



User Manual

HUMAX High Performance Router

T10x, T9x, T7x, T5x

This user manual describes HUMAX Router T10x, T9x, T7x, T5x.

- HUMAX T10x AC2600 High Performance Router
- HUMAX T9x AC2400 High Performance Router
- HUMAX T7x AC1900 High Performance Router
- HUMAX T5x AC1700 High Performance Router

Content




Chapter 1. Introducing Your Router	1
1.1 Package contents	2
1.2 Overview of the Router	2
1.3 Main Features	3
1.4 Requirements for Operation	5
1.5 Product Overview	6
Chapter 2. Connecting Your Router.....	8
2.1 Connection	9
2.2 Position	12
Chapter 3. Logging in to Your Router	13
3.1 Access to Web Interface	13
3.2 Installation Wizard	15
3.3 Installation Wizard (Repeater Mode).....	23
Chapter 4. Knowing Connection Status.....	26
4.1 Quick Menu	26
4.2 System Settings.....	27
4.3 Home Menu.....	32
Chapter 5. Setting Network Environment.....	36
5.1 Internet Connection	36
5.2 LAN Port Allocation.....	38
5.3 Operation mode Setting	39
Chapter 6. Setting Wireless Network.....	45
6.1 Main Network Setting.....	45
6.2 Guest Network Setting.....	48
6.3 WPS Connection	50

Chapter 7 Sharing Media or Server.....	51
7.1 USB Connection Setting.....	51
7.2 Network Server Setting.....	54
Chapter 8 Quality of Service (QoS)	61
Chapter 9 Securing Up Network.....	63
9.1 Parental Control.....	63
9.2 Firewall Setting.....	65
9.3 VPN Setting.....	67
9.4 Filtering Rule Setting.....	73
Chapter 10 Setting Advanced Options	76
10.1 Advanced Network Setting.....	76
10.2 Advanced Wireless Network Setting.....	78
10.3 IPTV Setting	80
10.4 DDNS / WoL Setting	81
10.5 Port Forwarding Rule / DMZ Setting.....	84
10.6 Port Triggering Rule Setting	86
10.7 Routing Rule Setting	87
10.8 UPnP Setting	89
10.9 IPv6 Setting.....	90
10.10 Diagnosing	91
Chapter 11. Troubleshooting	92
Chapter 12. Supplemental Information.....	94

Chapter 1. Introducing Your Router

Thank you for purchasing a HUMAX product. Please read this user's manual carefully to be able to safely install, use and maintain the product at maximum performance. Keep this user's manual next to your product for future reference. The information in this user's manual is subject to change without notice. The detailed description may slightly differ depending on each product, and the images are merely for illustrational purposes and thus may differ from the screens you actually see.

Throughout the whole manual, pay special attention to the following marks that indicate hazardous situations.

	Warning	Indicates a hazardous situation which could result in serious injury.
	Note	Indicates additional information to make the user aware of possible problems and information of any importance to help understand, use and maintain the installation.
	Tips	Indicates information helpful to the user, like showing an easier way to do something.

1. Introducing Your Router

1.1 Package contents

The following items should be found in your package.

	T10x	T9x	T7x	T5x
HUMAX Router	✓	✓	✓	✓
Power Adaptor	✓	✓	✓	✓
Ethernet Cable	✓	✓	✓	✓
Quick Start Guide	✓	✓	✓	✓



Note: Make sure that the package contains the above items. If any of the listed items are damaged or missing, please contact your distributor.

1.2 Overview of the Router

HUMAX T10x, T9x, T7x, T5x AC2600/AC2400/AC1900/AC1700 High Performance Router provides revolutionary Gigabit 802.11ac wireless speed up to 2600/2400/1900/1700Mbps. HUMAX T10x, T9x, T7x, T5x allow users to experience outstanding Wi-Fi performance with dual band radio and MU-MIMO technology, and to enjoy CPU intensive games and 4K UHD content with Dual core-HEXA CPU.



Note: The number of ports, data rate, wireless standard and others are dependent on each model. The number of ports in the internal port range should be the same as that of external port range.

1. Introducing Your Router

1.3 Main Features

HUMAX T10x, T9x, T7x, T5x support exceptional network security features and superior performance.

For more detail, refer to the feature list of your router.

Category

- AC2600 High Performance Router (T10x)
- AC2400 High Performance Router (T9x)
- AC1900 High Performance Router (T7x)
- AC1700 High Performance Router (T5x)

Wireless

- Complies with IEEE 802.11a/b/g/n/ac Wi-Fi Standard.
- Supports simultaneous 2.4GHz and 5GHz connections for 2600Mbps (T10x), 2400Mbps (T9x), 1900Mbps (T7x), 1700Mbps (T5x) of total available bandwidth.

Internet

- Shares data and Internet access for users, supports Dynamic IP/Static IP/PPPoE Internet access.
- Supports Dual WAN via 3G/4G USB dongle.

Ports

- Provides one(1) 10/100/1000M RJ45 Internet port, four(4) 10/100/1000M RJ45 Ethernet ports, supporting Auto MDI/MDIX.
- Provides one(1) USB2.0 port and one (1) USB 3.0 port supporting media sharing and printer server.

Security

- Provides None, WPA-PSK, WPA2-PSK, WPA2-PSK/WPA-PSK, WPA2-Enterprise, WPA2/WPA-Enterprise, WEP(64/128bit).
- Allows guest network access that provides secure Wi-Fi access for guests to share home or office network.
- Provides WEP encryption security and wireless LAN ACL (Access Control List).

1. Introducing Your Router

- Supports IP/MAC filter and URL filter, Access Control list.
- Supports IPv6. (Internet Protocol Version 6).
- Parental Controls allow parents or administrators to establish restricted access policies for children or staff.
- Built-in NAT and DHCP server supporting static IP address distributing.

File Sharing

- Supports USB storage sharing, printer server, FTP server, Media Server (DLNA), Window Network(Samba), Torrent. Shares a printer locally and files & media with networked devices or remotely via FTP server.
- Supports UPnP, Dynamic DNS.

MU-MIMO

- Supports MU-MIMO (WAVE2) for communication with several devices at the same time.

User Interface

- Supports installation wizard on user interface and provides detailed instructions step by step in the user guide.
- Supports automatic firmware update and Web management.
- Supports Mobile app for network configuration on iOS and Android.

Performance

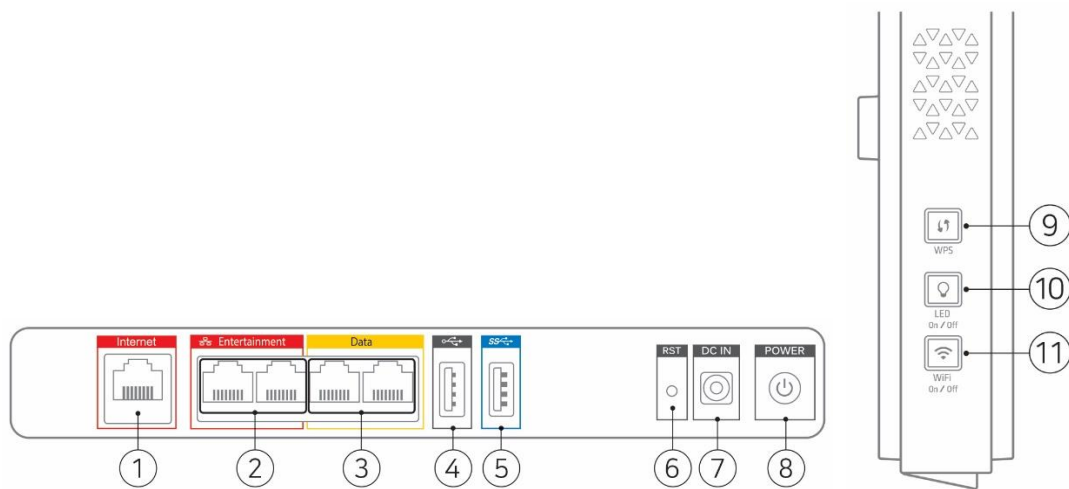
- Provides automatic-connection and scheduled connection on certain time to the Internet.
- Intelligent Quality of Service (QoS) makes it easier to manage the priority of devices connected to the router.
- Adopts Beamforming technology that enables highly efficient wireless connection.
- WPS button for one touch WPS connection and Wi-Fi button for one touch Wi-Fi on/off.

1.4 Requirements for Operation

To operate your product, the following environment is required:

- Broadband Internet Access Service (xDSL, Cable, Ethernet)
- PC having an Ethernet port
- Microsoft Windows 7 or later, MAC OS 10.7 or later, Netware, UNIX or Linux
- Web browsers: Latest versions of Chrome, Firefox Safari and Safari for iOS, as well as Internet Explorer versions 9-11.
- iOS or Android for HUMAX Wi-Fi Mobile App

1.5 Product Overview



1.5.1 Buttons & Ports

- ① **Internet port** Use an Ethernet cable to connect to the Internet.
- ② **Entertainment port** Use an Ethernet cable to connect a multimedia device (ex. Gaming console, NAS, IPTV). The Entertainment port has the priority in transmitting multimedia data without transmission delay or interruption.
- ③ **Data port** Use an Ethernet cable to connect a network device.
- ④ **USB2.0 port** Connect a USB storage device to share files or a network printer to share it over the network.
- ⑤ **USB3.0 port** Connect a USB storage device to share files or a network printer to share it over the network. It's more efficient in power consumption.
- ⑥ **Reset button** Keep pressing the reset button for 5 seconds to return to the factory default settings.
- ⑦ **DC Power connector** Connect the AC power adaptor from the power connector to the wall outlet.
- ⑧ **Power button** Turn the power on or off.
- ⑨ **WPS button** Press for one touch WPS connection.

1. Introducing Your Router

⑩ **LED button** Press to turn the LEDs on or off.

⑪ **Wi-Fi button** Turn the Wi-Fi on or off.



Note














- If you want to use the router to share files or printer, plug the USB storage device(s) to the USB port(s) or connect the printer to the router with a matching cable.
- The USB port is only for USB devices like flash drives, hard drives and printers. Do not connect PCs, USB modems, CD drives, USB power bank or DVD drives.

1.5.2 LED Lights

You can know the operational status of your router with the LED light.

You can turn the LEDs by pressing the LED button. To schedule the LED on/off time, go to **System**

> **LED Mode.**

Internet	 Off	Power is off.
	 White	Internet is connected.
	 Blinking	System is booting.
	 Red	Internet is not connected.
		Connect to the Internet or check the Internet connection.
Ethernet	 Off	LAN is not connected.
	 White	Ethernet connection to the Entertainment port or Data port is successful at 10/100/1000 Mbps.
2.4G/5G Wi-Fi	 Off	Wi-Fi is off.
	 White	Wi-Fi is on.
USB	 Off	No USB device is connected.
	 White	USB device is connected and active.
WPS	 Off	No WPS connection exists.
	 Slow blinking	WPS connection is in progress.
	 Fast blinking	WPS connection is failed.

Chapter 2. Connecting Your Router

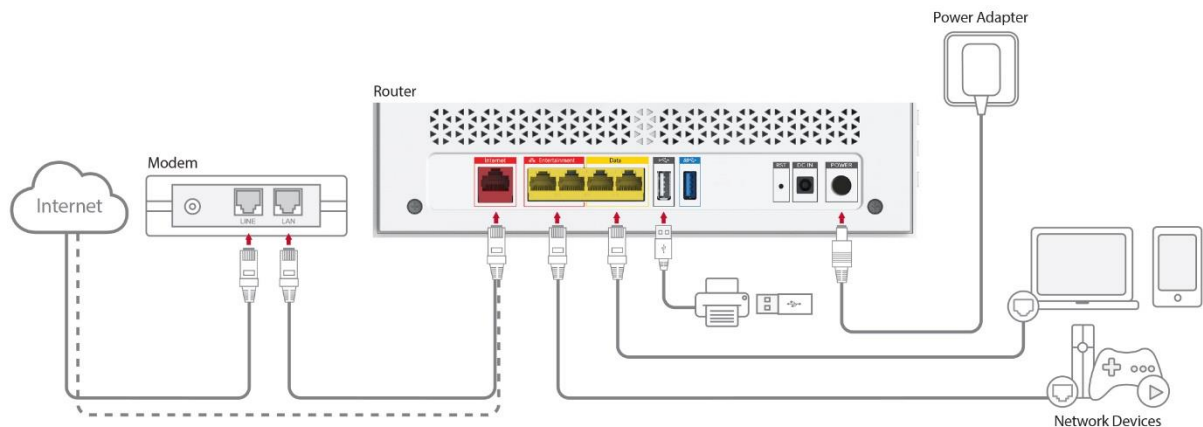
This chapter contains the following sections:

- How to connect your product to use it as a host router
- Where to locate your router to obtain maximum performance

2. Connecting Your Router

2.1 Connection

When you use your product as a host router, follow the steps below.



1. Connecting the Internet

You can connect your router to the Internet over a direct WAN or through a modem.

Over a direct WAN

If you access the Internet by WAN broadband, plug the Ethernet cable to the red Internet port of your router.

Through a modem

If you access Internet by the modem such as ADSL, VDSL, cable and FTTH, plug one end of the Ethernet cable to the red Internet port of your router and the other end to the LAN port of your modem.

2. Powering On

① Plug in the power connector from the DC IN port to an electrical outlet and then press the **POWER** button.

② If the power successfully turns on, the Internet LED blinks and then turns on white.



Note: Use only the AC power adaptor provided in this router. Using other adaptors may damage the router.

3. Connecting the Network Devices

Over wired Ethernet connection

- ① Turn off the Wi-Fi on your network devices such as PC, IPTV, OTT or gaming console.
- ② Connect the devices using Ethernet cables.



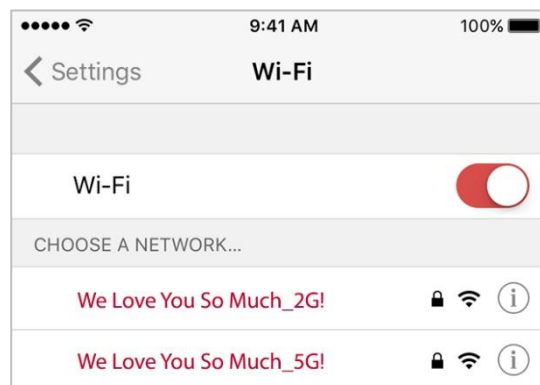
Note: We recommend you to connect entertainment devices such as OTT, gaming console and IPTV to the **Entertainment ports**. The ports have the priority in transmitting multimedia data without transmission delay or interruption.

Wirelessly

- ① Go to the Wi-Fi setting menu on your network devices.
- ② Select the network name (SSID) of your router from the Wi-Fi list and enter the password. If the network name is not shown, you need to enter it manually. The default network name (SSID) and password are printed on the label of your router.



[PC]



[Mobile Device]

Using WPS button

If your network device supports WPS, you can connect it to the router by simply pressing the WPS button.

- ① Tap the WPS icon or press the WPS button on your network device.

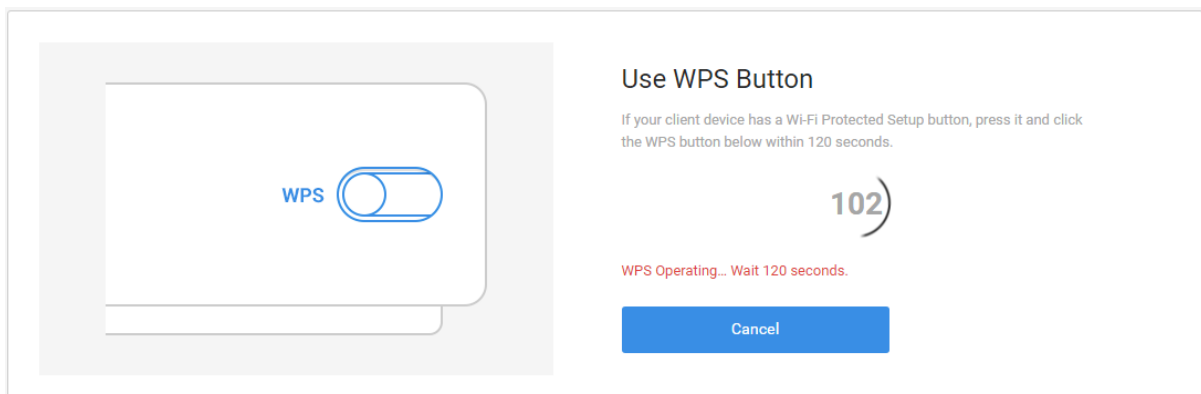
2. Connecting Your Router

② Press the WPS button on your router within 2 minutes. Alternatively, you can click the WPS button on the web UI.



Note:

- Make sure the Wi-Fi of your router is turned on. You can turn on or off Wi-Fi by simply pressing the Wi-Fi on/off button at the left side of router. The 2.4G/5G WiFi LEDs show the Wi-Fi on or off status.
- The WPS does not work when the wireless encryption protocol is set to WEP, WPA2-Enterprise, WPA2/WPA-Enterprise.
- Place your network device close to the router during WPS configuration.



Warning

- Always turn off all devices before you connect or disconnect any cables including power cord.
- Hazardous electrical voltages can exist on your devices and can be present on any connected cables.

2.2 Position

When you install your router, there are some tips to make Wi-Fi network more stable and strong at home.

- Locate your router near the center of the area where your PC and other devices operate. The center will be the best place for optimum connection.
- Place your router in the location where it can be connected to various devices as well as to a power source.
- Safely place the cables and power cord out of the way so they do not create a tripping hazard.
- Place your router in an elevated location, minimizing the number of walls and ceilings between the router and your other devices.
- Keep away from the strong electromagnetic radiation and the device of electromagnetic sensitive.
- Stand your router on a flat surface in an upright position not to tilt it. Alternatively, you can hang it on a wall.

Chapter 3. Logging in to Your Router

With a web-based utility, it is easy to configure and manage the router. The web-based utility can be used on any Windows, Macintosh or UNIX OS with a Web browser, such as Microsoft Internet Explorer, Google Chrome, Mozilla Firefox or Apple Safari.

3.1 Access to Web Interface

When you access the user interface for the first time, you need to log in to the router with the default ID and password and then proceed the installation wizard.

For quick and easy setup, follow the instructions. The wizard will guide you to configure your network.

1. Logging in


- ① Open the web browser.
- ② Enter *http://dearmyrouter.net* to the address bar, and then press the Enter key.
- ③ Enter the ID and password to log in to the router. The default ID and password are printed on the label of your router. They are case-sensitive.



Note: We recommend you change the default password to secure your network. Click the system icon at the top right and select **Change Password** to change your password.

WELCOME!

 Enter the Router Login ID

 Enter the Router Login Password

Login

For the default ID and Password see the label of the product.

Router Login:
http://dearmyrouter.net
ID: admin / Password: XXXX

Wireless Settings
2.4G SSID: We Love You So Much_2G!
5G SSID: We Love You So Much_5G!
Password: humax_XXXX

3. Logging in to Your Router

2. Agreeing to Privacy Policy

- ① Read through the general terms & conditions to use HUMAX service. Don't forget, we will always treat all your personal information as private and confidential.
- ② Click **Agree**. Agreeing will help us improve our products, software and services in the future.

Privacy Policy Terms of Use

Please read this privacy policy carefully before using Humax Products. By clicking the checkbox when installing or registering Humax Products for the first time, you declare that you have read, understood and accept this Privacy Policy.
[check box] I have read and accept the terms of this privacy policy.

PRIVACY POLICY

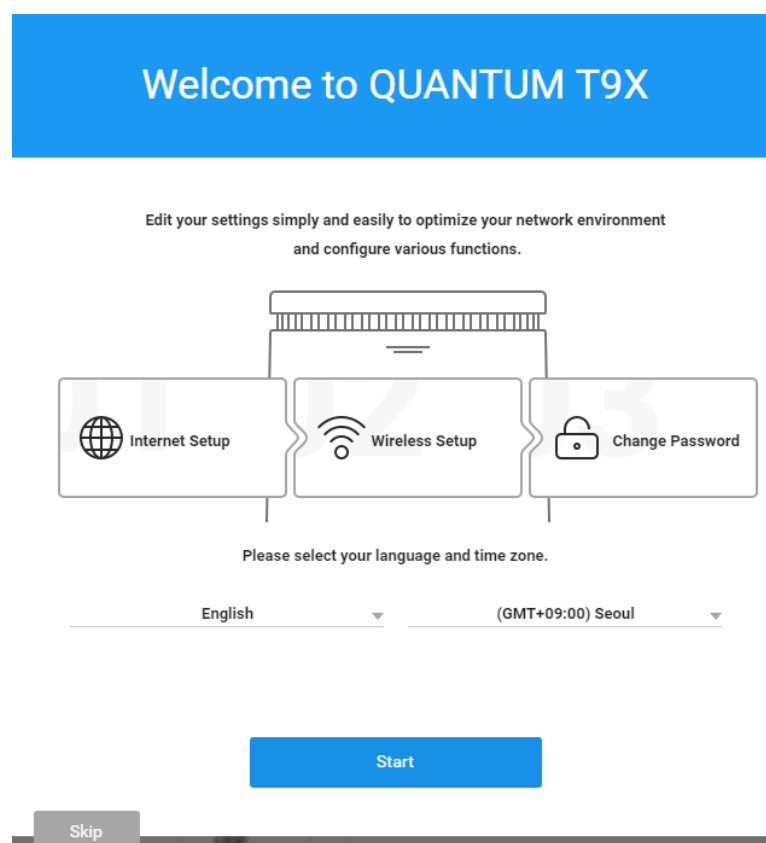
This Privacy Policy explains our policy regarding the collection, use, disclosure, processing and transfer of certain information, including your personal information by Humax Co., Ltd., and any member of the Humax group ("Humax", "we", "our" or "us") through Humax devices such as routers, extenders and all network devices ("Devices"), Humax website www.humaxdigital.com/hmxcpeweb.azurewebsites.net ("Website") or Humax mobile applications ("Mobile Apps") (collectively, "Humax Products"). The terms of this Privacy Policy are subject to applicable data privacy laws of your residence.

Agree

3.2 Installation Wizard

1. Starting

- ① Select your preferred language and local time zone to set a system time on your router. If your router is connected to the Internet, the system time will be set automatically. The system language will be set according to the language of your web browser. The time-based features are considered with the system time and thus if it is not correct, the time-based features may not operate properly.
- ② Click **Start**. The system will start the installation wizard.



Note:

- If you want to skip the installation wizard, click **Skip**. This button is available always during proceeding the installation wizard.
- You can start the installation wizard even though you skip the procedure. Click the system icon at the top right and then select **Wizard** to start the installation wizard anytime you want.

2. Connecting to the Internet

2-1 Automatic Connection

Select **Dynamic IP** for the Internet connection type. The router will detect your Internet connection type automatically. If the automatic Internet connection is successful, click **Next**. Then, the result of Internet connection will be displayed.

Internet Setup

You can manually configure your internet settings.
If you do not know the Internet connection type, please contact your ISP

Connection Type Dynamic IP

Back Next

Internet Setup

Internet is successfully connected as below

Connection Type	Dynamic IP
IP Address	10.0.15.52
Subnet Mask	255.255.255.0
Gateway	10.0.15.1
DNS Server 1	10.0.0.2
DNS Server 2	10.0.0.5

Back Next

3. Logging in to Your Router

2-2 Manual Connection

Select your Internet connection type from the drop-down list. In most cases, it will be **Dynamic IP**. But, the Internet connection is not working, you need to manually configure the settings. If you are not sure about the Internet connection information, contact your ISP.

- If you are provided more information such as IP address, subnet mask and default gateway, select **Static IP**. In **Static IP** type, you need to enter manually the Internet information.
- If you use DSL line and you are only provided with an account name and a password by your ISP, select **PPPoE**. Enter the information provided from your ISP.

The image displays two side-by-side screenshots of a router's 'Internet Setup' configuration page. Both screens have a blue header with the title 'Internet Setup' and a progress indicator (four circles, the first of which is filled).

Left Screenshot (Static IP):

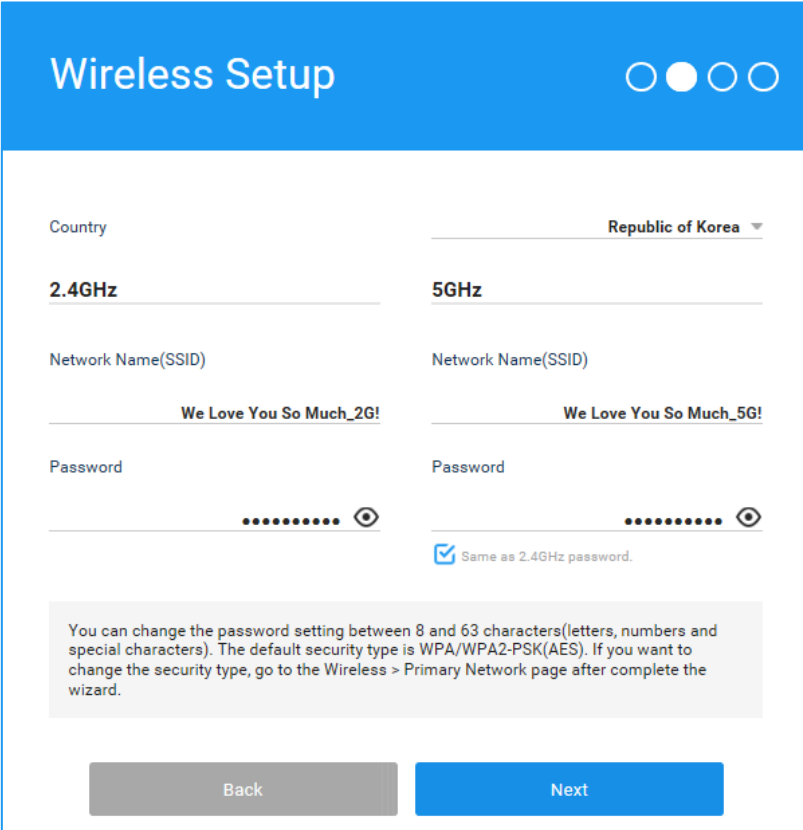
- Header: Internet Setup ● ○ ○ ○
- Text: You can manually configure your internet settings. If you do not know the Internet connection type, please contact your ISP.
- Form Fields:
 - Connection Type: Static IP (dropdown menu)
 - IP Address: Enter the IP Address
 - Subnet Mask: Enter the Subnet Mask
 - Gateway: Enter the Gateway address
 - DNS Server 1: Enter the primary DNS server address
 - DNS Server 2: Enter the secondary DNS server address
- Buttons: Back (grey), Next (blue)

Right Screenshot (PPPoE):

- Header: Internet Setup ● ○ ○ ○
- Text: You can manually configure your internet settings. If you do not know the Internet connection type, please contact your ISP. If you use the pppoe network, need to user name and password from your ISP.
- Form Fields:
 - Connection Type: PPPoE (dropdown menu)
 - User Name: Enter the user name
 - Password: Enter the password
 - Dynamic IP: ☒
- Buttons: Back (grey), Next (blue)

3. Configuring Wi-Fi

- ① Enter a new network name (SSID) and password to customize your own wireless network.
- ② Click **Next**.



The image shows a 'Wireless Setup' configuration screen. At the top, there's a blue header with the title 'Wireless Setup' and four progress indicators (three empty circles, one filled). Below the header, the 'Country' is set to 'Republic of Korea'. The screen is divided into two columns: '2.4GHz' and '5GHz'. Each column has fields for 'Network Name(SSID)' and 'Password'. The 2.4GHz SSID is 'We Love You So Much_2G!' and the 5GHz SSID is 'We Love You So Much_5G!'. The 2.4GHz password is masked with dots. The 5GHz password field has a checkbox labeled 'Same as 2.4GHz password.' which is checked. A note at the bottom states: 'You can change the password setting between 8 and 63 characters(letters, numbers and special characters). The default security type is WPA/WPA2-PSK(AES). If you want to change the security type, go to the Wireless > Primary Network page after complete the wizard.' At the bottom are 'Back' and 'Next' buttons.



Note:

- The password type should be WPA/WPA2-PSK for authentication purposes and you can change it from 8 to 63 characters.
- Once they are changed, the wireless network will be disconnected automatically. You must enter the new SSID and password to regain access to the Internet.

3. Logging in to Your Router

4. Changing Password

- ① Enter the current password.
- ② Enter a new password to change and enter it again.
- ③ Click **Next**.



Note: We recommend you change the default password to secure your network.

You can enter only letters, numbers and special characters and they are case-sensitive.

Change Password

If you change the password, your network will be more secure.
For the default router login password see the label of the product.
The new password will take effect the next login.

Login ID	admin
Current Password	••••
New Password	•••••••• Password is strong
Retype New Password	<u>Retype the new password.</u>

Back

Next

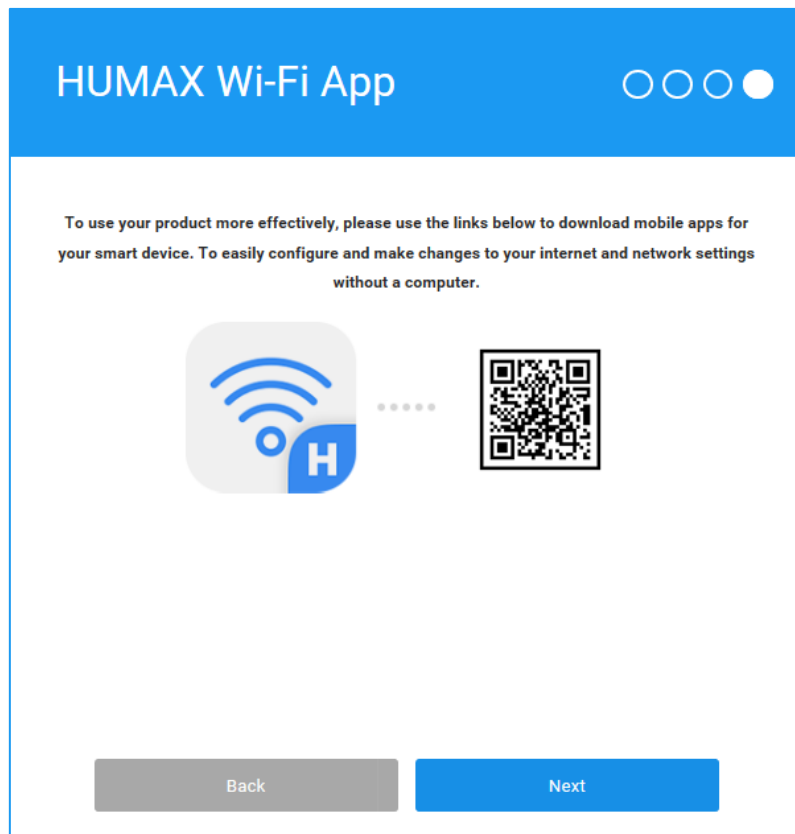
3. Logging in to Your Router

5. Installing HUMAX Wi-Fi App

① Scan the QR code to download HUMAX Wi-Fi app on your mobile device.

Using your mobile device, you can manage your network environment anytime, anywhere. Refer to the mobile App manual for more detail.

② Click **Next**.



3. Logging in to Your Router

6. Checking Result

① Confirm the information on your network.

② Click **Lets' go**.

Summary

Internet	Connection Type	Dynamic IP
	IP Address	10.0.15.52
	Subnet Mask	255.255.255.0
Wireless 2.4GHz	Network Name (SSID)	We Love You So Much_2G!
	Password	humax_0003
Wireless 5GHz	Network Name (SSID)	We Love You So Much_5G!
	Password	humax_0003

Let's Go

7. Completing

Now, your computer and network devices can connect to the Internet over wired or wirelessly.



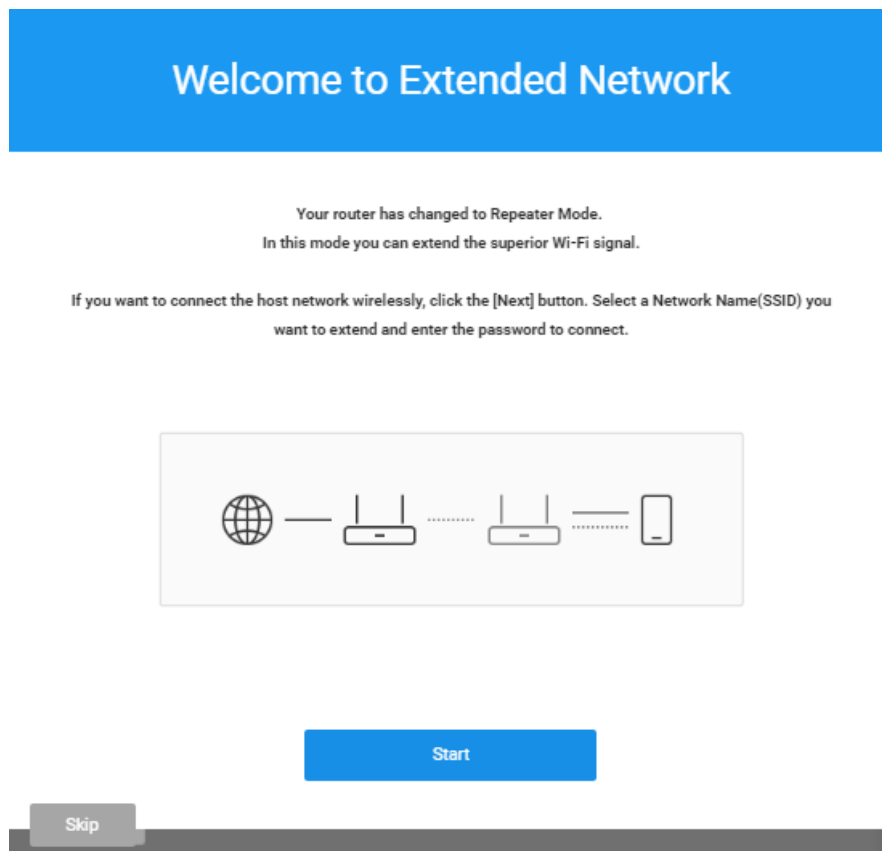
Tips. You can connect your computer to the router's Ethernet port using an Ethernet cable to join the local area network. You can also find and select the wireless network name on your network device to join the Wi-Fi network.

3.3 Installation Wizard (Repeater Mode)

After changing the operation mode to repeater mode, you can connect the router to a host router with the installation wizard of the repeater mode if it is not connected to the host router.

1. Start

- ① Click **Start**. The system starts the installation wizard in repeater mode.



Note:

- Click **Skip** to skip the simple setting. This button is available on all pages. Note, however, that the simple setting is recommended since the host router is not connected.
- You can run the simple setting at any time. You can start the installation wizard at any time by clicking the system icon on the upper right corner and then selecting **Simple Setting**.

2. Repeater Setting

4. Knowing Connection Status

- ① Select the host router to connect and enter the password.

Repeater Setting

Select a Network Name(SSID) you want to extend and enter the password to connect. It is not supported for host routers whose Security Type is set to WEP.
When you connect HUMAX product only, you will experience better Wi-Fi roaming performance. Please refer to the manual or FAQ for detailed models supported.

Network Name(SSID) ▾	CH ▾	RSSI ▾	Security	MAC Address	Band ▾
Messi_5G!	161	-29	WPA2/WPA-PSK	a0:72:2c:ad:b9:a2	5GHz
T9_5G_JY!	36	-38	WPA2/WPA-PSK	a0:72:2c:f2:d8:2c	5GHz
NetworkBiz.5G	36	-39	WPA2/WPA-PSK	a0:72:2c:f3:0c:16	5GHz
ahjlee3_5G!	149	-55	WPA2/WPA-PSK	40:3d:ec:a5:0e:3f	5GHz
We Love You So Much_5G!	153	-55	WPA2/WPA-PSK	40:3d:ec:89:09:50	5GHz
##T9x-Mesh-2GHz	40	-56	WPA2/WPA-PSK	40:3d:ec:89:70:50	5GHz
##T9x-Mesh-5GHz	36	-57	WPA2/WPA-PSK	40:3d:ec:89:50:50	5GHz
1234567890_5q	36	-60	NONE	4c:d0:8a:26:4a:89	5GHz

Password

Enter the password

Back

Next

Skip



Note

- If the security type of the host router is WEP, WPA2/WPA-Enterprise, or WPA2-Enterprise, the connection is not supported due to speed and security issues.

- ② The **Next** button is enabled if you enter a valid password. Click **Next** to proceed to the next page.

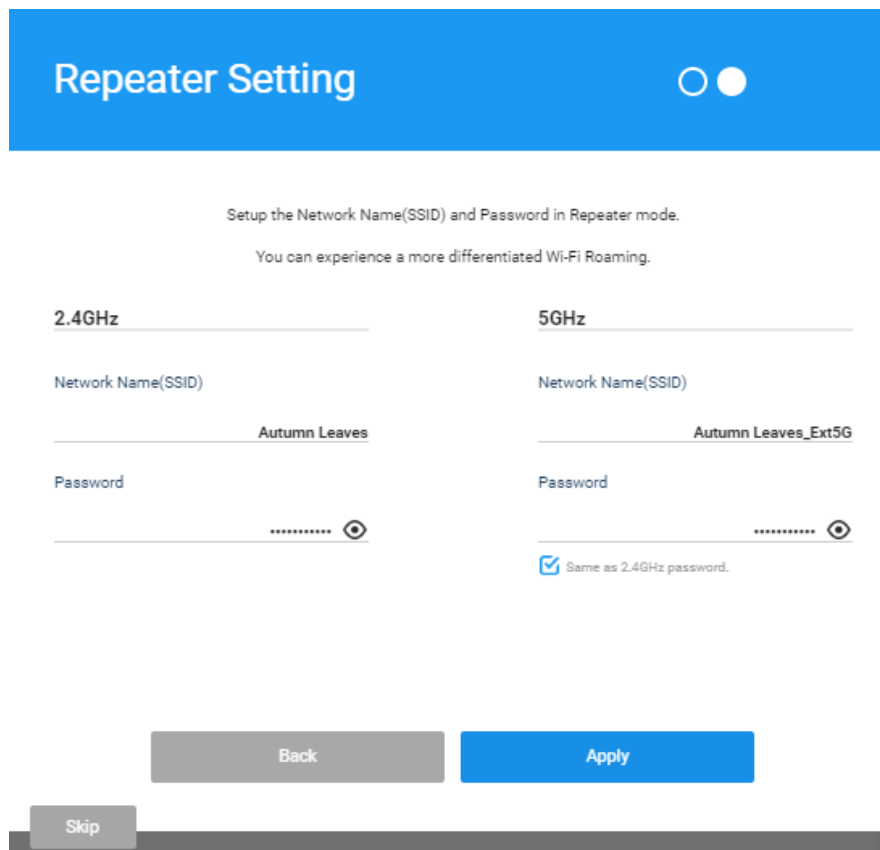
3. Wi-Fi Configuration

- ① Set the Network Name (SSID) and password for the repeater mode.

Network Name (SSID) is usually the same as the network name of the host router, or it has the

4. Knowing Connection Status

suffix "_Ext2G" (or "_Ext5G"). The password is set to be the same as that of the host router.



The image shows a web interface titled "Repeater Setting" with a blue header. Below the header, there is a blue bar with the title "Repeater Setting" and a progress indicator consisting of two circles, the second of which is filled. The main content area has a light gray background and contains the following text: "Setup the Network Name(SSID) and Password in Repeater mode." and "You can experience a more differentiated Wi-Fi Roaming." Below this, there are two columns for configuration. The left column is for "2.4GHz" and the right column is for "5GHz". Each column has a "Network Name(SSID)" field and a "Password" field. The 2.4GHz SSID is "Autumn Leaves" and the 5GHz SSID is "Autumn Leaves_Ext5G". The 2.4GHz password is masked with asterisks. The 5GHz password is also masked with asterisks, and there is a checkbox labeled "Same as 2.4GHz password." which is checked. At the bottom, there are three buttons: "Skip", "Back", and "Apply".

② Click **Apply** after completion of the setting.



Note:

- The wireless network connection is automatically terminated after the change. You must enter the new SSID and password to connect to the Internet again.

The screen returns to the simple setting page if connection to the higher-level network fails.

Ethernet port status: You can check the Ethernet connection status.

Chapter 4. Knowing Connection Status

4.1 Quick Menu

You can see the quick menu at the top right. Using the quick menu, you can check the Wi-Fi signal strength, access the HUMAX website and simply change the system environment.

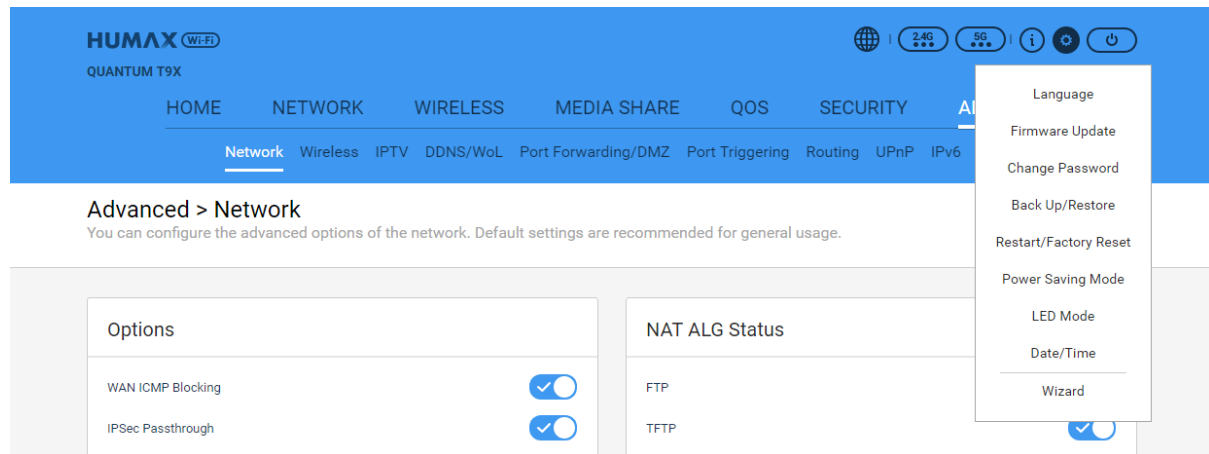


- **Brand / Product Name** to identify the product.
- **Internet** to display Internet connection status.
- **Wi-Fi** to display Wi-Fi signal strength.
- **Help** to have direct access to the support web site of HUMAX.
- **System** to change simple settings or start the installation wizard.
- **Log out** to log out from the web interface.

4. Knowing Connection Status

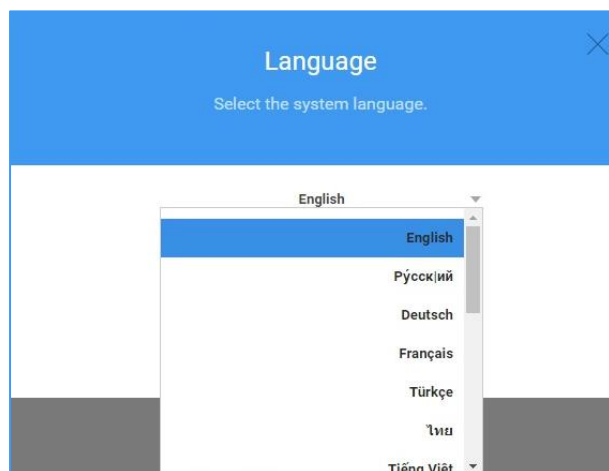
4.2 System Settings

You can change the system environment. Click the System icon to simply change the settings.



System > Language

Click the drop down list button and select your preferred language. Click **Apply** to change the system language on your web interface.



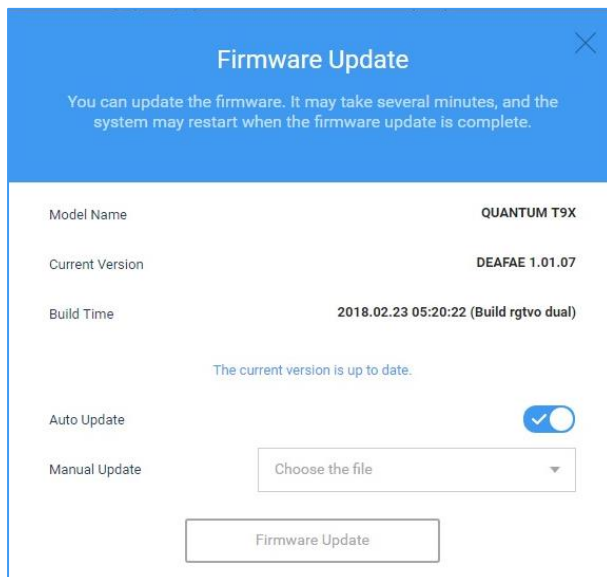
System > Firmware Update

You can check the current firmware version and update to the latest version.

Toggle to update firmware automatically or manually. If the current firmware is up to date,

Firmware Update is disabled.

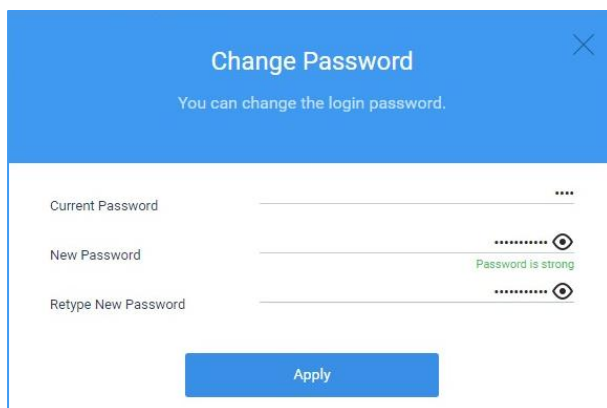
4. Knowing Connection Status



The Firmware Update dialog box has a blue header with the title 'Firmware Update' and a close button. Below the header, a message states: 'You can update the firmware. It may take several minutes, and the system may restart when the firmware update is complete.' The main content area displays system information: 'Model Name' is 'QUANTUM T9X', 'Current Version' is 'DEAF AE 1.01.07', and 'Build Time' is '2018.02.23 05:20:22 (Build rgtvo dual)'. A status message says 'The current version is up to date.' There are two options for updates: 'Auto Update' with a checked toggle switch, and 'Manual Update' with a 'Choose the file' dropdown menu. At the bottom is a 'Firmware Update' button.

System > Change Password

You can change the login password. We recommend you change the default password to secure your network.



The Change Password dialog box has a blue header with the title 'Change Password' and a close button. Below the header, a message states: 'You can change the login password.' The form contains three input fields: 'Current Password' (masked with asterisks), 'New Password' (masked with asterisks and has a 'Password is strong' green indicator), and 'Retype New Password' (masked with asterisks). An 'Apply' button is at the bottom.

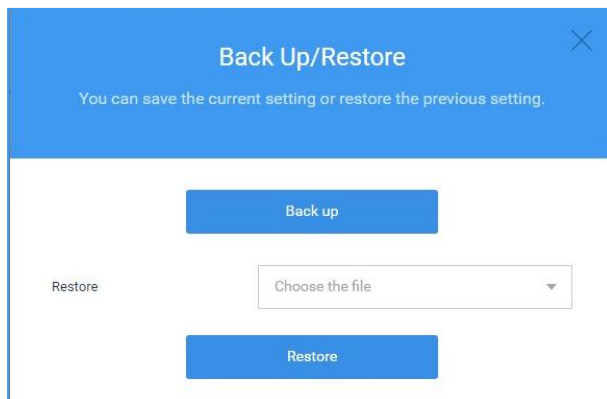
① Enter the current password, enter a new password to change and enter it again. You can enter only letters, numbers and special characters and they are case-sensitive.

② Click **Apply** to save your changes.

System > Back Up/Restore

You can save the current settings or restore the previous settings.

4. Knowing Connection Status



- Click **Back Up** to save the current configuration. The backup file name is *Setting_QUANTUM T10X/T9X/T7X/T5x* and the file will be stored automatically to the download folder in your PC.
- Click **Choose the file** to find a configuration file. After selecting the file, click **Restore** to install it. Then, the system will restart and it may take a few minutes.

System > Restart/Factory Reset

You can restart the system or reset the router to the factory default settings.



- Click **Restart** to restart the system. After restarting the system, all the changes will take effect.
- Click **Factory Reset** to restore to the factory default settings. Then, the system will restart and it may take a few minutes.



Warning: Once you do a factory reset, you will lose all your current settings.

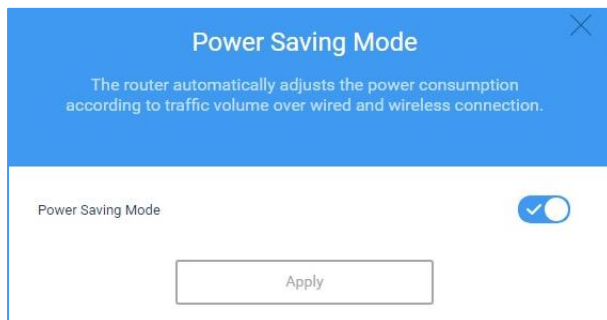
System > Power Saving Mode

4. Knowing Connection Status

The system will enter the networked standby mode if there is no traffic via a wired or wireless network connection during a specific time.

- **Power Saving Mode:** Toggle to turn on the power saving mode or not. We recommend you turn it on to save power consumption.

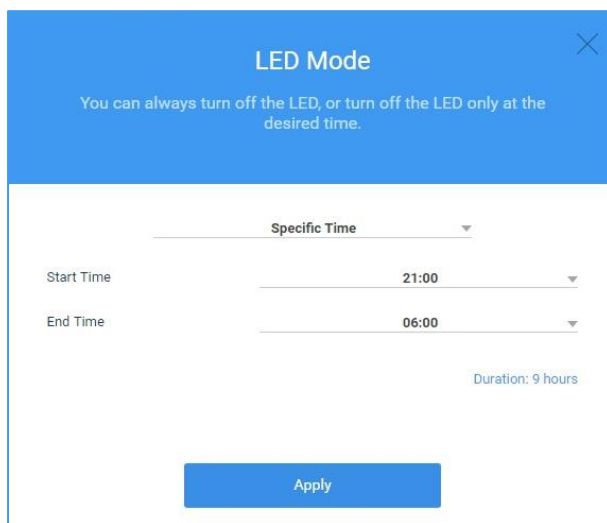
Click **Apply** to save your changes.



The screenshot shows a 'Power Saving Mode' configuration window. It has a blue header with the title 'Power Saving Mode' and a close button (X). Below the header, a text box explains: 'The router automatically adjusts the power consumption according to traffic volume over wired and wireless connection.' Underneath, there is a toggle switch labeled 'Power Saving Mode' which is currently turned on (indicated by a blue circle with a white checkmark). At the bottom, there is a rectangular 'Apply' button.

System > LED Mode

You can schedule the LED on/off time to save power consumption.



The screenshot shows an 'LED Mode' configuration window. It has a blue header with the title 'LED Mode' and a close button (X). Below the header, a text box explains: 'You can always turn off the LED, or turn off the LED only at the desired time.' Underneath, there is a dropdown menu labeled 'Specific Time' with a downward arrow. Below this, there are two time selection fields: 'Start Time' set to '21:00' and 'End Time' set to '06:00', both with downward arrows. Below these fields, it says 'Duration: 9 hours'. At the bottom, there is a blue rectangular 'Apply' button.

① Click **Specific Time**. You can set the LEDs to always turn on or off, or to turn off during a specific time.

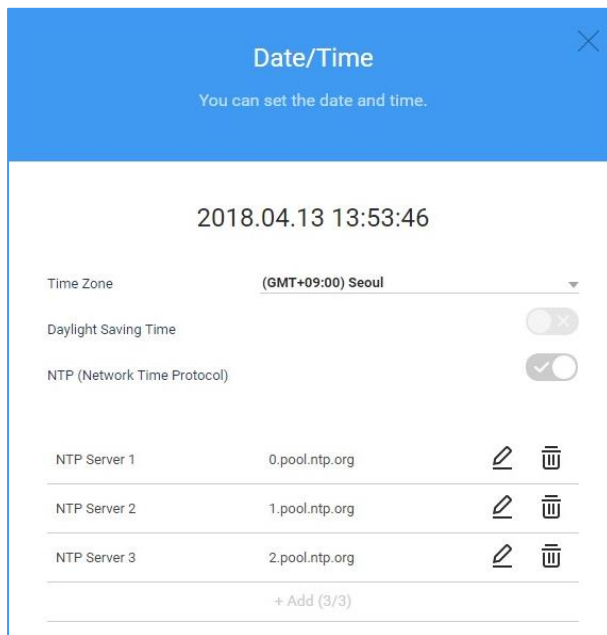
② If **Specific Time** is selected, set the start and end time to turn them off.

③ Click **Apply** to save your changes.

System > Date/Time

4. Knowing Connection Status

You can set the system time. The system time set to your router will be used for time-based features such as parental controls, wireless schedule, power saving and so on.



The screenshot shows a web interface titled "Date/Time" with a close button (X) in the top right corner. Below the title is a subtitle: "You can set the date and time." The main content area displays the current date and time: "2018.04.13 13:53:46". Below this, there are three settings:

- Time Zone:** A dropdown menu showing "(GMT+09:00) Seoul".
- Daylight Saving Time:** A toggle switch that is currently turned off.
- NTP (Network Time Protocol):** A toggle switch that is currently turned on.

Below these settings is a table listing NTP servers:

NTP Server #	NTP Server Address	Edit	Delete
NTP Server 1	0.pool.ntp.org		
NTP Server 2	1.pool.ntp.org		
NTP Server 3	2.pool.ntp.org		

At the bottom of the table, there is a link: "+ Add (3/3)".

- **Time Zone:** Select your country to set a local time zone. If the time zone is not correct, the time-based features may not operate properly.
- **Daylight Saving Time:** Toggle to use the daylight saving time or not. If the country does not use the daylight saving time, this button will be disabled.
- **NTP (Network Time Protocol):** Toggle to use NTP or not. NTP is a networking protocol for clock synchronization between computer systems over packet-switched, variable-latency data networks. If turned on, three NTP servers are listed automatically.
- **NTP Server #:** If enabled, you can edit or delete the NTP server address.

System > Wizard

You can proceed the installation wizard. For more detail, refer to **3.2. Installation Wizard**.

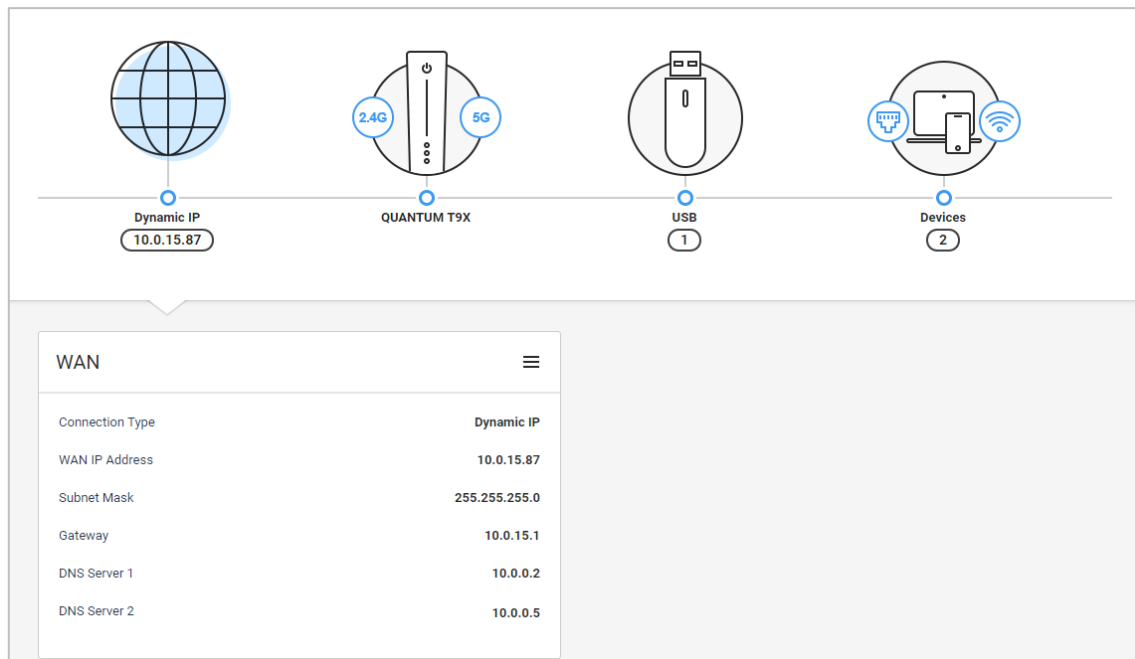
4. Knowing Connection Status

4.3 Home Menu

In HOME menu, you can see the information on the Internet and the connected devices. Click the images to see the information in more detail.

Internet Connection

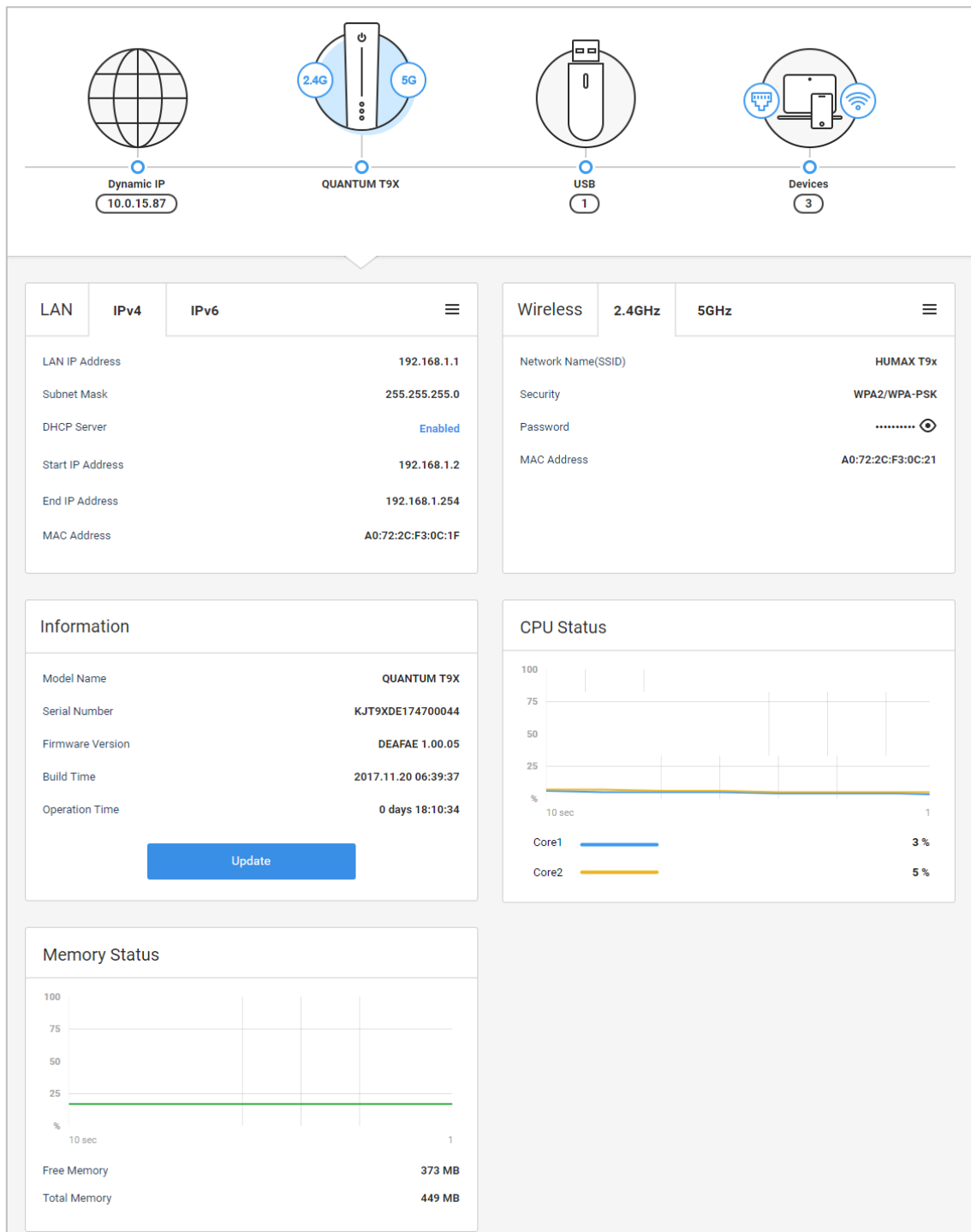
Click the globe image to see the Internet connection status.



4. Knowing Connection Status

Router Connection

Click the router image to see the information on your router.



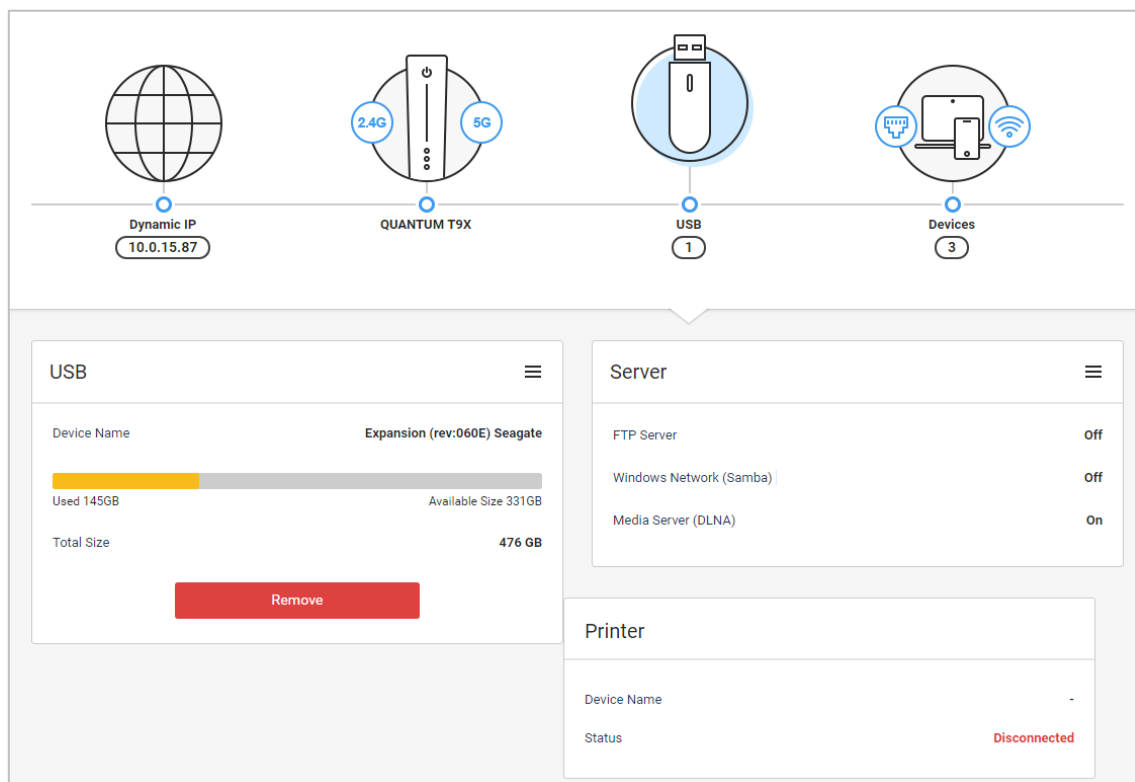
- **LAN:** You can check the connection information over IPv4 and IPv6.
- **Wireless:** You can check the wireless network connection information.

4. Knowing Connection Status

- **Information:** You can check the product name and serial number. If there is a new firmware available, you can update to the latest version.
- **CPU Status:** You can check the CPU's performance currently running on your router.
- **Memory Status:** You can check the size of total and free memory.

USB Information

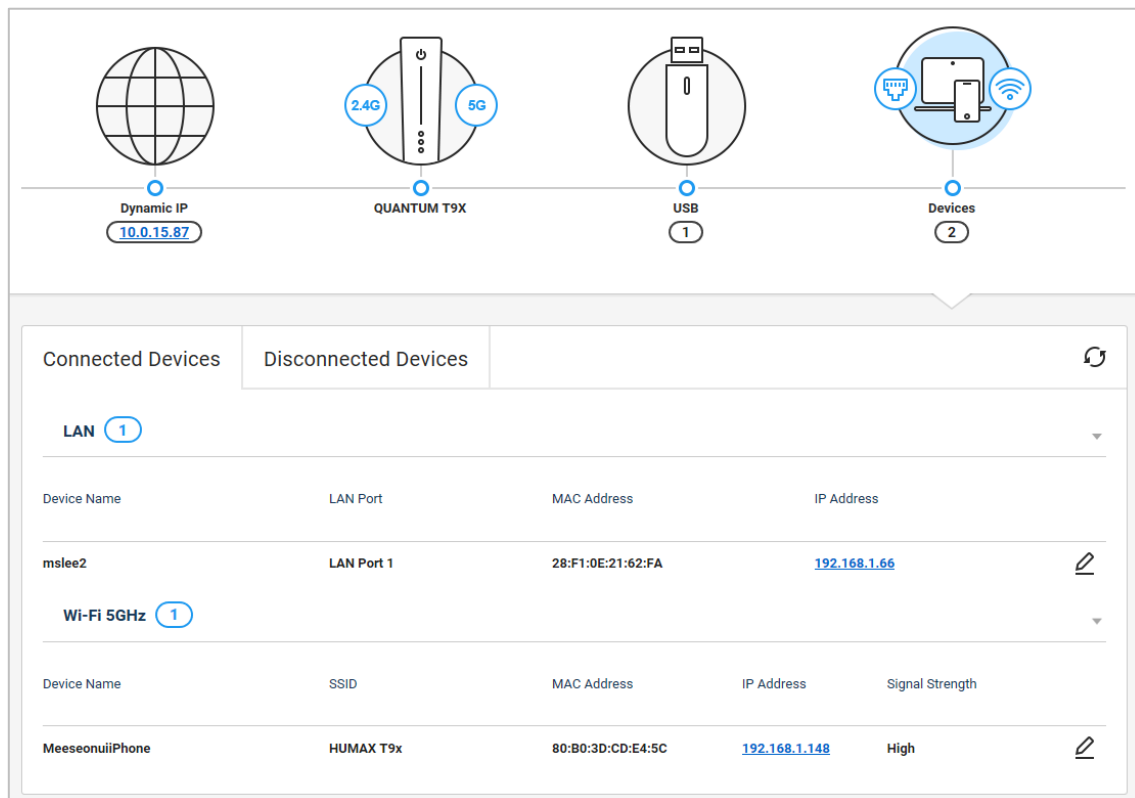
Click the USB image to see the information on the connected USB device. You can check the USB capacity and safely remove it from the router. Additionally, you can set the network server to remotely access the USB storage device. To do this, refer to **MEDIA SHARE > Server Settings**.



4. Knowing Connection Status

Connected Devices

Click the mobile device image to see the information on the devices connected over wired LANs or wirelessly.



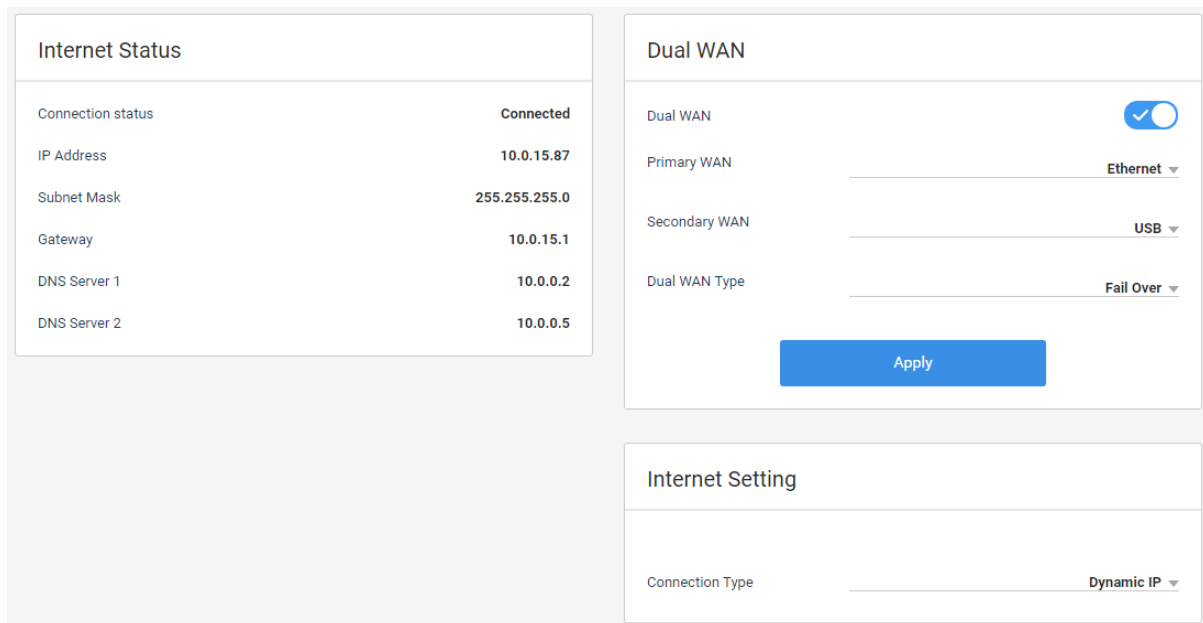
- **Connected Devices:** You can see the devices connected to your router. To simply set options on the device, click the pencil icon. You can reserve IP address, add to MAC filtering list or set a wake on LAN.
- **Disconnected Devices:** You can see the list of devices that have been connected to your router. You can block access to your router by simply clicking the toggle button.

Chapter 5. Setting Network Environment

5.1 Internet Connection

NETWORK > INTERNET

You can set the Internet connection and check the connection status.



Internet Status	
Connection status	Connected
IP Address	10.0.15.87
Subnet Mask	255.255.255.0
Gateway	10.0.15.1
DNS Server 1	10.0.0.2
DNS Server 2	10.0.0.5

Dual WAN

Dual WAN ☒

Primary WAN Ethernet ▾

Secondary WAN USB ▾

Dual WAN Type Fail Over ▾

[Apply](#)

Internet Setting

Connection Type Dynamic IP ▾

Internet Status

You can see the Internet connection status of your router.

Dual WAN

You can use two Internet types. Apart from the dedicated Ethernet WAN port, you can either plug in a 3G or 4G USB modem or use android tethering.

① Toggle to use two Internet channels or not.

If turned on,

- **Primary WAN:** Select a main Internet channel.
- **Secondary WAN:** Select a second Internet channel.
- **Dual WAN Type:** Select **Failover** or **Load Balance** to use a single or both Internet connection. In **Failover**, when the Internet connection is down, it automatically switches

5. Setting Network Environment

to the other one. In **Load Balance**, both connections are active and a load balancer distributes client requests or network load efficiently across multiple servers.

② Click **Apply** to save your changes.

Internet Setting

When you connect your router to the Internet, you can set up the Internet connection according to your Internet service provider.

① Select a connection type: Dynamic IP, Static IP, PPPoE.

If the Internet is already connected, the system automatically sets the connection type.

- If you use cable or fiber Internet service, select **Dynamic IP**. Your ISP dynamically assigns an IP address when your router establishes a connection.
- If you are provided with more information such as IP address, subnet mask and default gateway, select **Static IP**. Alternatively, you can configure your own internal network with **Static IP** if you need local network within a limited area such as an office building or school.
- If you use a DSL cable, select **PPPoE**. You need a username and password provided by your ISP to gain access to the Internet.

② Click **Apply** to save your changes.



Tips: If you are not sure what Internet connection type you should choose, contact your

ISP.

5. Setting Network Environment

5.2 LAN Port Allocation

NETWORK > LAN

You can set LAN IP address, subnet mask and DHCP server and allocate specific IP addresses to MAC address.

The screenshot displays the LAN configuration page. On the left, the 'LAN' section includes fields for IP Address (192.168.1.1), Subnet Mask (255.255.255.0), DHCP Server (enabled), Start IP Address (192.168.1.2), End IP Address (192.168.1.254), and Lease Time (60 Minutes). On the right, the 'Reserved IP Address' modal is open, showing a table with columns for 'Device Name / MAC Address' and 'IP Address'. The table contains one entry with device '1' and IP '192.168.1.2'. 'Save' and 'Cancel' buttons are at the bottom of the modal.

LAN

① Enter the options:

- **IP Address:** Enter the IP address of your router. You can access the web UI page via the IP address. The default value is 192.168.1.1.
- **Subnet Mask:** Leave the subnet mask as the default settings.
- **DHCP Server:** Toggle to enable the DHCP server or not.
- **Start IP Address:** Enter the starting IP address to be assigned.
- **End IP Address:** Enter the ending IP address.
- **Lease Time:** Select the lease time. After the time is up, your router is automatically assigned to the IP address your router had. If the router cannot obtain the IP address, it will get a new IP address.

② Click **Apply** to save your changes.



Note:

- If the LAN IP address is changed, you need to access the web page with a new address. If you are accessed to the web page with <http://dearmyrouter.net>, just refresh the web page.

5. Setting Network Environment

- If DHCP server is turned off, all the network devices will be disconnected from the network.
- We recommend the range between start and end IP addresses is over 32.

Reserved IP Address

You can allocate IP addresses to MAC address. Your device is allocated for the same IP address whenever accessing the DHCP server. Allocating IP address is similar to configuring static IP address.

- ① Click **Add** to add a rule.
- ② Select a device from the list of connected devices. You can enter the MAC address if there is no device name in the list.
- ③ Enter the last digit of IP address to allocate to the selected device.
- ④ Click **Save** to list up the allocation. You can see the list of reserved IP address. To edit or delete the reserved IP address from the list, click the pencil or trash icon. To add a new rule, click **Add** to add a new rule. You can add up to 32 devices.
- ⑤ Click **Apply** to save your changes.


5.3 Operation mode Setting

Network > Operation Mode Setting


You can set the operation mode of the router. It can operate in either Router mode, Repeater mode, or Access Point mode.

5. Setting Network Environment

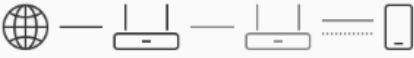
☒ **Router Mode** Roaming Mesh
Your router connects to the internet via Dynamic IP, Static IP, PPPoE, PPTP or L2TP and shares a wired or wireless network. The NAT, DHCP server are enabled.



☐ **Repeater Mode**
In Repeater mode, your router wirelessly connects to the host router to extend the wireless coverage. In this mode, NAT is disabled and the DHCP server switches to client mode. For wireless connection, disconnect the cable from Internet Port.



☐ **Access Point Mode**
In Access Point mode, your router wired to the host router to extend the wireless coverage. In this mode, NAT is disabled and the DHCP server switches to client mode.



Apply

Operation Mode

Select the operation mode to use.

- Router mode: ISP automatically allocates the IP address when the router is connected. The NAT and DHCP functions are executed. It is the most widely used operation mode.
- Repeater mode: The mode is used to broaden the wireless domain through the wireless connection to the host router.
- Access Point mode: The mode is used to broaden the wireless domain through the wired connection to the host router.



- Please inquire with your ISP (Internet Service Provider) if you are not sure which Internet connection mode to select.
- If you select the repeater mode, you need to know the Network Name (SSID), security type, and password of the host router.

5. Setting Network Environment

Settings the router to Router mode

- ① Select Router Mode.
- ② Connect the Internet cable to the WAN port.
- ③ Click **Apply** to save the change after selecting the Router mode. When you click **Apply**, a confirmation message will display asking if you want to restart the system to apply Router Mode. Click **OK** to proceed or **Cancel** to cancel the operation and move to the previous screen.



Note:

- If the LAN IP address is changed, you need to access the web page with a new address. If you are accessed to the web page with <http://dearmyrouter.net>, just refresh the web page.

Settings the router to Repeater mode

- ① Select Repeater Mode.
- ② Click **Next** after selecting the Repeater mode. It redirects you to the page for selecting the host router.
- ③ Select the host router to connect and enter the password of the selected host router.

5. Setting Network Environment

Repeater Mode

Select a Network Name(SSID) you want to extend and enter the password to connect. It is not supported for host routers whose Security Type is set to WEP.

When you connect HUMAX product only, you will experience better Wi-Fi roaming performance. Please refer to the manual or FAQ for detailed models supported.

Network Name(SSID)	CH	RSSI	Security	MAC Address	Band
Messi_5G!	161	-30	WPA2/WPA-PSK	a0:72:2c:ad:b9:a2	5GHz
T9_5G_JY!	36	-36	WPA2/WPA-PSK	a0:72:2c:f2:d8:2c	5GHz
NetworkBiz.5G	36	-40	WPA2/WPA-PSK	a0:72:2c:f3:0c:16	5GHz
We Love You So Much_5G!	153	-55	WPA2/WPA-PSK	40:3d:ec:89:09:50	5GHz
##T9x-Mesh-5GHz	36	-57	WPA2/WPA-PSK	40:3d:ec:89:50:50	5GHz
ahjlee3_5G!	149	-58	WPA2/WPA-PSK	40:3d:ec:a5:0e:3f	5GHz
1234567890_5g	36	-60	NONE	4c:d0:8a:26:4a:89	5GHz
t10x_5G_Aqing2	153	-70	WPA2/WPA-PSK	4c:d0:8a:26:6a:ca	5GHz

Enter the password

8 - 63 characters

Manual AP Scan

Back

Next



Note

- If the security type of the host router is WEP, WPA2/WPA-Enterprise, or WPA2-Enterprise, the connection is not supported due to speed and security issues.
- If you cannot find the Network Name (SSID) of the host router to connect, click **Manual AP Scan** button to enter the Network Name (SSID) for the search.

④ The **Next** button is enabled if you enter the valid password. Click **Next** to proceed to the next page.

⑤ Set the Network Name (SSID) and password for the repeater mode.

Network Name (SSID) is usually the same as the network name of the host router, or it has the suffix "_Ext2G" (or "_Ext5G"). The password is set to be the same as that of the host router.

5. Setting Network Environment

Repeater Mode

Setup the Network Name(SSID) and Password in Repeater mode.

2.4GHz	5GHz
Network Name(SSID) Autumn Leaves	Network Name(SSID) Autumn Leaves_Ext5G
Password *****	Password *****
	<input checked="" type="checkbox"/> Same as 2.4GHz password.

Back Apply

⑥ Click **Apply**.

When you click **Apply**, a confirmation message will display asking if you want to restart the system to apply Repeater Mode. Click **OK** to proceed or **Cancel** to cancel the operation and move to the previous screen.



Note:

- If the LAN IP address is changed, you need to access the web page with a new address. It is available to check the new address on the host router.
- If you are accessed to the web page with <http://dearmyrouter.net>, just refresh the web page.

Settings the router to Access Point mode

- ① Select Access Point Mode.
- ② Remove the Internet cable and connect WAN port to host router to connect.
- ③ Click **Apply** after selecting the Access Point Mode. When you click **Apply**, a confirmation message will display asking if you want to restart the system to apply Access Point Mode. Click **OK** to proceed or **Cancel** to cancel the operation and move to the previous screen.

5. Setting Network Environment



Note:

- If the LAN IP address is changed, you need to access the web page with a new address. It is available to check the new address on the host router.
- If you are accessed to the web page with <http://dearmyrouter.net>, just refresh the web page.

Chapter 6. Setting Wireless Network

Your router T10x, T9x, T7x, T5x uses concurrent dual band which supports both 2.4GHz and 5GHz wireless network at the same time.

6.1 Main Network Setting

WIRELESS > Primary Network

You can configure the primary network and its security settings according to your needs.

The screenshot displays two side-by-side configuration panels for the 2.4GHz and 5GHz wireless networks. Both panels have identical settings:

- 2.4GHz Panel:**
 - Network Name (SSID): We Love You So Much_2G! (23/32 characters)
 - Security: WPA2/WPA-PSK
 - Encryption: AES
 - Password: [Redacted] (8 - 63 characters)
 - Hide SSID: ☐
 - Web UI Access: ☒
 - MAC Address Control: ☐
- 5GHz Panel:**
 - Network Name (SSID): We Love You So Much_5G! (23/32 characters)
 - Security: WPA2/WPA-PSK
 - Encryption: AES
 - Password: [Redacted] (8 - 63 characters)
 - Hide SSID: ☐
 - Web UI Access: ☒
 - MAC Address Control: ☐

The configuration on both 2.4GHz and 5GHz network is identical to each other. Therefore, how to configure the 2.4GHz wireless network will be described and the description for the 5GHz wireless network will be omitted.

- **Network Name (SSID):** Enter a network name of your router if you want to change it.



Note:

- We recommend you use your own unique name. The network name will be shown on a client device to identify your network from other wireless networks that are in range of your device.
- After changing the SSID, you need to connect to the Wi-Fi with a new SSID.
- **Security:** Select a security type for your router. Your product provides **None**, **WPA2-PSK**, **WPA2/WPA-PSK**, **WPA2-Enterprise**, **WPA2/WPA-Enterprise** and **WEP** authentication.
 - **None** does not provide any security. Any devices have access to the Wi-Fi network.

- **WPA2-PSK** and **WPA2/WPA-PSK** provide a secure and fast connection and they are appropriate for most home networks but not business networks. For the encryption type, WPA2-PSK uses only AES that is faster and more secure and WPA2/WPA-PSK uses both AES and AES/TKIP for backward-compatibility.
- **WPA2-Enterprise** and **WPA2/WPA-Enterprise** provide the security needed for wireless networks in business environment where a RADIUS server is deployed. For the encryption type, WPA2-Enterprise uses only AES that is faster and more secure and WPA2/WPA-Enterprise uses both AES and AES/TKIP for backward-compatibility.
- **WEP** is a legacy 802.11 security. If selected, you need to set the encryption type, key type and password.



Note: We recommend you use the default value **WPA2/WPA-PSK** or **WPA2-PSK** for more secure and faster wireless network.

- **Encryption:** Select the encryption mode when using any of the WPA authentication schemes. **AES** provides the strongest encryption. **AES/TKIP** provides strong encryption with improved backward compatibility. The default value **AES/TKIP** is recommended.
- **Password:** Enter the password of Wi-Fi network. You can enter only letters, numbers and special characters and they are case-sensitive. The default password is printed on the label of your product. This will be required when you connect a mobile device wirelessly to your home network. You can change it proper for the security type if you want. If the security type is set to **WPA2-PSK**, **WPA2/WPA-PSK**, **WPA2-Enterprise**, **WPA2/WPA-Enterprise**, or **WEP (Character String)**, the password can be letters, numbers and special characters (!@#^&*()+_-={}[]:~`\$%W;'<>.,/) and they are case-sensitive. If set to **WEP (Hexadecimal)**, letters and numbers are allowable and they are not case-sensitive.
- **Hide SSID:** Toggle to show your network name or not. You can prevent other users from detecting your network when they scan for available wireless network.

6. Setting Wireless Network



Note:

- We recommend you turn it off. If turned on, the Wi-Fi is disconnected as well as you cannot use WPS connection.
 - If the SSID is hidden, some devices may not detect the Wi-Fi network of your router. You need to manually search the SSID to connect to the Wi-Fi network.
-
- **Web UI Access:** Toggle to allow Wi-Fi connected devices to access the web interface or not. If turned on, you can have access to the web interface with the devices. Regardless of this option, the devices connected via wired LAN are allowed to have access to the web interface. The default value is on.
 - **Wireless MAC Filtering:** Toggle to prevent unauthorized wireless devices from connecting to your network. You can allow or block the devices on your wireless network.

Click **Apply** to save your changes.

6. Setting Wireless Network

6.2 Guest Network Setting

WIRELESS > Guest Network

You can configure the guest network to allow wireless network access for guests without disclosing your main network.

The screenshot displays two side-by-side configuration panels for the 2.4GHz and 5GHz wireless bands. Each panel contains the following fields and controls:

- 2.4GHz Panel:**
 - Network Name (SSID): HUMAX_Guest_2G_2340
 - Security: WPA2/WPA-PSK
 - Encryption: AES/TKIP
 - Password: [masked] (8 - 63 characters)
 - Hide SSID: [toggle off]
 - Web UI Access: [toggle off]
 - Wireless MAC Filtering: [toggle off]
 - Buttons: Apply (blue), Cancel (grey)
- 5GHz Panel:**
 - Network Name (SSID): HUMAX_Guest_5G_3690
 - Security: WPA2/WPA-PSK
 - Encryption: AES/TKIP
 - Password: [masked] (8 - 63 characters)
 - Hide SSID: [toggle off]
 - Web UI Access: [toggle off]
 - Wireless MAC Filtering: [toggle off]
 - Buttons: Apply (blue), Cancel (grey)

① Click **Add** to add a new rule. You can add up to 7 guest network on each band.

② Toggle to allow wireless network access for guests or not.

③ Enter the option values:

- **Network Name (SSID):** Enter another network name of your router to broadcast to your guests.
- **Security:** Select a security option for your router. Your product provides WPA2-PSK, WPA2/WPA-PSK, WPA2-Enterprise, WPA2/WPA-Enterprise and WEP authentication.



Note: We recommend you use the default value WPA2/WPA-PSK or WPA2-PSK.



- **Encryption:** Select the encryption mode when using any of the WPA authentication schemes. **AES** provides the strongest encryption. **AES/TKIP** provides strong encryption with improved backward compatibility. The default value **AES/TKIP** is recommended.
- **Password:** Enter the password for the guest network.

6. Setting Wireless Network



- **Hide SSID:** Turn it off to show the guest network name. If turned on, your guests have to manually enter the network name for wireless network access.
- **Web UI Access:** Toggle to allow the guests to access the web interface or not. If turned on, your guest can have access to the web interface with the Wi-Fi connected devices. The default value is off.
- **Wireless MAC Filtering:** Toggle to prevent client devices from connecting to your guest network. You can allow or block the devices on your wireless guest network.

④ Click **Apply** to save your changes. To edit or delete the guest network, click the pencil or trash icon.

2.4GHz

	• Network Name (SSID)	• Security	• MAC Address Control	
01	<input checked="" type="checkbox"/> HUMAX_Guest_2G!	WPA2/WPA-PSK	Allowed Devices	 
<div>+ Add (1/7)</div>				

5GHz

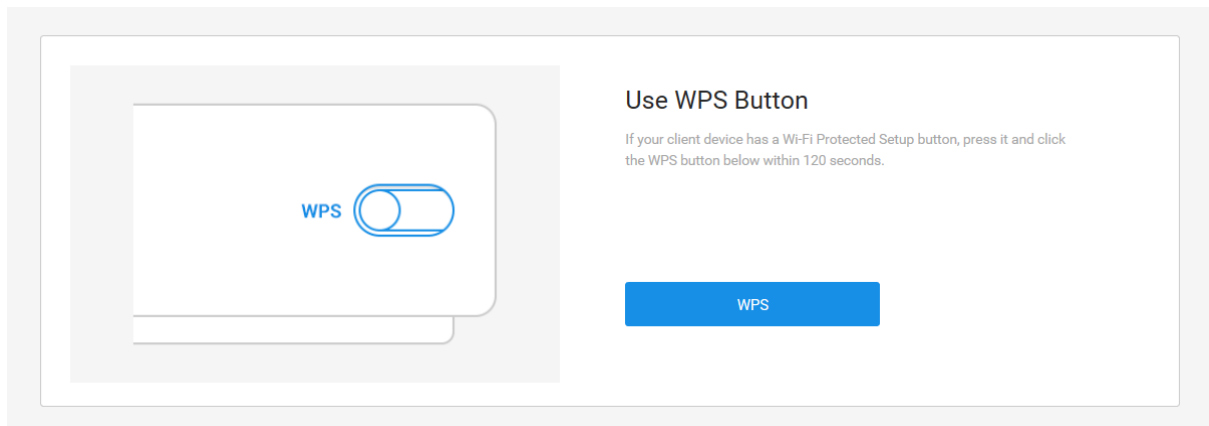
	• Network Name (SSID)	• Security	• MAC Address Control	
01	<input checked="" type="checkbox"/> HUMAX_Guest_5G!	WPA2/WPA-PSK	Allowed Devices	 
<div>+ Add (1/7)</div>				

6. Setting Wireless Network

6.3 WPS Connection

WIRELESS > WPS

You can connect your router to a network device conveniently with Wi-Fi Protected Setup (WPS) function. WPS is a procedure for establishing secure wireless LAN connection.



- ① Check if your network device supports WPS feature. If not, WPS connection is unavailable.
- ② Place the network device next to your router.
- ③ Press the WPS buttons on both devices within 2 minutes.
- ④ When the WPS connection is successful, the message "WPS Success" will display. Just press the WPS button.



Note: If the security type is set to WEP, WPA2-Enterprise or WPA2/WPA-Enterprise, the WPS connection is unavailable. Go to **WIRELESS > Primary Network** and check first the security type is set to WPA2-PSK or WPA2/WPA-PSK.

Chapter 7 Sharing Media or Server

You can share a USB storage device and a USB printer connected to your router with client devices. In addition, you can have access to your server while you are away from your home. By default, the router acts as a media server when a USB storage device is connected to the USB port. You can enjoy various content like music, movies and photos on a DLNA/UPnP compliant media players.

7.1 USB Connection Setting

MEDIA SHARE > USB

You can see the information on the USB device connected to your router and safely remove it from the router. This page is accessible only when a USB device is connected to the router.

Connected USB

01 JA Available 460GB / Total 465GB

Network Folder

Status	Description	Folder Path	Write/Read	Read
01	mslee	/JA/Movie		
02	Baby Driver	/JA/Movie/[2017] Baby Driver		

+ Add (2/8)

Account Settings

ID	Password
01 mslee

+ Add (1/5)

Connected USB

① Insert your USB storage device into the USB port of your router.

② Click the refresh icon. Then, the USB connection status will be updated.

To detach the USB storage device from the router, click the remove icon to safely remove it.



Note: Ejecting a USB storage device before safely removing it may cause data loss.

Your router works with USB compliant devices. The router supports the file system for read and write access as follows, but not detects the others.

- FAT32
- NTFS
- exFAT
- EXT3/EXT4

Network Folder

•Status	•Description	•Folder Path	•Write/Read	•Read
	Enter the description	/Expansion (rev:060E) Seagate	<input checked="" type="radio"/>	<input type="radio"/>

Save Cancel

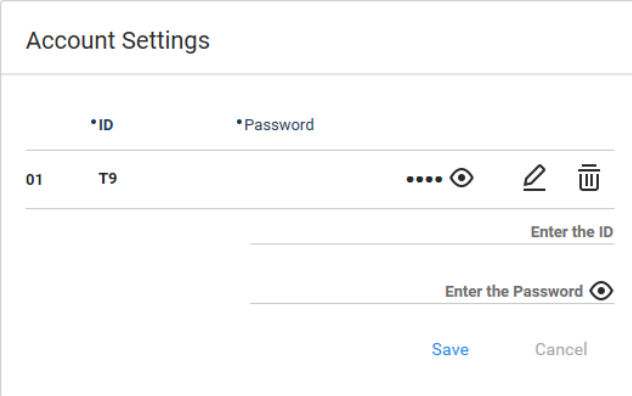
① Click **Add** to specify a network folder within the connected USB device.

② Select a destination folder and set whether to allow reading and writing or reading only. Since folders under the third level subfolder are not visible, we recommend the destination folder is not too deep.

③ Click **Save** and then **Apply** to save your changes. You can share the folder with others.

7. Sharing Media or Server

Account Settings



The 'Account Settings' dialog box contains a table with two columns: 'ID' and 'Password'. The first row shows '01' and 'T9'. To the right of the table are icons for visibility (dots and eye), edit (pencil), and delete (trash). Below the table are two input fields labeled 'Enter the ID' and 'Enter the Password' with an eye icon. At the bottom are 'Save' and 'Cancel' buttons.

ID	Password
01	T9

Enter the ID

Enter the Password

Save Cancel

① Set the ID and password. The account will be required when you access the shared network folder.

② Click **Save** and then **Apply** to save your changes.

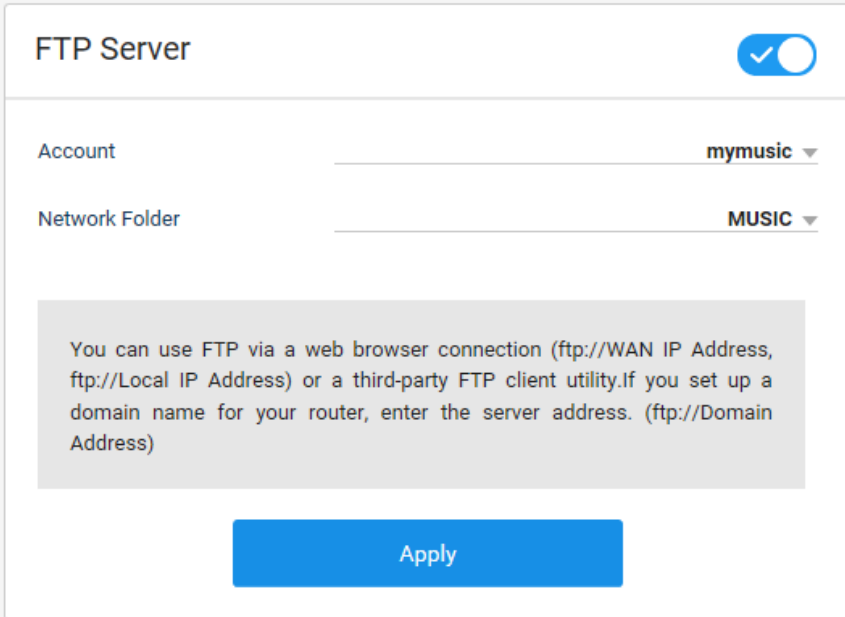
7.2 Network Server Setting

MEDIA SHARE > Server Settings

You can set up how to share and access a USB storage device from all clients through FTP, DLNA, Samba, or Torrent server.

To use this feature, you need to connect first a USB storage device to the USB3.0 port or USB2.0 of your router. And then, make a folder to share and create an account and password. Refer to **7.1 USB Connection Setting**.

FTP Server



FTP Server ☒

Account mymusic ▼

Network Folder MUSIC ▼

You can use FTP via a web browser connection (ftp://WAN IP Address, ftp://Local IP Address) or a third-party FTP client utility. If you set up a domain name for your router, enter the server address. (ftp://Domain Address)

Apply

You can access the connected USB storage device by the local area network or by external network.

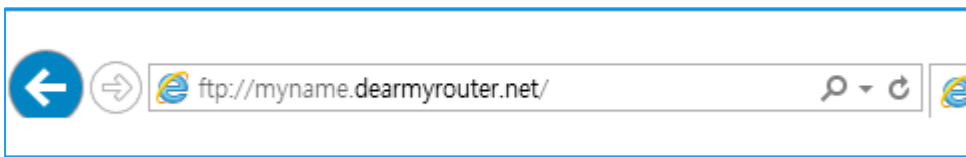
To set the FTP server,

- ① Toggle to allow remote access from a FTP client to the FTP server or not.
- ② Select an account and network folder. You need it when logging in to your server.
- ③ Click **Apply** to save your changes.

To access remotely from your home,

7. Sharing Media or Server

- ④ Open a web browser on your PC.
- ⑤ Enter the FTP server address ftp://<WAN IP address of your router> to remotely access the FTP server. When you are accessed within the local network, you can have access with the LAN IP address (ex. ftp://192.168.1.1).
- ⑥ If you set up a domain name for your router, enter the server address *ftp://domain name of your router*. Refer to the DDNS setting page to learn how to set up a domain name for your router.



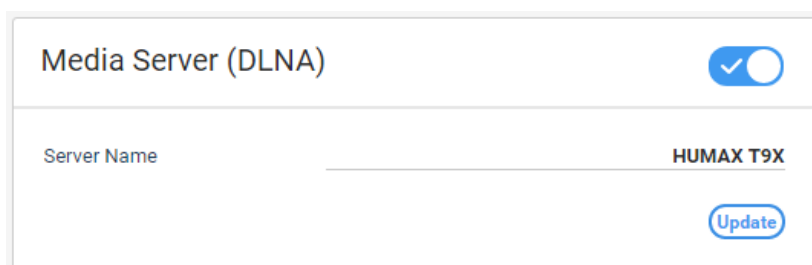
- ⑦ Log in to the server with the user name and password. Then, you can see the shared folder.
- ⑧ Enjoy multimedia contents from the USB storage device even though you are away from your home.



Note:

- To use this FTP server, you need to create an account and network folder first in **MEDIA SHARE > USB** page.
- We recommend you have remote access to the server with a domain name.

Media Server (DLNA)



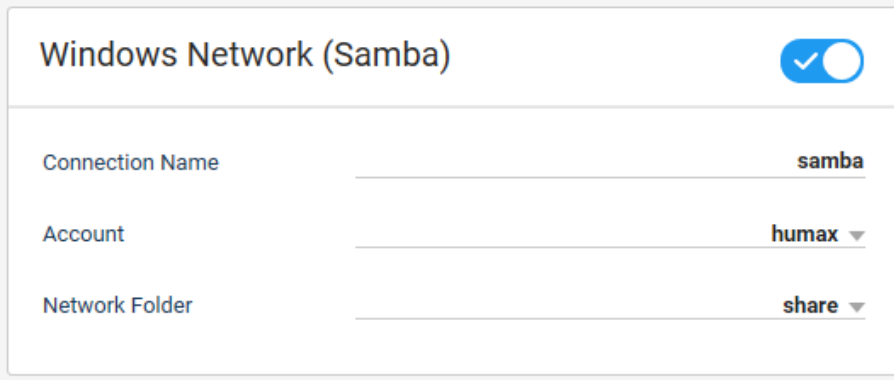
You can access the connected USB storage device on DLNA compliant devices such as Bluray disc players, televisions, computers, smartphones, tablets and more.

- ① Toggle to allow access to the DLNA server or not.

7. Sharing Media or Server

- ② Enter a server name to find it on your DLNA devices.
- ③ Click **Apply** to save your changes.
- ④ Connect your DLNA device to your router over an Ethernet cable or wirelessly.
- ⑤ Open a file sharing application on the DLNA device.
- ⑥ Enter the server name. The shared folders will be listed.
- ⑦ Enjoy multimedia contents from the USB storage device right on your DLNA device.

Windows Network (Samba)



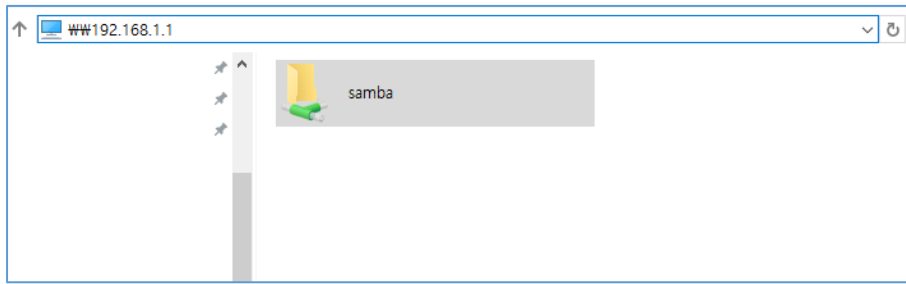
The screenshot shows a configuration window titled "Windows Network (Samba)". At the top right is a blue toggle switch with a checkmark, indicating it is turned on. Below the title bar are three rows of configuration fields:

Field Label	Value
Connection Name	samba
Account	humax ▼
Network Folder	share ▼

You can access the connected USB storage device through window network server. The application protocol differs depending on the operating system.

- ① Toggle to allow access to the window network server direct on your PC or not.
- ② Enter a connection name. This will be a part of server address.
- ③ Enter an account. You need it when logging in to your server. If you set to **Anonymous**, you are not required to enter the password when you have access to the samba server.
- ④ Connect your PC to your router over an Ethernet cable or wirelessly.
- ⑤ Go to the windows explorer and then enter the server address ~~WW~~192.168.1.1. If you use a tablet PC, use a third party app for network file sharing.

7. Sharing Media or Server



- ⑥ Log in to the server with the account and password.
- ⑦ Enjoy multimedia contents from the USB storage device right on your PC.



Note: To use this network server, you need to create an account and network folder first in

MEDIA SHARE > USB page.

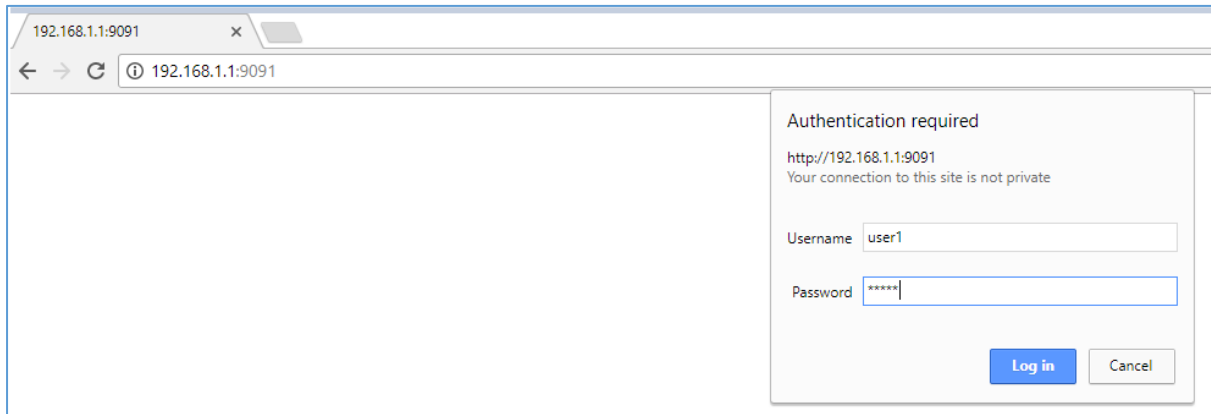
Torrent

A screenshot of a web interface for configuring a torrent program. At the top, the word 'Torrent' is displayed next to a blue toggle switch that is turned on. Below this, there are two dropdown menus. The first is labeled 'Account' and has 'test' selected. The second is labeled 'USB Device' and has 'Ultra USB 3.0 (rev:1.00) SanDisk' selected. At the bottom, there is a link that says 'Access the Torrent Program'.

Your router works as a torrent programme and thus you can download torrent files to the USB storage connected to the router.

- ① Toggle to allow access to the torrent programme or not.
- ② Select an account and USB storage device.
- ③ Click **Access the Torrent Program**. Alternatively, open a web browser and enter the server address <http://dearmyrouter.net:9091> to the address bar.
- ④ Log in to the server with the account and password.

7. Sharing Media or Server



⑤ Click the folder icon and then browse a file to upload. The file will be uploaded to the torrent programme. Then, you can download the file to your USB storage device.



Note: Uploading too large file may affect the performance of your router.

WebDAV Server

A screenshot of the 'WebDAV Server' configuration page. At the top, the title 'WebDAV Server' is followed by a blue toggle switch that is currently turned on. Below this, there are three configuration fields: 'Account' with the value 'abcde', 'Network Folder' with the value 'My favorite music', and 'Port' with the value '5005'. A small note below the port field says '1024 - 49151, Default 5005'. At the bottom of the form is a large blue button labeled 'Apply'.

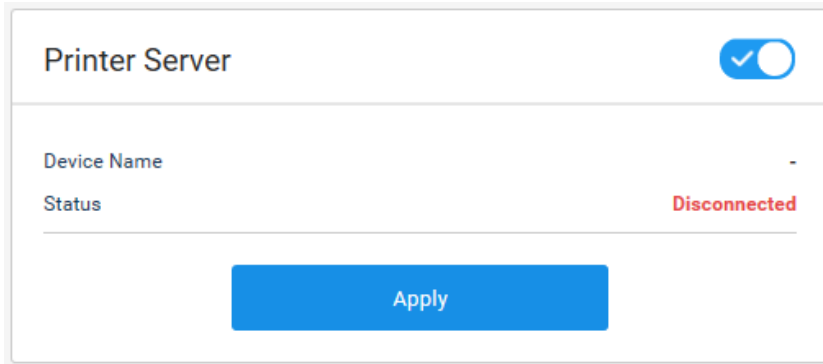
The LAN and external network can access the connected USB storage device.

- ① Set if you will allow remote access to the WebDAV server.
- ② Set the server user and network folder. They are necessary for login to the server.
- ③ Click **Apply** to save the change.

The links shown at the bottom enable internal and external accesses.

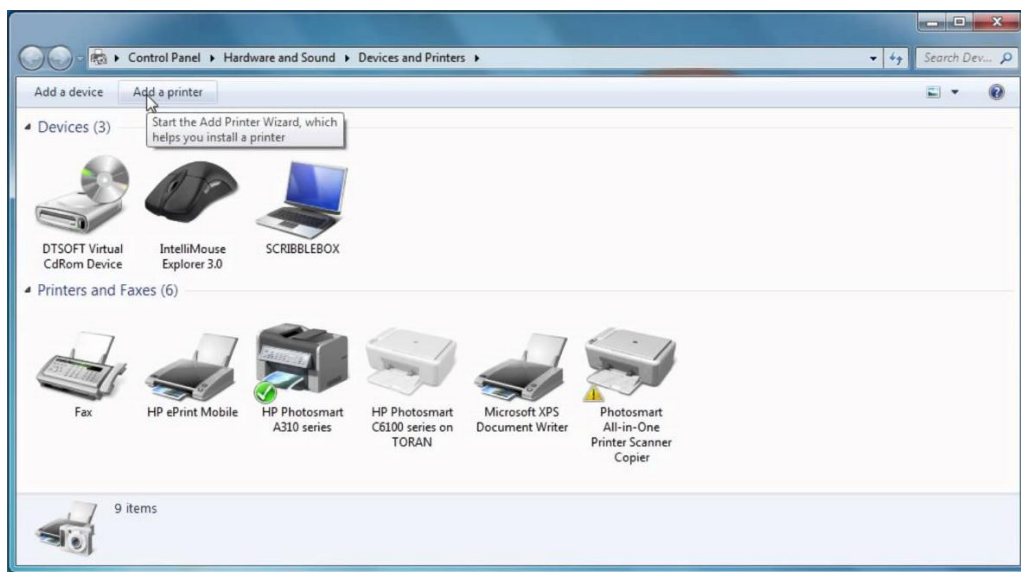
Printer Server

7. Sharing Media or Server



You can share a USB printer with all clients connected to your router. Note that the USB printer is connected to the USB port of your router.

- ① Connect a printer to the USB port of your router using a USB cable.
- ② Toggle on the printer server to allow access from the client devices.
- ③ Install the printer driver on each computer that needs printer service.
- ④ To install the printer driver on your PC, go to **Start > Control Pad > Device & Printers**. Then you get the Printers page.



- ⑤ Click add a printer and then follow the printer setup wizard.



Note:


- How to add a USB printer may differ depending on the operating system of your PC.

7. Sharing Media or Server

- The USB port is only for USB devices like flash drives, hard drives and printers. Do not connect PCs, USB modems, CD drives, USB power bank or DVD drives.
- For detailed information, refer to the FAQ on the web site.

Time Machine

A MAC user can back up the system to the connected USB device with the time machine function.



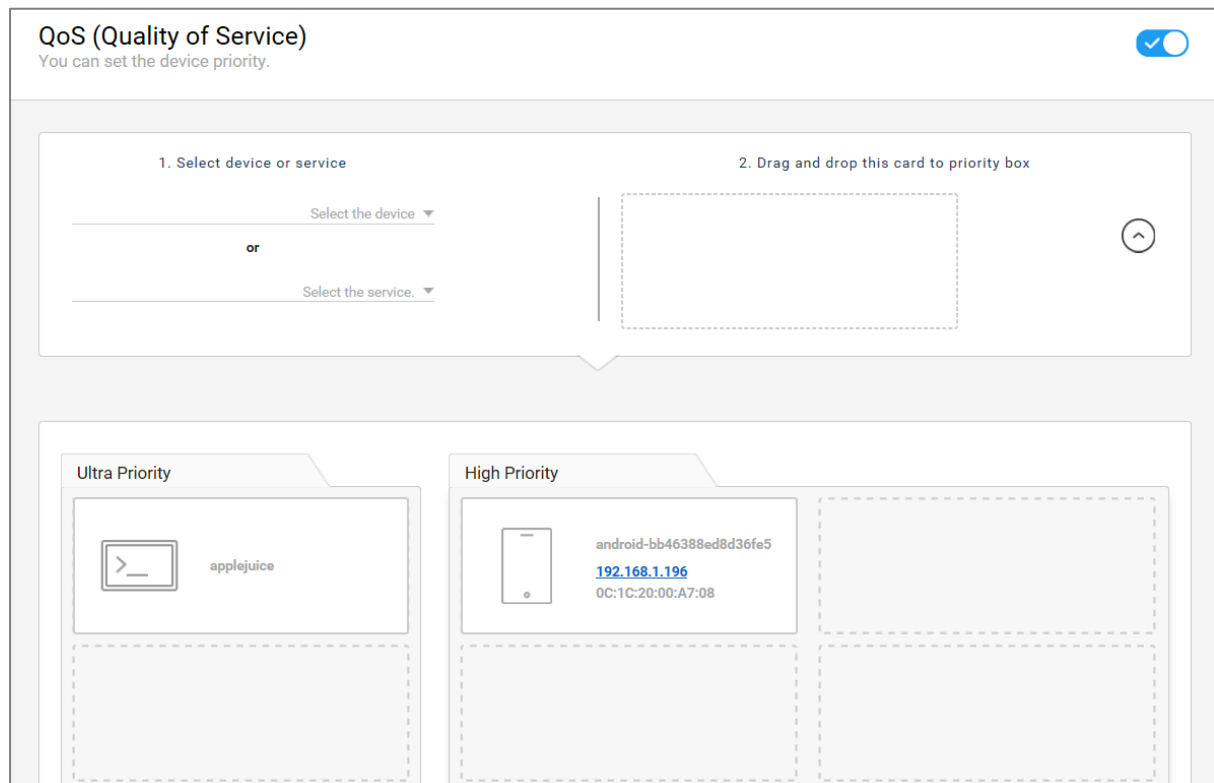
Time Machine	
Account	abcde ▼
Network Folder	My favorite music ▼
Limit Volume Size	0

- ① Specify if you will use the time machine backup.
- ② Enter the server user account. They are necessary for login to the server.
- ③ Specify the network folder to back up.
- ④ Specify the maximum capacity of the folder to back up. Set to 0 if you want to use the maximum capacity available.
- ⑤ Click **Apply** to save the change.

Chapter 8 Quality of Service (QoS)

QoS (Quality of Service)

You can set a client device or service to have the priority in transmitting data without transmission delay or interruption.



When you use multiple devices or a lot of services, the prioritized device will be guaranteed first for the bandwidth. You can enjoy entertainment services without transmission delay or interruption.

Connect to the Entertainment port,

- ① Connect an entertainment device such as OTT, gaming console and IPTV to the **Entertainment** port of your router.
- ② Toggle on the QoS to prioritize the device. Then, the device has the highest priority automatically.

8. Quality of Service (QoS)

Drag and drop the card,

- ① Connect a device to your router over a wired Ethernet connection or wirelessly.
- ② Toggle to prioritize a client device or not. If you turn it off, all options below will disappear.
- ③ Select a device or service (ex. Youtube, Facebook) from the list. Then, the device or service will be added to the right box.
- ④ Click the card in the right box, and then drag and drop the card to the priority box. You can set the priority level to Ultra or High. The order of cards in the priority box does not matter.

Chapter 9 Securing Up Network

You can secure a home wireless network by setting the security options. You can block inappropriate, explicit and malicious websites, and control access to specified websites during specified time.

9.1 Parental Control

SECURITY > Parental Control

You can configure the parental controls to block access to the websites by URL including specific keywords and to restrict Internet access during specified time.

Toggle to set the blocking rules or not.

Control Rule

Control Rule

• Device Name/MAC Address • Service Filters • Block Schedule

Select the device ▼ Setup the Filters Setup the Schedule

6C:96:CF:BE:13:07 ✕

Only Specific Time

Save Cancel

- ① Click **Add** to add a rule
- ② Select a device from the list. You can enter the MAC address if there is no device name in the list.
- ③ Click **Setup the Filters** and select a service to block access to the unwanted websites. You can enter a specific keyword in the user define menu (e.g. facebook, youtube, etc.).
- ④ Click **Setup the Schedule** to block on a schedule or block all the time. The sites are only blocked during the scheduled time with certain URL or keywords.
- ⑤ Click **Save** to save your changes.



Note: Since the web pages compressed using HTTP compression cannot be filtered, you cannot use the word *https* as a filtering keyword. Not only that the word *www* is not regarded as a keyword.

Parental Code

When you access the parental control setting page for the first time and toggle on the button, you are required to set a parental control code. The code will be required whenever you have access to this page.

Parental Code ☒

Change Parental Code

New Parental Code

Retype New Parental Code

- ① Enter a new parental code and enter the code again to confirm.
- ② Click **Apply** to save your changes.

9.2 Firewall Setting

SECURITY > Firewall

Firewall can protect cyber-attacks and validate the traffic that is passing through the router based on the protocol.

Firewall ☒

Protection Level

Low Medium High

Allowed Service : Total 29

	• Service	• Port (Start - End)	• Protocol
1	AIM/ICQ	5190 - 5190	TCP
2	DHCPv6	546 - 547	UDP
3	DNS TCP	53 - 53	TCP
4	DNS UDP	53 - 53	UDP
5	FTP-S	989 - 990	TCP
6	HTTP	80 - 80	TCP

Block TCP SYN Flood ☐

Block IP Spoofing ☐

IPv6 Firewall ☒

Apply

① Toggle to set a firewall.

② Click the level **Low**, **Medium** or **High** to set a protection level. Whenever the level is changed, the services allowed for the level will be listed below.

- **Block TCP SYN Flood:** Toggle to prevent SYN flood attack that works by not reacting to the server with the normal ACK code.
- **Block IP Spoofing:** Toggle to prevent IP spoof attacks or not. An IP spoof is to make packets appear to come from a trusted source.
- **IPv6 Firewall:** Toggle to use IPv6 firewall protection or not. This option is available only when

9. Securing Up Network

the IPv6 is turned on.

Click **Apply** to save your changes.

9.3 VPN Setting

SECURITY > VPN

You can configure a virtual private network (VPN) across the public network. VPN provides a secure tunnel between your home network and a remote computer. You can securely access your home network through the tunnel from anywhere.

When you use your router as a VPN server:

The screenshot shows the 'VPN Mode' configuration page. At the top left, 'VPN Mode' is selected. On the right, 'Server' is chosen from a dropdown menu. The main configuration area includes a 'VPN Server' toggle switch that is turned on. Below this, the 'Protocol' is set to 'PPTP'. A section titled 'Clients Account (Max Entry : 10)' contains a table with two columns: 'Status' and 'User Name / Password'. Below the table are input fields for 'Enter the User Name' (with a character count of 0/32) and 'Enter the Password' (with an eye icon to toggle visibility). At the bottom of the form are 'Save', 'Cancel', and a prominent blue 'Apply' button.

- ① Select **Server** in VPN mode to use your router as a VPN server.
- ② Toggle to use a VPN connection or not.
- ③ Select a VPN type to use when a VPN server works. Available types are PPTP, L2TP and OpenVPN.

Using PPTP

The screenshot shows the 'VPN Server' configuration window. At the top, the 'VPN Server' toggle is turned on. The 'Protocol' dropdown is set to 'PPTP'. Below this, the 'Clients Account (Max Entry : 10)' section is visible. It contains a table with two columns: 'Status' and 'User Name / Password'. Below the table, there are two input fields: 'Enter the User Name' (with a character count of 0/32) and 'Enter the Password' (with an eye icon to toggle visibility). At the bottom, there are 'Save' and 'Cancel' buttons, and a large blue 'Apply' button.

④ Enter a user name and password to allow access to your home network. The password will be required when a client logs in to your home network.

⑤ Click **Save** and then **Apply** to save your changes. To edit or delete the client, click the pencil or trash icon. To add a new client allowable, click **Add**. You can add up to 10 clients.

Using L2TP

The screenshot shows the 'VPN Server' configuration window. At the top, the 'VPN Server' toggle is turned on. The 'Protocol' dropdown is set to 'L2TP'. Below this, the 'L2TP Presharedkey' section is visible, with an input field labeled 'Enter the Password' and an eye icon to toggle visibility. Below this, the 'Clients Account (Max Entry : 10)' section is visible. It contains a table with two columns: 'Status' and 'User Name / Password'. Below the table, there are two input fields: 'Enter the User Name' (with a character count of 0/32) and 'Enter the Password' (with an eye icon to toggle visibility). At the bottom, there are 'Save' and 'Cancel' buttons, and a large blue 'Apply' button.

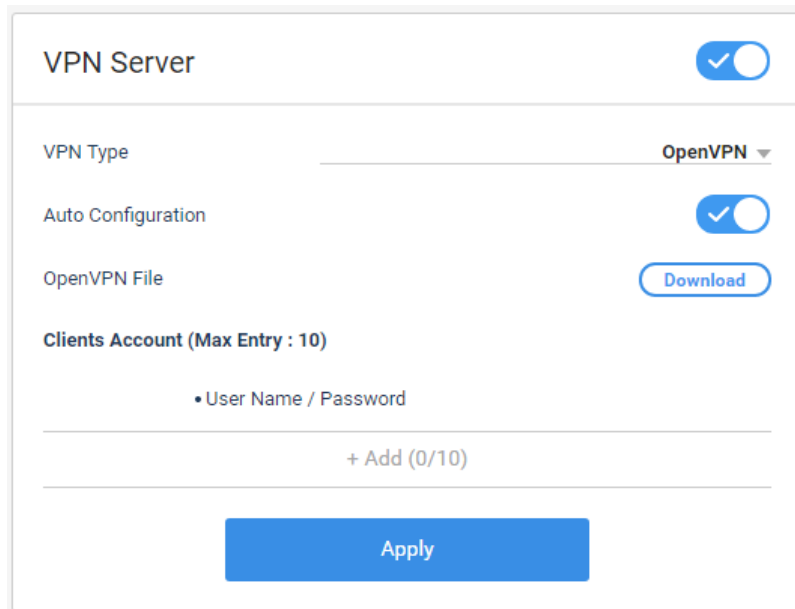
④ Enter a presharedkey for the VPN connection.

⑤ Enter a user name and password to allow access to your home network. The password will be required when a client logs in to your home network.

9. Securing Up Network

⑥ Click **Save** and then **Apply** to save your changes. To edit or delete the client, click the pencil or trash icon. To add a new client allowable, click **Add**. You can add up to 10 clients.

Using Open VPN



The screenshot shows the 'VPN Server' configuration page. At the top, there is a toggle switch for 'VPN Server' which is turned on. Below this, the 'VPN Type' is set to 'OpenVPN'. The 'Auto Configuration' toggle is also turned on. There is a 'Download' button for the 'OpenVPN File'. Under the 'Clients Account (Max Entry : 10)' section, there is a table with one header row: 'User Name / Password'. Below the table is a '+ Add (0/10)' button. At the bottom of the form is a large blue 'Apply' button.

④ **Auto Configuration:** Toggle to automatically set the use of open VPN or not. If turned on, the details are automatically set up to use open VPN and thus you can skip steps ⑤, ⑥ and ⑦ below:

If you want to manually set the details follow the steps ⑤, ⑥ and ⑦:

⑤ Select a protocol type.

TCP is a connection oriented protocol and **UDP** is a connectionless Internet protocol. In TCP type, data is transmitted bidirectional and thus it is more reliable than UDP.

⑥ Set a server port from 1024 to 49151. The default value is 1194.

⑦ Toggle on the authorization mode to authenticate the account or not.

⑧ Click **Download** to download the server configuration file.

⑧ Click **Add** to and then enter a user name and password to allow access to your home network.

You can add up to 10 clients. To edit or delete the client, click the pencil or trash icon.

⑨ Click **Apply** to save your changes.



Note: This type of VPN access is called a client-to-gateway tunnel. You can access VPN server (Router) through a VPN tunnel remotely. When the router (VPN server) is enabled, a VPN client must install and run VPN client software on each Windows computer, Mac computer, iOS device or Android device that the client plans to use for VPN connections to your router. An IP address or hostname is required to connect to a VPN server. VPN uses DDNS to conveniently connect with your router. To use a DDNS service, register an account with a host name (sometimes called a domain name). Please refer to the DDNS explanation.

When you use your router as a VPN client:

VPN Mode

Client

VPN Client

Connection Status **Disconnected**

IP Address -

Protocol PPTP

VPN Server 12.25.232.322

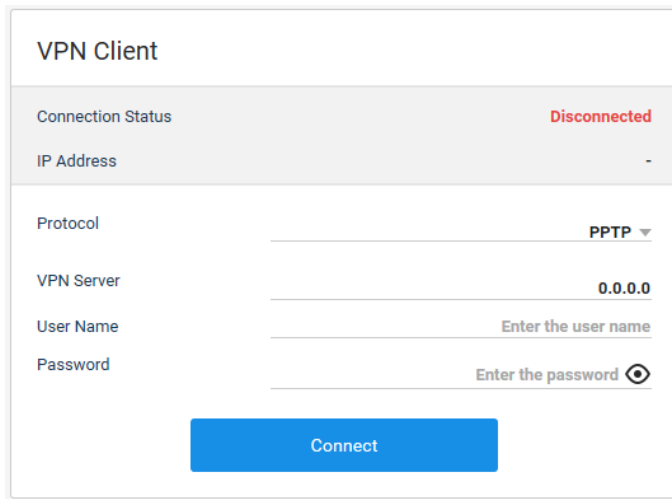
User Name longlong

Password

Connect

- ① Check whether a client is connected and the IP address assigned by a VPN server. The connection status and IP address show whether the connection is successful.
- ② Select **Client** in VPN mode to use your router as a VPN client. VPN clients can access their local network with their own user name and password.
- ③ Select a protocol to use when a VPN client works.

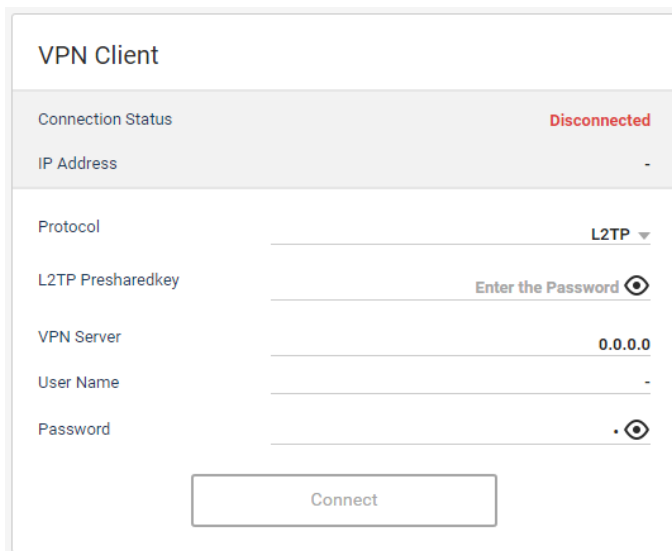
PPTP



The screenshot shows the 'VPN Client' configuration window for PPTP. At the top, the title is 'VPN Client'. Below it, a status bar shows 'Connection Status' as 'Disconnected' in red text. Underneath, 'IP Address' is shown as '-'. The main configuration area has several fields: 'Protocol' is set to 'PPTP' with a dropdown arrow; 'VPN Server' is set to '0.0.0.0'; 'User Name' has a placeholder 'Enter the user name'; and 'Password' has a placeholder 'Enter the password' with an eye icon. At the bottom, there is a blue 'Connect' button.

- ④ Enter the user name and password given by your VPN provider.
- ⑤ Click **Connect** to connect to a VPN server.

L2TP



The screenshot shows the 'VPN Client' configuration window for L2TP. At the top, the title is 'VPN Client'. Below it, a status bar shows 'Connection Status' as 'Disconnected' in red text. Underneath, 'IP Address' is shown as '-'. The main configuration area has several fields: 'Protocol' is set to 'L2TP' with a dropdown arrow; 'L2TP Presharedkey' has a placeholder 'Enter the Password' with an eye icon; 'VPN Server' is set to '0.0.0.0'; 'User Name' has a placeholder '-'; and 'Password' has a placeholder with a dot and an eye icon. At the bottom, there is a 'Connect' button.

- ④ Enter the VPN server address to have access to. You can enter IP address or domain address.
- ⑤ Enter the user name and password given by your VPN provider.
- ⑥ Click **Connect** to connect to a VPN server.

Open VPN

VPN Client

Connection Status

Disconnected

Protocol

OpenVPN ▾

User Name

-

Password

• 👁

Upload OpenVPN File

Choose the file ▾

Connect

- ④ Enter the user name and password given by your VPN provider.
- ⑤ Click **Upload** to upload the client configuration file.
- ⑥ Click **Connect** to connect to a VPN server.

9.4 Filtering Rule Setting

SECURITY > Filtering

You can configure the filtering rules to prevent network devices from sending outgoing TCP/UDP traffic to the Internet to the Internet via their MAC addresses or your router. It can be useful to prevent unauthorized devices from connecting to your network.

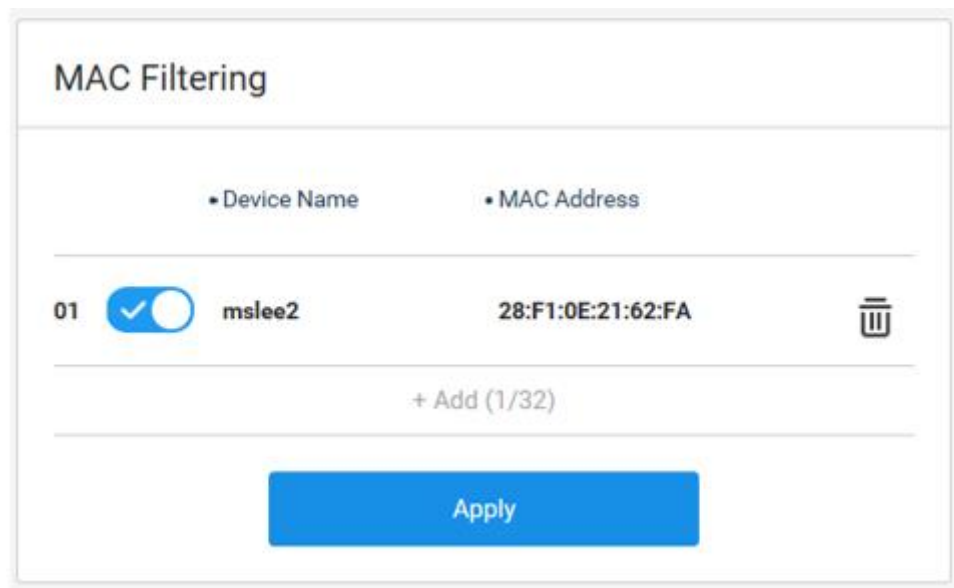
IP/Port Filtering

ID	Status	Description	IP Address	Port (Start-End)	Protocol	Actions
01	<input checked="" type="checkbox"/>	Another user	192.168.1.2	1 - 1	TCP	


+ Add (1/32)

- ① Click **Add** to add a filtering rule. You can add up to 32 rules.
- ② Take a note to remember the rule if you need.
- ③ Enter an IP address to block access.
- ④ Enter the start and end ports to block access to the ports. If the start and end ports are the same, the single port is blocked, and if the input box is blank, any client is allowed to use the service.
- ⑤ Select a protocol from TCP, UDP or TCP+UDP. UDP controls endpoint filtering for packets of the UDP protocol, TCP controls endpoint filtering for packets of the TCP protocol.
- ⑥ Click **Save** to list up the filtering rule.

MAC Filtering



The screenshot shows a 'MAC Filtering' configuration window. At the top, there are two column headers: '• Device Name' and '• MAC Address'. Below these, there is a table with one row of data. The first cell of the row contains the number '01' and a blue toggle switch that is turned on. The second cell contains the device name 'mslee2'. The third cell contains the MAC address '28:F1:0E:21:62:FA'. To the right of the MAC address is a trash can icon. Below the table, there is a link that says '+ Add (1/32)'. At the bottom of the window is a large blue button labeled 'Apply'.

	• Device Name	• MAC Address	
01	<input checked="" type="checkbox"/> mslee2	28:F1:0E:21:62:FA	

[+ Add \(1/32\)](#)


Apply

- ① Click **Add** to add a filtering rule. You can add up to 32 rules.
- ② Select a device from the list of connected devices. You can enter the MAC address if there is no device name in the list.
- ③ Click **Save** and then **Apply** to list up the filtering rule. The devices that are restricted to have access to your network will be listed. To delete the rule, click the trash icon.

9.5 Security Check

SECURITY > Security Check

You can check how secure your router is and have direct access to each page for security settings.

Security check		
Login Password Changed	Yes	
Login Password Security Level	Strong	
2.4GHz Wireless Password Security Type	Good(WPA2/WPA-PSK)	
5GHz Wireless Password Security Type	Good(WPA2/WPA-PSK)	
UPnP Service	Enable	
Remote Access	Enable	
PING from WAN	Disable	
DMZ	Disable	
Port Triggering	Disable	
Port Forwarding	Disable	
Anonymous Login to FTP Server	Disable	

Click the refresh icon to check the current security status.

If the security is weak, the option values are displayed in red text and linked to the corresponding pages. Then, you can change the settings to secure the router.

Chapter 10 Setting Advanced Options

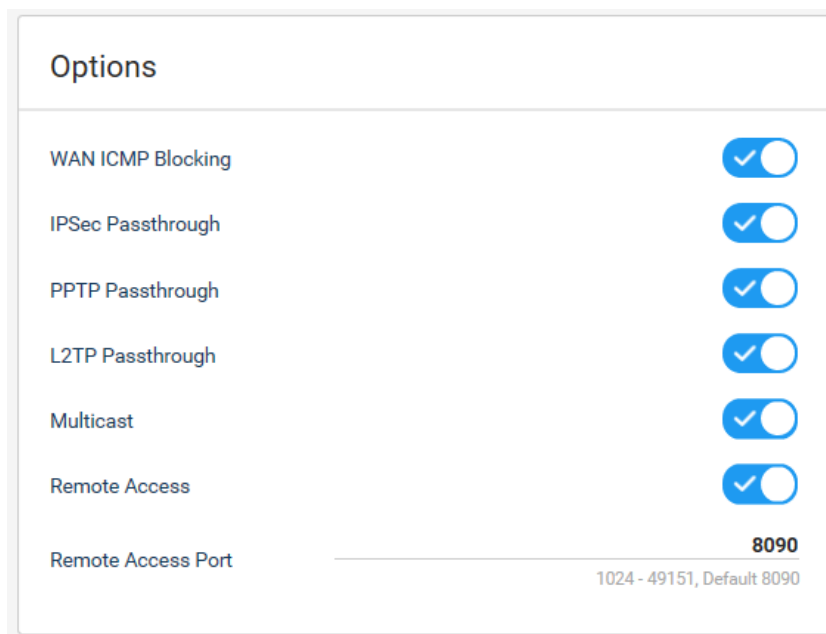
You can set the advanced network options. If you are not familiar with network settings, we recommend not to change the settings in the advanced menus. Most users have no need to change these settings.

10.1 Advanced Network Setting

ADVANCED > Network

You can block network traffic from any sources in several ways.

Options



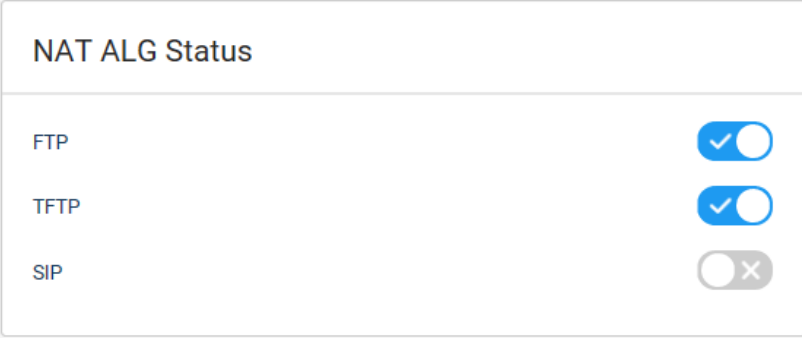
Options	
WAN ICMP Blocking	<input checked="" type="checkbox"/>
IPSec Passthrough	<input checked="" type="checkbox"/>
PPTP Passthrough	<input checked="" type="checkbox"/>
L2TP Passthrough	<input checked="" type="checkbox"/>
Multicast	<input checked="" type="checkbox"/>
Remote Access	<input checked="" type="checkbox"/>
Remote Access Port	8090 1024 - 49151, Default 8090

- **WAN ICMP Blocking:** Toggle to block ICMP ping over WAN or not. The default value is on.
- **IPSec Passthrough:** Toggle to block IPSec passthrough or not. The default value is on.
- **PPTP Passthrough:** Toggle to block PPTP passthrough or not. The default value is on.
- **L2TP Passthrough:** Toggle to block L2TP passthrough or not. The default value is on.
- **Multicast:** Toggle to allow multicast from broadband network or not. The default value is on.
- **Remote Access:** Toggle to allow remote access to your router or not. You can view or configure router's settings over the Internet. The default value is off.

10. Setting Advanced Options

- **Remote Access Port:** Enter the port number to access the router remotely when the remote access is allowed. This number will be needed when you enter the WAN IP address or when you remotely access the router. You can set the port number from 1 to 49151 and the default value is 8090.

NAT ALG Status.



The image shows a configuration panel titled "NAT ALG Status". It contains three rows, each with a protocol name and a toggle switch. The first row is for "FTP" with a blue toggle switch that is turned on (indicated by a checkmark). The second row is for "TFTP" with a blue toggle switch that is also turned on (indicated by a checkmark). The third row is for "SIP" with a grey toggle switch that is turned off (indicated by an 'X' in a circle).

NAT ALG Status	
FTP	<input checked="" type="checkbox"/>
TFTP	<input checked="" type="checkbox"/>
SIP	<input type="checkbox"/>

- **FTP:** Toggle to allow remote access from an FTP client to the FTP server or not.
- **TFTP:** Toggle to use trivial file transfer protocol (TFTP) or not. TFTP allows a user to get a file from or put a file onto a remote host.
- **SIP:** Toggle to use session initiation protocol (SIP) or not.

10.2 Advanced Wireless Network Setting

ADVANCED > Wireless

You can configure the wireless network and its security settings according to your needs.

The screenshot displays two side-by-side configuration panels for wireless networks. The left panel is for the 2.4GHz band, and the right panel is for the 5GHz band. Both panels have a 'Radio' toggle at the top, which is currently turned on. Below the toggle, there are several settings: 'Channel' (set to 'Auto' with a 'Q APs' button), '802.11 Mode' (set to '802.11b+g+n' for 2.4GHz and '802.11a+n+ac' for 5GHz), 'Bandwidth' (set to 'Auto'), 'Sideband' (set to 'Lower' for 2.4GHz), '802.11n Protection' (toggle on), 'Short Guard Interval' (toggle on), 'WMM' (toggle on), 'Beamforming' (toggle on), 'Output Power' (set to 'High'), 'Beacon Interval' (set to '100 ms' with a range of '40 - 1000, Default 100'), and 'DTIM Interval' (set to '1' with a range of '1 - 15, Default 1').

- **Radio:** Toggle to use wireless network or not. If you turn it off, all the options below will disappear and you cannot use Wi-Fi.
- **Channel:** Select an operating channel for the wireless network. The default value is **Auto** that enables selecting an optimal channel for the current network environment.
- **802.11 Mode:** Select 802.11 mode according to your wireless client devices to allow 802.11 supported devices on your wireless network.
- **Bandwidth:** Select a channel width for the wireless network. The default value is **Auto** that enables setting an optimal bandwidth for the current network environment.
- **Sideband:** Select **Upper** to use higher frequency band than the carrier frequency or **Lower** below it.
- **802.11n Protection:** Toggle to enable the protection mechanisms or not. This feature is supported in 802.11b+g+n only. You can see this option only at 2.4GHz band.
- **Short Guard Interval:** Toggle to lower the interval or not. If turned on, data rate will be

10. Setting Advanced Options

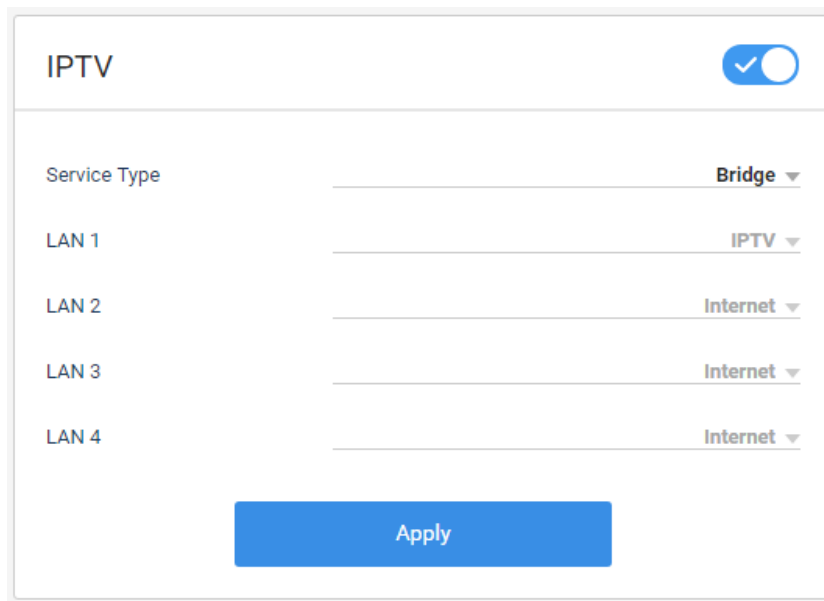
increased.

- **Wi-Fi Multimedia (WMM):** Toggle to give the priority to Wi-Fi multimedia data or not. The multimedia data packets have a higher priority than normal traffic.
- **Beamforming:** Toggle to allow the AP to effectively concentrate its signal at the client device.
- **Output Power:** Set the radio signal strength. Medium is 25% lower and low is 50% lower than high level. The default value is **High**. The medium and low options affect wireless signal attenuation.
- **Beacon Interval:** Enter the beacon interval in milliseconds for the AP. The default is 100, which is fine for nearly all applications.
- **DTIM Interval:** Enter the data beacon rate to set the wakeup interval for clients in power-save mode. When a client is running in power save mode, lower values provide higher performance but result in decreased client battery life while higher values provide lower performance but result in increased client battery life. The default value is 1.

10.3 IPTV Setting

ADVANCED > IPTV

You can set up the LAN port to use IPTV, IP-phone and Internet services that are available only through the Internet. Your product has a LAN port for gaming and streaming IPTV and IP phone service. We recommend you connect the IPTV or IP phone to the Entertainment port.



IPTV	
Service Type	Bridge ▼
LAN 1	IPTV ▼
LAN 2	Internet ▼
LAN 3	Internet ▼
LAN 4	Internet ▼
<button>Apply</button>	

- **IPTV:** Toggle to use IPTV service or not. If you turn it off, all the options below will disappear.
- **Service Type:** Select an appropriate connection mode for your ISP. If there is no your ISP in the list, select **User Define**. In User Define, you can set the IPTV, IP-phone and Internet service for each LAN port. For each service, you can set the VLAN ID and VLAN priority. For **Singapore-ExStream, Malaysia-Unifi, Malaysia-Maxis, SKB/LGU+ or KT**, connect the device to the preset LAN port. The VLAN ID and the VLAN priority are automatically preset and thus you do not need to enter each value.
- **LAN 1, 2, 3, 4:** LAN port options are activated if available. Select a LAN port to connect your IPTV, IP phone and Internet service. At least one port should be allocated for the Internet service.

Click **Apply** to save your changes.

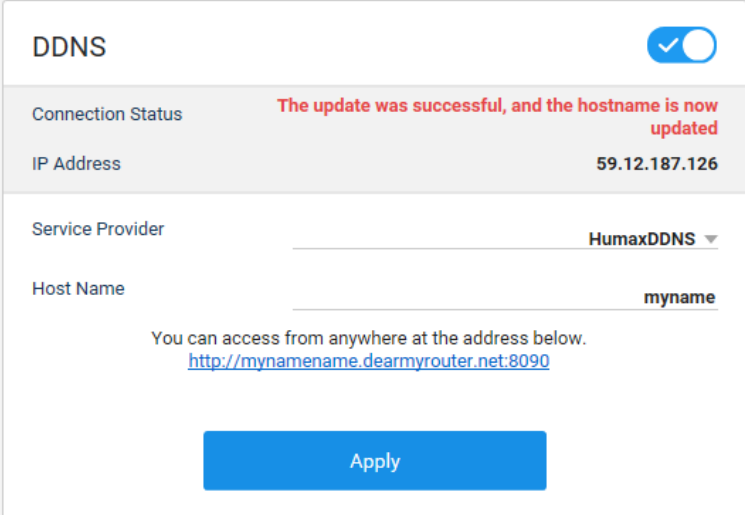
10.4 DDNS / WoL Setting

ADVANCED > DDNS/WoL

You can set a domain name utilizing Dynamic Domain Name Service for your router to have access to your router and local network. Your Internet Service Providers (ISPs) assign a dynamic IP addresses to identify each Internet account because variable IP address is assigned dynamically. You can use the IP address to access your router remotely. However, the IP address dynamically changes and you cannot know it whenever it changes. In this case, you can access the router using the domain name if the DDNS is registered.

DDNS

To use free HUMAX account,



The screenshot shows the DDNS configuration page. At the top, the title 'DDNS' is followed by a blue toggle switch that is turned on. Below this, a 'Connection Status' section displays a red message: 'The update was successful, and the hostname is now updated'. Underneath, the 'IP Address' is listed as '59.12.187.126'. The 'Service Provider' is set to 'HumaxDDNS' with a dropdown arrow. The 'Host Name' field contains 'myname'. A note states: 'You can access from anywhere at the address below.' followed by the URL 'http://mynamename.dearmyrouter.net:8090'. At the bottom, there is a blue 'Apply' button.

- ① Open a web browser on a PC or Wi-Fi device that is connected to the network.
- ② Enter <http://dearmyrouter.net>. A login page will display.
- ③ Log in with the ID and password. The default ID and password are printed on the bottom of your product. The ID and password are case-sensitive.
- ④ Go to **Advanced > DDNS / WoL**.
- ⑤ Toggle on to use a dynamic DNS service.
- ⑥ Select **HumaxDDNS** from the service provider list.
- ⑦ In the host name field, type the name you want to use for your URL. You can enter up to 32

10. Setting Advanced Options

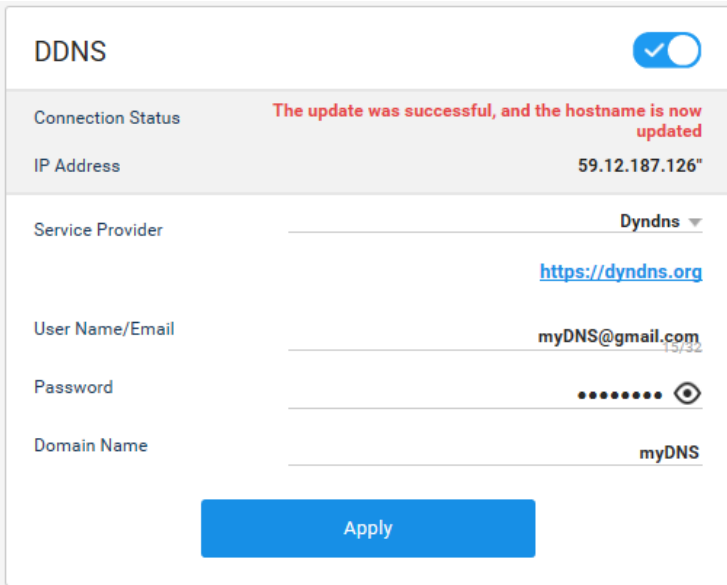
alphanumeric characters or the hyphen (–) character, but it cannot start or end with a hyphen (-).

If a host name is already in use, another name will be recommended.

Your free URL includes the host name that you specify and ends with `dearmyrouter.net`. For example, specify `http://myname.dearmyrouter.net/8090`. When you remotely access your router, enter `myname.dearmyrouter.net:8090`. You can change the remote access port number 8090 in **ADVANCED > Network**, but we recommend you use the default value.

⑧ Click **Apply** to save the DDNS name. Then the URL will be displayed and you can be redirected to the path.

To use the others,



If you already have a DDNS account with other DDNS services like Dynamic DNS, No-IP or Duck DNS you can set up the router to use your account.

- ① Open a web browser on a PC or Wi-Fi device that is connected to the network.
- ② Enter <http://dearmyrouter.net>. A login page will display.
- ③ Log in with the ID and password. The default ID and password are printed on the bottom of your product. The ID and password are case-sensitive.
- ④ Go to **Advanced > DDNS / WoL**.

10. Setting Advanced Options

⑤ Toggle on to use a dynamic DNS service.

⑥ Select one from the service provider list.

- <https://dyn.com/dns/>
- <https://www.noip.com/>
- <http://www.duckdns.org/>

⑦ In the host name field, type the name (sometimes called the domain name) for your account.

⑧ For noip.com or dyn.com account, in the user name field, enter the user name for your account.

⑨ In the password field, type the password for your DDNS account.

⑩ Click **Apply** to save your changes.

WoL (Wake on LAN)

• Description		• MAC Address	
01		mslee2	28:F1:0E:21:62:FA
Unknown device		Select the device ▼	
Save		Cancel	

You can turn on or wake your PC remotely over the Internet.

① Click **Add** to register a device.

② Select a wired-connected device from the list or directly enter the MAC address.

③ Click **Save** and then **Apply** to add the device. To delete the device, click the trash icon.



Note: This feature is available on the device connected to your router over a wired Ethernet connection.

10.5 Port Forwarding Rule / DMZ Setting

ADVANCED > Port Forwarding/DMZ

Port Forwarding

You can run a publicly accessible server on the LAN to grant controlled access to the PCs or mobile devices over your network to other clients. Specify the mapping of TCP/UDP ports to a local LAN.

This will be used to open multiple ports in your router and redirect data through those ports to a single PC on your network. You need networking knowledge to set up these features.

	• Service Type	• IP Address	• Local Port (Start-End)	• External Port (Start-End)	• Protocol	
01	<input checked="" type="checkbox"/> HTTP	192.168.1.2	80 - 80	80 - 80	TCP/UDP	
+ Add (1/20)						
<button>Apply</button>						

- ① Click **Add** to add a rule.
- ② Select a service type from the list.
- ③ Enter the IP address.



Note: Since dynamically assigned IP addresses vary, we recommend you allocate a static IP address.

- ④ Enter the local and external port ranges. The range can be from 0 to 65535. For the local and external ports, refer to your network devices.
- ⑤ Select a port protocol from TCP, UDP or TCP+UDP. If you are not sure, select **TCP+UDP**.
- ⑥ Click **Save** and then **Apply** to save your changes.



Note: If your home network includes a server, you can allow certain types of incoming traffic to reach the server. For example, you might want to make a local web server, FTP server or

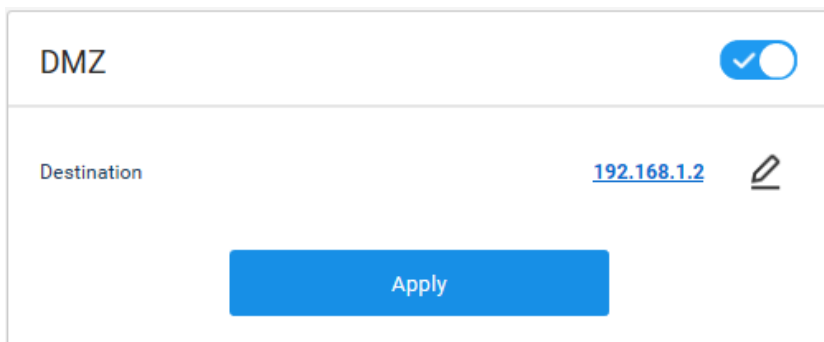
10. Setting Advanced Options

game server visible and available on the Internet. The router can forward incoming traffic with specific protocols to PCs on your local network. You can specify the servers for applications and you can also specify a default DMZ to which the router forwards all other incoming protocols.

DMZ

You can configure the DMZ to make applications free from port restrictions.

When a PC is set to be a DMZ host in the local network, it is totally exposed to the Internet, which can realize the unlimited bidirectional communication between internal hosts and external hosts. The DMZ host becomes a virtual server with all ports opened. When you are not clear about which ports to open in some special applications, such as IP camera and database software, you can set the PC to be a DMZ host. But, in this case, all ports open and it may cause security vulnerable.



The screenshot shows a web-based configuration interface for DMZ. At the top, the word "DMZ" is displayed next to a blue toggle switch that is currently turned on. Below this, there is a section labeled "Destination" on the left and the IP address "192.168.1.2" on the right, with a small edit icon (a pencil) to the right of the IP address. At the bottom of the configuration area is a large blue button labeled "Apply".



- ① Toggle to configure a DMZ host or not.
- ② Enter the host IP address.
- ③ Click **Apply** to save your changes.

10.6 Port Triggering Rule Setting

ADVANCED > Port Triggering

You can configure a port triggering rule to control communication between internal and external host devices in an IP network. By setting up port triggering, your network devices will have access to the Internet without any interruption.

Port Triggering

	Description	Triggered Range(Start-End)	Protocol	Forwarded Range(Start-End)	Protocol	
01	<input checked="" type="checkbox"/> Triggering Rule	27 - 32	TCP	127 - 132	TCP	 
+ Add (1/10)						

Apply

① Click **Add** to add a triggering rule.

② Enter the option values.

- **Description:** Take a note to remember the rule if you need.
- **Triggered Range(Start-End):** Enter a port range. You can set the range from 0 to 65535.
- **Protocol:** Select a protocol to apply to the triggered ports.
- **Forwarded Range(Start-End):** Enter a forwarding range. You can set the range from 0 to 65535.
- **Protocol:** Select a protocol to apply to the forwarded ports.

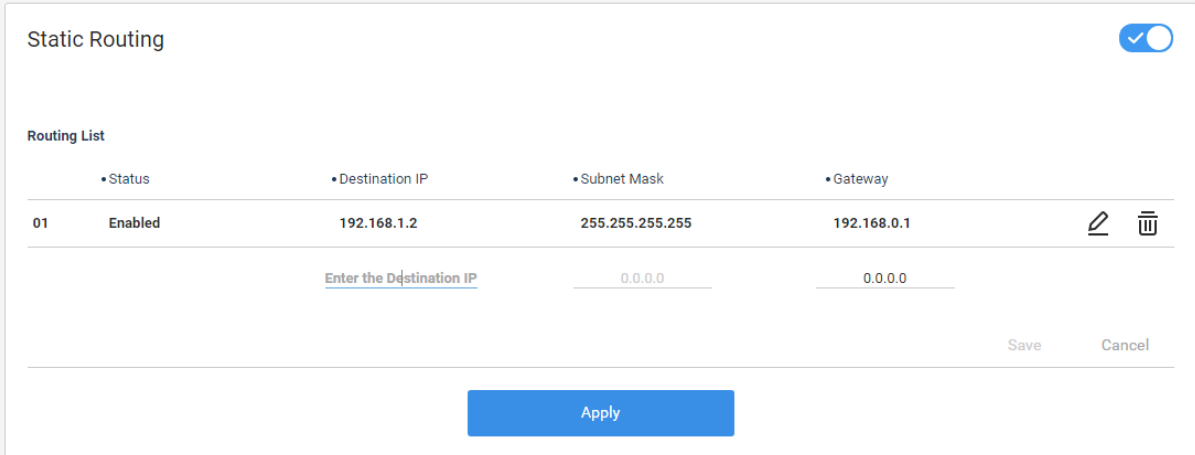
③ Click **Save** and then **Apply** to save your changes.

10.7 Routing Rule Setting

ADVANCED > Routing

Static Routing

You can manually set the network routing path of packets for data to travel from one network to another with optimal speed and minimal delay.



The image shows a 'Static Routing' configuration window. At the top right, there is a toggle switch labeled 'Static Routing' which is currently turned on (indicated by a blue checkmark). Below this is a 'Routing List' table with four columns: 'ID', 'Status', 'Destination IP', 'Subnet Mask', and 'Gateway'. The first row shows an ID of '01', Status of 'Enabled', Destination IP of '192.168.1.2', Subnet Mask of '255.255.255.255', and Gateway of '192.168.0.1'. To the right of the table are edit and delete icons. Below the table, there are input fields for 'Enter the Destination IP' (with a placeholder '0.0.0.0') and 'Gateway' (with a placeholder '0.0.0.0'). At the bottom right are 'Save' and 'Cancel' buttons. A large blue 'Apply' button is centered at the bottom of the window.

ID	Status	Destination IP	Subnet Mask	Gateway
01	Enabled	192.168.1.2	255.255.255.255	192.168.0.1

Enter the Destination IP: 0.0.0.0 Gateway: 0.0.0.0

Save Cancel

Apply

- ① Toggle to use static routing or not. The default value is off.
- ② Click **Add** to add a rule.
- ③ Enter the option values:
 - **Destination IP Address:** Enter a destination IP address.
 - **Subnet Mask:** A subnet mask will be defined automatically according to the destination IP address.
 - **Gateway:** Enter a gateway address.
- ④ Click **Save** to save your changes and then **Apply** to list up the fixed network routes.

RIP (RIP (Routing Information Protocol))

You can set the RIP parameters to employ the hop count as a routing metric. RIP prevents routing loops by implementing a limit on the number of hops allowed in a path from source to destination.

10. Setting Advanced Options

RIP (Routing Information Protocol) ☒

RIP Reporting Interval Seconds
1 - 255, Default 30

Reporting Unicast IP Address

MD5 Authentication ☒

MD5 Authentication Key ID
0 - 255, Default 0

MD5 Authentication Key String

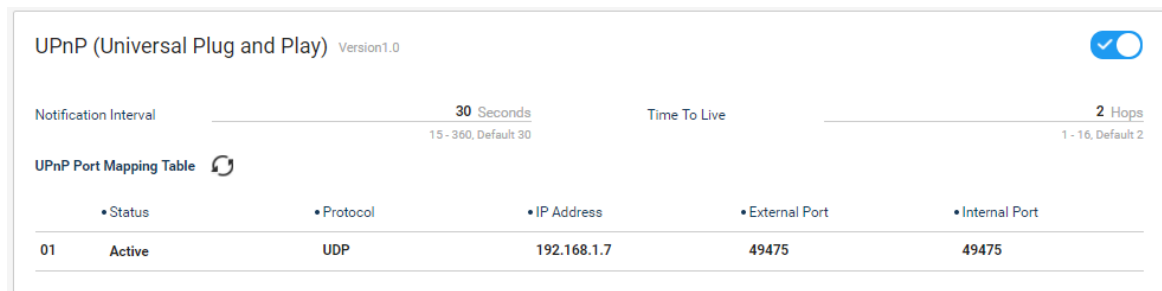
Apply

- ① Toggle to use RIP or not. The default value is off.
- ② Enter the option values:
 - **RIP Reporting Interval:** Enter a time interval between routing updates. The default value is 30 seconds.
 - **Reporting Unicast IP Address:** Enter the IP address to report.
- ③ Toggle to use MD5 Authentication or not.
 - **MD5 Authentication Key ID:** Enter a key ID used when a receiving routing device verifies the packet.
 - **MD5 Authentication Key String:** Enter an authentication key password used to authenticate sent and received packets.
- ④ Click **Apply** to save your changes.

10.8 UPnP Setting

ADVANCED > UPnP

Universal Plug and Play (UPnP) helps devices, such as Internet appliances, mobile devices and PCs, access the network and connect to other devices as needed. You can enable UPnP to allow a device to discover automatically the services from other registered UPnP devices on the network.



	• Status	• Protocol	• IP Address	• External Port	• Internal Port
01	Active	UDP	192.168.1.7	49475	49475

- ① Toggle to allow free communication between a host router and client devices or not.
- ② Enter the option values:
 - **Notification Interval:** Enter the time interval between 15 and 360 in seconds to be notified.
 - **Time To Live:** Enter the TTL value. A packet will be discarded if the hop-count exceeds the value.
- ③ Click the refresh button to update the UPnP port mapping table. The table will show the information on each UPnP device that is accessing the router, including what type of port is open and whether that port is still active for each IP address.



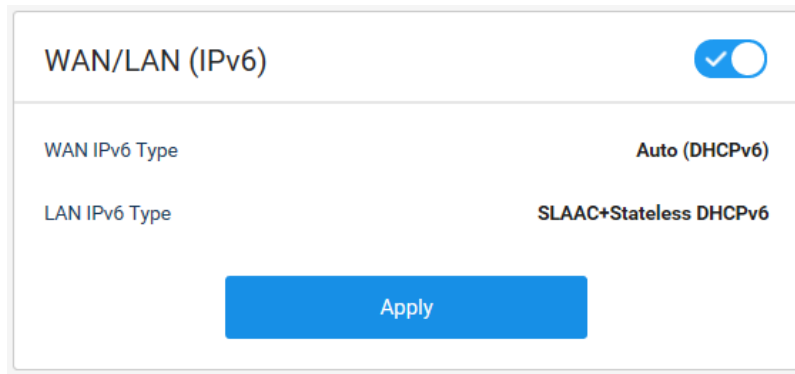
Note: If you want to use applications such as multiplayer gaming, peer-to-peer connections, real-time communications like an instant messaging or remote assistance (a feature in Windows OS), enable UPnP. Free the improved network connections with UPnP.

10. Setting Advanced Options

10.9 IPv6 Setting

ADVANCED > IPv6

Your router supports IPv6 and thus in this page you can set to use IPv6 feature or not.



The screenshot shows a web interface for IPv6 settings. At the top, there is a header 'WAN/LAN (IPv6)' with a blue toggle switch to its right, which is currently turned on (indicated by a checkmark). Below the header, there are two rows of settings. The first row is 'WAN IPv6 Type' with a value of 'Auto (DHCPv6)'. The second row is 'LAN IPv6 Type' with a value of 'SLAAC+Stateless DHCPv6'. At the bottom of the settings area, there is a blue button labeled 'Apply'.

You can automatically obtain WAN IP address and LAN IP address.

- **WAN/LAN (IPv6):** Toggle to use IPv6 address or not. More types of IPv6 will be provided later.

The type of WAN IPv6 and LAN IPv6 is preset to automatically obtain the WAN IP address from your ISP.

10.10 Diagnosing

ADVANCED > Diagnostics

You can diagnose the network connection problems with the ping test or traceroute.

The screenshot displays a web-based network diagnostic tool. It is divided into two main panels: 'Diagnostics' on the left and 'Results' on the right.

Diagnostics Panel:

- Utility:** A dropdown menu currently set to 'Ping Test'.
- Target:** A text input field containing '192.168.0.1'.
- Ping Size:** A text input field containing '64' Bytes, with a range of '64 - 1518, Default 64' shown below.
- Ping Count:** A text input field containing '3', with a range of '1 - 256, Default 3' shown below.
- Ping Interval:** A text input field containing '1000' ms, with a range of '100 - 3600000, Default 1000' shown below.
- Start:** A blue button at the bottom of the configuration section.

Results Panel:

- Results:** A section header for the test output.
- Test Output:** A light gray box containing the following text:

```
PING 192.168.0.1 (192.168.0.1) 64(92) bytes of data:
--- 192.168.0.1 ping statistics ---
3 packets transmitted, 0 received, 100% packet loss, time 1999ms
```
- Clear:** A blue button at the bottom of the results section.

① Select the network test type either **Ping Test** or **Traceroute**. A ping test is a method for checking if your PC is connected to a network. It also determines the latency or delay between two PCs. A traceroute is a method for recording the route through the Internet between your PC and a specified destination device. It also calculates and displays the amount of time each hop took.

According to the test type, the following options will be changed.

② Enter the option values.

③ Click **Start** to run the test.

④ Check the test results at the right table. You can use the results to rule out a connection issue or identify where in the network the issue is occurring. To clear the results, click **Clear**.

Chapter 11. Troubleshooting

You can find information to diagnose and solve problems you might have with your product. Before contacting the customer service center, make sure to read the tips below carefully. If the problem persists after you complete the following procedure, please contact the customer service for further instructions.

The product does not work

- Check the LEDs light white.
- Check the power adaptor is plugged into a suitable power outlet.
- Connect the power adaptor to another power outlet.
- Restart the system and wait until the LEDs light white.

Cannot access the Internet but the router

- Check the router is obtaining an IP address from the Internet Service Provider (ISP). If your router cannot obtain an IP address, you may need to contact your ISP.

Cannot access the web interface

- Check the Ethernet cable is correctly connected between the product and PC.
- If the PC is connected to the Wi-Fi, check with the SSID the connected router is correct.
- Check the web access address <http://dearmyrouter.net> is correct.
- Try to access with IP address 192.168.1.1.
- Power off the router by detaching the power adaptor and then restart the system within a few seconds.

Cannot log in to the router

- Check the IP address of your PC is on the same subnet as the router.
- Check your login information is correct. The default ID and password are printed on the label of your product. The ID and password are case-sensitive.

Cannot remember the login ID and password

- Reset the router to the factory settings. Press the reset button more than 5 seconds. Then, log in to the router with a default ID and password. The ID and password are printed on the label of your product.

Cannot search for SSID on the network devices

- Check the wireless network is turned on in **ADVANCED > Wireless**.

11. Troubleshooting

Cannot connect to Wi-Fi

- Check the LED status. During normal operation, the LEDs on the router stays lighting white. If green, the Wi-Fi is off. Then, long press the WPS button to turn on the Wi-Fi.
- Check your wireless network is broadcast on your wireless devices or PC. If not, check the Hide SSID is set to off in **WIRELESS > Primary Network**.

Cannot remember the Wi-Fi password

- Go to **Home** menu and click the eye icon at the password option. You can change the password in **WIRELESS > Primary Network**.

Chapter 12. Supplemental Information

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Warranty

The warranty does not cover parts which may become defective due to misuse of the information contained in this manual.

'WEEE' Instructions

This product should not be disposed with other household waste at the end of its working life. Please separate this from other types of waste and recycle it responsibly to promote the sustainable reuse of material resources. This will prevent possible harm to the environment or human health from uncontrolled waste disposal.

Domestic users:

Please contact either the retailer where you purchased this product or their local government office for details of where and how they can take this item for environmentally safe recycling.

Business users:

Contact your supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial waste for disposal.

FCC Customer Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operations.

KC

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12. Supplemental Information

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Appliance Classes

	Double insulated Class II equipment (IEC 60417-5172). Do not require an earth connection.
	For indoor use only (IEC 60417-5957).
	Direct current (IEC 60417-5031).
	Stand by (IEC 60417-5009)

Safety and Regulatory Information

This HUMAX router's user guide contains important safety and license information.

Safety instructions

Please read these instructions before using your product. We do not want you to get hurt or your product to get damaged.

- Do not use your product near water and keep your product dry. If you need to clean it, do not use a wet towel. Wipe the product with a clean and dry cloth. Never use cleaning fluid or similar chemicals.
- Do not spray cleaners directly on the product or use forced air to remove dust.
- Do not place your product near any heat sources, such as hot appliances like heaters and radiators, other electronics like computers and stereos, or inside your fireplace. Your product is cool, and you should help it to that way.
- Do not place the product on a soft surface, such as a carpeted floor, which may block the airflow. It is important that the product is placed on an unobstructed, solid surface.
- Do not cover the product, or block the airflow to the product with any other objects. Keep the product away from excessive heat and humidity and keep the product free from vibration and dust.
- The product is for indoor use only. Do not try to use it outside.
- Do not try to open, modify or repair your product. This could cause electric shock or injury to you. Any customer modification voids your authority to operate the equipment and will void your product warranty.
- Protect your product's power cord by allowing it to loosely rest between the product and the power outlet. Do not stretch it or compress it between objects.
- Handle your product with care. Do not drop or shake your product.
- This product was qualified under test conditions that included the use of the supplied cables between systems components. To ensure regulatory and safety compliance, use only the

12. Supplemental Information

provided power and interface cables and install them properly.

- Postpone installation until there is no risk of thunderstorm or lightning activity in the area.
- Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in safe operating condition.

Choking hazards

The product packaging may include plastic bags and tie-wraps. Please dispose of these properly and keep them out of reach of children, as they could present a choking hazard. Keep the product, its cords, and its accessories out of the reach of small children.

Simplified EU Declaration of Conformity

The simplified EU declaration of conformity referred to in Article 10(9) shall be provided as follows:

Hereby, HUMAX declares that the radio equipment type [HUMAX T10x, HUMAX T9x, HUMAX T7x, HUMAX T5x] is in compliance with Directive 2014/53/EU and relevant directives.

The full text of the EU declaration of conformity is available at the following internet address:

- United Kingdom : <http://uk.humaxdigital.com/ec>
- Germany : <http://de.humaxdigital.com/ec>

Wireless Equipment Use Information

1. In France

Authorization for outdoor usage is limited to Channels 1~7 (2.400 ~ 2.454 GHz).

2. In Italy

For outdoor usage a general authorization is required from the national spectrum authorities.

3. In Latvia

For outdoor usage an authorization is required from the Electronic Communications Office.

4. 5GHz Radio Local Area Networks (RLANs) Band only indoor use.

5. This equipment may be operated in all European Union member countries and Turkey.

Radio Frequency Specifications	
Frequency mode (band)	Wi-Fi b/g/n (20/40MHz), RF4CE(Zigbee), BT
RF output power	Maximum power level is not exceeding 20dBm
Frequency range (MHz)	2.4GHz

And


Radio Frequency Specifications	
Frequency mode (band)	Wi-Fi a, n(20/40MHz), ac(20/40/80MHz)

12. Supplemental Information





RF output power (EIRP)	Maximum power level is not exceeding 23dBm (for TPC) / 20dBm (without TPC)
Frequency range (MHz)	5150MHz to 5350MHz

And

Radio Frequency Specifications	
Frequency mode (band)	Wi-Fi a, n(20/40MHz), ac(20/40/80MHz)
RF output power (EIRP)	Maximum power level is not exceeding 14dBm
Frequency range (MHz)	5725MHz to 5875MHz

		BE	BG	CZ	DK
LV	LT	LU	HU	MT	NL

Product Specification

	T10x	T9x	T7x	T5x
Wi-Fi	Simultaneous dual band 800Mbps at 2.4GHz, 1800Mbps at 5GHz	Simultaneous dual band 600Mbps at 2.4GHz, 1800Mbps at 5GHz	Simultaneous dual band 600Mbps at 2.4GHz, 1300Mbps at 5GHz	Simultaneous dual band 400Mbps at 2.4GHz, 1300Mbps at 5GHz
Processor	1.6GHz dual-core	1.6GHz dual-core	1.6GHz dual-core	1.6GHz dual-core
Antenna	Internal 2.4GHz 4T4R / 5G 4T4R	Internal 2.4GHz 3T3R / 5G 4T4R	Internal 2.4GHz 3T3R / 5G 3T3R	Internal 2.4GHz 2T2R / 5G 3T3R
Memory	256MB flash 512MB RAM	256MB flash 512MB RAM	256MB flash 512MB RAM	256MB flash 512MB RAM
Ethernet ports	Five (5) 10/100/1000 (1 WAN and 4 LAN) Gigabit Ethernet ports	Five (5) 10/100/1000 (1 WAN and 4 LAN) Gigabit Ethernet ports	Five (5) 10/100/1000 (1 WAN and 4 LAN) Gigabit Ethernet ports	Five (5) 10/100/1000 (1 WAN and 4 LAN) Gigabit Ethernet ports
USB ports	One (1) USB 3.0 port One (1) USB 2.0 port	One (1) USB 3.0 port One (1) USB 2.0 port	One (1) USB 3.0 port One (1) USB 2.0 port	One (1) USB 3.0 port One (1) USB 2.0 port
Power	Input: 100-240~50/60hz 0.5A max. Output: 12V  2.5A	Input: 100-240~50/60hz 0.5A max. Output: 12V  2.5A	Input: 100-240~50/60hz 0.5A max. Output: 12V  2.5A	Input: 100-240~50/60hz 0.5A max. Output: 12V  2.5A
Size (WxDxH)	261 x 31 x 164 mm	261 x 31 x 164 mm	261 x 31 x 164 mm	261 x 31 x 164 mm
Weight	718g	718g	718g	718g
Operating Temperature	0 ~ 40 °C	0 ~ 40 °C	0 ~ 40 °C	0 ~ 40 °C
Operating Humidity				