

# Archer C50 User Guide AC1200 Wireless Dual Band Router

# Contents

Abou	ut This Guide1
Chap	oter 1. Get to Know About Your Router
1.1.	Product Overview
1.2.	Main Features
1.3.	Panel Layout
	1. 3. 1.Top View
	1. 3. 2.The Back Panel 6
Chap	oter 2. Connect the Hardware
2.1.	Position Your Router
2. 2.	Connect Your Router
Chap	oter 3. Log into Your Router 12
Chap	oter 4. Set Up Internet Connections
4.1.	Quick Setup
4. 2.	Manually Configure Your Internet Connection Settings
4.3.	Setting Up an IPv6 Internet Connection
Chap	oter 5. Guest Network 25
5.1.	Create Guest Network
5.2.	Customize Guest Network Options
Chap	oter 6. USB Application
6.1.	Local Storage Sharing
	6. 1. 1.Access the USB Disk
	6. 1. 2.Customize Your Settings
6. 2.	Remote Access via FTP Server
	6. 2. 1.Access the USB Disk 34
	6. 2. 2.Customize Your Settings 37
6.3.	Media Sharing
	6. 3. 1.Access the USB Disk

	6. 3. 2.Customize Your Settings
6.4.	Printer Sharing
Chap	ter 7. Parental Control
Chap	ter 8. Bandwidth Control 49
Chap	ter 9. Network Security53
9.1.	Protect the Network from Cyber Attacks54
9.2.	Access Control
9.3.	IP & MAC Binding
Chap	ter 10.NAT Forwarding60
10.1.	Share Local Resources in the Internet by Virtual Server
10. 2.	Open Ports Dynamically by Port Triggering
10. 3.	Make Applications Free from Port Restriction by DMZ
10.4.	Make Xbox Online Games Run Smoothly by UPnP65
Chap	ter 11.Customize Your Network Settings
11.1.	Change the LAN Settings
11.2.	Configure to Support IPTV Service
11.3.	Specify DHCP Server Settings 69
11.4.	Set Up a Dynamic DNS Service Account
11.5.	Create Static Routes
11.6.	Specify Wireless Settings
11.7.	Use WPS for Wireless Connection75
	11. 7. 1.Set the Router's PIN
	11. 7. 2.Use the WPS Wizard for Wi-Fi Connections
11.8.	Schedule Your Wireless Function
Chap	ter 12. Manage the Router 79
12. 1.	Set Up System Time
12.2.	Test the Network Connectivity
12.3.	Upgrade the Firmware
12.4.	Backup and Restore Configuration Settings
12.5.	Change the Administrator Account
12.6.	Local Management

12.7.	Remote Management	86
12.8.	System Log	86
12.9.	SNMP Settings	
12.10.	. Monitor the Internet Traffic Statistics	89
FAQ.		91
Speci	ifications	102

# **About This Guide**

This guide provides details of each function and shows how to configure the router appropriate to your needs. In addition to this guide, a Quick Installation Guide is also released with each TP-LINK router, you are suggested to configure your router for quick Internet setup by following the published Quick Installation Guide before you get started with a further configuration.

## Conventions

Convention	Description
router	Stands for Archer C50 Wireless Dual Band Router without any explanation.
parameters	Parameters provided in the screenshots are just references for setting up the device, which may differ from the actual situation. You can set the parameters according to your demand.
screenshots	The demonstrated screenshots may look a little different from the actual web page of your device due to the various firmware versions. Please just configure your product based on the actual web page.
Blue Italic	Hyperlinks are in blue italic. You can click to redirect to a website or a specific section.
Blue	Contents to be emphasized and texts on the web page are in blue, 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.
Ø Tips:	Indicates important information that helps you make better use of your device.
symbols on the web page	<ul> <li>Click to edit the corresponding entry.</li> <li>Click to delete the corresponding entry.</li> <li>Click to enable or disable the corresponding entry.</li> </ul>

In this guide the following conventions are used:

## Chapter 1

# Get to Know About Your Router

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

This chapter contains the following sections:

- Product Overview
- Main Features
- Panel Layout

# 1.1. Product Overview

## What This Product Does

The Archer C50 AC1200 Wireless Dual Band Router integrates 4-port Switch, Firewall, NAT-router and Wireless AP. The AC1200 Wireless Dual Band Router delivers exceptional range and speed, which can fully meet the need of Small Office/Home Office (SOHO) networks and the users demanding higher networking performance. Your wireless connections are radio band selectable to avoid interference in your area.

## Fast Wireless Speed with 802.11ac

The Archer C50 comes with the next generation Wi-Fi standard – 802.11ac, 3 times faster than wireless N speeds and delivering a combined wireless data transfer rate of up to 1.2Gbps. With 300Mbps over the 2.4GHz band and 867Mbps wireless speeds over the crystal clear 5GHz band, the Archer C50 is the superior choice for seamless HD streaming, online gaming and other bandwidth-intensive tasks.

## **Dual Band Connections for Lag-Free Work and Entertainment**

The Archer C50 operates over both the 2.4GHz and 5GHz bands, ensuring amazing wireless performance. Simultaneous Dual Band offers you the flexibility of two dedicated networks – with multiple times the bandwidth for your needs. Simple tasks like sending e-mails or web browsing can be handled by the 2.4GHz band while bandwidth intensive tasks like online gaming or HD video streaming can be processed by the 5GHz band – all at the same time.

## Multifunctional USB Port – Easy Storage and Sharing

Using the USB 2.0 port, you can share a printer with multiple computers and devices on your network and can also share files & media at home or via the FTP server while away from home.

## **Guest Network**

Guest Network Access provides secure Wi-Fi access for guests sharing your home or office network in a controlled manner without exposing private Wi-Fi access codes or other personal data.

## **Parental Control**

Parental Controls allow parents or administrators to deploy restricted access for children or staff. With URL blocking, you can easily set up a black or white list to limit the level of web access.

## **Tether APP**

TP-LINK Tether provides the easiest way to access and manage your router with your devices.

# 1.2. Main Features

- Complies with IEEE 802.11ac.
- One 10/100M Auto-Negotiation RJ45 Internet port, four 10/100M Auto-Negotiation RJ45 Ethernet ports, supporting Auto MDI/MDIX.
- Provides USB 2.0 port supporting storage/FTP/Media/Print Server.
- Provides WPA/WPA2, WPA2-PSK authentication, TKIP/AES encryption security.
- Shares data and Internet access for users, supporting Dynamic IP/ Static IP/ PPPoE/ PPTP/ L2TP/ BigPond Cable Internet access.
- Supports simultaneous 2.4GHz and 5GHz connections for 1167Mbps of total available bandwidth.
- Supports Virtual Server, Port Triggering, DMZ host and UPnP.
- Supports Dynamic DNS, Static Routing.
- Provides Automatic-connection and Scheduled Connection on certain time to the Internet.
- Built-in NAT and DHCP server supporting static IP address distributing.
- Supports Parental Control and Access Control.
- Connects Internet on demand and disconnects from the Internet when idle for PPPoE.
- Provides 64/128-bit WEP encryption security and wireless LAN ACL (Access Control List).
- Supports Traffic Statistics.
- Supports IPv6.
- Supports firmware upgrade and Web management.

# 1.3. Panel Layout

## 1.3.1. Top View



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

## **LED Explanation**

Name	Status	Indication	
	On	System initialization completes.	
பு (Power)	Flashing	System initialization or firmware upgrade is in process. Do not disconnect or power off the router.	
	Off	Power is off. Please ensure that the power adapter is connected correctly.	
	On	The wireless 2.4GHz band is working properly.	
$\widehat{\mathbf{T}}$ (2.4GHz Wireless)	Off	The wireless 2.4 GHz band is disabled.	
	On	The wireless 5GHz band is working properly.	
ᅙ (5GHz Wireless)	Off	The wireless 5GHz band is disabled.	
	Green	The router is connected to the Internet.	
ン (Internet)	Orange	The WAN port is connected, but there is no Internet connection.	
	Off	The WAN port is not connected.	

Name	Status	Indication
	On	At least one LAN port is connected.
다 (LAN)	Off	No LAN port is connected.
	On	The USB device is identified and ready to use.
Ф (USB)	Flashing	The USB device is being identified.
4 (038)	Off	No USB device is plugged into the USB port or the USB device is not identified or USB device has been safely ejected.
	On/Off	Turns On when a WPS synchronization is established and automatically turns Off about 5 minutes later.
<b>(</b> WPS)	Flashing	A wireless device is trying to connect to the network via WPS. This process may take up to 2 minutes.

## **LED Explanation**

## 1.3.2. The Back Panel



The router's back panel shows the connection ports, buttons and antennas (view from left to right). Refer to the following for detailed instructions.

ltem	Description
Wi-Fi Button	Press this Wi-Fi button for about 2 seconds to turn on or off the wireless function of your router.

ltem	Description
WPS/Reset	Used as WPS button: Pressing this button for less than 5 seconds enables the WPS function. If your client devices, such as wireless adapters, that support Wi-Fi Protected Setup, then you can press this button to quickly establish a connection between the router and client devices and automatically configure wireless security for your wireless network. Used as RESET button: Press and hold this button for more than 5 seconds to reset
	the router.
Internet Port	This port is where you'll connect to the DSL/Cable modem, or Ethernet.
LAN1, LAN2, LAN3, LAN4	These ports (1, 2, 3, 4) connect the router to the local PC(s).
USB 2.0	For connecting to a 2.0 USB storage device or a 2.0 USB printer.
Power On/Off Button	Press this button to power on or off the router.
Power	For connecting the router to power socket via the provided power adapter.

# Chapter 2

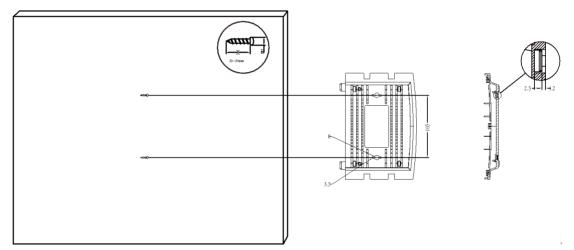
# **Connect the Hardware**

This chapter contains the following sections:

- Position Your Router
- Connect Your Router

# 2.1. Position Your Router

- The Product should not be located where it will be exposed to moisture or excessive heat.
- Place the router in a location where it can be connected to the various 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 away from the strong electromagnetic radiation and the device of electromagnetic sensitive.



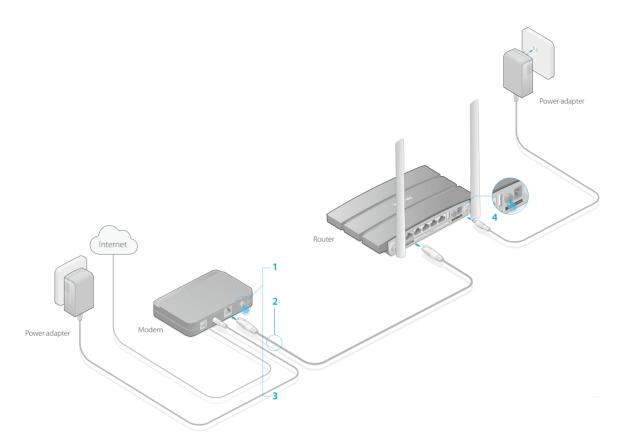
#### Note:

# 2.2. Connect Your Router

Follow the steps below to connect your router.

1. If your Internet connection is through an Ethernet cable from the wall instead of through a DSL / Cable / Satellite modem, connect the Ethernet cable directly to the router's Internet port, then follow steps 4 and 5 to complete the hardware connection.

The diameter of the screw ranges from 3.5 mm to 8 mm, and the distance between two screws is 105 mm. The screw that projects from the wall needs around 4.5 mm base, and the length of the screw needs to be at least 20 mm to withstand the weight of the product.



- 1) Turn off the modem, and remove the backup battery if it has one.
- 2) Connect the modem to the Internet port on your router with an Ethernet cable.
- 3) Turn on the modem, and then wait about 2 minutes for it to restart.
- 4) Turn on the router.
- 5) Verify that the hardware connection is correct by checking these LEDs.

	<u> </u>		9
Power	2.4G	5G	Internet
On	On	On	On (Green)

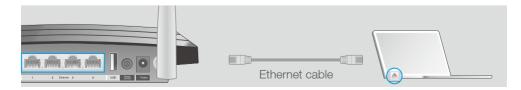
Note:

If the 2.4G LED ? and 5G LED ? are off, please press the Wi-Fi On/Off button on the side panel for 2 seconds and check the LEDs again in a few seconds later.

### 2. Connect your computer to the router.

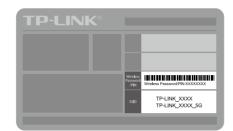
### Method 1: Wired

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



### Method 2: Wirelessly

Connect wirelessly by using the SSID (Network Name) and Wireless Password/PIN printed on the product label at the bottom of the router.



### Method 3: Use the WPS button

Wireless devices that support WPS, including Android phones, tablets, most USB network cards, can be connected to your router through this method.(WPS is not supported by IOS devices.)

Note:

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.

### 2. Immediately press the WPS button on your router.



Chapter 3

# Log into Your Router

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

Follow the steps below to log into 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 log in with the username and password you've set for the router. The default one is admin for both username and password.

$\leftrightarrow \rightarrow \mathbf{C}  \mathbf{n}$ 🗋 http://tplinkwifi.net	=
TP-LINK	
Andre 116	
	Password
	Login

#### Note:

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

## Chapter 4

# Set Up Internet Connections

This chapter introduces how to connect your router to the Internet. The router is equipped with a web-based Quick Setup wizard. It has many 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 provided IPv6 service.

This chapter contains the following sections:

- Quick Setup
- Manually Configure Your Internet Connection Settings
- Setting Up an IPv6 Internet Connection

# 4.1. Quick Setup

The Quick Setup Wizard will guide you through the process to set up your router to access the Internet.

Tips:

If you need the IPv6 Internet connection, please refer to the section of "4. 3. Setting Up an IPv6 Internet Connection".

Follow the steps below to set up your router to access the Internet.

- 1. Visit *http://tplinkwifi.net*, and log in with the password you set for the router.
- 2. Go to *Quick Setup* on the top of the page.
- 3. Select your Time Zone from the drop-down list and click Next.

Intern	et Connection	Туре	Wireless Setting		Connectio	n Test
Time Zone	•	•	•			
Time Zone				Summary		
Time Zone:		(GMT-08:00) Pacifi	c Time (US & Canada);	; Tijuana		•
					Exit	Next

#### 4. Click Auto Detect and the router will detect your connection type automatically. Note:

You can also choose the connection type manually. If you use DSL line and you are only provided an account name and a password by your ISP, choose PPPoE. If you use cable TV or fiber cable, choose Dynamic IP. If you are provided more information such as IP address, Subnet Mask and Default Gateway, choose Static IP. Contact your ISP if you are not sure about the Internet connection information.

Internet Connection Type	Wireless Setting	Connection	Test
ime Zone	Summary		
Auto Detect			
Dynamic IP			
○ Static IP			
O PPPoE			
O L2TP			
О рртр			
Note: If you are not sure which Internet Conne Provider (ISP) for assistance.	ection Type you have, use Auto Detect or contact	your Internet Se	ervice
		Back	Next

5. In this case, the router automatically detects Dynamic IP as the connection type. Click Next.

Internet Connection Type	Wireless Setting	Connection Test
• • •		
n and Time Zone	Summar	У
Auto Detect Detecting		
Oynamic IP		
O Static IP		
O PPPoE		
O L2TP		
○ рртр		
Note: If you are not sure which Internet Connec Provider (ISP) for assistance.	ction Type you have, use Auto Detect or co	ntact your Internet Service
		Back Next

6. Follow the instructions on the page to decide whether to clone MAC Address. Click Next.

Internet Connection Type	Wirel	ess Setting		Connection Test
•	-0	•		
Time Zone			Summary	
If your ISP only allows Internet access to a other devices. If you are not sure, select D      Do NOT clone MAC Address      Clone Current Computer MAC Address, pluster: If you select Clone MAC Address, pluster clicking Next.	o NOT clone MAC Address	5.		

7. Configure your wireless settings and click Next.

Internet Connection Type	Wireless Set	ting	Connection	Test
• •	• •			
Time Zone		Summary		
You can rename your wireless net	work name and create your own pa	assword.		
Wireless 2.4GHz:	🗹 Enable Wireless Radio			
Wireless Network Name (SSID):	TP-LINK_0507			
Password:	12345670			
Wireless 5GHz:	Enable Wireless Radio			
Wireless Network Name (SSID):	TP-LINK_0507_5G			
Password:	12345670			
			Back	Next

#### Note:

You may customize your 2.4GHz/5GHz SSID and password. Once done, the wireless connection will disconnect automatically, and you must then use the new SSID/password to regain access to the Internet.

#### 8. Confirm the information and click Save.

Internet Connection Type	Wireless Setting	Connection Test	
Time Zone	Sun	Imary	
Time Zone: Internet Connection Type:	(GMT-08:00) Pacific Time (US & Canada); Tijuana Dynamic IP		
Wireless 2.4GHz: Wireless Network Name (SSID): Password:	Enabled TP-LINK_0507 12345670		
Wireless 5GHz: Wireless Network Name (SSID): Password:	Enabled TP-LINK_0507_5G 12345670		
		Back S	Save

9. Click Test Internet Connection. If you successfully connect to the Internet, the screen will display as follows.

Internet Conne	ection Type	Wireless Settings	_	Test TInternet Connection
Time Zone			Summ	ary
Congratulatic You have completed th Click Test Internet Con		Success! Click Finish to end the Quick Setup process.	8	
→ <u>Test Internet Connec</u>		ОК		Finish

#### 10. Now your computer and WiFi device can connect to the Internet! <sup>®</sup>Tips:

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

# 4.2. Manually Configure Your Internet Connection Settings

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 the password you set for the router.
- 2. Go to *Basic* > *Internet* on the left to enter the setting page.
- 3. Select your Internet connection type from the drop-down list.

Internet Connection Setup					
Auto Detect					
Internet Connection Type:	Dynamic IP	•			

#### Note:

If you are unsure what your connection type is, click Auto Detect. Since different connection types need different cables and connection information, you can also refer to the demonstrations in Step 4 to judge 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 cable TV or fiber cable.

Internet Connection Setup					
Auto Detect					
Internet Connection Type:	Dynamic IP	•			
Do NOT Clone MAC Address					
O Clone Current Computer MAC	C Address				
				Save	

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

Internet Connection Setup						
Auto Detect						
Internet Connection Type:	Static IP 🔹					
IP Address:	192.168.203.218					
Subnet Mask:	255.255.255.0					
Default Gateway:	192.168.203.219					
Primary DNS:	192.168.203.254					
Secondary DNS:	192.168.202.254	(Optional)				
			Save			

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

Internet Connection Setur	)	
Auto Detect		
Internet Connection Type:	PPPoE 🔻	
Username:	075504673554@163.gd	
Password:	•••••	
		Save

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.

Internet Connection Se	etup		
Auto Detect			
Internet Connection Type:	L2TP		•
Username:			
Password:			
Secondary Connection:	Oynamic IP	Static IP	
Server IP Address/Name:			

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

Internet Connection S	etup
Auto Detect	
Internet Connection Type:	РРТР
Username:	pptp
Password:	•••••
Secondary Connection:	Oynamic IP O Static IP
Server IP Address/Name:	

5. Click Save to make the settings take effect. To check your Internet connection, click Network Map on the left of the page.

#### Note:

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

6. After the connection succeed, the screen will display as follows. Here we take PPPoE as an example.

Inte	ernet	Route	2.4GHz 5GHz
Wireless Clients	Wired Clients	Printer	USB Disk
Internet			
Internet Status:	Connected		
Connection Type:	Dynamic IP		
Internet IP Address:	192.168.1.122		
DNS:	192.168.1.1 0.0.0.0		
Gateway:	192.168.1.1		

#### Ø Tips:

- 1. If your Internet connection type is Bigpond Cable, please go to Advanced > Network > Internet.
- 2. If you use Dynamic IP and PPPoE and you are provided any other parameters that are not required on the page, please go to Advanced > Network > Internet to complete the configuration.
- 3. If you still cannot connect to the Internet, refer to FAQ for further instructions.

## 4.3. Setting Up an IPv6 Internet Connection

Your ISP provides information about one of the following Internet connection types: PPPoE, Dynamic IP, Static IP, 6to4 tunnel.

- 1. Visit *http://tplinkwifi.net*, then log in with the password you set for the router.
- 2. Go to *Advanced* > *IPv6* to log into the configuration page.

IPv6 Internet		
Enable IPv6:		
Internet Connection Type:	Dynamic IP 🔹	
IPv6 Address:		
IPv6 Default Gateway:		
Addressing Type:	DHCPv6	
Advanced		
O Advanced		Save
Advanced		Save
⊘ Advanced IPv6 LAN		Save
0	RADVD O DHCPv6 Server	Save
IPv6 LAN	RADVD O DHCPv6 Server     Enable RDNSS	Save
IPv6 LAN		Save
IPv6 LAN	Enable RDNSS	Save
IPv6 LAN Address Type:	<ul> <li>Enable RDNSS</li> <li>Enable ULA Prefix</li> <li>Delegated          Static</li> </ul>	Save
IPv6 LAN Address Type: Site Prefix Type:	<ul> <li>Enable RDNSS</li> <li>Enable ULA Prefix</li> <li>Delegated          Static</li> </ul>	Save

3. Select the Internet connection type provided by ISP.

IPv6 Internet	
Enable IPv6:	
Internet Connection Type:	Dynamic IP
IPv6 Address:	Dynamic IP
IPv6 Default Gateway:	Static IP
Addressing Type:	PPPoE
Optimized	6to4 Tunnel
O Advanced	

#### Tips:

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

- 4. Fill in information as required by different connection type. (IPv6 Address must be filled.)
  - 1) Static IP: Fill in blanks and click Save.

IPv6 Internet		
Enable IPv6:		
Internet Connection Type:	Static IP	•
IPv6 Address:	::	
IPv6 Default Gateway:	::	(optional)
Primary IPv6 DNS:	::	(optional)
Secondary IPv6 DNS:		(optional)
🖂 Advanced		
-		Save

2) Dynamic IP: Click Advanced to have more configuration if ISP requires. Click Save to finish the configuration.

IPv6 Internet		
Enable IPv6:		
Internet Connection Type:	Dynamic IP	•
IPv6 Address:	::	
IPv6 Default Gateway:	::	
Addressing Type:	DHCPv6	•
⊘ Advanced		

3) PPPoE: Fill in the Username and Password, and select the Addressing Type. Click Advanced to have more configuration if ISP requires. Click Save to finish the configuration.

IPv6 Internet		
Enable IPv6:		
Internet Connection Type:	PPPoE	
Username:		
Password:		
Confirm password:		
Addressing Type:	DHCPv6	•
⊘ Advanced		

4) 6to4 Tunnel: An IPv4 Internet connection type is a prerequisite for this connection type. (Go to *Manually Configure Your Internet Connection Settings* for more information.) Click Save to finish the configuration.

IPv6 Internet					
Enable IPv6:					
Internet Connection Type:	6to4 Tunnel	•			
WAN Connection	No available interface				

# 5. Configure the IPv6 LAN settings. Leave the settings as default, and click Save to save the settings.

#### Tips:

Find Help on the management interface to know more about items.

IPv6 LAN	
Address Type:	RADVD O DHCPv6 Server
	Enable RDNSS
	Enable ULA Prefix
Site Prefix Type:	Delegated      Static
Prefix Delegated WAN Connection:	ewan_ipoev6_d
	Save

6. Click Status to check whether you succeed or not. The following figure is an example of a successful PPPoE configuration.

internet 🥑	IPv4   IPv6
MAC Address:	00-0A-EB-AC-25-01
IP Address:	2001:c68:202:2111::120/ 64
Default Gateway:	fe80::edd0:80d2:7f5e:6be 7
Primary DNS:	2001:c68:202:2111::1
Secondary DNS:	2001:c68:202:2111::2
Connection Type:	PPPoE

Tips:

Visit FAQ if there is no Internet connection.

## Chapter 5

# **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 limit the network authorities for guests to ensure network security and privacy.

This chapter contains the following sections:

- Create Guest Network
- Customize Guest Network Options

## 5.1. Create Guest Network

- 1. Visit *http://tplinkwifi.net*, and log in with the username and password you set for the router.
- 2. Go to Advanced > Guest Network.
- 3. Create a 2.4GHz or 5GHz guest network according to your needs.
  - 1) Enable Wireless Network 2.4GHz or Wireless Network 5GHz.
  - 2) Set an easy-to-identify SSID. Don't select Hide SSID unless you want your guests and other people to manually input this SSID for Wi-Fi access.
  - 3) Set Security to WPA/WPA2 Personal, keep the default Version and Encryption values, and set an easy-to-remember Password.

Wireless Settings		
Wireless 2.4GHz:	☑ Enable Wireless Radio	
Wireless Network Name (SSID):	TP-LINK_Guest_0507	Hide SSID
Security:	○ No Security	ersonal
Version:	O Auto 💿 WPA2-PSK	
Encryption:	O Auto O TKIP 💿 AES	
Password:		
Wireless 5GHz:	🗹 Enable Wireless Radio	
Wireless Network Name (SSID):	TP-LINK_Guest_0507_5G	Hide SSID
Security:	No Security O WPA/WPA2 Pe	ersonal
		Save

4. Click Save. Now your guests can access your guest network using the SSID and password you set!

Ø Tips:

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

# 5.2. Customize Guest Network Options

- 1. Visit *http://tplinkwifi.net*, and log in with the password you set for the router.
- 2. Go to Advanced > Guest Network.
- 3. Customize guest network options according to your needs.

Settings						
See each other:	☑ Allow guests to see	e each other				
Access my local network:	Allow guests to access my local network					
USB Storage Sharing: 🗹 Allow guests to access my USB storage sharing						
Bandwidth Control: 🗹 Enable guest network bandwidth control						
Egress Rate (kbps):	100	- 200				
Ingress Rate (kbps):	- 200					
		Sav	e			

#### Allow guests to see each other

Select this checkbox if you want to allow the clients in your guest network to access each other.

Allow guests to access my local network

Select this checkbox if you want to allow the clients in your guest network to access your local network, not just Internet access.

Allow guests to access my USB storage sharing

Select this checkbox if you want to allow the clients in your guest network to access your router's USB storage sharing.

#### • Enable guest network bandwidth control

Select this checkbox if you want to assign the upstream and downstream bandwidth for the guest network. This option is available only when Bandwidth Control is enabled on the *Advanced* > *Bandwidth Control* page.

4. Click Save. Now users in your guest network can enjoy only the network authorities you assigned!

Ø Tips:

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

## Chapter 6

# **USB** Application

This chapter describes how to share and access USB devices connected to the router among different clients.

The router only supports USB external flash drives, hard drives, USB printers and USB 3G/4G modems.

This chapter contains the following sections:

- Local Storage Sharing
- Remote Access via FTP Server
- Media Sharing
- Printer Sharing

## 6.1. Local Storage Sharing

Share your USB storage devices with different users on the network.

## 6.1.1. Access the USB Disk

### 1. Connect Your USB Disk

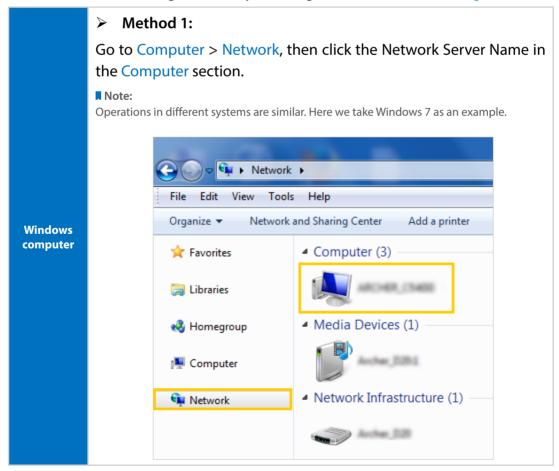
Insert your USB storage device into the router's USB port directly or using a USB cable. Wait several seconds until the USB LED becomes solid on.

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 or NTFS.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Go to Advanced > USB Settings > Disk Settings and click

### 2. Access Your USB Disk

By default, all the network clients can access all folders on your USB disk. Refer to the following table for access instructions. You can also customize your sharing content and set a sharing account by referring to *Customize Your Settings*.



	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].						
Windows computer	The second secon						
	File Edit View Tools Help						
	Organize 🔻 Include in library 💌						
	1) Select Go > Connect to Server						
	2) Type the server address smb://tplinkwifi.net						
	3) Click Connect.						
	Connect to Server						
	Server Address:       smb://tplinkwifi.net     + O •						
	Favorite Servers:						
Мас							
	? Remove Browse 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.)						
Pad	Use a third-party app for network files management.						

### Ø Tips:

You can also access your USB disk by using your Network/Media Server Name as the server address. Refer to *To Customize the Address of the USB Disk* to learn more.

## 6.1.2. Customize Your Settings

### > To Only Share Specific Content

By default, Share All is enabled so all content on the USB disk is shared. If you want to only share specific folders, follow the steps below:

- 1. Visit *http://tplinkwifi.net*, then log in with the username and password you've set for the router.
- 2. Go to Basic > USB Settings > Folder Sharing. Focus on the Folder Sharing section.
- 3. Click the button to disable Share All, then click Add to add a new sharing folder.

	Folder Sharing								
	Share All:								
		ID	Folder Name		Folder Path	Media Sharing	Volume	Status	Modify
	V	olume	Name:		Select a folder		•		
	Folder Path: Folder Name:		Browse			Browse			
				Enable Write Access					
			Enable Media Sl	haring					
							Canc	el	ок

- 4. Select the Volume Name and Folder Path, then enter a Folder Name as you like.
- 5. Decide the way you share the folder:
  - Enable Authentication: If you tick this check box, you will be required to use a username and password to access the folder. Refer to *To Set up Authentication for Data Security* to learn more.
  - Enable Write Access: If you tick this check box, network clients can modify the folder.
  - Enable Media Sharing: If you tick this check box, you can view photos, play music and watch movies in the folder directly from DLNA-supported devices. Refer to *Media Sharing* to learn more.

6. Click OK.

#### Ø Tips:

The router can share 14 volumes at most. You can click Q on the page to detach the corresponding volume you do not need to share.

USB Storage Device				
Safely Remove				
ID	Volume Name	Capacity	Free Space	Active
1	sda1	1.9 GB	569.2 MB	S

### > To Set up Authentication for Data Security

If you enable Authentication, network clients will be required to enter the username and password you set when accessing the USB disk.

- 1. Visit *http://tplinkwifi.net*, then log in with the username and password you've set for the router.
- 2. Go to Advanced > USB Settings > Folder Sharing. Focus on the Sharing Account section.

Sharing Account				
Prepare an account for sha	aring contents. You can use the login account or create a new one.			
Account:	Use Default Account			
	O Use New Account			
Username:	admin			
Password:	(Same as Login Password)			
	Save			

- 3. Choose Use Default Account (admin) or Use New Account and click Save.
- 4. Enable Authentication to apply the account you just set.
  - If you leave Share All enabled, click the button to enable Authentication for all folders.

Folder Sharing	
Share All:	
Enable Authentication:	

• If Share All is disabled, enable Authentication for specific folders.

F	Folder Sharing										
Share All:								¢	🕈 Add 😑 Delete		
	ID     Folder Name           Volume Name:			Folder Path	Media Sharing	Volume	Status	Modify			
				Select a folder	•						
	Fo	older F	Path:					Browse			
	Fo	older I	Name:	_							
					🗹 Enable Authent	tication					
					Enable Write A	ccess					
					Enable Media Sharing						
							Canc	el	ок		

#### Note:

Due to Windows credential mechanism, you might be unable to access the USB disk after changing Authentication settings. Please log out from Windows and try to access again. For more details, please refer to FAQ.

### > To Customize the Address of the USB Disk

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

- 1. Visit *http://tplinkwifi.net*, then log in with the username and password you've set for the router.
- 2. Go to Advanced > USB Settings > Folder Sharing. Focus on the Sharing Setting section.
- 3. Make sure Network Neighborhood is ticked, and enter a Network/Media Server Name as you like, such as My-Share, then click Save.

Sharing Setti	ng			
Network/Media Se	erver Name:	My-Share		
Enable	Access	Method	Link	Port
	Media	Server		
	Network No	eighborhood	\\My-Share	
	F	ТР	ftp://192.168.0.1:21	21
	FTP(via	Internet)	ftp://0.0.0.0:21	21

**3.** Now you can access the USB disk by visiting \\My-Share (for Windows) or smb:// My-Share (for Mac).

### 6.2. Remote Access via FTP Server

You can access your USB disk outside the local area network.

### For example:

- 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.

### 6.2.1. Access the USB Disk

### 1. Connect Your USB Disk

Insert your USB storage device into the router's USB port directly or using a USB cable. Wait several seconds until the USB LED becomes solid on.

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 or NTFS.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Select Advanced > USB Settings > Disk Settings and click Safely Remove.

### 2. Enable Authentication for Data Security

It is strongly recommended that you set and apply a sharing account for data security.

- 1) Visit *http://tplinkwifi.net*, then log in with the username and password you've set for the router.
- 2) Go to Advanced > USB Settings > Folder Sharing. Focus on the Sharing Account section.
- 3) Choose to Use default Account (admin) or Use New Account and click Save.

Sharing Account		
Prepare an account for sharin	ng contents. You can use the login a	account or create a new one.
Account:	Ose Default Account	
	O Use New Account	
Username:	admin	
Password:	•••••	(Same as Login Password)
		Save

- 4) Enable Authentication to apply the sharing account.
- If you leave Share All enabled, click the button to enable Authentication for all folders.

Folder Sharing										
Share All:										
Enable Authentication:										

• If Share All is disabled, enable Authentication for specific folders.

F	Folder Sharing											
Share All:								e	🕽 Add 😑 Delete			
	ID     Folder Name           Volume Name:			Folder Path	Media Sharing	Volume	Status	Modify				
				Select a folder								
	Fo	older F	Path:					Browse				
	Fo	older M	Name:									
		🗹 Enable Authentic			ication							
					Enable Write Ad	ccess						
				🗌 Enable Media S	haring							
							Cano	el	ОК			

3. Enable the FTP (via Internet)

Select the check box to enable FTP (via Internet), then click Save.

etwork/Media Se	erver Name:	My-Share		
Enable	Access	Method	Link	Port
	Media	Server	rver	
	Network Ne	eighborhood	\\My-Share	
	F	ТР	ftp://192.168.0.1:21	21
	FTP(via ]	internet)	ftp://0.0.0.0:21	21

### 4. Access Your USB Disk via Internet

Now different clients with Internet connection can access the USB disk:

	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 address="" ip="" of="" router="" the="">:<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&gt;:<port number=""> (such as ftp://MyDomainName:21)</port></domain </port></wan>								
Computer	<b>ftp://59.40.2.243:21</b>								
	File Edit View Tools Help								
	Organize 👻 Include in library 💌								
	The Address Bar of the Windows Explorer (Windows 7)								
	3) Press [Enter] on the keyboard.								
	4) Access with the username and password you've set in <i>Step 2</i> Enable Authentication for Data Security.								
	<b><i>©</i> Tips:</b> You can also access the USB disk via a third-party app for network files management, which can resume broken file transfers.								
Pad	Use a third-party app for network files management.								

Ø Tips:

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

### 6.2.2. Customize Your Settings

### > To Only Share Specific Content

By default, Share All is enabled so all content on the USB disk is shared. If you want to only share specific folders, follow the steps below:

- 1. Visit *http://tplinkwifi.net*, then log in with the username and password you've set for the router.
- 2. Go to Basic > USB Settings > Folder Sharing. Focus on the section of Folder Sharing. Click the button to disable Share All, then click Add to add a new sharing folder.
- 3. Select the Volume Name and Folder Path, then specify the Folder Name as you like.
- 4. Tick Enable Authentication. If you allow network clients to modify this folder, Tick Enable Write Access.

F	Folder Sharing									
0	Share All	l:						¢	🕁 Add 😑 Delete	
		ID	Folder Name		Folder Path	Media Sharing	Volume	Status	Modify	
	Volume Name:			Select a folder						
	Fo	older F	Path:					Browse		
	Fo	older M	Name:							
					🗹 Enable Authent	ication				
					☑ Enable Write Access					
				🗌 Enable Media Sl	haring					
						Canc	el	ок		

### 5. Click OK.

#### Ø Tips:

The router can share 14 volumes at most. You can click Q on the page to detach the corresponding volume you do not need to share.

USB Storage Device											
Scan	Scan										
Kingston DataTo	aveller G2			Safely Remove							
ID	Volume Name	Capacity	Free Space	Active							
1	sda1	1.9 68	569.2 HB	S							

### 6.3. Media Sharing

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

### 6.3.1. Access the USB Disk

### 1. Connect Your USB Disk

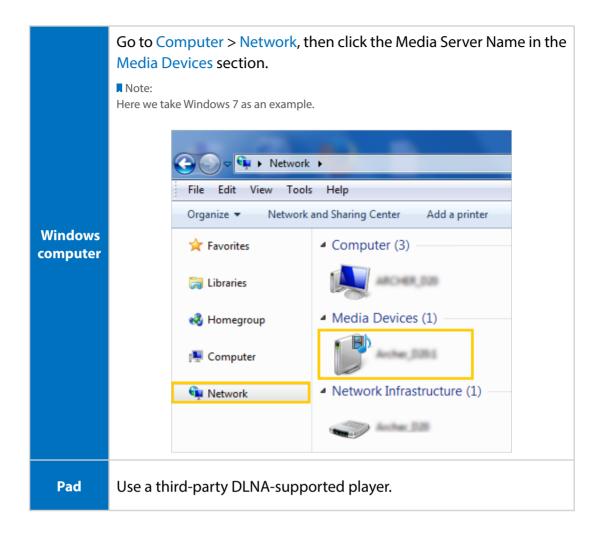
Insert your USB storage device into the router's USB port directly or using a USB cable. Wait several seconds until the USB LED becomes solid on.

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 or NTFS.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Go to Advanced > USB Settings > Disk Settings and click Safely Remove.

### 2. Play the Media on Your USB Disk

Now the DLNA-supported devices (such as your computer and pad) connected to the router can detect and play the media files on the USB disks.



### 6.3.2. Customize Your Settings

### > To Only Share Specific Content

By default, Share All is enabled so all content on the USB disk is shared. If you want to only share specific folders, follow the steps below:

- 1. Visit *http://tplinkwifi.net*, then log in with the username and password you've set for the router.
- 2. Go to Basic > USB Settings > Folder Sharing. Focus on the Folder Sharing section.
- 3. Click the button to disable Share All, then click Add to add a new sharing folder.
- 4. Select the Volume Name and Folder Path, then enter a Folder Name as you like.
- 5. Tick Enable Media Sharing and click OK.

I	Folder Sharing										
Share All:								¢	🗗 Add 😑 Delete		
	ID     Folder Name           Volume Name:			Folder Path	Media Sharing	Volume	Status	Modify			
				Select a folder 🔹 🔻							
	Fo	older F	Path:					Browse			
	Fo	older M	Name:								
					Enable Authent	ication					
					Enable Write Access						
				🗹 Enable Media Sł	naring						
							Canc	el	ок		

#### Ø Tips:

The router can share 14 volumes at most. You can click Q on the page to detach the corresponding volume you do not need to share.

USB Storage Device												
Scan												
Kingston DataTo	Safely Remove											
ID	Volume Name	Capacity	Free Space	Active								
1	sda1	1.9 68	569.2 MB	Q								

### 6.4. Printer Sharing

The Printer Sharing feature helps you share a printer with different computers connected

#### to the router.

#### Note:

Printers unlisted on this page may be incompatible with the router: *http://www.tp-link.com/compatible/print-server/*.

#### 1. Install the Driver of the Printer

Make sure you have installed the driver of the printer on each computer that needs printer service.

If you do not have the driver, contact the printer manufacturer.

### 2. Connect the Printer

Cable a printer to the USB port with the USB cable. Wait several seconds until the USB LED becomes solid on.

### 3. Install the TP-LINK USB Printer Controller Utility

TP-LINK USB Printer Controller Utility helps you access the shared printer. Download and install the utility on each computer that needs printer service.

- 1) Visit http://www.tp-link.com/app/usb/.
- 2) Click PC Utility (for Windows users) or Mac Utility to download the installation file and uncompress it.



3) Open the uncompressed folder, then click TP-LINK USB Printer Controller Setup (for Windows users) or TP-Link UDS Printer Controller Installer (for Mac users) to install the utility.

### 4. Access the Printer

You should set the shared printer as Auto-Connect Printer on every computer that needs printer service.



- 1) Double-click the icon an your desktop to launch the USB Printer Controller.
- 2) Highlight the printer you share.

÷	🛹 TP-LINK USB Printer Controller									
Sys	System Tools About									
	Configure Server	Auto-Connect for Printing	Connect for Scanning	<b>P</b> Disconnect	Request to Connect					
		P - MG6200	D series							

Windows

00	TP-Link USB Printer Controller
🏠 🚵 🕰 💥 🚷	
V 10-WEDRO - 192 168 1.1	
🍓 MFP - 🛛 - MG6200 series	
	Мас

3) Click the Auto-Connect for printing tab to pull down a list, then select Set Auto-Connect Printer.

-	TP-LINK USB P	rinter Controller				
S	ystem Tools	About				
	Configure Server	Auto-Connect	Connect for	Disconnect for	Request to Connect	
	🦢 Mr.	-	Connect Printer			

Windows

OOO	TP-Link USB Printer Controller		
▼ <>	+ Set Auto-Connect Printer		
9	+ Set Auto-Connect Printer		
	- Delete Auto-Connect Printer		
		Close	

Mac

4) Select the printer you share, then click Apply.

🛹 Add to Auto-Cor	Add to Auto-Connect Printer List					
	< Installed Printer List >					
Printer Name						
Fax	series Printer <mark>recommended</mark>					
	Apply	Cancel				
	Windows					
000	TP-Link USB Printer Controller					
🏠 🊵 🔁 🗶						
V 🖉	Add to Auto-Connect Printer List					
	Installed Printer List					
	10.10.180					
	series					
	Stylus Photo 720-f97c12 1000 J110 series					
	1000 J110 series-1					
	Apply Cancel					

Mac

5) You will see the printer marked as Auto-Connect Printer. Now you can print with this printer.

🛹 TP-LINK USB	Printer Control	ller				
System Tools	Help					
Configure Server	Auto-Connect for Printing	Connect for Scanning	<b>P</b> Disconnect	Request to Connect		
MFP - series [Auto-Connected Printer]						
		Wind	dows			
0 0		TP-Link USB Pr	inter Controller			
🐔 🚵 🔁 🛣 🎨						
MFP - series [Auto-Connected Printer]						
Мас						

#### Ø Tips:

The Print Server also allows different clients to share the scan feature of MFPs (Multi-Function Printers). To scan with TP-LINK USB Printer Controller, right-click the printer and select Network Scanner. Then, a scanning window will pop up. Finish the scanning process by following the on-screen instructions.

Chapter 7

## **Parental Control**

This function allows you to block inappropriate, explicit and malicious websites, and controls access to specified websites at specified time.

do that?

Control what types of websites my children or other home I want to: network users can visit and even the times of day they are allowed to access the Internet.

> For example, I want to allow my children's devices (e.g. a computer or a tablet) to access only www.tp-link.com and Wikipedia.org from 18:00 (6PM) to 22:00 (10PM) at the weekend and not other times.

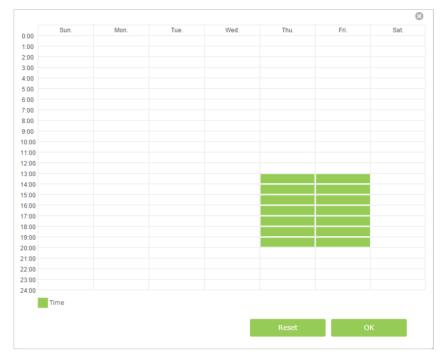
#### 1. Visit *http://tplinkwifi.net*, and log in with the username and How can I password you set for the router.

2. Go to Advanced > Parental Control and enable Parental Control.

Parental Control	
Status:	

3. Click Add. And then Click View Existing Devices, and select the access device. Or, input the Device Name and MAC Address manually.

Dev	Devices Under Parental Control							
	The Effective Time Schedule is based on the time of the Router. The time can be set in "Advanced -> System Tools -> Time Settings"							
					🕜 Refresh	Add	Delete	
	ID	Device Name	MAC Address	Effective Time	Description	Status	Modify	
	Devi	ice Name:			View Existin	g Devices		
	MAC	Address:						
	Effe	ctive Time:	Q					
	Description :							
			🗹 Enable					
					Cancel	ОК		



**4.** Click the ③ icon to set the Internet Access Time. Drag the cursor over the appropriate cell(s) and click OK.

- 5. Enter a Description for the entry. Keep the Enable checkbox selected. Click OK.
- 6. Select Whitelist as the restriction policy.



#### 🖉 Tips:

- 1. In Blacklist mode, the controlled devices cannot access any websites containing the specified keywords during the Internet Access Time period.
- 2. In Whitelist mode, the controlled devices can only access websites containing the specified keywords during the Internet Access Time period.
- **7.** Click <sup>•</sup> Add a new keyword . Enter a keyword or a website and click Save.

You can add up to 32 keywords for either Blacklist or Whitelist. Below are some sample entries to allow access.

- Enter a web address (e.g. wikipedia.org) or a web address keyword (e.g. wikipedia) to only allow or block access to the websites containing that keyword.
- Specify the domain suffix (eg. .edu or .org) to allow access only to the websites with that suffix.
- If you wish to block all Internet browsing access, do not add any keyword to the Whitelist.

Content Restriction		
Restriction	O Blacklist	
🕂 Add a new keyword		
www.google.com	•	
		Save

### Done!

Now you can control your children's Internet access according to your needs.

### Chapter 8

## **Bandwidth Control**

The Bandwidth Control feature is used to fully utilize your limit bandwidth and optimize the load respectively. With this feature enabled, you can assign a specific minimum or maximum bandwidth for each computer, thus minimizing the impact caused when the connection is under heavy load.

l want to:	Use an independent bandwidth and enjoy a good Internet experience without being affected by other users who are sharing the same router.					
	For example, my roommate and I share 512Kbps Upstream Bandwidth and 8Mbps Downstream Bandwidth via this router, she likes to watch live show and play online games, which may take up much bandwidth. I don't want to be affected, so we agree to equally distribute the bandwidth. Our IP addresses are 192.168.0.101 and 192.168.0.110.					
Tips:	Address on each comp reservation on the rou	outer to be cont Iter in order to eservation, ple	e, you'd better set static IP rolled or configure Address manage easily. About how ase refer to <i>To reserve an IP</i>			
How can I do that?	<ol> <li>Visit <i>http://tplinkwi</i>set for the router.</li> <li>Go to <i>Advanced</i> &gt; E</li> </ol>		in with the password you trol page.			
	Bandwidth Control		0			
	Bandwidth Control:	🗹 Enable				
	Total Upstream Bandwidth:	512	kbps			
	Total Downstream Bandwidth:	8192	kbps			

- 3. Enable Bandwidth Control.
- Enter the Total Upstream Bandwidth and the Total Downstream Bandwidth given by your ISP. (1Mbps=1024Kbps). Click Save to save the settings.
- **5.** Click Add to add controlling rules for each computer respectively.

							🕂 Add	😑 Dele
	Description		Priority	Up(min/n	nax)	Down(min/max)	Enable	Modif
IP R	Range:	192	.168.0.3	101	-	192.168.0.101		
Port	t Range:	1			-	65535		
Prot	tocol:	ALL		•				
Prio	rity:	5		<b>▼</b> (1)	mean	s the highest prior	rity.)	
Ups	tream:	250	)		to	500		
Dov	vnstream:	200	0		to	4000		
		🗹 Ena	able this	entry				
						Cancel	ОК	

- IP Range: Enter the IP address. The field can be single IP address or IP address range according to your demands. When you configure the single IP address, the computer with this IP address will get independent given bandwidth. When you configure the IP address range, all computers in the range will share the given bandwidth.
- 2) Port Range: Keep the default settings. The default port range of TCP protocol or UDP protocol is from 1 to 65535.
- 3) Protocol: Keep the default setting. Or you can choose the TCP protocol or UDP protocol or both of them.
- 4) Priority: Keep the default setting. You can change the value if you want to first guarantee the bandwidth for one computer. The smaller value has the higher priority.
- 5) Upstream/Downstream: Enter the bandwidth according to your division.
- 6) Check to enable this entry and click OK to save the settings.

**6.** Follow the steps above to add a rule for the other computer. And then you will get the following table.

Controlling Rules						
					🔂 Add	😑 Delete
	Description	Priority	Up(min/max)	Down(min/max)	Enable	Modify
	192.168.0.110	5	250/500 kbps	2000/4000 kbps	Q	20
	192.168.0.101	5	250/500 kbps	2000/4000 kbps	Q	20

Done!

Now you and your roommate have an independent bandwidth.

### 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 protect your home network against DoS (Denial of Service) attacks from flooding your network with server requests using DoS Protection, 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 function.

This chapter contains the following sections:

- Protect the Network from Cyber Attacks
- Access Control
- IP & MAC Binding

### 9.1. Protect the Network from Cyber Attacks

The SPI (Stateful Packet Inspection) Firewall and DoS (Denial of Service) Protection protect the router from cyber attacks.

The SPI Firewall can prevent cyber attacks and validate the traffic that is passing through the router based on the protocol. This function is enabled by default, and it's recommended to keep the default setting.

DoS Protection can protect your home network against DoS attacks from flooding your network with server requests. Follow the steps below to configure DoS Protection.

- 1. Visit *http://tplinkwifi.net*, and log in with the username and password you set for the router.
- 2. Go to Advanced > Security > DDoS.

DoS Protection:		
ICMP-FLOOD Attack Filtering	Off	•
UDP-FLOOD Attack Filtering:	Off	•
TCP-SYN-FLOOD Attack Filte	ring: Off	•
	Forbid Ping Packets F	rom LAN Port
	Forbid Ping Packets F	From WAN Port
		Save
Blocked DoS Host Lis	t	
		🕝 Refresh 🗧 Delete
ID ID	IP Address	MAC Address

- 3. Enable DoS Protection.
- 4. Set the level (Off, Low, Middle or High) of protection for ICMP-FLOOD Attack Filtering, UDP-FlOOD Attack Filtering and TCP-SYN-FLOOD Attack Filtering.
  - ICMP-FLOOD Attack Filtering Enable to prevent the Internet Control Message Protocol (ICMP) flood attack.
  - UDP-FIOOD Attack Filtering Enable to prevent the User Datagram Protocol (UDP) flood attack.
  - TCP-SYN-FLOOD Attack Filtering Enable to prevent the Transmission Control Protocol-Synchronize (TCP-SYN) flood attack.

### Ø Tips:

The level of protection is based on the traffic packets number. The protection will be triggered immediately when the number of packets exceeds the preset threshold value (the value can be set on *Advanced* > *System Tools* > *System Parameters* > *DoS Protection Level Settings*), and the vicious host will be displayed in the Blocked DoS Host List.

- 5. Select Forbid Ping Packets From LAN Port if you want to ignore the ping packets from WAN port.
- 6. Select Forbid Ping Packet From LAN Port if you want to ignore the ping packets from LAN port.
- 7. Click Save to make the settings effective.

### 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 the username and password you set for the router.
- 2. Go to Advanced > Security > Access Control.

Access	Contro	bl					?
Access C	ontrol:						
Access	Mode						
Default A	ccess Mo	de: 🖲 Bla	acklist				
		O w	nitelist				
						Save	
Devices	s in Bla	acklist					
						🕀 Add 😑 Delete	
	IC	Device N	lame		MAC Address	Modify	
Device	s Onlin	e					
						🕑 Refresh  🛇 Bind	
	ID	Device Name	IP Add	dress	MAC Address	Connection Type	
	1	Unknown	192.168	3.0.123	00-04.EB 14:78:00	Wired	
	2	ARCHER, C2-5HA RE	192.168	3.0.133	00-0A-EB-C2-02-38	Wired	

- 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.
- 2) Select the device(s) to be blocked in the Devices Online table.
- 3) Click Block above the Devices Online table. The selected devices will be added to Devices in Blacklist automatically.

### To allow specific device(s)

- 1) Select Whitelist and click Save.
- 2) Click Add.

Devices	in Whitel	ist		
				🔁 Add 😑 Delete
	ID	Device Name	MAC Address	Modify
Devi	ce Name:			
MAC	Address:			
			Cancel	ок
	1	Unknown	50:E5:49:1E:06:80	

- 3) Enter the Device Name and MAC Address (You can copy and paste the information from the following list if the device is connected to your network).
- 4) 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 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 *http://tplinkwifi.net*, and log in with the username and password you set for the router.
- 2. Go to Advanced > Security > IP & MAC Binding.

8. M	IAC Bin	ding				
ndi	ing Li	st				
					🔂 Ad	d 😑 Delete
	ID	MAC Address	IP Address	Status	Enable	Modify
RP	List				🕝 Refr	esh 🚫 Bind
	List	Device Name	MAC Address	IP Address		
RP		Device Name TP-SHARE	MAC Address 00:0A:EB:13:7B:00	IP Address 192.168.0.8	Boun	d Modify
	ID				Boun 8 Unload	d Modify led 🔟
	ID 1	TP-SHARE	00:0A:EB:13:7B:00	192.168.0.8	Boun 8 Unload 33 Unload	d Modify led 🔟

- **3.** Enable IP & MAC Binding.
- **4.** Bind your device(s) according to your need.

### To bind the connected device(s)

- 1) Select the device(s) to be bound in the ARP List.
- 2) Click Bind to add to the Binding List.

#### To bind the unconnected device

1) Click Add.

				🔂 Ado	d 😑 Delete
ID	MAC Address	IP Address	Status	Enable	Modify
MAC A	ddress:				
IP Add	lress:				
		2 Enable			
			Cancel	Ok	c

2) Enter the MAC address and IP address that you want to bind.

3) Select the checkbox to enable the entry and click OK.

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

### Chapter 10

## **NAT Forwarding**

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

With forwarding feature the router can penetrate the isolation of NAT and allows the external hosts in the Internet to initiatively communicate with the devices in the local network, thus to realize some special functions.

TP-LINK router includes 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.

This chapter contains the following sections:

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

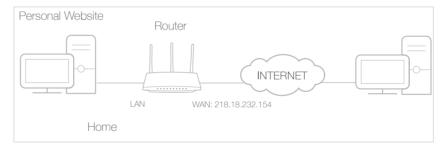
# 10.1. Share Local Resources in the Internet by Virtual Server

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

Virtual server can be used for setting up public services in your local network, such as HTTP, FTP, DNS, POP3/SMTP and Telnet. Different service uses different service port. 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 in my home PC (192.168.0.100). I hope that my friends in 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 the password you set for the router.
- 3. Go to Advanced > NAT Forwarding > Virtual Servers, click Add.

Virtu	ual S	Servers							
							e	Add 😑	Delete
	ID	Service Type	Externa Port	Internal IP	Inter Por		Protocol	Status	Modify
	Sen	vice Name:		НТТР		V	iew Existin	g Applicati	ons
	Exte	ernal Port:		80		(XX	-XX or XX)		
	Inte	ernal IP:		192.168.0.100					
	Inte	ernal Port:		80		(XX	or Blank, 1	-65535)	
	Prot	cocol:		ТСР	•				
				Enable this Entry					
					C	anc	el	ок	

- **4.** Click View Existing Services, and choose HTTP. The external port, internal port and protocol will be automatically filled with contents. Enter the PC's IP address 192.168.0.100 in the Internal IP field.
- 5. Click OK to save the settings.

#### Tips:

- 1. 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.
- 2. 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 need.
- 3. You can add multiple virtual server rules if you want to provide several services in a router. Please note that the External Port cannot be overlapped.

#### Done!

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

- Tips:
- 1. WAN IP should be a public IP address. For the WAN IP is assigned dynamically by ISP, it is recommended to apply and register a domain name for the WAN by DDNS, go to *Set Up a Dynamic DNS Service Account* for more information. Then you can use http://domain name to visit the website.
- 2. 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 in 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 and video players. Common applications include 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 the password you set for the router.
- 2. Go to *Advanced* > *NAT Forwarding* > *Port Triggering* and click Add.

Port	Trig	igering							
								🕂 Add	🖨 Delete
	ID	Application	Triggering	Port	Triggering Protocol	External Port	External Protocol	Status	Modify
	Appl	ication :		M	SN Gaming	g Zone	View Exis	ting Applic	ations
	Trigg	gering port:		47	7624		(XX)		
	Trigg	gering protocol:		т	CP	•			
	Exte	ernal Port:		23	300-2400,2	8800-29000	(XX or XX-X	(X or XX,XX	(-XX)
	Exte	ernal Protocol:		т	CP	•			
				V E	nable this E	intry			
							ancel	ОК	
							ancei	UK	

3. Click View Existing Applications, and select the desired application. The triggering port and protocol, the external port and protocol will be automatically filled with contents. Here we take application MSN Gaming Zone as an example.

### 4. Click OK to save the settings.

Ø Tips:

- 1. You can add multiple port triggering rules according to your network need.
- 2. The external ports of different rules cannot be overlapped.
- 3. One rule can only be used by one host at one time. Other hosts' request at the same time will be rejected.
- 4. At any time, one host can only use one Port Triggering rule.
- 5. 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 in the local network, it is totally exposed to the Internet, which can realize the unlimited bidirectional communication between internal hosts and external hosts. The DMZ host becomes a virtual server with all ports opened. When you are not clear about which ports to open in some special applications, like IP camera and database software, you can set the PC to be a DMZ host.

### Note:

DMZ is more applicable in the situation that users are not clear about which ports to open. When it is enabled, the DMZ host is totally exposed to the Internet, which may bring some potential safety hazard. If DMZ is not in use, please disable it in time.

l want to:	make the home restriction.	PC join the Internet online game without port
	online games, y	ue to some port restriction, when playing the rou can login normally but cannot join a team ers. To solve this problem, set your PC as a DMZ pened.
How can l do that?	<b>1.</b> Assign a st 192.168.0.10	tatic IP address to your PC, for example 0.
	<ol> <li>Visit http://tp set for the ro</li> </ol>	<i>plinkwifi.net</i> , and log in with the password you puter.
		nced > NAT Forwarding > DMZ and select the enable DMZ.
	DMZ	
	DMZ:	☑ Enable DMZ
	DMZ Host IP Address:	192.168.0.100
		Save

- **4.** Enter the IP address 192.168.0.100 in the DMZ Host IP Address filed.
- 5. Click Save to save the settings.

## **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

UPnP (Universal Plug and Play) protocol allows the 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 in the both sides of NAT device can freely communicate with each other 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. <sup>*o*</sup> Tips:

- 1. UPnP is enabled by default in this router.
- 2. Only the application supporting UPnP protocol can use this feature.
- 3. 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 the password you set for the router;
- 2. Go to *Advanced* > *NAT Forwarding* > *UPnP* and toggle on or off according to your needs.

JPnP					
JPnP:					
	Service List				Refres
		External Port	Protocol	Internal IP Address	Refres     Interna     Port

### Chapter 11

## Customize Your Network Settings

This chapter guides you on how to configure advanced networking features that are available for this router.

This chapter contains the following sections:

- Change the LAN Settings
- Configure to Support IPTV Service
- Specify DHCP Server Settings
- Set Up a Dynamic DNS Service Account
- Create Static Routes
- Specify Wireless Settings
- Use WPS for Wireless Connection
- Schedule Your Wireless Function

### 11.1. 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-based 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 the username and password you set for the router.
- 2. Go to Advanced > Network > LAN Settings page.
- 3. Type in a new IP Address appropriate to your needs.

LAN		
MAC Address:	00:02:03:04:05:07	
IP Address:	192.168.0.117	
Subnet Mask:	255.255.25.0 🔻	
IGMP Snooping:	IGMP Snooping	
		Save

- 4. Leave the Subnet Mask as the default settings.
- 5. Keep IGMP Snooping as enabled by default. IGMP Snooping is the process of listening to IGMP (Internet Group Management Protocol) network traffic. The function prevents hosts on a local network from receiving traffic for a multicast group they have not explicitly joined.

#### 6. 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 them.

### 11.2. Configure to Support IPTV Service

IPTV is the abbreviation of Internet Protocol Television. The service can only be delivered through the Internet, and our router provides a specific LAN port for IPTV.

By automatically seperating IPTV from Internet surfing, we guarantee you a high quality of vedio streaming and a high speed of Internet surfing.

I want to: Configure the router to enable Internet Protocol Television (IPTV) Services.

For example, I already bought IPTV service, but this service can only be delivered through the Internet. Therefore, I need to configure my router first.

### How can I do that?

- 1. Visit *http://tplinkwifi.net*, and log in with the username and password you set for the router.
- 2. Go to *Advanced* > *Network* > *IPTV* to open the configuration page.
- 3. Configure IPTV settings:

IPTV Settings		
IPTV:	🗹 Enable IPTV	
Mode:	Bridge	•
IGMP Proxy:	V3 <b>•</b>	
LAN1:	IPTV	•
LAN2:	Internet	•
LAN3:	Internet	•
LAN4:	Internet	•

- 1) Select the Enable IPTV check box.
- 2) Select the appropriate Mode according to your ISP. Select Bridge if your ISP is not listed and no other parameters are required, and then skip to substep 4. Select Custom if your ISP is not listed but provides necessary parameters.
- 3) After you have selected a mode, the necessary parameters are predetermined. You can perform other configuration, e.g. enter the IPTV Multicast VLAN ID and select the IPTV Multicast VLAN Priority in Russia mode according to your ISP.
- 4) select the IGMP Proxy version, either V2 or V3, according to the information provided by your ISP.
- 5) For Russia, Singapore-ExStream, Malaysia-Unifi and Malaysia-Maxis mode, connect device to the predetermined LAN port. For Bridge and Custom mode, select a LAN port as the IPTV port and connect the settop box to the corresponding port.
- 6) Click Save.

Your IPTV setup is done now! You may need other configurations

on your set-top box before enjoying your TV.

# 11.3. 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 DHCP Server if necessary, and you can reserve LAN IP address for specified client device.

- 1. Visit *http://tplinkwifi.net*, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > DHCP Server.

DHCP Server		
DHCP:	Enable DHCP	
	DHCP Server O DHCP Rela	У
IP Address Pool:	192.168.0.100 - 1	.92.168.0.199
Address Lease Time:	120	minutes(1-2880)
Default Gateway:	192.168.0.1	(optional)
Default Domain:		(optional)
Primary DNS:	0.0.0.0	(optional)
Secondary DNS:	0.0.0.0	(optional)
		Save

#### Note:

1. The router can be configured to work as a DHCP Relay. A DHCP relay is a computer that forwards DHCP data between computers that request IP addresses and the DHCP server that assigns the addresses. Each of the device's interfaces can be configured as a DHCP relay. If it is enabled, the DHCP requests from local PCs will be forwarded to the DHCP server that runs on WAN side.

#### > To specify the IP address that the router assigns:

- 1. Make sure that the Enable DHCP Server checkbox is selected.
- 2. Enter the starting and ending IP address in the IP Address Pool.
- 3. Enter other parameters if the ISP offers, the Default Gateway is automatically filled the same as the LAN IP address of the router.
- 4. Click Save to make the settings effective.

#### > To reserve an IP address for a specified client device:

1. Click the Add button.

Address I	Reservation				
				🕂 Add	🔵 Delete
	MAC Address	Reserved IP Address	Group	Enable	Modify
MAC	Address:				
Reser	rved IP Address:				
Group	p:	Default 🔻			
		Enable this entry			
			Cancel	ок	

- 2. Enter the MAC address of the device for which you want to reserve IP address.
- 3. Specify the IP address which will be reserved by the router.

#### 4. Check to Enable this entry and click OK to make the settings effective.

#### Note:

You can also appoint IP addresses within a specified range to devices of the same type by using Condition Pool feature. For example, you can assign IP addresses within the range (192.168.0.50 to 192.168.0.80) to Camera devices, thus facilitating the network management.

# 11.4. Set Up a Dynamic DNS Service Account

Most ISPs (Internet service provieders) 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 any time and you don't know when it changes. In this case, you might need 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 domain name, in no need of checking and remembering the IP address (such as 192.168.0.x) to the router.

#### Note:

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

#### To set up DDNS, please follow the instructions below:

- 1. Visit *http://tplinkwifi.net*, and log in with the username and password you set for the router.
- 2. Go to Advanced > Network > Dynamic DNS.
- 3. Select the DDNS service provider (NO-IP or Dyndns). If you don't have a DDNS account, select a service provider and click Go to register.

Dynamic DNS Settings				
Service Provider:	Dyndns O NO-IP Go to register			
Username:	lisaddns			
Password:	• • • • • • • •			
Domain Name:	lisa.ddns.net			
Login Logou	E Disconnected			
		Save		

- 4. Enter the username, password and domain name of the account (such as lisadns. ddns.net).
- 5. Click Login and click Save.

Ø Tips:

If you want to use a new DDNS account, please Logout first, then login with the new account.

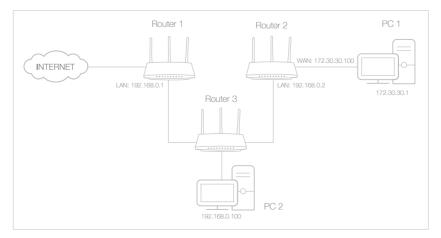
# 11.5. Create Static Routes

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 multiple servers at the same time.

For example, in a small office, my PC can surf the Internet, but I also want to visit my company's network. Now I have a switch and another router. I connect the devices as shown in the following figure so that the physical connection between my PC and my company's server is achieved. 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 router's LAN IP addresses to two different IP addresses on the same subnet. Disable Router 2's DHCP function.
- 2. Visit *http://tplinkwifi.net*, and log in with the username and password you set for the router.
- **3.** Go to Advanced > Network > Advanced Routing.
- 4. Click Add to add a new static routing entry.

	Static Route						
:e	Add 😑 Delete	¢					
	Modify	Enable	Gateway	Subnet Mask	Destination IP	ID	

#### 5. Finish the settings according to the following explanations:

Static R	oute						
						Ð	Add 😑 Delete
	ID	Destination IP	Subnet Mask	Gatew	/ay	Enable	Modify
Des	tination IP	Address:	172.30.30.1				
Sub	onet Mask:		255.255.255.255				
Gat	eway:		192.168.0.2				
Inte	erface:		LAN & WLAN	•			
Stat	tus:		Enabled	•			
					Cancel		ок
					ouncer		

Destination IP: 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 the router. In the example, the IP address of the company network is the destination IP address, so here enters 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 enters 255.255.255.255.

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 the data. In the example, the data packets will be sent to the LAN port of Router 2 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 the data packets. In the example, the data is sent to the gateway through the LAN port, so LAN should be selected.

Status: Determines the status of the entry. In the example, Enabled should be selected.

- 6. Click OK to save the settings.
- 7. Check the System Routing Table below. If you can find the entry you set in the System Routing Table, the static routing is set successfully.

System	ystem Routing Table						
				🕑 Refresh			
ID	Destination Network	Subnet Mask	Gateway	Interface			
1	172.30.30.1	255.255.255.255	192.168.0.2	LAN & WLAN			
2	192.168.2.0	255.255.255.0	0.0.0.0	LAN & WLAN			
3	192.168.0.0	255.255.255.0	0.0.0.0	LAN & WLAN			

#### Done!

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

# 11.6. 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 product label. You can customize the wireless settings according to your needs.

- 1. Visit *http://tplinkwifi.net*, and log in with the username and password you set for the router.
- 2. Go to *Basic* > *Wireless*.

Wireless Settings			
Wireless 2.4GHz:	🗹 Enable Wireless Radio		
Wireless Network Name (SSID):	TP-LINK_2642	Hide SSID	
Password:	09897717		
Wireless 5GHz:	🗹 Enable Wireless Radio		
Wireless Network Name (SSID):	TP-LINK_2642_5G	Hide SSID	
Password:	09897717		

#### > To enable or disable the wireless function of 2.4GHz or 5GHz:

The wireless radio is enabled by default, if you want to disable the wireless function of the router, just clear 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 of 2.4GHz or 5GHz:

Create a new SSID in Wireless Network Name (SSID) and customize the password for the network in Password. The default SSID is TP-LINK\_XXXX for 2.4GHz, TP-LINK\_XXXX\_5G for 5GHz, and the value is case-sensitive.

#### Note:

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

#### > To hide SSID of 2.4GHz or 5GHz:

Select Hide SSID, and your SSID will not broadcast. Your SSID won't display when you scan for local wireless network list on your wireless device and you need to manually join the network.

#### To change the security option:

1. Go to Advanced > Wireless > Wireless Settings.

Wireless Settings	2.4GHz   5GHz
Wireless Radio:	☑ Enable Wireless Radio
Wireless Network Name (SSID):	TP-LINK_0507
Security:	WPA/WPA2 Personal(Recommended)
Version:	O Auto   WPA2-PSK
Encryption:	O Auto O TKIP O AES
Password:	12345670
Mode:	802.11bgn mixed 🔻
Channel:	Auto 💌
Channel Width:	Auto 🔻
Transmit Power:	🔿 Low 🔿 Middle 🖲 High
	Save

- 2. Select the wireless network 2.4GHz or 5GHz.
- 3. Select an option from the Security dropdown list. The router provides four security options, No Security, WPA/WPA2 Personal (Recommended), WPA/WPA2 Enterprise and WEP. 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. 802.11b/g/n mixed, 802.11g/n mixed or 802.11n only for 2.4GHz; and 802.11a/n/ac mixed, 802.11n/ac mixed or 802.11ac only for 5GHz. 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.

# 11.7. Use WPS for Wireless Connection

Wi-Fi Protected Setup(WPS) gives consumers an easier approach to set up a securityprotected Wi-Fi connection.

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

#### 2. Go to Advanced > Wireless > WPS.

#### 11.7.1. Set 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.

Router's PIN	2.4GH	z   5GHz	?		
Other devices can connect to th	iis Router by WPS wi	th the Router's PIN cod	e.		
Enable Router's PIN:					
Router's PIN:	12345670	Generate	Restore		

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 labeled on the bottom of the router.
```

#### 11.7.2. Use the WPS Wizard for Wi-Fi Connections

1. Select a setup method:

• **Push Button(Recommended)**: Click the **Connect** button on the screen. Within two minutes, push the WPS button on the client device.



**PIN**: Enter the client's PIN, and click Connect.

WPS Settings			2.4GHz   5GHz
Enable WPS:			
Select a setup method:	O Push Button (Recommended)	IN Number	
Enter the client's PIN:			
Connect			

Success will appear on the above screen and the WPS LED on the router will keep on for five minutes if the client has been successfully added to the network.

# **11.8.** Schedule Your Wireless Function

You can automatically turn off your wireless network (both 2.4GHz and 5GHz) at time when you do not need the wireless connection.

- 1. Visit *http://tplinkwifi.net*, and log in with the password you set for the router.
- 2. Go to Advanced > Wireless > Wireless Schedule page.
- **3.** Select the 2.4GHz wireless network to configure. Toggle on the button to enable the Wireless Schedule feature.

		_					
/ireless	Schedule:						
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
00:00							
1:00 2:00							
2:00 3:00							
1:00							
5:00							
5:00 -							
7:00 -							
3:00							
9:00 -							
0:00							
1:00							
2:00							
3:00							
4:00							
5:00							
6:00							
7:00							
8:00							
9:00							
0:00							
1:00							
2:00							
3:00							
4:00							

# **4.** Set the time. Drag the cursor to cover the time area and click Save to make the settings effective. The selected time will be in red.

#### 5. Repeat steps 3 and 4 to set time for 5GHz wireless network.

#### Note:

- 1. If you just set time for one wireless band, the other wireless band is still always on, so set time for both of the two bands to schedule your whole wireless network.
- 2. The wireless LED (2.4GHz , 5GHz ) will turn off if the corresponding wireless network is disabled.
- 3. The wireless network will be automatically turned on after the time period you set.

# Chapter 12

# **Manage the Router**

This chapter will show you the configuration for managing and maintaining your router. This chapter includes the following sections:

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

# 12.1. 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 manually set how to get the system time.

Visit *http://tplinkwifi.net*, and log in with the username and password you set for the router. Go to *Advanced* > *System Tools* > *Time Settings*.

#### > To automatically synchronize the time:

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

Time Setting	gs	
Current time:	01/01/2000 02:52:58	
Set the time:	Get automatically from the Internet C	Manually
Time Zone:	(GMT-08:00) Pacific Time (US & Cana	ada); Tijuana 🔹 🔻
NTP Server I:	0.0.0.0	(optional)
NTP Server II:	0.0.0.0	(optional)
Obtain		
		Save

- 2. Select your local Time Zone from the drop-down menu.
- 3. In the NTP Server I fileId, enter the IP address or domain name of your desired NTP Server. (Optional)
- 4. In the NTP Server II fileld, enter the IP address or domain name of the second NTP Server. (Optional)
- 5. Click Obtion.
- 6. Click Save to make the settings effective.

#### > To manually set the date and time:

1. In the Set Time field, select Manually.

Time Settin	gs							
Current time:	01/01/2000	02:52:5	8					
Set the time:	O Get auton	natically	from th	he Ir	nternet	0	Manually	
Date:	01/01/200	00					(MM/DD/YY)	
Time:	2 🔻	: 52	•	:	58	•		
								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 make the settings effective.
- To set up Daylight Saving Time:
- 1. Select Enable Daylight Saving Time.

Daylight Savin	g							
Daylight Saving:	🗹 Enable	Daylight Sa	ving					
Start:	Mar	<b>▼</b> M	Last	•	W Sun	<b>v</b> T	02:00	•
End:	Oct	<b>▼</b> M	Last	•	W Sun	<b>v</b> T	03:00	•
							_	
							Sa	ive

- 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 to make the settings effective.

## 12.2. 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 the username and password you set for the router.
- 2. Go to Advanced > System Tools > Diagnostics.

Diagnostic Tool:	Ping     O Traceroute	
Diagnostic room	o materiolate	
IP Address/Domain Name:		

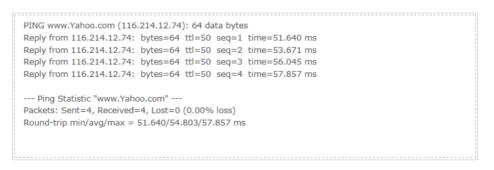
- 3. Enter the information with the help of page tips:
  - 1) Choose Ping or Traceroute as the diagnostic tool to test the connectivity;
  - Ping is used to test the connectivity between the router and the tested host, and measure the round-trip time.
  - Traceroute is used to display the route (path) 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.

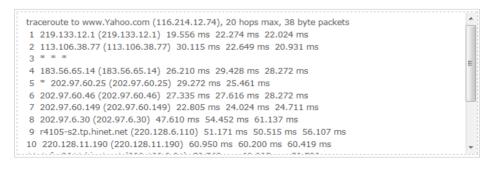
Tips:

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.



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



# 12.3. Upgrade the Firmware

TP-LINK is dedicated to improving and richening the product features, giving you a better network experience. We will release the latest firmware at TP-LINK official website, you can download the latest firmware file from the Support page of our website *www. tp-link.com* and upgrade the firmware to the latest version.

- 1. Make sure the latest firmware file is matched with the hardware version (as shown in the webpage).
- 2. Make sure that you have a stable connection between the router and your computer. It is NOT recommended to upgrade the firmware wirelessly.
- 3. Make sure you remove any USB storage device connected to the router before the firmware upgrade to prevent data loss.
- 4. Backup your router configuration.
- 5. Do NOT turn off the router during the firmware upgrade.

#### Follow the steps to upgrade the firmware.

- 1. Download the latest firmware file for the router from our website *www.tp-link.com*.
- 2. Visit *http://tplinkwifi.net*, and log in with the username and password you set for the router.
- 3. Go to Advanced > System Tools > Firmware Upgrade.
- 4. Click Browse to locate the downloaded new firmware file, and click Upgrade.

New Firmware File:	Browse	
Firmware Version:	1.0.0 Build 20150522 Rel. 42154	
Hardware Version:	Archer C2600 v1.0	

5. Wait a few moments for the upgrading and rebooting.

# 12.4. 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 the username and 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 saved sett	ings from a file.		
File:		Browse	
			Restore

#### 2. Wait a few moments for the restoring and rebooting.

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

#### > To reset the router to factory default settings:

1. Click Factory Restore to reset the router.



#### 2. Wait a few moments for the reset and reboot.

Note:

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

# 12.5. Change the Administrator Account

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

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

2. Go to *Advanced* > *System Tools* > *Administration* and complete the settings in Account Management section.

Old Username:	admin	<b>I</b>	
Old Password:	•••••	0	
New Username:	Mary		
New Password:	•••••		
	Low Middle High		
Confirm New Password:	•••••	0	

3. Enter the old username and old password. Enter the new username and enter the new password twice (both case-sensitive). Click Save.

Use the new username and password for the following logins.

# 12.6. Local Management

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

- 1. Visit *http://tplinkwifi.net*, and log in with the username and password you set for the router.
- 2. Go to *Advanced* > *System Tools* > *Administration* and complete the settings In Local Management section according to your needs.
- 3. Keep the Port as the default setting. Enter the IP address or MAC address of the local device to manage the router.
- Note:
- 1. The IP address of the local device must be in the same subnet as the router's LAN IP address.
- 2. If you want that all local devices can manage the router, just leave the IP/MAC Address field blank.

Local Management		
Port:	80	
IP/MAC Address:		
		Save

4. Click Save to make the settings effective. Now only the device using the IP address or MAC address you set can manage the router.

#### Remote Management 12.7.

By default, the remote devices are not allowed to manage the router from the Internet.

Follow the steps below to allow remote devices to manage the router.

- 1. Visit http://tplinkwifi.net, and log in with the username and password you set for the router.
- 2. Go to Advanced > System Tools> Administration page. Locate the Remote Management section.

Remote Management:	🗹 Enable
Port:	80
IP/MAC Address:	255.255.255.255

- 3. Tick the checkbox to enable Remote Management.
- 4. Keep the Port as the default setting. Enter the IP address or MAC address of the remote device to manage the router.
- **Note:** If you want that all remote devices can manage the router, just leave the IP/MAC Address field blank.
- 5. Click Save to make the settings effective. Now, only the device using the IP address or MAC address you set can log in to http://router's Internet IP address:port number (such as http://113.116.60.229:80) to manage the router remotely.
- Ø Tips:
- 1. You can find the Internet IP address of the router on *Basic > Network Map > Internet*.
- 2. The router's Internet IP is usually a dynamic IP. Please refer to Set Up a Dynamic DNS Service Account if you want to log in to the router through a domain name.

#### 12.8. System Log

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

- To Save the System Log in Local:
- 1. Visit http://tplinkwifi.net, and log in with the username and password you set for the router.
- 2. Go to Advanced > System Tools > System Log.

ype:			ALL	•	
evel:			Debug	. •	
					🕝 Refresh 😑 Delete All
ID	Time	Туре	Level		Log Content
426	2000-01-16 10:34:32	IGMP	Warning	V2 igmp route	r occured! Not matching ours V3.
425	2000-01-16 10:33:51	IGMP	Warning	V2 igmp route	r occured! Not matching ours V3.
424	2000-01-16 10:32:27	IGMP	Warning	V2 igmp router	r occured! Not matching ours V3.
423	2000-01-16 10:31:46	IGMP	Warning	V2 igmp router	r occured! Not matching ours V3.
422	2000-01-16 10:30:22	IGMP	Warning	V2 igmp route	r occured! Not matching ours V3.
421	2000-01-16 10:29:41	IGMP	Warning	V2 igmp route	r occured! Not matching ours V3.
420	2000-01-16 10:28:17	IGMP	Warning	V2 igmp router	r occured! Not matching ours V3.
419	2000-01-16 10:27:36	IGMP	Warning	V2 igmp router	r occured! Not matching ours V3.

#### To view the system logs:

- 1. Select the log Type. Select ALL to view all kinds of logs, or select DHCPC, DHCPD or IGMP to view the specific logs.
- 2. Select the log Level and you will see the logs with the specific or higher levels.
- 3. Click Refresh to refresh the log list.

#### To save the system logs:

You can choose to save the system logs to your local computer or a remote server.

Click Save Log to save the logs in a txt file to your computer.

Click Log Settings to set the save path of the logs.

Log Settings		
Save Locally		
Minimum Level	Information	•
Save Remotely		
Minimum Level:	Warning	•
Server IP:	192.168.1.100	
Server Port:	514	
Local Facility Name:	User	•

- Save Locally: Select this option to cache the system log to the router's local memory, select the minimum level of system log to be saved from the drop-down list. The logs will be shown in the table in descending order on the System Log page.
- Save Remotely: Select this option to send the system log to a remote server, select the minimum level of system log to be saved from the drop-down list and enter the information of the remote server. If the remote server has a log viewer client or a sniffer tool implemented, you can view and analyze the system log remotely in realtime.

# 12.9. SNMP Settings

SNMP (Simple Network Management Protocol) has been widely applied in the computer networks currently, which is used for ensuring the transmission of the management information between two nodes. In this way, network administrators can easily search and modify the information on any node on the network. Meanwhile, they can locate faults promptly and implement the fault diagnosis, capacity planning and report generating.

An SNMP Agent is an application running on the router that performs the operational role of receiving and processing SNMP messages, sending responses to the SNMP manager, and sending traps when an event occurs. So a router contains SNMP "agent" software can be monitored and/or controlled by SNMP Manager using SNMP messages.

- 1. Visit *http://tplinkwifi.net*, and log in with the username and password you set for the router.
- 2. Go to Advanced > System Tools > SNMP Settings page.

SNMP Settings			
	Protocol(SNMP) allows managed by a second seco	gement applications to retrieve status vice.	3
Read Community:	public		
Set Community:	private		
System Name:	Archer		
System Description:	0.0101v004b00und15060		
System Location:			
System Contact:			
Trap Manager IP:	0.0.0.0		
		Sa	ve

- Enable SNMP Agent: Toggle On to enable the built-in SNMP agent that allows the router to operate as the operational role in receiving and processing of SNMP messages, sending responses to the SNMP manager, and triggering SNMP traps when an event occurs.
- Read Community: Displays the default public community string that protects the router from unauthorized access.
- Set Community: Displays the default read and write community string that protects the router from unauthorized changes.
- System Name: Displays the administratively-assigned name for this managed device.
- System Description: Displays the textual description of the managed device. This value should include the full name and version identification of the system's hardware type, software operating-system, and networking software.
- System Location: Displays the physical location of this device (e.g., telephone closet, 3rd floor).
- System Contact: Displays the textual identification of the contact person for this managed device, together with information on how to contact this person.
- Trap Manager IP: Displays the IP address of the host to receive the traps.

You are suggested to keep the default settings. Click Save to make the settings effective.

## 12. 10. Monitor the Internet Traffic Statistics

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

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

- 2. Go to Advanced > System Tools > Statistics.
- 3. Toggle on Traffic Statistics, and then you can monitor the traffic statistics in Traffic Statistics List section.
- *I* Tips: This function is enabled by default.

affic Statistics								
able Traffic Statistic	cs:							
(0. or								
raffic Statistics	LIST							
					🕑 F	efresh 🌀	Reset 😑	Delete All
IP Address/ MAC Address	Total Packets	Total Bytes	Current Packets	Current Bytes	Current ICMP Tx	Current UDP Tx	Current SYN Tx	Modify
192.168.0.100 3 8:83:45:C8:47:56	40	13,120	8	3	3	0	5	•
192.168.0.101 4 0:16:9F:C8:A7:16	4	9,312	0	5	9	0	0	<b>()</b>
192.168.0.102 5 4:E6:FC:C7:47:5C	14	6,312	1	13	1	15	1	<b>O</b>
192.168.0.103 5 C:63:BF:C7:AC:50	40	312	20	40	55	64	70	<del>ن</del> (
192.168.0.104 6 4:66:B3:A8:4E:51	4	3,126	0	10	0	0	0	<b>()</b>
192.168.0.105 6 4:70:02:B8:47:A6	45	1,319	1	0	4	0	9	<b>()</b>
192.168.0.106 6 C:E8:73:C8:47:55	53	3,512	50	0	60	0	90	•
192.168.0.107 7 4:EA:3A:08:47:56	48	3,142	0	30	0	50	45	<b>()</b>
192.168.0.108 8 C:21:0A:C8:07:56	49	3,212	12	56	23	78	89	<b>O</b> 🕅

Click Refresh to update the statistic information on the page.

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

Click Delete All to delete all statistic information in the list.

Click <sup>()</sup> to reset the statistic information of the specific device.

Click  $\stackrel{\text{lin}}{=}$  to delete the specific device item in the list.

# FAQ

## Q1. What can I do if I forgot my wireless password?

The default password is labeled at the back of the router. If the password has been altered, please connect the router to the computer using a cable and follow the steps below:

- 1. Visit *http://tplinkwifi.net*, and log in with the username and password you set for the router.
- 2. Go to *Basic* > *Wireless*, locate the password on the loading page, and mark down your new password for future use.

# Q2. How to retrieve the username and password of the web management page?

The default username and password of the web management page are admin (in lower case). If the password has been altered, please follow the steps below:

- 1. Reset the router to factory default settings: While the router is powered on, press and hold the Reset button on the back for about 8 seconds until all LEDs go on, then release the button;
- 2. Visit http://tplinkwifi.net;
- 3. Enter admin (in lower case) as both username and password to login.

Note: 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. I cannot login to the router's web management page, what can I do?

This can happen for a variety of reasons, please try the methods below and try again.

- 1. Make sure the router connects to the computer correctly and the corresponding LED indicator(s) light up.
- 2. Make sure the IP address of your computer is configured as Obtain an IP address automatically and Obtain DNS server address automatically.
- 3. Make sure the *http://tplinkwifi.net* you input is right.
- 4. Check your computer's settings:
  - 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, select Never dial a connection;

eneral	Security	Privacy	Content	Connections	Programs	Advanced
1	To set up Setup.	an Inter	net connec	tion, click	Set	up
Dial-up a	and Virtua	Private N	Network se	ttings		6
🎒 B	roadbar	nd Conn	ection		Add	l
					Add V	PN
					Remo	ve
	Settings for a conn		ed to config	jure a proxy	Sett	ings
Nev	ver dial a	connectio	n			
🔘 Dial	wheneve	r a netwo	ork connect	ion is not pres	ent	
O Alw	ays dial m	y default	connection	1		
Curre	ent	None			Set de	fault
Local Ar	ea Netwo	rk (LAN) s	ettings -			
			r to dial-up r dial-up se	connections. ettings.	LAN se	ttings

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

		override manual sett le automatic configu	
Automatic	ally detect setti	ngs	
Use autor	natic configurati	on script	
Address			
Proxy server			
	xy server for yo VPN connection	our LAN (These settin s).	gs will not apply to
Address:		Port; 80	Advanced
114410001		for local addresses	

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

😢 Internet Proper	ties				? <b>x</b>
General Security	Privacy	Content	Connections	Programs	Advanced
Settings					-
Enab Move Rese Rese Browsing Auto Close Disat Disat	ys expand le Caret Br e system ca t text size t text size t zoom leve matically re e unused fo ble script de ay a notific	aret with for to medium to medium el for new ecover from olders in His ebugging () ebugging () ation abou	new windows a cus/selection of for new window while zooming <sup>a</sup> windows and ta n page layout e story and Favor internet Explore Other) t every script e	hanges ws and tabs bs rrors with Co rites* er)	sque
♥         Display Accelerator button on selection         ▼           <					
Reset Internet E	xplorer set	tings	ernet Explorer Restore to their default	advanced so	
You should on	y use this i	if your brow	wser is in an un	usable state	Apply

- 5. Change a web browser or computer and login again.
- 6. Reset the router to factory default settings: Press and hold the Reset button for at least 10 seconds and then release.

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

Open a web browser and login again. If login still fails, please contact the technical support.

# Q4.1 cannot access the Internet even though the configuration is finished, what can I do?

- 1. Visit *http://tplinkwifi.net*, and log in with the username and 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 IP address, please try the methods below and try again:

Internet	IPv4   IPv6		
MAC Address:	00-0A-EB-AC-88-16		
IP Address:	59.40.0.91		
Subnet Mask:	255.255.255.0		
Default Gateway:	59.40.0.1		
Primary DNS:	202.96.128.166		
Secondary DNS:	202.96.134.133		
Connection Type:	Dynamic IP		

- 1. Your computer might not recognize any DNS server addresses, please manually configure DNS server.
  - 1) Go to Advanced > Network > DHCP Server;
  - 2) Enter 8.8.8.8 as Primary DNS, click Save.
  - *<sup>©</sup>* Tips: 8.8.8.8 is a safe and public DNS server operated by Google.

DHCP Server		
DHCP:	Enable DHCP	
	DHCP Server O DHCP Re	elay
IP Address Pool:	192.168.0.100 -	192.168.0.199
Address Lease Time:	120	minutes(1-2880)
Default Gateway:	192.168.0.1	(optional)
Default Domain:		(optional)
Primary DNS:	8.8.8.8	(optional)
Secondary DNS:	0.0.0.0	(optional)
		s

- 2. Power cycle the modem and the TP-LINK router.
  - 1) Power off your modem and TP-LINK router, leave them off for 1 minute;
  - 2) Power on your modem first, wait about 2 minutes until it get a solid cable or Internet light;
  - 3) Power back TP-LINK router;
  - 4) Wait another 1 or 2 minutes and check the Internet access.

#### 3. Reset the router to factory default settings and reconfigure.

**Note:** You'll have to reconfigure the router to access the Internet once the router is reset.

- 1) Reset the router to factory default settings: press and hold the RESET button for at least 10 seconds and then release;
- 2) Reconfigure the router with the help of "4. 1. Quick Setup".

4. Please refer to "12. 3. Upgrade the Firmware" to upgrade the firmware of the router.

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

Internet	IPv4   IPv6
MAC Address:	00-0A-EB-AC-88-16
IP Address:	0.0.0.0
Subnet Mask:	0.0.0.0
Default Gateway:	0.0.0.0
Primary DNS:	0.0.0.0
Secondary DNS:	0.0.0.0
Connection Type:	None

1. Check the physical connection.

Make sure the physical connection between the router and the modem is proper.

- 2. Clone the MAC address of your computer.
  - 1) Visit *http://tplinkwifi.net*, and log in with the username and password you set for the router;
  - 2) Go to Advanced > Network > Internet;
  - 3) Choose an option to your need (Enter the MAC address if Use Custom MAC Address is selected), and click Save.

Use Default MAC Address		
O Use Current Computer MAC	Address	
O Use Custom MAC Address		

#### Ø 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.

#### 3. 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, it may be conflicting with the IP range of your existent ADSL modem/router. If so, the router is not able to communicate with your modem and cause you can't access the Internet. To resolve the 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 the username and password you set for the router;
- 2) Go to Advanced > Network > LAN Settings;
- 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:	00:02:03:04:05:07	
IP Address:	192.168.2.1	
Subnet Mask:	255.255.255.0 🔻	
IGMP Snooping:	Enable IGMP Snooping	
		Save

- 4. Power cycle the modem and the TP-LINK router.
  - 1) Power off your modem and TP-LINK router, leave them off for 1 minute;
  - 2) Power on your modem first, wait about 2 minutes until it get a solid cable or Internet light;
  - 3) Power back TP-LINK router;
  - 4) Wait another 1 or 2 minutes and check the Internet access.

- 5. 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 the username and password you set for the router;
  - 3) Go to Advanced > Network > Internet;
  - 4) Select your Internet Connection Type and fill in other parameters with the help of page tips;
  - 5) Click Save.

WAN Interface		
Internet Connection Type:	Dynamic IP	
IP Address:	Dynamic IP	
Subnet Mask:	Static IP	
Default Gateway:	PPPoE	
Renew Release	L2TP	
Advanced	рртр	
0	BigPond Cable	

- 6) Power cycle the modem and the TP-LINK router again.
- 3. Please refer to "12. 3. Upgrade the Firmware" to upgrade the firmware of the router.
- **4.** Check the TCP/IP settings on the particular device if all other devices can get Internet from the router.

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

# Q5.I cannot find my wireless network or I cannot connect the wireless network, what can I do?

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

- 1. Make sure the wireless function 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.
- 2. 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) Clicking on 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;
- 7) Connect to wireless network.

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

- 1. Check the WLAN LED indicator on your wireless router/modem;
- 2. Make sure your computer/device is still in the range of your router/modem, move closer if it is currently too far away;
- 3. Go to *Advanced* > *Wireless* > *Wireless Settings*, and check the wireless router settings, double check your Wireless Network Name, make sure the wireless is not hided;

Wireless Settings		2.4GHz   5GF
Wireless Radio:	🗹 Enable Wireless Radio	
Wireless Network Name (SSID):	TP-LINK_0507	Hide SSID
Security:	WPA/WPA2 Personal(Re	ecommended) 🔻
Version:	○ Auto	
Encryption:	🔿 Auto 🔿 TKIP 🖲 AE	S
Password:	12345670	
Mode:	802.11bgn mixed	•
Channel:	Auto	•
Channel Width:	Auto	•
Transmit Power:	◯ Low ◯ Middle . Ə Hi	iah

4. Connect to wireless network.

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

- Authenticating problem, password mismatch:
- 1. Sometimes it will ask you 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 back of your wireless router;

Connect to a Network	×
it is not t	from the router display he general wireless password
PIN: Connect using a security ke	y instead
	Back Next Cancel

- 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 on saying 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.

- 4. Connect to wireless network.
- Windows was unable to connect to XXXX /Can not join this network/Taking longer than usual to connect to this network:
  - 1) Check the wireless signal strength of your network, if it is weak (1~3 bars), please move the router closer and try again;
  - 2) Change the wireless Channel of the router to 1,6,or 11 to reduce interference from other networks;
  - 3) Re-install or update the driver for your wireless adapter of the computer;
  - 4) Connect to wireless network.

# Q6. How to use the WDS Bridging function to extend my wireless network?

My house covers a large area. The wireless network coverage of the router I'm using (the root router) is limited. I want to use an extended router to extend the wireless network of the primary router. Follow the steps to configure the router.

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

- 2. Configure the LAN IP address of the router in the same subnet as the root router. For example, the IP address of the root router is 192.168.0.1, the IP address of the extended router should be from 192.168.0.2 to 192.168.0.254.).
- 3. Go to Advanced > System Tools > System Parameters page and locate the WDS section.
- 4. Select the check box to enable the WDS Bridging function.

WDS Bridging:	☑ Enable WDS Bridging
Wireless Network Name (SSID):	Survey
MAC Address (to be bridged):	
Security:	No Security O WPA/WPA2 Personal O WEP
	Save

5. Click Survey to scan all the AP devices and choose the root AP to be bridged.

ID	BSSID	SSID	Signal strength	Channel	Encryption	Connect
1	40:16:9F:BF:5 8:13	TP-LINK_5811_5G	69	116	Encrypted	ø
2	0C:30:01:1 3:4F:DC	TP-LINK_4FDD_5G	69	100	Encrypted	e
3	00:0A:EB:1 3:09:68	TP-LINK_0969_5G_1	61	36	Encrypted	ø
4	00:1D:0F:B F:51:14	TP-LINK_5116_5G	46	157	Encrypted	ø
5	00:0A:EB:1 3:09:67	TP-LINK_0969_5G_2	45	157	Encrypted	ø
6	F8:1A:67:2 E:E8:36	TP-LINK_5G_E836	44	149	None	ø
7	40:16:9F:BF:5 9:15	TP-LINK_5913_5G	41	36	Encrypted	ø
8	00:14:78:2 2:33:55	TP-LINK_5G_223355	38	36	None	ø

6. Click the connect icon and then the SSID and MAC will be automatically filled in. Configure the Security settings as the AP you choose to be bridged.

WDS Bridging:	Enable WDS Bridging	
Wireless Network Name (SSID):	TP-LINK_5811_5G	Survey
MAC Address (to be bridged):	40:16:9F:BF:58:13	
Security:	○ No Security	Personal 🔿 WEP
Version:	○ WPA-PSK	
Encryption:	○ TKIP	
Password:	1234567890	
		Save

7. Click Save to make the settings effective.

8. Go to Advanced > Network > DHCP Server page to disable DHCP.

Now, the root router's wireless network is extended and you can use the Archer C50's SSID and password to enjoy the network.

# **Specifications**

	Hardware	
	4 10/100Mbps LAN Ports	
Ethernet Ports	1 10/100Mbps WAN Port	
USB Port	1 USB 2.0 Ports	
Button	WPS/Reset Button, Wireless On/Off Button, Power On/Off Button	
External Power Supply	Power Supply 12V/2A	
Antenna	Two external antennas(I-Pex), 2.4G gain: 2 dBi / 5G gain: 3 dBi	
	Wireless	
Wireless Standards	IEEE 802.11ac/n/a 5GHz, IEEE 802.11b/g/n 2.4GHz	
Frequency	2.4GHz, 5GHz	
Signal Rate	867Mbps at 5GHz, 300Mbps at 2.4GHz	
Transmit Power	CE: <20dBm(2.4GHz), <23dBm(5GHz)	
	FCC: <30dBm	
Reception Sensitivity	5GHz: 11a 54Mbps:-76dBm; 11ac VHT20 MCS8: -70dBm; 11ac VHT40 MCS9: -65.5dBm; 11ac VHT80 MCS9: -61.5dBm	
	2.4GHz: 11g 54M: -76dBm; 11n HT20: -74dBm; 11n HT40: -71dBm	
Wireless Function	ess Function Enable/Disable Wireless Radio, WDS Bridge, WMM, Wireless Statistics	
Wireless Security	ss Security 64/128-bit WEP, WPA/WPA2, WPA2-PSK encryptions	
	Software	
WAN Type	Software Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond Cable	
WAN Type DHCP		
	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond Cable	
DHCP	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond Cable Server, Client, DHCP Client List, Address Reservation	
DHCP Quality of Service	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond Cable Server, Client, DHCP Client List, Address Reservation WMM, Bandwidth Control	
DHCP Quality of Service Port Forwarding	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond Cable         Server, Client, DHCP Client List, Address Reservation         WMM, Bandwidth Control         Virtual Server, Port Triggering, UPnP, DMZ	
DHCP Quality of Service Port Forwarding Dynamic DNS	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond CableServer, Client, DHCP Client List, Address ReservationWMM, Bandwidth ControlVirtual Server, Port Triggering, UPnP, DMZDynDns, NO-IPParental Control, Local Management Control, Host list, AccessSchedule, Rule Management	
DHCP Quality of Service Port Forwarding Dynamic DNS Access Control Firewall Security	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond CableServer, Client, DHCP Client List, Address ReservationWMM, Bandwidth ControlVirtual Server, Port Triggering, UPnP, DMZDynDns, NO-IPParental Control, Local Management Control, Host list, AccessSchedule, Rule ManagementSPI Firewall, IP Address Filter/Domain Filter, IP and MAC Address Binding	
DHCP Quality of Service Port Forwarding Dynamic DNS Access Control Firewall Security Protocols	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond CableServer, Client, DHCP Client List, Address ReservationWMM, Bandwidth ControlVirtual Server, Port Triggering, UPnP, DMZDynDns, NO-IPParental Control, Local Management Control, Host list, AccessSchedule, Rule ManagementSPI Firewall, IP Address Filter/Domain Filter, IP and MAC Address BindingSupports IPv4 and IPv6	
DHCP Quality of Service Port Forwarding Dynamic DNS Access Control Firewall Security Protocols USB Sharing	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond CableServer, Client, DHCP Client List, Address ReservationWMM, Bandwidth ControlVirtual Server, Port Triggering, UPnP, DMZDynDns, NO-IPParental Control, Local Management Control, Host list, AccessSchedule, Rule ManagementSPI Firewall, IP Address Filter/Domain Filter, IP and MAC Address BindingSupports IPv4 and IPv6Supports FTP Server/Media Server/Printer Server	
DHCP Quality of Service Port Forwarding Dynamic DNS Access Control Firewall Security Protocols USB Sharing Management	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond CableServer, Client, DHCP Client List, Address ReservationWMM, Bandwidth ControlVirtual Server, Port Triggering, UPnP, DMZDynDns, NO-IPParental Control, Local Management Control, Host list, AccessSchedule, Rule ManagementSPI Firewall, IP Address Filter/Domain Filter, IP and MAC Address BindingSupports IPv4 and IPv6Supports FTP Server/Media Server/Printer ServerAccess Control, Local Management, Remote Management	
DHCP Quality of Service Port Forwarding Dynamic DNS Access Control Firewall Security Protocols USB Sharing	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond CableServer, Client, DHCP Client List, Address ReservationWMM, Bandwidth ControlVirtual Server, Port Triggering, UPnP, DMZDynDns, NO-IPParental Control, Local Management Control, Host list, AccessSchedule, Rule ManagementSPI Firewall, IP Address Filter/Domain Filter, IP and MAC Address BindingSupports IPv4 and IPv6Supports FTP Server/Media Server/Printer ServerAccess Control, Local Management, Remote Management2.4GHz guest network x 1, 5GHz guest network x 1	
DHCP Quality of Service Port Forwarding Dynamic DNS Access Control Firewall Security Protocols USB Sharing Management	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond CableServer, Client, DHCP Client List, Address ReservationWMM, Bandwidth ControlVirtual Server, Port Triggering, UPnP, DMZDynDns, NO-IPParental Control, Local Management Control, Host list, AccessSchedule, Rule ManagementSPI Firewall, IP Address Filter/Domain Filter, IP and MAC Address BindingSupports IPv4 and IPv6Supports FTP Server/Media Server/Printer ServerAccess Control, Local Management, Remote Management	
DHCP Quality of Service Port Forwarding Dynamic DNS Access Control Firewall Security Protocols USB Sharing Management	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond CableServer, Client, DHCP Client List, Address ReservationWMM, Bandwidth ControlVirtual Server, Port Triggering, UPnP, DMZDynDns, NO-IPParental Control, Local Management Control, Host list, AccessSchedule, Rule ManagementSPI Firewall, IP Address Filter/Domain Filter, IP and MAC Address BindingSupports IPv4 and IPv6Supports FTP Server/Media Server/Printer ServerAccess Control, Local Management, Remote Management2.4GHz guest network x 1, 5GHz guest network x 1	
DHCP Quality of Service Port Forwarding Dynamic DNS Access Control Firewall Security Protocols USB Sharing Management Guest Network	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond CableServer, Client, DHCP Client List, Address ReservationWMM, Bandwidth ControlVirtual Server, Port Triggering, UPnP, DMZDynDns, NO-IPParental Control, Local Management Control, Host list, AccessSchedule, Rule ManagementSPI Firewall, IP Address Filter/Domain Filter, IP and MAC Address BindingSupports IPv4 and IPv6Supports FTP Server/Media Server/Printer ServerAccess Control, Local Management, Remote Management2.4GHz guest network x 1, 5GHz guest network x 1Environment	
DHCP Quality of Service Port Forwarding Dynamic DNS Access Control Firewall Security Protocols USB Sharing Management Guest Network	Dynamic IP/Static IP/PPPoE/PPTP/L2TP/Bigpond CableServer, Client, DHCP Client List, Address ReservationWMM, Bandwidth ControlVirtual Server, Port Triggering, UPnP, DMZDynDns, NO-IPParental Control, Local Management Control, Host list, AccessSchedule, Rule ManagementSPI Firewall, IP Address Filter/Domain Filter, IP and MAC Address BindingSupports IPv4 and IPv6Supports FTP Server/Media Server/Printer ServerAccess Control, Local Management, Remote Management2.4GHz guest network x 1, 5GHz guest network x 1Environment0°C~40°C (32°F ~104°F)	

### **COPYRIGHT & TRADEMARKS**

Specifications are subject to change without notice. **TP-LINK**<sup>°</sup> is a registered trademark of TP-LINK TECHNOLOGIES CO., LTD. Other brands and product names are trademarks or registered trademarks of their respective holders.

No part of the specifications may be reproduced in any form or by any means or used to make any derivative such as translation, transformation, or adaptation without permission from TP-LINK TECHNOLOGIES CO., LTD. Copyright © 2016 TP-LINK TECHNOLOGIES CO., LTD. All rights reserved.

# FCC STATEMENT

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:

This device may not cause harmful interference.

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 colocated or operating in conjunction with any other antenna or transmitter."

The device is restricted in indoor environment only.

## **Canadian Compliance Statement**

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1. This device may not cause interference, and
- 2. This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme aux norms CNR exemptes de licence d'Industrie Canada. Le fonctionnement est soumis aux deux conditions suivantes:

- 1. cet appareil ne doit pas provoquer d'interférences et
- 2. cet appareil doit accepter toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité de l'appareil.

### **Caution:**

- 1. 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;
- 2. For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

The high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

### **Avertissement:**

- 1. 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;
- 2. Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation point à point et non point à point, selon le cas.

En outre, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

### **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)

#### **Safety Information**

- When product has power button, the power button is one of the way to shut off the product; when there is no power button, the only way to completely shut off power is to disconnect the product or the power adapter from the power source.
- Don't disassemble the product, or make repairs yourself. You run the risk of electric shock and voiding the limited warranty. If you need service, please contact us.
- Avoid water and wet locations.
- Adapter shall be installed near the equipment and shall be easily accessible.
- The plug considered as disconnect device of adapter.

Explanation of the sy	mbols on the product label

Symbol	Explanation
	DC voltage
	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.