

User Guide

Shenzhen Tenda Technology Co., Itd



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Setup Wizard of Common Functions

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How to extend your wireless range?	Go
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How to configure your WiFi password (security key)?	Go
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How to control your Internet speed?	Go
How to prevent unknown device from connecting to your network?	Go



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I Get to Know Your Router

Before you connect to your Router, take a moment to become familiar with the package contents, product label and the front and back panels. Pay particular attention to the LEDs on the front panel.

This section contains the following:

Package Contents

LED Indicators

Buttons & Interfaces

Product Label

1 Package Contents

Unpack the package. Your box should contain the following items:

- ➤ Wireless Router * 1
- ➢ Power Adapter * 1
- ≻ Ethernet Cable * 1
- ➤ Install Guide * 1

* If any item is incorrect, missing or damaged, please keep the original package and contact the vendor for replacement immediately.

2 LED Indicators





LED Indicator	Status	Description		
Å	Blinking	The system is working fine.		
SYS 💥	Off	There is no power supply, or the router malfunctions.		
	Solid	WiFi is enabled.		
WiFi WiFi	Blinking	The Router is sending or receiving WiFi data.		
	Off	WiFi is disabled.		
1/2/3	Solid	The LAN port is well-connected.		
Blinking Off		The LAN port is transmitting data.		
		No connection is detected on the LAN port.		
	Solid	The WAN port is well-connected.		
wan 🖉	Blinking	The WAN port is transmitting data.		
	Off	No Ethernet cable is connected to the WAN port.		
	Solid	WPS is enabled, or a WPS connection is established.		
wps	Blinking	The Router is performing WPS negotiation to a client device, or transmitting data.		
	Off	WPS is disabled. Or 5 minutes later after the WPS connection is established, the WPS LED indicator will be off.		

3 Buttons & Interfaces





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This label is on the bottom panel of the router.



1. Default Access: 192.168.0.1

The default login IP address of the router. Type this IP address in the address bar of a web browser to log in to the router's User Interface.

2. Default Login Password: admin

The router requires a login password when you access to its User Interface. If you access to the router's User Interface for the first time, use the default login password *admin*. You'd better change

it in **Tools > Change Password** for security purpose, and write it down to avoid forgetting it.

3. MAC Address

This is the MAC address of the router.

The wireless router's default WiFi name is Tenda_XXXXXX, where XXXXXX represents the last six characters of the MAC address.



II Specify Your Internet Settings

This Chapter will instruct you to position, connect and configure your router.

It contains the following sections:

Position Your Router Connect Your Router Access to the Router

Specify the Internet Settings

Join Your WiFi

1 Position Your Router

The router lets you access the Internet anywhere within the operating range of your wireless network. However, the operating range of your wireless connection can vary significantly depending on the physical placement of your Router.



Put it on an elevated spot such as a high shelf, keeping the number of walls and ceilings to a minimum between the Router and other clients such as computers and smart phones.





> Place it around the central area which your laptops, smart phones and other devices usually surround, and preferably within line of sight to your wireless devices.



Keep it away from electrical devices that are potential sources of interference, such as ceiling fans, home security systems or microwaves.

- ➤ Keep it away from any large metal surfaces, such as a solid metal door or aluminum studs.
- Keep it away from other materials such as glass, insulated walls, fish tanks, mirrors, brick, and concrete that may also affect your wireless signal.

2 Connect Your Router

Connect your router to the Internet:

end

Select ADSL/Fiber/Cable or Ethernet Cable access according to your Internet access type.

ADSL/Fiber/Cable Access



- **1** Insert the power adapter to your router's PWR port, and plug the other end to a power outlet.
- **2** Connect the modem to the WAN port of your router using an Ethernet cable.
- S Insert your modem's power adapter to the power interface, and plug the other end to a power outlet.

Ethernet Cable





1 Insert the power adapter to your router's PWR port, and plug the other end to a power outlet.

2 Insert the **Ethernet cable** into the router's WAN port.

Connect your computer to the router:

You can connect your computer to the router wirelessly or via an Ethernet cable.

Wired



Wireless



WiFi Name: Tenda_XXXXXX (Default) No WiFi password set by default.

XXXXXX is the last six characters of the router's MAC address.

Wired:

Connect your computer to the router using the included Ethernet cable.

Wireless:

To connect with WiFi, use the WiFi name and password on the product label. And your computer MUST have a wireless adapter.



This label is on the bottom panel of the router.

Tips

1. If you don't know how to join its WiFi, please refer to <u>6 Join Your WiFi</u>.

2. Either WiFi (SSID) or WiFi password is changed, devices are required to reconnect with WiFi

manually once again.

3. The devices can only access the Internet after you finish Internet configuration.

3 Access to the Router

← → @ 192.168.0.1	P → C 🦉 Tenda 11N Wireless Rou ×	- □ ×
Tenda		^
Login		
	Default: admin Password: •••••	
	3 OK Cancel	~
<		>

• Launch a web browser on your connected computer, say IE, type *192.168.0.1* in the address bar, and click **Enter** on the keyboard.

2 Type the default login password *admin* in the Password field.

\rm Click **OK**.

Tips

If you cannot access the router's User Interface after the steps above, try to set your computer to obtain an IP address automatically. Refer to <u>Configure Your computer</u> for details.



4 Specify the Internet Settings

After the steps above, you will log in to **Home** page of the router's User Interface. If your Internet connection type is **PPPoE** or **DHCP** (Dynamic IP), you can finish Internet setup in **Home** Page. For other Internet connection types, click **Advanced > Internet Connection Setup**.

Tenda
Internet Connection Setup
Internet Connection Type O PPPoE O DHCP For other connection types, click " <u>Advanced</u> "
Wireless Security Setup Security Key 8~63 characters
OK Cancel

Refer to the instructions in the form below to select your Internet connection type.

Connection Type	The parameters your Internet Service Provider provided for Internet access
<u>PPPoE</u>	User name and password.
DHCP (Dynamic IP)	Nothing.
Static IP	Static IP address, subnet mask, gateway, DNS server.
<u>PPTP</u>	PPTP server address, user name, password. Sometimes static IP info is also provided.
<u>L2TP</u>	L2TP server address, user name, password. Sometimes static IP info is also provided.



PPPoE

Tenda	Store of the
Internet Connection Setup	1
Internet Connection Type	PPPoE OHCP
PPPoE Username	Enter username provided by ISP
PPPoE Password	Enter password provided by ISP
	For other connection types, click " <u>Advanced</u> "
Wireless Security Setup	
Security Key	8~63 characters
4	OK Cancel

1 Select **PPPoE**.

- **2** Type the PPPoE user name and password your ISP (Internet Service Provider) provided.
- **3** Customize a WiFi password (Security Key) for your WiFi.
- 4 Click **OK** to save your settings.



DHCP (Dynamic IP)

Tenda	
Internet Connection Setup Internet Connection Type	PPPoE OHCP For other connection types, click "Advanced"
Wireless Security Setup	
Security Key	8~63 characters
3 0	OK Cancel

1 Select **DHCP**.

2 Customize a WiFi password (Security Key) for your WiFi.

3 Click **OK** to save your settings.

Static IP

Click **Advanced > Internet Connection Setup**.



Tenda					
	Home Ad	lvanced	Wireless	QoS	Applications
Status	Internet Connection Setu	р			
Internet Connection Setup	Internet Connection Type	Static IP		•	
MAC Clone	internet connection Type				
WAN Speed	IP Address				
WAN Medium Type	Subnet Mask				2
LAN Settings	DNS Server				
DNS Settings	Alternate DNS Server			((Optional)
DHCP Server	MTU				
DHCP Client List		(The defaul required by	t value is 1500. D your ISP.)	o not modify i	t unless
	3	ОК	Cancel		

1 Select **Static IP**.

2 Type the static IP info (IP address, subnet mask, gateway and etc.) your ISP (Internet Service

Provider) provided.

3 Click **OK** to save your settings.

PPTP

Click **Advanced > Internet Connection Setup**.



Tenda			- A		UK Q
	Home Ad	lvanced	Wireless	QoS	Applications
Status	Internet Connection Setu	р			
Internet Connection Setup	lateration Trans	DDTD		-	
MAC Clone	Internet Connection Type	FFIF		•	
WAN Speed	PPTP Server Address				
WAN Medium Type	Username				
LAN Settings	Password	1452			
DNS Settings	Address Mode	Dynamic		•	
DHCP Server	IP Address	0.0.0.0			
DHCP Client List	Subnet Mask	0.0.0.0			
	Gateway	0.0.0.0			
	3	ОК	Cancel		

1 Select **PPTP**.

2 Type the PPTP server address, use name and password your ISP (Internet Service Provider) provided.

3 Click **OK** to save your settings.

If your ISP has assigned you a static IP address, follow the steps below:



1 Select **PPTP**.

2 Type the PPTP server address, use name and password your ISP (Internet Service Provider) provided.

B Select **Static**.

4 Type the IP address, subnet mask and gateway.

5 Click **OK** to save your settings.

L2TP

Click **Advanced > Internet Connection Setup**.



Tenda					
	Home Ad	lvanced	Wireless	QoS	Applications
Status	Internet Connection Setu	р			
Internet Connection Setup		1.270		_	
MAC Clone	Internet Connection Type	LZIP		▼	
WAN Speed	L2TP Server Address			-	
WAN Medium Type	Username				2
LANG	Password				
LAN Settings	MTU	1452			
DNS Settings	Address Mode	Dynamic		•	
DHCP Server	IP Address	0.0.0.0			
DHCP Client List	Subnet Mask	0.0.0.0			
	Gateway	0.0.0.0			
	3	ОК	Cancel		

1 Select **L2TP**.

2 Type the L2TP server address, use name and password your ISP (Internet Service Provider) provided.

3 Click **OK** to save your settings.

If your ISP has assigned you a static IP address, follow the steps below:



Tenda				a ak	OK O
	Home Ad	vanced	Wireless	QoS	Applications
Status	Internet Connection Setu	р			
Internet Connection Setup	Internet Connection Trees			-	
MAC Clone	Internet Connection Type	LZIF		•	
WAN Speed	L2TP Server Address				
WAN Medium Type	Username				2
LAN Settings	Password				
D it Settings	MTU	1452			
DNS Settings	Address Mode	Static		•	3
DHCP Server	IP Address				
DHCP Client List	Subnet Mask				4
	Gateway				
	5	ОК	Cancel		

O Select **L2TP**.

2 Type the L2TP server address, use name and password your ISP (Internet Service Provider) provided.

B Select **Static**.

4 Type the IP address, subnet mask and gateway.

5 Click **OK** to save your settings.

5. Done & Enjoy

After you complete the settings above, you can access the Internet now.

6 Join Your WiFi

This part instructs you how to connect to your wireless network via your notebook or other wireless devices. We take <u>Windows 8</u>, <u>Windows 7</u>, <u>iPad/iPhone</u>, and <u>Android</u> as examples here. Choose the corresponding configuration steps according to your needs.



Windows 8

U Click the icon 📓 on the bottom right corner of your desktop.



Tips

If you cannot find the icon in please move your cursor to the top right corner of your desktop, select Settings > Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings, right click Wi-Fi and select Connect/Disconnect.
 If you cannot find your WiFi from the list, ensure the Airplane Mode is not enabled on your

computer.

2 Select your WiFi from the list, click **Connect** and then follow onscreen instructions.

Connected successfully.



Windows 7

• Click the icon on the bottom right corner of your desktop. Select your WiFi from the list, click Connect and then follow onscreen instructions.





Tips

If you cannot find the icon description of your mouse to the bottom left corner of your desktop, select Start > Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings, right click Wireless Network Connection and select Connect/Disconnect.

Connected successfully.



iPad/iPhone



2 Click **Wi-Fi**, and choose your SSID.





Enter your Wireless password, and click **Join**.



Android

Click on **Settings**.

2 Click **WLAN** to enter your WLAN settings.







B Enable your WLAN, and select your SSID. 4 Enter your wireless password, and click



Connect.



5 When your WiFi is connected successfully, it will display **Connected**.

ℕ ៖≷፥ ஜ் ͡͡ậ "վլ 35% 📕 10:39 < 🔯 WLAN This feature has been turned off because mobile data is off. WLAN networks Tenda_XXXXXX bx_luozhihui JY_CCC123830 ŝ JY_FH307_liuli **A** JY_LMT_AS_2.4 ? Secured (WPS available) JY_ZHOUWEIXIN **~** 01/ 0 /0 WLAN Direct Scan

Tenda



III Specify Advanced Settings

This Chapter describes the advanced features of your Router, such as Access Control, DDNS,

Bandwidth Control, and etc.

Advanced

Wireless

QoS

Applications

Security

Tools

1 Advanced

Status

This section refers to WAN Status and system status, displaying the current Internet Connection.

Tenda					
	Home A	dvanced	Wireless	QoS	Applications
Status	WAN Status				
Internet Connection Setup	Connection Status	Connected			
MAC Clone	Internet Connection Type	DHCP			
WAN Speed	WAN IP	192.168.1	.152		
WAN Speed	Subnet Mask	255.255.2	55.0		
WAN Medium Type	Gateway	192.168.1	.1		
LAN Settings	DNS Server	192.168.1	.1		
-	Alternate DNS Server	8.8.8.8			
DNS Settings	Connection Time	01:55:18			
DHCP Server		Release	Refresh		
DHCP Client List	System Status				
	LAN MAC Address	C8:3A:35:0	00:9D:78		
	WAN MAC Address	C8:3A:35:0	00:9D:78		
	System Time	2015-07-1	10 10:21:42		
	Running Time	01:55:32			
	Connected Client	2			
	System Version	V11.13.01	.06_en		
	Hardware Version	V1.0			

The Router's system will skip to the **Advanced** > **Status** page when you finish all needed settings on the **Home** page. In the WAN status part, you may find one of the three WAN statuses: Connected, Disconnected and Connecting. Following parts help you to understand the indications of these WAN statuses.

Connected

Tenda

When you find Connected and a WAN IP address with the subnet mask, gateway, DNS server address displayed as below, you can access the Internet via the Router.

Tenda					
	Home	Advanced	Wireless	QoS	Applications
Status	WAN Status				
Internet Connection Setup	Connection Status	Connected			
MAC Clone	Internet Connection Type	DHCP			
WAN Second	WAN IP	192.168.1	.152		
WAN Speed	Subnet Mask	255.255.2	55.0		
WAN Medium Type	Gateway	192.168.1	.1		
	DNS Server	192.168.1	.1		
LAN Settings	Alternate DNS Server	8.8.8.8			
DNS Settings	Connection Time	02:00:05			
DHCP Server		Release	Refresh		

Disconnected

When you find Disconnected and there is no WAN IP address displayed, you cannot access the Internet.



Try following steps one by one to solve the problem:

1. Make sure that your computer is well connected to the LAN port of the Router and the WAN port is well connected to the Ethernet cable from the Internet side.

- 2. Make sure that your Internet service is active and undue.
- 3. Click **Refresh** to renew the web page.

If nothing goes wrong, you will find Connecting or Connected there.

Connecting

If you find Connecting here and see no WAN IP address, you cannot access the Internet right now. Try to refresh the web page several times.

Tenda					
Tenda				44	$OK \circ$
	Home	dvanced	Wireless	QoS	Applications
Status	WAN Status				
Internet Connection Setup	Connection Status	Connecting	I		
MAC Clone	Internet Connection Type	DHCP			
WAN Speed	Subnet Mask				
WAN Medium Type	Gateway				
LAN Settings	Alternate DNS Server				
DNS Settings	Connection Time	00:00:00			
DHCP Server		Release	Refresh		

However, when it's still Connecting, follow the guidelines below:

- 1. Try cloning the MAC address (MAC Clone).
- 2. Check the information in Diagnostic Connection Status.
- 3. Check the info you typed (if any).
- 4. Consult your ISP for help.

Internet Connection Setup

You can also set up your Internet connection here by clicking **Advanced** > **Internet Connection Setup.** For details, see <u>Specify the Internet Settings</u>.

Tenda					C K C
	Home	dvanced	Wireless	QoS	Applications
Status	Internet Connection Set	up			
Internet Connection Setup	Internet Connection Type	DHCP		•	
MAC Clone	internet connection type	Dilloi		-	
WAN Speed	MTU	1500			
WAN Medium Type		(The defau required b	lt value is 1500. D y your ISP.)	o not modify i	t unless
LAN Settings		OK	Cancel		
DNS Settings			Cancer		



MTU Value

If you come across some troubles (cannot access some website, send or receive emails, visit the FTP or POP servers), try to decrease the max MTU value from 1500 to 1400 step by step, till the trouble is gone.

Note that changing the MTU Value for optimal performance of some specific websites or application software on the other hand may bring downside. For all the Internet connection types on the Router, it's recommended to keep this value as the default setting.

MTU	Application
1500	The most common setting when it's not PPPoE or VPN dial-up.
1492	Always for PPPoE dial-up connection.
1472	The max value when using ping cmd.
1468	Some DHCP applications.
1436	VPN or PPTP applications.

MAC Clone

In general, if you cannot access the Internet via your connected computer or smart-phone, meanwhile you find you can only access the Internet via a specified computer directly without a router, you can try cloning the MAC address on the **MAC Clone** page.

Click **Advanced** > **MAC Clone** to enter the configuration interface.

Tenda					
	Home	Advanced	Wireless	QoS	Applications
Status	MAC Clone				
Internet Connection Setup	MAC Address	C8:34:35:00:0	0.78		
MAC Clone	MAC Address	00.57.00.00.0			
WAN Speed	Restore	e Default MAC	Clone MAC A	ddress	
WAN Medium Type		ОК	Cancel		
LAN Settings					
DNS Settings					
DHCP Server					
DHCP Client List					

If the specified computer connected to your router via an Ethernet cable, and you configure the

Tenda

router on the specified computer, follow the steps below:

1 Click Clone MAC address. The specified computer's MAC address will be entered in the MAC Address field.

2 Click OK

If the computer connected to your router is not the specified computer, follow the steps below:

1 Enter the MAC address of the specified computer in the MAC Address field.

2 Click OK.

Other Options may help:

Restore Default MAC: Click it to restore the current MAC address to factory default MAC of the Router.

Clone MAC Address: Click it to copy the MAC address of the connected computer to the MAC Address field.

WAN Speed

Here you can set the speed and duplex mode for the WAN port. It is advisable to keep the default **AUTO** setting to get the best speed. If you select other option, you may fail to access some websites.

Tenda				OK 9
	Home Advanced	Wireless	QoS	Applications
Status	Choose The WAN Speed			
Internet Connection Setup	AUTO			
MAC Clone	O 10M HALF-duplex			
WAN Speed	C 10M FULL-duplex			
LAN Settings	© 100M FULL-duplex			
DNS Settings		Canaal		
DHCP Server	UK	Cancel		



WAN Medium Type

Tenda				Y A	<u>DKC</u>
	Home	Advanced	Wireless	QoS	Applications
Status	WAN Medium Type				
Internet Connection Setup	WAN Medium Type	Wired WAN	─ Wireless W∆	N	
MAC Clone	man meanant type				
WAN Speed		OK	Cancel		
WAN Medium Type					

The device supports two WAN medium types: **Wired WAN** and **Wireless WAN**. Select **Wired WAN** if your router is connected to the Internet via a physical cable, and select **Wireless WAN** if your router is connected to the router wirelessly. The default WAN Medium Type is Wired WAN, so no settings are required here if your router is connected to the Internet via a physical cable. If your router is connected to the router wirelessly, do as follows:

Tenda					
	Home	Advanced	Wireless	QoS	Applications
Status	WAN Medium Type				
Internet Connection Setup	WAN Medium Type	Wired WAN	Wireless W		
MAC Clone	Complete below settings	to connect to WI	SP AP		
WAN Speed		Tonda 000D	70		
WAN Medium Type	Channel	AutoSelect	0	•	
LAN Settings	Security Mode	WPA-PSK		•	
DNS Settings	WPA Algorithms	@ AES		8.AES	
DHCP Server	Key	Enter WISP A	P's security key	QALS	
DHCP Client List		Ot	oen Scan 2		
		ОК	Cancel		

• Select Wireless WAN.

2 Click **Open Scan**.



Tenda						
	Home	Advanced	Wireless	QoS	Application	
	WAN Medium Tune					
Status	wan medium Type					
Internet Connection Setup	WAN Medium Type	Wired WAN	Wireless V	VAN		
MAC Clone	Complete below setting	s to connect to Wi	CD AD			
WAN Speed	Complete below setting	s to connect to wi	SF AF.			
WAN Medium Type	SSIE	Tenda_009D7	78			
waw месний туре	Channe	AutoSelect		•		
LAN Settings	Security Mode	WPA-PSK		•		
DNS Settings	WPA Algorithms	a 💿 AES 🛛		&AES		
DHCP Server	Key	Enter WISP A	P's security key			
DHCP Client List		Cl	ose Scan			
				×		
	_{Select} The page	at 192.168.0.1	says:	ity	Signal Strength	
	Are you sur	e to connect to th	IS AP?	A	64	
	•	4	ОК Са	ancel A	49	
	0			ES.	63	
	3 Tenda_66666	6-ZL C8:3A:35:	52:60:10 11	WPAWPA	5	

S Find and select the wireless network name (WiFi name) of your Wireless ISP (WISP).

4 Click OK.



		Home	Advanced	Wirel	255	QoS	Applicatio
tatus	WAN M	edium Type					
nternet Connection Setup	WAI	N Medium Type	Wired WA	N 💿 Wi	reless WAI	N	
IAC Clone	Complete	e below settings	to connect to V	VISP AP.			
/AN Speed		SSID	Tenda 6666	66-ZL			
/AN Medium Type		Channel	11			Ŧ	
AN Settings		Security Mode	Mixed WPA	/WPA2 - PSK		•	
NS Settings	v	VPA Algorithms			πκιρ&Δ	FS	
HCP Server		Key	Enter WISP	AP's security	key	5	
HCP Client List				Close Scan	6		
	Select	SSID	MAC	Address	Channel	Security	Signal Strength
	0	Tenda_yuan123	456 00:90:4	C:12:34:56	11	WPAWPA	-64
		bayanDSLWIFI_4	235 C8:3A:3	5:68:42:36	11	WPAWPA	-49
		Tenda_4E0CF8	C8:3A:3	5:4E:0C:F9	10	WPA/AES	-63
	۲	Tenda_666666-	-ZL C8:3A:3	5:52:60:10	11	WPAWPA	-5
Tenda					-	$e_{\Delta}e$	
		Home	Advanced	Wirel	ess	QoS	Applicatio
tatus	WAN M	edium Type					
nternet Connection Setup			- W. 1994	N 0.117			
IAC Clone	WA	N Medium Type	Wired WA		reless WAI	N	
VAN Speed	Complet	e below settings	to connect to V	VISP AP.			
/AN Medium Type		SSID	Tenda_666	566-ZL			
AN Settings		Channel	11 Mixed WDA	M/DA2 DOV		-	
NS Settings		Security Mode	WIXed WPA	WW 72 - FON		•	
DHCP Server	\ \	WPA Algorithms	AES (TKIP	TKIP&A	ES	
NHCP Client List		кеу					

5 Type the wireless security key (WiFi password) of the wireless network name (WiFi name) of

Tenda

your WISP in the **Key** field.



7 Click **OK**.

The router will reboot automatically.

Tenda					Y al	C K C
		Home	Advanced	Wireless	QoS	Applications
Status Internet Connection Setup MAC Clone WAN Speed WAN Medium Type	Reboo	t the router to bri OOting12	ng the settings in 2%	to effect.		

After the router reboots, check the WAN status. If it displays Connected, it indicates that you can

access to the Internet now.

Tenda					
	Home	dvanced	Wireless	QoS	Applications
Status	WAN Status				
Internet Connection Setup	Connection Status	Connected			
MAC Clone	Internet Connection Type	DHCP			
WAN Speed	WAN IP Subnet Mask	192.168.1. 255.255.25	.152 55.0		
WAN Medium Type	Gateway	192.168.1.	.1		
LAN Settings	DNS Server Alternate DNS Server	192.168.1. 8.8.8.8	.1		
DNS Settings	Connection Time	00:04:01			
DHCP Server		Release	Refresh		

If you failed to connect to your WISP, try following steps below one by one to solve the problem:

1. Check the security key (WiFi password), the SSID (wireless network name), channel, seurity mode, and WPA Algorithms.

Tenda	
	Home Advanced Wireless QoS Application
Status	WAN Medium Type
Internet Connection Setup	
MAC Clone	WAN Medium Type Wired WAN Wireless WAN
WAN Speed	SSID Tenda 666666-71
WAN Medium Type	Channel 11
LAN Settings	Security Mode Mixed WPA/WPA2 - PSK 🔹
DNS Settings	WPA Algorithms AES TKIP TKIP&AES
DHCP Server	Кеу ••••••
DHCP Client List	Open Scan
	OK Cancel

Generally, when you select the wireless network name of your WISP, and type the correct security key (WiFi password), the SSID (wireless network name), channel, seurity mode, and WPA Algorithms will be changed to the same as those of your WISP automatically. If they are not the same, correct them manually, and try to connect again.

Tips

If you don't know those parameters of your WISP you connected, contact your WISP for help.

2. Check the Internet connection type.

Tenda

Tenda		A A A A A A A A A A A A A A A A A A A				
	Home Ad	dvanced	Wireless	QoS	Applications	
Status	Internet Connection Setu	ıp				
Internet Connection Setup	Internet Connection Type	DHCP		•		
MAC Clone	Internet connection Type	Billor		-		
WAN Speed	MTU	1500				
WAN Medium Type		(The defaul required by	t value is 1500. D 7 your ISP.)	o not modify i	t unless	
LAN Settings		OK	Cancel			
DNS Settings		Cancer				
Make sure that you select the correct Interent conection type according to the parameters your Wireless Internet Service Provider provided. If you don't know how to select, refer to the form in <u>Specify the Interent Settings</u>.

3. Check the LAN IP address of your router.

Tenda	
	Home Advanced Wireless QoS Applications
Status	LAN Settings
Internet Connection Setup	This page is used to set the basic network parameters for LAN.
MAC Clone	LAN MAC Address C8:3A:35:00:9D:78
WAN Speed	IP Address 192.168.0.1
WAN Medium Type	Subnet Mask 255,255,255,0
LAN Settings	
DNS Settings	OK Cancel

The LAN IP address of the router should not be in the same network segment as that of your WISP you connected. For example, if the LAN IP address of your WISP is 192.168.0.1, the LAN IP address of your router can be 192.168.2.1.

It will have a prompt when there is an IP conflict. Juct click **OK**, and remember the new LAN IP address.

The page at 192.168.1	.1 says: ×	
IP conflict!The LAN IP addre <u>192.168.2.1</u> automatically ar address.	ess will be changed into nd it will be the new login IP	
	ОК Cancel	

LAN Settings

You can change the IP address to log in to the User Interface of the Router here. Remember or note down the new IP address for next login if you change it.

Click **Advanced** > **LAN Settings** to modify the login IP address.

Tenda					
Tenda	Home	Advanced	Wireless	QoS	Applications
Status Internet Connection Setup MAC Clone WAN Speed	LAN Settings This page is used to set th LAN MAC Address IP Address	he basic networl C8:3A:35:00:5 192.168.2.1	k parameters for LA 9D:78	N.	
WAN Medium Type	Subnet Mask	255.255.255.	0	2	
DNS Settings		3 ОК	Cancel		
DHCP Client List					

1 IP Address: Modify the IP address, say "192.168.2.1". (The default IP "192.168.0.1")

2 Subnet Mask: Enter a LAN subnet mask matching the IP address in **1**, say "255.255.255.0" (the default value).

3 Click **OK**.

DNS Settings

DNS settings page is for you to manually enable and set up the DNS settings.

Click **Advanced** > **DNS Settings** to start the DNS setup.

Tenda					UK O
	Home	Advanced	Wireless	QoS	Applications
Status	DNS Settings				
Internet Connection Setup	Enable Manual DNS				
MAC Clone	Assignment				
WAN Speed	Primary DNS Address	192.168.1.1			
	Alternate DNS Address	8.8.8		(Opt	ional)
WAN Medium Type	Note: To activate new sett	ings, you must i	reboot the device.		
LAN Settings		OK	Cancel		
DNS Settings			Gancer		

1 Enable Manual DNS Assignment: Check the box to enable DNS manual setup of the Router.

2 Primary DNS Address: Enter the preferred address of the DNS server provided by your ISP.

3 Alternate DNS Address (optional): Enter the alternate DNS address if your ISP provides this address.

4 Click **OK** and go to the **Tools** page to reboot the device to activate these new DNS settings.

DHCP Server

Tenda

DHCP server can automatically assign the broadband service info (IP Address, Subnet Mask, Gateway and DNS Server Address) to the computer or smart phone, or other devices which are connected to the Router. Do not disable this function until you want to configure the IP address manually for each device connected to the Router.

Click **Advanced** > **DHCP Server** to modify the IP range and the lease time.

Tenda					
	Home	Advanced	Wireless	QoS	Applications
Status Internet Connection Setup MAC Clone WAN Speed WAN Medium Type LAN Settings DNS Settings DHCP Server DHCP Client List	DHCP Server DHCP Server IP Pool Start Address IP Pool End Address Lease Time	 ✓ Enable 192.168.0. 192.168.0.	00 50 Cancel	 	

1 DHCP Server: Check Enable. (It's enabled by default.)

2 IP Pool Start/End Address: Configure the rightmost segment of the start address/end address, say 100/150 shown in the picture.

3 Lease Time: Select the lease time of the IP assigned automatically, say **One day**. When the lease time is used up, the IP will renew automatically. So you don't need to reset it manually.

4 Click OK.

DHCP Client List

This feature includes two parts, Static Assignment and DHCP Client List.



Static Assignment

Here you can set a static IP address to a specified device manually for convenient management. The static IP you set should be different from other IPs in use, or it will take no effect. Suggest you set the static IP with the rightmost part within "200~254". E.g., your current LAN IP is "192.168.0.1", you can set the static IP within "192.168.0.200" ~"192.168.0.254".

Here we cite an example to explain how to set up a static IP to a specific device on the User Interface.

Example

You hope that your notebook (MAC address: 18:DC:56:A4:06:FA) can always automatically get the IP address "192.168.0.201" to access the Internet. What should you do?

Configuration

In this case, Static Assignment feature of the Router can help you to get what you want.

Tenda							
		Hom	e Advanc	ed N	Wireless	QoS	Applicatio
Status	Static	Assignm	ient				
Internet Connection Setup		P Address	192.168.0.	201		1	3
MAC Clone	MA	C Address	18 : DC : 5	56 [:] A4	: 06 : FA	2	Add
WAN Speed		10.4.1.1					
WAN Medium Type	NO.	IP Add	ress	MAC AC	adress		Delete
LAN Settings		192.16	8.0.201	18:DC:5	0:A4:00:FA		Delete
DNS Settings	DHCP	Client Li	st				
DHCP Server							Refresh
OHCP Client List							
	Host N	Name	IP Address	MAC A	ddress	Lease	Time
			192.168.0.201	18:DC:	56:A4:06:FA	1Day(s	s)00:00:00

Click **Advanced** > **DHCP Client List** to enter the configuration page.

- **1 IPAddress:** Enter the rightmost segment of the IP address "201".
- **2** MAC Address: Enter the MAC address of notebook "18:DC:56:A4:06:FA".

3 Click Add and then the static IP route you set will be displayed on the Static Assignment section.

4 Click **OK** to save the settings.

Click **Refresh** one to three times and you will see the Static IP rules are displayed in the DHCP Client List.

Verification

After the settings above, check and verify your notebook is set to obtain IP automatically. Then, connect your notebook to the Router wirelessly or via an Ethernet cable, and your notebook will get the IP "192.168.0.201" and you can start surfing the Internet through the notebook.

DHCP Client List

All connected devices to the Router will be listed on the DHCP Client List. You can find the host name, IP, MAC address and lease time about a working IP.

Tenda							
		Home	e Advanc	ed	Wireless	QoS	Applicatio
Status	Static	Assignm	ent				
Internet Connection Setup		P Address	192,168.0.				
MAC Clone	MA	C Address		:	: :		Add
WAN Speed							
WAN Medium Type	NO.	IP Addı	ress	MAC A	ddress		Delete
LAN Settings	1	192.16	8.0.201	18:DC:5	56:A4:06:FA		Delete
DNS Settings	DHCP	Client Li	st				
DHCP Server							Defreeh
DHCP Client List							Reliesh
	Host I	Name	IP Address	MAC A	Address	Lease	Time
			192.168.0.201	18:DC	:56:A4:06:FA	1Day(s	\$)00:00:00
						1	
			0	ĸ	Cancel		

Rules you set in the **Static Assignment** section will be displayed on the list but the host name is absent when the device with the corresponding MAC address is not connected to the Router (via an Ethernet cable or wirelessly).

If there're unknown devices connected to your Router, you can check them on the list easily. To



stop they from accessing your router, go to <u>Wireless > Access Control</u> to forbid its MAC address.



2 Wireless

Wireless Basic Settings

Here you can change the WiFi name (Primary SSID) and do some basic settings to create a WLAN for easy recognition or management.

Click **Wireless** > **Wireless Basic Settings** to start settings.

Tenda					
	Home	Advanced	Wireless	QoS	Applications
Wireless Basic Settings	Wireless Basic Setting	IS			
Wireless Security	Enable Wireless				
Access Control	Enable wireless				
Wireless Connection Status	Primary SSID	Tenda_009D7	8		
	Secondary SSID				
Universal Repeater	Wireless Working Mode	Wireless Acc	cess Point(AP)	WDS Bridge	ge Mode
	Network Mode	11b/g/n mixed	Imode	•	
	SSID Broadcast	Enable	Disable		
	AP Isolation	Enable	Disable		
	Channel	2462MHz (Ch	annel 11)	•	
	Channel Bandwidth	© 20	40		
	Extension Channel	2442MHz (Ch	annel 7)	•	
	WMM Capable	Enable	Disable		
	APSD Capable	Enable	Disable		
		ОК	Cancel		

Check the Enable Wireless option, and change the Primary SSID.

Suggest you leave other options the way they are.

Description of other options on the configuration page

1. **Secondary SSID:** The second name of your WiFi, an optional field. You can connect your wireless device to the secondary SSID for accessing the Internet.

2. Network Mode: 4 modes supported on the Router.



Mode	Compatibility	Wireless Speed
11b/g/n	Allows 802.11b, 802.11g, and 802.11n devices to join the network.	Up to 300Mbps
11b/g	Allows 802.11b and 802.11g devices to join the network.	Up to 54Mbps
11b	Allows 802.11b devices to join the network.	Up to 11Mbps
11g	Allows 802.11g devices to join the network.	Up to 54Mbps

3. **SSID Broadcast:** When it's enabled, the wireless device will scan your Router's SSID; when it's disabled, your Router's SSID is hidden and you cannot find it on the SSID list, in which case you need to enter the SSID manually for connecting to it.

4. **AP Isolation:** When it's enabled, wireless devices connecting to your device cannot communicate with each other.

5. **Channel:** Do not change the channel unless you experience interference (shown by lost wireless connection or slow data transfers). If this happens, experiment with different channels to see which the best is. The recommended channel spacing between adjacent access points is four channels (for example, use channel 1 and 5, or 6 and 10).

- 6. **Channel Bandwidth:** Select any of these channel bandwidth options to accommodate higher transmission speeds:
- \geq 40: Select this bandwidth to maximize the wireless throughput.
- \geq 20: Select this bandwidth if you encounter some issues with your wireless connection.
- ➤ 20/40 (default): Keep the default unless you encounter some issues with your wireless connection.

7. Extension Channel: It's used to determine the wireless frequency band of your Router. It can only take effect in 11b/g/n mode when the channel bandwidth is "20/40".

8. **WMM Capable:** It's used to improve the wireless transmission performance. Suggest that you keep this field **Enable** by default.

9. **APSD Capable:** It's the time-saving mode, and can only take effect when **WMM Capable** is enabled. Suggest that you keep the **APSD Capable** field is disabled by default.

Wireless Working Mode

When your router performs as a wireless router, the wireless working mode will be **Wireless Access Point (AP)**. However, when you want to use it as a repeater, you can select **WDS Bridge Mode**.



WDS Bridge Mode

Example

If you already position a router in your house, but its WiFi signal may not be strong enough to cover both your home office and bedroom. To extend your Router's WiFi coverage, you can prepare one more router and enable **WDS Bridge Mode** of the router.

Do the following preparation before configuring **WDS Bridge Mode**. For easy recognition, we call the existing router "remote router" and call the Router you need to prepare "newly-added router".

- 1. Verify the remote router is connected to the Internet and provides proper Internet service.
- 2. Keep the WAN port of the newly-added router unplugged.

3. Go to the User Interface of the remote router and collect the following info: WiFi Name (SSID), security mode, encryption rule, the security key and LAN IP. And take a note.

Tips

1. The router or AP you select must be WDS-capable. This Router supports WDS.

2. When WDS settings are finished, SSIDs of both the remote device and newly-added device will be the same.

3. Do not change the SSID, channel, and security key in case the bridge disconnected.



Configure the newly-added router:

Change LAN IP of the newly added Router into another one, which should be in the same segment

as LAN IP of the remote Router but should not be the same LAN IP, say 192.168.1.10

Tenda					
	Home	Advanced	Wireless	QoS	Applications
Status	LAN Settings				
Internet Connection Setup	This page is used to set th	ne basic network	k parameters for U	AN.	
MAC Clone	LAN MAC Address	C8:3A:35:00:9	9D:78		
WAN Speed	IP Address	192.168.1.10			
WAN Medium Type	Subnet Mask	255.255.255.	0		
LAN Settings					
DNS Settings		ОК	Cancel		

Click **Wireless > Wireless Basic Settings**.



Tenda					
	Home	Advanced	Wireless	QoS	Application
Wireless Basic Settings	Wireless Basic Setting	Js			
Wireless Security	Enable Wireless				
Access Control					
Wireless Connection Status	Primary SSID	Tenda_009D7	8		
Universal Repeater	Secondary SSID				
Universal Repeater	Wireless Working Mode	Wireless Ac	cess Point(AP)	WDS Bridg	ge Mode
	Network Mode	11b/g/n mixed	i mode	•	
	SSID Broadcast	Enable	Disable		
	AP Isolation	Enable	Oisable		
	Channel	AutoSelect		•	
	Channel Bandwidth	© ₂₀	40)	
	Extension Channel	AutoSelect		•	
	WMM Capable	Enable	Disable		
	APSD Capable	Enable	Disable		
	Wireless Working Mo	de: WDS(Repe	ater mode)		
	AP MAC Address				
	AP MAC Address				
	Note: SSID and channel w you select MUST also sup compatibility with your se	ill automatically port WDS. WEP is elected AP.	set to match your recommended fo	r selected AP. N or the connecti	Note that the AP on for better
		Oper	Scan 2)	
		ОК	Cancel		

1 Select **WDS Bridge Mode**.

2 Click **Open Scan**.



		Close Scan					
Select	SSID	MAC Address	Chan	Security	Signal Strength		
0	TG-NETtest	EC:D9:D1:C0:D3:41	3	NONE	-61		
0	BX_axf_ceshi	C8:3A:35:51:86:89	5	WPA2/AES	-39		
0	Tenda_5364F8	C8:3A:35:53:64:F9	3	WPA/AES	-46		
0	The page at 19	The page at 102 169 0.1 cave: X					
0	ine page at 15	2.100.0.1 Suys.		S	-48		
0	Please click on OK	to confirm that you w	ant to co	nnect	-40		
0	to this AP!	_			-37		
0		4 ок	Cano	el	-38		
0					-56		
•	Tenda_131380	C8:3A:35:13:13:81	2	WPA2/AES	-56		
<mark>و ع</mark>	Tenda_666666-ZL	C8:3A:35:52:60:10	11	WPAWPA	-49		

Wireless We	orking Mode: WDS(Repeater mode)
AP MA	AC Address C8:3A:35:52:60:10
AP MA	AC Address
Note: SSID an you select ML compatibility	d channel will automatically set to match your selected AP. Note that the AF JST also support WDS. WEP is recommended for the connection for better with your selected AP.
	Open Scan
	5 OK Cancel
	The page at 192.168.0.1 says:
	The SSID (network name) will be changed to Tenda_666666-ZL! Please reconnect to the new SSID!
	6 ОК Cancel

- **3** Select the SSID of the remote Router.
- **4** Click **OK** on the pop-up window.
- **5** Then click **OK** on the bottom of the page.

6 Click **OK** on the pop-up window.

The MAC address of the router will be entered in the AP MAC address field automatically.

Wire	eless Working Mode	e: WDS(Repeater mode)	
	AP MAC Address	C8:3A:35:52:60:10	
	AP MAC Address		
Note you com	e: SSID and channel will select MUST also suppo patibility with your sele	automatically set to match your selected ort WDS. WEP is recommended for the con octed AP.	AP. Note that the AP nection for better

Verify that the primary SSID (wireless network name), network mode, channel, channel bandwidth, security mode, WPA Algorithms and security key (WiFi password) are the same as the note you've taken. If not, change them to the same.

Tenda					UK Q
	Home	Advanced	Wireless	QoS	Applications
Wireless Basic Settings Wireless Security	Wireless Basic Setting]2			
Access Control	Enable Wireless Primary SSID	✓ Tenda 66666	6-ZL		
Wireless Connection Status	Secondary SSID	_			J
Universal Repeater	Wireless Working Mode	Wireless Ac	cess Point(AP)	WDS Bridg	e Mode
	Network Mode	11b/g/n mixed	d mode	•	
	SSID Broadcast	Enable	 Disable Disable 		
	Channel	2462MHz (Ch	nannel 11)	•]
	Channel Bandwidth	© 20 ○	40		
	Extension Channel	2442MHz (Ch	nannel 7)	•	
	WMM Capable	Enable	Disable		
	APSD Capable	Enable	Oisable		

Tenda					
Tenda			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	A A	0K¢
	Home	Advanced	Wireless	QoS	Applications
Wireless Basic Settings	Wireless Security Set	ар			
Wireless Security	Select SSID	Tenda_009D	78	•	
Access Control	Security Mode	WPA2 - PSK		•	
Wireless Connection Status	WPA Algorithms	🖲 AES 🛛		&AES	
Universal Repeater	Security Key	•••••			
		Default: 12345	5678		

Click **Advanced** > **DHCP Server**, and keep **DHCP server** on the newly added Router disabled.

Tenda					
	Home	Advanced	Wireless	QoS	Applications
Status Internet Connection Setup MAC Clone WAN Speed WAN Medium Type LAN Settings DNS Settings DHCP Server	DHCP Server DHCP Server IP Pool Start Address IP Pool End Address Lease Time	Enable 192.168.0. 1 192.168.0. 1 One day 8 OK	7 00 50 Cancel		
DHCP Client List					

7 Uncheck the **Enable** option.

8 Click OK.

Configure the remote router:

Refer to steps 1-6 to configure similar settings on the remote router.

Tips

Verify that the DHCP server on the remote Router is enabled.

Check whether the WDS mode is set successfully

Connect a wireless client (computer, smart phone, etc.) to the newly added router's WiFi. And check whether the client can access the Internet.

Wireless Security

If you didn't set the **Security Key** at the home page, you can come to the **Wireless Security** section to encrypt your WiFi password. Click **Advanced** > **Wireless Security** to set the WiFi protected access, for providing extremely strong data security and very effectively blocking eavesdropping.

Tenda					
	Home	Advanced	Wireless	QoS	Applications
Wireless Basic Settings	Wireless Security Setu	ıp			
Wireless Security	Select SSID	Tenda_009D	78	•	
Access Control	Security Mode	Disable		•	
Wireless Connection Status					
Universal Repeater	W/DS Status	To configure a	wireless security	key, disable tł	ne WPS below!
	WPS Status	 Disable 	Enable		
			_		Reset OOB
	Notice				
	Wi-Fi Protected Setup (WP security to establish a sec existing network without of Simply enter a PIN code or and a secure wireless com mode: None, WPA2-PSK o selected.	S) makes it easy ure wireless hon entering long pa r press the softw nection is establ r Mixed WPA/WF OK	for home users w ne network, as wel ssphrases or conf vare PBC button or ished. The WPS ca PA2-PSK and ciphe Cancel	ho know little II as to add ne iguring compl hardware WP: n be used onl r type: AES or	of wireless w devices to an icated settings. S button (if any) y when security • TKIP&AES are

Commonly Used Encryption Methods

Tenda					C K Q	
	Home	Advanced	Wireless	QoS	Applications	
Wireless Basic Settings	Wireless Security Setu	р				
Wireless Security	Select SSID	Tenda 009D	78	_	1	
Access Control	Security Mode	WPA - PSK(R	ecommended)			
Wireless Connection Status	Security mode				2	
Universal Repeater	WPA Algorithms					
	Security Key	Default: 12345	678	(3	
		To configure a	wireless security	key, disable t	he WPS below!	
	WPS Status	Unconfigured				
	WPS Settings	Disable	Enable			
					Reset OOB	
	Notice					
	Wi-Fi Protected Setup (WP security to establish a sec existing network without Simply enter a PIN code of and a secure wireless com mode: None, WPA2-PSK o selected.	S) makes it easy ure wireless hon entering long pa r press the softw nection is establ r Mixed WPA/WF	for home users w ne network, as wel ssphrases or conf are PBC button or ished. The WPS ca 'A2-PSK and ciphe	ho know little II as to add n iguring comp hardware WF n be used on r type: AES o	e of wireless ew devices to an licated settings. 25 button (if any) ly when security r TKIP&AES are	

1 Select SSID: Select the WiFi name (SSID) you wish to encrypt, say "Tenda_009D78".

Security Mode, WPA Algorithms: Taking security, compatibility and wireless speed into consideration, suggest you select the WPA-PSK in the Security Mode field, and AES in the WPA Algorithms option.

Security Key: Customize the WiFi password. (Note: To configure a WiFi password, please verify that the WPS function is disabled.)

4 Click OK.

Description of other options on the configuration page

✓ Security Modes

1. Open: Open mode, WEP encryption, up to 54Mbps wireless speed.

2. Shared: Shared mode, WEP encryption, up to 54Mbps wireless speed.

3. **WPA-PSK:** WPA personal security key, supporting AES and TKIP.

4. WPA2-PSK: WPA2 personal security key, supporting AES, TKIP and TKIP&AES.

5. **Mixed WPA/WPA2-PSK:** Mixed mode. Wireless devices connect to the Internet by using WPA-PSK or WPA2-PSK.

✓ WPA Algorithms:

1. **AES:** When using this rule, wireless rate is up to 300Mbps.

2. TKIP: When using this rule, wireless rate is up to 54Mbps.

3. **TKIP&AES:** Compatible with TKIP and AES. Wireless devices connect to the Internet by using AES or TKIP.

WPS Encryption

Wi-Fi Protected Setup (WPS) makes it easy for home users to establish a home network, as well as to add new devices to an existing network without entering long passphrases or configuring complicated settings.

Only use WPS when your wireless device supports WPS function.

Here in the Router, if you choose to use WPS encryption, other security modes listed above in the pull-down menu cannot be configured.

Click **Wireless** > **Wireless** Security to enter the Wireless security setup page.



Use a WPS button

If your wireless client has a WPS push button, you can use it to connect to the router.



1 Press the **WPS** button on the router for 1~3 seconds and then release it.

2 Within 2 minutes, enable WPS feature on your wireless clients.

Take SAMSUNG cellphone as an example:

Enter the WLAN setting page, and tap the icon is on the bottom left corner on the cellphone.

Then select **WPS push button** on the pop-up subpage. The cellphone's WPS feature is enabled.



Use a PIN code

There are two ways to use PIN code. You can choose one to follow according to the WPS feature type of your wireless device.

Method 1:

Type the AP PIN Code to your wireless device's PIN required box, 31931076 here, and the click **OK** in the bottom of this page..



Universal Repeater	To configure a wireless security key, disable the WPS below!
	WPS Status Configured
	WPS Settings 💿 Disable 💿 Enable
	WPS Mode PBC PIN
	AP PIN Code 31931076
	Reset OOB

Method 2:

Type your wireless device's PIN code in the PIN box, and the click **OK** in the bottom of this page.

Universal Repeater	To configure a wireless security key, disable the WPS below!				
	WPS Status	Configured			
	WPS Settings	🔵 Disable 💿 Enable			
	WPS Mode	PBC IN			
	AP PIN Code	31931076			
		Reset OOB			

Access Control

Here you can set rules to permit or forbid wireless devices to connect to your WiFi. The rules refer to these devices' MAC addresses.

Example

You permit your computer (MAC: C8:9C:DC:54:90:77) to connect to the WiFi (SSID: Tenda_135760).

Tenda	
	Home Advanced Wireless QoS Application
Wireless Basic Settings	Access Control
Wireless Security	Select SSID Tenda_009D78 T
Access Control	
Wireless Connection Status	MAC Address Filter Permit
Universal Repeater	MAC Address Operate
	C8 : 9C : DC : 54 : 90 : 77 3 Add 4
	C8:9C:DC:54:90:77 Delete
	5 OK Cancel

- **1** Select SSID: Select the WiFi name that you want to permit, say "Tenda_009D78".
- **2** MAC Address Filter: Select **Permit** mode from the pull-down menu.
- **MAC address:** Enter your MAC address (C8:9C:DC:54:90:77) into the MAC address box.
- 4 Click Add

pnda

- **5** Click **OK**.
- Tips

You can check the wireless devices' MAC addresses in Wireless Connection Status or DHCP Client List.

Wireless Connection Status

Tenda					23	OK ¢
		Home	Advanced	Wireless	QoS	Applications
Wireless Basic Settings	Wireless (Connection	Status			
Wireless Security		Select SSID	Tenda 000D	78	•	
Access Control		261601 2210				
Wireless Connection Status	The current	tly connected	hosts list: Refr	esh		
Universal Repeater	NO.	MAC	Address		Bandwidth	n
	1	38:BC	:1A:AF:D1:1F		20M	

If there're unknown wireless devices to connect to your Router, you can check them on the list easily. To stop them from accessing your router, go to <u>Wireless > Access Control</u> to forbid its MAC address.

Universal Repeater

This section involves wireless network extension. The example below is for you to better understand how to extend the wireless network coverage.

Example

If you already position a router in your house, but its WiFi signal may not be strong enough to cover both your home office and bedroom. To extend your Router's WiFi coverage, you can prepare one more router and enable any wireless extender mode of the router.

Do the following preparation before configuring **Universal Repeater** function. For easy recognition, we call the router in your home "remote router" and call the Router you need to prepare "newly-added router".

1. Verify the remote router is connected to the Internet and provides proper Internet service.

2. Keep the WAN port of the newly-added router unplugged.

3. Go to the User Interface of both routers and collect the following info: WiFi Name (SSID), security mode, encryption rule, the security key and LAN IP. And take a note.



Configure the newly-added router:

<u>Change LAN IP of the newly added Router</u> into another one, which should be in the same segment as LAN IP of the remote Router but should not be the same LAN IP, say **192.168.1.10**

Tenda					
	Home	Advanced	Wireless	QoS	Applications
Status	LAN Settings				
Internet Connection Setup	This page is used to set	the basic network	c parameters for U	AN.	
MAC Clone	LAN MAC Address	C8:3A:35:00:9	D:78		
WAN Speed	IP Address	192.168.1.10			
WAN Medium Type	Subnet Mask	255.255.255.0)		
LAN Settings					
DNS Settings		OK	Cancel		

Click Wireless > Universal Repeater.

Tenda					
Tanda			~		
ier da	Home	Advanced	Wireless	QoS	Applications
Wireless Basic Settings	Universal Repeater				
Wireless Security	Settings	Disable	Enable		
Access Control	Complete below settings to	o connect to AP			
Wireless Connection Status	SSID	Tenda_009D7	78		
Universal Repeater	Channel	AutoSelect		•	
	Security Mode	Disable		•	
		Op	en Scan 2		
		ОК	Cancel		

1 Select **Enable**.

2 Click **Open Scan**.

Select	SSID	MAC Address	Channel	Secu	rity	Signal Strength
0	The page at 19	2.168.0.1 says:		×		-47
0						-47
0	Are you sure to co	onnect to this AP?			AES	-48
0		4 ок	Cano	el	A	-52
0						-60
۲	Tenda_666666-ZL	C8:3A:35:52:60:10	11	WPAW	PA	-1

S Find and select the wireless network name (WiFi name) of the remote router.

4 Click **OK** on the pop-up window.



S Type the wireless security key (WiFi password) of the wireless network name (WiFi name) of the remote router.

6 Click **OK**.

The router will reboot automatically. After the router reboots, you can try surfing the Internet.

	Home	Advanced	Wireless	QoS	Application
Reboot	the router to br	ing the settings int	to effect.		
Rebo	oting84	1%			
	Reboot Rebo	Home Reboot the router to br Rebooting84	Home Advanced Reboot the router to bring the settings in Rebooting84%	Home Advanced Wireless Reboot the router to bring the settings into effect. Rebooting84%	Home Advanced Wireless QoS Reboot the router to bring the settings into effect. Rebooting84%

Tips

The **Connection Status** in **Advanced** > **Status** cannot indicate that whether the router can access to the Internet or not in this situation.



3 QoS

Here QoS is about how to allocate the bandwidth properly for several clients which are connected to your Router's wired or wireless network. You can go to **Bandwidth Control** to configure and check traffic statistics in **Traffic Status**.

Bandwidth Control

Click **QoS** > **Bandwidth Control** to improve network performance by specifying the download/upload speed for connected clients. The example below is for you to consult to configure Bandwidth Control based on your own demands.

Example

Always several devices share 4M broadband service in your home. You recently have to watch lots of news videos to prepare for a special program but only to find it's hard to go through the videos smoothly. Your notebook starves for more bandwidths.

In this case, you can choose to configure a download bandwidth rule in **Bandwidth Control** to allocate sufficient bandwidth for your notebook. If you calculate the download/upload speed by yourself, these formats may help: IM (Bytes) = 1024K (Bytes); IBytes=8Bits. Upload bandwidth rule is not always used unless you have to upload lots of files and videos.

Configuration

Specify a static IP for your notebook (MAC address: 18:DC:56:A4:06:FA), "192.168.0.150".
 Make it always automatically get "192.168.0.150" to access the Internet. Consult <u>Static Assignment</u> for steps.





2 Check the **Enable** box.

Tenda	Home Advanced Wireless QoS Applications
Bandwidth Control	Bandwidth Control
Traffic Statistics	Enable Bandwidth Control 📄 Enable 2
	OK Cancel

Configure a download bandwidth rule for the IP.

Tenda							
		Home	Advanced	Wireless	QoS	A	pplications
Bandwidth Control Traffic Statistics	Ena	dwidth Control ble Bandwidth Control IP Address Upload/Download Bandwidth Range Enable	 ✓ Enable 192.168.0. Download 256 ✓ 6 Add 	150 ~ 150 d ~ 512 To List 7	(KB] yte/s)	3 4 5
	No.	IP Range	Destination	Bandwidth Range	Enable	Edit	Delete
	1	192.168.0.150~150	Download	256~512	\checkmark	Edit	Delete
		8	ок	Cancel			

3 IP Address: Enter "150" in two rightmost boxes. If you want to specify a rule for several devices which get IPs within an IP range, you need to enter the start IP and end IP to these two rightmost boxes respectively.

Upload/Download: Select **Download** from the pull-down menu.

5 Bandwidth Range: Enter "256" in the first box and "512" in the second box. Because your

broadband service is 4M, so the download speed is up to 512KByte/s (4 * 128KByte=512). On the other hand, 256~512KByte/s are sufficient for you to watch smooth HD videos.

6 Enable: Check the Enable box to enable all the settings in this rule.

Click Add to List. You can view the rule in the table, shown as the figure below. The icon " $\sqrt{}$ " indicates the rule is enabled. If it's "×", the rule is not enabled.

No.	IP Range	Destination	Bandwidth Range	Enable	Edit	Delete
1	192.168.0.150~150	Download	256~512	\checkmark	Edit	Delete

8 Click OK.

Traffic Statistics

Here you can view how much traffic each device is using via your Router.

Tenda							
		Home	Advanced	Wir	eless	QoS	Application
Bandwidth Control Traffic Statistics		statistics	🕑 Enable Tr	affic Statis	tics		
	IP Address	Uplink Rate(KByte/s)	Downlink Rate(KByte/s)	Sent Message	Sent Bytes(MByte)	Received Message	Received Bytes(MByte)
			ОК	Ca	ancel		

Enable Traffic Statistics: Check the box to enable **Traffic Statistics** feature, to see at a glance how much traffic each device in your network is using. When the option is enabled, the page will refresh every five minutes.

This option is disabled by default. Disabling it may boost your network. Suggest you only enable it if necessary. Statistics you can see on the list:



Statistics	Indications Description
IP Address	The IP address of one device connected to your Router
Uplink Rate	The upload speed (KByte/s) of a corresponding device
Downlink Rate	The download speed (KByte/s) of a corresponding device
Sent Message	The number of packets sent by a corresponding device via the Router
Sent Bytes	The number of Bytes (Unit: MByte) sent by a corresponding device via the Router
Received Message	The number of packets received by a corresponding device via the Router
Received Bytes	The number of Bytes (Unit: MByte) received by a corresponding device via the Router

4 Applications

Click **Applications** to join this part. The Router provides several ways for helping you or your friend to visit the intranet resource from the Internet.

Port Range Forwarding

Port range forwarding serves for web servers, ftp servers, e-mail servers, game consoles, and other specialized internet applications. The feature will help to forward some special services from the Internet via your Router's WAN port to the specified IP address (es). Other IPs will not share these services.

Example

If you want to share a giant file with your friend who are not in the same LAN with you, and it will take a lot of time to upload them. You can firstly **establish an ftp server** in your computer and then **set a rule of Port Range Forwarding** in your Router to share them quickly and conveniently. All parameters shown in the figure below are examples.



Configuration

Specify a static IP for your computer (MAC address: 18:DC:56:A4:06:FA), "192.168.0.150".
 Make it always get "192.168.0.150" to access the Internet. Consult <u>Static Assignment</u> for steps.



Tenda									
		Home	Advanced	Wireless	QoS	Applications	Security	Tools	
Status	Static	Assignment					Help		
Internet Connection Setup	I	P Address 192.1	68.0. 150		1		DHCP Client List displays a		
MAC Clone	MA	C Address 18	: DC : 56 :	A4 : 06 : FA		Add	list of devices t obtained IP add	hat have dresses from	
WAN Speed							the router's DH	ICP Server.	
WAN Me diam Trust	NO.	IP Address	MA	C Address		Delete	You can manua	ally assign a	
WAN Medium Type	1	192.168.0.150	18:	DC:56:A4:06:FA		Delete	static IP addres	is to a device	
LAN Settings							MAC address a	nd your	

2 Verify that the WAN IP of the Router is **a public IP**. If not, your environment is not fit for the Port Range Forwarding feature.

(3) Establish an FTP server in your computer, default port: "21", using TCP protocol. And update your file to the server.

4 Disable the firewall, virus protection and security guard on your computer. If not, users from the Internet might not be able to access the server on the internal computer.

5 Login to the Router's User Interface again, go to **Port Range Forwarding** section and do the following configurations.

Tenda				C C	A A	$\langle \cdot \rangle$	K
		Home	Advanced	Wireless	QoS	Ар	plicatio
Port Range Forwarding	Port	Range Forward	ling				
DMZ Host	Port r	ange forwarding	is useful for web se	ervers, ftp server	s, e-mail serv	ers, gam	ing and
DDNS	other comn	specialized Intern nunication reques	net applications. W ts from the Interne	hen you enable t t to your router'	the port range s WAN port wi	forwardi II be forv	ng, the varded
UPNP Settings	to the	specified LAN IP	address.				
Static Routing	NO.	Start Port-End	Port LAN IF	Prot	ocol I	Enable	Delete
Routing Table	1.	21 - 2	192.16	58.0. 150 T	CP 🔻		
	2.	-	192.16	58.0. T	CP 🔻 (
	3.	-	192.16	58.0. T	CP 🔻 (
	4.	-	192.16	58.0. T	CP 🔻 (
	5.	-	192.16	58.0. T	CP v		
	6.	-	192.16	58.0. T	CP 🔻 (
	7.	-	192.16	58.0. T	CP v		
	8.	-	192.16	58.0. T	CP • (
	9.	-	192.16	58.0. T	CP 🔻		
	10.	-	192.16	58.0. T	CP 🔻		

1. Start Port- End Port: Enter "21" in both fields.

You can also come to the **Well-known service ports** part, select FTP (21) from the pull-down menu. Select **1** from the ID pull-down menu. And click **Add to**, then you will find the **Stat Port- End Port** fields are entered with "**21**" automatically. Service port will vary according to your server type.

Well-known service ports:	FTP(21)	•	Add to	ID	1	•	
---------------------------	---------	---	--------	----	---	---	--

2. LAN IP: the internal host's IP address. Enter "150" as the rightmost byte of the LAN IP: "192.168.0.150".

3. **Protocol**: the protocol required for the service port(s). Select **TCP** from the pull-down menu in this example.

- 4. Enable: Check it to enable current settings.
- 5. Click **OK** to activate your this rule for Port Range Forwarding.

Verification

The IP format used by the Internet users to access your Intranet is *Server Type://Your Router's WAN IP:Port Number*. Here in the example, your friend can input <u>ftp://183.38.7.216:21</u> in his web browser and try to access your FTP server to download the giant file.

(⇐) (⇐) (⇐) ftp://183.38.7.216:21

Port Range Forwarding + *DDNS*

For the WAN IP address (Public IP) may be the dynamic IP allocated from the ISP, you can give your ftp server a static host name by setting <u>DDNS</u> so that friends on the Internet can visit the ftp server via the static host name. Your Tenda Router has DDNS feature. Go to <u>DDNS</u> for details.

DMZ Host

The DMZ host allows a particular interface or computer to have a direct access to some special massages via the Router without any firewall or network address translator (NAT) to mask the true identity of the interface or computer. These special messages refer to an HTTP server or FTP server. Your Router contains its DMZ settings shown as the screenshot below.

Tenda					
	Home	Advanced	Wireless	QoS	Applications
Port Range Forwarding	DMZ Host				
DMZ Host	NOTE: When the DMZ hos	t is enabled, the	firewall settings o	of the DMZ hos	st will not
DDNS	function.	192 168 0 150)		
UPNP Settings	DMZ Host IP Address	132.100.0.130	,		
Static Routing		🕑 Enable			
Routing Table		OK	Cancel		

Example

You want to create a DMZ host in your computer for messages transmitting via the HTTP server.

Configuration

1 Specify a static IP for your computer, "192.168.0.150". Make it always automatically get

"192.168.0.150" to access the Internet. Consult <u>Static Assignment</u> for steps.

2 Login to the Router's User Interface, click **Applications > DMZ**, to configure detailed settings.

1. **DMZ Host IP Address:** Enter "192.168.0.150" in this field. It is the IP address of the computer with DMZ host created.

- 2. Enable: Check it to enable the DMZ host feature.
- 3. Click **OK** to enable your settings.

Note

Once enabled, the DMZ host loses protection from the firewall and becomes vulnerable to Internet attacks. If you do not need to use DMZ host, disable it as soon as possible.

DDNS

DDNS (Dynamic Domain Name Server) allows a dynamic public IP address of one service to be associated with a static host name, so that anyone anywhere on the Internet can visit the host and share the service. Thus, uninterrupted access to services whose numeric IPs may change is maintained. After DDNS is enabled, using URL "*hostname.dyndns.org*" or "*hostname.no-ip.com*" can access the host.

DDNS is always used with **Port Range Forwarding** feature. Continue the example in Port Range Forwarding section. For your WAN IP (public IP) may change, DDNS can help you use a static host name to maintain the connection.

Follow steps below to apply for the domain name *tenda.dyndns.org*, username *tenda* and password *12345678*.

Tenda							
	Home	Advanced	Wireless	QoS	Applications		
Port Range Forwarding	DDNS						
DMZ Host							
DDNS	DDNS Service Service Provider	e Enable dyndns.org	 Disable 	▼ Sign	up 2		
UPNP Settings	Username	tenda]			
Static Routing	Password	12345678		}	3		
Routing Table	Domain Name	tenda.dyndns.	org	J			
	4	ОК	Cancel				



Configuration

1 DDNS Service: Check the **Enable** box to enable the DDNS feature.

2 Service Provider: Select your DDNS service provider from the drop-down menu. Here you can only use dyndns.org and no-ip.com.

(If you haven't got a DDNS account, click **Sign up** next to the pull down menu to sign in an DDNS account and then come back to continue the settings with the DDNS domain name, username and password.)

3 User Name, Password, Domain Name: Enter the registered user name, password and domain name.

4 Click **OK** to activate your settings.

Verification



After the configuration above, your friend can access your ftp server via <u>ftp://tenda.dyndns.org</u> instead of <u>ftp://183.38.7.216:21</u> to download the giant file.



UPnP Settings

When UPnP is enabled on your Router, a network device possessing a specific purpose, such as a printer, can be identified and used automatically by another computer or device on your network. If the UPnP protocol is disabled, devices behind the Router may have difficulty communicating their identification or purpose. Access your Tenda Router to turn on UPnP.

Tenda								
Tenda				- ANKOKO				
	Home	Advanced	Wireless	QoS	Applications			
Port Range Forwarding DMZ Host DDNS UPNP Settings	UPNP Settings Enable UPnP	✓	Cancel					

Static Routing

Generally, **dynamic routing** is default and recommended, because this feature allows the router to detect physical changes of networking automatically.

Static Routing in the Router can provide additional routes for connecting to external network. It's commonly needed at home when there're several routers, or IP subnets on the network.

Example

You've applied for 2 network services: Internet service and MAN (Metropolitan Area Network) service. These 2 networks are isolated, shown as below.



Every time you want to enjoy the Internet, you should go to COMPUTER1. When you want to enjoy the specified MAN service, like a movie or an old TV show on one of the servers on the



MAN, you should go to COMPUTER2.

To avoid such inconvenient switch over these two isolated networks, as well as expand your Internet service to more wireless devices, you can add this Tenda Router and set up a static routing. Connect and configure the devices as below. Parameters here are examples.



Connection & Parameters Notes

Tenda Router and your located router (Router 1) should be connected via their LAN ports.
 And both routers should be in the same network segment. Here both are in 192.168.0.0 segment.
 Also, their LAN IP should be different. Here one is "192.168.0.1", the other is "192.168.0.10".

2. Your located router (Router 1) should disable its DHCP server. If you want to connect more devices to Router 1, you should configure static IP for every wanted device which can also both connect to the Internet and MAN.

Configuration
Tenda				4	
	Home	Advanced	Wireless	QoS	Applications
Port Range Forwarding	Static Routing				
DMZ Host					
DDNS	Destination Network	Subnet Mask	Gateway		
UPNP Settings	134.111.0.0	255.255.0.0	192.168.0.1	0	Add
Static Routing					
Routing Table	134.111.0.0	255.255.0.0	192.168.0.1	0	Delete
		ОК	Cancel		

Login to your Tenda Router's User Interface, click Advanced (on the homepage) >
 Applications > Static Routing to enter the setting page.

2 Add a static route here.

Tenda

Destination Network IP address: Enter the destination network range, "134.111.0.0".

Subnet Mask: Enter the subnet mask of the destination network range, "255.255.0.0".

Gateway: Input the LAN IP address of the next hop to which messages are forwarded from Tenda Router, here "192.168.0.10". Note that this Tenda Router and your located router should be in the same network segment.

6 Click **Add** to add the route to the list. Click **OK** to activate the settings.

Verification

Try visiting the Internet and MAN service from the computer or other connected wireless devices, if you can visit them successfully, the static routing you set takes effect.

Routing Table

Statistics through the Router are transmitted according to the routing table.



Home	Advanced	Wireless	QoS	Applicati
Routing Table				
Destination IP	Subnet Mask	Gateway	Hops	Interface
0.0.0.0	0.0.0.0	192.168.1.1	1	vlan2
192.168.0.0	255.255.255.0	192.168.0.0	0	br0
192.168.1.0	255.255.255.0	192.168.1.0	0	vlan2
	Home Routing Table Destination IP 0.0.0.0 192.168.0.0 192.168.1.0	Home Advanced Routing Table	Home Advanced Wireless Routing Table Destination IP Subnet Mask Gateway 0.0.0 0.0.0.0 192.168.1.1 192.168.0.0 192.168.1.0 255.255.255.0 192.168.1.0	Home Advanced Wireless QoS Routing Table Destination IP Subnet Mask Gateway Hops 0.0.0 0.0.0.0 192.168.1.1 1 192.168.0.0 255.255.255.0 192.168.0.0 0 192.168.1.0 255.255.255.0 192.168.1.0 0

5 Security

Here explains how to control the websites access, or block unauthorized accesses and malicious packet sniffing.

URL Filter Settings

By filtering URLs, and you will control websites access for an IP (range) within a specified time range.

Example

If you want to disallow all computers on your LAN to access *youtube.com* from 8:00 to 18:00 during working days: *Monday- Friday*, then do as follows.

Tenda							
	Home	Advanced	Wireless	QoS	Applications	Security	Tools
	UDL Filter Settings					Usla	
JRL Filter Settings	OKE THEF Settings					нер	
MAC Address Filter Settings	Filter Mode	Forbid Only		•		This section a	llows you to
Client Filter Settings						Select a policy	from the
	Access Policy	(1)		•		drop-down m	enu and
	Policy Name(Optional)	voutube				corresponding	g field. You
		Journa				can set the ac	cess letails
	Start IP	192.168.0. 2				including the	IP address
	End IP	192.168.0. 25	54			range of devic	es, time
	URL Character String					the week. Dor	nain name can
	Time	· · ·	• <u>10</u>			be entered the example www	e full name(for .google.com)
	Time	· · · ·	• ~ 10			or keyword(fo	r example
	Day(s)	Mon 🔻	∼ Fri •			google),but o one domain n	nly support ame for one
	Enable	Clear this	item: Clear			rule.	
						Be sure to stat	tically assign
		OK	Cancel			IP Address of	the devices

1 Filter Mode: Select Forbid Only from the pull-down menu.

2 Access Policy: Select the serial number of the access policy. The maximum policy is 10.

8 Policy Name (Optional): Enter a descriptive name for the policy, or leave it blank.

4 Start IP, End IP: Enter 2 and 254 in the corresponding field to limit all computers on the LAN.

To restrict only one device, input the same number in corresponding field. For example, if the IP of

the device you want to restrict is "192.168.0.13", enter "13" in both Stat IP and End IP field.

6 URL Character String: Enter a domain name you want to restrict, say "youtube".

6 Time, Day(s): Select 8:00~18:00, Mon~Fri.

7 Check **Enable** to activate your settings.

8 Click **OK** to save the settings.

How to disable URL Filter?

Select disable from the pull-down menu of the Filter Mode option and click OK.

MAC Address Filter Settings

By filtering the MAC address of the wanted devices, you can control their Internet access.

Example

To allow the computer (MAC address—00:E4:A5:44:35:69) to access the Internet from 13:00~18:00 on Sunday to Saturday, do as steps below.

Tenda							
	Home	Advanced	Wireless	QoS	Applications	Security	Tools
URL Filter Settings	MAC Address Filter So	ettings				Help	
MAC Address Filter Settings	Filter Mode	Permit Only		•		This section al	lows you to ecific clients
Client Filter Settings	Access Policy	(1)		¥		can or cannot i Internet via the MAC adresses. Policy from the	access the e devices' Select a e drop-down
	MAC Address	00 : E4 :	A5 : 44 : 35	: 69		menu and brie in the correspo You can set the	fly describe it onding field. e access
	Time	13 ▼: 0	▼ ~ 18	▼:0 ▼		restriction or p detail including period and sp	ermission in g the time ecific days of
	Day(s) Enable	Sun V	item: Clear	•		the week.	
		ОК	Cancel			When Time is s 0:0, the rule w 24 hrs/day.	et to 0:0 to ill be applied

1 Filter Mode: Select Permit Only from the pull-down menu.

2 Access Policy: Select the serial number of the access policy. The maximum policy is 10.



6 Policy Name (Optional): Enter a descriptive name for the policy, or leave it blank.

- **MAC Address:** Input the MAC address of the device you want to permit, here 00:E4:A5:44:35:69.
- **5** Time, Day(s): Select 13:00~18:00, Sun~Sat.

6 Enable: Check this box to enable the settings.

7 OK: Click **OK** to save the settings.

How to disallow the device with a specified MAC address?

Select Forbid Only from the pull-down menu of the Filter Mode option. And consult steps 2~7

in the example above.

How to disable MAC Address Filter?

Select Disable from the pull-down menu of the Filter Mode option and click OK.

Client Filter Settings

By filtering the IP address and port of the wanted clients, you can control their Internet access.

Example

If you want to prohibit COMPUTERs within the IP address range of "192.168.0.100--192.168.0.120" from accessing the Internet, do as follows.

ienua	Home	Advanced	Wireless	QoS	Applications	Security	Tools
URL Filter Settings	Client Filter Settings					Help	
IAC Address Filter Settings	Filter Mode	Forbid Only		•		This section al	lows you to
Client Filter Settings						can or cannot	access the
	Access Policy	(1)		•		addresses. Sel	ect a Policy
	Policy Name(Optional)	123				from the drop- and briefly des	-down menu scribe it in th
	Start IP	192.168.0. 1	00			corresponding	field. You
	End IP	192.168.0. 1	20			restriction or p	permission in
	Port	1	~ 65535			period, and sp	ecific days of
	Туре	Both		•		the week.	
	Time	0 • : 0) 🔻 ~ 0	•: 0 •		When Time is : 0:0, the rule w	set to 0:0 to vill be applied
	Day(s)	Sun	v ∼ Sat •	•		24 hrs/day.	
	Enable	Clear thi	is item: Clear				
		۵					
		OK	Cancel				

- **1** Filter Mode: Select Forbid Only from the pull-down menu.
- 2 Access Policy: Select the serial number of the access policy. The maximum policy is 10.

6 Policy Name (Optional): Enter a descriptive name for the policy, or leave it blank.

4 Start IP, End IP: Enter 100 and 120 in corresponding fields to limit devices within the IPs.

To restrict one device, input the same number in corresponding field. For example, the IP of the

device you want to restrict is "192.168.0.13". Enter '13' in both Stat IP and End IP field.

6 Port: Enter 1-65535 to forbid all Internet services and applications.

6 Type: Select Both.

- **7** Time, Day(s): Select 0 for a whole day and Sun~Sat for a whole week.
- **8** Enable: Check the box to enable the settings.
- **9 OK:** Click **OK** to save the settings.

How to permit clients with specified IP addresses?

Select **Permit Only** from the pull-down menu of the **Filter Mode** option. And consult steps $2 \sim 9$ in the example above.

How to disable Client Filter?

Select Disable from the pull-down menu of the Filter Mode option and click OK.



6 Tools

You can configure the Router in this section for administration and maintenance.

Reboot

Rebooting the Router will activate any modified settings on the Router. When parameters you set cannot take effect, you can try that. Note that when the Router is rebooting, do not power off any relevant devices (Router, computer, etc.).

Tenda							
	Home	Advanced	Wireless	QoS	Applications	Security	Tools
Reboot	Reboot The Router					Help	
Restore To Factory Default	Click the button to reb	oot the router:				Rebooting the	router will
Backup/Restore	Reboot The Route	r				activate any mo settings on the	router. While
Syslog	L					the router is re connections wi	booting, all II be lost and
Remote Web Management						reconnected au later.	tomatically
Time Settings							
Change Password							
Upgrade							

Restore To Factory Default

It's recommended that do not default the device unless you forget the login password or Tenda technical support suggests restoring it to factory default.

Tenda							
	Home	Advanced	Wireless	QoS	Applications	Security	Tools
Reboot Restore To Factory Default Backup/Restore Syslog Remote Web Management Time Settings Change Password Upgrade	Restore To Factory Click this button to res Restore To Factor	Default store all settings to ry Default	factory default.			Help All settings will to default. Default Passwo Default IP Add 192.168.0.1 Default Subnet 255.255.255.0	l be set back ord:admin ress: : Mask:

Click the button: **Restore to Factory Default**, and all the settings will be restored to factory defaults.

Then you need to use the default login IP and password to login to the User Interface to reconfigure

the Router. **Note that** during the restoration, do not disconnect the power of the Router and other relevant devices.

Backup / Restore

If you find the current settings can maintain a good performance for your Router, you can back up the configurations on time in case of need.

Tenda								
	Hoi	me	Advanced	Wireless	QoS	Applications	Security	Tools
Reboot Restore To Factory Default Backup/Restore	Backup/Reste Here you can Ba saved configura	ore ackup you ation file.	r router's curren	t configuration or	restore your ro	puter with a	Help Backup:Click o to save a copy router's config	n this button of your urations to
Syslog Remote Web Management Time Settings Change Password Upgrade	Click here to sa	ve a confi No file cho	guration file to y	Restore	3ackup		Restore: First cl "Browse" to bro- computer and configuration fi to upload to yo Then click on t button to uplus selection and a settings saved	lick on wyse your select the ile you want our router. he "Restore" oad your pply the in that file.

Syslog

Syslog refers to the history of the Router's action. Up to 150 entries can be listed on the pages. When one more entry added, the earliest log will be cleared automatically.

Tenda							
	Home	Advanced	Wireless	QoS	Applications	Security	Tools
Reboot	Syslog					Help	
Restore To Factory Default		Here you can view the history of the router's actions. After 150 entries,					
Backup/Restore							
Syslog						the previous log cleared automa	gs will be itically.
Remote Web Management		Refresh	Clear				
Time Settings							
Change Password							
Upgrade							

Remote Web Management

This section can help you to manage your Router remotely.

Example

You want to manage your home network when you are in the company. Assume that the WAN IP

address of your computer in the company is "202.165.100.105", and it is a **public IP** address (Only when the IP is a public IP, can this Router can be managed remotely). And your Router at home is working properly, the WAN IP is "190.136.2.5", and it's a **public IP** address as well.

Now configure the Router to provide remote web management.

Configuration

1 Click **Tools** > **Remote Web Management** to the section. Check the **Enable** option.

2 Port: The default port 8080 is a common alternate for HTTP. For greater security, enter a custom port of the remote web management interface. Select a number from 1024~65535, but do use the number of any common service port. Note that normal web browser access uses port 80.

6 Input the IP address "202.165.100.105" into the **IP Address** field, and click **OK**.

<i>Tenda</i>								
		Home	Advanced	Wireless	QoS	Applications	Security	Tools
Reboot Restore To Factory Default Backup/Restore Syslog Remote Web Management Time Settings Change Password Upgrade	Remote V	Veb Manag Port	ement Enable t 8080 5 202.165.100. OK	105 Cancel			Help This section al administrator to the router rem Port:This is the management p open to outsid default setting IP Address:He specify the IP a remote manag	lows network to manage otely. e ort to be e access. The is 8080. re you can uddress for ement.When ere to 0.0
							the device bec romotely acces PCs on Interne	omes sible to all t.

Verification

When you're in the company, you can use your computer to access your Router's User Interface by entering "http://190.136.2.5:8080" in a browser.



Remote Web Management + DDNS

However, in the example above, the WAN IP of the Router in your home may not always be static. You can give the WAN IP a static host name via DDNS to maintain the connection between your Router and the computer in your company. Go to "<u>DDNS</u>" for details to configure a username, password, and domain name.

Assume you signed up an account tenda01.3322.org from dyndns.org, the username is tenda01, and



the password is 1234567890.

After you bind a static hostname to the WAN IP, when you're in the company, you can also access the Router's User Interface by entering "http://tenda01.3322.org:8080" in a browser of your computer in the company.

() () () () () () () () () ()	$\rho \rightarrow \gamma$

Time Settings

In this section, you can set the time manually or let the router sync GMT time from the Internet automatically.

Home Advanced Wireless QoS Applications Security Reboot Time Settings Image: Security Default Image: Secur	Tenda	
Reboot Time Settings Help Restore To Factory Default Time Zone This page is used router's system to can choose to set manually or get to tan the system time will not be accurate unless there is an access to the Internet or you select "Customized Time" below. This page is used router's system to the system will automatically con manually or get to the system will automatically con NTP server to synthe time.		Tools
Change Password 2015 Year 7 Month 10 Day 20 Hour 3 Minute 50 Second Note:Configured date info will be l	eboot estore To Factory Default ackup/Restore /slog emote Web Management me Settings hange Password	used to set the im time. You o set the time get the GMT e Internet and ill o connect to o synchronize ured time and be lost when

To auto-sync the system time with the Internet server, just uncheck the **Customized Time** option

and click **OK**.

To manually customize the time, check the **Customized Time** option, enter the current time and click **OK**.

Verification

Click **Advanced > Status** to check whether the System Time is correct.



Tenda							
	Home	Advanced	Wireless	QoS	Applications	Security	Tools
	WAN Status					Help	
Internet Connection Setup	Connection Status	Connected	1			Connection Sta	tus:Refers t
MAC Clone	Internet Connection Type	DHCP				the connection	between the
WAN Speed	WAN IF Subnet Mask	192.168.1 255.255.2	.152			connected to the WAN.	ie router's
WAN Medium Type	Gateway	192.168.1	.1			Internet Conne	ction Type:
LAN Settings DNS Settings	DNS Server Alternate DNS Server Connection Time	192.168.1 8.8.8.8 00:47:46	.1			This can be set > Internet Com Setup. DHCP an	in Advance nection d PPPoE are
DHCP Server		Release	Refresh			Connection Tir	ion. ne:Displays
DHCP Client List	System Status					WAN connectio for the DHCP/D	n duration Ivnamic IP
	LAN MAC Address WAN MAC Address System Time Running Time Connected Client System Version Hardware Version	 C8:3A:35: C8:3A:35: 2015-07- 00:50:50: 1 V11.13.01 V1.0 	00:9D:78 00:9D:78 10 20:01:02 .06_en			and PPPoE conr System Version the current firm of the device.	i:Displays i:ware versio

Note

The configured system time will be lost when the device is disconnected from power supply. However, it will be updated automatically when the device reconnects to Internet.

To make some time-based features (e.g. System Log) effective, the time shall be set correctly first, either manually or automatically.

Change Password

It is advisable to change the default login password "admin" for better security. Note that the login password is not

the WiFi password; the login password only includes 0~12 characters without any space.

Tenda						
	Home Adv	anced Wireless	QoS	Applications	Security	Tools
Reboot Restore To Factory Default Backup/Restore Syslog Remote Web Management Time Settings Change Password	Change Password Administrator Login Credentials Password must be alpha-numer Old Password New Password Confirm New Password	ic. OK Cancel			Help This section all change the logi Device's default "admin". It is ac change it for be Otherwise, any network may ac utility to view o your settings.	ows you to n password. : password is lvisable to :tter security. one in your ccess this r change
Upgrade					Old Password: password. If yo	inter the old u use the



Upgrade

Tenda official website offers the latest software version for your Router. Follow steps below to upgrade the device if needed. However, when the Router is in normal operation, it is not advisable



• Verify your computer is connected to one of the LAN port of the Router by using an Ethernet cable; and every device is kept with power supply.

2 Download the firmware file from Tenda website "<u>www.tendacn.com</u>", save and unzip it to the local computer.

2 Click **Choose file** to select the *.bin* file you saved.

6 Click **Upgrade** to start the upgrade process and the Router will reboot automatically.

4 Login to the User Interface again to restore the Router to factory default after the Router finishes

reboot. After that, customize the Router as you like.

Tips

Do not upgrade your Router from the computer that is wirelessly connected, or damage might be done to the Router. Once damages happen, contact your reseller.



IV Appendix

This Chapter provides you with more information about how to configure your computer, common questions and answers, and etc.

It contains the following sections: Configure Your computer

FAQs Technical Support Safety and Emission Statement

1 Configure Your Computer

Windows 8

1 Right click the icon **a** on the bottom right corner of your desktop. Click **Open Network and Sharing Center**.

					Troubleshoot p	problems		
	[2:21 PM		Open Network	and Sharing (Center	
			1/24/2015	>		L CK CW	1/24/2015	
Tip	s							
If you	cannot find	l the icon 强,	please move	your	cursor to the top	o right corn	ner of your de	esktop,
select Settings > Control Panel > Network and Internet > Network and Sharing.								

2 Click **Ethernet** > **Properties**.



3 Find and double click **Internet Protocol Version 4**(**TCP/IPv4**). Select **Obtain an IP address automatically** and **Obtain DNS server address automatically** and click **OK**.

🖗 Ethernet Properties 💌	
Networking	Internet Protocol Version 4 (TCP/IPv4) Properties
Connect using:	General Alternate Configuration
Configure	this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
This connection uses the following items:	Obtain an IP address automatically
File and Printer Sharing for Microsoft Networks Microsoft Network Adapter Multiplexor Protocol	Use the following IP address:
	Subnet mask:
✓ ✓	Default gateway:
< >	Obtain DNS server address automatically
Install Uninstall Properties	Use the following DNS server addresses:
Description	Preferred DNS server:
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication	Alternate DNS server:
across diverse interconnected networks.	Validate settings upon exit Advanced
OK Cancel	OK Cancel

4 Click **OK** on the **Ethernet Properties** window (see 3 for the screenshot).

Windows 7

① Click the icon 🖾 on the bottom right corner of your desktop. Click **Open Network and** Sharing Center.



Tips

If you cannot find the icon and the bottom right corner of your desktop, follow steps below: Click Start > Control Panel > Network and Internet > Network and Sharing Center.

2 Click Local Area Connection > Properties.

Tenda

1			
🐨 🗸 – 🔛 « Networ	rk and Internet 🕨 Network and Sh	aring Center 🛛 👻 🍕	Search Control Panel
Control Panel Home	Local Area Connection Status		× · · · · · · · · · · · · · · · · · · ·
Channelation	General		set up connections
Change adapter setti Change advanced sh	Connection		
settings	IPv4 Connectivity:	No Internet access	Internet
	IPv6 Connectivity: Media State:	No Internet access Enabled	Connect or disconnect
	Duration:	03:40:31	ss type: No Internet access
	Speed:	1.0 Gbps	ections: Q Local Area Connection
	Details		
			E
	Activity		or VPN connection: or set up a
	Sent —	Received —	of virve connection, of set up a
	Bytes: 758,618	8,236,680	
			I-up, or VPN network connection.
See also	Properties 😯 Disable	Diagnose	
HomeGroup		Class	vork computers, or change sharing
Internet Options		Close	

3 Find and double click **Internet Protocol Version 4**(**TCP/IPv4**). Select **Obtain an IP address automatically** and **Obtain DNS server address automatically** and click **OK**.



Local Area Connection Properties	Internet Protocol Version 4 (TCP/IPv4) Properties
Networking	General Alternate Configuration
Connect using:	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.
Configure This connection uses the following items:	Obtain an IP address automatically Other for the following ID address
Client for Microsoft Networks	IP address:
✓	Subnet mask:
Link-Layer Topology Discovery Mapper I/O Driver Link-Layer Topology Discovery Responder	 Obtain DNS server address automatically
Install Uninstall Properties	Use the following DNS server addresses: Preferred DNS server:
Description Transmission Control Protocol/Internet Protocol. The default	Alternate DNS server:
across diverse interconnected networks.	Validate settings upon exit
OK Cancel	OK Cancel

4 Click **OK** on the Local Area Connection Properties window (see 3 for the screenshot).

Windows XP

1 Right click My Network Places on your desktop and select Properties. Right click Local Area

Connection and select Properties.



2 Scroll down to find and double click **Internet Protocol** (**TCP/IP**). Select **Obtain an IP address automatically** and **Obtain DNS server address automatically** and click **OK**.



eneral Advanced	General Alternate Configuration
Connect using: Marvell Yukon 88E 8057 PCI-E Gigabi Configure	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.
This connection uses the following items:	Obtain an IP address automatically
Client for Microsoft Networks	O Use the following IP address:
Real of the sharing for inclosed methods	Subnet mask
Install Uninstall Properties	Default gateway
Description	Obtain DNS server address automatically
Transmission Control Protocol/Internet Protocol. The default	O Use the following DNS server addresses:
wide area network protocol that provides communication across diverse interconnected networks.	Preferred DNS server
Show icon in notification area when connected	Alternate DNS server:
Notify me when this connection has limited or no connectivity	Advanced
OK Cancel	OK Cancel

3 Click **OK** on the **Local Area Connection Properties** window (see **2** for the screenshot).



2 FAQs

Read the following Frequently Asked Questions if you are running into problems.

Q1: I cannot access the device's User Interface. What should I do?

A1: Please do as the following one by one until you solve your problem.

a. Clear cache of your browser, or change another browser.

b. Verify the Ethernet cable is undamaged and well-connected to your computer and router. If not, change the Ethernet cable. For details, see <u>Connect Your Router</u> here.

c. Make sure you've set your computer to **Obtain an IP address automatically** or **Use the following IP address** and input a different IP address which should be the same net segment as LAN IP address of the Router. If you are using the recommended addressing scheme, your computer's IP address should be in the range of 192.168.0.2 to 192.168.0.254.

d. Press and hold the **WPS/RST** button on the top panel of the router for about 8 seconds to reset the Router to factory default. And try again.

e. Try accessing the User Interface from another computer, smart phone or iPad.

Q2: My notebook is unable to search wireless networks, what should I do?

A2: Please do as the following one by one until you solve your problem.

a. Check the wireless hardware or software button on your notebook. Verify that the wireless is enabled.

b. Verify that the wireless feature is enabled.

c. Log in to the User Interface, and click **Advanced** > **Wireless** > **Wireless Basic Settings** to change the **WiFi Name** (**SSID**). Then search again on your notebook.

Q3: I cannot join my wireless network, what should I do?

A3: Please do as the following one by one until you solve your problem.

a. Verify that you entered a correct WiFi password. If you forget it, try next step. Note that the WiFi Password is different from login password.

b. Log in to the User Interface, change the **Security Key** (WiFi Password) in **Home** page, and click **Advanced** > **Wireless** > **Wireless Basic Settings** to change the **WiFi Name** (**SSID**). Then connect again.



3 Technical Support

If you still have some problems, please contact our technical support.

Global Hotline: (86) 755-27657180	United States Hotline: 1-800-570-5892
Australia Hotline: 1300787922	New Zealand Hotline: 800787922
HongKong Hotline: 00852-81931998	United Kingdom Hotline: 44 0800 1337 824
Canada Hotline: 1-888-998-8966	Skype: Tendasz
Website: http:// www.tendacn.com	E-mail: support@tenda.com.cn



4 Safety and Emission Statement

CE Mark Warning

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. This device complies with EU 1999/5/EC.

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.

FCC Statement

FCC Statement

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.

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 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.

FCC 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.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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.

IC RSS Warning

Industry Canada (RSS-Gen Issue 4)

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

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

(1) l'appareil ne doit pas produire de brouillage;

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that, the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conform ément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner

avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'énetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radio dectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonn é équivalente (p.i.r.e.) ne dépasse pas l'intensit é nécessaire à l'établissement d'une communication satisfaisante.

IC Radiation Exposure Statement:

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

IC D éclaration sur la radioexposition:

Cet équipement est conforme aux limites d'exposition aux rayonnements RF IC énonc és pour un environnement non contrôl é Cet énetteur ne doit pas être co-localis és ou op érant en conjonction avec une autre antenne ou transmetteur.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur. Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

CAN ICES-3 (B) /NMB-3 (B)

EHC