TP-LINK®
The Reliable Choice

Touch P5

User Guide

AC1900 Touch Screen Wi-Fi Gigabit Router

Contents

Chapter 1. Get to Know About Your Router 3

1.1 Product Overview 4

1.2 Main Features 5

1.3 Panel Layout 6

1.3.1 The Front Panel 6

1.3.2 The Back Panel 7

1.4 Requirements for Operation 7

1.5 Position Your Router 8

Chapter 2. Configure your Touch P5 as a Router 9

2.1 Connect Your Router 10

2.2 Log into Your Router 11

2.3 Quick Setup 13

2.4 Mode Selection 14

2.5 Wireless Settings 15

2.6 WPS 18

2.7 Guest Network 20

2.8 Parental Controls 22

2.9 Devices Control 25

2.10 Printer Server 27

2.11 DDNS 31

2.12 LAN 32

2.13 DHCP Server 33

2.14 QoS 36

2.15 Clock 39

2.16 Screen Settings 42

2.17 Reboot & Reset 43

2.18 Administrator Password 44

2.19 About 45

2.20 USB Application 46

2.20.1 Local Storage Sharing 47

2.20.2 Remote Access via FTP Server 49
2.20.3 Media Sharing 52
2.21 Set Up IPv6 Connection 55
2.22 NAT Forwarding 57
2.22.1 Share Local Resources in the Internet by Virtual Server 58
2.22.2 Open Ports Dynamically by Port Triggering 59
2.22.3 Make Applications Free from Port Restriction by DMZ 60
2.22.4 Make Xbox Online Games Run Smoothly by UPnP 61
2.23 Update the Firmware 63
Troubleshooting Guide & FAQ 64
Appendix A: Specifications 70
Appendix B: Glossary 72

Chapter 1. Get to Know About Your Router

This chapter introduces what the router can do and shows its main features and appearance. And its operation requirements and positioning methods.

1.1 Product Overview

What This Product Does

The Touch P5 AC1900 Touch Screen Wi-Fi Gigabit Router integrates four Gigabit Ethernet ports, Firewall, NAT-router and Wireless AP. Powered by 3x3 MIMO technology, this router delivers exceptional range and speed, which can fully meet the need of Small Office/Home Office (SOHO) networks and the users demanding higher networking performance. Your wireless connections are radio band selectable to avoid interference in your area, and the four built-in Gigabit ports supply high-speed connection to your wired devices.

Intuitive Touchscreen - Wi-Fi at Your Fingertip

TP-LINK's Touch P5 features a 4.3 inch color touchscreen display, which provides easier installation and network management with just a few taps.

Multi-Function Design - Meet Various Demands

TP-LINK's Touch P5 can function as a router, repeater, or access point to best serve your networking needs now and in the future.

802.11ac - The Next Generation of Wi-Fi

TP-LINK's Touch P5 comes with the next generation Wi-Fi standard – 802.11ac, backward compatible with 802.11n and 3 times faster than wireless N speeds. With higher power efficiency and robust security, 802.11ac is the perfect way to accelerate a home multimedia network and solve congestion that multiple devices may cause.

1900Mbps Concurrent Dual Band - More Bandwidth, Less Interference

With 1300Mbps wireless speeds over the crystal clear 5GHz band and 600Mbps over the 2.4GHz band, Touch P5 offers you the flexibility of two dedicated networks and ensures amazing wireless performance. Simple tasks such as sending e-mails or web browsing can be handled by the 2.4GHz band while bandwidth intensive tasks like online gaming or HD video streaming can be processed by the 5GHz band - all at the same time.

Broad Wi-Fi Coverage and Targeted Connection

Featuring three detached external antennas, Touch P5 is able to boost Wi-Fi coverage throughout your home. Advanced beamforming technology enables Touch P5 to focus Wi-Fi signal to connected devices, delivering a more targeted and highly efficient wireless connection.

Multifunctional USB Port - Easy Storage and Sharing

Using the Touch P5's multi-functional USB 2.0 and USB 3.0 ports, you can share a printer with multiple computers and devices on your network and can also share files & media at home or via the FTP server while away from home.

Guest Network

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

IPv6 Supported

Touch P5 supports IPv6, which is the foundation of the next generation of the Internet and enables a range of new services and improved user experience.

1.2 Main Features

- Extra-large 4.3 inch capacitive colorful touchscreen surfaced with unbreakable toughened glass
- Complies with IEEE 802.11a/b/g/n/ac, IEEE 802.3/3u, IEEE 802.3ab
- 1*10/100/1000Mbps shielded Internet Port, 4*10/100/1000Mbps shielded Ethernet Ports, supports Auto-negotiation and Auto MDI/MDIX
- Simultaneous Dual Band, with maximum speed up to 600Mbps 2.4GHz and 1300Mbps over 5GHz
- User-friendly UI, convenient for users to configure the router and check network status
- With wall mounting design, users can place the router flexibly
- With one USB 3.0 Port and one USB 2.0 Port, support USB Storage Sharing, Print Server, FTP Server, and Media Server. Share a printer locally and files & media with networked devices or remotely via FTP server
- 3 dual band external antennas and high power amplifiers provide maximum omni-directional wireless coverage and reliability
- Beamforming Technology brings a more targeted and highly efficient Wi-Fi connection
- Supports wireless router, access point and repeater modes
- Guest Network access provides secure Wi-Fi access for guests sharing your home or office network
- Parental Controls allow parents or administrators to establish restricted access policies for children or staff
- Supports PPPoE, Dynamic IP, Static IP, PPTP, L2TP Cable Internet access
- Supports UPnP, Dynamic DNS, Static Routing, Flow Statistics, VPN Pass-through
- Supports Virtual Server, Special Application and DMZ host
- Supports WEP, WPA/WPA2, WPA-PSK/WPA2-PSK encryptions
- Supports IPv6
- Built-in NAT and DHCP server supports static IP address distributing
- Supports firmware upgrade and Web management

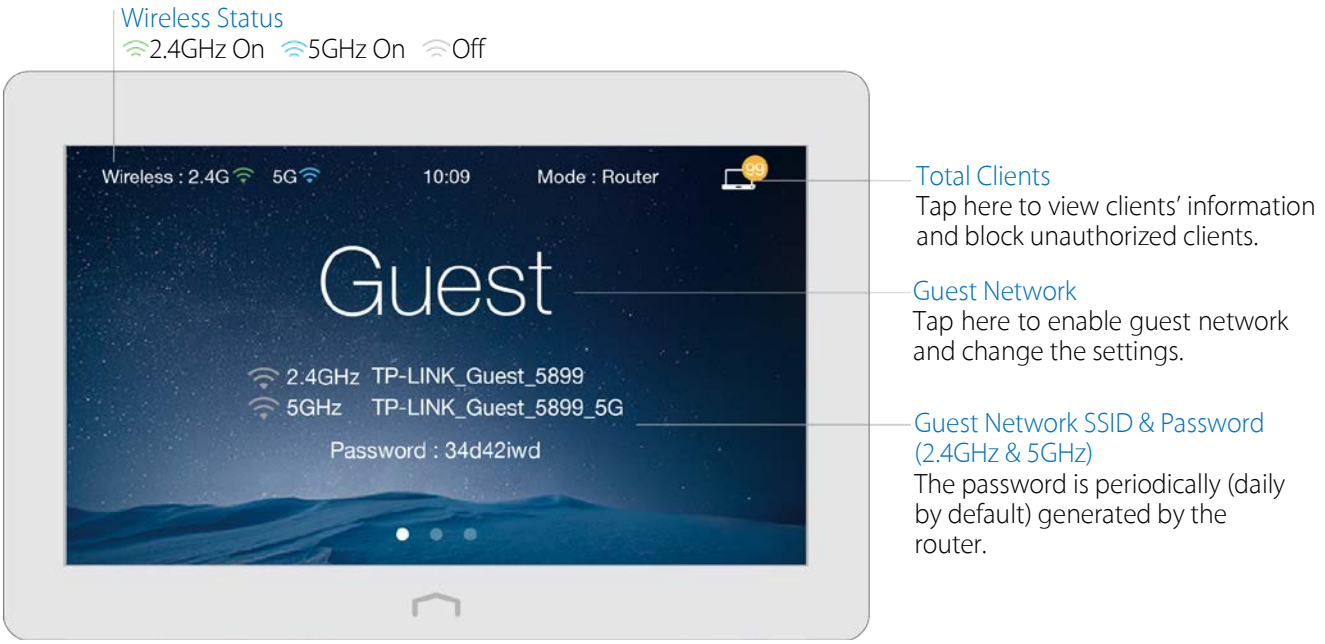
1.3 Panel Layout

1.3.1 The Front Panel

Power LED

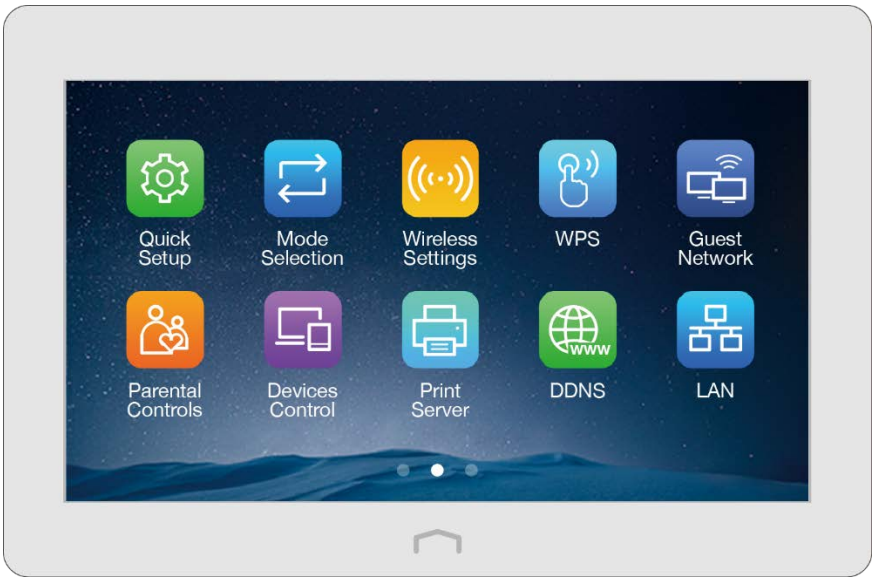
The router's power LED is right in front of the home screen. It will be solid on when the router is powered on.

Home Screen



Menu Screen

Tap the icons to perform various functions of the router, such as Quick Setup, Mode Selection, Parental Controls, etc.



1.3.2 The Back Panel

The router's back panel shows the connection ports, buttons and antennas. Refer to the following for detailed instructions.

Item	Description
Power	For connecting the router to power socket via the provided power adapter.
Power On/Off	The switch for the power. Press it to power on or off the router.
USB 2.0	For connecting to a USB 2.0 storage device or a USB 2.0 printer.
USB 3.0	It's on the right front corner of the router. For connecting to a 3.0 USB storage device or a 3.0 USB printer. It is also compatible with USB 2.0 devices.
Internet	In router mode, it's used for connecting to the DSL/cable Modem or Internet. In repeater mode, it's used for connecting to Ethernet-enabled device, working the same as the Ethernet port. In access point mode, it's used for connecting to front router or Internet.
Ethernet (1, 2, 3, 4)	These ports (1, 2, 3, 4) connect the router to the local computer(s).
Reset	With the router powered on, use a pin to press and hold the Reset button until the Touch P5 logo displays.
Antennas	Used for wireless operation and data transmit. Upright them for the best Wi-Fi performance.

1.4 Requirements for Operation

To connect and use the router for Internet sharing, you must have the following:

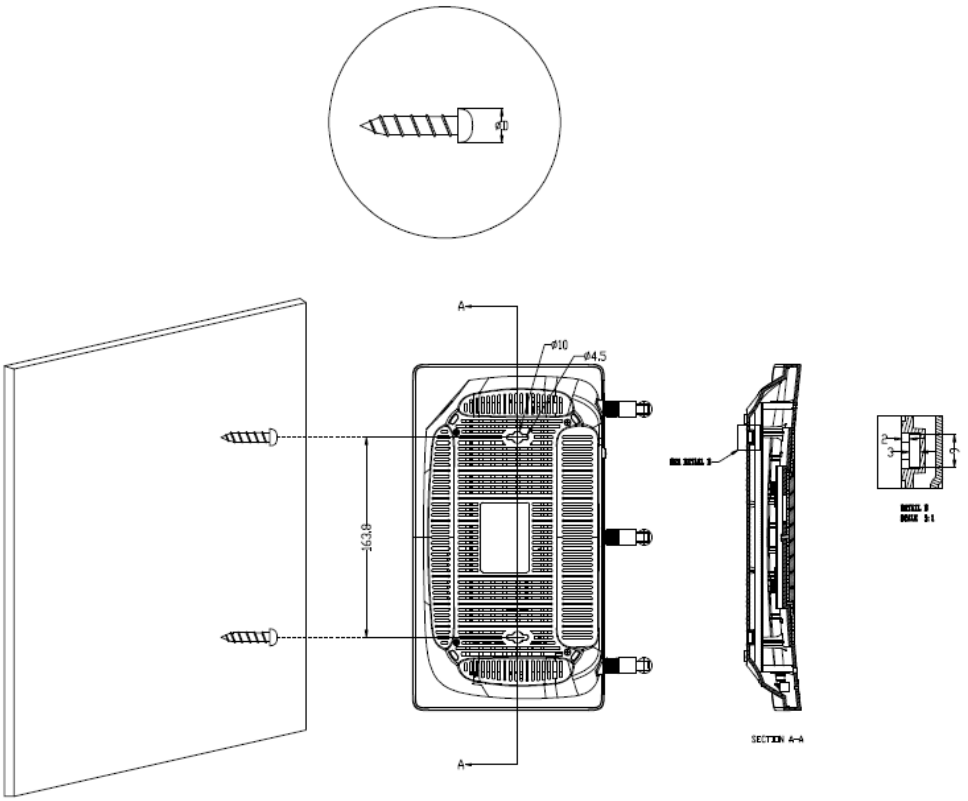
- Broadband Internet Access Service (DSL/Cable/Ethernet).
- One DSL/Cable Modem that has an RJ45 connector (which is not necessary if the router is connected directly to the Ethernet).
- Computers with an active Ethernet Adapter and an Ethernet cable with RJ45 connectors.
- TCP/IP protocol on each computer.

- Web browser, such as Microsoft Internet Explorer, Mozilla Firefox and Apple Safari.

1.5 Position Your Router

- Place the router in a well-ventilated place far from any heater or heating vent
- Avoid direct irradiation of any strong light (such as sunlight)
- Keep at least 2 inches (5 cm) of clear space around the router
- Operating Temperature: 0℃~40℃ (32℉~104℉)
- Operating Humidity: 10%~90%RH, Non-condensing

Generally, Touch P5 is placed on a horizontal surface. The device also can be mounted on the wall as shown below.



Note: The diameter of the screw, 3.5mm<D<6mm, and the distance of two screws is 163.8mm. The screw that project from the wall need around 4mm based, and the length of the screw need to be at least 20mm to withstand the weight of the product.

Chapter 2. Configure your Touch P5 as a Router

This chapter introduces how to connect and configure the Touch P5 in router mode. Most configuration can be done through the touchscreen. Furthermore, some other features, such as the USB Application, IPv6 Connection, NAT Forwarding and Firmware Upgrade, etc., can be configured through web-based utility.

2.1 Connect Your Router

Follow the steps below to connect your router.

1. Install the antennas and position them vertically.

   Note: If your Internet connection is through an Ethernet cable from the wall, instead of a modem, connect the Ethernet cable directly to the router's Internet port, and skip step 2,3,4.
2. Turn off the modem, and remove the backup battery if it has one.
3. Connect the modem to the Internet port on the router via an Ethernet cable.
4. Turn on the modem, and wait 2 minutes for it to restart.
5. Turn on the router and wait until the system boot on the screen completes.
6. Connect your computer to the router.

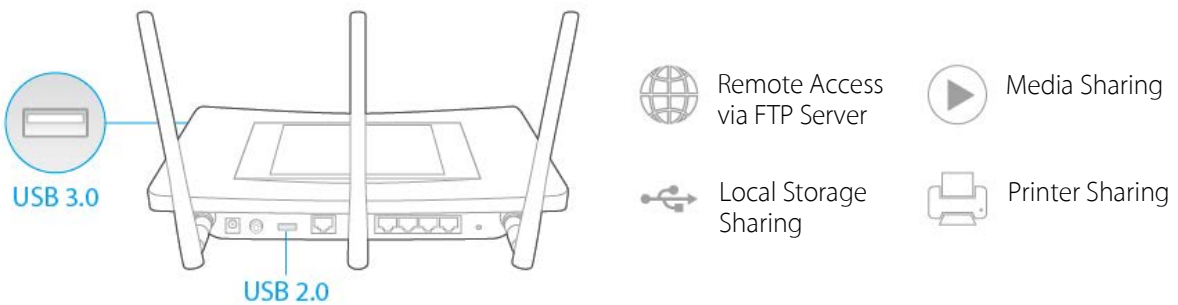
   Option 1: Wired

   Connect your computer's Ethernet port to the Internet port on the router Touch P5 via the Ethernet cable.

   Option 2: Wirelessly

   Use the default SSID (Wireless Network Name) and Wireless Password printed on the product label of the router to connect wirelessly.

Note: If you want to use the router for media sharing, storage sharing and printer sharing, please cable the USB storage device or printer to the USB port of the router.

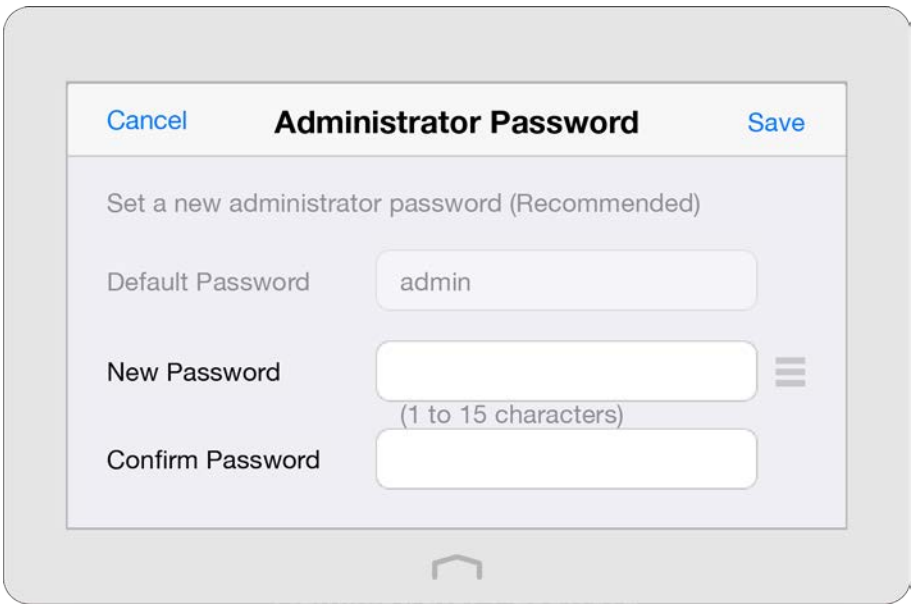


2.2 Log into Your Router

You can log in and manage the Touch P5 AC1900 Touch Screen Wi-Fi Gigabit Router through the touchscreen or web-based utility.

Option 1: Through the Touchscreen (Recommended)

1. Tap the home button or the screen and slide to start the screen.
2. The first time you log in, you will need to set a new administrator password for your router. Enter the new password and enter again to confirm. Tap Save, then follow the Quick Setup to complete the initial configuration..

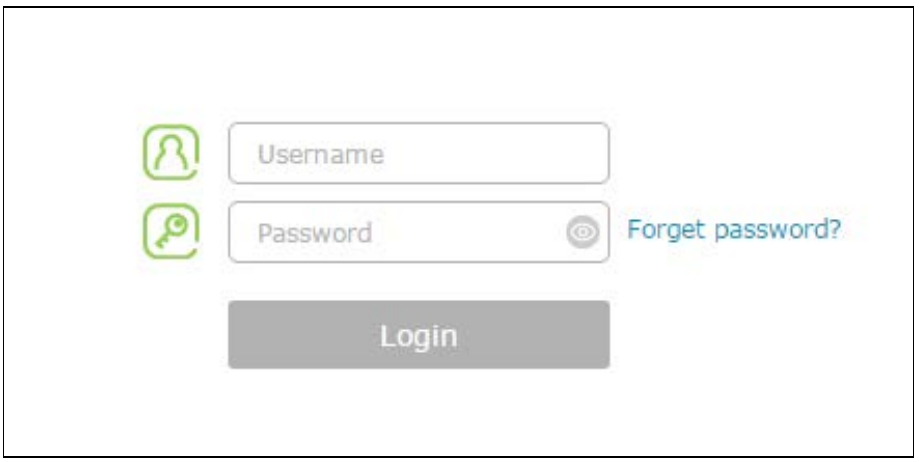


Note: Apps on the touchscreen and web-based utility will need to use the new password that you have set to log in.

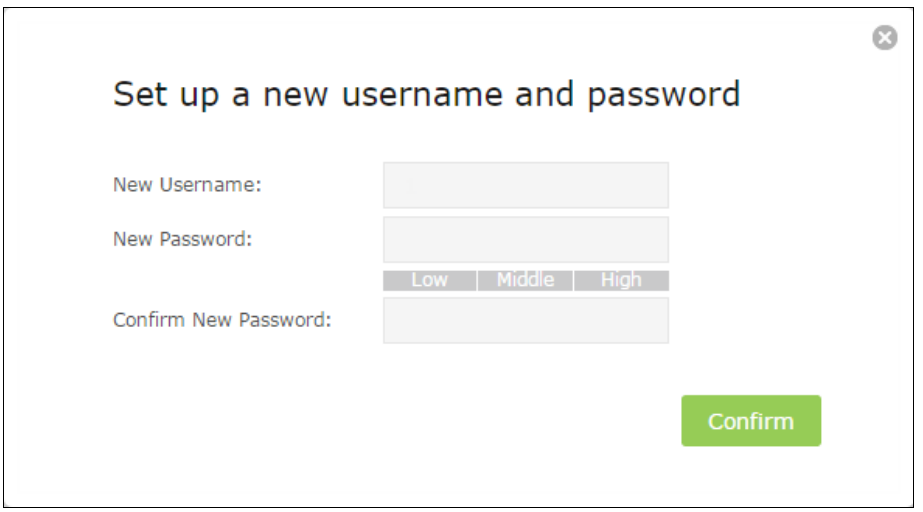
Option 2: Through Web-based Utility

The web-based utility can be used on any Windows, Macintosh or UNIX OS with a web browser, such as Microsoft Internet Explorer, Mozilla Firefox or Apple Safari. Follow the steps below to log into your router.

1. If the TCP/IP Protocol on your computer is set to the static (fixed) IP address, you need to change it to obtain an IP address automatically.
2. Open a web-browser on your computer, visit http://tplinkwifi.net and log in with the default username and password (admin/admin).



3. The first time you log in, you will need to set up a new username and password for your router. Enter your new username and password and the new password again to confirm. Click Confirm.

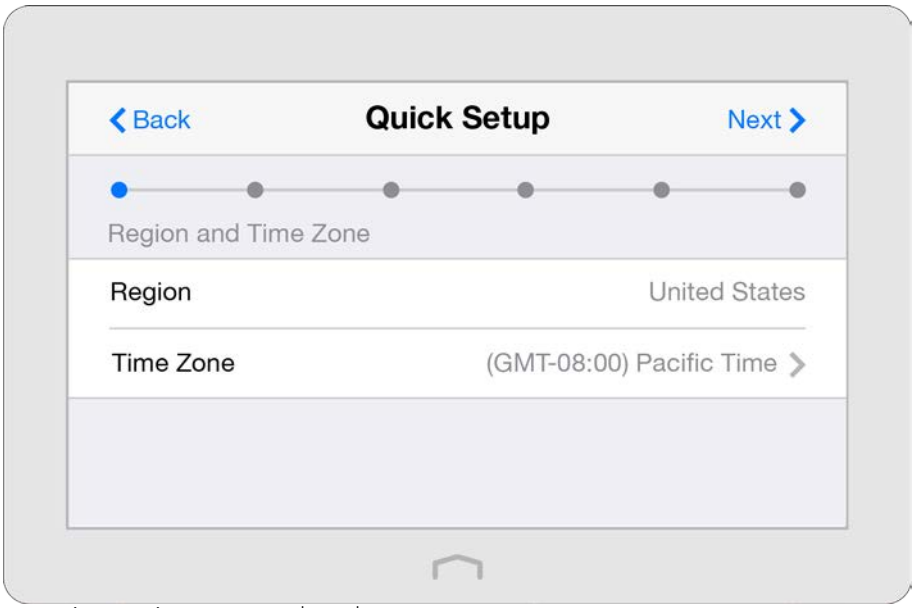


Note: Apps on the touchscreen will also need to use the new password that you have set to log in.

2.3 Quick Setup

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

1. On the menu screen, tap the Quick Setup icon to open it.
2. Set your Region and Time Zone and tap Next.



3. Follow the on-screen instructions to complete the setup.

Note:
If you change the preset wireless network name (SSID) and wireless password during the quick setup process, all your wireless devices must use the new SSID and password to connect to the router.

2.4 Mode Selection

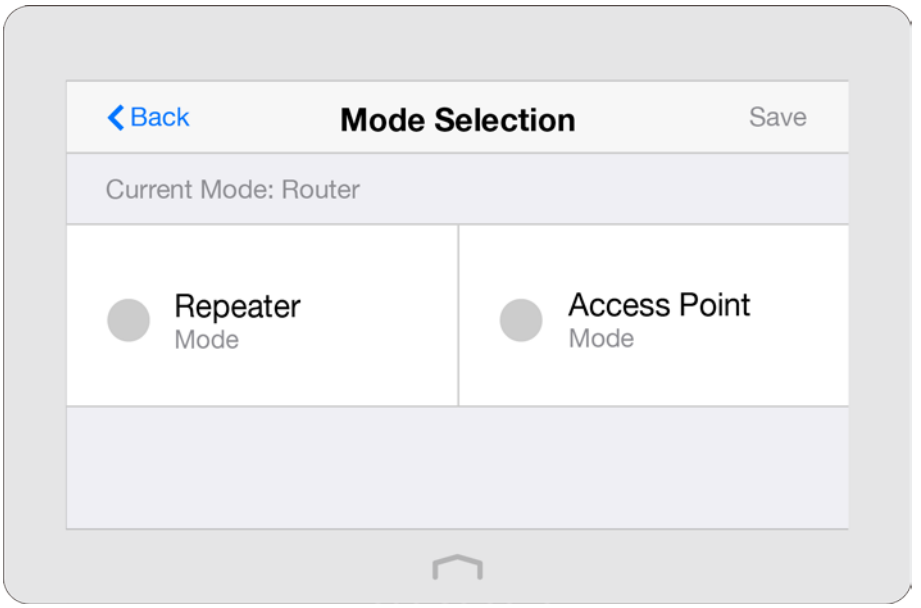
The Mode Selection app helps you easily switch Touch P5 to a router, repeater or an access point.

Router Mode (Default): The device can provides Internet access for multiple wired and wireless devices simultaneously.

Repeater Mode: The device can extends your existing wireless coverage by repeating the wireless signal.

Access Point Mode: The device can transforms your existing wired network to a wireless network.

1. On the menu screen, tap the Mode Selection icon to open it.
2. Select your desired mode, and tap Save.



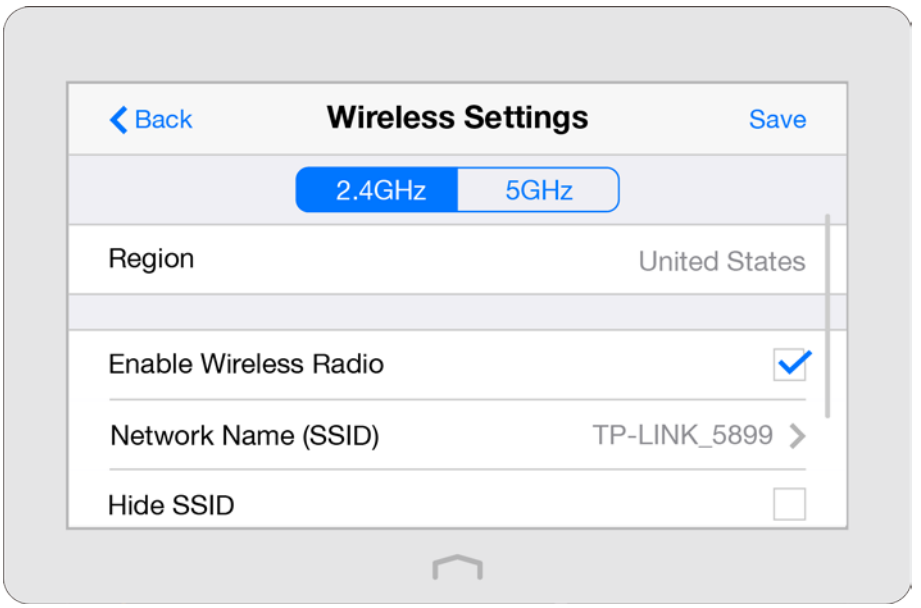
Note:

The device will reboot to make your changes take effect, please do NOT operate during the process.

2.5 Wireless Settings

The Wireless Settings app helps you customize the wireless settings including the wireless radio, wireless network name, password and security option, etc., according to your needs.

On the menu screen, tap the Wireless Settings icon to open it. Set your Region.



To enable or disable the wireless function:

Select the wireless network 2.4GHz or 5GHz and enable the Wireless Radio. If you don't want to use the wireless function, just uncheck the box. If you disable the wireless function, all the wireless settings won't be effective.

To change the network name (SSID) and hide SSID:

Select the wireless network 2.4GHz or 5GHz and enter a new SSID using up to 32 characters. The default SSID is TP-LINK_XXXX and the value is case-sensitive.

Note:

If you use a wireless device to change the wireless settings, you will be disconnected when the settings are effective.

Select the wireless network 2.4GHz or 5GHz and select Hide SSID, and your SSID will not broadcast. Your SSID won't display when you scan for local wireless network list on your wireless device and you need to manually join the network.

To change the security option:

Select the wireless network 2.4GHz or 5GHz and choose your Security Type, and enter the corresponding encryption parameters, the router provides four options:

- No Security: Select this option to disable the wireless security.
- WPA/WPA2-Personal (Recommended): Select this option to enable the standard authentication method based on a Pre-shared Key (PSK), also called passphrase. Its security level is the highest.
- WPA/WPA2-Enterprise: Select this option to enable the more advanced authentication method using a RADIUS (Remote Authentication Dial In User Service) server. If selected, WPS function will be disabled.

- WEP: Select this option to enable basic authentication method if any of your client devices can only access the wireless using WEP (Wired Equivalent Privacy).

To change the mode, channel or transmit power:

Select the wireless network 2.4GHz or 5GHz.

Mode: Select the desired mode.

- 802.11n only: Select only if all of your wireless clients are 802.11n devices.
- 802.11g/n mixed: Select if you are using both 802.11b and 802.11g wireless clients.
- 802.11b/g/n mixed: Select if you are using a mix of 802.11b, 11g, and 11n wireless clients.

Note: When 802.11n only mode is selected, only 802.11n wireless stations can connect to the modem router. It is strongly recommended that you select 802.11b/g/n mixed, and all of 802.11b, 802.11g, and 802.11n wireless stations can connect to the modem router.

- 802.11ac only (5GHz): Select only if all of your wireless clients are 802.11ac devices.
- 802.11 n/ac mixed (5GHz): Select if you are using both 802.11n and 802.11ac wireless clients.
- 802.1111a/n/ac mixed (5GHz): Select if you are using a mix of 802.11ac, 802.11n and 802.11ac wireless clients. It is strongly recommended that you select 11a/n/ac mixed.

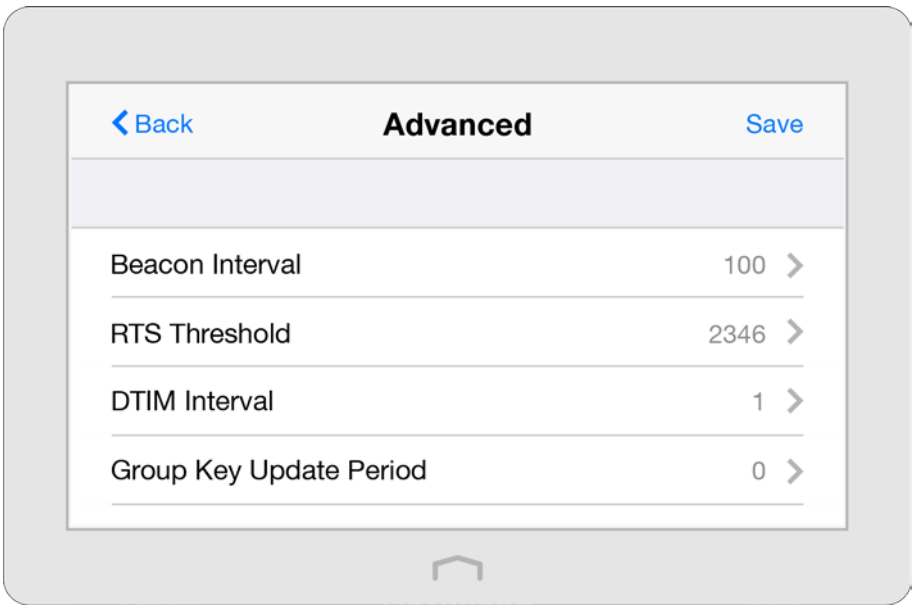
Channel Width: Select the channel width from the list. The default setting is automatic, which can adjust the channel width for your clients automatically.

Channel: Select the channel you want to use from the list. This field determines which operating frequency will be used. It is not necessary to change the wireless channel unless you notice interference problems with another nearby access point.

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

Advanced wireless settings:

Advanced wireless settings are for those have a network concept. If you are not familiar with the settings on this page, it's strongly recommended that you keep the provided default values; otherwise it may result in lower wireless network performance.



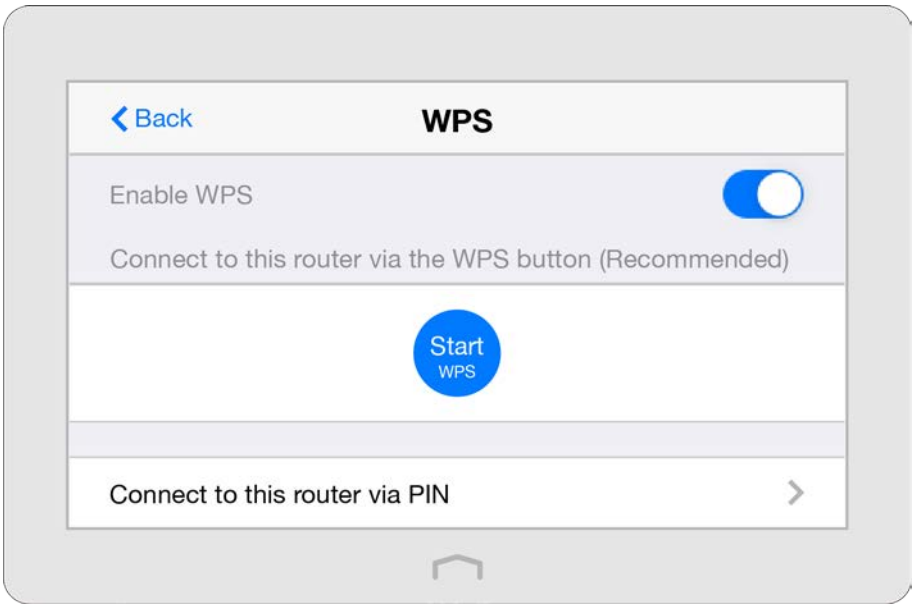
- Beacon Interval: Enter a value between 40 and 1000 in milliseconds to determine the duration between beacon packets that are broadcasted by the router to synchronize the wireless network. The default is 100 milliseconds.
- RTS Threshold: Enter a value between 1 and 2346 to determine the packet size of data transmission through the router. By default, the RTS (Request to Send) Threshold size is 2346. If the packet size is greater than the preset threshold, the router sends Request of Send frames to a particular receiving station and negotiates the sending of a data frame, or else the packet will be sent immediately.
- DTIM Interval: This value determines the interval of the Delivery Traffic Indication Message (DTIM). Enter a value between 1 and 15 beacon intervals. The default value is 1, 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: The WMM function guarantees the packets with high-priority messages being transmitted preferentially. It is enabled by default and highly recommended.
- Enable Short GI: This function is enabled by default and recommended to increase the data capacity by reducing the Guard Interval (GI) time.
- Enable AP Isolation: If you want to confine and restrict all wireless devices connected to your network from interacting with each other, but still able to access the Internet, select the Enable AP Isolation checkbox.

2.6 WPS

The WPS app helps you quickly establish a wireless connection between the Wi-Fi Protected Setup (WPS) supported devices and Touch P5. Wireless devices that support WPS, including Android phones, tablets, and most USB network cards, can connect to your router through this method. (WPS is not supported by IOS devices.)

Note: The WPS function cannot be configured if the wireless function of the router is disabled. Also, the WPS function will be disabled if your wireless encryption is WEP. Please make sure the wireless function is enabled and is configured with the appropriate encryption before configuring the WPS.

1. On the menu screen, tap the WPS icon to open it.

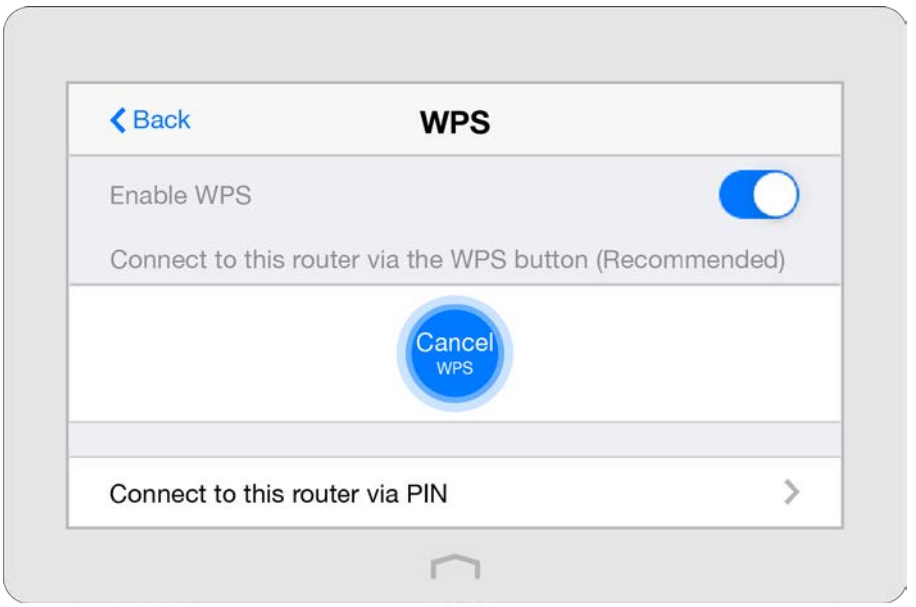


2. Connect either using either WPS Button method or PIN method

   Option 1 Use the WPS Button (Recommended)

   Use this option if your client device has a Wi-Fi Protected Setup button.

   1. Tap the Start WPS button on the screen of the router, and the WPS button will show as below during the process.

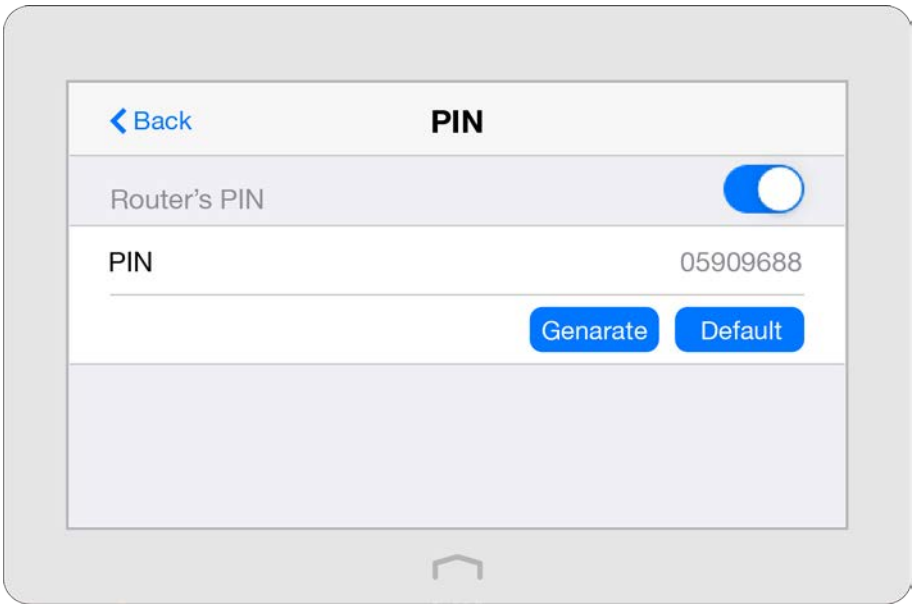


2. Immediately press the WPS button of the client device in two minutes.
3. Success will appear on the above screen, which means the client device has successfully connected to the router.

Option 2 Use the PIN

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

1. Tap Connect to this router via PIN on the above screen of the router to get the router's PIN, you can use the default one or generate a new one.

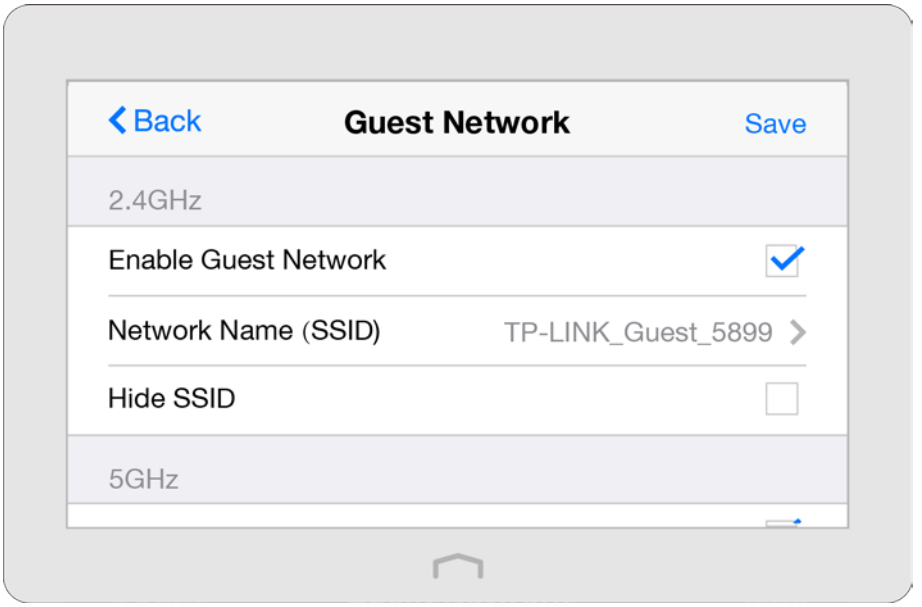


2. On the client device, enter the router's PIN to connect.

2.7 Guest Network

The Guest Network app allows you to provide Wi-Fi access for guests without disclosing your main network. When you have guests in your house, apartment, or workplace, you can create a guest network for them. In addition, you can assign permissions for guest network users to ensure the security and privacy of your main network.

On the menu screen, tap the Guest Network icon to open it.



To enable or disable the guest network:

Guest Network is enabled by default. If you don't want to use the guest network function, just uncheck the box and all the guest network settings won't be effective.

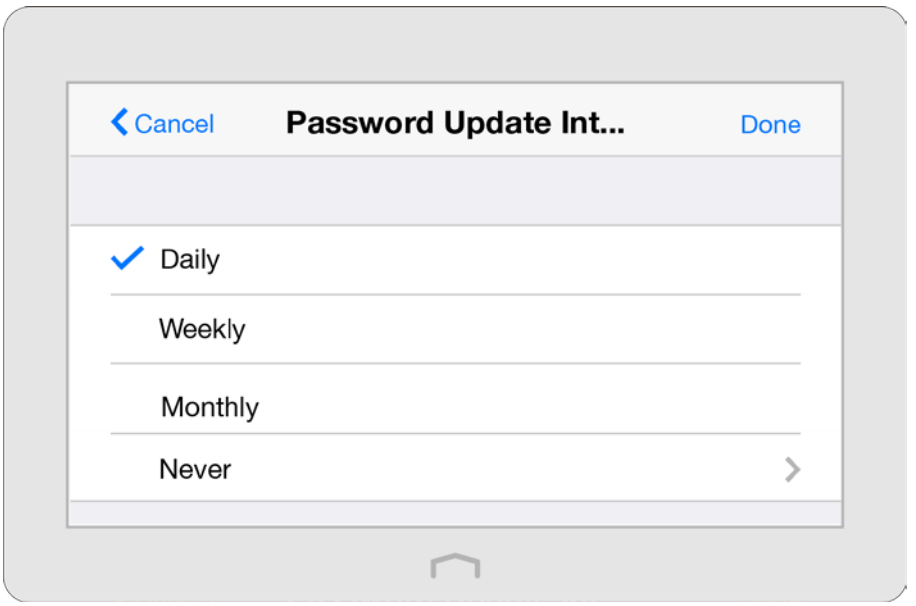
To change the guest network name (SSID) and hide SSID:

1. Enter a new SSID using up to 32 characters. The default SSID is TP-LINK_Guest_XXXX/ TP-LINK_Guest_XXXX_5G and the value is case-sensitive.
2. Select Hide SSID, and your guest SSID will not broadcast. Your SSID won't display when you scan for local wireless network list on your wireless device and you need to manually join the network.

To change the password and password update interval:

Guest Network 2.4GHz and 5GHz shares one password. By default, guest network password updates daily. You can change the update interval to weekly, monthly.

Or you can also select Never to set a static password for your guest network. If you select Never, please create a password between 8 and 63 ASCII characters or between 8 and 64 hexadecimal characters (0-9, a-f, A-F).



To limit the guest network authorities

- Allow guests to see each other

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

- Allow guests to access my local network

  Select this checkbox to allow the clients in your guest network access your local network shares and printers, not just Internet access.

2.8 Parental Controls

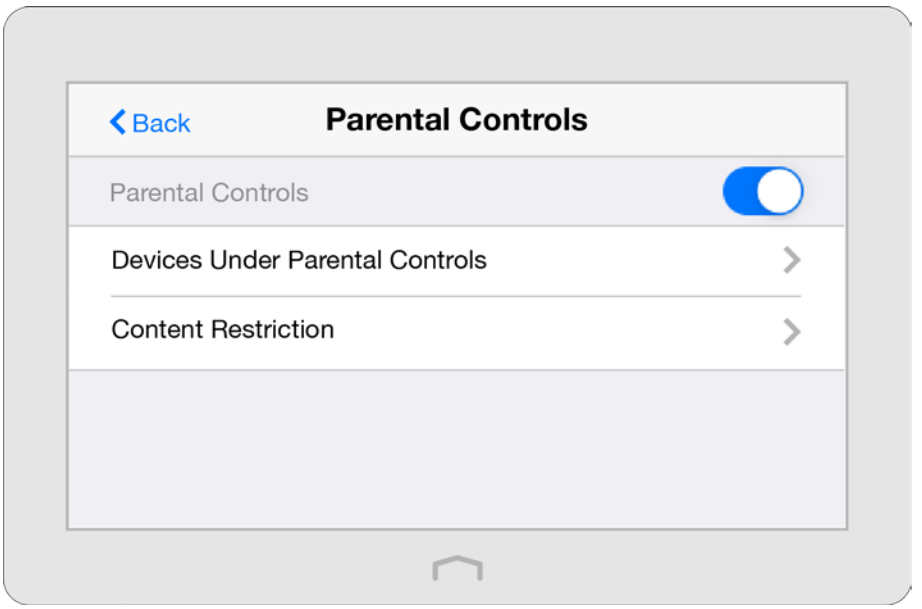
The Parental Controls app allows you to block inappropriate, explicit and malicious websites; restrict access by certain times of day (for example, client devices can only visit www.tp-link.com during office hours); and at the same time it protects every device on your home network against malware and phishing through one central control point.

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

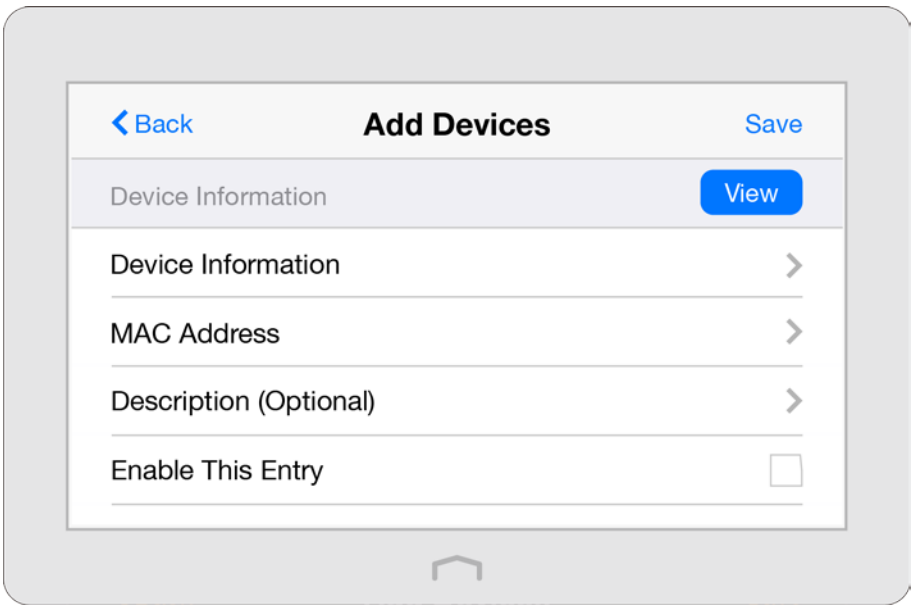
For example, I want to allow my children's devices (e.g. a computer or a tablet) to access only the following websites, www.tp-link.com and Wikipedia.org, from 18:00 (6PM) to 22:00 (10PM) on weekdays and not at other times.

How can I do that?

1. On the menu screen, tap the Parental Controls icon to open it. Toggle the button to enable Parental Controls.



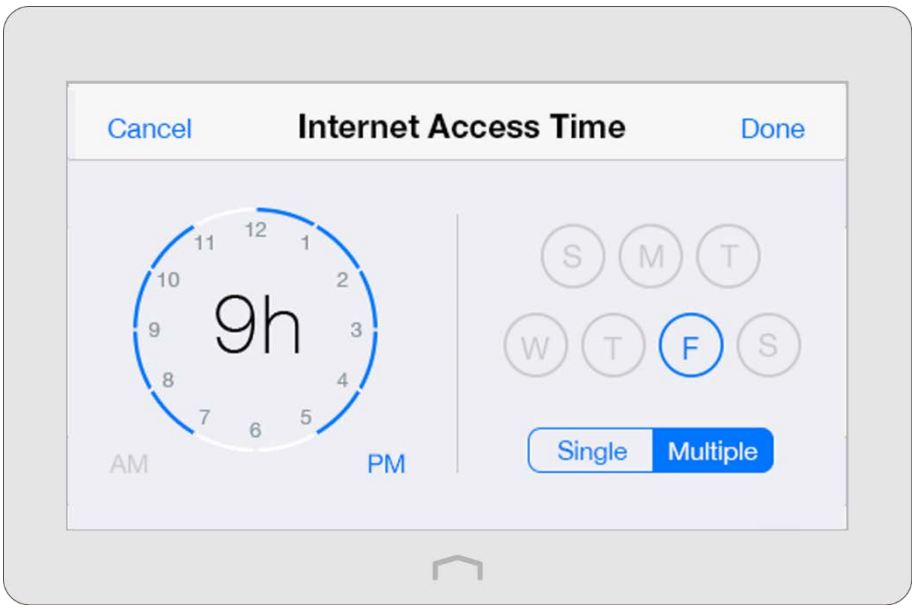
2. Tap Devices Under Parental Controls and then Add to add a device under parental controls.



1) Tap View to select the device from the list. Or, enter the Device Name and MAC Address manually if your desired device isn't in the list.

2) Enter the Description of the device. Tap Enable This Entry.

3) Tap Internet Access Time to set time for the device.



4) Select the time period and the date, and tap Done.

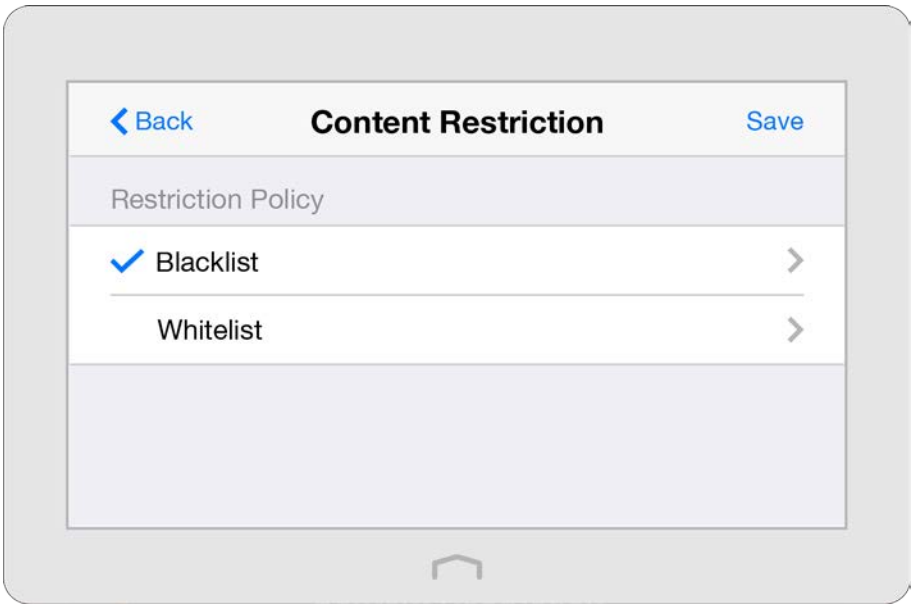
   Note: The access time schedule takes effect based on the router's system time. The system time can be set through the Clock app.

5) Tap Save to make the settings effective.

Note: If you want to modify a device, tap the device to modify it. If you want to add or delete a device, tap Edit on the Devices Under Parental Controls page to set up according to your needs.

3. Return to the home page of Parental Controls and tap Content Restriction to specify the

restriction policy.



1) Select the restriction mode.

- In Blacklist mode, the controlled devices cannot access any websites containing the specified keywords during the Internet Access Time period.
- In Whitelist mode, the controlled devices can only access the websites in the whitelist during the Internet Access Time period.

2) Tap Add to Add a New Keyword or Add a New Domain Name, then tap Done to save the rule.

   You can add up to 32 keywords for Blacklist and 32 domain names for Whitelist. Below are some sample entries to allow access.

   a. Enter a web address keyword (e.g. wikipedia) in blacklist to block access to the websites containing that keyword.

   b. Enter a web address domain name (e.g. www.tp-link.com) allowed to access in whitelist. Specify the domain suffix (eg. .edu or .org) to allow access only to the websites with that suffix.

   c. If you wish to block all Internet browsing access, do not add any keyword to the Whitelist.

Note: If you want to modify a rule, tap the rule to modify it. If you want to add or delete a rule, tap Edit to set up according to your needs.

4. Return to the Content Restriction page and tap Save.

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

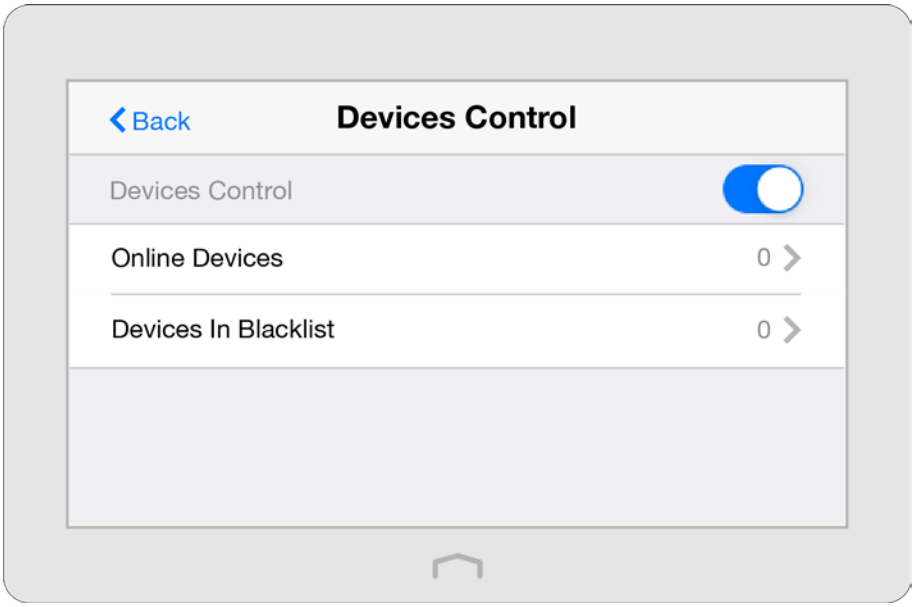
2.9 Devices Control

The Devices Control app helps to view the client information and block network access from unauthorized users (wired or wireless).

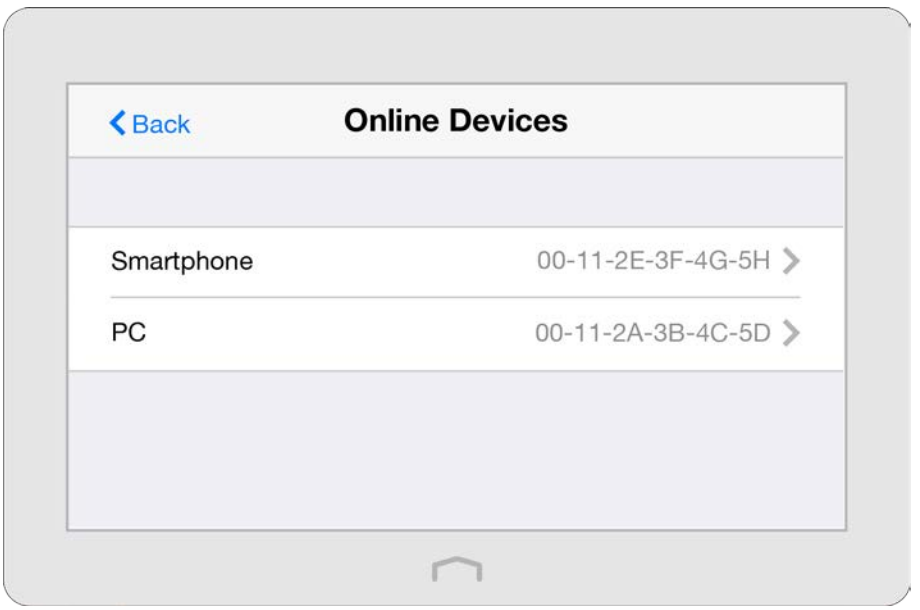
I want to: Block some specific client devices to access my network.

How can I do that?

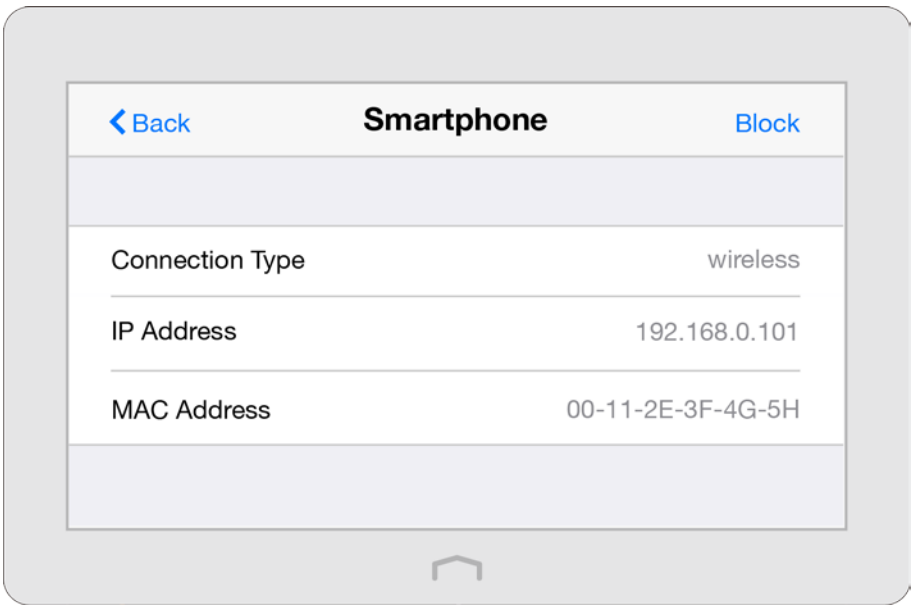
1. On the menu screen, tap the Devices Control icon to open it. Toggle the button to enable Devices Control.



2. Tap Online Devices to view the connected clients.



3. Select the device(s) to be blocked and tap Block.



4. The blocked device(s) will be added to Devices in Blacklist automatically.

Note: If you want to add a device manually or delete a blocked device, tap Edit on the Devices In Blacklist page to set up according to your needs.

Done! Now devices in the blacklist cannot access your network.

2.10 Printer Server

The Printer Server app guides you how to share a printer with different computers connected to the router.

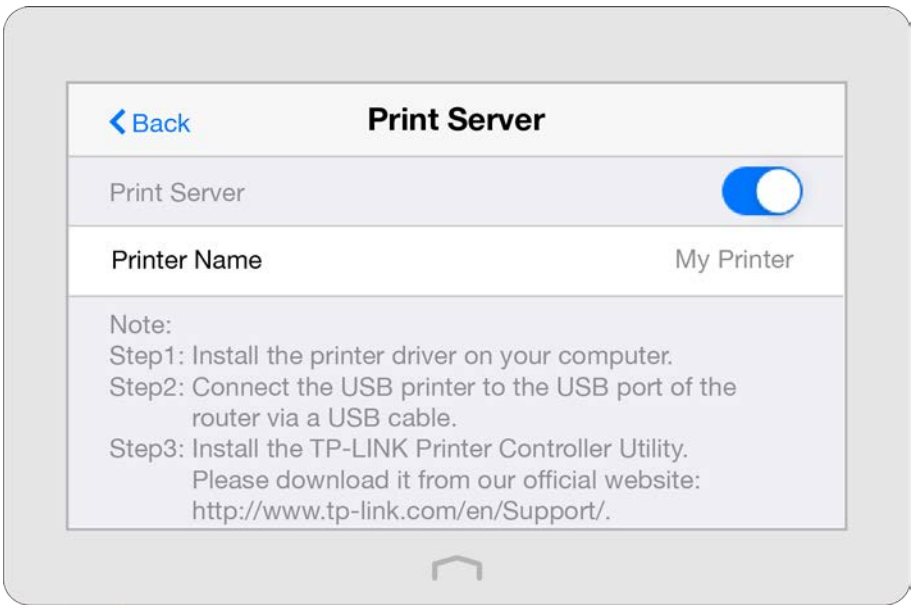
1. Install the Driver of the Printer

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

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

2. Connect the Printer

Cable a printer to the USB port of the router with a USB cable. Wait several seconds until the Printer Name listed on the screen.



Note: You can check Printer Compatibility List at http://www.tp-link.com/app/usb/ to verify whether your printer is supported by the router. Printers unlisted may be incompatible with the router.

3. Install the TP-LINK USB Printer Controller Utility

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

You can get the utility from http://www.tp-link.com/app/usb/. PC Utility is for Windows computer and Mac Utility is for Mac computer.

4. Access the Printer

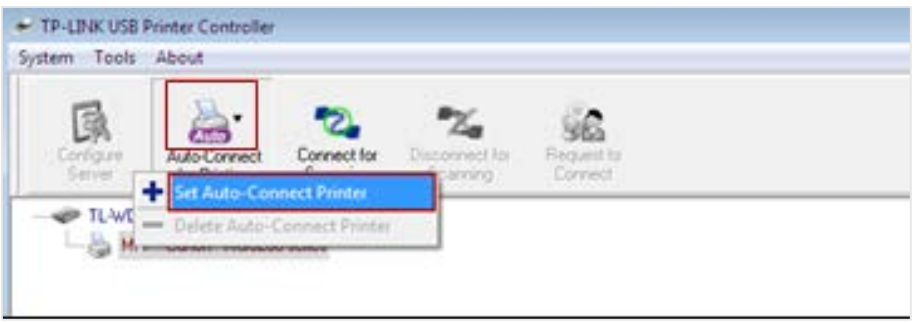
You should set the shared printer as Auto-Connect Printer on every computer that needs printer service.

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

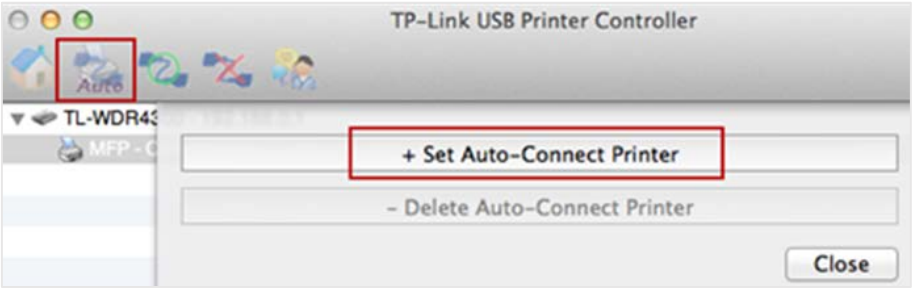
Windows

Mac

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

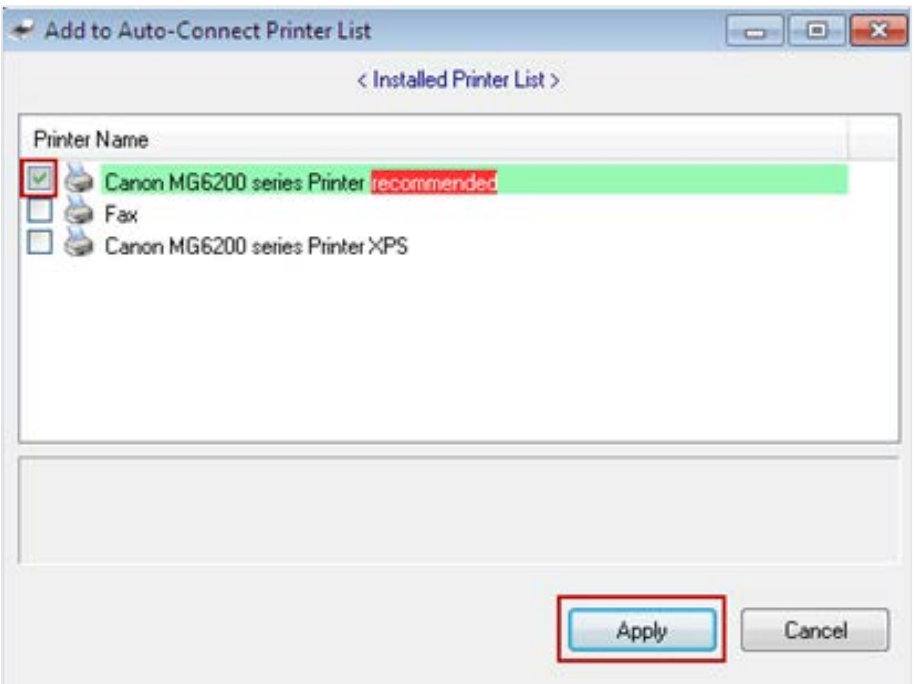


Windows

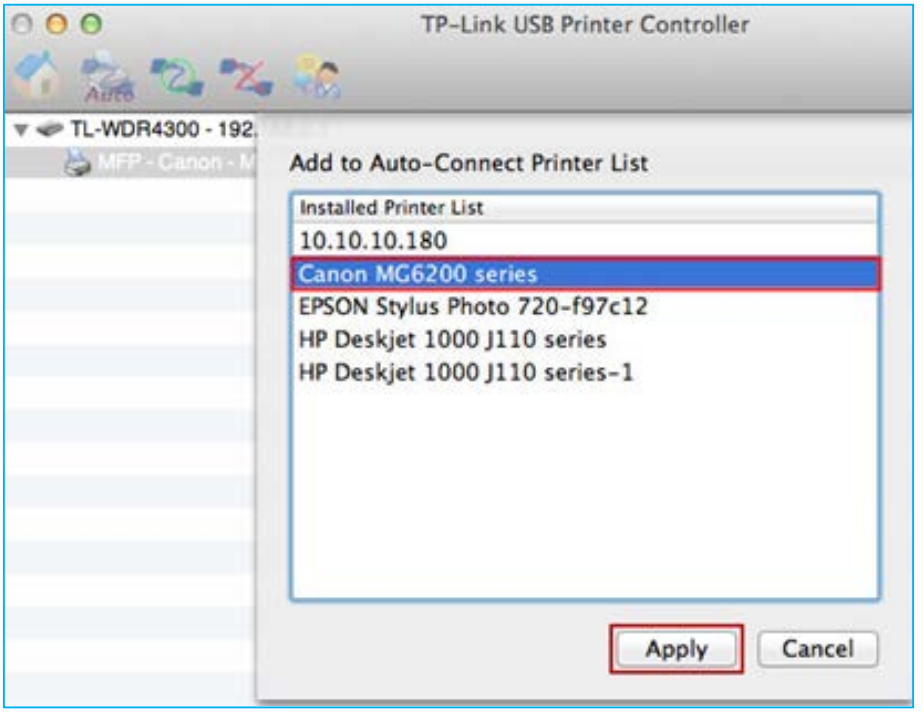


Mac

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

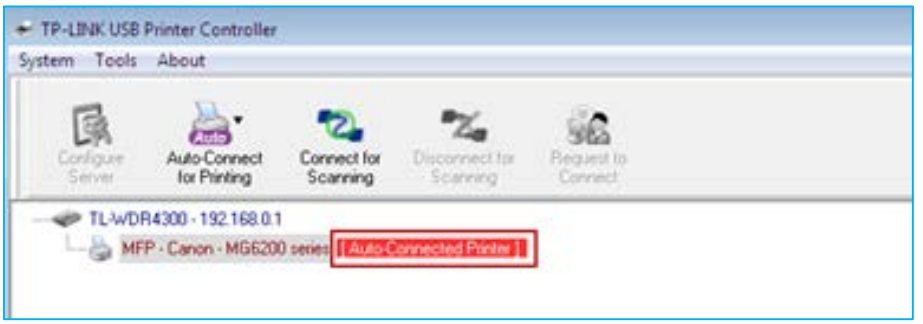


Windows



Mac

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



Windows

Mac

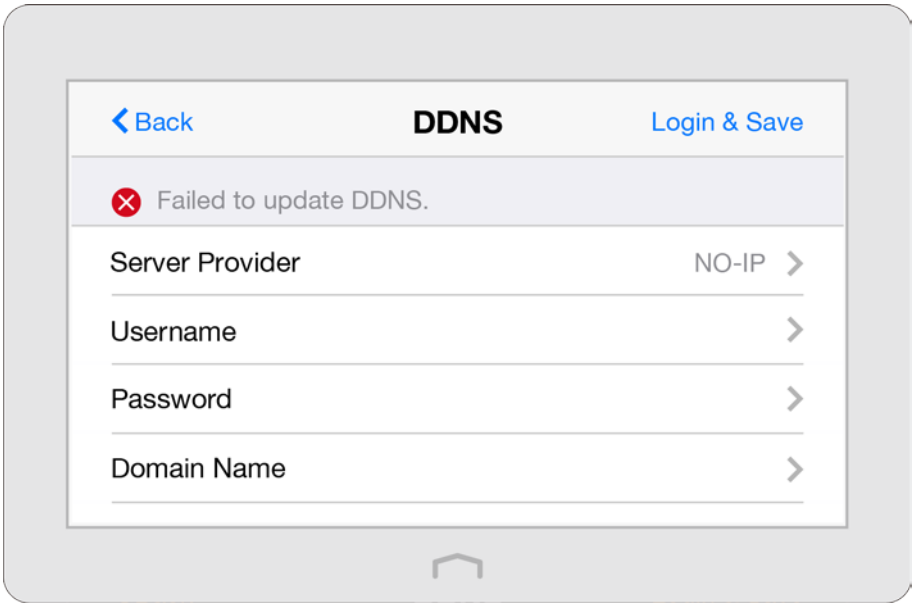
Note: The Print Server also allows different clients to share the scan feature of MFPs (Multi-Function Printers). To scan with TP-LINK USB Printer Controller, right-click the printer and select Network Scanner. Then, a scanning window will pop up. Finish the scanning process following on-screen instructions.

2.11 DDNS

The remote user needs to log in to http://Router's WAN IP:port number to manage the router remotely or visit your server (FTP, HTTP, etc.), which requires the remote user to know the router's WAN IP. The ISP (Internet Service Provider), however, usually assigns a dynamic WAN IP to the router. If the WAN IP changes, the remote user needs to reconfirm it when needed. The Dynamic DNS (DDNS) can link the router's dynamic WAN IP with a domain name, thus allow the remote user to log in the router with the domain name and save the trouble of reconfirming.

Note: DDNS does not work if the ISP assigns a private WAN IP address (such as 192.168.0.x) to the router.

1. On the menu screen, tap the DDNS icon to open it.



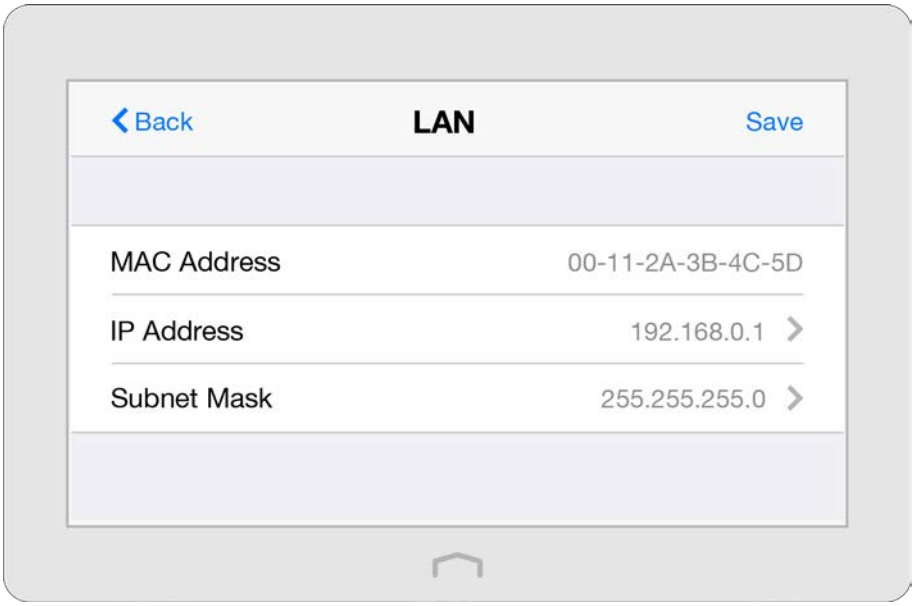
2. Select a DDNS Service Provider (NO-IP or Dyndns). If you don't have a DDNS account, please register an account with a service provider such as www.dyndns.com.
3. Enter the username, password, domain name (such as lisadns.ddns.net), and select update interval of the account.
4. Tap Login & Save.

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

2.12 LAN

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

1. On the menu screen, tap the LAN icon to open it.



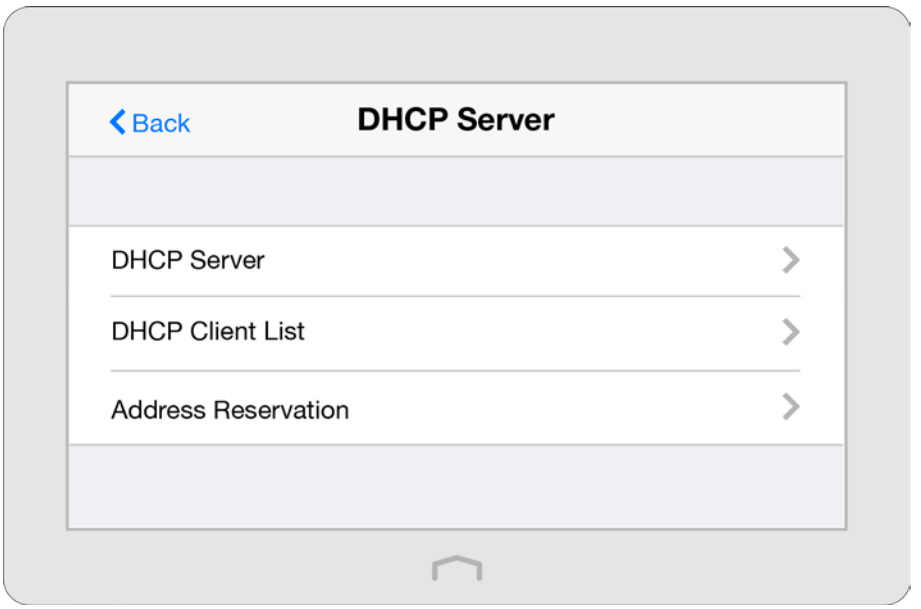
2. Type in a new IP Address appropriate to your needs.
3. Select the Subnet Mask or custom one in dotted decimal format. The subnet mask together with the IP address identifies your local IP subnet.
4. Tap Save.

2.13 DHCP Server

The DHCP Server app can configure the router to act as a DHCP (Dynamic Host Configuration Protocol) server to assign IP addresses to its clients and view client information from the client list. To use the DHCP server function of the router, you must configure all computers on the LAN as "Obtain an IP Address automatically".

You can also manually reserve an IP address for a client that is connected to the router. Once reserved, the IP address will only be assigned to the same client by the DHCP server. If there are some devices in the LAN that require permanent IP addresses, please configure Address Reservation on the router for the purpose.

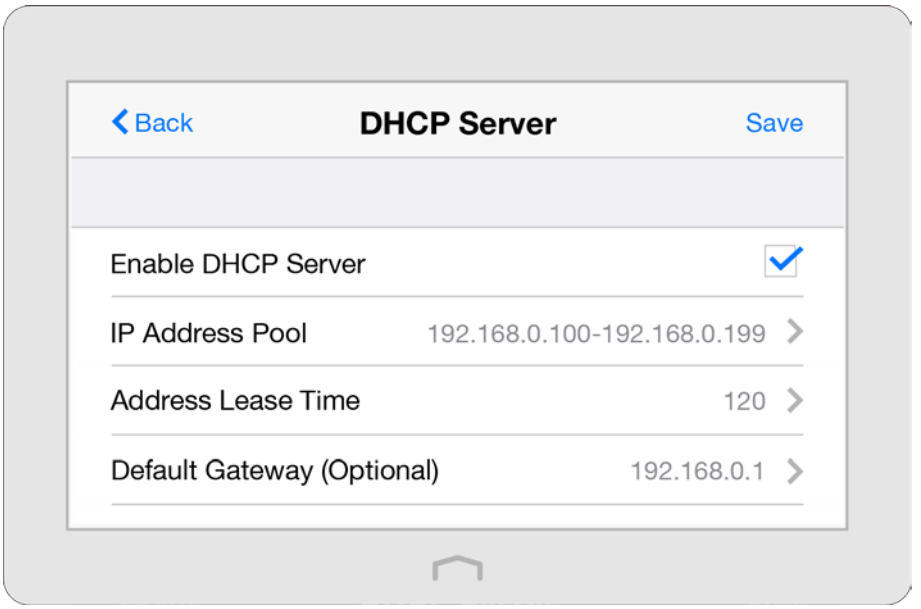
1. On the menu screen, tap the DHCP Server icon to open it.



2. Configure the DHCP settings according to your needs.

To set DHCP server of the router:

1. Select DHCP Server.

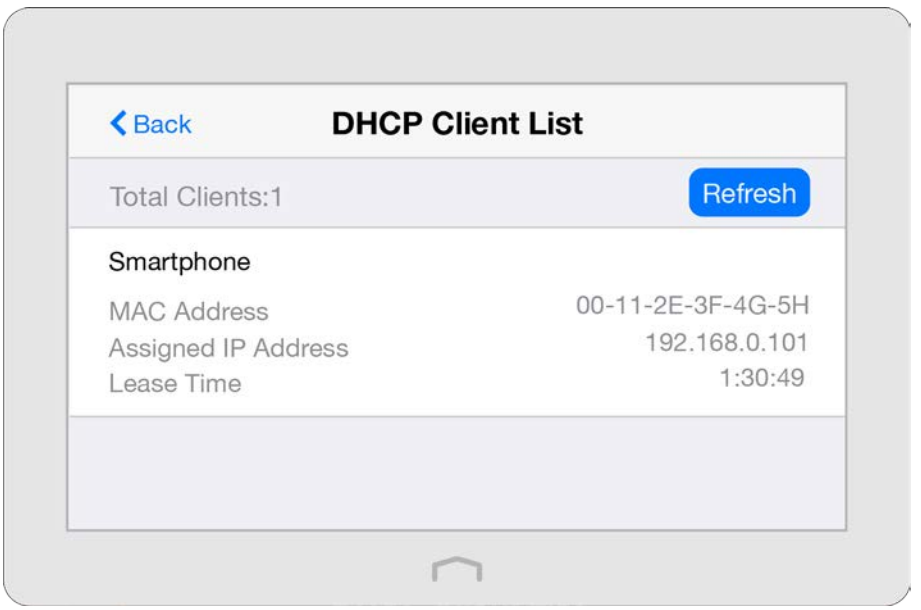


2. The Enable DHCP Server checkbox is enabled by default.
3. Specify the IP Address Pool, the start address and end address must be on the same subnet with LAN IP. The router will assign addresses within this specified range to its clients. It is from 192.168.0.100 to 192.168.0.199 by default.
4. Enter a value for the Address Lease Time.

   The Address Lease Time is the amount of time in which a DHCP client can lease its current dynamic IP address assigned by the router. After the dynamic IP address expires, the user will be automatically assigned a new dynamic IP address. The default is 120 minutes.
5. The Default Gateway is automatically filled the same as the LAN IP address of the router. Enter Primary DNS and Secondary DNS if the ISP offers.
6. Tap Save.

To view the client information:

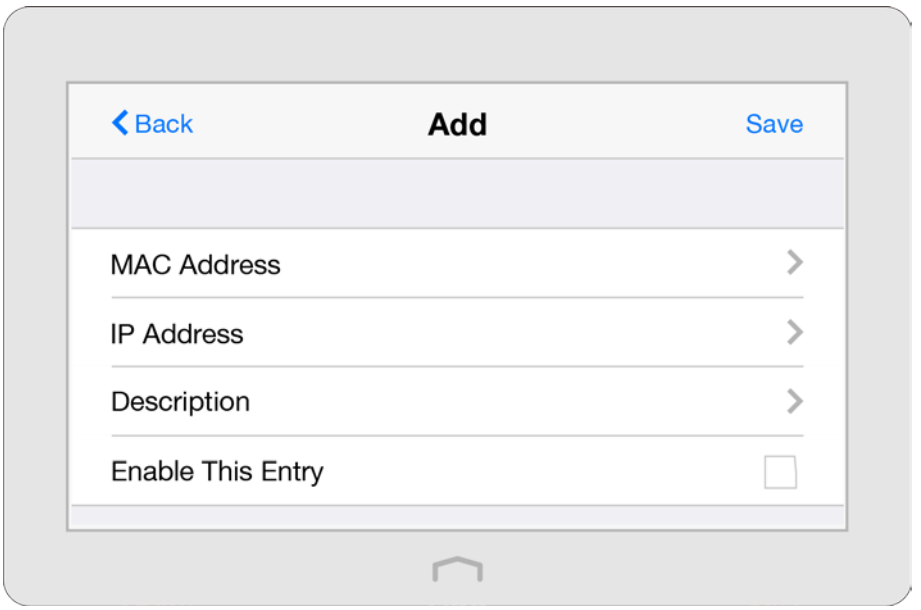
1. Select DHCP Client List.



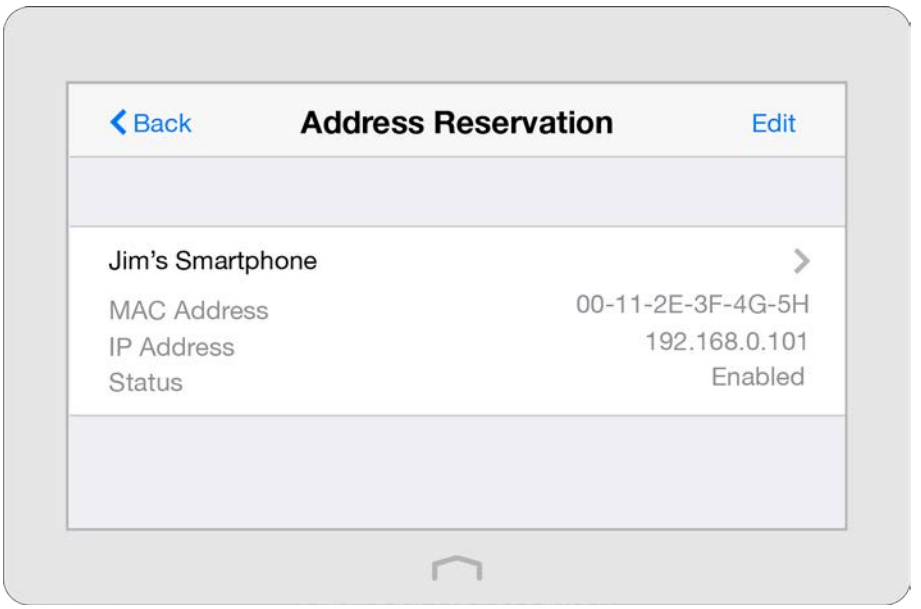
2. You can view the information of connected client.

To reserve LAN IP addresses for a specified client device:

1. Select Address Reservation and tap Add to add an address reservation entry for your device.



2. Enter the MAC Address of the device for which you want to reserve IP address.
3. Specify the IP Address which will be reserved for the device.
4. Enter the Description for the device.
5. Check to Enable This Entry and tap Save to make the settings effective (shown as figure below).

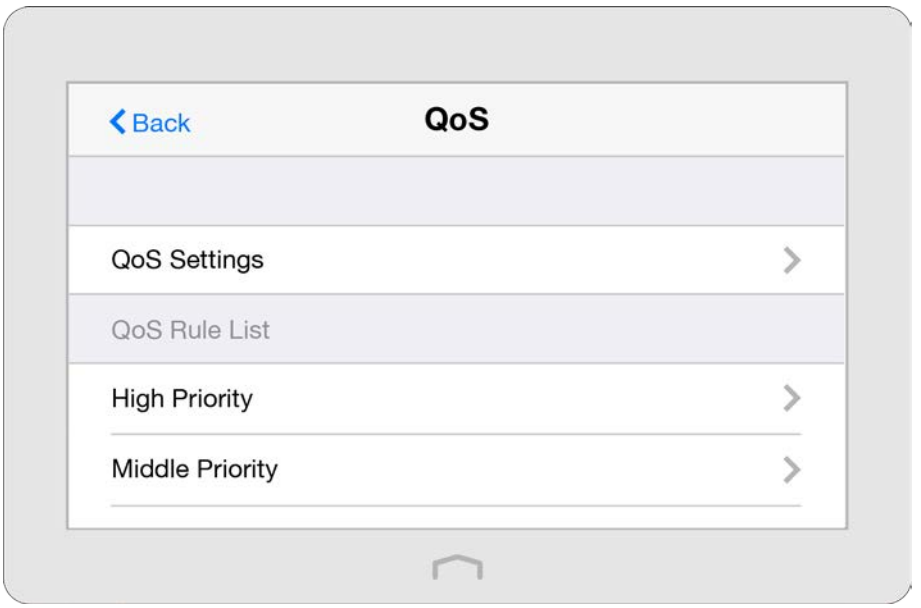


Note: If you want to modify a reserved address, tap the reserved address to modify it. If you want to add or delete a reserved address, tap Edit to set up according to your needs.

2.14 QoS

By default, the Internet bandwidth is shared by connected devices and applications, which means that the bandwidth of each device or application is uncontrollable while they are sharing the Internet. When some device is streaming video on Internet or downloading with P2P software, it will affect the Internet experience of other applications. The QoS (Quality of Service) app can help to specify priority levels for some devices or applications, thus help to avoid the situation.

1. On the menu screen, tap the QoS icon to open it.

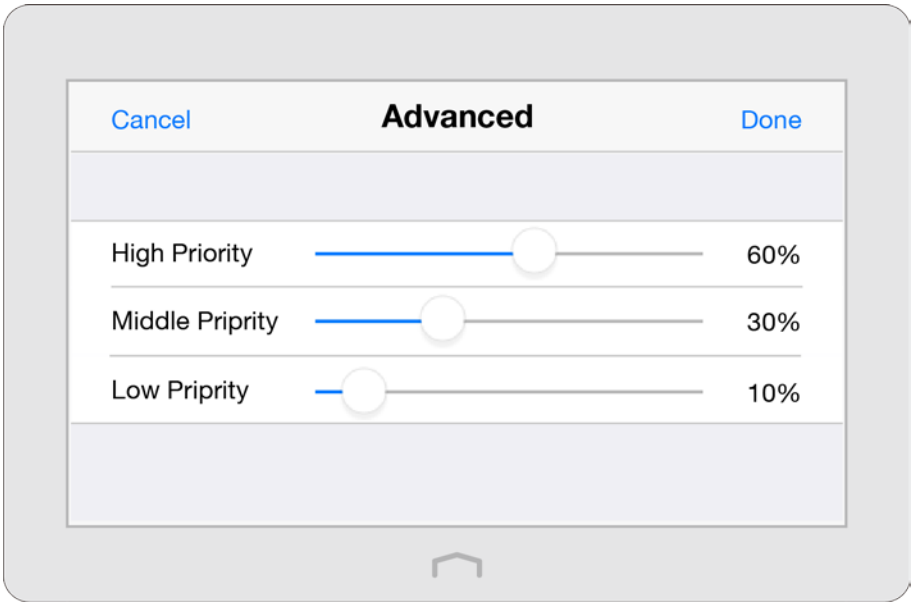


2. Select QoS Settings to set the parameters of QoS.

   1) Select Enable QoS checkbox
   2) Set the maximum upload and download bandwidth provided by your service provider. 1Mbps is equal to 1024Kbps.
   3) Select Advanced and drag the scroll bar to set the bandwidth priority percentage. Tap Done.

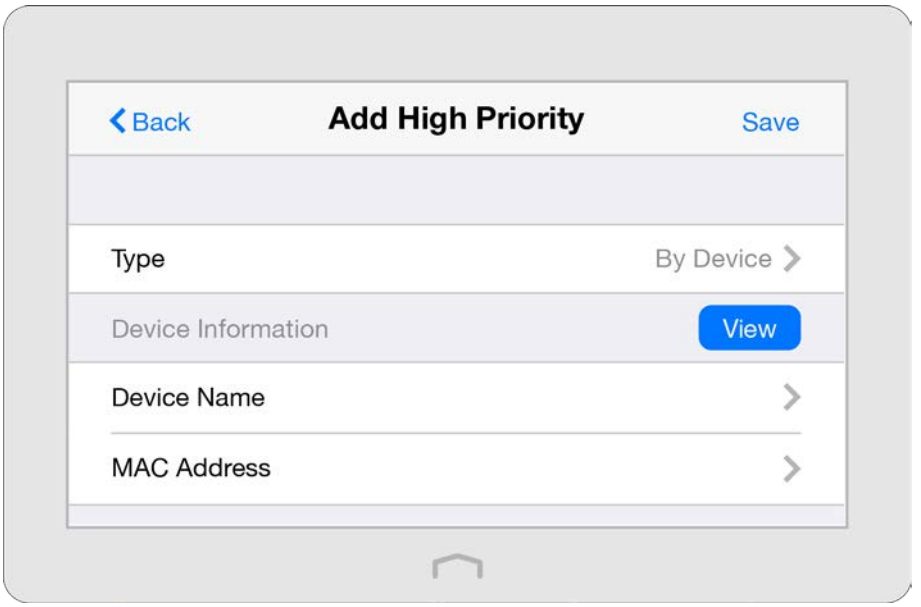
Note:

- Add each priority up no more than 100%.
- High priority is greater than middle priority, and middle priority is greater than low priority.



4) Tap Save.

3. Return to the home screen of QoS, and select High, Middle or Low Priority to Add the rules. Here we use High Priority as an example.



4. Select By Device to add the rule:

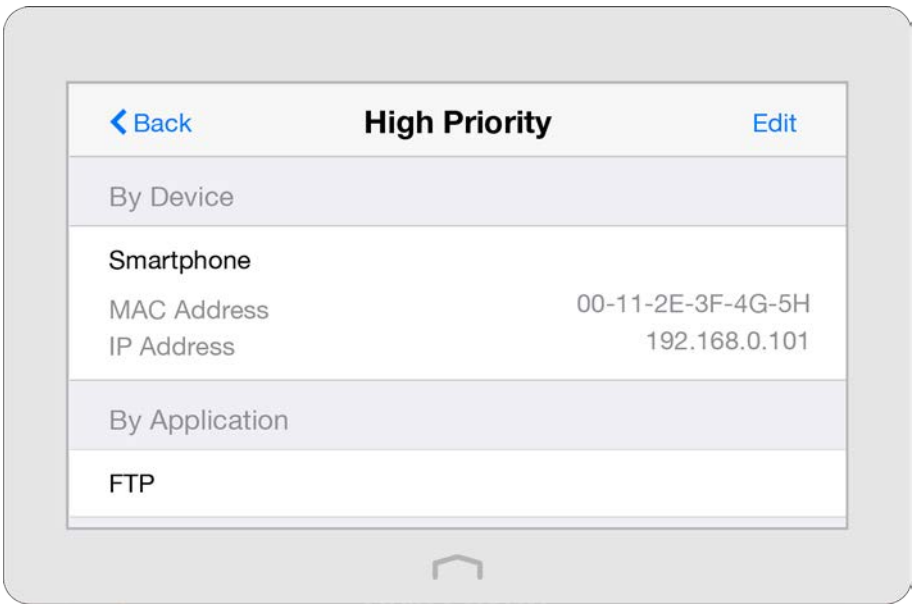
   Tap View to choose the respective device, if the device is not listed, enter the Device Name and MAC Address manually. Tap Save to add the rule to the list.

   Select By Application to add the rule:

   Tap Application to select the corresponding application, if the application is not listed, tap Custom Application to enter the application manually. Tap Save to add the rule to the list.

- Name: Type in a name for your application.
- Protocol: Select the protocol for your application, if you are not sure, select ALL.
- Port: Enter the destination port for your application, usually each application has a fixed port, please ensure you enter the correct the port.

5. The QoS rule will list in the priority table.

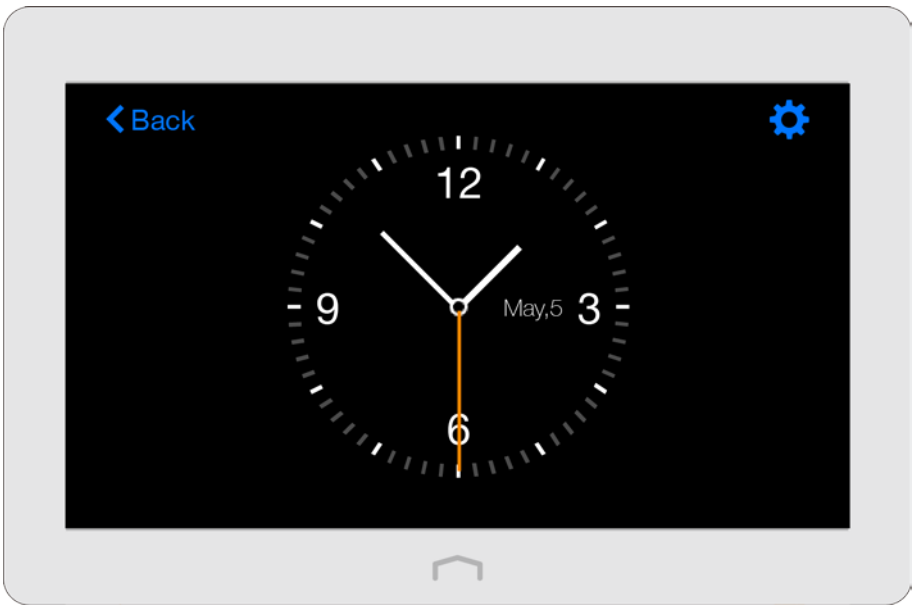


Note: If you want to add or delete a QoS rule, tap Edit to set up according to your needs.

2.15 Clock

The Clock app displays the time while the router is running. The system time you configure here will be used for other time-based functions like Parental Controls.

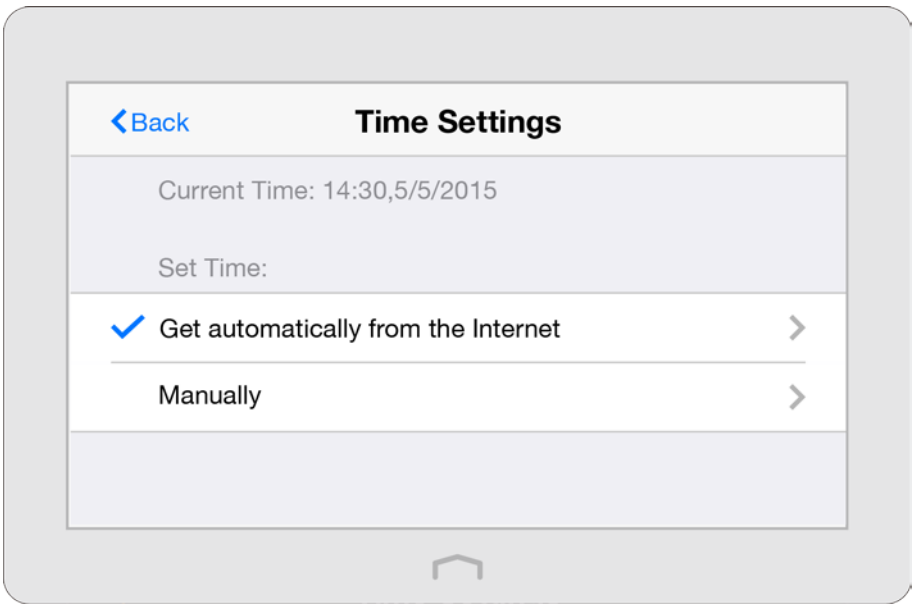
1. On the menu screen, tap the Clock icon to open it.



2. Tap ⚙ to configure the time settings.

To set the time of the router:

1. Select Time Settings.

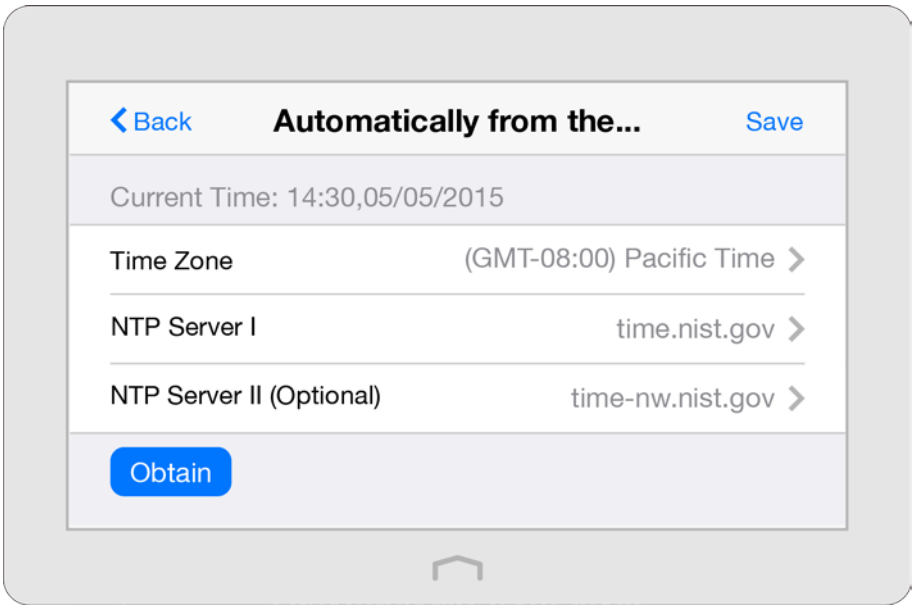


2. Two ways for you to configure the system time:

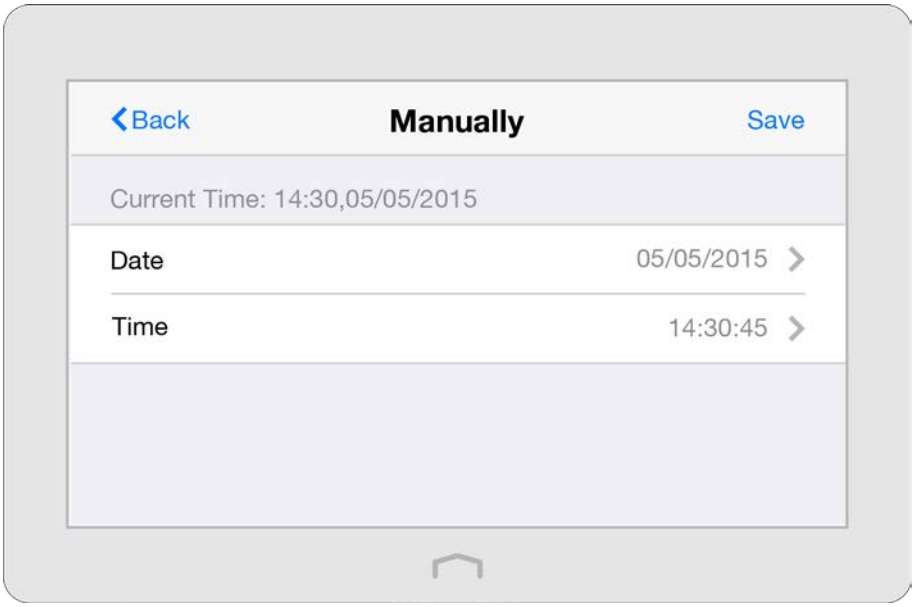
   Get automatically from the Internet: Select this if you want to get time from the Internet. Make sure your router can access the Internet before you select this way to get system time.

   1) Select your local Time Zone.

2) In the NTP Server I field, enter the IP address or domain name of your desired NTP Server.
3) In the NTP Server II field, enter the IP address or domain name of the second NTP Server. (Optional)
4) Tap Obtain to get the time and then Save.

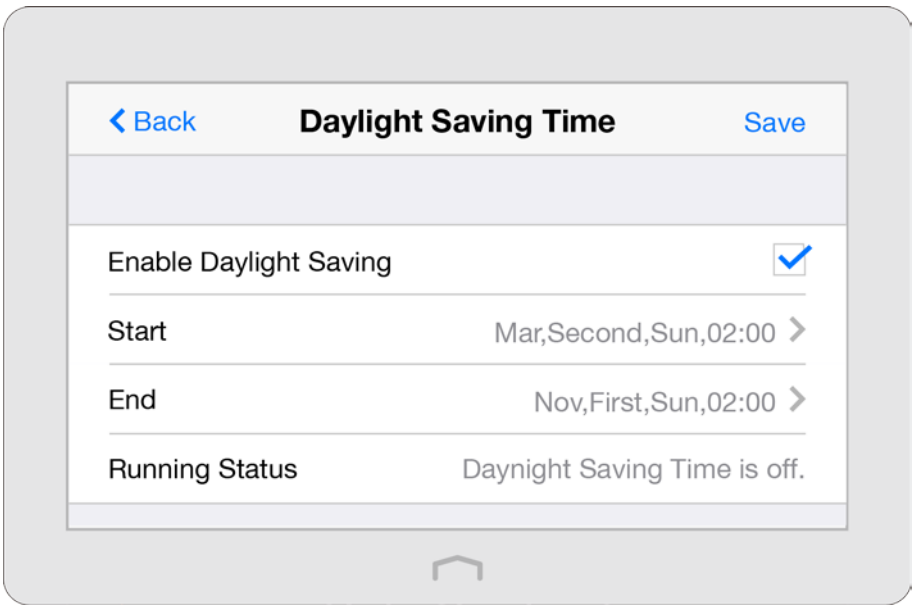


Manually: Select to set the data and time manually, then tap Save to make the settings effective.



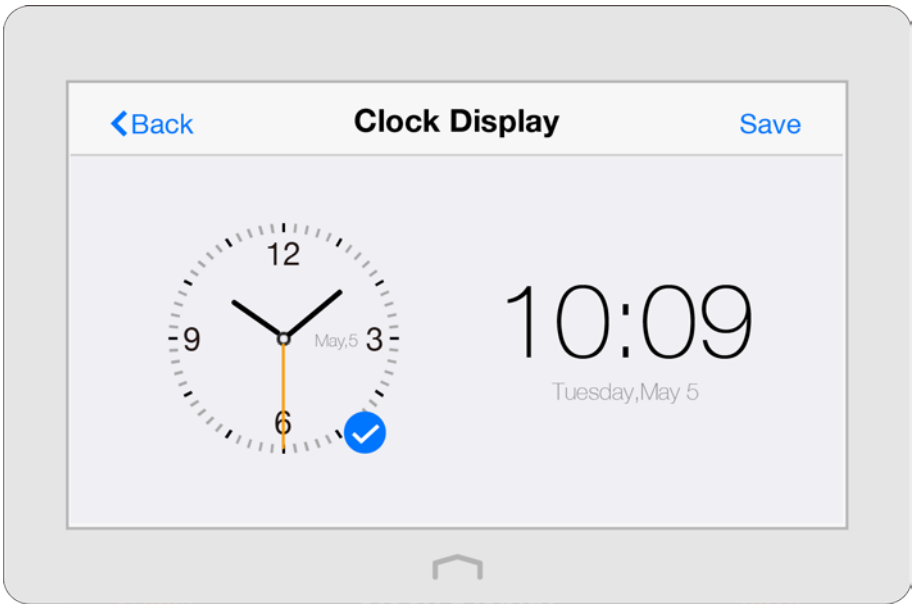
To set up daylight saving time of the router:

1. Select Daylight Saving Time.
2. Select the checkbox to enable Daylight Saving Time. Set the start and end time and then tap Save to make the settings effective.



To set up the display type of the clock:

1. Select Clock Display.
2. Select the clock type and tap Save.



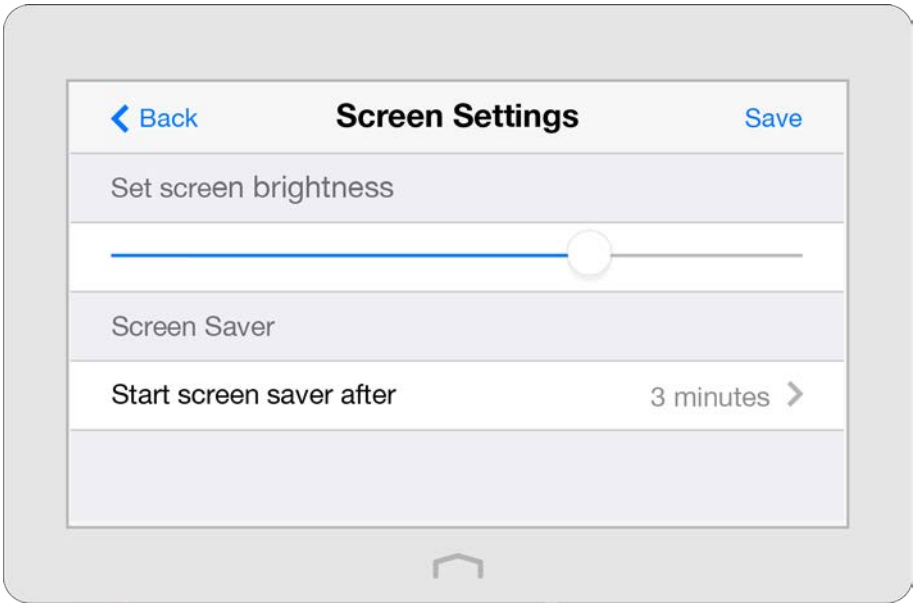
3. To use the router as a clock, you need to stay at the home page of Clock app. Then the clock will display on the screen while the router is locked.

   Note: Overusing the screen as a clock will decrease the life span of the screen.

2.16 Screen Settings

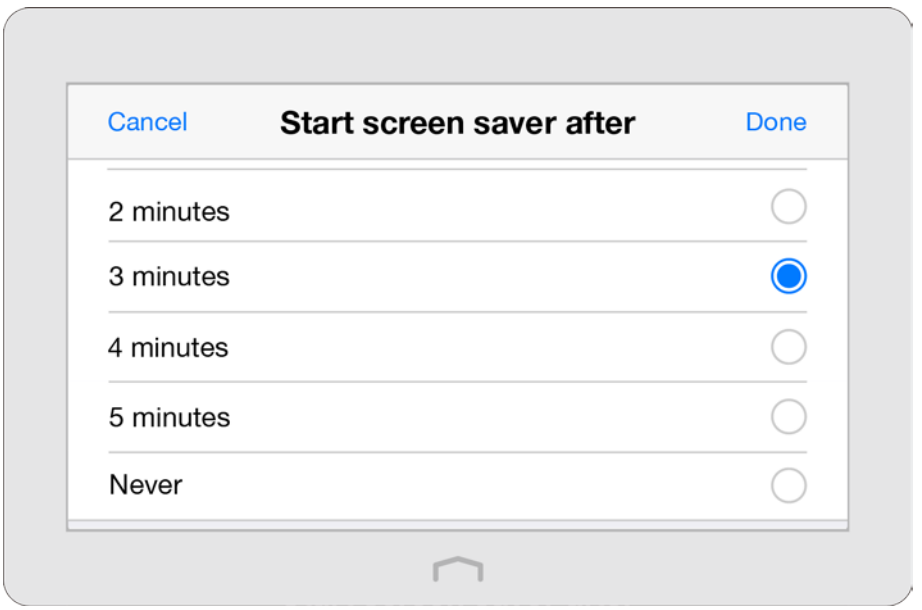
The Screen Settings app helps to set the brightness and screen saver of the router.

1. On the menu screen, tap the Screen Settings icon to open it.



2. Drag the scroll bar to set the brightness of the screen.
3. By default, the screen will go to sleep if it is idle for 3 minutes, you can change the wait time.

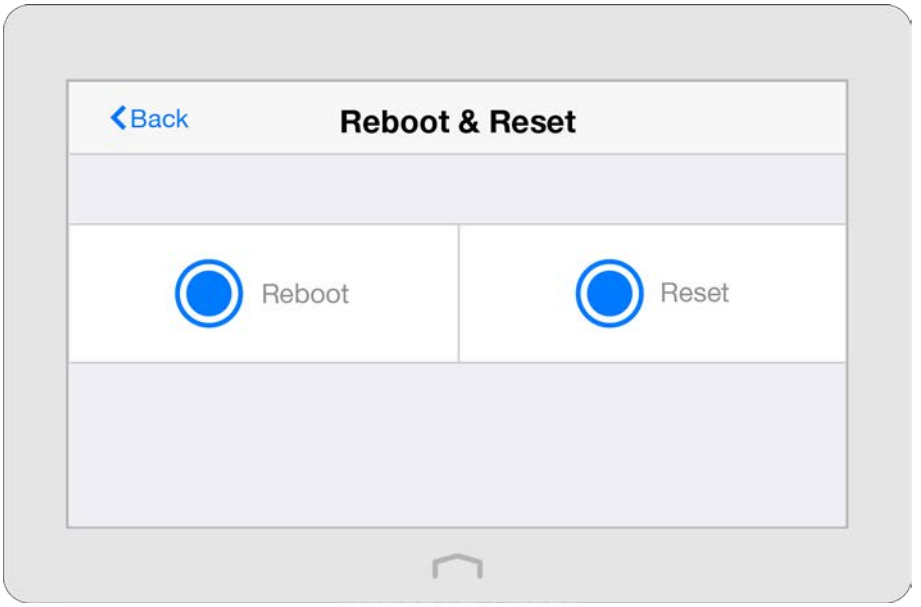
   Note: If you select Never, the screen will stay on and never go to sleep and this will decrease the life span of the screen.



2.17 Reboot & Reset

With Reboot & Reset app, you can restart your router or reset your router to its factory default settings.

1. On the menu screen, tap the Reboot & Reset icon to open it.



2. Reboot: The router will shut down and boot again.

   Reset: To reset your router to its factory default settings. It will erase all settings that you have configured for the router.

Note: Please do NOT power off the router during the rebooting or resetting process.

2.18 Administrator Password

Administrator password is used to log in to the touchscreen page and web-management page of the router. You are required to set a new administrator password at your first login. You can also change it with the Administrator Password app.

1. On the menu screen, tap the Administrator Password icon to open it.

2. Enter the old password. Enter the new password and enter again to confirm.
3. Tap Save to make the settings effective.

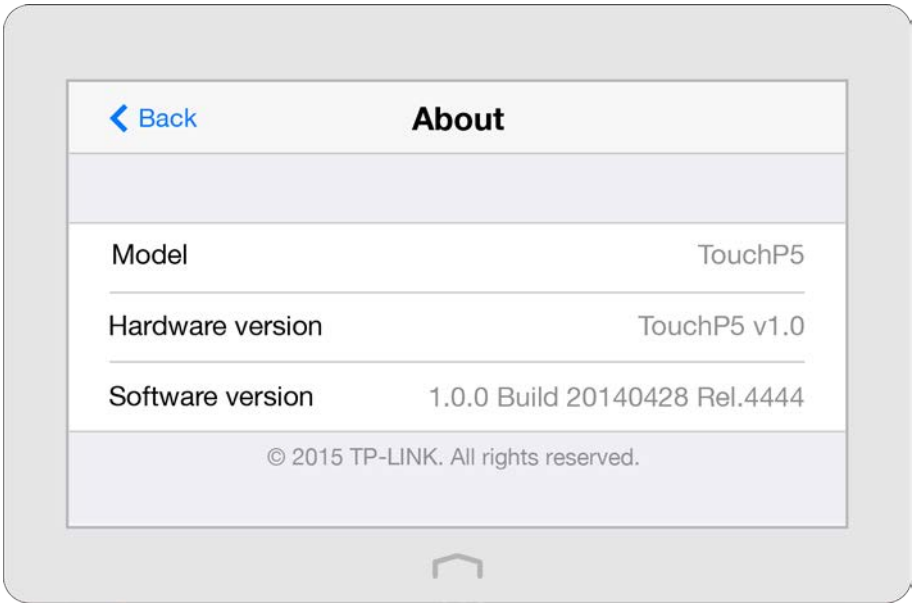
Note:

1. If you disable this function, your touchscreen will under no protection and anyone can change the settings of your router through the touchscreen. But logging in through web-based management page still requires the password.
2. If you change the administrator password on the screen, logging in through web-based management page also requires the new password.

2.19 About

The About app displays the product model, hardware and firmware information of the router.

On the menu screen, tap the About icon to open it.



2.20 USB Application

This chapter describes how to share and access USB devices connected to the router among different clients through web-based utility. Refer to Through Web-based Utility to log in the router.

The router only supports USB external flash drives, hard drives and USB printers, and does not support USB 3G/4G modems.

This chapter contains the following sections:

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

2.20.1 Local Storage Sharing

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

1. Access the USB disk

   1) Connect Your USB Disk

   Insert your USB storage device into the router's USB port directly or using a USB cable.

   Note:

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

   2) Access Your USB Disk

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

Windows computer	1. Press Start ( ) + R on the keyboard (or go to Start > Run) 2. Type the server address *\\tplinkwifi.net* or *ftp://tplinkwifi.net* in the dialog box 3. Click OK
Mac	1. Select Go > Connect to Server 2. Type the server address *smb://tplinkwifi.net* or *ftp://tplinkwifi.net* 3. Click Connect
Pad	Use a third-party app for network files management.

   Note: You can also access using your Network/Media Server Name. Refer to To Customize the Address of the USB Disk to learn more.

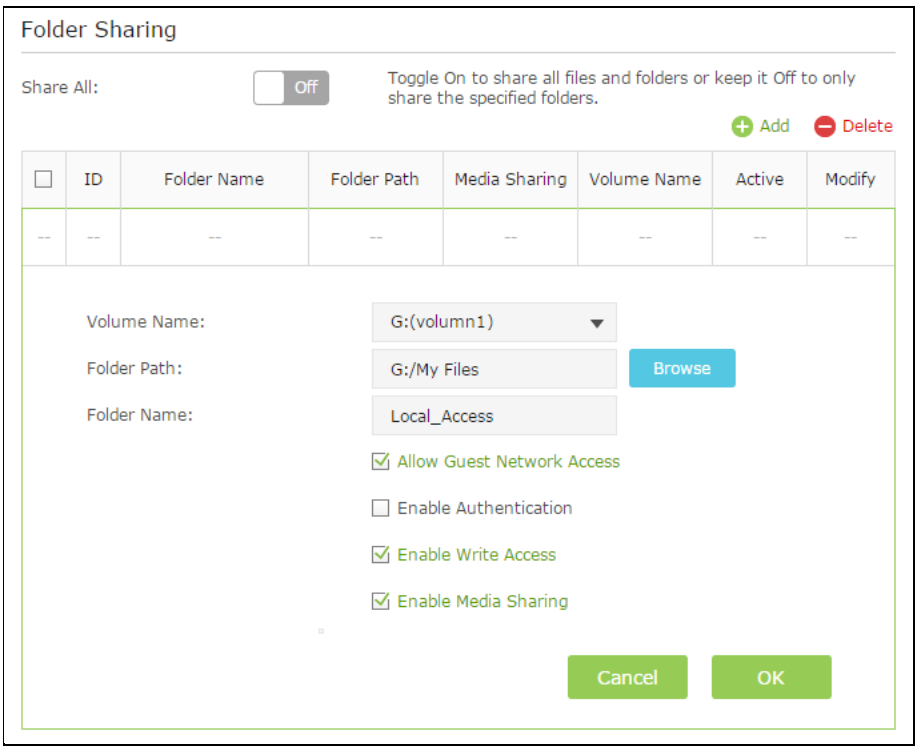
2. Customize Your Settings

   To Only Share Specific Content

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

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

   b. Select *Basic > USB Settings > Sharing Access*. Focus on the Folder Sharing section. Click the button to disable Share All, then click Add to add a new sharing folder.



c. Select the Volume Name and Folder Path, then enter a Folder Name as you like.

d. Decide the way you share the folder:

Allow Guest Network Access: Tick to allow the clients in your guest network to access the shared folder.

Enable Authentication: Tick to enable authentication for this folder sharing, and you will be required to use a username and password to access the USB disk. Refer to To Set up Authentication for Data Security to learn more.

Enable Write Access: If you tick this check box, network clients can modify this folder.

Enable Media Sharing: Tick to enable media sharing for this folder, and you can view photos, play music and watch movies stored on the USB disk directly from DLNA-supported devices. Click Media Sharing to learn more.

e. Click OK.

Note:

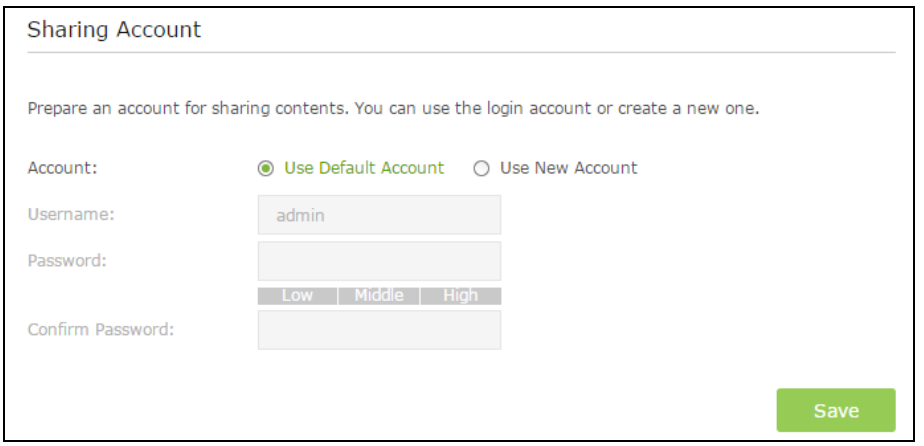
The router can share eight volumes at most. You can click on the page to detach the corresponding volume you do not need to share.

To Set up Authentication for Data Security

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

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

b. Select *Advanced > USB Settings > Sharing Access.*



c. Choose to use the default Account (admin) or use a new account and click Save.

d. Enable Authentication to apply the account you just set.

- If you leave Share All enabled, click the button to enable Authentication for all folders.

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

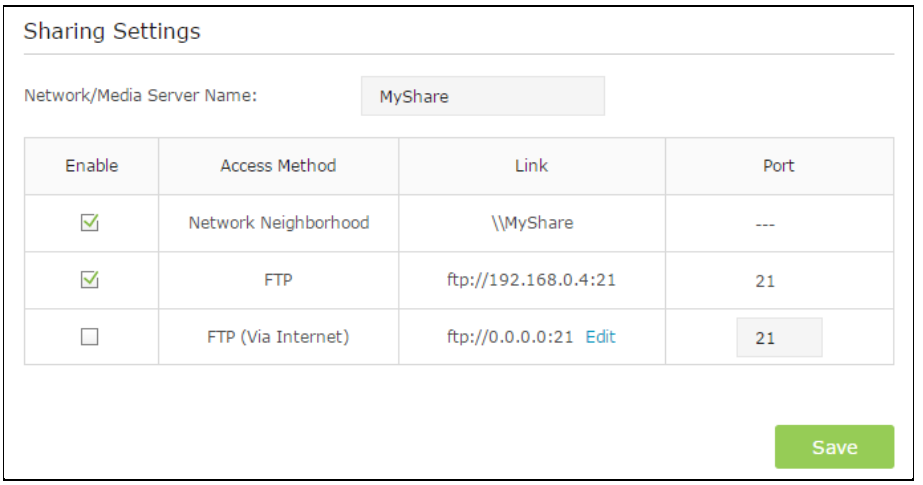
To Customize the Address of the USB Disk

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

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

b. Go to *Advanced > USB Settings > Sharing Access*.

c. Make sure Network Neighborhood is ticked, and enter a Network/Media Server Name as you like, such as MyShare, then click Save.



d. Now you can access the USB disk with \\MyShare (smb://MyShare for Mac).

2.20.2 Remote Access via FTP Server

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

For example:

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

Note:

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

1. Access the USB disk

   1) Connect Your USB Disk

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

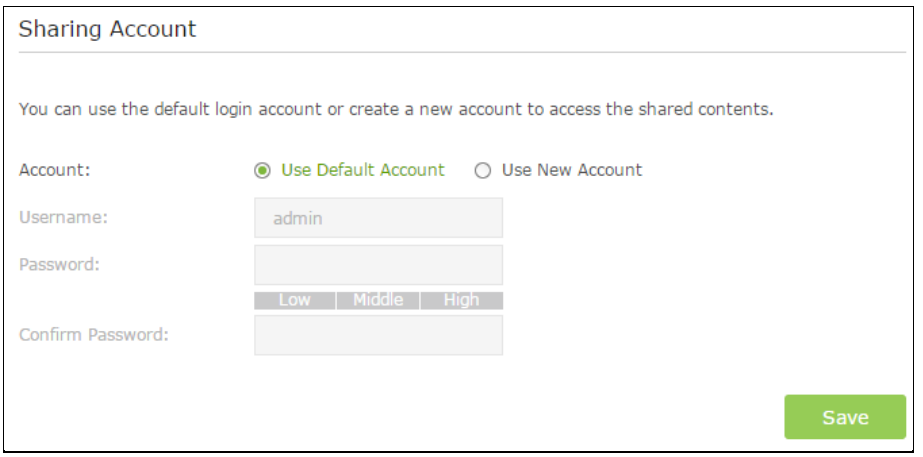
      Note:

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

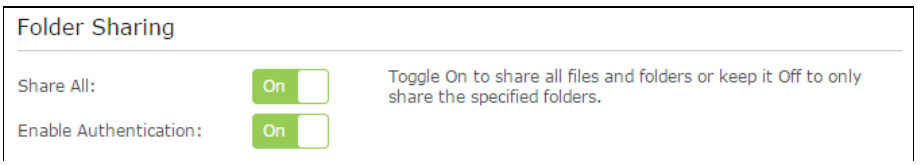
   2) Enable Authentication for Data Security

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

      a. Visit http://tplinkwifi.net/, then log in with the username and password you set for the router.
      b. Select *Advanced > USB Settings > Sharing Access*.
      c. Choose to use the default Account (admin) or use a new account and click Save.



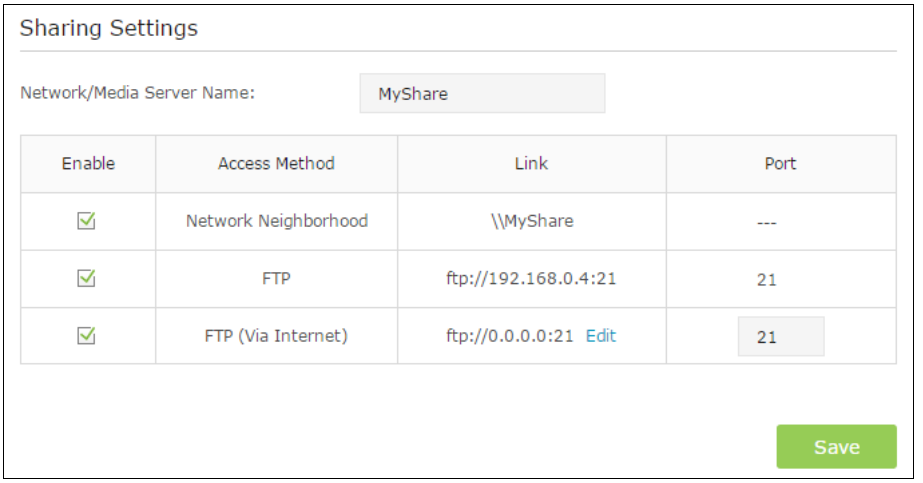
      d. Enable Authentication to apply the sharing account.
         - If you leave Share All enabled, click the button to enable Authentication for all folders.



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

3) Enable the FTP(via Internet)

Tick the check box to enable FTP(Via Internet), then click Save.



4) Access Your USB Disk via Internet

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

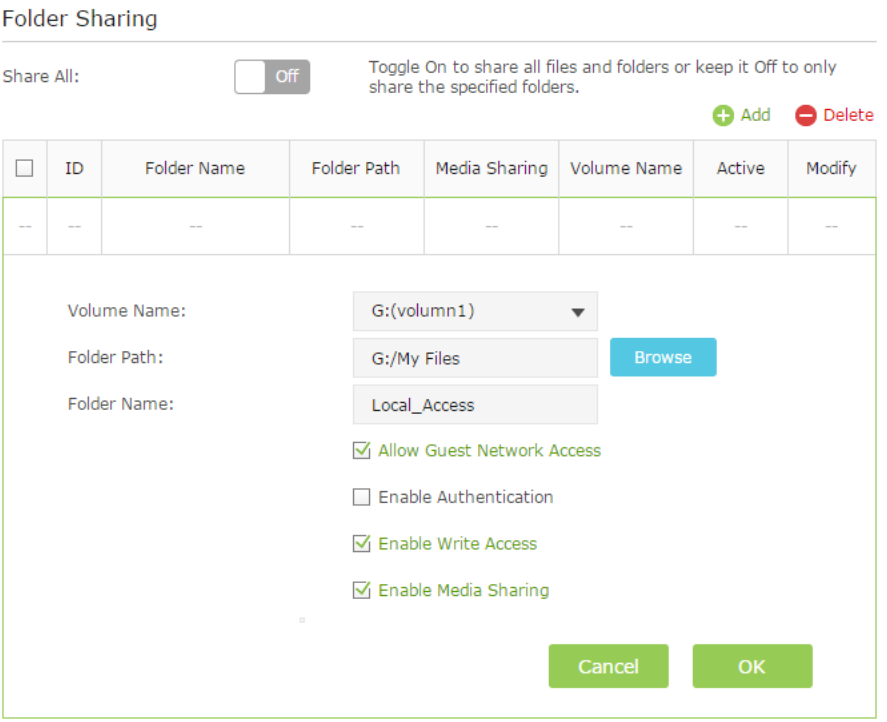
Computer	• To download, open a web browser and type the server address ftp://<WAN IP address of the router>:<port number> (such as ftp://59.40.2.243:21) or ftp://<domain name of the router>:<port number> (such as ftp://MyDomainName:21) in the address bar, then press Enter on the keyboard. • To upload, use a third-party app for network files management.
Pad	• Use a third-party app for network files management.

Note: Click DDNS to learn how to set up a domain name for you router.

2. Customize Your Settings

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

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



3. Select the Volume Name and Folder Path, then specify the Folder Name as you like.
4. Tick Enable Authentication. If you allow network clients to modify this folder, tick Enable Write Access.
5. Click OK.

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

2.20.3 Media Sharing

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

1. Access the USB disk

1) Connect Your USB Disk

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

Note:

If you use USB hubs, make sure no more than four devices are connected to the router.

- If the USB storage device requires using bundled external power, make sure the external power has been connected.
- If you use a USB hard drive, make sure its file system is FAT32 or NTFS.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Select Advanced > USB Settings > Device Settings and click Safely Remove.

2) Access the Media Files on Your USB Disk

Now the DLNA-supported devices connected to the router can detect and play the media files on the USB disks.

For example:

Windows computer	1. Open the Windows Media Player. 2. Click the media server name (Touch_P5-Share by default) under the list of Other Libraries, then you can directly view photos, play music and watch movies that you share on the USB disks.
Pad	Use a third-party DLNA-supported player.

2. Customize Your Settings

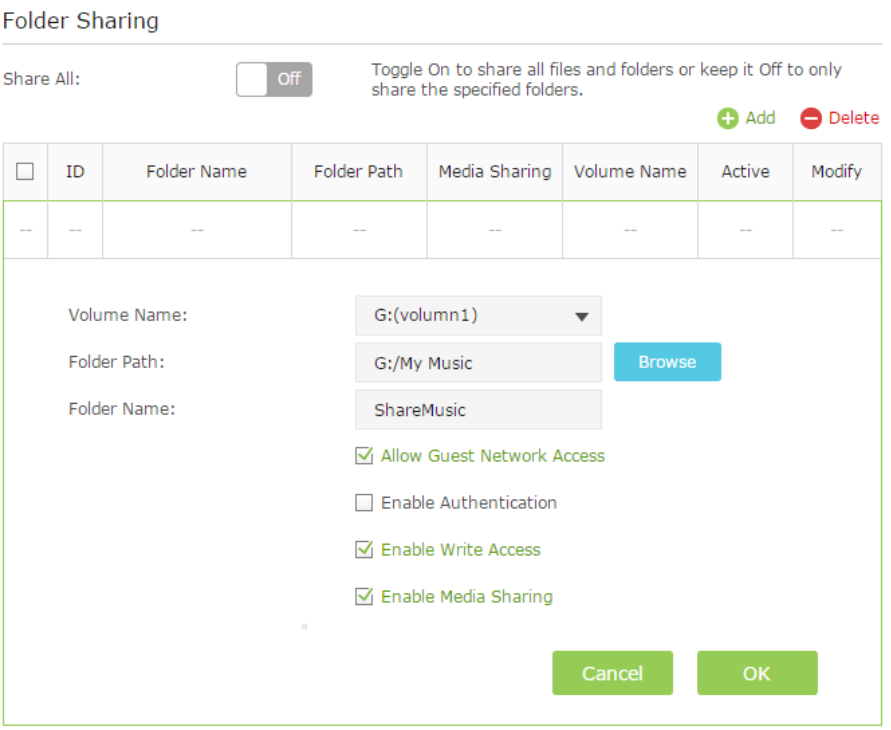
To Only Share Specific Content

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

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

b. Select Basic > USB Settings > Sharing Access.

c. Focus on the section of Folder Sharing. Click the button to disable Share All, then click Add to add a new sharing folder.



d. Select the Volume Name and Folder Path, then enter a Folder Name as you like.

e. Tick Enable Media Sharing and click OK.

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

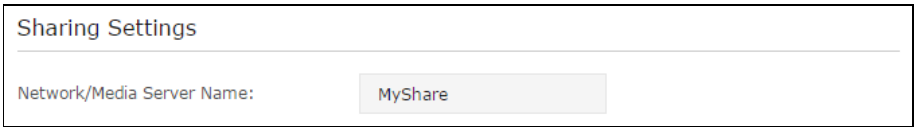
To Specify the Media Server

You can also modify the media server name or disable the feature of Media Sharing as needed.

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

b. Select Basic > USB Settings > Sharing Access.

c. Enter a Network/Media Server Name as you like, such as MyShare.



d. Click Save.

2.21 Set Up IPv6 Connection

If your ISP provides IPv6 connection and has provided some detailed IPv6 parameters, you can configure the router to permit IPv6 connection.

I want to Connect to IPv6 network with information provided by my ISP.

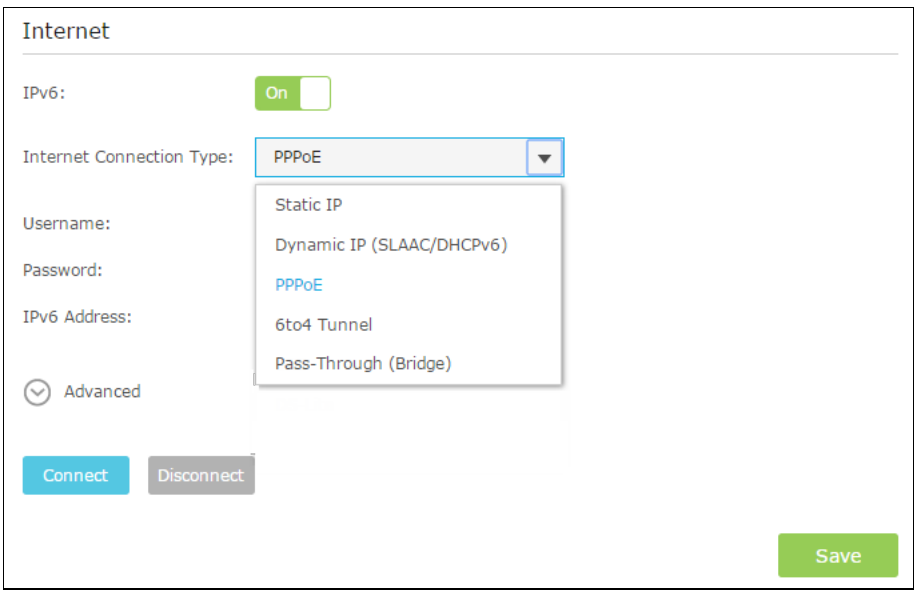
For example: my ISP provides information about one of the following Internet connection types: PPPoE, Dynamic IP, Static IP, 6to4 tunnel, 6RD, DS-lite and Pass-Through (Bridge).

How can I do that?

1. Visit http://tplinkwifi.net/, and log in with the username and password you set for the router.
2. Go to Advanced > IPv6 to enable IPv6 connection.

3. Select the Internet connection type provided by ISP. Fill in information as required by different connection type.

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



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

   2) Dynamic IP: Click Advanced to have more configuration if ISP requires. Click Save to save the settings and then click Renew to finish the configuration.

   3) PPPoE: Fill in the Username and Password. Click Advanced to have more configuration if ISP requires. Click Save to save the settings and click Connect to finish the configuration.

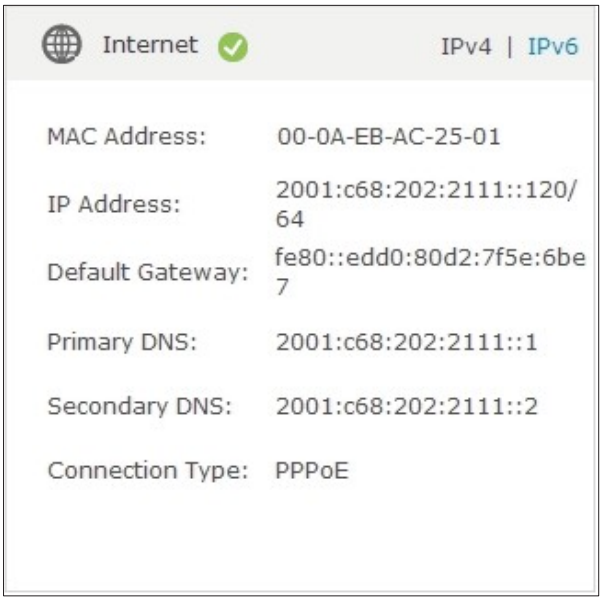
   4) 6to4 Tunnel: An IPv4 Internet connection type is a prerequisite for this connection type. Click Advanced to have more configuration if ISP requires. Click Save to save the settings and then click Connect to finish the configuration.

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

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

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

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



Done! Now your router has successfully connected to IPv6 Internet. Devices can connect to the Internet by wired or wireless connection.

2.22 NAT Forwarding

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

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

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

This chapter contains the following sections:

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

2.22.1 Share Local Resources in the Internet by Virtual Server

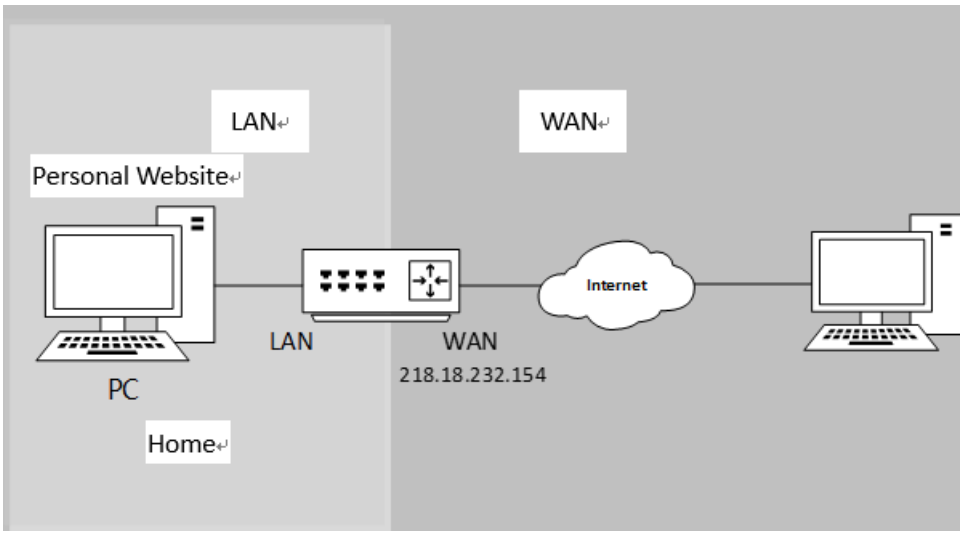
When you build up a server in the local network and want to share it on the Internet, Virtual Server can realize the service and provide it to the Internet users. At the same time virtual server can keep the local network safe as other services are still invisible from the Internet.

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

I want to

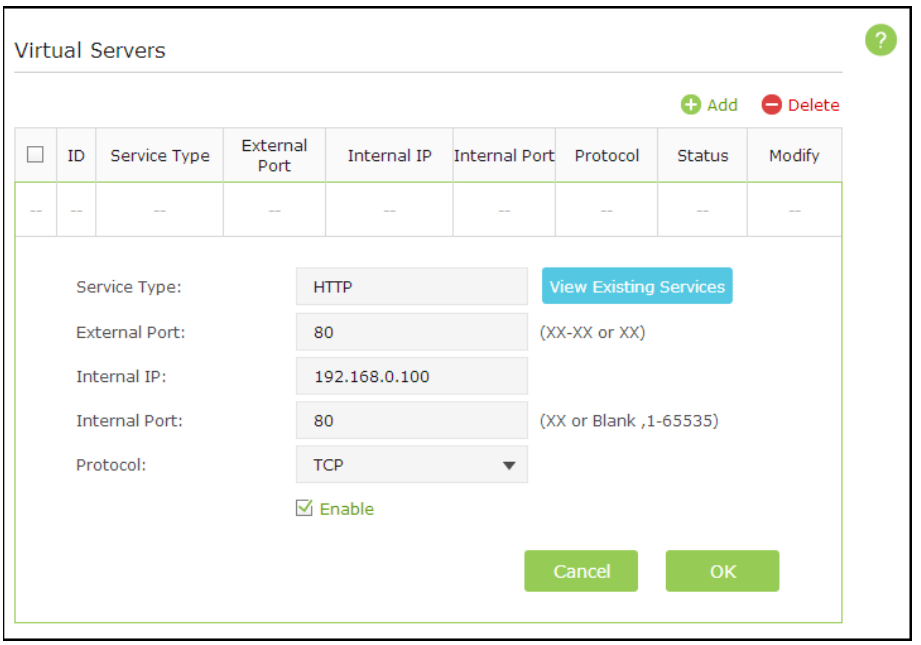
Share my personal website I've built in local network with my friends through the Internet.

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



How can I do that?

1. Assign a static IP address to your computer, for example 192.168.0.100.
2. Visit http://tplinkwifi.net, and log in with the username and password you set for the router.
3. Go to Advanced -> NAT Forwarding -> Virtual Servers, and click Add.
4. Click View Existing Services, and select your Service Type (in this case: HTTP). The External Port, Internal Port and Protocol will be automatically filled with contents. Enter the computer's IP address 192.168.0.100 in the Internal IP field.
5. Click OK to save the settings.



Note:

1) It is recommended to keep the default settings of Internal Port and Protocol if you are not clear about which port and protocol to use.

2) If the service you want to use is not in the list of Service Type, you can enter the corresponding parameters manually. You should verify the ports number that the service need.

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

Done! Users in the Internet can enter Service Type://WAN IP to visit your local resources. (in this case, enter http://218.18.232.154 to visit your personal website).

Note:

1) WAN IP should be a public IP address. For the WAN IP is assigned dynamically by ISP, it is recommended to apply and register a domain name for the WAN by DDNS. Then you can use Service Type://Domain Name to visit your local resources

2) If you have changed the default External Port, you should use Service Type://WAN IP:External Port or Service Type://Domain Name:External Port to visit your local resources

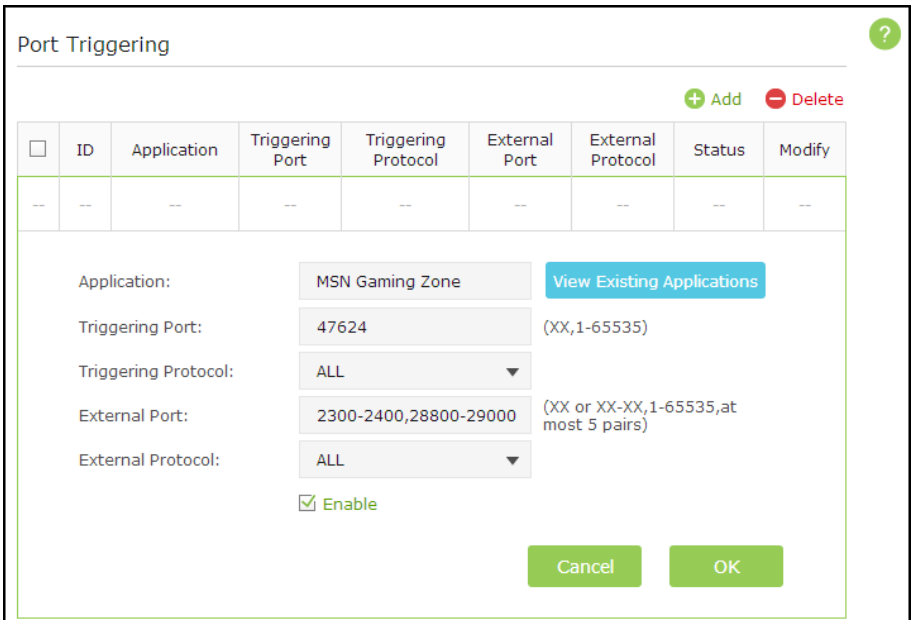
2.22.2 Open Ports Dynamically by Port Triggering

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

Follow the steps below to configure the port triggering rules:

1. Visit http://tplinkwifi.net, and log in with the username and password you set for the router.
2. Go to Advanced ->NAT Forwarding -> Port Triggering and click Add.

3. Click View Existing Applications, and select the desired Application. The External Port, Internal Port and Protocol will be automatically filled with contents. The following picture takes application MSN Gaming Zone as an example.
4. Click OK to save the settings.



Note:

1) You can add multiple port triggering rules according to your network needs.
2) The external ports of different rules cannot be overlapped.
3) One rule can only be used by one host at one time. Other hosts' request at the same time will be rejected.
4) At any time, one host can only use one Port Triggering rule.
5) If the application you want to use is not in the list of Existing Applications, you can enter the corresponding parameters manually. You should verify the ports number that the application need.

2.22.3 Make Applications Free from Port Restriction by DMZ

When a computer is set to be a DMZ (Demilitarized Zone) host in the local network, it is totally exposed to the Internet, which can realize the unlimited bidirectional communication between internal hosts and external hosts. The DMZ host becomes a virtual server with all ports opened. When you are not clear about which ports to open in some special applications, like IP camera and database software, you can set the computer to be a DMZ host.

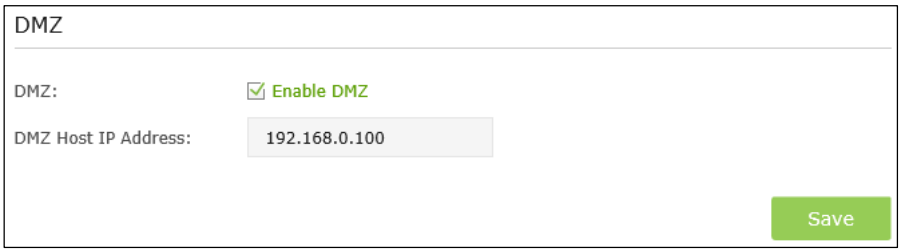
Note: DMZ is more applicable in the situation that users are not clear about which ports to open. When it is enabled, the DMZ host is totally exposed to the Internet, which may bring some potential safety hazard. If DMZ is not in use, please disable it in time.

I want to: Make the home computer join the Internet online game without port restriction.

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

How can I do that?

1. Assign a static IP address to your computer, for example 192.168.0.100.
2. Visit http://tplinkwifi.net, and log in with the username and password you set for the router.
3. Go to Advanced -> NAT Forwarding -> DMZ and select the checkbox to enable DMZ.



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

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

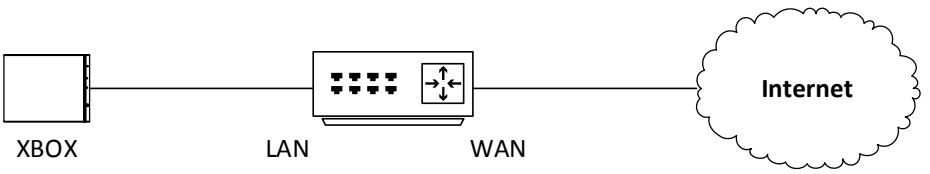
2.22.4 Make Xbox Online Games Run Smoothly by UPnP

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

Note:

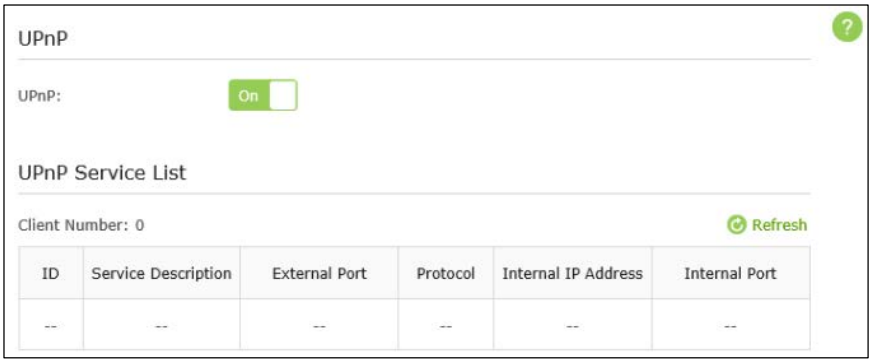
1. Only the application supporting UPnP protocol can use this feature.
2. UPnP feature needs the support of operating system (e.g. Windows Vista/ Windows 7/ Windows 8, etc. Some of operating system need to install the UPnP components).

For example: When you connect your Xbox to the router which has connected to the Internet to play online games, UPnP will send request to the router to open the corresponding ports allowing the following data penetrating the NAT to transmit. Therefore, you can play Xbox online games without a hitch.



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

1. Visit http://tplinkwifi.net, and log in with the username and password you set for the router.
2. Go to Advanced ->NAT Forwarding -> UPnP and toggle on or off according to your needs.


UPnP
UPnP:
On
UPnP Service List
Client Number: 0
Refresh
ID
Service Description
External Port
Protocol
Internal IP Address
Internal Port
--
--
--
--
--
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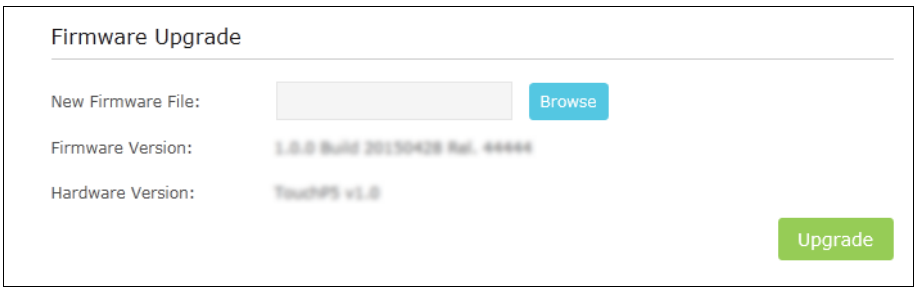
2.23 Update the Firmware

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

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



3. Click Browse to locate the downloaded new firmware file, and click Upgrade.
4. Wait a few moments for the upgrading and rebooting.

Note:

1. Before upgrading the firmware, it's better to back up your current settings.
2. During the upgrading process, do NOT turn off or reset the router.
3. The upgraded firmware version must correspond to the hardware.

Troubleshooting Guide & FAQ

T1. What can I do if I cannot access the Internet?

- Check if the Internet is working properly by connecting a computer directly to the modem via an Ethernet cable. If not, contact your Internet Service Provider.
- Tap Quick Setup on the menu screen to run the setup again.
- Tap Reboot & Reset on the menu screen, select Reboot to reboot the router and try again.
- If your Internet Connection Type is Dynamic IP, go through Quick Setup and enter the MAC address that is registered with your ISP, then reboot both the modem and the router.

T2. What can I do if I forgot my wireless network password?

Tap Wireless Settings on the menu screen to obtain the security password, both for 2.4GHz and 5GHz wireless network.

For the Guest network, the password displays on the home screen.

T3. How do I restore the router to its factory default settings?

- Tap Reboot & Reset on the menu screen, then tap Reset.
- With the router powered on, press and hold the Reset button on the back panel until the Touch P5 logo displays

Note: Once the router is reset, the current configuration settings will be lost and you will need to re-configure the router.

T4. What can I do if I forgot my administrator password?

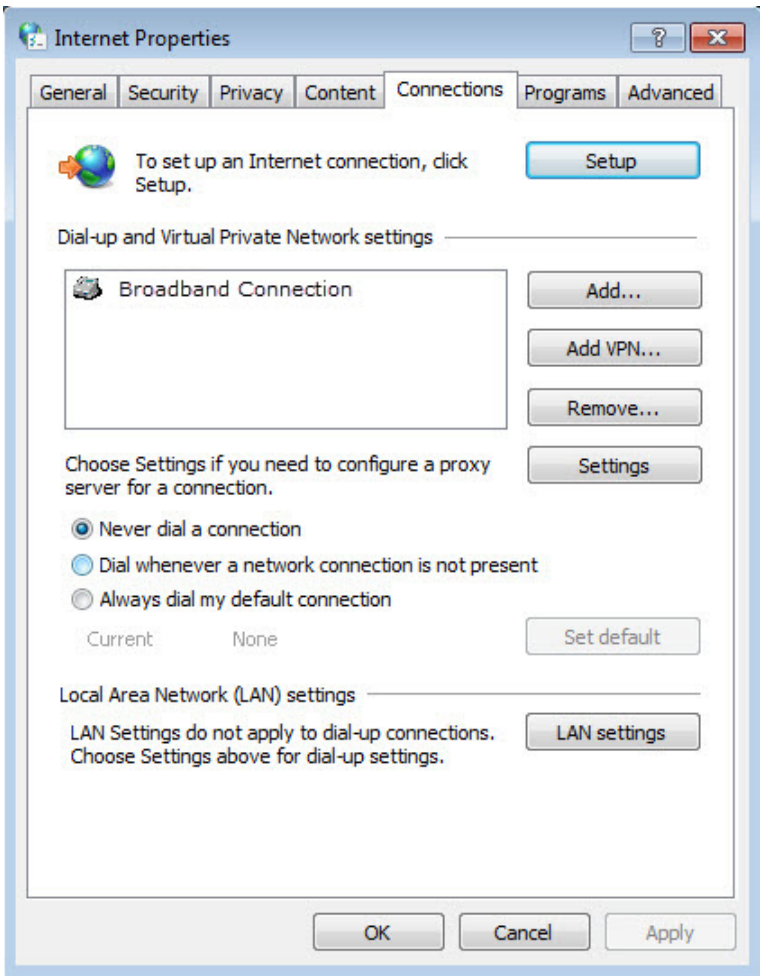
With the router powered on, press and hold the Reset button on the back panel until the Touch P5 logo displays to restore the router to its factory default settings, and create a new administrator password.

T5. What can I do if I forgot my web-based management utility account?

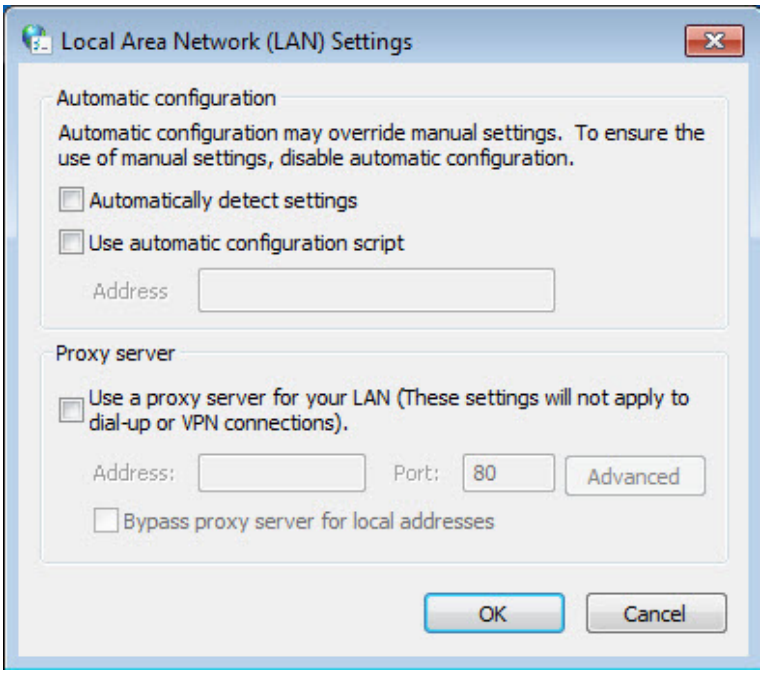
- The default username and password of the web management utility are admin (in lower case).
- The web-based management utility and touchscreen shares the same password, please try the administrator password of the touchscreen.
- Restore the router to its factory default settings: With the router powered on, press and hold the Reset button on the back panel until the Touch P5 logo displays.

T6. I cannot login the router's web management page, what can I do?

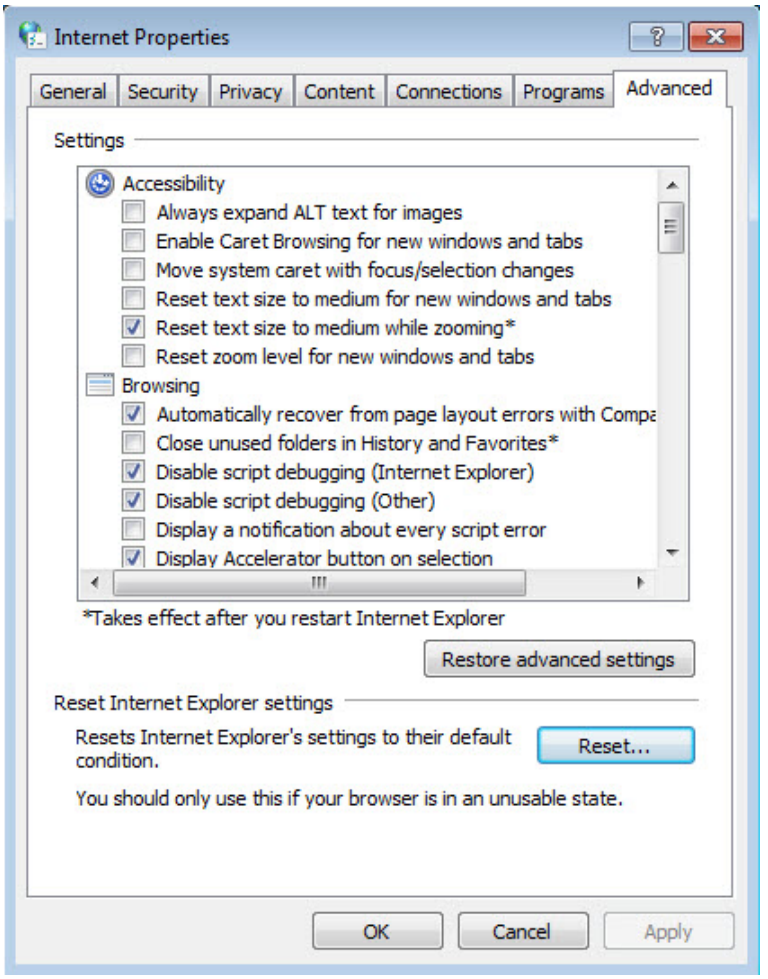
- Make sure the router connects to the computer correctly.
- Make sure the IP address of your computer is configured as "Obtain an IP address automatically" and "Obtain DNS server address automatically".
- Make sure the default access you input is right.
- Check your computer's settings:
    1. Go to *Start* > *Control Panel* > *Network and Internet* page, and click View network status and tasks;
    2. Click Internet Options on the bottom left;
    3. Click Connections, select Never dial a connection;



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



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



- Change a web browser or computer and login again.
- Reset the router to factory default settings: With the router powered on, press and hold the Reset button on the back panel until the Touch P5 logo displays.

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

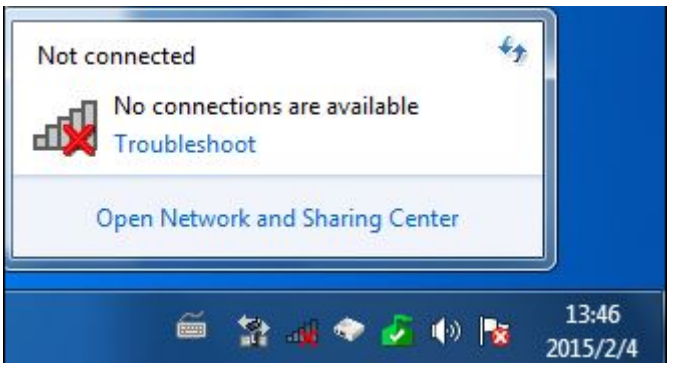
If this doesn't solve the problem, please contact the technical support.

T7. I cannot find my wireless network or I cannot connect the wireless network, what can I do?

- If you fail to find any wireless network, please follow the steps below:
  1. Make sure the wireless function is enabled if you're using a laptop with built-in wireless adapter. You can refer to the relevant document or contact the laptop manufacturer.
  2. Make sure the wireless adapter driver is installed successfully and the wireless adapter is enabled.

     On Windows 7

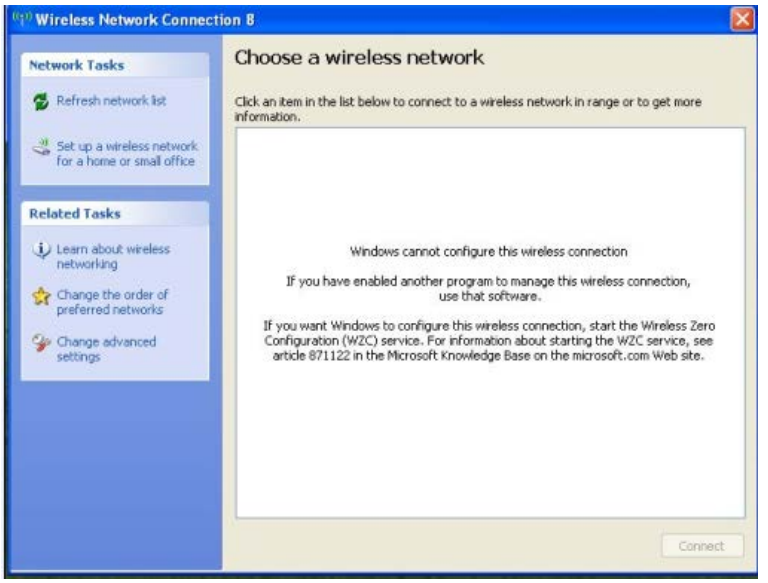
     1) If you see the message No connections are available, it is usually because the wireless function is disabled or blocked somehow;



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

On Windows XP

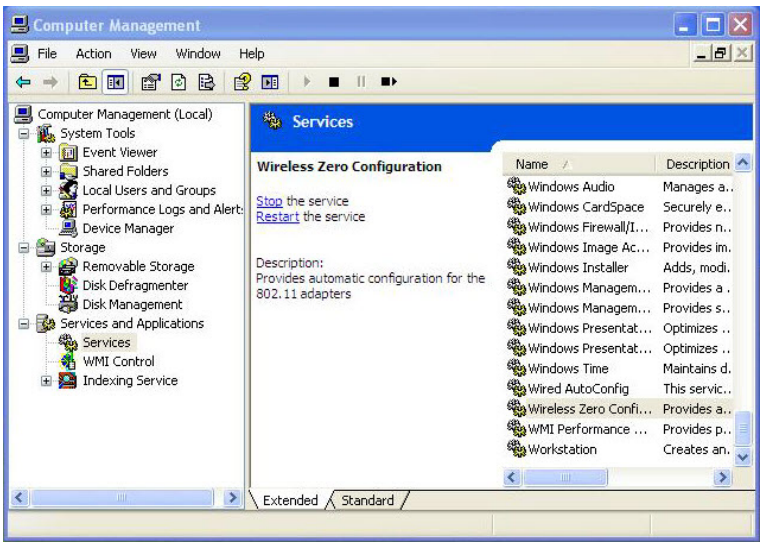
1) If you see the message Windows cannot configure this wireless connection, this is usually because windows configuration utility is disabled or you are running another wireless configuration tool to connect the wireless;



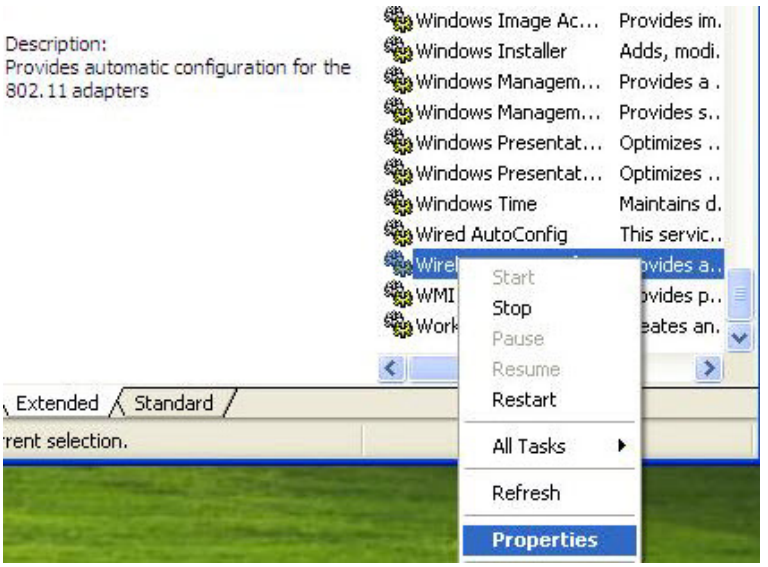
2) Exit the wireless configuration tool(the TP-LINK Utility, for example);

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

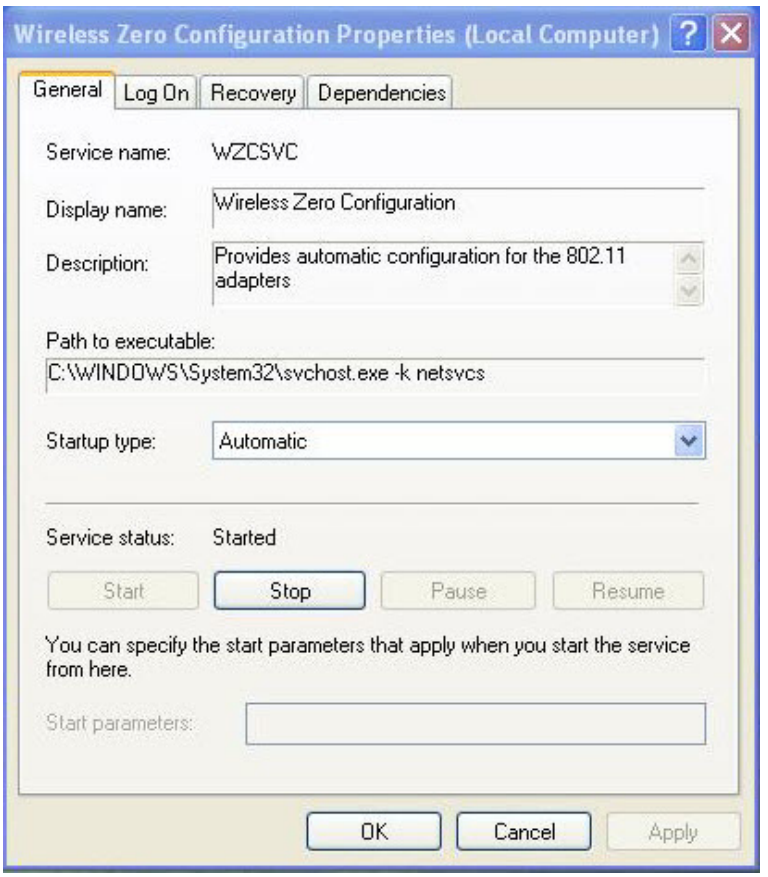
4) Expand Services and Applications > Services, find and locate Wireless Zero Configuration in the Services list on the right side;



5) Select Wireless Zero Configuration, right click, and then select Properties;



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



7) Connect to wireless network.

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

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

Appendix A: Specifications

General	
Standards and Protocols	IEEE 802.11ac, IEEE 802.11n, IEEE 802.11g, IEEE 802.11b, IEEE 802.11a, IEEE 802.11e, IEEE 802.11i, IEEE 802.1X, IEEE 802.3X, IEEE 802.3, IEEE 802.3u, IEEE 802.3ab
Protocols	TCP/IP, PPPoE, DHCP, ICMP, NAT, SNTP
Ports	1 10/100/1000M Auto-Negotiation Internet RJ45 port; 4 10/100/1000M Auto-Negotiation Ethernet RJ45 ports supporting Auto MDI/MDIX; 1 USB 2.0 port and 1 USB 3.0 port supporting storage/FTP/Media/Print Server;
Cabling Type	10Base-T: UTP category 3, 4, 5 cable (maximum 100m) EIA/TIA-568 100Ω STP (maximum 100m) 100Base-TX: UTP category 5, 5e cable (maximum 100m) EIA/TIA-568 100Ω STP (maximum 100m) 1000Base-TX: UTP category 5, 5e cable (maximum 100m) EIA/TIA-568 100Ω STP (maximum 100m)
Antenna	2.4GHz: Omni directional antenna with 2dBi gain 5.0GHz: Omni directional antenna with 2dBi gain
Safety & Emissions	FCC, CE
Wireless	
Frequency Band	2.4GHz, 5GHz
Radio Data Rate	11b: 1/2/5.5/11Mbps 11a/g: 6/9/12/18/24/36/48/54Mbps 11n: up to 600Mbps 11ac: up to 1.3Gbps
Frequency Expansion	DSSS (Direct Sequence Spread Spectrum)
Modulation	11ac: 256-QAM for OFDM 11n/g/a: QPSK,BPSK,16-QAM, 64-QAM for OFDM 11b: CCK,DQPSK,DBPSK
Security	WEP, WPA/WPA2, WPA2-PSK/WPA-PSK

Sensitivity	5GHz: 11a 6Mbps: -94dBm 11a 54Mbps: -75dBm 11ac HT20: -66dBm 11ac HT40: -62dBm 11ac HT80: -59dBm	2.4GHz: 11b 1M: -96dBm 11g 54M: -76dBm 11n HT20: -73dBm 11n HT40: -71dBm
Physical and Environment		
Working Temperature	0℃ ~ 40℃ (32℉ to 104℉)	
Storage Temperature	-40℃ ~ 70℃ (-40℉ to 158℉)	
Working Humidity	10% ~ 90% RH, Non-condensing	
Storage Humidity	5% ~ 90% RH, Non-condensing	

* Only 2.412GHz~2.462GHz is allowed to be used in USA, which means only channel 1~11 is available for American users to choose.

Appendix B: Glossary

- 802.11ac - IEEE 802.11ac is a wireless computer networking standard of 802.11.This specification will enable multi-station WLAN throughput of at least 1 gigabit per second .This is accomplished by extending the air interface concepts embraced by 802.11n: wider RF bandwidth, more MIMO spatial streams, multi-user MIMO, and high-density modulation (up to 256 QAM).
- 802.11n - 802.11n builds upon previous 802.11 standards by adding MIMO (multiple-input multiple-output). MIMO uses multiple transmitter and receiver antennas to allow for increased data throughput via spatial multiplexing and increased range by exploiting the spatial diversity, perhaps through coding schemes like Alamouti coding. The Enhanced Wireless Consortium (EWC) [3] was formed to help accelerate the IEEE 802.11n development process and promote a technology specification for interoperability of next-generation wireless local area networking (WLAN) products.
- 802.11b - The 802.11b standard specifies a wireless networking at 11 Mbps using direct-sequence spread-spectrum (DSSS) technology and operating in the unlicensed radio spectrum at 2.4GHz, and WEP encryption for security. 802.11b networks are also referred to as Wi-Fi networks.
- 802.11g - specification for wireless networking at 54 Mbps using direct-sequence spread-spectrum (DSSS) technology, using OFDM modulation and operating in the unlicensed radio spectrum at 2.4GHz, and backward compatibility with IEEE 802.11b devices, and WEP encryption for security.
- DDNS (Dynamic Domain Name System) - The capability of assigning a fixed host and domain name to a dynamic Internet IP Address.
- DHCP (Dynamic Host Configuration Protocol) - A protocol that automatically configure the TCP/IP parameters for the all the computer(s) that are connected to a DHCP server.
- DMZ (Demilitarized Zone) - A Demilitarized Zone allows one local host to be exposed to the Internet for a special-purpose service such as Internet gaming or videoconferencing.
- DNS (Domain Name System) - An Internet Service that translates the names of websites into IP addresses.
- Domain Name - A descriptive name for an address or group of addresses on the Internet.
- DSL (Digital Subscriber Line) - A technology that allows data to be sent or received over existing traditional phone lines.
- ISP (Internet Service Provider) - A company that provides access to the Internet.
- MTU (Maximum Transmission Unit) - The size in bytes of the largest packet that can be transmitted.
- NAT (Network Address Translation) - NAT technology translates IP addresses of a local area network to a different IP address for the Internet.
- PPPoE (Point to Point Protocol over Ethernet) - PPPoE is a protocol for connecting remote hosts to the Internet over an always-on connection by simulating a dial-up connection.
- SSID - A Service Set Identification is a thirty-two character (maximum) alphanumeric key identifying a wireless local area network. For the wireless devices in a network to communicate with each other, all devices must be configured with the same SSID. This is typically the configuration parameter for a wireless computer card. It corresponds to the ESSID in the wireless Access Point and to the wireless network name.
- WEP (Wired Equivalent Privacy) - A data privacy mechanism based on a 64-bit or 128-bit or 152-bit shared key algorithm, as described in the IEEE 802.11 standard.

- Wi-Fi - A trade name for the 802.11b wireless networking standard, given by the Wireless Ethernet Compatibility Alliance (WECA, see http://www.wi-fi.net), an industry standards group promoting interoperability among 802.11b devices.
- WLAN (Wireless Local Area Network) - A group of computers and associated devices communicate with each other wirelessly, which network serving users are limited in a local area.

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http://www.tp-link.com

FCC STATEMENT

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

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

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

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 operates in 5.15 ~ 5.25GHz / 5.745 ~ 5.85 GHz frequency range. It is restricted in indoor environment only. This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

CE Mark Warning

CE1588

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.

RF Exposure Information

This device meets the EU requirements (1999/519/EC) 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 form your body.

National Restrictions

This device is intended for home and office use in all EU countries (and other countries following the EU directive 1999/5/EC) without any limitation except for the countries mentioned below:

Country	Restriction	Reason/remark
Belarus	Not implemented	
Norway	Implemented	This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Ålesund on Svalbard
Italy	Implemented	The public use is subject to general authorisation by the respective service provider
Russian Federation	Limited implementation	**1. SRD with FHSS modulation** 1.1. Maximum 2.5 mW e.i.r.p. 1.2. Maximum 100 mW e.i.r.p. Permitted for use SRD for outdoor applications without restriction on installation height only for purposes of gathering telemetry information for automated monitoring and resources accounting systems. Permitted to use SRD for other purposes for outdoor applications only when the installation height is not exceeding 10 m above the ground surface. 1.3.Maximum 100 mW e.i.r.p. Indoor applications **2. SRD with DSSS and other than FHSS wideband modulation** 2.1. Maximum mean e.i.r.p. density is 2 mW/MHz. Maximum 100 mW e.i.r.p. 2.2. Maximum mean e.i.r.p. density is 20 mW/MHz. Maximum 100 mW e.i.r.p. It is permitted to use SRD for outdoor applications only for purposes of gathering telemetry information for automated monitoring and resources accounting systems or security systems. 2.3. Maximum mean e.i.r.p. density is 10 mW/MHz. Maximum 100 mW e.i.r.p. Indoor applications
Ukraine	Limited implementation	e.i.r.p. ≤100 mW with built-in antenna with amplification factor up to 6 dBi

ATTENTION: Due to EU law, the country settings must be identical to the country where the device is operating (important due to non-harmonised frequencies in the EU).

Restricted to indoor use.

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.）

This radio transmitter (IC: 8853A-P5 / Model: Touch P5) 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, 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-P5 / Model: Touch P5) 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, et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

This device has been designed to operate with the antennas listed below (Appendix A) , and having a maximum gain of 2 dBi. Antennas not included in this list or having a gain greater than 2 dBi are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

Caution:

(i) 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;
(ii) 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
(iii) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:

(i) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
(ii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande de 5725 à 5 850 MHz) doit être conforme à la limite de la p.i.r.e. spécifiée pour l'exploitation point à point et l'exploitation non point à point, selon le cas;
(iii) De plus, 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 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)

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。

減少電磁波影響，請妥適使用。

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。

Продукт сертифіковано згідно с правилами системи УкрСЕПРО на відповідність вимогам нормативних документів та вимогам, що передбачені чинними законодавчими актами України.

EAC

Safety Information

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

This product can be used in the following countries:

AT	BG	BY	CA	CZ	DE	DK	EE
ES	FI	FR	GB	GR	HU	IE	IT
LT	LV	MT	NL	NO	PL	PT	RO
RU	SE	SG	SK	TR	UA	US	

TP-LINK® TP-LINK TECHNOLOGIES CO., LTD

DECLARATION OF CONFORMITY

For the following equipment:

Product Description: AC1900 Touch Screen Wi-Fi Gigabit Router

Model No.: **Touch P5**

Trademark: **TP-LINK**

We declare under our own responsibility that the above products satisfy all the technical regulations applicable to the product within the scope of Council Directives:

Directives 1999/5/EC, Directives 2004/108/EC, Directives 2006/95/EC, Directives 1999/519/EC, Directives 2011/65/EU

The above product is in conformity with the following standards or other normative documents

EN 300 328 V1.8.1

EN 301 489-1 V1.9.2 & EN 301 489-17 V2.2.1

EN 55022: 2010 + AC: 2011

EN 55024: 2010

EN 61000-3-2: 2006 + A1: 2009 + A2: 2009

EN 61000-3-3: 2013

EN 60950-1: 2006+A11: 2009+A1: 2010+A12: 2011+A2: 2013

EN 50385: 2002

EN 301 893 V1.7.1

The product carries the CE Mark:

CE1588

Person responsible for making this declaration:

Yang Hongliang

Product Manager of International Business

Date of issue: 2015-06-30

TP-LINK TECHNOLOGIES CO., LTD.

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