

**TP-LINK®**

# **TL-WR902AC**

# **User Guide**

AC750 Wireless Travel Router

# Contents

<b>About This Guide .....</b>	<b>1</b>
<b>Chapter 1. Get to Know About Your Router .....</b>	<b>2</b>
1. 1. Product Overview .....	3
1. 2. Appearance.....	3
<b>Chapter 2. Connect the Hardware.....</b>	<b>5</b>
2. 1. Position Your Router.....	6
2. 2. Connect Your Router .....	6
<b>Chapter 3. Set Up Internet Connection Via Quick Setup Wizard .....</b>	<b>9</b>
3. 1. Log into the Router.....	10
3. 2. Configure the Router .....	10
<b>Chapter 4. Configure the Router in Standard Router Mode .....</b>	<b>22</b>
4. 1. Status.....	23
4. 2. Network .....	25
4. 3. Wireless.....	36
4. 4. DHCP .....	45
4. 5. USB Settings .....	47
4. 6. Forwarding .....	56
4. 7. Security.....	61
4. 8. Parental Controls .....	66
4. 9. Access Control .....	67
4. 10. Advanced Routing .....	70
4. 11. Bandwidth Control .....	72
4. 12. IP&MAC Binding.....	74
4. 13. Dynamic DNS .....	76
4. 14. System Tools .....	79
<b>Chapter 5. Configure the Router in Hotspot Router Mode .....</b>	<b>91</b>
5. 1. Status.....	92
5. 2. Network .....	94
5. 3. Wireless.....	102

5.4.	DHCP .....	111
5.5.	USB Settings .....	114
5.6.	Forwarding .....	123
5.7.	Security.....	128
5.8.	Parental Controls .....	134
5.9.	Access Control .....	135
5.10.	Advanced Routing .....	138
5.11.	Bandwidth Control .....	140
5.12.	IP&MAC Binding.....	142
5.13.	Dynamic DNS .....	144
5.14.	System Tools .....	147

## **Chapter 6. Configure the Router in Access Point Mode ..... 157**

6.1.	Status.....	158
6.2.	Operation Mode .....	159
6.3.	Network .....	160
6.4.	Wireless.....	161
6.5.	DHCP .....	169
6.6.	System Tools .....	172

## **Chapter 7. Configure the Router in Range Extender Mode..... 181**

7.1.	Status.....	182
7.2.	Operation Mode .....	183
7.3.	Network .....	184
7.4.	Wireless.....	185
7.5.	DHCP .....	191
7.6.	System Tools .....	194

## **Chapter 8. Configure the Router in Client Mode ..... 203**

8.1.	Status.....	204
8.2.	Operation Mode .....	205
8.3.	Network .....	205
8.4.	Wireless.....	206
8.5.	DHCP .....	211
8.6.	System Tools .....	213

## **FAQ..... 222**

# About This Guide

This guide is a complement to Quick Installation Guide. The Quick Installation Guide provides instructions for quick Internet setup, while this guide contains details of each function and demonstrates how to configure them.

When using this guide, please notice that features of the router may vary slightly depending on the model and software version you have, and on your location, language, and Internet service provider. All screenshots, images, parameters and descriptions documented in this guide are used for demonstration only.

## Conventions

In this guide the following conventions are used:

Convention	Description
<i>Blue Italic</i>	Hyperlinks are in blue italic. You can click to redirect to a website or a specific section.
Blue	Contents to be emphasized and texts on the web page are in blue, including the menus, items, buttons, and so on.
>	The menu structures to show the path to load the corresponding page. For example, <a href="#">Advanced</a> > <a href="#">Wireless</a> > <a href="#">MAC Filtering</a> means the MAC Filtering function page is under the Wireless menu that is located in the Advanced tab.
<b>Note:</b>	Ignoring this type of note might result in a malfunction or damage to the device.
<b>Tips:</b>	Indicates important information that helps you make better use of your device.

## More Info

- The latest software, management app and utility are available from the [Download Center](http://www.tp-link.com/support) at <http://www.tp-link.com/support>.
- The Quick Installation Guide (QIG) can be found where you find this guide or inside the package of the router.
- Specifications can be found on the product page at <http://www.tp-link.com>.
- A Technical Support Forum is provided for you to discuss our products at <http://forum.tp-link.com>.
- Our Technical Support contact information can be found at the [Contact Technical Support](http://www.tp-link.com/support) page at <http://www.tp-link.com/support>.



## Chapter 1

---

# Get to Know About Your Router

---

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

This chapter contains the following sections:

- *Product Overview*
- *Appearance*

## 1.1. Product Overview

To meet the wireless needs of almost any situation you might encounter, the TP-LINK portable router, with multiple operation modes, is designed for home and travel use. The portable size of the router means that you can put it in your pocket and take it with you wherever you go.

## 1.2. Appearance



### LED Explanation

LED	Status	Indication
⏻ (Power)	On	The router is on.
	Blinking	The router is initializing or being upgraded.
🌐 (Internet)	On	The Internet is available.
	Off	The Internet is unavailable.
📶 (Wireless)	On	The wireless network is enabled.
	Blinking	The router is connecting to the host network when in Range Extender or Client mode.
	Off	The wireless network is disabled.
🔌 (USB)	On	A USB device is connected.
	Off	No USB device is connected.

LED	Status	Indication
🔒 (WPS)	On	The LED stays on for 5 minutes when WPS connection is established, and then goes off.
	Blinking	WPS connection is in progress.
	Off	No WPS connection is established.

## Port and Button Description

Item	Description
Mode Switch	This button is used to switch the operation mode of the router.
WAN/LAN Port	This port functions as a WAN port in Router mode and as a LAN port in Hotspot, Access Point, Range Extender and Client mode.
Power	This port is used to connect the power adapter.
Reset (Hole)	Use a pin to press and hold this button for 5 seconds to reset the router.
3G/4G USB	This port is used to plug a 3G/4G USB modem or a USB disk into.
🔒 (WPS)	Press this button to establish WPS connection.

## Chapter 2

---

# Connect the Hardware

---

This chapter contains the following sections:

- *Position Your Router*
- *Connect Your Router*

## 2.1. Position Your Router

- The product should not be located where it will be exposed to moisture or excessive heat.
- Place the router in a location where it can be connected to devices as well as to a power source.
- Make sure the cables and power cord are safely placed out of the way so they do not create a tripping hazard.
- The router can be placed on a shelf or desktop.
- Keep the product away from the strong electromagnetic radiation and the device of electromagnetic sensitive.

## 2.2. Connect Your Router

There are five operation modes supported by this router: Standard Router, Hotspot Router, Access Point, Repeater and Client. Please determine which operation mode you need and carry out the corresponding steps.

### 2.2.1. Standard Router Mode

Create a private wireless network instantly and share the Internet with multiple Wi-Fi devices. This mode is suitable for hotel rooms and home networks.

1. Switch the operation mode to **Share ETH** and connect the hardware according to Step A to D.

 Tips: Plug a 3G/4G USB modem with a SIM/UIM card into the 3G/4G USB port as needed.

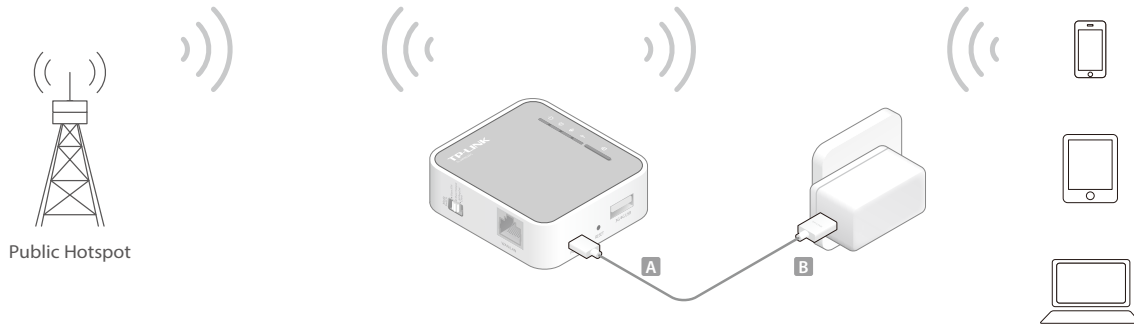
2. Connect your device to the router wirelessly. The Wi-Fi network name and password are on the router's label.



### 2.2.2. Hotspot Router

In Hotspot Router mode, the router enables multiple users to share Internet connection from WISP.

1. Switch the operation mode to **Share Hotspot** and plug the router's adapter into an electrical outlet.
2. Connect your device to the router wirelessly or via an Ethernet cable. The Wi-Fi network name and password are on the router's label.



### 2.2.3. Access Point Mode

Create a wireless network from an Ethernet connection. This mode is suitable for dorm rooms or homes where there's already a wired router but you need a wireless hotspot.

1. Switch the operation mode to **AP/Rng Ext/Client** and connect the hardware according to Step A to D.
2. Connect your device to the router wirelessly. The Wi-Fi network name and password are on the router's label.

#### Note:

If the Internet has an authentication process, you will need to authenticate it on EACH device.



### 2.2.4. Repeater Mode

Repeat signal from an existing wireless network. This mode is suitable to extend wireless coverage, reaching devices that were previously too far from your Host AP to maintain stable wireless connection.

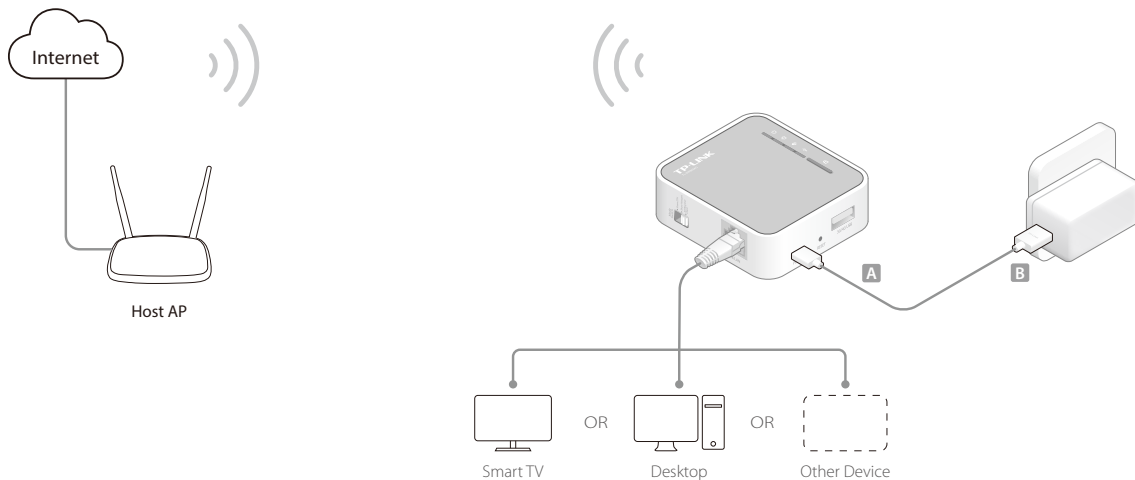
1. Switch the operation mode to **AP/Rng Ext/Client** and plug the router's adapter into an electrical outlet near your host AP.
2. Connect your device to the router wirelessly or via an Ethernet cable. The Wi-Fi network name and password are on the router's label.



### 2.2.5. Client Mode

In this mode, this device can be connected to another device via an Ethernet cable and act as an adapter to grant your wired devices access to a wireless network, especially for a smart TV, media player, or game console.

1. Switch the operation mode to **AP/Rng Ext/Client** and plug the router's adapter into an electrical outlet within the signal range of your host AP.
2. Connect your device to the router wirelessly or via an Ethernet cable. The Wi-Fi network name and password are on the router's label.



## Chapter 3

---

# Set Up Internet Connection Via Quick Setup Wizard

---

This chapter introduces how to connect your router to the Internet via the web-based Quick Setup Wizard.

This chapter contains the following sections:

- *Log into the Router*
- *Configure the Router*

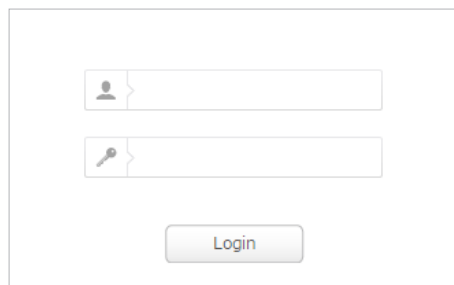


## 3.1. Log into the Router

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

Follow the steps below to log into your router.

1. Set up the TCP/IP Protocol in [Obtain an IP address automatically](#) mode on your computer.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router. The default one is [admin](#) (all lowercase) for both username and password.



**Note:**

If the login window does not appear, please refer to the [FAQ](#) section.

## 3.2. Configure the Router

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

### 3.2.1. Standard Router Mode

1. Go to [Quick Setup](#), select your time zone and click [Next](#) to continue.
2. (Optional) Enter the parameters of your 3G/4G USB modem if any and click [Next](#).
3. Select the [WAN Connection Type](#). When using the router in a hotel room or a small office, select [Dynamic IP](#).

**Note:**

- If you use DSL line and you are only provided with an account name and a password by your ISP, choose [PPPoE](#).
- If you use cable TV or fiber cable, choose [Dynamic IP](#).
- If you are provided with more information such as IP address, Subnet Mask and Default Gateway, choose [Static IP](#).
- Contact your ISP if you are not sure about the WAN connection information. You can also select [Auto-Detect](#) to let the router detect your connection type automatically.

Time Zone      WAN Connection Type      Wireless Settings      Test Your Connection

3G/4G Settings      Summary

Dynamic IP

Static IP

PPPoE

L2TP

PPTP

Note: If you are not sure which WAN Connection Type you have, use **Auto Detect** or contact your Internet Service Provider (ISP) for assistance.

4. In this case, we take dynamic IP for instance. Please select to clone the mac address or not and click [Next](#). For other connection types, please enter the parameters provided by your ISP, and then click [Next](#).

Time Zone      WAN Connection Type      Wireless Settings      Test Your Connection

3G/4G Settings      Summary

**WAN Connection Type - Dynamic IP**

If your ISP only delivers internet access to a specific MAC address, you may need to Clone that MAC Address to provide access to other devices.

If you are not sure, select **Do NOT clone MAC Address**.

Do NOT clone MAC Address

Clone MAC Address

Note: If you select **Clone MAC Address**, please make sure the MAC Address of this computer is registered with your ISP BEFORE clicking **Next**.

5. Either customize your [Network Names \(SSIDs\)](#) and [Passwords](#) or keep the default ones, and then click [Next](#).

The screenshot shows the 'Wireless Settings' step of the Quick Setup Wizard. At the top, a progress bar indicates the current step is 'Wireless Settings', with previous steps 'Time Zone', 'WAN Connection Type', and '3G/4G Settings' completed, and 'Summary' and 'Test Your Connection' remaining. The settings are as follows:

<b>Wireless 2.4GHz:</b>	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
<b>Network Name(SSID):</b>	TP-LINK_7B00
<b>Password:</b>	12345670
<b>Wireless 5GHz:</b>	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
<b>Network Name(SSID):</b>	TP-LINK_7B00_5G
<b>Password:</b>	12345670

At the bottom right, there are 'Back' and 'Next' buttons.

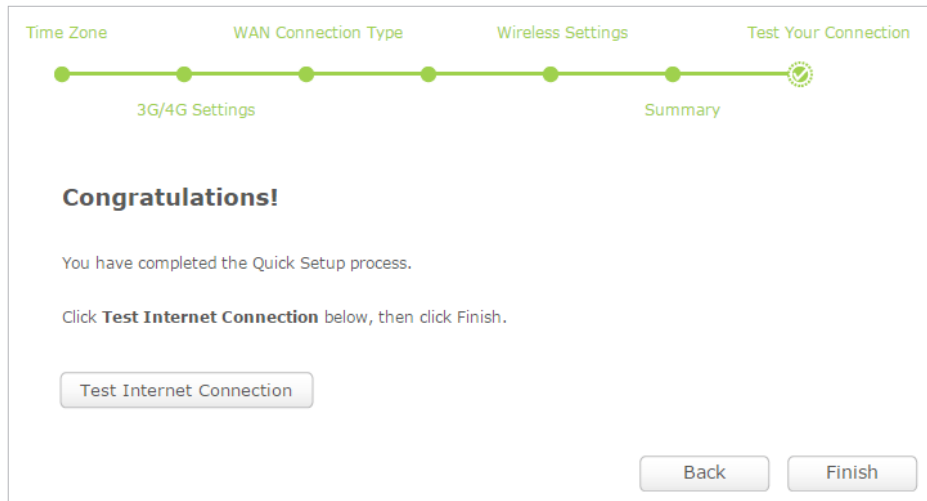
6. Check the wireless settings and click [Save](#).

The screenshot shows the 'Summary' step of the Quick Setup Wizard. The progress bar now highlights 'Summary', indicating that 'Wireless Settings' has been completed. The summary of the configuration is as follows:

<b>Operation Mode:</b>	WAN Preferred
<b>Time Zone:</b>	(GMT-08:00) Pacific Time
<b>Mobile ISP:</b>	AT&T
<b>WAN Connection Type:</b>	Dynamic IP
<b>Wireless 2.4GHz:</b>	On
<b>Network Name(SSID):</b>	TP-LINK_7B00
<b>Password:</b>	12345670
<b>Wireless 5GHz:</b>	On
<b>Network Name(SSID):</b>	TP-LINK_7B00_5G
<b>Password:</b>	12345670

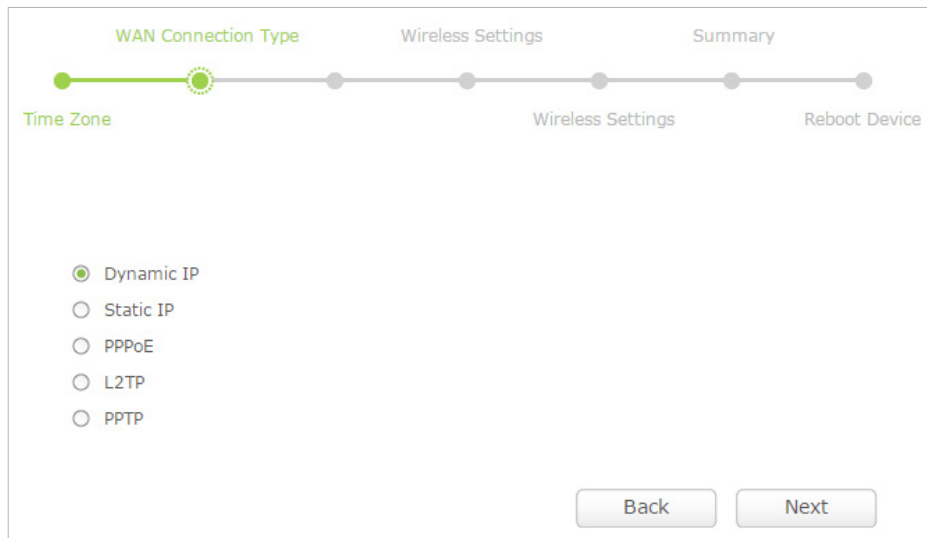
At the bottom right, there are 'Back' and 'Save' buttons.

7. Click [Finish](#) to complete the configuration. Now your computers and Wi-Fi devices can connect to the Internet!



### 3.2.2. Hotspot Router Mode

1. Go to [Quick Setup](#), select your time zone and click [Next](#) to continue.
2. Select the [WAN Connection Type](#). When using the router in a hotel room or a small office, select [Dynamic IP](#).



3. In this case, we take dynamic IP for instance. Please select to clone the mac address or not and click [Next](#). For other connection types, please enter the parameters provided by your ISP, and then click [Next](#).

WAN Connection Type    Wireless Settings    Summary

Time Zone    Wireless Settings    Reboot Device

### WAN Connection Type - Dynamic IP

If your ISP only delivers internet access to a specific MAC address, you may need to Clone that MAC Address to provide access to other devices.

If you are not sure, select **Do NOT clone MAC Address**.

Do NOT clone MAC Address

Clone MAC Address

Note: If you select **Clone MAC Address**, please make sure the MAC Address of this computer is registered with your ISP BEFORE clicking **Next**.

Back    Next

4. Select 2.4GHz or 5GHz, click [Survey](#) to find the public Wi-Fi network and click [Choose](#). Enter the public Wi-Fi password in the [Wireless Password](#) field and click [Next](#).

WAN Connection Type    Wireless Settings    Summary

Time Zone    Wireless Settings    Reboot Device

**Wireless:**     2.4GHz     5GHz

**Wireless Name of Root AP:**       

**MAC Address of Root AP:**   

**Wireless Security Mode:**     ▼

**Wireless Password:**   

Back    Next

5. Either customize your [Network Names \(SSIDs\)](#) and [Passwords](#) for the wireless networks or keep the default ones, and then click [Next](#).

WAN Connection Type    Wireless Settings    Summary

Time Zone    Wireless Settings    Reboot Device

**Wireless 2.4GHz:**  ON  OFF

**Network Name(SSID):**

**Password:**

**Wireless 5GHz:**  ON  OFF

**Network Name(SSID):**

**Password:**

6. Click [Save](#) to complete the configuration.

WAN Connection Type    Wireless Settings    Summary

Time Zone    Wireless Settings    Reboot Device

**Time Zone:** (GMT-08:00) Pacific Time

**WAN Connection Type:** Dynamic IP

**Wireless Name of Root AP:** TP-LINK\_4F88

**Wireless Security:** Most Secure(WPA/WPA2-PSK)

**Password:** 123456789

**Wireless 2.4GHz:** On

**Network Name(SSID):** TP-LINK\_7B00

**Password:** 12345670

**Wireless 5GHz:** On

**Network Name(SSID):** TP-LINK\_7B00\_5G

**Password:** 12345670

### 3.2.3. Access Point Mode

1. Go to [Quick Setup](#), select your time zone and click [Next](#) to continue.
2. Select [Access Point](#) as the operation mode on the System Working Mode page.

System Working Mode    Wireless Settings    Summary

Time Zone    Wireless Settings    Network Settings    Reboot Device

**Access Point** - Transform your existing wired network to a wireless network  
 **Range Extender** - Extend your existing wireless coverage by relaying wireless signal  
 **Client** - Acting as a "Wireless Adapter" to connect your wired devices (e.g. Xbox/PS3) to a wireless network

Back    Next

3. Either customize your **Network Names (SSIDs)** and **Passwords** for the wireless networks or keep the default ones, and then click **Next**.

System Working Mode    Wireless Settings    Summary

Time Zone    Wireless Settings    Network Settings    Reboot Device

**Wireless 2.4GHz:**    ON OFF  
**Network Name(SSID):**    TP-LINK\_7B00  
**Password:**    12345670

**Wireless 5GHz:**    ON OFF  
**Network Name(SSID):**    TP-LINK\_7B00\_5G  
**Password:**    12345670

Back    Next

4. Select the LAN IP type of the router or leave the default setting **Smart IP** for most cases, and then click **Next**.

System Working Mode    Wireless Settings    Summary

Time Zone    Wireless Settings    Network Settings    Reboot Device

**type:**    Smart IP(DHCP)

**IP Address:**    192.168.0.1

**Subnet Mask:**    255.255.255.0

**DHCP Server:**    ON OFF

Back    Next

- Click [Save](#) to complete the configuration.

System Working Mode    Wireless Settings    Summary

Time Zone    Wireless Settings    Network Settings    Reboot Device

**System Working Mode:** Access Point

**Time Zone:** (GMT-08:00) Pacific Time

**Wireless 2.4GHz:** On

**Network Name(SSID):** TP-LINK\_7B00

**Password:** 12345670

**Wireless 5GHz:** On

**Network Name(SSID):** TP-LINK\_7B00\_5G

**Password:** 12345670

Back    Save

### 3.2.4. Repeater Mode

- Go to [Quick Setup](#), select your time zone and click [Next](#) to continue.
- Select [Range Extender](#) as the operation mode on the System Working Mode page.

System Working Mode    Wireless Settings    Summary

Time Zone    Wireless Settings    Network Settings    Reboot Device

**Access Point** - Transform your existing wired network to a wireless network

**Range Extender** - Extend your existing wireless coverage by relaying wireless signal

**Client** - Acting as a "Wireless Adapter" to connect your wired devices (e.g. Xbox/PS3) to a wireless network

Back    Next

- Select 2.4GHz OR 5GHz, click [Survey](#) to find the corresponding host network and click [Choose](#). Enter the host network's password in the [Wireless Password](#) field, and then click [Next](#).



The screenshot shows a progress bar at the top with five steps: System Working Mode, Time Zone, Wireless Settings, Network Settings, and Summary. The 'Wireless Settings' step is currently active, indicated by a green circle and a dashed line. Below the progress bar, the 'Wireless' section includes a radio button selection for 2.4GHz (selected) and 5GHz. There are input fields for 'Wireless Name of Root AP', 'MAC Address of Root AP', and 'Wireless Password'. A dropdown menu for 'Wireless Security Mode' is set to 'Most Secure(WPA/WPA2-PSK)'. A 'Survey' button is located to the right of the AP name field. 'Back' and 'Next' buttons are at the bottom right.

4. Select the LAN IP type of the router or leave the default setting **Smart IP** for most cases, and then click **Next**.

The screenshot shows the progress bar with the 'Network Settings' step now active, indicated by a green circle and a dashed line. The 'type' dropdown is set to 'Smart IP(DHCP)'. The 'IP Address' field contains '192.168.0.1' and the 'Subnet Mask' field contains '255.255.255.0'. The 'DHCP Server' section has 'ON' and 'OFF' radio buttons. 'Back' and 'Next' buttons are at the bottom right.

5. Click **Save** to complete the configuration.

System Working Mode    Wireless Settings    Summary

Time Zone    Wireless Settings    Network Settings    Reboot Device

**System Working Mode:** Range Extender

**Time Zone:** (GMT-08:00) Pacific Time

**Wireless Name of Root AP:** TP-LINK\_4F88

**Wireless Security:** Most Secure(WPA/WPA2-PSK)

**Password:** 123456789

**Wireless 2.4GHz:** On

**Network Name(SSID):** TP-LINK\_4F88

**Password:** 123456789

**Wireless 5GHz:** On

**Network Name(SSID):** TP-LINK\_4F88\_5G

**Password:** 123456789

Back    Save

- Relocate the router about **halfway** between your host AP and the Wi-Fi dead zone. The extended networks share the **same passwords** as those of your host networks, but a suffix (e.g. **\_2.4G** or **\_5G**) will be added for one of the two extended SSIDs.

### 3.2.5. Client Mode

- Go to **Quick Setup**, select your time zone and click **Next** to continue.
- Select **Client** as the operation mode on the System Working Mode page.

System Working Mode    Wireless Settings    Summary

Time Zone    Wireless Settings    Network Settings    Reboot Device

**Access Point** - Transform your existing wired network to a wireless network

**Range Extender** - Extend your existing wireless coverage by relaying wireless signal

**Client** - Acting as a "Wireless Adapter" to connect your wired devices (e.g. Xbox/PS3) to a wireless network

Back    Next

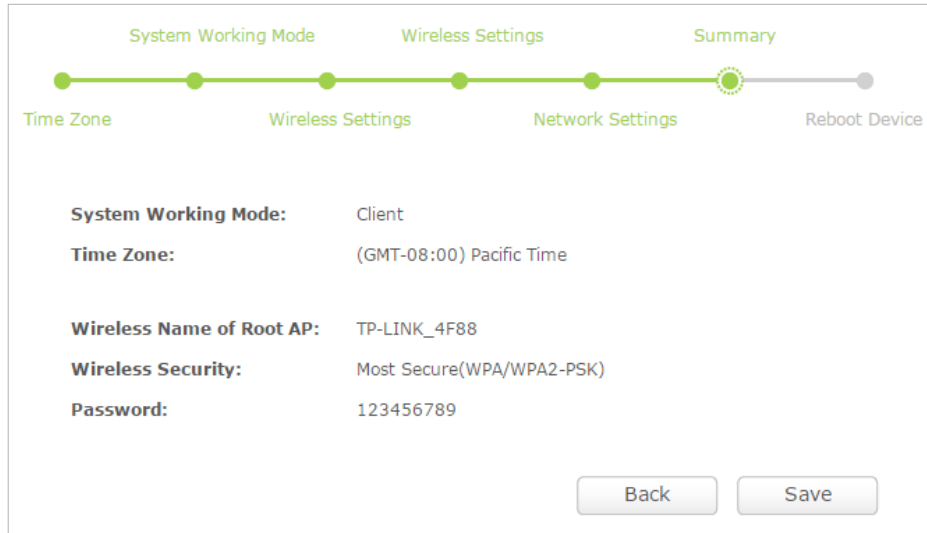
- Select 2.4GHz OR 5GHz, click **Survey** to find the corresponding host network and click **Choose**. Enter the host network's password in the **Wireless Password** field, and then click **Next**.

The screenshot shows the 'Wireless Settings' step of the Quick Setup Wizard. At the top, a progress bar indicates the current step is 'Wireless Settings', with 'System Working Mode' and 'Summary' also visible. Below the progress bar, the 'Wireless' section is active, showing radio buttons for '2.4GHz' (selected) and '5GHz'. The 'Wireless Name of Root AP' field is empty, with a 'Survey' button to its right. The 'MAC Address of Root AP' field contains '0C-4A-08-13-4F-88'. The 'Wireless Security Mode' dropdown is set to 'Most Secure(WPA/WPA2-PSK)'. The 'Wireless Password' field is empty. At the bottom, there are 'Back' and 'Next' buttons.

4. Select the LAN IP type of the router or leave the default setting **Smart IP** for most cases, and then click **Next**.

The screenshot shows the 'Network Settings' step of the Quick Setup Wizard. At the top, the progress bar indicates the current step is 'Network Settings', with 'System Working Mode' and 'Wireless Settings' also visible. Below the progress bar, the 'type' dropdown is set to 'Smart IP(DHCP)'. The 'IP Address' field contains '192.168.0.1'. The 'Subnet Mask' dropdown is set to '255.255.255.0'. The 'DHCP Server' section has 'ON' selected and 'OFF' unselected. At the bottom, there are 'Back' and 'Next' buttons.

5. Click **Save** to complete the configuration. Now you can connect your wired-only device to the router's WAN/LAN port via an Ethernet cable.



The image shows a summary screen from a Quick Setup Wizard. At the top, a progress bar indicates the current step is 'Summary', with previous steps 'Time Zone', 'Wireless Settings', and 'Network Settings' completed. The 'Summary' step is highlighted with a green circle. Below the progress bar, the following settings are listed:

<b>System Working Mode:</b>	Client
<b>Time Zone:</b>	(GMT-08:00) Pacific Time
<b>Wireless Name of Root AP:</b>	TP-LINK_4F88
<b>Wireless Security:</b>	Most Secure(WPA/WPA2-PSK)
<b>Password:</b>	123456789

At the bottom right of the screen, there are two buttons: 'Back' and 'Save'.

## Chapter 4

---

# Configure the Router in Standard Router Mode

---

This chapter presents how to configure the various features of the router working as a Standard Wireless Router.

This chapter contains the following sections:

- *Status*
- *Network*
- *Wireless*
- *DHCP*
- *USB Settings*
- *Forwarding*
- *Security*
- *Parental Controls*
- *Access Control*
- *Advanced Routing*
- *Bandwidth Control*
- *IP&MAC Binding*
- *Dynamic DNS*
- *System Tools*

## 4.1. Status

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Status](#). You can view the current status information of the router in Standard Router Mode.

**Status**

---

**Firmware Version:**

**Hardware Version:**

---

**LAN**

**MAC Address:** 00-0A-EB-13-7B-00

**IP Address:** 192.168.0.1

**Subnet Mask:** 255.255.255.0

---

**Wireless 2.4GHz**

**Wireless Radio:** Enable

**Name (SSID):** TP-LINK\_7B00

**Mode:** 11b/g/n mixed

**Channel Width:** Automatic

**Channel:** 6

**MAC Address:** 00-0A-EB-13-7B-00

---

**Wireless 5GHz**

**Wireless Radio:** Enable

**Name (SSID):** TP-LINK\_7B00\_5G

**Mode:** 11a/n/ac mixed

**Channel Width:** Automatic

**Channel:** Auto (Current channel 153)

**MAC Address:** 00-0A-EB-13-7A-FF

---

**WAN**

**MAC Address:** 00-0A-EB-13-7B-01

**IP Address:** 0.0.0.0 Dynamic IP

**Subnet Mask:** 0.0.0.0

**Default Gateway:** 0.0.0.0

**DNS Server:** 0.0.0.0 , 0.0.0.0

---

**Traffic Statistics**

	Received	Sent
<b>Bytes:</b>	0	0
<b>Packets:</b>	0	0

---

**System Up Time:** 0 days 00:21:21 Refresh

- [Firmware Version](#) - The version information of the router's firmware.
- [Hardware Version](#) - The version information of the router's hardware.
- [LAN](#) - This field displays the current settings of the LAN, and you can configure them on the [Advanced](#) > [Network](#) > [LAN](#) page.
  - [MAC address](#) - The physical address of the router.
  - [IP address](#) - The LAN IP address of the router.
  - [Subnet Mask](#) - The subnet mask associated with the LAN IP address.
- [Wireless 2.4GHz/5GHz](#) - This field displays the basic information or status of the 2.4GHz/5GHz wireless network, and you can configure them on the [Advanced](#) > [Wireless 2.4GHz/5GHz](#) > [Wireless Settings](#) page.
  - [Wireless Radio](#) - Indicates whether the wireless feature is enabled or not.
  - [Name \(SSID\)](#) - The SSID of the 2.4GHz/5GHz wireless network.
  - [Mode](#) - The current wireless working mode in use.
  - [Channel Width](#) - The current wireless channel width in use.
  - [Channel](#) - The current wireless channel in use.
  - [MAC Address](#) - The physical address of the router.
- [WAN](#) - This field displays the current settings of the WAN, and you can configure them on the [Network](#) > [WAN](#) page.
  - [MAC Address](#) - The physical address of the WAN port.
  - [IP Address](#) - The current WAN (Internet) IP Address. This field will be blank or 0.0.0.0 if the IP Address is assigned dynamically and there is no Internet connection.
  - [Subnet Mask](#) - The subnet mask associated with the WAN IP Address.
  - [Default Gateway](#) - The Gateway currently used is shown here. When you use Dynamic IP as the Internet connection type, click [Renew](#) or [Release](#) here to obtain new IP parameters dynamically from the ISP or release them.
  - [DNS Server](#) - The IP addresses of DNS (Domain Name System) server.
- [Traffic Statistics](#) - The router's traffic statistics.
  - [Received \(Bytes\)](#) - Traffic in bytes received from the WAN port.
  - [Received \(Packets\)](#) - Traffic in packets received from the WAN port.
  - [Sent \(Bytes\)](#) - Traffic in bytes sent out from the WAN port.
  - [Sent \(Packets\)](#) - Traffic in packets sent out from the WAN port.
- [System Up Time](#) - The length of the time since the router was last powered on or reset.

Click [Refresh](#) to get the latest status and settings of the router.

## 4.2. Network

### 4.2.1. 3G/4G

To use the 3G/4G function, you should first insert a 3G/4G USB modem into the 3G/4G USB port of the router. There is already much 3G/4G USB modem information embedded in the router. The USB modem parameters will be set automatically if the SIM/UIM card is supported by the router.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Network](#) > [3G/4G](#).

The screenshot shows the 3G/4G configuration page. At the top, there is a blue header with the text '3G/4G'. Below this, the settings are organized into sections:

- 3G/4G USB Modem:** Unplugged
- Location:** A dropdown menu showing 'USA'.
- Mobile ISP:** A dropdown menu showing 'AT&T'.
- Connection Mode:** Three radio buttons: 'Connect on Demand' (unselected), 'Connect Automatically' (selected), and 'Connect Manually' (unselected). Below this is a 'Max Idle Time' field set to '15' minutes, with a note '(0 means remain active at all times)'.
- Authentication Type:** Three radio buttons: 'Auto' (selected), 'PAP' (unselected), and 'CHAP' (unselected). Below this is a red notice: 'Notice: The default is Auto, do not change unless necessary.'

At the bottom of the settings area, there are three buttons: 'Connect', 'Disconnect', and 'Disconnected' (in blue text). Below the entire settings area, there are three more buttons: 'Advanced', 'Save', and 'Modem Settings'.

- **Location** - Please select the location where you're enjoying the 3G/4G card.
- **Mobile ISP** - Please select the ISP (Internet Service Provider) providing the 3G/4G service. The router will automatically fill in the default Dial Number and APN of that ISP.
- **Connection Mode** - Please select the connection mode to access the Internet with the 3G/4G modem.
  - **Connect on Demand** - You can configure the router to disconnect your Internet connection after a specified idle period of the Internet connectivity. If your Internet connection has been terminated due to inactivity, **Connect on Demand** enables the router to automatically re-establish your connection as soon as



you attempt to access the Internet. If you want your Internet connection to remain active at all times, enter 0 in the [Max Idle Time](#) field.

- [Connect Automatically](#) - The router will get connected to the Internet automatically when disconnected.
- [Connect Manually](#) - You can configure the router to connect or disconnect manually. After a specified idle period, the router will disconnect your Internet connection. You can only manually get connected to the Internet when [Connect Manually](#) is selected. If you want your Internet connection to remain active at all times, enter 0 in the [Max Idle Time](#) field.
- [Authentication Type](#) - Some ISPs require authentication to access the Internet. Please select [Auto](#) or consult your ISP.
  - [Auto](#) - The router will have dynamic negotiation with the dialing server and the authentication type doesn't need to be specified.
  - [PAP](#) - Password Authentication Protocol. Select [PAS](#) if required by your ISP.
  - [CHAP](#) - Challenge Handshake Authentication Protocol. Select [CHAP](#) if required by your ISP.

Click [Advanced](#) to set advanced options.

3G/4G Advanced Settings

---

**Location:** USA

**Mobile ISP:** AT&T

Set the Dial Number, APN, Username and Password manually

**Dial Number:** \*99#

**APN:** broadband

**Username:**  (Optional)

**Password:**  (Optional)

**MTU Size (in bytes):**  (The default is 1480, do not change unless necessary)

Use The Following DNS Servers

**Primary DNS:**

**Secondary DNS:**  (Optional)

---

- [Set the Dial Number and APN manually](#) - Select this check box to fill in the dial number and APN (Access Point Name) if your ISP is not listed or the default values are not the latest.
- [Dial Number](#) - Enter the dial number provided by your ISP.

- **APN** - Enter the APN provided by your ISP.
- **Username/Password** - Enter the username and password provided by your ISP.
- **MTU Size** - The default value is 1480. Keep the default one unless required to change by your ISP.
- **Use The Following DNS Servers** - Select this check box if your ISP specifies a DNS server IP address for you.
- **Primary DNS** - Enter the DNS IP address provided by your ISP.
- **Secondary DNS - (Optional)** Enter another DNS IP address provided by your ISP.

If your 3G/4G USB modem is not supported by the router, please follow the steps below to have further configuration.

1. Download a most recent 3G/4G USB modem configuration file from our website <http://www.tp-link.com>.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
3. Go to **Advanced > Network > 3G/4G**, and click **Modem Settings**.
4. Click **Add New...**

ID	Vendor	Model	Delete
<input type="button" value="Add New..."/> <input type="button" value="Delete All"/>			
<input type="button" value="Back"/>			

5. Click **Browser...** to locate the file you have downloaded and click **Upload**.

**File:**

Please Note: If you restore the router's factory setting, the bin file will be lost. In the event that you do lose the bin file, you will need to re-upload it, or download our latest firmware from [www.tp-link.com](http://www.tp-link.com). The updated firmware will be installed into your 3G/4G router and restore all of its functions.

## 4.2.2. WAN

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

2. Go to [Advanced](#) > [Network](#) > [WAN](#).
3. Configure the IP parameters of the WAN and click [Save](#).

## 111 Dynamic IP

If your ISP provides the DHCP service, please select [Dynamic IP](#), and the router will automatically get IP parameters from your ISP.

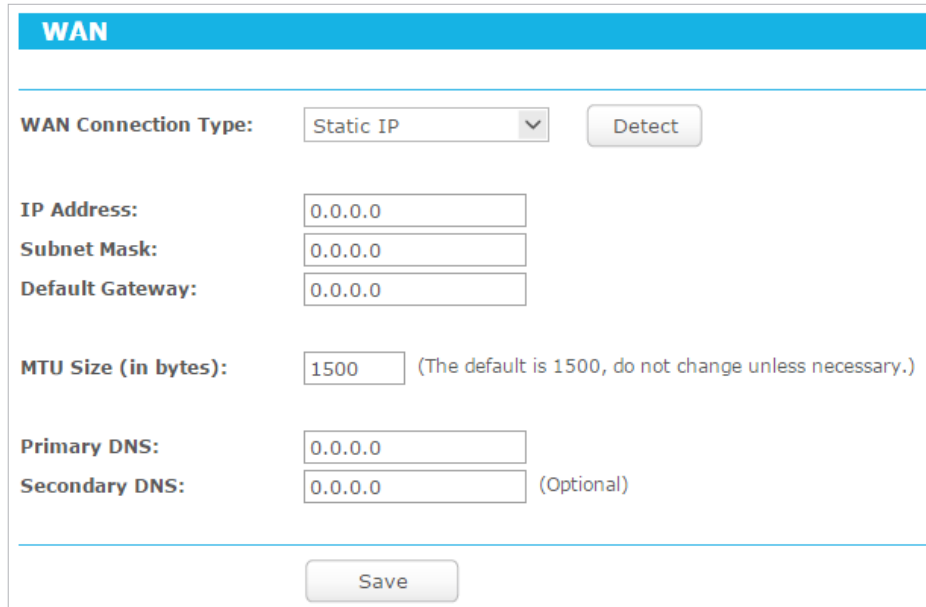
Click [Renew](#) to renew the IP parameters from your ISP. Click [Release](#) to release the IP parameters.

The screenshot shows the WAN configuration interface. At the top, there is a blue header with the text "WAN". Below the header, the "WAN Connection Type" is set to "Dynamic IP" in a dropdown menu, with a "Detect" button to its right. The "IP Address", "Subnet Mask", and "Default Gateway" fields are all set to "0.0.0.0". Below these fields are "Renew" and "Release" buttons. The "MTU Size (in bytes)" is set to "1500" in a text box, with a note in parentheses: "(The default is 1500, do not change unless necessary.)". There is a checkbox labeled "Use These DNS Servers" which is currently unchecked. Below this, the "Primary DNS" and "Secondary DNS" fields are both set to "0.0.0.0", with "(Optional)" next to the secondary field. The "Host Name" field is set to "TL-WR902AC". At the bottom, there is another unchecked checkbox labeled "Get IP with Unicast DHCP (It is usually not required.)". A "Save" button is located at the bottom center of the form.

- [MTU Size](#) - The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. It is not recommended that you change the default MTU size unless required by your ISP.
- [Use These DNS Servers](#) - If your ISP provides you one or two DNS addresses, select [Use These DNS Servers](#) and enter the primary and secondary addresses. Otherwise, the DNS servers will be assigned dynamically from your ISP.
- [Host Name](#) - This option specifies the name of the router.
- [Get IP with Unicast DHCP](#) - A few ISPs' DHCP servers do not support the broadcast applications. If you cannot get the IP address normally, you can choose this option (It is rarely required).

## 112 Static IP

If your ISP provides a static or fixed IP address, subnet mask, default gateway and DNS setting, please select [Static IP](#).



The screenshot shows the WAN configuration interface. At the top, there is a blue header with the text "WAN". Below the header, the "WAN Connection Type" is set to "Static IP" in a dropdown menu, with a "Detect" button to its right. The "IP Address" field is set to "0.0.0.0". The "Subnet Mask" field is set to "0.0.0.0". The "Default Gateway" field is set to "0.0.0.0". The "MTU Size (in bytes)" field is set to "1500", with a note in parentheses: "(The default is 1500, do not change unless necessary.)". The "Primary DNS" field is set to "0.0.0.0". The "Secondary DNS" field is set to "0.0.0.0" and is marked as "(Optional)". At the bottom of the form, there is a "Save" button.

- [IP Address](#) - Enter the IP address in dotted-decimal notation provided by your ISP.
- [Subnet Mask](#) - Enter the subnet mask in dotted-decimal notation provided by your ISP. Normally 255.255.255.0 is used as the subnet mask.
- [Default Gateway](#) - Enter the gateway IP address in dotted-decimal notation provided by your ISP.
- [MTU Size](#) - The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. It is not recommended that you change the default MTU size unless required by your ISP.
- [Primary/Secondary DNS](#) - (Optional) Enter one or two DNS addresses in dotted-decimal notation provided by your ISP.

## 113 PPPoE/Russia PPPoE

If your ISP provides a PPPoE connection, select [PPPoE/Russia PPPoE](#).

**WAN** ?

**WAN Connection Type:** PPPoE/Russia PPPoE

**PPPoE Connection:**

**User Name:**

**Password:**

**Confirm Password:**

**Secondary Connection:**  Disabled  Dynamic IP  Static IP (For Dual Access/Russia PPPoE)

Connect on Demand  
Max Idle Time:  minutes (0 means remain active at all times.)

Connect Automatically

**Wan Connection Mode:**  Time-based Connecting  
Period of Time: from  :  (HH:MM) to  :  (HH:MM)

Connect Manually  
Max Idle Time:  minutes (0 means remain active at all times.)

**Disconnected!**

- **User Name/Password** - Enter the username and password provided by your ISP. These fields are case-sensitive.
- **Confirm Password** - Enter the password provided by your ISP again to ensure the password you entered is correct.
- **Secondary Connection** - It's available only for PPPoE connection. If your ISP provides an extra connection type, select **Dynamic IP** or **Static IP** to activate the secondary connection.
- **WAN Connection Mode**
  - **Connect on Demand** - In this mode, the Internet connection can be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the Internet again. If you want to keep your Internet connection active all the time, please enter 0 in the **Max Idle Time** field. Otherwise, enter the number of minutes you want to have elapsed before your Internet access disconnects.
  - **Connect Automatically** - The connection can be re-established automatically when it is down.
  - **Time-based Connecting** - The connection will only be established in the period from the start time to the end time (both are in HH:MM format).
  - **Connect Manually** - You can click **Connect/Disconnect** to connect/disconnect immediately. This mode also supports the **Max Idle Time** function as **Connect on Demand** mode. The Internet connection can be disconnected automatically

after a specified inactivity period (Max Idle Time) and not be able to re-establish when you attempt to access the Internet again.

**Note:**

- Only when you have configured the system time on the [System Tools](#) > [Time Settings](#) page, will the time-based connecting function take effect.
- Sometimes the connection cannot be terminated although you have specified the [Max Idle Time](#) because some applications are visiting the Internet continually in the background.

If you want to do some advanced configurations, please click [Advanced](#).

- [MTU Size](#) - The default MTU size is 1480 bytes. It is not recommended that you change the default MTU size unless required by your ISP.
- [Service Name/AC Name](#) - The service name and AC (Access Concentrator) name should not be configured unless you are sure it is necessary for your ISP. In most cases, leaving these fields blank will work.
- [ISP Specified IP Address](#) - If your ISP does not automatically assign IP addresses to the router, please select [Use IP address specified by ISP](#) and enter the IP address provided by your ISP in dotted-decimal notation.
- [Detect Online Interval](#) - The router will detect Access Concentrator online at every interval. The default value is 0. You can input the value between 0 and 120. The value 0 means no detect.
- [Primary DNS/Secondary DNS](#) - If your ISP does not automatically assign DNS addresses to the router, please select [Use the following DNS servers](#) and enter the IP address in dotted-decimal notation of your ISP's primary DNS server. If a secondary DNS server address is available, enter it as well.

## 114L2TP/Russia L2TP

If your ISP provides L2TP connection, please select [L2TP/Russia L2TP](#).

WAN

---

**WAN Connection Type:** L2TP/Russia L2TP ▼

**User Name:**

**Password:**

**Confirm Password:**

Disconnected!

Dynamic IP     Static IP

**Server IP Address/Name:**

**IP Address:** 0.0.0.0

**Subnet Mask:** 0.0.0.0

**Gateway:** 0.0.0.0

**DNS:** 0.0.0.0 , 0.0.0.0

**Internet IP Address:** 0.0.0.0

**Internet DNS:** 0.0.0.0 , 0.0.0.0

**MTU Size (in bytes):** 1460 (The default is 1460, do not change unless necessary.)

**Max Idle Time:** 15 minutes (0 means remain active at all times.)

**Connection Mode:**
 Connect on Demand  
 Connect Automatically  
 Connect Manually

---

- [User Name/Password](#) - Enter the username and password provided by your ISP. These fields are case-sensitive.
- [Confirm Password](#) - Enter the Password provided by your ISP again to ensure the password you entered is correct.
- [Connect/Disconnect](#) - Click this button to connect or disconnect immediately.
- [Dynamic IP/ Static IP](#) - Select either as required by your ISP. If [Static IP](#) is selected, please enter the IP address, subnet mask, gateway and DNS also provided by your ISP.
- [Internet IP Address/ Internet DNS](#) - The Internet IP address and DNS server address assigned by L2TP server.
- [Connection Mode](#)

- **Connect on Demand** - In this mode, the Internet connection can be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the Internet again. If you want to keep your Internet connection active all the time, please enter 0 in the **Max Idle Time** field. Otherwise, enter the number of minutes you want to have elapsed before your Internet access disconnects.
- **Connect Automatically** - The connection can be re-established automatically when it is down.
- **Connect Manually** - You can click **Connect/Disconnect** to connect/disconnect immediately. This mode also supports the **Max Idle Time** function as **Connect on Demand** mode. The Internet connection can be disconnected automatically after a specified inactivity period (Max Idle Time) and not be able to re-establish when you attempt to access the Internet again.

**Note:**

Sometimes the connection cannot be terminated although you have specified the **Max Idle Time** because some applications are visiting the Internet continually in the background.

## 115PPTP/Russia PPTP

If your ISP provides PPTP connection, please select **PPTP/Russia PPTP**.



WAN

---

**WAN Connection Type:** PPTP/Russia PPTP ▼

**User Name:**

**Password:**

**Confirm Password:**

Disconnected!

Dynamic IP     Static IP

**Server IP Address/Name:**

**IP Address:** 0.0.0.0

**Subnet Mask:** 0.0.0.0

**Gateway:** 0.0.0.0

**DNS:** 0.0.0.0 , 0.0.0.0

**Internet IP Address:** 0.0.0.0

**Internet DNS:** 0.0.0.0 , 0.0.0.0

**MTU Size (in bytes):** 1420 (The default is 1420, do not change unless necessary.)

**Max Idle Time:** 15 minutes (0 means remain active at all times.)

**Connection Mode:**

Connect on Demand  
 Connect Automatically  
 Connect Manually

---

- **User Name/Password** - Enter the username and password provided by your ISP. These fields are case-sensitive.
- **Confirm Password** - Enter the Password provided by your ISP again to ensure the password you entered is correct.
- **Connect/Disconnect** - Click this button to connect or disconnect immediately.
- **Dynamic IP/ Static IP** - Select either as required by your ISP. If **Static IP** is selected, please enter the IP address, subnet mask, gateway and DNS also provided by your ISP.
- **Internet IP Address/ Internet DNS** - The Internet IP address and DNS server address assigned by PPTP server.
- **Connection Mode**
  - **Connect on Demand** - In this mode, the Internet connection can be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the Internet again. If you want to keep your Internet connection active all the time, please enter 0 in the **Max Idle Time**

field. Otherwise, enter the number of minutes you want to have elapsed before your Internet access disconnects.

- **Connect Automatically** - The connection can be re-established automatically when it is down.
- **Connect Manually** - You can click **Connect/Disconnect** to connect/disconnect immediately. This mode also supports the **Max Idle Time** function as **Connect on Demand** mode. The Internet connection can be disconnected automatically after a specified inactivity period (Max Idle Time) and not be able to re-establish when you attempt to access the Internet again.

**Note:**

Sometimes the connection cannot be terminated although you have specified the **Max Idle Time** because some applications are visiting the Internet continually in the background.

### 4.2.3. MAC Clone

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > Network > MAC Clone**.
3. Configure the WAN MAC address and click **Save**.

MAC Clone	
WAN MAC Address:	<input type="text" value="00-0A-EB-13-7B-01"/> <input type="button" value="Restore Factory MAC"/>
Your PC's MAC Address:	<input type="text" value="14-CF-92-13-6D-78"/> <input type="button" value="Clone MAC Address"/>
<input type="button" value="Save"/>	

- **WAN MAC Address** - This field displays the current MAC address of the WAN port. If your ISP requires you to register the MAC address, please enter the correct MAC address in this field. Click **Restore Factory MAC** to restore the MAC address of WAN port to the factory default value.
- **Your PC's MAC Address** - This field displays the MAC address of the PC that is managing the router. If the MAC address is required, you can click **Clone MAC Address** and this MAC address will be filled in the **WAN MAC Address** field.

**Note:**

- You can only use the MAC Address Clone function for PCs on the LAN.
- If you have changed the WAN MAC address when the WAN connection is PPPoE, it will not take effect until the connection is re-established.

### 4.2.4. LAN

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Network](#) > [LAN](#).
3. Configure the IP parameters of the LAN and click [Save](#).

**LAN**

MAC Address: 00-0A-EB-13-7B-00

IP Address: 192.168.0.1

Subnet Mask: 255.255.255.0

IGMP Proxy: Enable

Note:IGMP(Internet Group Management Protocol) works for IPTV multicast stream.The device supports both IGMP proxy with enabled/disabled option and IGMP snooping.

Save

- **MAC Address** - The physical address of the LAN ports. The value can not be changed.
- **IP Address** - Enter the IP address in dotted-decimal notation of your router (factory default - 192.168.0.1).
- **Subnet Mask** - An address code that determines the size of the network. Normally 255.255.255.0 is used as the subnet mask.
- **IGMP Proxy** - The Internet Group Management Protocol (IGMP) feature allow you to watch TV on IPTV-supported devices in the LAN .

■ **Note:**

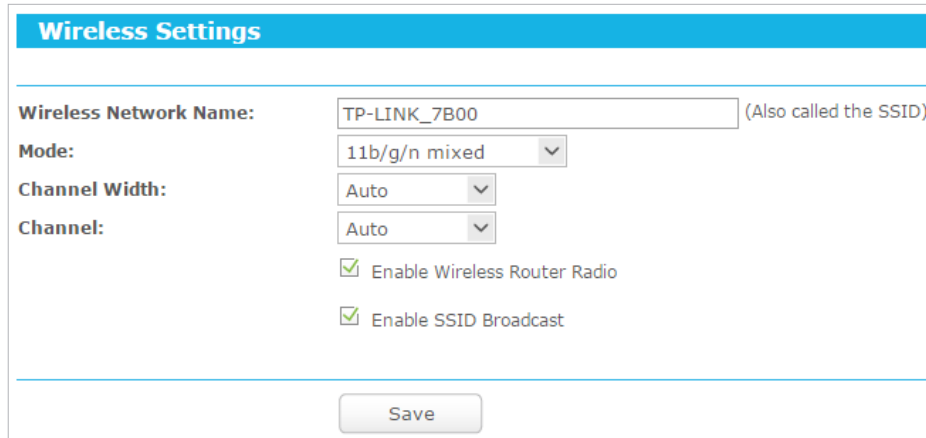
- If you have changed the IP address, you must use the new IP address to login.
- If the new IP address you set is not in the same subnet as the old one, the IP address pool in the DHCP Server will be configured automatically, but the Virtual Server and DMZ Host will not take effect until they are re-configured.

## 4.3. Wireless

In this section, we will take the settings for the 2.4GHz wireless network for example.

### 4.3.1. Wireless Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Wireless 2.4GHz](#) > [Wireless Settings](#).
3. Configure the basic settings for the wireless network and click [Save](#).



**Wireless Settings**

Wireless Network Name:  (Also called the SSID)

Mode:

Channel Width:

Channel:

Enable Wireless Router Radio

Enable SSID Broadcast

- **Wireless Network Name** - Enter a string of up to 32 characters. The default SSID is TP-LINK\_XXXX (XXXX indicates the last unique four numbers of each Router's MAC address). It is strongly recommended that you change your network name (SSID). This value is case-sensitive. For example, TEST is NOT the same as test.
- **Mode** - Select the desired mode. It is strongly recommended that you keep the default setting **11b/g/n mixed**, so that all 802.11b/g/n wireless devices can connect to the router.
- **Channel Width** - Select any channel width from the drop-down list. The default setting is **Auto**, which can automatically adjust the channel width for your clients.
- **Channel** - This field determines which operating frequency will be used. The default channel is set to **Auto**. It is not necessary to change the wireless channel unless you notice interference problems with another nearby access point.
- **Enable Wireless Router Radio** - The wireless radio of the router can be enabled or disabled to allow or deny wireless access. If enabled, the wireless clients will be able to access the router.
- **Enable SSID Broadcast** - If enabled, the router will broadcast the wireless network name (SSID).

### 4.3.2. WPS

WPS (Wi-Fi Protected Setup) can help you to quickly and securely connect to a network. This section will guide you to add a new wireless device to your router's network quickly via WPS.

**Note:**

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

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > Wireless 2.4GHz > WPS**.

3. Follow one of the following three methods to connect your client device to the router's Wi-Fi network.

### 116 Method ONE: Press the WPS Button on Your Client Device

1. Keep the WPS Status as **Enabled** and click **Add Device**.

**WPS (Wi-Fi Protected Setup)**

**WPS Status:** **Enabled**

**Current PIN:** **12345670**

Disable PIN of this device

**Add a new device:**

2. Select **Press the button of the new device in two minutes** and click **Connect**.

**Add A New Device**

Enter the new device's PIN.  
PIN:

Press the button of the new device in two minutes.

3. Within two minutes, press the WPS button on your client device.
4. A success message will appear on the WPS page if the client device has been successfully added to the router's network.

### 117 Method TWO: Enter the Client's PIN

1. Keep the WPS Status as **Enabled** and click **Add Device**.

**WPS (Wi-Fi Protected Setup)**

**WPS Status:** **Enabled**

**Current PIN:** **12345670**

Disable PIN of this device

**Add a new device:**

2. Select [Enter the new device's PIN](#), enter your client device's current PIN in the [PIN](#) field and click [Connect](#).

**Add A New Device**

Enter the new device's PIN.  
PIN:

Press the button of the new device in two minutes.

3. A success message will appear on the WPS page if the client device has been successfully added to the router's network.

### 118Method Three: Enter the Router's PIN

1. Keep the WPS Status as [Enabled](#) and get the [Current PIN](#) of the router.

**WPS (Wi-Fi Protected Setup)**

**WPS Status:** **Enabled**

**Current PIN:** **12345670**

Disable PIN of this device

**Add a new device:**

2. Enter the router's current PIN on your client device to join the router's Wi-Fi network.

### 4.3.3. Wireless Security

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Wireless 2.4GHz](#) > [Wireless Security](#).
3. Configure the security settings of your wireless network and click [Save](#).

**Wireless Security**

Disable Security

**WPA/WPA2 - Personal(Recommended)**

Version:

Encryption:

Wireless Password:   
(You can enter ASCII characters between 8 and 63 or Hexadecimal characters between 8 and 64.)

Group Key Update Period:  Seconds  
(Keep it default if you are not sure, minimum is 30, 0 means no update)

**WPA/WPA2 - Enterprise**

Version:

Encryption:

Radius Server IP:

Radius Port:  (1-65535, 0 stands for default port 1812)

Radius Password:

Group Key Update Period:  (in second, minimum is 30, 0 means no update)

**WEP**

Type:

WEP Key Format:

Key Selected	WEP Key	Key Type
Key 1: <input checked="" type="radio"/>	<input type="text"/>	Disabled <input type="text"/>
Key 2: <input type="radio"/>	<input type="text"/>	Disabled <input type="text"/>
Key 3: <input type="radio"/>	<input type="text"/>	Disabled <input type="text"/>
Key 4: <input type="radio"/>	<input type="text"/>	Disabled <input type="text"/>

- **Disable Security** - The wireless security function can be enabled or disabled. If disabled, wireless clients can connect to the router without a password. It's strongly recommended to choose one of the following modes to enable security.
- **WPA-PSK/WPA2-Personal** - It's the WPA/WPA2 authentication type based on pre-shared passphrase.
  - **Version** - Select [Automatic](#), [WPA-PSK](#) or [WPA2-PSK](#).
  - **Encryption** - Select [Automatic](#), [TKIP](#) or [AES](#).

- **Wireless Password** - Enter ASCII or Hexadecimal characters. For Hexadecimal, the length should be between 8 and 64 characters; for ASCII, the length should be between 8 and 63 characters.
- **Group Key Update Period** - Specify the group key update interval in seconds. The value can be 0 or at least 30. Enter 0 to disable the update.
- **WPA /WPA2-Enterprise** - It's based on Radius Server.
  - **Version** - Select **Automatic**, **WPA** or **WPA2**.
  - **Encryption** - Select **Automatic**, **TKIP** or **AES**.
  - **Radius Server IP** - Enter the IP address of the Radius server.
  - **Radius Port** - Enter the port that Radius server used.
  - **Radius Password** - Enter the password for the Radius server.
  - **Group Key Update Period** - Specify the group key update interval in seconds. The value should be 30 or above. Enter 0 to disable the update.
- **WEP** - It is based on the IEEE 802.11 standard.
  - **Type** - The default setting is **Automatic**, which can select Shared Key or Open System authentication type automatically based on the wireless client's capability and request.
  - **WEP Key Format** - Hexadecimal and ASCII formats are provided here. Hexadecimal format stands for any combination of hexadecimal digits (0-9, a-f, A-F) in the specified length. ASCII format stands for any combination of keyboard characters in the specified length.
  - **WEP Key (Password)** - Select which of the four keys will be used and enter the matching WEP key. Make sure these values are identical on all wireless clients in your network.
  - **Key Type** - Select the WEP key length (64-bit, 128-bit or 152-bit) for encryption. **Disabled** means this WEP key entry is invalid.
  - **64-bit** - Enter 10 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 5 ASCII characters.
  - **128-bit** - Enter 26 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 13 ASCII characters.
  - **152-bit** - Enter 32 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 16 ASCII characters.

#### 4.3.4. Wireless MAC Filtering

Wireless MAC Filtering is used to deny or allow specific wireless client devices to access your network by their MAC addresses.

**I want to:** Deny or allow specific wireless client devices to access my



network by their MAC addresses.

For example, you want the wireless client A with the MAC address 00-0A-EB-B0-00-0B and the wireless client B with the MAC address 00-0A-EB-00-07-5F to access the router, but other wireless clients cannot access the router

## 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](#) > [Wireless 2.4GHz](#) > [Wireless MAC Filtering](#).
3. Click [Enable](#) to enable the Wireless MAC Filtering function.
4. Select [Allow the stations specified by any enabled entries in the list to access](#) as the filtering rule.
5. Delete all or disable all entries if there are any entries already.
6. Click [Add New](#) and fill in the blanks.

Add or Modify Wireless MAC Address Filtering entry

---

MAC Address:

Description:

Status: Enabled ▼

---

Save
Back

- 1) Enter the MAC address 00-0A-EB-B0-00-0B/00-0A-EB-00-07-5F in the MAC Address field.
  - 2) Enter wireless client A/B in the Description field.
  - 3) Leave the status as [Enabled](#).
  - 4) Click [Save](#) and click [Back](#).
7. The configured filtering rules should be listed as the picture shows below.

**Filtering Rules**

Deny the stations specified by any enabled entries in the list to access.

Allow the stations specified by any enabled entries in the list to access.

ID	MAC Address	Status	Description	Modify
1	00-0A-EB-B0-00-0B	Enabled	wireless client A	<a href="#">Modify</a> <a href="#">Delete</a>
2	00-0A-EB-B0-07-5F	Enabled	wireless client B	<a href="#">Modify</a> <a href="#">Delete</a>

**Done!**

Now only client A and client B can access your network.

### 4.3.5. Wireless Advanced

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Wireless 2.4GHz](#) > [Wireless Advanced](#).
3. Configure the advanced settings of your wireless network and click [Save](#).

**Note:**

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

- **Transmit Power** - Select **High**, **Middle** or **Low** which you would like to specify for the router. **High** is the default setting and recommended.
- **Beacon Interval** - Enter a value between 40-1000 milliseconds for Beacon Interval here. Beacon Interval value determines the time interval of the beacons. The beacons are the packets sent by the Router to synchronize a wireless network. The default value is 100.
- **RTS Threshold** - Here you can specify the RTS (Request to Send) Threshold. If the packet is larger than the specified RTS Threshold size, the Router will send RTS frames to a particular receiving station and negotiate the sending of a data frame. The default value is 2346.
- **Fragmentation Threshold** - This value is the maximum size determining whether packets will be fragmented. Setting a low value for the Fragmentation Threshold may result in poor network performance because of excessive packets. 2346 is the default setting and is recommended.
- **DTIM Interval** - This value determines the interval of the Delivery Traffic Indication Message (DTIM). A DTIM field is a countdown field informing clients of the next window for listening to broadcast and multicast messages. When the Router has buffered

broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. You can specify the value between 1-255 Beacon Intervals. The default value is 1, which indicates the DTIM Interval is the same as Beacon Interval.

- **Enable WMM** - WMM function can guarantee the packets with high-priority messages being transmitted preferentially. It is strongly recommended to enable this function.
- **Enable Short GI** - It is recommended to enable this function, for it will increase the data capacity by reducing the guard interval time.
- **Enable AP Isolation** - This function isolates all connected wireless stations so that wireless stations cannot access each other through WLAN. This function will be disabled if WDS/Bridge is enabled.

### 4.3.6. Wireless Statistics

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > Wireless 2.4GHz > Wireless Statistics** to check the data packets sent and received by each client device connected to the router.

ID	MAC Address	Current Status	Received Packets	Sent Packets	Configure
1	14-CF-92-13-6D-78	WPA2-PSK	44639	46216	Deny

- **MAC Address** - The MAC address of the connected wireless client.
- **Current Status** - The running status of the connected wireless client.
- **Received Packets** - Packets received by the wireless client.
- **Sent Packets** - Packets sent by the wireless client.
- **Configure** - The button is used for loading the item to the Wireless MAC Filtering list.
  - **Allow** - If the Wireless MAC Filtering function is enabled, click this button to allow the client to access your network.
  - **Deny** - If the Wireless MAC Filtering function is enabled, click this button to deny the client to access your network.

## 4.4. DHCP

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

### 4.4.1. DHCP Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > DHCP > DHCP Settings**.
3. Specify DHCP server settings and click **Save**.

DHCP Settings	
DHCP Server:	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
Start IP Address:	<input type="text" value="192.168.0.100"/>
End IP Address:	<input type="text" value="192.168.0.199"/>
Address Lease Time:	<input type="text" value="120"/> minutes (1~2880 minutes, the default value is 1)
Default Gateway:	<input type="text" value="192.168.0.1"/>
Default Domain:	<input type="text"/> (Optional)
Primary DNS:	<input type="text" value="0.0.0.0"/> (Optional)
Secondary DNS:	<input type="text" value="0.0.0.0"/> (Optional)
<input type="button" value="Save"/>	

- **DHCP Server** - Enable or disable the DHCP server. If disabled, you must have another DHCP server within your network or else you must configure the computer manually.
- **Start IP Address** - Specify an IP address for the DHCP Server to start with when assigning IP addresses. 192.168.0.100 is the default start address.
- **End IP Address** - Specify an IP address for the DHCP Server to end with when assigning IP addresses. 192.168.0.199 is the default end address.
- **Address Lease Time** - The Address Lease Time is the amount of time a network user will be allowed to connect to the router with the current dynamic IP Address. When time is up, the current dynamic IP will be automatically renewed. The range of the time is 1 ~ 2880 minutes. The default value is 120.
- **Default Gateway (Optional)** - It is suggested to input the IP address of the LAN port of the router. The default value is 192.168.0.1.
- **Default Domain (Optional)** - Input the domain name of your network.

- **Primary DNS (Optional)** - Input the DNS IP address provided by your ISP.
- **Secondary DNS (Optional)** - Input the IP address of another DNS server if your ISP provides two DNS servers.

**Note:**

To use the DHCP server function of the router, you must configure all computers on the LAN as [Obtain an IP Address automatically](#).

#### 4.4.2. DHCP Client List

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [DHCP](#) > [DHCP Client List](#) to view the information of the clients connected to the router.

DHCP Client List				
ID	Client Name	MAC Address	Assigned IP	Lease Time
1		14-CF-92-13-6D-78	192.168.0.101	01:57:29
2		B4-0B-44-1A-C7-58	192.168.0.100	00:45:14

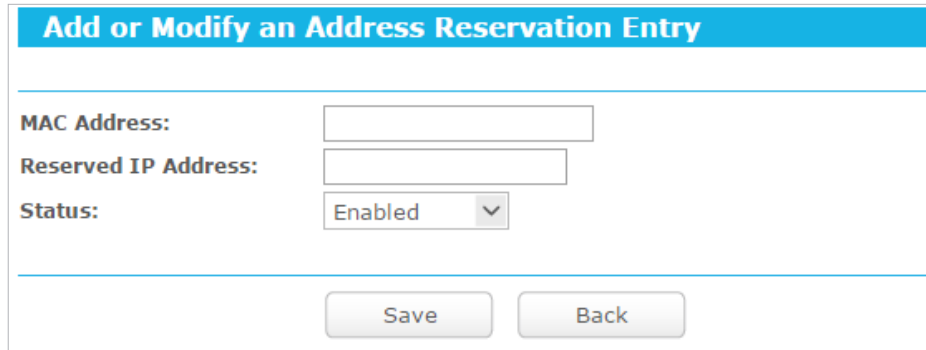
- **Client Name** - The name of the DHCP client.
- **MAC Address** - The MAC address of the DHCP client.
- **Assigned IP** - The IP address that the router has allocated to the DHCP client.
- **Lease Time** - The time of the DHCP client leased. After the dynamic IP address has expired, the dynamic IP address will be automatically renewed.

You cannot change any value on this page. To update this page and show the current connected devices, click [Refresh](#).

#### 4.4.3. Address Reservation

You can reserve an IP address for a specific client. When you have specified a reserved IP address for a PC on the LAN, this PC will always receive the same IP address each time it accesses the DHCP server.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [DHCP](#) > [Address Reservation](#).
3. Click [Add New](#) and fill in the blanks.



**Add or Modify an Address Reservation Entry**

MAC Address:

Reserved IP Address:

Status:

- 1) Enter the MAC address (in XX-XX-XX-XX-XX-XX format) of the client for which you want to reserve an IP address.
- 2) Enter the IP address (in dotted-decimal notation) which you want to reserve for the client.
- 3) Leave the status as **Enabled**.
- 4) Click **Save**.

## 4.5. USB Settings

You can insert a USB drive to share files among users on the LAN, access the USB drive remotely on the Internet and enjoy videos and photos stored in the USB drive.

### 4.5.1. Storage Sharing

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

#### ➤ To access the USB disk:

##### 1. Connect Your USB Disk

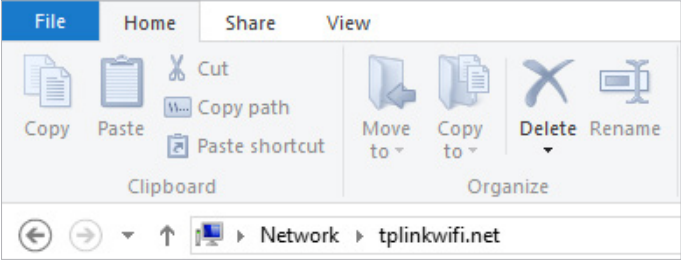
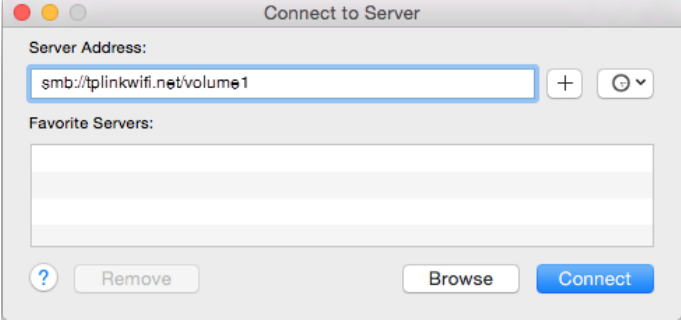
Insert your USB storage device into the router's USB port directly or using a USB cable. Wait several seconds until the USB LED becomes solid on.

#### 🔗 Tips:

- If you use USB hubs, make sure no more than 2 devices are connected to the router.
- If the USB storage device requires using bundled external power, make sure the external power has been connected.
- If you use a USB hard drive, make sure its file system is FAT32 or NTFS.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Go to [Advanced](#) > [USB Settings](#) > [Storage Sharing](#) and click [Eject Disk](#).

##### 2. Access Your USB Disk

By default, all the network clients can access your USB disk. Refer to the following table for access instructions. You can customize user accounts by referring to [User Accounts](#).

<b>Windows computer</b>	<p>Open the <a href="#">Windows Explorer</a> (or go to <a href="#">Computer</a>), type the server address <a href="#">\\tplinkwifi.net</a> in the address bar, enter a username and password if required and then press [<a href="#">Enter</a>].</p> <p><b>Note:</b> Here we take Windows 8 as an example.</p> 
<b>Mac</b>	<ol style="list-style-type: none"> <li>1) Click <a href="#">Go</a> in the top left corner of the desktop and go to <a href="#">Connect to Server</a>.</li> <li>2) Type the server address <a href="#">smb://tplinkwifi.net/volume1</a>. <b>Note:</b> Here we take <a href="#">volume1</a> for example.</li> <li>3) Click <a href="#">Connect</a>.</li> </ol>  <ol style="list-style-type: none"> <li>4) When prompted, select the <a href="#">Guest</a> radio box (If you have set up a username and password to deny anonymous access to the USB disk, you should select the <a href="#">Registered User</a> radio box. To learn how to set up an account for the access, refer to <a href="#">User Accounts</a>).</li> </ol>
<b>Tablet</b>	<p>Use a third-party app for network files management.</p>

➤ **To Customize Your Settings:**

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [USB Settings](#) > [Storage Sharing](#).

Volume	Capacity	Used	Free	Use%	Shared
volume1	7.5 GB	5.8 GB	1.7 GB	78%	Disable

- **Server Status** - Indicates the current status of the Storage Sharing server.
- **Access shared storage with password** - Check this box to ask users to provide the username and password to access the USB drive.
- **Volume** - The volume name of the USB drive users have access to.
- **Capacity** - The storage capacity of the USB drive.
- **Used** - The used capacity of the USB drive.
- **Free** - The available capacity of the USB drive.
- **Use%** - The percentage of the used capacity.
- **Shared** - Indicates the shared or non-shared status of a specific volume.

Click **Eject Disk** to safely remove the USB drive that is connected to the router.

Click **Rescan** to start a new scan.

### 4.5.2. FTP Server

You can share specific folders on you USB drive on the LAN or access your USB drive outside the local area network.

For example:

- Only share specific folders with clients on the LAN.
- 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 material for a presentation.

➤ **To set up your FTP server:**



**FTP Server Configuration**

Server Status: **Started**

Internet Access:  Enable  Disable

Service Port:  (The default is 21, do not change unless necessary.)

Internet Address: 0.0.0.0

1. 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.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
3. Go to [Advanced](#) > [USB Settings](#) > [FTP Server](#).
4. Click [Start](#) to enable the FTP Server.
5. Click [Enable](#) to enable the Internet access to the FTP server.
6. Specify a port number for the [Service Port](#). The default value is 21.
7. Click [Save](#).

➤ **To specify a folder to be accessed via the FTP server:**

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [USB Settings](#) > [FTP Server](#).
3. Click [Add New Folder](#).

**FTP Server Configuration**

Server Status: **Started**

Internet Access:  Enable  Disable

Service Port:  (The default is 21, do not change unless necessary.)

Internet Address: 0.0.0.0

4. Specify a name for the folder to be shared in the [Display Name](#) field. And select the folder you want to share or select [Share entire partition](#) to share all folders.

**Add or Modify Share Folder**

**Display Name:**

**Partition:**  Share entire partition

**Folder Location:** /

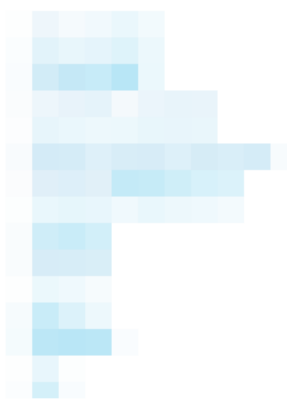
---

**Select**

Upper

- 
- 
- 
- 
- 
- 
- 
- 
- 
-

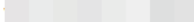
**Folder**



---

Current No.  Page

5. Click [Save](#).
6. You can check which folder is shared and also edit or delete the folder.

Name	Partition	Folder	Modify
folder1	volume1		<a href="#">Edit</a> <a href="#">Delete</a>

### ➤ To access the USB disk locally:

#### 1. Connect Your USB Disk

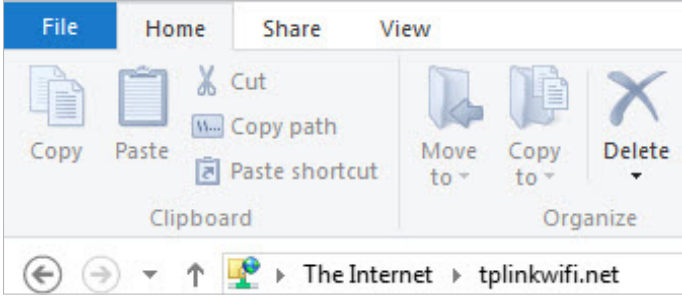
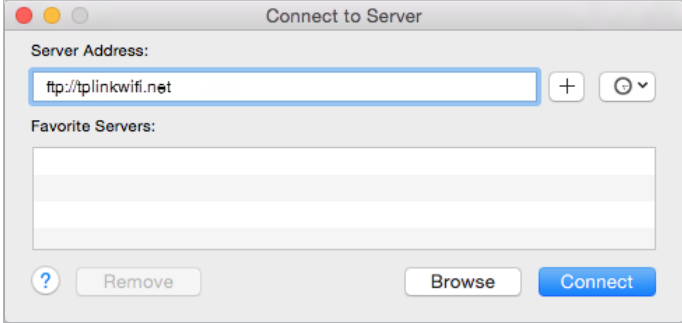
Insert your USB storage device into the router's USB port directly or using a USB cable. Wait several seconds until the USB LED becomes solid on.

##### Tips:

- If you use USB hubs, make sure no more than 2 devices are connected to the router.
- If the USB storage device requires using bundled external power, make sure the external power has been connected.
- If you use a USB hard drive, make sure its file system is FAT32 or NTFS.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Go to [Advanced](#) > [USB Settings](#) > [Storage Sharing](#) and click [Eject Disk](#).

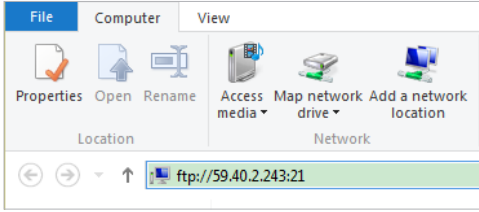
#### 2. Access Your USB Disk Locally

Refer to the following table for access instructions. You can customize user accounts by referring to [User Accounts](#).

<b>Windows computer</b>	<p>Open the <a href="#">Windows Explorer</a> (or go to <a href="#">Computer</a>), type the server address <a href="ftp://tplinkwifi.net">ftp://tplinkwifi.net</a> in the address bar, enter a username and password and then press [Enter].</p> <p><b>Note:</b> Here we take Windows 8 as an example.</p> 
<b>Mac</b>	<ol style="list-style-type: none"> <li>1) Click <a href="#">Go</a> in the top left corner of the desktop and go to <a href="#">Connect to Server</a>.</li> <li>2) Type the server address <a href="ftp://tplinkwifi.net">ftp://tplinkwifi.net</a>.</li> <li>3) Click <a href="#">Connect</a>.</li> </ol>  <ol style="list-style-type: none"> <li>4) When prompted, select the <a href="#">Registered User</a> radio box and enter a username and password (To learn how to set up an account for the access, refer to <a href="#">User Accounts</a>).</li> </ol>
<b>Tablet</b>	<p>Use a third-party app for network files management.</p>

➤ **To access the USB disk remotely:**

Refer to the following table for access instructions. You can customize user accounts by referring to [User Accounts](#).

Computer	<ol style="list-style-type: none"> <li>1) Open the <a href="#">Windows Explorer</a> (or go to <a href="#">Computer</a>, only for Windows users) or open a web browser.</li> <li>2) Type the server address in the address bar: Type in <a href="#">ftp://&lt;WAN IP address of the router&gt;:&lt;port number&gt;</a> (such as <a href="#">ftp://59.40.2.243:21</a>). If you have specified a domain name for the router, you can also type in <a href="#">ftp://&lt;domain name&gt;:&lt;port number&gt;</a> (such as <a href="#">ftp://MyDomainName:21</a>)</li> </ol> <div style="text-align: center; margin: 10px 0;">  <p>The Windows Explorer (Windows 8)</p> </div> <ol style="list-style-type: none"> <li>3) Press <a href="#">[Enter]</a>.</li> <li>4) Access with the username and password by referring to <a href="#">User Accounts</a>.</li> </ol> <p><b>Tips:</b> You can also access the USB disk via a third-party app for network files management, which can resume broken file transfers.</p>
	Tablet

### 4.5.3. Media Server

The Media Server feature allows to view photos, play music and watch movies on the USB drive directly with DLNA-supported devices, such as on your computer, pad and PS2/3/4.

➤ **To share specific folders:**

1. 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.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
3. Go to [Advanced > USB Settings > Media Server](#).
4. Click [Start](#) to enable the Media Server.

**Media Server Setting**

**Server Name:**            **TP-LINK\_7B00**

**Server Status:**        **Started**

- Click [Add New Folder](#). Specify a name for the folder to be shared in the [Display Name](#) field. And select the folder you want to share or select [Share entire partition](#) to share all folders.

**Add New Folder**

**Display Name:**   

**Partition:**         Share entire partition

**Folder Location:**    /

---

Select	Folder
<input type="button" value="Upper"/>	
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<div style="background-color: #ADD8E6; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #ADD8E6; width: 150px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #ADD8E6; width: 200px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #ADD8E6; width: 150px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #ADD8E6; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #ADD8E6; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #ADD8E6; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #ADD8E6; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #ADD8E6; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #ADD8E6; width: 100px; height: 20px; margin-bottom: 5px;"></div>

Current No.  page

- Click [Save](#).
- You can check which folder is shared and also edit or delete the folder.

Name	File System	Folder	Delete
folder1	NTFS	<input type="checkbox"/>	<a href="#">Delete</a>

➤ **To access the USB disk:**

- 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.

**Tips:**

- If you use USB hubs, make sure no more than 2 devices are connected to the router.
- If the USB storage device requires using bundled external power, make sure the external power has been connected.
- If you use a USB hard drive, make sure its file system is FAT32 or NTFS.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Go to [Advanced](#) > [USB Settings](#) > [Storage Sharing](#) and click [Eject Disk](#).

## 2. Access the Media Files on Your USB Disk

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

<b>Windows computer</b>	<ul style="list-style-type: none"> <li>• Go to <a href="#">Computer</a> &gt; <a href="#">Network</a>, and click the Media Server Name in the <a href="#">Media Devices</a> section.</li> </ul> <p><b>Note:</b> Here we take Windows 8 as an example.</p>  <p>The screenshot shows the Windows 8 Network view. The address bar indicates the current location is 'Network'. On the left, there are navigation options: Favorites (Desktop, Downloads, Recent places), Homegroup, and This PC (Desktop, Documents, Downloads). On the right, there are three sections: 'Computer (1)' with a computer icon, 'Media Devices (1)' with a media server icon labeled 'TP-LINK_7800:1' (highlighted with a yellow box), and 'Network Infrastructure (1)' with a router icon labeled 'AC750 Wireless Travel Router'.</p>
<b>Tablet</b>	<ul style="list-style-type: none"> <li>• Use a third-party DLNA-supported player.</li> </ul>

### 4.5.4. User Accounts

You can specify the username and password for Storage Sharing and FTP Server access. The default user account is [admin](#). It has read and write access to Storage Sharing and can access FTP Server.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [USB Settings](#) > [User Accounts](#).
3. Click [Add New User](#).
4. Specify a new username and password in the [User Name](#) and [Password](#) fields, and reenter the password for confirmation.

Add or Modify User Account

---

**User Name:**

**Password:**

**Confirm Password:**

**Storage Authority:**

**FTP Access:**

---

5. Select [Read Only](#) or [Read and Write](#) for Storage Authority.
6. Select [No](#), [Read Only](#) or [Read and Write](#) for FTP Access.
7. Click [Save](#).
8. You can check the newly added account and also edit or delete the account.

User Name	Password	Storage Authority	FTP Access	Modify
admin	admin	Read and Write	Read and Write	<a href="#">Edit</a>
admin1	admin	Read Only	Read and Write	<a href="#">Edit</a> <a href="#">Delete</a>

## 4.6. Forwarding

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

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

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

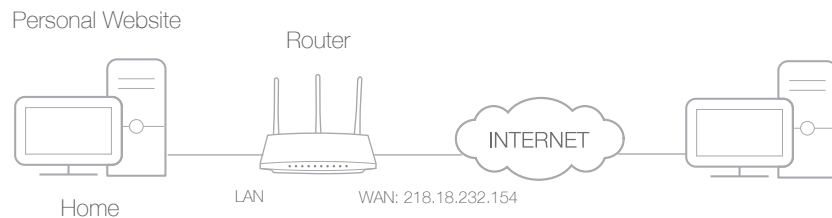
### 4.6.1. Virtual Servers

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

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

**I want to:** Share my personal website I've built on local network with my friends through the Internet.

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



1. Set your PC to a static IP address, 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](#) > [Forwarding](#) > [Virtual Servers](#).
4. Click [Add New](#). Select [HTTP](#) from the [Common Service Port](#) list. The [Service Port](#), [Internal Port](#) and [Protocol](#) will be automatically filled in. Enter the PC's IP address 192.168.0.100 in the [IP Address](#) field.

Add or Modify a Virtual Server Entry	
Service Port:	<input type="text" value="80"/> (XX-XX or XX)
Internal Port:	<input type="text" value="80"/> (XX, Enter a specific port number or leave it blank)
IP Address:	<input type="text" value="192.168.0.100"/>
Protocol:	<input type="text" value="All"/>
Status:	<input type="text" value="Enabled"/>
Common Service Port:	<input type="text" value="HTTP"/>
<input type="button" value="Save"/> <input type="button" value="Back"/>	

5. Leave the status as [Enabled](#) and click [Save](#).

**Note:**

- It is recommended to keep the default settings of [Internal Port](#) and [Protocol](#) if you are not clear about which port and protocol to use.
- If the service you want to use is not in the [Common Service Port](#) list, you can enter the corresponding parameters manually. You should verify the port number that the service needs.



- You can add multiple virtual server rules if you want to provide several services in a router. Please note that the [Service Port](#) should not be overlapped.

## Done!

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

### Note:

If you have changed the default [Service Port](#), you should use [http:// WAN IP:Service Port](http://WAN IP:Service Port) to visit the website.

## 4.6.2. Port Triggering

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

Follow the steps below to configure the port triggering rules:

- Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
- Go to [Advanced](#) > [Forwarding](#) > [Port Triggering](#).
- Click [Add New](#). Select the desired application from the [Common Applications](#) list. The trigger port and incoming ports will be automatically filled in. The following picture takes application [MSN Gaming Zone](#) as an example.

Add or Modify a Port Triggering Entry

---

<b>Trigger Port:</b>	<input type="text" value="47624"/>
<b>Trigger Protocol:</b>	<input type="text" value="All"/>
<b>Incoming Ports:</b>	<input type="text" value="2300-2400,28800-29000"/>
<b>Incoming Protocol:</b>	<input type="text" value="All"/>
<b>Status:</b>	<input type="text" value="Enabled"/>
<b>Common Applications:</b>	<input type="text" value="MSN Gaming Zone"/>

- Leave the status as [Enabled](#) and click [Save](#).

### Note:

- You can add multiple port triggering rules according to your network need.

- The triggering ports can not be overlapped.
- If the application you need is not listed in the [Common Applications](#) list, please enter the parameters manually. You should verify the incoming ports the application uses first and enter them in [Incoming Ports](#) field. You can input at most 5 groups of ports (or port sections). Every group of ports must be set apart with “,”. For example, 2000-2038, 2050-2051, 2085, 3010-3030.

### 4.6.3. DMZ

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

**Note:**

When DMZ is enabled, the DMZ host is totally exposed to the Internet, which may bring some potential safety hazards. If DMZ is not in use, please disable it in time.

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

**For example,** due to some port restriction, when playing the online games, you can log in normally but cannot join a team with other players. To solve this problem, set your PC as a DMZ host with all ports open.

**How can I do that?**

1. Assign a static IP address to your PC, for example 192.168.0.100.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
3. Go to [Advanced](#) > [Forwarding](#) > [DMZ](#).
4. Select [Enable](#) and enter the IP address 192.168.0.100 in the [DMZ Host IP Address](#) field.

5. Click [Save](#).

**Done!**

You've set your PC to a DMZ host and now you can make a team to game with other players.

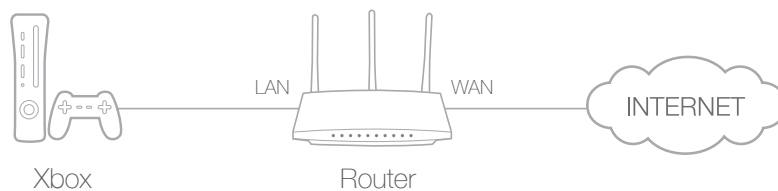
#### 4.6.4. UPnP

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

**Tips:**

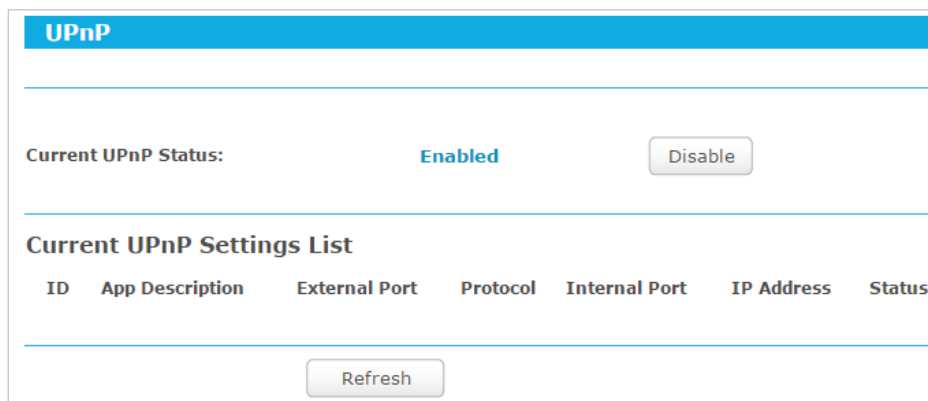
- Only the application supporting UPnP protocol can use this feature.
- The UPnP feature needs the support of operating system (e.g. Windows Vista/ Windows 7/ Windows 8, etc. Some of operating system need to install the UPnP components).

**For example,** when you connect your Xbox to the router which is 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.



UPnP is enabled by default. 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 > Forwarding > UPnP**.
3. Click **Disable** or **Enable** as needed.



## 4.7. Security

This function allows you to protect your home network from cyber attacks and unauthorized users by implementing these network security functions.

### 4.7.1. Basic Security

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Security](#) > [Basic Security](#), and you can enable or disable the security functions.

**Basic Security**

---

**Firewall**

**SPI Firewall:**  Enable  Disable

---

**VPN**

**PPTP Passthrough:**  Enable  Disable

**L2TP Passthrough:**  Enable  Disable

**IPSec Passthrough:**  Enable  Disable

---

**ALG**

**FTP ALG:**  Enable  Disable

**TFTP ALG:**  Enable  Disable

**H323 ALG:**  Enable  Disable

**RTSP ALG:**  Enable  Disable

**SIP ALG:**  Enable  Disable

- **Firewall** - A firewall protects your network from Internet attacks.
  - **SPI Firewall** - SPI (Stateful Packet Inspection, also known as dynamic packet filtering) helps to prevent cyber attacks by tracking more state per session. It

validates that the traffic passing through the session conforms to the protocol. SPI Firewall is enabled by default.

- **VPN** - VPN Passthrough must be enabled if you want to allow VPN tunnels using IPSec, PPTP or L2TP protocols to pass through the router's firewall.
    - **PPTP Passthrough** - Point-to-Point Tunneling Protocol (PPTP) allows the Point-to-Point Protocol (PPP) to be tunneled through an IP network. If you want to allow PPTP tunnels to pass through the router, you can keep the default (Enabled).
    - **L2TP Passthrough** - Layer 2 Tunneling Protocol (L2TP) is the method used to enable Point-to-Point sessions via the Internet on the Layer 2 level. If you want to allow L2TP tunnels to pass through the router, you can keep the default (Enabled).
    - **IPSec Passthrough** - Internet Protocol Security (IPSec) is a suite of protocols for ensuring private, secure communications over Internet Protocol (IP) networks, through the use of cryptographic security services. If you want to allow IPSec tunnels to pass through the router, you can keep the default (Enabled).
  - **ALG** - It is recommended to enable Application Layer Gateway (ALG) because ALG allows customized Network Address Translation (NAT) traversal filters to be plugged into the gateway to support address and port translation for certain application layer "control/data" protocols such as FTP, TFTP, H323 etc.
    - **FTP ALG** - To allow FTP clients and servers to transfer data across NAT, keep the default **Enable**.
    - **TFTP ALG** - To allow TFTP clients and servers to transfer data across NAT, keep the default **Enable**.
    - **H323 ALG** - To allow Microsoft NetMeeting clients to communicate across NAT, keep the default **Enable**.
    - **RTSP ALG** - To allow some media player clients to communicate with some streaming media servers across NAT, click **Enable**.
    - **SIP ALG** - To allow some multimedia clients to communicate across NAT, click **Enable**.
3. Click **Save**.

#### 4.7.2. Advanced Security

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > Security > Advanced Security**, and you can protect the router from being attacked by ICMP-Flood, UDP Flood and TCP-SYN Flood.

Advanced Security

---

**Packets Statistics Interval (5 ~ 60):**  Seconds

**DoS Protection:**  Disable  Enable

Enable ICMP-FLOOD Attack Filtering

**ICMP-FLOOD Packets Threshold (5 ~ 3600):**  Packets/Secs

Enable UDP-FLOOD Filtering

**UDP-FLOOD Packets Threshold (5 ~ 3600):**  Packets/Secs

Enable TCP-SYN-FLOOD Attack Filtering

**TCP-SYN-FLOOD Packets Threshold (5 ~ 3600):**  Packets/Secs

Ignore Ping Packet from WAN Port to Router

Forbid Ping Packet from LAN Port to Router

---

- **Packets Statistics Interval (5~60)** - The default value is 10. Select a value between 5 and 60 seconds from the drop-down list. The **Packets Statistics Interval** value indicates the time section of the packets statistics. The result of the statistics is used for analysis by SYN Flood, UDP Flood and ICMP-Flood.
- **DoS Protection** - Denial of Service protection. Select Enable or Disable to enable or disable the DoS protection function. Only when it is enabled, will the flood filters be enabled.

**Note:**

Dos Protection will take effect only when the Statistics in [System Tool > Statistics](#) is enabled.

- **Enable ICMP-FLOOD Attack Filtering** - Check the box to enable or disable this function.
- **ICMP-FLOOD Packets Threshold (5~3600)** - The default value is 50. Enter a value between 5 ~ 3600. When the number of the current ICMP-FLOOD packets is beyond the set value, the router will startup the blocking function immediately.
- **Enable UDP-FLOOD Filtering** - Check the box to enable or disable this function.
- **UDP-FLOOD Packets Threshold (5~3600)** - The default value is 500. Enter a value between 5 ~ 3600. When the number of the current UPD-FLOOD packets is beyond the set value, the router will startup the blocking function immediately.

- [Enable TCP-SYN-FLOOD Attack Filtering](#) -Check the box to enable or disable this function.
  - [TCP-SYN-FLOOD Packets Threshold \(5~3600\)](#) - The default value is 50. Enter a value between 5 ~ 3600. When the number of the current TCP-SYN-FLOOD packets is beyond the set value, the router will startup the blocking function immediately.
  - [Ignore Ping Packet From WAN Port](#) - The default setting is disabled. If enabled, the ping packet from the Internet cannot access the router.
  - [Forbid Ping Packet From LAN Port](#) - The default setting is disabled. If enabled, the ping packet from LAN cannot access the router. This function can be used to defend against some viruses.
3. Click [Save](#).
  4. Click [Blocked DoS Host List](#) to display the DoS host table by blocking.

### 4.7.3. Local Management

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Security](#) > [Local Management](#), and you can block computers in LAN from accessing the router.

**Local Management**

**Management Rules**

All the PCs on the LAN are allowed to access the Router's Web-Based Utility

Only the PCs listed can browse the built-in web pages to perform Administrator tasks

**MAC 1:**

**MAC 2:**

**MAC 3:**

**MAC 4:**

**Your PC's MAC Address:**

For example, if you want to allow PCs with specific MAC addresses to access the router's web management page locally from inside the network, please follow the instructions below:

- 1) Select [Only the PCs listed can browse the built-in web pages to perform Administrator tasks](#).

- 2) Enter the MAC address of each PC separately. The format of the MAC address is XX-XX-XX-XX-XX-XX (X is any hexadecimal digit). Only the PCs with the listed MAC addresses can use the password to browse the built-in web pages to perform administrator tasks.
- 3) Click [Add](#), and your PC's MAC address will also be listed.
- 4) Click [Save](#).

**Note:**

If your PC is blocked but you want to access the router again, press and hold the [Reset](#) button to reset the router to the factory defaults.

#### 4.7.4. Remote Management

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Security](#) > [Remote Management](#), and you can manage your router from a remote device via the Internet.

Remote Management	
Web Management Port:	<input type="text" value="80"/>
Remote Management IP Address:	<input type="text" value="0.0.0.0"/> (Enter 255.255.255.255 for all)
<input type="button" value="Save"/>	

- [Web Management Port](#) - Web browser access normally uses the standard HTTP service port 80. This router's default remote management web port number is 80. For higher security, you can change the remote management web port to a custom port by entering a number between 1 and 65534 but do not use the number of any common service port.
- [Remote Management IP Address](#) - This is the address you will use when accessing your router via a remote device. This function is disabled when the IP address is set to the default value of 0.0.0.0. To enable this function, change 0.0.0.0 to a valid IP address. If it is set to 255.255.255.255, then all the remote devices can access the router from the Internet.

**Note:**

- To access the router, enter your router's WAN IP address in your browser's address bar, followed by a colon and the custom port number. For example, if your router's WAN address is 202.96.12.8, and the port number used is 8080, please enter <http://202.96.12.8:8080> in your browser. Later, you may be asked for the router's password. After successfully entering the username and password, you will be able to access the router's web management page.
- Be sure to change the router's default password for security purposes.



## 4.8. Parental Controls

Parental Controls allows you to block inappropriate and malicious websites, and control access to specific websites at specific time for your children's devices.

For example, you want the children's PC with the MAC address 00-11-22-33-44-AA can access [www.tp-link.com](http://www.tp-link.com) on Saturday only while the parent PC with the MAC address 00-11-22-33-44-BB is without any restriction.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Access Control](#) > [Schedule](#).
3. Click [Add New](#) to create a new schedule entry with [Schedule Description](#) as Schedule\_1, [Day](#) as Sat and [Time](#) as all day-24 hours. And click [Save](#).

**Advance Schedule Settings**

Note: The Schedule is based on the time of the Router.

**Schedule Description:**

**Day:**  Everyday  Select Days

Mon  Tue  Wed  Thu  Fri  Sat  Sun

**Time:**  all day-24 hours

**Start Time:**  (HHMM)

**Stop Time:**  (HHMM)

4. Go to [Advanced](#) > [Parental Control](#).
5. Select [Enable](#) and enter the MAC address 00-11-22-33-44-BB in the [MAC Address of Parental PC](#) field.
6. Click [Add New](#), and enter appropriate parameters in corresponding fields.

Add or Modify Parental Control Entry

The Schedule is based on the time of the Router. The time can be set in "System Tools -> [Time settings](#)".

<b>MAC Address of Children's PC:</b>	<input type="text" value="00-11-22-33-44-AA"/>
<b>All MAC Address In Current LAN:</b>	<input type="text" value="--Please Select--"/>
<b>Website Description:</b>	<input type="text" value="Allow TP-LINK"/>
<b>Allowed Website Name:</b>	<input type="text" value="www.tp-link.com"/>
	<input type="text"/>
	<input type="text"/>
	<input type="text"/>
	<input type="text"/>
	<input type="text"/>
	<input type="text"/>
<b>Effective Time:</b>	<input type="text" value="Schedule_1"/>
	The time schedule can be set in "Access Control -> <a href="#">Schedule</a> "
<b>Status:</b>	<input type="text" value="Enabled"/>

- Enter 00-11-22-33-44-AA in the [MAC Address of Children's PC](#) field.
- Enter Allow TP-LINK in the [Website Description](#) field.
- Enter www.tp-link.com in the [Allowed Website Name](#) field.
- Select Schedule\_1 you created just now from the [Effective Time](#) drop-down list.
- In the [Status](#) field, select [Enabled](#).

7. Click [Save](#).

Then you can go back to the [Parental Control](#) Settings page to check the following list.

ID	MAC address	Website Description	Schedule	Status	Modify
1	00-11-22-33-44-AA	Allow TP-LINK	Schedule_1	☑	<a href="#">Edit</a> <a href="#">Delete</a>

## 4.9. Access Control

Access Control is used to deny or allow specific client devices to access your network with access time and content restrictions.

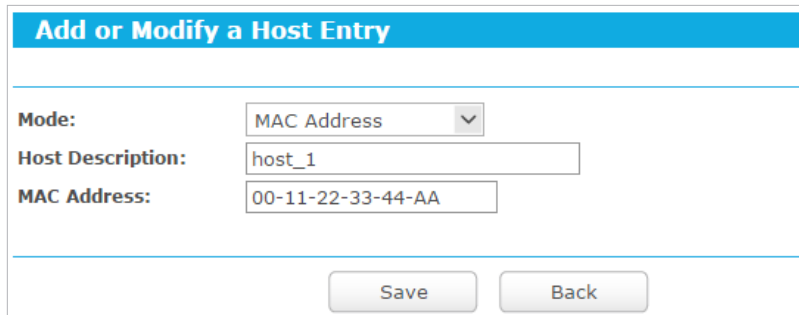
**I want to:** Deny or allow specific client devices to access my network with access item and content restrictions.

[For example](#), If you want to restrict the Internet activities of

host with MAC address 00-11-22-33-44-AA on the LAN to access www.tp-link.com only, please follow the steps below:

## 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](#) > [Access Control](#) > [Host](#) and configure the host settings:
  - 1) Click [Add New](#).
  - 2) Select [MAC Address](#) as the mode type. Create a unique description (e.g. [host\\_1](#)) for the host in the [Host Description](#) field and enter 00-11-22-33-44-AA in the [MAC Address](#) field.



Add or Modify a Host Entry	
Mode:	MAC Address
Host Description:	host_1
MAC Address:	00-11-22-33-44-AA
<input type="button" value="Save"/> <input type="button" value="Back"/>	

- 3) Click [Save](#).
3. Go to [Advanced](#) > [Access Control](#) > [Target](#) and configure the target settings:
  - 1) Click [Add New](#).
  - 2) Select [Domain Name](#) as the mode type. Create a unique description (e.g. [target\\_1](#)) for the target in the [Target Description](#) field and enter the domain name, either the full name or the keywords (for example TP-LINK) in the [Domain Name](#) field.

**Note:**

Any domain name with keywords in it (e.g. www.tp-link.com) will be blocked or allowed.

**Add or Modify an Access Target Entry**

Mode:

Target Description:

Domain Name:

- 3) Click [Save](#).
4. Go to [Advanced](#) > [Access Control](#) > [Schedule](#) and configure the schedule settings:
  - 1) Click [Add New](#).
  - 2) Create a unique description (e.g. [schedule\\_1](#)) for the schedule in the [Schedule Description](#) field and set the day(s) and time period.

**Advance Schedule Settings**

Note: The Schedule is based on the time of the Router.

Schedule Description:

Day:  Everyday  Select Days

Mon  Tue  Wed  Thu  Fri  Sat  Sun

Time:  all day-24 hours

Start Time:  (HHMM)

Stop Time:  (HHMM)

- 3) Click [Save](#).
5. Go to [Advanced](#) > [Access Control](#) > [Rule](#) and add a new access control rule.
  - 1) Click [Add New](#).
  - 2) Give a name for the rule in the [Rule Name](#) field. Select [host\\_1](#) from the host drop-down list; select [target\\_1](#) from the target drop-down list; select [schedule\\_1](#) from the schedule drop-down list.

**Add Internet Access Control Entry**

Rule Name:

Host:  [Click Here To Add New Host List.](#)

Target:  [Click Here To Add New Target List.](#)

Schedule:  [Click Here To Add New Schedule.](#)

Status:

3) Leave the status as **Enabled** and click **Save**.

6. Select **Enable Internet Access Control** to enable Access Control function.
7. Select **Allow the packets specified by any enabled access control policy to pass through the Router** as the default filter policy and click **Save**.

**Default Filter Policy**

Allow the packets specified by any enabled access control policy to pass through the Router

Deny the packets specified by any enabled access control policy to pass through the Router

**Done!**

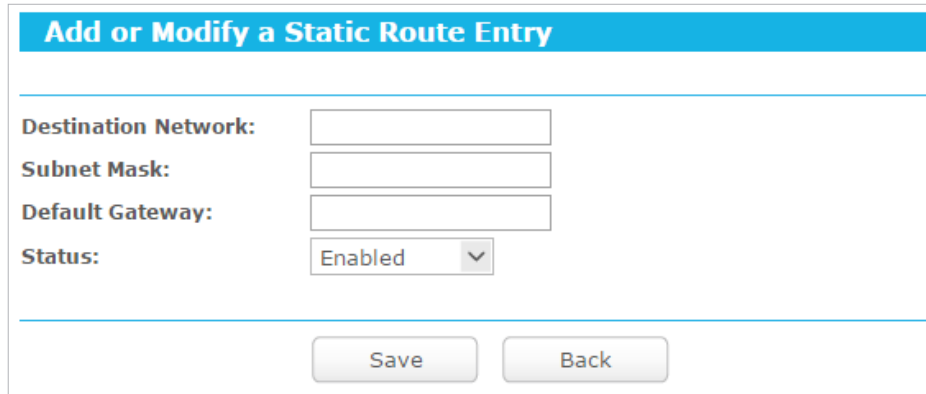
Now only the specific host(s) can visit the target(s) within the scheduled time period.

## 4. 10. Advanced Routing

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

### 4. 10. 1. Static Routing List

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
  2. Go to **Advanced > Advanced Routing > Static Routing**.
- **To add static routing entries:**
1. Click **Add New**, and enter the following information.



**Add or Modify a Static Route Entry**

**Destination Network:**

**Subnet Mask:**

**Default Gateway:**

**Status:**  ▼

- **Destination Network** - The Destination Network is the address of the network or host that you want to assign to a static route.
  - **Subnet Mask** - The Subnet Mask determines which portion of an IP Address is the network portion, and which portion is the host portion.
  - **Default Gateway** - This is the IP Address of the default gateway device that allows the contact between the router and the network or host.
2. Select **Enabled** or **Disabled** for this entry on the **Status** drop-down list.
  3. Click **Save**.

You can also do the following operations to modify the current settings.

- Click **Delete** to delete the entry.
- Click **Enable All** to enable all the entries.
- Click **Disable All** to disable all the entries.
- Click **Delete All** to delete all the entries.
- Click **Previous** to view the information on the previous screen and **Next** to view the information on the next screen.

#### 4. 10. 2. System Routing Table

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced** > **Advanced Routing** > **System Routing Table**, and you can view all the valid route entries in use.

System Routing Table				
ID	Destination Network	Subnet Mask	Gateway	Interface
1	192.168.0.0	255.255.255.0	0.0.0.0	LAN & WLAN
2	239.0.0.0	255.0.0.0	0.0.0.0	LAN & WLAN

- **Destination Network** - The Destination Network is the address of the network or host to which the static route is assigned.
- **Subnet Mask** - The Subnet Mask determines which portion of an IP address is the network portion, and which portion is the host portion.
- **Gateway** - This is the IP address of the gateway device that allows for contact between the Router and the network or host.
- **Interface** - This interface tells you whether the Destination IP Address is on the LAN & WLAN (internal wired and wireless networks), or the WAN(Internet).

Click [Refresh](#) to refresh the data displayed.

## 4. 11. Bandwidth Control

### 4. 11. 1. Control Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Bandwidth Control](#) > [Control Settings](#).

Bandwidth Control Settings	
<b>Enable Bandwidth Control:</b>	<input type="checkbox"/>
<b>Line Type:</b>	<input checked="" type="radio"/> ADSL <input type="radio"/> Other
<b>Egress Bandwidth:</b>	<input type="text" value="512"/> Kbps
<b>Ingress Bandwidth:</b>	<input type="text" value="2048"/> Kbps

The values you configure for the Egress Bandwidth and Ingress Bandwidth should be less than 100,000Kbps. For optimal control of the bandwidth, please select the right Line Type and consult your ISP for the total egress and ingress bandwidth.

- **Enable Bandwidth Control** - Check this box so that the Bandwidth Control settings can take effect.

- **Line Type** - Select the right type for you network connection. If you are not sure, please consult your ISP.
- **Egress Bandwidth** - The upload speed through the WAN port.
- **Ingress Bandwidth** - The download speed through the WAN port.

### 4.11.2. Rules List

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > Bandwidth Control > Rules List**, and you can view and configure the Bandwidth Control rules.

Bandwidth Control Rule List							
ID	Description	Egress Bandwidth(Kbps)		Ingress Bandwidth(Kbps)		Enable	Modify
		Min	Max	Min	Max		
The current list is empty.							
<input type="button" value="Add New..."/>		<input type="button" value="Delete All"/>					
<input type="button" value="Previous"/>		<input type="button" value="Next"/>		Current No. <input type="text" value="1"/>	<input type="button" value="Page"/>		

- **Description** - This is the information about the rules such as address range.
- **Egress Bandwidth** - This field displays the max and min upload bandwidth through the WAN port. The default is 0.
- **Ingress Bandwidth** - This field displays the max and min download bandwidth through the WAN port. The default is 0.
- **Enable** - This field displays the status of the rule.
- **Modify** - Click **Modify/Delete** to edit/delete the rule.

➤ **To add a Bandwidth control rule:**

1. Click **Add New**.
2. Enter the information like the figure shown below.



3. Click [Save](#).

## 4. 12. IP&MAC Binding

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

### 4. 12. 1. Binding Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [IP & MAC Binding](#) > [Binding Settings](#).
3. Select [Enable](#) for ARP Binding.

4. Click [Save](#).

#### ➤ To add IP & MAC Binding entries:

1. Click [Add New](#).
2. Select the [Bind](#) checkbox. And enter the MAC address and IP address.

**IP & MAC Binding Settings**

---

**Bind:**

**MAC Address:**

**IP Address:**

---

3. Click [Save](#).

➤ **To modify or delete an existing entry:**

1. Find the desired entry in the table.
2. Click [Modify](#) or [Delete](#) in the Modify column.

➤ **To find an existing entry:**

1. Click [Find](#).
2. Enter the MAC address or IP address in the corresponding field.
3. Click [Find](#) on this page as shown below.

**Find IP & MAC Binding Entry**

---

**MAC Address:**

**IP Address:**

ID	MAC Address	IP Address	Bind Link
1	00-0A-EB-B0-00-0B	192.168.0.22	<input checked="" type="checkbox"/> <a href="#">To page</a>

---

## 4.12.2. ARP List

To manage a device, you can observe the device on the LAN by checking its MAC address and IP address on the ARP list, and you can also configure the items. This page displays the ARP List which shows all the existing IP & MAC Binding entries.

ARP List				
ID	MAC Address	IP Address	Status	Configure
1	00-0A-EB-B0-00-0B	192.168.0.22	Bound	<a href="#">Load</a> <a href="#">Delete</a>
2	14-CF-92-13-6D-78	192.168.0.101	Unbound	<a href="#">Load</a> <a href="#">Delete</a>

- **MAC Address** - The MAC address of the listed computer on the LAN.
- **IP Address** - The assigned IP address of the listed computer on the LAN.
- **Status** - Indicates whether or not the MAC and IP addresses are bound.
- **Configure** - Load or delete an item.
  - **Load** - Load the item to the IP & MAC Binding list.
  - **Delete** - Delete the item.
- Click **Bind All** to bind all the current items.
- Click **Load All** to load all items to the IP & MAC Binding list.
- Click **Refresh** to refresh all items.

■ **Note:**

An item can not be loaded to the IP & MAC Binding list if the IP address of the item has been loaded before. Error warning will prompt as well. Likewise, **Load All** only loads the items without interference to the IP & MAC Binding list.

## 4. 13. Dynamic DNS

The router offers the DDNS (Dynamic Domain Name System) feature, which allows the hosting of a website, FTP server, or e-mail server with a fixed domain name (named by yourself) and a dynamic IP address. Thus your friends can connect to your server by entering your domain name no matter what your IP address is. Before using this feature, you need to sign up for DDNS service providers such as [www.comexe.cn](http://www.comexe.cn), [www.dyn.org](http://www.dyn.org), or [www.noip.com](http://www.noip.com). The Dynamic DNS client service provider will give you a password or key.

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

### 119Comexe DDNS

If the dynamic DNS Service Provider you select is [www.comexe.cn](http://www.comexe.cn), the following page will appear.

**DDNS**

**Service Provider:** Comexe ( www.comexe.cn ) [Go to register...](#)

**Domain Name:**

**Domain Name:**

**Domain Name:**

**Domain Name:**

**Domain Name:**

**User Name:**

**Password:**

Enable DDNS

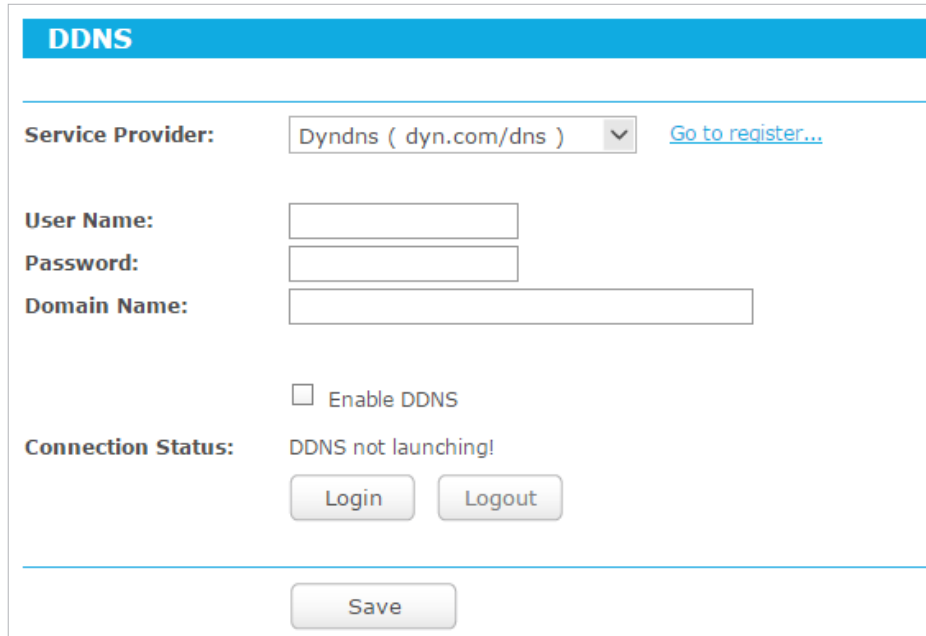
**Connection Status:** DDNS not launching!

To set up for DDNS, follow these instructions:

1. Enter the [Domain Name](#) received from your dynamic DNS service provider.
  2. Enter the [User Name](#) for your DDNS account.
  3. Enter the [Password](#) for your DDNS account.
  4. Click [Login](#).
  5. Click [Save](#).
- [Connection Status](#) - The status of the DDNS service connection is displayed here.
  - [Logout](#) - Click [Logout](#) to log out of the DDNS service.

### 1110Dyndns DDNS

If the dynamic DNS Service Provider you select is [www.dyn.com](http://www.dyn.com), the following page will appear.



**DDNS**

**Service Provider:** Dyndns ( dyn.com/dns ) [Go to register...](#)

**User Name:**

**Password:**

**Domain Name:**

Enable DDNS

**Connection Status:** DDNS not launching!

To set up for DDNS, follow these instructions:

1. Enter the [User Name](#) for your DDNS account.
  2. Enter the [Password](#) for your DDNS account.
  3. Enter the [Domain Name](#) you received from dynamic DNS service provider here.
  4. Click [Login](#).
  5. Click [Save](#).
- [Connection Status](#) - The status of the DDNS service connection is displayed here.
  - [Logout](#) - Click [Logout](#) to log out of the DDNS service.

### 1111No-ip DDNS

If the dynamic DNS Service Provider you select is [www.noip.com](http://www.noip.com), the following page will appear.

**DDNS**

**Service Provider:** No-IP ( www.noip.com ) [Go to register...](#)

**User Name:**

**Password:**

**Domain Name:**

Enable DDNS

**Connection Status:** DDNS not launching!

To set up for DDNS, follow these instructions:

1. Enter the [User Name](#) for your DDNS account.
  2. Enter the [Password](#) for your DDNS account.
  3. Enter the [Domain Name](#) you received from dynamic DNS service provider.
  4. Click [Login](#).
  5. Click [Save](#).
- [Connection Status](#) - The status of the DDNS service connection is displayed here.
  - [Logout](#) - Click [Logout](#) to log out of the DDNS service.

## 4. 14. System Tools

### 4. 14. 1. Working Mode

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Working Mode](#). Select the working mode for the router as needed and click [Save](#).

■ When [Control the system mode by software](#) is checked, the operation mode switch on the router will be disabled. If you want to enable it, please log in to the web management page and go to [Working Mode](#) to uncheck [Control the system mode by software](#).

**Working Mode**

Control the system mode by software

**Standard Router**

Hotspot

AP/Rng Ext/Client

Save

#### 4.14.2. Time Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Time Settings](#) and configure the system time as needed.

**Time Settings**

Time Zone: (GMT-08:00) Pacific Time

Date: 1 / 1 / 2016 (MM/DD/YY)

Time: 2 / 17 / 52 (HH/MM/SS)

NTP Server 1: 0.0.0.0 (Optional)

NTP Server 2: 0.0.0.0 (Optional)

Get GMT

Enable Daylight Saving

Start: 2016 Mar 2nd Sun 2am

End: 2016 Nov First Sun 2am

Daylight Saving Status:

Note: Click "GET GMT" to update time settings through the pre-defined servers or enter customized server(IP or Domain) in the frames above.

Save

➤ **To set time manually:**

1. Select your local time zone.
2. Enter the **Date** in Month/Day/Year format.
3. Enter the **Time** in Hour/Minute/Second format.
4. Click **Save**.

➤ **To set time automatically:**

1. Select your local time zone.
2. Enter the address or domain of the [NTP Server I](#) or [NTP Server II](#).
3. Click [Get GMT](#) to get time from the Internet if you have connected to the Internet.
4. Click [Save](#).

➤ **To set Daylight Saving Time:**

1. Select [Enable DaylightSaving](#).
2. Select the start time from the drop-down list in the [Start](#) field.
3. Select the end time from the drop-down list in the [End](#) field.
4. Click [Save](#).

■ **Note:**

This setting will be used for some time-based functions such as firewall. You must specify your time zone once you login to the router successfully; otherwise, time-based functions will not take effect.

### 4.14.3. Diagnostic

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

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Diagnostic](#).



**Diagnostic Tools**

**Diagnostic Parameters**

Diagnostic Tool:  Ping  Traceroute

IP Address/ Domain Name:

Ping Count:  (1-50)

Ping Packet Size:  (4-1472 Bytes)

Ping Timeout:  (100-2000 Milliseconds)

Traceroute Max TTL:  (1-30)

**Diagnostic Results**

This device is ready.

Start

- **Diagnostic Tool** - Select one diagnostic tool.
  - **Ping** - This diagnostic tool troubleshoots connectivity, reachability, and name resolution to a given host or gateway.
  - **Tracerouter** - This diagnostic tool tests the performance of a connection.

**Note:**

You can use ping/traceroute to test both numeric IP address or domain name. If pinging/tracerouting the IP address is successful, but pinging/tracerouting the domain name is not, you might have a name resolution problem. In this case, ensure that the domain name you are specifying can be resolved by using Domain Name System (DNS) queries.

- **IP Address/Domain Name** - Enter the destination IP address (such as 192.168.0.1) or Domain name (such as www.tp-link.com).
  - **Pings Count** - The number of Ping packets for a Ping connection.
  - **Ping Packet Size** - The size of Ping packet.
  - **Ping Timeout** - Set the waiting time for the reply of each Ping packet. If there is no reply in the specified time, the connection is overtime.
  - **Traceroute Max TTL** - The max number of hops for a Traceroute connection.
3. Click **Start** to check the connectivity of the Internet.
  4. The **Diagnostic Results** page displays the diagnosis result. If the result is similar to the following figure, the connectivity of the Internet is fine.

```

Diagnostic Results
-----
Pinging 192.168.0.1 with 64 bytes of data:

Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=1
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=2
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=3
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=4

Ping statistics for 192.168.0.1
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)
Approximate round trip times in milliseconds:
Minimum = 1, Maximum = 1, Average = 1

```

**Note:**

Only one user can use this tool at one time. Options "Number of Pings", "Ping Size" and "Ping Timeout" are used for the Ping function. Option "Tracert Hops" is used for the Tracert function.

#### 4.14.4. Firmware Upgrade

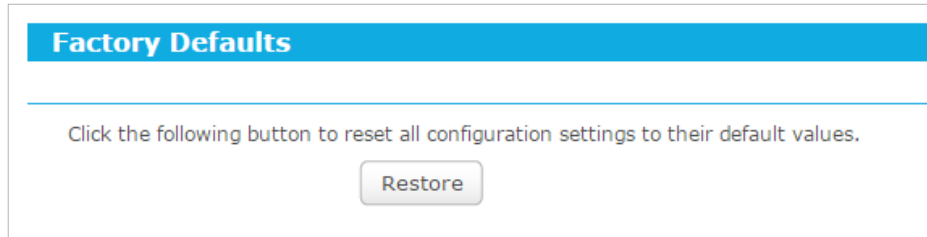
TP-LINK is dedicated to improving and enriching the product features, giving users a better network experience. We will release the latest firmware at the TP-LINK official website [www.tp-link.com](http://www.tp-link.com). You can download the latest firmware file from the [Support](#) page and upgrade the firmware to the latest version.

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

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

#### 4.14.5. Factory Defaults

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Factory Defaults](#). Click [Restore](#) to reset all settings to the default values.

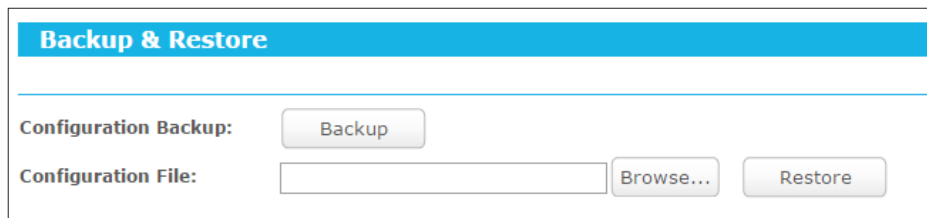


- The default **Username**: admin
- The default **Password**: admin
- The default **IP Address**: 192.168.0.1
- The default **Subnet Mask**: 255.255.255.0

#### 4.14.6. Backup & Restore

The configuration settings are stored as a configuration file in the router. You can backup the configuration file in your computer for future use and restore the router to the previous settings from the backup file when needed.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > System Tools > Backup & Restore**.



##### ➤ To backup configuration settings:

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

##### ➤ To restore configuration settings:

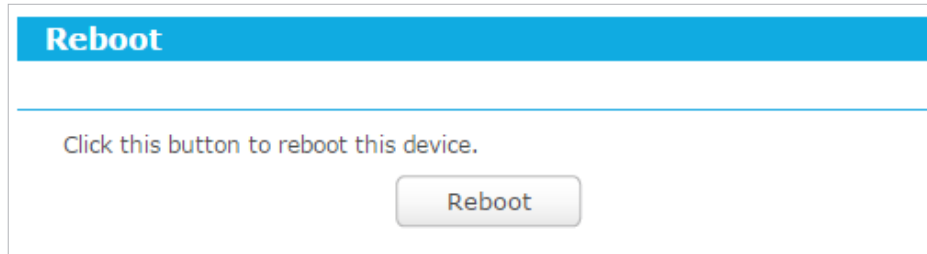
1. Click **Choose File** to locate the backup configuration file stored in your computer, and click **Restore**.
2. Wait a few minutes for the restoring and rebooting.

##### ■ Note:

During the restoring process, do not power off or reset the router.

#### 4.14.7. Reboot

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > System Tools > Reboot**, and you can restart your router.

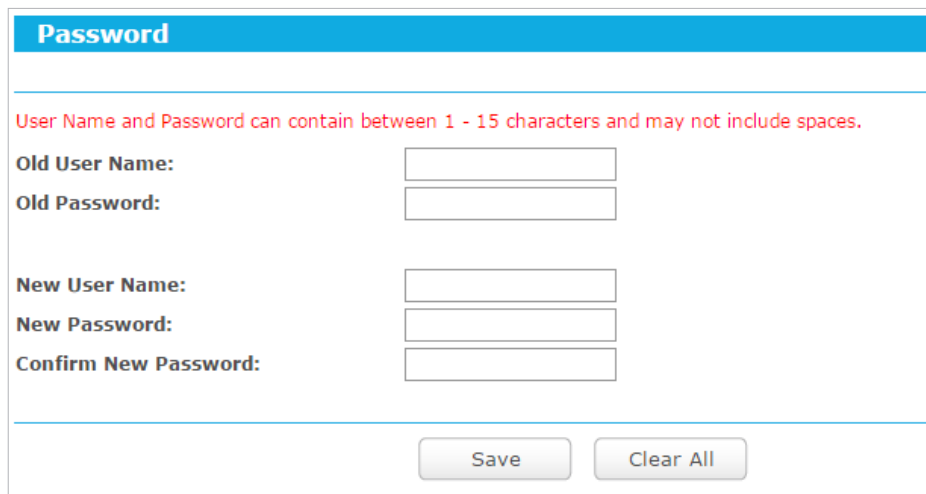


Some settings of the router will take effect only after rebooting, including:

- Change the LAN IP Address (system will reboot automatically).
- Change the DHCP Settings.
- Change the Working Mode.
- Change the Web Management Port.
- Upgrade the firmware of the router (system will reboot automatically).
- Restore the router to its factory defaults (system will reboot automatically).
- Update the configuration with the file (system will reboot automatically).

#### 4.14.8. Password

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Password](#), and you can change the factory default username and password of the router.



It is strongly recommended that you change the default username and password of the router, for all users that try to access the router's web-based utility or Quick Setup will be prompted for the router's username and password.

**Note:**

The new username and password must not exceed 15 characters and not include any spacing.

3. Click [Save](#).

#### 4. 14. 9. System Log

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [System Log](#), and you can view the logs of the router.

System Log

---

**Auto Mail Feature:** Disabled Mail Settings

**Log Type:** ALL **Log Level:** ALL

Index	Time	Type	Level	Log Content
242	1st day 02:23:22	3G/4G	INFO	primary device is not in
241	1st day 02:22:52	3G/4G	INFO	primary device is not in
240	1st day 02:22:22	3G/4G	INFO	primary device is not in
239	1st day 02:21:52	3G/4G	INFO	primary device is not in
238	1st day 02:21:22	3G/4G	INFO	primary device is not in
237	1st day 02:20:52	3G/4G	INFO	primary device is not in
236	1st day 02:20:22	3G/4G	INFO	primary device is not in
235	1st day 02:19:52	3G/4G	INFO	primary device is not in
234	1st day 02:19:21	3G/4G	INFO	primary device is not in
233	1st day 02:18:51	3G/4G	INFO	primary device is not in

**Time = 2016-01-01 2:23:44 8626s**  
**H-Ver =**  **S-Ver =**   
**L = 192.168.0.1 : M = 255.255.255.0**  
**W1 = DHCP : W = 0.0.0.0 : M = 0.0.0.0 : G = 0.0.0.0**

Refresh
Save Log
Mail Log
Clear Log

---

Previous
Next
Current No. 1
Page

- [Auto Mail Feature](#) - Indicates whether the auto mail feature is enabled or not.
- [Mail Settings](#) - Set the receiving and sending mailbox address, server address, validation information as well as the timetable for Auto Mail Feature.

- **From** - Your mail box address. The router will connect it to send logs.
- **To** - Recipient's mail address. The destination mailbox which will receive logs.
- **SMTP Server** - Your smtp server. It corresponds with the mailbox filled in the **From** field. You can log on the relevant website for help if you are not clear with the address.
- **Authentication** - Most SMTP Server requires Authentication. It is required by most mailboxes that need username and password to log in.

**Note:**

Only when you select Authentication, do you have to enter the username and password in the following fields.

- **User Name** - Your mail account name filled in the From field. The part behind @ is included.
- **Password** - Your mail account password.
- **Confirm The Password** - Enter the password again to confirm.
- **Enable Auto Mail Feature** - Select it to mail logs automatically. You could mail the current logs either at a specified time everyday or by intervals, but only one could be the current effective rule. Enter the desired time or intervals in the corresponding field.

Click **Save** to apply your settings.

Click **Back** to return to the previous page.

- **Log Type** - By selecting the log type, only logs of this type will be shown.
- **Log Level** - By selecting the log level, only logs of this level will be shown.
- **Refresh** - **Refresh** the page to show the latest log list.
- **Save Log** - Click to save all the logs in a txt file.

- [Mail Log](#) - Click to send an email of current logs manually according to the address and validation information set in Mail Settings.
- [Clear Log](#) - All the logs will be deleted from the router permanently, not just from the page.

Click [Next](#) to go to the next page, or click [Previous](#) to return to the previous page.

#### 4. 14. 10. Statistics

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Statistics](#), and you can view the statistics of the router, including total traffic and the value of the last Packet Statistic Interval in seconds.

**Statistics**

**Current Statistics Status:** **Enabled**

**Packets Statistics Interval(5~60):**  Seconds  Auto-refresh

**Sorted Rules:**

IP Address/ MAC Address	Total		Current				Modify
	Packets	Bytes	Packets	Bytes	ICMP Tx	UDP Tx	
The current list is empty.							

entries per page. Current No.  Page

- [Current Statistics Status](#) - Enable or Disable. The default value is disabled. To enable, click the Enable button. If disabled, the function of DoS protection in Security settings will be disabled.
- [Packets Statistics Interval \(5-60\)](#) - The default value is 10. Select a value between 5 and 60 in the drop-down list. The Packets Statistic Interval indicates the time section of the packets statistic.
- [Sorted Rules](#) – Choose how displayed statistics are sorted.
- Select [Auto-refresh](#) to refresh automatically. Click [Refresh](#) to refresh immediately.
- Click [Reset All](#) to reset the values of all the entries to zero.
- Click [Delete All](#) to delete all entries in the table.

#### 1112Statistics Table

IP/MAC Address	The IP and MAC address are displayed with related statistics.
----------------	---

Total	Packets	The total number of packets received and transmitted by the router.
	Bytes	The total number of bytes received and transmitted by the router.
Current	Packets	The total number of packets received and transmitted in the last Packets Statistic interval seconds.
	Bytes	The total number of bytes received and transmitted in the last Packets Statistic interval seconds.
	ICMP Tx	The number of the ICMP packets transmitted to WAN per second at the specified Packets Statistics interval. It is shown like "current transmitting rate / Max transmitting rate".
	UDP Tx	The number of UDP packets transmitted to the WAN per second at the specified Packets Statistics interval. It is shown like "current transmitting rate / Max transmitting rate".
	TCP SYN Tx	The number of TCP SYN packets transmitted to the WAN per second at the specified Packets Statistics interval. It is shown like "current transmitting rate / Max transmitting rate".
Modify	Reset	Reset the value of the entry to zero.
	Delete	Delete the existing entry in the table.





## Chapter 5

---

# Configure the Router in Hotspot Router Mode

---

This chapter presents how to configure the various features of the router working as a Hotspot Router.

This chapter contains the following sections:

- *Status*
- *Network*
- *Wireless*
- *DHCP*
- *USB Settings*
- *Forwarding*
- *Security*
- *Parental Controls*
- *Access Control*
- *Advanced Routing*
- *Bandwidth Control*
- *IP&MAC Binding*
- *Dynamic DNS*
- *System Tools*

## 5.1. Status

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Status](#). You can view the current status information of the router in Hotspot Router Mode.

Status		
<b>Firmware Version:</b>		
<b>Hardware Version:</b>		
<b>LAN</b>		
<b>MAC Address:</b>	00-0A-EB-13-7B-00	
<b>IP Address:</b>	192.168.0.1	
<b>Subnet Mask:</b>	255.255.255.0	
<b>WISP</b>		
<b>Wireless Name of Root AP:</b>		
<b>Connection Status:</b>	Init...	
<b>Wireless 2.4GHz</b>		
<b>Wireless Radio:</b>	Enable	
<b>Name (SSID):</b>	TP-LINK_7B00	
<b>Channel:</b>	6	
<b>Mode:</b>	11b/g/n mixed	
<b>Channel Width:</b>	Automatic	
<b>MAC Address:</b>	00-0A-EB-13-7B-00	
<b>Wireless 5GHz</b>		
<b>Wireless Radio:</b>	Enable	
<b>Name (SSID):</b>	TP-LINK_7B00_5G	
<b>Channel:</b>	Auto (Current channel 44)	
<b>Mode:</b>	11a/n/ac mixed	
<b>Channel Width:</b>	Automatic	
<b>MAC Address:</b>	00-0A-EB-13-7A-FF	
<b>WAN</b>		
<b>MAC Address:</b>	00-0A-EB-13-7B-01	
<b>IP Address:</b>	0.0.0.0	Dynamic IP
<b>Subnet Mask:</b>	0.0.0.0	
<b>Default Gateway:</b>	0.0.0.0	
<b>DNS Server:</b>	0.0.0.0 , 0.0.0.0	
<b>Traffic Statistics</b>		
	<b>Received</b>	<b>Sent</b>
<b>Bytes:</b>	0	0
<b>Packets:</b>	0	0
<b>System Up Time:</b>	0 days 00:16:07	
	<input type="button" value="Refresh"/>	

- **Firmware Version** - The version information of the router's firmware.
- **Hardware Version** - The version information of the router's hardware.
- **LAN** - This field displays the current settings of the LAN, and you can configure them on the [Advanced](#) > [Network](#) > [LAN](#) page.
  - **MAC address** - The physical address of the router.
  - **IP address** - The LAN IP address of the router.
  - **Subnet Mask** - The subnet mask associated with the LAN IP address.
- **WISP** - This field displays the information of the public wireless network.
  - **Wireless Name of Root AP** - The network name (SSID) of the connected public wireless network.
  - **Connection Status** - The current status of the connected public wireless network.
- **Wireless 2.4GHz/5GHz** - This field displays the basic information or status of the wireless function, and you can configure them on the [Advanced](#) > [Wireless 2.4GHz/5GHz](#) > [Wireless Settings](#) page.
  - **Wireless Radio** - Indicates whether the wireless feature is enabled or not.
  - **Name (SSID)** - The SSID of the router.
  - **Channel** - The current wireless channel in use.
  - **Mode** - The current wireless working mode in use.
  - **Channel Width** - The current wireless channel width in use.
  - **MAC Address** - The physical address of the router.
- **WAN** - This field displays the current settings of the WAN, and you can configure them on the [Network](#) > [WAN](#) page.
  - **MAC Address** - The physical address of the WAN port.
  - **IP Address** - The current WAN (Internet) IP Address. This field will be blank or 0.0.0.0 if the IP Address is assigned dynamically and there is no Internet connection.
  - **Subnet Mask** - The subnet mask associated with the WAN IP Address.
  - **Default Gateway** - The Gateway currently used is shown here. When you use Dynamic IP as the Internet connection type, click [Renew](#) or [Release](#) here to obtain new IP parameters dynamically from the ISP or release them.
  - **DNS Server** - The IP addresses of DNS (Domain Name System) server.
- **Traffic Statistics** - The router's traffic statistics.
  - **Received (Bytes)** - Traffic in bytes received from the WAN port.
  - **Received (Packets)** - Traffic in packets received from the WAN port.
  - **Sent (Bytes)** - Traffic in bytes sent out from the WAN port.
  - **Sent (Packets)** - Traffic in packets sent out from the WAN port.

- **System Up Time** - The length of the time since the router was last powered on or reset. Click [Refresh](#) to get the latest status and settings of the router.

## 5.2. Network

### 5.2.1. WAN

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Network](#) > [WAN](#).
3. Configure the IP parameters of the LAN and click [Save](#).

#### Dynamic IP

If your ISP provides the DHCP service, please select [Dynamic IP](#), and the router will automatically get IP parameters from your ISP.

Click [Renew](#) to renew the IP parameters from your ISP. Click [Release](#) to release the IP parameters.

**WAN**

**WAN Connection Type:** Dynamic IP

**IP Address:** 0.0.0.0  
**Subnet Mask:** 0.0.0.0  
**Default Gateway:** 0.0.0.0

**MTU Size (in bytes):** 1500 (The default is 1500, do not change unless necessary.)

Use These DNS Servers

**Primary DNS:** 0.0.0.0  
**Secondary DNS:** 0.0.0.0 (Optional)

**Host Name:** TL-WR902AC

Get IP with Unicast DHCP (It is usually not required.)

- **MTU Size** - The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. It is not recommended that you change the default MTU size unless required by your ISP.

- [Use These DNS Servers](#) - If your ISP provides you one or two DNS addresses, select [Use These DNS Servers](#) and enter the primary and secondary addresses. Otherwise, the DNS servers will be assigned dynamically from your ISP.
- [Host Name](#) - This option specifies the name of the router.
- [Get IP with Unicast DHCP](#) - A few ISPs' DHCP servers do not support the broadcast applications. If you cannot get the IP address normally, you can choose this option (It is rarely required).

## Static IP

If your ISP provides a static or fixed IP address, subnet mask, default gateway and DNS setting, please select [Static IP](#).

The screenshot shows the WAN configuration interface with the following fields and options:

- WAN Connection Type:** A dropdown menu set to "Static IP" and a "Detect" button.
- IP Address:** A text input field containing "0.0.0.0".
- Subnet Mask:** A text input field containing "0.0.0.0".
- Default Gateway:** A text input field containing "0.0.0.0".
- MTU Size (in bytes):** A text input field containing "1500" with a note: "(The default is 1500, do not change unless necessary.)"
- Primary DNS:** A text input field containing "0.0.0.0".
- Secondary DNS:** A text input field containing "0.0.0.0" with a note: "(Optional)".
- Save:** A button at the bottom of the form.

- [IP Address](#) - Enter the IP address in dotted-decimal notation provided by your ISP.
- [Subnet Mask](#) - Enter the subnet mask in dotted-decimal notation provided by your ISP. Normally 255.255.255.0 is used as the subnet mask..
- [Default Gateway](#) - Enter the gateway IP address in dotted-decimal notation provided by your ISP.
- [MTU Size](#) - The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. It is not recommended that you change the default MTU size unless required by your ISP.
- [Primary/Secondary DNS](#) - (Optional) Enter one or two DNS addresses in dotted-decimal notation provided by your ISP.

## PPPoE/Russia PPPoE

If your ISP provides a PPPoE connection, select [PPPoE/Russia PPPoE](#).

**WAN**

**WAN Connection Type:** PPPoE/Russia PPPoE

**PPPoE Connection:**

**User Name:**

**Password:**

**Confirm Password:**

**Secondary Connection:**  Disabled  Dynamic IP  Static IP (For Dual Access/Russia PPPoE)

**Wan Connection Mode:**

Connect on Demand  
Max Idle Time:  minutes (0 means remain active at all times.)

Connect Automatically

Time-based Connecting  
Period of Time: from  :  (HH:MM) to  :  (HH:MM)

Connect Manually  
Max Idle Time:  minutes (0 means remain active at all times.)

**Disconnected!**

- **User Name/Password** - Enter the username and password provided by your ISP. These fields are case-sensitive.
- **Confirm Password** - Enter the Password provided by your ISP again to ensure the password you entered is correct.
- **Secondary Connection** - It's available only for PPPoE connection. If your ISP provides an extra connection type, select **Dynamic IP** or **Static IP** to activate the secondary connection.
- **WAN Connection Mode**
  - **Connect on Demand** - In this mode, the Internet connection can be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the Internet again. If you want to keep your Internet connection active all the time, please enter 0 in the **Max Idle Time** field. Otherwise, enter the number of minutes you want to have elapsed before your Internet access disconnects.
  - **Connect Automatically** - The connection can be re-established automatically when it is down.
  - **Time-based Connecting** - The connection will only be established in the period from the start time to the end time (both are in HH:MM format).
  - **Connect Manually** - You can click **Connect/Disconnect** to connect/disconnect immediately. This mode also supports the **Max Idle Time** function as **Connect on Demand** mode. The Internet connection can be disconnected automatically

after a specified inactivity period (Max Idle Time) and not be able to re-establish when you attempt to access the Internet again.

**Note:**

1. Only when you have configured the system time on the [System Tools > Time Settings](#) page, will the Time-based Connecting function take effect.
2. Sometimes the connection cannot be terminated although you have specified the [Max Idle Time](#) because some applications are visiting the Internet continually in the background.

If you want to do some advanced configurations, please click [Advanced](#).

- **MTU Size** - The default MTU size is 1480 bytes. It is not recommended that you change the default MTU size unless required by your ISP.
- **Service Name/AC Name** - The service name and AC (Access Concentrator) name should not be configured unless you are sure it is necessary for your ISP. In most cases, leaving these fields blank will work.
- **ISP Specified IP Address** - If your ISP does not automatically assign IP addresses to the router, please select [Use IP address specified by ISP](#) and enter the IP address provided by your ISP in dotted-decimal notation.
- **Detect Online Interval** - The router will detect Access Concentrator online at every interval. The default value is 0. You can input the value between 0 and 120. The value 0 means no detect.
- **Primary DNS/Secondary DNS** - If your ISP does not automatically assign DNS addresses to the router, please select [Use the following DNS servers](#) and enter the IP address in dotted-decimal notation of your ISP's primary DNS server. If a secondary DNS server address is available, enter it as well.



## L2TP/Russia L2TP

If your ISP provides L2TP connection, please select [L2TP/Russia L2TP](#).

WAN

---

**WAN Connection Type:** L2TP/Russia L2TP ▼

**User Name:**

**Password:**

**Confirm Password:**

Disconnected!

Dynamic IP     Static IP

**Server IP Address/Name:**

**IP Address:** 0.0.0.0

**Subnet Mask:** 0.0.0.0

**Gateway:** 0.0.0.0

**DNS:** 0.0.0.0 , 0.0.0.0

**Internet IP Address:** 0.0.0.0

**Internet DNS:** 0.0.0.0 , 0.0.0.0

**MTU Size (in bytes):** 1460 (The default is 1460, do not change unless necessary.)

**Max Idle Time:** 15 minutes (0 means remain active at all times.)

**Connection Mode:**
 Connect on Demand  
 Connect Automatically  
 Connect Manually

---

- [User Name/Password](#) - Enter the username and password provided by your ISP. These fields are case-sensitive.
- [Confirm Password](#) - Enter the Password provided by your ISP again to ensure the password you entered is correct.
- [Connect/Disconnect](#) - Click this button to connect or disconnect immediately.
- [Dynamic IP/ Static IP](#) - Select either as required by your ISP. If [Static IP](#) is selected, please enter the IP address, subnet mask, gateway and DNS also provided by your ISP.
- [Internet IP Address/ Internet DNS](#) - The Internet IP address and DNS server address assigned by L2TP server.
- [Connection Mode](#)

- **Connect on Demand** - In this mode, the Internet connection can be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the Internet again. If you want to keep your Internet connection active all the time, please enter 0 in the **Max Idle Time** field. Otherwise, enter the number of minutes you want to have elapsed before your Internet access disconnects.
- **Connect Automatically** - The connection can be re-established automatically when it is down.
- **Connect Manually** - You can click **Connect/Disconnect** to connect/disconnect immediately. This mode also supports the **Max Idle Time** function as **Connect on Demand** mode. The Internet connection can be disconnected automatically after a specified inactivity period (Max Idle Time) and not be able to re-establish when you attempt to access the Internet again.

**Note:**

Sometimes the connection cannot be terminated although you have specified the **Max Idle Time** because some applications are visiting the Internet continually in the background.

### **PPTP/Russia PPTP**

If your ISP provides PPTP connection, please select **PPTP/Russia PPTP**.

**WAN**

**WAN Connection Type:** PPTP/Russia PPTP

**User Name:**

**Password:**

**Confirm Password:**

**Disconnected!**

Dynamic IP  Static IP

**Server IP Address/Name:**

**IP Address:** 0.0.0.0

**Subnet Mask:** 0.0.0.0

**Gateway:** 0.0.0.0

**DNS:** 0.0.0.0 , 0.0.0.0

**Internet IP Address:** 0.0.0.0

**Internet DNS:** 0.0.0.0 , 0.0.0.0

**MTU Size (in bytes):**  (The default is 1420, do not change unless necessary.)

**Max Idle Time:**  minutes (0 means remain active at all times.)

**Connection Mode:**

Connect on Demand

Connect Automatically

Connect Manually

- **User Name/Password** - Enter the username and password provided by your ISP. These fields are case-sensitive.
- **Confirm Password** - Enter the Password provided by your ISP again to ensure the password you entered is correct.
- **Connect/Disconnect** - Click this button to connect or disconnect immediately.
- **Dynamic IP/ Static IP** - Select either as required by your ISP. If **Static IP** is selected, please enter the IP address, subnet mask, gateway and DNS also provided by your ISP.
- **Internet IP Address/ Internet DNS** - The Internet IP address and DNS server address assigned by L2TP server.
- **Connection Mode**
  - **Connect on Demand** - In this mode, the Internet connection can be terminated automatically after a specified inactivity period (Max Idle Time) and be re-established when you attempt to access the Internet again. If you want to keep your Internet connection active all the time, please enter 0 in the **Max Idle Time**

field. Otherwise, enter the number of minutes you want to have elapsed before your Internet access disconnects.

- **Connect Automatically** - The connection can be re-established automatically when it is down.
- **Connect Manually** - You can click **Connect/Disconnect** to connect/disconnect immediately. This mode also supports the **Max Idle Time** function as **Connect on Demand** mode. The Internet connection can be disconnected automatically after a specified inactivity period (Max Idle Time) and not be able to re-establish when you attempt to access the Internet again.

**Note:**

Sometimes the connection cannot be terminated although you have specified the **Max Idle Time** because some applications are visiting the Internet continually in the background.

## 5.2.2. MAC Clone

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > Network > MAC Clone**.
3. Configure the WAN MAC address and click **Save**.

- **WAN MAC Address** - This field displays the current MAC address of the WAN port. If your ISP requires you to register the MAC address, please enter the correct MAC address in this field. Click **Restore Factory MAC** to restore the MAC address of WAN port to the factory default value.
- **Your PC's MAC Address** - This field displays the MAC address of the PC that is managing the router. If the MAC address is required, you can click **Clone MAC Address** and this MAC address will be filled in the **WAN MAC Address** field.

**Note:**

1. You can only use the MAC Address Clone function for PCs on the LAN.
2. If you have changed the WAN MAC address when the WAN connection is PPPoE, it will not take effect until the connection is re-established.

### 5.2.3. LAN

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Network](#) > [LAN](#).
3. Configure the IP parameters of the LAN and click [Save](#).

**LAN**

MAC Address: 00-0A-EB-13-7B-00

IP Address: 192.168.0.1

Subnet Mask: 255.255.255.0

IGMP Proxy: Enable

Note:IGMP(Internet Group Management Protocol) works for IPTV multicast stream.The device supports both IGMP proxy with enabled/disabled option and IGMP snooping.

Save

- **MAC Address** - The physical address of the LAN ports. The value can not be changed.
- **IP Address** - Enter the IP address in dotted-decimal notation of your router (factory default - 192.168.0.1).
- **Subnet Mask** - An address code that determines the size of the network. Normally 255.255.255.0 is used as the subnet mask.
- **IGMP Proxy** - The Internet Group Management Protocol (IGMP) feature allow you to watch TV on IPTV-supported devices on the LAN .

■ **Note:**

1. If you have changed the IP address, you must use the new IP address to login.
2. If the new IP address you set is not in the same subnet as the old one, the IP Address pool in the DHCP Server will be configured automatically, but the Virtual Server and DMZ Host will not take effect until they are re-configured.

## 5.3. Wireless

In this section, we will take the settings for the 2.4GHz wireless network for example.

### 5.3.1. Wireless Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Wireless 2.4GHz](#) > [Wireless Settings](#).
3. Configure the basic settings for the wireless network and click [Save](#).

Wireless Settings

---

### Connect to Root AP

Root AP Connection: Enabled Disable

SSID:

BSSID:  Example:00-1D-0F-11-22-33

Survey

Key type: None ▼

WEP Index: 1 ▼

Auth type: open ▼

Password:

---

### Local Wireless AP

Local SSID:

Enable SSID Broadcast

Disable Local Wireless Access

---

Save

- [Connect to Root AP](#) - The settings of the public Wi-Fi your router is going to connect to.
  - [Root AP Connection](#) - Displays the status of the root AP connection. Click [Enable/Disable](#) to enable/disable the root AP connection.
  - [SSID](#) - The SSID of the public Wi-Fi your router is going to connect to as a client.
  - [BSSID](#) - The MAC address of the public Wi-Fi your router is going to connect to as a client.
  - [Survey](#) - Click this button to search the public Wi-Fi.
  - [Key type](#) - Select the key type according to the public Wi-Fi's security configuration. It is recommended that the key type is the same as the public Wi-Fi's security type.
  - [WEP Index](#) - Select which of the four keys will be used if the key type is WEP (ASCII) or WEP (HEX).
  - [Auth Type](#) - Select the authorization type if the key type is WEP (ASCII) or WEP (HEX).
  - [Password](#) - Enter the public Wi-Fi's password if required.
- [Local Wireless AP](#) - The wireless settings of your router.

- **Local SSID** - Enter a string of up to 32 characters. It is strongly recommended that you change your network name (SSID). This value is case-sensitive. For example, TEST is NOT the same as test.
- **Enable SSID Broadcast** - If enabled, the router will broadcast the wireless network name (SSID).
- **Disable Local Wireless Access** - If you select this option, the wireless clients will not be able to connect to the router.

### 5.3.2. WPS

WPS (Wi-Fi Protected Setup) can help you to quickly and securely connect to a network. This section will guide you to add a new wireless device to your router's network quickly via WPS.

**Note:**

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

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced** > **Wireless 2.4GHz** > **WPS**.
3. Follow one of the following three methods to connect your client device to the router's Wi-Fi network.

#### Method ONE: Press the WPS Button on Your Client Device

1. Keep the WPS Status as **Enabled** and click **Add Device**.

**WPS (Wi-Fi Protected Setup)**

**WPS Status:** **Enabled**

**Current PIN:** **12345670**    
 Disable PIN of this device

**Add a new device:**

2. Select **Press the button of the new device in two minutes** and click **Connect**.

**Add A New Device**

Enter the new device's PIN.  
PIN:

Press the button of the new device in two minutes.

3. Within two minutes, press the WPS button on your client device.
4. A success message will appear on the WPS page if the client device has been successfully added to the router's network.

### Method TWO: Enter the Client's PIN

1. Keep the WPS Status as **Enabled** and click **Add Device**.

**WPS (Wi-Fi Protected Setup)**

**WPS Status:** **Enabled**

**Current PIN:** **12345670**

Disable PIN of this device

**Add a new device:**

2. Select **Enter the new device's PIN**, enter your client device's current PIN in the **PIN** field and click **Connect**.

**Add A New Device**

Enter the new device's PIN.  
PIN:

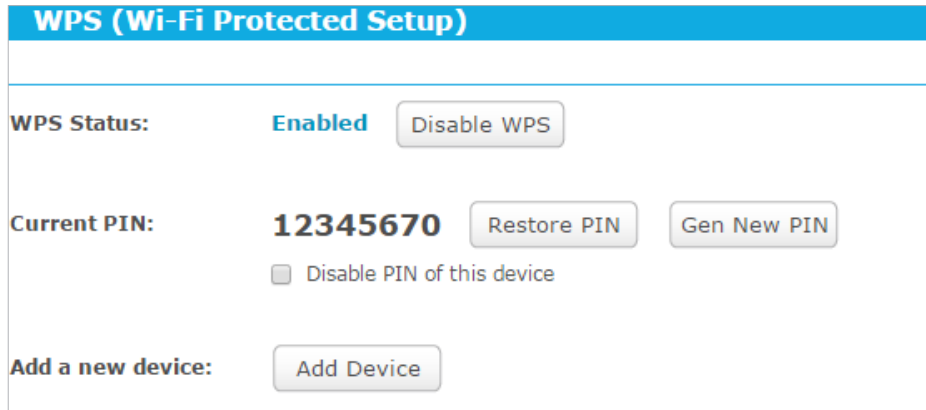
Press the button of the new device in two minutes.

3. A success message will appear on the WPS page if the client device has been successfully added to the router's network.



## Method Three: Enter the Router's PIN

1. Keep the WPS Status as **Enabled** and get the **Current PIN** of the router.



**WPS (Wi-Fi Protected Setup)**

**WPS Status:** **Enabled**

**Current PIN:** **12345670**

Disable PIN of this device

**Add a new device:**

2. Enter the router's current PIN on your client device to join the router's Wi-Fi network.

### 5.3.3. Wireless Security

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > Wireless 2.4GHz > Wireless Security**.
3. Configure the security settings of your wireless network and click **Save**.

Wireless Security

---

**Disable Security**

**WPA/WPA2 - Personal(Recommended)**

**Version:**

**Encryption:**

**Wireless Password:**   
(You can enter ASCII characters between 8 and 63 or Hexadecimal characters between 8 and 64.)

**Group Key Update Period:**  Seconds  
(Keep it default if you are not sure, minimum is 30, 0 means no update)

**WPA/WPA2 - Enterprise**

**Version:**

**Encryption:**

**Radius Server IP:**

**Radius Port:**  (1-65535, 0 stands for default port 1812)

**Radius Password:**

**Group Key Update Period:**  (in second, minimum is 30, 0 means no update)

**WEP**

**Type:**

**WEP Key Format:**

Key Selected	WEP Key	Key Type
Key 1: <input checked="" type="radio"/>	<input type="text"/>	<input type="text" value="Disabled"/>
Key 2: <input type="radio"/>	<input type="text"/>	<input type="text" value="Disabled"/>
Key 3: <input type="radio"/>	<input type="text"/>	<input type="text" value="Disabled"/>
Key 4: <input type="radio"/>	<input type="text"/>	<input type="text" value="Disabled"/>

- **Disable Security** - The wireless security function can be enabled or disabled. If disabled, wireless clients can connect to the router without a password. It's strongly recommended to choose one of the following modes to enable security.
- **WPA-PSK/WPA2-Personal** - It's the WPA/WPA2 authentication type based on pre-shared passphrase.
  - **Version** - Select **Automatic**, **WPA-PSK** or **WPA2-PSK**.
  - **Encryption** - Select **Automatic**, **TKIP** or **AES**.
  - **Wireless Password** - Enter ASCII or Hexadecimal characters. For Hexadecimal, the length should be between 8 and 64 characters; for ASCII, the length should be between 8 and 63 characters.
  - **Group Key Update Period** - Specify the group key update interval in seconds. The value can be 0 or at least 30. Enter 0 to disable the update.
- **WPA /WPA2-Enterprise** - It's based on Radius Server.
  - **Version** - Select **Automatic**, **WPA** or **WPA2**.

- **Encryption** - Select **Automatic**, **TKIP** or **AES**.
- **Radius Server IP** - Enter the IP address of the Radius server.
- **Radius Port** - Enter the port that Radius server used.
- **Radius Password** - Enter the password for the Radius server.
- **Group Key Update Period** - Specify the group key update interval in seconds. The value should be 30 or above. Enter 0 to disable the update.
- **WEP** - It is based on the IEEE 802.11 standard.
  - **Type** - The default setting is **Automatic**, which can select Shared Key or Open System authentication type automatically based on the wireless client's capability and request.
  - **WEP Key Format** - Hexadecimal and ASCII formats are provided here. Hexadecimal format stands for any combination of hexadecimal digits (0-9, a-f, A-F) in the specified length. ASCII format stands for any combination of keyboard characters in the specified length.
  - **WEP Key (Password)** - Select which of the four keys will be used and enter the matching WEP key. Make sure these values are identical on all wireless clients in your network.
  - **Key Type** - Select the WEP key length (64-bit, 128-bit or 152-bit) for encryption. **Disabled** means this WEP key entry is invalid.
  - **64-bit** - Enter 10 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 5 ASCII characters.
  - **128-bit** - Enter 26 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 13 ASCII characters.
  - **152-bit** - Enter 32 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 16 ASCII characters.

#### 5.3.4. Wireless MAC Filtering

Wireless MAC Filtering is used to deny or allow specific wireless client devices to access your network by their MAC addresses.

##### **I want to:**

Deny or allow specific wireless client devices to access my network by their MAC addresses.

**For example**, you want the wireless client A with the MAC address 00-0A-EB-B0-00-0B and the wireless client B with the MAC address 00-0A-EB-00-07-5F to access the router, but other wireless clients cannot access the router

##### **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](#) > [Wireless 2.4GHz](#) > [Wireless MAC Filtering](#).
3. Click [Enable](#) to enable the Wireless MAC Filtering function.
4. Select [Allow the stations specified by any enabled entries in the list to access](#) as the filtering rule.
5. Delete all or disable all entries if there are any entries already.
6. Click [Add New](#) and fill in the blanks.

Add or Modify Wireless MAC Address Filtering entry

---

**MAC Address:**

**Description:**

**Status:** Enabled ▼

---

Save
Back

- 1) Enter the MAC address 00-0A-EB-B0-00-0B/00-0A-EB-00-07-5F in the MAC Address field.
  - 2) Enter wireless client A/B in the Description field.
  - 3) Leave the status as [Enabled](#).
  - 4) Click [Save](#) and click [Back](#).
7. The configured filtering rules should be listed as the picture shows below.

**Filtering Rules**

Deny the stations specified by any enabled entries in the list to access.

Allow the stations specified by any enabled entries in the list to access.

ID	MAC Address	Status	Description	Modify
1	00-0A-EB-B0-00-0B	Enabled	wireless client A	<a href="#">Modify</a> <a href="#">Delete</a>
2	00-0A-EB-B0-07-5F	Enabled	wireless client B	<a href="#">Modify</a> <a href="#">Delete</a>

**Done!**

Now only client A and client B can access your network.

### 5.3.5. Wireless Advanced

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Wireless 2.4GHz](#) > [Wireless Advanced](#).
3. Configure the advanced settings of your wireless network and click [Save](#).

**Note:**

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

Wireless Advanced	
Transmit Power:	High <input type="button" value="v"/>
Beacon Interval :	<input type="text" value="100"/> (40-1000)
RTS Threshold:	<input type="text" value="2346"/> (1-2346)
Fragmentation Threshold:	<input type="text" value="2346"/> (256-2346)
DTIM Interval:	<input type="text" value="1"/> (1-255)
	<input checked="" type="checkbox"/> Enable WMM

- **Transmit Power** - Select **High**, **Middle** or **Low** which you would like to specify for the router. **High** is the default setting and recommended.
- **Beacon Interval** - Enter a value between 40-1000 milliseconds for Beacon Interval here. Beacon Interval value determines the time interval of the beacons. The beacons are the packets sent by the router to synchronize a wireless network. The default value is 100.
- **RTS Threshold** - Here you can specify the RTS (Request to Send) Threshold. If the packet is larger than the specified RTS Threshold size, the Router will send RTS frames to a particular receiving station and negotiate the sending of a data frame. The default value is 2346.
- **Fragmentation Threshold** - This value is the maximum size determining whether packets will be fragmented. Setting a low value for the Fragmentation Threshold may result in poor network performance because of excessive packets. 2346 is the default setting and is recommended.
- **DTIM Interval** - This value determines the interval of the Delivery Traffic Indication Message (DTIM). A DTIM field is a countdown field informing clients of the next window for listening to broadcast and multicast messages. When the Router has buffered broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. You can specify the value between 1-255 Beacon Intervals. The default value is 1, which indicates the DTIM Interval is the same as Beacon Interval.
- **Enable WMM** - WMM function can guarantee the packets with high-priority messages being transmitted preferentially. It is strongly recommended to enable this function.
- **Enable Short GI** - It is recommended to enable this function, for it will increase the data capacity by reducing the guard interval time.
- **Enable AP Isolation** - This function isolates all connected wireless stations so that wireless stations cannot access each other through WLAN. This function will be disabled if WDS/Bridge is enabled.

### 5.3.6. Wireless Statistics

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Wireless 2.4GHz](#) > [Wireless Statistics](#) to check the data packets sent and received by each client device connected to the router.

ID	MAC Address	Current Status	Received Packets	Sent Packets	Configure
1	14-CF-92-13-6D-78	WPA2-PSK	44639	46216	Deny

- **MAC Address** - The MAC address of the connected wireless client.
- **Current Status** - The running status of the connected wireless client.
- **Received Packets** - Packets received by the wireless client.
- **Sent Packets** - Packets sent by the wireless client.
- **Configure** - The button is used for loading the item to the Wireless MAC Filtering list.
  - **Allow** - If the Wireless MAC Filtering function is enabled, click this button to allow the client to access your network.
  - **Deny** - If the Wireless MAC Filtering function is enabled, click this button to deny the client to access your network.

## 5.4. DHCP

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

### 5.4.1. DHCP Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [DHCP](#) > [DHCP Settings](#).
3. Specify DHCP server settings and click [Save](#).

DHCP Settings

---

**DHCP Server:**       Disable     Enable

**Start IP Address:**   

**End IP Address:**     

**Address Lease Time:**  minutes (1~2880 minutes, the default value is 1)

**Default Gateway:**   

**Default Domain:**       (Optional)

**Primary DNS:**          (Optional)

**Secondary DNS:**       (Optional)

---

- **DHCP Server** - Enable or disable the DHCP server. If disabled, you must have another DHCP server within your network or else you must configure the computer manually.
- **Start IP Address** - Specify an IP address for the DHCP Server to start with when assigning IP addresses. 192.168.0.100 is the default start address.
- **End IP Address** - Specify an IP address for the DHCP Server to end with when assigning IP addresses. 192.168.0.199 is the default end address.
- **Address Lease Time** - The Address Lease Time is the amount of time a network user will be allowed to connect to the Router with the current dynamic IP Address. When time is up, the current dynamic IP will be automatically renewed. The range of the time is 1 ~ 2880 minutes. The default value is 120.
- **Default Gateway (Optional)** - It is suggested to input the IP address of the LAN port of the Router. The default value is 192.168.0.1.
- **Default Domain (Optional)** - Input the domain name of your network.
- **Primary DNS (Optional)** - Input the DNS IP address provided by your ISP.
- **Secondary DNS (Optional)** - Input the IP address of another DNS server if your ISP provides two DNS servers.

**Note:**

To use the DHCP server function of the Router, you must configure all computers on the LAN as [Obtain an IP Address automatically](#).

## 5.4.2. DHCP Client List

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > DHCP > DHCP Client List** to view the information of the clients connected to the router.

DHCP Client List				
ID	Client Name	MAC Address	Assigned IP	Lease Time
1		14-CF-92-13-6D-78	192.168.0.101	01:57:29
2		B4-0B-44-1A-C7-58	192.168.0.100	00:45:14

- **Client Name** - The name of the DHCP client.
- **MAC Address** - The MAC address of the DHCP client.
- **Assigned IP** - The IP address that the router has allocated to the DHCP client.
- **Lease Time** - The time of the DHCP client leased. After the dynamic IP address has expired, the dynamic IP address will be automatically renewed.

You cannot change any of the values on this page. To update this page and show the current attached devices, click [Refresh](#).

### 5.4.3. Address Reservation

You can reserve an IP address for a specific client. When you specify a reserved IP address for a PC on the LAN, this PC will always receive the same IP address each time when it accesses the DHCP server.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [DHCP](#) > [Address Reservation](#).
3. Click [Add New](#) and fill in the blanks.

Add or Modify an Address Reservation Entry	
<b>MAC Address:</b>	<input type="text"/>
<b>Reserved IP Address:</b>	<input type="text"/>
<b>Status:</b>	Enabled <input type="button" value="v"/>
<input type="button" value="Save"/> <input type="button" value="Back"/>	

- 1) Enter the MAC address (in XX-XX-XX-XX-XX-XX format.) of the client for which you want to reserve an IP address.
- 2) Enter the IP address (in dotted-decimal notation) which you want to reserve for the client.
- 3) Leave the status as [Enabled](#).



4) Click **Save**.

## 5.5. USB Settings

You can insert a USB drive to share files among users on the LAN, access the USB drive remotely on the Internet and enjoy videos and photos stored in the USB drive.

### 5.5.1. Storage Sharing

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

#### ➤ To 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.

#### 🔗 Tips:

- If you use USB hubs, make sure no more than 2 devices are connected to the router.
- If the USB storage device requires using bundled external power, make sure the external power has been connected.
- If you use a USB hard drive, make sure its file system is FAT32 or NTFS.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Go to [Advanced](#) > [USB Settings](#) > [Storage Sharing](#) and click [Eject Disk](#).

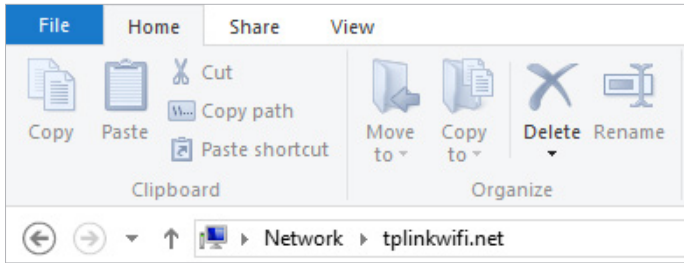
##### 2. Access Your USB Disk

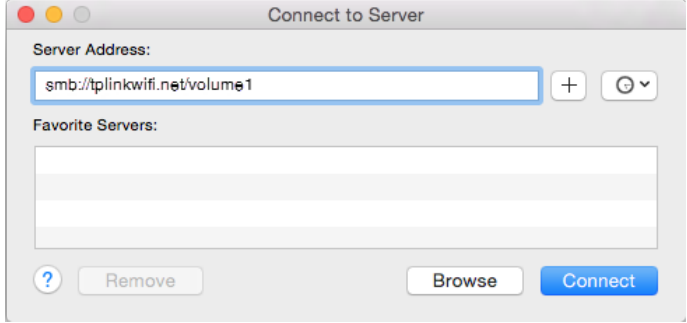
By default, all the network clients can access your USB disk. Refer to the following table for access instructions. You can customize user accounts by referring to [User Accounts](#).

Windows  
computer

Open the [Windows Explorer](#) (or go to [Computer](#)), type the server address `\\tplinkwifi.net` in the address bar, enter a username and password if required and then press [[Enter](#)].

■ Note:  
Here we take Windows 8 as an example.



Mac	<ol style="list-style-type: none"> <li>1) Click <a href="#">Go</a> in the top left corner of the desktop and go to <a href="#">Connect to Server</a></li> <li>2) Type the server address <a href="#">smb://tplinkwifi.net/volume1</a>.  <span style="font-size: small;">▶ Note: Here we take <a href="#">volume1</a> for example.</span></li> <li>3) Click <a href="#">Connect</a>.</li> </ol>
	
Tablet	<ol style="list-style-type: none"> <li>4) When prompted, select the <a href="#">Guest</a> radio box (If you have set up a username and password to deny anonymous access to the USB disk, you should select the <a href="#">Registered User</a> radio box. To learn how to set up an account for the access, refer to <a href="#">User Accounts</a>).</li> </ol>
	Use a third-party app for network files management.

➤ **To Customize Your Settings:**

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [USB Settings](#) > [Storage Sharing](#).

Storage Sharing					
<b>Service Status:</b> <span style="color: #0070c0; font-weight: bold;">Started</span> <span style="margin-left: 20px;">Stop</span>					
<input checked="" type="checkbox"/> Access shared storage with password					
Volume	Capacity	Used	Free	Use%	Shared
volume1	7.5 GB	5.8 GB	1.7 GB	78%	Disable
Eject Disk		Rescan			

- [Server Status](#) - Indicates the current status of the Storage Sharing server.
- [Access shared storage with password](#) - Check this box to ask users to provide the username and password to access the USB drive.

- **Volume** - The volume name of the USB drive users have access to.
- **Capacity** - The storage capacity of the USB drive.
- **Used** - The used capacity of the USB drive.
- **Free** - The available capacity of the USB drive.
- **Use%** - The percentage of the used capacity.
- **Shared** - Indicates the shared or non-shared status of a specific volume.

Click **Eject Disk** to safely remove the USB drive that is connected to the router.

Click **Rescan** to start a new scan.

### 5.5.2. FTP Server

You can share specific folders on you USB drive on the LAN or access your USB drive outside the local area network.

For example:

- Only share specific folders with clients on the LAN.
- 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 material for a presentation.

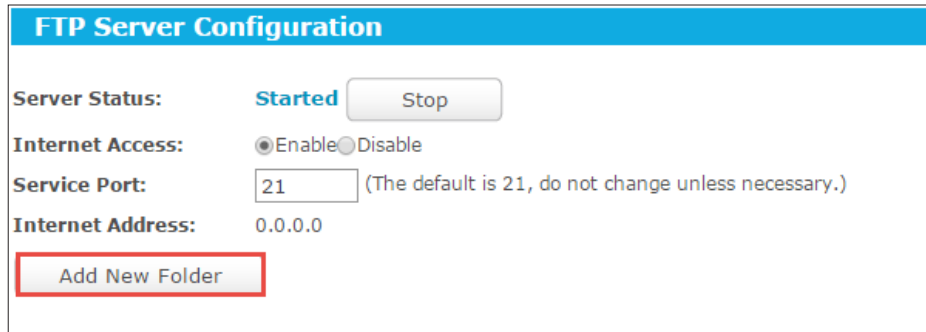
#### ➤ To set up your FTP server:

FTP Server Configuration	
Server Status:	Started <input type="button" value="Stop"/>
Internet Access:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Service Port:	<input type="text" value="21"/> (The default is 21, do not change unless necessary.)
Internet Address:	<input type="text" value="0.0.0.0"/>

1. 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.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
3. Go to **Advanced > USB Settings > FTP Server**.
4. Click **Start** to enable the FTP Server.
5. Click **Enable** to enable the Internet access to the FTP server.
6. Specify a port number for the **Service Port**. The default value is 21.
7. Click **Save**.

To specify a folder to be accessed via the FTP server:

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [USB Settings](#) > [FTP Server](#).
3. Click [Add New Folder](#).



**FTP Server Configuration**

**Server Status:** Started Stop

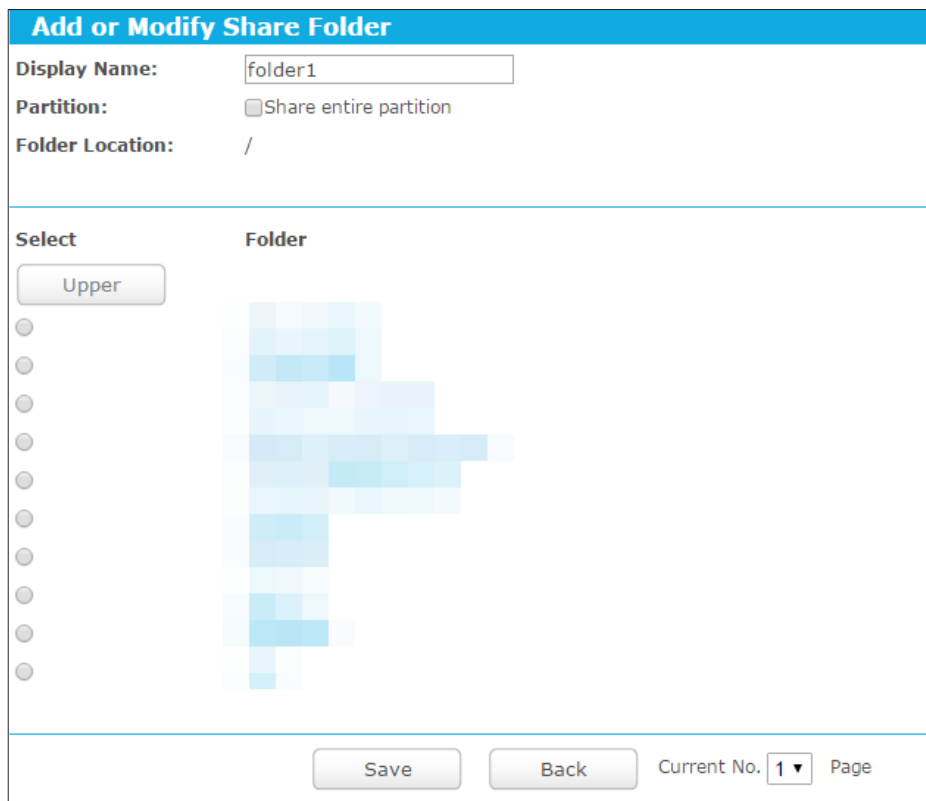
**Internet Access:**  Enable  Disable

**Service Port:**  (The default is 21, do not change unless necessary.)

**Internet Address:** 0.0.0.0

Add New Folder

4. Specify a name for the folder to be shared in the [Display Name](#) field. And select the folder you want to share or select [Share entire partition](#) to share all folders.



**Add or Modify Share Folder**

**Display Name:**


**Partition:**  Share entire partition

**Folder Location:** /

Select	Folder
<span>Upper</span>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	

Save Back Current No. 1 Page

5. Click [Save](#).
6. You can check which folder is shared and also edit or delete the folder.

Name	Partition	Folder	Modify
folder1	volume1		<a href="#">Edit</a> <a href="#">Delete</a>

➤ **To access the USB disk locally:**

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.

 **Tips:**

- If you use USB hubs, make sure no more than 2 devices are connected to the router.
- If the USB storage device requires using bundled external power, make sure the external power has been connected.
- If you use a USB hard drive, make sure its file system is FAT32 or NTFS.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Go to [Advanced](#) > [USB Settings](#) > [Storage Sharing](#) and click [Eject Disk](#).

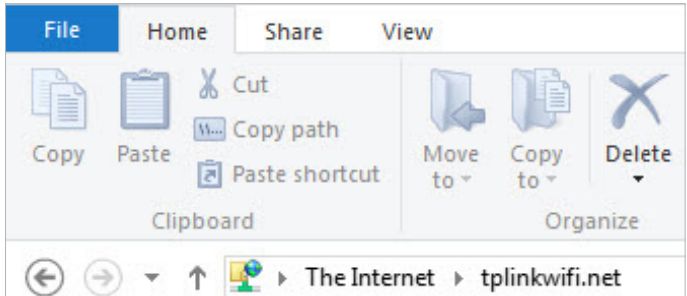
2. Access Your USB Disk Locally

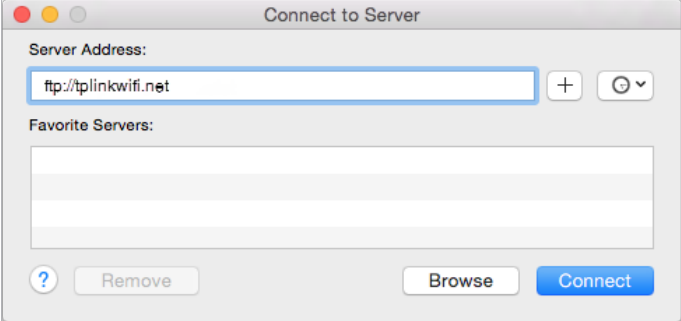
Refer to the following table for access instructions. You can customize user accounts by referring to [User Accounts](#).

Windows computer

Open the [Windows Explorer](#) (or go to [Computer](#)), type the server address <ftp://tplinkwifi.net> in the address bar, enter a username and password and then press [\[Enter\]](#).

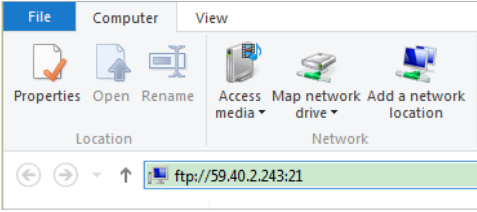
**Note:**  
Here we take Windows 8 as an example.



<b>Mac</b>	<ol style="list-style-type: none"><li>1) Click <a href="#">Go</a> in the top left corner of the desktop and go to <a href="#">Connect to Server</a>.</li><li>2) Type the server address <a href="#">ftp://tplinkwifi.net</a>.</li><li>3) Click <a href="#">Connect</a>.</li></ol>  <ol style="list-style-type: none"><li>4) When prompted, select the <a href="#">Registered User</a> radio box and enter a username and password (To learn how to set up an account for the access, refer to <a href="#">User Accounts</a>).</li></ol>
<b>Tablet</b>	Use a third-party app for network files management.

➤ **To access the USB disk remotely:**

Refer to the following table for access instructions. You can customize user accounts by referring to [User Accounts](#).

Computer	<ol style="list-style-type: none"> <li>1) Open the <a href="#">Windows Explorer</a> (or go to <a href="#">Computer</a>, only for Windows users) or open a web browser.</li> <li>2) Type the server address in the address bar: Type in <a href="#">ftp://&lt;WAN IP address of the router&gt;:&lt;port number&gt;</a> (such as <a href="#">ftp://59.40.2.243:21</a>). If you have specified a domain name for the router, you can also type in <a href="#">ftp://&lt;domain name&gt;:&lt;port number&gt;</a> (such as <a href="#">ftp://MyDomainName:21</a>)</li> </ol> <div style="text-align: center;">  <p>The Windows Explorer (Windows 8)</p> </div> <ol style="list-style-type: none"> <li>3) Press <a href="#">[Enter]</a>.</li> <li>4) Access with the username and password by referring to <a href="#">User Accounts</a>.</li> </ol> <p><b>Tips:</b> You can also access the USB disk via a third-party app for network files management, which can resume broken file transfers.</p>
Tablet	<p>Use a third-party app for network files management.</p>

### 5.5.3. Media Server

The Media Server feature allows to view photos, play music and watch movies on the USB drive directly with DLNA-supported devices, such as on your computer, pad and PS2/3/4.

➤ **To share specific folders:**

1. 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.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
3. Go to [Advanced](#) > [USB Settings](#) > [Media Server](#).
4. Click [Start](#) to enable the Media Server.

Media Server Setting

**Server Name:**            **TP-LINK\_7B00**  
**Server Status:**        **Started**

5. Click [Add New Folder](#). Specify a name for the folder to be shared in the [Display Name](#) field. And select the folder you want to share or select [Share entire partition](#) to share all folders.

Add New Folder

**Display Name:**              
**Partition:**                 Share entire partition  
**Folder Location:**        /

---

Select	Folder
<input type="button" value="Upper"/>	<div style="background-color: #cce5ff; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #cce5ff; width: 150px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #cce5ff; width: 200px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #cce5ff; width: 180px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #cce5ff; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #cce5ff; width: 120px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #cce5ff; width: 80px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #cce5ff; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: #cce5ff; width: 120px; height: 20px; margin-bottom: 5px;"></div>

---

       Current No. 1 page

6. Click [Save](#).
7. You can check which folder is shared and also edit or delete the folder.

Name	File System	Folder	Delete
folder1	NTFS	<input type="checkbox"/>	<a href="#">Delete</a>

➤ **To 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.

**Tips:**

- If you use USB hubs, make sure no more than 2 devices are connected to the router.
- If the USB storage device requires using bundled external power, make sure the external power has been connected.
- If you use a USB hard drive, make sure its file system is FAT32 or NTFS.
- Before you physically disconnect a USB device from the router, safely remove it to avoid data damage: Go to [Advanced](#) > [USB Settings](#) > [Storage Sharing](#) and click [Eject Disk](#).

## 2. Access the Media Files on Your USB Disk

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

<b>Windows computer</b>	<ul style="list-style-type: none"> <li>• Go to <a href="#">Computer</a> &gt; <a href="#">Network</a>, and click the Media Server Name in the <a href="#">Media Devices</a> section.</li> </ul> <p><b>Note:</b> Here we take Windows 8 as an example.</p>  <p>The screenshot shows the Windows 8 Network view. On the left, there are navigation options like Favorites, Homegroup, and This PC. On the right, under 'Media Devices (1)', a device named 'TP-LINK_7800:1' is highlighted with a yellow box. Below it, under 'Network Infrastructure (1)', a device named 'AC750 Wireless Travel Router' is visible.</p>
<b>Tablet</b>	<ul style="list-style-type: none"> <li>• Use a third-party DLNA-supported player.</li> </ul>

### 5.5.4. User Accounts

You can specify the username and password for Storage Sharing and FTP Server access. The default user account is [admin](#). It has read and write access to Storage Sharing and can access FTP Server.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [USB Settings](#) > [User Accounts](#).
3. Click [Add New User](#).
4. Specify a new username and password in the [User Name](#) and [Password](#) fields, and reenter the password for confirmation.

Add or Modify User Account

---

**User Name:**

**Password:**

**Confirm Password:**

**Storage Authority:**

**FTP Access:**

---

5. Select [Read Only](#) or [Read and Write](#) for Storage Authority.
6. Select [No](#), [Read Only](#) or [Read and Write](#) for FTP Access.
7. Click [Save](#).
8. You can check the newly added account and also edit or delete the account.

User Name	Password	Storage Authority	FTP Access	Modify
admin	admin	Read and Write	Read and Write	<a href="#">Edit</a>
admin1	admin	Read Only	Read and Write	<a href="#">Edit</a> <a href="#">Delete</a>

## 5.6. Forwarding

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

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

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

### 5.6.1. Virtual Servers

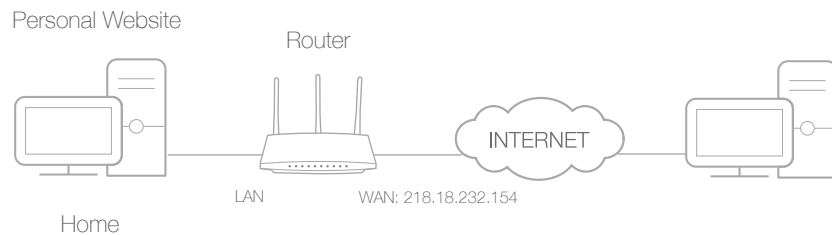
When you build up a server on the local network and want to share it on the Internet, Virtual Servers can realize the service and provide it to Internet users. At the same time Virtual Servers can keep the local network safe as other services are still invisible from the Internet.

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

**I want to:**

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

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



1. Set your PC to a static IP address, 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](#) > [Forwarding](#) > [Virtual Servers](#).
4. Click [Add New](#). Select [HTTP](#) from the [Common Service Port](#) list. The [Service Port](#), [Internal Port](#) and [Protocol](#) will be automatically filled in. Enter the PC's IP address 192.168.0.100 in the [IP Address](#) field.

Add or Modify a Virtual Server Entry

Service Port:	<input type="text" value="80"/>	<small>(XX-XX or XX)</small>
Internal Port:	<input type="text" value="80"/>	<small>(XX, Enter a specific port number or leave it blank)</small>
IP Address:	<input type="text" value="192.168.0.100"/>	
Protocol:	<input type="text" value="All"/>	
Status:	<input type="text" value="Enabled"/>	
Common Service Port:	<input type="text" value="HTTP"/>	

5. Leave the status as [Enabled](#) and click [Save](#).

**Note:**

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

- If the service you want to use is not in the [Common Service Port](#) list, you can enter the corresponding parameters manually. You should verify the port number that the service needs.
- You can add multiple virtual server rules if you want to provide several services in a router. Please note that the [Service Port](#) should not be overlapped.

## Done!

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

### Note:

If you have changed the default [Service Port](#), you should use <http://WAN IP: Service Port> to visit the website.

## 5.6.2. Port Triggering

Port triggering can specify a triggering port and its corresponding external ports. When a host on the local network initiates a connection to the triggering port, all the external ports will be opened for subsequent connections. The router can record the IP address of the host. When the data from the Internet return to the external ports, the router can forward them to the corresponding host. Port triggering is mainly applied to online games, VoIPs, video players and common applications include MSN Gaming Zone, Dialpad and QuickTime 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](#) > [Forwarding](#) > [Port Triggering](#).
3. Click [Add New](#). Select the desired application from the [Common Applications](#) list. The trigger port and incoming ports will be automatically filled in. The following picture takes application [MSN Gaming Zone](#) as an example.

Add or Modify a Port Triggering Entry	
Trigger Port:	<input type="text" value="47624"/>
Trigger Protocol:	<input type="text" value="All"/>
Incoming Ports:	<input type="text" value="2300-2400,28800-29000"/>
Incoming Protocol:	<input type="text" value="All"/>
Status:	<input type="text" value="Enabled"/>
Common Applications:	<input type="text" value="MSN Gaming Zone"/>
<input type="button" value="Save"/> <input type="button" value="Back"/>	

4. Leave the status as [Enabled](#) and click [Save](#).

**Note:**

- You can add multiple port triggering rules according to your network need.
- The triggering ports can not be overlapped.
- If the application you need is not listed in the [Common Applications](#) list, please enter the parameters manually. You should verify the incoming ports the application uses first and enter them in [Incoming Ports](#) field. You can input at most 5 groups of ports (or port sections). Every group of ports must be set apart with “,”. For example, 2000-2038, 2050-2051, 2085, 3010-3030.

### 5.6.3. DMZ

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

**Note:**

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 hazards. If DMZ is not in use, please disable it in time.

**I want to:**

Make the home PC join the Internet online game without port restriction.

**For example**, due to some port restriction, when playing the online games, you can login normally but cannot join a team with other players. To solve this problem, set your PC as a DMZ host with all ports open.

**How can I do that?**

1. Assign a static IP address to your PC, for example 192.168.0.100.
2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
3. Go to [Advanced](#) > [Forwarding](#) > [DMZ](#).
4. Select [Enable](#) and enter the IP address 192.168.0.100 in the [DMZ Host IP Address](#) field.

5. Click [Save](#).

**Done!** You've set your PC to a DMZ host and now you can make a team to game with other players.

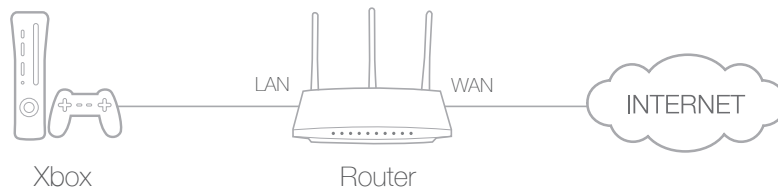
#### 5.6.4. UPnP

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

☛ **Tips:**

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

**For example,** when you connect your Xbox to the router which is 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.



UPnP is enabled by default in this router. 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 > Forwarding > UPnP**.
3. Click **Disable** or **Enable** according to your needs.

### UPnP

---

Current UPnP Status: **Enabled**

---

Current UPnP Settings List

ID	App Description	External Port	Protocol	Internal Port	IP Address	Status
----	-----------------	---------------	----------	---------------	------------	--------

---

## 5.7. Security

This function allows you to protect your home network from cyber attacks and unauthorized users by implementing these network security functions.

### 5.7.1. Basic Security

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Security](#) > [Basic Security](#), and you can enable or disable the security functions.

### Basic Security

---

#### Firewall

**SPI Firewall:**  Enable  Disable

---

#### VPN

**PPTP Passthrough:**  Enable  Disable

**L2TP Passthrough:**  Enable  Disable

**IPSec Passthrough:**  Enable  Disable

---

#### ALG

**FTP ALG:**  Enable  Disable

**TFTP ALG:**  Enable  Disable

**H323 ALG:**  Enable  Disable

**RTSP ALG:**  Enable  Disable

**SIP ALG:**  Enable  Disable

---

Save

- **Firewall** - A firewall protects your network from Internet attacks.
  - **SPI Firewall** - SPI (Stateful Packet Inspection, also known as dynamic packet filtering) helps to prevent cyber attacks by tracking more state per session. It validates that the traffic passing through the session conforms to the protocol. SPI Firewall is enabled by default.
- **VPN** - VPN Passthrough must be enabled if you want to allow VPN tunnels using IPSec, PPTP or L2TP protocols to pass through the router's firewall.
  - **PPTP Passthrough** - Point-to-Point Tunneling Protocol (PPTP) allows the Point-to-Point Protocol (PPP) to be tunneled through an IP network. If you want to allow PPTP tunnels to pass through the router, you can keep the default (Enabled).
  - **L2TP Passthrough** - Layer 2 Tunneling Protocol (L2TP) is the method used to enable Point-to-Point sessions via the Internet on the Layer 2 level. If you want to allow L2TP tunnels to pass through the router, you can keep the default (Enabled).



- **IPSec Passthrough** - Internet Protocol Security (IPSec) is a suite of protocols for ensuring private, secure communications over Internet Protocol (IP) networks, through the use of cryptographic security services. If you want to allow IPSec tunnels to pass through the router, you can keep the default (Enabled).
  - **ALG** - It is recommended to enable Application Layer Gateway (ALG) because ALG allows customized Network Address Translation (NAT) traversal filters to be plugged into the gateway to support address and port translation for certain application layer “control/data” protocols such as FTP, TFTP, H323 etc.
    - **FTP ALG** - To allow FTP clients and servers to transfer data across NAT, keep the default **Enable**.
    - **TFTP ALG** - To allow TFTP clients and servers to transfer data across NAT, keep the default **Enable**.
    - **H323 ALG** - To allow Microsoft NetMeeting clients to communicate across NAT, keep the default **Enable**.
    - **RTSP ALG** - To allow some media player clients to communicate with some streaming media servers across NAT, click **Enable**.
    - **SIP ALG** - To allow some multimedia clients to communicate across NAT, click **Enable**.
3. Click **Save**.

### 5.7.2. Advanced Security

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced** > **Security** > **Advanced Security**, and you can protect the router from being attacked by ICMP-Flood, UDP Flood and TCP-SYN Flood.

Advanced Security

---

**Packets Statistics Interval (5 ~ 60):**  Seconds

**DoS Protection:**  Disable  Enable

Enable ICMP-FLOOD Attack Filtering

**ICMP-FLOOD Packets Threshold (5 ~ 3600):**  Packets/Secs

Enable UDP-FLOOD Filtering

**UDP-FLOOD Packets Threshold (5 ~ 3600):**  Packets/Secs

Enable TCP-SYN-FLOOD Attack Filtering

**TCP-SYN-FLOOD Packets Threshold (5 ~ 3600):**  Packets/Secs

Ignore Ping Packet from WAN Port to Router

Forbid Ping Packet from LAN Port to Router

---

- **Packets Statistics Interval (5~60)** - The default value is 10. Select a value between 5 and 60 seconds from the drop-down list. The **Packets Statistics Interval** value indicates the time section of the packets statistics. The result of the statistics is used for analysis by SYN Flood, UDP Flood and ICMP-Flood.
- **DoS Protection** - Denial of Service protection. Select Enable or Disable to enable or disable the DoS protection function. Only when it is enabled, will the flood filters be enabled.

**Note:**

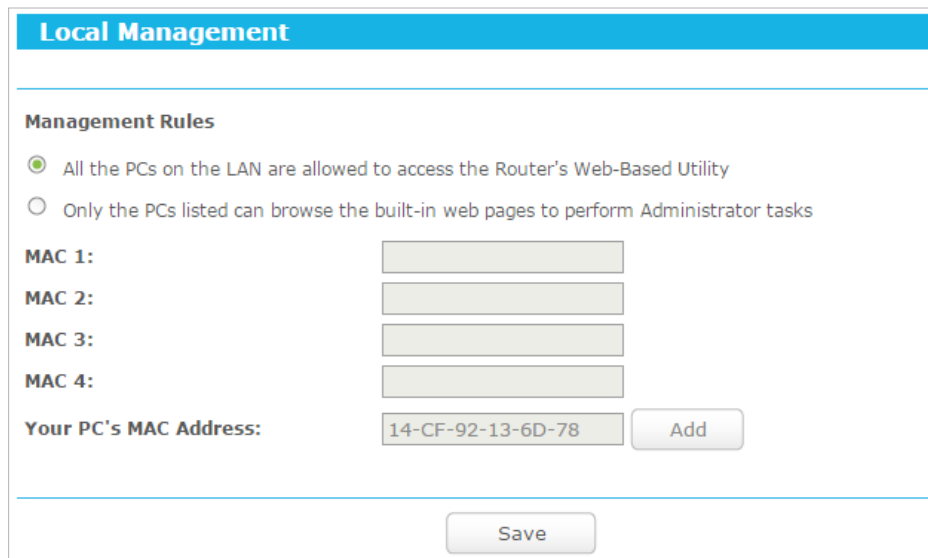
Dos Protection will take effect only when the Statistics in [System Tool > Statistics](#) is enabled.

- **Enable ICMP-FLOOD Attack Filtering** - Check the box to enable or disable this function.
- **ICMP-FLOOD Packets Threshold (5~3600)** - The default value is 50. Enter a value between 5 ~ 3600. When the number of the current ICMP-FLOOD packets is beyond the set value, the router will startup the blocking function immediately.
- **Enable UDP-FLOOD Filtering** - Check the box to enable or disable this function.
- **UDP-FLOOD Packets Threshold (5~3600)** - The default value is 500. Enter a value between 5 ~ 3600. When the number of the current UPD-FLOOD packets is beyond the set value, the router will startup the blocking function immediately.

- [Enable TCP-SYN-FLOOD Attack Filtering](#) -Check the box to enable or disable this function.
  - [TCP-SYN-FLOOD Packets Threshold \(5~3600\)](#) - The default value is 50. Enter a value between 5 ~ 3600. When the number of the current TCP-SYN-FLOOD packets is beyond the set value, the router will startup the blocking function immediately.
  - [Ignore Ping Packet From WAN Port](#) - The default setting is disabled. If enabled, the ping packet from the Internet cannot access the router.
  - [Forbid Ping Packet From LAN Port](#) - The default setting is disabled. If enabled, the ping packet from LAN cannot access the router. This function can be used to defend against some viruses.
3. Click [Save](#).
  4. Click [Blocked DoS Host List](#) to display the DoS host table by blocking.

### 5.7.3. Local Management

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Security](#) > [Local Management](#), and you can block computers in LAN from accessing the router.



The screenshot shows the 'Local Management' configuration page. At the top, there is a blue header with the text 'Local Management'. Below the header, the page is titled 'Management Rules'. There are two radio button options: the first is selected and reads 'All the PCs on the LAN are allowed to access the Router's Web-Based Utility', and the second is unselected and reads 'Only the PCs listed can browse the built-in web pages to perform Administrator tasks'. Below these options, there are four input fields labeled 'MAC 1:', 'MAC 2:', 'MAC 3:', and 'MAC 4:'. At the bottom, there is a field labeled 'Your PC's MAC Address:' containing the text '14-CF-92-13-6D-78' and an 'Add' button. A 'Save' button is located at the bottom center of the page.

For example, if you want to allow PCs with specific MAC addresses to access the router's web management page locally from inside the network, please follow the instructions below:

- 1) Select [Only the PCs listed can browse the built-in web pages to perform Administrator tasks](#).

- 2) Enter the MAC address of each PC separately. The format of the MAC address is XX-XX-XX-XX-XX-XX (X is any hexadecimal digit). Only the PCs with the listed MAC addresses can use the password to browse the built-in web pages to perform administrator tasks.
- 3) Click [Add](#), and your PC's MAC address will also be listed.
- 4) Click [Save](#).

**Note:**

If your PC is blocked but you want to access the router again, press and hold the [Reset](#) button to reset the router to the factory defaults.

### 5.7.4. Remote Management

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Security](#) > [Remote Management](#), and you can manage your router from a remote device via the Internet.

Remote Management	
Web Management Port:	<input type="text" value="80"/>
Remote Management IP Address:	<input type="text" value="0.0.0.0"/> (Enter 255.255.255.255 for all)
<input type="button" value="Save"/>	

- **Web Management Port** - Web browser access normally uses the standard HTTP service port 80. This router's default remote management web port number is 80. For higher security, you can change the remote management web port to a custom port by entering a number between 1 and 65534 but do not use the number of any common service port.
- **Remote Management IP Address** - This is the address you will use when accessing your router via a remote device. This function is disabled when the IP address is set to the default value of 0.0.0.0. To enable this function, change 0.0.0.0 to a valid IP address. If it is set to 255.255.255.255, then all the remote devices can access the router from the Internet.

**Note:**

1. To access the router, enter your router's WAN IP address in your browser's address bar, followed by a colon and the custom port number. For example, if your router's WAN address is 202.96.12.8, and the port number used is 8080, please enter <http://202.96.12.8:8080> in your browser. Later, you may be asked for the router's password. After successfully entering the username and password, you will be able to access the router's web management page.
2. Be sure to change the router's default password for security purposes.

## 5.8. Parental Controls

Parental Control allows you to block inappropriate and malicious websites, and control access to specific websites at specific time for your children's devices.

For example, you want the children's PC with the MAC address 00-11-22-33-44-AA can access [www.tp-link.com](http://www.tp-link.com) on Saturday only while the parent PC with the MAC address 00-11-22-33-44-BB is without any restriction.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Access Control](#) > [Schedule](#).
3. Click [Add New](#) to create a new schedule entry with [Schedule Description](#) as Schedule\_1, [Day](#) as Sat and [Time](#) as all day-24 hours. And click [Save](#).

**Advance Schedule Settings**

Note: The Schedule is based on the time of the Router.

**Schedule Description:**

**Day:**  Everyday  Select Days

Mon  Tue  Wed  Thu  Fri  Sat  Sun

**Time:**  all day-24 hours

**Start Time:**  (HHMM)

**Stop Time:**  (HHMM)

4. Go to [Advanced](#) > [Parental Control](#).
5. Select [Enable](#) and enter the MAC address 00-11-22-33-44-BB in the [MAC Address of Parental PC](#) field.
6. Click [Add New](#), and enter appropriate parameters in corresponding fields.

Add or Modify Parental Control Entry

The Schedule is based on the time of the Router. The time can be set in "System Tools -> [Time settings](#)".

**MAC Address of Children's PC:**

**All MAC Address In Current LAN:**

**Website Description:**

**Allowed Website Name:**

**Effective Time:**

The time schedule can be set in "Access Control -> [Schedule](#)"

**Status:**

- Enter 00-11-22-33-44-AA in the [MAC Address of Children's PC](#) field.
- Enter Allow TP-LINK in the [Website Description](#) field.
- Enter www.tp-link.com in the [Allowed Website Name](#) field.
- Select Schedule\_1 you created just now from the [Effective Time](#) drop-down list.
- In the [Status](#) field, select [Enabled](#).

7. Click [Save](#).

Then you can go back to the [Parental Control](#) Settings page to check the following list.

ID	MAC address	Website Description	Schedule	Status	Modify
1	00-11-22-33-44-AA	Allow TP-LINK	Schedule_1	<input checked="" type="checkbox"/>	<a href="#">Edit</a> <a href="#">Delete</a>

## 5.9. Access Control

Access Control is used to deny or allow specific client devices to access your network with access time and content restrictions.

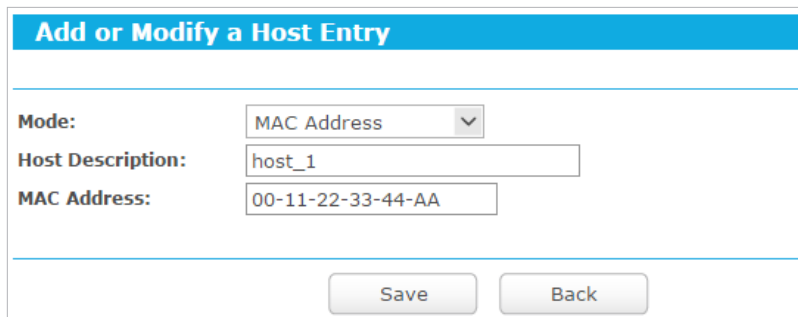
**I want to:** Deny or allow specific client devices to access my network with access item and content restrictions.

[For example](#), If you want to restrict the Internet activities of

host with MAC address 00-11-22-33-44-AA on the LAN to access www.tp-link.com only, please follow the steps below:

## 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](#) > [Access Control](#) > [Host](#) and configure the host settings:
  - 1) Click [Add New](#).
  - 2) Select [MAC Address](#) as the mode type. Create a unique description (e.g. [host\\_1](#)) for the host in the [Host Description](#) field and enter 00-11-22-33-44-AA in the [MAC Address](#) field.



**Add or Modify a Host Entry**

Mode:

Host Description:

MAC Address:

- 3) Click [Save](#).
3. Go to [Advanced](#) > [Access Control](#) > [Target](#) and configure the target settings:
  - 1) Click [Add New](#).
  - 2) Select [Domain Name](#) as the mode type. Create a unique description (e.g. [target\\_1](#)) for the target in the [Target Description](#) field and enter the domain name, either the full name or the keywords (for example TP-LINK) in the [Domain Name](#) field.

**Note:**

Any domain name with keywords in it (e.g. www.tp-link.com) will be blocked or allowed.

3) Click [Save](#).

4. Go to [Advanced](#) > [Access Control](#) > [Schedule](#) and configure the schedule settings:

1) Click [Add New](#).

2) Create a unique description (e.g. [schedule\\_1](#)) for the schedule in the [Schedule Description](#) field and set the day(s) and time period.

3) Click [Save](#).

5. Go to [Advanced](#) > [Access Control](#) > [Rule](#) and add a new access control rule.

1) Click [Add New](#).

2) Give a name for the rule in the [Rule Name](#) field. Select [host\\_1](#) from the host drop-down list; select [target\\_1](#) from the target drop-down list; select [schedule\\_1](#) from the schedule drop-down list.



- 3) Leave the status as **Enabled** and click **Save**.
6. Select **Enable Internet Access Control** to enable Access Control function.
7. Select **Allow the packets specified by any enabled access control policy to pass through the Router** as the default filter policy and click **Save**.

**Done!**

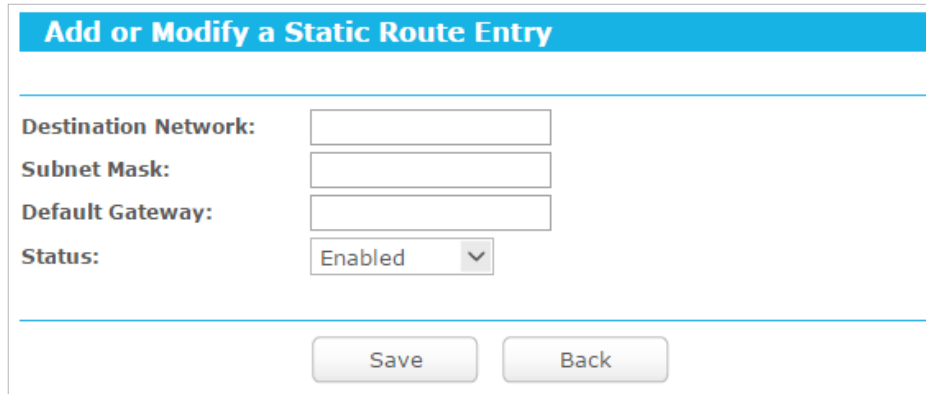
Now only the specific host(s) can visit the target(s) within the scheduled time period.

## 5. 10. Advanced Routing

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

### 5. 10. 1. Static Routing List

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
  2. Go to **Advanced > Advanced Routing > Static Routing**.
- **To add static routing entries:**
1. Click **Add New**, and enter the following information.



**Add or Modify a Static Route Entry**

Destination Network:

Subnet Mask:

Default Gateway:

Status:

- **Destination Network** - The Destination Network is the address of the network or host that you want to assign to a static route.
  - **Subnet Mask** - The Subnet Mask determines which portion of an IP Address is the network portion, and which portion is the host portion.
  - **Default Gateway** - This is the IP Address of the default gateway device that allows the contact between the router and the network or host.
2. Select **Enabled** or **Disabled** for this entry on the **Status** drop-down list.
  3. Click **Save**.

You can also do the following operations to modify the current settings.

- Click **Delete** to delete the entry.
- Click **Enable All** to enable all the entries.
- Click **Disable All** to disable all the entries.
- Click **Delete All** to delete all the entries.
- Click **Previous** to view the information on the previous screen and **Next** to view the information on the next screen.

### 5.10.2. System Routing Table

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced** > **Advanced Routing** > **System Routing Table**, and you can view all the valid route entries in use.

System Routing Table				
ID	Destination Network	Subnet Mask	Gateway	Interface
1	192.168.0.0	255.255.255.0	0.0.0.0	LAN & WLAN
2	239.0.0.0	255.0.0.0	0.0.0.0	LAN & WLAN

Refresh

- **Destination Network** - The Destination Network is the address of the network or host to which the static route is assigned.
- **Subnet Mask** - The Subnet Mask determines which portion of an IP address is the network portion, and which portion is the host portion.
- **Gateway** - This is the IP address of the gateway device that allows for contact between the Router and the network or host.
- **Interface** - This interface tells you whether the Destination IP Address is on the LAN & WLAN (internal wired and wireless networks), or the WAN(Internet).

Click [Refresh](#) to refresh the data displayed.

## 5. 11. Bandwidth Control

### 5. 11. 1. Control Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [Bandwidth Control](#) > [Control Settings](#).

Bandwidth Control Settings	
Enable Bandwidth Control:	<input type="checkbox"/>
Line Type:	<input checked="" type="radio"/> ADSL <input type="radio"/> Other
Egress Bandwidth:	<input type="text" value="512"/> Kbps
Ingress Bandwidth:	<input type="text" value="2048"/> Kbps

Save

The values you configure for the Egress Bandwidth and Ingress Bandwidth should be less than 100,000Kbps. For optimal control of the bandwidth, please select the right Line Type and consult your ISP for the total egress and ingress bandwidth.

- **Enable Bandwidth Control** - Check this box so that the Bandwidth Control settings can take effect.

- **Line Type** - Select the right type for you network connection. If you are not sure, please consult your ISP.
- **Egress Bandwidth** - The upload speed through the WAN port.
- **Ingress Bandwidth** - The download speed through the WAN port.

### 5.11.2. Rules List

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced > Bandwidth Control > Rules List**, and you can view and configure the Bandwidth Control rules.

Bandwidth Control Rule List							
ID	Description	Egress Bandwidth(Kbps)		Ingress Bandwidth(Kbps)		Enable	Modify
		Min	Max	Min	Max		
The current list is empty.							
<input type="button" value="Add New..."/>		<input type="button" value="Delete All"/>					
<input type="button" value="Previous"/>		<input type="button" value="Next"/>		Current No. <input type="text" value="1"/>	<input type="button" value="Page"/>		

- **Description** - This is the information about the rules such as address range.
- **Egress Bandwidth** - This field displays the max and min upload bandwidth through the WAN port. The default is 0.
- **Ingress Bandwidth** - This field displays the max and min download bandwidth through the WAN port. The default is 0.
- **Enable** - This field displays the status of the rule.
- **Modify** - Click **Modify/Delete** to edit/delete the rule.

➤ **To add a Bandwidth control rule:**

1. Click **Add New**.
2. Enter the information like the figure shown below.

3. Click [Save](#).

## 5.12. IP&MAC Binding

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

### 5.12.1. Binding Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [IP & MAC Binding](#) > [Binding Settings](#).
3. Select [Enable](#) for ARP Binding.

4. Click [Save](#).

#### ➤ To add IP & MAC Binding entries:

1. Click [Add New](#).
2. Select the [Bind](#) checkbox. And enter the MAC address and IP address.

IP & MAC Binding Settings

---

**Bind:**

**MAC Address:**

**IP Address:**

---

3. Click [Save](#).

➤ **To modify or delete an existing entry:**

1. Find the desired entry in the table.
2. Click [Modify](#) or [Delete](#) in the Modify column.

➤ **To find an existing entry:**

1. Click [Find](#).
2. Enter the MAC address or IP address in the corresponding field.
3. Click [Find](#) on this page as shown below.

Find IP & MAC Binding Entry

---

**MAC Address:**

**IP Address:**

ID	MAC Address	IP Address	Bind Link
1	00-0A-EB-B0-00-0B	192.168.0.22	<input checked="" type="checkbox"/> <a href="#">To page</a>

---

### 5.12.2. ARP List

To manage a device, you can observe the device on the LAN by checking its MAC address and IP address on the ARP list, and you can also configure the items. This page displays the ARP List which shows all the existing IP & MAC Binding entries.

ARP List				
ID	MAC Address	IP Address	Status	Configure
1	00-0A-EB-B0-00-0B	192.168.0.22	Bound	<a href="#">Load</a> <a href="#">Delete</a>
2	14-CF-92-13-6D-78	192.168.0.101	Unbound	<a href="#">Load</a> <a href="#">Delete</a>

- **MAC Address** - The MAC address of the listed computer on the LAN.
- **IP Address** - The assigned IP address of the listed computer on the LAN.
- **Status** - Indicates whether or not the MAC and IP addresses are bound.
- **Configure** - Load or delete an item.
  - **Load** - Load the item to the IP & MAC Binding list.
  - **Delete** - Delete the item.
- Click **Bind All** to bind all the current items.
- Click **Load All** to load all items to the IP & MAC Binding list.
- Click **Refresh** to refresh all items.

■ **Note:**

An item can not be loaded to the IP & MAC Binding list if the IP address of the item has been loaded before. Error warning will prompt as well. Likewise, **Load All** only loads the items without interference to the IP & MAC Binding list.

## 5.13. Dynamic DNS

The router offers the DDNS (Dynamic Domain Name System) feature, which allows the hosting of a website, FTP server, or e-mail server with a fixed domain name (named by yourself) and a dynamic IP address. Thus your friends can connect to your server by entering your domain name no matter what your IP address is. Before using this feature, you need to sign up for DDNS service providers such as [www.comexe.cn](http://www.comexe.cn), [www.dyn.org](http://www.dyn.org), or [www.noip.com](http://www.noip.com). The Dynamic DNS client service provider will give you a password or key.

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

### Comexe DDNS

If the dynamic DNS Service Provider you select is [www.comexe.cn](http://www.comexe.cn), the following page will appear.

The screenshot shows a web interface for configuring Dynamic DNS (DDNS). At the top, there is a blue header with the text "DDNS". Below the header, the "Service Provider" is set to "Comexe ( www.comexe.cn )" with a dropdown arrow and a link "Go to register...". There are five "Domain Name:" labels, each followed by an empty text input field. Below these are "User Name:" and "Password:" labels, each followed by an empty text input field. A checkbox labeled "Enable DDNS" is currently unchecked. The "Connection Status:" is displayed as "DDNS not launching!". Below the status are "Login" and "Logout" buttons. At the bottom of the form is a "Save" button.

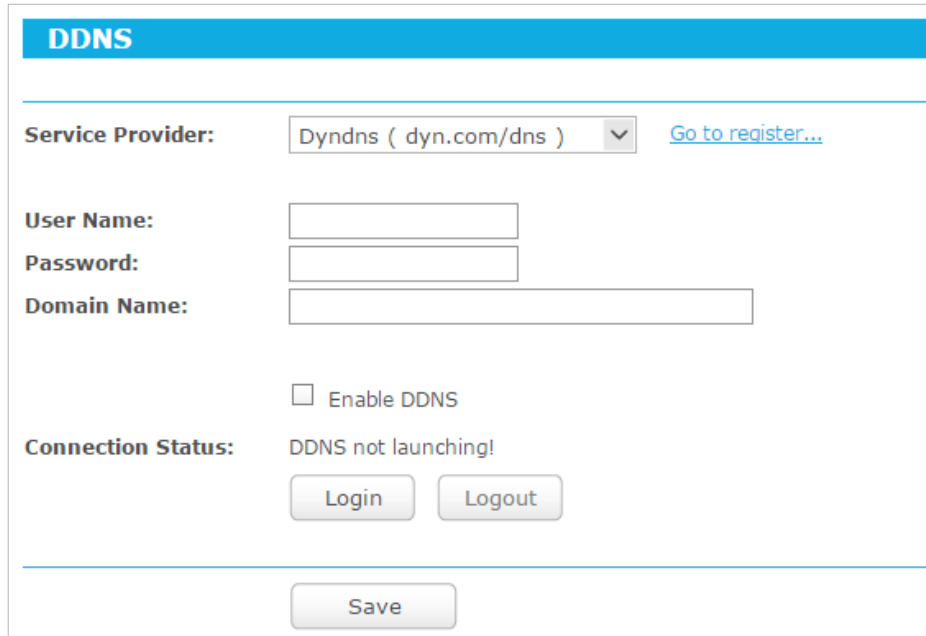
To set up for DDNS, follow these instructions:

1. Enter the [Domain Name](#) received from your dynamic DNS service provider.
  2. Enter the [User Name](#) for your DDNS account.
  3. Enter the [Password](#) for your DDNS account.
  4. Click [Login](#).
  5. Click [Save](#).
- [Connection Status](#) - The status of the DDNS service connection is displayed here.
  - [Logout](#) - Click [Logout](#) to log out of the DDNS service.

### Dyndns DDNS

If the dynamic DNS Service Provider you select is [www.dyn.com](http://www.dyn.com), the following page will appear.





**DDNS**

**Service Provider:** Dyndns ( dyn.com/dns ) [Go to register...](#)

**User Name:**

**Password:**

**Domain Name:**

Enable DDNS

**Connection Status:** DDNS not launching!

To set up for DDNS, follow these instructions:

1. Enter the [User Name](#) for your DDNS account.
  2. Enter the [Password](#) for your DDNS account.
  3. Enter the [Domain Name](#) you received from dynamic DNS service provider here.
  4. Click [Login](#).
  5. Click [Save](#).
- [Connection Status](#) - The status of the DDNS service connection is displayed here.
  - [Logout](#) - Click [Logout](#) to log out of the DDNS service.

### No-ip DDNS

If the dynamic DNS Service Provider you select is [www.noip.com](http://www.noip.com), the following page will appear.

**DDNS**

**Service Provider:** No-IP ( www.noip.com ) [Go to register...](#)

**User Name:**

**Password:**

**Domain Name:**

Enable DDNS

**Connection Status:** DDNS not launching!

To set up for DDNS, follow these instructions:

1. Enter the [User Name](#) for your DDNS account.
  2. Enter the [Password](#) for your DDNS account.
  3. Enter the [Domain Name](#) you received from dynamic DNS service provider.
  4. Click [Login](#).
  5. Click [Save](#).
- [Connection Status](#) - The status of the DDNS service connection is displayed here.
  - [Logout](#) - Click [Logout](#) to log out of the DDNS service.

## 5.14. System Tools

### 5.14.1. Working Mode

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Working Mode](#). Select the working mode as needed and click [Save](#).

■ When [Control the system mode by software](#) is checked, the operation mode switch on the router will be disabled. If you want to enable it, please log in to the web management page and go to [Working Mode](#) to uncheck [Control the system mode by software](#).

**Working Mode**

---

Control the system mode by software

Standard Router

Hotspot

AP/Rng Ext/Client

---

### 5.14.2. Time Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Time Settings](#) and configure the system time as needed.

**Time Settings**

---

**Time Zone:** (GMT-08:00) Pacific Time

**Date:**    (MM/DD/YY)

**Time:**    (HH/MM/SS)

**NTP Server 1:**  (Optional)

**NTP Server 2:**  (Optional)

Enable Daylight Saving

**Start:** 2016

**End:** 2016

**Daylight Saving Status:**

Note: Click "GET GMT" to update time settings through the pre-defined servers or enter customized server(IP or Domain) in the frames above.

---

➤ **To set time manually:**

1. Select your local time zone.
2. Enter the **Date** in Month/Day/Year format.
3. Enter the **Time** in Hour/Minute/Second format.
4. Click **Save**.

➤ **To set time automatically:**

1. Select your local time zone.
2. Enter the address or domain of the [NTP Server I](#) or [NTP Server II](#).
3. Click [Get GMT](#) to get time from the Internet if you have connected to the Internet.

➤ **To set Daylight Saving Time:**

1. Select [Enable DaylightSaving](#).
2. Select the start time from the drop-down list in the [Start](#) field.
3. Select the end time from the drop-down list in the [End](#) field.
4. Click [Save](#).

■ **Note:**

This setting will be used for some time-based functions such as firewall. You must specify your time zone once you login to the router successfully; otherwise, time-based functions will not take effect.

### 5.14.3. Diagnostic

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

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Diagnostic](#).

### Diagnostic Tools

---

#### Diagnostic Parameters

**Diagnostic Tool:**  Ping  Traceroute

**IP Address/ Domain Name:**

**Ping Count:**  (1-50)

**Ping Packet Size:**  (4-1472 Bytes)

**Ping Timeout:**  (100-2000 Milliseconds)

**Traceroute Max TTL:**  (1-30)

#### Diagnostic Results

This device is ready.

- **Diagnostic Tool** - Select one diagnostic tool.
  - **Ping** - This diagnostic tool troubleshoots connectivity, reachability, and name resolution to a given host or gateway.
  - **Tracerouter** - This diagnostic tool tests the performance of a connection.

■ **Note:**

You can use ping/traceroute to test both numeric IP address or domain name. If pinging/tracerouting the IP address is successful, but pinging/tracerouting the domain name is not, you might have a name resolution problem. In this case, ensure that the domain name you are specifying can be resolved by using Domain Name System (DNS) queries.

- **IP Address/Domain Name** - Enter the destination IP address (such as 192.168.0.1) or Domain name (such as www.tp-link.com).
  - **Pings Count** - The number of Ping packets for a Ping connection.
  - **Ping Packet Size** - The size of Ping packet.
  - **Ping Timeout** - Set the waiting time for the reply of each Ping packet. If there is no reply in the specified time, the connection is overtime.
  - **Traceroute Max TTL** - The max number of hops for a Traceroute connection.
3. Click **Start** to check the connectivity of the Internet.
  4. The **Diagnostic Results** page displays the diagnosis result. If the result is similar to the following figure, the connectivity of the Internet is fine.

```

Diagnostic Results
-----
Pinging 192.168.0.1 with 64 bytes of data:

Reply from 192.168.0.1: bytes=64 time=1    TTL=64 seq=1
Reply from 192.168.0.1: bytes=64 time=1    TTL=64 seq=2
Reply from 192.168.0.1: bytes=64 time=1    TTL=64 seq=3
Reply from 192.168.0.1: bytes=64 time=1    TTL=64 seq=4

Ping statistics for 192.168.0.1
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)
    Approximate round trip times in milliseconds:
        Minimum = 1, Maximum = 1, Average = 1
  
```

■ **Note:**

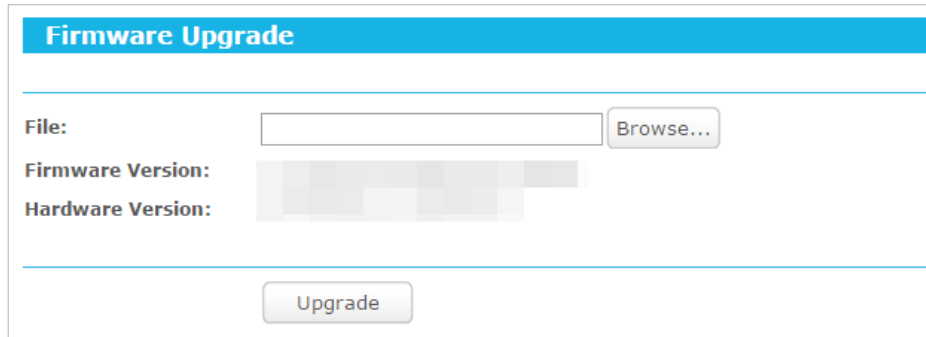
Only one user can use this tool at one time. Options "Number of Pings", "Ping Size" and "Ping Timeout" are used for the Ping function. Option "Tracert Hops" is used for the Tracert function.

## 5.14.4. Firmware Upgrade

TP-LINK is dedicated to improving and enriching the product features, giving users a better network experience. We will release the latest firmware at the TP-LINK official website [www.tp-link.com](http://www.tp-link.com). You can download the latest firmware file from the [Support](#) page and upgrade the firmware to the latest version.

1. Download the latest firmware file for the router from our website [www.tp-link.com](http://www.tp-link.com).

2. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
3. Go to [Advanced](#) > [System Tools](#) > [Firmware Upgrade](#).
4. Click [Browse](#) to locate the downloaded firmware file, and click [Upgrade](#).

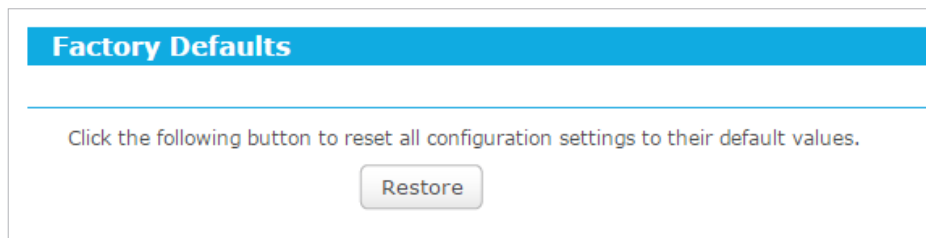


The screenshot shows the 'Firmware Upgrade' page. At the top, there is a blue header with the text 'Firmware Upgrade'. Below the header, there are three rows of labels: 'File:', 'Firmware Version:', and 'Hardware Version:'. The 'File:' label is followed by a text input field and a 'Browse...' button. The 'Firmware Version:' and 'Hardware Version:' labels are followed by greyed-out text boxes. At the bottom of the page, there is a single 'Upgrade' button.

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

### 5.14.5. Factory Defaults

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Factory Defaults](#). Click [Restore](#) to reset all settings to the default values.



The screenshot shows the 'Factory Defaults' page. At the top, there is a blue header with the text 'Factory Defaults'. Below the header, there is a line of text that reads: 'Click the following button to reset all configuration settings to their default values.' Below this text is a single 'Restore' button.

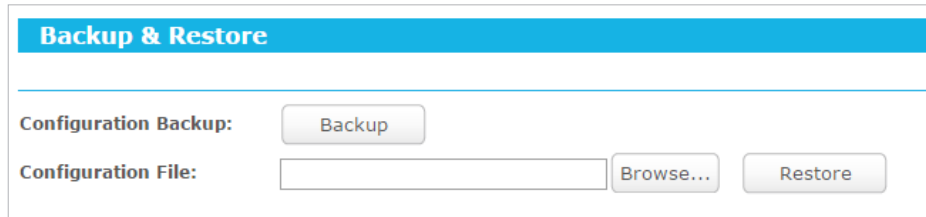
- The default **Username**: admin
- The default **Password**: admin
- The default **IP Address**: 192.168.0.1
- The default **Subnet Mask**: 255.255.255.0

### 5.14.6. Backup & Restore

The configuration settings are stored as a configuration file in the router. You can backup the configuration file in your computer for future use and restore the router to the previous settings from the backup file when needed.

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

2. Go to [Advanced](#) > [System Tools](#) > [Backup & Restore](#).



**Backup & Restore**

Configuration Backup:

Configuration File:

➤ **To backup configuration settings:**

Click [Backup](#) to save a copy of the current settings in your local computer. A “.bin” file of the current settings will be stored in your computer.

➤ **To restore configuration settings:**

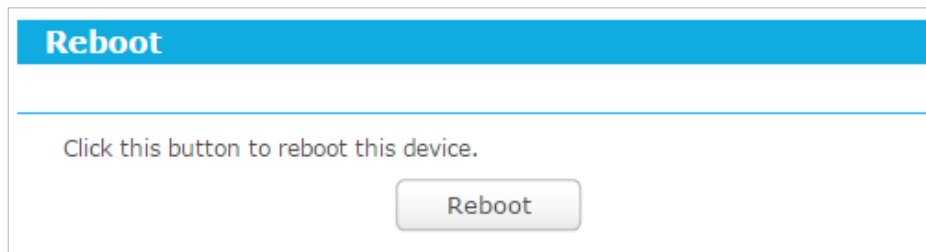
1. Click [Choose File](#) to locate the backup configuration file stored in your computer, and click [Restore](#).
2. Wait a few minutes for the restoring and rebooting.

■ **Note:**

During the restoring process, do not power off or reset the router.

### 5.14.7. Reboot

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Reboot](#), and you can restart your router.



**Reboot**

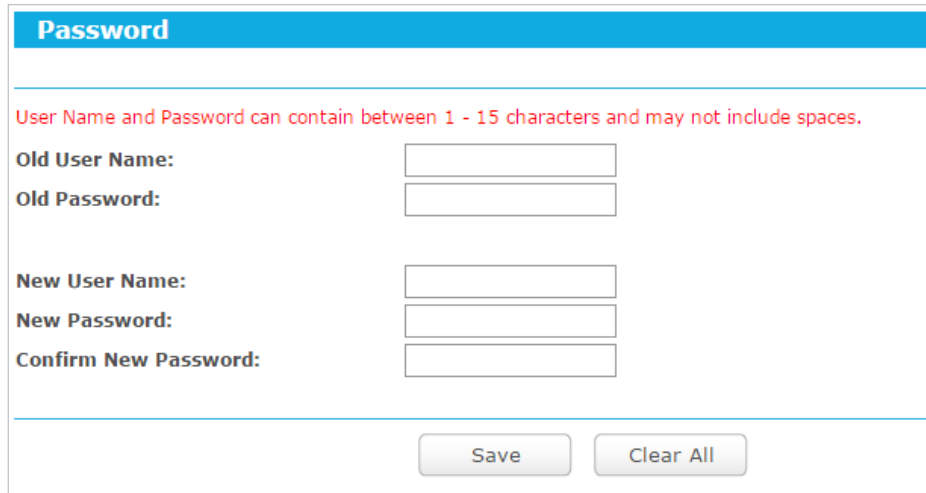
Click this button to reboot this device.

Some settings of the router will take effect only after rebooting, including:

- Change the LAN IP Address (system will reboot automatically).
- Change the DHCP Settings.
- Change the Working Mode.
- Change the Web Management Port.
- Upgrade the firmware of the router (system will reboot automatically).
- Restore the router to its factory defaults (system will reboot automatically).
- Update the configuration with the file (system will reboot automatically).

### 5.14.8. Password

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [Password](#), and you can change the factory default username and password of the router.



The screenshot shows the 'Password' configuration page. At the top, there is a blue header with the word 'Password' in white. Below the header, a red warning message states: 'User Name and Password can contain between 1 - 15 characters and may not include spaces.' The form contains six input fields: 'Old User Name', 'Old Password', 'New User Name', 'New Password', and 'Confirm New Password'. At the bottom of the form, there are two buttons: 'Save' and 'Clear All'.

It is strongly recommended that you change the default username and password of the router, for all users that try to access the router's web-based utility or Quick Setup will be prompted for the router's username and password.

■ **Note:**

The new username and password must not exceed 15 characters and not include any spacing.

3. Click [Save](#).

### 5.14.9. System Log

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Advanced](#) > [System Tools](#) > [System Log](#), and you can view the logs of the router.



**System Log**

---

**Auto Mail Feature:** Disabled Mail Settings

**Log Type:** ALL **Log Level:** ALL

Index	Time	Type	Level	Log Content
242	1st day 02:23:22	3G/4G	INFO	primary device is not in
241	1st day 02:22:52	3G/4G	INFO	primary device is not in
240	1st day 02:22:22	3G/4G	INFO	primary device is not in
239	1st day 02:21:52	3G/4G	INFO	primary device is not in
238	1st day 02:21:22	3G/4G	INFO	primary device is not in
237	1st day 02:20:52	3G/4G	INFO	primary device is not in
236	1st day 02:20:22	3G/4G	INFO	primary device is not in
235	1st day 02:19:52	3G/4G	INFO	primary device is not in
234	1st day 02:19:21	3G/4G	INFO	primary device is not in
233	1st day 02:18:51	3G/4G	INFO	primary device is not in

**Time = 2016-01-01 2:23:44 8626s**  
**H-Ver =**  **S-Ver =**   
**L = 192.168.0.1 : M = 255.255.255.0**  
**W1 = DHCP : W = 0.0.0.0 : M = 0.0.0.0 : G = 0.0.0.0**

Refresh
Save Log
Mail Log
Clear Log

---

Previous
Next
Current No. 1
Page

- **Auto Mail Feature** - Indicates whether the auto mail feature is enabled or not.
- **Mail Settings** - Set the receiving and sending mailbox address, server address, validation information as well as the timetable for Auto Mail Feature.

**Mail Account Settings**

---

**From:**

**To:**

**SMTP Server:**

Authentication

---

Enable Auto Mail Feature

Everyday, mail the log at  :  (HH:MM)

Mail the log every  hours

---

Save
Back

- **From** - Your mail box address. The router will connect it to send logs.
- **To** - Recipient's mail address. The destination mailbox which will receive logs.
- **SMTP Server** - Your smtp server. It corresponds with the mailbox filled in the **From** field. You can log on the relevant website for help if you are not clear with the address.
- **Authentication** - Most SMTP Server requires Authentication. It is required by most mailboxes that need username and password to log in.

■ **Note:**

Only when you select Authentication, do you have to enter the username and password in the following fields.

- **User Name** - Your mail account name filled in the From field. The part behind @ is included.
- **Password** - Your mail account password.
- **Confirm The Password** - Enter the password again to confirm.
- **Enable Auto Mail Feature** - Select it to mail logs automatically. You could mail the current logs either at a specified time everyday or by intervals, but only one could be the current effective rule. Enter the desired time or intervals in the corresponding field.

Click **Save** to apply your settings.

Click **Back** to return to the previous page.

- **Log Type** - By selecting the log type, only logs of this type will be shown.
- **Log Level** - By selecting the log level, only logs of this level will be shown.
- **Refresh** - **Refresh** the page to show the latest log list.
- **Save Log** - Click to save all the logs in a txt file.
- **Mail Log** - Click to send an email of current logs manually according to the address and validation information set in Mail Settings.
- **Clear Log** - All the logs will be deleted from the router permanently, not just from the page.

Click **Next** to go to the next page, or click **Previous** to return to the previous page.

## 5.14.10. Statistics

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Advanced** > **System Tools** > **Statistics**, and you can view the statistics of the router, including total traffic and the value of the last Packet Statistic Interval in seconds.

- **Current Statistics Status** - Enable or Disable. The default value is disabled. To enable, click the Enable button. If disabled, the function of DoS protection in Security settings will disabled.
- **Packets Statistics Interval (5-60)** - The default value is 10. Select a value between 5 and 60 in the drop-down list. The Packets Statistic Interval indicates the time section of the packets statistic.
- **Sorted Rules** – Choose how displayed statistics are sorted.
- Select **Auto-refresh** to refresh automatically. Click **Refresh** to refresh immediately.
- Click **Reset All** to reset the values of all the entries to zero.
- Click **Delete All** to delete all entries in the table.

## Statistics Table

IP/MAC Address	The IP and MAC address are displayed with related statistics.	
Total	Packets	The total number of packets received and transmitted by the router.
	Bytes	The total number of bytes received and transmitted by the router.
Current	Packets	The total number of packets received and transmitted in the last Packets Statistic interval seconds.
	Bytes	The total number of bytes received and transmitted in the last Packets Statistic interval seconds.
	ICMP Tx	The number of the ICMP packets transmitted to WAN per second at the specified Packets Statistics interval. It is shown like "current transmitting rate / Max transmitting rate".
	UDP Tx	The number of UDP packets transmitted to the WAN per second at the specified Packets Statistics interval. It is shown like "current transmitting rate / Max transmitting rate".
	TCP SYN Tx	The number of TCP SYN packets transmitted to the WAN per second at the specified Packets Statistics interval. It is shown like "current transmitting rate / Max transmitting rate".
Modify	Reset	Reset the value of the entry to zero.
	Delete	Delete the existing entry in the table.

## Chapter 6

---

# Configure the Router in Access Point Mode

---

This chapter presents how to configure the various features of the router working as an Access Point.

This chapter contains the following sections:

- *Status*
- *Operation Mode*
- *Network*
- *Wireless*
- *DHCP*
- *System Tools*

## 6.1. Status

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [Status](#). You can view the current status information of the router in Access Point Mode.

Status		
<b>Firmware Version:</b>	[REDACTED]	
<b>Hardware Version:</b>	[REDACTED]	
<b>Operation Mode:</b>	<b>Access Point</b>	
<b>Wired</b>		
<b>MAC Address:</b>	00-0A-EB-13-7B-00	
<b>IP Address:</b>	192.168.0.1	
<b>Subnet Mask:</b>	255.255.255.0	
<b>Wireless 2.4GHz</b>		
<b>Wireless Radio:</b>	Enable	
<b>Wireless Network Name:</b>	TP-LINK_7B00	
<b>Channel:</b>	Auto (Current channel 6)	
<b>Mode:</b>	11b/g/n mixed	
<b>Channel Width:</b>	Automatic	
<b>MAC Address:</b>	00-0A-EB-13-7B-00	
<b>Wireless 5GHz</b>		
<b>Wireless Radio:</b>	Enable	
<b>Wireless Network Name:</b>	TP-LINK_7B00_5G	
<b>Channel:</b>	Auto (Current channel 161)	
<b>Mode:</b>	11a/n/ac mixed	
<b>Channel Width:</b>	Automatic	
<b>MAC Address:</b>	00-0A-EB-13-7A-FF	
<b>Traffic Statistics</b>		
	<b>Received</b>	<b>Sent</b>
<b>Bytes:</b>	0	0
<b>Packets:</b>	0	0
<b>System Up Time:</b>	0 days 00:12:29	
	<input type="button" value="Refresh"/>	

- **Firmware Version** - The version information of the router's firmware.
- **Hardware Version** - The version information of the router's hardware.
- **Operation Mode** - This field displays the current operation mode of the router.
- **Wired** - This field displays the current settings of the LAN, and you can configure them on the [Setting > Network > LAN](#) page.
  - **MAC address** - The physical address of the router.
  - **IP address** - The LAN IP address of the router.
  - **Subnet Mask** - The subnet mask associated with the LAN IP address.
- **Wireless 2.4GHz/5GHz** - This field displays the basic information or status of the wireless function, and you can configure them on the [Setting > Wireless 2.4GHz/5GHz > Wireless Settings](#) page.
  - **Wireless Radio** - Indicates whether the wireless feature is enabled or not
  - **Wireless Network Name** - The SSID of the router.
  - **Channel** - The current wireless channel in use.
  - **Mode** - The current wireless mode which the router works on.
  - **Channel Width** - The current wireless channel width in use.
  - **MAC Address** - The physical address of the router.
- **Traffic Statistics** - The router's traffic statistics.
  - **Received (Bytes)** - Traffic in bytes received from the WAN port.
  - **Received (Packets)** - Traffic in packets received from the WAN port.
  - **Sent (Bytes)** - Traffic in bytes sent out from the WAN port.
  - **Sent (Packets)** - Traffic in packets sent out from the WAN port.
- **System Up Time** - The length of the time since the router was last powered on or reset.

Click [Refresh](#) to get the latest status and settings of the router.

## 6.2. Operation Mode

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting > Operation Mode](#).
3. Select the operation mode as needed and click [Save](#).

**Operation Mode**

---

**Access Point** - Setup Wi-Fi on an existing wired network  
 **Range Extender** - Extend the range of an existing Wi-Fi  
 **Client** - Act as a "Wireless Adapter" to connect your wired devices to existing Wi-Fi

---

## 6.3. Network

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [Network](#) > [LAN](#).
3. Configure the IP parameters of the LAN and click [Save](#).

**LAN**

---

**MAC Address:** 00-0A-EB-13-7B-00  
**Type:**  ▾  
**IP Address:**   
**Subnet Mask:**  ▾  
**Gateway:**

Note: The IP parameters cannot be configured if you have chosen Smart IP (DHCP)  
 (In this situation the device will help you configure the IP parameters automatically as you need).

---

- **MAC Address** - The physical address of the LAN ports. The value can not be changed.
- **Type** - Either select [Dynamic IP\(DHCP\)](#) to get IP address from DHCP server, or [Static IP](#) to configure IP address manually.
- **IP Address** - Enter the IP address in dotted-decimal notation if your select [Static IP](#) (factory default - 192.168.0.1).
- **Subnet Mask** - An address code that determines the size of the network. Normally 255.255.255.0 is used as the subnet mask.
- **Gateway** - The gateway should be in the same subnet as your IP address.

**Note:**

- If you have changed the IP address, you must use the new IP address to login.
- If you select [Dynamic IP\(DHCP\)](#), the DHCP server of the router will not start up.
- If the new IP address you set is not in the same subnet as the old one, the IP Address pool in the DHCP Server will be configured automatically, but the Virtual Server and DMZ Host will not take effect until they are re-configured.

## 6.4. Wireless

In this section, we will take the settings for the 2.4GHz wireless network for example.

### 6.4.1. Wireless Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [Wireless 2.4GHz](#) > [Wireless Settings](#).
3. Configure the basic settings for the wireless network and click [Save](#).

Wireless Settings	
Operation Mode:	Access Point
Wireless Network Name:	TP-LINK_7B00 (Also called the SSID)
Mode:	11b/g/n mixed
Channel Width:	Auto
Channel:	Auto
	<input checked="" type="checkbox"/> Enable Wireless Radio
	<input checked="" type="checkbox"/> Enable SSID Broadcast
<input type="button" value="Save"/>	

- **Operation Mode** - This field displays the current operation mode of the router.
- **Wireless Network Name** - Enter a string of up to 32 characters. The default SSID is TP-LINK\_XXXX (XXXX indicates the last unique four numbers of each router's MAC address). It is strongly recommended that you change your network name (SSID). This value is case-sensitive. For example, TEST is NOT the same as test.
- **Mode** - Select the desired mode. It is strongly recommended that you keep the default setting **11bgn mixed**, so that all 802.11b/g/n wireless devices can connect to the router.
- **Channel Width** - Select any channel width from the drop-down list. The default setting is **Auto**, which can automatically adjust the channel width for your clients.
- **Channel** - This field determines which operating frequency will be used. The default channel is set to **Auto**. It is not necessary to change the wireless channel unless you notice interference problems with another nearby access point.
- **Enable Wireless Router Radio** - The wireless radio of the router can be enabled or disabled to allow or deny wireless access. If enabled, the wireless clients will be able to access the router.



- **Enable SSID Broadcast** - If enabled, the router will broadcast the wireless network name (SSID).

## 6.4.2. WPS

WPS (Wi-Fi Protected Setup) can help you to quickly and securely connect to a network. This section will guide you to add a new wireless device to your router's network quickly via WPS.

**Note:**

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

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [Wireless 2.4GHz](#) > [WPS](#).
3. Follow one of the following three methods to connect your client device to the router's Wi-Fi network.

### Method ONE: Press the WPS Button on Your Client Device

1. Keep the WPS Status as **Enabled** and click [Add Device](#).

**WPS (Wi-Fi Protected Setup)**

Operation Mode: **Access Point**

WPS Status: **Enabled** [Disable WPS](#)

Current PIN: **12345670** [Restore PIN](#) [Gen New PIN](#)

Disable PIN of this device

Add a new device: [Add Device](#)

2. Select [Press the button of the new device in two minutes](#) and click [Connect](#).

**Add A New Device**

Enter the new device's PIN.  
PIN:

Press the button of the new device in two minutes.

[Back](#) [Connect](#)

3. Within two minutes, press the WPS button on your client device.
4. A success message will appear on the WPS page if the client device has been successfully added to the router's network.

### Method TWO: Enter the Client's PIN

1. Keep the WPS Status as **Enabled** and click **Add Device**.

**WPS (Wi-Fi Protected Setup)**

Operation Mode: **Access Point**

WPS Status: **Enabled**

Current PIN: **12345670**

Disable PIN of this device

Add a new device:

2. Select **Enter the new device's PIN**, enter your client device's current PIN in the **PIN** field and click **Connect**.

**Add A New Device**

Enter the new device's PIN.  
PIN:

Press the button of the new device in two minutes.

3. A success message will appear on the WPS page if the client device has been successfully added to the router's network.

### Method Three: Enter the Router's PIN

1. Keep the WPS Status as **Enabled** and get the **Current PIN** of the router.

**WPS (Wi-Fi Protected Setup)**

**Operation Mode:** Access Point

**WPS Status:** Enabled

**Current PIN:** 12345670

Disable PIN of this device

**Add a new device:**

2. Enter the router's current PIN on your client device to join the router's Wi-Fi network.

### 6.4.3. Wireless Security

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [Wireless 2.4GHz](#) > [Wireless Security](#).
3. Configure the security settings of your wireless network and click [Save](#).

Wireless Security

---

**Operation Mode:** Access Point

---

**Disable Security**

**WPA/WPA2 - Personal(Recommended)**

**Version:**

**Encryption:**

**Wireless Password:**   
(You can enter ASCII characters between 8 and 63 or Hexadecimal characters between 8 and 64.)

**Group Key Update Period:**  Seconds  
(Keep it default if you are not sure, minimum is 30, 0 means no update)

**WPA/WPA2 - Enterprise**

**Version:**

**Encryption:**

**Radius Server IP:**

**Radius Port:**  (1-65535, 0 stands for default port 1812)

**Radius Password:**

**Group Key Update Period:**  (in second, minimum is 30, 0 means no update)

**WEP**

**Type:**

**WEP Key Format:**

	WEP Key	Key Type
Key 1: <input checked="" type="radio"/>	<input type="text"/>	Disabled <input type="text"/>
Key 2: <input type="radio"/>	<input type="text"/>	Disabled <input type="text"/>
Key 3: <input type="radio"/>	<input type="text"/>	Disabled <input type="text"/>
Key 4: <input type="radio"/>	<input type="text"/>	Disabled <input type="text"/>

- **Disable Security** - The wireless security function can be enabled or disabled. If disabled, wireless clients can connect to the router without a password. It's strongly recommended to choose one of the following modes to enable security.
- **WPA-PSK/WPA2-Personal** - It's the WPA/WPA2 authentication type based on pre-shared passphrase.
  - **Version** - Select **Automatic**, **WPA-PSK** or **WPA2-PSK**.
  - **Encryption** - Select **Automatic**, **TKIP** or **AES**.
  - **Wireless Password** - Enter ASCII or Hexadecimal characters. For Hexadecimal, the length should be between 8 and 64 characters; for ASCII, the length should be between 8 and 63 characters.
  - **Group Key Update Period** - Specify the group key update interval in seconds. The value can be 0 or at least 30. Enter 0 to disable the update.

- **WPA /WPA2-Enterprise** - It's based on Radius Server.
  - **Version** - Select **Automatic**, **WPA** or **WPA2**.
  - **Encryption** - Select **Automatic**, **TKIP** or **AES**.
  - **Radius Server IP** - Enter the IP address of the Radius server.
  - **Radius Port** - Enter the port that Radius server used.
  - **Radius Password** - Enter the password for the Radius server.
  - **Group Key Update Period** - Specify the group key update interval in seconds. The value should be 30 or above. Enter 0 to disable the update.
- **WEP** - It is based on the IEEE 802.11 standard.
  - **Type** - The default setting is **Automatic**, which can select Shared Key or Open System authentication type automatically based on the wireless client's capability and request.
  - **WEP Key Format** - Hexadecimal and ASCII formats are provided here. Hexadecimal format stands for any combination of hexadecimal digits (0-9, a-f, A-F) in the specified length. ASCII format stands for any combination of keyboard characters in the specified length.
  - **WEP Key (Password)** - Select which of the four keys will be used and enter the matching WEP key. Make sure these values are identical on all wireless clients in your network.
  - **Key Type** - Select the WEP key length (64-bit, 128-bit or 152-bit) for encryption. **Disabled** means this WEP key entry is invalid.
  - **64-bit** - Enter 10 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 5 ASCII characters.
  - **128-bit** - Enter 26 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 13 ASCII characters.
  - **152-bit** - Enter 32 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 16 ASCII characters.

#### 6.4.4. Wireless MAC Filtering

Wireless MAC Filtering is used to deny or allow specific wireless client devices to access your network by their MAC addresses.

**I want to:** Deny or allow specific wireless client devices to access my network by their MAC addresses.

**For example,** you want the wireless client A with the MAC address 00-0A-EB-B0-00-0B and the wireless client B with the MAC address 00-0A-EB-00-07-5F to access the router, but other wireless clients cannot access the router

## 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 [Setting](#) > [Wireless 2.4GHz](#) > [Wireless MAC Filtering](#).
3. Click [Enable](#) to enable the Wireless MAC Filtering function.
4. Select [Allow the stations specified by any enabled entries in the list to access](#) as the filtering rule.
5. Delete all or disable all entries if there are any entries already.
6. Click [Add New](#) and fill in the blank.

Add or Modify Wireless MAC Address Filtering entry

---

MAC Address:

Description:

Status: Enabled ▼

---

- 1) Enter the MAC address 00-0A-EB-B0-00-0B/00-0A-EB-00-07-5F in the MAC Address field.
  - 2) Enter wireless client A/B in the Description field.
  - 3) Select [Enabled](#) in the Status drop-down list.
  - 4) Click [Save](#) and click [Back](#).
7. The configured filtering rules should be listed as the picture shows below.

**Filtering Rules**

Deny the stations specified by any enabled entries in the list to access.

Allow the stations specified by any enabled entries in the list to access.

ID	MAC Address	Status	Description	Modify
1	00-0A-EB-B0-00-0B	Enabled	wireless client A	<a href="#">Modify</a> <a href="#">Delete</a>
2	00-0A-EB-B0-07-5F	Enabled	wireless client B	<a href="#">Modify</a> <a href="#">Delete</a>

**Done!**

Now only client A and client B can access your network.

### 6.4.5. Wireless Advanced

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [Wireless 2.4GHz](#) > [Wireless Advanced](#).
3. Configure the advanced settings of your wireless network and click [Save](#).

**Note:**

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

**Wireless Advanced**

**Operation Mode:** Access Point

**Transmit Power:** High

**Beacon Interval :** 100 (40-1000)

**RTS Threshold:** 2346 (1-2346)

**Fragmentation Threshold:** 2346 (256-2346)

**DTIM Interval:** 1 (1-255)

Enable WMM

Enable Short GI

Enable AP Isolation

Save

- **Transmit Power** - Select **High**, **Middle** or **Low** which you would like to specify for the router. **High** is the default setting and recommended.
- **Beacon Interval** - Enter a value between 40-1000 milliseconds for Beacon Interval here. Beacon Interval value determines the time interval of the beacons. The beacons are the packets sent by the router to synchronize a wireless network. The default value is 100.
- **RTS Threshold** - Here you can specify the RTS (Request to Send) Threshold. If the packet is larger than the specified RTS Threshold size, the router will send RTS frames to a particular receiving station and negotiate the sending of a data frame. The default value is 2346.
- **Fragmentation Threshold** - This value is the maximum size determining whether packets will be fragmented. Setting a low value for the Fragmentation Threshold may result in poor network performance because of excessive packets. 2346 is the default setting and is recommended.
- **DTIM Interval** - This value determines the interval of the Delivery Traffic Indication Message (DTIM). A DTIM field is a countdown field informing clients of the next window for listening to broadcast and multicast messages. When the router has buffered broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. You can specify the value between 1-255 Beacon Intervals. The default value is 1, which indicates the DTIM Interval is the same as Beacon Interval.
- **Enable WMM** - WMM function can guarantee the packets with high-priority messages being transmitted preferentially. It is strongly recommended to enable this function.

- **Enable Short GI** - It is recommended to enable this function, for it will increase the data capacity by reducing the guard interval time.
- **Enable AP Isolation** - This function isolates all connected wireless stations so that wireless stations cannot access each other through WLAN. This function will be disabled if WDS/Bridge is enabled.

### 6.4.6. Wireless Statistics

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > Wireless 2.4GHz > Wireless Statistics** to check the data packets sent and received by each client device connected to the router.

Wireless Statistics						
Operation Mode:			Access Point			
Current Connected Wireless Stations numbers:					1	Refresh
ID	MAC Address	Current Status	Received Packets	Sent Packets	Configure	
1	90-FD-61-3F-6B-16	WPA2-PSK	86	13	Deny	
Previous		Next				

- **MAC Address** - The MAC address of the connected wireless client.
- **Current Status** - The running status of the connected wireless client.
- **Received Packets** - Packets received by the wireless client.
- **Sent Packets** - Packets sent by the wireless client.
- **Configure** - The button is used for loading the item to the Wireless MAC Filtering list.
  - **Allow** - If the Wireless MAC Filtering function is enabled, click this button to allow the client to access your network.
  - **Deny** - If the Wireless MAC Filtering function is enabled, click this button to deny the client to access your network.

## 6.5. DHCP

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



### 6.5.1. DHCP Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [DHCP](#) > [DHCP Settings](#).
3. Specify DHCP server settings and click [Save](#).

- **DHCP Server** - Enable or disable the DHCP server. If disabled, you must have another DHCP server within your network or else you must configure the computer manually.
- **Start IP Address** - Specify an IP address for the DHCP Server to start with when assigning IP addresses. 192.168.0.100 is the default start address.
- **End IP Address** - Specify an IP address for the DHCP Server to end with when assigning IP addresses. 192.168.0.199 is the default end address.
- **Address Lease Time** - The Address Lease Time is the amount of time a network user will be allowed to connect to the router with the current dynamic IP Address. When time is up, the current dynamic IP will be automatically renewed. The range of the time is 1 ~ 2880 minutes. The default value is 1.
- **Default Gateway (Optional)** - It is suggested to input the IP address of the LAN port of the router. The default value is 192.168.0.1.
- **Default Domain (Optional)** - Input the domain name of your network.
- **Primary DNS (Optional)** - Input the DNS IP address provided by your ISP.
- **Secondary DNS (Optional)** - Input the IP address of another DNS server if your ISP provides two DNS servers.

**Note:**

- To use the DHCP server function of the router, you must configure all computers on the LAN as [Obtain an IP Address automatically](#).
- When you choose [Dynamic IP \(DHCP\)](#) in [Setting](#) > [Network](#) > [LAN](#), the DHCP Server function will be disabled. You will see the page as below.

**DHCP Settings**

---

**DHCP Server:**       Disable     Enable

**Start IP Address:**   

**End IP Address:**    

**Address Lease Time:**  minutes (1~2880 minutes, the default value is 1)

**Default Gateway:**  

**Default Domain:**      (Optional)

**Primary DNS:**         (Optional)

**Secondary DNS:**      (Optional)

Note: The DHCP Settings function cannot be configured if you have chosen Smart IP (DHCP) in **Network->LAN** (in this situation the device will help you configure the DHCP automatically as you need).

### 6.5.2. DHCP Client List

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting > DHCP > DHCP Client List](#) to view the information of the clients connected to the router.

**DHCP Client List**

---

ID	Client Name	MAC Address	Assigned IP	Lease Time
1	<input type="text"/>	14-CF-92-13-6D-78	192.168.0.101	01:57:29
2	<input type="text"/>	B4-0B-44-1A-C7-58	192.168.0.100	00:45:14

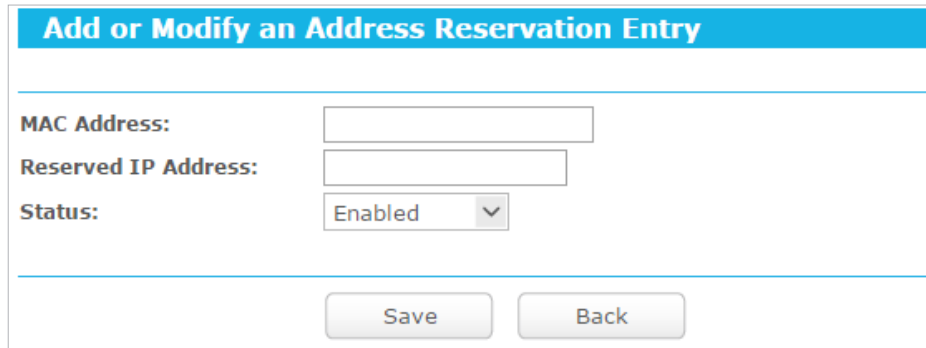
- **Client Name** - The name of the DHCP client.
- **MAC Address** - The MAC address of the DHCP client.
- **Assigned IP** - The IP address that the router has allocated to the DHCP client.
- **Lease Time** - The time of the DHCP client leased. After the dynamic IP address has expired, the dynamic IP address will be automatically renewed.

You cannot change any of the values on this page. To update this page and show the current attached devices, click [Refresh](#).

### 6.5.3. Address Reservation

You can reserve an IP address for a specific client. When you specify a reserved IP address for a PC on the LAN, this PC will always receive the same IP address each time when it accesses the DHCP server.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [DHCP](#) > [Address Reservation](#).
3. Click [Add New](#) and fill in the blanks.



**Add or Modify an Address Reservation Entry**

**MAC Address:**

**Reserved IP Address:**

**Status:**  ▼

- 1) Enter the MAC address (in XX-XX-XX-XX-XX-XX format.) of the client for which you want to reserve an IP address.
- 2) Enter the IP address (in dotted-decimal notation) which you want to reserve for the client.
- 3) Leave the [Status](#) as [Enabled](#).
- 4) Click [Save](#).

## 6.6. System Tools

### 6.6.1. Working Mode

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [Working Mode](#). Select the working mode for the router as needed and click [Save](#).

■ When [Control the system mode by software](#) is checked, the operation mode switch on the router will be disabled. If you want to enable it, please log in to the web management page and go to [Working Mode](#) to uncheck [Control the system mode by software](#).

## 6.6.2. Diagnostic

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

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [Diagnostic](#).

- **Diagnostic Tool** - Select one diagnostic tool.
  - **Ping** - This diagnostic tool troubleshoots connectivity, reachability, and name resolution to a given host or gateway.
  - **Tracerouter** - This diagnostic tool tests the performance of a connection.

**Note:**

You can use ping/traceroute to test both numeric IP address or domain name. If pinging/tracerouting the IP address is successful, but pinging/tracerouting the domain name is not, you might have a name resolution problem. In this case, ensure that the domain name you are specifying can be resolved by using Domain Name System (DNS) queries.

- **IP Address/Domain Name** - Enter the destination IP address (such as 192.168.0.1) or Domain name (such as www.tp-link.com).
  - **Pings Count** - The number of Ping packets for a Ping connection.
  - **Ping Packet Size** - The size of Ping packet.
  - **Ping Timeout** - Set the waiting time for the reply of each Ping packet. If there is no reply in the specified time, the connection is overtime.
  - **Traceroute Max TTL** - The max number of hops for a Traceroute connection.
3. Click **Start** to check the connectivity of the Internet.
  4. The **Diagnostic Results** page displays the diagnosis result. If the result is similar to the following figure, the connectivity of the Internet is fine.

```

Diagnostic Results
-----
Pinging 192.168.0.1 with 64 bytes of data:

Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=1
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=2
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=3
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=4

Ping statistics for 192.168.0.1
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)
Approximate round trip times in milliseconds:
Minimum = 1, Maximum = 1, Average = 1

```

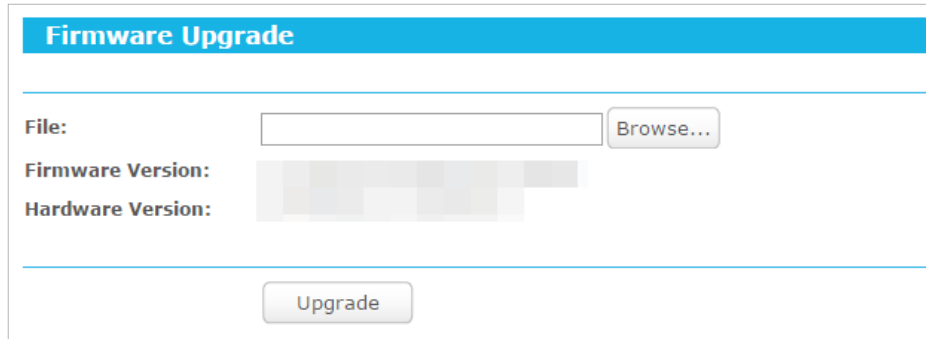
**Note:**

Only one user can use this tool at one time. Options "Number of Pings", "Ping Size" and "Ping Timeout" are used for the Ping function. Option "Tracert Hops" is used for the Tracert function.

### 6.6.3. Firmware Upgrade

TP-LINK is dedicated to improving and enriching the product features, giving users a better network experience. We will release the latest firmware at the TP-LINK official website [www.tp-link.com](http://www.tp-link.com). You can download the latest firmware file from the [Support](#) page and upgrade the firmware to the latest version.

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

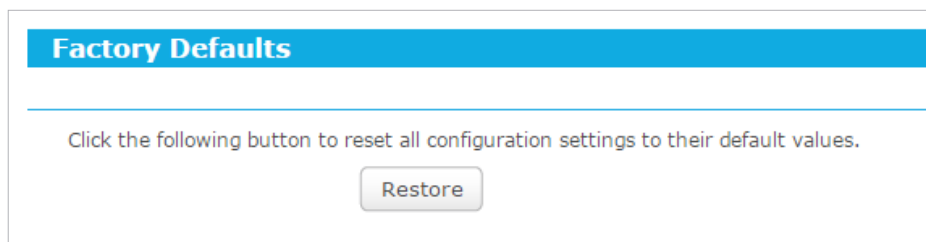


The screenshot shows the 'Firmware Upgrade' page. At the top, there is a blue header with the text 'Firmware Upgrade'. Below the header, there are three rows of information: 'File:' with an empty text input field and a 'Browse...' button; 'Firmware Version:' with a greyed-out text input field; and 'Hardware Version:' with a greyed-out text input field. At the bottom of the page, there is a single 'Upgrade' button.

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

#### 6.6.4. Factory Defaults

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > System Tools > Factory Defaults**. Click **Restore** to reset all settings to the default values.



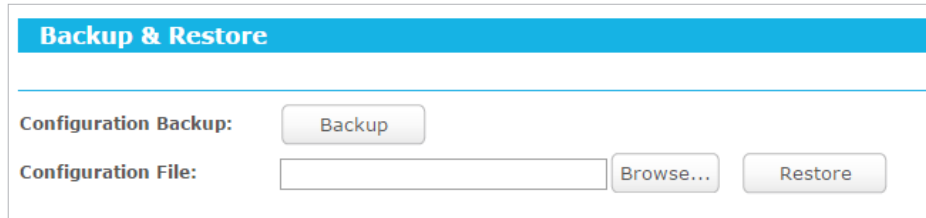
The screenshot shows the 'Factory Defaults' page. At the top, there is a blue header with the text 'Factory Defaults'. Below the header, there is a line of text: 'Click the following button to reset all configuration settings to their default values.' Below this text is a single 'Restore' button.

- The default **Username**: admin
- The default **Password**: admin
- The default **IP Address**: 192.168.0.1
- The default **Subnet Mask**: 255.255.255.0

#### 6.6.5. Backup & Restore

The configuration settings are stored as a configuration file in the router. You can backup the configuration file in your computer for future use and restore the router to the previous settings from the backup file when needed.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > System Tools > Backup & Restore**.



**Backup & Restore**

Configuration Backup:

Configuration File:

➤ **To backup configuration settings:**

Click [Backup](#) to save a copy of the current settings in your local computer. A “.bin” file of the current settings will be stored in your computer.

➤ **To restore configuration settings:**

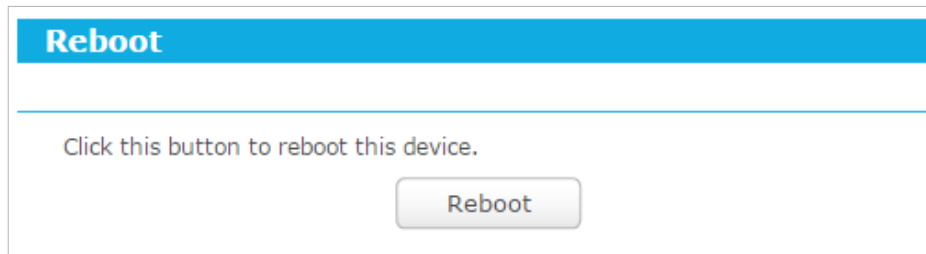
1. Click [Choose File](#) to locate the backup configuration file stored in your computer, and click [Restore](#).
2. Wait a few minutes for the restoring and rebooting.

■ **Note:**

During the restoring process, do not power off or reset the router.

### 6.6.6. Reboot

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [Reboot](#), and you can restart your router.



**Reboot**

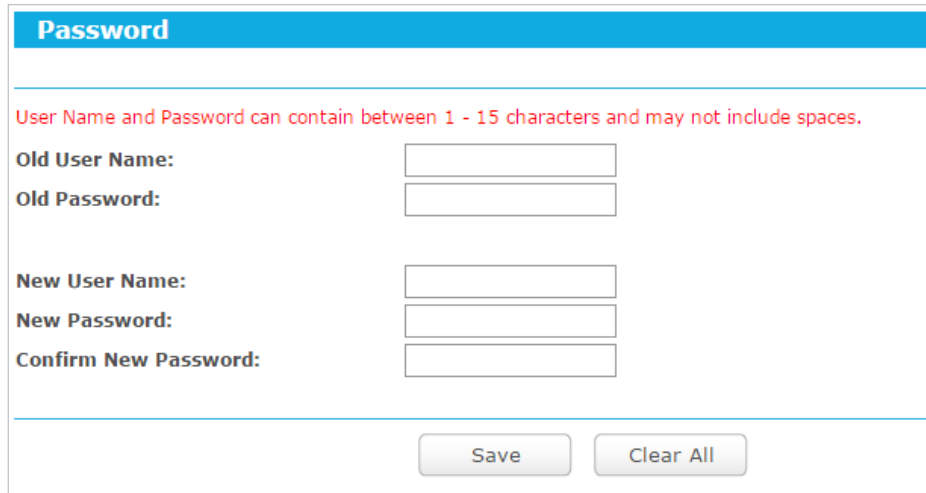
Click this button to reboot this device.

Some settings of the router will take effect only after rebooting, including:

- Change the LAN IP Address (system will reboot automatically).
- Change the DHCP Settings.
- Change the Working Mode.
- Change the Web Management Port.
- Upgrade the firmware of the router (system will reboot automatically).
- Restore the router to its factory defaults (system will reboot automatically).
- Update the configuration with the file (system will reboot automatically).

### 6.6.7. Password

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [Password](#), and you can change the factory default username and password of the router.



The screenshot shows the 'Password' configuration page. At the top, there is a blue header with the word 'Password' in white. Below the header, a red warning message states: 'User Name and Password can contain between 1 - 15 characters and may not include spaces.' The form contains six input fields: 'Old User Name', 'Old Password', 'New User Name', 'New Password', and 'Confirm New Password'. At the bottom of the form, there are two buttons: 'Save' and 'Clear All'.

It is strongly recommended that you change the default username and password of the router, for all users that try to access the router's web-based utility or Quick Setup will be prompted for the router's username and password.

**Note:**

The new username and password must not exceed 15 characters and not include any spacing.

3. Click [Save](#).

### 6.6.8. System Log

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [System Log](#), and you can view the logs of the router.



**System Log**

---

**Auto Mail Feature:** Disabled Mail Settings

**Log Type:** ALL **Log Level:** ALL

Index	Time	Type	Level	Log Content
242	1st day 02:23:22	3G/4G	INFO	primary device is not in
241	1st day 02:22:52	3G/4G	INFO	primary device is not in
240	1st day 02:22:22	3G/4G	INFO	primary device is not in
239	1st day 02:21:52	3G/4G	INFO	primary device is not in
238	1st day 02:21:22	3G/4G	INFO	primary device is not in
237	1st day 02:20:52	3G/4G	INFO	primary device is not in
236	1st day 02:20:22	3G/4G	INFO	primary device is not in
235	1st day 02:19:52	3G/4G	INFO	primary device is not in
234	1st day 02:19:21	3G/4G	INFO	primary device is not in
233	1st day 02:18:51	3G/4G	INFO	primary device is not in

**Time = 2016-01-01 2:23:44 8626s**

**H-Ver =**  **S-Ver =**

**L = 192.168.0.1 : M = 255.255.255.0**

**W1 = DHCP : W = 0.0.0.0 : M = 0.0.0.0 : G = 0.0.0.0**

Refresh
Save Log
Mail Log
Clear Log

---

Previous
Next
Current No. 1
Page

- **Auto Mail Feature** - Indicates whether the auto mail feature is enabled or not.
- **Mail Settings** - Set the receiving and sending mailbox address, server address, validation information as well as the timetable for Auto Mail Feature.

- **From** - Your mail box address. The router will connect it to send logs.
- **To** - Recipient's mail address. The destination mailbox which will receive logs.
- **SMTP Server** - Your smtp server. It corresponds with the mailbox filled in the **From** field. You can log on the relevant website for help if you are not clear with the address.
- **Authentication** - Most SMTP Server requires Authentication. It is required by most mailboxes that need user name and password to log in.

**Note:**

Only when you select Authentication, do you have to enter the user name and password in the following fields.

- **User Name** - Your mail account name filled in the From field. The part behind @ is included.
- **Password** - Your mail account password.
- **Confirm The Password** - Enter the password again to confirm.
- **Enable Auto Mail Feature** - Select it to mail logs automatically. You could mail the current logs either at a specified time everyday or by intervals, but only one could be the current effective rule. Enter the desired time or intervals in the corresponding field.

Click **Save** to apply your settings.

Click **Back** to return to the previous page.

- **Log Type** - By selecting the log type, only logs of this type will be shown.
- **Log Level** - By selecting the log level, only logs of this level will be shown.
- **Refresh** - **Refresh** the page to show the latest log list.

- [Save Log](#) - Click to save all the logs in a txt file.
- [Mail Log](#) - Click to send an email of current logs manually according to the address and validation information set in Mail Settings.
- [Clear Log](#) - All the logs will be deleted from the router permanently, not just from the page.

Click [Next](#) to go to the next page, or click [Previous](#) to return to the previous page.

## Chapter 7

---

# Configure the Router in Range Extender Mode

---

This chapter presents how to configure the various features of the router working as a Range Extender.

This chapter contains the following sections:

- *Status*
- *Operation Mode*
- *Network*
- *Wireless*
- *DHCP*
- *System Tools*

## 7.1. Status

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [Status](#). You can view the current status information of the router in Range Extender Mode.

**Status**

---

**Firmware Version:** [REDACTED]  
**Hardware Version:** [REDACTED]

---

**Operation Mode:** **Range Extender**

---

**Wired**

**MAC Address:** 00-0A-EB-13-7B-00  
**IP Address:** 192.168.0.1  
**Subnet Mask:** 255.255.255.0

---

**Host Network**

**Wireless Name of Root AP:**  
**Connection Status:** Init...

---

**Wireless 2.4GHz**

**Local Wireless Name(SSID):** TP-LINK\_7B00  
**Channel:** 6  
**Mode:** 11b/g/n mixed  
**Channel Width:** Automatic  
**MAC Address:** 00-0A-EB-13-7B-00

---

**Wireless 5GHz**

**Local Wireless Name(SSID):** TP-LINK\_7B00\_5G  
**Channel:** 44  
**Mode:** 11a/n/ac mixed  
**Channel Width:** Automatic  
**MAC Address:** 00-0A-EB-13-7A-FF

---

**Traffic Statistics**

	Received	Sent
<b>Bytes:</b>	<b>0</b>	<b>0</b>
<b>Packets:</b>	<b>0</b>	<b>0</b>

---

**System Up Time:** 0 days 01:07:35 Refresh

- **Firmware Version** - The version information of the router's firmware.
  - **Hardware Version** - The version information of the router's hardware.
  - **Operation Mode** - This field displays the current operation mode of the router.
  - **Wired** - This field displays the current settings of the LAN, and you can configure them on the [Setting > Network > LAN](#) page.
    - **MAC address** - The physical address of the router.
    - **IP address** - The LAN IP address of the router.
    - **Subnet Mask** - The subnet mask associated with the LAN IP address.
  - **Host Network** - This field displays the wireless name and connection status of the root AP.
  - **Wireless 2.4GHz/5GHz** - This field displays the basic information or status of the wireless function, and you can configure them on the [Setting > Wireless 2.4GHz/5GHz > Wireless Settings](#) page.
    - **Local Wireless Name (SSID)** - The wireless network name (SSID) of the extended network.
    - **Channel** - The current wireless channel in use.
    - **Mode** - The current wireless working mode in use.
    - **Channel Width** - The current wireless channel width in use.
    - **MAC Address** - The physical address of the router.
  - **Traffic Statistics** - The router's traffic statistics.
    - **Received (Bytes)** - Traffic in bytes received from the WAN port.
    - **Received (Packets)** - Traffic in packets received from the WAN port.
    - **Sent (Bytes)** - Traffic in bytes sent out from the WAN port.
    - **Sent (Packets)** - Traffic in packets sent out from the WAN port.
  - **System Up Time** - The length of the time since the router was last powered on or reset.
- Click [Refresh](#) to get the latest status and settings of the router.

## 7.2. Operation Mode

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting > Operation Mode](#).
3. Select the operation mode as needed and click [Save](#).

Operation Mode	
<input type="radio"/> Access Point	- Setup Wi-Fi on an existing wired network
<input checked="" type="radio"/> Range Extender	- Extend the range of an existing Wi-Fi
<input type="radio"/> Client	- Act as a "Wireless Adapter" to connect your wired devices to existing Wi-Fi
<input type="button" value="Save"/>	

## 7.3. Network

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [Network](#) > [LAN](#).
3. Configure the IP parameters of the LAN and click [Save](#).

LAN	
<b>MAC Address:</b>	00-0A-EB-13-7B-00
<b>Type:</b>	<input type="text" value="Dynamic IP(DHCP) ▼"/>
<b>IP Address:</b>	<input type="text" value="192.168.0.1"/>
<b>Subnet Mask:</b>	<input type="text" value="255.255.255.0 ▼"/>
<b>Gateway:</b>	<input type="text" value="0.0.0.0"/>
<small>Note: The IP parameters cannot be configured if you have chosen Smart IP (DHCP) (In this situation the device will help you configure the IP parameters automatically as you need).</small>	
<input type="button" value="Save"/>	

- **MAC Address** - The physical address of the LAN ports. The value can not be changed.
- **Type** - Either select [Dynamic IP\(DHCP\)](#) to get IP address from DHCP server, or [Static IP](#) to configure IP address manually.
- **IP Address** - Enter the IP address in dotted-decimal notation if your select [Static IP](#) (factory default - 192.168.0.1).
- **Subnet Mask** - An address code that determines the size of the network. Normally 255.255.255.0 is used as the subnet mask.
- **Gateway** - The gateway should be in the same subnet as your IP address.
- **Allow remote access** - Allow remote devices to access the router by inputting the IP address in browser.

■ **Note:**

- If you have changed the IP address, you must use the new IP address to login.
- If you select [Dynamic IP\(DHCP\)](#), the DHCP server of the router will not start up.

- If the new IP address you set is not in the same subnet as the old one, the IP Address pool in the DHCP Server will be configured automatically, but the Virtual Server and DMZ Host will not take effect until they are re-configured.

## 7.4. Wireless

In this section, we will take the settings for the 2.4GHz wireless network for example.

### 7.4.1. Wireless Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [Wireless 2.4GHz](#) > [Wireless Settings](#).
3. Configure the basic settings for the wireless network and click [Save](#).

**Wireless Settings**

**Operation Mode:** **Range Extender**

**Root AP Connection:** **Enabled**

**Wireless Name of Root AP:**

**MAC Address of Root AP:**

**Mode:** 11b/g/n mixed

**Channel Width:** Auto

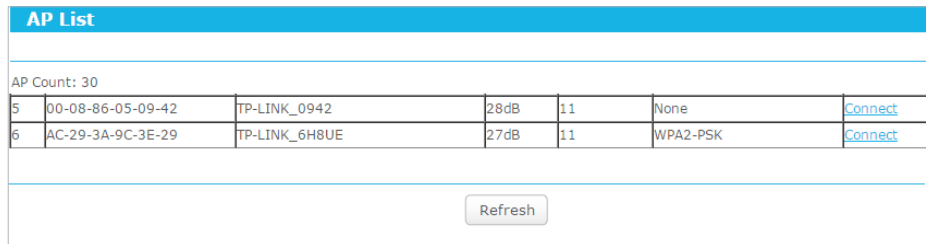
**WDS Mode:** Auto

- **Root AP Connection** - Displays the status of the root AP connection. Click [Enable/Disable](#) to enable/disable the root AP connection.
- **Wireless Name of Root AP** - The SSID of the AP that you want to connect to.
- **MAC Address of Root AP** - The MAC address of the AP that you want to connect to.
- **Mode** - Select the desired mode. It is strongly recommended that you keep the default setting [11b/g/n mixed](#), so that all 802.11b/g/n wireless devices can connect to the router.
- **Channel Width** - Select any channel width from the drop-down list. The default setting is [Auto](#), which can automatically adjust the channel width for your clients.
- **WDS Mode** - This field determines which WDS Mode will be used. It is not necessary to change the WDS mode unless you notice network communication problems



with root AP. If you select [Auto](#), then router will choose the appropriate WDS mode automatically.

- [Survey](#) - Click this button, and the [AP List](#) page will appear. Find the SSID of the Access Point you want to connect to, and click [Connect](#) in the corresponding row. The target network's SSID and MAC address will be automatically filled into the corresponding box.



AP List						
AP Count: 30						
5	00-08-86-05-09-42	TP-LINK_0942	28dB	11	None	<a href="#">Connect</a>
6	AC-29-3A-9C-3E-29	TP-LINK_6H8UE	27dB	11	WPA2-PSK	<a href="#">Connect</a>

[Refresh](#)

### 7.4.2. Wireless Security

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [Wireless](#) > [Wireless Security](#).
3. Configure the security settings of your wireless network and click [Save](#).

Wireless Security

---

**Operation Mode:** Range Extender

---

**Disable Security**

**WPA/WPA2 - Personal(Recommended)**

**Version:**

**Encryption:**

**Wireless Password:**   
(You can enter ASCII characters between 8 and 63 or Hexadecimal characters between 8 and 64.)

**Group Key Update Period:**  Seconds  
(Keep it default if you are not sure, minimum is 30, 0 means no update)

**WEP**

**Type:**

**WEP Key Format:**

Key Selected	WEP Key	Key Type
Key 1: <input checked="" type="radio"/>	<input type="text"/>	Disabled <input type="text"/>
Key 2: <input type="radio"/>	<input type="text"/>	Disabled <input type="text"/>
Key 3: <input type="radio"/>	<input type="text"/>	Disabled <input type="text"/>
Key 4: <input type="radio"/>	<input type="text"/>	Disabled <input type="text"/>

- **Disable Security** - The wireless security function can be enabled or disabled. If disabled, wireless clients can connect to the router without a password. It's strongly recommended to choose one of the following modes to enable security.
- **WPA-PSK/WPA2-Personal** - It's the WPA/WPA2 authentication type based on pre-shared passphrase.
  - **Version** - Select **Automatic**, **WPA-PSK** or **WPA2-PSK**.
  - **Encryption** - Select **Automatic**, **TKIP** or **AES**.
  - **Wireless Password** - Enter ASCII or Hexadecimal characters. For Hexadecimal, the length should be between 8 and 64 characters; for ASCII, the length should be between 8 and 63 characters.
  - **Group Key Update Period** - Specify the group key update interval in seconds. The value can be 0 or at least 30. Enter 0 to disable the update.
- **WEP** - It is based on the IEEE 802.11 standard.
  - **Type** - The default setting is **Automatic**, which can select Shared Key or Open System authentication type automatically based on the wireless client's capability and request.
  - **WEP Key Format** - Hexadecimal and ASCII formats are provided here. Hexadecimal format stands for any combination of hexadecimal digits (0-9,

a-f, A-F) in the specified length. ASCII format stands for any combination of keyboard characters in the specified length.

- **WEP Key (Password)** - Select which of the four keys will be used and enter the matching WEP key. Make sure these values are identical on all wireless clients in your network.
- **Key Type** - Select the WEP key length (64-bit, 128-bit or 152-bit) for encryption. **Disabled** means this WEP key entry is invalid.
- **64-bit** - Enter 10 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 5 ASCII characters.
- **128-bit** - Enter 26 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 13 ASCII characters.
- **152-bit** - Enter 32 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 16 ASCII characters.

### 7.4.3. Wireless MAC Filtering

Wireless MAC Filtering is used to deny or allow specific wireless client devices to access your network by their MAC addresses.

**I want to:** Deny or allow specific wireless client devices to access my network by their MAC addresses.

**For example,** you want the wireless client A with the MAC address 00-0A-EB-B0-00-0B and the wireless client B with the MAC address 00-0A-EB-00-07-5F to access the router, but other wireless clients cannot access the router

**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 **Setting > Wireless 2.4GHz > Wireless MAC Filtering**.
3. Click **Enable** to enable the Wireless MAC Filtering function.
4. Select **Allow the stations specified by any enabled entries in the list to access** as the filtering rule.
5. Delete all or disable all entries if there are any entries already.
6. Click **Add New** and fill in the blank.

Add or Modify Wireless MAC Address Filtering entry	
MAC Address:	<input type="text"/>
Description:	<input type="text"/>
Status:	Enabled ▼
<input type="button" value="Save"/> <input type="button" value="Back"/>	

- 1) Enter the MAC address 00-0A-EB-B0-00-0B/00-0A-EB-00-07-5F in the MAC Address field.
  - 2) Enter wireless client A/B in the Description field.
  - 3) Leave the status as **Enabled**.
  - 4) Click **Save** and click **Back**.
7. The configured filtering rules should be listed as the picture shows below.

Filtering Rules				
<input type="radio"/> Deny the stations specified by any enabled entries in the list to access.				
<input checked="" type="radio"/> Allow the stations specified by any enabled entries in the list to access.				
ID	MAC Address	Status	Description	Modify
1	00-0A-EB-B0-00-0B	Enabled	wireless client A	<a href="#">Modify</a> <a href="#">Delete</a>
2	00-0A-EB-B0-07-5F	Enabled	wireless client B	<a href="#">Modify</a> <a href="#">Delete</a>

**Done!**

Now only client A and client B can access your network.

#### 7.4.4. Wireless Advanced

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > Wireless 2.4GHz > Wireless Advanced**.
3. Configure the advanced settings of your wireless network and click **Save**.

**Note:**

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

Wireless Advanced	
<b>Operation Mode:</b>	<b>Range Extender</b>
<b>Transmit Power:</b>	High <input type="button" value="v"/>
<b>Beacon Interval :</b>	100 (40-1000)
<b>RTS Threshold:</b>	2346 (1-2346)
<b>Fragmentation Threshold:</b>	2346 (256-2346)
<b>DTIM Interval:</b>	1 (1-255)
	<input checked="" type="checkbox"/> Enable WMM
	<input checked="" type="checkbox"/> Enable Short GI
	<input type="checkbox"/> Enable AP Isolation
<input type="button" value="Save"/>	

- **Transmit Power** - Select **High**, **Middle** or **Low** which you would like to specify for the router. **High** is the default setting and recommended.
- **Beacon Interval** - Enter a value between 40-1000 milliseconds for Beacon Interval here. Beacon Interval value determines the time interval of the beacons. The beacons are the packets sent by the Router to synchronize a wireless network. The default value is 100.
- **RTSThreshold** - Here you can specify the RTS (Request to Send) Threshold. If the packet is larger than the specified RTS Threshold size, the Router will send RTS frames to a particular receiving station and negotiate the sending of a data frame. The default value is 2346.
- **Fragmentation Threshold** - This value is the maximum size determining whether packets will be fragmented. Setting a low value for the Fragmentation Threshold may result in poor network performance because of excessive packets. 2346 is the default setting and is recommended.
- **DTIM Interval** - This value determines the interval of the Delivery Traffic Indication Message (DTIM). A DTIM field is a countdown field informing clients of the next window for listening to broadcast and multicast messages. When the Router has buffered broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. You can specify the value between 1-255 Beacon Intervals. The default value is 1, which indicates the DTIM Interval is the same as Beacon Interval.
- **Enable WMM** - WMM function can guarantee the packets with high-priority messages being transmitted preferentially. It is strongly recommended to enable this function.
- **Enable Short GI** - It is recommended to enable this function, for it will increase the data capacity by reducing the guard interval time.
- **Enable AP Isolation** - This function isolates all connected wireless stations so that wireless stations cannot access each other through WLAN. This function will be disabled if WDS/Bridge is enabled.

#### 7.4.5. Wireless Statistics

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > Wireless 2.4GHz > Wireless Statistics** to check the data packets sent and received by each client device connected to the router.

Wireless Statistics						
Current Connected Wireless Stations numbers:					1	Refresh
ID	MAC Address	Current Status	Received Packets	Sent Packets	Configure	
1	14-CF-92-13-6D-78	WPA2-PSK	44639	46216	Deny	
		Previous	Next			

- **MAC Address** - The MAC address of the connected wireless client.
- **Current Status** - The running status of the connected wireless client.
- **Received Packets** - Packets received by the wireless client.
- **Sent Packets** - Packets sent by the wireless client.
- **Configure** - The button is used for loading the item to the Wireless MAC Filtering list.
  - **Allow** - If the Wireless MAC Filtering function is enabled, click this button to allow the client to access your network.
  - **Deny** - If the Wireless MAC Filtering function is enabled, click this button to deny the client to access your network.

## 7.5. DHCP

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

### 7.5.1. DHCP Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > DHCP > DHCP Settings**.
3. Specify DHCP server settings and click **Save**.

DHCP Settings

---

**DHCP Server:**       Disable     Enable

**Start IP Address:**   

**End IP Address:**     

**Address Lease Time:**  minutes (1~2880 minutes, the default value is 1)

**Default Gateway:**   

**Default Domain:**       (Optional)

**Primary DNS:**          (Optional)

**Secondary DNS:**       (Optional)

---

- **DHCP Server** - Enable or disable the DHCP server. If disabled, you must have another DHCP server within your network or else you must configure the computer manually.
- **Start IP Address** - Specify an IP address for the DHCP Server to start with when assigning IP addresses. 192.168.0.100 is the default start address.
- **End IP Address** - Specify an IP address for the DHCP Server to end with when assigning IP addresses. 192.168.0.199 is the default end address.
- **Address Lease Time** - The Address Lease Time is the amount of time a network user will be allowed to connect to the router with the current dynamic IP Address. When time is up, the current dynamic IP will be automatically renewed. The range of the time is 1 ~ 2880 minutes. The default value is 1.
- **Default Gateway (Optional)** - It is suggested to input the IP address of the LAN port of the router. The default value is 192.168.0.1.
- **Default Domain (Optional)** - Input the domain name of your network.
- **Primary DNS (Optional)** - Input the DNS IP address provided by your ISP.
- **Secondary DNS (Optional)** - Input the IP address of another DNS server if your ISP provides two DNS servers.

■ **Note:**

- To use the DHCP server function of the router, you must configure all computers on the LAN as [Obtain an IP Address automatically](#).
- When you choose **Dynamic IP(DHCP)** in **Setting > Network > LAN**, the DHCP Server function will be disabled. You will see the page as below.

DHCP Settings

---

**DHCP Server:**       Disable     Enable

**Start IP Address:**   

**End IP Address:**     

**Address Lease Time:**  minutes (1~2880 minutes, the default value is 1)

**Default Gateway:**   

**Default Domain:**       (Optional)

**Primary DNS:**         (Optional)

**Secondary DNS:**       (Optional)

Note: The DHCP Settings function cannot be configured if you have chosen Smart IP (DHCP) in **Network->LAN** (in this situation the device will help you configure the DHCP automatically as you need).

### 7.5.2. DHCP Client List

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [DHCP](#) > [DHCP Client List](#) to view the information of the clients connected to the router.

DHCP Client List

---

ID	Client Name	MAC Address	Assigned IP	Lease Time
1	<input type="text"/>	14-CF-92-13-6D-78	192.168.0.101	01:57:29
2	<input type="text"/>	B4-0B-44-1A-C7-58	192.168.0.100	00:45:14

- **Client Name** - The name of the DHCP client.
- **MAC Address** - The MAC address of the DHCP client.
- **Assigned IP** - The IP address that the router has allocated to the DHCP client.
- **Lease Time** - The time of the DHCP client leased. After the dynamic IP address has expired, the dynamic IP address will be automatically renewed.

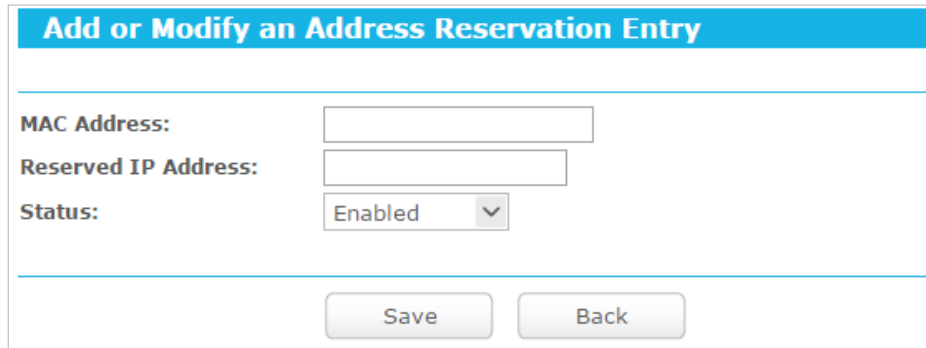
You cannot change any of the values on this page. To update this page and show the current attached devices, click [Refresh](#).

### 7.5.3. Address Reservation

You can reserve an IP address for a specific client. When you specify a reserved IP address for a PC on the LAN, this PC will always receive the same IP address each time when it accesses the DHCP server.



1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [DHCP](#) > [Address Reservation](#).
3. Click [Add New](#) and fill in the blank.



**Add or Modify an Address Reservation Entry**

**MAC Address:**

**Reserved IP Address:**

**Status:**

- 1) Enter the MAC address (in XX-XX-XX-XX-XX-XX format.) of the client for which you want to reserve an IP address.
- 2) Enter the IP address (in dotted-decimal notation) which you want to reserve for the client.
- 3) Leave the status as [Enabled](#).
- 4) Click [Save](#).

## 7.6. System Tools

### 7.6.1. Working Mode

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [Working Mode](#). Select the working mode for the router as needed and click [Save](#).

■ When [Control the system mode by software](#) is checked, the operation mode switch on the router will be disabled. If you want to enable it, please log in to the web management page and go to [Working Mode](#) to uncheck [Control the system mode by software](#).

**Working Mode**

---

Control the system mode by software

Standard Router

Hotspot

AP/Rng Ext/Client

---

### 7.6.2. Diagnostic

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

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [Diagnostic](#).

**Diagnostic Tools**

---

**Diagnostic Parameters**

Diagnostic Tool:  Ping  Traceroute

IP Address/ Domain Name:

Ping Count:  (1-50)

Ping Packet Size:  (4-1472 Bytes)

Ping Timeout:  (100-2000 Milliseconds)

Traceroute Max TTL:  (1-30)

**Diagnostic Results**

This device is ready.

---

- **Diagnostic Tool** - Select one diagnostic tool.
  - **Ping** - This diagnostic tool troubleshoots connectivity, reachability, and name resolution to a given host or gateway.
  - **Tracerouter** - This diagnostic tool tests the performance of a connection.

■ **Note:**

You can use ping/traceroute to test both numeric IP address or domain name. If pinging/tracerouting the IP address is successful, but pinging/tracerouting the domain name is not, you might have a name resolution problem. In this case, ensure that the domain name you are specifying can be resolved by using Domain Name System (DNS) queries.

- **IP Address/Domain Name** - Enter the destination IP address (such as 192.168.0.1) or Domain name (such as www.tp-link.com).
  - **Pings Count** - The number of Ping packets for a Ping connection.
  - **Ping Packet Size** - The size of Ping packet.
  - **Ping Timeout** - Set the waiting time for the reply of each Ping packet. If there is no reply in the specified time, the connection is overtime.
  - **Traceroute Max TTL** - The max number of hops for a Traceroute connection.
3. Click **Start** to check the connectivity of the Internet.
  4. The **Diagnostic Results** page displays the diagnosis result. If the result is similar to the following figure, the connectivity of the Internet is fine.

```

Diagnostic Results
-----
Pinging 192.168.0.1 with 64 bytes of data:

Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=1
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=2
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=3
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=4

Ping statistics for 192.168.0.1
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)
Approximate round trip times in milliseconds:
Minimum = 1, Maximum = 1, Average = 1
-----

```

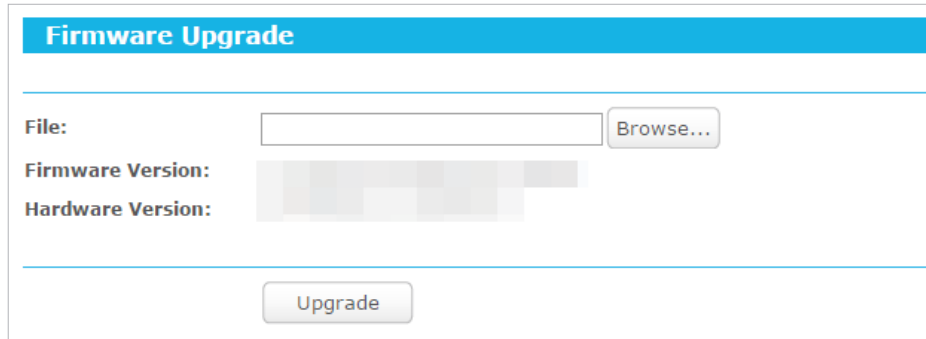
■ **Note:**

Only one user can use this tool at one time. Options "Number of Pings", "Ping Size" and "Ping Timeout" are used for the Ping function. Option "Tracert Hops" is used for the Tracert function.

### 7.6.3. Firmware Upgrade

TP-LINK is dedicated to improving and enriching the product features, giving users a better network experience. We will release the latest firmware at the TP-LINK official website [www.tp-link.com](http://www.tp-link.com). You can download the latest firmware file from the [Support](#) page and upgrade the firmware to the latest version.

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

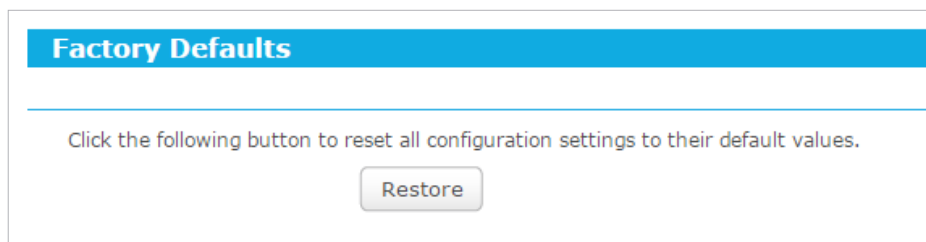


The screenshot shows the 'Firmware Upgrade' page. At the top, there is a blue header with the text 'Firmware Upgrade'. Below the header, there are three rows of information: 'File:' with an empty text input field and a 'Browse...' button; 'Firmware Version:' with a greyed-out text field; and 'Hardware Version:' with a greyed-out text field. At the bottom of the page, there is a single 'Upgrade' button.

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

#### 7.6.4. Factory Defaults

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > System Tools > Factory Defaults**. Click **Restore** to reset all settings to the default values.



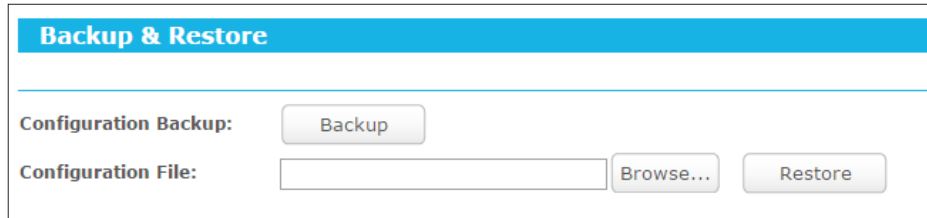
The screenshot shows the 'Factory Defaults' page. At the top, there is a blue header with the text 'Factory Defaults'. Below the header, there is a line of text: 'Click the following button to reset all configuration settings to their default values.' Below this text is a single 'Restore' button.

- The default **Username**: admin
- The default **Password**: admin
- The default **IP Address**: 192.168.0.1
- The default **Subnet Mask**: 255.255.255.0

#### 7.6.5. Backup & Restore

The configuration settings are stored as a configuration file in the router. You can backup the configuration file in your computer for future use and restore the router to the previous settings from the backup file when needed.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > System Tools > Backup & Restore**.



➤ **To backup configuration settings:**

Click [Backup](#) to save a copy of the current settings in your local computer. A “.bin” file of the current settings will be stored in your computer.

➤ **To restore configuration settings:**

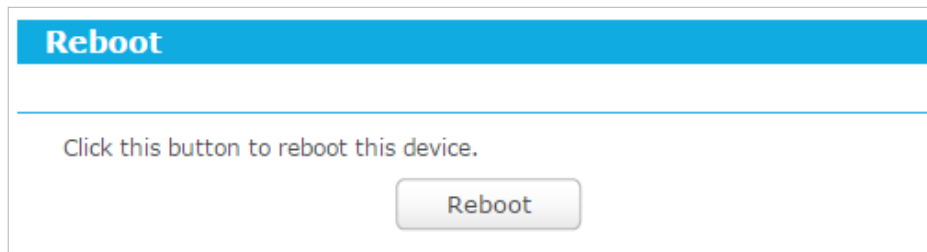
1. Click [Choose File](#) to locate the backup configuration file stored in your computer, and click [Restore](#).
2. Wait a few minutes for the restoring and rebooting.

■ **Note:**

During the restoring process, do not power off or reset the router.

### 7.6.6. Reboot

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [Reboot](#), and you can restart your router.

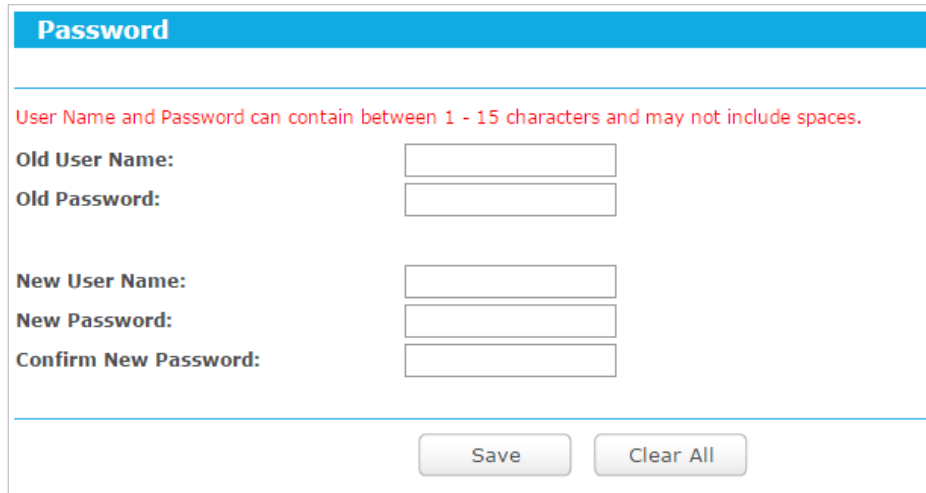


Some settings of the router will take effect only after rebooting, including:

- Change the LAN IP Address (system will reboot automatically).
- Change the DHCP Settings.
- Change the Working Mode.
- Change the Web Management Port.
- Upgrade the firmware of the router (system will reboot automatically).
- Restore the router to its factory defaults (system will reboot automatically).
- Update the configuration with the file (system will reboot automatically).

### 7.6.7. Password

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [Password](#), and you can change the factory default username and password of the router.



The screenshot shows the 'Password' configuration page. At the top, there is a blue header with the word 'Password' in white. Below the header, a red warning message states: 'User Name and Password can contain between 1 - 15 characters and may not include spaces.' The form contains six input fields: 'Old User Name', 'Old Password', 'New User Name', 'New Password', and 'Confirm New Password'. At the bottom of the form, there are two buttons: 'Save' and 'Clear All'.

It is strongly recommended that you change the default username and password of the router, for all users that try to access the router's web-based utility or Quick Setup will be prompted for the router's username and password.

■ **Note:**

The new username and password must not exceed 15 characters and not include any spacing.

3. Click [Save](#).

### 7.6.8. System Log

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [System Log](#), and you can view the logs of the router.

**System Log**

---

**Auto Mail Feature:** Disabled Mail Settings

**Log Type:** ALL **Log Level:** ALL

Index	Time	Type	Level	Log Content
242	1st day 02:23:22	3G/4G	INFO	primary device is not in
241	1st day 02:22:52	3G/4G	INFO	primary device is not in
240	1st day 02:22:22	3G/4G	INFO	primary device is not in
239	1st day 02:21:52	3G/4G	INFO	primary device is not in
238	1st day 02:21:22	3G/4G	INFO	primary device is not in
237	1st day 02:20:52	3G/4G	INFO	primary device is not in
236	1st day 02:20:22	3G/4G	INFO	primary device is not in
235	1st day 02:19:52	3G/4G	INFO	primary device is not in
234	1st day 02:19:21	3G/4G	INFO	primary device is not in
233	1st day 02:18:51	3G/4G	INFO	primary device is not in

**Time = 2016-01-01 2:23:44 8626s**

**H-Ver =**  **S-Ver =**

**L = 192.168.0.1 : M = 255.255.255.0**

**W1 = DHCP : W = 0.0.0.0 : M = 0.0.0.0 : G = 0.0.0.0**

Refresh
Save Log
Mail Log
Clear Log

---

Previous
Next
Current No. 1
Page

- **Auto Mail Feature** - Indicates whether the auto mail feature is enabled or not.
- **Mail Settings** - Set the receiving and sending mailbox address, server address, validation information as well as the timetable for Auto Mail Feature.

- **From** - Your mail box address. The router will connect it to send logs.
- **To** - Recipient's mail address. The destination mailbox which will receive logs.
- **SMTP Server** - Your smtp server. It corresponds with the mailbox filled in the **From** field. You can log on the relevant website for help if you are not clear with the address.
- **Authentication** - Most SMTP Server requires Authentication. It is required by most mailboxes that need user name and password to log in.

■ **Note:**

Only when you select Authentication, do you have to enter the user name and password in the following fields.

- **User Name** - Your mail account name filled in the From field. The part behind @ is included.
- **Password** - Your mail account password.
- **Confirm The Password** - Enter the password again to confirm.
- **Enable Auto Mail Feature** - Select it to mail logs automatically. You could mail the current logs either at a specified time everyday or by intervals, but only one could be the current effective rule. Enter the desired time or intervals in the corresponding field.

Click **Save** to apply your settings.

Click **Back** to return to the previous page.

- **Log Type** - By selecting the log type, only logs of this type will be shown.
- **Log Level** - By selecting the log level, only logs of this level will be shown.
- **Refresh** - **Refresh** the page to show the latest log list.



- [Save Log](#) - Click to save all the logs in a txt file.
- [Mail Log](#) - Click to send an email of current logs manually according to the address and validation information set in Mail Settings.
- [Clear Log](#) - All the logs will be deleted from the router permanently, not just from the page.

Click [Next](#) to go to the next page, or click [Previous](#) to return to the previous page.

## Chapter 8

---

# Configure the Router in Client Mode

---

This chapter presents how to configure the various features of the router working as a client.

This chapter contains the following sections:

- *Status*
- *Operation Mode*
- *Network*
- *Wireless*
- *DHCP*
- *System Tools*

## 8.1. Status

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [Status](#). You can view the current status information of the router in Client Mode.

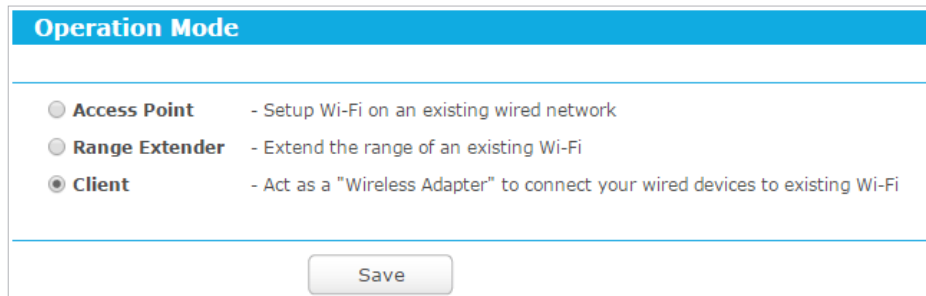
Status		
<b>Firmware Version:</b>	3.16.9 Build 20160624 Rel.76668n	
<b>Hardware Version:</b>	TL-WR902AC v1 00000000	
<b>Operation Mode:</b>	<b>Client</b>	
<b>Wired</b>		
<b>MAC Address:</b>	00-0A-EB-13-7B-00	
<b>IP Address:</b>	192.168.0.1	
<b>Subnet Mask:</b>	255.255.255.0	
<b>Host Network</b>		
<b>Wireless Name of Root AP:</b>		
<b>Connection Status:</b>	Init...	
<b>Traffic Statistics</b>		
	<b>Received</b>	<b>Sent</b>
<b>Bytes:</b>	0	0
<b>Packets:</b>	0	0
<b>System Up Time:</b>	0 days 01:41:17	<input type="button" value="Refresh"/>

- **Firmware Version** - The version information of the router's firmware.
- **Hardware Version** - The version information of the router's hardware.
- **Operation Mode** - This field displays the current operation mode of the router.
- **Wired** - This field displays the current settings of the LAN, and you can configure them on the [Setting](#) > [Network](#) > [LAN](#) page.
  - **MAC address** - The physical address of the router.
  - **IP address** - The LAN IP address of the router.
  - **Subnet Mask** - The subnet mask associated with the LAN IP address.

- **Host Network** - This field displays the wireless name and connection status of the root AP.
  - **Traffic Statistics** - The router's traffic statistics.
    - **Received (Bytes)** - Traffic in bytes received from the WAN port.
    - **Received (Packets)** - Traffic in packets received from the WAN port.
    - **Sent (Bytes)** - Traffic in bytes sent out from the WAN port.
    - **Sent (Packets)** - Traffic in packets sent out from the WAN port.
  - **System Up Time** - The length of the time since the router was last powered on or reset.
- Click [Refresh](#) to get the latest status and settings of the router.

## 8.2. Operation Mode

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [Operation Mode](#).
3. Select the operation mode as needed and click [Save](#).



Operation Mode	
<input type="radio"/> <b>Access Point</b>	- Setup Wi-Fi on an existing wired network
<input type="radio"/> <b>Range Extender</b>	- Extend the range of an existing Wi-Fi
<input checked="" type="radio"/> <b>Client</b>	- Act as a "Wireless Adapter" to connect your wired devices to existing Wi-Fi

Save

## 8.3. Network

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [Network](#) > [LAN](#).
3. Configure the IP parameters of the LAN and click [Save](#).

LAN	
MAC Address:	00-0A-EB-13-7B-00
Type:	Dynamic IP(DHCP) ▼
IP Address:	192.168.0.1
Subnet Mask:	255.255.255.0 ▼
Gateway:	0.0.0.0
Note: The IP parameters cannot be configured if you have chosen Smart IP (DHCP) (In this situation the device will help you configure the IP parameters automatically as you need).	
<input type="button" value="Save"/>	

- **MAC Address** - The physical address of the LAN ports. The value can not be changed.
- **Type** - Either select **Dynamic IP(DHCP)** to get IP address from DHCP server, or **Static IP** to configure IP address manually.
- **IP Address** - Enter the IP address in dotted-decimal notation if your select **Static IP** (factory default - 192.168.0.1).
- **Subnet Mask** - An address code that determines the size of the network. Normally 255.255.255.0 is used as the subnet mask.
- **Gateway** - The gateway should be in the same subnet as your IP address.

■ **Note:**

- If you have changed the IP address, you must use the new IP address to login.
- If you select **Dynamic IP(DHCP)**, the DHCP server of the router will not start up.
- If the new IP address you set is not in the same subnet as the old one, the IP Address pool in the DHCP Server will be configured automatically, but the Virtual Server and DMZ Host will not take effect until they are re-configured.

## 8.4. Wireless

In this section, we will take the settings for the 2.4GHz wireless network for example.

### 8.4.1. Wireless Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > Wireless 2.4GHz > Wireless Settings**.
3. Configure the basic settings for the wireless network and click **Save**.

**Wireless Settings**

Operation Mode: **Client**

Root AP Connection: **Enabled**

Enable WDS

Wireless Name of Root AP:

MAC Address of Root AP:

- **Root AP Connection** - Displays the status of the root AP connection. Click **Enable/Disable** to enable/disable the root AP connection.
- **Enable WDS** - If your host AP supports WDS well, please enable this option. If WDS is enabled, all traffic from wired networks will be forwarded in the format of WDS frames consisting of four address fields. If WDS is disabled, three address frames are used.
- **Wireless Name of Root AP** - Enter the SSID of the AP that you want to access.
- **MAC Address of Root AP** - Enter the MAC address of the AP that you want to access.
- **Survey** - Click this button, and the **AP List** page will appear. Find the SSID of the Access Point you want to connect to, and click **Connect** in the corresponding row. The target network's SSID and MAC address will be automatically filled into the corresponding box.

**AP List**

AP Count: 30

5	00-08-86-05-09-42	TP-LINK_0942	28dB	11	None	<a href="#">Connect</a>
6	AC-29-3A-9C-3E-29	TP-LINK_6H8UE	27dB	11	WPA2-PSK	<a href="#">Connect</a>

## 8.4.2. Wireless Security

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > Wireless 2.4GHz > Wireless Security**.
3. Configure the security settings of your wireless network and click **Save**.

Wireless Security

---

**Operation Mode:** Client

---

**Disable Security**

**WPA/WPA2 - Personal(Recommended)**

**Version:**

**Encryption:**

**Wireless Password:**   
(You can enter ASCII characters between 8 and 63 or Hexadecimal characters between 8 and 64.)

**Group Key Update Period:**  Seconds  
(Keep it default if you are not sure, minimum is 30, 0 means no update)

**WEP**

**Type:**

**WEP Key Format:**

Key Selected	WEP Key	Key Type
Key 1: <input checked="" type="radio"/>	<input type="text"/>	Disabled <input type="text"/>
Key 2: <input type="radio"/>	<input type="text"/>	Disabled <input type="text"/>
Key 3: <input type="radio"/>	<input type="text"/>	Disabled <input type="text"/>
Key 4: <input type="radio"/>	<input type="text"/>	Disabled <input type="text"/>

- **Disable Security** - The wireless security function can be enabled or disabled. If disabled, wireless clients can connect to the router without a password. It's strongly recommended to choose one of the following modes to enable security.
- **WPA-PSK/WPA2-Personal** - It's the WPA/WPA2 authentication type based on pre-shared passphrase.
  - **Version** - Select **Automatic**, **WPA-PSK** or **WPA2-PSK**.
  - **Encryption** - Select **Automatic**, **TKIP** or **AES**.
  - **Wireless Password** - Enter ASCII or Hexadecimal characters. For Hexadecimal, the length should be between 8 and 64 characters; for ASCII, the length should be between 8 and 63 characters.
  - **Group Key Update Period** - Specify the group key update interval in seconds. The value can be 0 or at least 30. Enter 0 to disable the update.
- **WEP** - It is based on the IEEE 802.11 standard.
  - **Type** - The default setting is **Automatic**, which can select Shared Key or Open System authentication type automatically based on the wireless client's capability and request.
  - **WEP Key Format** - Hexadecimal and ASCII formats are provided here. Hexadecimal format stands for any combination of hexadecimal digits (0-9,

a-f, A-F) in the specified length. ASCII format stands for any combination of keyboard characters in the specified length.

- **WEP Key (Password)** - Select which of the four keys will be used and enter the matching WEP key. Make sure these values are identical on all wireless clients in your network.
- **Key Type** - Select the WEP key length (64-bit, 128-bit or 152-bit) for encryption. **Disabled** means this WEP key entry is invalid.
- **64-bit** - Enter 10 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 5 ASCII characters.
- **128-bit** - Enter 26 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 13 ASCII characters.
- **152-bit** - Enter 32 hexadecimal digits (any combination of 0-9, a-f and A-F. Null key is not permitted) or 16 ASCII characters.

### 8.4.3. Wireless Advanced

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > Wireless 2.4GHz > Wireless Advanced**.
3. Configure the advanced settings of your wireless network and click **Save**.

**Note:**

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

Wireless Advanced	
Operation Mode:	Client
Transmit Power:	High
RTS Threshold:	2346 (1-2346)
Fragmentation Threshold:	2346 (256-2346)
	<input checked="" type="checkbox"/> Enable WMM
	<input checked="" type="checkbox"/> Enable Short GI
Save	

- **Transmit Power** - Select **High**, **Middle** or **Low** which you would like to specify for the router. **High** is the default setting and recommended.
- **RTS Threshold** - Here you can specify the RTS (Request to Send) Threshold. If the packet is larger than the specified RTS Threshold size, the router will send RTS frames



to a particular receiving station and negotiate the sending of a data frame. The default value is 2346.

- **Fragmentation Threshold** - This value is the maximum size determining whether packets will be fragmented. Setting a low value for the Fragmentation Threshold may result in poor network performance because of excessive packets. 2346 is the default setting and is recommended.
- **Enable WMM** - WMM function can guarantee the packets with high-priority messages being transmitted preferentially. It is strongly recommended to enable this function.
- **Enable Short GI** - It is recommended to enable this function, for it will increase the data capacity by reducing the guard interval time.

#### 8.4.4. Wireless Statistics

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > Wireless 2.4GHz > Wireless Statistics** to check the data packets sent and received by each client device connected to the router.

Wireless Statistics						
Operation Mode:		Client				
Current Connected Wireless Stations numbers:					1	Refresh
ID	MAC Address	Current Status	Received Packets	Sent Packets	Configure	
1	14-CF-92-13-6D-78	WPA2-PSK	44639	46216	Deny	

- **MAC Address** - The MAC address of the connected wireless client .
- **Current Status** - The running status of the connected wireless client .
- **Received Packets** - Packets received by the wireless client.
- **Sent Packets** - Packets sent by the wireless client.
- **Configure** - The button is used for loading the item to the Wireless MAC Filtering list.
  - **Allow** - If the Wireless MAC Filtering function is enabled, click this button to allow the client to access your network.
  - **Deny** - If the Wireless MAC Filtering function is enabled, click this button to deny the client to access your network.

## 8.5. DHCP

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

### 8.5.1. DHCP Settings

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > DHCP > DHCP Settings**.
3. Specify DHCP server settings and click **Save**.

**DHCP Settings**

DHCP Server:  Disable  Enable

Start IP Address:

End IP Address:

Address Lease Time:  minutes (1~2880 minutes, the default value is 1)

Default Gateway:

Default Domain:  (Optional)

Primary DNS:  (Optional)

Secondary DNS:  (Optional)

- **DHCP Server** - Enable or disable the DHCP server. If disabled, you must have another DHCP server within your network or else you must configure the computer manually.
- **Start IP Address** - Specify an IP address for the DHCP Server to start with when assigning IP addresses. 192.168.0.100 is the default start address.
- **End IP Address** - Specify an IP address for the DHCP Server to end with when assigning IP addresses. 192.168.0.199 is the default end address.
- **Address Lease Time** - The Address Lease Time is the amount of time a network user will be allowed to connect to the router with the current dynamic IP Address. When time is up, the current dynamic IP will be automatically renewed. The range of the time is 1 ~ 2880 minutes. The default value is 1.
- **Default Gateway (Optional)** - It is suggested to input the IP address of the LAN port of the router. The default value is 192.168.0.1.
- **Default Domain (Optional)** - Input the domain name of your network.

- **Primary DNS (Optional)** - Input the DNS IP address provided by your ISP.
- **Secondary DNS (Optional)** - Input the IP address of another DNS server if your ISP provides two DNS servers.

**Note:**

- To use the DHCP server function of the router, you must configure all computers on the LAN as [Obtain an IP Address automatically](#).
- When you choose [Dynamic IP\(DHCP\)](#) in [Network > LAN](#), the DHCP Server function will be disabled. You will see the page as below.

DHCP Settings

---

**DHCP Server:**             Disable    Enable

**Start IP Address:**       

**End IP Address:**        

**Address Lease Time:**     minutes (1~2880 minutes, the default value is 1)

**Default Gateway:**       

**Default Domain:**          (Optional)

**Primary DNS:**              (Optional)

**Secondary DNS:**          (Optional)

Note: The DHCP Settings function cannot be configured if you have chosen Smart IP (DHCP) in **Network->LAN** (in this situation the device will help you configure the DHCP automatically as you need).

## 8.5.2. DHCP Client List

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting > DHCP > DHCP Client List](#) to view the information of the clients connected to the router.

DHCP Client List

---

ID	Client Name	MAC Address	Assigned IP	Lease Time
1	<input type="text"/>	14-CF-92-13-6D-78	192.168.0.101	01:57:29
2	<input type="text"/>	B4-0B-44-1A-C7-58	192.168.0.100	00:45:14

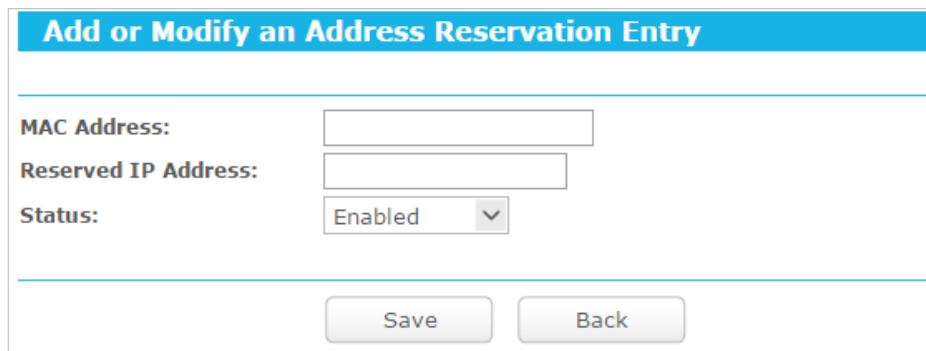
- **Client Name** - The name of the DHCP client.
- **MAC Address** - The MAC address of the DHCP client.
- **Assigned IP** - The IP address that the router has allocated to the DHCP client.
- **Lease Time** - The time of the DHCP client leased. After the dynamic IP address has expired, the dynamic IP address will be automatically renewed.

You cannot change any of the values on this page. To update this page and show the current attached devices, click [Refresh](#).

### 8.5.3. Address Reservation

You can reserve an IP address for a specific client. When you specify a reserved IP address for a PC on the LAN, this PC will always receive the same IP address each time when it accesses the DHCP server.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [DHCP](#) > [Address Reservation](#).
3. Click [Add New](#) and fill in the blank.



**Add or Modify an Address Reservation Entry**

MAC Address:

Reserved IP Address:

Status:

- 1) Enter the MAC address (in XX-XX-XX-XX-XX-XX format.) of the client for which you want to reserve an IP address.
- 2) Enter the IP address (in dotted-decimal notation) which you want to reserve for the client.
- 3) Leave the [Status](#) as [Enabled](#).
- 4) Click [Save](#).

## 8.6. System Tools

### 8.6.1. Working Mode

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [Working Mode](#). Select the working mode for the router as needed and click [Save](#).

■ When [Control the system mode by software](#) is checked, the operation mode switch on the router will be disabled. If you want to enable it, please log in to the web management page and go to [Working Mode](#) to uncheck [Control the system mode by software](#).

**Working Mode**

Control the system mode by software

Standard Router

Hotspot

AP/Rng Ext/Client

Save

## 8.6.2. Diagnostic

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

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [Diagnostic](#).

**Diagnostic Tools**

**Diagnostic Parameters**

Diagnostic Tool:  Ping  Traceroute

IP Address/ Domain Name:

Ping Count:  (1-50)

Ping Packet Size:  (4-1472 Bytes)

Ping Timeout:  (100-2000 Milliseconds)

Traceroute Max TTL:  (1-30)

**Diagnostic Results**

This device is ready.

Start

- **Diagnostic Tool** - Select one diagnostic tool.
  - **Ping** - This diagnostic tool troubleshoots connectivity, reachability, and name resolution to a given host or gateway.
  - **Tracerouter** - This diagnostic tool tests the performance of a connection.

**Note:**

You can use ping/traceroute to test both numeric IP address or domain name. If pinging/tracerouting the IP address is successful, but pinging/tracerouting the domain name is not, you might have a name resolution problem. In this case, ensure that the domain name you are specifying can be resolved by using Domain Name System (DNS) queries.

- **IP Address/Domain Name** - Enter the destination IP address (such as 192.168.0.1) or Domain name (such as www.tp-link.com).
  - **Pings Count** - The number of Ping packets for a Ping connection.
  - **Ping Packet Size** - The size of Ping packet.
  - **Ping Timeout** - Set the waiting time for the reply of each Ping packet. If there is no reply in the specified time, the connection is overtime.
  - **Traceroute Max TTL** - The max number of hops for a Traceroute connection.
3. Click **Start** to check the connectivity of the Internet.
  4. The **Diagnostic Results** page displays the diagnosis result. If the result is similar to the following figure, the connectivity of the Internet is fine.

```

Diagnostic Results
-----
Pinging 192.168.0.1 with 64 bytes of data:

Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=1
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=2
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=3
Reply from 192.168.0.1: bytes=64 time=1 TTL=64 seq=4

Ping statistics for 192.168.0.1
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)
Approximate round trip times in milliseconds:
Minimum = 1, Maximum = 1, Average = 1

```

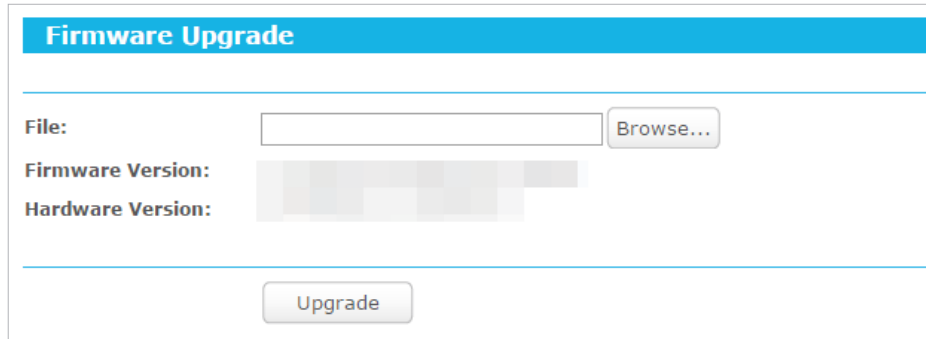
**Note:**

Only one user can use this tool at one time. Options "Number of Pings", "Ping Size" and "Ping Timeout" are used for the Ping function. Option "Tracert Hops" is used for the Tracert function.

### 8.6.3. Firmware Upgrade

TP-LINK is dedicated to improving and enriching the product features, giving users a better network experience. We will release the latest firmware at the TP-LINK official website [www.tp-link.com](http://www.tp-link.com). You can download the latest firmware file from the [Support](#) page and upgrade the firmware to the latest version.

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

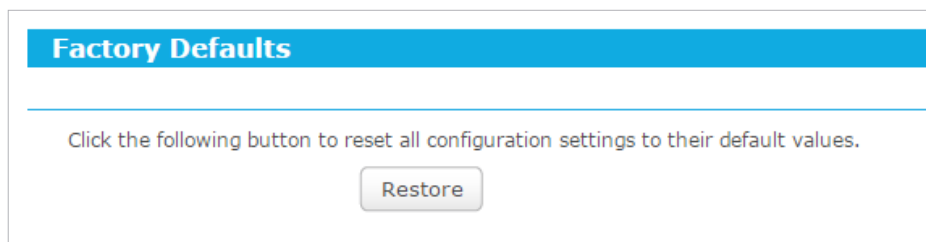


The screenshot shows the 'Firmware Upgrade' page. At the top, there is a blue header with the text 'Firmware Upgrade'. Below the header, there are three rows of information: 'File:' with an empty text input field and a 'Browse...' button; 'Firmware Version:' with a greyed-out text field; and 'Hardware Version:' with a greyed-out text field. At the bottom of the page, there is a single 'Upgrade' button.

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

#### 8.6.4. Factory Defaults

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > System Tools > Factory Defaults**. Click **Restore** to reset all settings to the default values.



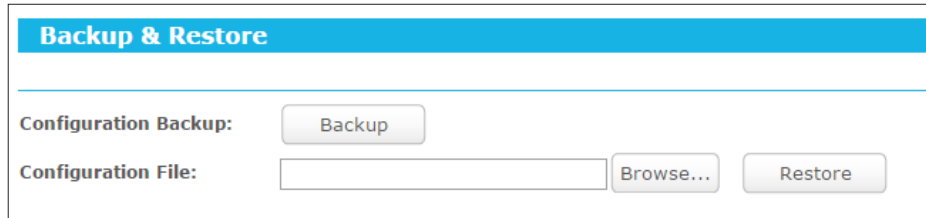
The screenshot shows the 'Factory Defaults' page. At the top, there is a blue header with the text 'Factory Defaults'. Below the header, there is a line of text: 'Click the following button to reset all configuration settings to their default values.' Below this text is a single 'Restore' button.

- The default **Username**: admin
- The default **Password**: admin
- The default **IP Address**: 192.168.0.1
- The default **Subnet Mask**: 255.255.255.0

#### 8.6.5. Backup & Restore

The configuration settings are stored as a configuration file in the router. You can backup the configuration file in your computer for future use and restore the router to the previous settings from the backup file when needed.

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to **Setting > System Tools > Backup & Restore**.



**Backup & Restore**

Configuration Backup:

Configuration File:

➤ **To backup configuration settings:**

Click [Backup](#) to save a copy of the current settings in your local computer. A “.bin” file of the current settings will be stored in your computer.

➤ **To restore configuration settings:**

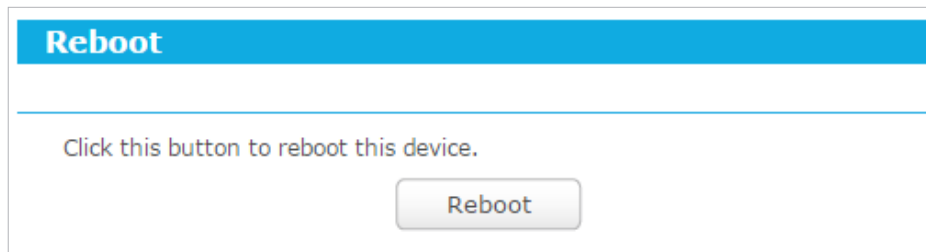
1. Click [Choose File](#) to locate the backup configuration file stored in your computer, and click [Restore](#).
2. Wait a few minutes for the restoring and rebooting.

■ **Note:**

During the restoring process, do not power off or reset the router.

### 8.6.6. Reboot

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [Reboot](#), and you can restart your router.



**Reboot**

Click this button to reboot this device.

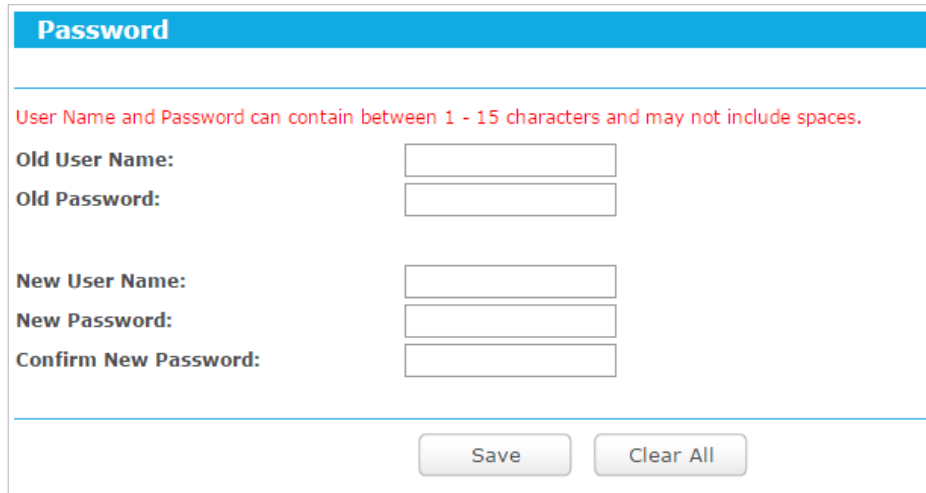
Some settings of the router will take effect only after rebooting, including:

- Change the LAN IP Address (system will reboot automatically).
- Change the DHCP Settings.
- Change the Working Mode.
- Change the Web Management Port.
- Upgrade the firmware of the router (system will reboot automatically).
- Restore the router to its factory defaults (system will reboot automatically).
- Update the configuration with the file (system will reboot automatically).



### 8.6.7. Password

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [Password](#), and you can change the factory default username and password of the router.



The screenshot shows the 'Password' configuration page. At the top, there is a blue header with the word 'Password'. Below the header, a red warning message states: 'User Name and Password can contain between 1 - 15 characters and may not include spaces.' The form contains six input fields: 'Old User Name', 'Old Password', 'New User Name', 'New Password', and 'Confirm New Password'. At the bottom of the form, there are two buttons: 'Save' and 'Clear All'.

It is strongly recommended that you change the default username and password of the router, for all users that try to access the router's web-based utility or Quick Setup will be prompted for the router's username and password.

**Note:**

The new username and password must not exceed 15 characters and not include any spacing.

3. Click [Save](#).

### 8.6.8. System Log

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Go to [Setting](#) > [System Tools](#) > [System Log](#), and you can view the logs of the router.

System Log

---

**Auto Mail Feature:** Disabled Mail Settings

**Log Type:** ALL **Log Level:** ALL

Index	Time	Type	Level	Log Content
242	1st day 02:23:22	3G/4G	INFO	primary device is not in
241	1st day 02:22:52	3G/4G	INFO	primary device is not in
240	1st day 02:22:22	3G/4G	INFO	primary device is not in
239	1st day 02:21:52	3G/4G	INFO	primary device is not in
238	1st day 02:21:22	3G/4G	INFO	primary device is not in
237	1st day 02:20:52	3G/4G	INFO	primary device is not in
236	1st day 02:20:22	3G/4G	INFO	primary device is not in
235	1st day 02:19:52	3G/4G	INFO	primary device is not in
234	1st day 02:19:21	3G/4G	INFO	primary device is not in
233	1st day 02:18:51	3G/4G	INFO	primary device is not in

**Time = 2016-01-01 2:23:44 8626s**

**H-Ver =**  **S-Ver =**

**L = 192.168.0.1 : M = 255.255.255.0**

**W1 = DHCP : W = 0.0.0.0 : M = 0.0.0.0 : G = 0.0.0.0**

Refresh
Save Log
Mail Log
Clear Log

---

Previous
Next
Current No. 1
Page

- **Auto Mail Feature** - Indicates whether the auto mail feature is enabled or not.
- **Mail Settings** - Set the receiving and sending mailbox address, server address, validation information as well as the timetable for Auto Mail Feature.

- **From** - Your mail box address. The router will connect it to send logs.
- **To** - Recipient's mail address. The destination mailbox which will receive logs.
- **SMTP Server** - Your smtp server. It corresponds with the mailbox filled in the **From** field. You can log on the relevant website for help if you are not clear with the address.
- **Authentication** - Most SMTP Server requires Authentication. It is required by most mailboxes that need user name and password to log in.

**Note:**

Only when you select Authentication, do you have to enter the user name and password in the following fields.

- **User Name** - Your mail account name filled in the From field. The part behind @ is included.
- **Password** - Your mail account password.
- **Confirm The Password** - Enter the password again to confirm.
- **Enable Auto Mail Feature** - Select it to mail logs automatically. You could mail the current logs either at a specified time everyday or by intervals, but only one could be the current effective rule. Enter the desired time or intervals in the corresponding field.

Click **Save** to apply your settings.

Click **Back** to return to the previous page.

- **Log Type** - By selecting the log type, only logs of this type will be shown.
- **Log Level** - By selecting the log level, only logs of this level will be shown.
- **Refresh** - **Refresh** the page to show the latest log list.

- [Save Log](#) - Click to save all the logs in a txt file.
- [Mail Log](#) - Click to send an email of current logs manually according to the address and validation information set in Mail Settings.
- [Clear Log](#) - All the logs will be deleted from the router permanently, not just from the page.

Click [Next](#) to go to the next page, or click [Previous](#) to return to the previous page.

# FAQ

## Q1. What can I do if I cannot access the Internet?

- If using a cable modem, unplug the Ethernet cable and reboot the modem. Wait until its Online LED is on and stable, and then reconnect the Ethernet cable to the modem.
- If you're in a hotel room or on a trade show, the Internet may be limited and requires that you authenticate for the service or purchase the Internet access.
- If your Internet access is still not available, contact TP-LINK Technical Support.

## Q2. How do I restore the router to its factory default settings?

With the router powered on, press and hold the [Reset](#) button until all the LEDs start flashing and then release the button.

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

## Q3. What can I do if I forgot my wireless password?

- If you have not changed the default wireless password, it can be found on the label of the router.
- If you have changed the default wireless password, please refer to FAQ > Q2 to reset the router and go through the Quick Setup again.

## Q4. What can I do if I forgot my login password of the web management page?

The default username and password of the web management page are [admin](#) (in lowercase). If you have altered the password:

1. Reset the router to factory default settings: With the router powered on, press and hold the [Reset](#) button until all the LEDs start flashing and then release the button.
2. Visit <http://tplinkwifi.net>, and enter [admin](#) (in lowercase) as both username and password to login.

**Note:** You'll need to reconfigure the router to surf the Internet once the router is reset, and please mark down your new password for future use.

## Q5. What do I need to do if I want to use NetMeeting?

If you start NetMeeting as a sponsor, you don't need to do anything with the router. If you start as a response, please follow the steps below to configure the router:

1. Visit <http://tplinkwifi.net>, and log in with the username and password you set for the router.
2. Enable DMZ: Go to [Advanced](#) > [Forwarding](#) > [DMZ](#). Select [Enable](#) and enter your IP address in the [DMZ Host IP Address](#) field, and then click [Save](#).

3. Enable H323 ALG: Go to [Advanced](#) > [Security](#) > [Basic Security](#), enable [H323 ALG](#) and click [Save](#).

Now you can enjoy your net meeting normally.

## **Q6. What can I do if my wireless signal is unstable or weak?**

It may be caused by too much interference.

- Set your wireless channel to a different one.
- Choose a location with less obstacles that may block the signal between the router and the host AP. An open corridor or a spacious location is ideal.
- Move the router to a new location away from Bluetooth devices and other household electronics, such as cordless phone, microwave, and baby monitor, etc., to minimize signal interference.
- When in Range Extender mode, the ideal location to place the router is halfway between your host AP and the Wi-Fi dead zone. If that is not possible, place the router closer to your host AP to ensure stable performance.

## **COPYRIGHT & TRADEMARKS**

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

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

## FCC STATEMENT



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

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

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

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."



## Canadian Compliance Statement

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

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

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

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

## 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.

## CE Mark Warning

**C € 1588 ⚠**

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 (1999/5/EC Article 3.1a) on the limitation of exposure of the general public to electromagnetic fields by way of health protection.

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

Restricted to indoor use.

## Korea Warning Statements:

당해 무선설비는 운용중 전파혼신 가능성이 있음.



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



## Industry Canada Statement

CAN ICES-3 (B)/NMB-3(B)

### 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。

### 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。

### 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. If you have any questions, please don't hesitate to contact us.

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

AT	BE	BG	CH	CY	CZ	DE	DK
EE	ES	FI	FR	GB	GR	HR	HU
IE	IS	IT	LI	LT	LU	LV	MT
NL	NO	PL	PT	RO	SE	SI	SK

## Explanations of the symbols on the product label

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