tp-link

User Guide

AX3000 Gigabit Wi-Fi 6 Router
Archer AX3000

Contents

About This Guide

This guide is a complement of Quick Installation Guide. The Quick Installation Guide instructs you on quick internet setup, and this guide provides details of each function and shows you the way to configure these functions appropriate to your needs.

When using this guide, please notice that features available of the router may vary by model and software version. Router availability may also vary by region or ISP. All images, steps, and descriptions in this guide are only examples and may not reflect your actual experience.

Conventions

In this guide the following conventions are used:

Convention	Description
Underlined	Underlined words or phrases are hyperlinks. You can click to redirect to a website or a specific section.
Teal	Contents to be emphasized and texts on the web page are in teal, including the menus, items, buttons, etc.
>	The menu structures to show the path to load the corresponding page. For example, Advanced > Wireless > MAC Filtering means the MAC Filtering function page is under the Wireless menu that is located in the Advanced tab.
🔖 Note:	• Ignoring this type of note might result in a malfunction or damage to the device.
📎 Tips:	Indicates important information that helps you make better use of your device.
symbols on the web page	• ☑ click to edit the corresponding entry. • 🗑 click to delete the corresponding entry. • 💡 click to enable or disable the corresponding entry. • ⑦ click to view more information about items on the page.

*Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput and wireless coverage are not guaranteed and will vary as a result of network conditions, client limitations, and environmental factors, including building materials, obstacles, volume and density of traffic, and client location.
*Use 1024-QAM requires clients to also support those functions.

More Info

The latest software, management app and utility can be found at Download Center at https://www.tp-link.com/support.

The Quick Installation Guide can be found where you find this guide or inside the package of the router.

Specifications can be found on the product page at https://www.tp-link.com.

The TP-Link Community is provided for you to discuss our products at https://community.tp-link.com.

Our Technical Support contact information can be found at the Contact Technical Support page at https://www.tp-link.com/support.

Chapter 1

Get to Know About Your Router

This chapter introduces what the router can do and shows its appearance.

It chapter contains the following sections:

- Product Overview
- Appearance

1. 1.   Product Overview

TP-Link AX router, with next-generation 802.11ax Wi-Fi Technology, achieves Wi-Fi performance at its ultimate level. The revolutionary combination of OFDMA and 1024QAM improve throughput by 4 times and dramatically increase the whole network capacity and efficiency. It's also backwards compatible with 802.11a/b/g/n/ac.

Moreover, it is simple and convenient to set up and use the TP-Link router due to its intuitive web interface and the powerful Tether app.

1. 2.   Appearance

1. 2. 1.   Top Panel

The router's LEDs (view from left to right) are located on the front. You can check the router's working status by following the LED Explanation table.

LED Explanation

LED	Status	Indication
⏻ (Power)	On	The system has started up successfully.
	Flashing slowly	The system is starting up or the firmware is being upgraded. Do not disconnect or power off your router.
	Flashing quickly	WPS connection is in process.
	Off	Power is off.
📶 (2.4GHz Wireless)	On	The 2.4GHz wireless band is enabled.
	Off	The 2.4GHz wireless band is disabled.
📶 (5GHz Wireless)	On	The 5GHz wireless band is enabled.
	Off	The 5GHz wireless band is disabled.
Ⓔ (Internet)	Green On	Internet service is available.
	Orange On	The router's WAN port is connected, but the internet service is not available.
	Off	The router's WAN port is unplugged.
🖵 (Ethernet)	On	At least one powered-on device is connected to the router's LAN port.
	Off	No powered-on device is connected to the router's LAN port.
⟳ (USB)	On	The USB device is identified and ready to use.
	Off	No USB device is plugged in to the USB port.

1. 2. 2.   The Back Panel

The following parts (view from left to right) are located on the back panel.

Button and Port Explanation

Item	Description
Power Port	For connecting the router to a power socket via the provided power adapter.
Power On/Off Button	Press this button to power on or off the router.
WAN Port	For connecting to a DSL/Cable modem, or an Ethernet jack.
LAN Ports (1/2/3/4)	For connecting your PC or other wired devices to the router.
USB Port	For connecting to a USB storage device.
WPS/Wi-Fi Button	Press the button for 1 second, and immediately press the WPS button on your client to start the WPS process.
	Press and hold the button for 2 seconds to turn on or off the wireless function of your router.
Reset Button	Press and hold the button until all LEDs turn on to reset the router to its factory default settings.
LED Button	Press the button for 1 second to turn on or off the LEDs of your router.
Antennas	Used for wireless operation and data transmit. Upright them for the best Wi-Fi performance.

Chapter 2

Connect the Hardware

This chapter contains the following sections:

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2. 1.   Position Your Router
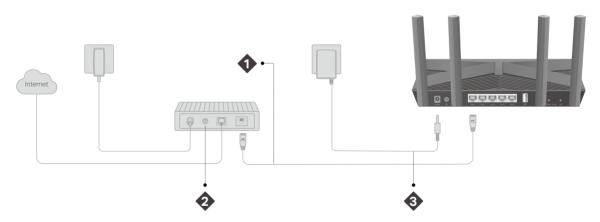
- The product should not be located in a place where it will be exposed to moisture or excessive heat.

- Place the router in a location where it can be connected to multiple devices as well as to a power source.

- Make sure the cables and power cord are safely placed out of the way so they do not create a tripping hazard.

- The router can be placed on a shelf or desktop.

- Keep the router away from devices with strong electromagnetic interference, such as Bluetooth devices, cordless phones and microwaves.

2. 2.   Connect Your Router

Before you start, turn off your modem, if any, and remove the backup battery if it has one. And place the router horizontally and orient the antennas vertically.

Follow the steps below to connect your router.

If your internet connection is through an Ethernet cable directly from the wall instead of through a DSL / Cable / Satellite modem, connect the Ethernet cable to the router's WAN port, and then follow steps 3 and 4 to complete the hardware connection.

1. Connect the modem to the router's WAN port with an Ethernet cable.

2. Turn on the modem, and then wait about **2 minutes** for it to restart.

3. Connect the power adapter to the router and turn on the router.

4. Verify that the hardware connection is correct by checking the following LEDs.

| Power | 2.4G | 5G | Internet |
| On | On | On | On |

Note:

Note: If the 2.4GHz LED and 5GHz LED are off, press and hold the WPS/Wi-Fi button on the back for more than 2 seconds. Both the LEDs should turn solid on.

5. Connect your computer to the router.
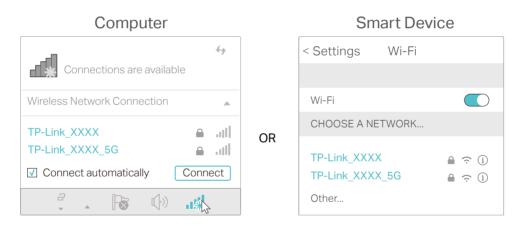
• **Method 1: Wired**

Turn off the Wi-Fi on your computer and connect the devices as shown below.

Ethernet cable

• **Method 2: Wirelessly**

1) Find the SSID (Network Name) and Wireless Password printed on the label at the bottom of the router.

2) Click the network icon of your computer or go to Wi-Fi Settings of your smart device, and then select the SSID to join the network.

Computer

Connections are available

Wireless Network Connection

TP-Link_XXXX
TP-Link_XXXX_5G

☑ Connect automatically   Connect

OR

Smart Device

< Settings   Wi-Fi

Wi-Fi

CHOOSE A NETWORK...

TP-Link_XXXX
TP-Link_XXXX_5G

Other...

• **Method 3: Use the WPS button**

Wireless devices that support WPS, including Android phones, tablets, and most USB network cards, can be connected to your router through this method.

Note:

• WPS is not supported by iOS devices.
• The WPS function cannot be configured if the wireless function of the router is disabled. Also, the WPS function will be disabled if your wireless encryption is WEP. Please make sure the wireless function is enabled and is configured with the appropriate encryption before configuring the WPS.

1) Tab the WPS icon on the device's screen. Here we take an Android phone for instance.

2) Within two minutes, press the WPS button on your router.

close to

Chapter 3

Log 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, Mac OS or UNIX OS with a Web browser, such as Microsoft Internet Explorer, Mozilla Firefox or Apple Safari.

Follow the steps below to log in to your router.

1. Set up the TCP/IP Protocol in Obtain an IP address automatically mode on your computer.

2. Visit http://tplinkwifi.net, and create a login password for secure management purposes. Then click Let's Get Started to log in.

Note:
• If the login window does not appear, please refer to the FAQ Section.
• If you have registered a TP-Link ID and bound your cloud router to it, the login password you created here will be invalid. Please log in to the cloud router using your TP-Link ID.

Chapter 4

Set Up Internet Connection

This chapter introduces how to connect your router to the internet. The router is equipped with a web-based Quick Setup wizard. It has necessary ISP information built in, automates many of the steps and verifies that those steps have been successfully completed. Furthermore, you can also set up an IPv6 connection if your ISP provides IPv6 service.

It contains the following sections:

- Use Quick Setup Wizard
- Quick Setup Via TP-Link Tether App
- Manually Set Up Your Internet Connection
- Set Up the Router as an Access Point
- Set Up an IPv6 Internet Connection

4. 1.   Use Quick Setup Wizard

The Quick Setup Wizard will guide you to set up your router.

📎 Tips:
If you need the IPv6 internet connection, please refer to the section of Set Up an IPv6 Internet Connection.

Follow the steps below to set up your router.

1. Visit http://tplinkwifi.net, and log in with the password you set for the router.

2. Click Quick Setup on the top of the page. Then follow the step-by-step instructions to connect your router to the internet.

3. To enjoy a more complete service from TP-Link (remote management, TP-Link DDNS, and more), log in with your TP-Link ID or click Resigter Now to get one. Then follow the instructions to bind the cloud router to your TP-Link ID.

🔖 Note:
- To learn more about the TP-Link Cloud service, please refer to the TP-Link Cloud Service section.
- If you do not want to register a TP-Link ID now, you may click Log In Later to proceed.
- If you have changed the preset wireless network name (SSID) and wireless password during the Quick Setup process, all your wireless devices must use the new SSID and password to connect to the router.

4. 2.   Quick Setup Via TP-Link Tether App

The Tether app runs on iOS and Android devices, such as smartphones and tablets.

1. Launch the Apple App Store or Google Play store and search "TP-Link Tether" or simply scan the QR code to download and install the app.

2. Connect your device to the router's wireless network.

3. Launch the Tether app, tap the **+** button and select Router > Wireless Router. Follow the steps to complete the setup and connect to the internet.

4. Connect your devices to the newly configured wireless networks of the router and enjoy the internet!

4. 3.   Manually Set Up Your Internet Connection

In this part, you can check your current internet connection settings. You can also modify the settings according to the service information provided by your ISP.

Follow the steps below to check or modify your internet connection settings.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Basic > Internet.

3. Select your internet connection type from the drop-down list.

🔖 Note:
If you are unsure of what your connection type is, click Auto Detect. Since different connection types require different cables and connection information, you can also refer to the demonstrations in Step 4 to determine your connection type.

4. Follow the instructions on the page to continue the configuration. Parameters on the figures are just used for demonstration.

   1)   If you choose Dynamic IP, you need to select whether to clone the MAC address. Dynamic IP users are usually equipped with a cable TV or fiber cable.

Internet

Auto Detect

Internet Connection Type: Dynamic IP ▼

◉ Do NOT Clone MAC Address

○ Clone Current Computer MAC Address

Note: If you are not sure about which Internet Connection Type you have, use Auto Detect or contact your Internet Service Provider (ISP) for assistance.

Save

2) If you choose Static IP, enter the information provided by your ISP in the corresponding fields.

Internet

Auto Detect

Internet Connection Type: Static IP ▼

IP Address:

Subnet Mask:

Default Gateway:

Primary DNS:

Secondary DNS: (Optional)

Note: If you are not sure about which Internet Connection Type you have, use Auto Detect or contact your Internet Service Provider (ISP) for assistance.

Save

3) If you choose PPPoE, enter the username and password provided by your ISP. PPPoE users usually have DSL cable modems.

4) If you choose L2TP, enter the username and password and choose the Secondary Connection provided by your ISP. Different parameters are needed according to the Secondary Connection you have chosen.

5) If you choose PPTP, enter the username and password, and choose the Secondary Connection provided by your ISP. Different parameters are needed according to the Secondary Connection you have chosen.

5. Click Save.

6. To check your internet connection, click Network Map on the left of the page. After the connection succeeds, the screen will display as follows. Here we take PPPoE as an example.

⌗ Note:
It may take 1-2 minutes to make the settings valid.

⌀ Tips:
• If your internet connection type is BigPond Cable, please go to Advanced > Network > Internet to set your router.

- If you use Dynamic IP and PPPoE and you are provided with any other parameters that are not required on the page, please go to Advanced > Network > Internet to complete the configuration.
- If you still cannot access the internet, refer to the FAQ section for further instructions.

4. 4.   Set Up the Router as an Access Point

The router can work as an access point, transforming your existing wired network to a wireless one.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Operation Mode, select Access Point and click Save. The router will reboot and switch to Access Point mode.

3. After rebooting, connect the router to your existing wired router via an Ethernet cable.

4. Log in again to the web management page http://tplinkwifi.net, and click Quick Setup.

5. Configure your wireless settings and click Next.

6. Confirm the information and click Save. Now, you can enjoy Wi-Fi.

Tips:
- Functions, such as Parental Controls, Qos and NAT Forwarding, are not supported in the Access Point mode.
- Functions, such as Guest Network, are the same as those in the Router mode.

4. 5.   Set Up an IPv6 Internet Connection

Your ISP provides information about one of the following IPv6 internet connection types: PPPoE, Dynamic IP(SLAAC/DHCPv6), Static IP, 6to4 tunnel, Pass-Through (Bridge).

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > IPv6.

3. Enable IPv6 and select the internet connection type provided by your ISP.

Tips:
If you do not know what your internet connection type is, contact your ISP or judge according to the already known information provided by your ISP.

4. Fill in information as required by different connection types. Red blanks must be filled in.

1) Static IP: Fill in blanks and click Save.

2) Dynamic IP(SLAAC/DHCPv6): Click Advanced to input further information if your ISP requires. Click Save and then click Renew.

3) **PPPoE:** By default, the router uses the IPv4 account to connect to the IPv6 server. Click Advanced to input further information if your ISP requires. Click Save and then click Connect.

🔖 Note:

If your ISP provides two separate accounts for the IPv4 and IPv6 connections, please untick the PPPoE same session with IPv4 connection checkbox and manually enter the username and password for the IPv6 connection.

Internet

IPv6:	⬤
Internet Connection Type:	PPPoE ▼
	☑ PPPoE same session with IPv4 connection
IPv6 Address:	::

⊙ Advanced

Connect   Disconnect

Save

4) **6to4 Tunnel:** An IPv4 internet connection type is a prerequisite for this connection type (Manually Set Up Your Internet Connection). Click Advanced to input further information if your ISP requires. Click Save and then click Connect.

Internet

IPv6:	⬤
Internet Connection Type:	6to4 Tunnel ▼
IPv4 Address:	0.0.0.0
IPv4 Subnet Mask:	0.0.0.0
IPv4 Default Gateway:	0.0.0.0
TUNNEL ADDRESS:	::

⊙ Advanced

Connect   Disconnect

Save

5) **Pass-Through (Bridge):** Click Save and skip to Step 6.

5. Configure LAN ports. Windows users are recommended to choose from the first two types. Fill in Address Prefix provided by your ISP, and click Save.

Tips:
Find Help on the web management page to know more about items.

6. Click Status to check whether you have successfully set up an IPv6 connection. The following figure is an example of a successful PPPoE configuration.

Tips:
Visit the FAQ section if there is no internet connection.

Chapter 5

TP-Link Cloud Service

TP-Link Cloud service provides a better way to manage your cloud devices. Log in to your router with a TP-Link ID, and you can easily monitor and manage your home network when you are out and about via the Tether app on your smartphone or tablet. To ensure that your router stays new and gets better over time, the TP-Link Cloud will notify you when an important firmware upgrade is available. Surely you can also manage multiple TP-Link Cloud devices with a single TP-Link ID.

This chapter introduces how to register a new TP-Link ID, bind or unbind TP-Link IDs to manage your router, and the Tether app with which you can manage your home network no matter where you may find yourself.

It contains the following sections:

- Register a TP-Link ID
- Change Your TP-Link ID Information
- Manage the User TP-Link IDs
- Manage the Router via the TP-Link Tether App

5. 1.   Register a TP-Link ID

If you have skipped the registration during the Quick Setup process, you can:

1. Visit http://tplinkwifi.net, and log in with the password you set for the router.

2. Go to Basic > TP-Link Cloud.

3. Click Register Now and follow the instructions to register a TP-Link ID.

4. After activating your TP-Link ID, come back to the TP-Link Cloud page to log in. The TP-Link ID used to log in to the router for the first time will be automatically bound as an Admin.

⧠ Note:
- To learn more about the Admin and User TP-Link ID, refer to Manage the User TP-Link IDs.
- Once the router is bound to your TP-Link ID, you need to log in to the router with the TP-Link ID.
- Once you have registered a TP-Link ID on the web management page, you can only register another TP-Link ID via the Tether APP. Please refer to Manage the Router via the TP-Link Tether App to install the app and register a new one.
- If you want to unbind the admin TP-Link ID from your router, please go to Basic > TP-Link Cloud, an click Unbind in the Device Information section.

5. 2.   Change Your TP-Link ID Information

Follow the steps below to change your email address and password of your TP-Link ID as needed.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID.

2. Go to Basic > TP-Link Cloud, and focus on the Account Information section.

- **To change your email address**:

1. Click 🖉 behind the Email.

2. Enter the password of your TP-Link ID, then a new email address. And click Save.

- **To change your password:**

1. Click [icon] behind the Password.

2. Enter the current password, then a new password twice. And click Save.

5. 3.   Manage the User TP-Link IDs

The TP-Link ID used to log in to the router for the first time will be automatically bound as the Admin account. An admin account can add or remove other TP-Link IDs to or from the same router as Users. All accounts can monitor and manage the router locally or remotely, but user accounts cannot:

• Reset the router to its factory default settings either on the web management page or in the Tether app.

• Add/remove other TP-Link IDs to/from the router.

5. 3. 1.   Add TP-Link ID to Manage the Router

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID.

2. Go to Basic > TP-Link Cloud, and focus on the Bound Accounts section.

3. Click ⊕ Bind , enter another TP-Link ID as needed and click Save.

▌Note:
If you need another TP-Link ID, please register a new one via the Tether app. Please refer to Manage the Router via the TP-Link Tether App to install the app and register a new TP-Link ID.

4. The new TP-Link ID will be displayed in the Bound Accounts table as a User.

	ID	Email	Binding Date	Role
☐	1	zhangxun_rose@me.com	16/11/2016	Admin
☐	2	zhangxunfighting@163.com	16/11/2016	User

5. 3. 2.   Remove TP-Link ID(s) from Managing the Router

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID.

2. Go to Basic > TP-Link Cloud, and focus on the Bound Accounts section.

3. Tick the checkbox(es) of the TP-Link ID(s) you want to remove and click Unbind.

	ID	Email	Binding Date	Role
☐	1	zhangxun_rose@me.com	16/11/2016	Admin
☑	2	zhangxunfighting@163.com	16/11/2016	User

5. 4.   Manage the Router via the TP-Link Tether App

The Tether app runs on iOS and Android devices, such as smartphones and tablets.

1. Launch the Apple App Store or Google Play store and search "TP-Link Tether" or simply scan the QR code to download and install the app.

2. Connect your device to the router's wireless network.

3. Launch the Tether app, select the model of your router and log in with your TP-Link ID or the password your set for the router.

4. Manage your router as needed.

Note:

If you need to remotely access your router from your smart devices, you need:

- Log in with your TP-Link ID. If you don't have one, refer to Register a TP-Link ID.
- Make sure your smartphone or tablet can access the internet with cellular data or a Wi-Fi network.

Chapter 6

Guest Network

This function allows you to provide Wi-Fi access for guests without disclosing your main network. When you have guests in your house, apartment, or workplace, you can create a guest network for them. In addition, you can customize guest network options to ensure network security and privacy.

It contains the following sections:

- Create a Network for Guests
- Customize Guest Network Options

6. 1.   Create a Network for Guests

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Guest Network. Locate the Wireless section.

3. Create a guest network as needed.

1)   Enable 2.4GHz Wireless guest network or 5GHz Wireless guest network.

2)   Customize the SSID. Don't select Hide SSID unless you want your guests to manually input the SSID for guest network access.

3)   Select the Security type.

- If No security is selected, no password is needed to access your guest network.

- If WAP/WPA2-Personal is selected, keep the default Version and Encryption values, and customize your own password.
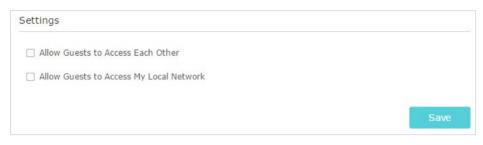
4. Click Save. Now your guests can access your guest network using the SSID and password you set!

Tips:

To view guest network information, go to Advanced > Status and locate the Guest Network section.

6. 2.   Customize Guest Network Options

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Guest Network. Locate the Settings section.

3. Customize guest network options according to your needs.

- **Allow Guests to Access Each Other**

  Tick this checkbox if you want to allow the wireless clients on your guest network to communicate with each other via methods such as network neighbors and Ping.

- **Allow Guests to Access My Local Network**

  Tick this checkbox if you want to allow the wireless clients on your guest network to communicate with the devices connected to your router's LAN ports or main network via methods such as network neighbors and Ping.

4. Click Save. Now you can ensure network security and privacy!

Tips:
To view guest network information, go to Advanced > Status and locate the Guest Network section.

Chapter 7

USB Settings

This chapter describes how to use the USB ports to share files and media from the USB storage devices over your home network locally, or remotely through the internet.

The router supports USB external flash drives and hard drives.

It contains the following sections:

- Access the USB Storage Device
- Media Sharing
- Time Machine

7. 1.　　Access the USB Storage Device

Insert your USB storage device into the router's USB port and then access files stored there locally or remotely.

✐ Tips:
- If you use USB hubs, make sure no more than 4 devices are connected to the router.
- If the USB storage device requires using bundled external power, make sure the external power has been connected.
- If you use a USB hard drive, make sure its file system is FAT32, exFat, NTFS or HFS+.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Go to Advanced > USB Sharing > USB Storage Device > Device Settings and click Remove.

7. 1. 1.　　Access the USB Device Locally

Insert your USB storage device into the router's USB port and then refer to the following table to access files stored on your USB storage device.

Windows computer	• **Method 1:** Go to Computer > Network, then click the Network Server Name (TP-SHARE by default) in the Computer section. ▌Note: Operations in different systems are similar. Here we take Windows 7 as an example.

Windows computer	• **Method 2:** Open the Windows Explorer (or go to Computer) and type the server address \\tplinkwifi.net or ftp://tplinkwifi.net in the address bar, then press Enter.
Mac	1) Select Go > Connect to Server. 2) Type the server address smb://tplinkwifi.net. 3) Click Connect. 4) When prompted, select the Guest radio box. (If you have set up a username and a password to deny anonymous access to the USB disks, you should select the Registered User radio box. To learn how to set up an account for the access, refer to To Set up Authentication for Data Security.)
Tablet	Use a third-party app for network files management.

🖉 Tips:

You can also access your USB storage device by using your Network/Media Server Name as the server address. Refer to To Customize the Address of the USB Storage Device to learn more.

7. 1. 2.   Access the USB Device Remotely

You can access your USB disk outside the local area network. For example, you can:

- Share photos and other large files with your friends without logging in to (and paying for) a photo-sharing site or email system.
- Get a safe backup for the materials for a presentation.
- Remove the files on your camera's memory card from time to time during the journey.

Note:
If your ISP assigns a private WAN IP address (such as 192.168.x.x or 10.x.x.x), you cannot use this feature because private addresses are not routed on the internet.
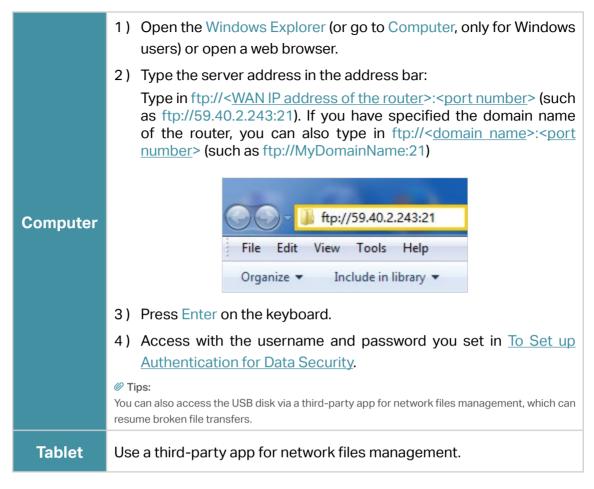
Follow the steps below to configure remote access settings.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > USB Sharing > USB Storage Device > Access Address page.

3. Tick the FTP (Via Internet) checkbox, and then click Save.

Access Address

Network/Media Server Name: TP-Share

Enable	Access Method	Address	Port
☑	Network Neighborhood	\\TP-Share	---
☑	FTP	ftp://192.168.0.23:21	21
☑	FTP (Via Internet)	ftp://0.0.0.0:21 Edit	21

Save

4. Refer to the following table to access your USB disk remotely.

Computer	1) Open the Windows Explorer (or go to Computer, only for Windows users) or open a web browser. 2) Type the server address in the address bar: Type in ftp://<WAN IP address of the router>:<port number> (such as ftp://59.40.2.243:21). If you have specified the domain name of the router, you can also type in ftp://<domain name>:<port number> (such as ftp://MyDomainName:21) 3) Press Enter on the keyboard. 4) Access with the username and password you set in To Set up Authentication for Data Security. 📎 Tips: You can also access the USB disk via a third-party app for network files management, which can resume broken file transfers.
Tablet	Use a third-party app for network files management.

📎 Tips:

Click Set Up a Dynamic DNS Service Account to learn how to set up a domain name for you router.

7. 1. 3.   Customize the Access Settings

By default, all the network clients can access all folders on your USB disk. You can customize your sharing settings by setting a sharing account, sharing specific contents and setting a new sharing address on the router's web management page.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > USB Sharing > USB Storage Device > Access Address page.

• **To Customize the Address of the USB Storage Device**

You can customize the server name and use the name to access your USB storage device.

1. On the Access Address part, make sure Network Neighborhood is ticked, and enter a Network/Media Server Name as you like, such as MyShare, then click Save.

2. Now you can access the USB storage device by visiting \\MyShare (for Windows) or smb://MyShare (for Mac).

• **To Customize Sharing Folders**

Focus on the Sharing Contents section. Click the ☑ button to select specific folders that you want to share and click Save. All folders are shared by default.

📎 Tips:
The Share icon appears in the Devices Settings section when more than 5 volumes are connected to the router. You can click the Share icon to disable volumes you don't need to share.

• **To Set up Authentication for Data Security**

You can set up authentication for your USB storage device so that network clients will be required to enter username and password when accessing the USB storage device.

1. Toggle on Access Authentication.

2. Click ⬚ to modify the access account. The username and password are both admin for default administrator account, and both visit for default visitor account. Accessing as an administrator can read and modify the shared folders while visitors can only read the shared folders.
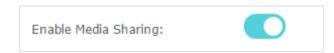
🔖 Note:

1. For Windows users, do not set the sharing username the same as the Windows username. Otherwise, Windows credential mechanism may cause the following problems:
    • If the sharing password is also the same as the Windows password, authentication will not work since the Windows will automatically use its account information for USB access.
    • If the sharing password is different from the Windows password, the Windows will be unable to remember your credentials and you will always be required to enter the sharing password for USB access.
2. Due to Windows credential mechanism, you might be unable to access the USB disk after changing Authentication settings. Please log out from the Windows and try to access again. Or you can change the address of the USB disk by referring to To Customize the Address of the USB Storage Device.

7. 2.   Media Sharing

The feature of Media Sharing allows you to view photos, play music and watch movies stored on the USB storage device directly from DLNA-supported devices, such as your computer, tablet and PS2/3/4.

1. Toggle on to enable Media Sharing.

2. When your USB storage device is inserted into the router, your DLNA-supported devices (such as your computer and pad) connected to the router can detect and play the media files on the USB storage devices.

3. Refer to the following table for detailed instructions.

Windows Computer	• Go to Computer > Network, then click the Media Server Name (Model number-share by default) in the Media Devices section. ▮ Note: Here we take Windows 7 as an example.
Tablet	• Use a third-party DLNA-supported player.

7. 3. Time Machine

Time Machine backs up all files on your Mac computer to a USB storage device connected to your router.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > USB Sharing > Time Machine.

3. Tick the checkbox to enable Time Machine.

4. Click Select to select a location for Time Machine backups.

5. Set the Size Limit for Backups.
⫬ **Note:** 0 means no limit for the space.

6. Click Save.

Chapter 8

Homecare – Parental Controls, QoS

TP-Link Homecare provides a kit of features to help you create a personalized network that caters for the whole family. You can ensure appropriate internet access for everyone with Parental Controls and save bandwidth for the things that matter with QoS.

It contains the following sections:

- Parental Controls
- QoS

8. 1.   Parental Controls

Parental Controls allows you to set up unique restrictions on internet access for each member of your family. You can block inappropriate content, set daily limits for the total time spent online and restrict internet access to certain times of the day.

8. 1. 1.   Setting Up Access Restrictions

I want to:

Block access to inappropriate online content for my child's devices, restrict internet access to 2 hours every day and block internet access during bed time (10 PM to 6 AM) on weekdays.

How can I do that?

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Parental Controls.

3. Click ⊕ Add to create a profile for a family member.

4. Add basic profile information.

1) Enter a Name for the profile to make it easier to identify.

2) Under Devices, click + .

3) Select the devices that belong to this family member. Access restrictions will be applied to these devices. Click Add when finished.

⚑ Note: Only devices that have previously been connected to your router's network are listed here. If you are unable to find the device you want to add, connect it to your network and then try again.

4) Click Next.

5. Customize the Blocked Content according to your needs for this profile.

1) Enter a keyword (for example, "Facebook") or a URL (for example, "www. facebook.com"), then click Add. All websites containing the keywords will be blocked.

2) Click Next.

6. Set time restrictions on internet access.

1) Enable Time Limits on Monday to Friday and Saturday & Sunday then set the allowed online time to 2 hours each day.

2) Enable Bed Time on Monday to Friday and use the up/down arrows or enter times in the fields. Devices under this profile will be unable to access the internet during this time period.

3) Click Save.

Done!

The amount of time your child spends online is controlled and inappropriate content is blocked on their devices.
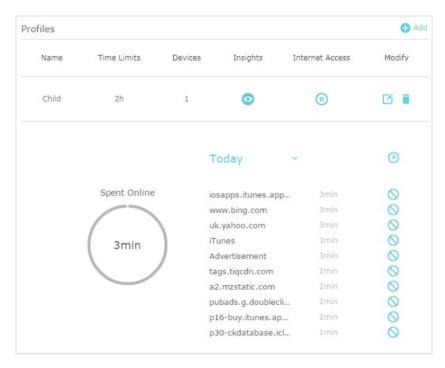
8. 1. 2.   Monitoring Internet Usage

I want to:

Check which websites my child has visited and how much time they have spent online recently.

How can I do that?

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Parental Controls.

3. Find the correct profile and click 👁 in the Insights column.
🔖 Note: If you have not set up a profile for your child yet, you should do that first by clicking ➕ Add , then follow the steps to create a profile. Refer to Setting Up Access Restrictions for detailed instructions.

4. Use the drop-down menu to view the websites visited and time spent online for any of the last 7 days. Click 🕐 to view a complete history.
📎 Tip: Click 🚫 to block the corresponding content for this profile.

Done!

You can now check up on your child's online activities.

8. 2.   QoS

QoS (Quality of Service) allows you to prioritize the internet traffic of specific online activities, such as gaming or streaming. Activities set as high priority will be allocated more bandwidth and so continue to run smoothly even when there is heavy traffic on the network. You can also prioritize the connection of specific devices for a set duration.

I want to:

Specify priority levels for some devices or applications.

For example, I have several devices that are connected to my wireless network. I would like to set an intermediate speed on the internet for my computer for the next 2 hours.

How can I do that?

1. Enable QoS and set bandwidth allocation.

   1) Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

   2) Go to Advanced > QoS.

   3) Select Enable QoS.

   4) Input the maximum upload and download bandwidth provided by your internet service provider. 1Mbps equal s to 1000Kbps.

   5) Click Save.

Global Settings			
QoS	☑ Enable QoS		
Upload Bandwidth	1000	Mbps ▼	
Download Bandwidth	1000	Mbps ▼	
			Save

2. In the Device Priority section, find your computer and toggle on Priority. Click the entry in the Timing column and select 2 hours as the duration you want the device to be prioritized for.

Device Priority					
Type	Information	Real-time Rate	Traffic Usage	Priority	Timing
🖥️	NicoLuo-PC (LAN) 8C:DC:D4:3E:69:CC	↑ 0.06KB/s ↓ 0KB/s	322.8KB	⬤	2 hours ⌄ 2 h 0 min Remaining
🖥️	Yan (2.4G) 38:CA:DA:3A:D8:B1	↑ 0KB/s ↓ 0KB/s	294.9KB	⬤	–

◁ 1 ▷

Done! You can now enjoy using your computer for the next 2 hours.

Chapter 9

Network Security

This chapter guides you on how to protect your home network from cyber attacks and unauthorized users by implementing these three network security functions. You can block or allow specific client devices to access your network using Access Control, or you can prevent ARP spoofing and ARP attacks using IP & MAC Binding.

It contains the following sections:

- Firewall
- Access Control
- IP & MAC Binding

9. 1.　　Firewall

The SPI (Stateful Packet Inspection) Firewall protects the router from cyber attacks and validates the traffic that is passing through the router based on the protocol. This function is enabled by default.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Security > Firewall.

3. It's recommended to keep the default settings. If necessary, deselect the corresponding checkbox and click Save.

9. 2.　　Access Control

Access Control is used to block or allow specific client devices to access your network (via wired or wireless) based on a list of blocked devices (Blacklist) or a list of allowed devices (Whitelist).

I want to:

Block or allow specific client devices to access my network (via wired or wireless).

How can I do that?

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Security > Access Control.

3. Enable Access Control.

4. Select the access mode to either block (recommended) or allow the device(s) in the list.

   To block specific device(s):

1) Select Blacklist and click Save.

Access Mode

Access Mode: ◉ Blacklist   ○ Whitelist

Save

2) Select the device(s) to be blocked in the Online Devices table by ticking the checkbox(es).

3) Click Block above the Online Devices table. The selected devices will be added to Devices in Blacklist automatically.

Online Devices

○ Refresh   🚫 Block

☑	ID	Device Name	IP Address	MAC Address	Connection Type	Modify
☑	1	Roses-iPhone	192.168.0.175	1C-1A-C0-3B-28-4B	Wireless	🚫
--	2	ADMIN-PC	192.168.0.157	C0-4A-00-1A-C3-45	Wireless	🚫

To allow specific device(s):

1) Select Whitelist and click Save.

Access Mode

Access Mode: ○ Blacklist   ◉ Whitelist

Save

2) Click Add in the Devices in Whitelist section. Enter the Device Name and MAC Address (You can copy and paste the information from the Online Devices list if the device is connected to your network).

Devices in Whitelist

➕ Add   ➖ Delete

☐	ID	Device Name	MAC Address	Modify
--	--	--	--	--

Device Name: [   ]

MAC Address: [   ]

Cancel   OK

3) Click OK.

Done!

Now you can block or allow specific client devices to access your network (via wired or

wireless) using the Blacklist or Whitelist.

9. 3.   IP & MAC Binding

IP & MAC Binding, namely, ARP (Address Resolution Protocol) Binding, is used to bind network device's IP address to its MAC address. This will prevent ARP Spoofing and other ARP attacks by denying network access to a device with matching IP address in the Binding list, but unrecognized MAC address.

I want to:

Prevent ARP spoofing and ARP attacks.

How can I do that?

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Security > IP & MAC Binding.

3. Enable IP & MAC Binding.

4. Bind your device(s) according to your need.

    To bind the connected device(s):

    Click 🔗 to add the corresponding device to the Binding List.

    To bind the unconnected device:

    1) Click Add in the Binding List section.

    2) Enter the MAC address and IP address that you want to bind. Enter a Description for this binding entry.

3) Tick the Enable This Entry checkbox and click OK.

Done!

Now you don't need to worry about ARP spoofing and ARP attacks!

Chapter 10

NAT Forwarding

The router's NAT (Network Address Translation) feature makes devices on the LAN use the same public IP address to communicate with devices on the internet, which protects the local network by hiding IP addresses of the devices. However, it also brings about the problem that an external host cannot initiatively communicate with a specified device on the local network.

With the forwarding feature the router can penetrate the isolation of NAT and allows devices on the internet to initiatively communicate with devices on the local network, thus realizing some special functions.

The TP-Link router supports four forwarding rules. If two or more rules are set, the priority of implementation from high to low is Virtual Servers, Port Triggering, UPNP and DMZ.

It contains the following sections:

- Share Local Resources on the Internet by Virtual Servers
- Open Ports Dynamically by Port Triggering
- Make Applications Free from Port Restriction by DMZ
- Make Xbox Online Games Run Smoothly by UPnP

10. 1.   Share Local Resources on the Internet by Virtual Servers

When you build up a server on the local network and want to share it on the internet, Virtual Servers can realize the service and provide it to internet users. At the same time Virtual Servers can keep the local network safe as other services are still invisible from the internet.

Virtual Servers can be used for setting up public services on your local network, such as HTTP, FTP, DNS, POP3/SMTP and Telnet. Different services use different service ports. Port 80 is used in HTTP service, port 21 in FTP service, port 25 in SMTP service and port 110 in POP3 service. Please verify the service port number before the configuration.

I want to:

Share my personal website I've built in local network with my friends through the internet.

For example, the personal website has been built on my home PC (192.168.0.100). I hope that my friends on the internet can visit my website in some way. The PC is connected to the router with the WAN IP address 218.18.232.154.

How can I do that?

1. Assign a static IP address to your PC, for example 192.168.0.100.

2. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

3. Go to Advanced > NAT Forwarding > Virtual Servers.

4. Click Add. Click View Existing Services and select HTTP. The External Port, Internal Port and Protocol will be automatically filled in. Enter the PC's IP address 192.168.0.100 in the Internal IP field.

5. Click OK.

⊘ Tips:
- It is recommended to keep the default settings of Internal Port and Protocol if you are not clear about which port and protocol to use.
- If the service you want to use is not in the Service Type, you can enter the corresponding parameters manually. You should verify the port number that the service needs.
- You can add multiple virtual server rules if you want to provide several services in a router. Please note that the External Port should not be overlapped.

Done!

Users on the internet can enter http:// WAN IP (in this example: http:// 218.18.232.154) to visit your personal website.

⊘ Tips:
- The WAN IP should be a public IP address. For the WAN IP is assigned dynamically by the ISP, it is recommended to apply and register a domain name for the WAN referring to Set Up a Dynamic DNS Service Account. Then users on the internet can use http:// domain name to visit the website.
- If you have changed the default External Port, you should use http:// WAN IP: External Port or http:// domain name: External Port to visit the website.

10. 2.   Open Ports Dynamically by Port Triggering

Port Triggering can specify a triggering port and its corresponding external ports. When a host on the local network initiates a connection to the triggering port, all the external ports will be opened for subsequent connections. The router can record the IP address of the host. When the data from the internet return to the external ports, the router can forward them to the corresponding host. Port Triggering is mainly applied to online games, VoIPs, video players and common applications including MSN Gaming Zone, Dialpad and Quick Time 4 players, etc.

Follow the steps below to configure the Port Triggering rules:

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > NAT Forwarding > Port Triggering and click Add.

3. Click View Existing Applications, and select the desired application. The Triggering Port, External Port and Protocol will be automatically filled in. The following picture takes application MSN Gaming Zone as an example.

4. Click OK.

Ⓐ Tips:
- You can add multiple port triggering rules according to your network need.
- The triggering ports can not be overlapped.
- If the application you need is not listed in the Existing Applications list, please enter the parameters manually. You should verify the external ports the application uses first and enter them into External Port field according to the format the page displays.

10. 3. Make Applications Free from Port Restriction by DMZ

When a PC is set to be a DMZ (Demilitarized Zone) host on 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.

Ⓝ Note:
When DMZ is enabled, the DMZ host is totally exposed to the internet, which may bring some potential safety hazards. If DMZ is not in use, please disable it in time.

I want to:

Make the home PC join the internet online game without port restriction.

For example, due to some port restriction, when playing the online games, you can login normally but cannot join a team with other players. To solve this problem, set your PC as a DMZ host with all ports open.

How can I do that?

1. Assign a static IP address to your PC, for example 192.168.0.100.

2. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

3. Go to Advanced > NAT Forwarding > DMZ and select Enable DMZ.

4. Enter the IP address 192.168.0.100 in the DMZ Host IP Address filed.

5. Click Save.

Done!

The configuration is completed. You've set your PC to a DMZ host and now you can make a team to game with other players.

10. 4. Make Xbox Online Games Run Smoothly by UPnP

The UPnP (Universal Plug and Play) protocol allows applications or host devices to automatically find the front-end NAT device and send request to it to open the corresponding ports. With UPnP enabled, the applications or host devices on the local network and the internet can freely communicate with each other thus realizing the seamless connection of the network. You may need to enable the UPnP if you want to use applications for multiplayer gaming, peer-to-peer connections, real-time communication (such as VoIP or telephone conference) or remote assistance, etc.

⬥ Tips:
- UPnP is enabled by default in this router.
- Only the application supporting UPnP protocol can use this feature.
- UPnP feature needs the support of operating system (e.g. Windows Vista/ Windows 7/ Windows 8, etc. Some of operating system need to install the UPnP components).

For example, when you connect your Xbox to the router which has connected to the internet to play online games, UPnP will send request to the router to open the

corresponding ports allowing the following data penetrating the NAT to transmit. Therefore, you can play Xbox online games without a hitch.

If necessary, you can follow the steps to change the status of UPnP.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > NAT Forwarding > UPnP and toggle on or off according to your needs.

Chapter 11

VPN Server

The VPN (Virtual Private Networking) Server allows you to access your home network in a secured way through internet when you are out of home. The router offers two ways to setup VPN connection: OpenVPN and PPTP (Point to Point Tunneling Protocol) VPN.

OpenVPN is somewhat complex but with greater security and more stable. It is suitable for restricted environment, such as campus network and company intranet.

PPTP VPN is more easily used and its speed is faster, it's compatible with most operating systems and also supports mobile devices. Its security is poor and your packets may be cracked easily, and PPTP VPN connection may be prevented by some ISP.

It contains the following sections, please choose the appropriate VPN server connection type as needed.

- Use OpenVPN to Access Your Home Network
- Use PPTP VPN to Access Your Home Network

11. 1.   Use OpenVPN to Access Your Home Network

In the OpenVPN connection, the home network can act as a server, and the remote device can access the server through the router which acts as an OpenVPN Server gateway. To use the VPN feature, you should enable OpenVPN Server on your router, and install and run VPN client software on the remote device. Please follow the steps below to set up an OpenVPN connection.

Home Network   Router   Remote Devices

Step1. Set up OpenVPN Server on Your Router

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > VPN Server > OpenVPN, and select Enable VPN Server.

📑 Note:
• Before you enable VPN Server, we recommend you configure Dynamic DNS Service (recommended) or assign a static IP address for router's WAN port and synchronize your System Time with internet.
• The first time you configure the OpenVPN Server, you may need to Generate a certificate before you enable the VPN Server.

3. Select the Service Type (communication protocol) for OpenVPN Server: UDP, TCP.

4. Enter a VPN Service Port to which a VPN device connects, and the port number should be between 1024 and 65535.

5. In the VPN Subnet/Netmask fields, enter the range of IP addresses that can be leased to the device by the OpenVPN server.

6. Select your Client Access type. Select Home Network Only if you only want the remote device to access your home network; select Internet and Home Network if you also want the remote device to access internet through the VPN Server.

7. Click Save.

8. Click Generate to get a new certificate.

Certificate	
Generate the certificate.	Generate

🔖 Note:

If you have already generated one, please skip this step, or click Generate to update the certificate.

9. Click Export to save the OpenVPN configuration file which will be used by the remote device to access your router.

Configuration File	
Export the configuration.	Export

Step 2. Configure OpenVPN Connection on Your Remote Device

1. Visit http://openvpn.net/index.php/download/community-downloads.html to download the OpenVPN software, and install it on your device where you want to run the OpenVPN client utility.

🔖 Note:

You need to install the OpenVPN client utility on each device that you plan to apply the VPN function to access your router. Mobile devices should download a third-party app from Google Play or Apple App Store.

2. After the installation, copy the file exported from your router to the OpenVPN client utility's "config" folder (for example, C:\Program Files\OpenVPN\config on Windows). The path depends on where the OpenVPN client utility is installed.

3. Run the OpenVPN client utility and connect it to OpenVPN Server.

11. 2.   Use PPTP VPN to Access Your Home Network

PPTP VPN Server is used to create a VPN connection for remote device. To use the VPN feature, you should enable PPTP VPN Server on your router, and configure the PPTP connection on the remote device. Please follow the steps below to set up a PPTP VPN connection.

Step 1. Set up PPTP VPN Server on Your Router

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > VPN Server > PPTP VPN, and select Enable VPN Server.

Note:

Before you enable VPN Server, we recommend you configure Dynamic DNS Service (recommended) or assign a static IP address for router's WAN port and synchronize your System Time with internet.

3. In the Client IP Address filed, enter the range of IP addresses (up to 10) that can be leased to the devices by the PPTP VPN server.

4. Click Advanced to set the PPTP connection permission according to your needs.

   - Select Allow Samba (Network Place) access to allow your VPN device to access your local Samba server.

   - Select Allow NetBIOS passthrough to allow your VPN device to access your Samba server using NetBIOS name.

   - Select Allow Unencrypted connections to allow unencrypted connections to your VPN server.

5. Click Save.

6. Configure the PPTP VPN connection account for the remote device, and you can create up to 16 accounts.
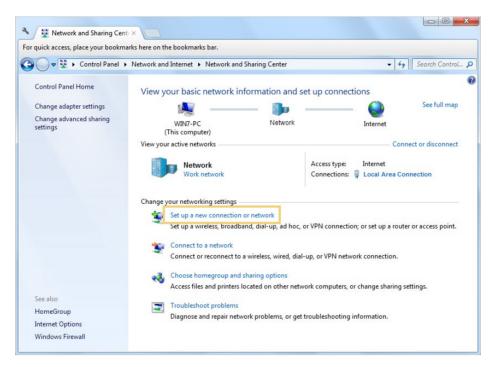
1) Click Add.

2) Enter the Username and Password to authenticate devices to the PPTP VPN Server.

3) Click OK.
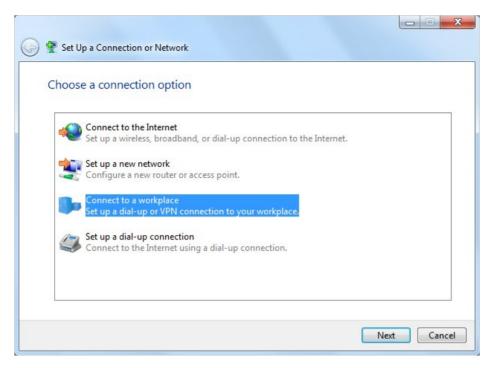
Step 2. Configure PPTP VPN Connection on Your Remote Device

The remote device can use the Windows built-in PPTP software or a third-party PPTP software to connect to PPTP Server. Here we use the Windows built-in PPTP software as an example.

1. Go to Start > Control Panel > Network and Internet > Network and Sharing Center.

2. Select Set up a new connection or network.

3. Select Connect to a workplace and click Next.

4. Select Use my Internet connection (VPN).
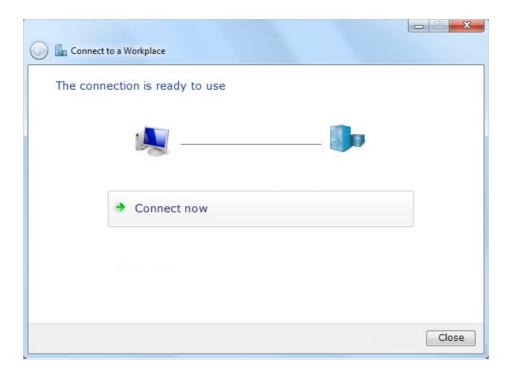
5. Enter the internet IP address of the router (for example: 218.18.1.73) in the Internet address field. Click Next.

6. Enter the User name and Password you have set for the PPTP VPN server on your router, and click Connect.

7. The PPTP VPN connection is created and ready to use.

Chapter 12

Customize Your Network Settings

This chapter guides you on how to configure advanced network features.

It contains the following sections:

12. 1.   Change the LAN Settings

The router is preset with a default LAN IP 192.168.0.1, which you can use to log in to its web management page. The LAN IP address together with the Subnet Mask also defines the subnet that the connected devices are on. If the IP address conflicts with another device on your local network or your network requires a specific IP subnet, you can change it.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Network > LAN.

3. Type in a new IP Address appropriate to your needs. And leave the Subnet Mask as the default settings.

4. Click Save.

Note:
If you have set the Virtual Server, DMZ or DHCP address reservation, and the new LAN IP address is not in the same subnet with the old one, then you should reconfigure these features.

12. 2.   Set Up Link Aggregation

The Link Aggregation feature combines two ports together to make a single high bandwidth data path, thus sustaining a higher-speed and more stable wired network.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Network > LAN.

3. Enable Link Aggregation and click Save. The router will reboot to apply the settings. The LAN3 and LAN4 ports will be used for Link Aggregation.

12. 3.   Configure to Support IPTV Service

I want to:

Configure IPTV setup to enable Internet/IPTV/Phone service provided by my internet service provider (ISP).

How can I do that?

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Network > IPTV.

3. **If your ISP provides the networking service based on IGMP technology**, for example, British Telecom(BT) and Talk Talk in UK:

    1) Check the box for IGMP Proxy and select the IGMP Version, either V2 or V3, as required by your ISP.

    2) Click Save.

    3) After configuring IGMP proxy, IPTV can work behind your router now. You can connect your set-top box to any of the router's Ethernet port.

    If IGMP is not the technology your ISP applies to provide IPTV service:

    1) Tick Enable IPTV.

    2) Select the appropriate Mode according to your ISP.

    • Select Bridge if your ISP is not listed and no other parameters are required.

    • Select Custom if your ISP is not listed but provides necessary parameters.

3) After you have selected a mode, the necessary parameters, including the LAN port for IPTV connection, are predetermined. If not, select the LAN type to determine which port is used to support IPTV service.

4) Click Save.

5) Connect the set-top box to the corresponding LAN port which is predetermined or you have specified in Step 3.

Done!

Your IPTV setup is done now! You may need to configure your set-top box before enjoying your TV.

12. 4.   Specify DHCP Server Settings

By default, the DHCP (Dynamic Host Configuration Protocol) Server is enabled and the router acts as a DHCP server; it dynamically assigns TCP/IP parameters to client devices from the IP Address Pool. You can change the settings of the DHCP Server if necessary, and you can reserve LAN IP addresses for specified client devices.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Network > DHCP Server.

- **To specify the IP address that the router assigns:**

1. Tick the Enable DHCP Server checkbox.

2. Enter the starting and ending IP addresses in the IP Address Pool.

3. Enter other parameters if the ISP offers. The Default Gateway is automatically filled in and is the same as the LAN IP address of the router.

4. Click Save.

- **To reserve an IP address for a specified client device:**

1. Click Add in the Address Reservation section.

2. Click View Existing Devices or enter the MAC address of the client device.

3. Enter the IP address to reserve for the client device.

4. Enter the Description for this entry.

5. Tick the Enable This Entry checkbox and click OK.

12. 5.   Set Up a Dynamic DNS Service Account

Most ISPs assign a dynamic IP address to the router and you can use this IP address to access your router remotely. However, the IP address can change from time to time and you don't know when it changes. In this case, you might apply the DDNS (Dynamic Domain Name Server) feature on the router to allow you and your friends to access your router and local servers (FTP, HTTP, etc.) using a domain name without checking and remembering the IP address.

Note:
DDNS does not work if the ISP assigns a private WAN IP address (such as 192.168.1.x) to the router.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Network > Dynamic DNS.

3. Select the DDNS Service Provider (TP-Link, NO-IP or DynDNS). It is recommended to select TP-Link so that you can enjoy TP-Link's superior DDNS service. Otherwise, please select NO-IP or DynDNS. If you don't have a DDNS account, you have to register first by clicking Go to register.

To enjoy TP-Link's DDNS service, you have to log in with a TP-Link ID. If you have not logged in with one, click Log in.

4. Click Register in the Domain Name List if you have chosen TP-Link, and enter the Domain Name as needed.

If you have chosen NO-IP or DynDNS, enter the username, password and domain name of your account.

5. Click Login and Save.

📎 Tips:

If you want to use a new DDNS account, please click Logout first, and then log in with a new account.
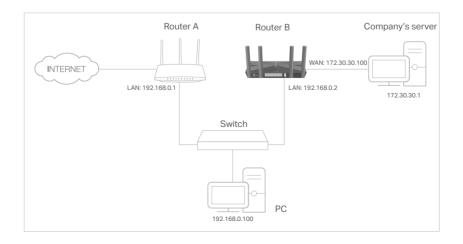
12. 6.   Create Static Routes

Static routing is a form of routing that is configured manually by a network administrator or a user by adding entries into a routing table. The manually-configured routing information guides the router in forwarding data packets to the specific destination.

I want to:

Visit multiple networks and servers at the same time.

For example, in a small office, my PC can surf the internet through Router A, but I also want to visit my company's network. Now I have a switch and Router B. I connect the devices as shown in the following figure so that the physical connection between my PC and my company's server is established. To surf the internet and visit my company's network at the same time, I need to configure the static routing.

How can I do that?

1. Change the routers' LAN IP addresses to two different IP addresses on the same subnet. Disable Router B's DHCP function.

2. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for Router A.

3. Go to Network > Static Routing.

4. Click Add and finish the settings according to the following explanations:

Static Routing

➕ Add   ➖ Delete

☐	ID	Network Destination	Subnet Mask	Default Gateway	Interface	Description	Status	Modify
--	--	--	--	--	--	--	--	--

Network Destination: 172.30.31.1

Subnet Mask: 255.255.255.255

Default Gateway: 192.168.0.2

Interface: LAN ▼

Description: company's network

☑ Enable This Entry

Cancel   OK

Network Destination: The destination IP address that you want to assign to a static route. This IP address cannot be on the same subnet with the WAN IP or LAN IP of Router A. In the example, the IP address of the company network is the destination IP address, so here enter 172.30.30.1.

Subnet Mask: Determines the destination network with the destination IP address. If the destination is a single IP address, enter 255.255.255.255; otherwise, enter the subnet mask of the corresponding network IP. In the example, the destination network is a single IP, so here enter 255.255.255.255.

Default Gateway: The IP address of the gateway device to which the data packets will be sent. This IP address must be on the same subnet with the router's IP which sends out data. In the example, the data packets will be sent to the LAN port of Router B and then to the Server, so the default gateway should be 192.168.0.2.

Interface: Determined by the port (WAN/LAN) that sends out data packets. In the example, the data are sent to the gateway through the LAN port of Router A, so LAN should be selected.

Description: Enter a description for this static routing entry.

5. Click OK.

6. Check the System Routing Table below. If you can find the entry you've set, the static routing is set successfully.

System Routing Table				
Active Routes Number: 1				↻ Refresh
ID	Network Destination	Subnet Mask	Gateway	Interface
1	192.168.0.0	255.255.255.0	0.0.0.0	lan

Done!

Open a web browser on your PC. Enter the company server's IP address to visit the company network.

12. 7. Specify Wireless Settings

The router's wireless network name (SSID) and password, and security option are preset in the factory. The preset SSID and password can be found on the label of the router. You can customize the wireless settings according to your needs.

Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

• **To enable or disable the wireless function:**

1. Go to Basic > Wireless.

2. The wireless radio is enabled by default. If you want to disable the wireless function of the router, just untick the Enable Wireless Radio checkbox. In this case, all the wireless settings will be invalid.

• **To change the wireless network name (SSID) and wireless password:**

1. Go to Basic > Wireless.

2. Create a new SSID in Network Name (SSID) and customize the password for the network in Password. The value is case-sensitive.

⚑ Note:
If you change the wireless settings with a wireless device, you will be disconnected when the settings are effective. Please write down the new SSID and password for future use.

• **To hide SSID:**

1. Go to Basic > Wireless.

2. Select Hide SSID, and your SSID won't display when you scan for local wireless networks on your wireless device and you need to manually join the network.

• **To use the smart connect function**

The smart connect function lets you to enjoy a more high-speed network by assigning your devices to best wireless bands based on actual conditions to balance network demands.

1. Go to Advanced > Wireless > Wireless Settings.

2. Enable Smart Connect.

3. Keep the default or set a new SSID and password, and click Save. This SSID and password will be applied both for 2.4GHz and 5GHz wireless networks.

• **To change the security option:**

1. Go to Advanced > Wireless > Wireless Settings.

2. Select the wireless network 2.4GHz or 5GHz.

3. Select an option from the Security drop-down list. We recommend you don't change the default settings unless necessary. If you select other options, configure the related parameters according to the help page.

In addition

• Mode - Select a transmission mode according to your wireless client devices. It is recommended to just leave it as default.

• Channel Width - Select a channel width (bandwidth) for the wireless network.

- Channel - Select an operating channel for the wireless network. It is recommended to leave the channel to Auto, if you are not experiencing the intermittent wireless connection issue.

- Transmit Power - Select either High, Middle or Low to specify the data transmit power. The default and recommended setting is High.

- **To enable the Airtime Fairness feature**

The Airtime Fairness feature can improve the overall network performance by sacrificing a little bit of network time on your slow devices. Enable Airtime Fairness when you wish to sacrifice some of the networking time from the slow devices, so that your faster devices can achieve better quality of service.

For example, you have a gaming computer next to the router in the living room, and a slower family computer upstairs. Enable the airtime fairness feature so that your gaming computer can perform as optimally as possible.

1. Go to Advanced > Wireless > Wireless Settings.

2. Select the wireless network 2.4GHz or 5GHz.

3. Check the box for Enable Airtime Fairness.

4. Click Save.

- **To enable the Multi-User MIMO feature**

A router with the Multi-User MIMO feature serves 4 devices simultaneously while a traditional router serves only one user at a time. That means Multi-User MIMO can provide a faster, more efficient Wi-Fi network for multiusers.

⚑ Note:
Devices supporting 5GHz wireless band can enjoy the Multi-User MIMO service.

1. Go to Advanced > Wireless > Wireless Settings.

2. Select the 5GHz wireless network.

3. Check the box for Enable Multi-User MIMO.

4. Click Save.

12. 8.   Use WPS for Wireless Connection

Wi-Fi Protected Setup (WPS) provides an easier approach to set up a security-protected Wi-Fi connection.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Make sure the Wi-Fi of your router is on and go to Advanced > Wireless > WPS.

12. 8. 1.   Push the WPS Button

Click Start WPS on the screen. Within two minutes, press the WPS button on your device. Success will appear on the above screen and the LED of the router should change from circulating blue in parallel to solid blue, indicating successful WPS connection.

Method One--Push Button(recommended)

Start
WPS

12. 8. 2.   Connect via the Router's PIN

Router's PIN is enabled by default to allow wireless devices to connect to the router using the PIN. You can use the default one or generate a new one.

Method Two--PIN

Router's PIN   Client's PIN

Router's PIN:

Router's PIN: 59798835   Generate   Default

🔖 Note:

PIN (Personal Identification Number) is an eight-character identification number preset to each router. WPS supported devices can connect to your router with the PIN. The default PIN is printed on the label of the router.

12. 8. 3.   Connect via the Client's PIN
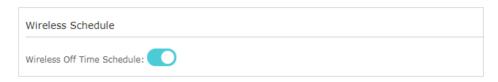
Enter the PIN of your device and click Connect. Then your device will get connected to the router.

Method Two--PIN

Router's PIN   Client's PIN

Enter the client's PIN:

Connect

12. 9.   Schedule Your Wireless Function

The wireless network can be automatically off at a specific time when you do not need the wireless connection.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Wireless > Wireless Schedule.

3. Enable the Wireless Off Time Schedule feature.

4. Click Add to specify a wireless off period during which you need the wireless off automatically, and click Save.

 Note:
- The Effective Time Schedule is based on the time of the router. You can go to Advanced > System Tools > Time Settings to modify the time.
- The wireless network will be automatically turned on after the time period you set.

Chapter 13

Manage the Router

This chapter will show you the configuration for managing and maintaining your router.

It contains the following sections:

- Set Up System Time
- Control LEDs
- Test the Network Connectivity
- Upgrade the Firmware
- Backup and Restore Configuration Settings
- Change the Administrator Account
- Password Recovery
- Local Management
- Remote Management
- System Log
- Monitor the Internet Traffic Statistics
- System Parameters

13. 1.   Set Up System Time

System time is the time displayed while the router is running. The system time you configure here will be used for other time-based functions like Parental Controls. You can choose the way to obtain the system time as needed.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > Time Settings.

✐ **Tips:**
You can toggle on to enable 24-Hour Time feature before configuration, which will be applied to system-time-based functions and configurations.

- **To get time from the internet:**

1. In the Set Time field, select Get from the Internet.

2. Select your local Time Zone from the drop-down list.

3. In the NTP Server I field, enter the IP address or domain name of your desired NTP Server.

4. (Optional) In the NTP Server II field, enter the IP address or domain name of the second NTP Server.

5. Click Obtain to get the current Internet time and click Save.

- **To get time from PC:**

1. In the Set Time field, select Get from PC.

2. Click Save.

System Time

Current Time:	8:15:55 PM, 07/23/2019
24-Hour Time:	⬤◯
Set Time:	◯ Get from the Internet ⦿ Get from PC ◯ Manually
PC Time:	3:49:28 PM, 07/28/2019

Save

• **To manually set the date and time:**

1. In the Set Time field, select Manually.

System Time

Current Time:	8:18:24 PM, 07/23/2019
24-Hour Time:	⬤◯
Set Time:	◯ Get from the Internet ◯ Get from PC ⦿ Manually
Date:	07/23/2019 (MM/DD/YYYY)
Time:	20 ▾ : 08 ▾ : 39 ▾ (HH/MM/SS)

Save

2. Set the current Date (In MM/DD/YYYY format).

3. Set the current Time (In HH/MM/SS format).

4. Click Save.

• **To set up Daylight Saving Time:**

1. Select Enable Daylight Saving Time.

Daylight Saving Time

☑ Enable Daylight Saving Time

Start:	2019	Mar ▾	2nd ▾	Sun ▾	10 AM ▾
End:	2019	Nov ▾	1st ▾	Sun ▾	9 AM ▾
Running Status:	Daylight Saving Time is on.				

Save

2. Select the correct Start date and time when daylight saving time starts at your local
   time zone.

3. Select the correct End date and time when daylight saving time ends at your local time zone.

4. Click Save.

13. 2. Control LEDs

The router's LEDs indicate router's activities and status. You can turn on or turn off the LEDs either from the web management page or by pressing the LED button.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > LED Control.

• **To control LED:**

Toggle on LED Status to turn on the LED while toggle off to turn off the LED.

• **To enable Night Mode:**

1. Tick the Night Mode checkbox.

2. Specify a time period in the LED Off Time as needed, and the LEDs will be off during this period.

3. Click Save.

13. 3. Test the Network Connectivity

Diagnostics is used to test the connectivity between the router and the host or other network devices.
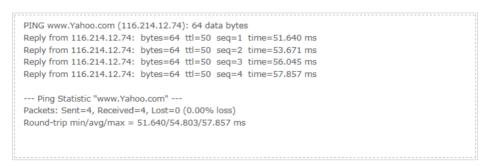
1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > Diagnostics.

Diagnostics

Diagnostic Tool:	⦿ Ping	◯ Traceroute
IP Address/Domain Name:		

Start

3. Enter the information with the help of page tips:

1) Choose Ping or Traceroute as the diagnostic tool to test the connectivity;

- Ping is used to test the connectivity between the router and the tested host, and measure the round-trip time.

- Traceroute is used to display the route (path) your router has passed to reach the tested host, and measure transit delays of packets across an Internet Protocol network.

2) Enter the IP Address or Domain Name of the tested host.

4. Click Start to begin the diagnostics.

�
 Tips:

Click Advanced, you can modify the ping count, ping packet size or the Traceroute Max TTL. It's recommended to keep the default value.

The figure below indicates the proper connection between the router and the Yahoo server (www.Yahoo.com) tested through Ping.

```
PING www.Yahoo.com (116.214.12.74): 64 data bytes
Reply from 116.214.12.74: bytes=64 ttl=50 seq=1 time=51.640 ms
Reply from 116.214.12.74: bytes=64 ttl=50 seq=2 time=53.671 ms
Reply from 116.214.12.74: bytes=64 ttl=50 seq=3 time=56.045 ms
Reply from 116.214.12.74: bytes=64 ttl=50 seq=4 time=57.857 ms

--- Ping Statistic "www.Yahoo.com" ---
Packets: Sent=4, Received=4, Lost=0 (0.00% loss)
Round-trip min/avg/max = 51.640/54.803/57.857 ms
```

The figure below indicates the proper connection between the router and the Yahoo server (www.Yahoo.com) tested through Traceroute.

```
traceroute to www.Yahoo.com (116.214.12.74), 20 hops max, 38 byte packets
 1  219.133.12.1 (219.133.12.1)  19.556 ms  22.274 ms  22.024 ms
 2  113.106.38.77 (113.106.38.77)  30.115 ms  22.649 ms  20.931 ms
 3  * * *
 4  183.56.65.14 (183.56.65.14)  26.210 ms  29.428 ms  28.272 ms
 5  * 202.97.60.25 (202.97.60.25)  29.272 ms  25.461 ms
 6  202.97.60.46 (202.97.60.46)  27.335 ms  27.616 ms  28.272 ms
 7  202.97.60.149 (202.97.60.149)  22.805 ms  24.024 ms  24.711 ms
 8  202.97.6.30 (202.97.6.30)  47.610 ms  54.452 ms  61.137 ms
 9  r4105-s2.tp.hinet.net (220.128.6.110)  51.171 ms  50.515 ms  56.107 ms
10  220.128.11.190 (220.128.11.190)  60.950 ms  60.200 ms  60.419 ms
```

13. 4. Upgrade the Firmware

TP-Link aims at providing better network experience for users.

We will inform you through the web management page if there's any update firmware available for your router. Also, the latest firmware will be released at the TP-Link official website www.tp-link.com, and you can download it from the Support page for free.

Note:
- Make sure you remove all attached USB devices from the router before the firmware upgrade to prevent data loss.
- Backup your router configuration before firmware upgrade.
- Do NOT turn off the router during the firmware upgrade.

13. 4. 1. Online Upgrade

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. When the latest firmware is available for your router, the update icon will display in the top-right corner of the page. Click the icon to go to the Firmware Upgrade page.

   Alternatively, you can go to Advanced > System Tools > Firmware Upgrade, and click Check for upgrade to see whether the latest firmware is released.

   Online Upgrade

   Latest Version:

   [Check for upgrade]

3. Focus on the Online Upgrade section, and click Upgrade.

   Online Upgrade

   Latest Version:

   [Upgrade]

4. Wait a few minutes for the upgrade and reboot to complete.

⊘ Tips:

If there's a new and important firmware update for your router, you will see the notification (similar as shown below) on your computer as long as a web browser is opened. Click Upgrade now, and log into the web management page with the username and password you set for the router. You will see the Firmware Upgrade page.

13. 4. 2.   Manual Upgrade

1. Download the latest firmware file for the router from www.tp-link.com.

2. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

3. Go to Advanced > System Tools > Firmware Upgrade.

4. Focus on the Device Information section. Make sure the downloaded firmware file is matched with the Hardware Version.

5. Focus on the Local Upgrade section. Click Browse to locate the downloaded new firmware file, and click Upgrade.

6. Wait a few minutes for the upgrade and reboot to complete.

13. 4. 3.   Restore Interrupted Upgrade After Power Failure

If your router cannot start up after an upgrade interruption due to power failure, follow the steps below to restore the interrupted upgrade. Otherwise, your router cannot work again.

1. Make sure you have the latest firmware file in your computer. If not, try another way to connect your computer to the Internet and download the latest firmware file from www.tp-link.com.

2. Connect your computer to the router with an Ethernet cable.

3. Visit 192.168.0.1 and you will see the following upgrade page.

System error. The router cannot start up normally.
Please upgrade your router. You can download the firmware file from www.tp-link.com.

New Firmware File: [   ]   **Browse**   **Upgrade**

4. Click Browse and select the downloaded firmware file.

5. Click Upgrade and wait for a few minutes until the router completes the upgrading and restarts.

13. 5.   Backup and Restore Configuration Settings

The configuration settings are stored as a configuration file in the router. You can backup the configuration file to your computer for future use and restore the router to a previous settings from the backup file when needed. Moreover, if necessary you can erase the current settings and reset the router to the default factory settings.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > Backup & Restore.

- **To backup configuration settings:**

Click Backup to save a copy of the current settings to your local computer. A '.bin' file of the current settings will be stored to your computer.

Backup

Save a copy of your current settings.

Backup

- **To restore configuration settings:**

1. Click Browse to locate the backup configuration file stored on your computer, and click Restore.

Restore

Restore previous settings from a saved file.

File: [   ]   **Browse**

Restore

2. Wait a few minutes for the restoring and rebooting.

Note: During the restoring process, do not turn off or reset the router.

- **To reset the router except your login password and bound TP-Link ID:**

1. Click Restore under the Factory Default Restore session.

Factory Default Restore

Restore all configuration settings to default values, except your login and cloud account information.

Restore

2. Wait a few minutes for the resetting and rebooting.

Note:
- During the resetting process, do not turn off the router.
- After reset, you can still use the current login password or the TP-Link ID to log in to the web management page.

- **To reset the router to factory default settings:**

1. Click Factory Restore to reset the router.

Revert all the configuration settings to their default values.

Factory Restore

2. Wait a few minutes for the resetting and rebooting.

Note:
- During the resetting process, do not turn off or reset the router.
- We strongly recommend you backup the current configuration settings before resetting the router.

13. 6.   Set the Router to Reboot Regularly

The Scheduled Reboot feature cleans the cache to enhance the running performance of the router.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > Reboot Schedule.

3. Check the box to enable Reboot Schedule.

4. Specify the Reboot Time when the router reboots and Repeat to decide how often it reboots.

5. Click Save.

13. 7. Change the Administrator Account

The account management feature allows you to change your login password of the web management page.

🔖 Note:
If you are using a TP-Link ID to log in to the web management page, the account management feature will be disabled. To manage the TP-Link ID, go to Basic > TP-Link Cloud.

1. Visit http://tplinkwifi.net, and log in with the password you set for the router.

2. Go to Advanced > System Tools > Administration and focus on the Account Management section.

3. Enter the old password, then a new password twice (both case-sensitive). Click Save.

4. Use the new password for future logins.

13. 8. Password Recovery

This feature allows you to recover the login password you set for you router in case you forget it.

Note:

If you are using a TP-Link ID to log in to the web management page, the Password Recovery feature will be disabled. To manage the TP-Link ID, go to Basic > TP-Link Cloud.

1. Visit http://tplinkwifi.net, and log in with the password you set for the router.

2. Go to Advanced > System Tools > Administration and focus on the Default Password Recovery section.

3. Tick the Enable Default Password Recovery checkbox.

4. Specify a mailbox (From) for sending the recovery letter and enter its SMTP Server address. Specify a mailbox (To) for receiving the recovery letter. If the mailbox (From) to send the recovery letter requires encryption, select Enable Authentication and enter its username and password.

> **Tips:**
> • SMTP server is available for users in most webmail systems. For example, the SMTP server address of Gmail is smtp.gmail.com. You can refer to their Help page to learn the SMTP server address.
> • Generally, Enable Authentication should be selected if the login of the mailbox requires username and password.

5. Click Save.

You can click Test Email to test whether the configuration is successful.

To recover the login password, please visit http://tplinkwifi.net, click Forgot Password? on the login page and follow the instructions to set a new password.

13. 9. Local Management

This feature allows you to limit the number of client devices on your LAN from accessing the router by using the MAC address-based authentication.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > Administration and complete the settings In Local
   Management section as needed.

- **Access the router via HTTPS and HTTP:**

Toggle on Local Management via HTTPS to access the router via HTTPS and HTTP, or
keep it disabled to access the router only via HTTP.

Local Management	
Local Management via HTTPS:	⬤

- **Allow all LAN connected devices to manage the router:**

Toggle on Access for All LAN Connected Devices.

Local Management		
Local Management via HTTPS:	◯	
Access for All LAN Connected Devices:	⬤	Toggle On to enable the management for all devices on LAN or toggle off to enable the management for specific devices.

- **Allow specific devices to manage the router:**

1. Toggle off Access for All LAN Connected Devices.

2. Click Add.

Access for All LAN Connected Devices:	◯	Toggle On to enable the management for all devices on LAN or toggle off to enable the management for specific devices.

⊕ Add   ⊖ Delete

☐	ID	MAC Address	Description	Status	Modify
--	--	--	--	--	--

MAC Address: [   ]   Scan
Description: [   ]
☐ Enable This Entry

Cancel   Save

| -- | 1 | 00-19-66-35-E1-B0 | Your PC! | ⚲ | ☑ 🗑 |

3. Click Scan and select the device to manage the router from the Existing Devices list,
   or enter the MAC address of the device manually.

4. Specify a Description for this entry.

5. Tick the Enable This Entry checkbox.

6. Click OK.

13. 10. Remote Management

This feature allows you to control remote devices' authority to manage the router.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > Administration and complete the settings in Remote Management section as needed.

Remote Management	
Remote Management:	☑ Enable
Web Address for Management:	https://0.0.0.0:443
HTTPS Port:	443
HTTP Port:	80
Remote Managers:	All Devices ▼
	Save

1. Tick the Enable checkbox to enable Remote Management.

2. Keep the HTTP and HTTPS port as default settings (recommended), or enter a value between 1024 and 65535.

3. Select the Remote Managers to decide which remote device can access and manage the router remotely:

   • All Devices - All remote devices can access the router.

   • Specified Device - Enter the IP address of the remote device to access the router.

4. Click Save.

Now you can remotely access and manage the router via the displayed Web Address for Management.

🔖 Note:
If a warning pops up when you visit the above address remotely, click Trust (or a similar option) to continue.

13. 11. System Log

When the router does not work normally, you can save the system log and send it to the technical support for troubleshooting.

• **To save the system log locally:**

1. Visit http://tplinkwifi.net, and log in your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > System Log.

3. Choose the type and level of the system logs as needed.

4. Click Save Log to save the system logs to a local disk.

- **To send the system log to a mailbox at a fixed time:**

For example, I want to check my router's working status at a fixed time every day, however, it's too troublesome to log in to the web management page every time I want to go checking. It would be great if the system logs could be sent to my mailbox at 8 a.m. every day.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > System Log.

3. Click Mail Settings.

4. Enter the information required:

Mail Settings

From:

To:

SMTP Server:

☑ Enable Authentication

Username:

Password:

☑ Enable Auto Mail

◉ Log at   00 ▼ : 00 ▼   (HH:MM) everyday

◯ Log every   24   hours

Save

1) From: Enter the email address used for sending the system log.

2) To: Enter the recipient's email address, which can be the same as or different from the sender's email address.

3) SMTP Server: Enter the SMTP server address.

✐ Tips: SMTP server is available for users in most webmail systems. For example, the SMTP server address of Hotmail is smtp-mail.outlook.com. You can refer to their Help page to learn the SMTP server address.

4) Select Enable Authentication.

✐ Tips: Generally, Enable Authentication should be selected if the login of the mailbox requires username and password.

5) Username: Enter the email address used for sending the system log.

6) Password: Enter the password to login the sender's email address.

7) Select Enable Auto Mail.

✐ Tips: The router will send the system log to the designated email address if this option is enabled.
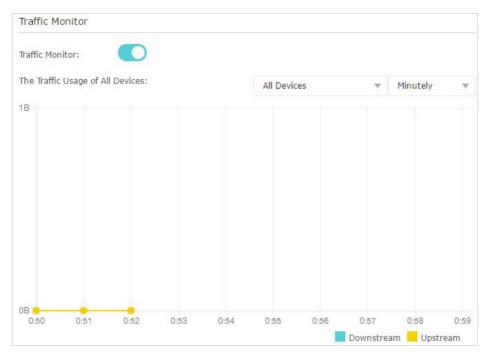
8) Set a fixed time. The recipient will receive the system log sent at this time every day.

5. Click Save.

13. 12. Monitor the Internet Traffic Statistics

The Traffic Statistics page displays the network traffic of the LAN, WAN and WLAN sent and received packets, allowing you to monitor the volume of internet traffic statistics.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > Traffic Monitor.

3. Toggle on Traffic Monitor, and then you can monitor the traffic usage of a specific device or all connected devices in 10 minutes, 24 hours or 7 days.

4. Check the total traffic statistics of each device on Traffic Monitor List.

Click Refresh to update the statistic information on the page.

Click Reset All to reset all statistic values in the list to zero.

13. 13. System Parameters

13. 13. 1. 2.4GHz/5GHz Wireless

You can configure the parameters of traffic transmission rules in wireless networks. It's recommended to keep the default settings if you are not sure of the proper ones in the case.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > System Parameters. Focus on 2.4GHz/5GHz Wireless section.

- **Bacon Interval** - Enter a value between 40 and 1000 to determine the duration between beacon packets that are broadcasted by the router to synchronize the wireless network. The default is 100 milliseconds.

- **RTS Threshold** – Enter a value between 1 and 2346 to determine the packet size of data transmission through the router. The default size is 2346. If the packet size is greater than the preset threshold, the router sends Request of Send frames to a particular receiving station and negotiates the sending of a data frame, or else the packet will be sent immediately.

- **DTIM Interval** - Enter a value between 1 and 15 to determine the interval of DTIM (Delivery Traffic Indication Message). The default interval is 1, indicating the DTIM interval is the same as Beacon Interval.

- **Group Key Update Period** - Enter the number of seconds between 30 and 86400, or use the default value 0 that indicates no key interval to control the time interval for the encryption key automatic renewal.

- **WMM Feature** - It is enabled by default and highly recommended, for the WMM function guarantees the packets with high-priority messages being transmitted preferentially.

- **Short GI Feature** - It is enabled by default and highly recommended, for it will increase the packet capacity by reducing the GI (Guard Interval) time.

- **AP Isolation Feature** - If you want to confine and restrict all wireless devices connected to the network from interacting with each other, but still able to access the internet, enable AP Isolation feature.

13. 13. 2. NAT

The router's NAT (Network Address Translation) feature makes devices on the LAN use the same public IP address to communicate with devices on the internet, which protects the local network by hiding IP addresses of the devices.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > System Parameters. Focus on NAT section.

3. NAT feature is enable by default and it's highly recommended. If you disable it, you may have no access to the internet and NAT Forwarding will not take effect.

13. 13. 3. Internet Port Negotiation Speed Setting

The router's NAT (Network Address Translation) feature makes devices on the LAN use the same public IP address to communicate with devices on the internet, which protects the local network by hiding IP addresses of the devices.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > System Tools > System Parameters. Focus on Internet Port Negotiation Speed Setting section.

3. Select the duplex type from the drop-down list and click Save.

13. 14. Log Out

Click Logout at the top right corner , and you will log out of the web page and be directed to the login window.
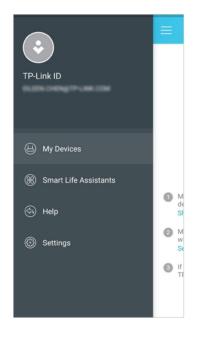
Chapter 14

Work with Alexa

This chapter will show you how to configure your router to work with Alexa.

Control your network devices using simply the power of your voice with the TP-Link Router Skill for Amazon. Prioritize the Internet connection of your laptop, switch off your router's LED or ask Alexa to read out the password of the guest network, all without stopping what you're doing.

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Smart Life Assistant.

3. Follow the on-screen instructions on the Alexa section to set up smart control of your router.

   Or download TP-Link Tether app, open it and tap the ☰ icon, then select Smart Life Assistants to complete the setup.

FAQ

Q1. What should I do if I forget my wireless password?

The default wireless password is printed on the label of the router. If the password has been altered:

1. Connect your computer to the router using an Ethernet cable.

2. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

3. Go to Basic > Wireless to retrieve or reset your wireless password.

Q2. What should I do if I forget my web management password?

- If you are using a TP-Link ID to log in, or you have enabled the Password Recovery feature of the router, click Forgot password on the login page and then follow the instructions to reset it.

- Alternatively, press and hold the Reset button of the router until LEDs turn on to reset it, and then visit http://tplinkwifi.net to create a new login password.

▌Note:
- Please refer to Password Recovery to learn how to configure Password Recovery.
- You'll need to reconfigure the router to surf the internet once the router is reset, and please mark down your new password for future use.

Q3. What should I do if I can't log in to the router's web management page?

This can happen for a variety of reasons. Please try the methods below to log in again.

- Make sure your computer is connected to the router correctly and the corresponding LED indicator(s) light up.

- Make sure the IP address of your computer is configured as Obtain an IP address automatically and Obtain DNS server address automatically.

- Make sure http://tplinkwifi.net or http://192.168.0.1 is correctly entered.

- Check your computer's settings:

    1) Go to Start > Control Panel > Network and Internet, and click View network status and tasks.

    2) Click Internet Options on the bottom left.

    3) Click Connections and select Never dial a connection.

4) Click LAN settings and deselect the following three options and click OK.

5) Go to Advanced > Restore advanced settings, click OK to save the settings.

- Use another web browser or computer to log in again.

- Reset the router to factory default settings and try again. If login still fails, please contact the technical support.

🔖 Note: You'll need to reconfigure the router to surf the internet once the router is reset.

Q4. What should I do if I can't access the internet even though the configuration is finished?

1. Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2. Go to Advanced > Status to check internet status:

As the follow picture shows, if IP Address is a valid one, please try the methods below and try again:

Internet ✕   IPv4 | IPv6

MAC Address: 50-C7-BF-02-EA-DD

IP Address: 58.61.172.101

Subnet Mask: 255.255.255.255

Default Gateway: 58.61.172.1

Primary DNS: 202.96.134.33

Secondary DNS: 202.96.128.86

Connection Type: PPPoE

- Your computer might not recognize any DNS server addresses. Please manually configure the DNS server.

    1) Go to Advanced > Network > DHCP Server.

    2) Enter 8.8.8.8 as Primary DNS, click Save.

    ⏚ **Tips:** 8.8.8.8 is a safe and public DNS server operated by Google.

Settings

DHCP Server: ☑ Enable DHCP Server

IP Address Pool: 192.168.0.100   -   192.168.0.199

Address Lease Time: 120   minutes. (1-2880. The default value is 120.)

Default Gateway: 192.168.0.2   (Optional)

Primary DNS: 8.8.8.8   (Optional)

Secondary DNS: (Optional)

Save

- Restart the modem and the router.

    1) Power off your modem and router, and leave them off for 1 minute.

    2) Power on your modem first, and wait about 2 minutes until it gets a solid cable or Internet light.

    3) Power on the router.

    4) Wait another 1 or 2 minutes and check the internet access.

- Reset the router to factory default settings and reconfigure the router.

- Upgrade the firmware of the router.
- Check the TCP/IP settings on the particular device if all other devices can get internet from the router.

As the picture below shows, if the IP Address is 0.0.0.0, please try the methods below and try again:

- Make sure the physical connection between the router and the modem is proper.
- Clone the MAC address of your computer.

  1) Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

  2) Go to Advanced > Network > Internet and focus on the MAC Clone section.

  3) Choose an option as needed (enter the MAC address if Use Custom MAC Address is selected), and click Save.

Tips:

- Some ISP will register the MAC address of your computer when you access the internet for the first time through their Cable modem, if you add a router into your network to share your internet connection, the ISP will not accept it as the MAC address is changed, so we need to clone your computer's MAC address to the router.
- The MAC addresses of a computer in wired connection and wireless connection are different.

• Modify the LAN IP address of the router.

> **Note:**
>
> Most TP-Link routers use 192.168.0.1/192.168.1.1 as their default LAN IP address, which may conflict with the IP range of your existing ADSL modem/router. If so, the router is not able to communicate with your modem and you can't access the internet. To resolve this problem, we need to change the LAN IP address of the router to avoid such conflict, for example, 192.168.2.1.

1) Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

2) Go to Advanced > Network > LAN.

3) Modify the LAN IP address as the follow picture shows. Here we take 192.168.2.1 as an example.

4) Click Save.

LAN	
MAC Address:	50-C7-BF-02-EA-DC
IP Address:	192.168.2.1
Subnet Mask:	255.255.255.0
	Save

• Restart the modem and the router.

1) Power off your modem and router, and leave them off for 1 minute.

2) Power on your modem first, and wait about 2 minutes until it get a solid cable or Internet light.

3) Power on the router.

4) Wait another 1 or 2 minutes and check the internet access.

• Double check the internet connection type.

1) Confirm your internet connection type, which can be learned from the ISP.

2) Visit http://tplinkwifi.net, and log in with your TP-Link ID or the password you set for the router.

3) Go to Advanced > Network > Internet.

4) Select your Internet Connection Type and fill in other parameters.

5) Click Save.

IPv4

Internet Connection Type:	Dynamic IP ▼
	Static IP
IP Address:	Dynamic IP
Subnet Mask:	PPPoE
Default Gateway:	BigPond Cable
	L2TP
Primary DNS:	PPTP
Secondary DNS:	0.0.0.0

[Renew] [Release]   WAN port is unplugged.

⊙ Advanced

[Save]

6) Restart the modem and the router again.

• Please upgrade the firmware of the router.

If you've tried every method above but still cannot access the internet, please contact the technical support.

Q5. What should I do if I can't find my wireless network or I cannot connect the wireless network?

If you fail to find any wireless network, please follow the steps below:

• Make sure the wireless function of your device is enabled if you're using a laptop with built-in wireless adapter. You can refer to the relevant document or contact the laptop manufacturer.

• Make sure the wireless adapter driver is installed successfully and the wireless adapter is enabled.

- **On Windows 7**

1) If you see the message No connections are available, it is usually because the wireless function is disabled or blocked somehow.

2) Click Troubleshoot and windows might be able to fix the problem by itself.

- **On Windows XP**

1) If you see the message Windows cannot configure this wireless connection, this is usually because windows configuration utility is disabled or you are running another wireless configuration tool to connect the wireless.

2) Exit the wireless configuration tool (the TP-Link Utility, for example).

3) Select and right click on My Computer on desktop, select Manage to open Computer Management window.

4) Expand Services and Applications > Services, find and locate Wireless Zero Configuration in the Services list on the right side.

5) Right click Wireless Zero Configuration, and then select Properties.

6) Change Startup type to Automatic, click on Start button and make sure the Service status is Started. And then click OK.

If you can find other wireless network except your own, please follow the steps below:

• Check the WLAN LED indicator on your wireless router/modem.

• Make sure your computer/device is still in the range of your router/modem. Move it closer if it is currently too far away.

• Go to Advanced > Wireless > Wireless Settings, and check the wireless settings. Double check your wireless Network Name and SSID is not hided.

If you can find your wireless network but fail to connect, please follow the steps below:

• **Authenticating problem/password mismatch:**

1) Sometimes you will be asked to type in a PIN number when you connect to the wireless network for the first time. This PIN number is different from the Wireless Password/Network Security Key, usually you can only find it on the label of your router.

2) If you cannot find the PIN or PIN failed, you may choose Connecting using a security key instead, and then type in the Wireless Password/Network Security Key.

3) If it continues to show note of Network Security Key Mismatch, it is suggested to confirm the wireless password of your wireless router.

Note: Wireless Password/Network Security Key is case sensitive.

- Windows unable to connect to XXXX / Can not join this network / Taking longer than usual to connect to this network:

  - Check the wireless signal strength of your network. If it is weak (1~3 bars), please move the router closer and try again.

  - Change the wireless Channel of the router to 1, 6 or 11 to reduce interference from other networks.

  - Re-install or update the driver for your wireless adapter of the computer.

FCC compliance information statement

FC

Product Name: AX3000 Gigabit Wi-Fi 6 Router

Model Number: Archer AX3000

Component Name	Model
I.T.E. Power	GQ24-120200-AU

Responsible party:

TP-Link USA Corporation, d/b/a TP-Link North America, Inc.

Address: 145 South State College Blvd. Suite 400, Brea, CA 92821

Website: http://www.tp-link.com/us/

Tel: +1 626 333 0234

Fax: +1 909 527 6803

E-mail: sales.usa@tp-link.com

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

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

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

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

1. This device may not cause harmful interference.

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

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

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

"To comply with FCC RF exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."

We, **TP-Link USA Corporatio**n, has determined that the equipment shown as above has been shown to comply with the applicable technical standards, FCC part 15. There is no unauthorized change is made in the equipment and the equipment is properly maintained and operated.

Issue Date: 2019.08.30

FCC compliance information statement
Product Name: I.T.E. Power Supply
Model Number: GQ24-120200-AU
Responsible party:
TP-Link USA Corporation, d/b/a TP-Link North America, Inc.
Address: 145 South State College Blvd. Suite 400, Brea, CA 92821
Website: http://www.tp-link.com/us/
Tel: +1 626 333 0234
Fax: +1 909 527 6803
E-mail: sales.usa@tp-link.com

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

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

1. This device may not cause harmful interference.

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

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

We, **TP-Link USA Corporation**, has determined that the equipment shown as above has been shown to comply with the applicable technical standards, FCC part 15. There is no unauthorized change is made in the equipment and the equipment is properly maintained and operated.

Issue Date: 2019.08.30

Canadian Compliance Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.

2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. l'appareil ne doit pas produire de brouillage;

2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement

Caution:

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

DFS (Dynamic Frequency Selection) products that operate in the bands 5250-5350 MHz, 5470-5600MHz, and 5650-5725MHz.

Avertissement:

Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

Les produits utilisant la technique d'atténuation DFS (sélection dynamique des fréquences) sur les bandes 5250- 5350 MHz, 5470-5600MHz et 5650-5725MHz.

Radiation Exposure Statement:

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

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Industry Canada Statement

CAN ICES-3 (B)/NMB-3(B)

NCC Notice & BSMI Notice:

注意！

依據 低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性或功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信規定作業之無線電信。低功率射頻電機需忍受合法通信或工業、科學以及醫療用電波輻射性電機設備之干擾。

4.7.9.1 應避免影響附近雷達系統之操作。

4.7.9.2 高增益指向性天線只得應用於固定式點對點系統。

安全諮詢及注意事項

- 請使用原裝電源供應器或只能按照本產品注明的電源類型使用本產品。
- 清潔本產品之前請先拔掉電源線。請勿使用液體、噴霧清潔劑或濕布進行清潔。
- 注意防潮，請勿將水或其他液體潑灑到本產品上。
- 插槽與開口供通風使用，以確保本產品的操作可靠並防止過熱，請勿堵塞或覆蓋開口。
- 請勿將本產品置放於靠近熱源的地方。除非有正常的通風，否則不可放在密閉位置中。
- 請不要私自打開機殼，不要嘗試自行維修本產品，請由授權的專業人士進行此項工作。

限用物質含有情況標示聲明書

產品元件名稱	限用物質及其化學符號					
	鉛 Pb	鎘 Cd	汞 Hg	六價鉻 CrVI	多溴聯苯 PBB	多溴二苯醚 PBDE
PCB	○	○	○	○	○	○
外殼	○	○	○	○	○	○
電源供應器	–	○	○	○	○	○
備考1. 超出0.1 wt %” 及 “超出0.01 wt %” 系指限用物質之百分比含量超出百分比含量基準值。						
備考2. “○”系指該項限用物質之百分比含量未超出百分比含量基準值。						
備考3. “－”系指該項限用物質為排除項目。						

Safety Information

- Keep the device away from water, fire, humidity or hot environments.
- Do not attempt to disassemble, repair, or modify the device.
- Do not use damaged charger or USB cable to charge the device.
- Do not use any other chargers than those recommended
- Do not use the device where wireless devices are not allowed.
- Adapter shall be installed near the equipment and shall be easily accessible.
- Use only power supplies which are provided by manufacturer and in the original packing of this product. If you have any questions, please don't hesitate to contact us.

Please read and follow the above safety information when operating the device. We cannot guarantee that no accidents or damage will occur due to improper use of the device. Please use this product with care and operate at your own risk.

Explanations of the symbols on the product label

Symbol	Explanation
===	DC voltage
⌂	Indoor use only
🗑	RECYCLING This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment. User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.