



AC1200 MU-MIMO Dual Band Gigabit WiFi Router \cdot AC10 / AC10U

User Guide

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Preface

Thank you for choosing Tenda! Please read this user guide before you start with AC10/AC10U.

Conventions

The typographical elements that may be found in this document are defined as follows.

Item	Presentation	Example
Cascading menus	>	System > Live Users
Parameter and value	Bold	Set User Name to Tom .
Variable	Italic	Format: XX:XX:XX:XX:XX:XX
UI control	Bold	On the Policy page, click the OK button.
Message	<i>u </i>	The "Success" message appears.

The symbols that may be found in this document are defined as follows.

Symbol	Meaning
	This format is used to highlight information of importance or special interest. Ignoring this type of note may result in ineffective configurations, loss of data or damage to device.
💡 TIP	This format is used to highlight a procedure that will save time or resources.

Picture of AC10U is used for guidance in network topologies in this user guide.

Acronyms and Abbreviations

Acronym or Abbreviation	Full Spelling
ISP	Internet Service Provider
VPN	Virtual Private Network
WPS	WiFi Protected Setup
IPTV	Internet Protocol Television

РРРОЕ	Point-to-Point Protocol over Ethernet
DHCP	Dynamic Host Configuration Protocol
DNS	Domain Name System
AP	Access Point
WISP	Wireless Internet Service Provider
РРТР	Point to Point Tunneling Protocol
L2TP	Layer 2 Tunneling Protocol
MPPE	Microsoft Point-to-Point Encryption
РРР	Point To Point Protocol
DDNS	Dynamic Domain Name System
DMZ	Demilitarized Zone
VLAN	Virtual Local Area Network

Additional Information

For more information, search this product model on our website at <u>http://www.tendacn.com</u>.

Technical Support

If you need more help, contact us by any of the following means. We will be glad to assist you as soon as possible.

Hotline	Global: (86) 755-27657180 United States: 1-800-570-5892 Canada: 1-888-998-8966 Hong Kong: 00852-81931998
Reb site	http://www.tendacn.com http://www.tendaus.com
Email	support@tenda.com.cn support.usa@tenda.com.cn

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1 Introduction

1.1 Overview

AC10/AC10U is a high-performance router dedicated to fiber users. With the new 802.11ac wave2.0 standard and four 6 dBi high-gain external antennas, AC10/AC10U offers simultaneous dual-band data rate of as high as 1167 Mbps. With Beamforming+ technology, AC10/AC10U features robust wall penetration capacity, making full use of the FTTH's advantage. The integration of technology MU-MIMO also makes AC10/AC10U support more devices at one time, creating faster and better network for you.

Features

- Supports 4 gigabit auto-negotiation ports.
- Supports the MU-MIMO technology.
- With 4 external omnidirectional antennas.
- Supports to enable/disable the WiFi network of the router at a press of the **WIFI** button.
- Supports WiFi Schedule to disable the WiFi network of the router at specified period.
- Supports 12 V dc 1 A (for AC10), and 12 V dc 1.5 A (for AC10U) power output.
- With a wireless data rate of as high as 1167 Mbps.
- Supports Wireless Repeating and Bandwidth Control.
- Supports migration of ISP user name and password for quick setup.
- Supports remote management with **Tenda WiFi** App.

1.2 Appearance

1.2.1 Front panel



LED indicator	LED indicator name	Status	atus Description	
	System / USB LED indicator	Solid on	 The router is starting. If the indicator is still solid on after your router completes startup, it indicates that the system is faulty. 	
SYS		Slowing blinking	The system is working properly.	
		Fast blinking twice (AC10U only)	A portable USB device is connected to the USB port.	
		Fast blinking (AC10U only)	Data is being transmitted over the USB port.	
	WAN LED indicator	Solid on	The WAN port is connected properly.	
WAN		Fast blinking	Data is being transmitted over the WAN port.	
		Off	The WAN port is disconnected or connected improperly.	
	LAN LED indicator	Solid on	Port 1, 2 or 3 is connected properly.	
LAN		Blinking twice	A device is connected to port 1, 2 or 3.	
		Off	None of ports 1, 2 and 3 is connected or connected properly.	
\ \ /iEi	WiFi / WPS	Solid on	At least the 2.4 GHz or 5 GHz WiFi network is enabled.	
WiFi	LED indicator	Fast blinking	Data is being transmitted wirelessly.	

LED indicator	LED indicator name	Status	Description	
		Slow blinking	The router is performing WPS negotiation.	
		Off	The WiFi network is disabled.	

1.2.2 Rear panel



AC10



AC10U

Port/Button	Description
WiFi	Used to enable/disable the WiFi network of the router.
RST/WPS	 Used to start the WPS negotiation process of the router, or to reset the router. WPS: Press the button of the router, and enable the WPS function of another device within 2 minutes to establish a WPS connection. Reset: When the SYS indicator blinks, hold the button down for about 8 seconds. The router is reset successfully when the SYS indicator lights solid on.
3	By default, it is a LAN port. But after the IPTV function of the router is enabled, it functions only as an IPTV port used to connect to a set-top box.
1/2	They are LAN ports used to connect to devices such as computers and switches.
WAN	Used to connect this router to the internet.
POWER	Used to connect to the power adapter included with the package.
USB (AC10U only)	Used to connect to a portable USB device.

1.2.3 Label on the bottom of the router

The bottom label shows the SSID, WiFi password and login IP address/domain name, pin code of the router. See the following figures:



Tenda		www.tendacn.com Made in China	
AC1200 MU-MIMO Dual B Model NO.:AC10	and Gigab	it WiFi Router	
(1) Access URL: http://192.168.0.1 or http://tendawifi.com	МАС	****	
Power:12V 1A FCC ID:V7TAC10 IC:9034A-AC10	SN	xxxxxxxxxxxxxxx —	(2)
	WiFi Name (SSID)	Tenda_xxxxxx —	(3)
	Password	xxxxxx —	(4)
F© EAE C E	WPS PIN	xxxxxxxx	(5)

- (1): It specifies the login IP address/domain name of the router. You can use this IP address/domain name to access the web UI of the router.
- (2): It specifies the serial number of the router. If the router is faulty, you need to provide this serial number for repair.
- (3): It specifies the default SSID of the router's WiFi network.
 - When you use AC10/AC10U for the first time, connect smart phone or other wireless devices to this SSID to set up your router.
 - After the router is connected to the internet, if this SSID is not changed, wireless devices (such as smart phones) connect to this SSID to access the internet. Otherwise, use the SSID and password you set to access the internet.
- (4): It specifies the default WiFi password of the router.
 - When you use AC10/AC10U for the first time, wireless devices connect the router's WiFi network using this WiFi password to set up internet access.
 - After the router is connected to the internet, if this password is not changed, wireless devices (such as smart phones) connect the router's WiFi network using this WiFi password. Otherwise, use the SSID and password you set to access the internet.

(5): It specifies the pin code of the router. When you connect a device to the router by WPS, this pin code is required.

2 Set up to access the internet

2.1 Setting the new router to access the internet

2.1.1 Setting up on phone

Step 1 Connect devices.

- 1. Power on the router using the power adapter included in the package.
- 2. Plug the Ethernet cable that has connected to the internet into the WAN port of the router.



3. Connect your smart phone to the WiFi network of the router using the WiFi name and password labeled on the bottom of the router.



Step 2 Set up the router.

1. Start a web browser on the phone that has connected to the router, and visit **tendawifi.com**.

tendawifi.com	×	\rightarrow
---------------	---	---------------

2. Tap Start.



- **3.** The system detects your connection type automatically. Set the parameters based on your situation. (PPPoE is used for instructions.)
 - **ISP User Name**: Enter the user name provided by your ISP.
 - **ISP Password**: Enter the password provided by your ISP.

o Tenda W	iFi O
	ect your connection type.
onnection Type:	PPPoE 🔹
ISP User Name:	Enter the user name from your ISP.
ISP Password:	Enter the password from your ISP.
	from the original router.
	Skip

- 4. Tap Next.
- 5. Set the WiFi name, WiFi password, and login password.

	WiFi Settings	
((:-	WiFi Name	
ę	WIFI password of 8-32 characters	Not Required
ð	the WiFi password as the login password of Login password of 5-32 characters	Not Required

6. Tap Next.

--End

Wait a moment. Connected. Connect wireless devices to the WiFi network of the router again using the WiFi name and password you set to access the internet. Wired devices can access the internet directly if they have connected to port 1, 2 or 3.

🔅 Tenda WiFi	0
\bigcirc	
Tenda_097190 or Tenda_097190_	5G

For more functions, refer to relevant contents in this user guide.

2.1.2 Setting up on computer

Step 1 Connect devices.

- 1. Power on the router using the power adapter included in the package.
- 2. Plug the Ethernet cable that has connected to the internet into the WAN port of the router.



3. Connect your computer to port 1, 2 or 3 of the router using an Ethernet cable.



A desktop computer can connect to the WiFi network of the router only when it is installed with a wireless adapter.

- **Step 2** Set up the router.
 - 1. Start a web browser on the computer that has connected to the router. Enter **tendawifi.com** in the address bar and press **Enter**.

< i> 🥭 🦉 tendawifi.com	,0 + →	<i>e</i> New tab	×	↑ ★ ₩

2. Click Start.

Tenda
Tenda Router Quick Setup Wizard
Start

- **3.** The system detects your connection type automatically. Please set the relevant parameters based on your actual situation. (PPPoE is used as an example for instructions here.)
 - **ISP User Name**: Enter the user name provided by your ISP.
 - **ISP Password**: Enter the password provided by your ISP.

Please select your connection type.					
As detected, your connection type may be: PPPoE					
Connection Type:	PPPoE •				
ISP User Name:	Enter the user name from your ISP.				
ISP Password:	Enter the password from your ISP.				
	Import PPPoE user name and password from the original router.				
	Next				

- 4. Click Next.
- 5. Set the WiFi name (SSID), WiFi password and login password.

(((•	WiFi Name	
Ģ	WiFi password of 8-32 characters	Not Require
\bigcirc_{F}	WiFi password of 8-32 characters	■Not F
🔳 Set	the WiFi password as the login passwo	rd of the admin

6. Click Next.

--End

Wait a moment. Connected. Connect wireless devices to the WiFi network of the router again using the WiFi name and password you set to access the internet. Wired devices can access the internet directly if they have connected to port 1, 2 or 3.



For more functions of the router, click **More**.

2.2 Replacing original router with AC10/AC10U

This setup method applies to users who use new routers to replace their original routers with PPPoE user names and passwords, which can migrate user names and passwords from original routers to new routers quickly.

2.2.1 Setting up on phone

Step 1 Migrate your PPPoE user name and password from your original router.

- **1.** Power on your original and new routers.
- 2. Connect the WAN port of the original router to port 1, 2 or 3 of the new router using an Ethernet cable.

When the LAN and WAN indicators of the new router light solid on for 3 seconds after blinking fast, your PPPoE

user name and password are migrated successfully.

3. Remove the original router.



Step 2 Connect devices.

- 1. After successful migration, plug the Ethernet cable that has connected to the internet into the WAN port of the new router.
- 2. Connect your wireless device such as a smart phone to the WiFi network of the new router using the WiFi name and password on the bottom label of the router.



- **Step 3** Set up the router.
 - 1. Start a web browser on the phone that has connected to the router, and visit **tendawifi.com**.



2. Tap Start.



3. The system populates your PPPoE user name and password automatically. Tap **Next**.

Please sel	ect your connection type.	
	our connection type may be: PPPoE	
Connection Type:	PPPoE	
ISP User Name:	chenhao	
ISP Password:		
	The PPPoE user name and passw been imported from the original re	
	Next	
	Next Skip	

4. Set the WiFi name (SSID), WiFi password and login password.

	WIEI Sattingo	
	WiFi Settings	
((;-	WiFi Name	
ę	WiFi password of 8-32 characters	Not Required
Set	the WiFi password as the login password of	the admin account
ð	Login password of 5-32 characters	Not Required
	Next	

5. Tap Next.

--End

Wait a moment. Connected. Connect wireless devices to the WiFi network of the router again using the WiFi name and password you set to access the internet. Wired devices can access the internet directly if they have connected to port 1, 2 or 3.

🗢 Tenda WiFi	0
\bigtriangledown	
Tenda_097190 or Tenda_097190_5	G

For more functions, refer to relevant contents in this user guide.

2.2.2 Setting up on computer

- **Step 1** Migrate your PPPoE user name and password from your original router.
 - **1.** Power on your original and new routers.
 - 2. Connect the WAN port of the original router to port 1, 2 or 3 of the new router using an Ethernet cable.

When the LAN and WAN indicators of the new router light solid on for 3 seconds after blinking fast, your PPPoE user name and password are migrated successfully.

3. Remove the original router.



- Step 2 Connect devices.
 - **1.** After successful immigration, connect WAN port of the new router to an Ethernet cable that has connected to the internet.
 - 2. Connect your computer to port 1, 2 or 3 of the new router using an Ethernet cable.



₽TIP

A desktop computer can connect to the WiFi network of the router only when it is installed with a wireless adapter

- **Step 3** Set up the router.
 - 1. Start a web browser on the computer that has connected to the router. Enter **tendawifi.com** in the address bar and press **Enter**.

< 🔿 🎯 tendawifi.com	,Q + →	🧯 New tab	×	↑ ★ ☆

2. Click Start.



3. The system populates your PPPoE user name and password automatically. Click Next.

Please sel	ect your connection type.	
As detected, y	our connection type may be: PPPoE	
Connection Type:	PPPoE	
ISP User Name:	chenhao	
ISP Password:	••••••	
	The PPPoE user name and password have been imported from the original router.	
	Next	

4. Set the WiFi name (SSID), WiFi password and login password.

((•	WiFi Name	
O _F	WiFi password of 8-32 characters	Not Require
accour	the WiFi password as the login password nt.	Not Requir

5. Click Next.

--End

Wait a moment. Connected. Connect wireless devices to the WiFi network of the router again using the WiFi name and password you set to access the internet. Wired devices can access the internet directly if they have connected to port 1, 2 or 3.



If you want to configure more functions of the router, click More.

3 Web UI description

3.1 Logging in to the web UI of the router

This section describes how to log in to the web UI of the router to manage your router. For the first time to set up your router, refer to <u>Chapter 2 Set up to access the internet</u> for instructions.

1. Start a web browser on the computer connected to your router. Enter **tendawifi.com** in the address bar, and press **Enter**.



2. Enter the login password of your router, and click Login.



If the figure above does not appear, set the Local Area Connection of your computer to Obtain an IP address automatically and Obtain DNS server address automatically. For detailed setting steps, refer to A.1 Setting the IP address of your computer in appendixes. Then try logging in again.

Log in to the web UI of the router successfully. See the following figure:



3.2 Logging out of the web UI of the router

If you log in to the web UI of the router and perform no operation within 5 minutes, the router logs you out. In addition, click **Exit** on the upper right corner of the web UI can log out as well.

4 Internet Status

The **Internet Status** page allows you to view the network status of the router, online devices, WiFi information and other status information.

4.1 Network status

This page shows the current network status of the router.

When the internet icon \checkmark is displayed, the router is connected to the internet successfully and devices can access the internet through the router.



Parameter description:

Parameter	Description
Current Speed	The upload and download rates of the WAN port.
WAN IP Address	The IP address of the WAN port.
Firmware Version	It specifies the current firmware version of the router. After upgrading the firmware version of the router, you can view the current firmware version here to check whether the upgrade is successful.

When <u>Connection failed</u> is displayed, click <u>Connection failed</u> to enter the Internet Settings page, and perform according to the onscreen instructions to solve the issue.



4.2 Online device/USB/WiFi extender

The right part of the **Internet Status** page shows the number of portable USB device inserted into the router, online devices, and gets you to know more about WiFi extender.



4.2.1 Online device

Click **Online** to find detailed information about online devices. See the following figure:

Mana	ge Device					×
ttached	Devices (2) Blacklis	t				
Device	Name		Upload Speed	Download Speed	Access Type	Add to Blacklist
?	liguilan-PC 192.168.0.129	_	0.0KB/s	0.0KB/s	Wired	Local Host
?	RedmiNote4X-ho 192.168.0.189	<u>/</u>	0.0KB/s	0.0KB/s	5G	Add to Blacklist

Add to Blacklist

Click **Add to Blacklist** to add unknown devices to the blacklist. Devices in the blacklist cannot access the internet through the router.

Manage Device						×
ttached Devices (2) Blacklist						
Device Name		Upload Speed	Download Speed	Access Type	Add to Blacklist	
iiguilan-PC 192.168.0.129	2	0.0KB/s	0.0KB/s	Wired	Local Host	
RedmiNote4X-ho 192.168.0.189	_	0.0KB/s	0.0KB/s	5G	Add to Blacklist	

Remove from Blacklist

To remove a device from the blacklist, click **Online** on the **Internet Status** page. Then click **Blacklist** on the **Manage Device** page and locate the corresponding device. Click **Remove**.

Devices removed from the blacklist can access the internet through the router.

Manage Device		×
Attached Devices (1) Blacklist		
Device Name	MAC Address	Remove from Blacklist
RedmiNote4X-hongmish	C4:0B:CB:81:5D:11	Remove

4.2.2 USB

Click **USB** to view detailed information about the USB devices connected to the router.



If a USB device is connected to your router, the USB page appears as follows: (USB Kingston DT 101 G2 is used as an example here)

USB App		×
Singston DT 101 G2	Unmount	
KINGSTON-b		
Available: 7.15GB; Total: 7.26GB		
	USB App Center	

To disconnect your USB, click **Unmount**.

USB App		×
Kingston DT 101 G2	Unmount	
KINGSTON-b		
Available: 7.15GB; Total: 7.26GB		
	USB App Center	

After you disconnect your USB device, the USB page appears as follows:

USB App		×
	No USB device detected	
	USB App Center	

For detailed information about USB function of your router (Only **AC10U** supports USB function), click **USB App** Center to access the **USB App** page.

4.3 WiFi information

The upper-right part of the **Internet Status** page displays the WiFi names (SSIDs) of 2.4 GHz and 5 GHz WiFi networks. After the router accesses the internet, you can connect wireless devices to 2.4 GHz and 5 GHz WiFi network SSIDs to access the internet.

🕋 Internet Status		English 👻 Exit
	2.4 GHz: Tenda_842E68 5 GHz: Tenda_842E68_5G	
Internet	Router	USB: 0 Online: 1 WiFi Extender

To change WiFi names or passwords of 2.4/5 GHz WiFi network, click configure the parameters on the **WiFi Settings** page. See the figure below:

on the Internet Status page, and

WiFi Settings		×
2.4 GHz Network		
WiFi Name:	Tenda_0A7E80	Hide
Encryption Mode:	WPA/WPA2-PSK (recommend V	
WiFi Password:		
5 GHz Network		
WiFi Name:	Tenda_0A7E80_5G	Hide
Encryption Mode:	WPA/WPA2-PSK (recommend V	
WiFi Password:		
	Save	

Set your WiFi names and passwords. If WiFi password is not set before, you need to select the encryption mode before setting the WiFi password. After configuring the parameters, click **Save**. Refer to <u>Chapter 6 WiFi Name</u> <u>and Password</u> for detailed instructions.

Only devices supporting 5 GHz signal can scan and connect to the 5 GHz WiFi network of the router. You are recommended to encrypt your wireless network for higher network security.

4.4 Other information

Click the router icon on Internet Status page. You can know more about the basic information, WAN port status, LAN port status and WiFi status of the router. See <u>Chapter 12 System Settings</u> for detailed parameter information.



5 Internet Settings

5.1 Overview

This page allows you to set internet parameters. Generally, the router detects your internet connection type automatically when you use the router for the first time or after you reset the router. You are recommended to select the detected connection type and follow the onscreen instructions to finish internet setup.

The following table may help you understand your internet connection type. If you are still uncertain about your internet connection type, consult your ISP.

Connection Type	Description
ΡΡΡοΕ	ISP user name and password are provided by your ISP.
Dynamic IP Address	Your ISP does not provide ISP user name, password or other information about IP address.
Static IP Address	Your ISP provides IP address, subnet mask, default gateway, DNS server(s).

To access the configuration page, click Internet Settings. PPPoE is used as an example here.

Internet Settings		English 👻 Exit
	Ethernet cable connected	
WAN Port:	L Ethernet cable connected	
Connection Type:	PPPoE	•
ISP User Name:	chenhao	
ISP Password:		
DNS Settings:	Automatic	Y
Connection Status:	Connected. You can access the internet now.	
Connection Duration:	35s	
	Disconnect	

Parameter description:

Parameter	Description	
WAN Port	It specifies the current status of the WAN port of the router, including Ethernet cable connected and Ethernet cable disconnected .	
Connection Type	It specifies how the router is connected to the internet. This router supports three connection types: PPPoE, dynamic IP address, and static IP address. Please select your connection type according to your actual situation.	
ISP User Name	Enter the user name provided by your ISP.	
ISP Password	Enter the password provided by your ISP.	
DNS Settings	 It specifies how the router obtains DNS information. This item is only needed when you choose to connect the router to the internet by PPPoE or dynamic IP address. Automatic: The router obtains DNS information from upstream device automatically. Manual: You need to enter correct DNS information manually. 	
IP Address Subnet Mask		
Default Gateway	The information is required only when you choose to connect the router to internet by static IP address. Enter the IP address and other information provided by your ISP	
Primary DNS Server	manually.	
Secondary DNS Server		
Connection Status	It specifies whether the router is connected to the internet. If the "Connected. You can access the internet now." message appears, the router is connected to the internet successfully and you can access the internet through your router. Otherwise, the router fails to connect to the internet. Please perform according to the onscreen instructions.	
Connection Duration	It specifies how long the router is connected to the internet successfully this time.	

5.2 Setting up an internet connection with PPPoE

Procedures:

- 1. Click Internet Settings.
- 2. Connection Type: Select PPPoE from the drop-down list box.
- 3. ISP User Name: Enter the user name provided by your ISP.
- 4. **ISP Password**: Enter the password provided by your ISP.
- 5. Click Connect.

WAN Port:	Ethernet cable connected
Connection Type:	PPPoE v
ISP User Name:	chenhao
ISP Password:	•••••
DNS Settings:	Automatic •
	Connect

--End

Verification

Assume that the ISP user name is chenhao, and password is 1234567. If the "Connected. You can access the internet now." message appears, you can access the internet through the router in a wired or wireless manner.

WAN Port:	Ethernet cable connected
Connection Type:	PPPoE •
ISP User Name:	chenhao
ISP Password:	
DNS Settings:	Automatic •
Connection Status:	Connected. You can access the internet now.
Connection Duration:	9s
	Disconnect
5.3 Setting up an internet connection with a dynamic IP address

Procedures:

- **1.** Click **Internet Settings**.
- 2. Connection Type: Select Dynamic IP.
- 3. Click Connect.

WAN Port:	Ethernet cable connected
Connection Type:	Dynamic IP Address
DNS Settings:	Automatic •
Connection Status:	Disconnected
	Connect

--End

Verification

If the "Connected. You can access the internet now." message appears, you can access the internet through the router in a wired or wireless manner.

WAN Det	Ethernet cable connected
WAN POIT.	
Connection Type:	Dynamic IP Address 🔹
DNS Settings:	Automatic •
Connection Status:	Connected. You can access the internet now.
Connection Duration:	10s
	Disconnect

5.4 Set up an internet connection with a static IP address

Procedures:

- **1.** Click Internet Settings.
- 2. Connection Type: Click Static IP Address.
- 3. IP Address, Subnet Mask, Default Gateway and Primary/Secondary DNS Server: Enter the relevant information provided by your ISP. Assume that the IP address in this example is 192.168.20.1, subnet mask 255.255.255.0, default gateway and primary DNS server 192.168.20.100.
- 4. Click Connect.

WAN Port:	Ethernet cable connected
Connection Type:	Static IP Address
IP Address:	192.168.20.1
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.20.100
Primary DNS Server:	192.168.20.100
Secondary DNS Server:	
	Connect

--End

Verification

If the "Connected. You can access the internet now." message appears, you can access the internet through the router in a wired or wireless manner.

WAN Port:	Ethernet cable connected
Connection Type:	Static IP Address
IP Address:	192.168.20.1
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.20.100
Primary DNS Server:	192.168.20.100
Secondary DNS Server:	
Connection Status:	Connected. You can access the internet now.
Connection Duration:	1min 16s
	Disconnect

6 WiFi Settings

This module includes the following functions: <u>WiFi Name & Password</u>, <u>WiFi Schedule</u>, <u>Wireless Repeating</u>, <u>Channel & Bandwidth</u>, <u>Transmit Power</u>, <u>WPS</u>, <u>Beamforming+</u>, <u>AP Mode</u>, and <u>Anti-interference</u>.

6.1 WiFi Name & Password

6.1.1 Overview

This router supports 2.4 GHz and 5 GHz WiFi signals. Features of these two signals are listed as follows:

- **2.4** GHz signal has longer wireless transmission distance than 5 GHz signal.
- 2.4 GHz signal has better wall penetration capacity than 5 GHz signal.
- **5** GHz signal has higher wireless transmission speed than 2.4 GHz signal.
- Comparing with 5 GHz, 2.4 GHz signal is more crowded, interrupted, but less stable.

You can set the WiFi names, encryption modes, and WiFi passwords for two WiFi networks on the **WiFi Name & Password** page. To access the configuration page, click **WiFi Settings** > **WiFi Name & Password**.

WiFi Name & Password		
2.4 GHz Network		
WiFi Name:	Tenda_0A7E80	Hide
Encryption Mode:	WPA/WPA2-PSK (recommend	
WiFi Password:	•••••	
5 GHz Network		
WiFi Name:	Tenda_0A7E80_5G	🔲 Hide
Encryption Mode:	WPA/WPA2-PSK (recommend	
WiFi Password:	•••••	
	Save	

Parameter description:

Parameter	Description
2.4 GHz/ 5 GHz Network	Used to enable/disable the 2.4 GHz/5 GHz WiFi network of your router.
WiFi Name	It specifies the name of 2.4 GHz/5 GHz WiFi network. You can change it if needed. After the router connects to the internet, wireless devices can surf the internet by connecting to the

	WiFi name.
	It specifies the encryption modes supported by the router, including:
Encryption Mode	- None : It indicates that the wireless network is not encrypted so that any wireless devices can connect to it. This option is not recommended as it leads to low network security.
	 WPA-PSK: It indicates that the WiFi network uses WPA-PSK/AES as its authentication method.
	 WPA2-PSK: It indicates that the WiFi network uses WPA2-PSK/AES as its authentication method.
	 WPA/WPA2-PSK (Recommended): It indicates that the WiFi network uses the mixed authentication method of WPA-PSK/AES and WPA2-PSK/AES as its authentication method.
WiFi Password	It specifies the WiFi password which is required when your wireless devices try connecting to the WiFi network.
	It specifies whether to prevent the WiFi name from being detected by wireless devices.
Hide	If the box beside Hide is checked, the router does not broadcast the WiFi signal. The WiFi name does not appear in the devices' lists of available networks, either. When wireless devices connect to the WiFi network, users should manually enter the WiFi name for connection.

6.1.2 Changing WiFi name & WiFi password

Assume to change the 2.4 GHz WiFi name to Tenda_2.4G, WiFi password to 12345678; 5 GHz WiFi name to Tenda_5G, WiFi password to 87654321.

Procedures:

- **Step 1** Click **WiFi Settings > WiFi Name & Password**.
- **Step 2** Change 2.4 GHz WiFi network information.
 - 1. WiFi Name: Set Tenda_2.4G as the WiFi Name.
 - 2. Encryption Mode: Keep the default setting, which is WPA/WPA2-PSK in this example. You can change it if needed.
 - 3. WiFi Password: Set 12345678 as the WiFi password.
- **Step 3** Change 5 GHz WiFi network information.
 - 1. WiFi Name: Set Tenda_5G as the WiFi Name.
 - 2. Encryption Mode: Keep the default setting, which is WPA/WPA2-PSK in this example. You can change it if needed.
 - 3. WiFi Password: Set 87654321 as the WiFi password.
- Step 4 Click Save.

WiFi Name & Password		
2.4 GHz Network		
WiFi Name:	Tenda_2.4G	Hide
Encryption Mode:	WPA/WPA2-PSK (recommend	
WiFi Password:	•••••	
5 GHz Network		
WiFi Name:	Tenda_5G	Hide
Encryption Mode:	WPA/WPA2-PSK (recommend	
WiFi Password:	•••••	
	Save 👆	

--End

Verification

Wait a moment for the modification to complete successfully. You can find the WiFi names have been changed on the **Internet Status** page.

Tenda	🕋 Internet Status		English 👻 Exit
🖀 Internet Status		2.4 GHz: Tenda_2.4G 5 GHz: Tenda_5G	
Internet Settings			
হ্ন WiFi Settings			
Guest Network			
🖴 Parental Control			● USB: 1
. <u>₽</u> VPN			Online: 1
🗄 USB App			WiFi Extender
Advanced Settings	Internet	Router	
System Settings			
	↑0.9KB/s ↓1.3KB/s	192.168.20.187	V15.03.06.35_multi NEW
	Current Speed	WAN IP Address	Firmware Version

6.2 WiFi Schedule

6.2.1 Overview

This WiFi Schedule function allows you to disable the WiFi network of the router at specified period. By default, this function is disabled.

To access the configuration page, click **WiFi Settings** > **WiFi Schedule**.

WiFi Schedule	×
WiFi Schedule:	
Save	
To restore WiFi connectivity when WiFi is disabled as scheduled, press the WiFi button on the router.	

The following figure appears when the WiFi Schedule function is enabled:

WiFi Schedule		×
WiFi Schedule:		
Turn Off During:	00 • : 00 • ~ 07 • : 00 •	
In:	 Every Day Specified Day 	
	♥ Mon. ♥ Tue. ♥ Wed. ♥ Thur. ♥ Fri. ■ Sat. ■ Sun.	
	Save	
To restore WiFi connectivity when WiFi	is disabled as scheduled, press the WiFi button on the router.	

Parameter description:

Parameter	Description
WiFi Schedule	Used to enable/disable the WiFi Schedule function.
Turn Off During	It specifies the period when the WiFi network is disabled. In that period, wireless devices cannot search the router's WiFi networks, but out of that period they can search and connect to the WiFi networks.
In	It allows you to customize your WiFi schedule. See the following:

- Every Day: The router disables its WiFi networks at the specified time you set every day.
- Specified Day: The router disables its WiFi networks at the specified time you set on specified days.

6.2.2 Example

Scenario

Michael bought an AC10/AC10U for network coverage. For a healthier sleeping environment, he wants to disable the WiFi networks every day during 23:00 to 7:00.

Procedures:

- 1. Click WiFi Settings > WiFi Schedule.
- 2. Set the WiFi schedule button to to
- 3. Turn Off During: Set the period as needed, which is 23:00~07:00 in this example.
- 4. In: Select the schedule type as needed, which is **Every Day** in this example.

5. Click Save.

WiFi Schedule		×
WiFi Schedule:		
Turn Off During:	23 • 00 • ~ 07 • 00 •	
In: @	Every Day Specified Day	
	河 Mon. 🗹 Tue. 🗹 Wed. 🗹 Thur. 🗹 Fri. 🗹 Sat. 河 Sun.	
1	Save 👆	
To restore WiFi connectivity when WiFi is	disabled as scheduled, press the WiFi button on the router.	

--End

Verification

The WiFi networks are disabled from 23:00 to 07:00 every day.

6.3 Wireless Repeating

6.3.1 Overview

The Wireless Repeating function enables the router to expand WiFi coverage by connecting to the WiFi network of an upstream router. This router supports two wireless repeating modes: WISP and Client+AP.



To access the configuration page, click **WiFi Settings** > **Wireless Repeating**. By default, the Wireless Repeating function is disabled.

Wireless Repeating		×
Wire	ess Repeating:	
	Save	

Set the wireless repeating button **to I**. Then the following figure appears:

Wireless Repeating		×
Wireless Repeating:		
Repeating Mode:	WISP O Client+AP	
Upstream WiFi Name:	Select V	
	Save	

If wireless repeating is enabled, the Sleeping Mode, IPTV Function, Guest Network, WPS, Tenda App, and WiFi Schedule functions become unavailable. You can find their icons disappear on the **WiFi Settings** page.

Parameter description:

Parameter	Description
Wireless Repeating	Used to enable/disable the Wireless Repeating function.

Repeating Mode	 It specifies how the router repeats the upstream WiFi network. WISP: The router repeats WiFi hotspot provided by ISP or ordinary WiFi network. Client+AP: The router repeats ordinary WiFi network.
Upstream WiFi Name	It specifies the name of the WiFi network you decide to repeat. You can select it from the drop-down list box.
Upstream WiFi Password	It specifies the password of the WiFi network you decide to repeat. This parameter appears after you select the upstream WiFi name.

6.3.2 Example

Scenario

Michael bought a wireless router for network after having broadband service. The router is placed in the living room. WiFi signals are strong in the living room and master bedroom, but too poor in the other bedrooms and restrooms to access the internet. Now he wants to expand the WiFi coverage, ensuring devices to access the internet everywhere.

Solution

Michael can buy an AC10/AC10U, and set the wireless repeating function on it to expand the WiFi network coverage of the original router. Thus, devices in dead zones can access the internet through the WiFi signal of AC10/AC10U. See the following figure:



Procedures:

- Click WiFi Settings > Wireless Repeating. 1.
- Set the wireless repeating button from to to 2.



- Select WISP or Client+AP. 3.
- 4. Upstream WiFi Name: Select the WiFi name of the original router from the drop-down list box, which is majianwei in this example.
- 5. Upstream WiFi Password: Enter the password of the WiFi network of the original router, which is 12345678 in this example. (If the wireless network of the upstream router is unencrypted, leave this box blank.)
- 6. Click Save.

Wireless Repeating		×
Wireless Repeating:		
Repeating Mode:	WISP Client+AP	
Upstream WiFi Name:	majianwei 💌	C2
Upstream WiFi Password:		
	Save	

7. Click OK.





Verification

After the message "Connected. You can access the internet now." appears on the Internet Settings page and the Internet Status page appears as the second figure, devices can access the internet through the WiFi network of AC10/AC10U.

Internet Settings		English 👻 Exit
WAN Port:	Ethernet cable disconnected	
Connection Type:	Dynamic IP Address	Ŧ
DNS Settings:	Automatic	•
Connection Status:	Connected. You can access the internet now.	
Connection Duration:	15s	
	Disconnect	





- If the connection type provided by the upstream router is dynamic IP address, the new router obtains connection information from the upstream router automatically. If the connection type is static IP address, you need to set the connection information manually.
- In mode WISP, if the LAN IP address of the new router is in the same network segment as that of the upstream router, an IP conflict occurs. In this case, the new router replaces its LAN IP address with an IP address which belongs to another network segment. Then log in to the web UI of the new router using tendawifi.com.
- In Client+AP mode, the LAN IP address of A10/AC10U changes and you can view the new IP address from the DHCP client list of the upstream router.

6.4 Channel & Bandwidth

6.4.1 Overview

This module allows you to change network mode, WiFi channel, and WiFi bandwidth of either 2.4 GHz or 5 GHz WiFi network. Please retain the default channel and bandwidth settings if you set without professional guidance. To access the configuration page, click **WiFi Settings** > **Channel & Bandwidth**.

Channel & Bandwidth		×
2.4 GHz Network		
Network Mod	e: 11b/g/n mixed •	
WiFi Chann	el: Auto 🔻	
WiFi Bandwid	h: 20/40 •	
5 GHz Network		
Network Mod	e: 11a/n/ac mixed •	
WiFi Chann	el: Auto 🔻	
WiFi Bandwid	h: 20/40/80 •	
	Save	

Parameter description:

Parameter	Description
Network	It specifies various protocols adopted for wireless transmission. You are recommended to keep the default settings. For 2.4 GHz networks, 11b/g mixed, 11b/g/n mixed, and 11n protocols are

Parameter	Description
Mode	available. For 5 GHz networks, the 11ac and 11a/n/ac protocols mixed are available.
	 11b/g mixed: It indicates that devices compliant with 802.11b or 802.11g protocol can connect to the router.
	 11b/g/n mixed: It indicates that all devices working at 2.4 GHz and compliant with 802.11b, 802.11g, or 802.11n protocol can connect to the router.
	 11n: It indicates that devices working at 2.4 GHz and compliant with 802.11n can connect to the router.
	- 11ac : It indicates that devices complaint with 802.11ac protocol can connect to the router.
	 - 11a/n/ac mixed: It indicates that devices working at 5 GHz and compliant with 802.11a, 802.11n or 802.11ac protocol can connect to the router.
	It specifies the operating channel of a WiFi network.
WiFi Channel	By default, the WiFi channel is Auto , which indicates that the router selects a proper channel based on the utilization rate it detected. But you can change it as required. A channel different from nearby channels and with less interference are recommended to use because of better wireless transmission efficiency. You can use a third-party tool to identify the channels different from nearby channels and with less interference.
	It specifies the bandwidth of the WiFi channel of a WiFi network. Change the default settings only when necessary.
	- 20 : It indicates that the channel bandwidth of a router is to 20 MHz.
WiFi	- 40 : It indicates that the channel bandwidth of a router is 40 MHz.
Bandwidth	- 20/40: It specifies that a router can switch its channel bandwidth between 20 MHz and 40 MHz based on the ambient environment. This option is available only at 2.4 GHz.80: It indicates that the channel bandwidth of a router is 80 MHz. This option is available only at 5 GHz.20/40/80: It specifies that a router can switch its channel bandwidth among 20 MHz, 40 MHz, and 80 MHz based on the ambient environment. This option is available only at 5 GHz.

6.4.2 Changing WiFi channel

Assume that the channel at 2.4 GHz WiFi network is required to change to channel 11, and 5 GHz WiFi network to channel 157.

Procedures:

- 1. Click WiFi Settings > Channel & Bandwidth.
- 2. Change the channel of 2.4 GHz WiFi network to **Channel 11**.
- **3.** Change the channel of 5 GHz WiFi network to **Channel 157**. (If there is no special requirement, retain the other default settings.)
- 4. Click Save.

Channel & Bandwidth		×
2.4 GHz Network		
Network Mode:	11b/g/n mixed •	
WiFi Channel:	Channel 11 v	
WiFi Bandwidth:	20/40 🔻	
5 GHz Network		
Network Mode:	11a/n/ac mixed •	
WiFi Channel:	Channel 157 •	
WiFi Bandwidth:	20/40/80 🔻	
	Save	

--End

6.5 Transmit Power

This router supports three WiFi signal strength modes: Low, Medium, and High. By default, 2.4 GHz and 5 GHz WiFi signal is in the High mode. You can adjust the WiFi coverage and wall penetration capacity of the router's WiFi network through changing its WiFi signal strength mode.

To access the configuration page, click **WiFi Settings** > **Transmit Power**.



Descriptions about WiFi signal strength modes:

- Low: WiFi transmit power in this mode is relatively weak, suitable for small-area or barrier-free WiFi coverage environment.
- Medium: WiFi transmit power in this mode is relatively strong, suitable for medium-area WiFi coverage environment or environment with few barriers.
- **High**: WiFi transmit power in this mode is strong, suitable for large-area WiFi coverage environment or environment with many barriers.

If WiFi network experience is excellent in Low mode, you are recommended to set your router in this mode.

If you want to improve your network experience in some areas with poor WiFi signal, you are recommended to have a Tenda WiFi extender to get your WiFi coverage wider. Click **Details** to know more about the recommended Tenda WiFi extender. For instructions about how to extend WiFi coverage using WiFi extender, refer to the installation guide or user guide of your WiFi extender.

Transmit Power	;	×
2.4 GHz Signal Strength:	 Low Medium High 	
5 GHz Signal Strength:	Medium Medium	
	Save	
Need wider WiFi signal coverage? Use Tenda WiFi extender, which enables you to extend your WiFi signal coverage and eliminate blind areas simply by pressing a single button! Details		

6.6 WPS

6.6.1 Overview

The WPS function enables wireless devices such as smart phones to connect to WiFi networks of the router easily.

To access the configuration page, click **WiFi Settings** > **WPS**. Then follow the onscreen instructions to set.

WPS		×
	WPS:	
	Method 1: Press the WPS button on the router or Click Here. Then, press the WPS button on the wireless network adapter within 2 minutes.	
	Method 2: Enter this pin on receiver:57039336	

6.6.2 Connect devices to WiFi network using WPS

- Smart phones can connect to the WiFi network of the router through WPS only when they support WPS function.
- Desktops or laptops can connect to the WiFi network of the router through WPS only when they are installed with wireless adapters. For detailed information, please refer to the user guide of relevant wireless adapter.

Method 1: Setting through the web UI of the router

- 1. Click WiFi Settings > WPS.
- 2. Click **Click Here**. Then the router's WiFi LED indicator on the front panel is blinking slowly.
- 3. Set WPS on a smart phone or computer installed with wireless network adapter within 2 minutes.

WPS		×
	WPS:	
	Method 1:	
	Press the WPS button on the router or Click Here. Then, press the WPS button on the wireless network adapter within 2 minutes.	
	Method 2:	
	Enter this pin on receiver:57039336	

--End

Smart phones or computers are connected to the WiFi network of the router successfully after a while.

Method 2: Setting via the WPS button on the router

- 1. Press the WPS button on the router.
- 2. Set WPS on a smart phone or computer installed with wireless adapter within two minutes.

--End

The smart phone or computer is connected to the WiFi network of the router successfully after a while.

Method 3: Setting through pin code of the router

WPS connection using pin code is generally applied on computer with wireless adapter. Please refer to relevant adapter's user guide for detailed instructions.

1. Record the router's pin code labeled on the bottom of the router.



2. Enter the pin code on the device for connection.

--End

The device is connected to the router's WiFi network successfully after a while.

6.6.3 Example

Scenario

Michael bought an AC10/AC10U for network and he has set the WiFi password. He hopes to connect devices to the router's WiFi network without entering WiFi password. Assume that the WiFi name of his router is Tenda_XXXXXX.

The WPS function can address this requirement.

Procedures:

Step 1 Set up the router.

1. Click WiFi Settings > WPS > Click Here.

WPS		×
	WPS:	
	Method 1: Press the WPS button on the router or Click Here. Then, press the WPS button on the wireless network adapter within 2 minutes.	
	Method 2: Enter this pin on receiver:57039336	

- **Step 2** Set WPS on a smart phone. Smart phone Redmi Note 4X is used as an example here.
 - **1.** Click **Settings** on the phone's homepage.



2. Then click WLAN > Advanced Settings > Connect WPS.



3. The smart phone is performing WPS negotiation with the router.



--End

Wait a moment for the negotiation to complete. Then the smart phone connects to the router's WiFi network successfully.



Verification

The smart phone accesses the internet through the router's WiFi network successfully.

6.7 Beamforming+

6.7.1 Overview

- As a wireless signal optimization technology, the location-oriented Beamforming could transmit wireless signals to wireless devices precisely, offering users with better internet connection, such as higher download speed or playback of HD videos. Wireless routers broadcast signals to all directions in transmission if they do not support Beamforming+ function.
- Wireless routers supporting Beamforming+ could transmit wireless signals toward the location of connected devices, improving users' internet experiences.

The following figure shows the wireless transmission when Beamforming+ is disabled.



The following figure shows the wireless transmission when Beamforming+ is enabled.



6.7.2 Setting Beamforming+

To access the configuration page, click **WiFi Settings** > **Beamforming+**. By default, Beamforming+ function is enabled. You are recommended to retain the default settings.

Beamforming+		×
Bean	ıforming+:	
Beamforming+	A Smarter WiFi Coverage Technology This Tenda router is equipped with the latest Beamforming+ technology, which detects and locks the positions of wireless devices on the network, such as mobile phones and tablets, and strengthens signal transmission to those positions for better web browsing, gaming, and video playback experience.	

6.8 AP Mode

6.8.1 Overview

In AP mode, the router implements the functions of wireless access point (AP), and WAN port of the router functions as a LAN port. Usually, in AP mode, when the router connects to the upstream router using an Ethernet cable, the router extends the wireless network coverage of the upstream router, or transforms the wired signal to wireless one.

To access the configuration page, click **WiFi Settings** > **AP Mode**. By default, AP mode is disabled.

AP Mode	×
AP Mode:	
AP mode: In this mode, the router provides WiFi signals for user devices to access its upstream rout which is connected to any WAN or LAN port of this router using an Ethernet cable.	er,
Save	

to

6.8.2 Enabling AP mode

1. Click WiFi Settings > AP Mode.

2. Set the AP mode button

3. Click Save.

AP Mode	>
AP Mode:	
 After enabling the AP mode, connect the Ethernet cable connected to the upstream router to any WAN or LAN port of this router. 	
 In AP mode, the Internet Settings, VPN, Parental Control, Bandwidth Control, and Virtual Server functions are unavailable. 	
After enabling the AP mode, the domain name of the router management UI changes to tendawifi.com.	
Save de	

--End

- If AP mode is enabled, Internet Settings, VPN, Parental Control, Bandwidth Control, and Virtual Server functions become unavailable.
- The LAN IP address of the router will be changed since AP mode is enabled. Please log in to the router's web UI by domain name **tendadwifi.com**, or look for the new LAN IP address from the client list of the upstream router, and log in to the router through the new IP address.

6.8.3 Example

Scenario

Michael could access the internet through his optical modem only in a wired manner. Now he wants to access the internet by WiFi network.

Solution

He is recommended to purchase an AC10 or AC10U and enable its AP mode. After setting up the router successfully, his wireless devices like smart phones could access the internet through WiFi network of the router.

Connect a LAN port of the optical modem to any port of the router using an Ethernet cable. Then connect your computer to the router using an Ethernet cable and your smart phones to the router's WiFi network. See the following figure:



Procedures:



4. Click **Ok** in the following window that appears:



--End

Verification

Wired devices like computers could access the internet successfully if they connect to the router using Ethernet cables, and wireless devices likes smart phones are also available to the internet if they connect the router's WiFi network.

6.9 Anti-interference

This router supports the Anti-interference function. When having bad internet experience, you are allowed to modify the Anti-interference settings.

To access the configuration page, click **WiFi Settings** > **Anti-interference**. By default, this function is in **Auto** status.



- When you choose Auto, the router will adjust receiving sensitivity automatically based on the current interference. Please keep Auto if you do not have any special requirement.
- When you choose **Enable**, the router has better anti-interference ability but smaller WiFi coverage.
- When you choose **Disable**, the router has wider WiFi coverage. But if the interference is strong is your environment, you are recommended to choose **Auto** or **Enable**.



7.1 Overview

This module makes you able to enable/disable the Guest Network function and change guest network's WiFi name and password.

Devices connected to the guest network can access to the internet and communicate with each other, but cannot access the router's web UI or the master network. This function not only enables guests to access the internet but also ensures the security of the master network.

To access the configuration page, click **Guest Network**. By default, the Guest Network function is disabled.

Guest Network		English 👻 Exit
Guest Network:		
2.4 GHz WiFi Name:	Tenda_VIP	
5 GHz WiFi Name:	Tenda_VIP_5G	
Guest Network Password:	Blank means no password.	
Validity:	8 hours v	
Shared Bandwidth for Guests:	Unlimited	Mbps
	Save	

Parameter description:

Parameter	Description
Guest Network	Used to enable the Guest Network function. By default, this function is disabled.
2.4 GHz/ 5 GHz WiFi Name	It specifies the WiFi name of the router's guest network. By default, Tenda_VIP is for 2.4 GHz WiFi network and Tenda_VIP_5G for 5 GHz WiFi network.
	You can change the SSIDs if required. To distinguish the guest network from the master network, you are recommended not to set the same name for these two networks.
Guest Network Password	It specifies the password for the router's two guest networks. Please set the password according to your requirements.

Parameter	Description
Validity	It specifies the validity of the guest networks. The Guest Network function will be disabled automatically out of the specified time so wireless devices will not search it. Please set the validity as needed.
Shared Bandwidth for Guests	It specifies the downloading speed of guest network devices, with a unit Mbps. By default, the speed is not limited. You can set it as needed.

7.2 Setting guest network

- **1.** Click **Guest Network**.
- 2. Set the Guest Network button to
- 3. 2.4 GHz WiFi Name: Change the WiFi name, such as to Michael.
- 4. 5 GHz WiFi Name: Change the WiFi name, such as to Michael_5G.
- 5. Guest Network Password: Set the password for guest networks, such as to 987654321.
- 6. Validity: Click the drop-down box, and choose 4 hours.
- 7. Shared Bandwidth for Guests: Click the drop-down box, and choose 2.
- 8. Click Save.

Guest Network		English 👻 Exit
Guest Network:		
2.4 GHz WiFi Name:	Michael	
5 GHz WiFi Name:	Michael_5G	
Guest Network Password:		
Validity:	4 hours v	
Shared Bandwidth for Guests:	2	Mbps
	Save the	

--End

After configuration, wireless devices such as smart phones, connected to **Michael** or **Michael_5G** share a downloading speed up to 2 Mbps, and can access the internet consecutively for 4 hours.

8 Parental Control

8.1 Overview

This module enables you to set the internet accessibility of devices in the router's LAN network, including specified time for surfing the internet, websites allowed or banned to visit.

To access the configuration page, click **Parental Control**. The **Parental Control** page shows devices which are connected to the router currently.

Device Name	MAC Address	Uptime	Operation
RedmiNote4X-hongmish 192.168.0.189	c4:0b:cb:81:5d:11	29 s	<u>/</u>
iguilan-PC 192.168.0.129	4c:cc:6a:ad:14:53	1 hour(s) 28 min 59 s	L

Parameter description:

Parameter	Description
Device Name	It specifies names of the devices connected to the router.
MAC Address	It specifies MAC addresses of the devices connected to the router.
Uptime	It specifies the time that has elapsed since the device is connected to the router currently.
Operation	Click 🖉 to set limits for devices to access the internet through the router.
+New	Click +New to add devices and set limits for them.

8.2 Setting parental control rules

8.2.1 Scenario 1: The device has been connected to the router

- **1.** Click **Parental Control**.
- 2. In device list, locate the device you want to set rules on and click \checkmark .

Device Name	MAC Address	Uptime	Operation
RedmiNote4X-hongmish 192.168.0.189	c4:0b:cb:81:5d:11	12 min 56 s	L
iguilan-PC 192.168.0.129	4c:cc:6a:ad:14:53	1 hour(s) 41 min 26 s	1

- 3. Set valid time for internet connection, and websites banned or allowed to visit.
- 4. Click Save.

Parental Control	×
Device Name:	liguilan-PC
Internet Accessible At:	19 v 00 v 21 v 00 v
In:	Every Day Specified Day
	 ✓ Sun. ✓ Mon. ✓ Tue. ✓ Wed. ✓ Thur. ✓ Fri. ✓ Sat.
Website Access Limit:	
Access Control Mode:	Blacklist O Whitelist
Blocked Websites:	goole
	Enter website keywords separated by a comma. For example, eHow,google indicates that the eHow and Google websites are inaccessible.
	Save

--End

8.2.2 Scenario 2: The device has not been connected to the router

- **1.** Click **Parental Control**.
- 2. Click +New.

🖴 Parental Control			English 👻 Exit
Device Name	MAC Address	Uptime	Operation
iiguilan-PC 192.168.1.129	4c:cc:6a:ad:14:53	2hour(s) 21min 39s	/
			-New

- 3. Set device name, MAC address, time limit to internet access and limit to website access as required.
- 4. Click Save.

Parental Control	×
Device Name:	Cindy
MAC Address:	c4:0b:4b:81:5d:11
Internet Accessible At:	19 v 00 v 21 v 00 v
In:	Every Day Specified Day
	 ✓ Sun. ✓ Mon. ✓ Tue. ✓ Wed. ✓ Thur. ✓ Fri. ✓ Sat.
Website Access Limit:	
Access Control Mode:	Blacklist Image: Whitelist
Unblocked Websites:	baidu
	Enter website keywords separated by a comma. For example, eHow,google indicates that only the eHow and Google websites are accessible.
	Save 👆

--End

Parameter description:

Parameter	Description		
Device Name	It specifies the name of the device you want to apply the rule to.		
MAC Address	It specifies the MAC address of the device you want to apply the rule to.		
Internet Accessible At	It specifies the specific time for the device to access the internet through the router.		
In	It specifies dates for the device to access the internet through the router.		
Website Access Limit	Used to enable/disable the website access limit function. By default, this function is enabled.		
Access Control Mode	 It specifies modes for website access limit in a parental control rule. Blacklist: The device under the rule is not allowed to visit the website(s) below. Whitelist: The device under the rule is only allowed to visit the website(s) below. 		
Blocked/Unblocked Websites	It specifies the websites that the device under the rule is banned/allowed to visit during Internet Accessible At.		

8.2.3 Example

Scenario

Michael bought an AC10/AC10U for network. His children always surf the internet on smart phones through the router. For the good of his children' learning, he intends to allow his children to access Google during 8:00 to 22:00 from Monday to Friday.

Solution

The Parental Control function of AC10/AC10U could fulfill his requirements.

Procedures:

- **1.** Click **Parental Control**.
- 2. In device list, locate the device you want to set a rule on and click \checkmark .

🛥 Parental Control			English 👻 Exit
Device Name	MAC Address	Uptime	Operation
RedmiNote4X-hongmish 192.168.1.189	c4:0b:cb:81:5d:11	12min 33s	-
iguilan-PC 192.168.1.129	4c:cc:6a:ad:14:53	3hour(s) 17min 42s	L
			+New

- 3. Internet Accessible At: Set time limit for the device to access the internet, which is **08:00~20:00** in this example.
- 4. In: Select Specified Day and then Monday to Friday.
- 5. Access Control Mode: Click Whitelist.
- 6. Unblocked Websites: Enter the website accessible for the device, which is google in this example.
- 7. Click Save.

Parental Control	×	
Device Name:	RedmiNote4X-hongmish 🥒	
Internet Accessible At:	08 • 00 • ~ 20 • 00 •	
In:	Every Day	
	 Sun. ✓ Mon. ✓ Tue. ✓ Wed. ✓ Thur. ✓ Fri. Sat. 	
Website Access Limit:		
Access Control Mode:	 Blacklist Whitelist 	
Unblocked Websites:	google	
	Enter website keywords separated by a comma. For example, eHow,google indicates that only the eHow and Google websites are accessible.	
	Save (^{III})	

--End

Verification

Google is only accessible for the device under the rule during 8:00-20:00 on weekdays.



The VPN module includes the following functions: <u>PPIP Server</u>, <u>Online PPTP Users</u>, and <u>PPTP/L2TP Client</u>.

VPN (Virtual Private Network) is a dedicated network across the shared or public network (usually the internet). However, since this dedicated network does not have physical lines but only exists logically, it is called the virtual private network. The VPN technology allows employees at a branch of an enterprise and employees at the headquarters to exchange resources conveniently without exposing these resources to other internet users.

9.1 PPTP Server

9.1.1 Overview

The **PPIP Server** page allows you to set the router as PPIP server.

PPTP server allows the specified VPN users to dial in. For example, you can allows staffs on business trip to access the headquarter's resources through VPN dialing up on a router whose PPTV server function is enabled.

To access the configuration page, click **VPN** > **PPTP Server**.

PPTP Server			×
	PPTP Server:		
		Save	
User Name	Password	Connection Status	Operation
		-	+New

After enabling the PPIP Server function, the figure below appears:

PPTP Server			×
	PPTP Server:		
	IP Address Pool:	10.0.0.100 ~10.0.0. 200	
	MPPE Encryption:		
		Save	
User Name	Password	Connection Status	Operation
			+New

Parameter description:

Parameter	Description		
PPTP Server	Used to enable/disable the PPTP server function. If the function is enabled, the router functions as a PPTP server.		
IP Address Pool	It specifies the range of IP addresses that the PPTP server can assign to users.		
MPPE Encryption	Used to enable/disable the MPPE encryption function.		
User Name	Set user name and password that is allowed to dial in the PPTP server. This name and		
Password	password are needed when a device connects to the PPTP server.		
Connection Status	It specifies the status of a VPN connection.		
	The following operations can be performed on the PPTP user rules:		
	 +New: It is used to add PPTP users. Users can access the PPTP server successfully after you have added them. 		
Operation	- 🕗 : It is used to disable PPTP users to access the PPTP server.		
	 Second second sec		
	- 🔟 : It is used to delete PPTP users.		

9.1.2 Example

Scenario

Michael bought an AC10/AC10U for network. And he needs to access the resources of his FTP server at home.

Solution

The PPTP server function of AC10/AC10U can address this requirement. Set PPTP Server function on the router. He can access the resources on the computer's FTP server by VPN dialing up on business trip.

Assume that the IP address of the FTP server is 192.168.0.104, and the WAN IP address of the router is 113.88.112.220. After the PPTP server function of the router is enabled, the WAN IP address becomes the address of the PPTP server.

Procedures:

- **1.** To access the configuration page, choose **VPN** > **PPTP Server**.
- 2. PPTP Server: set to to
- **3. IP Address Pool**: Set the range of IP addresses that the PPTP server assigns to devices. You are recommended to keep the default settings.
- 4. MPPE Encryption: Set to to , and configure the number of MPPE encryption bits, which is **128** in this example.
- 5. User Name, Password: Set user names and passwords that devices use for VPN dialing up, which are admin1 in this example.
- 6. Click +New.
- 7. Click Save.

	PPTP Server:		
	IP Address Pool:	10.0.0.100 ~10.0.0. 200	
	MPPE Encryption:		
	Number of MPPE Encryption Bits:	40	
		Save 🖑	
User Name	Password	Connection Status	Operation
			+New
admin1	admin1	2	

--End

Verification (Example: Windows 7)

On business trip, Michael succeeds in accessing resources on his computer's FTP server at home. The following describes the steps:
1. Click 🖳 at the lower-right corner of the desktop, and click **Open Network and Sharing Center**.



2. Click Set up a new connection or network.

🕢 🗸 📲 « All Control Panel	Items Network and Sharing Center	- 4 Search Control Panel		
Control Panel Home	View your basic network information	and set up connections		
Change adapter settings Change advanced sharing	ADMIN-PC Netwo	rk 12 Internet		
settings	(This computer) View your active networks	Connect or disconnect		
	Network 12 Public network	Access type: Internet Connections: 🍯 Local Area Connection		
	Change your networking settings			
	Set up a new connection or network Set up a wireless, broadband, dial-up, ad hoc, or VPN connection; or set up a router or access point.			
	Connect to a network Connect or reconnect to a wireless, wired, dial-up, or VPN network connection.			
	Choose homegroup and sharing optic Access files and printers located on ot	ons her network computers, or change sharing settings.		
See also HomeGroup	Troubleshoot problems Diagnose and repair network problem	s, or get troubleshooting information.		
Internet Options Windows Firewall				

3. Click **Connect to a workplace > Next**.



4. Click Use my Internet connection (VPN). If a dialog box appears, you can follow the onscreen instructions to perform operations.

108.1	inservation of the second seco				
🚱 🌆 Connect to a Workplace					
How do you want to cor	inect?				
Use my Internet co Connect using a virtual p	nnection (VPN rivate network (VP	l) N) connec	tion through th	ne Internet.	
·	() –				
 Dial directly Connect directly to a pho 	one number witho	ut going tł	rough the Inte	rnet.	
i					
What is a VPN connection?					
					Cancel

5. Enter the IP address of the PPTP server in the Internet address text box, which is **113.88.112.220** in this example. Then click **Next**.

🚱 🌆 Connect to a Workplace					
Type the Internet addr	Type the Internet address to connect to				
Your network administrator	can give you this address.				
Internet address:	113.88.112.220				
Destination name:	VPN Connection				
🔲 Use a smart card					
🜍 🔽 Allow other people to This option allows ar	o use this connection iyone with access to this computer to use this connection.				
📝 Don't connect now; j	ust set it up so I can connect later				
	Ne	d Cancel			

6. Enter the user name and password for connecting to the PPTP server, which are **admin1** in this example. Click **Create**.

🚱 🌆 Connect to a Workplace		Change 1
Type your user name	and password	
User name:	admin1]
Password:	•••••]
	Show characters	
Domain (optional):	Remember this password	
		Create Cancel

7. Click **Click Now** after a while.



8. Access the resources on the FTP Server at home by the server or **My Computer**.

Method: "ftp: //Server IP address: Service port number", which is **ftp: //192.168.0.104:21** in this example.



9. Access successfully. See the following figure:

□ □ × Search My >					
Organize 🔻 Includ	Organize 🔻 Include in library 🕶 Share with 🕶 ᠉ 🔠 💌 🗍 🕢				
☆ Favorites	A Name	Date modi 🔦			
C Desktop	LEGO Creations	4/22/2010			
Downloads	My Books	4/18/2010 : ≡			
🖳 Recent Places	📃 🛯 🤑 My Digital Editions	4/18/2010 :			
Recorded TV	🎉 My Dropbox	4/18/2010 :			
Dropbox	🌗 My Games	4/18/2010 :			
	퉬 My Kindle Content	4/19/2010 :			
🥃 Libraries	🌗 My Practice Files	4/18/2010 :			
Documents	퉬 My Virtual Machines	2/6/2010 1			
📄 Family Videos	鷆 My Weblog Posts	4/18/2010 : 🕌			
Forms	▼	- F			
44 items					

9.2 Online PPTP Users

This page enables you to have detailed information about the VPN devices dialed up to the PPTP server.

To access the page, select **VPN > Online PPTP Users**.

Online PPTP Users				×
User Name	Dial-In IP Address	Assigned IP Address	Uptime	
The online users list is empty.				

Parameter description:

Parameter	Description
User Name	It specifies the user name for a user to dial in the PPTP server.
Dial-in IP Address	It specifies the IP address of a device. If the device is a router, IP address of the WAN port which enables VPN function will be displayed.
Assigned IP Address	It specifies the IP address that the PPTP server assigns to a device.
Uptime	It specifies the time that has elapsed since the PPTP device dials in the server successfully this time.

9.3 PPTP/L2TP Client

9.3.1 Overview

You are allowed to set router as a PPTP/L2TP client on the **PPTP/L2TP Client** page.

The router can connect to PPTP/L2TP server after the PPTP/L2TP Client function is enabled.

Example: If users subscribe to the VPN service provided by their ISP when having broadband, they can dial in their ISP's VPN network through the PPTP/L2TP Client function of the router.

To access the configuration page, click **VPN > PPTP/L2TP Client**.

PPTP/L2TP Client		×
	PPTP/L2TP Client:	

The following figure appears after enabling the PPTP/L2TP Client function:

PPTP/L2TP Client	×
PPTP/L2TP Client:	
Client Type:	PPTP OL2TP
Server IP Address/Domain Name:	
User Name:	
Password:	
Status:	Disconnected
	Connect

Parameter	Description
PPTP/L2TP Client	Used to enable/disable the PPTP/L2TP Client function. After the function is enabled, the router works as a VPN client.
Client Type	It specifies whether the router is a PPTP client or an L2TP client.
Server IP Address/Domain Name	It specifies the IP address or domain name of the PPTP/L2TP server to which the router is to be connected.
User Name	It specifies the user name and password assigned by the PPTP/L2TP server to the
Password	PPTP/L2TP client.
Status	It specifies the current connection status of a VPN client.

9.3.2 Example

Scenario

Michael subscribed to PPTP service provided by ISP when he had broadband. Assume that the VPN service information provided by his ISP is as follows:

- PPTP Server Address: 1.1.1.1
- User name/Password: 123

Michael bought an AC10/AC10U for network. Now he wants to access VPN resources provided by his ISP.

Solution

The PPTP Client function could address this requirement. Set the PPTP Client function on his router. Then clients in LAN network could access the VPN resources provided by the ISP.

Procedures:

- 1. Click VPN > PPTP/L2TP Client.
- 2. **PPTP/L2TP Client**: Switch the button to to
- 3. Client Type: Select client type, which is PPTP in this example.
- 4. Server IP/Domain Name: Enter the PPTP server's IP address or domain name, which is 1.1.1.1 in this example.
- 5. User Name, Password: Set user name and password that client uses for VPN dialing up, which are **123** in this example.
- 6. Click Connect.

PPTP/L2TP Client:	
Client Type:	● PPTP ◎ L2TP
Server IP Address/Domain Name:	1.1.1.1
User Name:	123
Password:	•••
Status:	Disconnected
	Connect
	U

Verification

Clients in LAN network could access the VPN resources provided by the ISP.



10.1 Overview

The USB App function includes the Share File feature. This feature allows you to share the files of a connected USB device with LAN devices or internet devices. If you insert a portable USB device to the router, the USB app function is enabled automatically. Otherwise, this function is disabled. For the **USB App** page, see the following figure:

Tenda	🗄 USB App	English 👻 Exit
🖀 Internet Status		
	\sim	
	Share File Disable	
🗄 USB App		

AC10U supports the USB App function, but AC10 does not own this function.

To access the **USB App** page, click **USB App** > **Share File**.

FTP Server				
	Encoding Type:	Unicode (utf-8)		
	Allow Internet Access:			
	LAN Address:	ftp://192.168.0.1:21		
Samba Server				
	Address for Windows OS:	\\192.168.0.1		
	Address for MAC OS:	smb://192.168.0.1		
Role	User Name	Password	Permission	
Administrator	admin		Read/Write	
Guest	guest1	•••••	Read •	
		Save		

Share File			
FTP Server			
	Encoding Type:	Unicode (utf-8)	
	Allow Internet Access:		
	Access from Internet:	<u>ftp://192.168.20.187</u> : 21]
	LAN Address:	<u>ftp://192.168.0.1:21</u>	
Samba Server			
	Address for Windows OS:	\\192.168.0.1	
	Address for MAC OS:	smb://192.168.0.1	
Role	User Name	Password	Permission
Administrator	admin		Read/Write
Guest	guest1		Read •
		Save	

Parameter	Description		
FTP Server	It specifies one of the built-in servers of your router which supports the File Transfer Protocol (FTP). You can access the USB resources of your router through this server.		
Encoding Type	 It specifies the encoding type for every language in the world. Unicode (utf-8): It is an encoding type for all languages which is acceptable worldwide. Simplified Chinese (GBK): It is an encoding type for simplified Chinese. Traditional Chinese (Big5): It is an encoding type for traditional Chinese. 		
Allow Internet Access	 It specifies whether to allow internet devices to access the USB resources of your router through the FTP server. If you set the button to , devices in the internet can access the USB resources of the router. If not, devices in the internet cannot access the USB resources. 		

Access from Internet	It specifies the login address internet users need to enter in address bar when they try to access the USB resources through the FTP server. This address changes with the WAN IP address of your router. 21 in the box is the control port of the FTP protocol. If not necessary, you are recommended to keep the default settings.
LAN Address	It specifies the login address LAN users need to enter in address bar when they try to access the USB resources through the FTP server. This address changes with the LAN IP address of your router. LAN users can also visit FTP server using ftp://tendawifi.com which does not change with LAN IP address of your router.
Samba Server	It specifies one of the built-in servers of your router which supports the Server Messages Block (SMB) protocol. You can access the USB resources of your router through this server.
	Only LAN devices can access the USB resources through the samba server.
Access from Windows OS	It specifies the login address LAN users need to enter in address bar when they try to access the USB resources through the samba server on a device with windows operating system. This address changes with the LAN IP address of your router. LAN users using devices with windows operating systems can visit samba server using \\tendawifi.com for all time.
Access from MAC OS	It specifies the login address LAN users need to enter in address bar when they try to access the USB resources through the samba server on a device with MAC operating system. This address changes with the LAN IP address of your router. LAN users using devices with MAC operating systems can visit samba server using smb://tendawifi.com for all time.
Role	 It specifies the account allowed to access the USB resources through FTP/samba server of your router. The servers only allow two accounts for visiting: one administrator and one guest. Administrator: After visiting the servers of the router through this account, the user not only can view the files in the USB device, but also edit, delete or move the files and so on. Guest: Guest account is used for another user (except the administrator) to visit the servers of your router.
User Name	It specifies the user name of an account used to visit the FTP/samba server of your router. The user name of administrator account is admin for all time. The default user name of guest account is guest1 , but you can customize it yourself.
Password	It specifies the password of an account used to visit the FTP/samba server of your router. The default password of administrator account is admin, and guest account is guest1 . But you can customize these two parameters yourself.
Permission	 It specifies the operation allowed for an account to perform on the USB resources of your router, which includes Read and Read/Write. Read: It specifies the account is only allowed to view/download the files in the USB device, but not to edit, delete or move the files. Read/Write: It specifies the account is allowed not only to view/download the files in the USB device, but also edit, delete or move the files and so on. Permission for administrator account is Read/Write all the time.

10.2 Modifying role information

In this module, both the default user name and password of administrator are admin, and you are only allowed to modify the password of administrator. Both the default user name and password of guest are **guest1**, and you can customize these two parameters yourself. The permission for administrator is **Read/Write** for all time, while the default permission for guest is **Read** but you can modify it as required.

10.2.1 Example

Procedure:

1. Access the web UI of your router, then click **USB App > Share File**.

Share File			
FTP Server			
	Encoding Type:	Unicode (utf-8)	
	Allow Internet Access:		
	LAN Address:	<u>ftp://192.168.0.1:21</u>	
Samba Server			
	Address for Windows OS:	\\192.168.0.1	
	Address for MAC OS:	smb://192.168.0.1	
Role	User Name	Password	Permission
Administrator	admin	•••••	Read/Write
Guest	guest1	•••••	Read •
		Save	

- 2. Clear the default user name for guest, default passwords for administrator or guest, and enter your desired user name and passwords.
- 3. To modify the permission for guest, select your desired permission from the drop-down-list box.
- 4. Click Save.

Share File			
FTP Server			
	Encoding Type:	Unicode (utf-8)]
	Allow Internet Access:		
	LAN Address:	<u>ftp://192.168.0.1:21</u>	
Samba Server			
	Address for Windows OS:	\\192.168.0.1	
	Address for MAC OS:	smb://192.168.0.1	
Role	User Name	Password	Permission
Administrator	admin		Read/Write
Guest	12345678	•••••	Read/W •
		Save 🄚	

Verification

Modification succeeds. See the following figure:

Share File			
FTP Server			
	Encoding Type:	Unicode (utf-8)	
	Allow Internet Access:		
	LAN Address: ftp	<u>://192.168.0.1:21</u>	
Samba Server			
	Address for Windows OS: \\1	92.168.0.1	
	Address for MAC OS: sn	nb://192.168.0.1	
Role	User Name	Password	Permission
Administrator	admin	•••••	Read/Write
Guest	12345678	•••••	Read/W •
		Save	

If the user name or password of either account is modified, you need to enter the new user name or password to visit the FTP/samba server next time.

10.3 Accessing USB resources through FTP/Samba servers

10.3.1 Accessing the USB resources from a LAN device

Procedure: (FTP server is used as an example here)

- 1. Insert your USB (KINGSTON-b in this example) to the USB port of AC10U. You can check whether your USB is connected to the router properly on **Internet Status** page.
- 2. Log in to the web UI of your router, then click USB App > Share File.

SI	hare File			
	FTP Server			
		Encoding Type: Un	icode (utf-8)	
		Allow Internet Access:		
		LAN Address: <u>ftp:///</u>	<u>192.168.0.1:21</u>	
	Samba Server			
		Address for Windows OS: \\192	.168.0.1	
		Address for MAC OS: smb:	//192.168.0.1	
Ro	ble	User Name	Password	Permission
Ad	Iministrator	admin		Read/Write
Gι	lest	guest1	•••••	Read •
		S	ave	

- **3.** Record the LAN address used to visit the FTP server, which is **ftp://192.168.0.1:21** in this example.
- Click My Computer in a computer connected to your router. Enter ftp://192.168.0.1:21 in the address bar, and press Enter.



5. Enter your user name and password, which are both **admin** in this example, and click **log on**.

Log On A:	5	×	
? >	Either the server does not allow anonymous logins or the e-mail address was not accepted.		
	FTP server:	192.168.0.1	
	User name:		
	Password:		
	After you log or	, you can add this server to your Favorites and return to it easily.	
Δ		crypt or encode passwords or data before sending them to the ect the security of your passwords and data, use WebDAV instead.	
	Log on anon		



Verification

Access the USB resources of your router successfully. See the following figure:

🕞 🕞 🗣 💽 The Inter	net > 192.168.0.1 >
Organize 🔻	
 ✓ Favorites ■ Desktop ③ Recent Places 	KINGSTON-Ь File folder
 ✓ □ Libraries ▷ □ Documents ▷ □ Music ▷ □ Pictures ▷ □ Videos 	

10.3.2 Accessing the USB resources from an internet device

Procedure: (FTP server is used as an example here)

- Insert your USB (KINGSTON-b in this example) to the USB port of AC10U. You can check whether your USB is connected to the router properly on Internet Status page.
- 2. Log in to the web UI of your router, then click USB App > Share File.

Share File			
FTP Server			
	Encoding Type:	Unicode (utf-8)	
	Allow Internet Access:		
	LAN Address:	<u>ftp://192.168.0.1:21</u>	
Samba Server			
	Address for Windows OS:	\\192.168.0.1	
	Address for MAC OS:	smb://192.168.0.1	
Role	User Name	Password	Permission
Administrator	admin	•••••	Read/Write
Guest	guest1	•••••	Read •
		Save	
Guest	guest1		Read •

3. Set the Allow Internet Access button to and click Save on the bottom of the page.

Share File			
FTP Server			
	Encoding Type:	Unicode (utf-8)	
	Allow Internet Access:		
	Access from Internet:	ftp://192.168.20.133: 21]
	LAN Address:	ftp://192.168.0.1:21	
Samba Server			
	Address for Windows OS:	\\192.168.0.1	
	Address for MAC OS:	smb://192.168.0.1	
Role	User Name	Password	Permission
Administrator	admin		Read/Write
Guest	guest1		Read •
		Save 👆	

- 4. Access the configuration page again, and record the address used to visit the FTP server for internet devices, which is **ftp://192.168.20.133:21** in this example.
- Click My Computer in a computer not connected to your router. Enter ftp://192.168.20.133:21 in the address bar, and press Enter.



6. Enter your user name and password, which are both **admin** in this example, and click **log on**.

Log On A	ls X
? >	Either the server does not allow anonymous logins or the e-mail address was not accepted.
	FTP server: 192.168.20.133
	User name:
	Password:
	After you log on, you can add this server to your Favorites and return to it easily.
⚠	FTP does not encrypt or encode passwords or data before sending them to the server. To protect the security of your passwords and data, use WebDAV instead.
	Log on anonymously Save password Log On Cancel



Verification

Access the USB resources of your router successfully. See the following figure:



11 Advanced Settings

This module includes: <u>Bandwidth Control</u>, <u>Tenda App</u>, <u>Sleeping Mode</u>, <u>LED Control</u>, <u>Filter MAC Address</u>, <u>Firewall</u>, <u>IPTV</u>, <u>Static Route</u>, <u>DDNS</u>, <u>Virtual Server</u>, <u>DMZ Host</u>, <u>UPnP</u>.

11.1 Bandwidth Control

11.1.1 Overview

This page allows you to view information about online devices, and set upload limits or download limits for devices if needed.

To access the configuration page, click **Advanced Settings** > **Bandwidth Control**.

Bandwidth Control					×
Device Name		Upload Speed	Download Speed	Upload Limit	Download Limit
iiguilan-PC 192.168.0.129	_	1.0KB/s	5.0KB/s	Unlimited -	Unlimited -
RedmiNote4X-hon 192.168.0.189	_	0.0KB/s	0.0KB/s	Unlimited -	Unlimited -
			Save		

Parameter description:

Parameter	Description
Device Name	It presents information about a device that has connected to the router, including name, IP address. You can change the device name by clicking \checkmark .
Upload/Download Speed	It specifies the current upload and download speeds of a device.
Upload/Download Limit	It specifies the maximum upload/download speed of a device. You can select your preferred maximum upload/download from the drop-down box, or entering the speed manually.

11.1.2 Example

Scenario

Michael bought an AC10/AC10U for network after having broadband. He needs to set download limit for every device to ensure all family members can have good internet experience.

Procedures:

- 1. Click Advanced Settings > Bandwidth Control.
- 2. Download Limit: Set download limit to a value for the devices in the list, which is 2Mbps in this example.
- 3. Click Save.

Device Name	Upload Speed	Download Speed	Upload Limit	Download Limit
1iguilan-PC 192.168.0.129	2 0.0KB/s	0.0KB/s	Unlimited -	2Mbps -
RedmiNote4X-hon 192.168.0.189	0.0KB/s	0.0KB/s	Unlimited -	2Mbps -
	1	Save		

--End

Verification

The maximum download speed for each device in the list is 2 Mbps, which allows each device to see HD videos and surf the internet normally.

11.2 Tenda App

11.2.1 Overview

App management on this router allows you to manage it wherever and whenever you are. You can use **Tenda WiFi** app to:

Manage your router in LAN.

Manage your router remotely over the internet.

To access the Tenda App page, click **Advanced Settings > Tenda App**.

11.2.2 Example

The following figure may help you understand how to manage the router remotely using Tenda WiFi.



Procedures:

Step 1 Install **Tenda WiFi** app.

Download Tenda WiFi in app store of your smart phone.

- Step 2 Register a Tenda account.
 - 1. Open **Tenda WiFi** and enter the login password of your router (if any) in the password box. Click **Log**.



2. Click 🦉 for registration. (Example: Email address)



3. Choose your registration type, which is **Email address** in this example.

<	Register
	Email address
Ð	Password
	Register
I ha	we an account with a password.

- 4. Email address: Enter the email address you want to set as an account name, which is 12345678901@163.com in this example.
- 5. **Password**: Set a password for your Tenda account.
- 6. Click Register.
- 7. The activation email has sent to your email address. Please tap **click here to confirm** to activate in valid time.

To initiate the Account co	nfirmation process for your
<u>1 @163.com</u>	Tenda Account, click here to confirm
If clicking the link above of	loesn't work, please copy and paste the URL below in a
new browser window inst	ead. The link is valid in 24 hours.
http://182.254.218.214:80	081/mail/regist/v1?encry=20e7d54fc04c1f3fa19b4ba08aa96fc8⟨=en&path=account
If you've received this ma	il in error, it's likely that another user entered
your email address by mi	stake while trying to register an account. If you
didn't initiate the request,	you don't need to take any further action and
can safely disregard this	email.
Sincerely,	
The Tenda Cloud Team	

to

- 8. Your account is activated successfully.
- **Step 3** Log in to the web UI of the router, and enable the Tenda App function.
 - **1.** Log in to the web UI of the router. Then click **Advanced Settings** > **Tenda App**.
 - 2. Manage with Tenda App: Switch the button
 - 3. Account: Enter the account registered in your Tenda WiFi app.
 - 4. Click Save.

Manage with Tenda App:	3168972	
Cloud Account:	1@163.com	Scan to download Tenda App.
	Save	

--End

Verification

When you are not at home, you can use **Tenda WiFi** app to manage the router by connecting your smart phone to WiFi network or traffic.



11.3 Sleeping Mode

This router supports Sleeping Mode function. When this function takes effect, LED indicators and WiFi network of this router will be disabled.

The Sleeping Mode function works based on time settings. If the system time of the router is not synchronized with the internet time, this function cannot work properly.

To access the configuration page, click **Advanced Settings** > **Sleeping Mode**. By default, the Sleeping Mode function is disabled.

Sleeping Mode	;	×
	Sleeping Mode: The Sleeping mode takes effect only if the system time is synchronized with the internet time.	
	When it is enabled, indicators are turned off and the WiFi network and USB port enter the Sleeping mode to reduce power consumption.	
	Save	

The following figure appears after the Sleeping Mode function is enabled:

Sleeping Mode		×
Sleeping Mode:	The Sleeping mode takes effect only if the system time is synchronized with the internet time.	
Sleeping Time:	00 • 00 • 07 • 00 •	
Delay:	Delay enabling the Sleep mode when there is an online user.	
	Save	
How to use the WiFi network when the router is in Slee Method 1: Press the WiFi button on the router. Method 2: Wake up the router using Tenda App. (To do code.)	eping mode? ownload Tenda App, choose Advanced Settings > Tenda App and scan the	QR

Parameter	Description
	Used to enable/disable the Sleeping Mode function
Sleeping Mode	When the router is in Sleeping mode, you can enable the WiFi network function by pressing the WIFI button on the rear panel of the router or using Tenda WiFi app. For details about how to enable this WiFi network function by Tenda WiFi app, refer to the usage of the app.
Sleeping Time	It specifies the time when the Sleeping Mode function is effective.
Delay	 When Delay enabling the Sleep mode when there is an online user option is selected, if device (s) exchange(s) data with the router in a WAN speed of no more than 3KB/s within 30 minutes, the router enters Sleeping mode; if no device exchanges data with the router, and the traffic is less than 3 KB/s within 3 minutes, the router enters Sleeping mode.
	 When the Sleeping Mode function is enabled and the Delay enabling the Sleep mode when there is an online user option is not selected, the router enters Sleeping mode during Sleeping Time automatically.

11.4 LED Control

This page allows you to set on/off status of the router's LED indicators.

To access the configuration page, click **Advanced Settings** > **LED Control**.

LED Control		×
	LED Control: Always on Always off Schedule	
	Save	

Parameter	Description
Always on	It indicates that all the LED indicators work in ordinary states.
Always off	It indicates that all the indicators are off even the router is working.
Schedule	In specifies that all the LED indicators are turned off at the duration of Turn Off During , but return to their ordinary states when the periods expire.

11.5 Filter MAC Address

11.5.1 Overview

Usually computers and smart phones have their own MAC addresses.

The **Filter MAC Address** page allows you to add a filter rule and set internet limit for devices with specific MAC addresses, including **To disallow listed devices to access the internet** and **To allow only the listed devices to access the internet**.

To access the configuration page, click Advanced Settings > Filter MAC Address.

Filter MAC Address		×
MAC Addr	ess Filter Mode: Blacklist (To disallow listed de Whitelist (To allow only the listed de	evices to access the internet) sted devices to access the internet)
Blacklisted Device	MAC Address	Operation
		+New
The blacklist is empty.		
	Save	

Parameter	Description	
	It specifies whether the listed devices are allowed to access the internet through the router.	
MAC Address Filter Mode	 Whitelist: It specifies that only the listed devices can access the internet through the router. 	
	 Blacklist: It specifies that the listed devices cannot access the internet through the router. 	
Blacklisted/Whitelisted Device	Enter names of devices that you want to add in blacklist or whitelist.	
MAC Address	Enter MAC addresses of devices that you want to add in blacklist or whitelist.	
Operation	Click +New to add the device to blacklist or whitelist.	
Add all online devices to the whitelist	Click this link to add all online devices to the whitelist. This link is only available for Whitelist .	

This link only appears when you set the whitelist for the first time.

11.5.2 Adding a MAC address filter rule

- 1. To access the configuration page, click Advanced Settings > Filter MAC Address.
- 2. MAC Address Filter Mode: Select your MAC address filter mode, which is Blacklist in this example.

- **3. Blacklisted Device**: Set the device that you disallow to access the internet through your router, which is **Michael's Phone** in this example.
- 4. MAC Address: Enter the MAC address of the blacklisted device, which is C8:3A:35:13:05:18 in this example.
- 5. Click +New.
- 6. Click Save.

Filter MAC Address	5			×
	MAC Address Filter Mode		listed devices to access the internet) ly the listed devices to access the internet)	
Blacklisted Device		MAC Address	Operation	
Michael's phone		C8:3A:35:13:05:18	+New Thy	
		Save		

11.5.3 Deleting a MAC address filter rule

- 1. To access the configuration page, click Advanced Settings > Filter MAC Address.
- 2. Select the rule you want to delete, and click $\widehat{1}$.
- 3. Click **Save** on the bottom of the page.

Filter MAC Addres	SS		>
	MAC Address Filter Mode	 Blacklist (To disallow I Whitelist (To allow online) 	
Blacklisted Device		MAC Address	Operation
			+New
Michael's phone		C8:3A:35:13:05:18	
		Save	

11.5.4 Example

Scenario

Michael bought an AC10/AC10U for network. He finds unknown devices in module **Attached Devices** of the router. But he hopes to allow only devices owned by his family members to access the internet through the router.

Solution

The Filter MAC Address function of the router can address this requirement.

Assume that the devices owned by his family members have following MAC addresses:

- 4C:CC:6A:AD:14:53
- 14:5F:94:BC:FC:81
- LC:5C:F2:B4:40:01

Procedures:

- 1. To access the configuration page, click Advanced Settings > Filter MAC Address.
- 2. MAC Address Filter Mode: Select Whitelist.
- Whitelisted Device: Enter name of the device allowed to connect to the router, which is Phone-1 in this example.
- 4. MAC Address: Enter MAC address of the device allowed to connect to the router, which is 14:5F:94:BC:FC:81 in this example.
- 5. Click +New.

- 6. Refer to step 3-5 for adding MAC address 4C:CC:6A:AD:14:53.
- 7. Click Save.

MAC Address Filter Mode		
	MAC Address	Operation
		+New
	4C:CC:6A:AD:14:53	Local Host
	14:5F:94:BC:FC:81	
	1C:5C:F2:B4:40:01	Î
S	ave	
		MAC Address Filter Mode: Blacklist (To disallow listed devices to acc Whitelist (To allow only the listed devices) MAC Address AC:CC:6A:AD:14:53 4C:CC:6A:AD:14:53 14:5F:94:BC:FC:81 1C:5C:F2:B4:40:01 Save

Verification

Only devices with MAC address 4C:CC:6A:AD:14:53, 14:5F:94:BC:FC:81 or 1C:5C:F2:B4:40:01 can access the internet through the router.

11.6 Firewall

The firewall can protect the router against some common DoS attacks such as ICMP Flood Attack, TCP Flood Attack, and UCP Flood Attack. It also ignores Ping packets from the WAN port as well, helping ensure network security.

To access the configuration page, click **Advanced Settings** > **Firewall**. By default, the Firewall function is enabled. You are recommended to retain the default settings.

Firewall		×
ICMP Flood Attack Defense:		
TCP Flood Attack Defense:		
UDP Flood Attack Defense:		
Ignore Ping Packet From WAN Port:		
	Save	

Parameter	Description
	Used to enable/disable the ICMP flood attack defense.
	ICMP Flood Attack is an attack using ICMP packets.
ICMP Flood Attack Defense	If an attacker sends many ICMP ECHO packets to destination host, which results in ICMP flood. Then destination host pays much time and resources on ICMP ECHO packets but nothing on normal requests or responses, which achieves attack against destination host.
	Used to enable/disable the TCP flood attack defense.
	In TCP protocol, when one device sends connection request and initialization to a server, protocol stack in the server will leave Backlog Quene for information exchange in connecting process.
TCP Flood Attack Defense	Attackers make use of Backlog Quene and send TCP connection requests only with SYN to the server many times by special program. Server will regard those requests as uncompleted and establish sessions for them in Backlog Queue.
	If those SYN requests are more than what server can hold, Backlog Queue will be full. Then server will not accept new request so that other legal connection will be refused.
	Used to enable/disable the UCP flood attack defense.
UCP Flood Attack Defense	UCP Flood Attack works on the similar principle as ICMP Flood Attack. If an attacker sends many UDP packets to destination host, the destination host pays much time and resources on UDP packets but nothing on normal packet requests or responses, which achieves attack against the destination host.
	It specifies whether to ignore ping packets from WAN port.
Ignore Ping Packet Form WAN Port	When host in the internet tries to ping WAN IP address of the router, the router will ignore that ping request automatically, protecting itself from exposure to the internet and external Ping attack.

11.7 IPTV

11.7.1 Overview

IPTV is the abbreviation of Internet Protocol Television. It is new technology integrating with internet, multimedia, telecommunication and many other technologies, providing interactive services including digital TV to family users by internet broadband lines. IPTV is a service provided by ISP. Uses can have multiple IPTV programs by IP set-top-box and television at home.

To access the configuration page, click **Advanced Settings > IPTV**.

IPTV		×
	IPTV:	
	Save	

The following figure appears after IPTV is enabled:

IPTV	×
IPTV:	
	Connect the IPTV STB to the IPTV port of the router.
VLAN:	Default •
	Save

Parameter description:

Parameter	Description	
ΙΡΤV	Used to enable/disable the IPTV function of the router. When this function is enabled, the third LAN port of this router can be used only as IPTV port and connect IPTV set-top-box, but cannot access other devices such as computer.	
VLAN	It specifies the VLAN ID of your IPTV service If you do not have any information about VLAN provided by your ISP when having IPTV	

Parameter	Description
	service, please keep Default .
	 If you have VLAN ID from your ISP when having IPTV service, please choose Custom VLAN and enter the VLAN value.
	- If you have IPTV service in Shanghai, please choose Shanghai VLAN and click VLAN value.

11.7.2 Example

Scenario

Michael subscribed to IPTV service when he had broadband. His ISP provided IPTV account and password but no information about VLAN. After buying an AC10/AC10U for network, he wants to have IPTV program.

Solution

The IPTV function of the router can address this requirement. Network topology is shown as follows:



Procedures:

- Step 1 Set you router
 - **1.** To access the configuration page, click **Advanced Settings** > **IPTV**.
 - 2. IPTV: Switch the button ______ to
 - 3. Click Save.

IPTV:	
	Connect the IPTV STB to the IPTV port of the router.
VLAN:	Default
	Save
	d.

Step 2 Set your set-top-box

Dial up on set-top-box with the account and password provided by ISP.

--End

Verification

Michael can have IPTV programs on television.

11.8 Static Route

11.8.1 Overview

Routing is performed to select the best route for delivering data from a source address to a destination address. A static route is a manually configured route which is simple, efficient, and reliable. Appropriate static routes help reduce route selection problems and data overload of route selection, improving the packet forwarding speed. To access the configuration page, click **Advanced Settings** > **Static Route**.
Destination Network	Subnet Mask	Gateway	WAN	Operation
			WAN1	+New
0.0.0.0	0.0.0.0	192.168.20.100	WAN1	System
192.168.0.0	255.255.255.0	0.0.0.0	br0	System
192.168.20.0	255.255.255.0	0.0.0.0	WAN1	System
224.0.0.0	240.0.0.0	0.0.0.0	br0	System

Parameter description:

Parameter	Description
Destination Network	It specifies the destination IP address of a packet.
Subnet mask	It specifies the subnet mask of a packet's destination IP address.
Gateway	It specifies the IP address of the next hop of packet transmitted from the router.
WAN	It specifies router's WAN port where packets leave the router.
Operation	It allows you to add/delete a static route rule.

11.8.2 Example

Scenario

Michael used wired router and switch for network in the past. Now he purchases an AC10/AC10U for wireless coverage and builds office intranet on that network, requiring devices connected to AC10/AC10U able to access both the internet and office intranet.

Solution

The following figure shows a network topology for reference:



Router 1 accesses the internet and Router 2 to the intranet. AC10/AC10U gets IP address to access the internet from Router 1 automatically. Set static route on AC10/AC10U, achieving LAN devices access both the internet and intranet.

Assume that the devices have following MAC addresses:

- AC10/AC10U LAN IP Address: 192.168.0.1
- Router 1 LAN IP Address: 192.168.1.10
- Router 2 LAN IP Address: 192.168.1.20

Assume that the intranet has following information:

- Address: 172.16.105.10
- Subnet Mask: 255.255.255.0

Procedures:

- **Step 1** Set Router 1 to access the internet. Please refer to the installation guide/user guide of the router for detailed steps. Set Router 2 to access the intranet and disable the DHCP function of this router. Please refer to the installation guide / user guide of the router for detailed steps.
- **Step 2** Set AC10/AC10U to access the internet by dynamic IP address. Please refer to <u>5.3 Setting up an internet</u> <u>connection with a dynamic IP address</u> in this user guide for detailed steps.

WAN Port:	Ethernet cable connected
Connection Type:	Dynamic IP Address
DNS Settings:	Automatic •
Connection Status:	Connected. You can access the internet now.
Connection Duration:	10s
	Disconnect

- **Step 3** Set a static route rule on AC10/AC10U.
 - **1.** To access the configuration page, click **Advanced Settings** > **Static Route**.
 - 2. Destination Network: Enter IP address of the destination network, which is **172.16.105.0** in this example.
 - 3. Subnet mask: Enter subnet mask of the destination IP address, which is **255.255.255.0** in this example.
 - 4. Gateway: Set Gateway to the LAN IP address of Router 2, which is **192.168.1.20** in this example.
 - 5. Click +New.

Static Route				×
Destination Network	Subnet Mask	Gateway	WAN	Operation
172.16.105.0	255.255.255.0	192.168.1.20	WAN1	+New
0.0.0.0	0.0.0.0	192.168.1.10	WAN1	System
192.168.0.0	255.255.255.0	0.0.0.0	br0	System
192.168.1.0	255.255.255.0	0.0.0.0	WAN1	System
224.0.0.0	240.0.0.0	0.0.0.0	br0	System

Configuration succeeds.

Static Route				
Destination Network	Subnet Mask	Gateway	WAN	Operation
			WAN1	+New
0.0.0.0	0.0.0.0	192.168.1.10	WAN1	System
192.168.0.0	255.255.255.0	0.0.0.0	br0	System
192.168.1.0	255.255.255.0	0.0.0.0	WAN1	System
224.0.0.0	240.0.0.0	0.0.0.0	br0	System
172.16.105.0	255.255.255.0	192.168.1.20	WAN1	Î

Verification

Devices connected to the router can access both the internet and the intranet.

11.9 DDNS

11.9.1 Overview

WAN IP address is needed when Virtual Server, DMZ Host, and Tenda App function are enabled. If router's WAN IP address changes, these functions will not work properly. The DDNS function allows you to map a dynamic WAN IP address (public IP address) of the router to a static domain name, helping internet users (WAN side) access the router by static domain name.

If you dislike remembering complex IP addresses, you can enable the DDNS function. To access the configuration page, click **Advanced Settings** > **DDNS**.

DDNS		×
	DDNS:	
	Save	

The following figure appears after DDNS is enabled:

DDNS	×
DDNS:	
Service Provider:	no-ip.com v Register
User Name:	
Password:	
Domain Name:	
Connection Status:	Disconnected
	Save

Parameter description:

Parameter	Description
DDNS	Used to enable/disable the DDNS function. By default, this function is disabled.
Service Provider	It specifies a DDNS service provider. AC10/AC10U supports service provider no-ip.com, 3322.org, dyndns.org, 88ip.cn, and oray.com.
User Name	It specifies the user name registered on a DDNS service provider's website for logging into the DDNS service.
Password	It specifies the password registered on a DDNS service provider's website for logging into the DDNS service.
Domain Name	It specifies the DDNS domain name registered on a DDNS service provider's website. If this item does not appear after you select service provider, you do not need to enter a domain name manually.
Connection Status	It specifies whether the DDNS service is configured successfully.

11.9.2 Adding a DDNS rule

- 1. To access the configuration page, click **Advanced Settings** > **DDNS**.
- 2. DDNS: Switch to
- **3. Service Provider**: Choose your DDNS service provider.

₹TIP

If you do not have a DDNS account, please select a service provider and click **Register** to have one on the website of the service provider. After successful registration, log in to the DDNS configuration page to configure again.

- 4. Set User Name, Password, and Domain Name.
- 5. Click Save.

DDNS	×
DDNS:	
Service Provider:	oray.com
User Name:	Tenda
Password:	•••••
Connection Status:	Disconnected
	Save

When the Connection Status displays **Connected**, the configuration succeeds.

DDNS	×
DDNS:	
Service Provider:	oray.com
User Name:	Tenda
Password:	••••
Connection Status:	Connected.
	Save

11.9.3 Example

Scenario

Michael bought an AC10/AC10U for network after having broadband. He wants to make a web server built on LAN accessible to the internet, and internet users can visit that server by static domain name.

The following figure shows the scenario:





Solution

This requirement can be addressed by Virtual Server function and DDNS function. Assume that the intranet web server has following information:

- Server IP Address: 192.168.0.110
- MAC Address of the Server Host: C8:3A:35:13:05:18
- User Name/Password: admin/admin
- Server Port: 80

Procedures:

- **Step 1** Register a domain name.
 - 1. To access the configuration page, click Advanced Settings > DDNS.
 - 2. DDNS: Switch to
 - 3. Service Provider: Select a DDNS service provider, which is dyndns.org in this example, and click Register.

DDNS	×
DDNS:	
Service Provider:	dyndns.org
User Name:	
Password:	
Domain Name:	
Connection Status:	Disconnected
	Save

- 4. Register on the website of the selected DDNS service provider. Assume the registered information are listed as follows:
 - Service Provider: dyndns.org
 - User Name: Tenda
 - Password: 12345678
 - Domain Name: tenda.dyndns.org
- Step 2 Set DDNS
 - **1.** To access the configuration page, click **Advanced Settings** > **DDNS**.
 - 2. DDNS: Switch to
 - 3. Service Provider: Select dyndns.org from drop-down-box.
 - 4. User Name: Enter the user name registered on DDNS service provider's website, which is **Tenda** in this example.
 - 5. **Password**: Enter the password registered on DDNS service provider's website, which is **12345678** in this example.
 - 6. Domain Name: Enter domain name registered on DDNS service provider's website, which is tenda.dyndns.org in this example.
 - 7. Click Save.

Wait until the connection status changes to **Connected**.

DDNS:		
Service Provider:	dyndns.org	<u>Register</u>
User Name:	Tenda	
Password:	•••••	
Domain Name:	tenda.dyndns.org	
Connection Status:	Connected	
	Save	

Step 3 Set Virtual Server function. For detailed steps, please refer to <u>11.10 Virtual Server</u> in this guide.
 --End

Verification

The visit path for internet users to access intranet resources is: http://domain name: server port, which is http:// tenda.dyndns.org.net:80 in this example. Then perform according to onscreen instructions.

New Tab	×	
\leftrightarrow \Rightarrow G	http://tenda.dyndns.org.net	

11.10 Virtual Server

Usually, internet users cannot access LAN through router, but internet users can visit LAN resources on router by enabling virtual server. After the Virtual Server function is configured, if one host in LAN has Web or FTP server, internet users can access that server successfully.

To access the configuration page, click **Advanced Settings > Virtual Server**.

Virtual Server			×
Internal IP Address	LAN Port	WAN Port Protocol	Operation
	21 •	TCP •	+New

Parameter description:

Parameter	Description
Internal IP Address	It specifies the IP address of an internal server.
	It specifies the service port number of a server that resides on the LAN of the router.

Click drop-down list box, and select corresponding service port number; or enter service port number manually. See the following figure:

	LAN Port		
	21 T		
	21 (FTP)		
	23 (TELNET)		
LAN Port	25 (SMTP)		
	53 (DNS)		
	80 (HTTP)		
	110 (pop3)		
	1723 (PPTP)		
	3389 (remote desktop)		
	9000		
	Manual		

WAN Port	It specifies a router port accessible to internet users. WAN port will be populated automatically after you select LAN port.
Protocol	It specifies the protocol of a service. If you are uncertain about which service protocol is used, TCP/UDP is recommended.
Operation	It allows you to add/delete a virtual server rule.

11.10.1 Adding a virtual server rule

- 1. To access the configuration page, click Advanced Settings > Virtual Server.
- 2. Internal IP Address: Enter IP address of the internal sever, which is **192.168.0.110** in this example.
- **3.** LAN Port: Click drop-down list box and select internal service port number or enter the number manually, which is **21** in this example.
- 4. **Protocol**: Select protocol of a service from the drop-down list box, which is **TCP&UDP** in this example.
- 5. Click +New.

Internal IP Address	LAN Port	WAN Port Protocol	Operation
192.168.0.110	21 🗸	21 TCP&UDP -	+New

--End

The rule is added successfully. See the following figure:

Virtual Server			×
Internal IP Address	LAN Port	WAN Port Protocol	Operation
	21 🔻	TCP&UDP	+New
192.168.0.110	21	21 TCP&UDP	

11.10.2 Deleting a virtual server rule

- 1. To access the configuration page, click Advanced Settings > Virtual Server.
- 2. Select the rule you want to delete, and click 💼.

Virtual Server			×
Internal IP Address	LAN Port	WAN Port Protocol	Operation
	21 •	TCP&UDP	+New
192.168.0.110	21	21 TCP&UDP	

--End

11.10.3 Example

Scenario

Michael bought an AC10/AC10U for network after having broadband. He wants to make the web server built on LAN accessible to internet users.

The following figure shows the scenario:



Solution

This requirement can be addressed by the Virtual Server function.

Assume that the internal web server information is listed as follows:

- Server IP Address: 192.168.0.110
- MAC Address of the Server Host: C8:3A:35:13:05:18
- User Name/Password: admin/admin
- Server Port: 80

Procedures:

- Step 1 Configure the Virtual Server function
 - **1.** To access the configuration page, click **Advanced Settings** > **Virtual Server**.
 - 2. Internal IP Address: Enter IP address of the internal web server, which is 192.168.0.110 in this example.
 - **3.** LAN Port: Click drop-down list box and select internal service port number, which is **80(HTTP)** in this example.
 - 4. **Protocol**: Select protocol of a service from the drop-down list box, which is **TCP&UDP** in this example.
 - 5. Click +New.

Internal IP Address	LAN Port	WAN Port Protocol	Operation
192.168.0.110	80 -	80 TCP&UDP	+New

The rule is added successfully, see the following figure:

Virtual Server			×
Internal IP Address	LAN Port	WAN Port Protocol	Operation
	80 -	TCP&UDP •	+New
192.168.0.110	80	80 TCP&UDP	Ĩ

Step 2 Assign static IP address to the host on which the server is built.

- 1. Select System Settings > DHCP Reservation.
- 2. Device Name: Set a name for the host, which is Web Server in this example.
- **3.** MAC Address: Enter the MAC address of the host, which is **C8:3A:35:13:05:18** in this example.
- 4. IP Address: Enter the static IP address assigned to the host, which is **192.168.0.110** in this example.
- 5. Click +New.

DHCP Reservation	1				×
Device Name	MAC Address	IP Address	Status	Operation	
Web Server	C8:3A:35:13:05:18	192.168.0.110		+New	

--End

The DHCP reservation rule is added successfully. See the following figure:

DHCP Reservati	on				×
Device Name	MAC Address	IP Address	Status	Operation	
				+New	
liguilan-PC	4c:cc:6a:ad:14:53	192.168.0.129 -	2.	P	
Web Server	C8:3A:35:13:05:18	192.168.0.110		i n	

Verification

Internet users visit this web server in the form of "Protocol: //WAN IP address: external port", which is **http://102.33.66.88:80** in this example. Then perform according to onscreen instructions.



If you want to visit that server by domain name, you can try the "Virtual Server+DDNS" method.

11.11 DMZ Host

The DMZ Host function If you can set a computer in LAN as DMZ host, that computer will become available to the internet completely, which achieves unlimited bidirectional communication. When you play games or have video meeting on some computer, you can set it as DMZ host for better user experience.

To access the configuration page, click **Advanced Settings** > **DMZ Host**. By default, the DMZ Host function is disabled.

DMZ Host		×
	DMZ Host:	
	Save	

- A DMZ host is not protected by the firewall of the router because the host is exposed to the internet completely. A hacker may leverage the DMZ host to attack your LAN. Therefore, enable the DMZ function only when necessary.
- Manually set a static IP address for a DMZ host, to prevent changes of dynamic IP address which lead to DMZ function failures.
- Security software, antivirus software, and the built-in OS firewall of the computer may cause DMZ function failures. Disable them when using the DMZ function. If the DMZ function is not required, it is recommended that you disable it and enable your firewall, security, and antivirus software.

11.11.1 Setting a computer to DMZ host

1. To access the configuration page, click Advanced Settings > DMZ Host.



- **3. DMZ Host IP Address**: Enter the last part of the IP address of the computer to be set to DMZ host, which is **110** in this example.
- 4. Click Save.

DMZ Host IP Address: 192.168.0. 110	
Save	

11.12 UPnP

Universal Plug and Play (UPnP) is a set of networking protocols. This function enables the router to open ports for LAN apps supporting UPnP, which improves user experience.

To access the configuration page, click Advanced Settings > UPnP.

UPnP				×
	UPr	IP:		
Remote Host	Internet Port	Local Host	Internal Port	Protocol

After UPnP is enabled, port transfer information displays on the configuration page when UPnP application, such as Thunder, is running in the LAN network. Port transfer information is provided when apps make requests. See the following figure:

UPnP				>
	U	IPnP:		
Remote Host	Internet Port	Local Host	Internal Port	Protocol
anywhere	54321	192.168.0.23	12345	UDP
anywhere	54321	192.168.0.23	54321	TCP

12 System Settings

This module includes the following functions: <u>LAN Settings</u>, <u>DHCP Reservation</u>, <u>WAN Settings</u>, <u>Time Settings</u>, <u>Login Password</u>, <u>Reboot and Reset</u>, <u>Firmware Upgrade</u>, <u>Backup/Restore</u>, <u>Remote Management</u>, <u>System Status</u>, <u>System Log</u>, and <u>Automatic Maintenance</u>.

12.1 LAN Settings

12.1.1 Overview

This module enables you to do the followings:

Modify the LAN IP address of the router.

The LAN IP address is the management IP address of the router, which is **192.168.0.1** by default but can be modified if necessary.

Modify parameters of DHCP server.

If the DHCP Server function is enabled, the DHCP server can automatically assign IP addresses, subnet mask, gateway and other internet parameters to the devices connected to the router. If this function is disabled, you have to manually set the IP address settings on your devices to access the internet. You are recommended to retain the DHCP Server function enabled.

Configure the DNS information assigned to devices.

To access the configuration page, click **System Settings** > **LAN Settings**.

LAN Settings	×
LAN IP Address:	192.168.0.1
Subnet Mask:	255.255.255.0
DHCP Server:	
IP Address Range:	192.168.0. 100 ~ 200
Lease Time:	1 day 🔻
DNS Settings:	
	Save

Parameter description:

Parameter		Description
LAN IP Add	ress	It specifies the LAN IP address of the router, which is the IP address used to log in to the web UI of the router. You can log in to the web UI of the router through either IP address (default: 192.168.0.1) or the domain name (tendawifi.com).
Subnet Ma	sk	It specifies the subnet mask of the IP address of the router.
	IP Address Range	It specifies the IP addresses assigned by the DHCP server to devices, which ranges from 192.168.0.100 to 192.168.0.200 by default.
	It specifies the validity period of an IP address assigned by the DHCP server to a device. When the lease time expires:	
DHCP Server		 If the device is still connected to the router, the device automatically extends the lease time and continues to use this IP address.
	Lease Time	 If the device has been disconnected (shutdown, or the Ethernet cable between the device and the router has been removed) from the router, the router recycles the IP address. The router assigns this IP address to other devices requested for IP addresses.
		You are recommended to retain the default value.
		It specifies the primary DNS server IP address assigned by the DHCP server to LAN devices.
	Primary	E NOTE
DNS Settings	DNS Server	Generally, you are recommended to retain the default configuration. If it is necessary to change the default configuration, please set this parameter to a correct DNS server IP address or DNS proxy IP address, to enable devices to access the internet.
	Secondary DNS Server	It specifies the secondary DNS server IP address assigned by the DHCP server to devices. This parameter is optional. If it is empty, the DHCP server does not assign it to devices.

12.1.2 Changing the LAN IP address

- 1. To access the configuration page, click **System Settings** > **LAN Settings**.
- 2. LAN IP Address: Modify the LAN IP Address, which is **192.168.3.1** in this example.
- 3. Click **Save** in the bottom of the page.

LAN IP Address:	192.168.3.1
Subnet Mask:	255.255.255.0
DHCP Server:	
IP Address Range:	192.168.3. 1 ~ 254
Lease Time:	1 day
DNS Settings:	
	Save

Wait till the modification completes successfully, you will be redirected to the login page. If you fail to log in to the web UI of the router, ensure that the local connection of your computer is set to **Obtain an IP address automatically**. Then release the current IP address of your computer and try to log in again after your computer get new IP address. If the problem still persists, please try logging in again using **tendawifi.com**. For details about how to set local area connection of your computer, please refer to **A1 Setting the IP address of your computer** in the appendixes. To release the current IP address of your computer, disconnect the Ethernet cable between your router and computer for a while, and reconnect it soon.

12.2 DHCP Reservation

This function allows the device to obtain the same IP address all the time, ensuring the Virtual Server and DMZ Host functions that requires fixed IP address take effect normally.

To access the configuration page, click **System Settings** > **DHCP Reservation**.

OHCP Reservatio	n)
Device Name	MAC Address	IP Address	Status	Operation	
Optional				+New	

Parameter description:

Parameter	Description
Device Name	It specifies the name of the device to be bound with a fixed IP address.
MAC Address	It specifies the MAC address of a device.
IP Address	It specifies the IP address to be bound with the device indicated by the corresponding MAC address.
Status	It indicates whether a device is connected to the router or not.
Operation	It is used to edit a DHCP Reservation rule, including four operations: - +New : It is used to add a DHCP Reservation rule. - \mathscr{P} : It is used to bind a device with a static IP. - \mathscr{P} : It is used to unbind a device with a static IP. - $\widetilde{\mathbb{P}}$: It is used to unbind a device with a static IP. - $\widetilde{\mathbb{P}}$: It is used to delete a DHCP Reservation rule.

12.2.1 Adding a DHCP reservation rule

- **1.** To access the configuration page, click **System Settings > DHCP Reservation**.
- Device Name: Enter the device name used to assign static IP addresses, which is Web Server in this example.
- 3. MAC Address: Enter the MAC address of the device, which is C8:3A:35:13:05:18 in this example.
- 4. IP Address: Enter the static IP address assigned to the device, which is **192.168.0.110** in this example.
- 5. Click +New.

Device Name	MAC Address	IP Address	Status	Operation
Web Server	C8:3A:35:13:05:1	192.168.0.110		+New

--End

The DHCP reservation rule is added successfully. See the following figure:

DHCP Reservatio	n				×
Device Name	MAC Address	IP Address	Status	Operation	
Optional				+New	
Web Server	C8:3A:35:13:05:18	192.168.0.110		i 🗊	

12.2.2 Deleting a DHCP reservation rule

1. To access the configuration page, click **System Settings > DHCP Reservation**.

2. Locate the rule you want to delete, and click 💼.

DHCP Reservation	n			×
Device Name	MAC Address	IP Address	Status	Operation
Optional				+New
Web Server	C8:3A:35:13:05:18	192.168.0.110	2.	P Delete

--End

12.3 WAN Settings

12.3.1 Overview

This module enables you to modify MTU, speed and MAC address of the WAN port. If you cannot access the internet after configuring the internet settings, try modifying the WAN parameters.

To access the configuration page, click **System Settings** > **WAN Settings**.

	:	×
1500]	
1000 Mbps auto-negotiatior		
Default •	Default: C8:3A:35:84:2E:71	
Save		
	1000 Mbps auto-negotiatior Default	1500 1000 Mbps auto-negotiatior ▼ Default ▼ Default: C8:3A:35:84:2E:71

Parameter description:

Parameter	Description
MTU	Maximum transmission unit (MTU). It specifies the size of the largest data packet that can be transmitted across the network devices. You are recommended to retain the default value.
Speed	It specifies the speed of the WAN port of the router. If the LED indicator of the WAN port is off, or does not turn on until 5 seconds later under the circumstance that the quality Ethernet cable has been connected correctly, you can select 10 Mbps FDX or 10 Mbps HDX from the drop-down list box of Speed .
	Otherwise, you are recommended to retain the default configuration 1000 Mbps

Parameter	Description
	Auto-negotiation.
MAC Address	 It is used to clone the MAC address accessible to the internet to the WAN port of the router. If the router cannot access the internet after you configure the internet settings, it is perhaps that the ISP has bound the connection information with a MAC address. In this case, you can try to clone the MAC address, and try to access the internet again. Default: It is used to restore the MAC address of the WAN port of the router to factory settings.
	 Clone local MAC address: It is used to set the MAC address of the WAN port to the MAC address of the current device managing the router.
	 Set MAC address: It is used to set the MAC address of the WAN port manually.

12.3.2 Changing MTU value

You are recommended to retain the default value of MTU, unless the following cases happen:

- Websites are inaccessible, or you cannot log in to some secure websites (such as paypal login page).
- Email service fails, or FTP, POP and other servers are inaccessible.

In these cases, you can try to decrease the MTU value from the maximum one (recommended range: 1400-1500), till the problem is resolved.

МТU	Description
1500	It is commonly used for ADSL and non-VPN dial-up connections.
1492	It is used for PPPoE dial-up connections.
1472	It is the maximum value for the ping command. (A packet with a size larger than 1472 is splitted.)
1468	It is used for DHCP connections.
1436	It is used for VPN or PPTP connections.

12.3.3 Changing the MAC address of the WAN port

Ensure that the MAC address to be cloned is correct! Before you have AC10/AC10U, the MAC address of your computer that can access to the internet through the Ethernet jack, or the WAN MAC address of your original router that can access to the internet, is the correct MAC address you should clone.

- 1. To access the configuration page, click System Settings > WAN Settings.
- MAC Address: Select Clone local MAC address or Set MAC address from the drop down list box. If you select Set MAC address, enter the MAC address that you want to clone. If you select Clone local MAC address, configure this function on the computer with a correct MAC address.
- 3. Click Save.

WAN Settings			×
MTU:	1500		
Speed:	1000 Mbps auto-negotiatior •]	
MAC Address:	Default •	Default: C8:3A:35:84:2E:71	
	Save		

To verify if cloning MAC address is successful, choose **System Settings** > **System Status**, if the MAC address under the WAN Status is same as the MAC address you select to clone, MAC address cloning succeeds. If the internet is inaccessible after you clone the MAC address successfully, contact your ISP to resolve this issue.

12.4 Time Settings

12.4.1 Overview

This module enables you to set the system time of the router. Correct system time of the router makes time-based functions take effect successfully, such as the WiFi Schedule, Parental Control, LED Control, Sleeping Mode, and Automatic Maintenance functions. Please keep the system time of your router correct.

To access the configuration page, click System Settings > Time Settings.

The default time zone of the router is **(GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi, Taipei**. After connected, the router automatically synchronizes its system time with the time zone you select.

Time Settings	×
Select Time Zone: (GMT+08:00) Beijing, Chongqing, Hong K	T
Current Time: 2018-01-22 17:41:52 (synchronized with internet	et time)
Save	

12.5 Login Password

12.5.1 Overview

This module enables you to modify the login password of the router. The login password is used to log in to the web UI of the router. By default, the router has no login password. You are recommended to configure a login password when you set up the router for the first time.

To access the configuration page, click **System Settings > Login Password**.

Login Password	×
New Password:	
Confirm Password:	
	Save

12.5.2 Changing the login password

- **1.** To access the configuration page, click **System Settings > Login Password**.
- 2. New Password: Set a new login password.
- 3. Confirm Password: Enter the new login password again.
- 4. Click Save.

Login Password			×
New Password:]	
]	
Confirm Password:	•••••		
	Save 👆		

--End

You will be redirected to the login page. Enter the new login password, and click Login to login to the web UI

of the router.

Tenda
Please enter a login password.
Login
Forgot password? 👻

12.6 Reboot and Reset

12.6.1 Overview

This module enables you to reboot the router or restore the router to factory settings.

- If a setting does not take effect or the router does not work properly, you can try rebooting the router to resolve the problem.
- If the internet is inaccessible for unknown reasons, or you forget the login password, you are recommended to restore the router to factory settings and reconfigure it. The router can be reset through the web UI or holding down the **RST/WPS** button on the back panel of the router for 8 seconds. After resetting the router, refer to <u>Chapter 2 Set up to access the internet</u> to configure your router for internet connection.

Reboot and Reset	×
Reboot	
The router will disconnect from the internet for about 45 seconds when it reboots.	
Reset	
Restoring the factory settings deletes all current settings. After the factory settings are restored, you need to reconfigure the rout connect to the internet.	ter to

To access the configuration page, click **System Settings** > **Reboot and Reset**.

12.6.2 Rebooting the router

- 1. To access the configuration page, click System Settings > Reboot and Reset.
- 2. Click Reboot.



--End

12.6.3 Resetting the router

Resetting the router deletes all your current configuration. You need to reconfigure the router to access the internet. Ensure that the power supply of the router is properly when the router is resetting.

Resetting the router via the web UI

- 1. To access the configuration page, click **System Settings** > **Reboot and Reset**.
- Click Reset. Your router is reset successfully when all the indicators blink once. Then wait for the router to restart.



--End

Resetting the router via the RST/WPS button

Power on your router. When the SYS indicator blinks, hold the **RST/WPS** button down for about 8 seconds. Your router is reset successfully when all the indicators blink once.

12.7 Firmware Upgrade

12.7.1 Overview

This module enables you to upgrade the firmware of the router.

Firmware upgrade offers the router with more stable performance and new functions. The router supports **Online Upgrade** and **Local Upgrade**, and the default setting is **Online Upgrade**, which means the router automatically detects whether the new firmware is available or not and displays its information if any.

To access the configuration page, click **System Settings > Firmware Upgrade**.

Firmware Upgrade	×
Current Version: V15.03.06.35_multi	
Upgrade Type: Online Upgrade Local Upgrade 	
Latest Version: V15.03.06.35(8045)-circle	
Update Content: V15.03.06.35(8045)-circle	
Upgrade	

12.7.2 Steps for local upgrade

- Before an upgrade, check if the firmware is accurate. Erroneous firmware will damage the router.
- Do not power off the router during an upgrade. Otherwise, the router may be damaged.
- After the firmware is upgraded, you are recommended to restore the factory settings of the router and configure the router again, so as to ensure stability of the new firmware and proper operation of its new functions.
- Log in to the official website of Tenda <u>http://www.tendacn.com</u> and download the latest firmware to your computer.
- 2. Log in to the web UI of the router, and choose System Settings > Firmware Upgrade.
- 3. Upgrade Type: Click Local Upgrade.
- Select Upgrade File: Click Choose File, and select the firmware that has been downloaded to your computer.

Firmware Upgrade		×
Current Version:	V15.03.06.35_multi	
Upgrade Type:	Online Upgrade Iccal Upgrade	
Select Upgrade File:	Choose File No file chosen	
	Upgrade	

5. Click Upgrade.

Firmware Upgrade	×
Current Version: V15.03.06.35_multi	
Upgrade Type: Online Upgrade Iccal Upgrade	
Select Upgrade File: Choose File US_AC10UV1TDE01.bin	
Upgrade L	

--End

Wait a second for the upgrade to complete. You can go to the **Internet Status** page to see whether the upgrade succeeds. If it does, reset your router and configure it again to access the internet.

12.7.3 Checking your firmware version

- **1.** Log in to the web UI of the router, restore the router to the factory settings, and reconfigure the router.
- 2. After login to the web UI, click System Settings > Firmware Upgrade.
- **3.** Check whether the current firmware version of the router is the same as the one you used for upgrade just now.

12.7.4 Steps for online upgrade

After connecting to the internet, the router detects firmware version automatically. If new firmware is available, you can choose **Online Upgrade** to upgrade the router's firmware.

- **1.** To access the configuration page, click **System Settings > Firmware Upgrade**.
- 2. Click Upgrade.

Firmware Upgrade		×
Current Version:	V15.03.06.35_multi	
Upgrade Type:	Online Upgrade O Local Upgrade	
Latest Version:	V15.03.06.35(8045)-circle	
Update Content:	V15.03.06.35(8045)-circle	
	Upgrade 👆	

Wait for the upgrade to complete. You will be redirected to the login page of the router after successful upgrade.

12.8 Backup/Restore

12.8.1 Overview

This module enables you to back up the current configuration of your router to your computer, or restore your router to a previous configuration by importing the configuration file on your computer to the router.

The module enables you to back up the router's configuration in case that you lost all the configuration after resetting the router. After you clicking **Backup**, the system generates a configuration file. If the router is restored to factory settings, importing the configuration file can restore the router to the previous settings.

To access the configuration page, click **System Settings > Backup/Restore**.

Backup/Restore	×
Backup Click the button to back up the system configuration to your local computer.	
Restore Click the button to restore a configuration backup to the system.	

- **Backup**: It is used to back up the current configuration of the router.
- **Restore**: It is used to restore the router to previous settings by importing the backup configuration file.

12.8.2 Steps for backup

- 1. To access the configuration page, click **System Settings** > **Backup/Restore**.
- 2. Click Backup.
- 3. Follow the onscreen instructions to backup the configuration.

--End

12.8.3 Steps for restore

- 1. To access the configuration page, click **System Settings** > **Backup/Restore**.
- 2. Click **Restore**, and select the configuration file to be restored.
- **3.** Wait for the router to reboot.

--End

12.9 Remote Management

12.9.1 Overview

This module enables you to login to the web UI of the router over the internet.

Generally, only devices connected to the router can log in to the web UI of the router. But if necessary, you can to log in to the web UI of the router remotely over the internet.

To access the configuration page, click System Settings > Remote Management.

Remote Management	×
Remote Management:	
Save	

The following figure appears after this function is enabled:

Remote Management			×
Remote Management:			
Remote IP Address:	0.0.0.0]	
Port:	8080]	
	Save		

Parameter description:

Parameter	Description	
Remote Management	Used to enable/disable the remote management function. By default, this function is disabled.	
Remote IP Address	It specifies the IP address that can access the router remotely.	
	It specifies the port number needed when you manage the router remotely. The default po number is 8080, which can be modified if necessary.	
Port		
	Since ports 1 to 1024 are used by well-known service, you are strongly recommended to set the value in the range of 1025~65535 to prevent port	

12.9.2 Configuring remote management

confliction.

- **1.** To access the configuration page, click **System Settings > Remote Management**.
- 2. Remote Management: Set _____ to
- 3. Remote IP Address: Set the IP address allowed to access the router remotely.
- 4. **Port**: Set the port number used for remote access. You are recommended to keep the default value if you do not have special requirement.
- 5. Click Save.

×

Scenario

Michael bought an AC10/AC10U for network after having broadband. The WAN IP address of the router is 202.105.106.55. Michael needs to log in to the web UI of the router on business trip.

Solution

The remote management function can address this requirement. The following figure shows a network topology for reference:



Procedures:

1. To access the configuration page, click **System Settings > Remote Management**.

2. Remote Management: Set ______ to

3. **Remote IP Address**: Enter remote IP address, which is 0.0.0.0 in this example.

- 4. **Port**: Keep the default settings.
- 5. Click Save.

Remote Management:		
Remote IP Address:	0.0.0.0	
Port:	8080	
	Save	

Verification

You can log into the web UI of the router to manage it by accessing **http://202.105.106.55:8080** on the remote computer with the IP address **0.0.0.0**.

12.10 System Status

This module enables you to view the basic information of the router, including the **Information**, **WAN Status**, **LAN Status**, and **WiFi Status** sections.

To access the configuration page, click **System Settings** > **System Status**.

12.10.1 Information

This module enables you to view system time, uptime, firmware version, and hardware version. See the following figure:

System Status	×
Information	
System Time	2018-01-23 10:20:10
Uptime	1 hour(s) 46 min 7 s
Firmware Version	V15.03.06.35_multi
Hardware Version	V1.0

Parameter description:

Parameter	Description
System Time	It specifies the current system time of the router. Ensure that the router is connected to the internet properly.
Uptime	It specifies the time that has elapsed since the router was previously started.
Firmware Version	It specifies the current firmware version of the router. You can check whether the firmware upgrade configured in Firmware Upgrade succeeded or not here.
Hardware Version	It specifies the current hardware version of the router.

12.10.2 WAN Status

This module enables you to view the WAN status of the router. See the following figure:

System Status	
WAN Status	Dunamia ID Address
	Dynamic IP Address
Connection Status:	
Connection Duration:	1 hour(s) 49 min 49 s
IP Address:	192.168.20.187
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.20.100
Primary DNS:	192.168.20.100
Secondary DNS:	
MAC Address:	C8:3A:35:84:2E:71

Parameter description:

Parameter	Description
Connection Type	It specifies the current connection type of the router.
Connection Status	It specifies the current connection status of the router.
Connection Duration	It specifies the time that has elapsed since the router was connected to the internet previously.

IP Address	It specifies the WAN IP address of the router. This parameter is needed for when you use functions like Virtual Server or Remote Management.	
Subnet Mask	It specifies the subnet mask of the WAN IP address of the router.	
Default Gateway	It specifies the gateway assigned to the router.	
Primary DNS	It specifies the primary DNS assigned to the router.	
Secondary DNS	It specifies the secondary DNS assigned to the router.	
MAC Address	It specifies the MAC address of the WAN port of the router. You can check whether the MAC clone configured in WAN Settings succeeded here.	

12.10.3 LAN Status

This module enables you view the LAN IP address (the login IP address) of the router.

System Status	
LAN Status	
IP Add	ress: 192.168.0.1
Subnet N	lask: 255.255.255.0
MAC Add	ress: C8:3A:35:84:2E:68

Parameter description:

Parameter	Description	
IP Address	It specifies the LAN IP address of the router, which is the IP address used to log in to the web UI of the router. You can log in to the web UI of the router through either IP address (default: 192.168.0.1) or the domain name (tendawifi.com).	
Subnet Mask	It specifies the subnet mask of the LAN IP address of the router.	
MAC Address	It specifies the MAC address of the LAN port of the router.	

12.10.4 WiFi Status

This module allows you to view the WiFi status of the router, such as WiFi name, whether the WiFi network is enabled or not. See the following figure:

System Status	
WiFi Status	
2.4 GHz Networ	c Visible
Hotspot Nam	e: Tenda_842E68
Encryption Mod	a: None
WiFi Channe	1: 4
WiFi Bandwidt	n: 20
MAC Addres	s: C8:3A:35:84:2E:69
5 GHz Networ	ς Visible
Hotspot Nam	e: Tenda_842E68_5G
Encryption Mod	a: None
WiFi Channe	I: 157
WiFi Bandwidt	n: 80
MAC Addres	s: C8:3A:35:84:2E:6D

Parameter description:

Parameter	Description	
2.4 GHz/ 5 GHz Network	 It specifies the WiFi status over 2.4 GHz/5 GHz network of the router. Disable: It indicates that the WiFi network is disabled. Visible: It indicates that the WiFi network is enabled and users can connect the Hotspot Name of the WiFi network to access the internet. 	
Hotspot Name	It specifies the current WiFi name of the router. After the 2.4 GHz/5 GHz WiFi network is enabled, smart devices can scan and connect to it to access the internet.	
Encryption Mode	It specifies the encryption mode of the WiFi network of the router.	
WiFi Channel	It specifies the current wireless data transmission channel of the router.	
WiFi Bandwidth	It specifies the bandwidth of the operating channel of the router's WiFi network, with a unit MHz.	
MAC Address	It specifies the MAC address of the WiFi network of the router.	

12.11 System Log

This module enables you to view the system log information. The system logs can be used for troubleshooting
when the router is faulty.

To access the configuration page, click **System Settings** > **System Log**.

System Log							
lote: If the r	ote: If the router is not connected to the internet, the default logging time is 2000-X-X XX:XX:XX.						
Number	Time	Туре	Log Content				
1	2018-02-01 19:25:17	wan	DHCP_ack Received From (192.168.20.100)				
2	2018-02-01 19:25:17	wan	Sending DHCP_renew for 192.168.20.187 to 192.168				
3	2018-02-01 19:11:37	wan	DHCP_ack Received From (192.168.20.100)				
4	2018-02-01 19:11:37	wan	Sending DHCP_renew for 192.168.20.187 to 192.168				
5	2018-02-01 18:58:09	wan	DHCP_ack Received From (192.168.20.100)				
6	2018-02-01 18:58:09	wan	Sending DHCP_renew for 192.168.20.187 to 192.168				
7	2018-02-01 18:49:08	system	LAN3 up				

Clicking **Export** can export the system log to your local computer.

12.12 Automatic Maintenance

12.12.1 Overview

This module enables you to set the router to reboot at a specified time, improving the system stability and service life of the router.

To access the configuration page, click **System Settings** > **Automatic Maintenance**. By default, the Automatic Maintenance function is enabled.

Automatic Maintenance		×
System Reboot Schedule:		
Reboot At:	02 • : 00 •	
	Delay rebooting the router when it is exchanging data with a device at a speed higher than 3 KB/s.	
	Save	

Parameter description:

Parameter	Description
System Reboot Schedule	Used to enable or disable the system reboot schedule function.
Reboot At	It specifies the time for the router to reboot.
	It specifies the premise for the router to delay a reboot.
Delay	 Selected: The router reboots automatically when there are devices connected to the router, and the traffic over the WAN port is less than 3 KB/s for 30 minutes; or there are no device connected to the router, and the traffic over the WAN port is less than 3 KB/s for 3 minutes.
	- Unselected : The router reboots automatically when the time for the router to reboot is up.

12.12.2 Configuring system reboot schedule

- **1.** To access the configuration page, click **System Settings > Automatic Maintenance**.
- 2. **Reboot At**: Select the time to reboot from the drop-down list box, which is **23:30** in this example.
- 3. Click Save.

Automatic Maintenance		×
System Reboot Schedule:		
System reboot benedule.		
Reboot At:	23 • : 30 •	
Delay:	Delay rebooting the router when it is exchanging data with a	
	device at a speed higher than 3 KB/s.	
	Save	
	chn)	

--End

After the configuration above, the router reboots automatically at 23:30 every day if there are devices connected to the router, and the traffic over the WAN port is less than 3 KB/s for 30 minutes; or there are no devices connected to the router, and the traffic over the WAN port is less than 3 KB/s for 3 minutes.

Appendixes

A.1 Setting the IP address of your computer

The following describes the configuration steps for Win8 and Win7. Choose the proper instructions according to your computer system. A computer installed with a wired network adapter is used as an example here to describe the procedures. Steps for configuring a computer installed with a wireless adapter are similar.

A.1.1 Windows 8

1. Right-click 📰 in the lower-right corner of the desktop and choose **Open Network and Sharing Center**.



2. Click Ethernet and Properties.

	Network an	d Sharing Center	-				
🔄 🄄 🕆 📱 « Network and Internet » Network and Sharing Center v 🖒 Search Control Panel							
Control Panel Home		et Status	× connections				
Change adapter settings	General						
Change advanced sharing settings	Connection IPv4 Connectivity: IPv6 Connectivity: Media State: Duration: Speed:	No Internet access No Internet access Enabled 00:14:16 1.0 Gbps	pe: <u>No Internet</u> access ons: <u>Ethernet</u>				
	Details		ooting information.				
	Activity ————————————————————————————————————	- Received					
	Bytes: 2,40						
See also		d					
HomeGroup		Close					
Internet Options							
Windows Firewall							

3. Double-click Internet Protocol Version 4 (TCP/IPv4).

Ethernet Proper	ties ×						
Networking							
Connect using:							
Intel(R) 82574L Gigabit Network Con	nnection						
	Configure						
This connection uses the following items:							
File and Printer Sharing for Micros Microsoft Network Adapter Multipl Aicrosoft LLDP Protocol Driver Aicrosoft LLDP Protocol Version 6 (TCP/ Aicrosoft LLDP Protocol Version 4 (TCP/ Aicrosoft LLDP	lexor Protocol lapper I/O Driver lesponder IPv6)						
<	>						
Install Uninstall	Properties						
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks. OK Cancel							

4. Select Obtain an IP address automatically and Obtain DNS server address automatically, and click OK.

Internet Protocol Version 4 (TCP/IPv4) Properties	×					
General Alternate Configuration						
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.						
Obtain an IP address automatically						
O Use the following IP address:						
IP address:						
Subnet mask:						
Default gateway:						
Obtain DNS server address automatically						
O Use the following DNS server addresses:	-					
Preferred DNS server:						
Alternate DNS server:						
Validate settings upon exit Advanced						
OK Cance	el					

5. You are redirected to the Enternet Properties box, and click OK.

A.1.2 Windows 7

1. Right-click 🚺 in the lower-right corner of the desktop and choose **Open Network and Sharing Center**.



2. Click Local Area Connection > Properties.

A Nativalia	IT I I I BLI I			
Wetwork a	nd Internet Network	and Sharing Center	 Search Control Panel 	۹
Change adapter setti Change advanced sh	Local Area Connection S General		set up connecti	ions See full map
settings	IPv4 Connectivity: IPv6 Connectivity: Media State: Duration:	No Internet acc No Internet acc Enab 03:40	ess Con	nect or disconnect
	Speed:	1.0 G	ss type: No Int	Area Connection
	Activity ————————————————————————————————————	nt — 💐 — Receiv	ved	n; or set up a
	Bytes: 7	758,618 8,236,6	680 I-up, or VPN netwo	ork connection.
See also	Properties 😗 D	isable Diagnose	vork computers, or	r change sharing
HomeGroup Internet Options		C	llose	

3. Double-click Internet Protocol Version 4 (TCP/IPv4).



4. Select Obtain an IP address automatically and Obtain DNS server address automatically, and click OK.

Int	ternet Protocol Version 4 (TCP/IPv4) Properties
Γ	General Alternate Configuration
	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
	Obtain an IP address automatically
	O Use the following IP address:
	IP address:
	Subnet mask:
	Default gateway:
	Obtain DNS server address automatically
	O Use the following DNS server addresses:
	Preferred DNS server:
	Alternate DNS server:
	Validate settings upon exit
	OK Cancel

5. You are redirected to the Enternet Properties box, and click OK.

A.2 FAQ

Q1: I cannot access the web UI of the router after entering tendawifi.com or 192.168.0.1. What should I do?

A1: Try the following solutions and log in again:

- Ensure that your Ethernet cable with internet connectivity is plugged into the WAN port of the router rather than a LAN port.
- Ensure that your wireless device is connected to the router's SSID.
- Ensure that your wired device is connected to port 1, 2 or 3 of the router properly by Ethernet cable.
 And the device is also set to Obtain an IP address automatically and Obtain DNS server address automatically.
- Ensure that **tendawifi.com** is entered correctly, or you can try logging by entering **192.168.0.1**.
- Clear the cache of your web browser or replace the web browser, and try logging in again.
- Disable the firewall of your computer or replace the computer, and try logging in again.
- If the problem persists, reset your router and try logging in again.

Q2: How to choose my connection type?

A2: You can choose your internet connection type based on the following table or by consulting your internet service provider (ISP).

Internet connection media	Internet connection type	Description
Telephone line/Ethernet cable	ΡΡΡοΕ	You need to double-click 😹 and enter a PPPoE user name and password to set up a dial-up connection.
TV cable/Ethernet cable	Dynamic IP address	You can access the internet after connecting to an upstream router or a cable TV.
Ethernet cable/Optical Static IP add fiber		You are assigned a static IP address, a subnet mask, a default gateway address, and DNS server address for accessing the internet.

Q3: I cannot access the internet after configuring internet settings. What should I do?

A3: Try the following solutions and log in again:

Log in to the web UI of the router, and check your router's connection status on the Internet Status page.

 If your router is connected to the internet successfully as the figure shown below, try the following solutions:



Connect your wireless devices to the WiFi network of the router using the new WiFi name and password you set.

- If **Connection failed** appears on the page:
 - Click Internet Settings on the web UI to check whether the connection type and parameters you entered are correct.

Connection type	Information provided by your ISP
РРРоЕ	ISP user name and ISP password
Dynamic IP address	None
Static IP address	IP address, subnet mask, gateway, DNS server and other parameters

- > Connect the Ethernet cable with internet connectivity to your computer directly.
 - If your computer cannot access the internet, consult your ISP.
 - Otherwise, reconnect the Ethernet cable with internet connectivity to your router, reset your router and configure it again.

Q4: How to reset the router if I cannot access the web UI of the router?

A4: Power on your router. When the **SYS** indicator blinks, hold down the **RST/WPS** button for about 8 seconds. The router is reset successfully when all the LED indicators blink once.

Q5: An IP address conflict message appears after a computer which is connected to the router starts. What should I do?

A5: Try checking the following items:

- Ensure that there is no other DHCP server in your LAN or the other DHCP server is disabled.
- Verify that the IP address of your router is not used by another device in your LAN. The default IP address of the router is 192.168.0.1.
- Ensure that the static IP address assigned to the computer in your LAN is not used by other devices.

- Q6: I forget the login password of the router. What should I do?
- A6: Reset the router and log in the router's web UI.

Method to reset: Power on your router. When the **SYS** indicator blinks, hold down the **RST/WPS** button for about 8 seconds. The router is reset successfully when all the LED indicators blink once

CE

CE Mark Warning

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

Operations in the 5.15-5.25 GHz band are restricted to indoor use only.

This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

The mains plug is used as disconnect device, the disconnect device shall remain readily operable.

NOTE: (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.

Declaration of Conformity

Hereby, SHENZHEN TENDA TECHNOLOGY CO., LTD. declares that the radio equipment type AC10 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: http://www.tendacn.com/en/service/download-cata-101.html

Hereby, SHENZHEN TENDA TECHNOLOGY CO., LTD. declares that the radio equipment type AC10U is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: http://www.tendacn.com/en/service/download-cata-101.html

Operate Frequency:

2.4 GHz: EU/2400-2483.5 MHz (CH1-CH13)

5 GHz: EU/5150-5250 MHz (CH36-CH48)

EIRP Power (Max.):

2.4 GHz: 19.95 dBm

5 GHz: 22.9 dBm

Software Version: V15.03.06



Adapter Model: BN036-A12012E Manufacture: SHENZHEN HEWEISHUN NETWORK TECHNOLOGY Co., LTD. Input: 100 - 240 V AC 50/60 Hz 0.4 A Output: 12 V dc 1 A

: DC Voltage



Caution : (For AC10U)

Adapter Model: BN037-A18012E

Manufacture: SHENZHEN HEWEISHUN NETWORK TECHNOLOGY Co., LTD.

Input: 100 - 240 V AC 50/60 Hz 0.6 A

Output: 12 V dc 1.5 A

--- : DC Voltage



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.

The device is for indoor usage only.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Caution:

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

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

NOTE: (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.

Operating Temperature: 0 °C - 40 °C

Operating Humidity: (10 – 90)% RH, non-condensing



RECYCLING

This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment.

User has the choice to give his product to a competent recycling organization or to the retailer when he buys new electrical or electronic equipment.

EHC

_	BE	BG	CZ	DK	DE	EE	IE
	EL	ES	FR	HR	IT	СҮ	LV
	LT	LU	HU	MT	NL	AT	PL
	PT	RO	SI	SK	FI	SE	UK

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Hong Kong Hotline: 00852-81931998

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