- 6. Select your Client Access type. Select Home Network Only if you only want the remote device to access your home network; select Internet and Home Network if you also want the remote device to access internet through the VPN Server.
- 7. Click Save.
- 8. Click Generate to get a new certificate.

Certificate	
Generate the certificate.	Generate

Note:

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

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

Configuration File	
Export the configuration.	Export

> Step 2. Configure OpenVPN Connection on Your Remote Device

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

Note:

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

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

12.2. Use PPTP VPN to Access Your Home Network

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

Step 1. Set up PPTP VPN Server on Your Router

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

PPTP VPN		
	Enable VPN Server	
Client IP Address:	10.0.0.11 -10.0.0. 20 (up to 10 clients)	
Username:	admin	
Password:	admin	
	Sav	/e

Note:

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

- 3. In the Client IP Address filed, enter the range of IP addresses (up to 10) that can be leased to the devices by the PPTP VPN server.
- 4. Enter the Username and Password to authenticate clients to the PPTP VPN server.
- 5. Click Save.

> 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.	
i i i i i i i i i i i i i i i i i i i	
Dial directly Connect directly to a phone number without going through the Internet.	
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 Workpl	ace	
Type your user na	me 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 13

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>
- Set Up Link Aggregation
- <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>
- <u>Schedule Your Wireless Function</u>

13. 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 your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Network > LAN.
- 3. Type in a new IP Address appropriate to your needs. And leave the Subnet Mask as the default settings.

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.

13.2. Set Up Link Aggregation

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

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

Link Aggregation		
Link Aggregation:	✓ Enable	
Mode:	-Please Select-	
Hash Algorithm:	-Please Select-	
Link Aggregation Ports:	V LAN1 V LAN2 LAN3 LAN4	
		Sav

- 3. Enable Link Aggregation.
- 4. Select aggregation Mode and Hash Algorithm.
- 5. Specify two ports for link aggregation.
- 6. Click Save.

13.3. Configure to Support IPTV Service

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

IPTV	
IGMP Proxy:	Enable
IGMP Snooping:	✓ Enable
IGMP Version:	V2 💌

- 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 🔍
	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.

Done!

Qos and IPTV cannot be enabled at the same time.

13.4. Specify DHCP Server Settings

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

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

Settings			
HCP Server:	Enable DHCP Server		
P Address Pool:	192.168.0.100	- 192.168.0.199	
ddress Lease Time:	120 minutes		
efault Gateway:	192.168.0.1	(Optional)	
rimary DNS:		(Optional)	
econdary DNS:		(Optional)	
econdary DNS:		(Optional)	_

- 1. Check the box for Enable DHCP Server.
- 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.

Addr	ess Res	servation					
						🕂 Ado	d 😑 Delete
	ID	MAC Address		Reserved IP Address	Description	Status	Modify
	MAC Ad	ldress:			Scan		,
	IP Address:						
	Description:				(a-z, A-Z, (0-9, -, _)	
			✓ E	nable This Entry			
					Cance	el Sav	e

- 2. Click Scan 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.

13.5. Set Up a Dynamic DNS Service Account

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

Note:

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

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Network > Dynamic DNS.
- 3. Select the DDNS Service Provider (TP-Link, NO-IP or DynDNS). It is recommended to select TP-Link so that you can enjoy TP-Link's superior DDNS service. Otherwise, please select NO-IP or DynDNS. If you don't have a DDNS account, you have to register first by clicking Go to register.

Service Provider:	TP-Link	○ NO-IP	🔿 DynD	NS		
Current Domain Name:						
Domain Name List						
Domain Name List						
Domain Name List					🕂 Registe	er 🖨 Dele
	n Name	Registe	red Date	Status	Registe Operation	er 😑 Dele Modify

Note:

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

Dynamic DNS	
Service Provider:	TP-Link ONO-IP ODynDNS
DDNS Unavailable	
To use our superior TP-LINK service provider.	DDNS service, please Log in with your TP-LINK Cloud account, or choose another

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

Dynamic DNS							
Service Provider:	TP-Link	⊖ NO-IP ⊖ Dyr	DNS				
Current Domain Name:							
Domain Name List							
				🕂 Registe	er 🖨 Delet		
Domai	n Name	Registered Date	Status	Operation	Modify		

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

Dynamic DNS		
Service Provider:	🔿 TP-Link 🏾 🖲	NO-IP O DynDNS Go to register
Username:		
Password:		
Domain Name:		
Update Interval:	1 hour	V
WAN IP binding:	Oisable	Enable
Login and Save	ogout 🛛 😣 Not laur	nching

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.

13.6. Create Static Routes

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

I want to:

Visit multiple networks and servers at the same time.

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



and visit my company's network at the same time, I need to configure the static routing.

- 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 your TP-Link ID or the password you set for Router A.
 - **3.** Go to Network > Static Routing.
 - **4.** Click Add and finish the settings according to the following explanations:

Sta	Static Routing								
								🕂 Add	😑 Delete
	ID	Network Destination	St	ubnet Mask	Default Gateway	Interface	Description	Status	Modify
	N	letwork Destinati	on:	172.30.3	1.1				
	Subnet Mask:			255.255.	255.255				
	0	Default Gateway:		192.168.	0.2				
	I	nterface:		LAN					
	0	Description :		company'	s network				
				Enable T	his Entry				
							Cancel	Save	

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

l do that?

How can

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

System Routing Table							
Active Routes Number: 1							
ID Network Destination Subnet Mask Gateway Interface							
1	192.168.0.0	255.255.255.0	0.0.0	lan			

Done!

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

13.7. Specify Wireless Settings

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

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

> To enable or disable the wireless function:

1. Go to Basic > Wireless.

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

Note:

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

> To hide SSID:

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

> To use the smart connect function

The smart connect function helps devices run faster by assigning them to best wireless bands based on actual conditions to balance network demands.

- 1. Go to Advanced > Wireless > Wireless Settings.
- 2. Enable Smart Connect and click Save.
- 3. Keep the default or set a new SSID and password, and click Save. This SSID and password will be applied both for 2.4GHz and 5GHz wireless networks.

Smart Connect	
Smart Connect:	
Wireless Settings	
	✓ Enable Wireless Radio
Network Name (SSID):	TP-Link_5053
Security:	WPA/WPA2-Personal (Recommended)
Version:	Auto O WPA-PSK O WPA2-PSK
Encryption:	Auto O TKIP O AES
Password:	66378365
Transmit Power:	○ Low ○ Middle
Airtime Fairness Feature:	Enable Airtime Fairness
	Save

> To change the security option:

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

In addition

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

> To enable the Airtime Fairness feature

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

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

- 1. Go to Advanced > Wireless > Wireless Settings.
- 2. Select the wireless network 2.4GHz or 5GHz.
- 3. Tick the Enable Airtime Fairness checkbox.
- 4. Click Save.

13.8. Use WPS for Wireless Connection

You can use WPS (Wi-Fi Protected Setup) feature to add a new wireless device to your existing network quickly.

13.8.1. Method 1: Use the WPS Button

Use this method if your client device has a WPS button.

1. Press the WPS button of the router for 1 second.

- 2. Press the WPS button of the client device directly.
- 3. The WPS LED flashes for about 2 minutes during the WPS process.
- 4. When the WPS LED is on, the client device has successfully connected to the router.

13.8.2. Method 2: Use the WPS Button on the Web Management Page

Use this method if your client device has a WPS button.

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

WPS Method	
Method OnePush Button(recommended)	
	Start WPS

- 3. Click Start WPS.
- 4. Press the WPS button of the client device directly.
- 5. The WPS LED of the router flashes for about 2 minutes during the WPS process.
- 6. When the WPS LED is on, the client device has successfully connected to the router.

13.8.3. Method 3: Enter the Router's PIN on Your Client Device

Use this method if your client device asks for the router's PIN.

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

Method TwoPIN			
Router's PIN C) Client's PIN		
Router's PIN:			
Router's PIN:	31929035	Generate	Default

3. Take a note of the router's PIN. You can also click Generate to get a new PIN.

- 4. On the client device, enter the router's PIN. (The default PIN is also printed on the label of the router.)
- 5. The WPS LED flashes for about two minutes during the WPS process.

6. When the WPS LED is on, the client device has successfully connected to the router. Note:

The WPS function cannot be configured if the wireless function of the modem router is disabled. Please make sure the wireless function is enabled before configuring the WPS.

13.8.4. Method 4: Enter the Client Device's PIN on the Router

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

Method TwoPIN	
○ Router's PIN	
Enter the client's PIN:	
Connect	

- 3. Select Client's PIN.
- 4. Enter the client device's PIN in the field. Then click the Connect button.
- 5. Connect successfully will appear on the above screen, which means the client device has successfully connected to the router.

13.9. Schedule Your Wireless Function

This feature allows you to turn off the wireless netowrks at a specific time automatically when you do not need the wireless connection.

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

Wire	less S	Schedule					
Wirele	ess Off T	ïme Schedule: 🧲	D				
Wire	eless C	Off Time					
						¢	Add 😑 Delete
	ID	Wireles	ss Off Time		Repeat		Modify
	Wirel From	ess Off Time: :	00	V			
	To:		06				
	Repe	at:	O Every Day O	Selected	Day		
	Selec	ted Day:	🗌 Sun 🕑 Mon	✓ Tue	✔ Wed ✔	Thu 🕑 Fri	🗌 Sat
	Note	: The rule of repeat	tition days is applied to	o all time	entries. Cance	el S	Save

4. Click Add to set the Wireless Off Time, and click Save.

5. Repeat Step 3 and 4 to set another entry if needed.

Note:

- Make sure that the time of the router is correct before applying this function. For details, refer to Set Up System Time.
- The wireless LEDs (2.4GHz and 5GHz) will be off if the wireless schedule takes effect.
- The wireless network(s) will be automatically turned on after the time period you have set.

Chapter 14

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>
- <u>Set Up Port Mirroring</u>
- <u>Upgrade the Firmware</u>
- Backup and Restore Configuration Settings
- Set the Router to Reboot Regularly
- <u>Change the Administrator Account</u>
- Default Password Recovery
- Local Management
- <u>Remote Management</u>
- System Log

14.1. 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 your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System Tools > Time Settings.
- 3. If you want the time to be displayed in 24-hour format, toggle on the 24-Hour Time button.

> To get time from the Internet:

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

System Time			
Current Time:	1:35:00 AM, 10/24/2016		
24-Hour Time:			
Set Time:	Get from the Internet	○ Get from PC ○ Manually	,
Time Zone:	(GMT) Greenwich Mean Ti	me, Dublin, London	T
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 fileId, enter the IP address or domain name of the second NTP Server.
- 5. Click Obtain to get the current internet time and click Save.

> To get time from PC

- 1. In the Set Time field, select Get from PC.
- 2. The current system time and date of your PC will display below. Click Save.

Ø Tips:

Make sure the time on your PC is correct if you want to get the PC's system time.

System Time	
Current Time: 24-Hour Time:	1:35:00 AM, 10/24/2016
Set Time:	○ Get from the Internet
	Save

> To manually set the time:

1. In the Set Time field, select Manually.

System Time	
Current Time:	1:35:00 AM, 10/24/2016
24-Hour Time:	
Set Time:	○ Get from the Internet ○ Get from PC ● Manually
	11/21/2016 17:34:20
Date:	10/24/2016 (MM/DD/YYYY)
Time:	24 V: 00 V: 00 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	Time									
	✓ Enable Daylight Saving Time									
Start:	2016	Mar	▼	2nd	▼	Sun	▼	2 AM	•	
End:	2016	Nov	•	First	•	Sun	•	2 AM	•	
Running Status:	Dayligh	t Saving	, Time	e 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.

14.2. 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 your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System Tools > LED Control.
- 3. Tick the Night Mode checkbox.
- 4. Specify a time period in the LED Off Time as needed, and the LEDs will be off during this period.

LED Control		
✓ Night Mode		
LED Off Time:	22 ▼ 00 ▼ 06 ▼ 00 ▼	
Note: Before enabling t	he LED Control, make sure <u>System Time</u> is correct.	
		Save

5. Click Save.

14.3. 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 your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System Tools > Diagnostics.

Diagnostics	
Diagnostic Tool:	Ping
IP Address/Domain Name:	
Start	

- 3. Enter the information with the help of page tips:
 - 1) Choose Ping or Traceroute as the diagnostic tool to test the connectivity;
 - Ping is used to test the connectivity between the router and the tested host, and measure the round-trip time.
 - Traceroute is used to display the route (path) your router has passed to reach the tested host, and measure transit delays of packets across an Internet Protocol network.
 - 2) Enter the IP Address or Domain Name of the tested host.
- 4. Click Start to begin the diagnostics.

Tips:

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

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



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

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

14.4. Set Up Port Mirroring

Port Mirroring refers to the process of forwarding copies of packets from a mirrored port to a mirroring port. Usually, the mirroring port is connected to a data diagnose device, which is used to analyze the mirrored packets for monitoring and troubleshooting the network.

> To forward copies of packets to the designated port:

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System Tools > Diagnostics, and focue on the Port Mirroring section.
- 3. Enable Port Mirroring.

Port Mirroring						
Port Mirroring:						
Port Mirroring forward	s copies of pa	ckets from th	e WAN port o	r LAN port(s)	to the design	ated LAN port.
Source Port:	U WAN1	🗌 LAN1	LAN2	LAN3	LAN4	
Target Port:	LAN1		•			
						Save

4. Select the desired port(s) as Source Port(s).

5. Select a desired port as Target Port.

6. Click Save.

Note:

A port cannot be set as the Source Port and the Target Port simultaneously.

14.5. Upgrade the Firmware

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

We will inform you throught 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:

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

14.5.1. Online Upgrade

- 1. Visit <u>http://tplinkwifi.net</u>, and log in with your TP-Link ID or the password you set for the router.
- 2. When the latest firmware is available for your router, the update icon update will display in the top-right corner of the page. Click the icon to go to the Firmware Upgrade page.

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

Check for upgrade

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

Online Upgrade	
Latest Version:	1.1.1 Market 1007700 Mark 2019000
1. said for its flag (3),	
	Upgrade

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

Ø Tips:

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



14.5.2. Local 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 your TP-Link ID or the password you set for the router.
- 3. Go to Advanced > System Tools > Firmware Upgrade.

- 4. Focus on the Device Information section. Make sure the downloaded firmware file is matched with the Hardware Version.
- 5. Focus on the Local Upgrade section. Click Browse to locate the downloaded new firmware file, and click Upgrade.

Local Upgrade		
New Firmware File:	Browse	
		Upgrade

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

14.5.3. Restore Interrupted Upgrade after Power Failure

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

- 1. Make sure you have the latest firmware file in your computer. If not, try another way to connect your computer to the Internet and download the latest firmware file from www.tp-link.com.
- 2. Connect your computer to the router with an Ethernet cable.
- 3. Visit <u>192.168.0.1</u> and you will see the following upgrade page.



- 4. Click Browse and select the downloaded firmware file.
- 5. Click Upgrade and wait for a few minutes until the router completes the upgrading and restarts.

14.6. 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 your TP-Link ID or the password you set for the router.

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

> To backup configuration settings:

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

Backup	
Save a copy of your current settings.	
	Backup

> To restore configuration settings:

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

Restore		
Restore saved settings from a	a file.	
File:	Browse	
		Restore

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

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

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

1. Click Restore under the Factory Default Restore session.



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

Note:

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

> To reset the router to factory default settings:

1. Click Factory Restore to reset the router.

Factory Default Restore	
Revert all the configuration settings to their default values.	
	Factory Restore

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

Note:

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

14.7. 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 your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System Tools > Scheduled Reboot.
- 3. Toggle on Scheduled Reboot.
- 4. Specify the Time when the router reboots and Auto Reboot Interval to decide how often it reboots.

Scheduled Reboot	
Scheduled Reboot:	
Time: 03 • : 00 • (HH:MM) Auto Reboot Interval: O Three Days One Week O Thirty Days	
Note: Before enabling the Auto Reboot, make sure System Time is correct.	
	Save

5. Click Save.

14.8. Change the Administrator Account

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

Note:

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

1. Visit <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 Managemer	ıt	
Old Password:		
New Password:		
	Low Middle High	
Confirm New Password:		
		Sav

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

14.9. Default Password Recovery

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

Note:

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

- 1. Visit <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 Default Password Recovery section.
- 3. Check the box for Enable Default Password Recovery.
- 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.

Default Passwor	l Recovery	
	Enable Default 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.

14. 10. 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 your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System Tools > Administration and complete the settings In Local Management section as needed.
- > 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.

Loca	al Ma	anagem	ent				
Unrestricted LAN Access: Toggle On to enable the management for all devices on LAN or keep it Off to enable the management for a specific device.							
						🕂 Add	🖨 Delete
		ID	MAC Address		Description	Status	Modify
-	_						
		AC Address			Scan		
			🗆 Enab	ble Thi	s Entry		
					Cancel	Save	
-		1	C0-4A-00-1A-C3-4	5	Your PC!	Ş	

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

14.11. 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 your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System Tools > Administration and complete the settings in Remote Management section as needed.

Remote Management		
	Disable Remote Management	
	 Enable Remote Management for All Devices 	
	O Enable Remote Management for Specified Devices	
Web Management Port:		
Remote Management IP Address:		
	Save	

> Forbid all devices to manage the router remotely:

Select Disable Remote Management and click Save.

- > Allow all devices to manage the router remotely:
- 1. Select Enable Remote Management for All Devices.
- 2. Enter Web Management Port (1024-65535 or 80).
- 3. Click Save.

Devices on the Internet can log in to <u>http://Router's WAN IP address:port number</u> (such as <u>http://113.116.60.229:1024</u>) to manage the router.

Ø Tips:

- You can find the WAN IP address of the router on Basic > Network Maps > Internet.
- The router's WAN IP is usually a dynamic IP. Please refer to <u>Set Up a Dynamic DNS Service Account</u> if you want to log in to the router through a domain name.

> Allow specific devices to manage the router remotely:

- 1. Select Enable Remote Management for Specified Devices.
- 2. Enter Web Management Port (1024-65535 or 80).
- 3. In Remote Management IP address, enter the IP address of the remote device to manage the router.
- 4. Click Save.

Devices using this WAN IP can manage the router by logging in to <u>http://Router's WAN</u> IP:port number (such as <u>http://113.116.60.229:1024</u>).

Ø Tips:

The router's WAN IP is usually a dynamic IP. Please refer to <u>Set Up a Dynamic DNS Service Account</u> if you want to log in to the router through a domain name.

14.12. 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 your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System Tools > System Log.
- 3. Choose the type and level of the system logs as needed.
- 4. Click Save Log to save the system logs to local.

	lter: Type= ALL		▼ and Le	Vel= ALL 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'

> 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 your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > System Tools > System Log.
- 3. Click Mail Settings.
- 4. Enter the information required:

Mail Settings	
From:	
To:	
SMTP Server:	
	Enable Authentication
Username:	
Password:	
	✓ Enable Auto Mail
	● Log at 00 ▼ : 00 ▼ (HH:MM) everyday
	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.

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 your TP-Link ID or the password you set for the router.
- 3. Go to Basic > Wireless to retrieve or reset your wireless password.

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

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

Note:

- Please refer to <u>Default Password Recovery</u> 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 http://tplinkwifi.net or http://192.168.0.1 is correctly entered.
- Check your computer's settings:
 - 1) Go to Start > Control Panel > Network and Internet, and click View network status and tasks.
 - 2) Click Internet Options on the bottom left.
 - 3) Click Connections and select Never dial a connection.
| eneral Secu | urity Privacy | Content | Connections | Programs | Advanced |
|--------------|---------------------------------|---------------|-------------------|----------|----------|
| | set up an Inte
tup. | ernet connec | tion, click | Set | up |
| Dial-up and | Virtual Private | Network se | ttings | | |
| 🎒 Broa | adband Con | nection | | Add | ł |
| | | | | Add V | PN |
| | | | | Remo | ve |
| | ttings if you ne connection. | eed to config | jure a proxy | Sett | ings |
| Never d | dial a connecti | on | | | |
| 🔘 Dial whe | enever a netv | vork connect | tion is not prese | ent | |
| Always | dial my defau | It connection | n | | |
| Current | None | | | Set de | efault |
| Local Area N | Network (LAN) | settings - | | | |
| | gs do not app
ttings above f | | | 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
Settings						
	Settings Accessibility Always expand ALT text for images Enable Caret Browsing for new windows and tabs Move system caret with focus/selection changes Reset text size to medium for new windows and tabs Reset text size to medium while zooming* Reset zoom level for new windows and tabs Browsing Automatically recover from page layout errors with Compa Close unused folders in History and Favorites* Disable script debugging (Internet Explorer) Disable script debugging (Other)					
1				t every script e on selection		
*Tak	es effect a	fter you	restart Int	ernet Explorer		
				Restore	advanced s	ettings
Rese condi	tion.	Explorer'	s settings	to their default vser is in an uni	Rest	
			Ok	Ca	incel	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. How do I use the WDS Bridging function to extend my wireless network?

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 boost 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 your TP-Link ID or the password you set for the router.
- 2. Configure the IP address of the router:
 - 1) 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 💌	
		Sav

- 3. Survey the SSID to be bridged:
 - Go to Advanced > System Tools > System Parameters and focus on the 2.4GHz WDS section, click Enable WDS Bridging.
 - 2) 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.

2.4GHz WDS		
WDS Bridging:	Enable WDS Bridging	
DHCP Server:	🔿 Auto 💿 On 🔿 Off	
SSID (to be bridged):	TP-Link_4F98	Scan
MAC Address (to be bridged):	0C-4A-08-13-4F-98	Example: 00-1D-0F-11-22-33
Security:	O No Security	K/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.

Q5. 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 your TP-Link ID or the password you set for the router.
- 2. Go to Advanced > Status to check internet status:

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

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

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

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

- 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 😢	IPv4 IPv6
MAC Address:	50-C7-BF-02-EA-DD
IP Address:	0.0.0.0
Subnet Mask:	0.0.0.0
Default Gateway:	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 your TP-Link ID or the password you set for the router.
 - 2) Go to Advanced > Network > Internet and focus on the MAC Clone section.
 - 3) Choose an option as needed (enter the MAC address if Use Custom MAC Address is selected), and click Save.

MAC Clone		
Use Default MAC Address		
○ Use Current Computer MAC Address		
○ 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 your TP-Link ID or the password you set for the router.
- 2) Go to Advanced > Network > LAN.
- 3) Modify the LAN IP address as the follow picture shows. Here we take 192.168.2.1 as an example.
- 4) Click Save.

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

- 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 your TP-Link ID or the password you set for the router.
- 3) Go to Advanced > Network > Internet.
- 4) Select your Internet Connection Type and fill in other parameters.
- 5) Click Save.

IPv4				
Internet Connection Type:	Dynamic IP	▼		
IP Address:	Static IP			
Subnet Mask:	Dynamic IP PPPoE			
Default Gateway:	BigPond Cable			
Primary DNS:	L2TP PPTP			
Secondary DNS:	0.0.0			
Renew Release WAN port is unplugged.				
Advanced				
0				

- 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.

Q6. 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
 - 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.

Type the	8-digit PIN f	rom the round	
PIN:			
<u>Connect us</u>	ng a security key	y instead	 1

- 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 STATEMENT

Product Name: AC2300 Wireless MU-MIMO Gigabit Router

Model Number: Archer A10

Component Name	Model
I.T.E POWER SUPPLY	T090085-2B1

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 co-located or operating in conjunction with any other antenna or transmitter."

The device is restricted in indoor environment only.

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

Issue Date: 2018.2.10

FCC compliance information statement



Product Name: I.T.E POWER SUPPLY

Model Number: T090085-2B1

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.

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: 2018.2.10

CE Mark Warning

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

OPERATING FREQUENCY(the maximum transmitted power)

2412MHz-2472MHz (20dBm)

5180MHz—5240MHz (23dBm)

EU declaration of conformity

TP-Link hereby declares that the device is in compliance with the essential requirements and other relevant provisions of directives 2014/53/EU, 2009/125/EC and 2011/65/EU.

The original EU declaration of conformity may be found at http://www.tp-link. com/en/ce

RF Exposure Information

This device meets the EU requirements (2014/53/EU Article 3.1a) on the limitation of exposure of the general public to electromagnetic fields by way of health protection.

The device complies with RF specifications when the device used at 20 cm from your body.

Restricted to indoor use.

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.

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

This radio transmitter (IC: 8853A-C2300) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible

gain indicated. Antenna types not included in this list below, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (IC: 8853A-C2300) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste ci-dessous et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

	Antenna	Three dual band detachable antennas, 3dBi for 5GHz and 2dBi for	
		2.4GHz.	

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 5745-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-pointtopoint operation as appropriate; and

The high-power radars are allocated as primary users (i.e. priority users) of the bands 5745-5850 MHz and that these radars could cause interference and/or damage to LELAN 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 5745-5850 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 5745-5850 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)

Korea Warning Statements:

당해 무선설비는 운용중 전파혼신 가능성이 있음.

NCC Notice & BSMI Notice:

注意!

依據低功率電波輻射性電機管理辦法

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

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通行;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。

電磁波曝露量MPE標準值1mW/cm²,送測產品實測值為0.7259mW/cm²。

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

	限用物質及其化學符號					
產品元件名稱	鉛	鎘	汞	六價鉻	多溴聯苯	多溴二苯醚
	Pb	Cd	Hg	CrVI	PBB	PBDE
PCB	\bigcirc	\bigcirc	Ō	\bigcirc	\bigcirc	\bigcirc
外殼	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
電源適配器	_	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
備考1. 超出0.	1 wt %	"及	"超出(0.01 wt %	6"系指限月	用物質之百分比
含量超出百分比	七含量基	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."-"	系指詞	亥項限月	日物質為	谢除項目	0	

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.
- Li Use only power supplies which are provided by manufacturer and in the original packing of this product. If you have any questions, please don't hesitate to contact us.

For EU/EFTA, this product can be used in the following countries:

AT	BE	BG	СН	CY	CZ	DE	DK
EE	EL	EF	FI	FR	HR	HU	IE
IS	IT	LI	LT	LU	LV	MT	NL
NO	PL	PT	RO	SE	SI	SK	UK

Explanations of the symbols on the product label

Symbol	Explanation
	DC voltage
	Indoor use only
X	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.