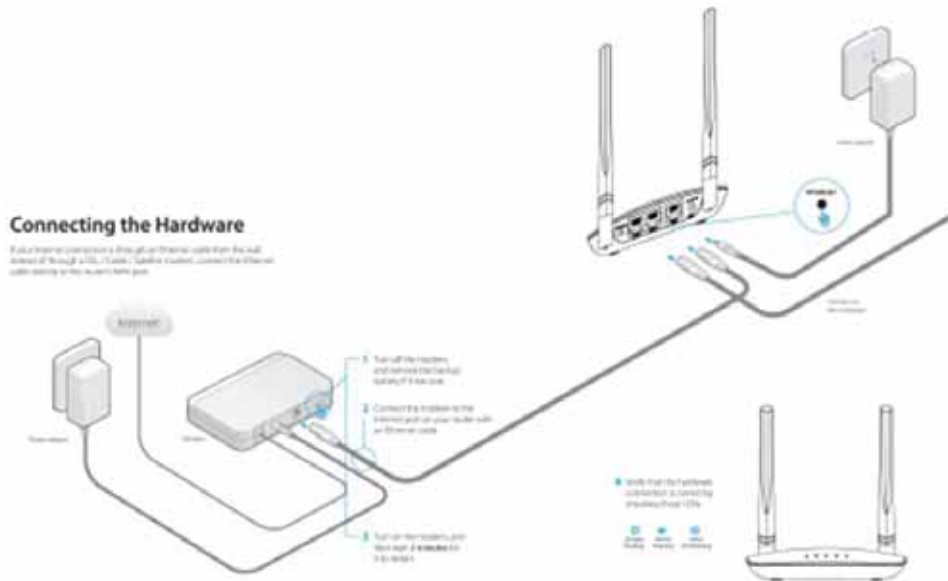
![Note icon]**Note** --

● Environmental factor will have influence on the distance of wireless transmission.

2.3.3 Hardware Connection

![Note icon]**Note** --

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

There are two measures to connect your device:

1) If you use ADSL connect the internet, please follow step 1-4 as graphical shown to connect your device.

![AMTC logo]

2) If you use Residential broadband, put the network line into the WAN port and follow the step 3-4 as graphical shown to connect your device.

Set Steps：

① Connect the modem.

② Please connect reticle what you ever connected to the computer with the router's WAN port.

③ Use another reticle to connect your computer Ethernet port with the router's any LAN port.

④ Connect the router's power adapter. And the hardware connection is finished.

⚠**Note** ---

● Please use the matched power adapter otherwise it will damage the router.

2.4 Configure local PC TCP/IP Settings

Before you log in to the router, 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**.
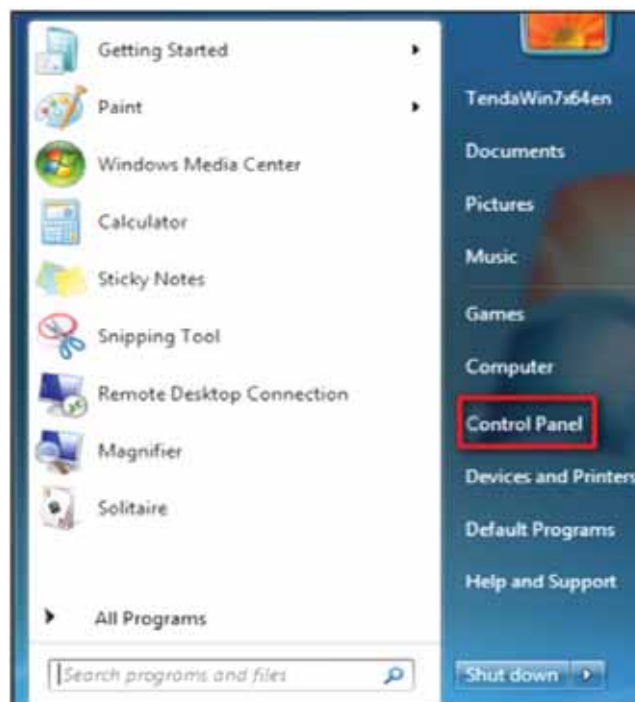
② Click **Network and Internet**.

③ Click **Network and Sharing Center**.

④ Click **Change adapter settings**.

⑤ Click **Local Area Connection** and select **Properties**.
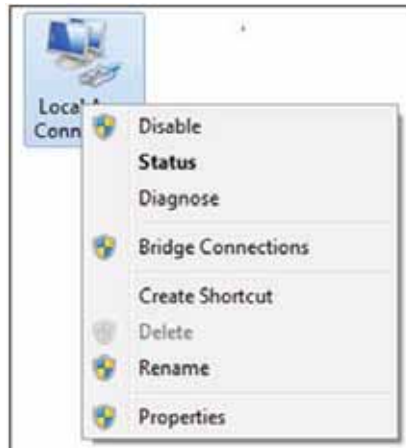
⑥ Select **Internet Protocol Version 4 (TCP/IPv4)** and click **Properties**.
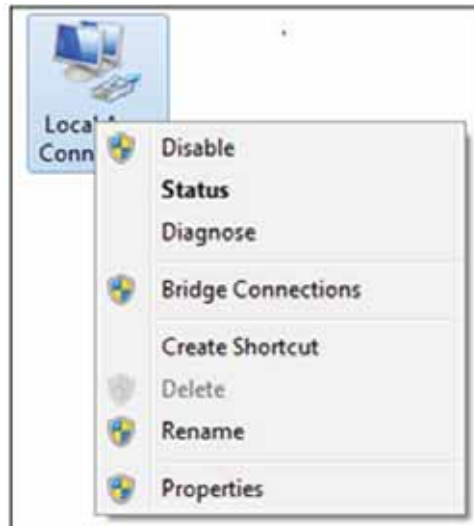
⑦ Select **Obtain an IP address automatically** and click **OK**

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

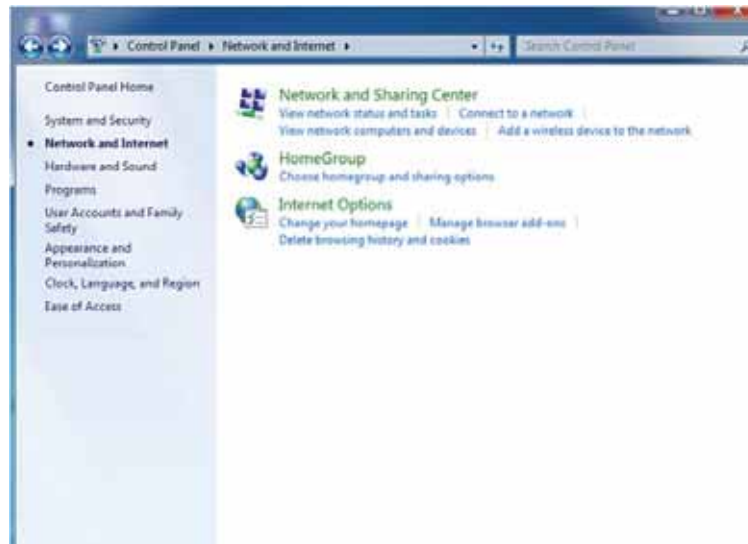⚠️**Note** ---

● If you need to configure the IP address manually, please set the PC's IP address and router IP

address in the same subnet, because the router'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 Router

1. To access the Router'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 "WR3011.setup.cn")

> http://192.168.1.1

Tips ---

● WR3011 as a Wifi Router 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.).

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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 **EN**. 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:

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
2	Secondary	menu, Select the results displayed in the configuration section
3	configuration zone	Configure and view area.
4	help information	The help information of current page
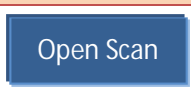
⚠️**Note** --

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.
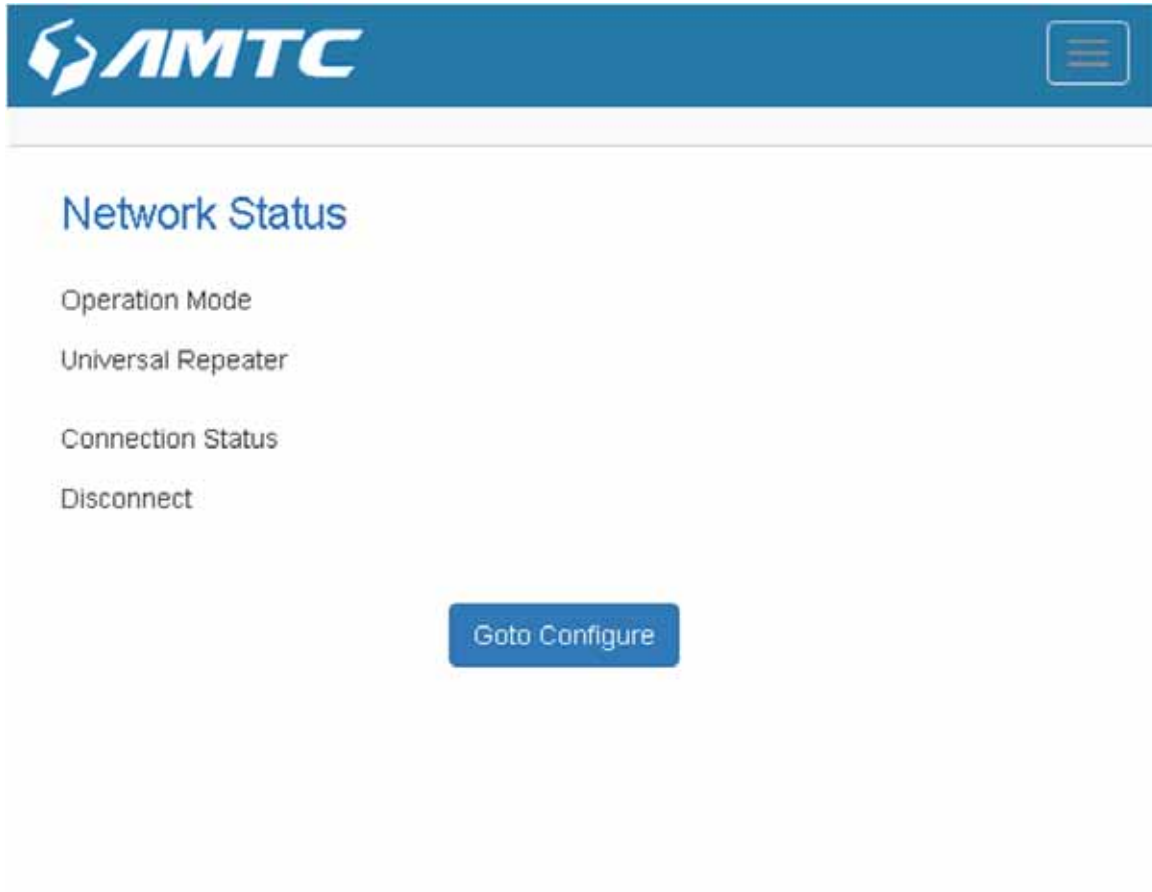
Note ---

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
Open Scan	Scan the information automatically
Goto Configure	Goto the configure page directly

Close Scan	Close the scan function
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
NEXT	Will go to the next step
Back	Will back to last step

3.2 Quick Setup

In this page you can configure the mode of operation.

Here are two modes Router and WISP:

Tips --

● The default mode is **Router**. You can change the operation mode on the quick setup page.

----

1) Router mode configure

Plug Internet cable to WR3011 WAN port.

Set steps:

① Select "**Router**".

② Click "**NEXT**".

③ You can select "**Dynamic IP**", "**Static IP**", "**PPPOE**" mode.

④ Click "**NEXT**" to configure the wireless information.

⑤ Click "**NEXT**".

⑥ Click "**Save**" to confirm.

2) WISP mode configure :

Set steps:

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

② Click "**Open Scan**" to scan wifi,then choosing an usable wifi,enter it's password.

③ Configure the wireless information.

④ Click "**Save**" and you have setted the **WISP** mode

![AMTC logo]

Knowledge Expansion --

● **WISP:** In this mode, the AP will behave as client.In addition, router function is added between the wireless WAN side and the Ethernet LAN side.Therefore, the WISP subscriber can share the WISP connection without the need of extra router.

● **Router:** The Ethernet port will behave as a WAN port for wired connection to ADSL or Cable modem. The NAT routing will be performed between the WAN and WLAN. Making IP sharing possible

----

3.3 System Status

Click "**System Status**", enter the system status web page, in this page you can see the "**System Status**", "**WAN Status**" ," **LAN Status**", "**Wireless Status**".

3.3.1 System Status

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

Parameters Specification:

➢ **Connection Clients:** displays the number of DHCP clients.
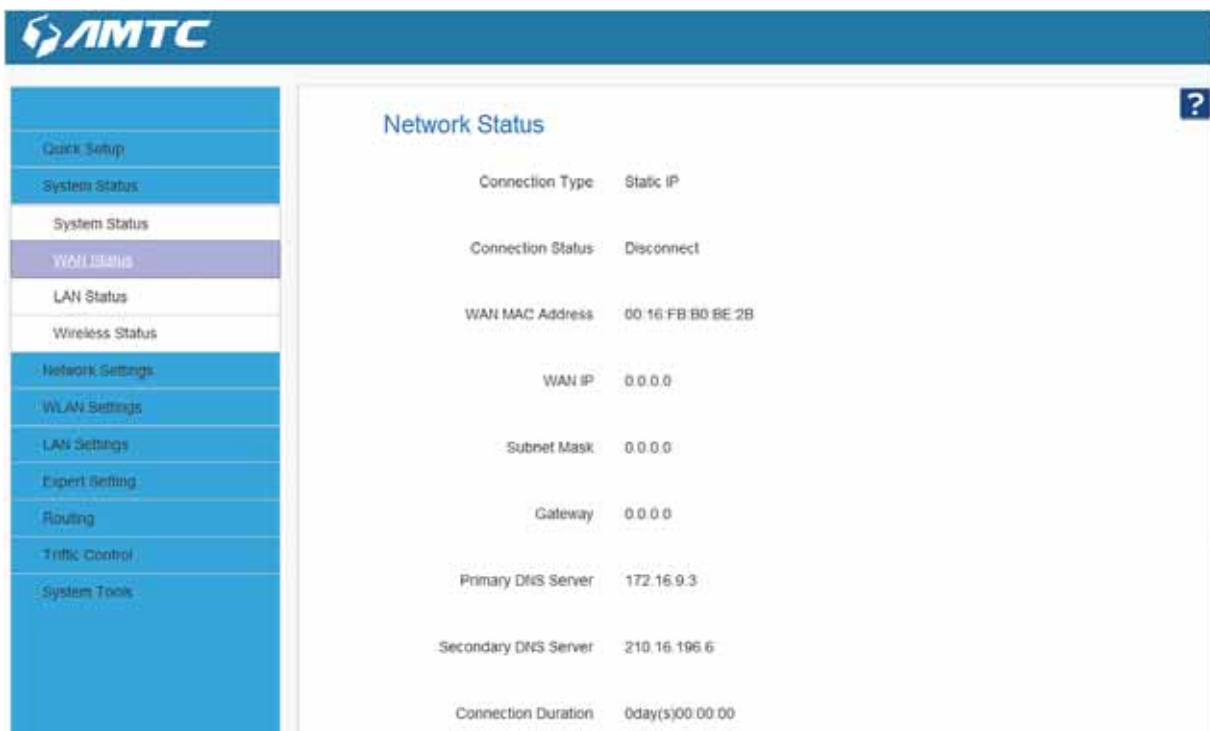
➢ **System Version:** Firmware Version.

![AMTC logo]

> **Running Time:** Displays the time duration indicating how long the router 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 router is turned on

3.3.2 WAN Status

Parameters Specification:

> **Connection Type:** It displays the current access mode of WAN port.

> **Connection Status:** The network connection status.

> **WAN MAC Address:** MAC address of your ISP's router to see.

> **WAN IP**: IP address obtained from ISP.

> **Subnet Mask:** Obtained from ISP.

> **Gateway:** Obtained from ISP.

> **Primary DNS Server:** Obtained from ISP.

➢ **Secondary DNS Server:** Obtained from ISP.

➢ **Connection Duration:** Access method for dynamic IP or PPPOE server and router and ISP connection is properly timed.
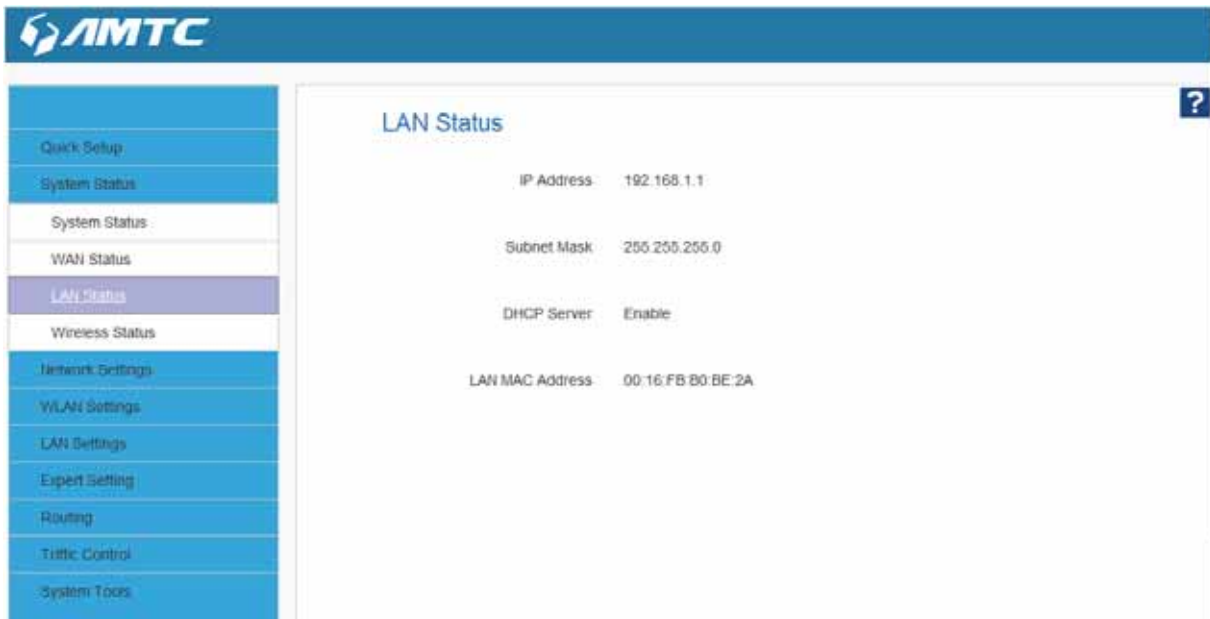
💡 **Tips** --

WAN IP/Subnet Mask/Gateway/Primary DNS Server/Secondary DNS Server: This types of information appears only if the router successfully connects to Internet via a PPPoE or DHCP (dynamic IP) connection. However if you connect the router to Internet with static IP settings provided by your ISP, these fields will display the settings you entered whether the router successfully connects to the Internet or not.

If nothing appears in the secondary DNS server field, there is no available secondary DNS server

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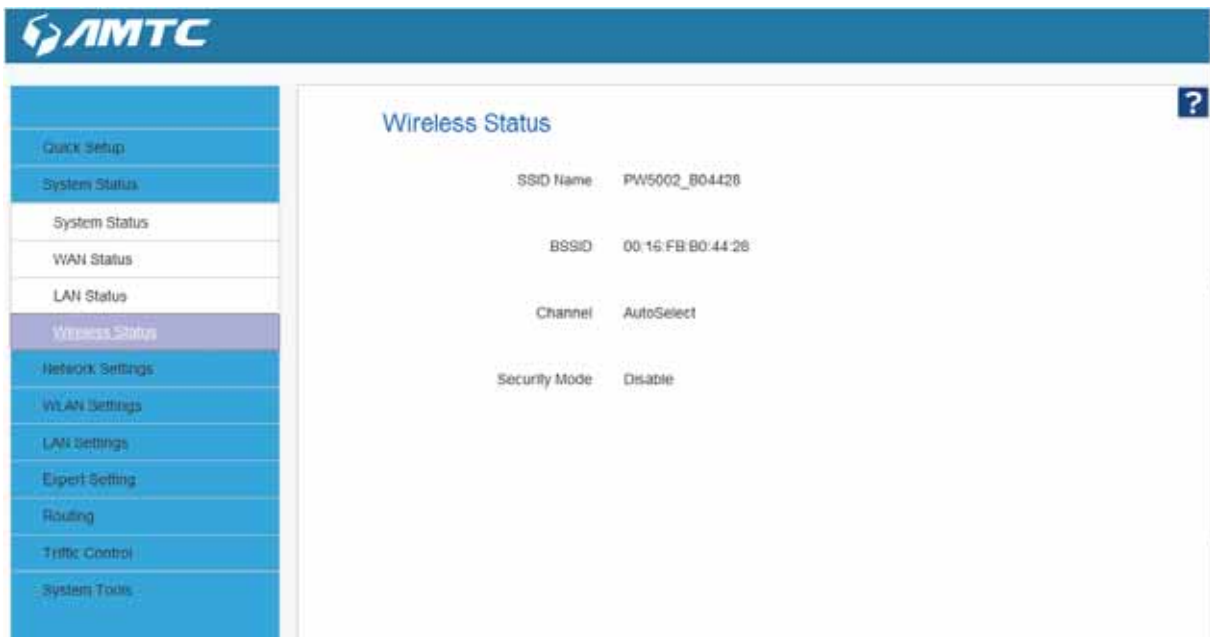
3.3.3 LAN Status

Parameters Specification:

➢ **IP Address:** The Router's LAN IP Address (not your PC's IP address).

➢ **Subnet Mask:** The Router's LAN subnet mask.

➢ **DHCP Server:** the status of DHCP server.

➢ **LAN MAC Address:** The router's physical address.

![AMTC logo]

- The default IP address is 192.168.1.1.

- The default Subnet mask value is 255.255.255.0

- If the router as a DHCP server, here shown as enabled. Otherwise disabled

----

3.3.4 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 **WR3011_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.

- **Default** channel is **AutoSelect.**

-

![AMTC logo]

Knowledge Expansion --

- **AutoSelect:** Under the "AutoSelect" 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 mode, the channel will not change all the time not matter the channel is good or bad.

3.4 Network Settings

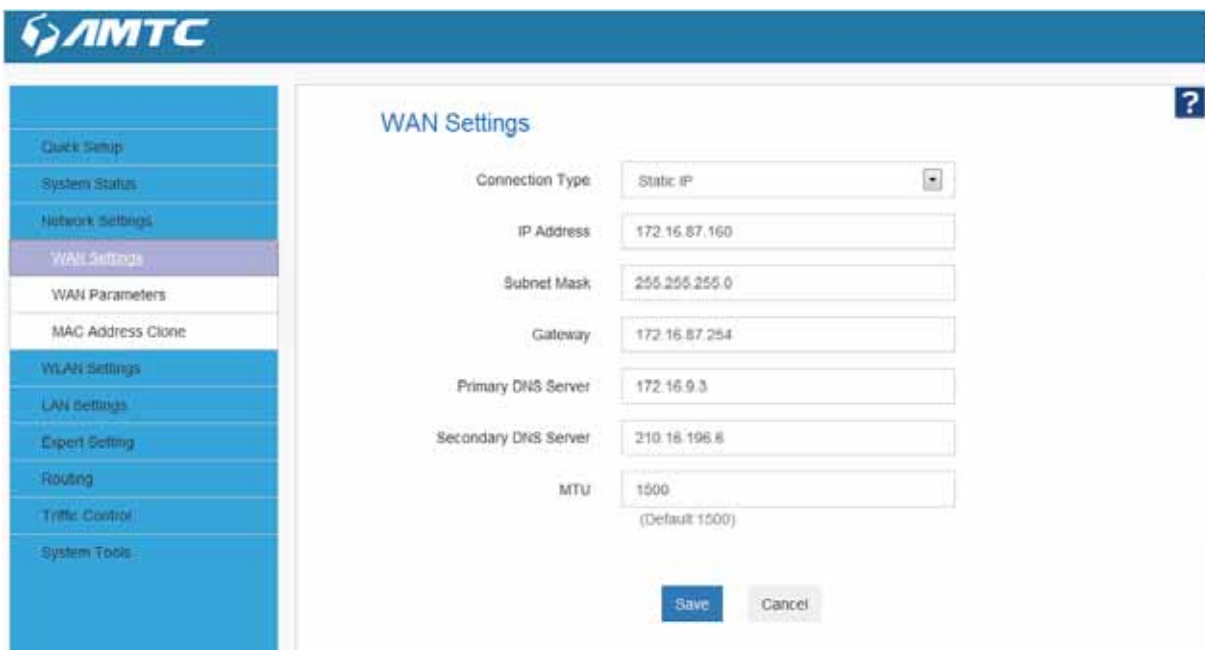Click "**Network Settings**" enter the Network setup web page，in this page you can set "**WAN Settings**", "**WAN Parameters**", "**MAC Address Clone**".

3.4.1 WAN Settings

Plug Internet cable to WR3011 WAN port.

Set Steps：

① Enter the web and Select **"Network Settings".**

② Click the **"WAN Settings"**.

Parameters Specification:

➢ **Connection Type:** It displays the routers mode.

AMTC

1、Configuration the Internet access
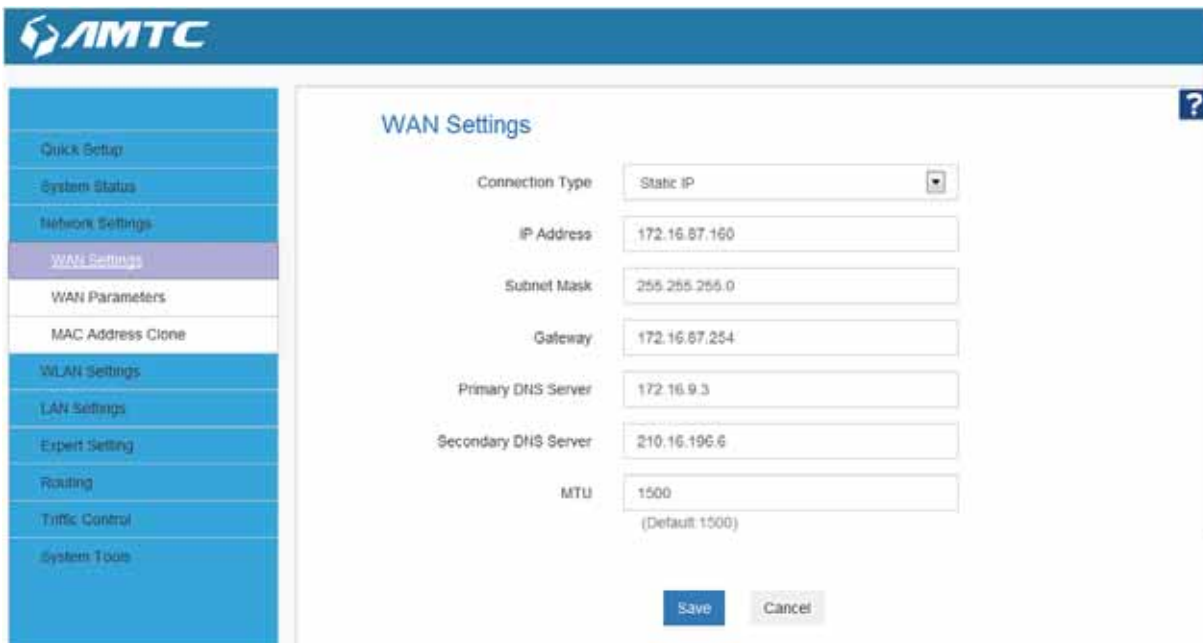
Support Static IP mode、Dynamic IP(DHCP)、PPOE.

WAN Connection Type	Instruction
Static IP mode	If your ISP provides you with an Ethernet cable from the incoming Internet side IP information (IP address, subnet mask, gateway IP address, DNS server address), your ISP uses a static IP connection.
Dynamic IP	If your ISP provides you with an Ethernet cable from the incoming Internet side but no ISP login account or IP information, your ISP uses a DHCP connection.
PPOE	If your ISP provides you with an Ethernet cable from the incoming Internet side and ISP login account, your ISP uses a PPOE connection.

1.1> Static IP mode

Set Steps：

① Click **"Network Settings"**.

② Select **"WAN Settings"**.

③ Select Connection Type **"Static IP"**.

④ Enter IP, Subnet Mask, Gateway, MTU, DNS

⑤ Click **"Save"** to confirm.

Parameters Specification:

➢ **Connection Type:** Select Static IP.

➢ **IP Address/Subnet Mask/WAN subnet mask/Gateway/Primary DNS Server/Secondary DNS Server:** Enter the ISP information you gathered in Getting Prepared.

➢ Click **Save** to save your settings.
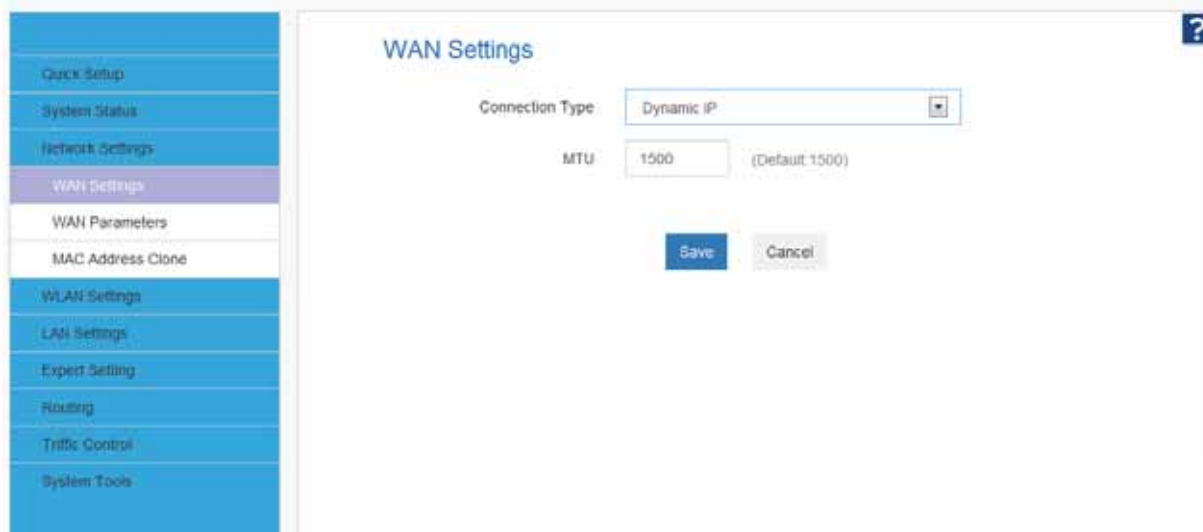
Tips --

● MTU better to choose the default values.

1.2> Dynamic IP mode.

Set Steps：

① Click **"Network Settings"**.

② Select **"WAN Settings".**

③ Select Connection Type **"Dynamic IP"**.

④ Click **"Save"** to confirm.

Tips --

● MTU better to choose the default values.

1.3> PPOE

Set Steps：

① Click **"Network Settings"**.

② Select **"WAN Settings"**.

③ Select Connection Type **"PPOE"**.

④ Enter the ISP login **UserName**，the ISP login **Password**.

⑤ Click **"Save"** to confirm.

⑥ Click "System Status"---> "WAN Status" to confirm
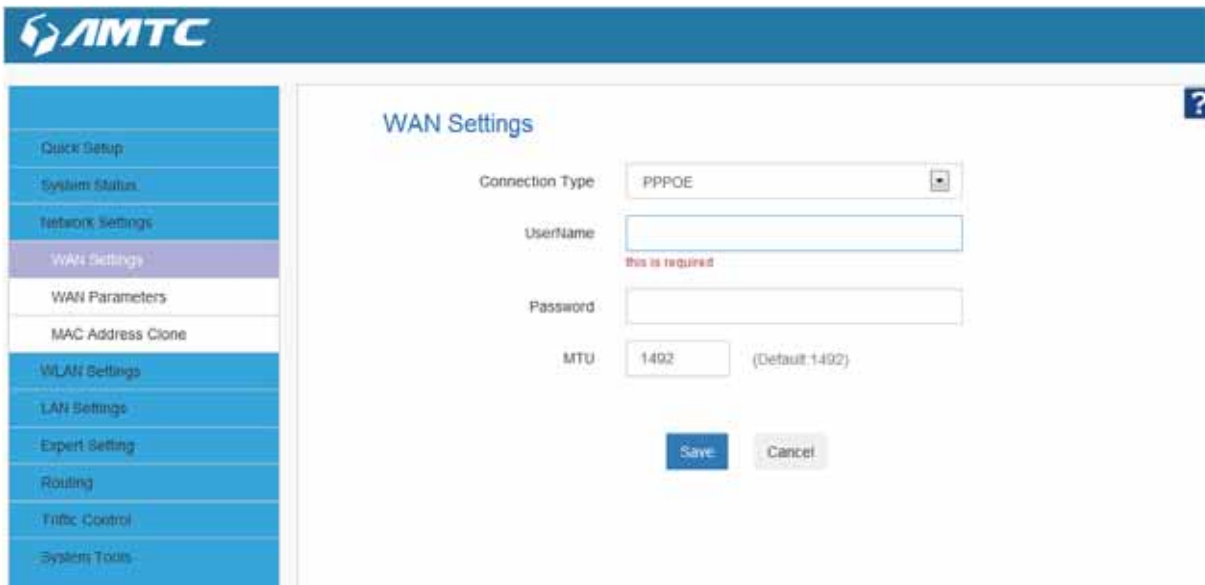
Knowledge Expansion

- **MTU:** Maximum Transmission Unit. It is the size of the largest data packet that can be sent over the network. The default value is 1500.

The common MTU sizes and applications are listed in the table below.

MTU	Application
1500	Typical for connections that do not use PPOE or VPN.
1492	Used in PPOE environments.
1472	Maximum size to use for pinging. (Larger packets are fragmented.)
1468	Used in some DHCP environments.
1436	Used in PPTP environments or with VPN.

Note

- A wrong/improper MTU value may cause Internet communication problems. For example, you may be unable to access certain websites, frames within websites, secure login pages, or FTP or POP servers.

- Do not modify it unless necessary, but if a specific website or web application software cannot open or be enabled, you can try to change the MTU value to 1500, 1400.

3.4.2 WAN Parameters

Set Steps：

① Click **"Network Settings"**.

② Select **"WAN Parameters"**.

③ Select Negotiation Mode type.

④ Click **"Save"** to confirm.

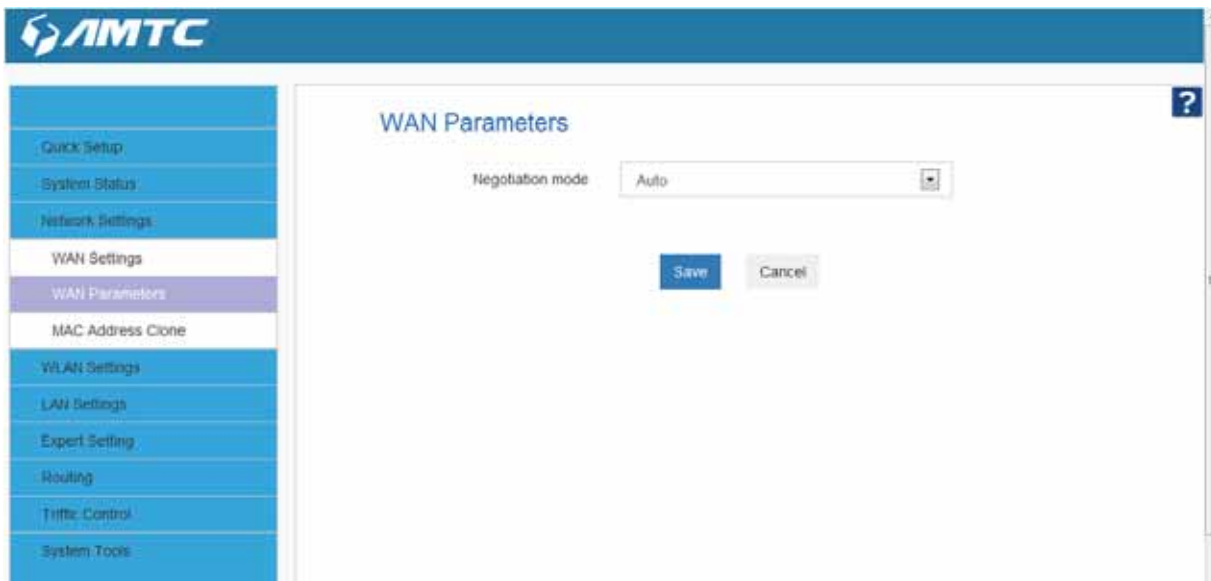**Parameters Specification:**

➢ **Negotiation mode:** you can set the value to match with the status

Tips ---

1. The router operates in "Auto-negotiation" (or Auto) mode by default. Usually, it works for most cases.

2. In some situations, you might need to change the port mode. For example, if the cable connected to your router's WAN port is longer than 100m, you may need to use 10M full-duplex or 10M half-duplex for better performance. Ensure that your router's WAN port operates with the same speed and duplex mode as the remote link partner. If not, your router's WAN port may not receive and send data.

3.4.3 MAC Address Clone

Some ISPs (Internet Service Providers) require end-user's MAC address to access their network. This feature copies your current PC's MAC address to the router.

Set Steps：

① Click **"Network Settings"**.

② Click **"MAC Address Clone"**.

③ You can set this page from three methods：

1、To Restore to Factory Default MAC

1> Click "Restore to factory Default MAC"

2> Click **Save** to save your settings.

2、To clone the MAC address of the computer that you are now using to the router:

1> Click **Clone My PC's MAC Address.**

2> Click **Save** to save your settings.

3、To manually enter the MAC address allowed by your ISP:

1> Enter the MAC address allowed by your ISP.

2> Click **Save** to save your settings.
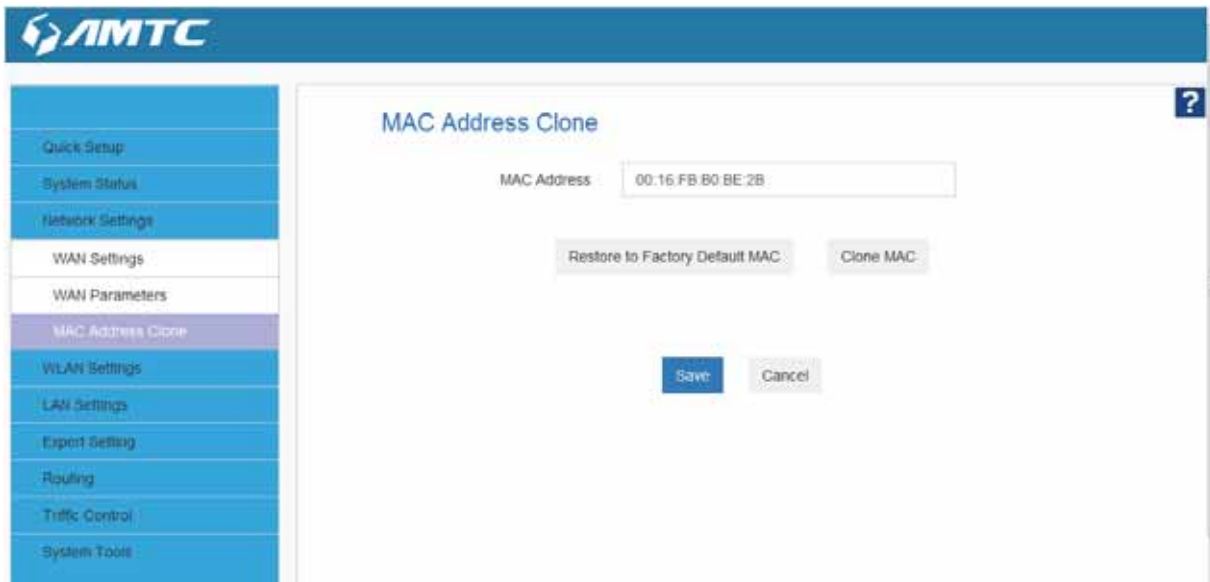
Parameters Specification:

➢ **MAC Address:** The computer or broadband modem authorized by your ISP.

![AMTC logo]

Knowledge Expansion ---

1. **Restore to Factory Default MAC:** Reset the router's WAN MAC to factory default.

2. **Clone MAC:** Clicking this button copies the MAC address of the computer that you are now using to the router. Also, you can manually enter the MAC address that you want to use. You have to use the computer whose MAC address is allowed by your ISP

3.5 WLAN Settings

Click "**WLAN Settings**" enter the configure page , here you can configure "**Base Settings**", "**Security Settings**", "**WPS Settings**", "**Access Control**", "**Connection Status**".

3.5.1 Basic Setting

Here you can configure the basic wireless settings of the router

Set Steps：

① Click "**WLAN Settings**".

② Select "**Basic Settings**".

③ Wireless **Enable**.

④ Select Network Mode

⑤ Enter **SSID name** (Default name is WR3011_XXXXXX).

⑥ Select "**Channel**"**.**

⑦ Select "**Channel BandWidth**".
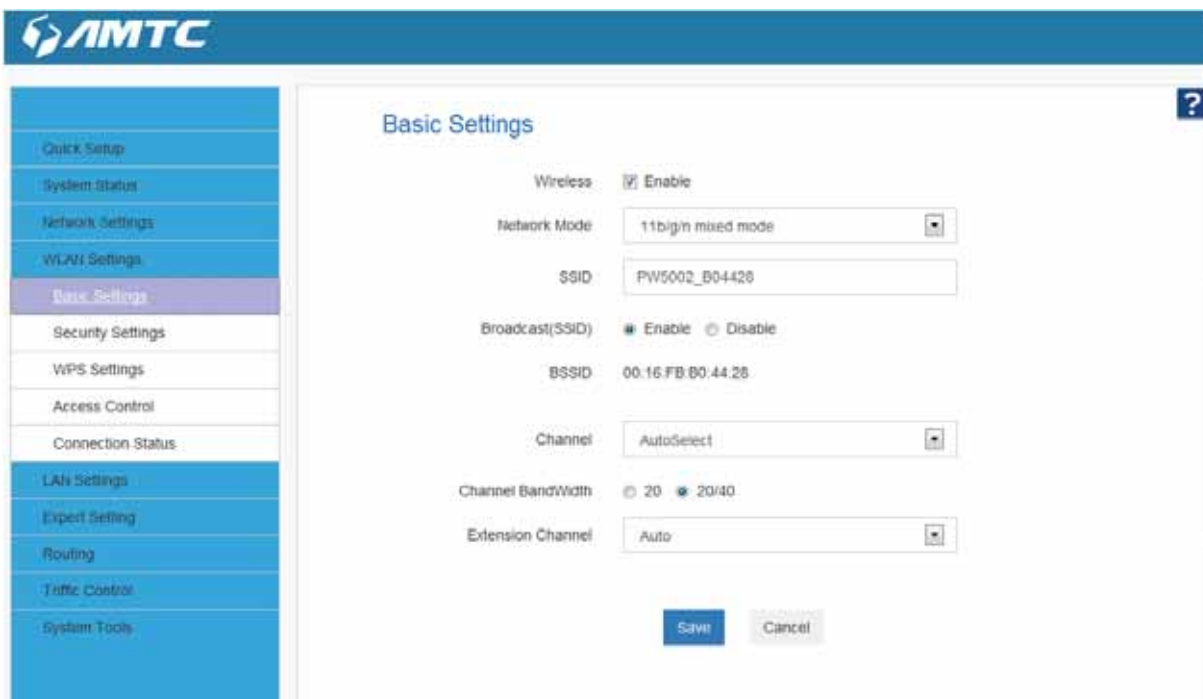
Parameters Specification:

➢ **Wireless:** wireless "Enable" or "Disable".

➢ **SSID:** It is the unique name of the wireless network and can be modified.

➢ **Broadcast (SSID):** Select "Enable" to enable the router' 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.

➢ **Channel:** The currently used channel by the router. Select an effective channel of the wireless network. The default is AutoSelect.

➢ **Channel Bandwidth:** Select an appropriate channel bandwidth to enhance the wireless performance. Select 20/40M when the network has 11b/g/n to promote its throughput

Note --

● The wireless Enable.

● The SSID must be entered.

Tips --

1. The SSID is **WR3011_XXXXXX** by default, 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.

2. If you are not an advanced user, it is advisable to only change the SSID (name of the network) and channel and leave other items unchanged.

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

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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 "**Network Settings**".

② Select "**Security Settings**"**.**

③ Select "**Security Mode**".

④ Click "**Apply**" to use you settings and click "**Save**" to save your settings.
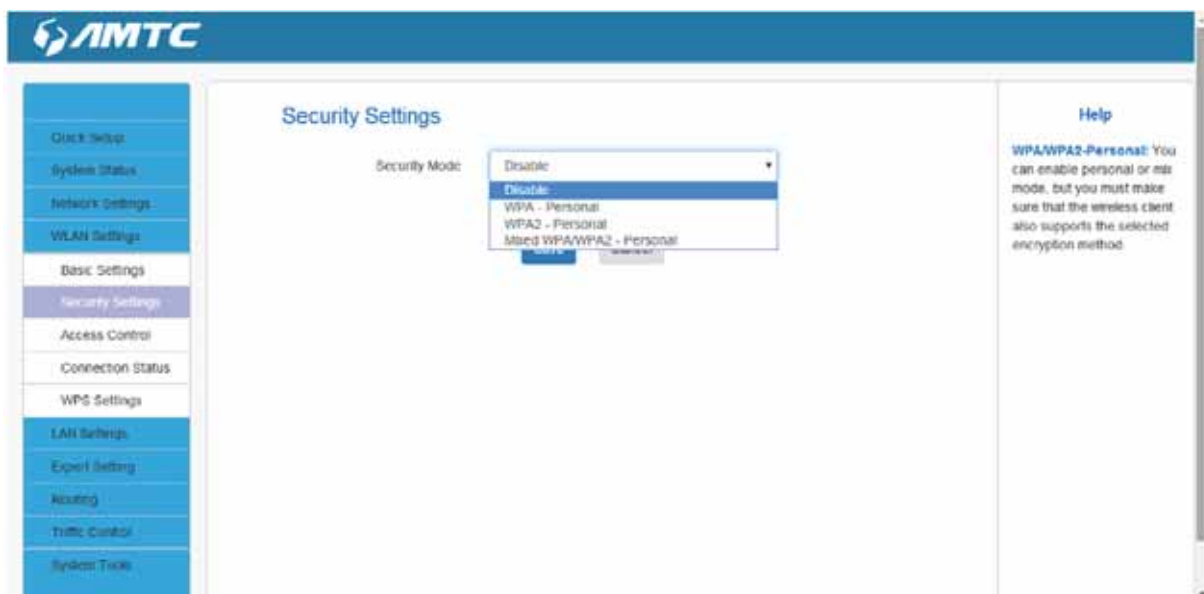
> **Security mode:** WPA – Personal、WPA2 – Personal、Mixed WPA/WPA2 – Personal.

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.
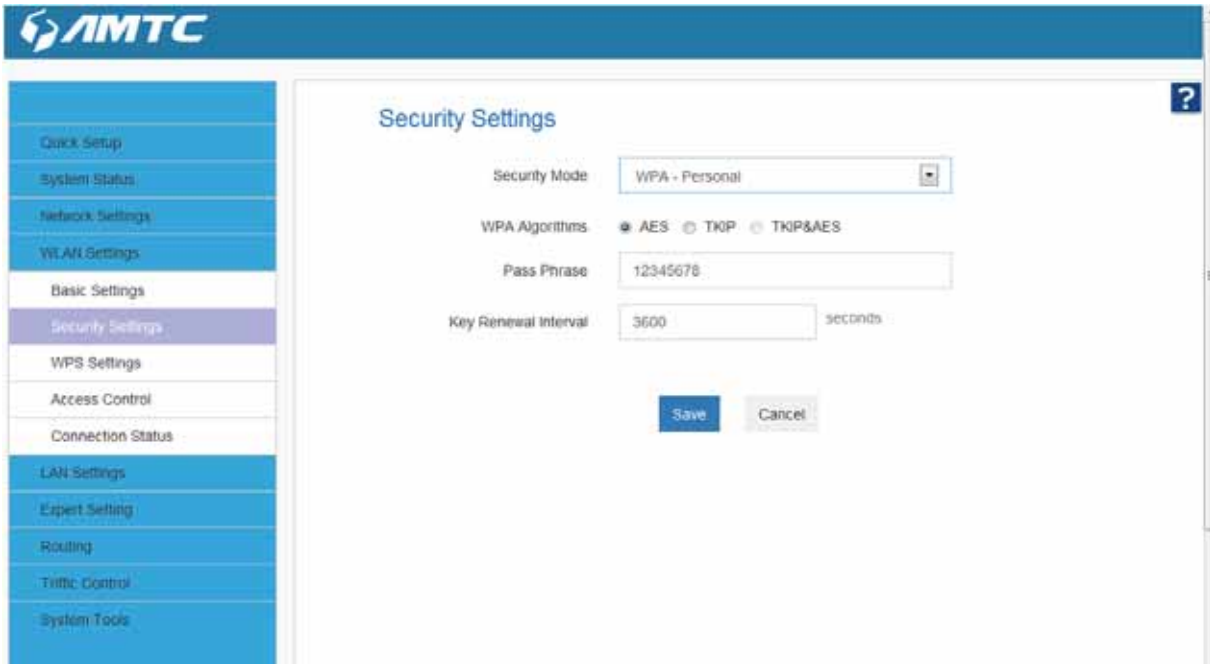
Parameters Specification:

➢ **WPA Algorithms:** Wi-Fi Protected Access Algorithms.

➢ **Pass Phrase:** The default is 12345678.

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.

![AMTC logo]

- 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.

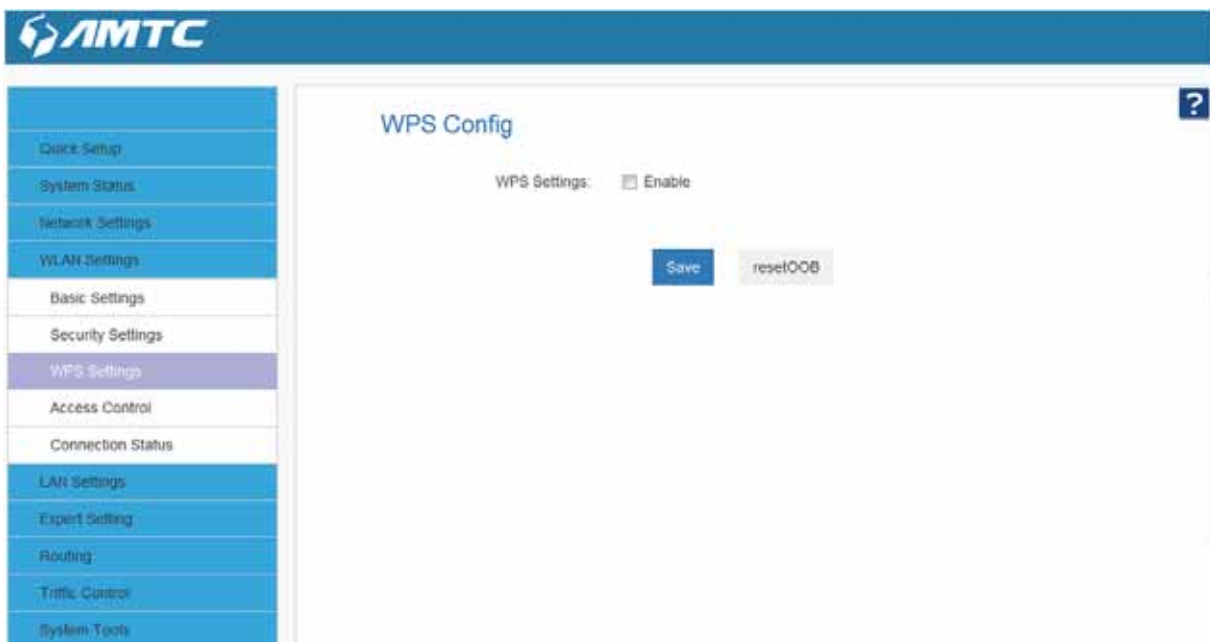--

3.5.3 WPS Settings

Set Steps：

① Click "**WLAN Settings**".

② Select "**WPS Settings**".

Knowledge Expansion --

WPS provides you with two main functions:

- if your wireless network unencrypted，WPS can quickly encryption your wireless network.

- If your wireless network encrypted, WPS can make you quickly connect your encrypted

 wireless network.

Parameters Specification:

The WPS provides below methods:

> **PBC:** Using routers and physical or logical button on a wireless device to connect WPS.

You have below methods to connect WPS:

1、Using the router WPS button on the rear panel for the PBC connection

① Click "**Enable**"

② Click "**Save**"

③ Hold the router on the rear panel of the WPS button for 3 seconds, then let go

④ The router's WPS led flashes two minutes, During this time, In the wireless client devices use the WPS/PBC connect to your wireless signal

Knowledge Expansion--

resetOOB:

● The router wireless SSID, safe mode resumed to not configured mode. Make the WPS reset the SSID, Encryption and password, after the completion of the reset, the router's SSID is factory default, safe mode is unencrypted.

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**".
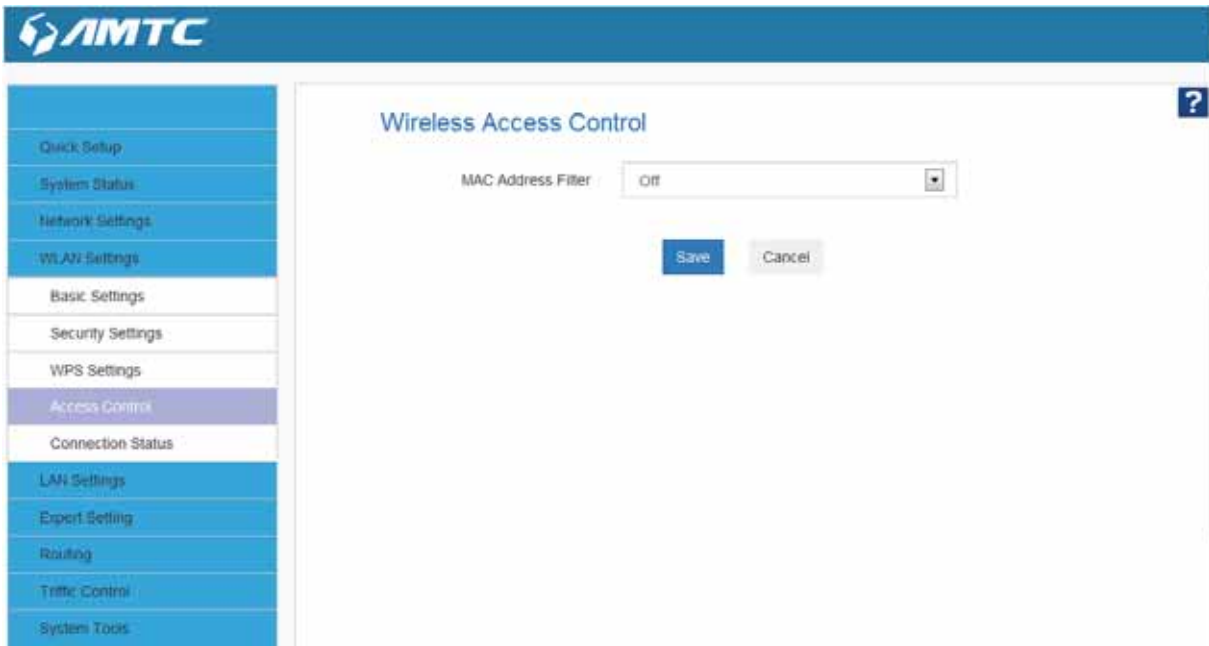
Parameters Specification:

> ➤ The Wireless Access Control is based on the MAC address of the wireless adapter

to determine whether it communicates with the Router 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：

① Select **Allow**.

② Enter the MAC address of the wireless device you want to restrict. Here in this example, enter 00:12:35:EC:DF:25.

③ Click **Add** to add the MAC address to the MAC address list.

④ 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 LAN Settings

Click "LAN Settings" enter the LAN Settings page, here you can configure LAN port info and
DHCP Server and DHCP List & Binding.
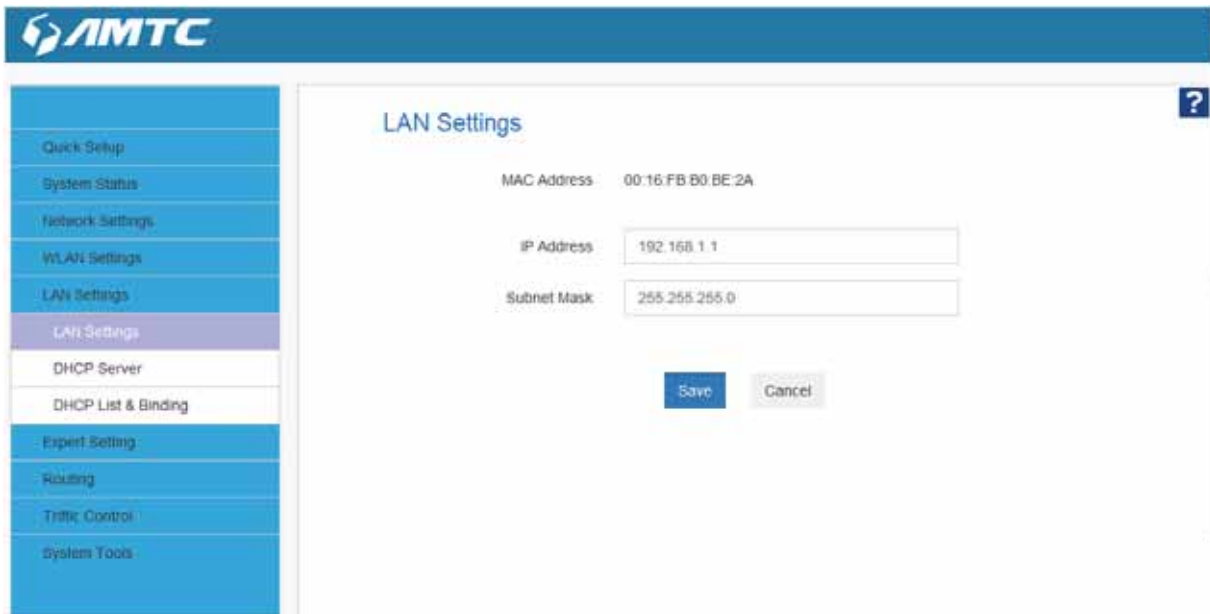
3.6.1LAN Settings

This page is to configure the basic parameters for LAN ports. This IP address is to be used to
access the device'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 router reboot automatically.

Parameters Specification:

➤ **MAC Address**：It displays the Router's LAN MAC address.

➤ **IP Address**：It displays the Router's LAN IP address.

➤ **Subnet Mask:** it displays the Router's LAN subnet mask.

Tips --
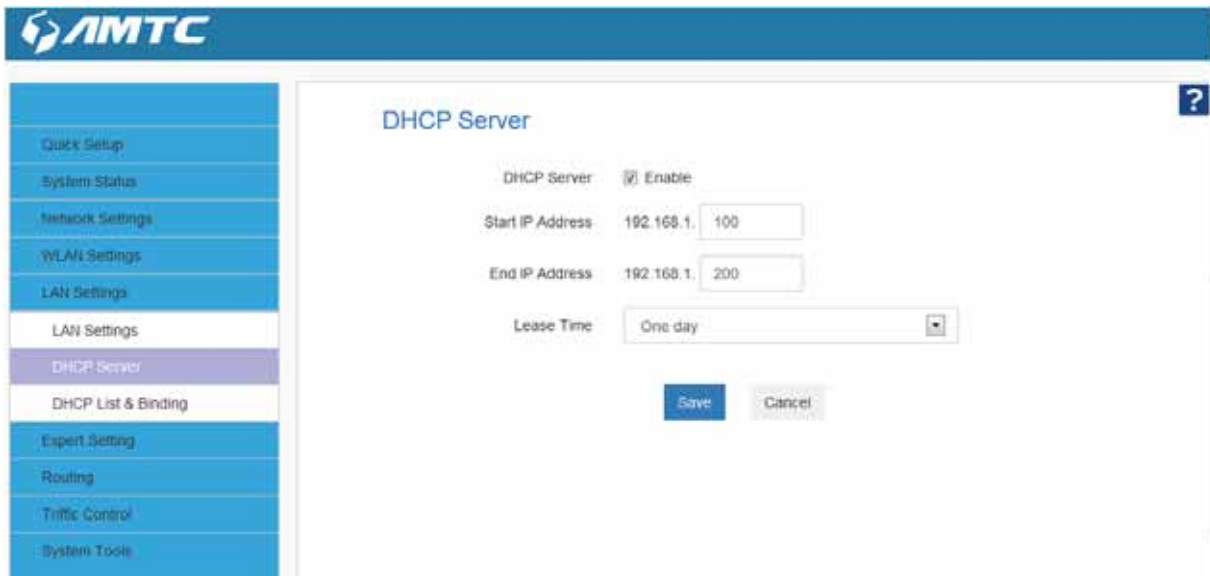
1. Default IP address and subnet mask are respectively 192.168.2.1 and 255.255.255.0.

2. Be sure to make a note of any changes you apply to this page. If you change the LAN IP

   address of the router, you have to open a new connection to the new IP address and log in

   again. Also, you have to set the default gateway addresses of all LAN PCs to this new IP

   address.

3. The router's LAN IP address and WAN IP address cannot be on the same IP segment. If not,

   the router will not be able to access Internet.

3.6.2 DHCP Server

Set Steps：

① Click "**LAN Settings**".

② Select "**DHCP Server**".

Parameters Specification:

➢ **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 router'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 router 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.
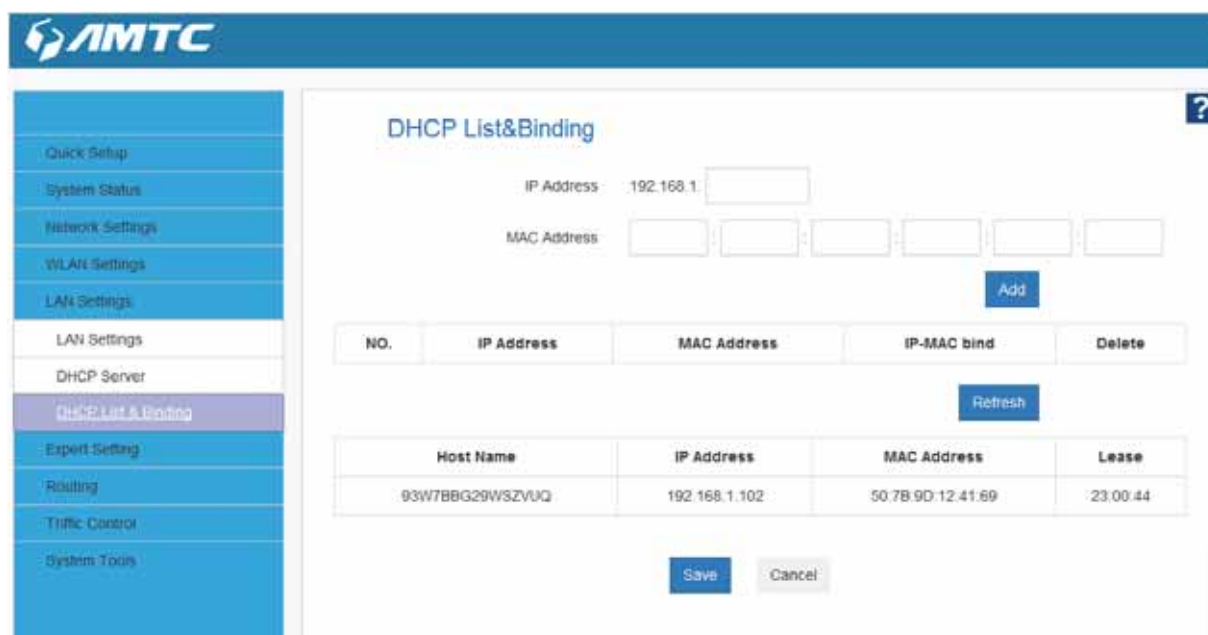
1. Lease time will be renewed automatically upon expiry. No additional configurations are needed.

2. If you are not an advanced user, the default DHCP server settings are recommended.

In order to use the function of the router's DHCP server, LAN in the computer's TCP/IP protocol must be set to "automatically obtain IP".

3.6.3 DHCP List & Binding

Set Steps：

① Click "**LAN Settings**".

② Select "**DHCP List & Binding**".

Parameters Specification:

➢ Enter the IP Address and MAC Address

➢ Click "**Add**" add to the DHCP list

➢ Click "**Refresh**" to update the related DHCP client information.
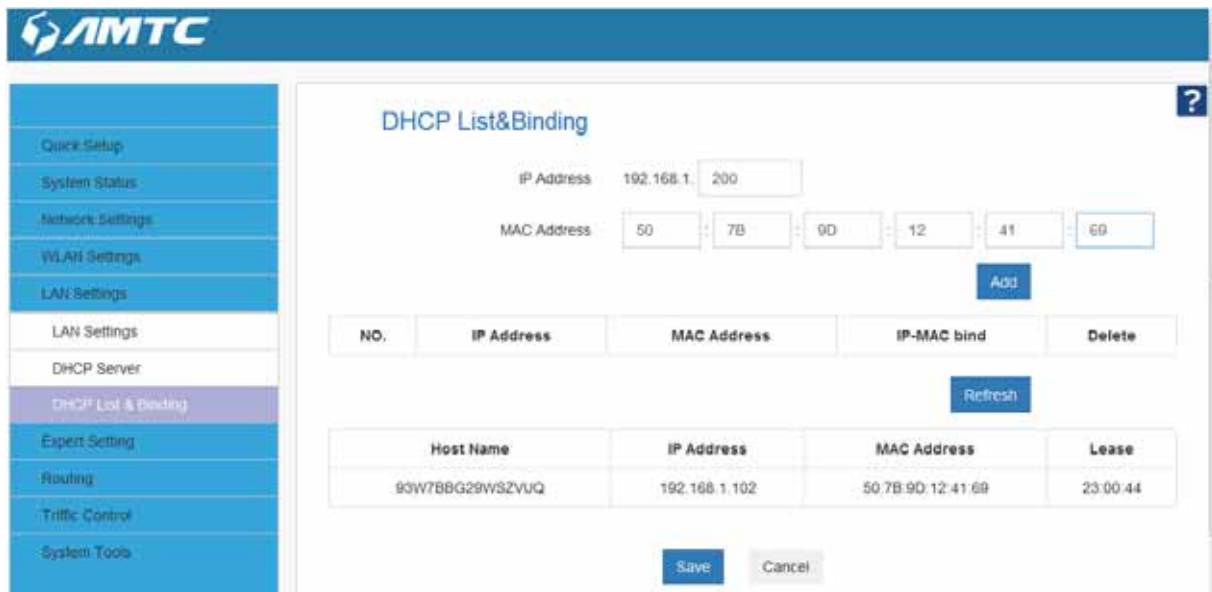
🔆Tips --

● 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 192.168.1.200

Parameters Specification:

➢ Enter the last number of the IP address you want to reserve, for example, 200.

➢ Enter the MAC address of 50:7B:9D:12:41:69

➢ 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

---

3.7 Expert Settings

Click "**Expert Settings**" enter the Virtual Server configure page ,here you can set "**URL Filter**", "**Port Range**", "**DMZ Settings**", "**DDNS**", "**Remote WEB**", "**WAN Ping**".
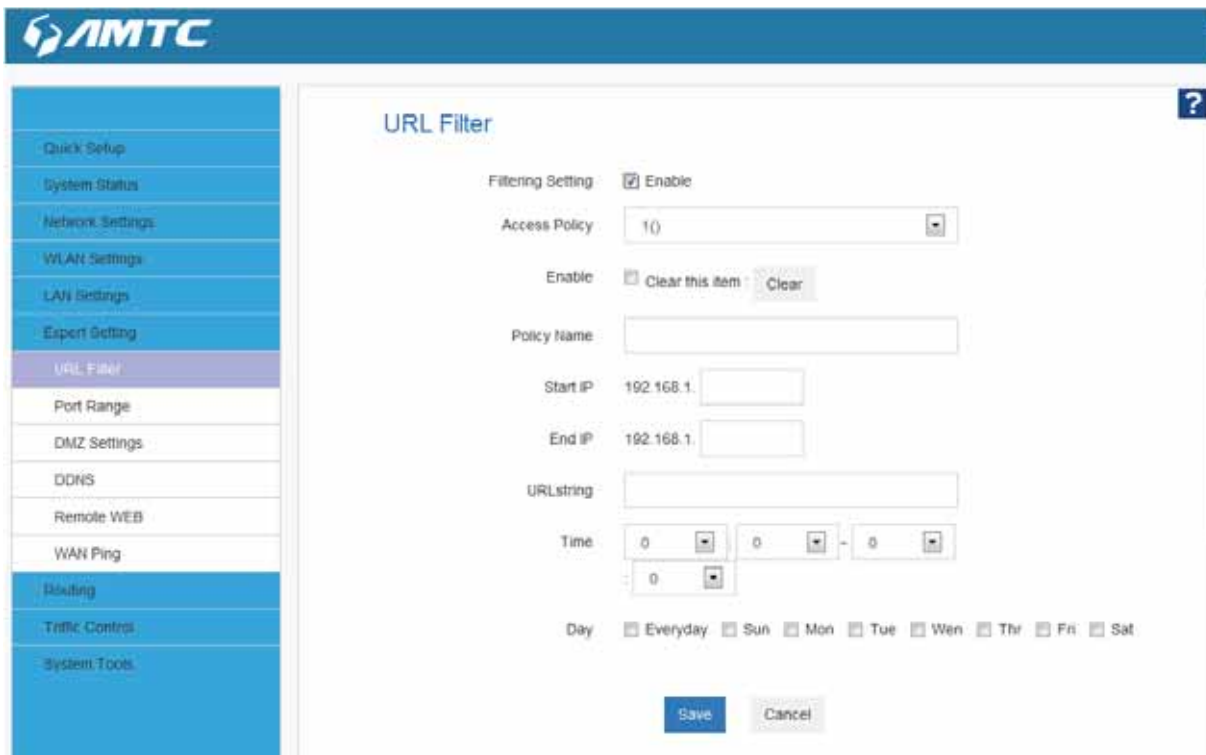
3.7.1 URL Filter

This section is to set URL filtering access. If you want to enable this function, please activate the checkbox. Select one policy from the drop-down menu and enter a policy name in the field. Of course, you can set the access restriction in details (e.g. the fixed IP range, URL, times and days). Note: When time is 0:0~0:0, it express 24 hours.
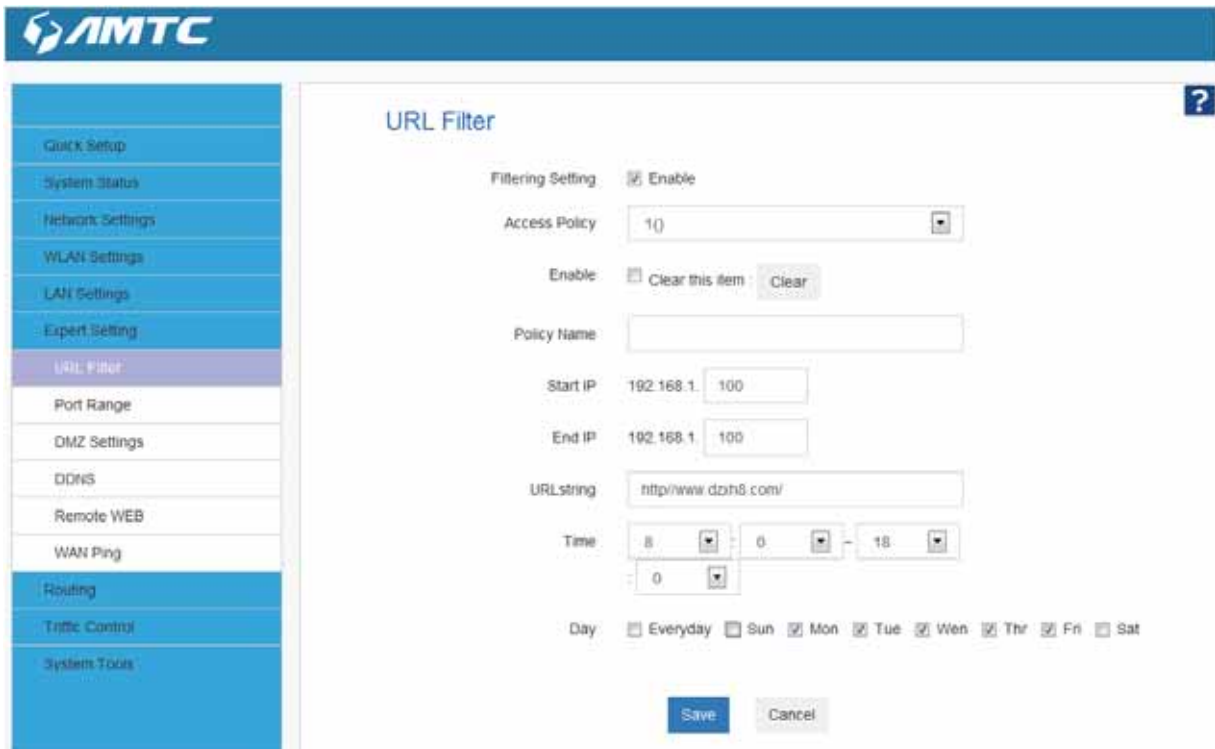
Set Steps：
① Click "**Expert Settings**".
② Select "**Client Filter**".

URL Filter Application Example:
To prevent your home PC (192.168.1.100) from accessing "YouTube" from 8:00 to 18:00 during working days: Monday- Friday.

Set Steps：

① Enter a Policy Name

② Enter the Start IP and End IP here for example:192.168.1.100

③ Enter part of or the entire domain name of the web site you wish to restrict. Separate different domain names or domain name key words with a comma, for example, "YouTube, Hollywood.com"

④ Select time and day

⑤ Click "**Save**" to save your settings.

Tips --

1. Different URL strings must be separated with a comma. To match all websites, use * (asterisk)

2. Up to 10 filter rules can be configured.

3. If you have not set up the system time for this device, click **System Tools -> Time Settings** to set up correct time and date for the rules to be effective
----

3.7.2 Port Range

You want to share resources on your PC with your friends who are not in your LAN. But, by default,

the router's firewall blocks inbound traffic from the Internet to your computers except replies to your outbound traffic. You can use the Port Forwarding feature to create exceptions to this rule so that your friends can access these files from external networks.

When accessing your PC from Internet, type "protocol://xxx.xxx.xxx.xxx:port number" into your browser's address or location field. The protocol and port are the ones used by the service and "xxx.xxx.xxx.xxx" is the WAN IP address of your router. For example, a FTP server uses the ftp protocol and 21 (standard port number).

Set Steps：

①　Click "**Expert Settings**".

②　Select "**Port Range**".

Application Example:

As shown in the figure above, your PC at 192.168.2.10 connects to the router and runs a FTP server on port number 21. Your friends want to access this FTP server on your PC from external network.

💡Tips ---

To successfully implement the port forwarding feature, note below:

　1. Make sure your WAN IP address (Internet IP address) is a public IP address. Private IP addresses are not routed on the Internet.

　2. Make sure you enter correct service port numbers.

　3. To ensure that your server computer always has the same IP address, assign a static IP address to your PC.

　4. Operating System built-in firewall and some anti-virus programs may block other PCs from accessing resources on your PC. So it is advisable to disable them before using this feature.
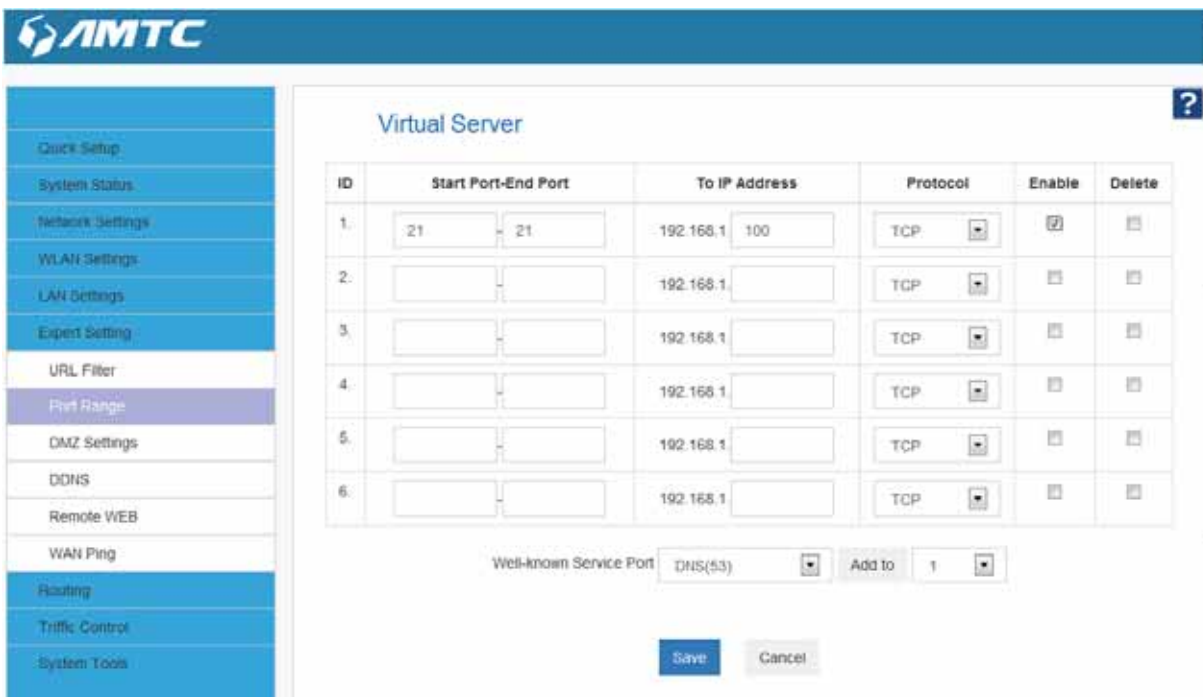
Parameters Specification:

➢ Start/End Port: Enter the start/end port number which ranges the External ports used to set the server or Internet applications. Here in this example, enter 21.

➢ IP Address: Enter the IP address of the PC where you want to set the applications. Here in this example, enter 192.168.1.100.

➢ Protocol: Specify the protocol required for the service utilizing the port(s). Select the protocol (TCP/UDP/Both) for the application.

➢ "**Enable**" to apply this function, "Delete" cancel this host configure.

➢ Click **'Save'** to save your settings.

If your WAN IP address is 192.168.1.100 when accessing your FTP server from external network, your friends only need to enter ftp:// 192.168.1.100:21 in their browsers.

3.7.3 DMZ Settings

Set Steps：

① Click "**Expert Settings**".

② Select "DMZ Settings".

③ Select "Enable"

④ Add DMZ Host IP which is the LAN IP

⑤ Click "**Save**" to confirm.
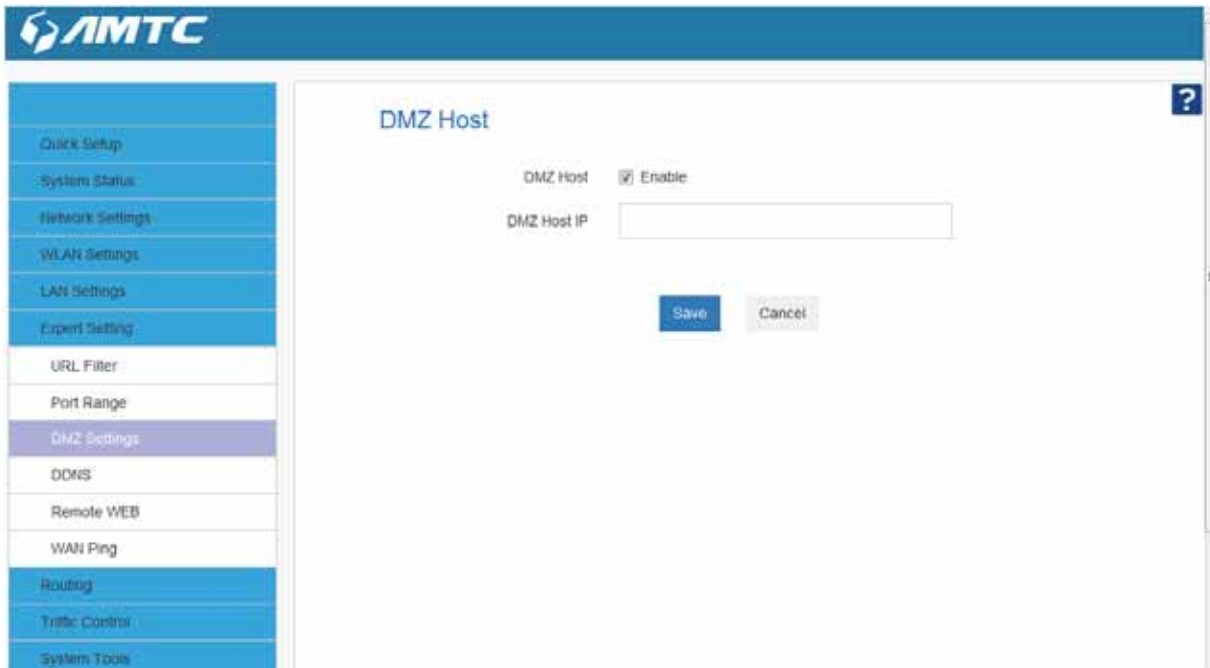
🟢 Tips --

- The DMZ Settings screen allows one local computer to be exposed to the Internet for use of a special-purpose service such as Internet gaming or videoconferencing.
- DMZ hosting forwards all the ports at the same time to one PC.

⚠️**Note** --

1. DMZ host poses a security risk. A computer configured as the DMZ host loses much of the protection of the firewall and becomes vulnerable to attacks from external networks.

2. Hackers may use the DMZ host computer to attack other computers on your network

----

3.7.4 DDNS Settings

The DDNS (Dynamic Domain Name System) is supported in this Router. It is used to assign a fixed host and domain name to a dynamic Internet IP address. Every time you access the Internet, the dynamic domain name software installed on your host will tell the ISP'S host server its dynamic IP address by sending messages. And the server software is responsible for providing DNS service and implementing dynamic domain name resolution.
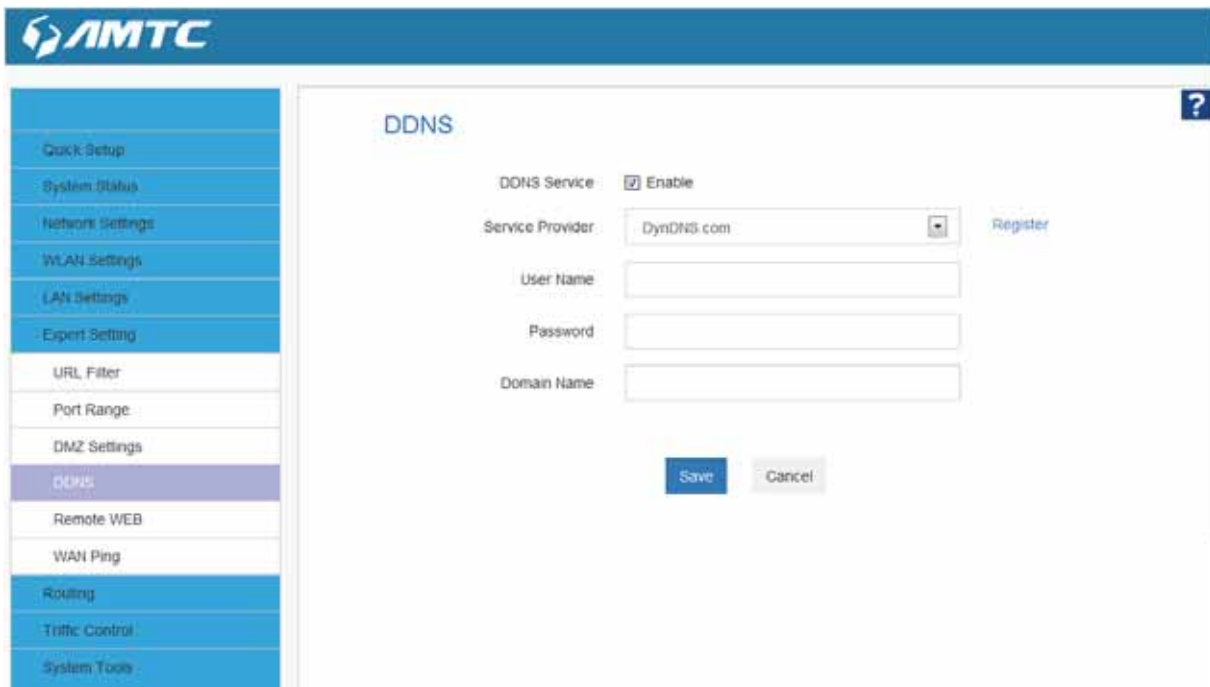
Set Steps：

① Click "**Expert Settings**"

② Select "**DNNS**"

③ Select "Enable"

④ Add "**Serve provider**".

⑤ Enter the "**User name**" and "**Password**"

⑥ Enter "**Domain Name**"

⑦ Click "**Save**" to confirm.

Tips ---

1. To use the DDNS feature, you need to have an account with one of the Service Providers in the

drop-down menu first.

2. This router supports five DDNS service providers: DynDNS.com and 88ip.cn and 3322.com
----

Parameters Specification:

➢ **DDNS Service:** Click the button to enable or disable the DDNS service.

➢ **Service provider:** Select one from the drop-down list and click "Sign up" for registration.

➢ **Username:** Enter the username that you use to register from the DDNS provider.

➢ **Password:** Enter the password that you use to register from the DDNS provider.

➢ **Domain name:** Enter the effective registered domain name.

3.7.5 Remote WEB

This section is to allow the network administrator to manage the router remotely. If you want to access the router remotely, please select "**Enable**".

Set Steps：

① Click "**Expert Settings**".

② Select "**Remote WEB**".

③ Enter the Port

④ Click "**Save**" to confirm.
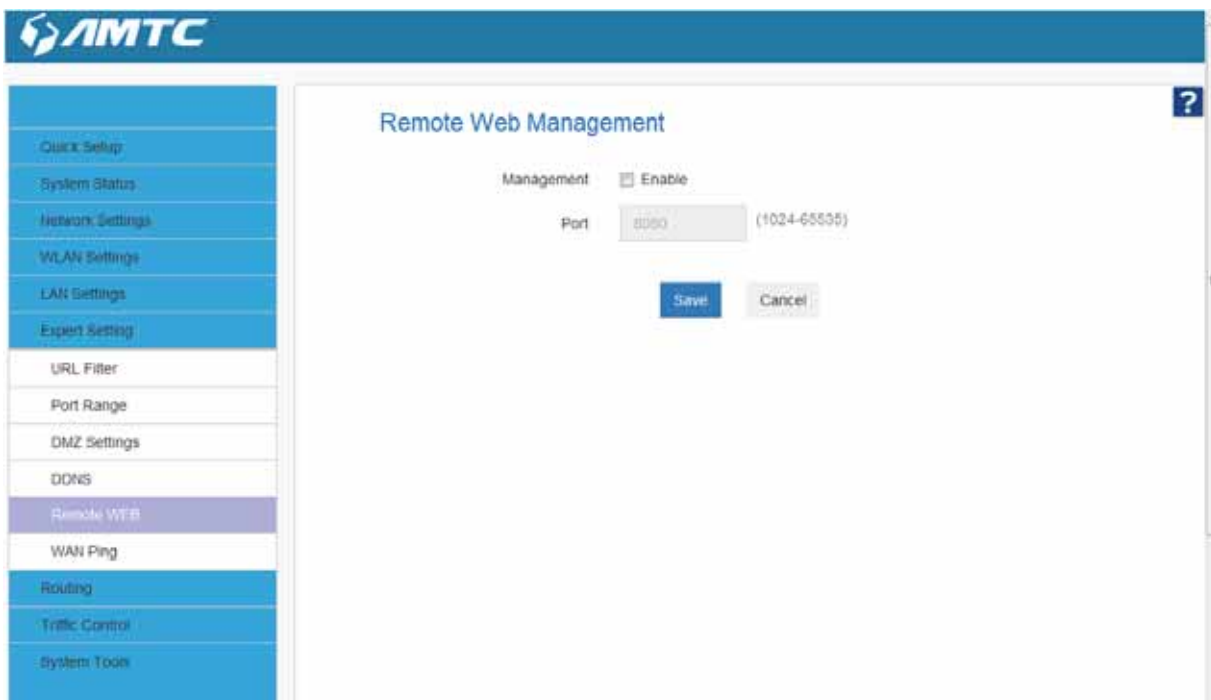
Parameters Specification:

➢ **Port:** The management port to be open to outside access.

Tips --

1. For better security, configure a port number (between 1025-65535) as remote web management interface, do not use the number of any common service port (1-1024).

![AMTC logo]

2. Make sure your WAN IP address (Internet IP address) is a public IP address. Private IP addresses are not routed on the Internet.

3. It is unsafe to make your router remotely accessible to all PCs on external network. For better security, we suggest that only enter the IP address of the PC for remote management

----

Remote Web Management Application Example:

To access your router (WAN IP address: 172.16.87.160) at your home from the PC (210.16.87.154) at your office via the port number 6060.

Set Steps：

① Management "**Enable**".

② Enter the Port: 6060.

③ Click "**Save**" to save your settings.

In the PC 210.16.87.154 Type "http:// 172.16.87.160:6060" into your browser's address or location field and you can access the router at your home remotely.
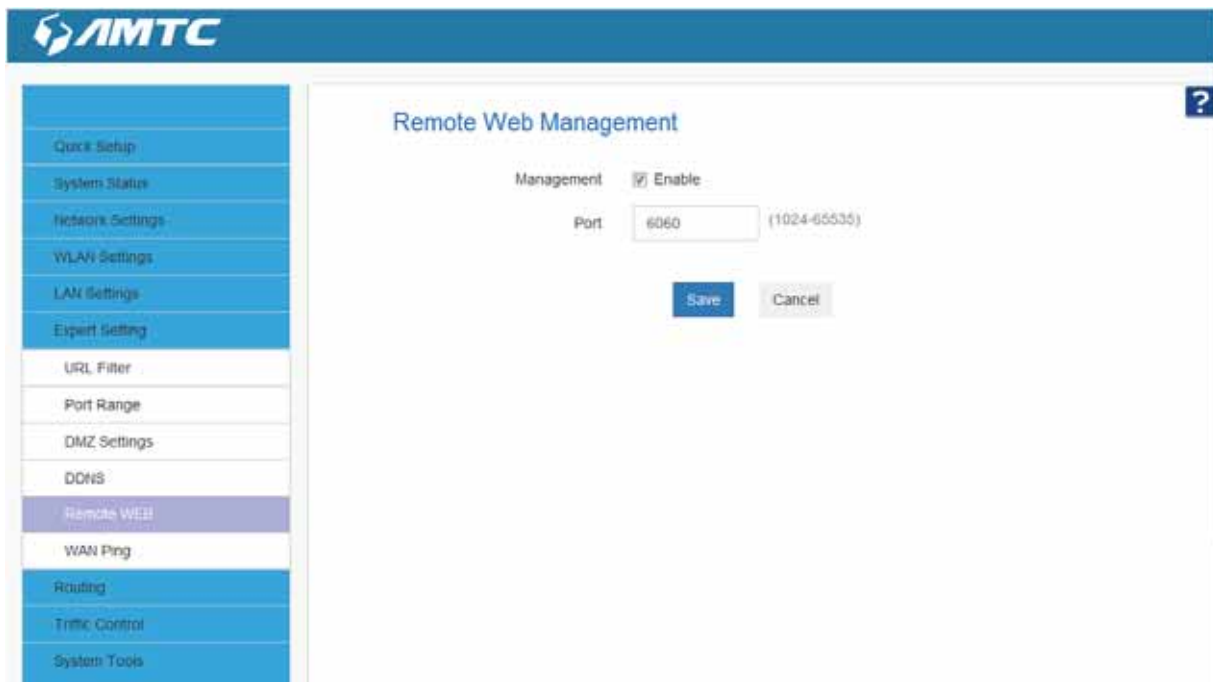
![Knowledge Expansion icon] Knowledge Expansion --

1. Port: This is the management port to be open to outside access. The default setting is 8080. This can be changed

----

3.7.6 WAN Ping

The ping test is to check the status of your internet connection. When disabling the test, the system would prevent the ping test from WAN.
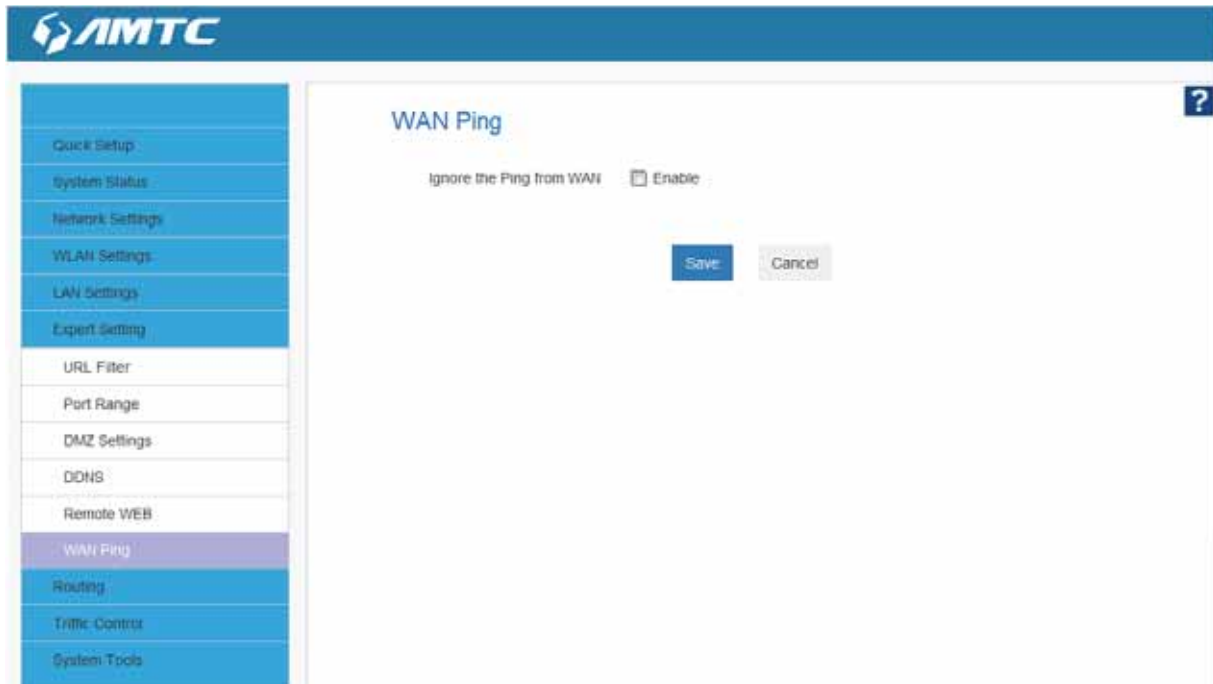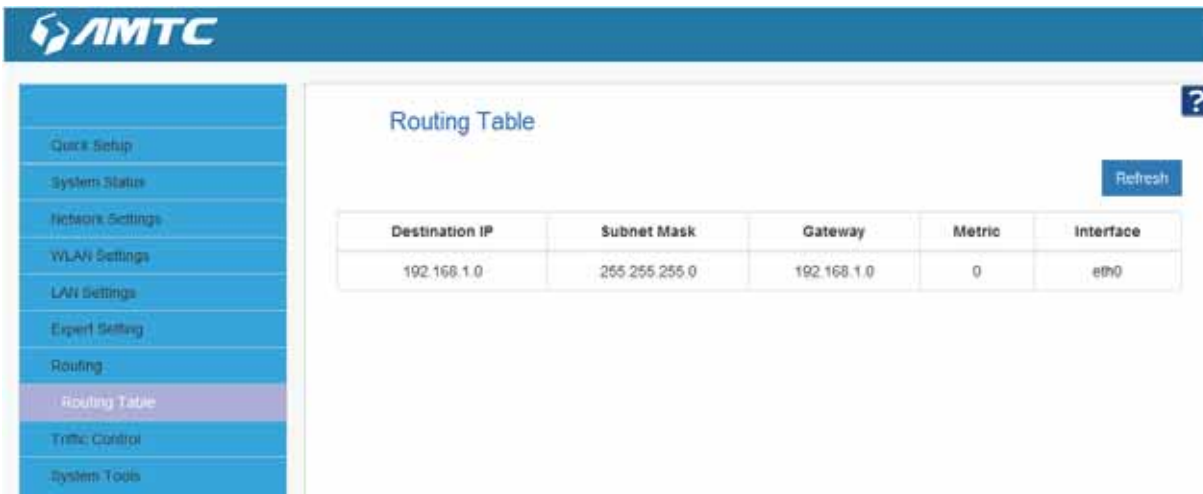
Set Steps:

    ①   **Select the "Expert Setting"**

    ②   **Select the "WAN Ping"**

    ③   **Select the "Enable"**

3.8 Routing

In this page you can view the routing table information.

Click "**Refresh**" to update

- ➢ **Destination IP:** The IP address of the final destination. "0.0.0.0" indicates any network segment.
- ➢ **Subnet Mask:** The subnet mask for the specified destination.
- ➢ **Gateway:** This is the next router on the same LAN segment as the router to reach.
- ➢ **Interface:** The interface between your router and the final destination.

3.9 Traffic Control

Traffic control is used to limit communication speed in the LAN. Up to 20 entries can be supported with the capability for at most 254 PCs' speed control, including for IP address range configuration.

Tips

1. 1M=128KByte/s.

2. The volume of uplink traffic/downlink traffic should not be larger than that allowed on your router's WAN (Internet) port. You can ask your ISP to provide the volume of Internet traffic.

3. The bandwidth for ADSL/DSL line usually refers to the download bandwidth

Bandwidth Control Application Example:

You share a 4M-broadband service with your neighbor (at 192.168.1.102). He always downloads a large volume of data from Internet, which sharply frustrates your Internet surfing experience; you can use this feature to set limits for the volume of Internet traffic he can get. For example, you can split the 4M into two, so your neighbor can only use up to 2M Internet traffic and you can enjoy 2M.
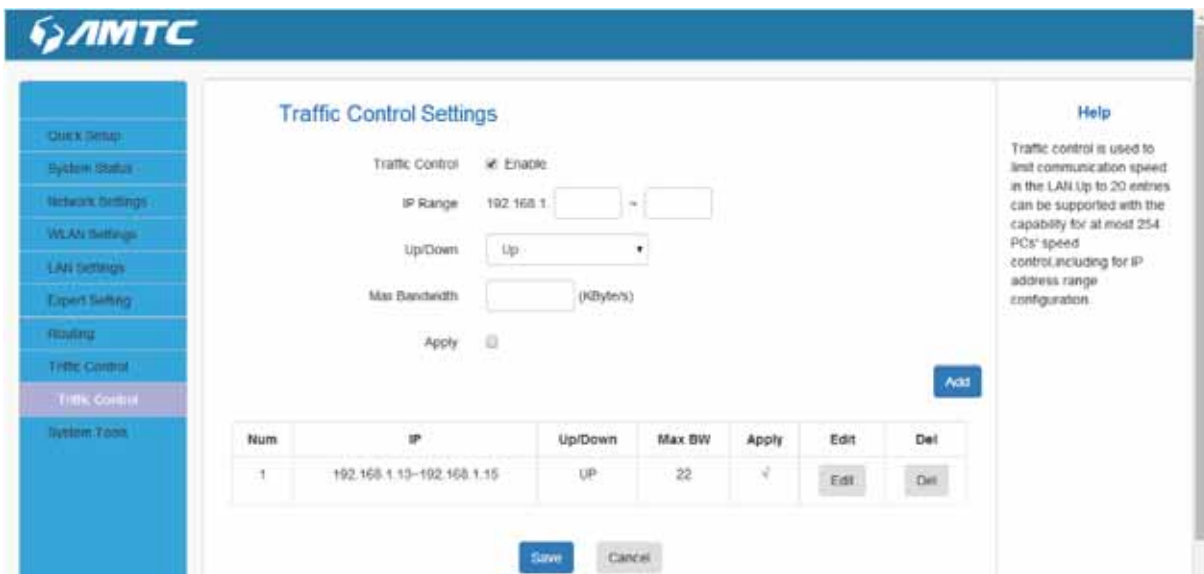
Set Steps：

① **Enable Traffic Control**: Check the **Enable** box to enable the Traffic Control feature.

② **IP Range:** Enter the last number of the IP address. Here in this example, enter 101 in both boxes.

③ **Up:** Set a limit to regulate upload bandwidth of PCs on the LAN. Here in this example, enter 32 in first boxes, and 256 in second box.

④ **Down:** Set a limit to regulate download bandwidth of PCs on the LAN.

⑤ **Apply:** Check to enable the current rule.

⑥ **Add:** Click to add current rule to the rule list.

⑦ Click **Save** to save your settings.

3.10 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**".

3.10.1 Time Settings

This section is to select the time zone for your location. If you turn off the router, the settings for time

![AMTC logo]

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

----
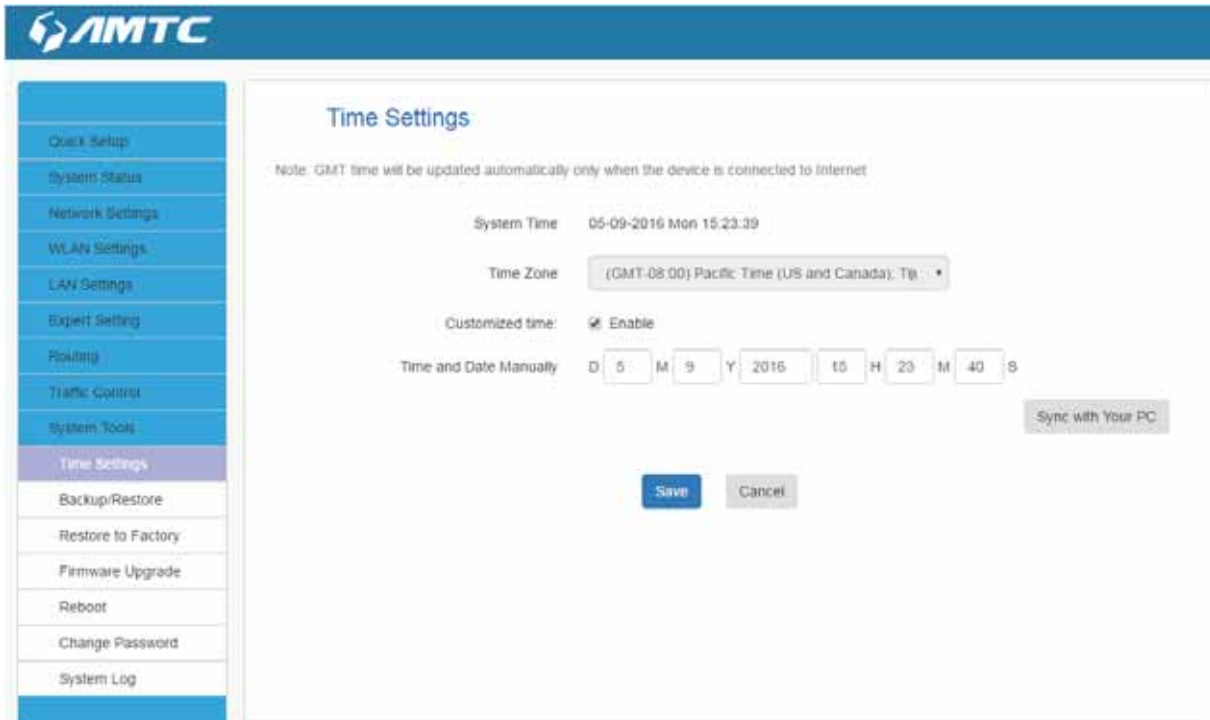
Set Steps：

① Click "**System Tools**".

② Select "**Time Settings**".

③ The time will synchronize with the internet   automatically in the default situation

④ Select Time Zone

⑤ If 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.

3.10.2 Backup/Restore
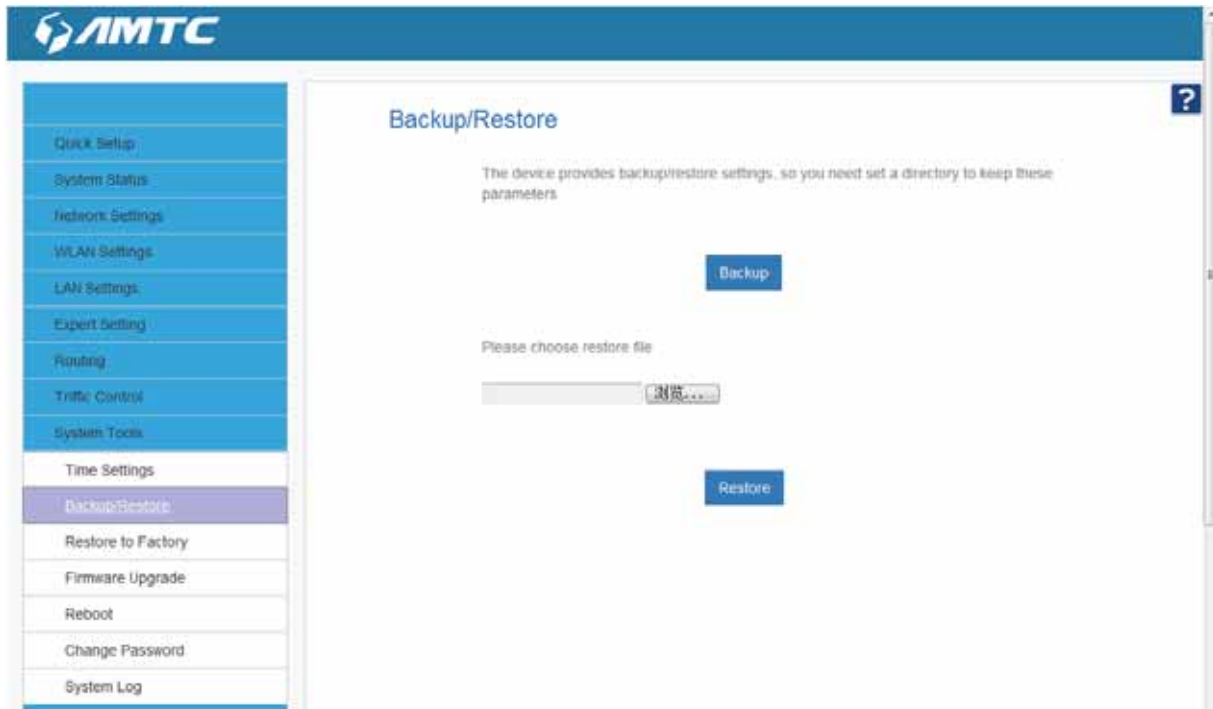
Parameters Specification:

➢ **Backup:** Click this button to back up the router's configurations.

➢ **Restore:** Click this button to restore the router's configurations.

Set Steps：

① Click "**System Tools**".

② Select "**Back/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.

3.10.3 Restore to Factory

Set Steps：

① Click "**System Tools**".

② Select **"Restore to Factory"**.
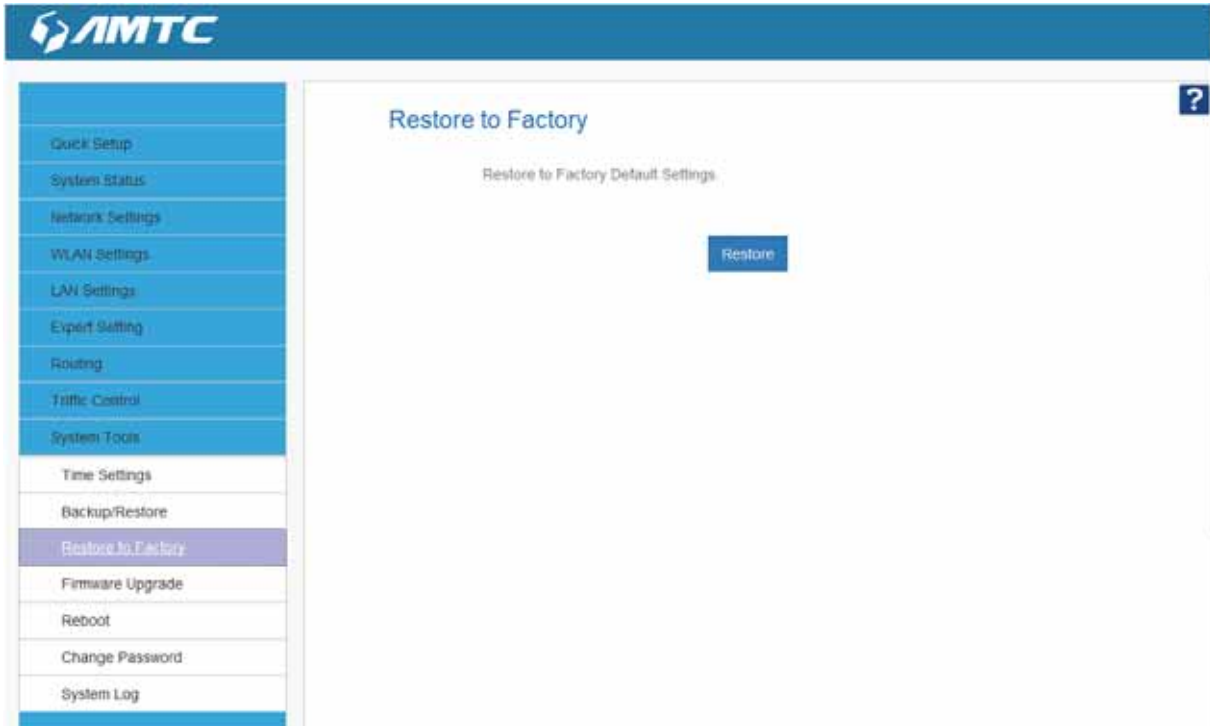
Parameters Specification:

➢ 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 router.

3.10.4 Firmware Upgrade

The router provides the firmware upgrade by clicking the "Upgrade" after browsing for the firmware upgrade packet.　After the upgrade is completed, the router will reboot automatically.
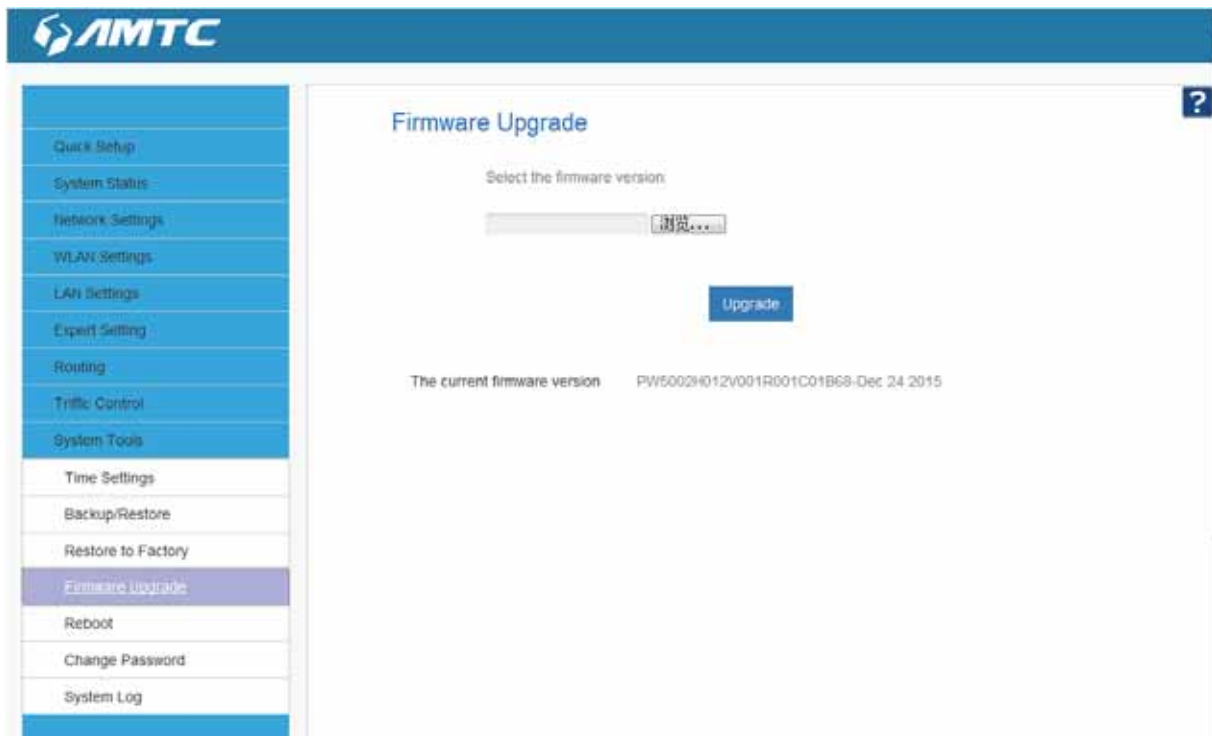
Set Steps：

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 router when the upgrade is in process otherwise the router may be permanently damaged.

3.10.5 Reboot

When a certain feature does not take effect or the device fails to function correctly, try rebooting the device.
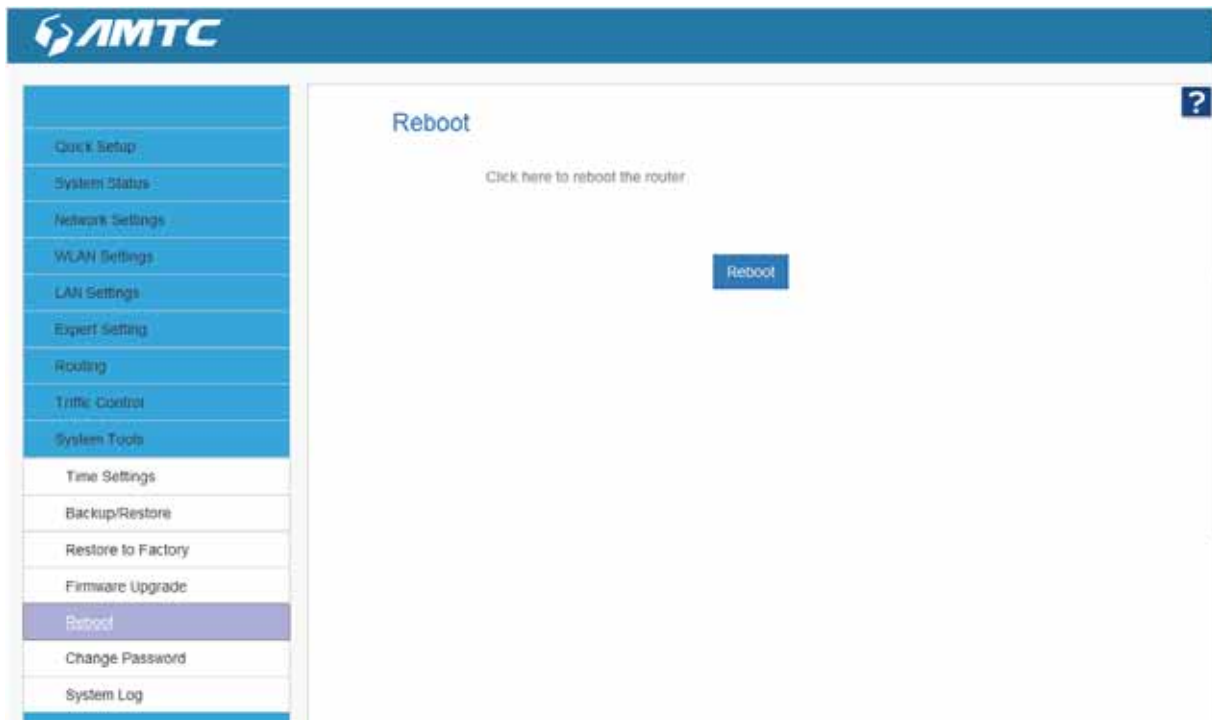
➢ Rebooting the Wifi Router is to make the settings configured go into effect or to set the Range Extender again if setting failure happens.

3.10.6 Change Password

You can change the password by this function
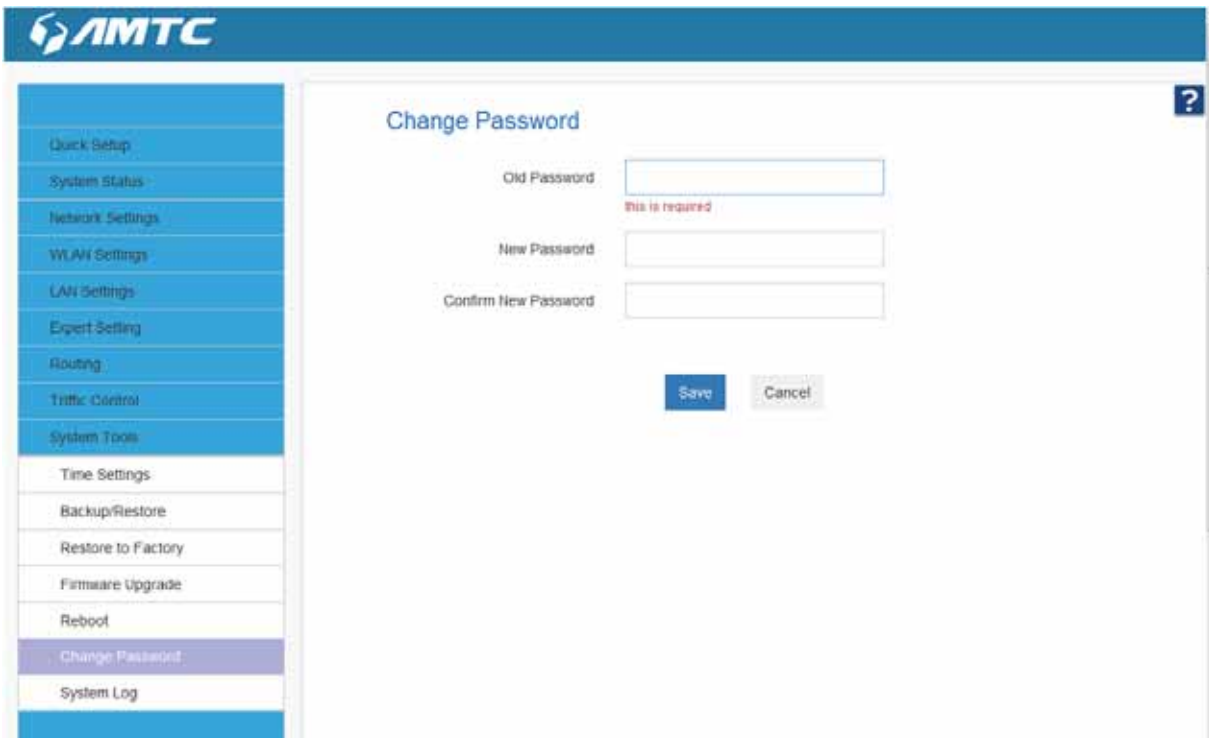
Set Steps：

① Click "**System Tools**"

② Select "**Change Password**"

③ Enter "**Old Password**" "**New Password**" and "**Confirm New Password**"

④ 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

3.10.7 System Log

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

Click the "**Clear**" to clear the screen.

Set Steps：

① Click "**System Tools**"

② Select "**System Log**"

③ Click "**Refresh**" can update the information

④ Click "**Clear**" to clear the screen

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**.

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

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

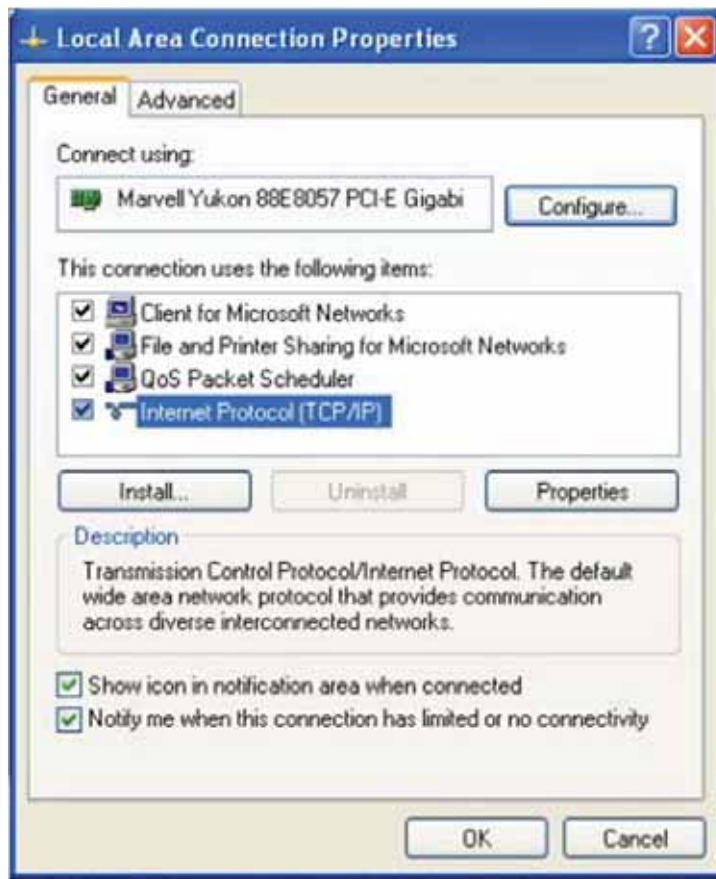⑧ Click **OK** on the **Local Area Connection Properties** window to save your settings.

Windows XP

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

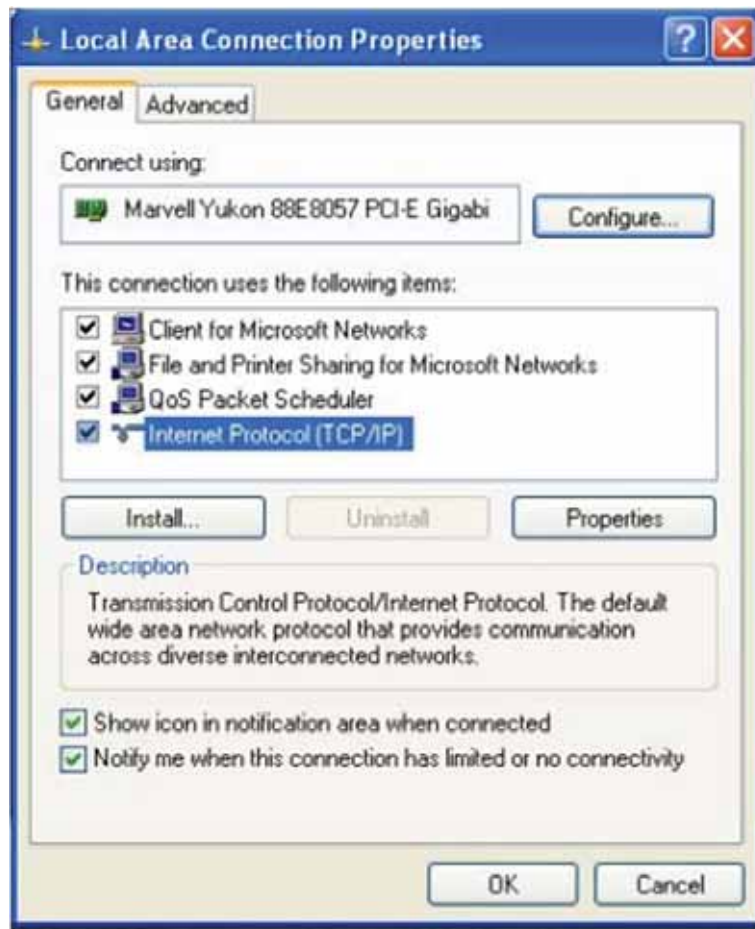② Right click **Local Area Connection** and select **Properties**.

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 Router Adapter：

1. The System LED does not light up.

Ans. Check the following:

a) Make sure that the Router 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 Router Adapter to the power outlet. If the system LED is still failed to light up, contact your local dealer for technical support.

2. The WAN LED does not light up.

Ans. Check the following:

a) Make sure that the Ethernet cable (RJ-45) is properly connected to the Router 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 Factory default settings

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

| Item		Default settings
Router Login	Login IP Address	192.168.1.1
	Login User Name	admin
	Login Password	admin
Network Settings	Internet Connection Type	Mode Auto-switch Enabled
	MTU	1492 (PPOE) 1500 (DHCP/Dynamic and Static IP)
	WAN Speed	Auto
	DNS	Disable
LAN Settings （LAN）	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
	Time Zone	(GMT+08:00)Beijing, Chongqing, Hong Kong, Urumqi
Wireless	Wireless	Enabled

|	SSID	WR3011_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
Others	Remote Web Management	Disabled
	Bandwidth Control	Disabled
	DMZ Host	Disabled
	UPnP	Enable
	Internet Access Management	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.
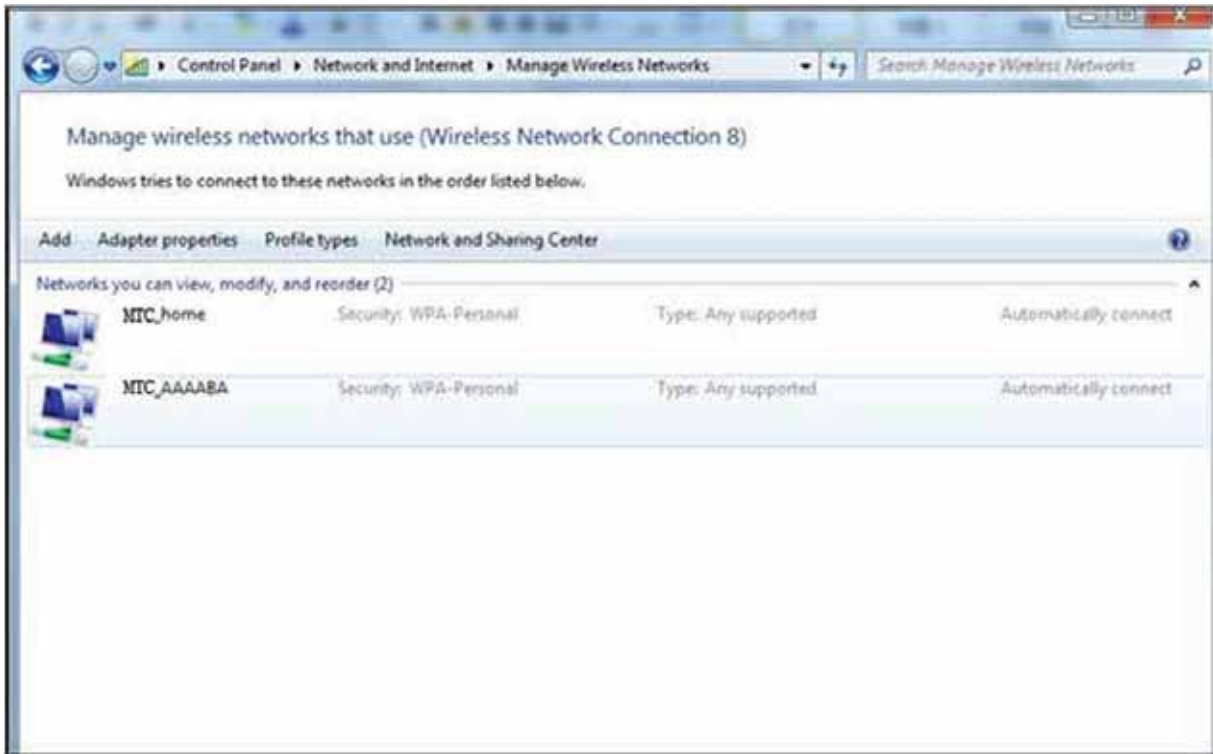
Windows 7

① Right-click the **Network** icon and select **Properties**.
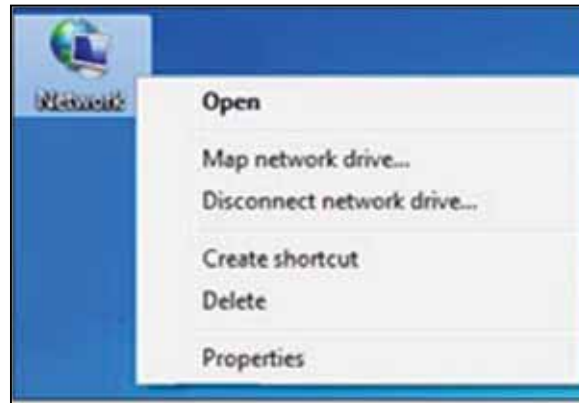
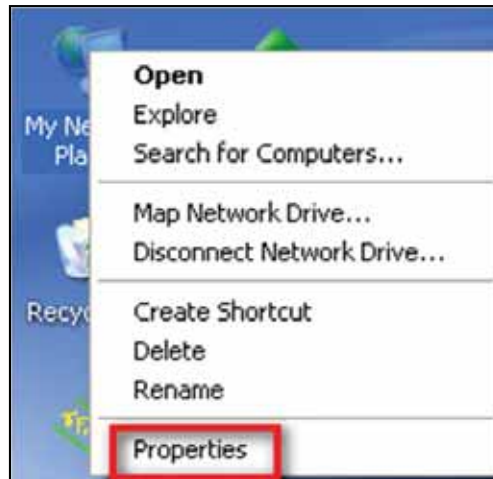② Select **Manage Wireless Networks**.
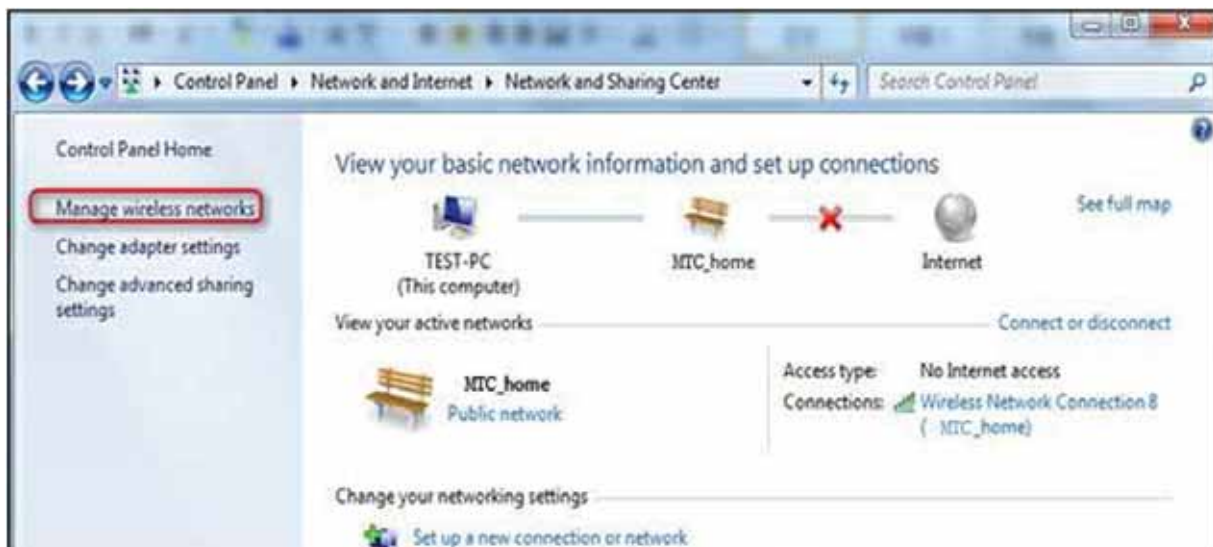
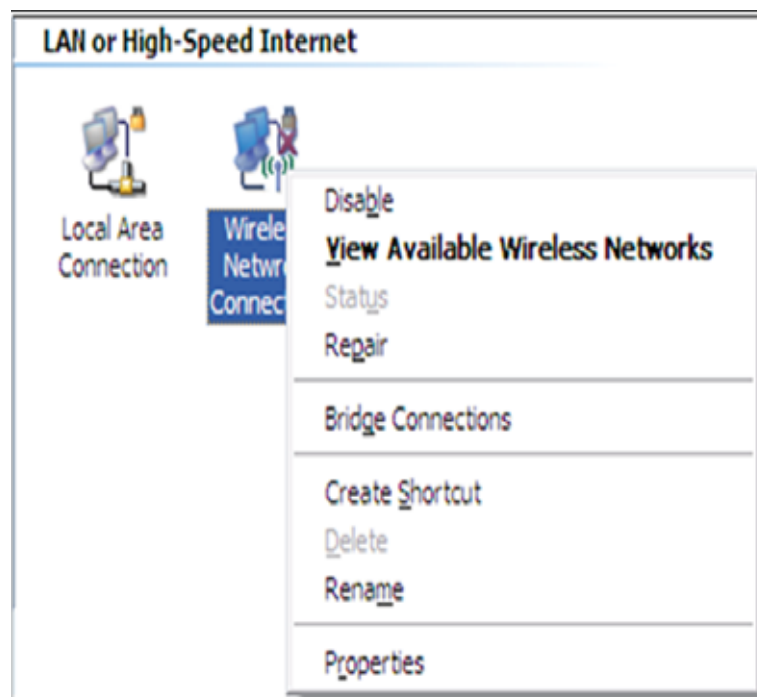③ Select the wireless network and click **Remove network**.

![AMTC]

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

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

"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."

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC ID: 2AHVHWR3011

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.