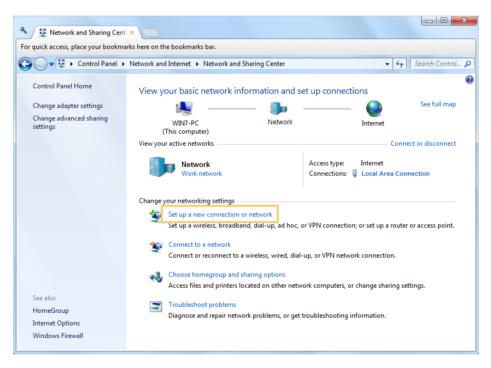
- 1) Click Add.
- 2) Enter the Username and Password to authenticate devices to the PPTP VPN Server.
- 3) Click OK.

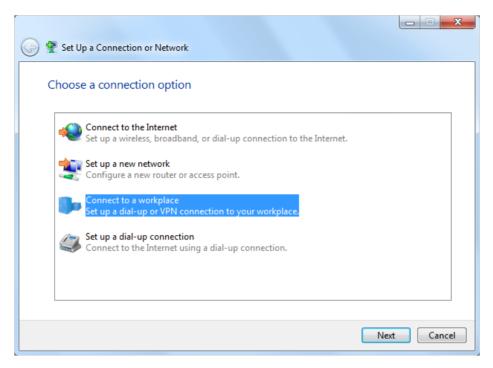
# 10.2.2. Step 2. Configure PPTP VPN Connection on Your Remote Device

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

- 1. Go to Start > Control Panel > Network and Internet > Network and Sharing Center.
- 2. Select Set up a new connection or network.



3. Select Connect to a workplace and click Next.



4. Select Use my Internet connection (VPN).

🚱 🌆 Connect to a Workplace	
How do you want to connect?	
Use my Internet connection (VPN) Connect using a virtual private network (VPN) connection through the Internet.	
ing	
Dial directly Connect directly to a phone number without going through the Internet.	
ing ing ing	
What is a VPN connection?	
	Cancel

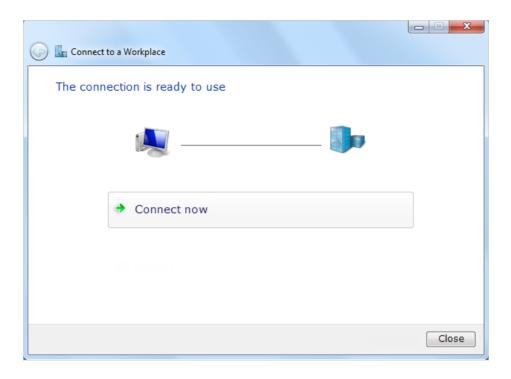
5. Enter the internet IP address of the router (for example: 218.18.1.73) in the Internet address field. Click Next.

G	Connect to a Workplace		
	Type the Internet addre	ess to connect to	
	Your network administrator of	an give you this address.	
	Internet address:	218.18.1.73	
	Destination name:	VPN Connection	
		use this connection yone with access to this computer to use this connection. ust set it up so I can connect later	
		Ne	t Cancel

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

😋 🌆 Connect to a Workpla	ace	
Type your user nar	ne and password	
User name:	admin	
Password:	•••••	
	Show characters Remember this password	
Domain (optional):		
		Connect Cancel

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



# Chapter 11

# **Customize Your Network Settings**

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

It contains the following sections:

- <u>Change the LAN Settings</u>
- <u>Configure to Support IPTV Service</u>
- <u>Specify DHCP Server Settings</u>
- <u>Set Up a Dynamic DNS Service Account</u>
- <u>Create Static Routes</u>
- <u>Specify Wireless Settings</u>
- <u>Use WPS for Wireless Connection</u>

## 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 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 <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > Network > LAN.
- 3. Type in a new IP Address appropriate to your needs. And leave the Subnet Mask as the default settings.

LAN	
MAC Address:	50-C7-BF-02-EA-DC
IP Address:	192.168.0.1
Subnet Mask:	255.255.255.0 💌

#### 4. Click Save.

#### Note:

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

## 11.2. Configure to Support IPTV Service

I want to:	Configure IPTV setup to enable Internet/IPTV/Phone service provided by my internet service provider (ISP).			
How can I do that?	1. Visit <u>http://tplinkwifi.net</u> , and log in with the password you set for the router.			
	2. Go to Advanced > Network > IPTV/VLAN.			
	3. If your ISP provides the networking service based on IGMP technology, e.g. British Telecom(BT) and Talk Talk in UK:			
	1) Tick the IGMP Proxy checkbox and select the IGMP Version, either V2 or V3, as required by your ISP.			

Done!

Settings		
IGMP Proxy:	Enable	
IGMP Version:	V2	w

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

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

- 1) Tick Enable IPTV.
- 2) Select the appropriate Mode according to your ISP.
  - Select Bridge if your ISP is not listed and no other parameters are required.
  - Select Custom if your ISP is not listed but provides necessary parameters.

IPTV:	Enable IPTV	
Mode:	Bridge	W
	Singapore-ExStream	
LAN1:	Malaysia-Unifi	
LAN2:	Malaysia-Maxis	
LAN3:	Vietnam-Viettel	
LAN4:	New Zealand-UFB	
	Australia-NBN	
	Portugal-MEO	

- 3) After you have selected a mode, the necessary parameters, including the LAN port for IPTV connection, are predetermined. If not, select the LAN type to determine which port is used to support IPTV service.
- 4) Click Save.
- 5) Connect the set-top box to the corresponding LAN port which is predetermined or you have specified in Step 3.

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

Qos and IPTV cannot be enabled at the same time.

## **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 the DHCP Server if necessary, and you can reserve LAN IP addresses for specified client devices.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > Network > DHCP Server.
- > To specify the IP address that the router assigns:

Settings			
DHCP Server:	✓ Enable DHCP Server		
IP Address Pool:	192.168.0.100	- 192.168.0.249	
Address Lease Time:	120 minutes	. (2-2880. The default value is 120.)	
Default Gateway:	192.168.0.1	(Optional)	
Primary DNS:		(Optional)	
Secondary DNS:		(Optional)	
			Save

- 1. Tick the Enable DHCP Server checkbox.
- 2. Enter the starting and ending IP addresses in the IP Address Pool.
- 3. Enter other parameters if the ISP offers. The Default Gateway is automatically filled in and is the same as the LAN IP address of the router.
- 4. Click Save.

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

1. Click Add in the Address Reservation section.

Addre	ess Res	servation					
						🕂 Ad	d 😑 Delete
	ID	MAC Address		Reserved IP Address	Description	Status	Modify
	MAC Ad IP Addr						
	Descrip	tion :	- EI	nable This Entry			
					Cance	el Ok	

- 2. Click View Exsiting Devices or enter the MAC address of the client device.
- 3. Enter the IP address to reserve for the client device.
- 4. Enter the Description for this entry.
- 5. Tick the Enable This Entry checkbox and click OK.

### 11.4. Set Up a Dynamic DNS Service Account

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

#### Note:

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the 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, you have to register first by clicking Go to register...
- 4. Enter the username, password and domain name of your account.

Dynamic DNS		
Service Provider:	NO-IP O DynDNS	Go to register
Username:		
Password:		
Domain Name:		
Update Interval:	1 hour	¥
WAN IP binding:	Disable      Disable	
Login and Save Logo	ut 😢 Not launching	

#### 5. Click Login and Save.

Ø Tips:

If you want to use a new DDNS account, please click logout first, and then log in with a new account.

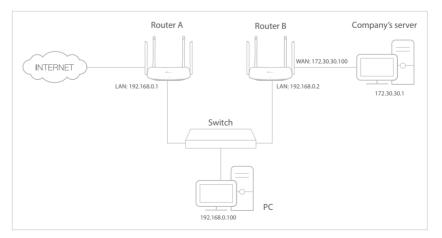
### 11.5. Create Static Routes

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 servers at the same time.

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



### How can I do that?

- 1. Change the routers' LAN IP addresses to two different IP addresses on the same subnet. Disable Router B's DHCP function.
- 2. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for Router A.
- 3. Go to Network > Advanced Routing.
- **4.** Click Add and finish the settings according to the following explanations:

Sta	tic R	louting						
							🕂 Add	😑 Delete
	ID	Network Destination	Subnet Mask	Default Gateway	Interface	Description	Status	Modify
	N	etwork Destination	n: 172.30.3	1.1				
	Subnet Mask:		255.255.	255.255.255.255				
	Default Gateway:		192.168.	192.168.0.2				
	Interface:		LAN	LAN				
	Description :		company'	company's network				
			Enable T	his Entry				
						Cancel	ОК	
						Guncer	OK	

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

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

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

Interface: Determined by the port (WAN/LAN) that sends out

data packets. In the example, the data are sent to the gateway through the LAN port of Router A, so LAN should be selected.

Description: Enter a description for this static routing entry.

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

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

#### Done!

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

### 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 label of the router. You can customize the wireless settings according to your needs.

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

#### > To enable or disable the wireless function:

- 1. Go to Basic > Wireless.
- 2. The wireless radio is enabled by default. If you want to disable the wireless function of the router, just untick the Enable Wireless Radio checkbox. In this case, all the wireless settings will be invalid.
- > To change the wireless network name (SSID) and wireless password:
- 1. Go to Basic > Wireless.
- 2. Create a new SSID in Network Name (SSID) and customize the password for the network in Password. The value is case-sensitive.

#### Note:

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

#### > To hide SSID:

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

#### > To change the security option:

- 1. Go to Advanced > Wireless > Wireless Settings.
- 2. Select the wireless network 2.4GHz or 5GHz.
- 3. Select an option from the Security drop-down list. We recommend you don't change the default settings unless necessary. If you select other options, configure the related parameters according to the help page.

#### In addition

- Mode Select a transmission mode according to your wireless client devices. It is recommended to just leave it as default.
- Channel Width Select a channel width (bandwidth) for the wireless network.
- Channel Select an operating channel for the wireless network. It is recommended to leave the channel to Auto, if you are not experiencing the intermittent wireless connection issue.
- Transmit Power Select either High, Middle or Low to specify the data transmit power. The default and recommended setting is High.

### 11.7. Use WPS for Wireless Connection

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the 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.

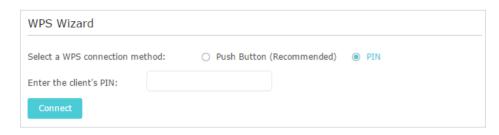
Route	er's PIN				
Router	s PIN:				
PIN:		35498841	Generate	Default	

#### Note:

- If you want to enable/disable the WPS feature, go to System Tools > System Parameters > WPS, tick or untick the Enable WPS checkbox.
- PIN (Personal Identification Number) is an eight-character identification number preset to each router. WPS supported devices can connect to your router with the PIN. The default PIN is printed on the label of the router.

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

- 1. Select a setup method:
  - **Push Button (Recommended)**: Click Connect on the screen. Within two minutes, press the WPS button on the client device.
  - **PIN**: Enter the client's PIN, and click Connect.



2. 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

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > Wireless > Wireless Schedule.
- 3. Select 2.4GHz or 5GHz to change the corresponding settings.
- 4. Enable the Wireless Schedule feature.

Wireless Schedule		2.4GHz   5GHz
Wireless Schedule:		
Edit Schedule:	•	
		Save

5. Click the icon 🕒 to set the effective time. Drag the cursor over the cells to choose the period during which you need the wireless off automatically, and click OK.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
00:00							
01:00							
02:00							
03:00							
04:00							
05:00							
06:00							
07:00							
08:00							
09:00							
10:00							
11:00							
12:00							
13:00							
14:00							
15:00							
16:00							
17:00							
18:00							
19:00							
20:00							
21:00							
22:00							
23:00							
24:00							
	Effective 1	Time					

#### 6. Click Save.

7. If you also want to set wireless off time for other band(s), please repeat the steps above.

Note:

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

### 11.9. TxBF, MU-MIMO

TxBF, MU-MIMO (Transmit Beamforming, Multi-User Multiple-Input Multiple-Output) enables the router to boost network capacity and strengthen Wi-Fi signals. Select the checkbox to enable this feature.

T×BF,MU-MIMO		
TxBF,MU-MIMO:	Enable TxBF,MU-MIMO	
		Save

# Chapter 12

# **Manage the Router**

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

- <u>Set Up System Time</u>
- <u>Control LEDs</u>
- <u>Test the Network Connectivity</u>
- Upgrade the Firmware
- Backup and Restore Configuration Settings
- Set the Router to Reboot Regularly
- <u>Change the Login Password</u>
- Password Recovery
- Local Management
- <u>Remote Management</u>
- <u>System Log</u>
- 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 choose the way to obtain the system time as needed.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > System Tools > Time Settings. It is 12-hour time by default, and you can toggle on to change to 24-hour time.

#### > To get time from the internet:

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

Time Settings		
Current Time:	12:06:21 AM, 01/01/2016	
24-Hour Time:		
Set Time:	Get automatically from the	Internet 🔿 Manually
Time Zone:	(GMT) Greenwich Mean Time	, Dublin, London 🔹
NTP Server I:	time.nist.gov	
NTP Server II:	time-nw.nist.gov	(Optional)
Obtain		
		Save

- 2. Select your local Time Zone from the drop-down list.
- 3. In the NTP Server I fileId, enter the IP address or domain name of your desired NTP Server.
- 4. (Optional) In the NTP Server II fileld, enter the IP address or domain name of the second NTP Server.
- 5. Click Obtain to get the current Internet time and click Save.

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

1. In the Set Time field, select Manually.

Time Settings		
Current Time:	12:10:23 AM, 01/01/2016	
24-Hour Time:		
Set Time:	○ Get automatically from the Internet	
Date:	01/01/2016 MM/DD/YYYY	
Time:	00 V : 10 V : 23 V (HH/MM/SS)	
		Save

- 2. Set the current Date (In MM/DD/YYYY format).
- 3. Set the current Time (In HH/MM/SS format).
- 4. Click Save.

#### > To set up Daylight Saving Time:

1. Select Enable Daylight Saving Time.

Daylight Saving 1	Fime -									
	🕑 Ena	ble Dayl	ight S	aving Ti	me					
Start:	2016	Mar	•	2nd	▼	Sun	•	2 AM	▼	
End:	2016	Nov	•	First	▼	Sun	•	2 AM	▼	
Running Status:	Dayligh	t Saving	) Time	is on.						
										Save

- 2. Select the correct Start date and time when daylight saving time starts at your local time zone.
- 3. Select the correct End date and time when daylight saving time ends at your local time zone.
- 4. Click Save.

### 12.2. Control LEDs

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > System Tools > System Parameters.
- 3. In the LED Control section, toggle to turn on / off the LED.

4. You can enable Night Mode if needed, and set a time period, and then the LEDs will be off during this period.

LED Control				
LED Status:				
Night Mode				
Note: Before enabling Nig	ht Mode, please	e make sure th	e <u>System Time</u> is correct.	
Current Time:	07/07/2017	01:13:48		
Night Mode: (everyday)	✓ Enable			
LED Off Time:	From:	22:00 🌲		
	To:	06:00 🌲	next day	
				Save

5. Click Save.

### 12.3. Test the Network Connectivity

Diagnostics is used to test the connectivity between the router and the host or other network devices.

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > System Tools > Diagnostics.

Diagnostic Tool: <ul> <li>Ping</li> <li>Traceroute</li> </ul>
IP Address/Domain Name:

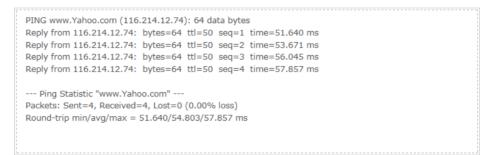
- 3. Enter the information with the help of page tips:
  - 1) Choose Ping or Traceroute as the diagnostic tool to test the connectivity;
  - Ping is used to test the connectivity between the router and the tested host, and measure the round-trip time.
  - Traceroute is used to display the route (path)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



### 12.4. Upgrade the Firmware

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

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

Note:

- Backup your router configuration before firmware upgrade.
- Do NOT turn off the router during the firmware upgrade.
- 1. Download the latest firmware file for the router from <u>www.tp-link.com</u>.
- 2. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 3. Go to Advanced > System Tools > Firmware Upgrade.
- 4. Focus on the Device Information section. Make sure the downloaded firmware file is matched with the Hardware Version.

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

Manual Upgrade		
New Firmware File:	Browse	
		Upgrade

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

## 12.5. Backup and Restore Configuration Settings

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

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

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

#### > To backup configuration settings:

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

Backup	
Save a copy of your current settings.	
	Backup

#### > To restore configuration settings from backup:

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

Restore		
Restore saved settings from a	file.	
File:	Вгом	se
		Restore

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

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

> To reset the router to factory default settings:

1. Click Factory Restore to reset the router.



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

#### Note:

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

### 12.6. Set the Router to Reboot Regularly

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > System Tools > Reboot Schedule.
- 3. Check the box to enable Reboot Schedule.

Reboot Schedule		
Note: Before enabling	Reboot Schedule, please make sure the <u>System Time</u> is	; correct.
Current Time:	12:09:35 AM, 01/01/2016	
Reboot Schedule:	✓ Enable	
Reboot Time:	03:00 AM 🌲	
Repeat:	Every Week   Monday	
		Save

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

### 12.7. Change the Login Password

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

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

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

Account Management		
Old Password:		
New Password:		
	Low Middle High	
Confirm New Password:		

- 3. Enter the old password, then a new password twice (both case-sensitive). Click Save.
- 4. Use the new password for future logins.

### 12.8. Password Recovery

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > System Tools > Administration and focus on the Password Recovery section.
- 3. Tick the Enable Password Recovery checkbox.
- 4. Specify a mailbox (From) for sending the recovery letter and enter its SMTP Server address. Specify a mailbox (To) for receiving the recovery letter. If the mailbox (From) to send the recovery letter requires encryption, select Enable Authentication and enter its username and password.

Tips:

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

Password Recov	егу	
	Enable Password Recovery	
From:		
To:		
SMTP Server:		
	☑ Enable Authentication	
Username:		
Password:		
	Test Email	Save

#### 5. Click Save.

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

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

### 12.9. Local Management

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > System Tools > Administration and complete the settings in Local Management section as needed.
- Allow all LAN connected devices to manage the router:

Toggle on Access for All LAN Connected Devices.

Local Management	
Access for All LAN Connected	Toggle On to enable the management for all devices on LAN or keep it Off to enable the management for a specific device.

- Allow specific devices to manage the router:
- 1. Toggle off Access for All LAN Connected Devices.
- 2. Click Add.

L	ocal M	anagem	ent					
Access for All LAN Connected Toggle On to enable the management for all devices on LAN or keep it Off to enable the management for a specific device.						n LAN		
							🕂 Add	😑 Delete
		ID	MAC Ad	dress	Descript	ion	Status	Modify
		AC Address	::			View Existi	ng Devices	
		·		🗌 Enable Thi	s Entry			
						Cancel	ОК	
		1	C0-4A-00-1	A-C3-45	Your Po	CI	Ş	ßÎ

- 3. Click View Existing Devices and select the device to manage the router from the Existing Devices list, or enter the MAC address of the device manually.
- 4. Specify a Description for this entry.
- 5. Tick the Enable This Entry checkbox.
- 6. Click OK.

### 12.10. Remote Management

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > System Tools > Administration and complete the settings in Remote Management section as needed.
- 3. Select the checkbox to enable Remote Management function.
- 4. Keep the HTTPs Port and HTTP Port as the default settings.
- 5. Select to decide which remote device can access the router remotely. Choose All Devices to allow all remote devices to manage the router; select Specified Device and enter the IP address of a remote device to allow only this device to manage the router.
- 6. Click Save.

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

Devices on the internet can access manage the router via the Web Address for Management, such as https://0.0.0.0:43 shown.

## 12.11. System Log

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

- > To save the system log in local:
- 1. Visit <u>http://tplinkwifi.net</u>, and log in the password you set for the router.
- 2. Go to Advanced > System Tools > System Log.
- 3. Choose the type and level of the system logs as needed.
- 4. Click Save Log to save the system logs to local.

				🖒 Refresh 🛛 🖨 Delete Al
ID	Time	Туре	Level	Log Content
1	2016-06-24 04:28:31	Local Management	NOTICE	[19000] Accessable mode change: Devices in the list.
2	2016-06-24 04:25:12	Locale	INFO	[16605] Language is changed to 'en_US'
3	2016-06-24 04:25:12	Locale	DEBUG	[16605] Explorer language is 'zh_CN'
4	2016-06-24 04:25:02	Locale	INFO	[16435] Language is changed to 'en_US'
5	2016-06-24 04:25:02	Locale	DEBUG	[16435] Explorer language is 'zh_CN'
6	2016-06-24 04:24:58	Locale	INFO	[16283] Language is changed to 'en_US'
7	2016-06-24 04:24:58	Locale	DEBUG	[16283] Explorer language is 'zh_CN'
				1

#### > To send the system log to a mailbox at a fixed time:

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > System Tools > System Log.
- 3. Click Mail Settings.
- 4. Enter the information required:

Mail Settings	
From:	
To:	
SMTP Server:	
	✓ Enable Authentication
Username:	
Password:	
	✓ Enable Auto Mail
	● Log at 00 ▼ : 00 ▼ (HH:MM) everyday
	O Log every 24 hours
	Save

- 1) From: Enter the email address used for sending the system log.
- 2) To: Enter the recipient's email address, which can be the same as or different from the sender's email address.
- 3) SMTP Server: Enter the SMTP server address.

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

4) Select Enable Authentication.

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

- 5) Username: Enter the email address used for sending the system log.
- 6) Password: Enter the password to login the sender's email address.
- 7) Select Enable Auto Mail.

@ Tips: The router will send the system log to the designated email address if this option is enabled.

- 8) Set a fixed time. The recipient will receive the system log sent at this time every day.
- 5. Click Save.

### 12. 12. Monitor the Internet Traffic Statistics

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

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

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

3. Toggle on Traffic Statistics, and then you can monitor the traffic statistics in Traffic Statistics List section.

raffic Statisti	CS				
raffic Statistics:					
raffic Statisti	ee Liet				
	CS LISU				
			ć	) Refresh 🗘 Reset	All 😑 Delete A
IP Address/MAC Address	Total Packets	Total Bytes	Current Packets	Refresh 🧳 Reset	All 🕒 Delete A Modify

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 🜔 to reset the statistic information of the specific device.

Click 🛑 to delete the specific device item in the list.

## 12. 13. Configure the System Parameters

### 12. 13. 1. Wireless Advanced

- 1. Visit http://tplinkwifi.net, and log in with the password you set for the router.
- 2. Go to Advanced > System Tools > System Parameters.
- 3. Configure the advanced settings of your wireless network and click Save.

#### Note:

If you are not familiar with the setting items on this page, it's strongly recommended to keep the provided default values; otherwise it may result in lower wireless network performance.

2.4GHz Wireless			
Beacon Interval:	100	(40-1000)	
RTS Threshold:	2346	(1-2346)	
DTIM Interval:	1	(1-15)	
Group Key Update Period:	0	seconds	
WMM Feature:	Enable WMM		
Short GI Feature:	Enable Short GI		
AP Isolation Feature:	Enable AP Isolation		
		_	
		S	ave

- Beacon Interval Enter a value between 40-1000 milliseconds for Beacon Interval here. Beacon Interval value determines the time interval of the beacons. The beacons are the packets sent by the router to synchronize a wireless network. The default value is 100.
- RTS Threshold Here you can specify the RTS (Request to Send) Threshold. If the packet is larger than the specified RTS Threshold size, the router will send RTS frames to a particular receiving station and negotiate the sending of a data frame. The default value is 2346.
- DTIM Interval This value determines the interval of the Delivery Traffic Indication Message (DTIM). A DTIM field is a countdown field informing clients of the next window for listening to broadcast and multicast messages. When the router has buffered broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. You can specify the value between 1-15 Beacon Intervals. The default value is 1, which indicates the DTIM Interval is the same as Beacon Interval.
- Group Key Update Period Enter the number of seconds (minimum 30) to control the time interval for the encryption key automatic renewal. The default is 0, indicating no key renewal.
- Enable WMM WMM function can guarantee the packets with high-priority messages being transmitted preferentially. It is strongly recommended to enable this function.
- Enable Short GI It is recommended to enable this function, for it will increase the data capacity by reducing the guard interval time.
- AP Isolation Feature If you want to confine and restrict all devices connected to your network from internet interacting with each other but still able to access the internet, select the checkbox to enable this function.

### 12.13.2.WDS

For example, my house covers a large area. The wireless 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 root router.

Note:

- WDS bridging only requires configuration on the extended router.
- WDS bridging function can be enabled either in 2.4GHz frequency or 5GHz frequency for a dual-band router. We use the WDS bridging function in 2.4GHz frequency as example.
- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Configure the IP address of the router:
  - Go to Advanced > Network > LAN, configure the IP address of the extended router to be in the same subnet with the root router; (For example, the IP address of the root router is 192.168.0.1, the IP address of the extended router can be 192.168.0.2~192.168.0.254. We take 192.168.0.2 as example.)

#### 2) Click Save.

Note: Log in to the web management page again if the IP address of the router is altered.

LAN			
MAC Address:	50-C7-BF-02-EA-DC		
IP Address:	192.168.0.2		
Subnet Mask:	255.255.255.0	•	

- 3. Survey the SSID to be bridged:
  - Go to Advanced > System Tools > System Parameters, focus on the 2.4GHz Wireless section and click Enable WDS Bridging.
  - Click Survey, locate the root router's SSID and click Choose (Here we take TP-Link\_4F98 as example).
  - 3) If the root router has wireless password, you should enter the wireless password of the root router.
  - 4) Click Save.

WDS Bridging:	Enable WDS Bridging	
SSID (to be bridged):	TP-Link_4F98	Survey
MAC Address (to be bridged):	0C-4A-08-13-4F-98	Example: 00-1D-0F-11-22-33
Security:	O No Security	SK/WPA2-PSK () WEP
Password:	12345678	
		Save

4. Disable DHCP:

- 1) Go to Network > DHCP Server.
- 2) Deselect Enable DHCP Server and click Save.

Now you can go to Advanced > Status > Wireless to check the WDS status. When the WDS status is Run, it means WDS bridging is successfully built.

#### 12.13.3.WPS

Enable this function to easily set up and connect your WPS-enabled devices to your Wi-Fi at a push of the WPS button.

WPS		
WPS:	Enable WPS	
		Save

#### 12.13.4. NAT

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

NAT		
NAT:	Enable NAT	
NAT Boost:	Enable NAT Boost	
		Save

#### 12.13.5. DoS Protection

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 <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > System Tools > System Parameters.

DoS Protection Level Sett	ings		
ICMP-FLOOD Packets Level	Low:	50	(5-7200)Packets/Secs
	Middle:	20	(5-7200)Packets/Secs
	High:	10	(5-7200)Packets/Secs
UDP-FLOOD Packets Level	Low:	7200	(5-7200)Packets/Secs
	Middle:	2000	(5-7200)Packets/Secs
	High:	400	(5-7200)Packets/Secs
TCP-FLOOD Packets Level	Low:	200	(5-7200)Packets/Secs
	Middle:	100	(5-7200)Packets/Secs
	High:	50	(5-7200)Packets/Secs
			Save

- **3.** Configure ICMP-FLOOD Attack Filtering, UDP-FIOOD Attack Filtering and TCP-SYN-FLOOD Attack Filtering.
  - ICMP-FLOOD Attack Filtering Enter a value between 5 and 7200 ICMP packets to trigger the ICMP-FLOOD protection immediately when the number of packets exceeds the preset threshold value.
  - UDP-FIOOD Attack Filtering -Enter a value between 5 and 7200 UDP packets to trigger the UDP-FLOOD protection immediately when the number of packets exceeds the preset threshold value.
  - TCP-SYN-FLOOD Attack Filtering Enter a value between 5 and 7200 TCP-SYN packets to trigger the TCP-SYN-FLOOD protection immediately when the number of packets exceeds the preset threshold value.
- 4. Click Save.

### 12.13.6. Duplex

Select the duplex type from the drop-down list and click Save. Duplex (or full-duplex) communication can go in both directions at once, while half-duplex communication can go only one way at a time. If you are not sure, you can keep the default Auto Negotiation.

Duplex		
Duplex:	Auto Negotiation	
		Save

# FAQ

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

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

- 1. Connect your computer to the router using an Ethernet cable.
- 2. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 3. Go to Basic > Wireless to retrieve or reset your wireless password.

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

- If you have enabled the Password Recovery feature of the router, click Forgot password on the login page and then follow the instructions to reset it.
- Alternatively, press and hold the Reset button of the router until the Power LED binks to reset it, and then visit <u>http://tplinkwifi.net</u> to create a new login password.

Note:

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

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

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

- Make sure your computer is connected to the router correctly and the corresponding LED indicator(s) light up.
- Make sure the IP address of your computer is configured as Obtain an IP address automatically and Obtain DNS server address automatically.
- Make sure <a href="http://tplinkwifi.net">http://192.168.0.1</a> is correctly entered.
- Check your computer's settings:
  - 1) Go to Start > Control Panel > Network and Internet, and click View network status and tasks.
  - 2) Click Internet Options on the bottom left.
  - 3) Click Connections and select Never dial a connection.

eneral Se	curity	Privacy	Content	Connections	Programs	Advanced	
	o set up etup.	o an Inter	net connec	tion, click	Set	up	
Dial-up and	d Virtua	Private N	Network se	ttings		13	
Broadband Connection					Add		
					Add V	'PN	
					Remo	ve	
Choose Server for			ed to config	jure a proxy	Sett	ings	
Never	dial a d	connection	n				
🔘 Dial w	heneve	r a netwo	ork connect	tion is not prese	ent		
Alway	s dial m	ny default	connection	n			
Curren		None			Set default		
Local Area	Netwo	rk (LAN) s	ettings -				
			to dial-up r dial-up se	connections. ettings.	LAN se	ttings	

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

	nfiguration may override manual settings. To ensure the al settings, disable automatic configuration.
Automatic	cally detect settings
Use autor	natic configuration script
Address	
Proxy server	
	xy server for your LAN (These settings will not apply to VPN connections).
	Port: 80 Advanced
Address:	

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

Interne	t Properti	es				? 💌
General	Security	Privacy	Content	Connections	Programs	Advanced
Setting	s					
	Enable Move : Reset Reset Browsing Autom Close : Uisable Uisable	s expand caret Br system ca text size text size zoom leve atically re unused for e script de e script de	aret with fo to medium to medium el for new v ecover fron olders in His ebugging (I ebugging ((	new windows o cus/selection of for new windo while zooming windows and ta n page layout e story and Favo internet Explor	hanges ws and tabs abs errors with Co rites* er)	sqmo
•	V Displa	y Accelera	ator button	on selection		•
*Tal	kes effect a	after you	restart Int	ernet Explorer		
				Restore	advanced s	ettings
	nternet Ex		-			
cond	ition.			to their default wser is in an un	Rest	
						-
			Ok	( Ci	ancel	Apply

- Use another web browser or computer to log in again.
- Reset the router to factory default settings and try again. If login still fails, please contact the technical support.

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

# Q4. What should I do if I cannot access the internet even though the configuration is finished?

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2. Go to Advanced > Status to check internet status:

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

💮 Internet 😣	IPv4   IPv6
MAC Address:	50-C7-BF-02-EA-DD
IP Address:	58.61.172.101
Subnet Mask:	255.255.255.255
Default Gateway:	58.61.172.1
Primary DNS:	202.96.134.33
Secondary DNS:	202.96.128.86
Connection Type:	PPPoE
Default Gateway: Primary DNS: Secondary DNS:	58.61.172.1 202.96.134.33 202.96.128.86

- Your computer might not recognize any DNS server addresses. Please manually configure the DNS server.
  - 1) Go to Advanced > Network > DHCP Server.
  - 2) Enter 8.8.8.8 as Primary DNS, click Save.
  - *i* Tips: 8.8.8 is a safe and public DNS server operated by Google.

DHCP Server:	Enable DHCP Server		
IP Address Pool:	192.168.0.100	- 192.168.0.199	
Address Lease Time:	120 minutes.	(1-2880. The default value is 120.)	
Default Gateway:	192.168.0.2	(Optional)	
Primary DNS:	8.8.8.8	(Optional)	
Secondary DNS:		(Optional)	

- Restart the modem and the router.
  - 1) Power off your modem and router, and leave them off for 1 minute.
  - 2) Power on your modem first, and wait about 2 minutes until it gets a solid cable or Internet light.
  - 3) Power on the router.
  - 4) Wait another 1 or 2 minutes and check the internet access.
- Reset the router to factory default settings and reconfigure the router.

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

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

Internet S	IPv4   IPv6
MAC Address:	50-C7-BF-02-EA-DD
IP Address:	0.0.0.0
Subnet Mask:	0.0.0
Default Gateway:	0.0.0.0
Primary DNS:	0.0.0
Secondary DNS:	0.0.0,0
Connection Type:	PPPoE

- Make sure the physical connection between the router and the modem is proper.
- Clone the MAC address of your computer.
  - 1) Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
  - 2) Go to Advanced > Network > Internet and focus on the MAC Clone section.
  - 3) Choose an option as needed (enter the MAC address if Use Custom MAC Address is selected), and click Save.

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

#### 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.

• Modify the LAN IP address of the router.

#### Note:

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

- 1) Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
- 2) Go to Advanced > Network > LAN.
- 3) Modify the LAN IP address as the follow picture shows. Here we take 192.168.2.1 as an example.
- 4) Click Save.

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

- Restart the modem and the router.
  - 1) Power off your modem and router, and leave them off for 1 minute.
  - 2) Power on your modem first, and wait about 2 minutes until it get a solid cable or Internet light.
  - 3) Power on the router.
  - 4) Wait another 1 or 2 minutes and check the internet access.
- Double check the internet connection type.
  - 1) Confirm your internet connection type, which can be learned from the ISP.
  - 2) Visit <u>http://tplinkwifi.net</u>, and log in with the password you set for the router.
  - 3) Go to Advanced > Network > Internet.
  - 4) Select your Internet Connection Type and fill in other parameters.
  - 5) Click Save.

IPv4				
Internet Connection Type:	Dynamic IP			
	Static IP			
IP Address:	Dynamic IP			
Subnet Mask:	PPPoE			
Default Gateway:	BigPond Cable			
	L2TP			
Primary DNS:	РРТР			
Secondary DNS: 0.0.0.0				
Renew Release WAN port is unplugged.				
Advanced				

6) Restart the modem and the router again.

• Please upgrade the firmware of the router.

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

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

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

- Make sure the wireless function of your device is enabled if you're using a laptop with built-in wireless adapter. You can refer to the relevant document or contact the laptop manufacturer.
- Make sure the wireless adapter driver is installed successfully and the wireless adapter is enabled.
  - On Windows 7 or higher
  - 1) If you see the message No connections are available, it is usually because the wireless function is disabled or blocked somehow.
  - 2) Click Troubleshoot and windows might be able to fix the problem by itself.
  - On Windows XP
  - 1) If you see the message Windows cannot configure this wireless connection, this is usually because windows configuration utility is disabled or you are running another wireless configuration tool to connect the wireless.
  - 2) Exit the wireless configuration tool (the TP-Link Utility, for example).

- 3) Select and right click on My Computer on desktop, select Manage to open Computer Management window.
- 4) Expand Services and Applications > Services, find and locate Wireless Zero Configuration in the Services list on the right side.
- 5) Right click Wireless Zero Configuration, and then select Properties.
- 6) Change Startup type to Automatic, click on Start button and make sure the Service status is Started. And then click OK.

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

- Check the WLAN LED indicator on your wireless router/modem.
- Make sure your computer/device is still in the range of your router/modem. Move it closer if it is currently too far away.
- Go to Advanced > Wireless > Wireless Settings, and check the wireless settings. Double check your Wireless Network Name and SSID is not hided.

Wireless Settings		2.4GHz   5GHz
	✓ Enable Wireless Radio	
Network Name (SSID):	TP-LINK_EADB	
Security:	WPA/WPA2-Personal (Recommended)	
Version:	● Auto ○ WPA-PSK ○ WPA2-PSK	
Encryption:	Auto O TKIP O AES	
Password:	35498841	
Mode:	802.11b/g/n mixed 🔍	
Channel Width:	Auto	
Channel:	Auto 🔻	
Transmit Power:	🔿 Low 🔿 Middle 💿 High	
		Save

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

#### • Authenticating problem/password mismatch:

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



- 2) If you cannot find the PIN or PIN failed, you may choose Connecting using a security key instead, and then type in the Wireless Password/Network Security Key.
- 3) If it continues to show note of Network Security Key Mismatch, it is suggested to confirm the wireless password of your wireless router.

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

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

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# FCC compliance information statement



#### Product Name: AC1200 Wireless MU-MIMO Gigabit Router

Model Number: Archer A6

Component Name	Model
I.T.E POWER SUPPLY	T120100-2B1

Responsible party:

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

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

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

Tel: +1 626 333 0234

Fax: +1 909 527 6803

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

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

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

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

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

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

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

# FCC RF Radiation Exposure Statement

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

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

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

Issue Date: 2018.11.19

# FCC compliance information statement

Product Name: I.T.E POWER SUPPLY

Model Number: T120100-2B1

Responsible party:

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

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

user is encouraged to try to correct the interference by one or more of the following measures:

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

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

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

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

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

Issue Date: 2018.11.19

# **Canadian Compliance Statement**

This device complies with Industry Canada license-exempt RSSs. 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) l'appareil ne doit pas produire de brouillage;
- 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

# **Caution:**

- 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:

- 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)

#### **NCC** Notice

注意!

依據 低功率電波輻射性電機管理辦法

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

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

4.7.9.1應避免影響附近雷達系統之操作。

4.7.9.2高增益指向性天線只得應用於固定式點對點系統。

## **BSMI** Notice

安全諮詢及注意事項

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

限用物質含有情況標示聲明書

產品元件	限用物質及其化學符號					
名稱	鉛	鎘	汞	六價鉻	多溴聯苯	多溴二苯醚
	Pb	Cd	Hg	CrVI	PBB	PBDE
PCB	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
外殼	0	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	0

電源適配器	_	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	$\bigcirc$
備考1. "超出0.1wt%"及 "超出0.01wt%" 系指限用物質之百分比含量超出百分比含量基				含量基準值。		
備考2. "〇" 系指該項限用物質之百分比含量未超出百分比含量基準值。						
備考 3. "一" 系指該項限用物質為排除項目。						

# **Safety Information**

- Keep the device away from water, fire, humidity or hot environments.
- Do not attempt to disassemble, repair, or modify the device.
- Do not use damaged charger or USB cable to charge the device.
- Do not use any other chargers than those recommended
- Do not use the device where wireless devices are not allowed.
- Adapter shall be installed near the equipment and shall be easily accessible.

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

# Explanations of the symbols on the product label

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