

User Guide

AXE7800 Tri-Band Wi-Fi 6E Router Archer AXE95

© 2021 TP-Link 1910013093 REV1.0.0

Contents

Abou	It This Guide	.1
Chap	oter 1. Get to Know About Your Router	.3
1. 1.	Product Overview	. 4
1. 2.	Appearance	. 4
	1. 2. 1.Top Panel	. 4
	1. 2. 2.Back Panel and Side Panel	. 5
Chap	oter 2. Connect the Hardware	.7
2. 1.	Position Your Router	. 8
2.2.	Connect Your Router	. 8
Chap	oter 3. Log In to Your Router	10
Chap	oter 4. Set Up Internet Connection	12
4. 1.	Use Quick Setup Wizard	13
4. 2.	Quick Setup Via TP-Link Tether App	13
4. 3.	Manually Set Up Your Internet Connection	
4.4.	Set Up the Router as an Access Point	
4. 5.	Set Up an IPv6 Internet Connection	18
Chap	oter 5. TP-Link Cloud Service	22
5. 1.	Register a TP-Link ID	23
5. 2.	Change Your TP-Link ID Information.	
5. 3.	Manage the User TP-Link IDs	
	5. 3. 1.Add TP-Link ID to Manage the Router	
	5. 3. 2.Remove TP-Link ID(s) from Managing the Router	
5. 4.	Manage the Router via the TP-Link Tether App	26
Chap	oter 6. Wireless Settings	27
6. 1.	Specify Wireless Settings	
6. 2.	Schedule Your Wireless Function	
6. 3.	Use WPS for Wireless Connection	
	6. 3. 1.Connect via the Client's PIN	
	6. 3. 2.Connect via the Router's PIN	31

	6. 3. 3.Push the WPS Button	. 31
6.4.	Advanced Wireless Settings	.32
Chap	oter 7. Guest Network	34
6. 1.	Create a Network for Guests	. 35
6.2.	Customize Guest Network Options	.36
Chap	oter 8. USB Settings	37
7.1.	Access the USB Storage Device	. 38
	7. 1. 1.Access the USB Device Locally	. 38
	7. 1. 2.Access the USB Device Remotely	. 39
	7. 1. 3.Customize the Access Settings	.41
7.2.	Media Sharing	.43
7.3.	Time Machine	.44
Chap	oter 9. HomeShield	46
8. 1.	Network Security	.47
8. 2.	Parental Controls	
8.3.	Network Analysis & Optimization	.48
Chap	oter 10.Network Security	50
9.1.	Protect the Network from Cyber Attacks	. 51
9. 2.	Access Control	. 51
9.3.	IP & MAC Binding	. 53
Chap	oter 11.NAT Forwarding	56
10. 1.	Share Local Resources on the Internet by Port Forwarding	. 57
10.2.	Open Ports Dynamically by Port Triggering	. 59
10.3.	Make Applications Free from Port Restriction by DMZ	
10. 4.	Make Xbox Online Games Run Smoothly by UPnP	. 61
Chap	oter 12.VPN Server	63
11.1.	Use OpenVPN to Access Your Home Network	. 64
11.2.	Use PPTP VPN to Access Your Home Network	.65
Chap	oter 13.Customize Your Network Settings	71
12.1.	Change the LAN Settings	.72
12.2.	Configure to Support IPTV Service	.72
12.3.	Specify DHCP Server Settings	.74

12.4.	Set Up a Dynamic DNS Service Account	5
12.5.	Create Static Routes	6
Chap	ter 14.Manage the Router 79	9
13.1.	Upgrade the Firmware	0
	13. 1. 1.Auto Update	0
	13. 1. 2.Online Upgrade	0
	13. 1. 3.Local Upgrade	1
13.2.	Backup and Restore Configuration Settings8	2
13.3.	Change the Login Password	3
13.4.	Password Recovery	4
13.5.	Local Management	5
13.6.	Remote Management	6
13.7.	System Log	8
13.8.	Test the Network Connectivity90	0
13.9.	Set Up System Time	2
13.10.	Set the Router to Reboot Regularly94	4
13.11.	Control the LED	5
FAQ.		6

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.

Note: Features available in 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 Router experience.

Conventions

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 > Guest Network means the Guest Network 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.	
Ø 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. Click to view more information about items on the page. 	

In this guide the following conventions are used:

More Info

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

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.

TP-Link Community is provided for you to discuss our products and share knowledge 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/.

*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 1) environmental factors, including building materials, physical objects, and obstacles, 2) network conditions, including local interference, volume and density of traffic, product location, network complexity, and network overhead, and 3) client limitations, including rated performance, location, connection, quality, and client condition.

*Use of Wi-Fi 6 (802.11ax), and features including OFDMA, MU-MIMO, 1024-QAM, and HT160 require clients to also support the corresponding features.

*2.5 Gbps internet speeds require compatible service plans and equipment. 2.5 Gbps and 1 Gbps ports cannot be concurrently configured as WAN ports.

*Saving clients' battery power requires clients to also support the 802.11ax Wi-Fi standard. Actual power reduction may vary as a result of network conditions, client limitations, and environmental factors.

*Use of WPA3 requires clients to also support the corresponding feature.

*This router may not support all the mandatory features as ratified in Draft 3.0 of IEEE 802.11ax specification.

*Further software upgrades for feature availability may be required.

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 AXE router, with the 802.11ax Wi-Fi technology and the brand-new 6 GHz band, achieves Wi-Fi performance at its ultimate level. The revolutionary combination of OFDMA and 1024QAM improve throughput by 4 times and dramatically increase capacity and efficiency of the whole network. Access to the 6 GHz band brings more bandwidth, faster speeds, and lower latency, opening up resources for future innovations like in AR/VR, 8K streaming and more.

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 LED is located on the front. You can check the router's working status by following the LED Explanation table.

LED Explanation

Status	Indication	
Pulsing orange	The router is starting up.	
Solid blue	The router is working properly.	
Solid red	No internet connection.	
Solid orange	The Wi-Fi is off.	
Pulsing red	The Wi-Fi is off and there is not internet connection.	

Status	Indication
Pulsing blue	The router is upgrading firmware, establishing WPS connection, or resetting to factory settings. Do not disconnect or power off your router.
Off	Power is off or the LED is turned off.

1. 2. 2. Back Panel and Side Panel



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

Button and Port Explanation

ltem	Description	
USB 2.0 Port	For connecting your USB storage devices to the router.	
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.	
Reset Button	Press and hold the button for about 6 seconds until the LED blinks to reset the router to its factory default settings.	
2.5 Gbps WAN/LAN Port*	For connecting to your modem, the Ethernet outlet or other internet devices. Used as the WAN or LAN port.	
1 Gbps WAN/LAN Port*	For connecting to your modem, the Ethernet outlet or other internet devices. Used as the WAN or LAN port.	
LAN Port (1-3)	For connecting your PC or other wired devices to the router.	

Note:

The 2.5 Gbps WAN/LAN port and 1 Gbps WAN/LAN port cannot be used as the WAN port at the same time. If you choose to use 2.5 Gbps WAN/LAN port as the WAN port for internet service, the 1 Gbps WAN/LAN port will be used as LAN port by default. It's recommended to use 2.5 Gbps WAN/LAN port as the WAN port.

The following parts are located on the side panel.

Button and Port Explanation

Item	Description	
USB 3.0 Port	For connecting your USB storage devices to the router.	
夺 (Wi-Fi Button)	Press and hold this button for about 2 seconds to turn on or off the wireless function of your router.	
举 (LED Button)	Press the LED button for 1 second to turn on or off the LED of your router.	
🗘 (WPS Button)	Press this WPS button for 1 second, and immediately press the WPS button on your client device to start the WPS process. The LED of the router should change from pulsing blue to solid on, indicating successful WPS connection.	

Chapter 2

Connect the Hardware

This chapter contains the following sections:

- Position Your Router
- <u>Connect Your Router</u>

2.1. Position Your Router

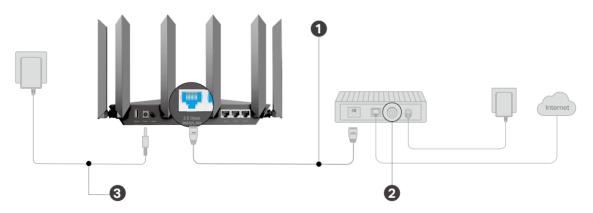
- The product should not be located in a place where it will be exposed to moisture or excessive heat.
- Place the router in a location where it can be connected to multiple devices as well as to a power source.
- Make sure the cables and power cord are safely placed out of the way so they do not create 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:

- 1) Turn off your modem, if any, and remove the backup battery if it has one.
- 2) Place the router horizontally and orient the antennas vertically.

If your internet comes from an Ethernet outlet instead of a DSL / Cable / Satellite modem, connect the router's **2.5 Gbps WAN/LAN port** to it, then follow steps 3 and 4 to complete the hardware connection.



1. Connect the **powered-off modem** to the **2.5 Gbps WAN/LAN port** with an Ethernet cable.

Note:

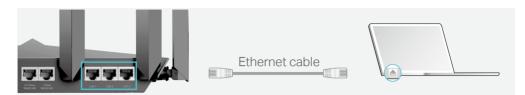
If you want to use the 1 Gbps WAN/LAN port as the WAN port instead, go to the Tether app or web management page to configure it.

- 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 the LED is solid on (red or blue) before moving on.

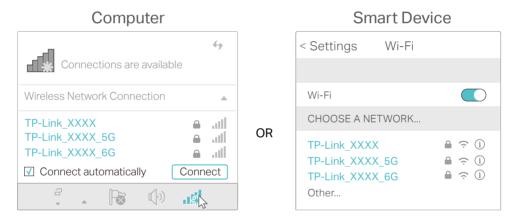
5. Connect your computer to the router.

• Method 1: Wired

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



- 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.



• 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) Tap 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.

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

← → C ♠ 🗋 http://tplinkwifi.net		
	Create an administrator password	
	For security purposes, create a local password for login before starting the quick setup.	
	New Password:	
	ø	
	Confirm Password:	
	ø	
	Let's Get Started	

Note:

• If the login window does not appear, please refer to the FAQ Section.

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
- <u>Manually Set Up Your Internet Connection</u>
- <u>Set Up the Router as an Access Point</u>
- <u>Set Up an IPv6 Internet Connection</u>

4.1. Use Quick Setup Wizard

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

Ø 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 <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- Follow the step-by-step instructions to complete Quick Setup configuration or go to Advanced > Quick Setup for configuration to connect your router to the internet. 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 Sign Up Now to get one. Then follow the instructions to bind the cloud router to your TP-Link ID.

(Get TP-Linl	Cloud Servio	ce
		P-Link ID. You can mar otified of the latest firm more.	
	TP-Link ID (Ema	il):	
	Password:		
		LOG IN	
	Sign Up Now	Forgot Password?	
		SKIP	

Note:

- To learn more about the TP-Link Cloud service, please refer to the <u>TP-Link Cloud Service</u> section.
- If you do not want to register a TP-Link ID now, you may click Skip 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.



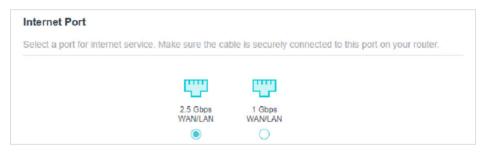
- 2. Open the Tether app and log in with your TP-Link ID. If you don't have an account, create one first.
- 3. Tap the + button and select Router > Wireless Router. Follow the steps to complete the setup and connect to the internet.
- 4. Connect your devices to the newly configured wireless networks 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Internet.
- 3. Select a port for internet service. Make sure the cable is securely connected to this port on your router.



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

Internet Connection		
Internet Connection		
Set up an internet connection with the se	ervice information provid	ed by your ISP (internet service provider).
Internet Connection Type:	Dynamic IP	~
	Select this type if your internet connection.	ISP doesn't provide any information for

5. 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 Connection	
Set up an internet connection with the se	ervice information provided by your ISP (internet service provider).
Internet Connection Type:	Dynamic IP 🗸
	Select this type if your ISP doesn't provide any information for internet connection.
Set the MAC address of your router. Use only a specific MAC address.	e the default address unless your ISP allows internet access from
MAC Clone	
Router MAC Address:	Use Default MAC Address

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

Internet Connection	
Set up an internet connection with the se	ervice information provided by your ISP (internet service provider).
Internet Connection Type:	Static IP 🗸
	Select this type if your ISP provides specific IP parameters.
IP Address:	
Subnet Mask:	
Default Gateway:	
Primary DNS:	
Secondary DNS:	(Optional)

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

ervice information provided by your ISP (internet service provider)
PPPoE V
Select this type if your ISP only provides a username and password.
m Ø

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.

1	ervice information provided by your ISP (internet service provi	
Internet Connection Type:	L2TP 🗸	
	Select this type if your ISP provides L2TP VPN server information and an account. Some ISPs also provide specifi parameters.	c I
Username:		
Password:	e s	
	Dynamic IP	
	O Static IP	
VPN Server IP/Domain Name:		

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.

Internet Connection		
Set up an internet connection with the se	ervice information provided by your ISP	(internet service provider).
Internet Connection Type:	PPTP V	
	Select this type if your ISP provides F information and an account. Some IS parameters.	
Username:		
Password:	e se	
	Oynamic IP	
	○ Static IP	
VPN Server IP/Domain Name:		

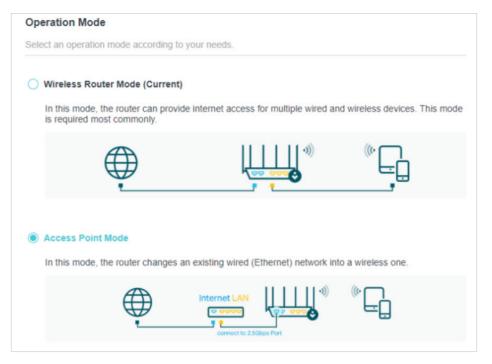
6. Click Save.

- Ø Tips:
- 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System > 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 go to Advanced Advanced Quick Setup.
- 5. Configure your wireless settings and click Next.
- 6. Confirm the information and click Save. Now, you can enjoy Wi-Fi.
- Ø 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 <u>http://tplinkwifi.net</u>, 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.

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.

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

Ø Tips:

IPv6 Internet		
Set up an IPv6 internet connection using	g the information provided by your ISP (internet service provi	der).
IPv6:		
Internet Connection Type:	Static IP 🗸	
IPv6 Address:		
Default Gateway:		
Primary DNS:		
Secondary DNS:		
MTU Size:	1500	
	bytes. (The default is 1500, do not change unless necessa	ary.)

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

IPv6 Internet		
Set up an IPv6 internet connection using	the information provided by your ISP	(internet service provider).
IPv6:		
Internet Connection Type:	Dynamic IP(SLAAC/DHCPv6)	
IPv6 Address:	:	
Primary DNS:	:	
Secondary DNS:	п	
	RENEW	
	RELEASE]
	Advanced Settings	

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, manually enter the username and password for the IPv6 connection.

IPv6 Internet		
Set up an IPv6 internet connection using	g the information provided by your ISP	(internet service provider).
IPv6:		
Internet Connection Type:	PPPoE V	
	Share the same PPPoE session w	ith IPv4
Username:		
Password:		
IPv6 Address:	:	
	Advanced Settings	
	CONNECT	
	DISCONNECT	

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.

IPv6 Internet		
Set up an IPv6 internet connection using	g the information provided by your ISP (internet service provider).
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 Settings	
	CONNECT	
	DISCONNECT	

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

IPv6 Internet	
Set up an IPv6 internet connection using	the information provided by your ISP (internet service provider).
IPv6:	
Internet Connection Type:	Pass-Through (Bridge)

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.

IPv6 LAN		
Configure the LAN IPv6 address of the the clients.	router and set the configuration type to	assign IPv6 addresses to
Assigned Type:	O DHCPv6	
	SLAAC+Stateless DHCP	
	SLAAC+RDNSS	
Address Prefix:		/64
Address:	FE80::9ADA:C4FF:FEB4:1D8/64	

6. Click Status to check whether you have successfully set up an IPv6 connection.

Ø 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. 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
- <u>Change Your TP-Link ID Information</u>
- 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 <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > TP-Link ID or click TP-Link ID on the very top of the page.
- 3. Click Sign Up and follow the instructions to register a TP-Link ID.

TP-Link ID		
Log in to bind the router to your The more.	P-Link ID. You can remotely manage your no	etwork via the Tether app, and
	TP-Link ID (Email):	
	Password:	
	Log In	
	Sign Up Forgot Password?	

4. After activating your TP-Link ID, come back to the TP-Link ID 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.
- If you want to unbind the admin TP-Link ID from your router, please go to Advanced > TP-Link ID, 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID.
- 2. Go to Advanced > TP-Link ID, 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.

Change Email	8
Password	
New Email	
Save	
Note: New email or password may not sync to client devices immediately. Please log in aga	

- To change your password:
- 1. Click 🗹 behind the Password.

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

Change Password	×
P Current Password	
New Password	
Low Middle High	
Confirm Password	
Save	
Note: New email or password may not sync to client devices immediately. Please log in again when your device is connected	

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 Advanced > TP-Link ID, 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. Refer to <u>Manage the Router via the</u> <u>TP-Link Tether App</u> to install the app and register a new TP-Link ID.

Add	Account	8
	Email	
	Cancel	Save

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

ound	d Acco	unts		
				🕀 Bind 🛛 😑 Unbind
	ID	Email	Binding Date	Role
	1	Parger, redminent		Admin
	2	thangounlighting\$143.com		User

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID.
- 2. Go to Advanced > TP-Link ID, 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.

Bound	d Acco	unts		
				🕂 Bind 😑 Unbind
	ID	Email	Binding Date	Role
	1	darper_redna.com		Admin
	2	parground phing \$143.com		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. Launch the Tether app and log in with your TP-Link ID.

Note: If you don't have a TP-Link ID, create one first.

- 3. Connect your device to the router's wireless network.
- 4. Go back to the Tether app, select the model of your router and log in with the password you set for the router.
- 5. Manage your router as needed.
- Note: If you need to remotely access your router from your smart devices, you need to:
- 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

Wireless Settings

This chapter guides you on how to configure the wireless settings.

It contains the following sections:

- <u>Specify Wireless Settings</u>
- <u>Schedule Your Wireless Function</u>
- Use WPS for Wireless Connection
- Advanced Wireless Settings

6.1. 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.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Wireless or Advanced > Wireless > Wireless Settings.

Wireless Settings			
Personalize settings for each band or ena	able Smart C	connect to configure the sar	ne settings for all bands.
OFDMA:	Enable	0	
TWT:	Enable	0	
Smart Connect:	Enable	0	Sharing Network
Wireless Radio:	Enable		
Network Name (SSID):	TP-Link_B	0E0	Hide SSID
Security:	WPA/WPA	2-Personal V	
Password:	12345670		

> To enable or disable OFDMA:

OFDMA enables multiple users to transmit data simultaneously, and thus greatly improves speed and efficiency. Noted that only when your clients also support OFDMA, can you fully enjoy the benefits. It is disabled by default.

1. Go to Advanced > Wireless > Wireless Settings.

2. Enable OFDMA.

> To enable or disable TWT:

TWT (Target Wake Time) allows 802.11ax routers and clients to negotiate their periods to transmit and receive data packets. Clients only wake up at TWT sessions and remain in sleep mode for the rest of the time, which significantly extend their battery life. It is disabled by default.

- 1. Go to Advanced > Wireless > Wireless Settings.
- 2. Enable TWT.

> To use the Smart Connect function:

The Smart Connect function lets you 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.

Smart Connect: Enable ? Sharing Network	
---	--

3. Keep the default values or set a new SSID and password, and click SAVE. This SSID and password will be applied for the 2.4GHz and 5GHz wireless networks. If you want to configure the wireless settings separately for each band, untick the checkbox to disable this feature.

> To enable or disable the wireless function:

- 1. Go to Wireless or Advanced > Wireless > Wireless Settings.
- 2. The wireless function is enabled by default. If you want to disable the wireless function of the router, just untick the Enable checkbox of each wireless network. In this case, all the wireless settings will be invalid.

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

- 1. Go to Wireless or Advanced > Wireless > Wireless Settings.
- 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 Wireless or Advanced > Wireless > Wireless Settings.
- 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 change the security option:

- 1. Go to Advanced > Wireless > Wireless Settings.
- Select an option from the Security drop-down list: None, WPA/WPA2-Personal, WPA2/WPA3-Personal, WPA/WPA2-Enterprise. We recommend you don't change the default settings unless necessary.

In addition

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

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

6.2. 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 <u>http://tplinkwifi.net</u>, 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 Schedule feature.

Wireless Schedule	
Schedule when to automatically turn off y	your wireless network.
Wireless Schedule:	Enable

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

Add Schedule	×
Wireless Off Time: From 10 V PM To 6 V AM	✓ (next day)
Repeat: S M T (CANCEL SAVE

Note:

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

6.3. 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 <u>http://tplinkwifi.net</u>, 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.

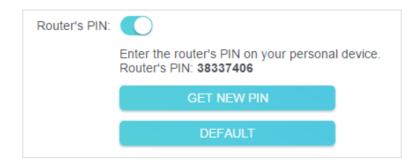
6. 3. 1. Connect via the Client's PIN

Enter the PIN of your device and click Connect. Then your device will get connected to the router.

WPS:	
Method 1:	Using a PIN
	Client's PIN
	O Router's PIN
	Enter your personal device's PIN here and click CONNECT
	CONNECT
	Conneor

6. 3. 2. Connect via the Router's PIN

Select Router's PIN in Method 1 to enable Router's PIN. You can use the default PIN or generate a new one.



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.

6. 3. 3. Push the WPS Button

Click Start on the screen or directly press the router's WPS button. Within two minutes, enable WPS on your personal device. Success will appear on the screen and the WPS LED of the router should change from flashing to solid on, indicating successful WPS connection.

Method 2:	Using the button below
	Click the button below, then enable WPS on your personal device within 2 minutes.
	Start
Method 3:	Using the router's WPS button
	Press the router's WPS button, then enable WPS on your personal device within 2 minutes.

6.4. Advanced Wireless Settings

Check advanced wireless settings for your device.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Wireless > Additional Settings.
- 3. Configure advanced wireless settings.

Check advanced wireless settings for you	ur device.	
WMM:	C Enable	
AP Isolation:	Enable	
Airtime Fairness:	Enable	
Zero Wait DFS:	Enable	
Beacon Interval:	100	
RTS Threshold:	2346	
DTIM Interval:	1	
Group Key Update Period:	0 s	

• WMM - WMM function can guarantee the packets with high-priority messages being transmitted preferentially.

- AP Isolation This function isolates all connected wireless stations so that wireless stations cannot access each other through WLAN.
- Airtime Fairness This function can improve the overall network performance by sacrificing a little bit of network time on your slow devices.
- Zero Wait DFS Zero Wait DFS (Dynamic Frequency Selection) allows the router to immediately reselect a new channel once the radar signal is detected on a channel allocated to radar devices to ensure lag-free network experience.
- Beacon Interval Enter a value between 40 and 1000 in milliseconds to determine the duration between beacon packets that are broadcasted by the router to synchronize the wireless network. The default value is 100 milliseconds.
- RTS Threshold- Enter a value between 1 and 2346 to determine the packet size of data transmission through the router. By default, the RTS (Request to Send) Threshold size is 2346. If the packet size is greater than the preset threshold, the router will send RTS frames to a particular receiving station and negotiate the sending of a data frame.
- DTIM Interval The value determines the interval of DTIM (Delivery Traffic Indication Message). Enter a value between 1 and 15 intervals. The default value is 1, which indicates the DTIM Interval is the same as Beacon Interval.
- Group Key Update Period Enter a number of seconds (minimum 30) to control the time interval for the encryption key automatic renewal. The default value is 0, meaning no key renewal.

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:

- <u>Create a Network for Guests</u>
- <u>Customize Guest Network Options</u>

6.1. Create a Network for Guests

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Wireless > Guest Network or click Wireless on the top page. Locate the Guest Network section.
- 3. Create a guest network as needed.
 - 1) Tick the Enable checkbox for the 2.4GHz, 5GHz-1, or 5GHz-2 wireless 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 and customize your own password. If No security is selected, no password is needed to access your guest network.

able the wheless ballus you want you	r guests to use and complete the related	iniornau01.
2.4GHz	Enable	Sharing Network
Network Name (SSID):	TP-Link_Guest_0B60	Hide SSID
5GHz-1:	Enable	Sharing Network
Network Name (SSID):	TP-Link_Guest_0B60_5G_1	Hide SSID
5GHz-2:	Enable	Sharing Network
Network Name (SSID):	TP-Link_Guest_0B60_5G_2	Hide SSID
Security:	WPA2/WPA3-Personal	
Password:		

- 4. Click Save. Now your guests can access your guest network using the SSID and password you set!
- 5. You can also click Sharing Network to share the SSID and password to your guests.



Ø Tips:

To view guest network information, go to Network Map and locate the Guest Network section. You can turn on or off the guest network function conveniently.

6.2. Customize Guest Network Options

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Wireless > Guest Network. Locate the Guest Permissions section.
- 3. Customize guest network options according to your needs.

Guest Permissions	
Control the data that guests can acces	S.
	Allow guests to see each other
	Allow guests to access your local network

• Allow guests to see 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 your 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!

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:

- <u>Access the USB Storage Device</u>
- 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.

```
Ø 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 > USB Storage Device 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.

	Method	1:				
	Go to Computer > Network, then click the Network Server SHARE by default) in the Computer section.					
	Note: Operations in different systems are similar. Here we take Windows 7 as an example.					
	Co ⊂ • Network ►					
		File Edit View Tools	; Help			
Windows		Organize 🔻 Network	and Sharing Center Add a printer			
computer		🔆 Favorites				
		ᇘ Libraries	TP-SHARE			
		🤣 Homegroup	Media Devices (1)			
		💵 Computer				
		👊 Network	 Network Infrastructure (1) 			
			Anim 12			

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.
Мас	 Select Go > Connect to Server. Type the server address smb://tplinkwifi.net. Click Connect. Click Connect. Server Address: smb://tplinkwifi.net Fevorite Servers: Remove Browse Connect 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.

Ø Tips:

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

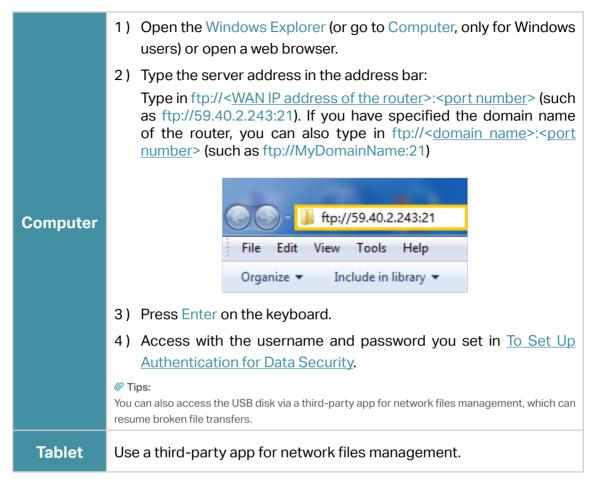
If your ISP assigns a private WAN IP address (such as 192.168.x.x or 10.x.x.x), you cannot use this feature because private addresses are not routed on the internet.

Follow the steps below to configure remote access settings.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > USB > USB Storage Device.
- 3. Tick the Internet FTP checkbox, and then click Save.

Access Method					
Select the method faccess address.	Select the method for accessing your USB storage device. The device can then be reached via the access address.				
Network/M	ledia Server Name: TP-Share				
Enable	Access Method	Address	Port		
	Samba for Windows	\\TP-Share			
	Local FTP	ftp://192.168.0.1:21	21		
	Internet FTP	ftp://0.0.0.0:21 Set DDNS	21		

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



Ø 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > USB > USB Storage Device.

• 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. In the Access Method session, make sure Samba for Windows is ticked, and enter a Network/Media Server Name as you like, such as MyShare, then click Save.

for accessing your USB storage de	vice. The device can then be reach	ed via the
fedia Server Name: MyShare		
Access Method	Address	Port
Samba for Windows	\\TP-Share	
Local FTP	ftp://192.168.0.1:21	21
Internet FTP	ftp://0.0.0.0:21 Set DDNS	21
	for accessing your USB storage de Media Server Name: MyShare Access Method Samba for Windows Local FTP	for accessing your USB storage device. The device can then be reach Nedia Server Name: MyShare Access Method Address Samba for Windows \\TP-Share Local FTP ftp://192.168.0.1:21 Internet FTP ftp://0.0.0:21

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

• To Only Share Specific Content

Focus on the File Sharing section. Specify sharing folders that you want to share and click Save.

Sharing	g Contents:	
	Share Selected Folders	Ø
Y	G:/Document G:/Pictures	

• 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. In the File Sharing section, enable Secure Sharing.

Secure Sharing				
Customize the access settings to ensure data security.				
Username	Password		Permissions	Modify
admin		ø	Read&Write	Ø
visit		ø	Read	Ø

2. Click i 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 <u>To Customize the Address of the USB Storage Device</u>.

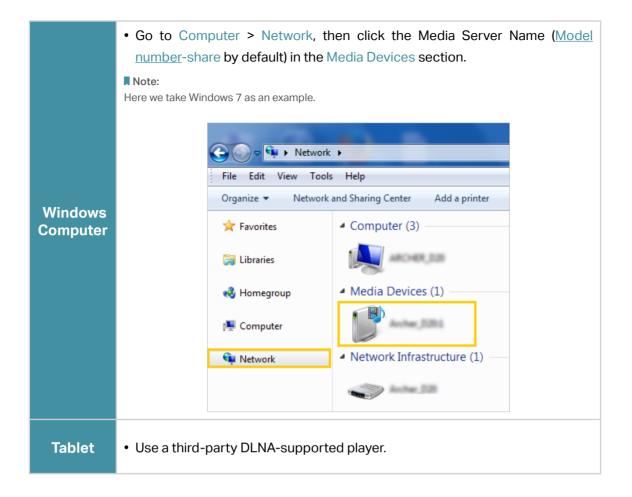
7.2. Media Sharing

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. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > USB > USB Storage Device.
- 3. Enable Media Sharing.

Media Sharing	
View photos, play music and watch movies stored on the USB storage device via the acces	s address.
Media Sharing: 🔵	

- 4. 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.
- 5. Refer to the following table for detailed instructions.



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<u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > USB > Time Machine.

Time Machine		
Back up all files on your Mac to a USB s	torage device connected to	/our router.
Time Machine:	Enable	
Backup Location:		
	Please select a location	for Time Machine backups
	SELECT	
Storage Limit for Backups:	0.0	GB
	(Enter "0" for no limit.)	

- 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.

HomeShield

Customize your home network with enhanced security using a kit of features built in TP-Link HomeShield. Whether protecting your sensitive data or limiting the access of kids and guests, TP-Link HomeShield provides you the tools you need to fully manage your network.

It contains the following sections:

- Network Security
- Parental Controls
- <u>Network Analysis & Optimization</u>

8.1. Network Security

TP-Link HomeShield provides many tools to protect your network from malicious attacks.



Network Analysis

Analyze and optimize your network



IoT Protection

Get real-time security for your Internet of Things



Intrusion Prevention System

Identifies and block network intruders



Malicious Content Filter

Block malicious content



DDoS Protection

Protects your home network from DDoS attacks

> To use this feature, download Tether to enjoy the HomeShield service

1. Scan the QR code or get the Tether app from the Apple App Store or Google Play.







2. Launch the Tether app and log in with your TP-Link ID. If you don't have an account, create one first.

3. Log in to your router and tap the HomeShield tab to use this feature.

8.2. 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.

Child Protection

Keep your child away from inappropriate content



Family Incentive Program

Manage screen time and create rewards



Family Time

Pause the internet to enjoy family time

- > To use this feature, download Tether to enjoy the HomeShield service
- 1. Scan the QR code or get the Tether app from the Apple App Store or Google Play.



- 2. Launch the Tether app and log in with your TP-Link ID. If you don't have an account, create one first.
- 3. Log in to your router and tap the HomeShield tab to use this feature.

8.3. Network Analysis & Optimization

TP-Link HomeShield provides many tools for you to analyze and optimize your network.



Weekly and Monthly Reports

Get weekly and monthly reports of your network usage



Quality of Service (QoS)

Prioritizes devices to give faster performance



Scan

Run a scan for a better network performance and security anytime

> To use this feature, download Tether to enjoy the HomeShield service

1. Scan the QR code or get the Tether app from the Apple App Store or Google Play.





- 2. Launch the Tether app and log in with your TP-Link ID. If you don't have an account, create one first.
- 3. Log in to your router and tap the HomeShield tab to use this feature.

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 protect your home network from cyber attacks, 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:

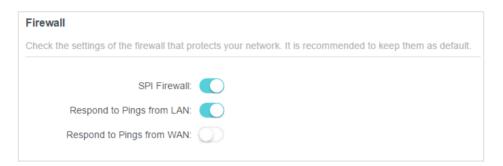
- Protect the Network from Cyber Attacks
- <u>Access Control</u>
- IP & MAC Binding

Tips: You can go to HomeShield to get a more comprehensive network protection system for your home network.

9.1. Protect the Network from Cyber Attacks

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Security > Firewall. It's recommended to keep the default settings.



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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Security > Access Control.
- 3. Toggle on to 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.



- 2) Click 🛟 Add and select devices you want to be blocked and Click ADD.
- 3) The Operation Succeeded message will appear on the screen, which means the selected devices have been successfully added to the blacklist.



To allow specific device(s):

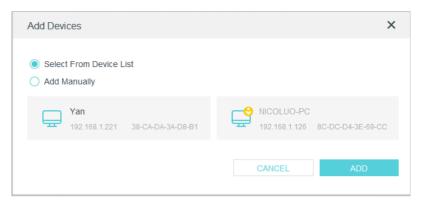
1) Select Whitelist and click SAVE.

Access Control	
Control the access to your network from	the specified devices.
Access Control:	
Access Mode:	O Blacklist
	Whitelist
	Configure a whitelist to only allow access to your network from the specified devices.

2) Your own device is in the whitelist by default and cannot be deleted. Click 🕤 Add to add other devices to the whitelist.

Device Type	Device Name	MAC Address	Modify
	UNKNOWN	00-19-66-35-E1-B0	莭

- Add connected devices
- 1) Click Select From Device List.
- 2) Select the devices you want to be allowed and click ADD.



- 3) The Operation Succeeded message will appear on the screen, which means the selected devices have been successfully added to the whitelist.
- Add unconnected devices
- 1) Click Add Manually.
- 2) Enter the Device Name and MAC Address of the device you want to be allowed and click ADD.

Add Devices		×
Select From Device List Add Manually Device Name: MAC Address:		
	CANCEL	DD

3) The Operation Succeeded message will appear on the screen, which means the device has been successfully added to the whitelist.

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

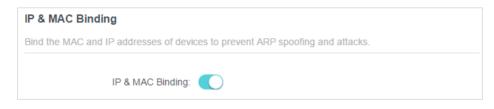
IP & MAC Binding, namely, ARP (Address Resolution Protocol) Binding, is used to bind network device's IP address to its MAC address. This will prevent ARP Spoofing and other ARP attacks by denying network access to an device with matching IP address in the Binding list, but unrecognized MAC address.

I want to:

Prevent ARP spoofing and ARP attacks.

How can I do that?

- 1. Visit <u>http://tplinkwifi.net</u>, 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):

1) Click 😌 Add in the Binding List section.

Binding List			
Add or delete binding ent	ries.		
			🕀 Add
Device Name	MAC Address	IP Address	Modify
No Entries			

2) Click VIEW CONNECTED DEVICES and select the device you want to bind. The MAC Address and IP Address fields will be automatically filled in.

Add Binding Entry		×
MAC Address:		
	VIEW CONNECTED DEVICES	
IP Address:		
	CANCEL	SAVE
	CANCEL	SAVE

3) Click SAVE.

To bind the unconnected device:

1) Click 😌 Add in the Binding List section.

Binding List			
Add or delete binding ent	ries.		
			🕂 Add
Device Name	MAC Address	IP Address	Modify
No Entries			

- 2) Enter the MAC Address and IP Address that you want to bind.
- 3) Click SAVE.

Done!

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

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 Port Forwarding, Port Triggering, UPNP and DMZ.

It contains the following sections:

- Share Local Resources on the Internet by Port Forwarding
- Open Ports Dynamically by Port Triggering
- <u>Make Applications Free from Port Restriction by DMZ</u>
- Make Xbox Online Games Run Smoothly by UPnP

10.1. Share Local Resources on the Internet by Port Forwarding

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

Port Forwarding 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 3. Go to Advanced > NAT Forwarding > Port Forwarding.
- 4. Click 🔂 Add.

Port Fo	rwarding					
Specify p	Specify ports to make specific devices or services on your local network accessible over the internet.					
						🔂 Add
Servio Name		External Port	Internal Port	Protocol	Status	Modify
No En	tries					

- 5. Click VIEW COMMON SERVICES and select HTTP. The External Port, Internal Port and Protocol will be automatically filled in.
- 6. Click VIEW CONNECTED DEVICES and select your home PC. The Device IP Address will be automatically filled in. Or enter the PC's IP address 192.168.0.100 manually in the Device IP Address field.
- 7. Click SAVE.

Add a Port Forwarding Entry		×
Service Name:	НТТР	
Device IP Address:	VIEW COMMON SERVICES	
	VIEW CONNECTED DEVICES	
External Port:	80	
Internal Port:	80	
Protocol:	TCP 🗸	
	Enable This Entry	
	CANCEL	SAVE

- Ø 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 common services list, you can enter the corresponding parameters
 manually. You should verify the port number that the service needs.
- You can add multiple port forwarding 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.

Ø 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 <u>Set Up a Dynamic DNS Service Account</u>. 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.

ort Triggeri	ng					
	allow devices o s (from the inter			imically open spe red it.	ecific external p	ports and
						()
Service Name	Triggering Port	Triggering Protocol	External Port	External Protocol	Status	Modify
No Entries						

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

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

Add a Port Triggering Entry		×
Service Name:	MSN Gaming Zone	
	VIEW COMMON SERVICES	
Triggering Port:	47624	
Triggering Protocol:	All	~
External Port:	2300-2400,28800-29000	
	(XX or XX-XX,1-65535,at most 5	pairs)
External Protocol:	All	~
	Enable This Entry	
	CANCE	L SAVE

4. Click SAVE.

Ø 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 log in 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 <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 3. Go to Advanced > NAT Forwarding > DMZ and tick to enable DMZ.
- 4. Click VIEW CONNECTED DEVICES and select your PC. The Device IP Address will be automatically filled in. Or enter the PC's IP address 192.168.0.100 manually in the DMZ Host IP Address field.

DMZ	
Expose a specific device in your local ne real-time communications.	etwork to the internet for applications such as online gaming and
DMZ:	C Enable
DMZ Host IP Address:	192.168.0.100
	VIEW CONNECTED DEVICES

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 <u>http://tplinkwifi.net</u>, 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.

UPnP
Enable UPnP (Universal Plug and Play) to allow devices on your local network to dynamically open ports for applications such as multiplayer gaming and real-time communications.
UPnP:

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.

- <u>Use OpenVPN to Access Your Home Network</u>
- <u>Use PPTP VPN to Access Your Home Network</u>