



PW5002

PLC 600Mbps

Wireless N 300Mbps Wi-Fi Router

User Guide

公司名称: Shenzhen MTC Co.,LTD

产品名称: Wireless Router

产品型号: PW5002




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 PW5002 to avoid damage, please do not change the fuse.
15. The Operating temperature is 0°C~40°C (32°F~104°F). The Storage temperature is -40°C~70°C (-40°F~158°F).

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 PW5002 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.

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Chapter 1 Introduction

1.1 Product Overview

Congratulations on your purchase of this outstanding 300Mbps Wi-Fi router. This device is not only a router adapter which transforms your house's existing electrical wiring into a ubiquitous networking infrastructure, but also 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 PW5002 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.

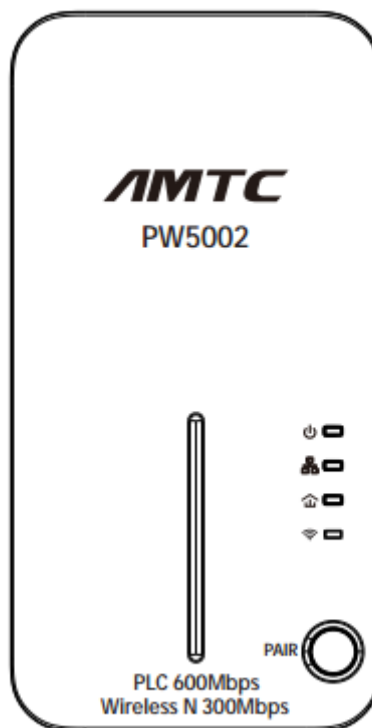
1.2 Product Feature

- Support a WAN Port, a LAN port and support port adaptive.
- Support Wireless up to 300M 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

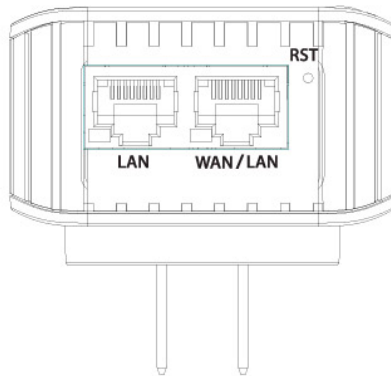


The LED indicator displays information about the device's status.

LEDs	Name	Status	Indications
	Power LED	Solid	The device is on.
		Off	The device is off.
		Blinking	The device is in the pairing procedure.
	Ethernet	Solid	The Ethernet port is connected.
	LED	Off	The Ethernet port isn't connected.
	Router LED	Solid	The device is connected to a router network, but there is no data being transferred.

		Off	The device isn't connected to any router network
		Blinking	The device is transferring data.
	Wi-Fi/Wi-Fi Clone	Off	The wireless function has been disabled.
		Blinking Slow	The extender is cloning Wi-Fi settings from other device.
		Blinking Quickly	The wireless function has been enabled

2.1.2 The product rear panel



Button and Interface description (from right to left)

- **Reset:** Under the electricity situation, press the button about five seconds, the router will reboot, and after the reboot, the router will restore factory default. You can enter the router use the default username and default password(username: admin, password: admin)
- **WAN Port:** WAN port jack (RJ45), the port used to connect the Ethernet cable/xDSL Modem/Cable Mode.
- **LAN Port:** LAN jack (RJ45), used to connect LAN in hub, switch or installed network card computer.

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 (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:

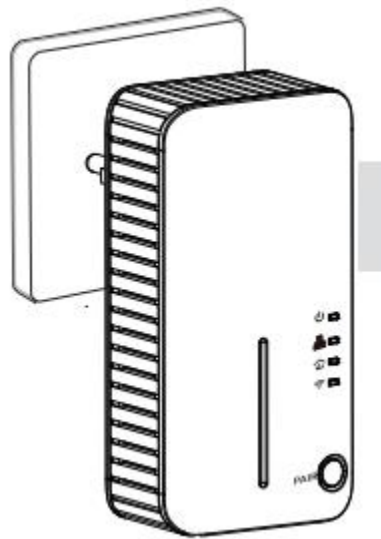
Item	Description
Router	Find it in your package.
PC	Should have installed IE8 or higher browser.
Gather ISP Information	<p>DHCP, PPOE or Static IP Internet Connection Type:</p> <ol style="list-style-type: none"> 1. Ethernet Cable from the incoming Internet side: This is provided by your ISP 2. ISP Information: 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 <p>If your ISP uses a PPOE Internet connection, you will need ISP login name and password</p> <ul style="list-style-type: none"> ● 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: <ol style="list-style-type: none"> 1) IP Address 2) Subnet Mask 3) Gateway 4) DNS Server 5) Alternate DNS Server (Optional) <hr/> <p>WISP Internet Access:</p> <ol style="list-style-type: none"> 1. Remote AP's SSID, MAC address, security mode, cipher type and security key

- | | |
|--|--|
| | <ol style="list-style-type: none">2. Internet connection information provided by the remote AP3. 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:

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.

2.3.3 Hardware Connection



Note

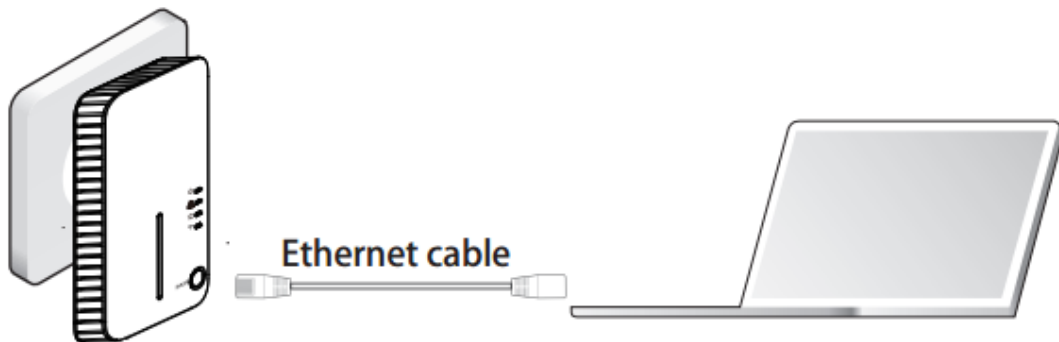
- Before connecting, please make sure that you can surf the internet in your computer to use the reticle provided by ISP.

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



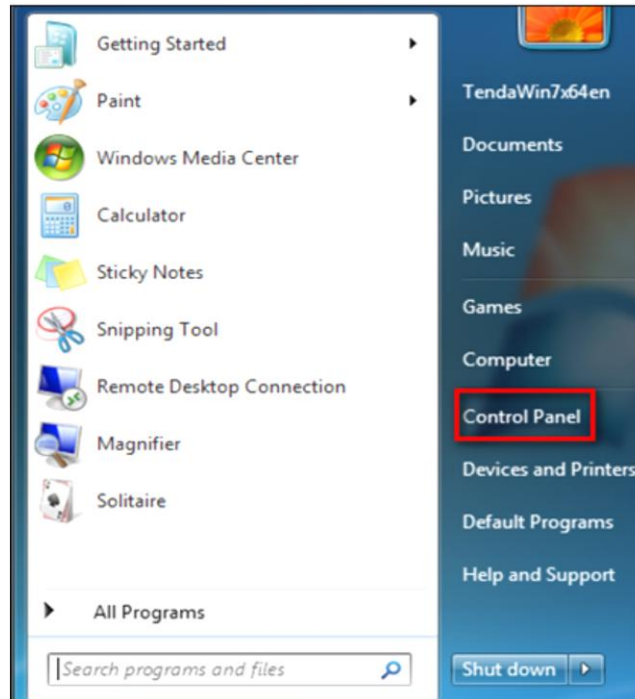
Note

- 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.

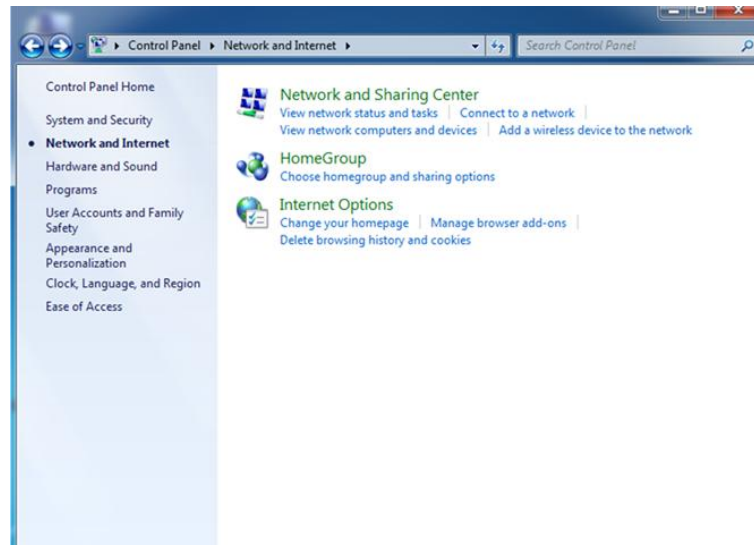
- ① Click **Start -> Control Panel**.



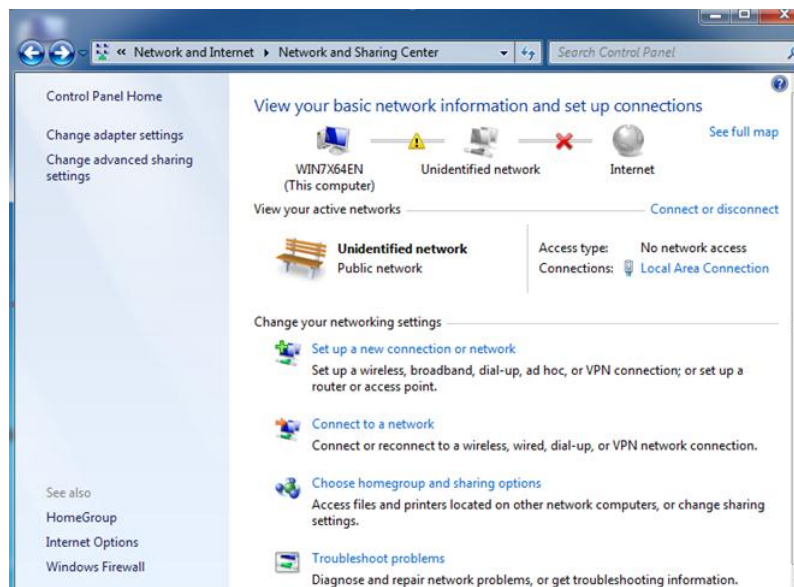
② Click **Network and Internet**.



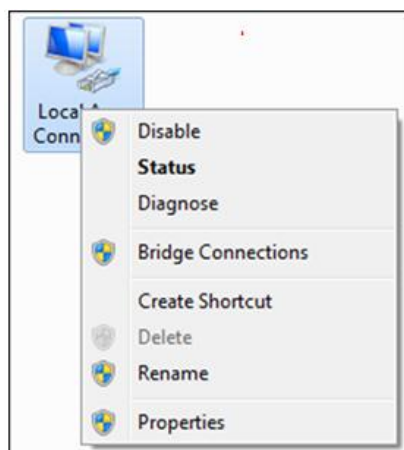
③ Click **Network and Sharing Center**.



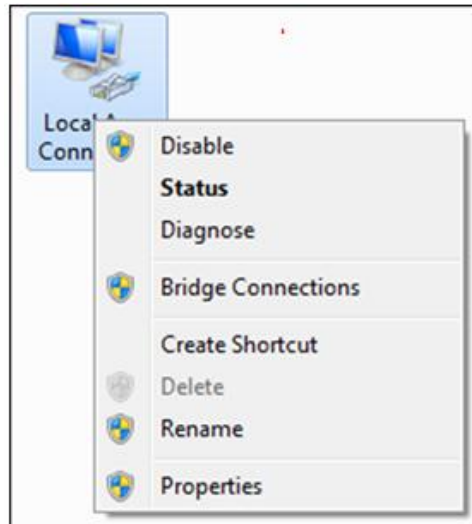
④ Click **Change adapter settings**.



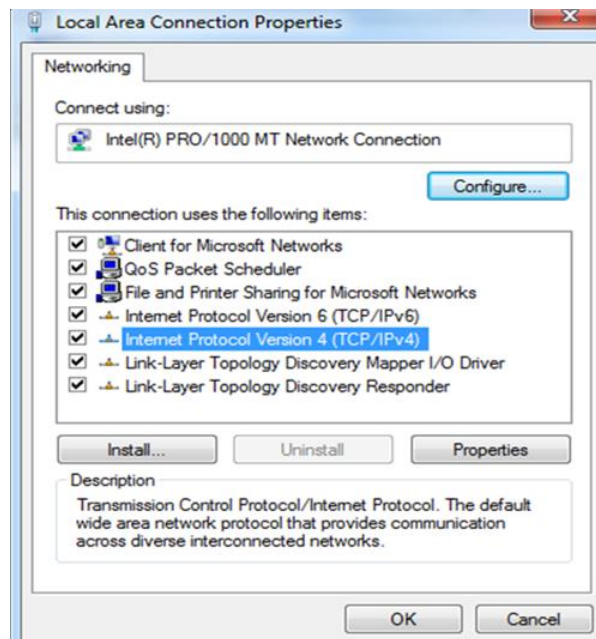
⑤ Click **Local Area Connection** and select **Properties**.



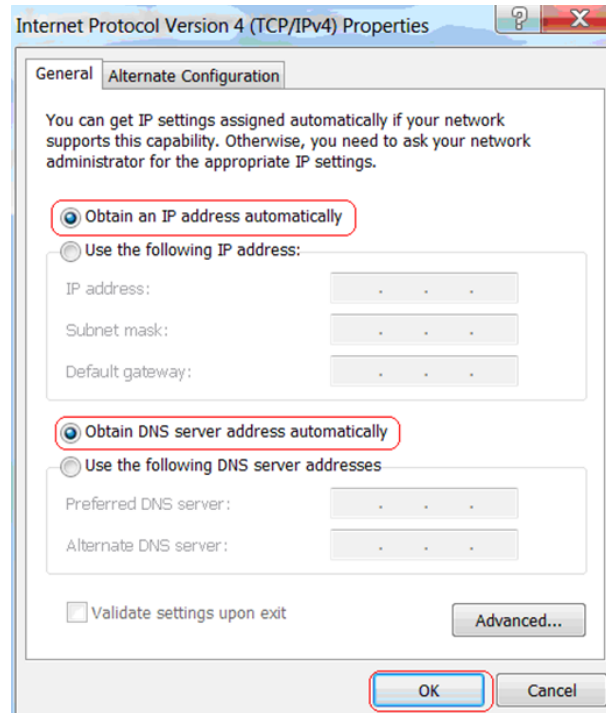
- ⑥ Select **Internet Protocol Version 4 (TCP/IPv4)** and click **Properties**.



- 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

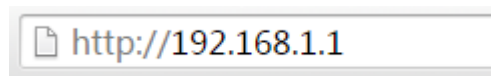
- If you need to configure the IP address manually, please set the PC's IP address and router IP address in the same subnet, because the router's default IP is 192.168.1.1, the subnet mask is 255.255.255.0, so your IP should set 192.168.1.XXX; XXX cannot be 1.

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 `“PW5002.setup.cn”`)



Tips

- PW5002 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.).
- 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 **“PW5002.setup.cn”**.

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

Please sign in

 English

 admin

Sign in



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 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.

Network Status

Operation Mode

Universal Repeater


Connection Status

Disconnect





Goto Configure



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.

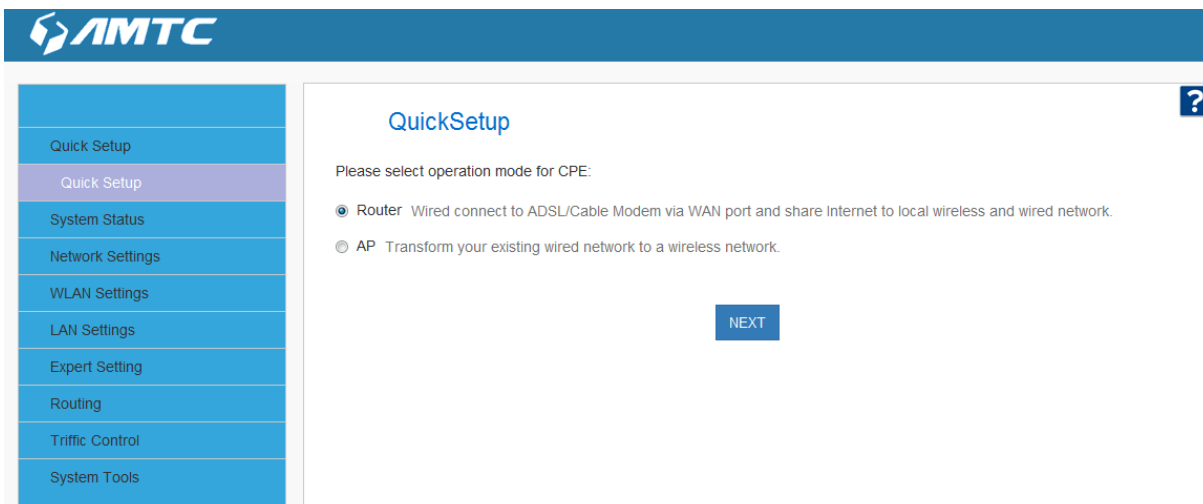
Commonly used web page elements description

Common elements	Description
	Scan the information automatically
	Goto the configure page directly
	Back to previous page
	Scan the information automatically

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	Enter the next configure page

3.2 Quick Setup

In this page you can configure the mode of operation.



Here are two modes Router and AP:



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 PW5002 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) 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.



Knowledge Expansion

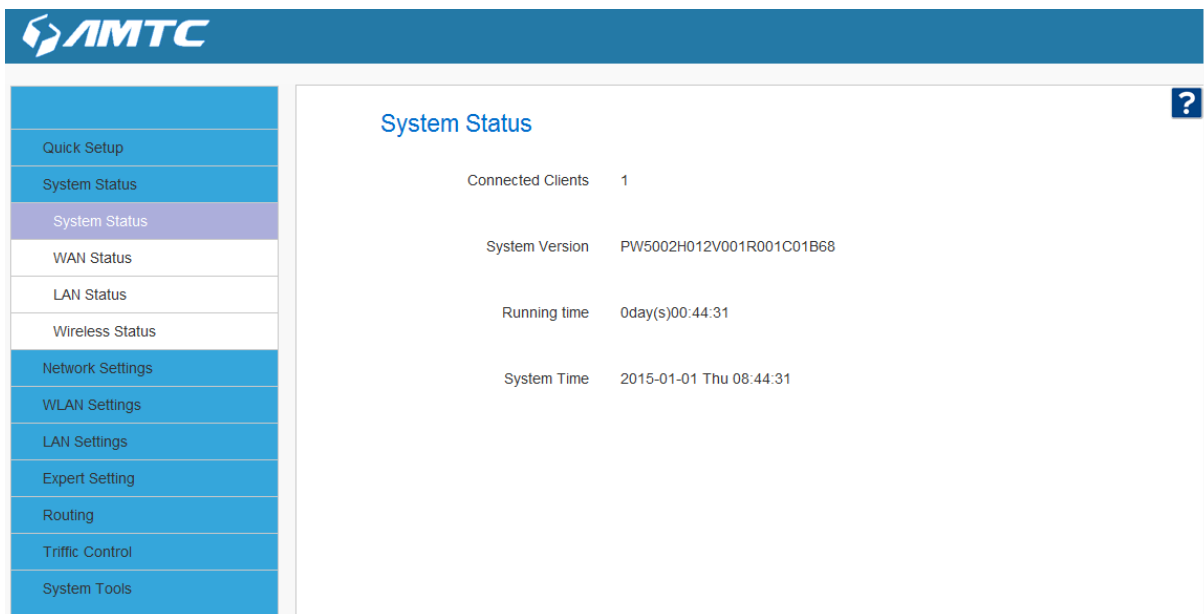
- **AP:** The most basic mode of multi-function is Access Point. In this mode, the AP will act as a central hotspot for different wireless LAN clients. In this mode, this device connect with up level router via Ethernet cable, and after connected, this device send wireless signal, you can surf the Internet through connection with the wireless signal.
- **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.



The screenshot shows the AMTC System Status web page. On the left is a navigation menu with the following items: Quick Setup, System Status (highlighted), System Status, WAN Status, LAN Status, Wireless Status, Network Settings, WLAN Settings, LAN Settings, Expert Setting, Routing, Traffic Control, and System Tools. The main content area is titled "System Status" and contains the following information:

Connected Clients	1
System Version	PW5002H012V001R001C01B68
Running time	0day(s)00:44:31
System Time	2015-01-01 Thu 08:44:31

Parameters Specification:

- **Connection Clients:** displays the number of DHCP clients.

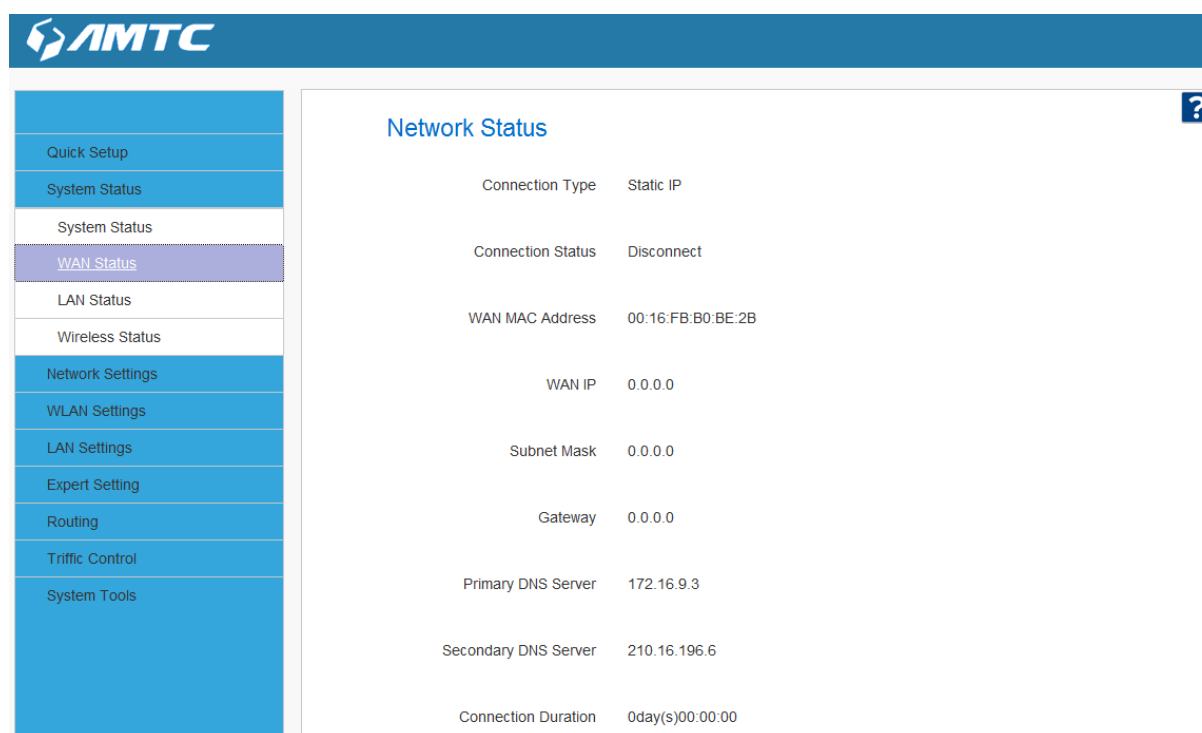
- **System Version:** Firmware Version.
- **Running Time:** Displays the time duration indicating how long the router has been up since startup. Up time is recounted and renewed upon power off.
- **System Time:** Current system time on this device. The device automatically synchronizes the system time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



Tips

- Running time is total time the router is turned on

3.3.2 WAN Status



The screenshot shows the AMTC router's web interface. On the left is a navigation menu with options: Quick Setup, System Status, WAN Status (highlighted), LAN Status, Wireless Status, Network Settings, WLAN Settings, LAN Settings, Expert Setting, Routing, Traffic Control, and System Tools. The main content area is titled "Network Status" and displays the following information:

Connection Type	Static IP
Connection Status	Disconnect
WAN MAC Address	00:16:FB:B0:BE:2B
WAN IP	0.0.0.0
Subnet Mask	0.0.0.0
Gateway	0.0.0.0
Primary DNS Server	172.16.9.3
Secondary DNS Server	210.16.196.6
Connection Duration	0day(s)00:00:00

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.

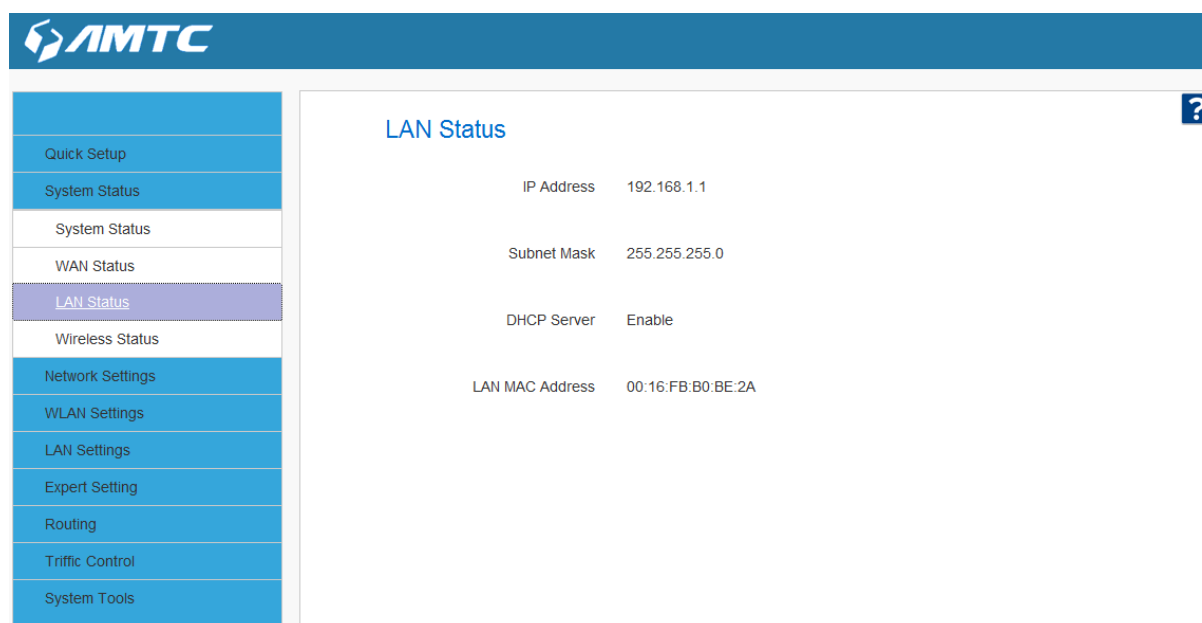


Tips

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

3.3.3 LAN Status



LAN Status	
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DHCP Server	Enable
LAN MAC Address	00:16:FB:B0:BE:2A

Parameters Specification:

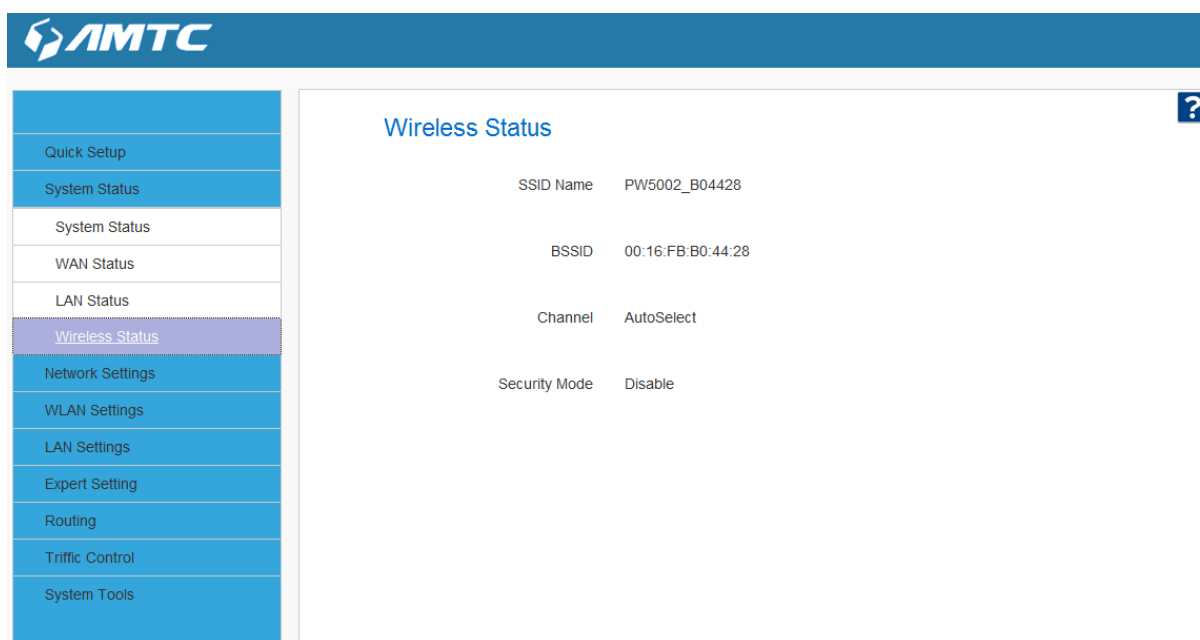
- **IP Address:** The Router's LAN IP Address (not your PC's IP address).
- **Subnet Mask:** The Router's LAN subnet mask.
- **DHCP Server:** the status of DHCP server.
- **LAN MAC Address:** The router's physical address.



Tips

- 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



The screenshot shows the AMTC web interface. On the left is a navigation menu with the following items: Quick Setup, System Status, System Status, WAN Status, LAN Status, **Wireless Status** (highlighted), Network Settings, WLAN Settings, LAN Settings, Expert Setting, Routing, Traffic Control, and System Tools. The main content area is titled "Wireless Status" and contains the following information:

SSID Name	PW5002_B04428
BSSID	00:16:FB:B0:44:28
Channel	AutoSelect
Security Mode	Disable

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 **PW5002_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.**



Knowledge Expansion

- **AutoSelect:** Under the “AutoSelect” the wireless signal will choose the user number is the least channel to improve the efficiency of the signal, it works for most cases.
- If you choose other mode, the channel will not change all the time no matter the channel is good or bad.

3.4 Network Settings

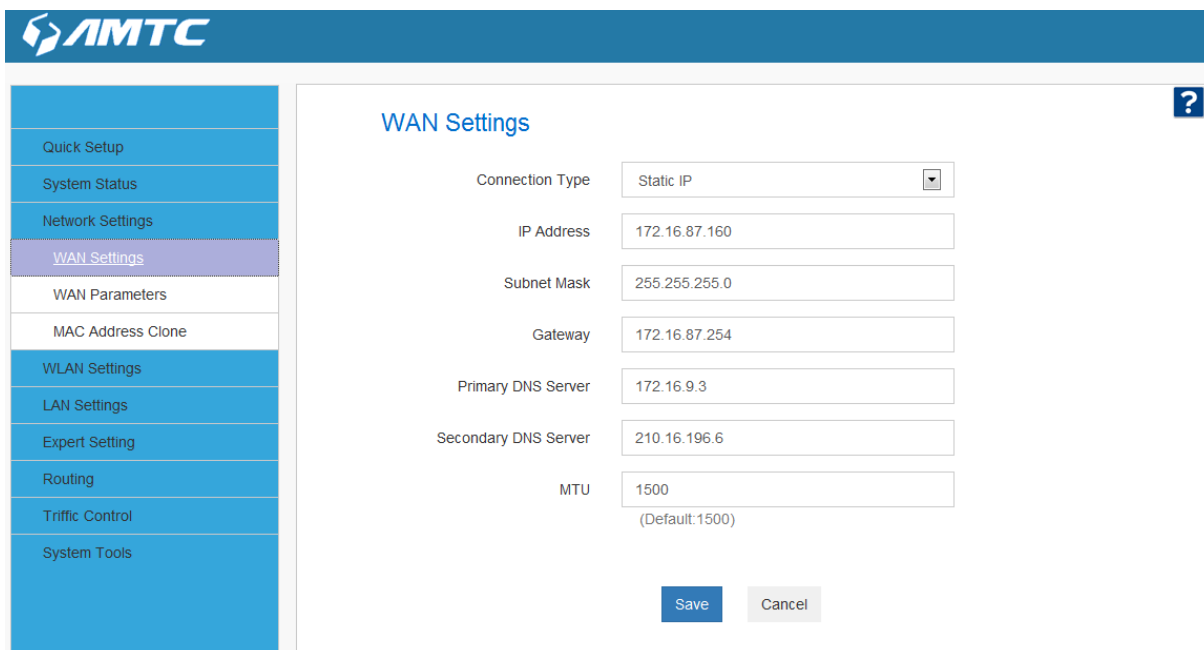
Click “**Network Settings**” enter the Network setup web page, in this page you can set “**WAN Settings**”, “**WAN Parameters**”, “**MAC Address Clone**”.

3.4.1 WAN Settings

Plug Internet cable to PW5002 WAN port.

Set Steps:

- ① Enter the web and Select “**Network Settings**”.
- ② Click the “**WAN Settings**”.



The screenshot shows the AMTC web interface for WAN Settings. On the left is a navigation menu with options: Quick Setup, System Status, Network Settings, WAN Settings (highlighted), WAN Parameters, MAC Address Clone, WLAN Settings, LAN Settings, Expert Setting, Routing, Traffic Control, and System Tools. The main content area is titled 'WAN Settings' and contains the following fields:

Connection Type	Static IP
IP Address	172.16.87.160
Subnet Mask	255.255.255.0
Gateway	172.16.87.254
Primary DNS Server	172.16.9.3
Secondary DNS Server	210.16.196.6
MTU	1500 (Default:1500)

At the bottom of the form are two buttons: 'Save' and 'Cancel'.

Parameters Specification:

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

1、 Configuration the Internet access

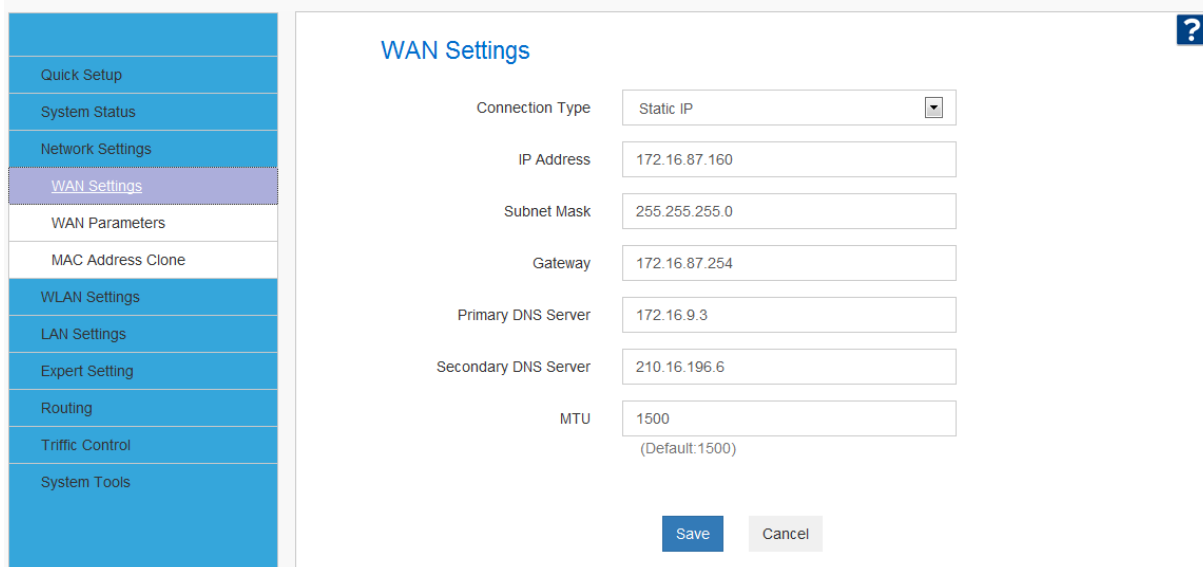
Support Static IP mode、 Dynamic IP(DHCP)、 PPOE.

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.



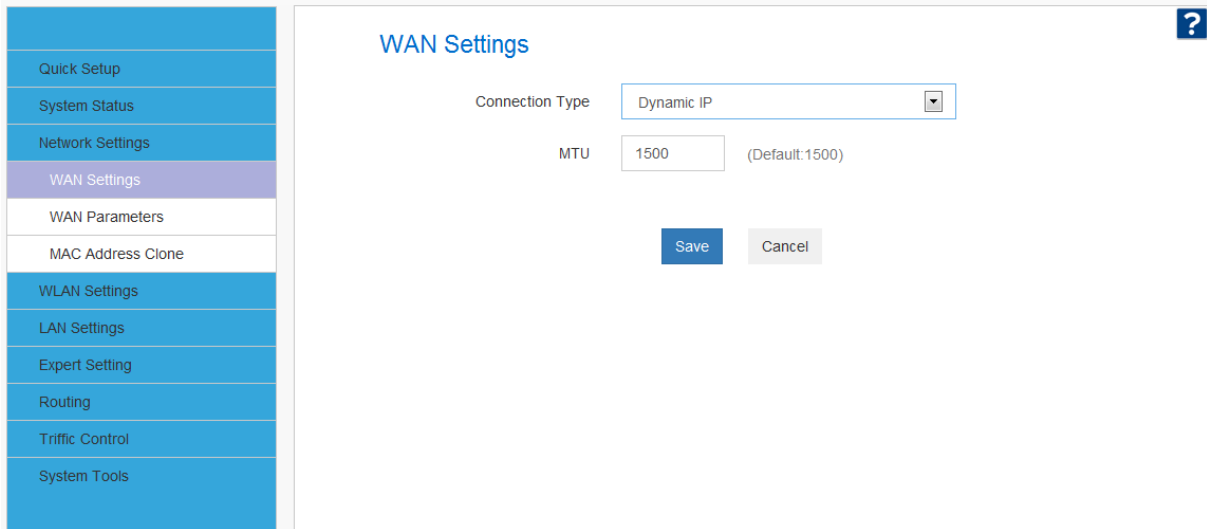
Tips

- 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.



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.



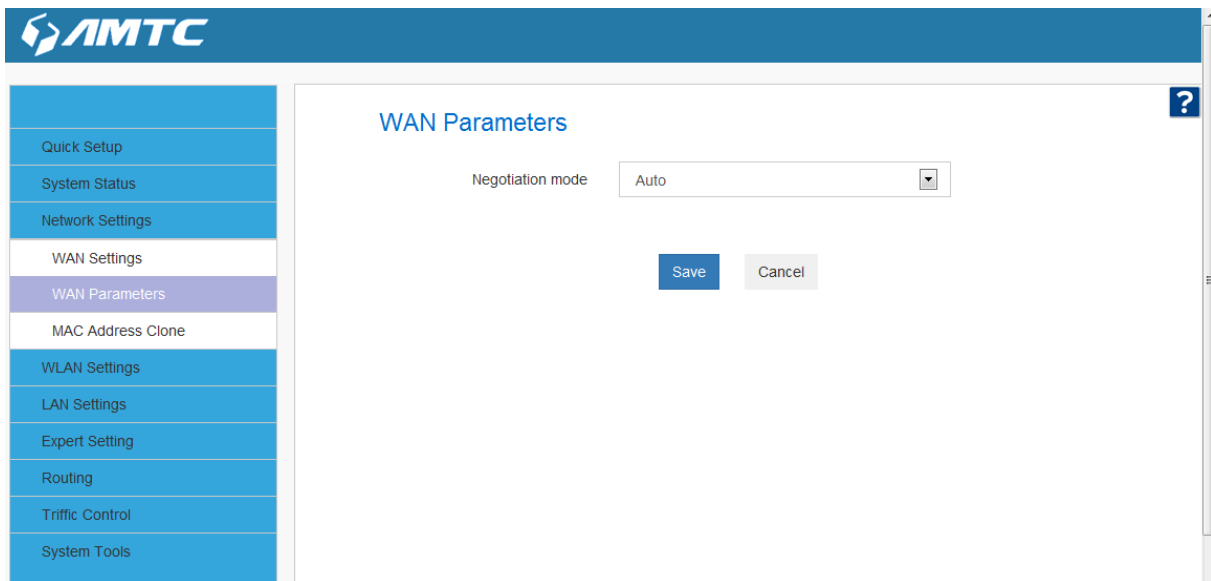
Note

- 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

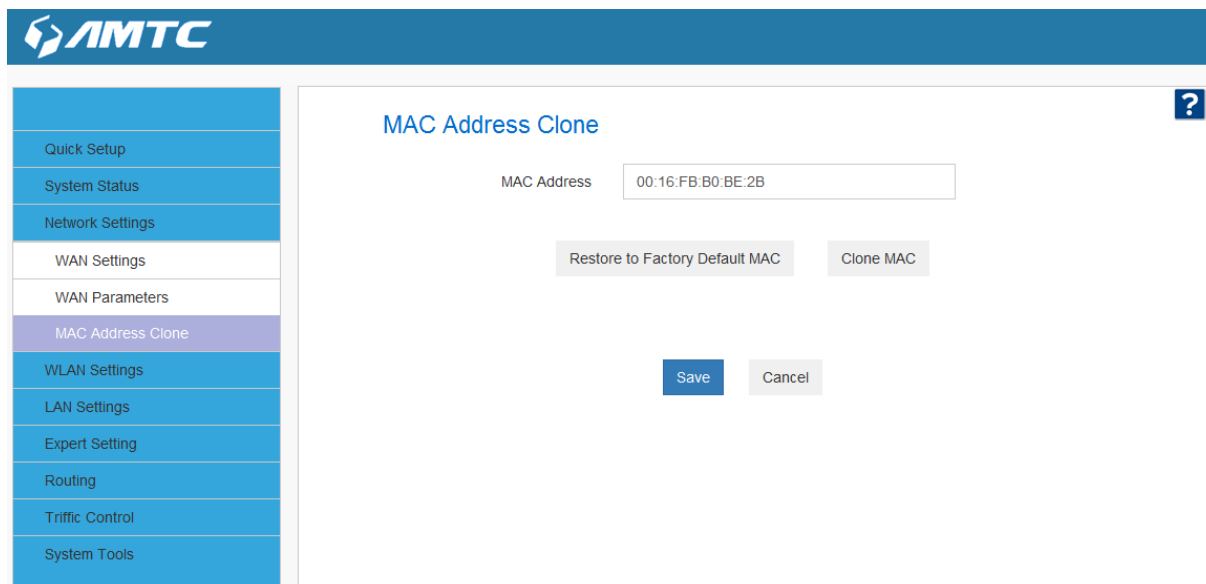
- 1> Click **“Restore to factory Default MAC”**
- 2> Click **Save** to save your settings.

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.



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

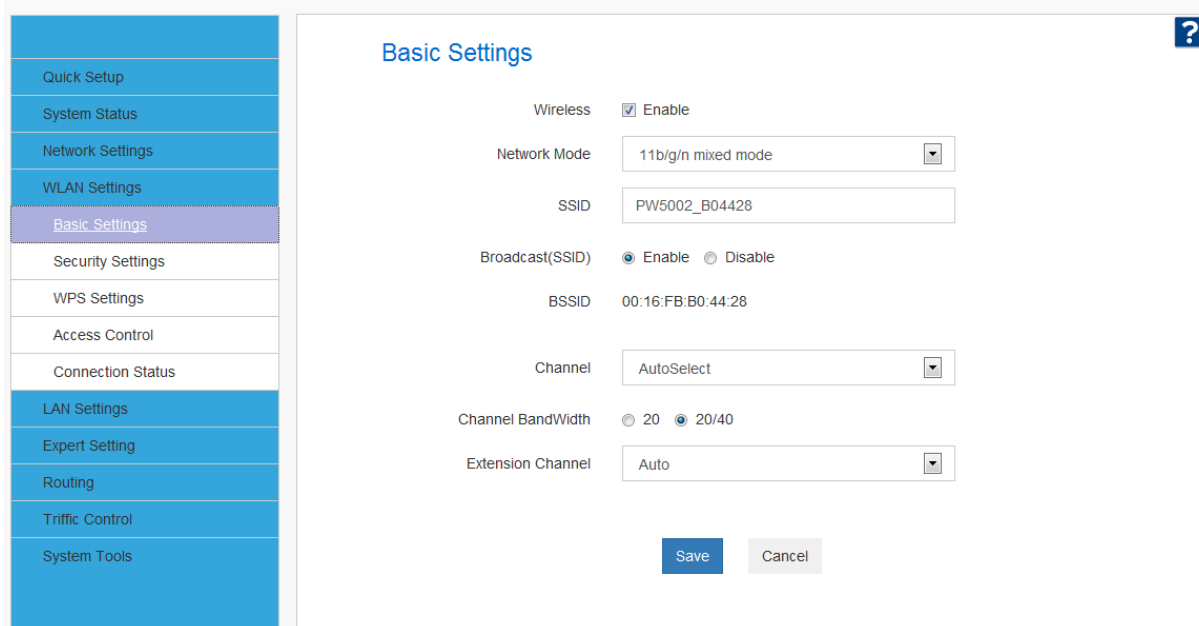
Click "**WLAN Settings**" enter the configure page , here you can configure "**Base Settings**", "**Security Settings**", "**WPS Settings**", "**Access Control**", "**Connection Status**".

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 **WR5002_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 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 Enable.
- The SSID must be entered.



Tips

1. The SSID is **PW5002_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.

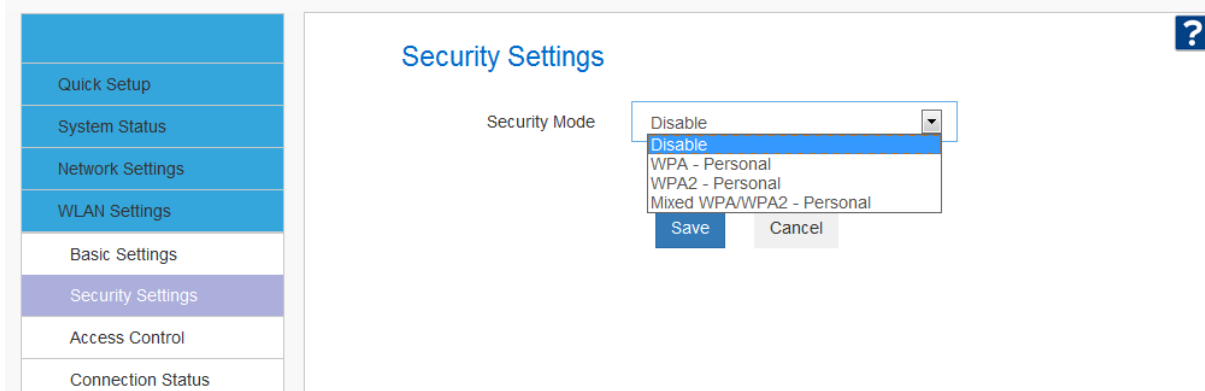
- **11b:** This network mode delivers wireless speed up to 11Mbps and is only compatible with 11b wireless clients.
- **11g:** This network mode delivers wireless speed up to 54Mbps and is only compatible with 11g wireless clients.
- **11b/g mixed:** This network mode delivers wireless speed up to 54Mbps 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

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.



Parameters Specification:

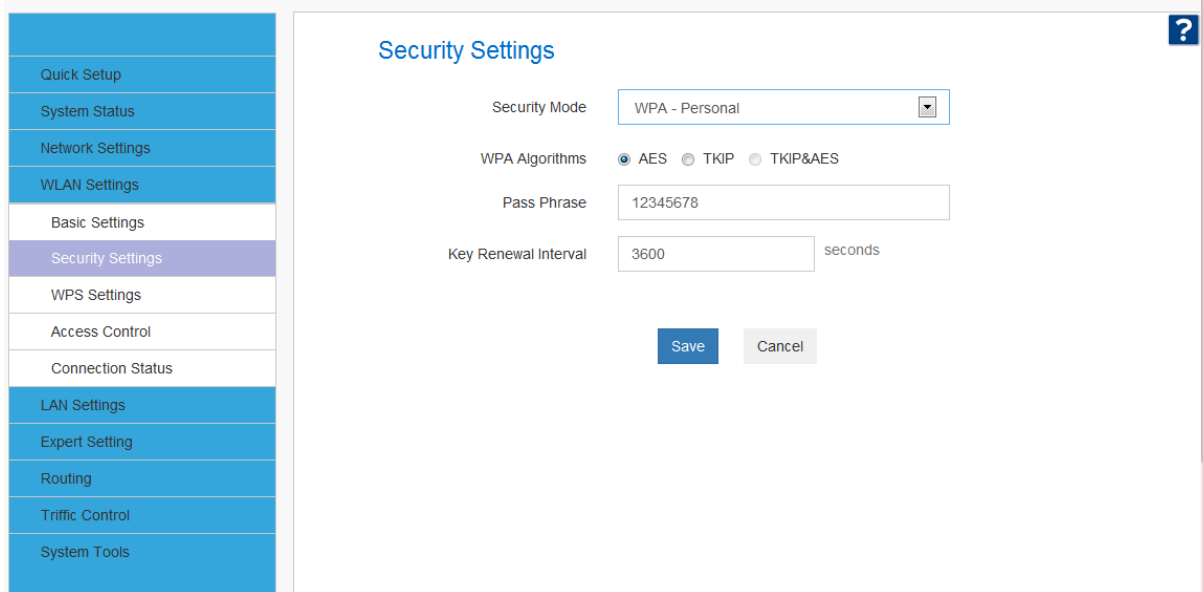
- **Security mode:** WPA – Personal、WPA2 – Personal、Mixed WPA/WPA2 – Personal.

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.



Parameters Specification:

- **WPA Algorithms:** Wi-Fi Protected Access Algorithms.
- **Pass Phrase:** The default is 123456.



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 to 300Mbps.
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 WPS Settings

Set Steps:

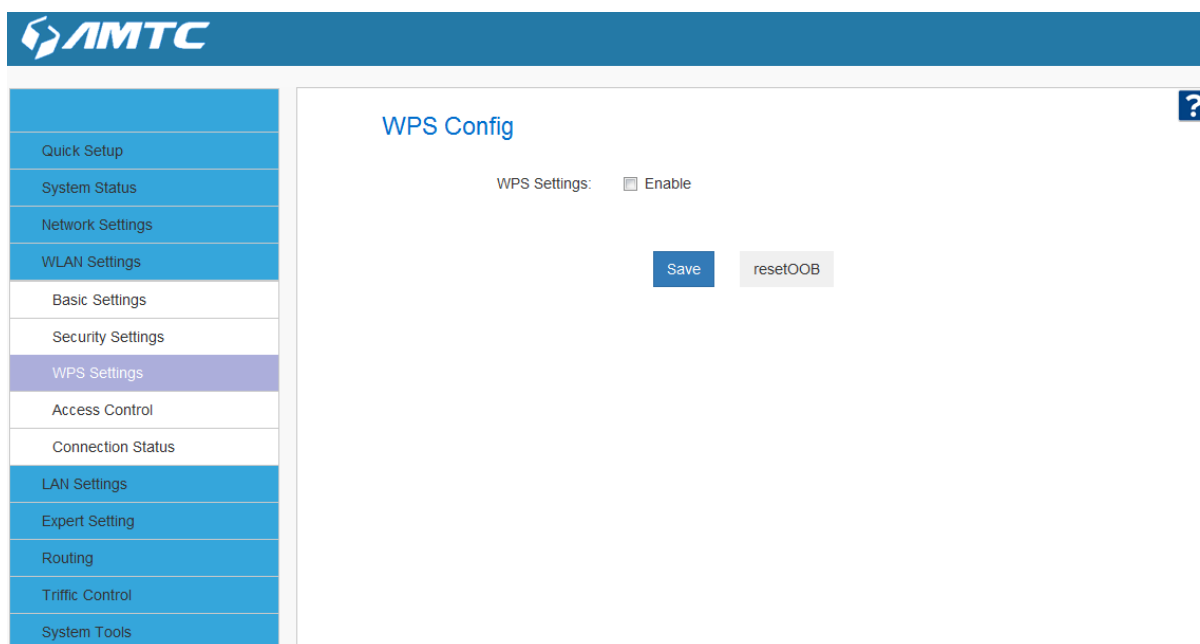
- ① Click “WLAN Settings”.
- ② Select “WPS Settings”.



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.



The screenshot shows the AMTC web interface for WPS configuration. On the left is a navigation menu with options: Quick Setup, System Status, Network Settings, WLAN Settings, Basic Settings, Security Settings, WPS Settings (highlighted), Access Control, Connection Status, LAN Settings, Expert Setting, Routing, Traffic Control, and System Tools. The main content area is titled 'WPS Config' and contains a 'WPS Settings' section with a checkbox labeled 'Enable' which is currently unchecked. Below this are two buttons: 'Save' and 'resetOOB'. A help icon (?) is visible in the top right corner of the main content area.

Parameters Specification:

The WPS provides two methods: PBC and PIN to achieve the function it provides

- **PBC:** Using routers and physical or logical button on a wireless device to connect WPS.
- **PIN:** Using routers and PIN for WPS connection on a wireless device.

You have four methods to connect WPS:

1、 Use the PBC function on the WPS management page to connect:

- ① Choice “**PBC**”
- ② Click “**Save**”
- ③ 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.

2、 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

3、 Using wireless network card 8bit PIN code

- ① Click “**Enable**”
- ② Select “**PIN**”
- ③ Enter “**PIN code**”
- ④ Click “**Save**”
- ⑤ 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

4、 Using the 8bit code on router sticker on the back.

- ① Click “**Enable**”
- ② Select “**PIN**”
- ③ Enter “**PIN code**”
- ④ The router WPS/PIN function opened, In the wireless client devices use the WPS/PIN mode, enter 8bit PIN code connect to your wireless signal



resetOOB:

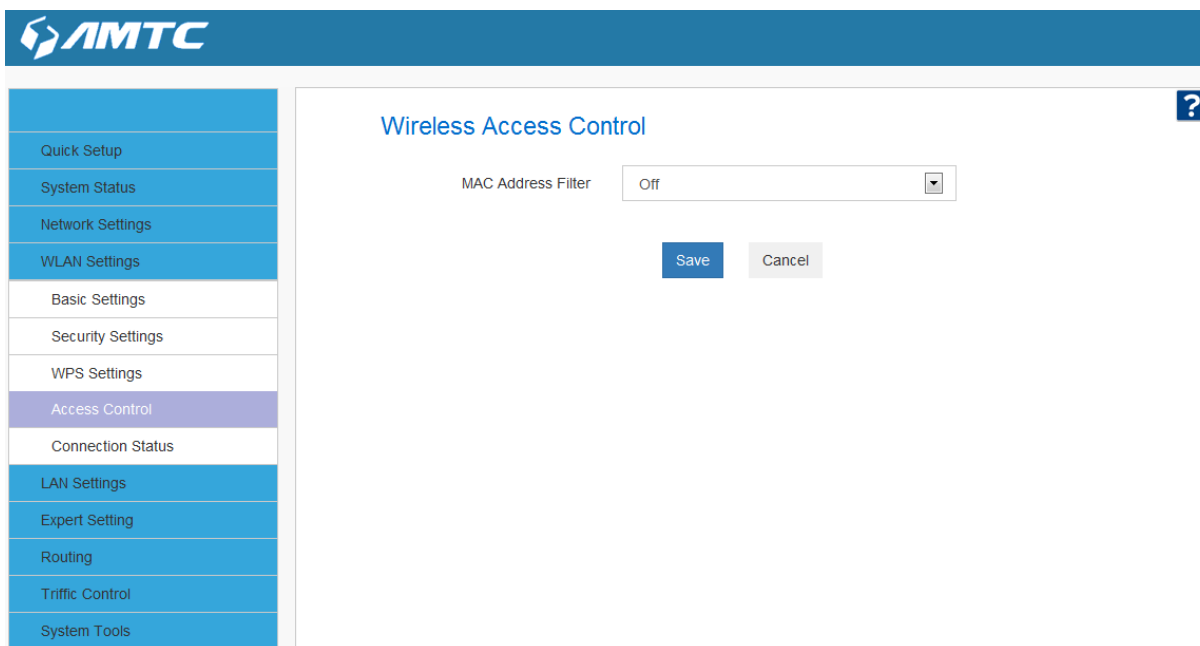
- The router wireless SSID, safe mode resumed to not configured mode. Make the WPS reset the SSID, Encryption and password, after the completion of the reset, the router's SSID is factory default, safe mode is unencrypted.
-

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:

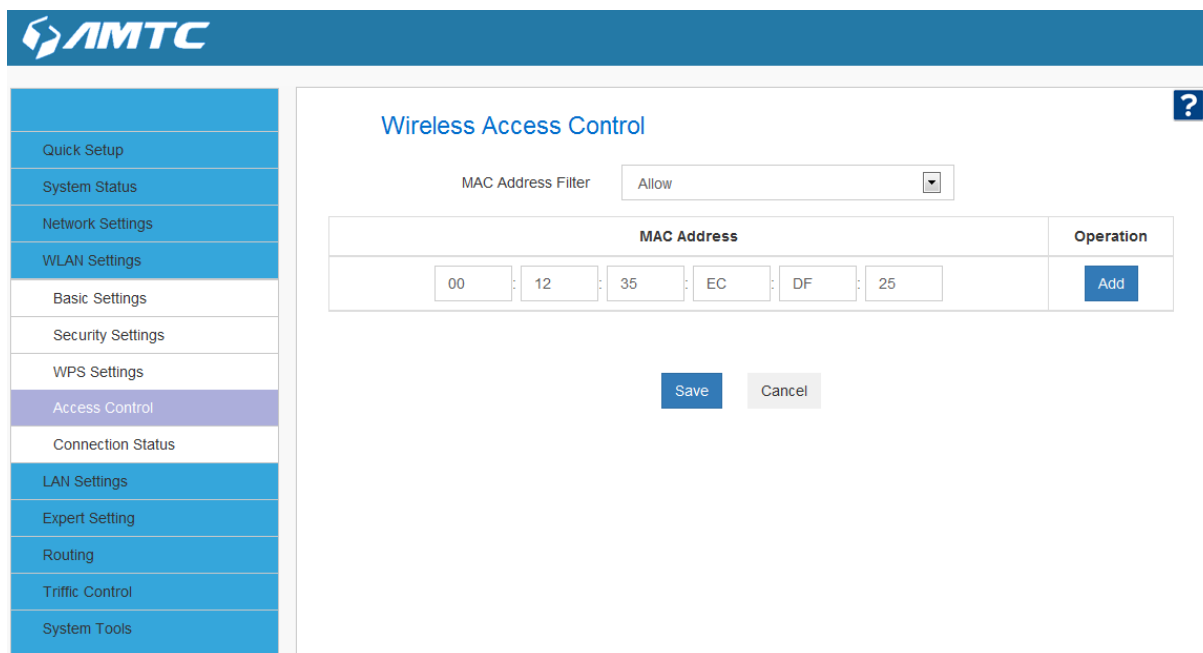
➤ The Wireless Access Control is based on the MAC address of the wireless adapter to determine whether it communicates with the Router or not;

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.

The screenshot shows the AMTC web interface. On the left is a navigation menu with items: Quick Setup, System Status, Network Settings, WLAN Settings, Basic Settings, Security Settings, WPS Settings, Access Control, Connection Status (highlighted), LAN Settings, Expert Setting, Routing, Traffic Control, and System Tools. The main content area is titled 'Wireless Connection Status' and contains the text 'The Current Wireless Access List:' followed by a 'Refresh' button. Below this is a table with three columns: 'NO.', 'MAC', and 'Bandwidth'. The table is currently empty.



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

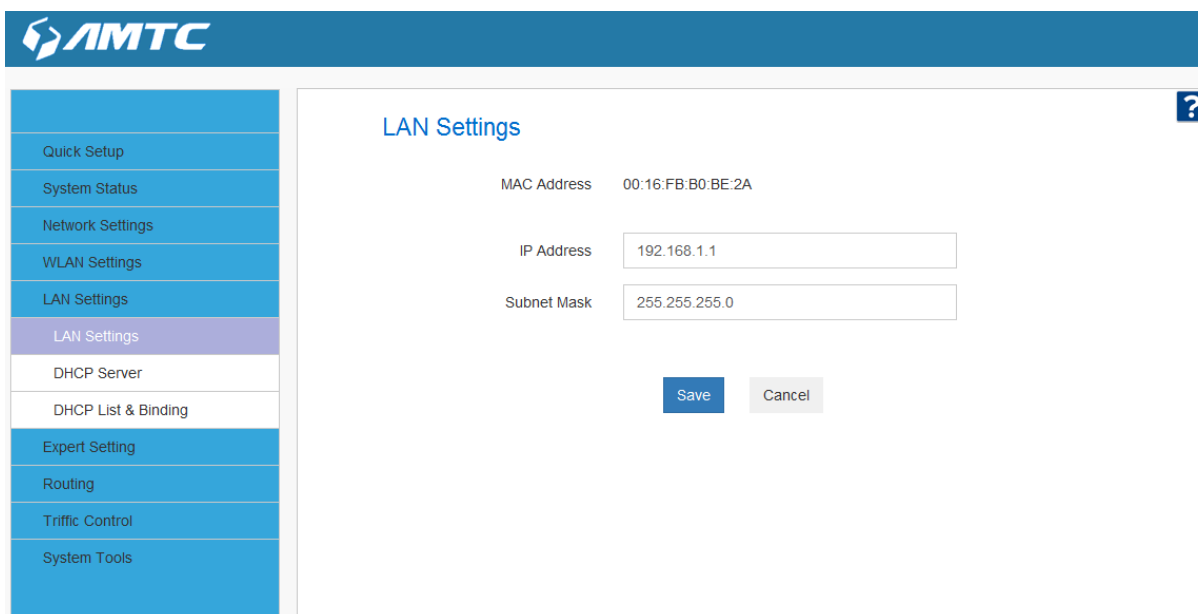
Click “LAN Settings” enter the LAN Settings page, here you can configure LAN port info and DHCP Server and DHCP List & Binding.

3.6.1 LAN 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.



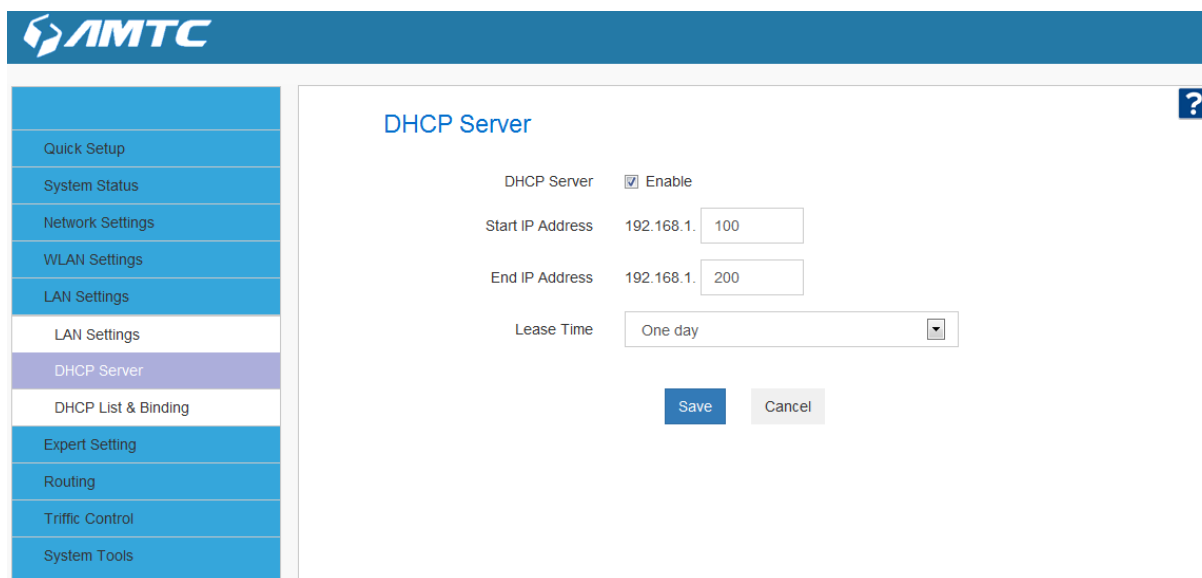
Tips

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.

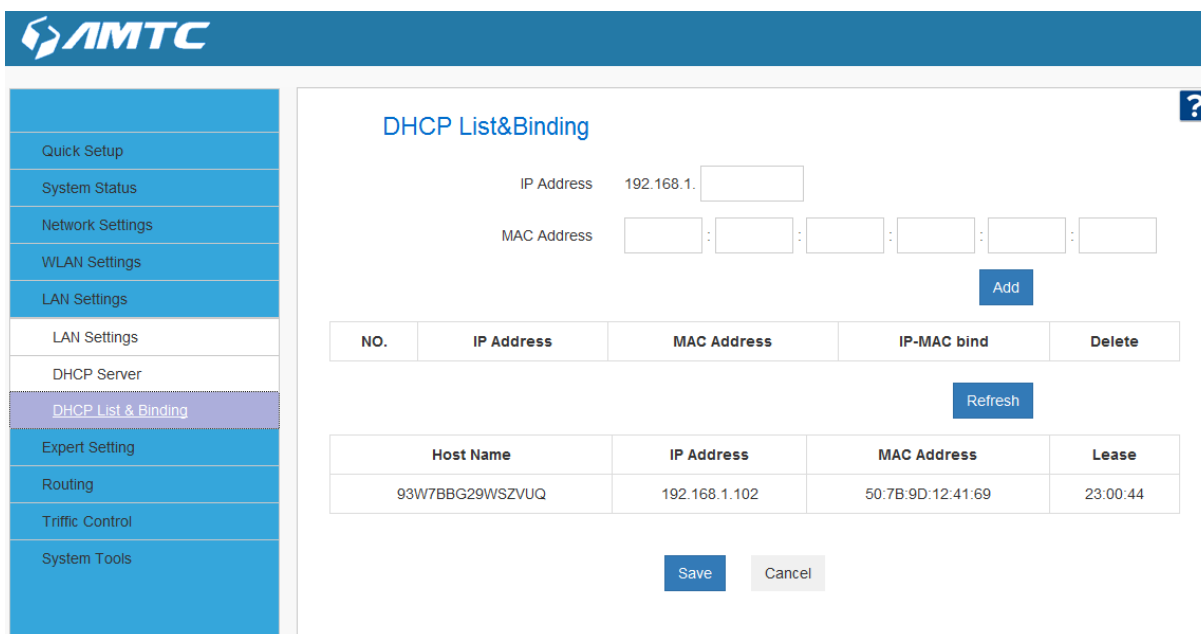
1. Lease time will be renewed automatically upon expiry. No additional configurations are needed.
2. If you are not an advanced user, the default DHCP server settings are recommended.

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".



The screenshot shows the AMTC web interface. On the left is a sidebar menu with the following items: Quick Setup, System Status, Network Settings, WLAN Settings, LAN Settings (highlighted), LAN Settings, DHCP Server, DHCP List & Binding (highlighted), Expert Setting, Routing, Traffic Control, and System Tools. The main content area is titled "DHCP List&Binding" and contains the following elements:

- IP Address: 192.168.1.
- MAC Address: : : : : :
-
- Table with columns: NO., IP Address, MAC Address, IP-MAC bind, Delete
-
- Table with columns: Host Name, IP Address, MAC Address, Lease
-

NO.	IP Address	MAC Address	IP-MAC bind	Delete

Host Name	IP Address	MAC Address	Lease
93W7BBG29WSZVUQ	192.168.1.102	50:7B:9D:12:41:69	23:00:44

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.

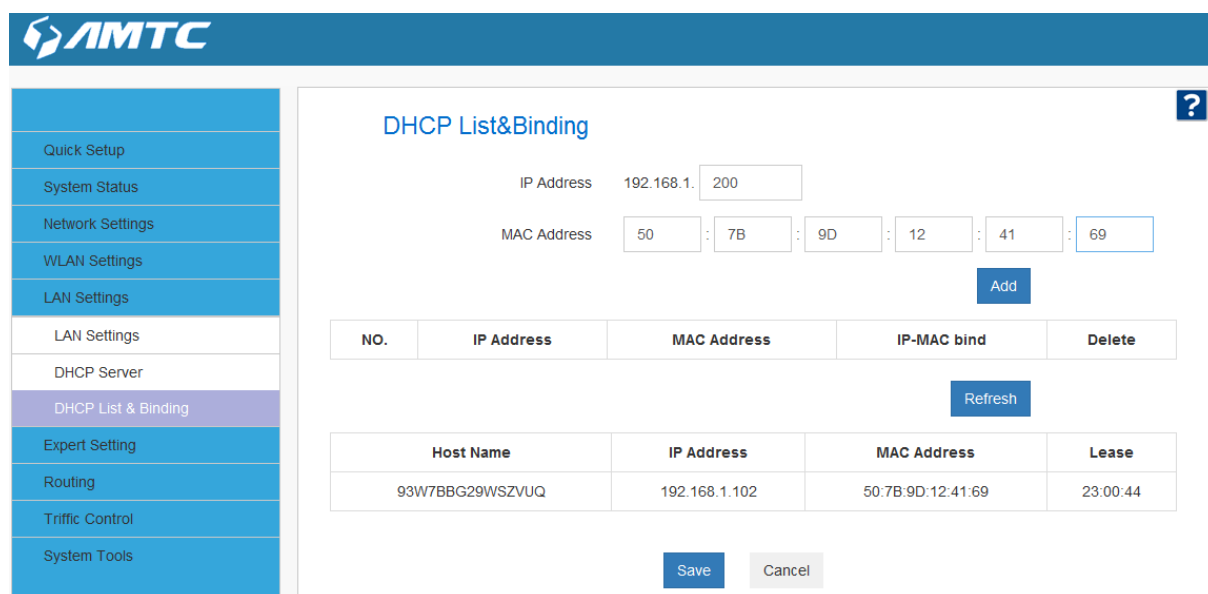


Tips

- 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



The screenshot shows the 'DHCP List&Binding' configuration page. The IP Address field is set to 192.168.1.200 and the MAC Address field is set to 50:7B:9D:12:41:69. An 'Add' button is visible below the MAC field. Below the form is a table with the following data:

NO.	IP Address	MAC Address	IP-MAC bind	Delete
	192.168.1.102	50:7B:9D:12:41:69		

Below the table is a 'Refresh' button. At the bottom of the page are 'Save' and 'Cancel' buttons.

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**”.

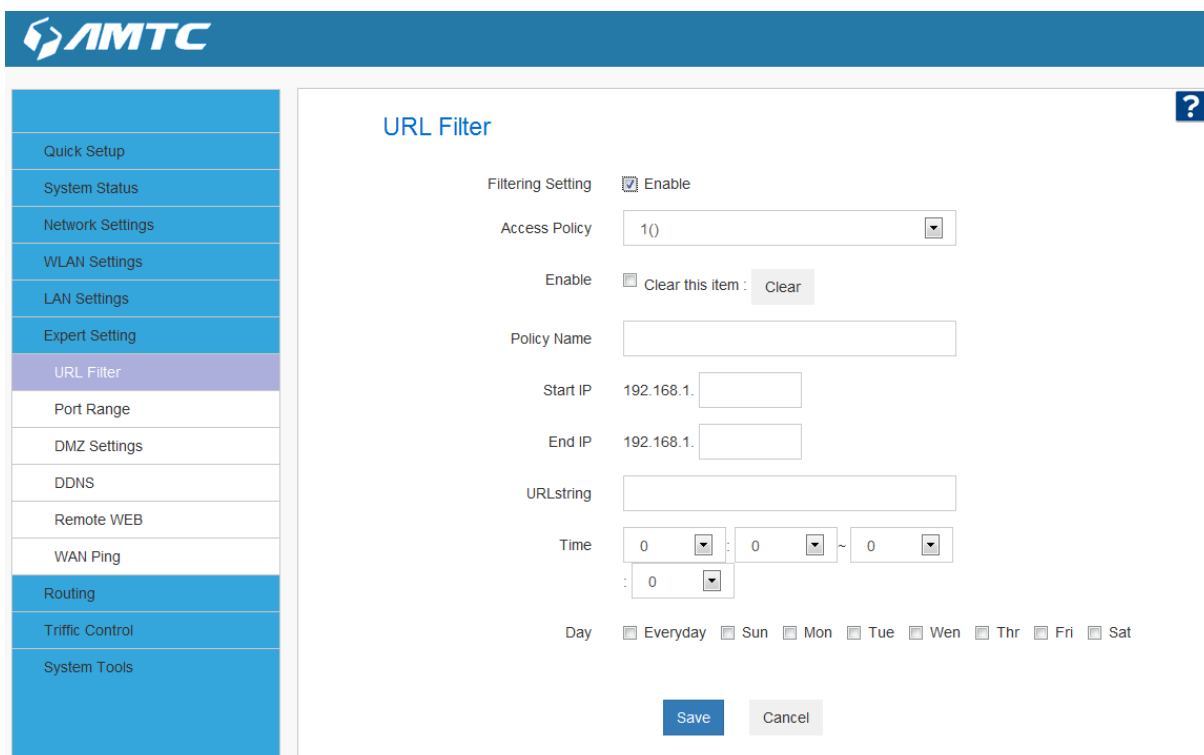
3.7.1 URL Filter

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**”.



The screenshot displays the AMTC web interface for configuring the URL Filter. On the left is a sidebar menu with options: Quick Setup, System Status, Network Settings, WLAN Settings, LAN Settings, Expert Setting, URL Filter (highlighted), Port Range, DMZ Settings, DDNS, Remote WEB, WAN Ping, Routing, Traffic Control, and System Tools. The main content area is titled "URL Filter" and contains the following settings:

- Filtering Setting: Enable
- Access Policy: 1() (dropdown menu)
- Enable: Clear this item : Clear
- Policy Name: (text input field)
- Start IP: 192.168.1. (text input field)
- End IP: 192.168.1. (text input field)
- URLstring: (text input field)
- Time: 0 : 0 ~ 0 (dropdown menus)
- Day: Everyday Sun Mon Tue Wen Thr Fri Sat

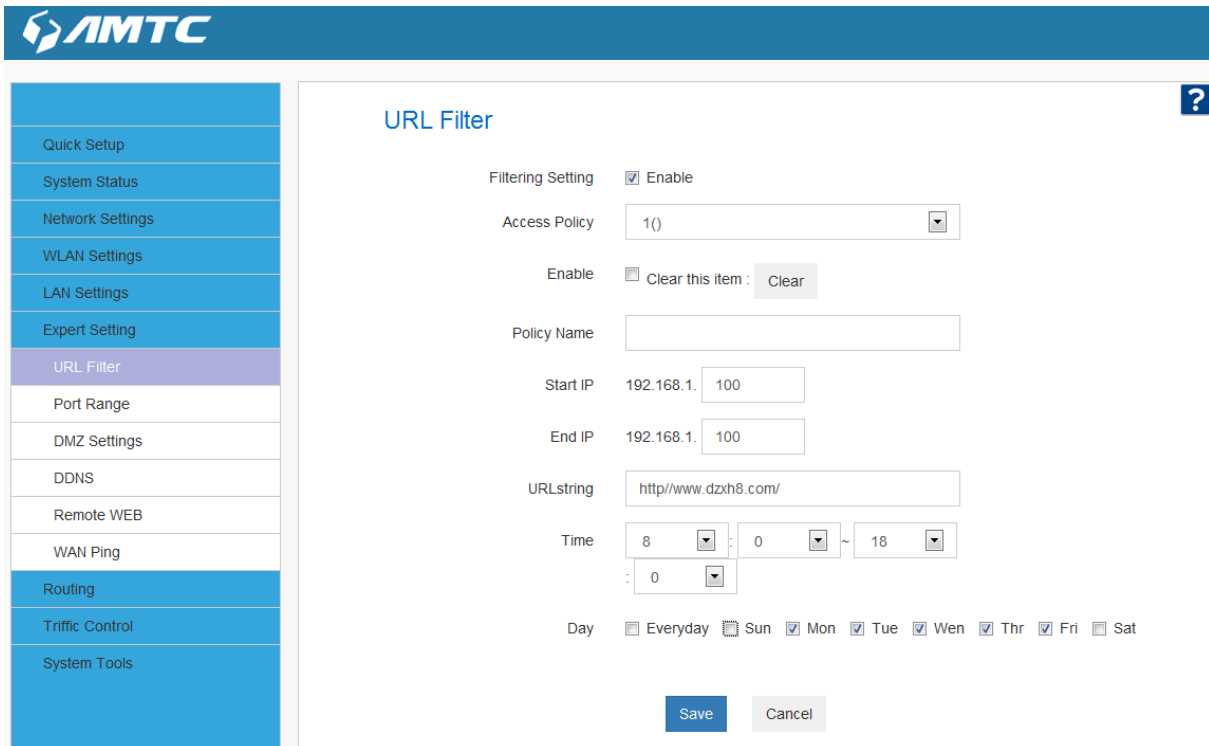
At the bottom of the configuration area are "Save" and "Cancel" buttons.

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.

Quick Setup

System Status

Network Settings

WLAN Settings

LAN Settings

Expert Setting

URL Filter

Port Range

DMZ Settings

DDNS

Remote WEB

WAN Ping

Routing

Traffic Control

System Tools

Virtual Server ?

ID	Start Port-End Port	To IP Address	Protocol	Enable	Delete
1.	<input type="text" value="21"/> - <input type="text" value="21"/>	192.168.1. <input type="text" value="100"/>	TCP <input type="text" value="v"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.	<input type="text"/> - <input type="text"/>	192.168.1. <input type="text"/>	TCP <input type="text" value="v"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="text"/> - <input type="text"/>	192.168.1. <input type="text"/>	TCP <input type="text" value="v"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	<input type="text"/> - <input type="text"/>	192.168.1. <input type="text"/>	TCP <input type="text" value="v"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	<input type="text"/> - <input type="text"/>	192.168.1. <input type="text"/>	TCP <input type="text" value="v"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	<input type="text"/> - <input type="text"/>	192.168.1. <input type="text"/>	TCP <input type="text" value="v"/>	<input type="checkbox"/>	<input type="checkbox"/>

Well-known Service Port Add to

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.

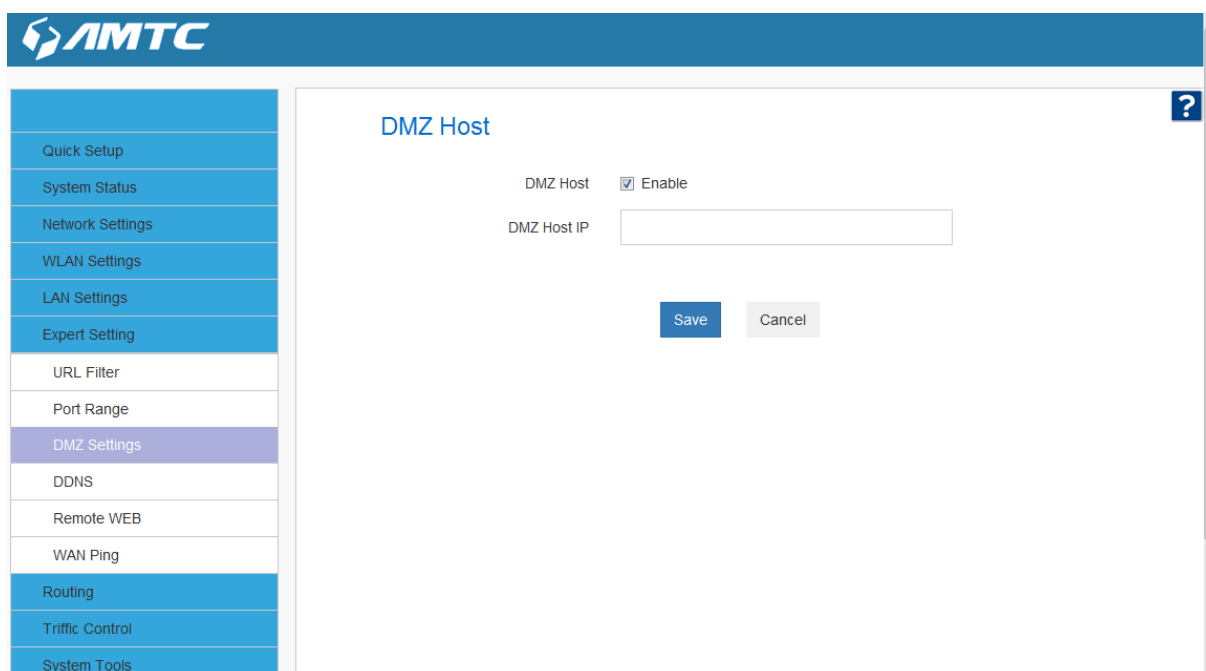
If your WAN IP address is 192.168.1.100 when accessing your FTP server from external network, your friends only need to enter [ftp:// 192.168.1.100:21](ftp://192.168.1.100:21) in their browsers.

3.7.3 DMZ Settings

Set Steps:

- ① Click **“Expert Settings”**.
- ② Select **“DMZ Settings”**.
- ③ DMZ Host **Enable**
- ④ Add a DMZ Host IP among 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.

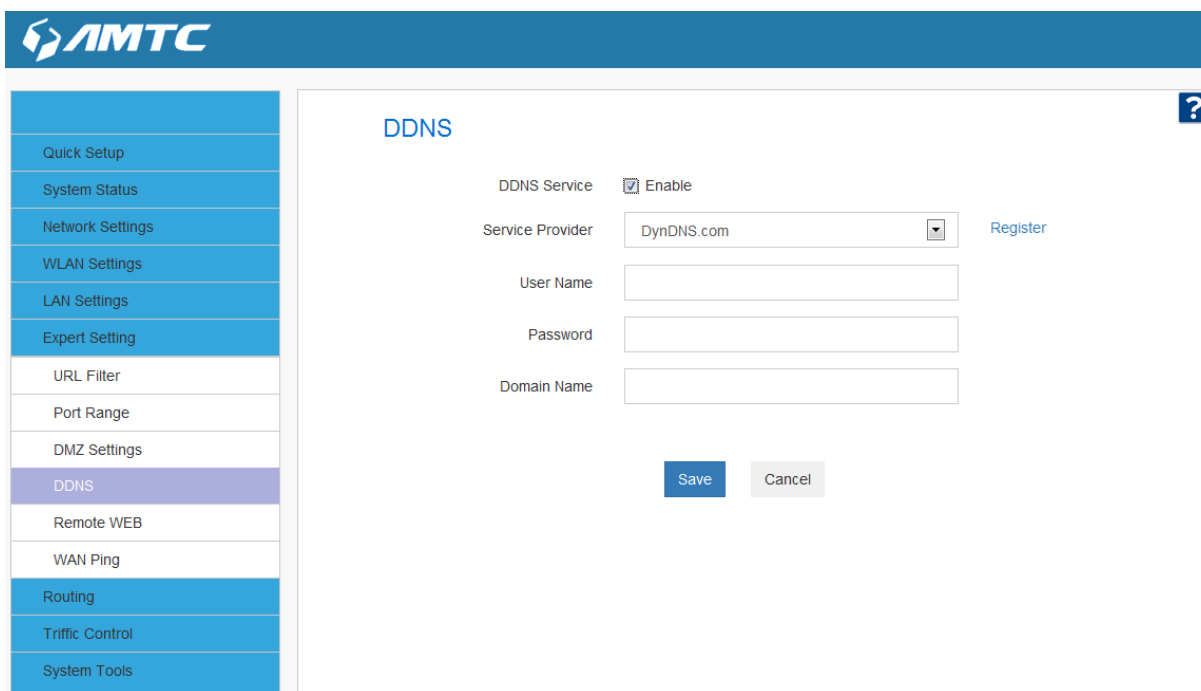
Set Steps:

- ① Click “**Expert Settings**”
- ② Select “**DNNS**”
- ③ DNNS Service **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



The screenshot shows the AMTC DDNS configuration interface. On the left is a navigation menu with options: Quick Setup, System Status, Network Settings, WLAN Settings, LAN Settings, Expert Setting, URL Filter, Port Range, DMZ Settings, DDNS (highlighted), Remote WEB, WAN Ping, Routing, Traffic Control, and System Tools. The main content area is titled 'DDNS' and contains the following fields and controls:

- DDNS Service:** A checkbox labeled 'Enable' which is checked.
- Service Provider:** A dropdown menu currently showing 'DynDNS.com' with a 'Register' link to its right.
- User Name:** An empty text input field.
- Password:** An empty text input field.
- Domain Name:** An empty text input field.
- Buttons:** 'Save' and 'Cancel' buttons at the bottom.

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.

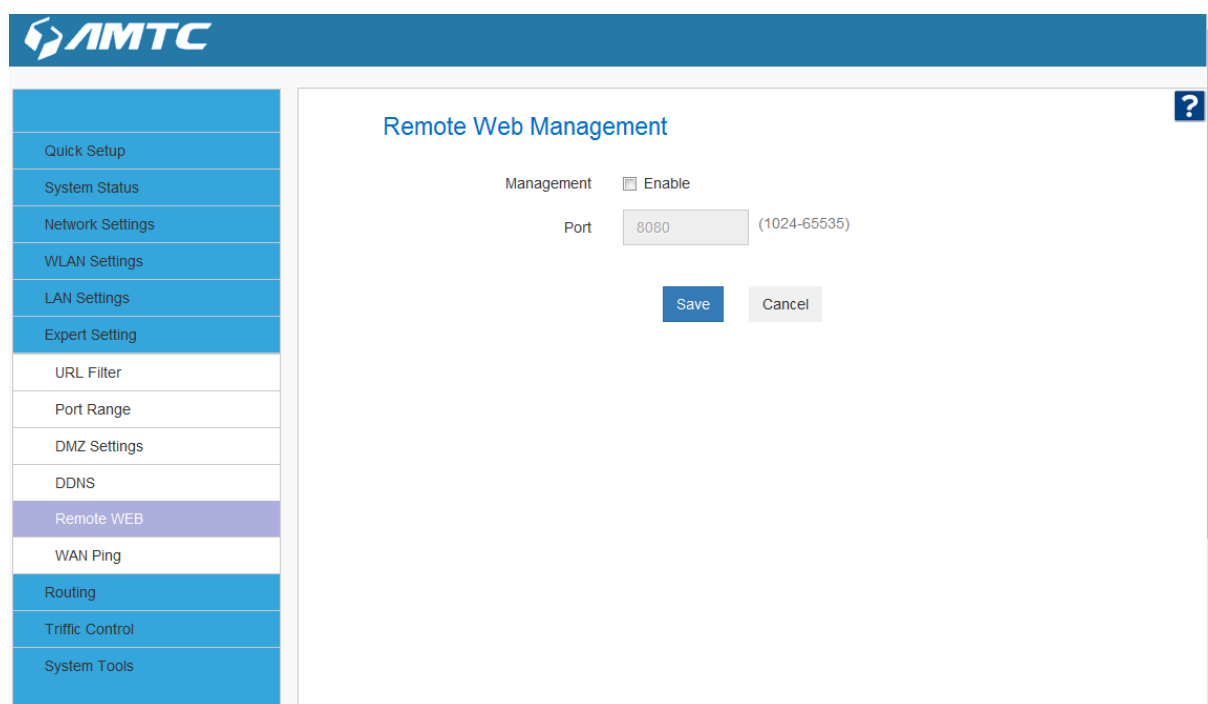
- **Domain name:** Enter the effective registered domain name.

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).

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

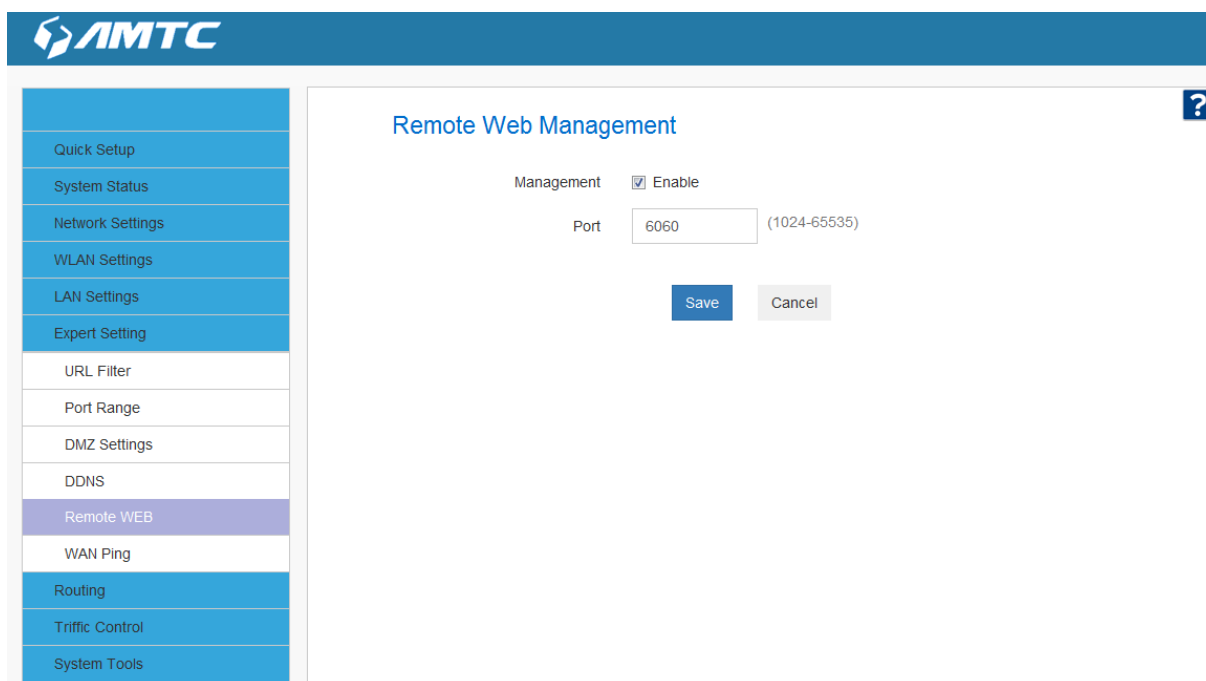
Remote Web Management Application Example:

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 Enter the IP Address here for example: 210.16.87.154
- ④ Click “**Save**” to save your settings.

In the PC 210.16.87.154 Type “[http:// 172.16.87.160:6060](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

1. IP Address: Here you can specify the IP address for remote management (When set to **0.0.0.0**, the device becomes remotely accessible to all the PCs on Internet or other external networks).

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

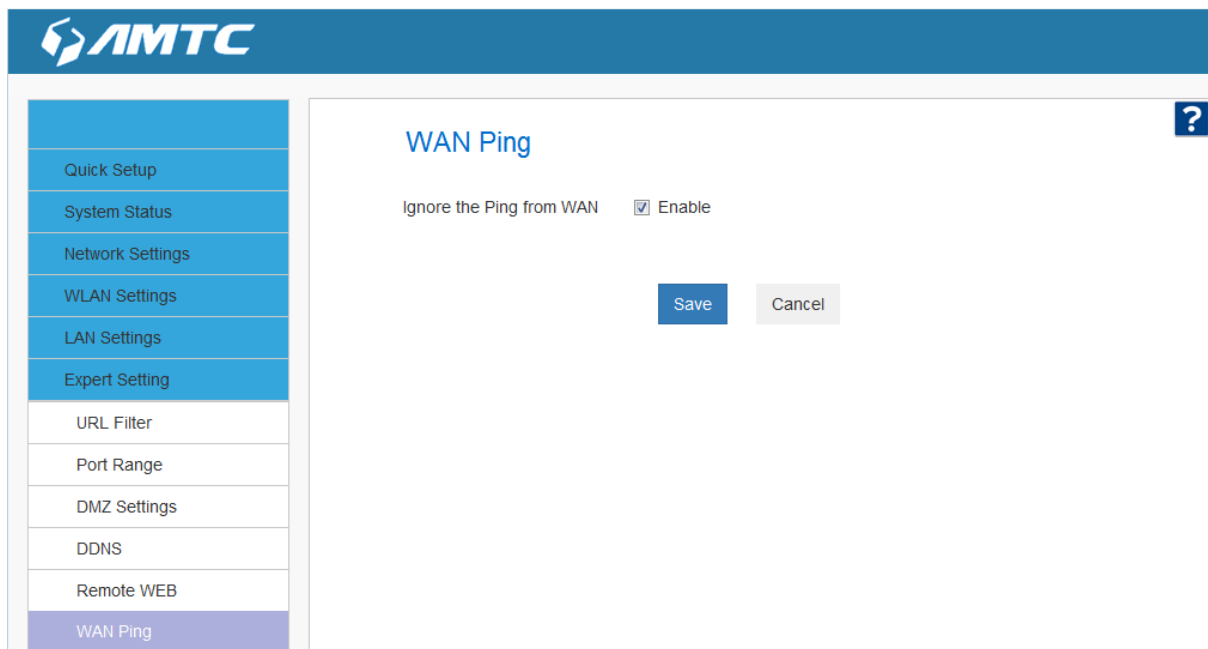
This can be changed

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 Click **“Expert Settings”**
- ② Click **“WAN Ping”**
- ③ Ignore the Ping from WAN **Enable**
- ④ Click **“Save”** to confirm



3.8 Routing

In this page you can view the routing table information.

Click **“Refresh”** to update

Destination IP	Subnet Mask	Gateway	Metric	Interface
192.168.1.0	255.255.255.0	192.168.1.0	0	eth0

- **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.

Set Steps:

- ① Click “**Traffic Control**” enter the configure page.
- ② Traffic Control **Enable**
- ③ Enter the IP Range, such as 192.168.101~192.168.101
- ④ Select Up/Down, Select **up** for example
- ⑤ Enter the Max Bandwidth, such as 1024
- ⑥ Select “**Apply**”
- ⑦ Click “**Add**”, the information you configured will show in the list.

Quick Setup

System Status

Network Settings

WLAN Settings

LAN Settings

Expert Setting

Routing

Traffic Control

Traffic Control

System Tools

Traffic Control Settings ?

Traffic Control Enable

IP Range 192.168.1. ~

Up/Down

Max Bandwidth (KByte/s)

Apply

Num	IP	Up/Down	Max BW	Apply	Edit	Del
1	192.168.1.101~192.168.1.101	UP	1024	√	<input type="button" value="Edit"/>	<input type="button" value="Del"/>

⑧ In the list table you can Edit or Delete the configure.

⑨ Click “**Save**” to save your settings.



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

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



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:

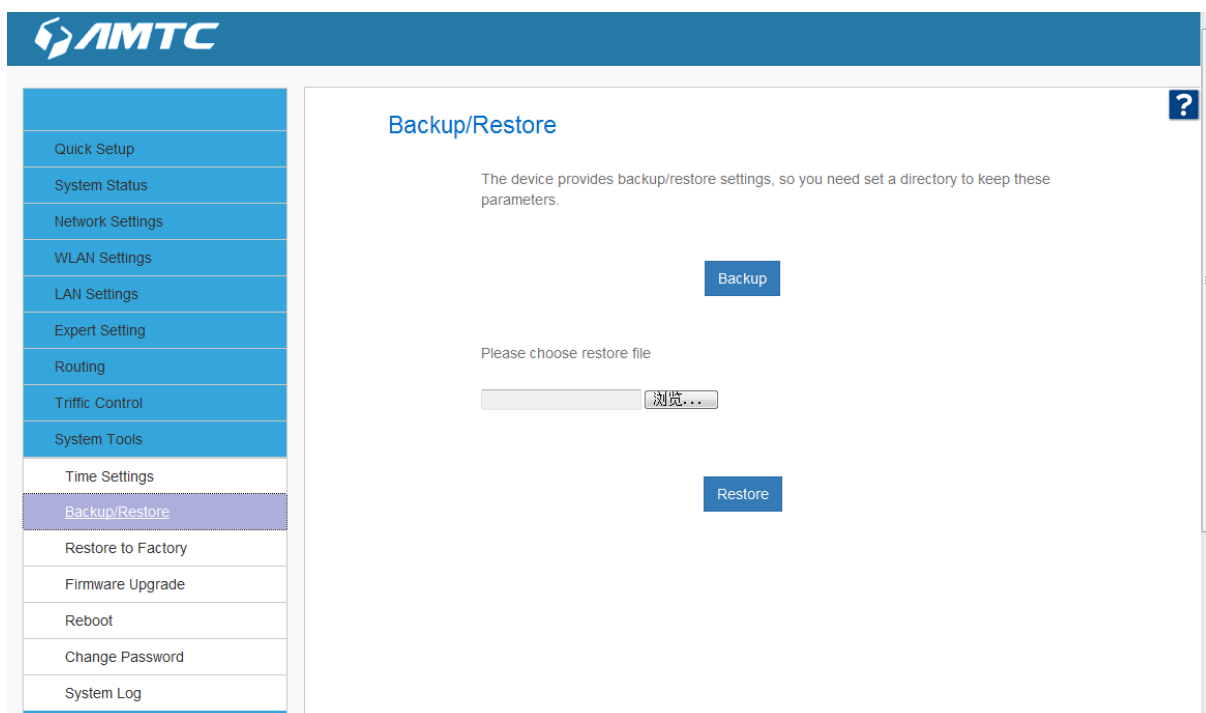
- ① Click “**System Tools**”.
 - ② Select “**Time Settings**”.
 - ③ Select Time Zone.
 - ④ You can enter the time and date manually or click “**Sync with your PC**”, synchronize automatically.
 - ⑤ Click **Save** to save you settings.
- **Synchronize with your PC:** Specify a time interval for periodic 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.

3.10.2 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

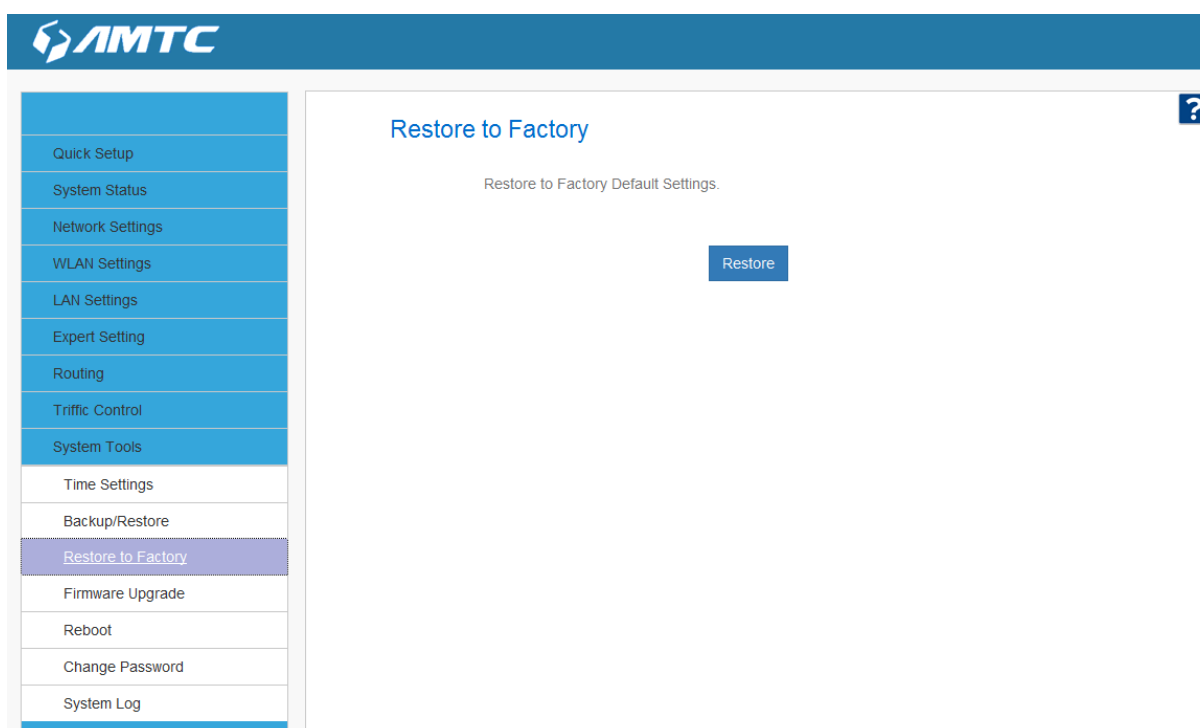
The default configuration file name is "RouterCfm.cfg". Do include the file name suffix of

“.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



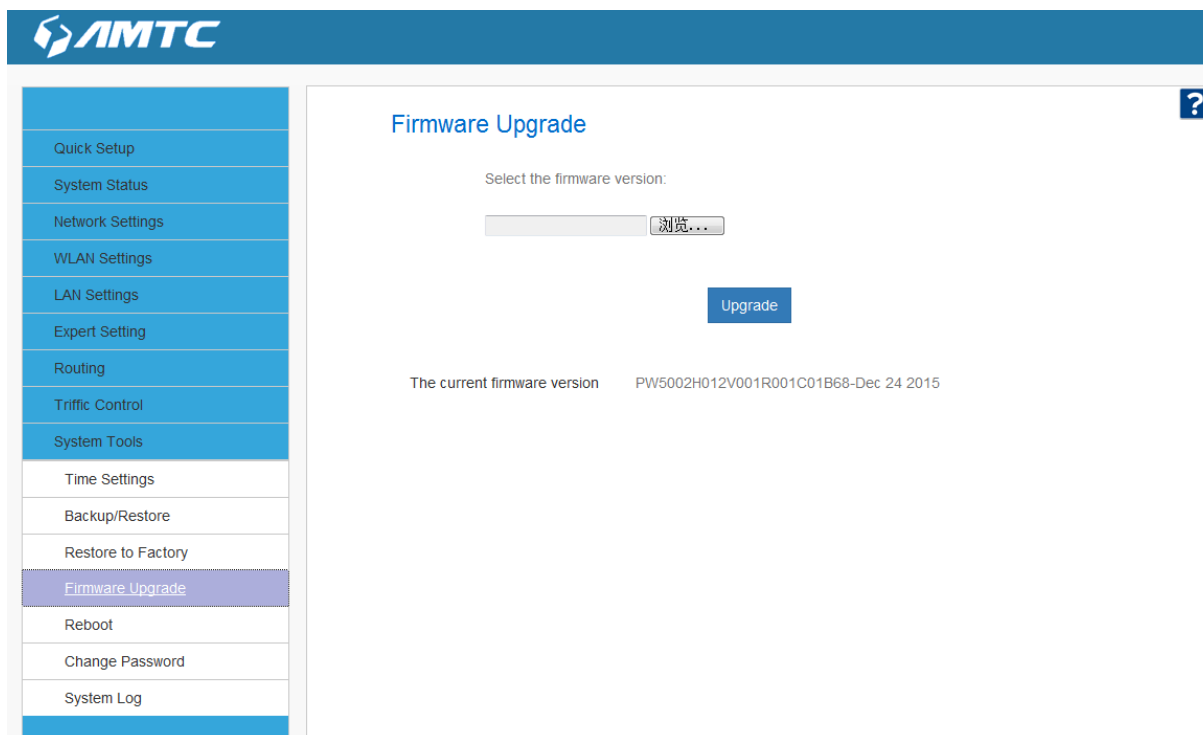
Note

- 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.
- DO NOT interrupt the power to the router when Restore to factory is in process otherwise the router may be permanently damaged.

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

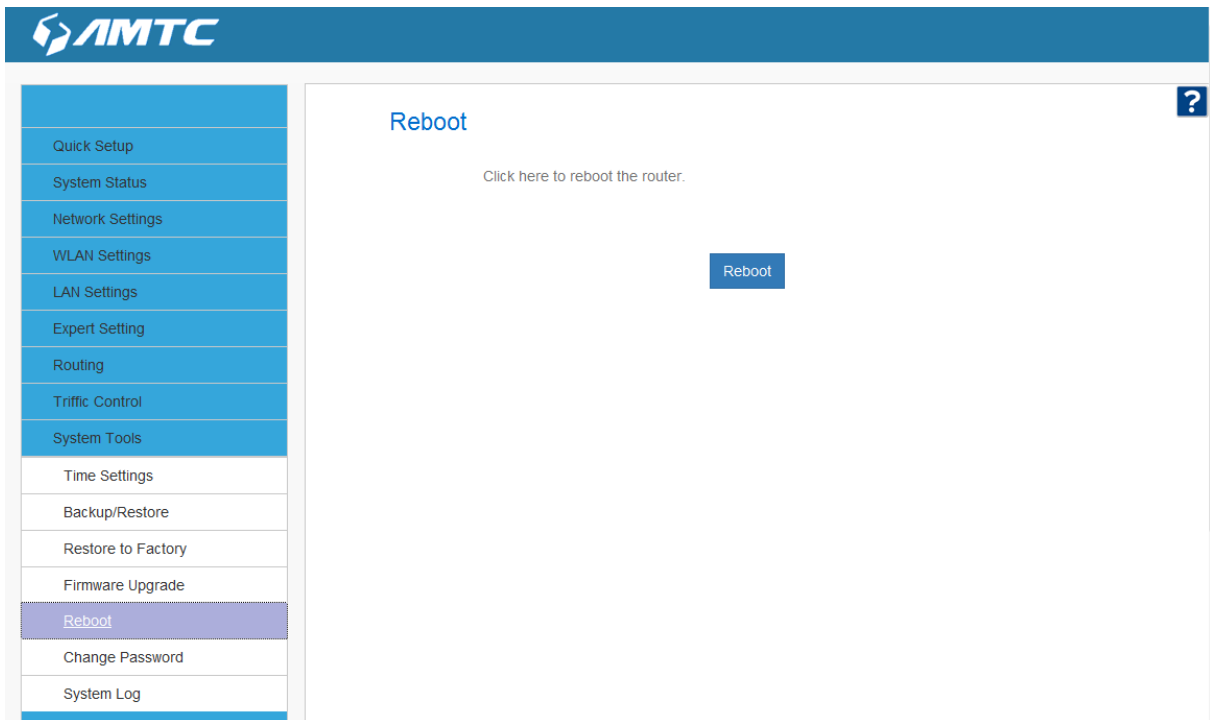
1. Before you upgrade the firmware, make sure you are having a correct firmware. A wrong

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

The screenshot shows the AMTC web interface. On the left is a navigation menu with items: Quick Setup, System Status, Network Settings, WLAN Settings, LAN Settings, Expert Setting, Routing, Traffic Control, System Tools (highlighted), Time Settings, Backup/Restore, Restore to Factory, Firmware Upgrade, Reboot, Change Password (highlighted), and System Log. The main content area is titled 'Change Password' and contains three input fields: 'Old Password' (with a red error message 'this is required'), 'New Password', and 'Confirm New Password'. At the bottom right are 'Save' and 'Cancel' buttons.

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.

System Log Refresh Clear ?

1	2015-01-01 08:00:03	[SYS]	Wlan start
2	2015-01-01 08:00:05	[HTTP]	Httpd start
3	2015-01-01 08:00:05	[SYS]	System start
4	2015-01-01 08:00:06	[SYS]	Ver 2.1.2.121 Fri Dec 25 10:04:02 2015
5	2015-01-01 08:00:36	[HTTP]	ifra305x: esw_linkmask=14 up
6	2015-01-01 08:01:13	[DHCPD]	sending OFFER of 192.168.1.101
7	2015-01-01 08:01:13	[DHCPD]	broadcasting packet to client
8	2015-01-01 08:01:13	[DHCPD]	Recive REQUEST
9	2015-01-01 08:01:13	[DHCPD]	Not my server ID
10	2015-01-01 08:02:30	[HTTP]	ifra305x: esw_linkmask=04 up

[1][2][3]

Set Steps:

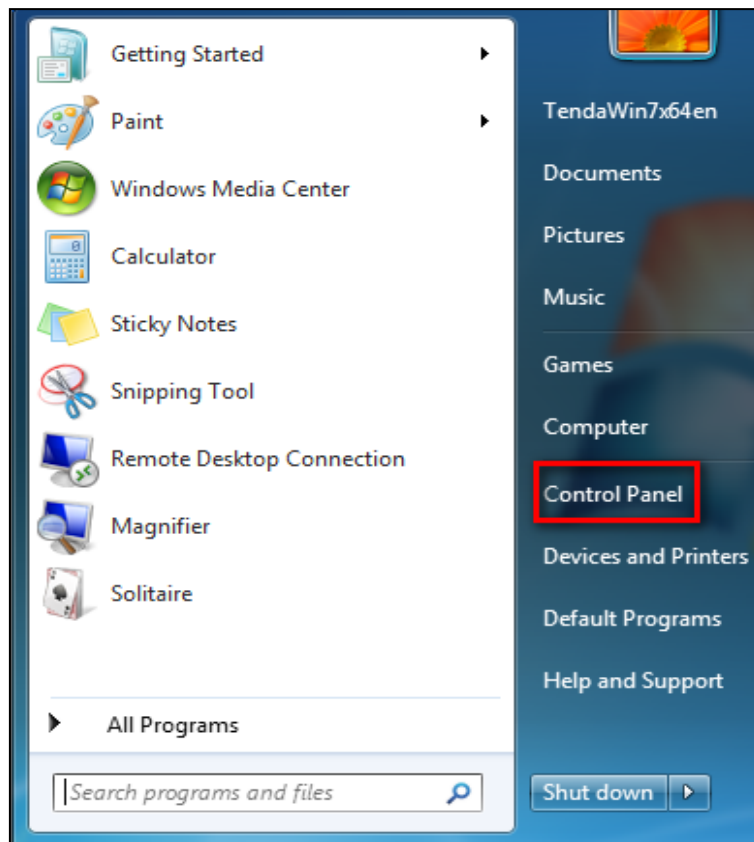
- ① Click **"System Tools"**
- ② Select **"System Log"**
- ③ Click **"Refresh"** can update the information
- ④ Click **"Clear"** to clear the screen

Appendix

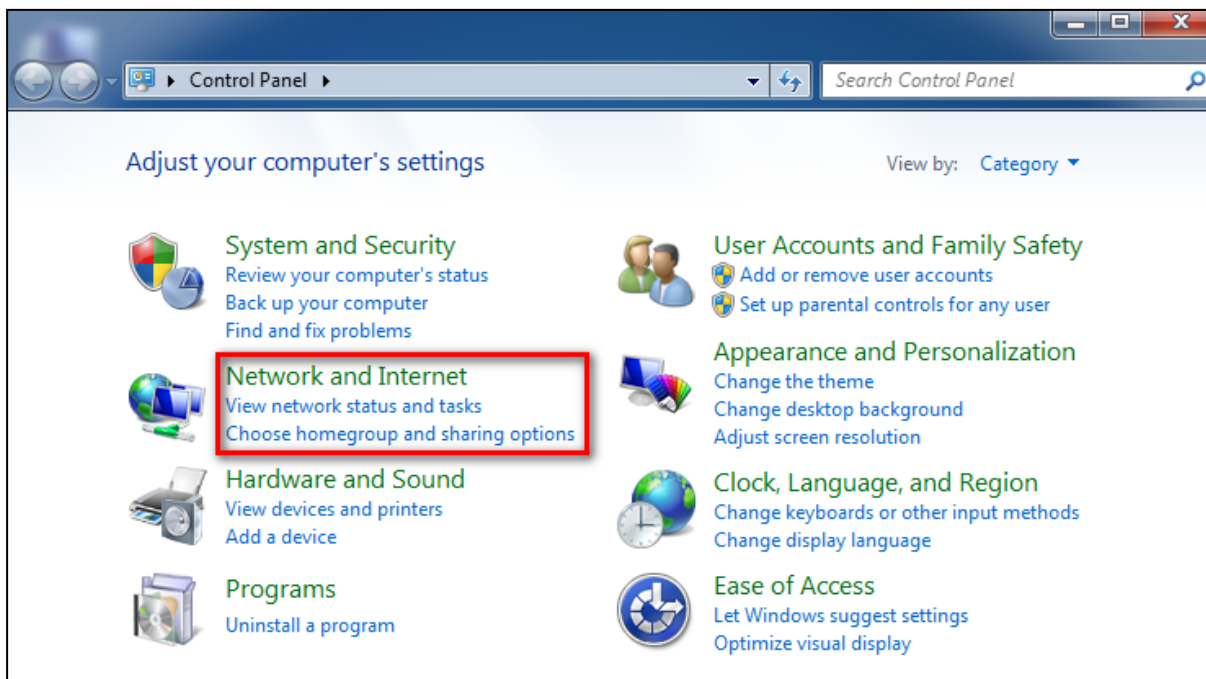
1 Configure PC TCP/IP Settings

Windows 7

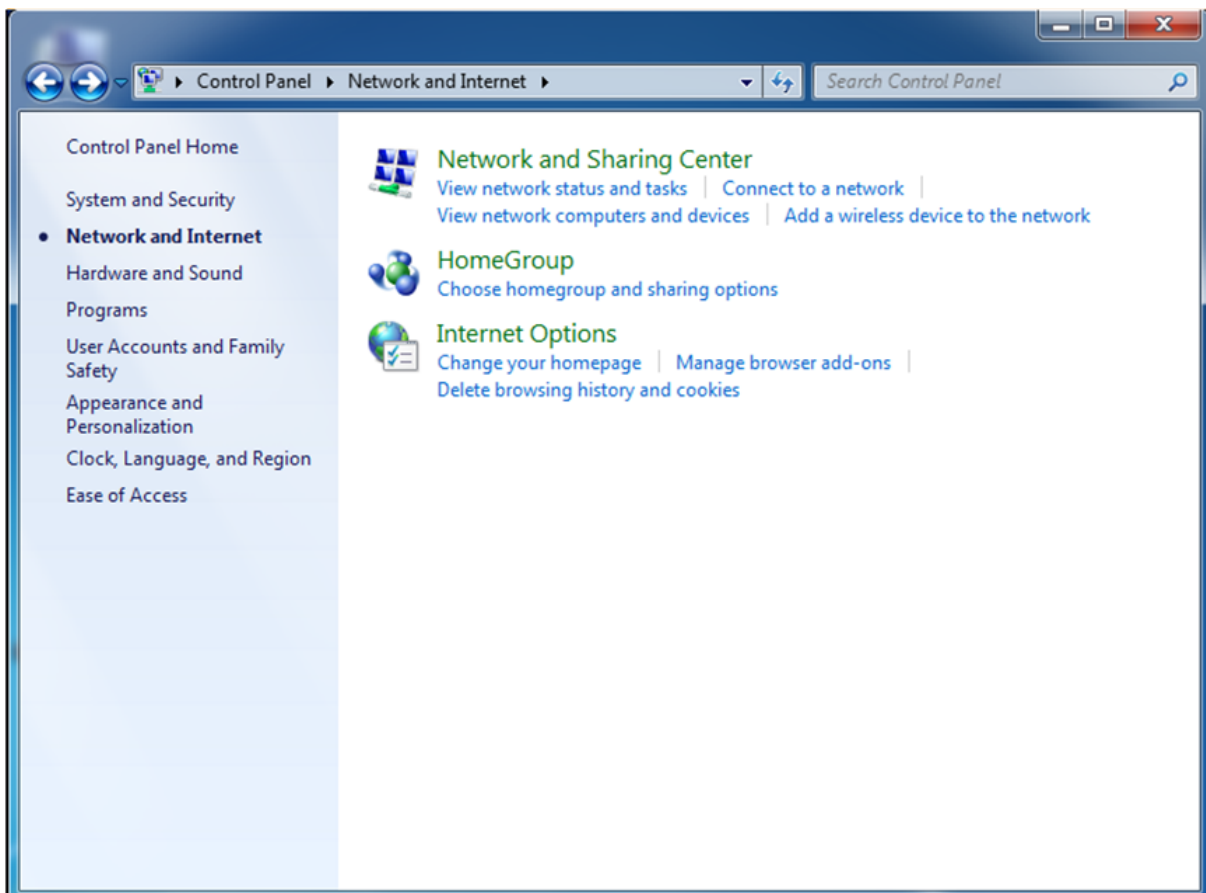
- 1 Click **Start -> Control Panel**.



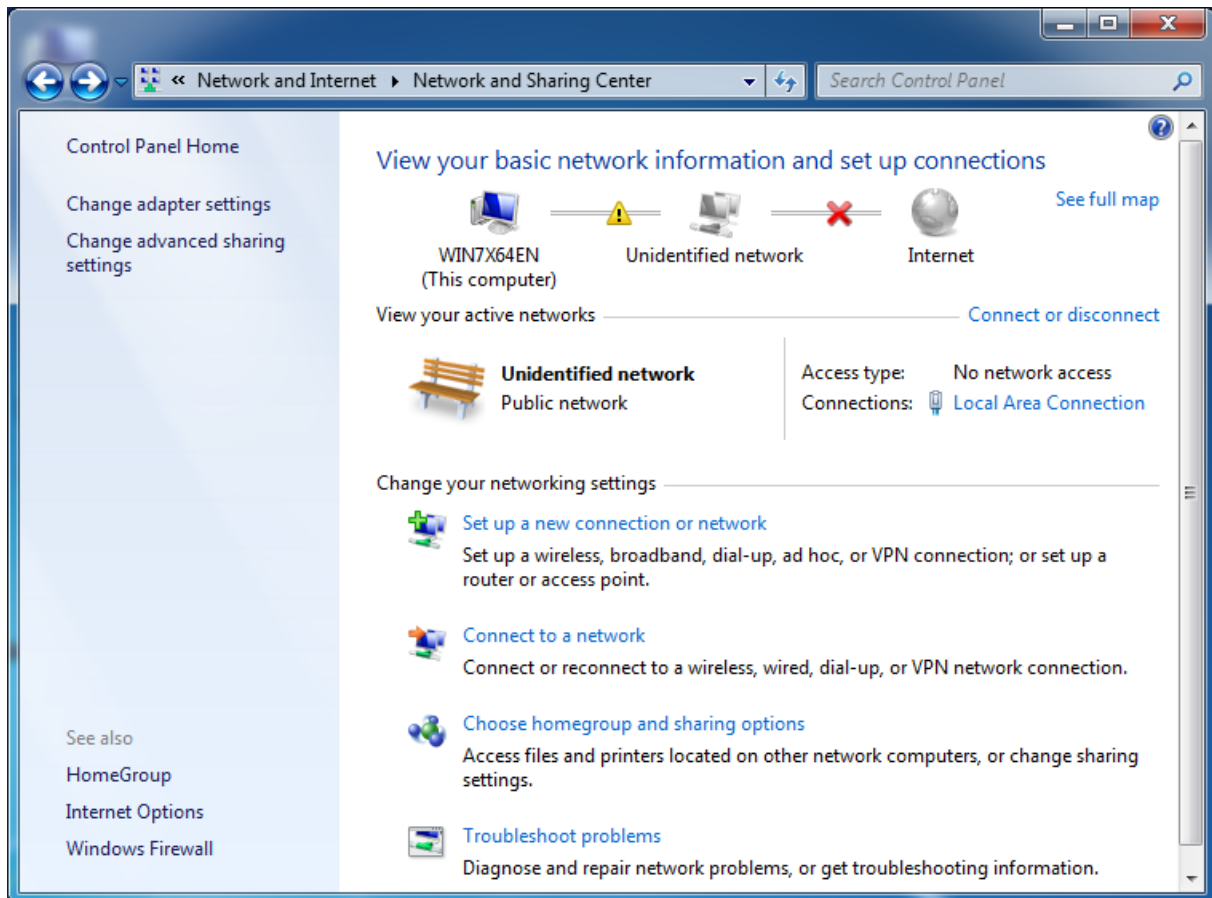
② Click **Network and Internet**.



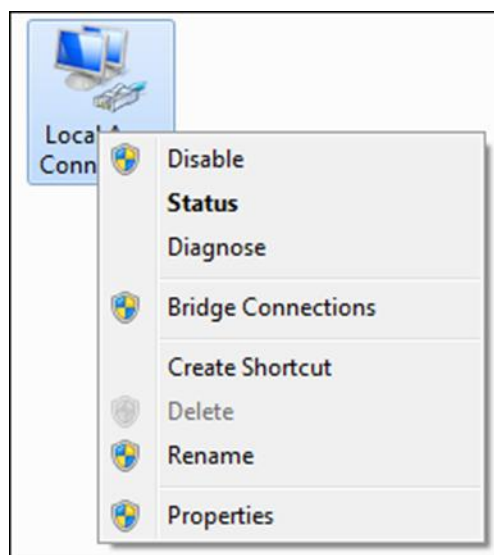
③ Click **Network and Sharing Center**.



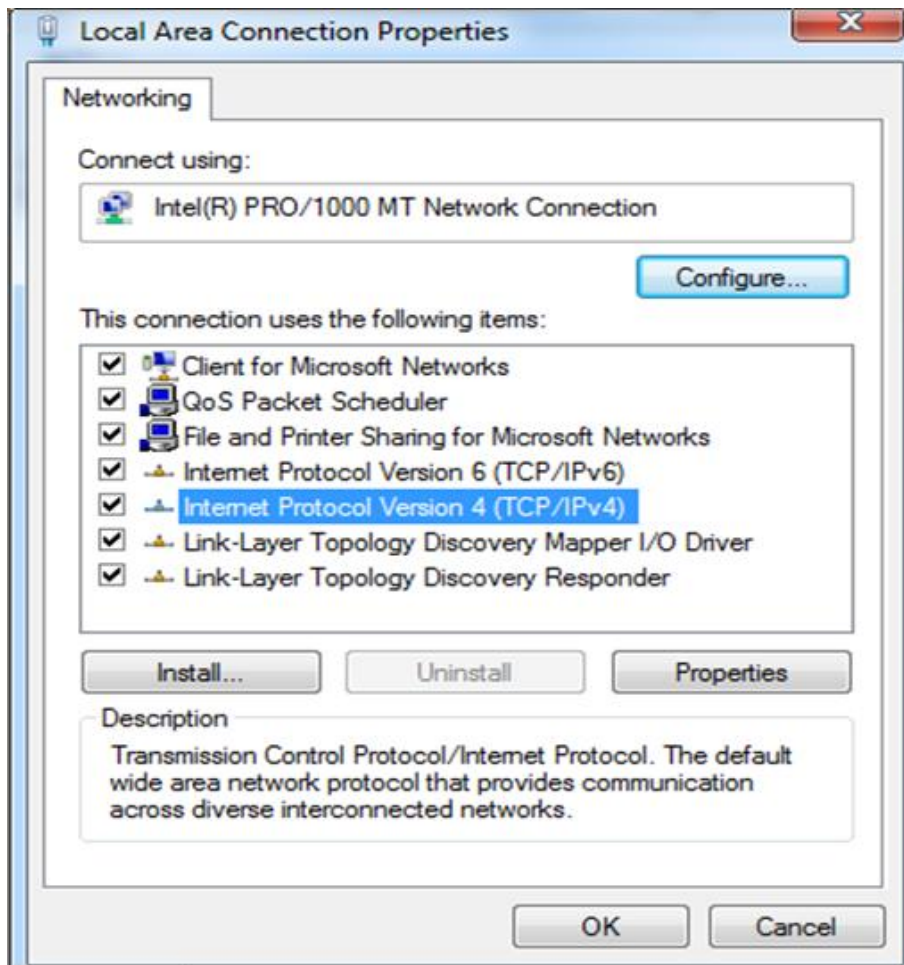
④ Click **Change adapter settings**.



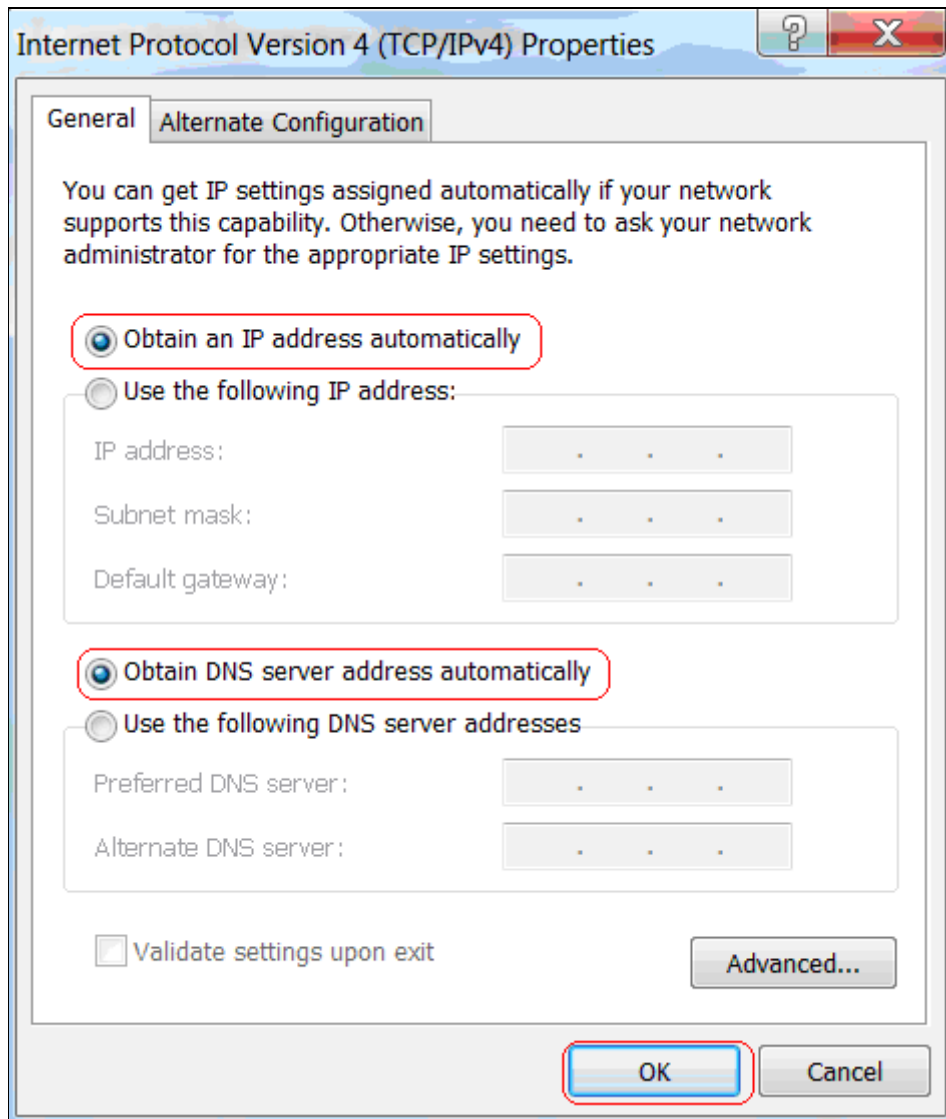
⑤ Click **Local Area Connection** and select **Properties**.



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

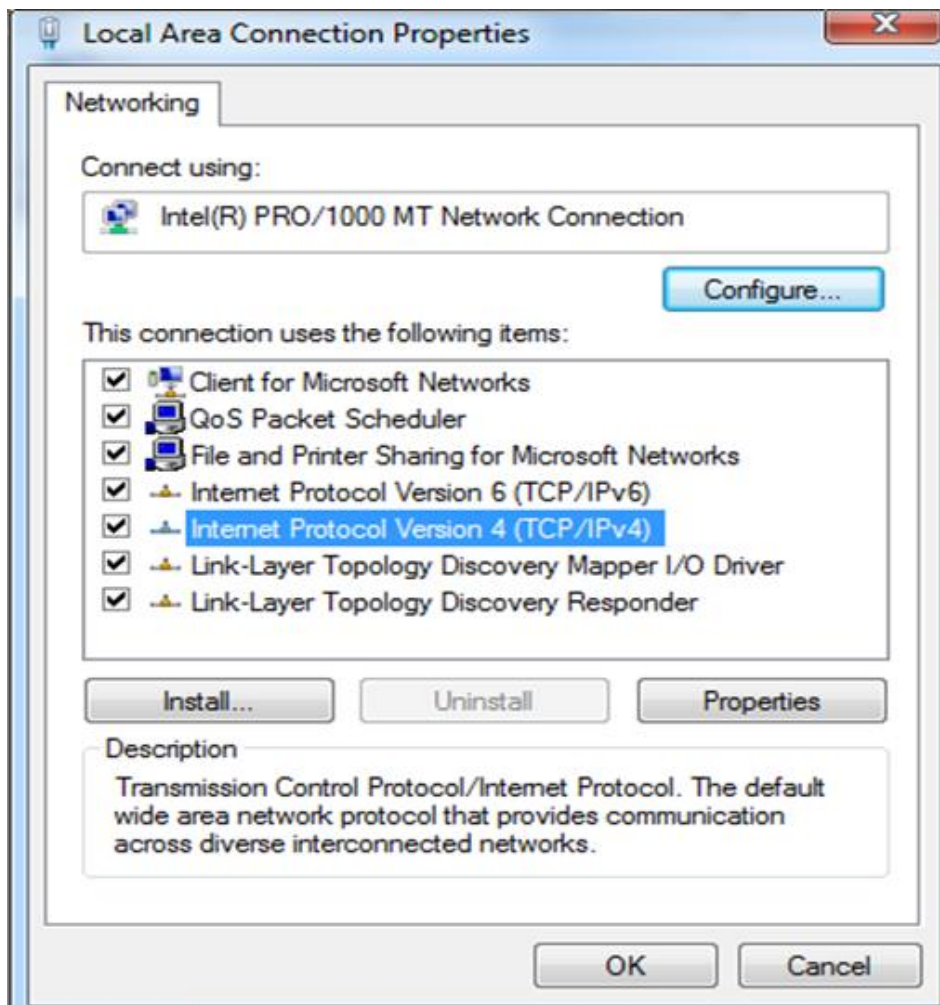


- ⑦ Select **Obtain an IP address automatically** and click **OK**.



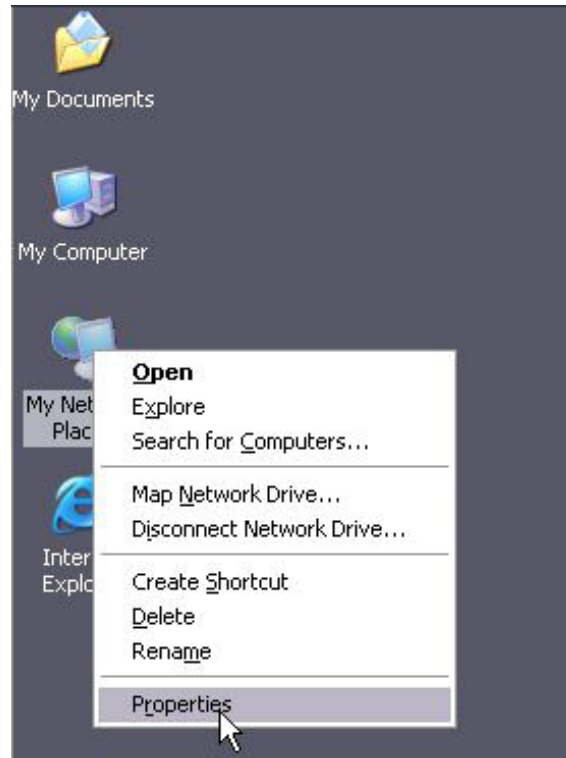
The screenshot shows the "Internet Protocol Version 4 (TCP/IPv4) Properties" dialog box. The "General" tab is active. The text reads: "You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings." There are two radio button options, both highlighted with red boxes: "Obtain an IP address automatically" (selected) and "Use the following IP address:". Below the second option are three input fields for "IP address:", "Subnet mask:", and "Default gateway:". There are also two radio button options for DNS: "Obtain DNS server address automatically" (selected, highlighted with a red box) and "Use the following DNS server addresses". Below the second option are two input fields for "Preferred DNS server:" and "Alternate DNS server:". At the bottom left is a checkbox for "Validate settings upon exit" (unchecked). At the bottom right is an "Advanced..." button. At the very bottom are "OK" and "Cancel" buttons, both highlighted with red boxes.

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



Windows XP

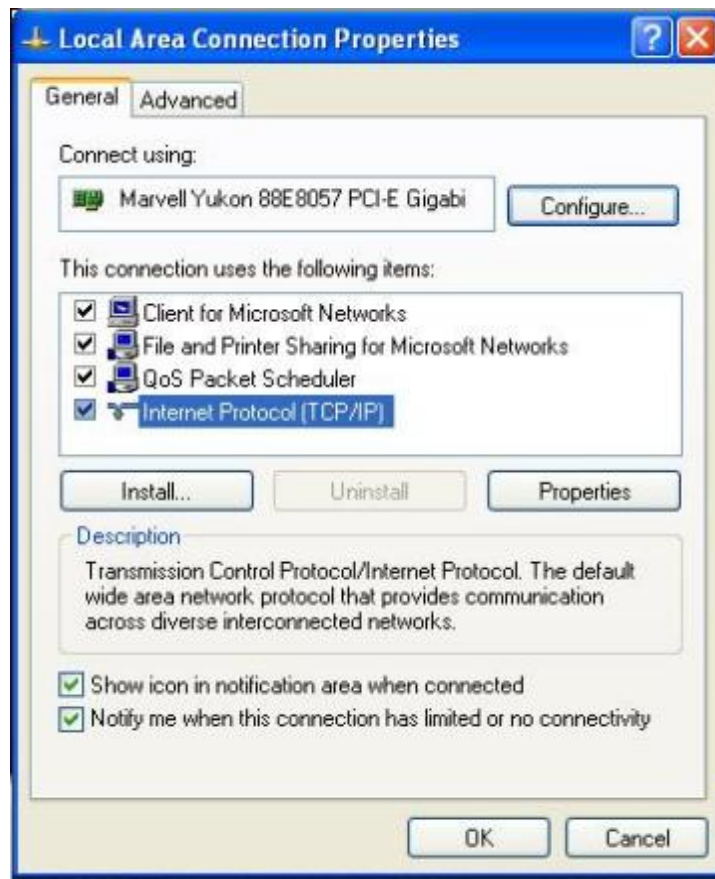
- ① Right-click **My Network Places** and select **Properties**.



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



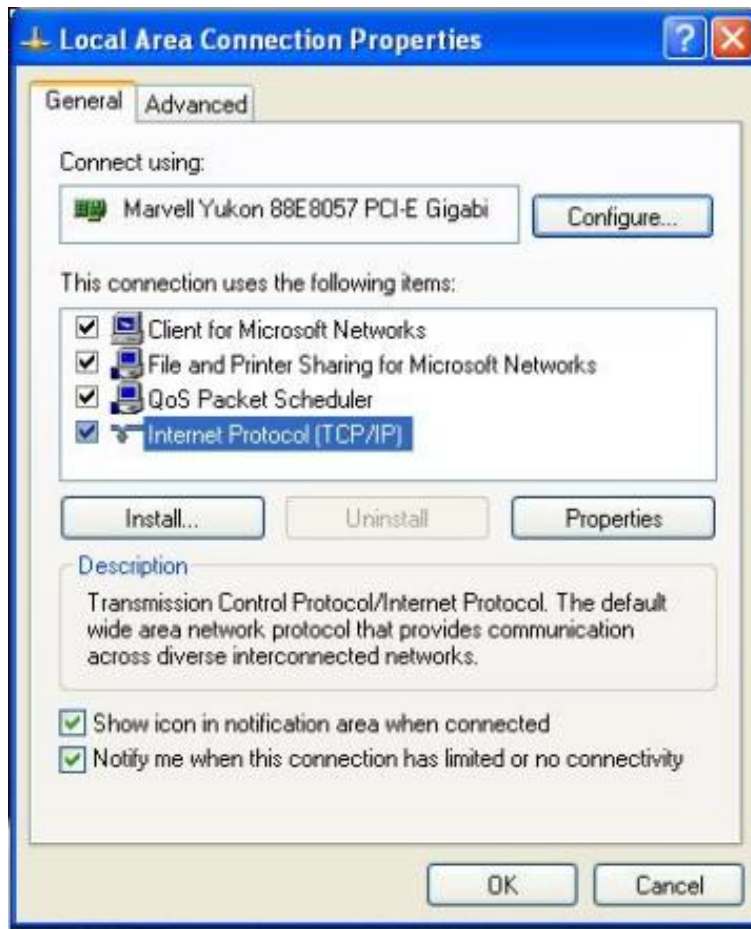
- ③ Select **Internet Protocol Version 4 (TCP/IPv4)** and click **Properties**.



- 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 Power LED does not light up.

Ans. Check the following:

- Make sure that the Router Adapter is properly plugged into a power outlet.
- Make sure the power outlet is active (working) by plugging another electric device into it.
- Re-plug the Router 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:

- 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. The Router LED does not light up.

Ans. Check the following:

- a) Double click to enable the Management Utility and click the “Rescan” tab under the Network configuration homepage. The Management Utility will automatically detect all other Router Adapters on your router network.
- b) Try to plug a second Router Adapter into a nearby power outlet and check whether the Router LED lights up or not.
- c) Contact your local dealer for technical support if the Router 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	192.168.2.1
	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
	IP Address	192.168.2.1

(LAN)	Subnet Mask	255.255.255.0
	DHCP Server	Enabled
	IP Pool	192.168.2.100~192.168.2.200
	Time Zone	(GMT+08:00)Beijing, Chongqing, Hong Kong, Urumqi
Wireless	Wireless	Enabled
	SSID	MTC_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

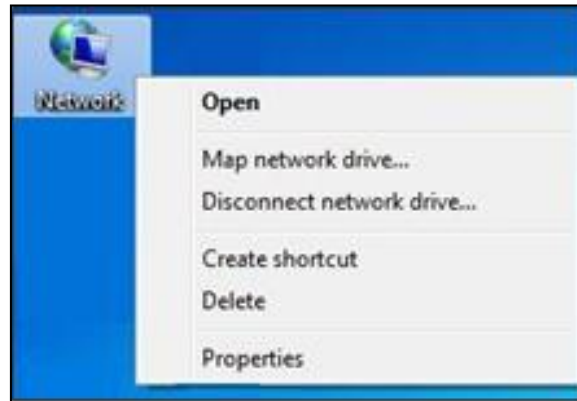
4 Remove Wireless Network from Your PC

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

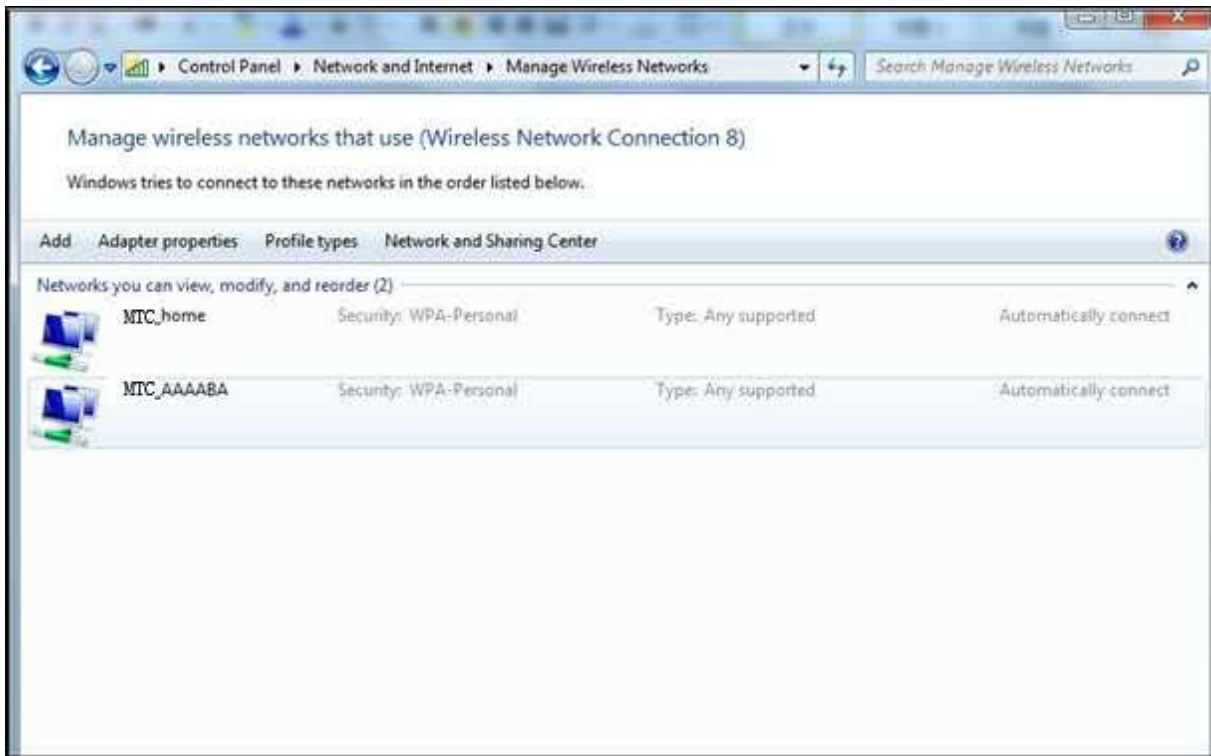
① Right-click the **Network** icon and select **Properties**.



② Select **Manage Wireless Networks**.

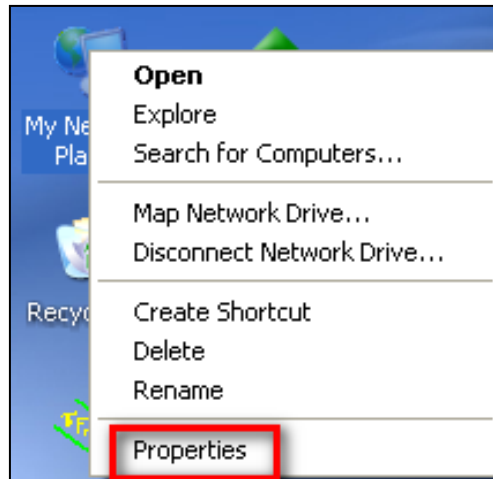


- ③ Select the wireless network and click **Remove network**.



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



CE Mark Warning

This is a Class B product in a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures. This device complies with EU 1999/5/EC.

NOTE: (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable

Hereby, Shenzhen MTC Co.,LTD declares that this **Wireless Router(PW5002)** is in compliance with



the essential requirements and other relevant provision of Directive 1999/5/EC.

The declaration of monformity may be consult at Manufacture Name: Shenzhen MTC Co.,LTD

Manufacture Address: MTC Industry Park,1st Lilang Rd, Xialilang Community, Nanwan Street, Longgang District, Shenzhen



FCC Statement

FCC ID: 2AHVHPW5002

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.

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 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.

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

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



The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

Radiation Exposure Statement

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

NOTE:(1)The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.(2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable