



HooToo Dual Band AC1200 Router

ONLINE GUIDE

Model: HT-ND001

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1 Product Overview

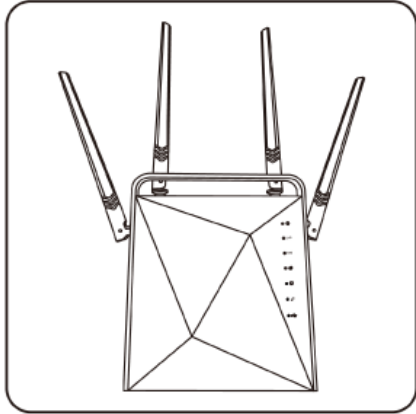
Thank you for choosing the **HooToo HT-ND001 Dual Band AC1200 Router**. Please read this manual carefully and keep it for future reference.

1.1 Introduction

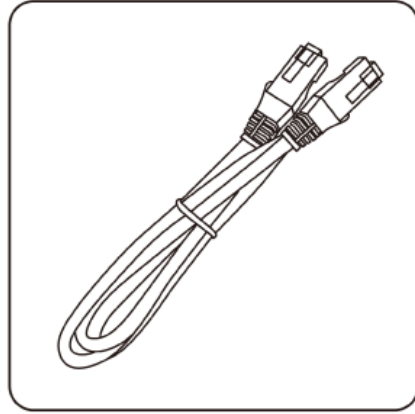
The HT-ND001 Router supports both 2.4GHz and 5GHz wireless bands for up to 1200Mbps of total available bandwidth, as well as DHCP, PPPoE, and static IP Internet modes. Other features include Wireless Password Setup, USB functionality to save/read data to/from a USB flash drive, and the following:

- Compliance with IEEE 802.11a/an/ac and 802.11b/g/n
- USB 3.0 port for file sharing and use as a print server
- WPA/WPA2, WPA-PSK/WPA2-PSK authentication, TKIP/AES encryption security
- Access control
- Client filter, MAC filter, URL filter
- Remote web management
- DDNS, Port forwarding, DMZ host, UPNP

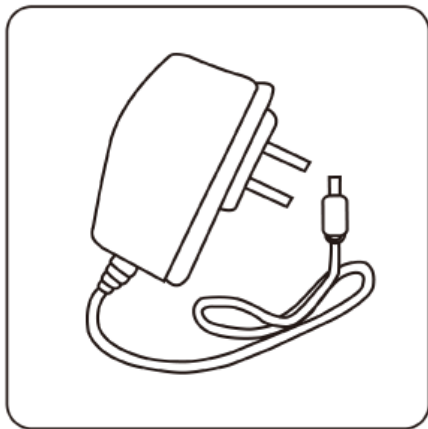
1.2 Package Contents



1 x HooToo Dual Band
AC1200 Router (Model HT-ND001)



1 x Ethernet Cable

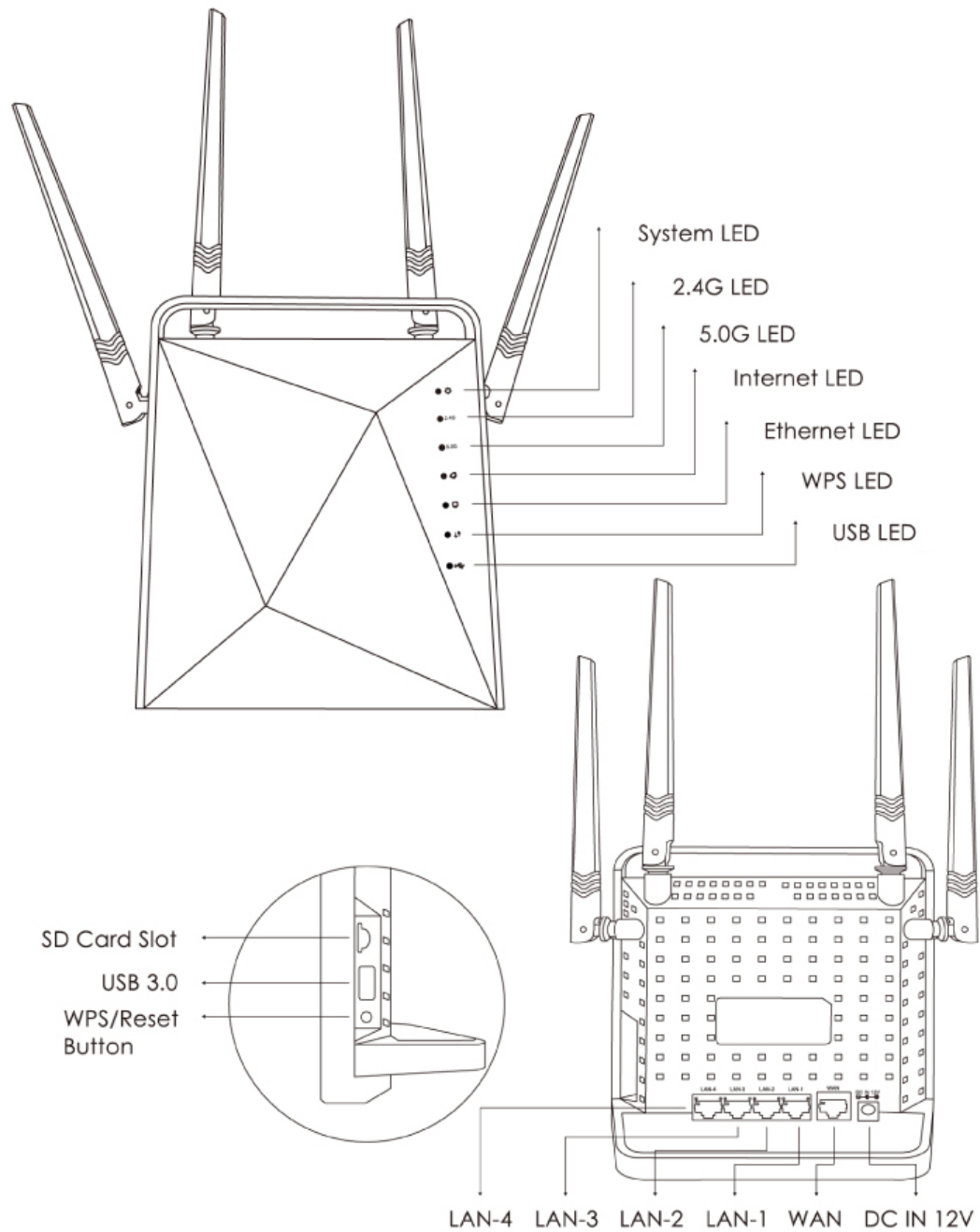


1 x Power Adapter



1 x User Guide

1.3 Product Diagram



1.4 LED Indicator

The LED indicator displays information about the device status.

LED	Name	Status	What It Means
	System LED	Blinking	The router is booting or upgrading.
		Solid	The router has booted.
		Off	Power is off or the router is not booted.
2.4G	2.4G LED	Blinking	2.4GHz wireless is on with data being transferred.
		Off	2.4GHz wireless is disabled.
5.0G	5G LED	Blinking	5GHz wireless is on with data being transferred.
		Off	5GHz wireless is disabled.
	Internet LED	Solid	The Internet port is connected but inaccessible.
		Blinking	The Internet port is connected and accessible.
		Off	The Internet port is not connected.
	Ethernet LED	Blinking	Device(s) connected to the Ethernet (1/2/3/4) port(s).
		Off	No device is connected to any Ethernet (1/2/3/4) port.
	WPS LED	Blinking	WPS button on the router is pressed and the router is trying to connect a wireless device to its network via WPS.
		Solid	The connection via WPS is successful.
		Off	The connection via WPS has failed.
	USB LED	Off	No device is connected to the USB port.
		Solid	Device connected to the USB port.

1.5 Physical Interface

Item	Description
Supply Hub	Connect to a power socket via power adapter (output 12V, 1.5A).
WAN Port	Connect to the Internet.
LAN Port	Ports (1, 2, 3, 4) to connect a PC/Laptop.
WPS/RST Button	Press the button to connect to another router via WPS. Press and hold the button for 10 seconds for a device factory reset.
USB Port	Connect to a USB storage device or a USB printer.

2 Connecting

2.1 Preparation

Before you start the installation process, make sure to prepare the following:

Item	Description
Router	Included
Power Adapter	Included
PC	Requires Internet Explorer 8 or higher

ISP Information	DHCP, PPPoE, or Static IP Internet Connection Type: 1. Ethernet Cable from the incoming Internet side (provided by your Internet service provider - 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, please contact your ISP. 3. If your ISP uses a PPPoE Internet connection, you will need the 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 3. Ethernet Cable (included in the package). You will need it to connect your PC to the device

2.2 Hardware Connection

Please follow the following steps to set up the router:

1. Use an Ethernet cable and connect the router's WAN port to the internet.
2. Use an Ethernet cable and connect your computer's Ethernet port with the router's LAN port.
3. Connect the router's power adapter.

Note:

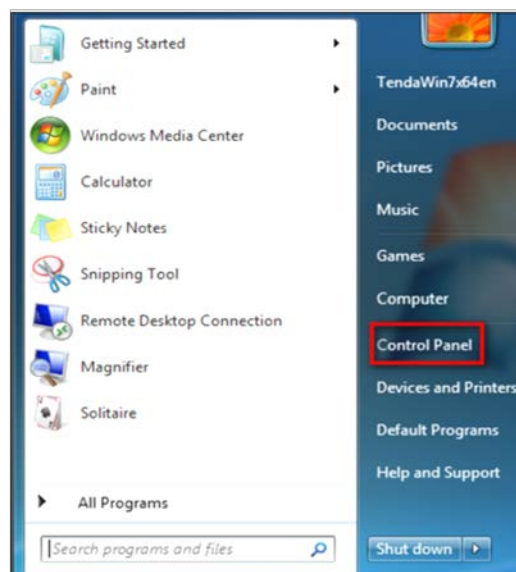
Before connecting, please make sure that your internet is working normally.

2.3 PC TCP/IP Settings

Prior to logging onto the router, please make sure your computer is set to "Obtain an IP address automatically" and "Obtain DNS server address automatically":

2.4 For Windows

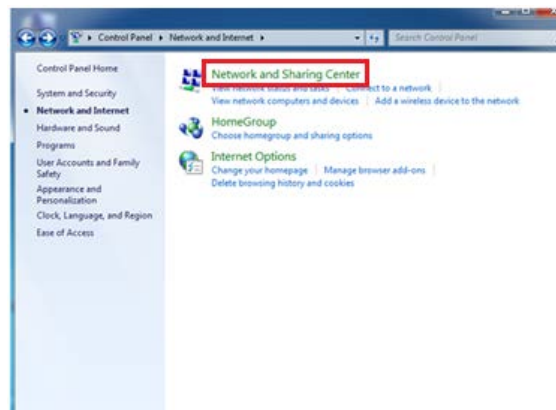
1. Click **Start** and then select **Control Panel**.



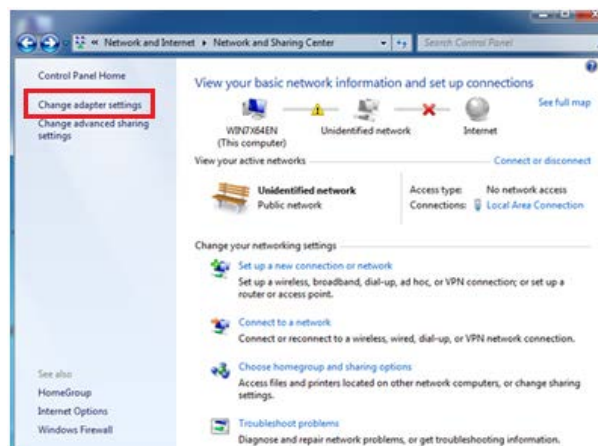
2. Click **Network and Internet**.



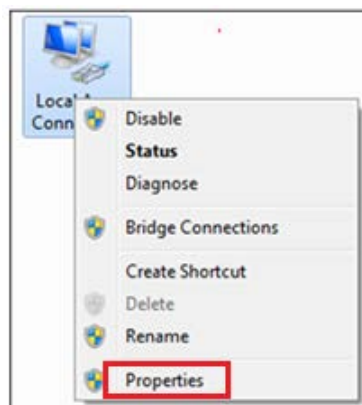
3. Click **Network and Sharing Center**.



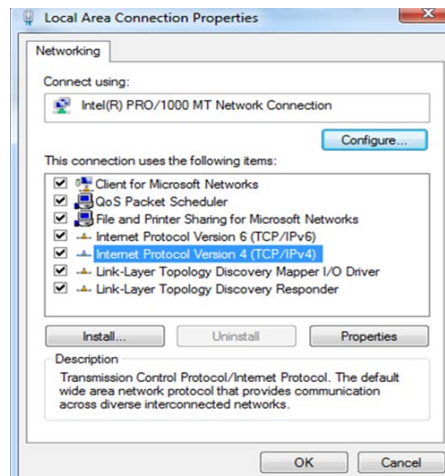
4. Click **Change adapter settings**.



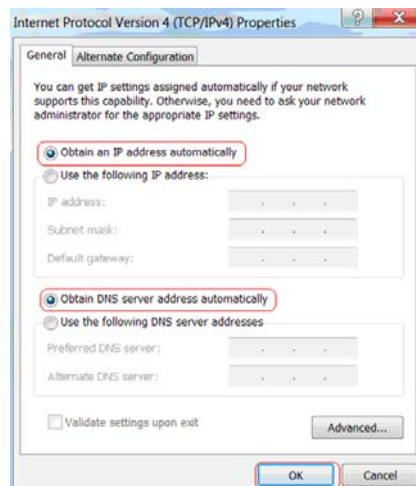
5. Click **Local Area Connection** and select **Properties**.



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



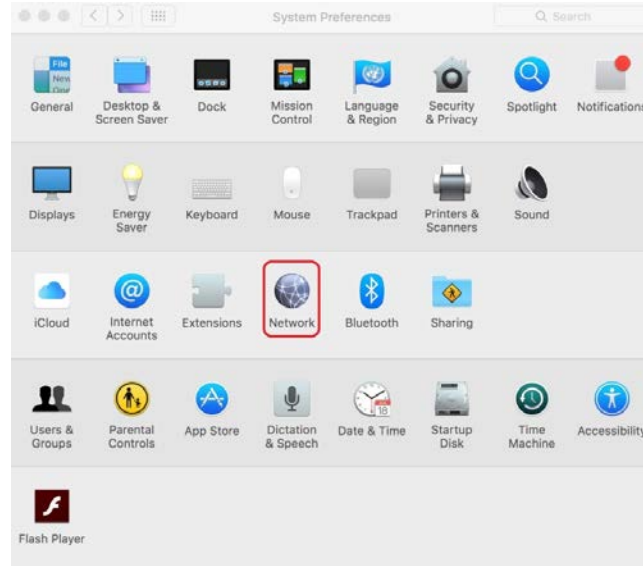
7. Select **Obtain an IP address automatically** and click **OK**.



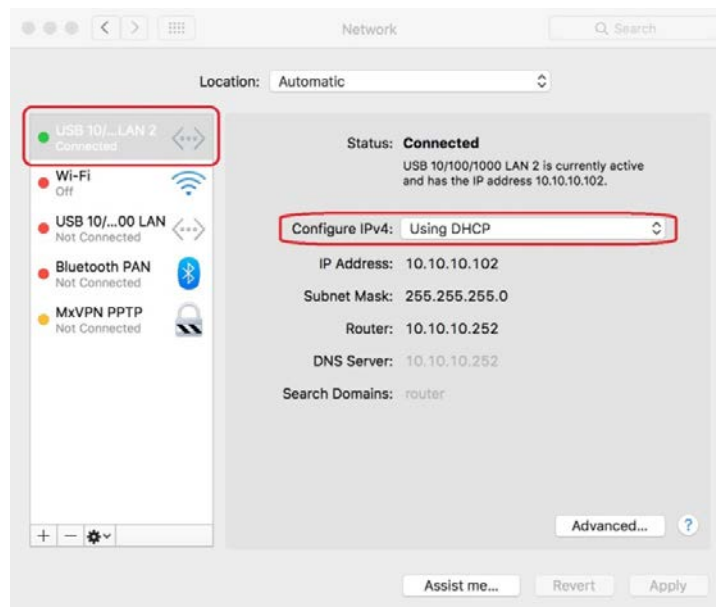
8. Click **OK** on the **Local Area Connection Properties** window to save your settings.

2.5 For Mac OS

1. Enter the System Preferences page and select Network.



2. Select IPv4 as shown below:

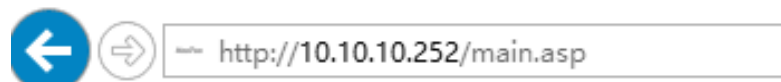


3. Click **Apply** on the **Network** window to save your settings.

3. Logging into the Router

3.1 Log in

To access the Router's Web-based Utility, launch a web browser (such as Internet Explorer or Firefox) and enter `http://10.10.10.252` into your browser address bar. Press "Enter".



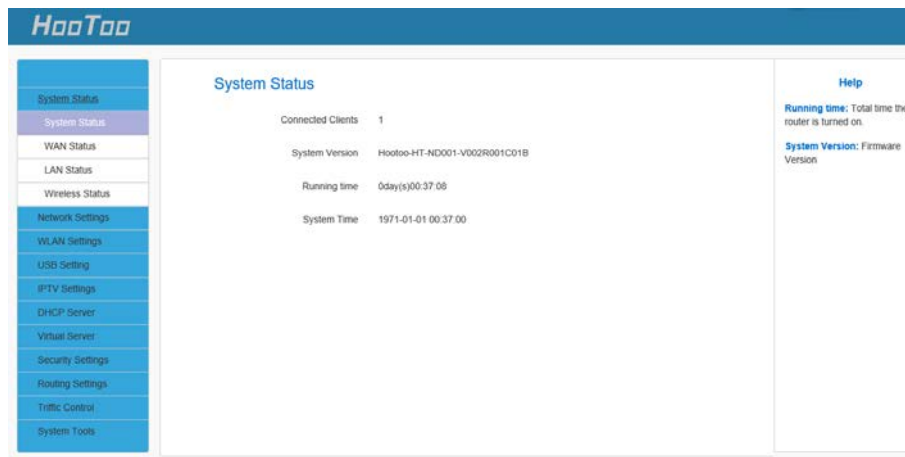
The system will automatically display the login page. Please enter the correct password (default password is admin) and click the Login button or press "Enter".

A screenshot of a login page with a white background and a light gray border. At the top, it says "Please sign in". Below this is a language selection dropdown menu showing "English". Underneath is a password input field with a lock icon on the left. At the bottom is a blue "Sign in" button.

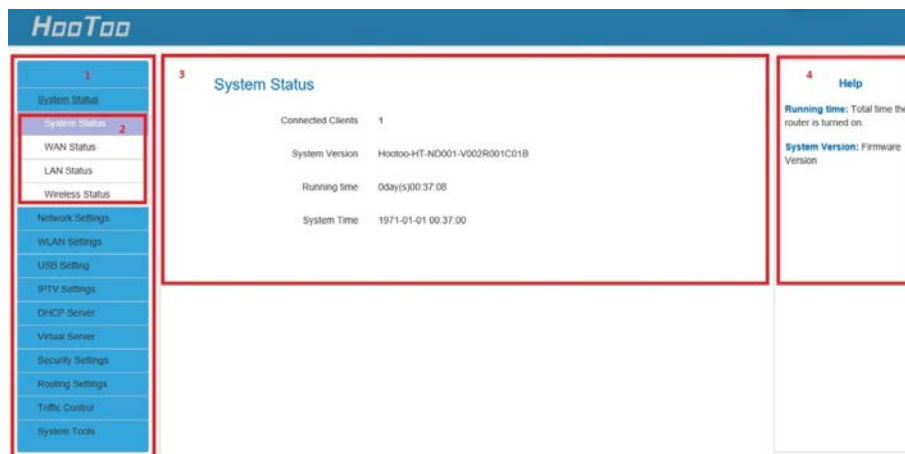
Note: Password is case sensitive. The default password is admin.

3.2 Webpage Layout

After the first-time login or initial password setup, the system will display the router web page. Router settings can be viewed and modified here. The web page is structured into Primary & Secondary Navigation, Configuration, and Help sections.



Four sections categorized as below:



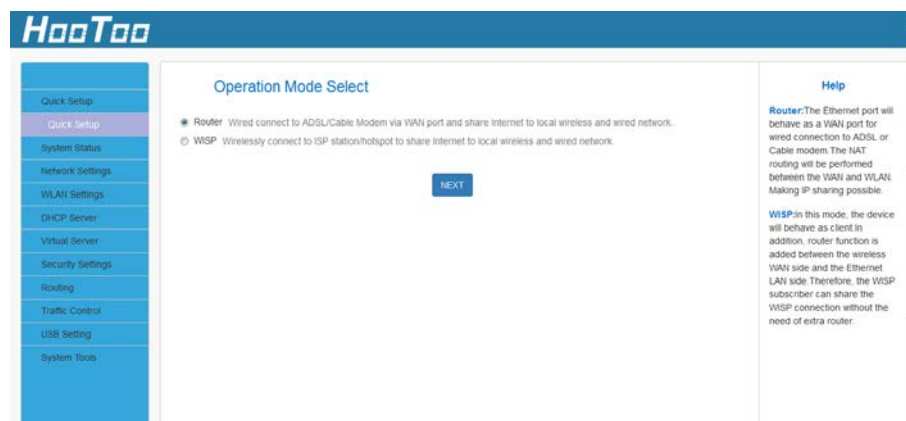
No.	Name	Introductions
1	Primary Navigation	The navigation bar is organized in multiple tabs. Once a function menu has been selected from the navigation bar, the results will be displayed in the Configuration area.
2	Secondary Navigation	
3	Configuration	To configure and view settings.
4	Help	Shows help/information on the current page.

3.3 Commonly Used Webpage Elements

Common Elements	Introductions
Release	To release the WAN IP address information.
Renew	To obtain the WAN IP address information again.
Save	To save the current configuration page.
Cancel	To cancel the current configuration page.
Add	To add settings to the list
Delete	To delete the selected rules.
Refresh	To refresh the current page.

4.Features & Configuration

4.1 Quick Setup



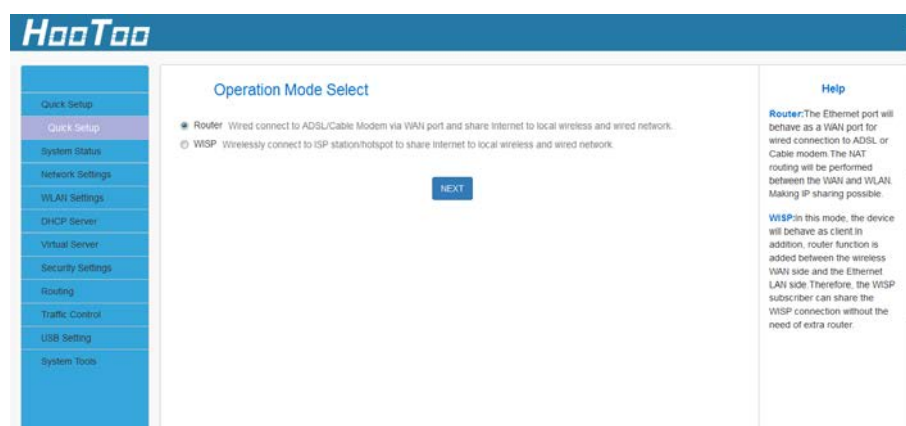
Router: The Ethernet port will behave as a WAN port for a wired connection to an ADSL or Cable modem. The NAT routing will be performed between the WAN and WLAN to make IP sharing possible.

WISP: In this mode, the AP will behave as client. The router function will also be added between the wireless WAN side and the Ethernet LAN side. Therefore, the WISP subscriber can share the WISP connection without the need for an extra router.

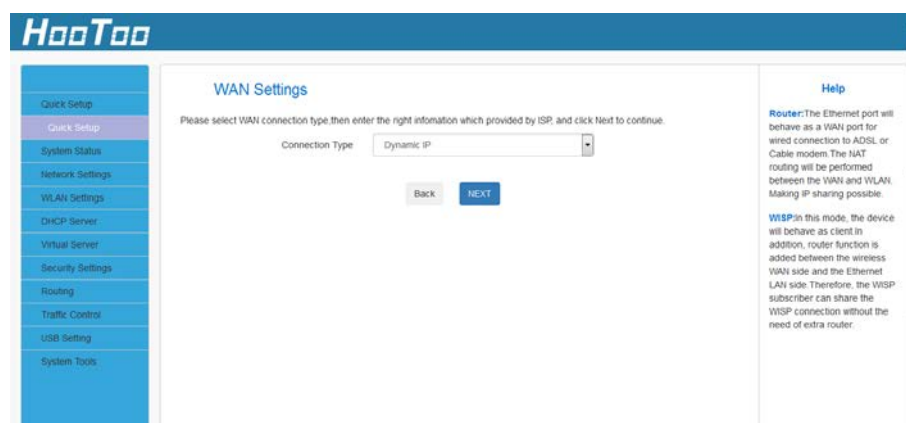
4.1.1 Router

In Router mode, a wired connection can be made to an ADSL or Cable Modem via the WAN port to share the Internet to local wireless and wired networks.

1. If you want to set the adapter in Router mode, choose Router, and then click the “NEXT” button.



2. Choose the connection type then click the “NEXT” button.



Static IP: If your broadband ISP provides you a static IP, please select Static IP mode.

Dynamic IP: If your ISP uses DHCP server, please select DHCP and your ISP

will automatically assign these values to you (includes the DNS server).

PPPoE: Inquire with your ISP to make sure you can use PPPoE. Enter your username and password provided by your ISP.

3. In this setting, you can set the wireless name and wireless password for your local network. Then click the “NEXT” button. You have configured the adapter to work as a router. Click the “Save” button to confirm the settings.

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Wireless Settings

This sector is used to set wireless network name and wireless password for your local network.

5G Config

SSID: HT_5GWiFi_B2B259

Channel: AutoSelect

Security Mode: Disable

2.4G Config

SSID: HT_24GWiFi_B2B258

Channel: AutoSelect

Security Mode: Disable

Back NEXT

Help

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.

WISP:In this mode, the device 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.

HooToo

Congratulations!

You are configuring the device to work as Router mode. If you have confirmed settings please click Save to reboot the device and activate the configuration.

Back Save

Help

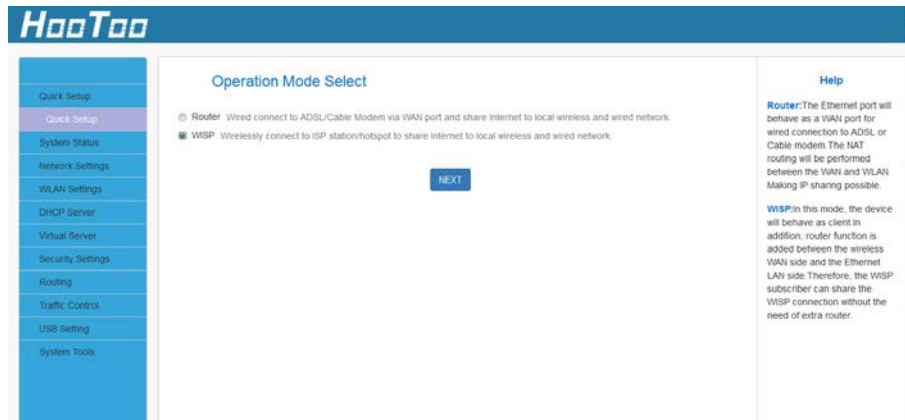
Router:The Ethernet port will behave as a WAN port for wired connection to ADSL or Cable modem. The NAT routing will be performed between the WAN and WLAN. Making IP sharing possible.

WISP:In this mode, the device 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.

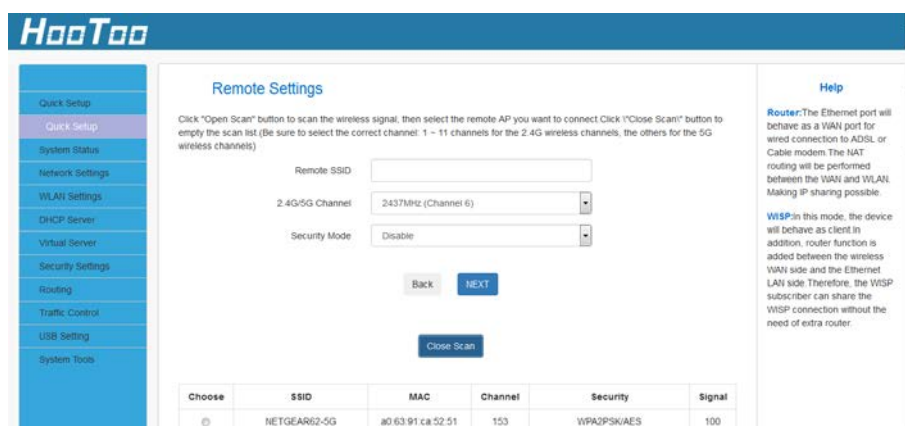
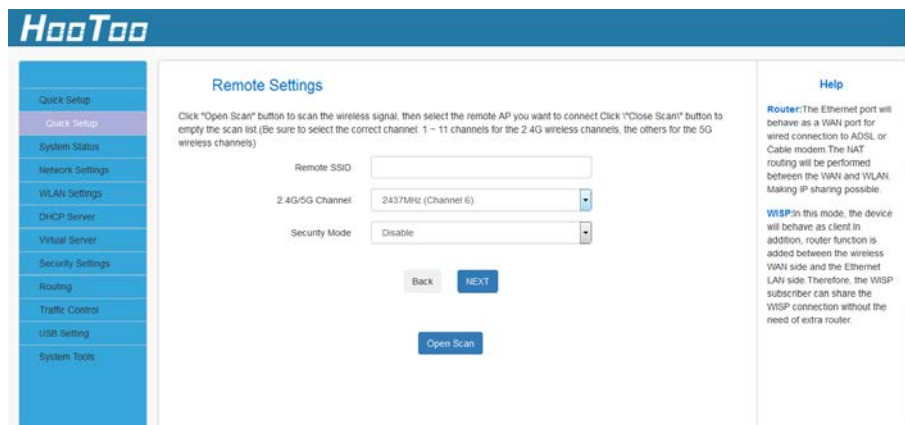
4.1.2 WISP

In WISP mode, wirelessly connect to an ISP station/hotspot to share Internet to local wireless and wired networks.

1. If you want to set the adapter in WISP mode, choose WISP, then click the “NEXT” button;



2. Click Open Scan to search Wi-Fi signal. Select your Wi-Fi and enter the password, then click NEXT.



3. Set the pass phrase (password) for the Wi-Fi, then click the "NEXT" button.

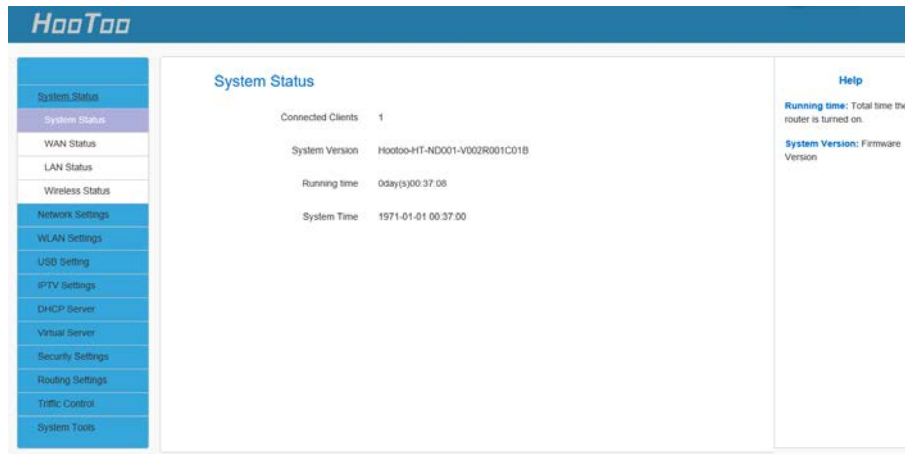
4. You are configuring the device to work in WISP mode. If you have confirmed the settings, please click the “Save” button to reboot the device and activate the configurations.

4.2 System Status

This section includes the following: System Status, WAN Status, LAN Status, and Wireless Status. You can click **Status** to enter the page.

4.2.1 System Status

It displays System Information: System Time, Up Time, Connected Clients, LAN MAC Address, WAN MAC Address, Firmware Version, and Hardware Version.

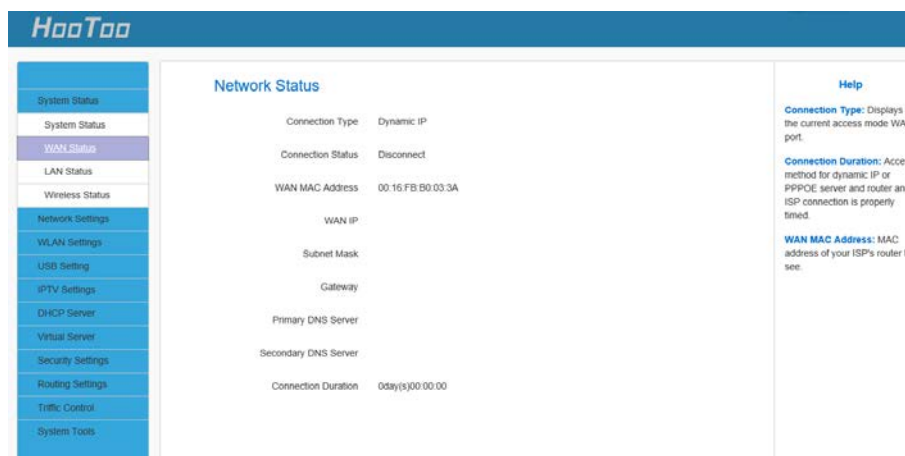


Connected Clients	Number of DHCP clients.
System Version	Router System Version.
Running Time	It indicates how long the router has been working since startup. Running time is reset when the device is powered off.
System Time	Current system time on this device. The device automatically synchronizes the system time with the Internet server time.

4.2.2 WAN Status

This section displays the WAN basic information.

WAN Status includes **Dynamic IP**, **PPPoE**, and **Static IP** modes.



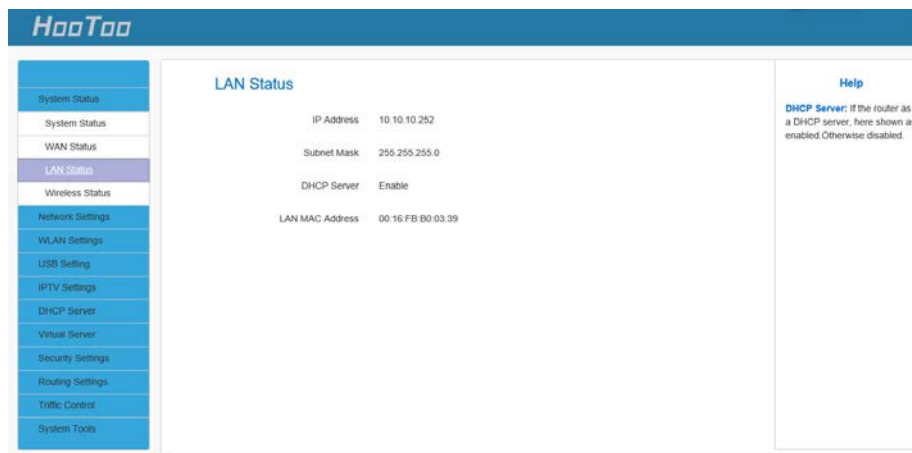
Parameter Description

Connection Status	It displays the connection status. It displays "Connected" when connected to the Internet.
WAN IP	IP address obtained from ISP. It connects to wide area network.
Subnet Mask	Obtained from ISP. Generally 255.255.255.0.
Gateway	Obtained from ISP. Refers to the next router address.
Primary DNS Server	Obtained from ISP. Turns domain name resolution into an IP address.
Secondary DNS Server	Obtained from ISP.
Connection Type	It displays the connection type: Dynamic IP, PPPoE, or Static IP.
WAN MAC Address	MAC address of your ISP's router to see.

Note:

- 1、 WAN IP, Subnet Mask, Gateway, Primary DNS Server, Secondary DNS Server: This type of information appears only if the router successfully connects to the Internet via a PPPoE or DHCP (dynamic IP) connection. However, if you connect the router to the Internet with static IP settings provided by your ISP, these fields will display the settings you entered once the router successfully connects to the Internet.
- 2、 If nothing appears in the secondary DNS server field, there is no available secondary DNS server.

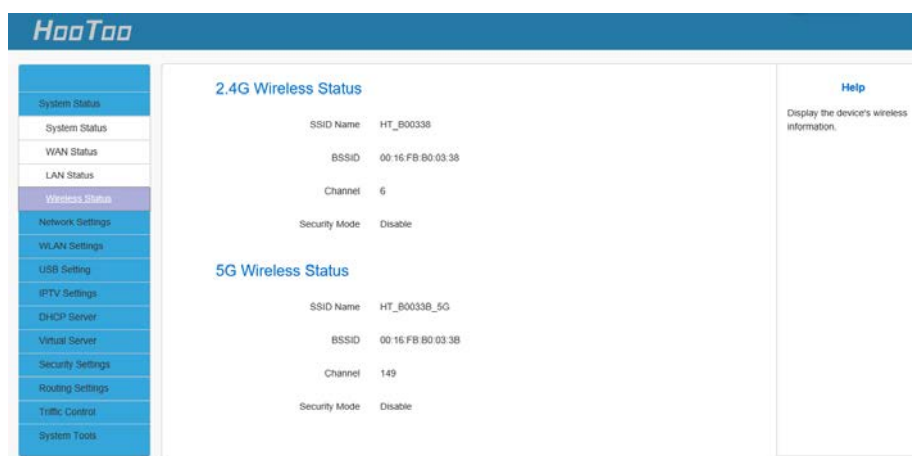
4.2.3 LAN Status



IP Address	The Router LAN IP address (not your PC IP address). The default value is 10.10.10.252; you can change it when necessary.
IP Mask	The Router LAN subnet mask. The default value is 255.255.255.0.
DHCP Server	It displays DHCP Server on/off.
LAN MAC Address	MAC address of your ISP's router to see.

4.2.4 Wireless Status

It displays the Range Extender wireless basic information.



Working Mode	It displays router wireless working mode.
Wireless	It displays wireless status (enabled/disabled).
SSID Name	Wireless name, you can set up it in.
Security Mode	Selected encryption way.
BSSID	MAC address of the device wireless interface

4.3 Network Settings

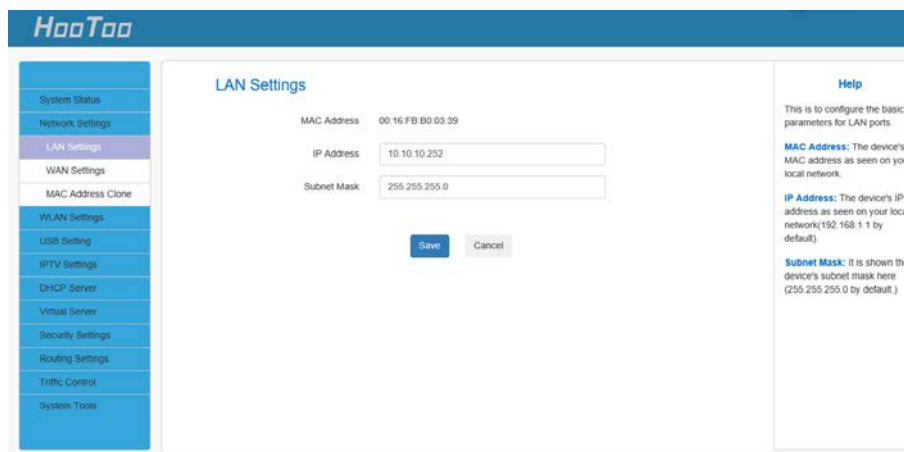
This section includes: LAN Settings, WAN Settings, WAN Speed, DNS Settings, MAC Clone, DHCP Server, DHCP Client List.

Click **Basic** and enter the page

- To change the device login IP address, see **LAN Settings**.
- To set up the Internet connection, see **WAN Settings**.
- To clone MAC address, see **MAC Clone**.

4.3.1 LAN Settings

Here you can configure the LAN IP Address and Subnet Mask. This IP address is used to access the device settings through a web browser. Make sure to keep track of any changes you apply to this page.



Configuration Procedure:

1. Change the IP address to the one you wish to use, for example, 10.10.10.252.
2. Click **Save** to save your settings.

Note:

1. Default IP address and subnet mask are, respectively, 10.10.10.252 and 255.255.255.0.
2. Make sure to keep track of any changes you apply to this page. If you change the Router LAN IP address, it is necessary to connect 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 LAN IP address and WAN IP address cannot be on the same IP segment. If not, the router will not be able to access the Internet.

4.3.2 WAN Settings

Here you can configure your Internet connection settings. First, select internet connection type:

- A. Select PPPoE if your ISP uses a PPPoE connection and gives you a PPPoE user name and a PPPoE password.
- B. Select Static IP if your ISP provides you with fixed or static IP address settings (special deployment by ISP).
- C. Select Dynamic IP if you can access Internet simply by directly connecting your computer to an Internet-enabled ADSL/Cable modem without configuring any settings.

Different connection types will have different a different configuration:

PPPOE

The screenshot shows the HooToo router's WAN Settings page. On the left is a sidebar menu with options: System Status, Network Settings, LAN Settings, WAN Settings (highlighted), MAC Address Clone, WLAN Settings, USB Setting, IPTV Settings, DHCP Server, Virtual Server, Security Settings, Routing Settings, Traffic Control, and System Tools. The main content area is titled 'WAN Settings' and contains the following fields: 'Connection Type' (set to PPPoE with a dropdown arrow), 'UserName' (empty text box), 'Password' (empty text box), and 'MTU' (set to 1450 with a note '(Default 1452)'). At the bottom are 'Save' and 'Cancel' buttons. On the right, a 'Help' section provides instructions for Static IP, Dynamic IP, PPPoE, and PPTP.

Static IP: If your broadband ISP provides you a static IP, please select the static IP mode.

Dynamic IP: If your ISP uses DHCP server, please select DHCP, and your ISP will automatically assign these values to you (includes the DNS server.)

PPPoE: Inquire your ISP to make sure whether you can use PPPoE. If they provide PPPoE, then enter your username and password.

PPTP: Enter the PPTP server IP address, username, and password that are provided by your ISP. For the WAN IP address, Subnet Mask, Default Gateway, you can choose to either obtain automatically or manually enter the information provided by your ISP.

PPPoE Configuration:

1. **Internet Connection Type:** PPPoE.
2. **Username:** ISP login name.
3. **Password:** ISP login password.
4. Click **Save** to save your settings.

Note:

MTU: The MTU (maximum transmission unit) is the largest data packet a network device transmits. The normal MTU value for most Ethernet networks is 1500 bytes, or 1492 bytes for PPPoE connections. For some ISPs, you might need to change the MTU. This should not be done unless it is necessary for your ISP connection.

Static IP

The screenshot shows the HooToo web interface for WAN Settings. On the left is a sidebar menu with options: System Status, Network Settings, LAN Settings, WAN Settings (highlighted), MAC Address Clone, WLAN Settings, USB Setting, IPTV Settings, DHCP Server, Virtual Server, Security Settings, Routing Settings, Traffic Control, and System Tools. The main content area is titled 'WAN Settings' and contains the following fields: Connection Type (set to 'Static IP' with a dropdown arrow), IP Address, Subnet Mask, Gateway, Primary DNS Server, Secondary DNS Server, and MTU (set to 1500 with '(Default: 1500)' below it). At the bottom are 'Save' and 'Cancel' buttons. On the right is a 'Help' section with three paragraphs: 'Static IP: If your broadband ISP provides you a static IP, please select the static IP mode.', 'Dynamic IP: If your ISP uses DHCP server, please select DHCP, and your ISP will automatically assign these values to you (includes the DNS server.)', and 'PPPoE: Inquire your ISP to make sure whether you can use PPPoE. If they provide PPPoE, Then enter your username and password.' Below this is a paragraph for 'PPTP: Enter the PPTP server IP address, username, and password that are provided by your ISP. For the WAN IP address, Subnet Mask, Default Gateway, you can choose to either obtain automatically or manually enter the information provided by your ISP.'

Static IP Configuration:

1. **Connection Type:** Static IP.
2. **IP Address/Subnet Mask/Gateway/Primary DNS Server/Secondary DNS Server:** ISP information.
3. Click **Save** to save your settings.

Dynamic IP

The screenshot shows the HooToo web interface. On the left is a sidebar menu with options: System Status, Network Settings, LAN Settings, WAN Settings (highlighted), MAC Address Clone, WLAN Settings, USB Setting, IPTV Settings, DHCP Server, Virtual Server, Security Settings, Routing Settings, Traffic Control, and System Tools. The main content area is titled 'WAN Settings'. It features a 'Connection Type' dropdown menu set to 'Dynamic IP', an 'MTU' input field with '1500' and '(Default: 1500)' text, and 'Save' and 'Cancel' buttons. On the right, a 'Help' section provides instructions for Static IP, Dynamic IP, PPPoE, and PPTP configurations.

Dynamic IP Configuration:

Connection Type: Dynamic IP.

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

Note: An incorrect 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. It is recommended to use the default MTU value. In case any of the following circumstances occurs, please do not modify the MTU value.

- You have problems connecting to your ISP or other Internet service, and either your ISP or our technical support suggests changing the MTU value. The web-based applications listed below might require an MTU change:
- You use a VPN and encounter serious performance problems.
- You used a program to optimize MTU performance, and you have connectivity or performance problems.
- If you suspect an MTU problem, try changing the MTU to 1400. If this does not help, gradually reduce the MTU from the maximum value 1500 until the issue disappears.
- The common MTU sizes and applications are listed in the table below.

MTU	Application
1500	Typical for connections that do not use PPPoE or VPN.
1492	Used in PPPoE 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.

L2TP

The screenshot shows the HooToo WAN Settings page. On the left is a sidebar menu with options: System Status, Network Settings, LAN Settings, WAN Settings (highlighted), MAC Address Clone, WLAN Settings, USB Setting, IPTV Settings, DHCP Server, Virtual Server, Security Settings, Routing Settings, Traffic Control, and System Tools. The main content area is titled 'WAN Settings' and contains the following fields:

- Connection Type:** A dropdown menu with 'L2TP' selected and a checkmark icon.
- L2TP Server:** A text input field.
- UserName:** A text input field.
- Password:** A text input field.
- Address Mode:** A dropdown menu with a checkmark icon.
- MTU:** A text input field containing '1460' with '(Default: 1400)' below it.

At the bottom of the form are 'Save' and 'Cancel' buttons. On the right side, there is a 'Help' section with the following text:

Static IP: If your broadband ISP provides you a static IP, please select the static IP mode.

Dynamic IP: If your ISP uses DHCP server, please select DHCP, and your ISP will automatically assign these values to you (includes the DNS server).

PPPoE: Inquire your ISP to make sure whether you can use PPPoE. If they provide PPPoE, then enter your username and password.

PPTP: Enter the PPTP server IP address, username, and password that are provided by your ISP. For the WAN IP address, Subnet Mask, Default Gateway, you can choose to either obtain automatically or manually enter the information provided by your ISP.

L2TP Configuration:

1. **Connection Type:** L2TP.
2. **L2TP Server/Username/Password:** ISP information.
3. Click **Save** to save your settings.

Note:

For the WAN IP address, Subnet Mask, Default Gateway, you can choose to either obtain automatically or manually enter the information provided by your ISP.

PPTP

The screenshot shows the HooToo router's web interface. On the left is a sidebar menu with options: System Status, Network Settings, LAN Settings, WAN Settings (highlighted), MAC Address Clone, WLAN Settings, USB Setting, IPTV Settings, DHCP Server, Virtual Server, Security Settings, Routing Settings, Traffic Control, and System Tools. The main content area is titled 'WAN Settings'. It contains the following fields: 'Connection Type' (a dropdown menu set to 'PPTP'), 'PPTP Server' (a text input field), 'UserName' (a text input field), 'Password' (a text input field), 'MPPE' (a checkbox labeled 'Enable' which is unchecked), 'Address Mode' (a dropdown menu set to 'Static'), and 'MTU' (a text input field set to '1500' with '(Default: 1400)' below it). At the bottom of the form are 'Save' and 'Cancel' buttons. On the right side of the page is a 'Help' section with text explaining Static IP, Dynamic IP, PPPoE, and PPTP configurations.

PPTP Configuration:

1. **Connection Type:** PPTP.
2. **PPTP Server/Username/Password:** ISP information.
3. Click **Save** to save your settings.

Note:

For the WAN IP address, Subnet Mask, Default Gateway, you can choose to either obtain automatically or manually enter the information provided by your ISP.

4.3.3 MAC Address Clone

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

The screenshot shows the HooToo router's web interface for the 'MAC Address Clone' page. The sidebar menu is the same as in the previous screenshot, with 'MAC Address Clone' highlighted. The main content area is titled 'MAC Address Clone'. It features a 'MAC Address' text input field containing '00:16:FB:B0:03:3A'. Below this field are two buttons: 'Restore to Factory Default MAC' and 'Clone MAC'. At the bottom of the form are 'Save' and 'Cancel' buttons. On the right side is a 'Help' section with text explaining the 'MAC Address clone' feature, the 'MAC Address' field, and the 'Restore Default MAC' and 'Clone MAC' buttons.

Restore Default MAC	Router WAN MAC factory reset.
Clone MAC	Click this button to copy your PC MAC address onto the router. Also, you can manually enter the MAC address that you want to use. It is necessary to use a computer whose MAC address is allowed by your ISP.

- To restore default MAC address:
 1. Click **Restore Default MAC**.
 2. Click **Save** to save your settings.
- To copy your PC MAC address onto the router.
 1. Click **Clone MAC**.
 2. Click **Save** to save your settings.
- To manually enter the MAC address allowed by your ISP:
 1. Enter the MAC address allowed by your ISP.
 Click **Save** to save your settings.

4.4 WLAN Settings

4.4.1 Basic Settings

Here you can configure the basic wireless settings of the router.

The screenshot shows the 'Basic Settings' page for the HooToo router's WLAN configuration. The left sidebar contains a menu with options: System Status, Network Settings, WLAN Settings (highlighted), Basic Settings, Security Settings, Advanced Settings, WPS Settings, Access Control, Connection Status, USB Setting, IPTV Settings, DHCP Server, Virtual Server, Security Settings, Routing Settings, and Traffic Control. The main content area is titled 'Basic Settings' and includes the following fields:

- Wireless:** ☒ Enable
- Band Switch:** 2.4G
- Network Mode:** 11b/g/n mixed mode
- SSID:** HT_800338
- Broadcast(SSID):** ☒ Enable ☐ Disable
- BSSID:** 00:16:FB:B0:03:38
- Channel:** Channel 6
- Channel Bandwidth:** ☐ 20 ☒ 20/40
- Extension Channel:** Channel 2

At the bottom of the form are 'Save' and 'Cancel' buttons. On the right side, there is a 'Help' section with the following text:

SSID: The wireless network public name. The SSID is a must to enter.

Channel: Select one from 1~11 channels or AutoSelect. As far as possible, select the channel which is used less for preventing signal interference.

Extension Channel: It can be used to ensure 11 N network frequency.

The screenshot shows the 'Basic Settings' page for a HooToo device. On the left is a sidebar menu with options: System Status, Network Settings, WLAN Settings, Basic Settings (highlighted), Security Settings, Advanced Settings, WPS Settings, Access Control, Connection Status, USB Setting, IPTV Settings, DHCP Server, Virtual Server, Security Settings, Routing Settings, and Traffic Control. The main content area is titled 'Basic Settings' and contains the following fields:

- Wireless:** A checkbox labeled 'Enable' which is checked.
- Band Switch:** A dropdown menu currently showing '5G'.
- Network Mode:** A dropdown menu currently showing '11an mode'.
- SSID:** A text input field containing 'HT_B0033B_5G'.
- Broadcast(SSID):** Radio buttons for 'Enable' (selected) and 'Disable'.
- BSSID:** A text input field containing '00:16:F8:B0:03:3B'.
- Channel:** A dropdown menu currently showing '5745MHz (Channel 149)'.
- Channel Bandwidth:** Radio buttons for '20' (selected), '40', and '80'.

At the bottom of the main area are 'Save' and 'Cancel' buttons. On the right side, there is a 'Help' section with the following text:

- SSID:** The wireless network public name. The SSID is a must to enter.
- Channel:** Select one from 1~11 channels or AutoSelect. As far as possible, select the channel which is used less for preventing signal interference.
- Extension Channel:** It can be used to ensure 11 N network frequency.

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

SSID: This is the public name of your wireless network.

BSSID: This is the MAC address of the device wireless interface.

SSID Broadcast: This option allows you to have your network names (SSIDs) publicly broadcast/hidden.

Channel: Manually select a channel or select Auto for the system to automatically select one for your wireless network to operate on. The best choice would be a channel that is the least used by neighboring networks.

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:

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

4.4.2 Security Settings

Here you can define a security key to secure your wireless network against unauthorized connections.

Security Settings

Band Switch: 2.4G

SSID Name: HT_B00338

Security Mode: WPA - Personal

WPA Algorithms: ☐ AES ☐ TKIP ☒ TKIP&AES

Pass Phrase: 12345678

Key Renewal Interval: 3600 second

Save **Cancel**

Help
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.

Backup:

1. Configure security mode, cipher type and security key (12345678).
2. Click **Save** to save your settings.

Security Mode:

1. **Disable**: If you want to allow all wireless clients to join your wireless network.
2. **WPA-Personal**: WPA personal, support AES and TKIP cipher types.
3. **WPA2-Personal**: WPA2 personal, support AES, TKIP and TKIP+AES cipher types.
4. **Mixed WPA/WPA2-PSK**: If selected, both WPA-PSK and WPA2-PSK secured wireless clients can join your wireless network.

WPA cipher type:

1. **AES**: If selected, wireless speed can reach up to 300Mbps.
2. **TKIP**: If selected, wireless speed can reach up to 54Mbps.
3. **TKIP&AES**: If selected, both AES and TKIP secured wireless clients can join your wireless network.

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

4.4.3 Advanced Settings

In this section, you can configure the advanced wireless settings of the Router; including Beacon Interval, TX Power, and Basic Data Rate. In case of uncertainty on how to configure the advanced wireless settings, it is recommended to keep the default values.

HooToo

Advanced Settings

Band Switch: 5G

BG Protection Mode: Auto

Basic Data Rates: Default(1-2-5-5-11 Mbit/s)

Beacon Interval: 100 ms (Range: 20 - 999, Default: 100)

Fragment Threshold: 2346 (Range: 256 - 2346, Default: 2346)

RTS Threshold: 2347 (Range: 1 - 2347, Default: 2347)

TX Power: ☒ High ☐ Medium ☐ Low

WMM Capable: ☐ Enable ☒ Disable

APSD Capable: ☐ Enable ☒ Disable

20/40 BssCoexSupport: ☒ Enable ☐ Disable

Help

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

WMM (Wi-Fi Multimedia): when WMM is enabled, the wireless multimedia data transmission will be improved greatly (video or on-line demand).

APSD: it is used for auto power-saved service. The default is disabled.

Save Cancel

WMM (Wi-Fi Multimedia): Improved wireless multimedia data transmission (video or on-line demand).

APSD: Power saver mode. Disabled as default.

4.4.4 WPS Settings

To choose PIN or PBC for improved WiFi protection.

HooToo

WPS Config

Band Switch: 2.4G

WPS Settings: ☐ Enable

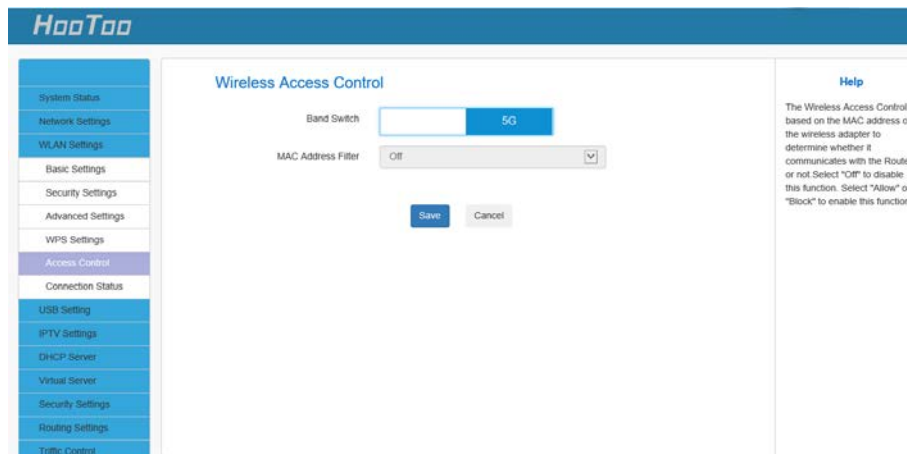
Save resetOOB

Help

You could setup security easily by choosing PIN or PBC method to do Wi-Fi Protected Setup.

4.4.5 Access Control

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

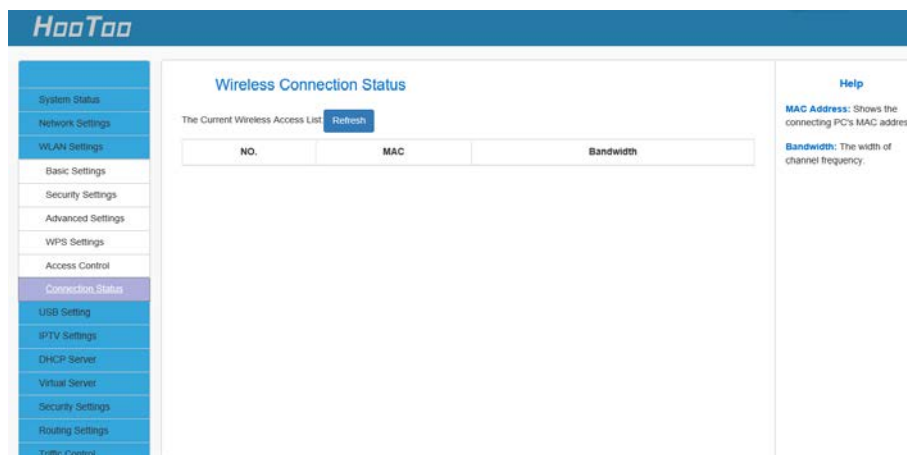


Select "Off" to disable this function.

Select "Allow" or "Block" to enable this function.

4.4.6 Connection Status

Here you can see a list of the wireless devices connected to the router.



MAC Address: Shows the connecting PC's MAC address.

Bandwidth: The width of channel frequency

Note:

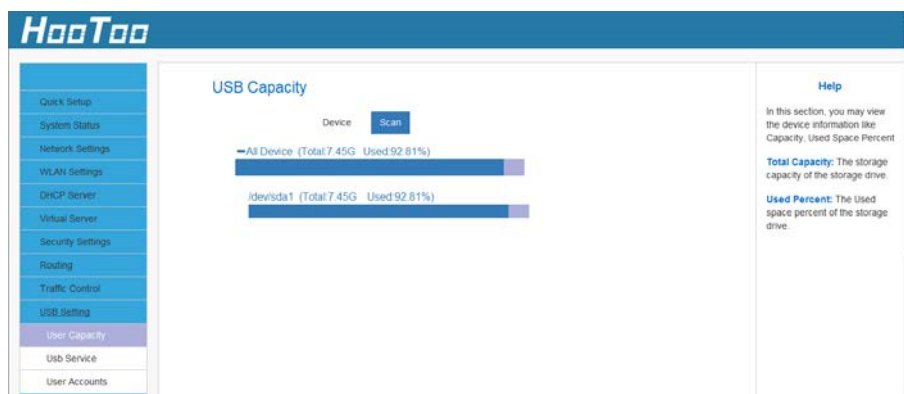
The bandwidth refers to the channel bandwidth instead of wireless connection rate. You can know whether there are unauthorized connections to your wireless network by viewing the wireless client list.

4.5 USB Settings

4.5.1 Device Sharing

Follow the steps below to connect a USB device to the router.

1. First, please make sure your USB device is FAT 32, then connect it to the router.
2. Power on the router, enter the IP address 10.10.10.252 to access the router web page.
3. On the web menu to the left, select USB Setting to enter the USB Settings page. Click Scan. The device information will appear once detected, see the picture below.



Delete: Remote shared USB device.

Note: To successfully share files, first you need to access the User Account Interface, enter user name and password, and then open sharing.

If the router fails to detect the USB device, the below page will appear.

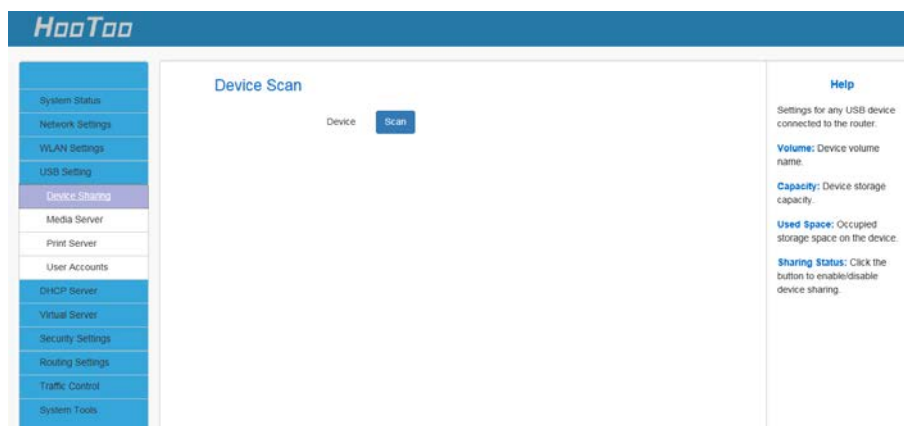


Figure 3

The reasons for this issue are as below:

1. The USB device is not formatted and incompatible with the router.
Please format the USB device and restore to default FAT32
2. You are using a defective USB device; please use a fully functional USB device.

3. Configure SAMBA access:

On the USB Setting page, click the “Share” button to activate the USB function. Then click User Accounts. The below page will be shown:

USB Access control

ID	Username	Password	Action
1			Delete
1			Add

Help
Set the username and password for storage sharing users.
User Name: Consist of up to 32 alphanumeric symbols.
Password: Consist of up to 32 alphanumeric symbols.

Enter a Username and Password. If you enter 12345 as the username, then the password is also 12345.

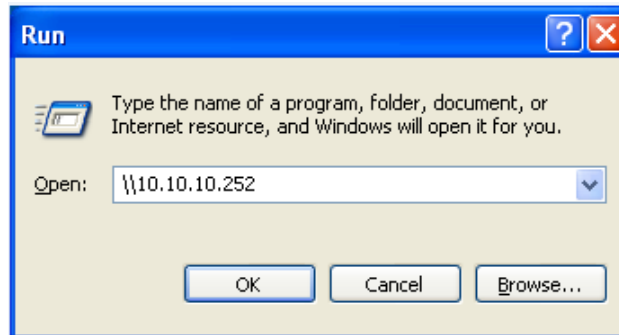
USB Access control

ID	Username	Password	Action
1	hooToo	*****	Delete
1			Add

Help
Set the username and password for storage sharing users.
User Name: Consist of up to 32 alphanumeric symbols.
Password: Consist of up to 32 alphanumeric symbols.

For Windows:

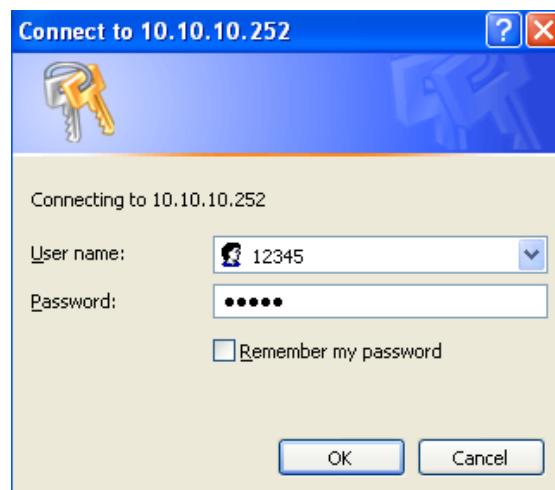
1. Click on the *Start* menu on the left corner of your desktop, enter \\10.10.10.252 in the *Search programs and files* column.



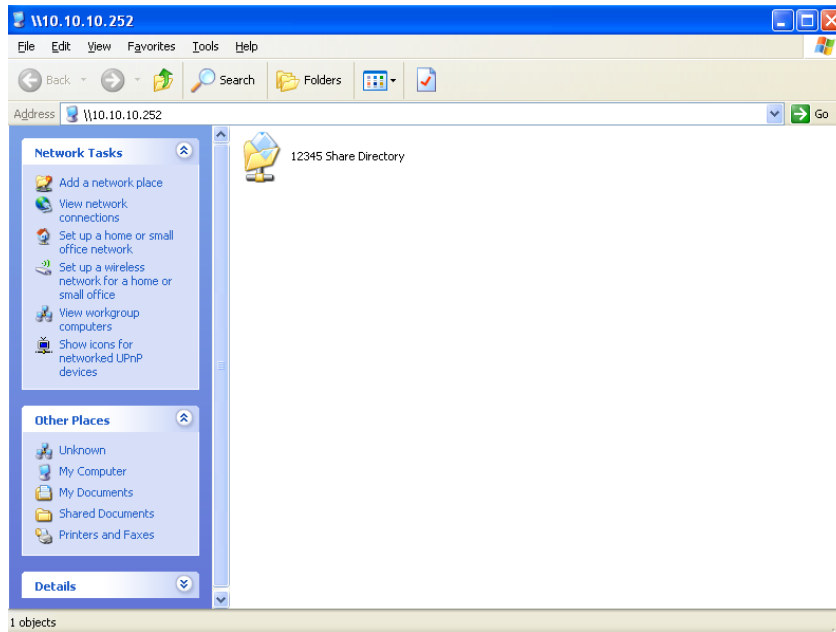
Note: In case your router IP address has been altered, i.e. 192.168.10.1, please enter the modified IP address following its exact format:

\\192.168.10.1

2. Press enter and a popup box will appear; enter the username and password to log on, i.e. 12345/12345 for the username and password.

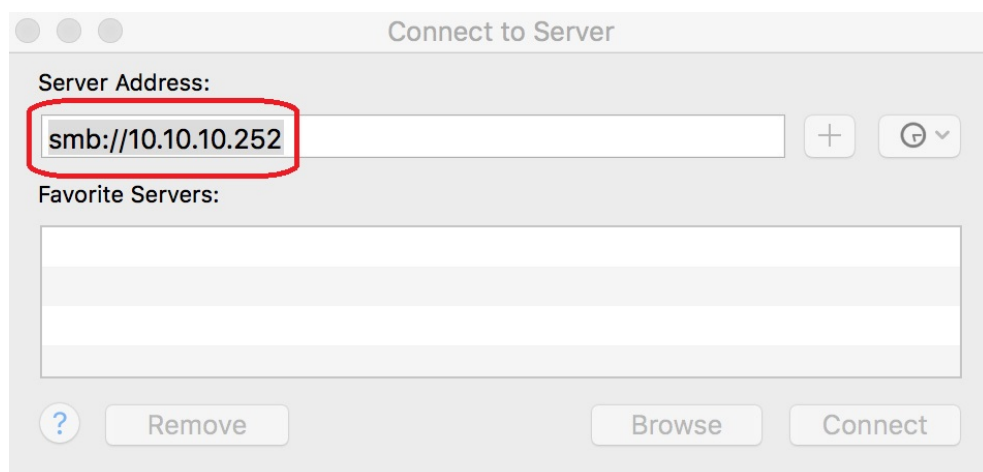


3. After entering the username and password, click “OK” to access the USB device.



For MacBook:

1. Click Finder, select *Connect to Server*; you will be directed to below page, enter `smb://10.10.10.252`. In case your IP address has been altered, please use the new IP address. When done, click *Connect*.



2. Enter the preset User Account (user name and password) on USB Settings page, click *Connect* to enter the directory of the USB drive.

Enter your name and password for the server "10.10.10.252".

Connect As: ☐ Guest ☒ Registered User

Name: 12345

Password:

☐ Remember this password in my keychain

Cancel Connect

Please Note:

1. The user name and password should be consistent with the preset info on the User Accounts page.
2. Once the share function is activated, all the data on the USB device will be synched to the public folder of the router. Please be careful with data security.

Double click the xxxxx Share Directory icon to manage the files, such as uploading, downloading, and deleting etc.

4.5.2 Media Server

You can configure the media server for the network on this page.

HooToo

Media Server

DLNA ☒ Enable

Network/Media Server Name: HooToo_DLNA

DLNA Port: 8200

Save Cancel

[Help](#)

Configure media server for the network.

4.5.3 Print Server

You can configure the print server for the network on this page.

The screenshot shows the 'Print Server' configuration page in the HooToo web interface. On the left is a sidebar menu with options: System Status, Network Settings, WLAN Settings, USB Setting, Device Sharing, Media Server, Print Server (highlighted), User Accounts, IPTV Settings, DHCP Server, Virtual Server, Security Settings, Routing Settings, Traffic Control, and System Tools. The main content area is titled 'Print Server' and contains a 'Print Server' checkbox labeled 'Enable', a 'Printer Name' field with the value 'Printer_Hootoo', and 'Save' and 'Cancel' buttons. A 'Help' section on the right explains the 'Print Server' status and the 'Printer Name' field.

Print Server: Indicates the current Enable/Disable status of the Print Server.

Printer Name: Name of printer connected to the router

4.5.4 User Account

You can specify the user name and password for Storage Sharing and FTP Server users on this page.

The screenshot shows the 'USB Access control' page in the HooToo web interface. The sidebar menu is identical to the previous page, with 'User Accounts' highlighted. The main content area is titled 'USB Access control' and features a table with columns 'ID', 'Username', 'Password', and 'Action'. The table has two rows: the first row has ID '1' and a 'Delete' button; the second row has ID '1' and an 'Add' button. A 'Help' section on the right provides instructions for specifying user names and passwords, noting that they must be alphanumeric and not exceed 32 characters in length.

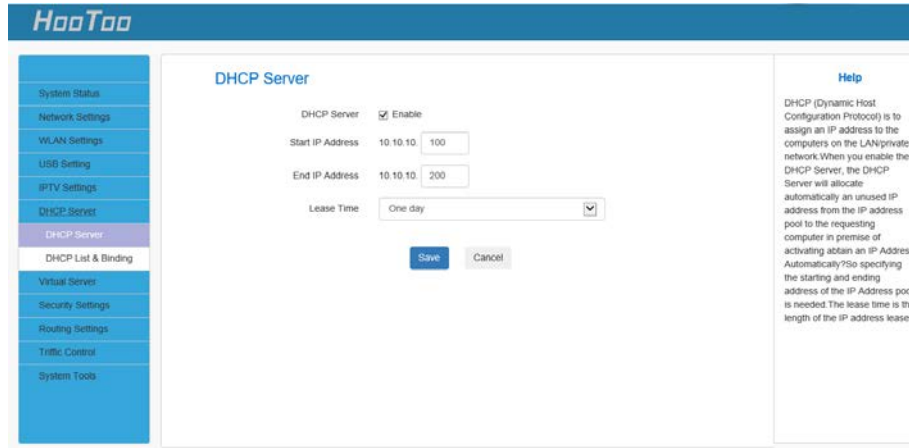
User Name: Type the user name to whom you want to grant access to the USB drive. The user name must contain alphanumeric symbols and not exceed 32 characters in length.

Password: The password must contain alphanumeric symbols and not exceed 32 characters in length. For security purposes, the password of each individual user is not displayed.

4.6 DHCP Server

4.6.1 DHCP Server

Here you can change the DHCP IP address pool and lease time.



The screenshot shows the HooToo web interface for DHCP Server configuration. On the left is a sidebar menu with options: System Status, Network Settings, WLAN Settings, USB Setting, IPTV Settings, DHCP Server (highlighted), DHCP List & Binding, Virtual Server, Security Settings, Routing Settings, Traffic Control, and System Tools. The main content area is titled 'DHCP Server' and contains the following settings:

- DHCP Server:** A checkbox labeled 'Enable' is checked.
- Start IP Address:** A text input field showing '10.10.10' and a numeric input field showing '100'.
- End IP Address:** A text input field showing '10.10.10' and a numeric input field showing '200'.
- Lease Time:** A dropdown menu showing 'One day'.

At the bottom of the settings are 'Save' and 'Cancel' buttons. On the right side of the interface is a 'Help' section with the following text:

DHCP (Dynamic Host Configuration Protocol) is to assign an IP address to the computers on the LAN/private network. When you enable the DHCP Server, the DHCP Server will allocate automatically an unused IP address from the IP address pool to the requesting computer in premise of activating obtain an IP Address Automatically? So specifying the starting and ending address of the IP Address pool is needed. The lease time is the length of the IP address lease.

DHCP Server Configuration:

1. **DHCP Server:** Enable/disable the DHCP server.
2. **Start IP/End IP:** Specify Start/End IP addresses of the IP address pool. These addresses should be part of the same IP address subnet as the router LAN IP address.
3. **Lease Time:** Time length for the IP address to be assigned to each device before it is refreshed.
4. Click **Save** to save your settings.

Note:

1. By default, the router performs as a DHCP server. Do not disable the DHCP server feature unless you want to manually configure TCP/IP settings for all PCs on your LAN.
2. Lease time will be renewed automatically upon expiration. No additional configuration is needed.
3. If you are not an advanced user, the default DHCP server settings are recommended.

4.6.2 DHCP List & Binding

Here you can view the DHCP dynamic client list: host name, IP address, MAC address, and lease time information.

The screenshot shows the HooToo DHCP List & Binding interface. On the left is a sidebar with navigation options: System Status, Network Settings, WLAN Settings, USB Setting, IPTV Settings, DHCP Server, DHCP List & Binding (selected), Virtual Server, Security Settings, Routing Settings, Traffic Control, and System Tools. The main content area is titled 'DHCP List&Binding'. It features input fields for 'IP Address' (10.10.10) and 'MAC Address' (with five empty boxes). Below these are 'Add' and 'Refresh' buttons. A table displays the DHCP client list with columns: NO., IP Address, MAC Address, IP-MAC bind, and Delete. The table contains one entry for 'bruce-nb' with IP 10.10.10.100, MAC B8:2A:72:F5:EE:A9, and lease time 22:47:44. Below the table are 'Save' and 'Cancel' buttons. On the right, a 'Help' section explains that users can add IP and MAC addresses manually to set the DHCP client list, and that they should click 'Save' to save settings and 'Refresh' to update the client information.

NO.	IP Address	MAC Address	IP-MAC bind	Delete
	Host Name	IP Address	MAC Address	Lease
	bruce-nb	10.10.10.100	B8:2A:72:F5:EE:A9	22:47:44

Note:

1. You can know whether there are unauthorized connections by viewing the client list.
2. You can specify a reserved IP address for a PC in the LAN. That PC will always receive the same IP address each time it accesses the DHCP server. Reserved IP addresses can be assigned to servers that require permanent IP settings.
3. 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 DHCP server, instead, you have to manually specify a different IP address for your PC to access the Internet.
4. For PCs that have already obtained IP addresses, you may need to perform the Repair action to activate the configured static IP addresses.

4.7 Virtual Server

4.7.1 Port Range

Port range allows you to share resources on your PC with your friends who are not in your LAN. By default, the router's firewall blocks inbound traffic from the Internet to your computer except for the replies to the 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 bar. 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)

ID	Start Port-End Port	To IP Address	Protocol	Enable	Delete
1.		10.10.10.	TCP	☐	☐
2.		10.10.10.	TCP	☐	☐
3.		10.10.10.	TCP	☐	☐
4.		10.10.10.	TCP	☐	☐
5.		10.10.10.	TCP	☐	☐
6.		10.10.10.	TCP	☐	☐

Well-known Service Port: DNS(53) Add to 1

Save Cancel

Help
Start/End Port: Enter the start/end port number which ranges the External ports used to set the server or Internet applications.
IP Address: Enter the IP address of the PC where you want to set the applications.
Protocol: Select the protocol (TCP/UDP/Both) for the application.

Start/End Port: Enter the start/end port number within the ranges forwarded from the external ports to set the server or Internet applications.

IP Address: Enter the IP address of the PC where you want to set the applications.

Protocol: Select the protocol (TCP/UDP/Both) for the application

Enable: Activate this rule.

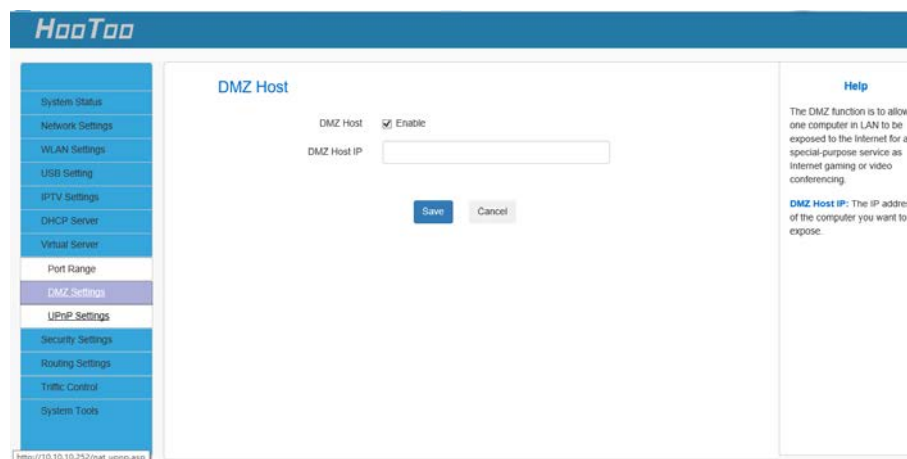
Note:

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 the 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.
5. When finished, click **Save** to save your settings.

For example: if your WAN IP address is 202.33.56.88, when accessing your FTP server from external network, your friends only need to enter <ftp://202.33.56.88:21> in their browsers.

4.7.2 DMZ Settings

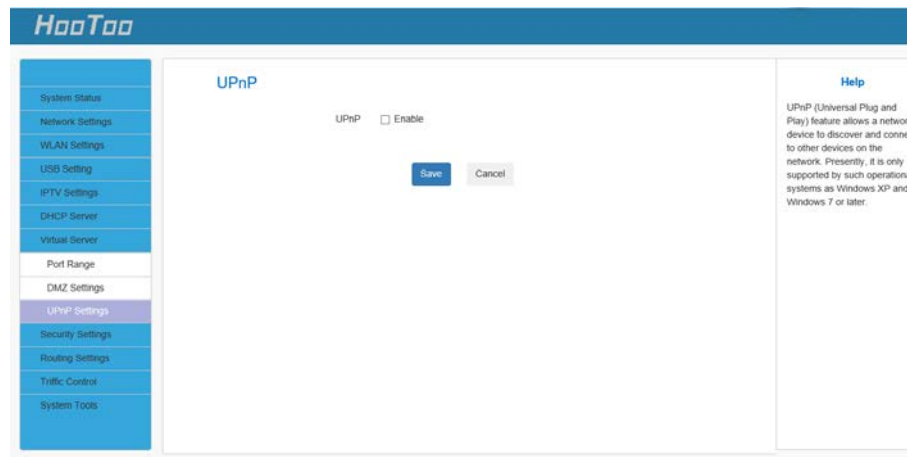
The DMZ function is to allow one computer in LAN to be exposed to the Internet for a special-purpose service as Internet gaming or video conferencing.



DMZ Host IP: The IP address of the computer you want to expose.

4.7.3 UPnP Settings

UPnP (Universal Plug and Play) feature allows a network device to discover and connect to other devices on the network. At the current date, it is only supported by Windows XP and Windows 7 or later.

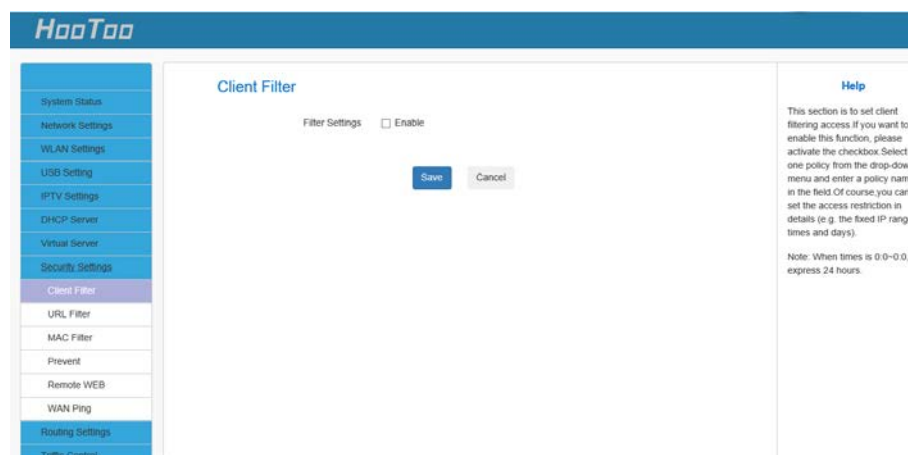


Note: The UPnP feature is enabled by default.

4.8 Security Settings

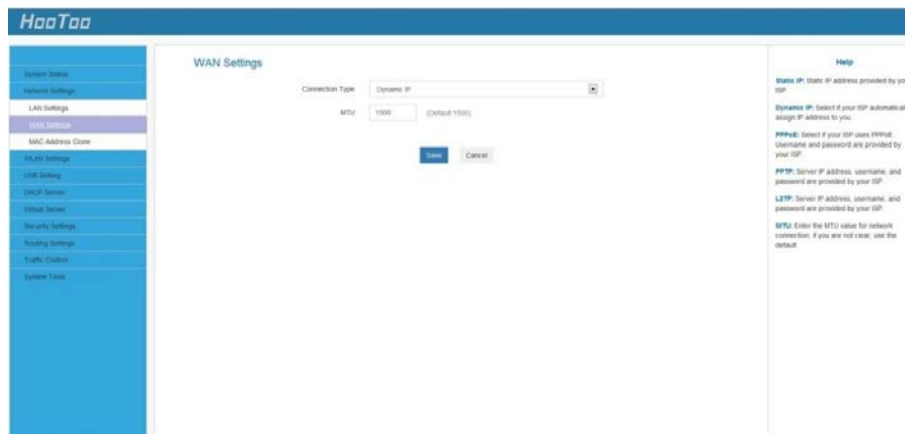
4.8.1 Client Filter

This section is to set the client filter access. Check the checkbox to enable this function. Select a policy from the drop-down menu and enter a policy name in the field.

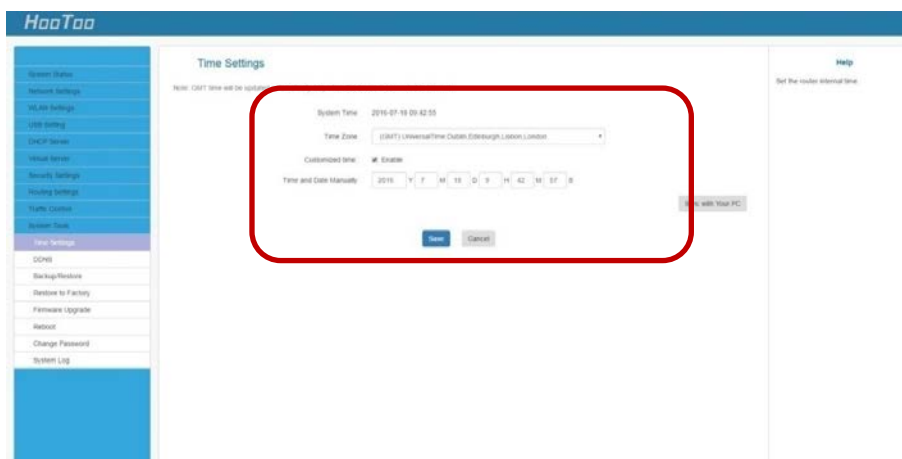


You can set the access restriction parameters (e.g. a fixed IP range, times, and days) and set the client filter by following the steps below.

1. Power on the router and enter the router gateway 10.10.10.252 (password: admin) in the browser to log onto the router's web page.
2. On the menu column, click Network Settings and then WAN Settings. Select Dynamic IP (or the Connection type of your setting) and click "Save".



3. Click System Tools on the menu column and select Time Settings. Sync the Customized Time with the System time. Click Save.



- On the menu, click Security Settings and select Client Filter to access its page. Tick the Enable box to turn on the Client Filter function.

- Follow Step 4 to configure the parameters. When all are done, click Save.

Parameter configuration details are as below:

- Policy Number: Items to be configured, selectable from 1 to 10.
- Access Policy: Tick to enable Access Policy; un-tick to disable.
- Policy Name: Create a name for the policy.
- Start IP: The default start IP is 10.10.10.X (X stands for the initial IP you set, the initial IP of this setting is 100. Set the Start IP according to your own setting).
- End IP: The default end IP is 10.10.10.X. (X stands for the end IP you set. Usually the end IP is 254.)
- Port: Usually set to 1 to 65535.

- 7) Type: Protocol type, including TCP, UDP, and Both. In normal cases, TCP is selected.
 - 8) Time: Set the timeframe of the access restriction as needed.
 - 9) Day: Tick to select a specific day, every day, or none
(Options: Everyday, SUN, MON, TUE, WED, THU, FRI, SAT).
6. When above settings are configured, restart the DUT. Follow Step 3 to synchronize the System time with the Customized time after the restart.

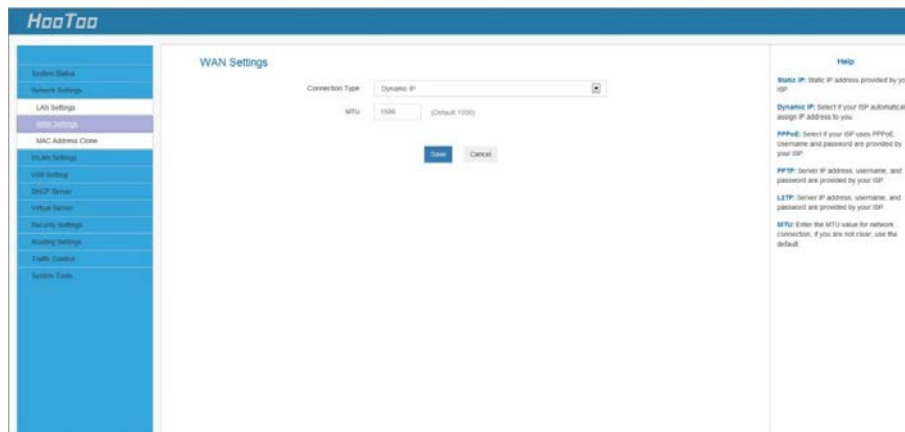
4.8.2 URL Filter

This section is to set URL filtering access. Check the checkbox to enable this function. Select one policy from the drop-down menu and enter a policy name in the field.

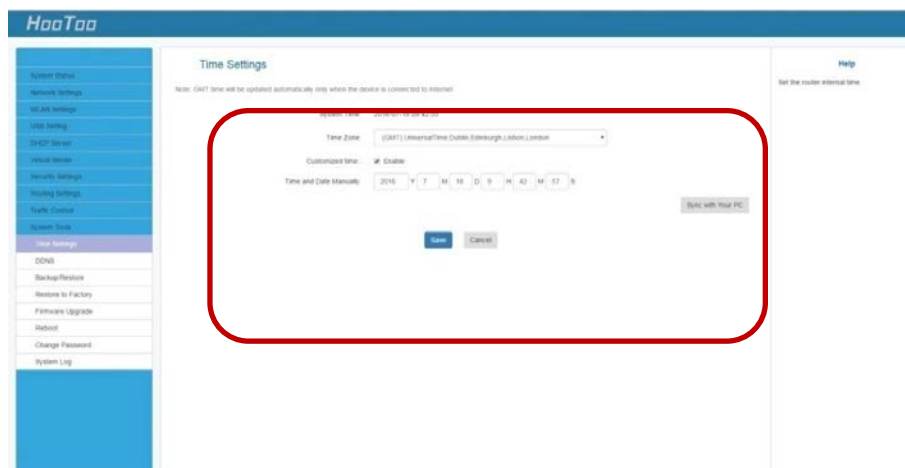
The screenshot shows the HooToo web interface. On the left is a vertical menu with various system settings. The 'URL Filter' option is highlighted. The main panel displays the 'URL Filter' configuration page. It features a 'Filtering Setting' section with an 'Enable' checkbox and 'Save' and 'Cancel' buttons. A 'Help' section on the right provides instructions on how to use the URL filtering feature, including a note about time formatting (0:0-0:0 for 24 hours).

You can set the access restriction parameters (e.g. the fixed IP range, times, and days). You can set the URL filter through the steps below.

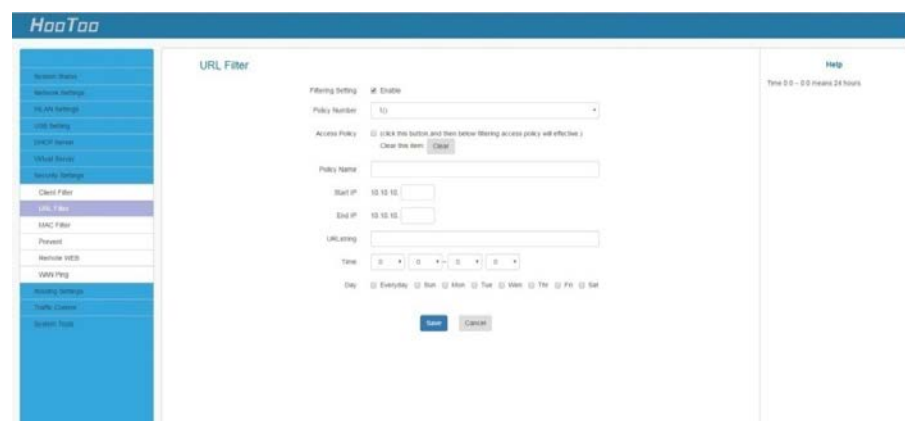
1. Power on the router, access the gateway through 10.10.10.252 (password: admin) to log onto the router's web page.
2. On the menu, select the Network Settings, then WAN Settings to access its page, connect to Internet through Dynamic IP (based on the actual settings). Click Save.



3. Click System Tools on the menu, select Time Settings, sync the System Time with the Customized Time.



4. On the menu, click Security Settings, select URL Filter to enter its page. Tick "Enable" to activate the URL Filter function.



5. Configure each parameter in Step 4. After the configuration is done, click “Save”.

The screenshot shows the 'URL Filter' configuration page. The left sidebar has a menu with items: System Status, Network Settings, Access Settings, Client Filter, URL Filter (selected), MAC Filter, Firewall, Network WEB, VPN Ping, Routing Settings, Traffic Control, and System Tools. The main content area is titled 'URL Filter' and contains the following fields and controls:

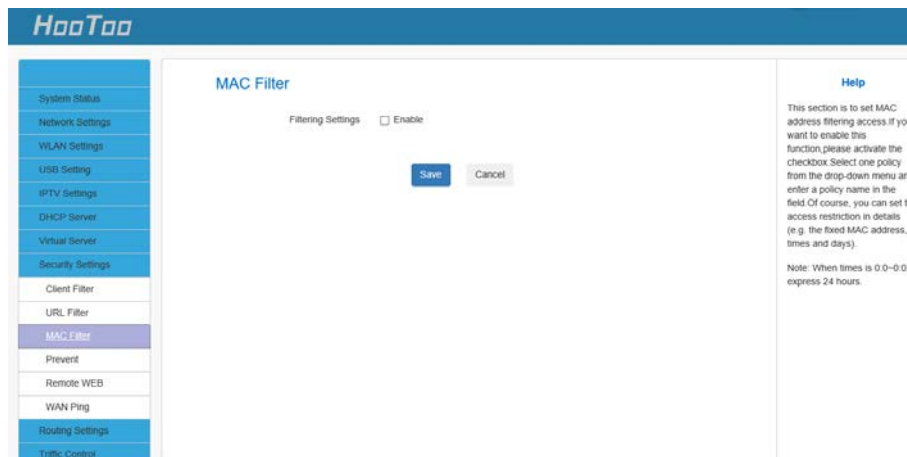
- Filtering Setting: 1/1234
- Policy Number: 1/1234
- Access Policy: ☒ (Click this button, and then below filtering access policy will be effective.)
- Policy Name: 1234
- Start IP: 10.10.10.100
- End IP: 10.10.10.254
- URL String: www.bing.com
- Time: 6:00 to 24:00
- Day: ☒ Everyday ☐ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat
- Buttons: Save, Cancel

Parameter configuration details are as below:

- 1) Policy Number: Items to be configured, selectable from 1 to 10.
 - 2) Access Policy: Tick to enable Access Policy; un-tick to disable.
 - 3) Policy Name: Create a name for the policy.
 - 4) Start IP: The default start IP is 10.10.10.X (X stands for the initial IP you set, the initial IP of this setting is 100. Set the Start IP according to your own setting).
 - 5) End IP: The default end IP is 10.10.10.X. (X stands for the end IP you set. Usually the end IP is 254.)
 - 6) URL String: The URL that you wish to restrict access to, i.e. www.bing.com, www.yahoo.com, etc.
 - 7) Time: Set the timeframe of the access restriction as needed.
 - 8) Day: Tick to select a specific day, every day, or none (Everyday, SUN, MON, TUE, WED, THU, FRI, SAT).
6. After above settings are configured, restart the DUT. Follow Step 3 to synchronize the System Time with the Customized Time after the restart.

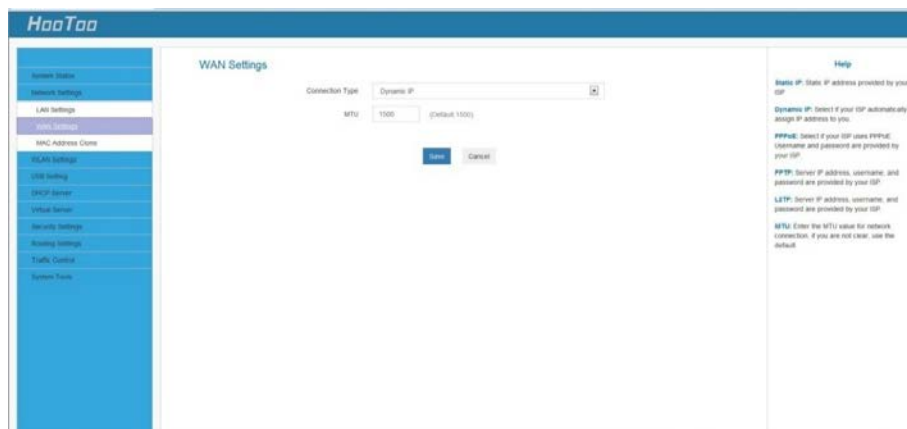
4.8.3 MAC Filter

This section is to set MAC address filtering access. Check the checkbox to enable this function. Select one policy from the drop-down menu and enter a policy name in the field.

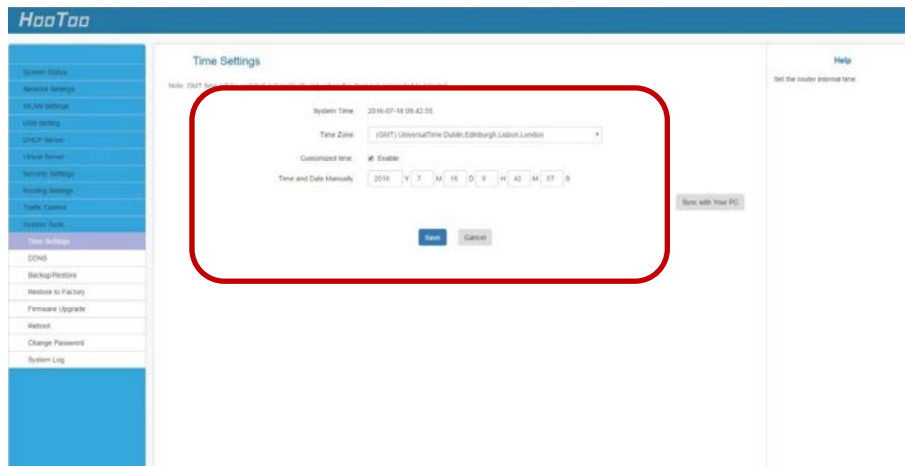


You can set the access restriction parameters (e.g. the fixed IP range, times, and days), you can set the filter through the steps below.

1. Log on the router web page via the gateway 10.10.10.252 (password: admin) after the router is normally powered on.
2. On the menu, click Network Settings to access WAN Settings page. Select Dynamic IP (or select according to your own settings) and click “Save”.



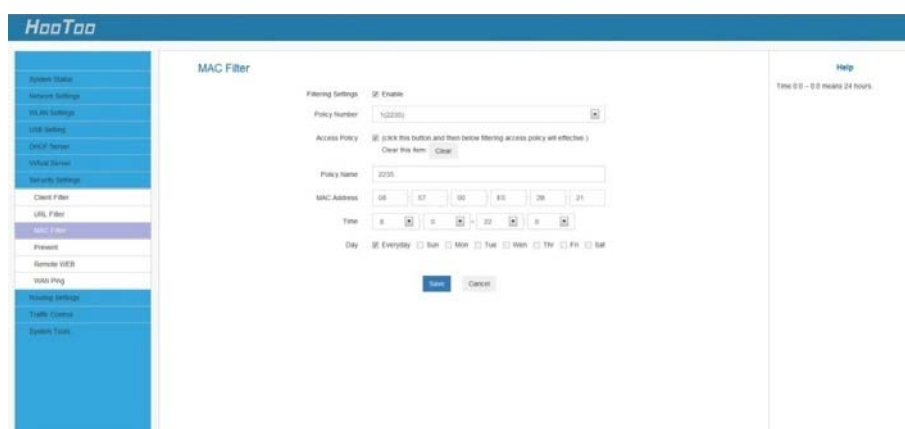
3. Click System Tools to enter the Time Settings page. Sync the Customized time with the System time. Click Save after you are done.



4. Click Security Settings to access the MAC Filter page. Tick “Enable” to turn on MAC Filter function.



5. Configure each parameter in Step 4. When done, click Save.



Parameter configuration details are as below:

- 1) Policy Number: Items to be configured, selectable from 1 to 10.
 - 2) Access Policy: Tick to enable Access Policy; un-tick to disable.
 - 3) Policy Name: Create a name for the policy.
 - 4) MAC Address: The MAC address for wired and wireless internet connection. Enter the wired and wireless MAC address respectively for when the PC is connected to DUT with wire and wirelessly.
 - 5) Time: Set the timeframe of the access restriction as needed.
 - 6) Day: Tick to select a specific day, every day, or none (Everyday, SUN, MON, TUE, WED, THU, FRI, SAT).
6. After above settings are done, restart the DUT. Follow Step 3 to sync the System Time with the Customized Time after the restart.

4.8.4 Threat Prevention

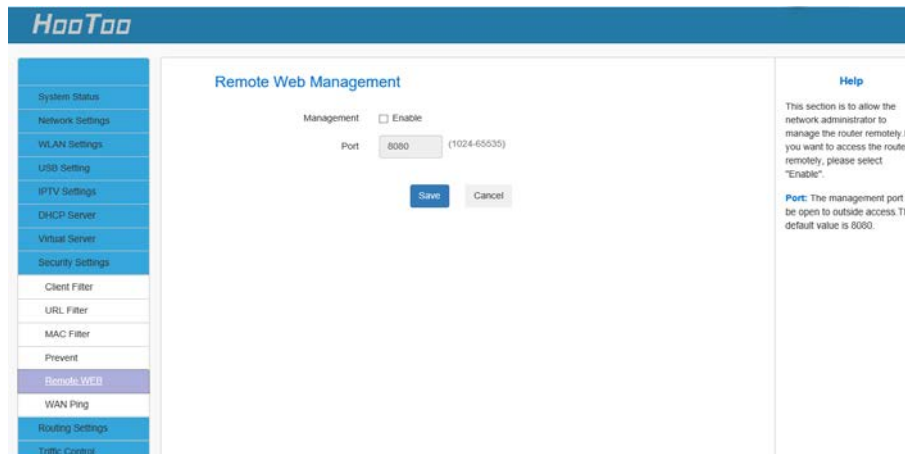
This section is to protect the internal network from external security threats. You can click “Enable” to limit the connection speed within the LAN. Up to 20 entries can be supported.

The screenshot shows the 'HooToo' web interface for 'Traffic Control Settings'. On the left is a sidebar menu with options: System Status, Network Settings, WLAN Settings, USB Setting, DHCP Server, Virtual Server, Security Settings, Routing Settings, Traffic Control (highlighted), and System Tools. The main content area is titled 'Traffic Control Settings' and includes a 'Traffic Control' checkbox which is checked and labeled 'Enable'. Below this are input fields for 'IP Range' (showing '10.10.10.' followed by a dropdown), 'Up/Down' (a dropdown menu set to 'Up'), and 'Bandwidth Range' (two input boxes separated by a tilde, with '(KBytes/s)' to the right). There are 'Apply' and 'Add' buttons. At the bottom is a table with columns: Num, IP, Up/Down, BW Range, Apply, Edit, and Del. Below the table are 'Save' and 'Cancel' buttons. On the right side, there is a 'Help' section with text: 'Limit the connection speed within the LAN. Up to 20 entries can be supported.' and a note: 'Note: Maximum speed cannot exceed the WAN speed.'

Note: Maximum speed cannot exceed the WAN speed.

4.8.5 Remote WEB Access

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



Set Steps:

- ① Click “**Security Settings**”.
- ② Select “**Remote WEB**”.
- ③ Enter the Port. Click “**Save**” to confirm.

Enable: Check to enable the Remote Web Management feature.

Port: The management port to grant external access. The default setting is 8080. This can be changed.

Note:

1. For better security, configure a port number (between 1025 to 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 from 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.

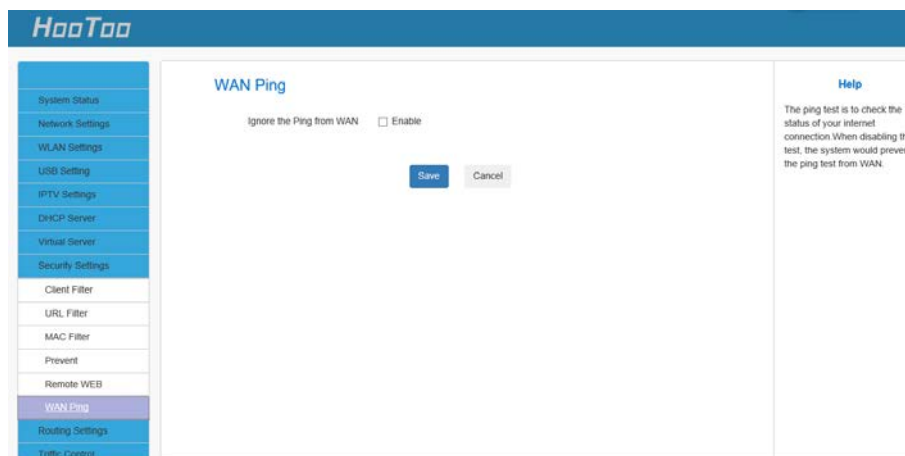
Set Steps:

- 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](http://172.16.87.160:6060)” into your browser’s address or location field and you can access the router at your home remotely.

4.8.6 WAN Ping

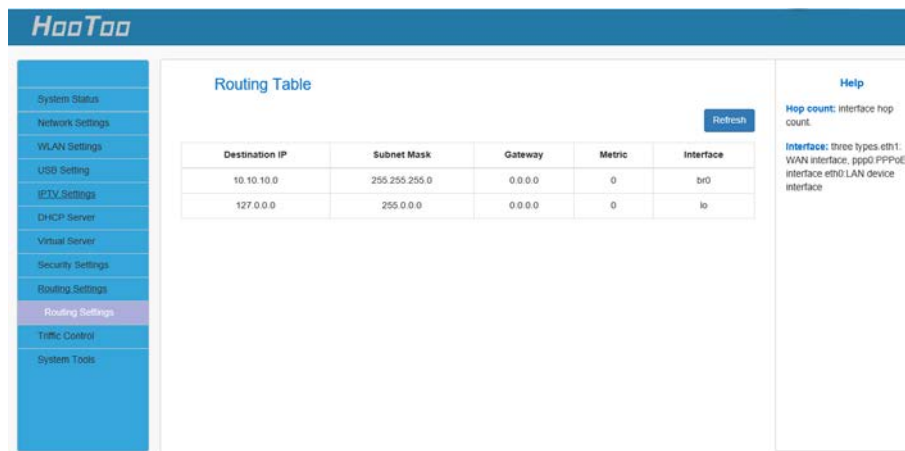
The ping test is to check the status of your internet connection. When disabling the test, the system will prevent the ping test from WAN.



Set Steps:

- ① Select the “**Expert Setting**”
- ② Select the “**WAN Ping**”
- ③ Select the “**Enable**”

4.9 Routing Settings



Destination IP	Subnet Mask	Gateway	Metric	Interface
10.10.10.0	255.255.255.0	0.0.0.0	0	br0
127.0.0.0	255.0.0.0	0.0.0.0	0	lo

Help
Hop count: interface hop count.
Interface: three types eth1: WAN interface, ppp0 PPPoE interface eth0 LAN device interface

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.

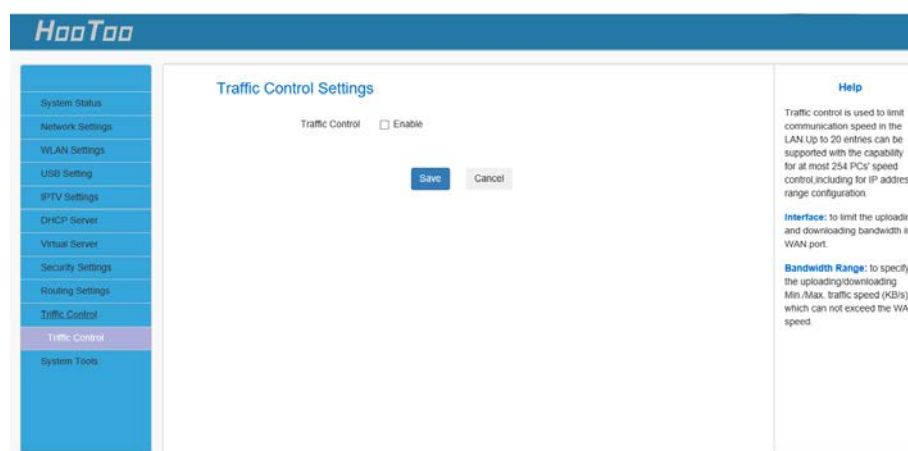
Gateway: The next router on the same LAN segment as the router to reach.

Metric: The number of routers between your network and the destination.

Interface: The interface between your router and the final destination.

4.10 Traffic Control

Traffic control is used to monitor and control the communication speed in the LAN. It can support up to 20 entries to monitor at most 254 PCs, including IP address range configuration.



Traffic Control Settings

Traffic Control ☐ Enable

Save **Cancel**

Help
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.
Interface: to limit the uploading and downloading bandwidth in WAN port.
Bandwidth Range: to specify the uploading/downloading Min/Max traffic speed (KB/s), which can not exceed the WAN speed.

Interface: To limit the uploading/downloading bandwidth in WAN port.

Bandwidth Range: To specify the uploading/downloading Min/Max traffic speed (KB/s) - that cannot exceed WAN speed.

4.11 System Tools

4.11.1 Time Settings

In order to select the time zone for your location. If you turn off the router, time zone settings reset to default. However, the router will automatically obtain the GMT time again once it has access to the Internet.

HooToo

Time Settings

Note: GMT time will be updated automatically only when the device is connected to Internet

System Time: 1971-01-01 01:22:51

Time Zone: (GMT) UniversalTime Dublin, Edinburgh, Lisbon

Customized time: ☐ Enable

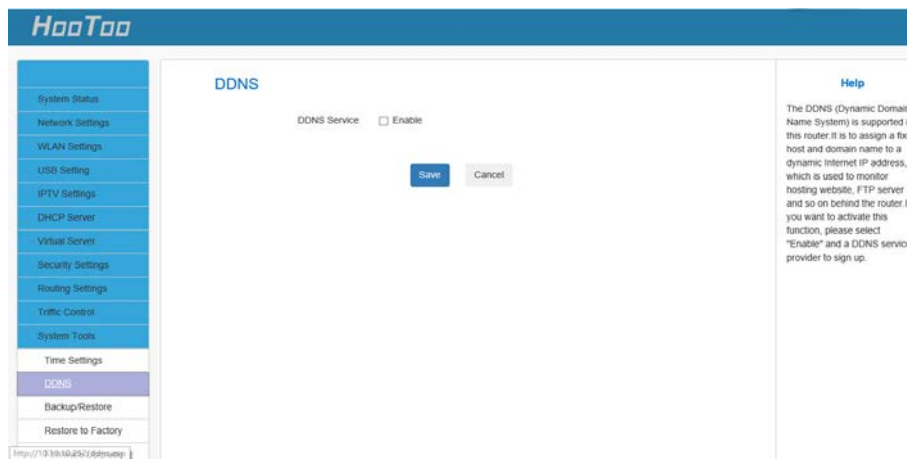
Save **Cancel**

Help

This section is to select the time zone for your location. If you turn off the router, the settings for time disappear. However, the router would automatically obtain the GMT time again once it has access to the Internet.

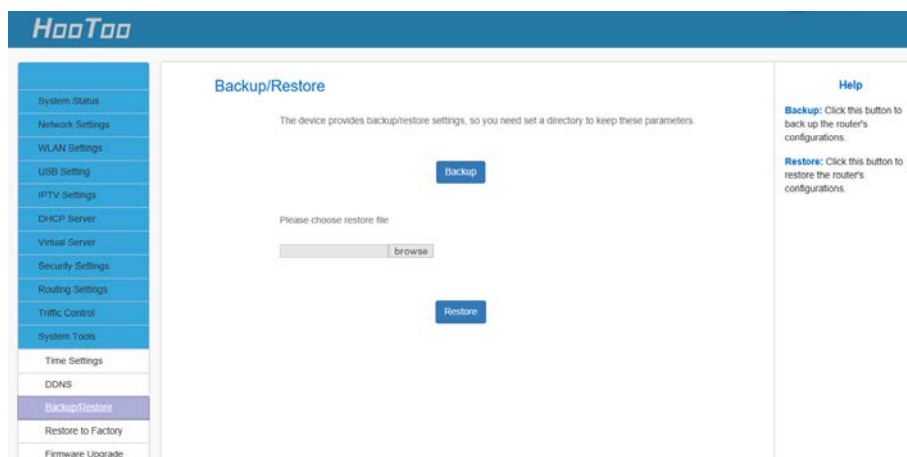
4.11.2 DDNS

The router supports DDNS (Dynamic Domain Name System). This is used to assign a fixed host and domain name to a dynamic Internet IP address and FTP server. To activate this function, check "Enable" and sign into the DDNS service provider.



4.11.3 Backup/Restore

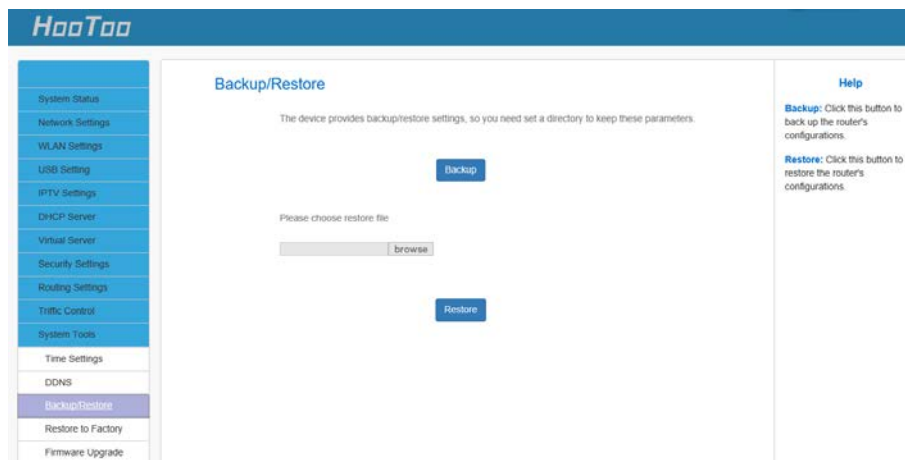
You can save the device settings onto your local hard drive to import them to your device at a later time in case a factory reset should be needed.



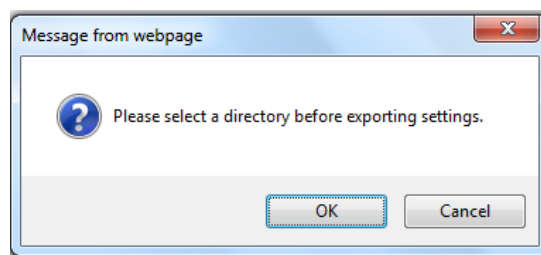
Backup: Click this button to back up the router's configuration. **Restore:** Click this button to restore the router's configuration.

Backup Configuration Procedures:

1. Click **Backup**

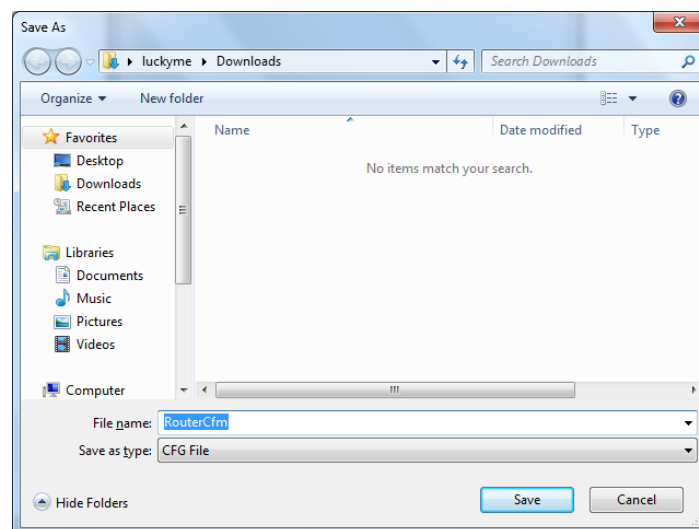


2. Click **OK** on the appearing window.



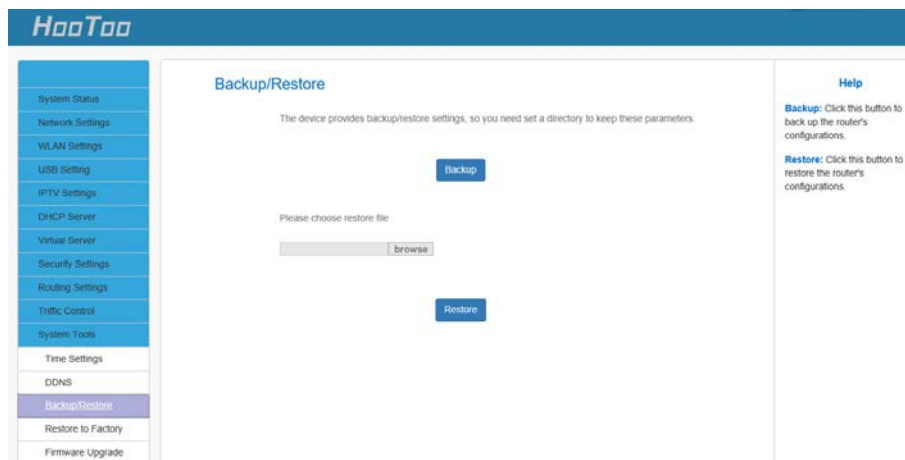
3. Click **Save** on the **File Download** window.

4. Select a local hard drive to save the file and click **Save**.

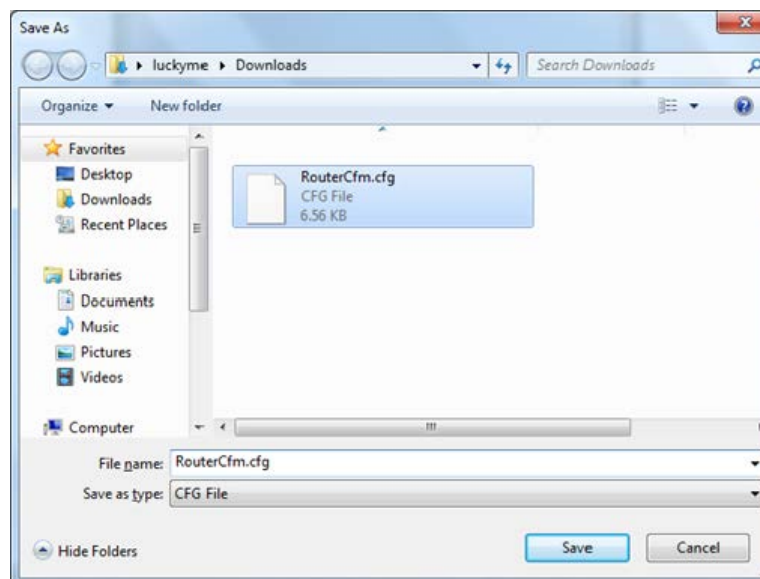


To Restore Configurations:

1. Click **Browse**.



2. Select the configuration file previously saved onto your local hard drive and click **Open**.



3. Click the **Restore** button to reset your device to previous settings.

Note:

The default configuration file name is "RouterCfm.cfg". Include the file name suffix ".cfg" when renaming the file name to avoid further issues.

4.11.4 Factory Reset

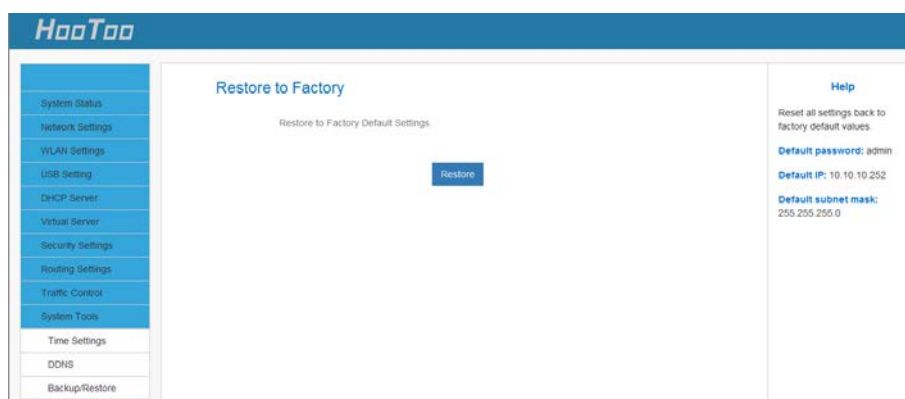
This button is to reset all settings to the default values. Since the router's current settings will be reset, it is recommended to take some notes to reestablish the previous settings at a later time:

Default password: admin

Default IP: 10.10.10.252

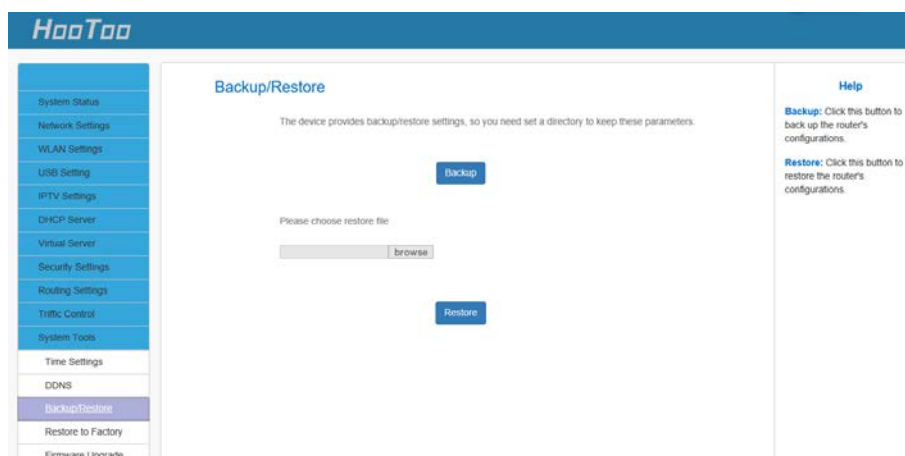
Default subnet mask: 255.255.255.0

Password: admin



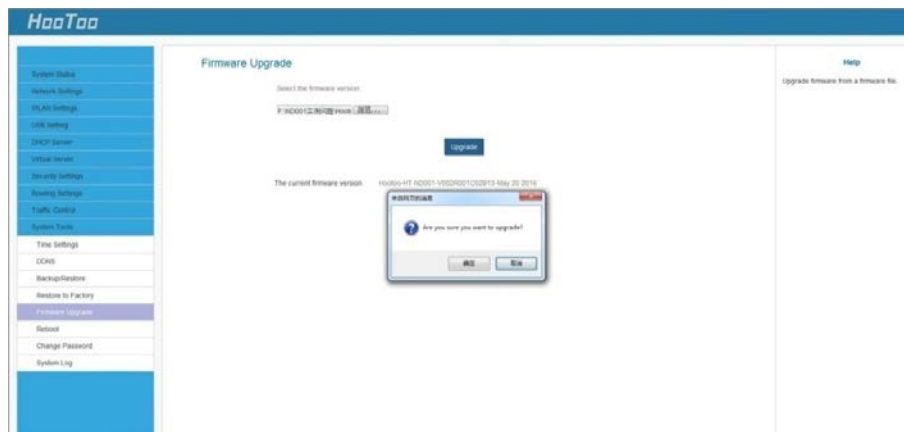
4.11.5 Firmware Upgrade

Click the "Upgrade" button to browse for the latest firmware version. After the upgrade, the router will reboot automatically.

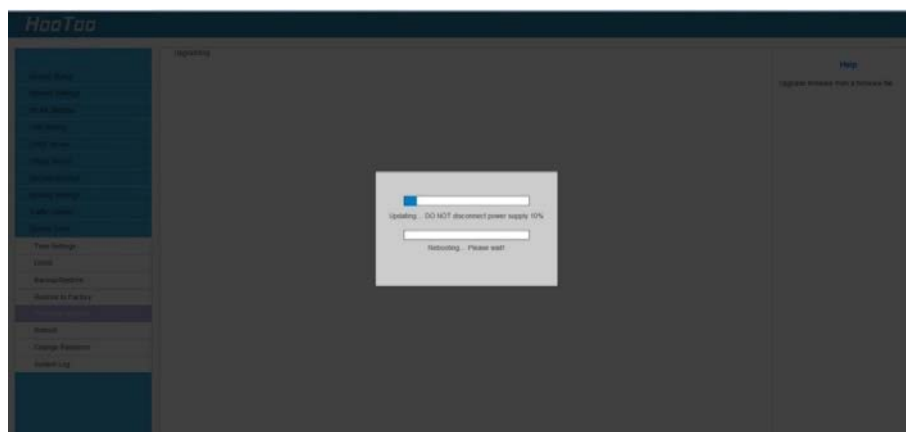


1. Get ready for firmware upgrade (Download the new firmware from the HooToo website or its support page and save it on your PC).

2. After the router is powered, enter the router gateway 10.10.10.252 (password: admin) to log onto the router web page.
3. On the web menu, click System Tools to access the Firmware Upgrade page. Click the “browse” button to locate and select the downloaded firmware. Click Upgrade. A popup box “Are you sure you want to upgrade?” will appear.



4. Click “Confirm” to upgrade the firmware.

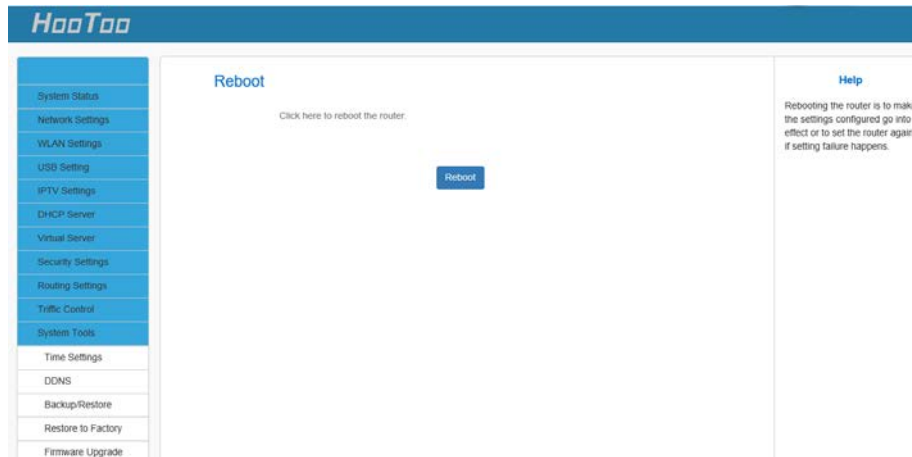


Note: Do not shut down the power of the router during an upgrade, as it will damage the router and interrupt the upgrade process. After the upgrade is done, reboot the router before using it.

When firmware is upgraded, enter the router gateway 10.10.10.252 (password: admin) to log on the router's web page. The router is successfully updated.

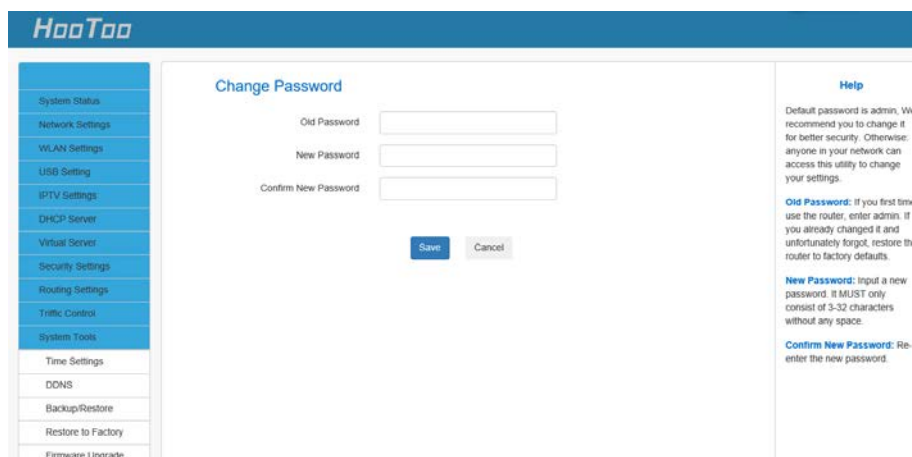
4.11.6 Reboot

Reboot the router to activate new settings or to change the current settings in cause of setting failure/software freeze.



4.11.7 Change Password

The default password is "admin". We recommend you change it in order to increase security.



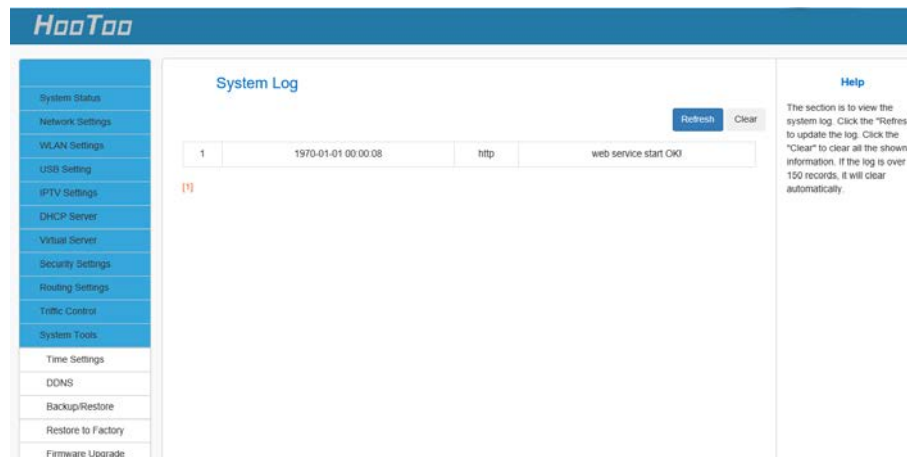
Old Password: The first time you use the router, enter admin. If you already changed it and unfortunately forgot it, restore the router to factory defaults.

New Password: Input a new password. The password has to contain 3-32 characters without any space.

Confirm New Password: Re-enter the new password.

4.11.8 System Log

The section is to view the system log. Click the "Refresh" button to update the log. Click the "Clear" button to clear all information. The log will clear automatically once reached 150 records.



5 FAQs

1. Q: I cannot access the device management interface. What should I do?

- Make sure the System LED on the device front panel is on.
- Make sure all cables are correctly connected and the corresponding LAN LED on the device is on.
- Verify that your PC's TCP/IP settings are configured correctly. If you select the "Use the following IP address" option, set your PC's IP address to any IP address between 10.10.10.2 ~ 10.10.10.254. You can also select the "Obtain an IP address automatically" option.
- Delete your browser cache and cookies or try using a different browser. Make sure you enter 10.10.10.252 in the address bar.
- Press the WPS/RST button for about 10 seconds to restore your device to factory default settings. Then log into your device again.

2. Q: I changed the login password and unfortunately forgot it. What should I do?

Press the WPS/RST button for over 10 seconds to restore your device to factory default settings.

3. Q: My computer shows an IP address conflict error after connecting to the device. What should I do?

- Make sure there are no other DHCP servers on your LAN/no DHCP servers are disabled.
- Make sure the device LAN IP address is not used by other devices on your LAN. The device default LAN IP address is 10.10.10.252.
- Make sure the statically assigned IP addresses to the PCs on LAN are not used by others PCs.

4. Q: I have problems connecting to the Internet/Secure websites do not open or display only part of a web page. What should I do?

This problem mainly happens to users who use PPPoE or Dynamic IP Internet connection types. You need to change the MTU size. Try changing the MTU to 1450 or 1400. If this does not help, gradually reduce the MTU from the maximum value until the problem disappears.

6.Factory Default Settings

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

Item		Default Settings
Router Login	Login IP Address	10.10.10.252
	Login User Name	admin
	Login Password	admin
Network Settings	Internet Connection Type	Mode Auto-switch Enabled
	MTU	1492 (PPPoE) 1500 (DHCP/ Static IP)
	WAN Speed	Auto
	DNS	Disable
LAN Settings (LAN)	IP Address	10.10.10.252
	Subnet Mask	255.255.255.0
	DHCP Server	Enabled
	IP Pool	10.10.10.100~10.10.10.200
	Time Zone	(GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi
2.4G Wireless	Wireless	Enabled
	SSID	HT_XXXXXX (where XXXXXX is the last six characters in the

		device's MAC address)
	802.11 Mode	11b/g/n mixed Mode
	SSID Broadcast	Enabled
	Channel	2437MHz(Channel 6)
	Channel Bandwidth	20/40
	Extension Channel	2437MHz(Channel 10)
	Wireless Security	Disabled
	Wireless Access Control	Disabled
5.0G Wireless	Country	America
	Wireless	Enabled
	SSID	HT_XXXXXX (where XXXXXX is the last six characters in the device's MAC address)
	802.11 Mode	11a/an/ac mode
	SSID Broadcast	Enabled
	Channel	5745MHz(Channel 149)
	Channel Bandwidth	40
	WMM Capable	Enabled
	APSD Capable	Disabled
	Wireless Security	Disabled
	Wireless Access Control	Disabled
Others	Remote Web Management	Disabled
	Bandwidth Control	Disabled
	DMZ Host	Disabled
	UPnP	Enabled
	Internet Access Management	Disabled

Warranty

HooToo products are covered by a 12 month limited warranty from the date of its original purchase. If any problems occur, please contact our support team.

We can only provide after sales service for products that are sold by HooToo or HooToo authorized retailers and distributors. If you have purchased your unit from a different place, please contact your seller for return and warranty issues.



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FCC Compliance

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 withstand any interference received, including interference that may cause undesired operation.

