

# User Guide

## www.tendacn.com



3G/4G Wireless N150/N300 Router

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## **About this Manual**

Thank you for choosing Tenda! Before you start, please read this User Guide, which instructs you to install and configure your device. This User Guide is applicable to 4G600 and 4G630. Unless otherwise specified, the 4G630 is used as an example throughout this User Guide.

## Convention

This user guide uses the following formats to highlight special messages:

Icon	Description				
	This format is used to highlight information of				
٨	importance or special interest. Ignoring this type				
Note	of note may result in ineffective configurations,				
	loss of data or damage to device.				
<b>V</b> Tin	This format is used to highlight a procedure that				
* TP	will save time or resources.				
Knowledge Center	Description of fields on the device GUI.				

## **Technical Support**

- Website: <u>http://www.tendacn.com</u>
- Email: <u>support02@tenda.com.cn</u>
- Skype: tendasz
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## **I Product Overview**

## **1 Package Contents**

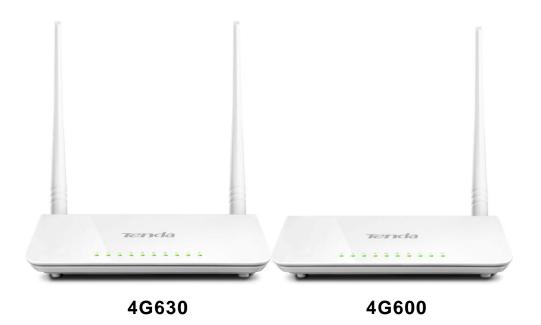
Unpack the package. Your box should contain the following items:

- > 3G/4G Wireless Router
- Ethernet Cable
- Power Adapter
- Install Guide
- Resource CD

If any of the parts are incorrect, missing, or damaged, contact your Tenda dealer. Keep the carton, including the original packing materials, in case you need to return the product for repair.

## 2 Getting to Know Your Device

## 2.1 What It Looks like







LED	Status	Description
PWR	Solid	The device is receiving electric power.
SYS	Blinking	System is starting up properly.
WPS	Blinking	The device is functioning properly.

WAN/LAN/WiFi	Blinking	The WAN/LAN /WLAN interface is transmitting							
		data.							
	Solid	The WAN/LAN interface is connected correctly.							
		The WiFi radio is on.							
USB	Solid	The USB port is connected correctly.							
T	/	This icon indicates no actual meaning. It is only for							
		decoration.							

## 2.3 Button & Interface



Button/Interface	Description
USB	USB port for attaching a 3G/4G USB Modem
	Pressing this button for over 6 seconds resets the
WPS/Reset	device to factory default settings or 1-3 seconds to
	enable WPS quick encryption.
WAN	Internet port for cabling the device to the Internet side
LAN1/2/3	Local (LAN) Ethernet ports for cabling the device to

	local computers, switches, etc.
POWER	Power port for connecting the device to a power outlet

## 2.4 Label

Tenda		Made in china www.tendacn.com
<b>3G/4G Wireless N300 Router</b> Model: 4G630         IP Address: 192.168.0.1         User Name: admin         Password: admin         Power: 12V1A         FCC ID: V7T4G630         ROHES         COMPLIANT	MAC WPS PIN Serial No.	

1→Product Model

 $2{\rightarrow} \text{Default Login IP address}$ 

This IP address is to be used to access the device's settings through a Web browser.

3/4→Default login user name/password

This information is to be used for web access authentication.

 $5 \rightarrow \text{Device's physical address}$ 

## **II Quick Setup**

## 1 Hardware Install

You can either connect to the device wirelessly or using Ethernet cables. Select an install method according to your network environment.

- A. If you access the Internet via a 3G/4G USB modem, see <u>3G/4G Router</u> Mode.
- B. If you access the Internet by connecting the device to the Ethernet cable from the incoming Internet side, see <u>Wireless Router Mode</u>.
- C. If you acquire Internet access from a remote AP on an existing network, see <u>Universal Repeater Mode</u>.

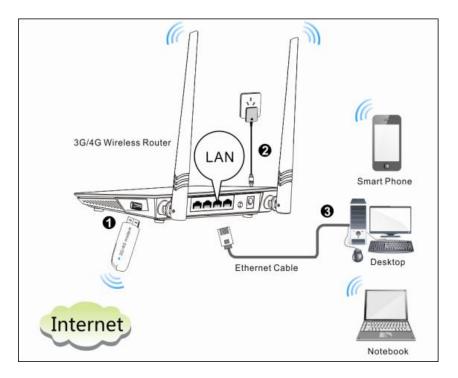
## <mark>∆</mark>Note

- 1 DO NOT expose the device to heat sources.
- 2 Disconnect the device from power supply in thunderstorm weather.
- (3) Keep the device away from electrical appliances (such as electromagnetic cooker and cordless phone, etc.) to avoid electromagnetic interference.

## 3G/4G Router Mode

By connecting an activated 3G/4G USB modem to your device and it gives you the freedom to roam while staying connected to the Internet.

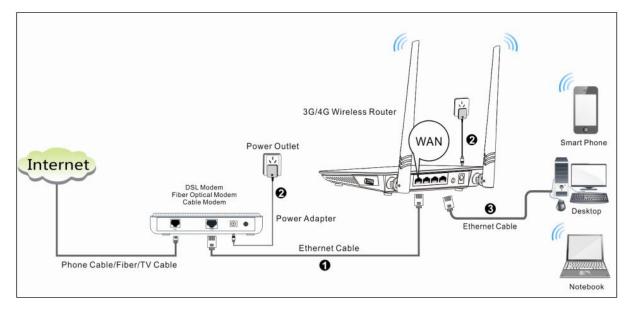
- ① Insert a 3G/4G USB modem to the device.
- 2 Connect the device to a power outlet.
- ③ Connect your desktop, notebook and smart phone, etc. to the device.



### **Wireless Router Mode**

In this mode, your device functions as a common wireless router. Simply connect it to an Internet-enabled DSL/fiber optical/cable modem.

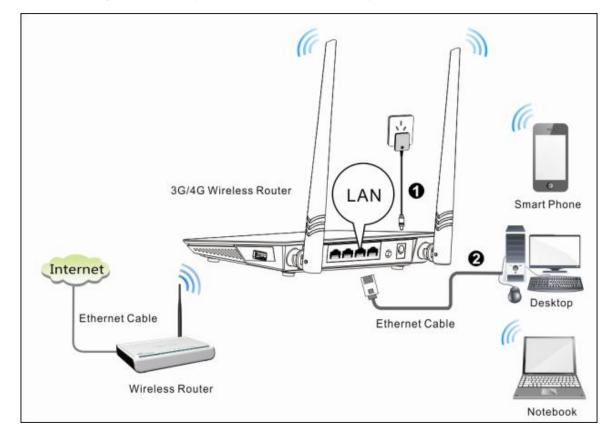
- Connect the WAN port of the device to an Internet-enabled DSL/fiber optical/cable modem.
- 2 Connect the modem and the device to a power outlet.
- 3 Connect your desktop, notebook and smart phone to the device.



## **Universal Repeater Mode**

The universal repeater feature can be used to extend your existing wireless network coverage.

- ① Connect the device to a power outlet.
- ② Connect your desktop, notebook and smart phone to the device.



#### 🦗 Тір

- To scan and connect to a remote wireless device see <u>Universal Repeater</u> <u>Mode</u> in **4 Quick Internet Setup & Wireless Security Setup**.
- 2 To connect the device wirelessly, see <u>2 Join Your Wireless Network</u>.

## 2 Configure Your PC

If your computer is set to a static or fixed IP address (This is uncommon), change it to "Obtain an IP address automatically" and "Obtain DNS server address automatically" from the device. See <u>1 Configure Your PC</u>.

## 3 Web Login

① Launch a Web browser, say, IE.



② In the address bar, input the device's LAN IP address (192.168.0.1 by default), and press Enter.

Tenda   LOGIN - Windows Internet Explorer			
	-	)	X

③ Enter the login password (admin by default) and click Login.

Mobile WIFI	
User Name:	admin
Password:	•••••
	Login Cancel

④ The Status screen appears. Click Wizard to enter the setup wizard interface.

Tenda					ON U		
	w	izard	Status	Basic	Wireless	Advanced	Tools
Status	WAN Status					Help	
3G/4G Traffic Statistics	Internet Connection Status	3G/4G USB	modem not atta	ched		Here you can vi status, LAN sta	
	WAN IP	0.0.0.0				status and syst	
	Subnet Mask	0.0.0				the device.	
	Gateway	0.0.0.0					
	Primary DNS Server	0.0.0.0					
	Secondary DNS Server	0.0.0.0					
	Internet Connection Type	3G/4G					
	Connect	Disconne	ect				
	LAN Status						
		100 100 0 1					
	IP Address	192.168.0.1					
	Subnet Mask	255.255.255	0.0				
	DHCP Server	Enabled					
	Wireless Status						
	Wireless Radio	Enabled					
	SSID	Tenda_38DI	DC9				
Tenda							
	Wiz	zard	Status	Basic	Wireless	Advanced	Tools
Wittend	Minorel					Hala	
Wizard	Wizard					Help	
	Y Home	O Wireless	Router Mode			3G/4G Router M mode, the route	
		3G/4G R				Internet access activated 3G/4G	-

## 4 Quick Internet Setup & Wireless Security Setup

Read the following and determine your Internet connection type. Then follow the right setup wizard.

O Universal Repeater Mode

Auto-switch System Mode

Next

3G/4G Priority
 C Ethernet Priority

which is attached to its USB

Wireless Router Mode: In this

mode, the router acquires Internet access through a

wired WAN port. 3G/4G access is disabled. Universal Repeater: Also

known as Client plus AP Mode. In this mode the router

port. Wired WAN access is

disabled.

A. If you access the Internet via a 3G/4G USB modem, see 3G/4G Router

#### <u>Mode</u>.

- B. If your ISP provides you with a cable from the incoming Internet side but no ISP login account or IP information, your ISP uses a DHCP connection. See <u>Wireless Router Mode – DHCP</u>.
- C. If your ISP provides you with a cable from the incoming Internet side and a PPPoE login account, your ISP uses a PPPoE connection. See <u>Wireless</u> <u>Router Mode – PPPoE</u>.
- D. If you acquire Internet access from a remote AP on an existing network, see <u>Universal Repeater Mode</u>.
- E. To learn about the Auto-switch System Mode, 3G/4G Priority and/or
   Ethernet Priority, see <u>Auto-switch System Mode & Priority</u>.

### 3G/4G Router Mode

① Select **3G/4G Router Mode** and click **Next**.

Tenda							
		Wizard	Status	Basic	Wireless	Advanced	Tools
Wizard	Wizard		ess Router Mode			Help 3G/4G Router M mode, the route Internet access activated 3G/4G	er acquires through an
			S Router Mode rsal Repeater Mod	e		activated 3G/4G which is attache port. Wired WAN disabled. Wireless Route	ed to its USB Naccess is
		<ul> <li>Auto-:</li> <li>3G/40</li> </ul>	switch System Mod G Priority C Et	e hernet Priority		mode, the route Internet access wired WAN port	r acquires through a 3G/4G
			Next			access is disab Universal Repe known as Clien Mode. In this m	ater: Also t plus AP

② Configure 3G/ 4G Internet connection settings and then click Next. If you are not sure of which service provider to use, select Auto.

Tenda						Kõ	Ŭ
	Wiz	zard	Status	Basic	Wireless	Advanced	Tools
Wizard	Wizard					Help	
	Country	UK		•		3G/4G Router M mode, the route Internet access activated 3G/4G	r acquires through an
	Service Provider	Vodafon Vodafone		V		which is attache port. Wired WAN disabled.	ed to its USB
	APN	Internet				Wireless Route mode, the route	r acquires
	Dial Number	*99#				Internet access wired WAN port	3G/4G
	User Name	web				access is disab Universal Repe known as Clien	ater: Also
	Password	•••				Mode. In this me acquires Interne	de the router
		Previ	ious Next			a remote wirele provides access the meantime.	

## ③ Configure your wireless network: SSID, Channel, Key and then click Next.

Tenda							
	Wiz	ard	Status	Basic	Wireless	Advanced	Tools
Wizard	Wizard					Help	
	🗶 Home					3G/4G Router N	
	SSID	Tenda_38D	DC9			mode, the route	
	Channel	Auto		•		activated 3G/4G	USB modem
	14-11					which is attache	
	Key	12345678				disabled.	4 800033 13
	Security Mode					Wireless Route	er Mode: In this
	Tenda optimizes wireless secur	ity. Default AE	3 under WPA2-F	SK will effective	ly protect your	mode, the route	er acquires
	network against unauthorized ac	ccesses. If this	field is left blar	k, your wireless	network is not	Internet access	through a
	secured.					wired WAN port	t. 3G/4G
						access is disat	oled.
		Previou	s Next			Universal Repe	ater: Also
						known as Clien	it plus AP
						Mode. In this m	ode the router
						acquires Intern	et access from
						a remote wirele	ess device and
						provides acces	s to clients in
						the meantime.	

#### ④ Click **Finish** and wait for the device to restart.

<b>Tend</b> a°								
		Wizard	Status	Basic	Wireless	Advanced	Tools	
Wizard	Wizard					Help		
	Y Home	Configura	ations complete			3G/4G Router M mode, the route access only. W/	er will try 3G/4G	
		Previ	ious Finish			disabled. Wireless Route mode, the route access only. 30 disabled.	er will try WAN	

## Wireless Router Mode – DHCP

1) Select Wireless Router Mode and click Next.

Tenda								
		Wizard	Status	Basic	Wireless	Advanced	Tools	
Wizard	Wizard					Help		
	K Home					3G/4G Router N	lode: In this	
		💽 Wire	eless Router Mode			mode, the route		
		O 36/4	4G Router Mode			Internet access activated 3G/4G	-	
						which is attached to its USB		
		O Univ	ersal Repeater Mod	9	port. Wired WAN access is disabled.			
				Wireless Router Mode: In this				
		Auto	-switch System Mod	e		mode, the route		
		③ 3G/4	4G Priority O Et	nernet Priority		Internet access wired WAN port	-	
						access is disat		
			Next			Universal Repe	ater: Also	
			NEAL			known as Clien	nt plus AP	
						Mode. In this m	ode the router	
						acquires Intern	et access from	
						a remote wirele	ess device and	
						provides acces	s to clients in	
						the meantime.		

2 Select **DHCP** and click **Next**.

Tenda					<b>KOK</b>	Ŏ	
		Wizard	Status	Basic	Wireless	Advanced	Tools
Wizard	Wizard Mome Internet Connection		vious Next	×		Help 3G/4G Router II mode, the router Internet access activated 3G/4G which is attacher port. Wired WAN disabled.	er acquires through an USB modem ed to its USB

③ Configure your wireless network: SSID, Channel, Key and then click Next.

Tenda										
	Wiz	Wizard Status Basic Wireless			Advanced Tools					
Wizard	Wizard				Help					
	Key	Tenda_38DDC9 Auto 12345678	3G/4G Router Mode: In this mode, the router will try 3G/4G access only. WAN access is disabled. Wireless Router Mode: In this mode, the router will try WAN							
	Security Mode Tenda optimizes wireless secur network against unauthorized ac	es wireless security. Default AES under WPA2-PSK will effectively protect your it unauthorized accesses.				/4G access is lode: Dials up nection using 4G network ater: This is AP Mode. In outer acquires				

(4) Click **Finish** and wait for the device to restart.

Tenda		COLOR STOR								
		Wizard	Status	Basic	Wireless	Advanced	Tools			
Wizard	Wizard	Configura	ations complete ous Finish			Help 3G/4G Router II mode, the route access only. W disabled. Wireless Route mode, the route access only. 30 disabled.	er will try 3G/4G AN access is er Mode: In this er will try WAN			

## <u>Wireless Router Mode – PPPoE</u>

① Select Wireless Router Mode and click Next.

Tenda									
		Wizard	Status	Basic	Wireless	Advanced	Tools		
Wizard	Wizard					Help			
	Y Home	·	less Router Mode G Router Mode			3G/4G Router M mode, the route Internet access activated 3G/4G which is attache	r acquires through an USB modem		
			ersal Repeater Mod -switch System Mod	port. Wired WAN access is disabled. Wireless Router Mode: In this mode, the router acquires					
		⊙ 3G/4	G Priority O Et		Internet access through a wired WAN port. 3G/4G access is disabled. Universal Repeater: Also				
			Next			known as Clien Mode. In this me acquires Interne a remote wirele	t plus AP ode the router et access from ss device and		
						provides access the meantime.	s to clients in		

2 Select PPPoE, enter the PPPoE User Name/Password and click Next.

Tenda							
		Wizard	Status	Basic	Wireless	Advanced	Tools
Wizard	Wizard Memory Home Internet Connection PPPoE User I PPPoE Pass	n Type PPPOE				Help 3G/4G Router II mode, the route Internet access activated 3G/4G which is attach port. Wired WAN disabled. Wireless Route mode, the route Internet access wired WAN port access is disat Universal Repe known as Clien Mode. In this m a cquires Intern a remote wirele provides acces	lode: In this r acquires through an USB modem ed to its USB l access is r Mode: In this r acquires through a .3G/4G iled. ater: Also t plus AP ode the router et access from ss device and
						the meantime.	

③ Configure your wireless network: SSID, Channel, Key and then click Next.

Tenda				$\sim$ $\langle$	PIO.	KÖ	0
	Wiz	zard	Status	Basic	Wireless	Advanced	Tools
Wizard	Wizard					Help	
	For Home SSID Channel Key	Tenda_ Auto 123456	38DDC9 78	×		3G/4G Router M mode, the route Internet access activated 3G/4G which is attache port. Wired WAN disabled.	r acquires through an USB modem id to its USB
	Security Mode Tenda optimizes wireless secu network against unauthorized ar secured.	ccesses. If		nk, your wireless		Wireless Route mode, the route internet access wired WAN port. access is disab Universal Repe known as Client Mode. In this mo acquires Interne a remote wirele provides access the meantime.	r acquires through a 3G/4G led. ater: Also t plus AP ode the router access from ss device and

④ Click **Finish** and wait for the device to restart.

Tenda							
		Wizard	Status	Basic	Wireless	Advanced	Tools
Wizard	Wizard	Configura	ations complete ous Finish			Help 3G/4G Router II mode, the rout access only. W disabled. Wireless Route mode, the rout access only. 30 disabled.	er will try 3G/4G AN access is er Mode: In this er will try WAN



Five Internet connection types are supported for the wired WAN connection (Ethernet): DHCP, PPPOE, PPTP, L2TP and Static IP. For PPTP, L2TP and Static IP, see <u>2.2 WAN Settings</u>.

## **Universal Repeater Mode**

① Select Universal Repeater Mode and click Next.

Tenda					10K	0	
		Wizard	Status	Basic	Wireless	Advanced	Tools
Wizard	Wizard					Help	
	K Home	O Wirel	ess Router Mode			3G/4G Router M mode, the route	
			G Router Mode			Internet access activated 3G/4G	-
		💽 Unive	ersal Repeater Mod	le		which is attache port. Wired WAN	
		T Auto-	switch System Mod	le		disabled. Wireless Route mode, the route	
			G Priority 🏾 🏾 🖱 E	thernet Priority		Internet access wired WAN port. access is disab	. 3G/4G
			Next			Universal Repe known as Client	ater: Also
						Mode. In this mo	
						acquires Interne	
						a remote wirele	
						the meantime.	s to circlits III

2 Enter or select the **SSID**, **MAC**, **Channel** and security settings exactly the same as the remote AP and then click Next.

<b>Tend</b> a <sup>®</sup>							10K
			Wizard	Status		Basic	Wireless
Wizard	Wizard						
	🖌 Ho	me					
		Remote AP's S	SID Tenda	C8DA50			
		Remote AP's M	IAC C8:3A:	35:80:80:80			
			(Exampl	etc8:3a:35:3c:10	:b8)		
	R	emote AP's Chan	nel 1			•	
	Please s	elect link AP's se	curity mode fror	n below and ente	er its seci	urity key:	
		Security Mo	wPA-	PSK		•	
		Cipher T	ype AES			•	
		Security I	Key 123456	)78			
				Clear			
	Select	SSID	MAC Addre	ISS	Cha	Security	Signal St
	$\odot$	Tenda_C8DA50	C8:3A:35:80	:80:80	1	WPA/AES	59

③ Configure your wireless network: SSID and Key and then click Next.

Tenda				A P		Ŏ	
	Wi	zard	Status	Basic	Wireless	Advanced	Tools
Wizard	Wizard Wizard Mixed SSID Channel Key Security Mode Tenda optimizes wireless secu network against unauthorized a secured.	Tenda_ 1 123456 rity. Default	38DDC9 78 !AES under WPA2-P	SK will effectively p	protect your	Advanced Help 3G/4G Router M mode, the route Internet access activated 3G/4G which is attache port. Wireless Route mode, the route Internet access wired WAN port access is disat Universal Repe	lode: In this r acquires through an USB modem ed to its USB J access is r Mode: In this r acquires through a . 3G/4G iled.
				_		known as Clien Mode. In this me acquires Interne	ode the router
						a remote wirele provides acces the meantime.	

④ Click **Finish** and wait for the device to restart.

<b>Tend</b> a°							
		Wizard	Status	Basic	Wireless	Advanced	Tools
Wizard	Wizard	Configura	ations complete ious Finish			Help 3G/4G Router II mode, the route access only. W disabled. Wireless Route mode, the route access only. 30 disabled.	er will try 3G/4G AN access is er Mode: In this er will try WAN

## 

In **Universal Repeater Mode**, your wireless network must operate on the same channel as the remote AP.

## Auto-switch System Mode & Priority

Auto-switch System Mode: If unchecked, system will not switch between the 3G/4G Router Mode and Wireless Router Mode.

If the Auto-switch System Mode and 3G/4G Priority are selected, system will:

• prioritize the 3G/4G Router Mode when detecting the coexistence of an

Ethernet cable and a 3G/4G USB modem.

- operate in the 3G/4G Router Mode when only detecting a 3G/4G USB modem.
- toggle to the Wireless Router Mode when only detecting an Ethernet cable.

If the Auto-switch System Mode and Ethernet Priority are selected, system will:

- prioritize the Wireless Router Mode when detecting the coexistence of an Ethernet cable and a 3G/4G USB modem.
- toggle to the 3G/4G Router Mode when only detecting a 3G/4G USB modem.
- operate in the **Wireless Router Mode** when only detecting an Ethernet cable.

## **III Features & Configurations**

## 1 Status

Click Status to enter the Status screen.

## WAN Status

WAN Status in 3G/4G Router Mode:

Tenda							
	W	zard	Status	Basic	Wireless	Advanced	Tools
						1	
	WAN Status					Help	
3G/4G Traffic Statistics	Internet Connection Status	Connected	C.			Here you can status, LAN st	
	WAN IP	10.30.233	107			status, LAIV st status and sys the device.	
	Subnet Mask	255.255.2	55.255			the device.	
	Gateway	10.0.0.1					
	Primary DNS Server	221.12.1.2	27				
	Secondary DNS Server	221.12.33	227				
	Internet Connection Type	3G/4G					
	Connect	Discon	nect				

### **3G/4G Traffic Statistics**

To view the 3G/4G traffic statistics, click Status -> 3G/4G Traffic Statistics. This screen is available only in the 3G/4G Router Mode.

Tenda									
		Wizard	Status	Basic	Wireless	Advanced	Tools		
Status	3G/4G Traffic Statistic	s				Help			
						Here is only for Internet data tra	ffic passing		
	Upload Speed	0.06 KB/s				through the 3G/ that is attached			
	Download Speed	0.16 KB/s				router.			
	TX Data	47.11 KB							
	RX Data	246.6 KB							
	Connected Time	00:09:56							
	Total Statistics	293.7 KB	Clear						
	Note: This traffic statistics ISP.	s is for reference	es only. For actua	al statistics info co	onsult your				

## WAN Status in Wireless Router Mode

Tenda				10K		
	Wi	zard Sta	atus Basic	Wireless	Advanced	Tools
Status	WAN Status				Help	
	Internet Connection Status	Connected			Here you can vi	
	WAN IP	223.0.0.214			status, LAN stat	
	Subnet Mask	255.255.255.0			the device.	
	Gateway	223.0.0.1				
	Primary DNS Server	2.2.2.2				
	Secondary DNS Server	4.4.4.4				
	Internet Connection Type	Dynamic IP				
	Connect	Disconnect				

## WAN Status in Universal Repeater Mode

	Wizard	Status	Basic	Wireless	Tools	
WAN Status				Help		
Repeater Status Connected					Here you can view the WAN	
		WAN Status	WAN Status	WAN Status	WAN Status Help	



- (1) WAN IP/Subnet Mask/Gateway/Primary DNS Server/Secondary DNS Server: This type of information appears only if the router successfully connects to the Internet via a PPPoE or a DHCP (dynamic IP) connection. However if you connect the router to the Internet with static IP settings provided by your ISP, these fields will display the settings you entered whether the router successfully connects to the Internet or not.
- ② If there is no available secondary DNS server, nothing appears in the secondary DNS server field.

### LAN Status

LAN Status	
IP Address	192.168.0.1
Subnet Mask	255.255.255.0
DHCP Server	Enabled

## **∆**<sub>Note</sub>

The DHCP Server is disabled in Universal Repeater Mode.

## **Wireless Status**

Wireless Status							
Wireless Radio	Enabled						
SSID	Tenda_38DDC9						
802.11 Mode	11b/g/n mixed mode						
Channel	Auto						
Security Mode	Disabled						

## System Status

System Status							
System Time	2013-12-16 17:33:13						
Up Time	00:03:47						
Firmware Version	4G630_V1.0.0.1_EN						
Hardware Version	V1.0						
LAN MAC Address	C8:3A:35:38:DD:C8						
WAN MAC Address	C8:3A:35:38:DD:C8						
Connected Clients	1						

## Knowledge Center

WAN MAC Address: The device's current WAN MAC address.

**System Time:** Current system time on this device. The device automatically synchronizes the system time with Internet time servers.

**Up Time:** Displays the time duration indicating how long the router has been up since startup. Up time is recounted and renewed upon power-off.

**Connected Clients:** Displays the number of DHCP clients.

## **2 Basic Settings**

- To change the device's login IP address, see **<u>2.1 LAN Settings</u>**.
- To set up the Internet, see **<u>2.2 WAN Settings</u>**.
- To set up speed and duplex mode for the WAN port, see 2.3 WAN Speed

#### (Available only in Wireless Router Mode).

- To configure DNS server, see <u>2.4 DNS Settings</u>.
- To clone MAC address, see 2.5 MAC Clone (Available only in Wireless

#### <u>Router Mode)</u>.

- To configure DHCP server, see <u>2.6 DHCP Server</u>.
- To assign static IP addresses and view LAN device information, see <u>2.7</u>

#### DHCP Client List.

## <mark>≜</mark>∧ote

In the Universal Repeater Mode, only the LAN Settings screen is available.

## 2.1 LAN Settings

Here you can configure the LAN IP address and subnet mask. This IP address is to be used to access the device's settings through a Web browser. Be sure to make a note of any changes you apply to this page.

### 🧳 Tip

- Default IP address and subnet mask are respectively 192.168.0.1 and 255.255.255.0.
- ② If you change the LAN IP address of the device, you have to open a new connection to the new IP address and log in again. Also, you have to set the default gateway addresses of all LAN PCs to this new IP address.
- ③ The device's LAN IP address and WAN IP address must be on different IP

segments. If not, it will not be able to access the Internet.

Tenda	
	Wizard Status Basic Wireless Advanced Tools
LAN Settings	LAN Settings Help
WAN Settings	IP Address 192.168 0 1 Use this section to configure
WAN Speed	Subnet Mask 255.255.255.0 Subnet Mask The default IP
DNS Settings	address is 192.168.0.1, and the default Subnet Mask is
MAC Clone	Save Cancel 255.255.0.
DHCP Server	
DHCP Client List	

#### **Configuration Procedures:**

- Change the IP address to the one you wish to use, for example, 192.168.10.1.
- ② Click **Save** to save your settings.

## 2.2 WAN Settings

Click **Basic -> WAN Settings** to configure your Internet connection settings.

### 3G/4G Router Mode

Tenda							
		Wizard	Status	Basic	Wireless	Advanced	Tools
LAN Settings	WAN Settings					Help	
WAN Settings	Country	UK		-		Connect on Den	
DNS Settings	Service Provider	Vodafone (Pre-pa	av)	-		specially recom those who do no	
DHCP Server	100			_		always stay con want to save ava	
DHCP Client List	ISP	Vodafone (Pre-pa	iy)			of Internet traffic	or bill. In this
	APN	pp.vodafone.co.ul	k			connection mod connection auto	
	Dial Number	*99#				starts when ther traffic to the Inter	
	Advanced PPP Settings					automatically ter	
	User Name	web				save your bill if t Internet activity.	lete is no
	Password	•••					
	Select your connect mode: C	Click Save and reboo	t the device to acit	vate your settii	ngs.		
	<ul> <li>Connect Automatically: Connection failure.</li> </ul>	Connect automatical	lly to the Internet af	ter system ret	oot or		
	C Connect Manually (Requisession.)	uire the user to man	ually connect to Inte	ernet before e	ach		
	C Connect On Demand: R transmitting.	e-establish connect	tion to the Internet o	only when the	re is data		
	Max Idle Time	60	(60-3600,second	d)			
	C Connect During Specifie specified time length.	ed Time Period:Conr	nect automatically t	to Internet dur	ing a		
	Note: To activate the"Connec time (Tools> Time & Date) fo		ïme" feature, you n	nust first confi	gure system		

### **Configuration Procedures:**

- 1 **Country:** Select your country.
- 2 Service Provider/ISP: Select your 3G/4G service provider and ISP.
- **3 APN:** Access point Name. Consult your ISP if you are not clear.
- ④ Dial Number: Common numbers are \*99#, #777 and \*99\*\*\*1. Consult your ISP if you are not clear.
- (5) User Name/Password: Enter the user name and password for your 3G/4G Internet service.
- 6 Click Save.

## Knowledge Center

**Connect Automatically:** Connect automatically to the Internet after rebooting the system or connection failure.

**Connect Manually:** Require the user to manually connect to the Internet before each session.

**Connect On Demand:** Re-establish connection to the Internet only when there is data transmitting.

**Connect During Specified Time Period:** Connect automatically to the Internet during a specified time length.

#### Wireless Router Mode

The Wireless Router Mode includes the following Internet connection types:

- DHCP
- PPPoE
- Static IP
- L2TP
- <u>PPTP</u>
- A. Select PPPoE if your ISP uses a PPPoE connection and gives you a PPPoE user name and a PPPoE password.
- B. Select Static IP if your ISP provides you with fixed or static IP address settings (special deployment by ISP; this is rare).
- C. Select DHCP (Dynamic IP) if your ISP does not provide you with any ISP login account or IP information.
- D. Select L2TP (Layer 2 Tunneling Protocol) if your ISP uses an L2TP connection.
- E. Select PPTP (Point-to-Point-Tunneling Protocol) if your ISP uses a PPTP connection.

#### <u>DHCP</u>

DHCP or Dynamic IP is a connection mode that allows the device to automatically acquire IP information from your ISP or your existing networking equipment.

Tenda				$\langle Q \rangle$	10k		
		Wizard	Status	Basic	Wireless	Advanced	Tools
LAN Settings	WAN Settings					Help	
WAN Settings	Internet Connection Type	DHCP		•		Static IP: Select	
WAN Speed	MTU	1500		(Do not	change it from	ISP provided yo connection info	
DNS Settings		factory default	unless necessarj	.)		subnet mask, g address, and D	
MAC Clone		Save	e Cancel			(es) and enter t corresponding	
DHCP Server						your ISP if you n	need any help.
DHCP Client List						DHCP: Also kno Dynamic IP con	
						Select it to auto	matically
						obtain an IP ad	
						DNS server add	
						Internet connec	
						not provided wit user name/pas	
						the ISP.	sword into by

### **Configuration Procedures:**

#### **1** Internet Connection Type: Select DHCP.

② Click **Save** to save your settings.

### <u>PPPoE</u>

PPPoE is a connection mode associated with some DSL connections that requires user name and password. Contact your ISP if you need assistance with these login credentials.

Tenda							
		Wizard	Status	Basic	Wireless	Advanced	Tools
LAN Settings	WAN Settings					Help	
WAN Settings	Internet Connection Type	PPPOE		•		Static IP: Select	
WAN Speed	User Name					ISP provided yo connection info	
DNS Settings	Password					subnet mask, g address, and D	
MAC Clone	MTU	1492		(Do not c	hange it from	(es) and enter t corresponding	
DHCP Server		factory default	t unless necessary.)			your ISP if you r DHCP: Also kno	
DHCP Client List		Savi	e Cancel			Dynamic IP con Select it to auto obtain an IP ad DNS server add Internet connec not provided wit	matically dress and dress for tion if you are th any IP or
						user name/pas the ISP.	sword info by

### **Configuration Procedures:**

**1** Internet Connection Type: Select PPPoE.

- 2 User Name: Enter the ISP login name.
- **Bassword:** Enter the ISP login password.
- ④ Click Save to save your settings.

## Knowledge Center

**MTU:** The MTU (maximum transmission unit) is the largest data packet a network device transmits. The normal MTU value for most Ethernet networks is 1500 bytes, or 1492 bytes for PPPoE connections. For some ISPs, you might need to change the MTU. This is rarely required, and should not be done unless you are sure it is necessary for your ISP connection. For more information, see *WAN MTU Setup*.

#### Static IP

Static IP is a connection mode that allows you to specify the Static IP information provided by your ISP or that corresponds with your existing networking equipment.

Tenda							
		Wizard	Status	Basic	Wireless	Advanced	Tools
LAN Settings	WAN Settings					Help	
WAN Settings	Internet Connection Type	Static IP	-			Static IP: Select	-
WAN Speed	IP Address	223.0.0.214				ISP provided you connection info:	IP address,
DNS Settings	Subnet Mask	255.255.255.0				subnet mask, g address, and D	NS address
MAC Clone	Gateway	223.0.0.1				(es) and enter th corresponding f	
DHCP Server	Dimen DNO					your ISP if you n DHCP: Also kno	
DHCP Client List	Primary DNS	2.2.2.2				Dynamic IP con	
	Secondary DNS	4.4.4.4				Select it to autor obtain an IP add	
	MTU	1500		(Do not ch	ange it from	DNS server add	
		factory default ur	lless necessary.)			Internet connect not provided wit	
		Save	Cancel			user name/pas the ISP.	aword info by

#### **Configuration Procedures:**

**1** Internet Connection Type: Select Static IP.

2 IP Address/Subnet Mask/Gateway/Primary DNS/Secondary DNS: Enter

the information provided by your ISP.

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

#### <u>L2TP</u>

L2TP (Layer 2 Tunneling Protocol) is a network protocol that enables the secure transfer of data from a remote client to a private enterprise server by creating a VPN across TCP/IP-based data. Enter your ISP provided information to establish a connection.

Tenda			~ (	PIC	K	Ő		
		Wizard S	tatus E	Basic Wir	eless	Advanced	Tools	
				-				
LAN Settings	WAN Settings					Help		
WAN Settings	Internet Connection Type	L2TP	•			Static IP: Select		
WAN Speed	L2TP Server Address			(IP Address)		ISP provided you connection info:		
DNS Settings	User Name			]		subnet mask, ga address, and Df		
MAC Clone	Password					(es) and enter th corresponding fi		
DHCP Server	Fassword					your ISP if you no		
DHCP Client List	Address Mode	Static	•			DHCP: Also kno Dynamic IP conr		
	IP Address					Select it to auton	natically	
	Subnet Mask					obtain an IP address and DNS server address for		
				7		Internet connection if you are not provided with any IP or		
	Gateway					user name/pass		
	MTU	1458		(Do not change it f	irom	the ISP.		
			PPPoE: Select PPPoE (Point to Point Protocol over Ethernet) if your ISP uses a					
		Save	Cancel			PPPoE connecti		
						provides you wit		
						user name and		
						password. Simp	ly enter them	
						in corresponding	g fields.	

#### **Configuration Procedures:**

- **1 Internet Connection Type:** Select L2TP.
- 2 L2TP Server Address: Enter the L2TP IP address provided by your ISP.
- 3 User Name: Enter your L2TP user name.
- **4 Password:** Enter your L2TP Password.
- 6 Address Mode: Select Dynamic if you don't get any IP information from your ISP, otherwise select Static. Consult your ISP if you are

not clear.

- IP Address: Enter the IP address provided by your ISP. Consult your local ISP if you are not clear.
- **O** Subnet Mask: Enter the subnet mask.
- (8) Gateway: Enter the gateway provided by your ISP. Consult your local ISP if you are not clear.
- 9 Click Save to save your settings.

#### <u> PPTP</u>

PPTP (Point-To-Point Tunneling Protocol) is a network protocol that enables the secure transfer of data from a remote client to a private enterprise server by creating a VPN across TCP/IP-based data. Enter your ISP provided information to establish a connection.

MPPE is an encryption technology developed by Microsoft to encrypt point-to-point links.

Tenda						$\mathbf{\tilde{v}}$	
		Wizard	Status	Basic	Wireless	Advanced	Tools
LAN Settings	WAN Settings					Help	
WAN Settings	Internet Connection Type	PPTP		•		Static IP: Select	Static IP if your
WAN Speed	PPTP Server Address			(IP Addres	s)	ISP provided yo connection info	IP address,
DNS Settings	User Name					subnet mask, g address, and D	-
MAC Clone	0.501 Mallie					(es) and enter t	
DHCP Server	Password					corresponding your ISP if you n	
DHCP Client List	Address Mode	Static		•		DHCP: Also kno	
	IP Address					Dynamic IP con Select it to auto	
						obtain an IP ad	dress and
	Subnet Mask					DNS server address for Internet connection if you are	
	Gateway					not provided wit	-
	MPPE					user name/pas the ISP.	
						PPPoE: Select	
	MTU	1460		(Do not c	hange it from	to Point Protoco Ethernet) if your	
		factory default uni	ess necessary.)			PPPoE connect	
		-	-			provides you wi	
		Save	Cancel			user name and	
						password. Sim	ply enter them
						in correspondin	ig fields.

#### **Configuration Procedures:**

**1 Internet Connection Type:** Select **PPTP**.

- ② PPTP Server Address: Enter the PPTP IP address provided by your ISP.
- 3 User Name: Enter your PPTP user name.
- 4 Password: Enter your PPTP password.
- 6 Address Mode: Select Dynamic if you don't get any IP information from your ISP, otherwise select Static. Consult your ISP if you are not clear.
- IP Address: Enter the IP address provided by your ISP. Consult your local ISP if you are not clear.
- ⑦ Subnet Mask: Enter the subnet mask.
- (8) Gateway: Enter the gateway provided by your ISP. Consult your local ISP if you are not clear.
- Olick Save to save your settings.

#### WAN MTU Setup

The MTU (maximum transmission unit) is the largest data packet a network device transmits. The normal MTU value for most Ethernet networks is 1500 bytes, or 1492 bytes for PPPoE connections. For some ISPs, you might need to change the MTU. This is rarely required, and should not be done unless you are sure it is necessary for your ISP connection. When one network device communicates across the Internet with another, the data packets travel through many devices along the way. If a device in the data path has a smaller MTU value than the other devices, the data packets have to be "fragmented" to accommodate the device with the smallest MTU value.

The best MTU value is often just the factory default value. In some situations, changing the MTU value fixes one problem but causes another. Leave the MTU unchanged unless one of these situations occurs:

A. You have problems connecting to your ISP or other Internet service, and either your ISP or our technical support suggests changing the MTU value. Below Web-based applications might require an MTU change:

• A secure Website that does not open, or displays only part of a Web

#### page

- Yahoo email
- MSN portal

**B.** You use VPN and encounter serious performance problems.

**C.** You used a program to optimize MTU for performance reasons, and now you have connectivity or performance problems.

If you suspect an MTU problem, try changing the MTU to 1400. If this does not help, gradually reduce the MTU from the maximum value of 1500 until the problem disappears.

The common MTU sizes and applications are listed in the table below.

ΜΤυ	Application
1500	Typical for connections that do not use PPPoE or VPN.
1492	Used in PPPoE environments.
1472	Maximum size to use for pinging. (Larger packets are fragmented.)
1468	Used in some DHCP environments.
1436	Used in PPTP environments or with VPN.

## <mark>∧∧</mark>Note

A wrong/improper MTU value may cause Internet communication problems. For example, you may be unable to access certain Websites, frames within Websites, secure login pages, FTP or POP servers.

## 2.3 WAN Speed (Available only in Wireless Router Mode)

Click **Basic -> WAN Speed** to enter the configuration interface. Here you can configure the WAN speed and duplex mode.

Tenda	Second Se	
	Wizard Status Basic Wireless	Advanced Tools
LAN Settings	WAN Speed	Help
-		
WAN Settings	Speed/Duplex Auto	Aging and the length of an Ethernet cable may reduce
WAN Speed	Save Cancel	transmission capability. In this
DNS Settings	Gander	case select 10M Full Duplex or the mode specified by the
MAC Clone		ISP from the Speed/Duplex drop-down list to improve
DHCP Server		performance.
DHCP Client List		



- 1 The device operates in Auto (Auto-negotiation) mode by default. Usually, it works for most cases.
- In some situations, you might need to change the speed/duplex mode. For example, if the cable connected to your device's WAN port is longer than 100m, you may need to use 10M full-duplex or 10M half-duplex for better performance. Ensure that your device's WAN port operates with the same speed and duplex mode as the remote link partner. Otherwise, your device's WAN port may not receive and send data.

## 2.4 DNS Settings

Click **Basic -> DNS Settings** to enter the configuration interface.

Tenda		KARAKO .					
		Wizard	Status	Basic	Wireless	Advanced	Tools
LAN Settings WAN Settings WAN Speed	DNS Settings DNS Settings Primary DNS Address	✓ 202.96.134.	33			Help DNS server trai resolves doma IP addresses.	in names into
DNS Settings	Secondary DNS Address	202.96.128.	68			configure the D addresses, che	
MAC Clone DHCP Server DHCP Client List		Savi	Cancel			DNS Manually I DNS server IP a from your ISP a leave the same unchecked. If the DNS IP Ac entered are inc pages will not t open. Thus it is to change the d here	addresses utomatically, a box ddresses orrect, web be able to a advisable not

### **Configuration Procedures:**

**ONS Settings:** Check/uncheck to enable/disable the DNS settings.

Primary DNS Address: Enter the IP address of the primary DNS server provided by your ISP.

**3** Secondary DNS Address: If a secondary DNS server address is available,

enter it here. This field is optional.

④ Click **Save** to save your settings.

## <mark>∆</mark>Note

The default DNS settings are recommended. Only change the DNS default settings if you know that your ISP requires specific servers. If incorrect DNS settings are configured, Webpages may not open.

### 2.5 MAC Clone (Available only in Wireless Router Mode)

Some ISPs (Internet Service Providers) require end-user's MAC address to access their network. This feature copies your current PC's MAC address to the device.

Click Basic -> MAC Clone to enter the configuration screen.

Tenda										
		Wizard	Status	Basic	Wireless	Advanced	Tools			
LAN Settings WAN Settings WAN Speed DNS Settings	MAC Clone MAC Address	C8:3A:35:38 Restore Defau		ne MAC		Help WAN MAC Addre device's WAN M. seen from the In your ISP. Norma need to chance	AC address Iternet side by Illy you don't			
MAC Clone		Sav	e Cancel			value. Normally to change the de	you don't need			
DHCP Server DHCP Client List						MAC value. How ISPs may requir PC's MAC addre connection auth this case, simpl correct MAC add the "Clone MAC" then save your s Clone MAC: Clic PC's MAC addre device.	ever, some e the client ess for Internet entication. In y enter the Iress or click ' button and settings. k to copy your			

## Knowledge Center

**Restore Default MAC:** Reset the device's WAN MAC address to factory default. **Clone MAC:** Clicking this button copies the MAC address of the computer that you are currently using to the router. Note that you have to use the computer whose MAC address is allowed by your ISP. Also, you can manually enter the MAC address that you want to use.

### To restore default MAC address:

- ① Click Restore Default MAC.
- 2 Click Save to save your settings.

To copy the MAC address of the computer that you are currently using to the device:

- ① Click Clone MAC.
- 2 Click **Save** to save your settings.

#### To manually enter the MAC address allowed by your ISP:

- ① Enter the MAC address allowed by your ISP.
- 2 Click Save to save your settings.

### 2.6 DHCP Server

DHCP (Dynamic Host Configuration Protocol) assigns an IP address to each device on the LAN/private network. When you enable the DHCP Server, the DHCP Server will automatically allocate an unused IP address from the IP address pool specified in this screen to the requesting device as long as the device is set to "Obtain an IP Address Automatically". If you disable this feature, you have to manually configure the TCP/IP settings for all PCs on your LAN to access the Internet.

Click **Basic -> DHCP Server** to enter the screen below. Here you can change the DHCP IP address pool and lease time.

Tenda								
		Wizard	Status	Basic	Wireless	Advanced	Tools	
LAN Settings WAN Settings	DHCP Server DHCP Server	☑ Enable				Help The Dynamic H Configuration P		
WAN Speed	Start IP	192.168.0. 1	00			(DHCP) is an a configuration pr	utomatic	
MAC Clone	End IP Lease Time	192.168.0. 2	00	•		IP networks. If y built-in DHCP s router, it will aut	erver on the	
DHCP Server DHCP Client List		Save	e Cancel			configure the T( settings for all F LAN, including I	PC's in the	
						subnet mask, g DNS. Start IP: Enter th address for the server's IP assi End IP: Enter th address for the server's IP assi Lease Time: Th is a time length address is assi device before it	e starting IP DHCP griment. e ending IP DHCP griment. e lease time that the IP igned to each	

#### **Configuration Procedures:**

- DHCP Server Enable: Check/uncheck the box to enable or disable the DHCP server feature.
- Start IP/End IP: You can specify the starting and ending addresses of the IP address pool here. These addresses should be part of the same IP address subnet as the device's LAN IP address.

- ③ Lease Time: The lease time is a time length that the IP address is assigned to each device before it is refreshed.
- ④ Click **Save** to save your settings.

### 🦗 Тір

- ① By default, the device functions as a DHCP server. Do not disable the DHCP server feature unless you want to manually configure the TCP/IP settings for all the PCs on your LAN.
- 2 Lease time will be renewed automatically upon expiry.
- ③ If you are not an advanced user, the default DHCP server settings are recommended.

### 2.7 DHCP Client List

Click **Basic -> DHCP Client List**. Here you can see a list of the DHCP dynamic clients (if any). By viewing this list, you can know whether there are unauthorized accesses.

Tenda							
		Wizard	Status	Basic	Wireless	Advanced	Tools
LAN Settings WAN Settings WAN Speed DNS Settings		<b>ment</b> Address 192.168.0.		: Add		Help The DHCP Clie information of d have obtained II from the device	evices that P addresses 's DHCP
MAC Clone	Index I	P Address	MAC Address	D	elete	Server. If you we devices on your always have the	network to
DHCP Server		Sa	ve Cancel			addresses, you	can use this
DHCP Client List	DHCP Client I		Guncer			feature and main static DHCP Re	servation entry
		for each such device. Important: To activate new settings, you must click the					
	Host Name	IP Address	MAC Addr	ess Lea	ase Time	Save button. Note: Rememb	er to reboot
	INVE-20130508	IIP 192.168.0.15	6 c8:9c:dc:3b	ac:89 23:	44:42	device after you	finish.

Also, you can specify a reserved IP address for a PC on your LAN. That PC will always receive the same IP address each time when it accesses the DHCP server. Reserved IP addresses could be assigned to servers that require permanent IP settings.

#### Static Assignment Application Example:

To have a PC at the MAC address of 44:37:E6:4F:37:38 always receive the same IP address of 192.168.0.123.

Tenda									
			Wizard	Status	Basic	Wireless	Advanced	Tools	
LAN Settings WAN Settings WAN Speed DNS Settings	Static A	SSignment IP Address MAC Address	Help The DHCP Client List display information of devices that have obtained IP addresses from the device's DHCP Server. If you would like some						
MAC Clone	Index	IP Address	Ν	/IAC Address	Delet	е	devices on your network to		
DHCP Server	1	192.168.0.12	3 4	4:37:E6:4F:37:38	De	lete	always have the same IP addresses, you can use this		
DHCP Client List	Save       Cancel       feature and manually add a         DHCP Client List       static DHCP Reservation entry         perfect       Important To activate new         settings, you must click the       Save button.								
	Refres	Note: Rememb							
	Host Name IP Address MAC Address Lease Time device after your						device after you	tinisn.	
	INVE-20	130508IP	192.168.0.15	i6 c8:9c:dc:3b	cac:89 23	:44:42			

#### **Configuration Procedures:**

- Enter the last number of the IP address you want to reserve. Here in this example, enter 123.
- 2 Enter the MAC address of 44:37:E6:4F:37:38.
- 3 Click Add.
- ④ Click Save to save your settings.



- If the IP address you have reserved for your PC is currently used by another client, then you will not be able to obtain a new IP address from the device's DHCP server, instead, you must manually specify a different IP address for your PC to access the Internet.
- 2 For PCs that have already obtained IP addresses, you may need to perform

the **Repair** action to activate the configured static IP addresses.

## **3 Wireless Settings**

- To configure wireless network name, channel and other basic wireless settings, see <u>3.1 Basic</u>.
- To secure your wireless network, see <u>3.2 Security</u>.
- To restrict access to your wireless network, see **<u>3.3 Access Control</u>**.
- To see who are connecting to your wireless network, see <u>3.4 Connection</u>
   <u>Status</u>.

### 3.1 Basic

Here you can configure the basic wireless settings of the device.

Tenda										
		Wizard	Status	Basic	Wireless	Advanced	Tools			
Basic	Wireless Basic					Help				
Security	Wireless Enable	Wireless Enable 🔽 Enable								
Access Control	SSID	Tenda_38D	DC9			config basic wireless settings. It is advisable that you only				
Connection Status	802.11 Mode	11b/g/n mix	ed mode	•		config the SSID and channel settings and leave other items unchanged.				
	BSSID	C8:3A:35:38:I	DD:C9			SSID: This is the	e public name			
	SSID Broadcast	Enable	C Disable			of your wireless network. Broadcast SSID: Wireless clients find your wireless				
	Channel	2462MHz (0	Channel 11)	•		network by perfo				
	Channel Bandwidth	C 20 @	20/40	to see what's available. When enabled, your wireless						
	Extension Channel	2442MHz (0	Channel 7)	•		network is visibl wireless clients				
		Sav	e Cancel			coverage when wireless networ disabled, your w	they scan for a k; when vireless			
						secure.	Die and tilus			

#### **Configuration Procedures:**

**SSID:** This is the public name of your wireless network.

② **Channel:** Select a channel or select **Auto** to let system automatically select one for your wireless network to operate on if you are unsure of which channel to use. The best selection is a channel that is the least used by neighboring networks.

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

## Knowledge Center

802.11 Mode: Select a correct network mode according to your wireless clients.

- **11b mode:** This network mode delivers wireless speed up to 11Mbps and is only compatible with 11b wireless clients.
- **11g mode:** This network mode delivers wireless speed up to 54Mbps and is only compatible with 11g wireless clients.
- **11b/g mixed mode:** This network mode delivers wireless speed up to 54Mbps and is compatible with 11b/g wireless clients.
- **11b/g/n mixed mode:** This network mode delivers wireless speed up to 300Mbps and is compatible with 11b/g/n wireless clients.

**BSSID:** This is the MAC address of the device's wireless interface.

**SSID Broadcast:** This option allows you to have your wireless network name (SSID) publicly broadcast or if you choose to disable it, the SSID will be hidden.

**Channel Bandwidth:** Select a proper channel bandwidth to enhance wireless performance. This option is available only in 802.11b/g/n mixed mode. Maximum wireless speed in the channel bandwidth of 20/40 is 2 times in 20.

**Extension Channel:** This is used to ensure N speeds for 802.11n devices on the network. This option is available only in 11b/g/n mixed mode with the channel bandwidth of 20/40.

### 3.2 Security

Click **Wireless -> Security** to enter the configuration screen. Here you can define a security key to secure your wireless network against unauthorized accesses.

Tenda										
		Wizard	Status	Basic	Wireless	Advanced	Tools			
Basic	Wireless Security					Help				
	SSID	Tenda_38DD	0C9			WEP Key: Selec				
Connection Status Cipher T Security Key Renewal Inte WPS Settings	Security Mode Cipher Type Security Key Key Renewal Interval <b>WPS Settings</b>	WPA2 - PSI	O TKIP O TI	Shared or Mixed WEP from the corresponding drop-down list. ASCII: Enter 5 or 13 ASCII characters.Hex: Enter 10 or 16 Hex characters. WPAWPA2: You can select either personal or mixed, only ensure that either one you select is supported on your wireless clients. Important: If you are an						
	WPS	Disable     C Enable     Save     Cancel				advanced user and have configured security mode before, you can select any mode you like, only to assure that the one you choose is also supported by your wireless clients; if you are new to networking and have never configured this parameter before, we suggest that you select "WPA-PSK" or WPA2-PSK.				

### **Configuration Procedures:**

- ① Configure Security Mode, Cipher Type and Security Key.
- 2 Click **Save** to save your settings.

## Knowledge Center

**WEP:** WEP is intended to provide data confidentiality comparable to that of a traditional wired network.

**Open:** If selected, wireless speed can reach up to 54Mbps.

Shared: If selected, wireless speed can reach up to 54Mbps.

**Default Key:** Select a key to be effective for the current WEP encryption. For example, if you select **Key 2**, wireless clients must join your wireless network using this **Key 2**.

**WPA-PSK:** WPA personal supports AES and TKIP cipher types.

WPA2-PSK: WPA2 personal supports AES, TKIP and TKIP+AES cipher types.

**Mixed WPA/WPA2-PSK:** If selected, both WPA-PSK and WPA2-PSK secured wireless clients can join your wireless network.

AES: If selected, wireless speed can reach up to 300Mbps.

**TKIP:** If selected, wireless speed can reach up to 54Mbps.

**TKIP&AES:** If selected, both AES and TKIP secured wireless clients can join your wireless network.

Key Renewal Interval: Enter a valid time period for the key to be changed.

#### WPS

Wi-Fi Protected Setup makes it easy for home users who know little of wireless security to establish a home network, as well as to add new devices to an existing network without entering long passphrases or configuring complicated settings. Simply enter a PIN code or press the hardware WPS button and a secure wireless connection is established.

Tenda				10K				
		Wizard	Status	Basic	Wireless	Advanced	Tools	
					•			
Basic	Wireless Security					Help		
Security	SSID	Tenda_38D	DC9			WEP Key: Selec		
Access Control	Security Mode	Disable		•		Shared or Mixed corresponding		
Connection Status	WPS Settings					ASCII: Enter 5 o characters.Hex	Enter 10 or 16	
	WPS	C Disable	Enable     Enable	Hex characters. WPA/WPA2: You can select either personal or mixed, only				
	Device Pin	69790980				ensure that either one you		
	WPS Type	• PBC	O PIN	select is suppo wireless clients	-			
						Important: If you		
			Start PIN	Reset OOB		advanced user		
						configured secu before, you can	-	
		Sa	ve Cancel			mode you like,		
						that the one you		
						also supported	by your	
						wireless clients	s; if you are	
						new to network	ing and have	
						never configure	d this	
						parameter befo	re, we suggest	
						that you select "	WPA-PSK" or	
						WPA2-PSK.		

## Knowledge Center

WPS: Select Enable/Disable to enable/disable the WPS encryption.

**WPS Type:** Select PBC (Push-Button Configuration) or PIN.

**Reset OOB:** If clicked, the WPS LED will turn off and the security function will be disabled automatically. The WPS server on the router enters idle mode and will not respond to any client's WPS connection request. Device PIN: Displays the device's PIN code.

**Start PIN:** If you enter the client's PIN code on the router, clicking this button starts the PIN connection.

#### **Operation Instructions:**

**PBC:** If you press the hardware WPS button on the device for 1 second, the WPS LED will blink for about 2 minutes, indicating that the PBC encryption method is successfully enabled. During this time, an authentication routine can be performed between your device and a WPS/PBC capable wireless client. Simply enable the WPS/PBC on the client wireless device. If it passes the authentication, the wireless client device connects to your device and the WPS LED turns off. Repeat the steps above if you want to add more wireless client devices to your device.

**PIN:** To use this option, you must know the PIN code from the wireless client and enter it in the corresponding field on your device while using the same PIN code on the client side for this connection.

## ∆<sub>Note</sub>

- To use the WPS encryption, the wireless client device must also be WPS-capable.
- ② The WPS becomes unavailable if you select any of the following option: Open, Shared, WPA2-PSK plus TKIP, and Mixed WPA/WPA2-PSK plus TKIP.

### **3.3 Access Control**

Specify a list of devices to "Allow" or "Deny" a connection to your wireless network via the devices' MAC Addresses.

Click **Wireless** -> Access Control to enter the configuration screen. Three options are available: **Disable**, **Deny** and **Allow**.

A. If you want to allow all wireless clients to join your wireless network, select
 Disable.

- B. If you want to allow ONLY the specified wireless clients to join your wireless network, select Allow.
- C. If you want to disallow ONLY the specified wireless clients to join your wireless network, select **Deny**.

#### Wireless Access Control Application Example:

To only allow your own notebook at the MAC address of C8:3A:35:CC:34:25 to join your wireless network:

- 1 Select Allow.
- 2 Enter C8:3A:35:CC:34:25.
- ③ Click Add to add the MAC address to the MAC address list.
- ④ Click **Save** to save your settings.

Tenda									
		Wizard	Status	Basic	Wireless	Advanced	Tools		
Basic Security Access Control Connection Status	Wireless Access C Configure the wireless	interface MAC addr	ess filtering policy.			Help Specify a list of devices to allow or disallow a connection to your wireless network via the devices'MAC addresses.			
		CC : 34 : 25 Address		Action Add Delete	select "Disable"; to activate it				
	1 C8:3A	:35:CC:34:25 Sav	e Cancel	Delete					

### 🧳 Тір

If you don't want to configure the complex wireless security settings and want to disallow others to join your wireless network, you can configure a wireless access control rule to allow only your own wireless device.

### **3.4 Connection Status**

Click Wireless -> Connection Status. Here you can see a list of wireless

devices (if any) connected to the device.

Tenda							
		Wizard	Status	Basic	Wireless	Advanced	Tools
Basic	Wirele	ss Connection Status				Help	
Security	This sec	tion displays info of connected wi	reless clients.			This section displays info of	
Access Control	Current	ly Connected Clients: Refre		connected wire MAC: Wireless	MAC address		
Connection Status	NO.	MAC address	of a current hos	ST.			
	1	70:72:3C:30:4B:D7		58.0	0 Mbps		



- The Bandwidth here refers to the channel bandwidth instead of wireless connection rate.
- ② You can know whether there are unauthorized accesses to your wireless network by viewing this connection status list.

## **4 Advanced Applications**

This section includes the following:

- To remotely access the device via a domain name or access a server on a LAN PC, see <u>4.1 DDNS Settings</u>.
- To let an Internet user access your LAN PC without any restriction, see

### <u>4.2 DMZ Host</u>.

- To automatically map the ports between WAN and LAN, see 4.3 UPNP.
- To enable the remote Web management feature, see <u>4.4 Remote Web</u> Management.
- To regulate bandwidth, see <u>4.5 Bandwidth Control (Available only in</u>
   4G600).
- To restrict your LAN PCs to access certain services on the Internet via their IP addresses, see <u>4.6 Client Filter (Available only in 4G600)</u>.

## 4.1 DDNS Settings

Dynamic DNS or DDNS is a term used for the updating in real time of Internet Domain Name System (DNS) name servers. We use a numeric IP address allocated by Internet Service Provider (ISP) to connect to the Internet; the address may either be stable ("static"), or may change from one session on the Internet to the next ("dynamic"). However, a numeric address is inconvenient to remember; an address which changes unpredictably makes connection impossible. The DDNS provider allocates a static host name to the user; whenever the user is allocated a new IP address this is communicated to the DDNS provider by software running on a computer or network device at that address; the provider distributes the association between the host name and the address to the Internet's DNS servers so that they may resolve DNS queries. Thus, uninterrupted access to devices and services whose numeric IP address may change is maintained.

Click Advanced -> DDNS Settings to enter the screen below.

Tenda				10K	Õ	
	Wi	izard Status	Basic	Wireless	Advanced	Tools
DDNS Settings	DDNS Settings				Help	
DMZ Host	DNS Settings	Enable DDNS			DDNS makes i	
UPnP	DDNS Service Provider	no-ip.com 💌 🗷	egister Now		associate a sta name with a dy	
Remote Web Management	User Name Password Domain Name	Save Cance	1		changing WAN you can access web/FTP sever: in LAN without a changing IP. configuring any settings, click "I to register a do with your DDNS provider on its v	s or establish s, etc on PCs worrying about Before DDNS Register Now" main name S service
					DDNS Service I your DDNS ser from the drop-d enter the user r password, and (Host Name) th registered with service provide	lown menu and name, domain name at you your DDNS

# Tip

To use the DDNS feature, you need to have an account with one of the **DDNS** Service Providers in the drop-down list first.

### **DDNS Application Example:**

If your ISP gives you a dynamic (changing) public IP address, you want to access your router remotely (see <u>4.4 Remote Web Management</u>) but you cannot predict what your router's WAN IP address will be, and the address can change frequently. In this case, you can use a commercial Dynamic DNS service. It lets you register your domain to their IP address and forwards traffic directed at your domain to your frequently changing IP address.

If your DDNS service provider provides you with a DDNS account (**User Name:** tenda, **Password:** 123456, **Domain Name:** tenda.dyndns.org) and you want to use the PC at the IP address of 218.88.93.33 to remotely access this device on the port number of 8090. Then follow the steps below:

1 DDNS Settings: Check the Enable DDNS box.

② **DDNS Service Provider:** Select your DDNS service provider from the drop-down list. Here in this example, select **dyndns.org**.

**3** User Name: Enter the DDNS user name you have registered with your

DDNS service provider. Here in this example, enter tenda.

④ Password: Enter the DDNS Password you have registered with your DDNS service provider. Here in this example, enter 123456.

**Domain Name:** Enter the DDNS domain name you have registered with your DDNS service provider. Here in this example, enter tenda.dyndns.org.

6 Click **Save** to save your settings.

Tenda					CK		
		Wizard	Status	Basic	Wireless	Advanced	Tools
DDNS Settings	DDNS Settings					Help	
DMZ Host	DNS Settings	Enable [	DDNS			DDNS makes	
UPnP	DDNS Service Provider	dyndns.org	▼ Rec	iister Now		associate a st name with a d	
Remote Web Management	User Name	tenda				changing WAN you can acces web/FTP seve	
	Password	•••••				in LAN without	worrying about
	Domain Name	tenda.dynd	ns.org			a changing IP. configuring an settings, click	
		Sav	cancel			to register a do with your DDN	
						provider on its DDNS Service	website. Provider: Select
						your DDNS se	
						from the drop- enter the user	down menu and
							d domain name
						(Host Name) t	
						registered with	n your DDNS
						service provide	er.

⑦ Click Remote Web Management, enable the Remote Web Management feature, enter 8090 in the Port field, 218.88.93.33 in the IP Address field and then click Save to save your settings.

Tenda							
		Wizard	Status	Basic	Wireless	Advanced	Tools
						- 	
DDNS Settings	Remote WEB Manager	ment				Help	
DMZ Host	Enable	7				The Remote W	
UPnP	Port	8090				Management fe the Router to b	e managed
Remote Web Management	IP Address	218.88.93.3	3			from the Intern browser. To us	e this feature,
		Sav	e Cancel			Check the Ena Web Managem specify a Remo Management F Port: Remote a port used to ac from Internet o networks.	nent box and ote Port. Idmin port; the ccess the device

Now, you can access your device from the Internet by typing your device's domain name into your browser's address or location field on your PC

(218.88.93.33) followed by a colon (:) and the remote management port number. Here in this example, enter http://tenda.dyndns.org:8090.

## 4.2 DMZ Host

The DMZ (De-Militarized Zone) function disables the firewall on the router for one device for a special purpose service such as Internet gaming or video conferencing applications that are not compatible with NAT (Network Address Translation).

Click Advanced -> DMZ Host to enter the screen below.

## <mark>∆</mark>Note

- ① DMZ host poses a security risk. A computer configured as the DMZ host loses much of the protection of the firewall and becomes vulnerable to attacks from external networks.
- ② Hackers may use the DMZ host computer to attack other computers on your network.

Tenda					CK		
		Wizard	Status	Basic	Wireless	Advanced	Tools
DDNS Settings	DMZ Host					Help	
DMZ Host UPnP Remote Web Management	Note: Once a PC is set to vulnerable to attack as fir Enable DMZ Host IF	ewall settings be	come inoperative.	osed to Internet, an	d may be	function disabl on the router fo a special purpo such as Interne video conferen	r one device for see service et gaming or cing. Be sure to e IP Address of or this function it. Enter the so of the PC on you want to ost. Once MZ host loses device's comes

### **Configuration Procedures:**

① DMZ Host IP: The IP address of the device for which the router's firewall

will be disabled. Be sure to statically set the IP address of the device that serves as a DMZ host for this function to be consistent.

2 Enable: Check to enable the DMZ host functionality.

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

## . Тір

Security softwares such as anti-virus softwares and OS built-in firewall, etc. may affect the DMZ host feature. Disable them if the DMZ host fails.

### **4.3 UPNP**

The Universal Plug and Play (UPnP) feature allows network devices, such as computers from the Internet, to access resources on local host or devices as needed. UPnP-enabled devices can be discovered automatically by the UPnP service application on the LAN. If you use applications such as multiplayer gaming, peer-to-peer connections, real-time communications such as instant messaging, or remote assistance (a feature in Windows XP), you may need to enable Universal Plug and Play (UPnP) for better experience.

Click **Advanced -> UPnP** to enter the configuration screen. The UPnP feature is enabled by default.

Tenda					OK		
		Wizard	Status	Basic	Wireless	Advanced	Tools
DDNS Settings DMZ Host	UPnP Enable UP	inP 🔽				Help The Universal F (UPnP) feature	Plug and Play allows network
UPnP Remote Web Management		Sav	Cancel			devices, such a from Internet, to resources on Io devices as nee enabled device discovered auto the UPnP servi- on the LAN. Pre only supported systems like W and Windows >	o access boal host or ded. UPnP- s can be comatically by ce application esently, it is by operating indows ME

## 4.4 Remote Web Management

The Remote Web Management allows the device to be configured and managed remotely from the Internet via a Web browser.

Click Advanced -> Remote Web Management to enter the configuration screen.

Tenda							
		Wizard	Status	Basic	Wireless	Advanced	Tools
DDNS Settings	Remote WEB Manage	ment				Help	
DMZ Host	Enable					The Remote V	
UPnP	Port	8080				Management f	e managed
Remote Web Management	IP Address	0.0.0.0				from the Intern browser. To us	se this feature,
		Sav	e Cancel			rom Internet o networks. IP: Enter the IP trusted PC fror other external you want to au	eent box and ote Port. admin port; the ccess the device r external address of a n Internet or networks which thorize to outer remotely. address is icates that all



- ① For better security, configure a port number (between 1025 and 65535) as the remote Web management interface, do not use the number of any common service port (1~1024).
- ② Make sure your WAN IP address (Internet IP address) is a public IP address. Private IP addresses are not routed on the Internet.
- ③ It is unsafe to make your router remotely accessible to all PCs on external network. For the purpose of security, we suggest that you only enter the IP address of the PC that is to be used to remotely manage your device.

#### **Remote Web Management Application Example:**

To access your device (WAN IP address: 102.33.66.88) at your home from the

PC (218.88.93.33) at your office via the port number of 8090, follow the steps below:

**1 Enable:** Check to enable the remote Web management feature.

2 Port: Enter 8090.

③ **IP Address:** Specify the IP address for remote management. Here in this example, enter 218.88.93.33.

Olick Save to save your settings.

Tenda					10K		
		Wizard	Status	Basic	Wireless	Advanced	Tools
DDNS Settings	Remote WEB Manage	ment				Help	
DMZ Host	Enable	V				The Remote W	
UPnP	Port	8090				Management f	e managed
Remote Web Management	IP Address	218.88.93.3	3			from the Intern browser. To us	se this feature,
		Sav	e Cancel				nent box and ote Port. admin port; the ccess the device

Type "http://102.33.66.88:8090" into your browser's address or location field and you can remotely access the router from your home.

## Knowledge Center

**IP Address:** Here you can specify the IP address for remote management (If set to "0.0.0.0", the device becomes remotely accessible to all the PCs on the Internet or other external networks).

**Port:** This is the management port to be open to outside access. The default setting is 8080. This can be changed.

### 4.5 Bandwidth Control (Available only in 4G600)

If there are multiple PCs behind your device competing for limited bandwidth resource, then you can use this feature to specify a reasonable amount of

bandwidth for each such PC, so that no one will be over stuffed or starved to death. Note that this feature is unavailable in **3G/4G Router Mode**.

<b>Tend</b> a <sup>®</sup>	
	Wizard Status Basic Wireless Advanced Tools
DDNS Settings	Bandwidth Control Help
Bandwidth Control	Bandwidth Control 🔲 Enable Use this section to manage
DMZ Host	bandwidth allocation to devices on your LAN.
UPnP	Save Cancel Upload/Download Limit: Set a
Client Filter	upload/download bandwidth of PCs on the LAN.
Remote Web Management	Upload/Download Limit: Set a
	upload/download limit on specified PC(s).

### **Bandwidth Control Application Example:**

You share a 4M-broadband service with your neighbor (at the IP address of 192.168.0.125). He always downloads a large volume of data from the Internet, which sharply frustrates your Internet surfing experience; you can use this feature to set limits for the volume of Internet traffic he can get. For example, you can equally split the bandwidth, so your neighbor can only use up to 2M Internet traffic and you can smoothly enjoy 2M.

### **Configuration Procedures:**

**1 Bandwidth Control**: Check the **Enable** box to enable the feature.

(2) IP Address: Enter the last number of the IP address. Here in this example, enter 125 in both boxes.

**Opload Limit:** Set a limit to regulate the uplink bandwidth of PC(s) on the LAN. Here in this example, enter 32 in both boxes.

Ownload Limit: Set a limit to regulate the downlink bandwidth of PC(s) on the LAN. Here in this example, enter 256 in both boxes.

**6 Enable:** Check to enable the current rule.

6 Add to List: Click to add the current rule to the rule list.

Olick Save to save your settings.

Tenda			(O)					
		Wizard	Stat	ius	Basic	Wireless	Advanced	Tools
DDNS Settings	Bandwidth Cont	rol					Неір	
Bandwidth Control	Bandwidth C					٦	Use this section bandwidth alloc	ation to
	IP Ad	dress 192.168.0	). 125	~ _ ·	125		devices on your Upload/Downlo	
UPnP	Upload	Limit 32			KB/s(Ma)	(Traffic)	limit to regulate upload/downloa	
Client Filter	Download	Limit 256			KB/s(Ma)	(Traffic)	of PCs on the L	AN.
Remote Web Management	E	nable 🔽					Upload/Downlo upload/downloa	
			Add to L	ist			specified PC(s)	L.
	ID IP Range	Uplink	Downlink	Enable	Edit I	Delete		
	1 192.168.0.125	~125 32	256	1	Edit	Delete		
		5	Save	Cancel				

## -<sup> </sup> <sup> </sup> <sup> </sup> Tip

- 1M=128KByte/s.
- ② The volume of uplink traffic/downlink traffic should not be larger than that allowed on your device's WAN (Internet) port. Consult your ISP, if you are not sure of the total volume of Internet traffic that you can have.
- ③ The bandwidth for ADSL/DSL line usually refers to the download bandwidth.

## 4.6 Client Filter (Available only in 4G600)

This section allows you to set the times specific clients can or cannot access the Internet via the devices' IP addresses and service port. Note that this feature is unavailable in **3G/4G Router Mode**.

Tenda								
			Wizard	Status	Basic	Wireless	Advanced	Tools
DDNS Settings Bandwidth Control DMZ Host UPnP	Client Filt Enab	<b>er</b> le Client Filter Default	Deny Internet	<ul> <li>Access from</li> </ul>	m clients NOT includer	d in below list to	Help This section al the times spec or cannot acce via the devices' addresses and	ific clients can ss the Internet assigned IP
Client Filter Remote Web Management	Mode	IP	Port T	ype Time	S M T W T F	Action	numbers.You o access restrict permission in o to statically ass	ian set the ion or details. Be sure sign IP address
			Sa√		ete All Add		for this function consistent. For information, se Tips: To add a simply click the edit an existing	more e User Guide. new rule, Add button ; to

## Knowledge Center

**Default:** The default policy for the client filter. For the packets that do not match the set rule, the default rule is applied.

Filter Mode: Specify a filter mode for the rule.

- Deny: Disallow the packets that match the set rule to pass the router. For other packets that do not match the set rule, the default policy is applied.
- Allow: Allow the packets that match the set rule to pass the router. For other packets that do not match the set rule, the default policy is applied.

### **Client Filter Application Example:**

To prohibit PCs within the IP address range of 192.168.0.110--192.168.0.111 from accessing Web pages during the time period of 8:00~18:00 from Monday to Friday, follow the steps below:

- ① Click Add to add a filter rule.
- 2 Filter Mode: Select Deny.
- **3 Description:** Briefly describe the current rule. This field is optional.
- IP: Enter 192.168.0.110 as the starting IP address and 192.168.0.111 as the ending IP address.

- WAN Port Range: Enter a service port number. Here in this example, enter80 in both boxes. HTTP port 80 is the standard protocol for Web servers.
- **6 Type:** Select a protocol for the traffic. If you are unsure, select **Both**.
- Time: Specify a time period for the current rule to take effect. Here in this example, select 8:00~18:00.

**Day:** Select a day, or several days of the week for the current rule to take effect. Here in this example, select **Mon**, **Tue**, **Wed**, **Thur** and **Fri**.

8 Click **Save** to save your settings.

Tenda										
		Wizard	Status	Basic	Wireless	Advanced	Tools			
DDNS Settings	<b>Client Filter Setting</b>					Help				
Bandwidth Control	Filter Mode	Deny				This section all the times spec				
DMZ Host	Description	access wel	opage			or cannot acces via the devices'				
UPnP	IP	192.168.0.1	110	192.168.0.111		addresses and	-			
Client Filter		(Specify a sir	ngle IP address or	an IP range)		numbers.You o access restricti				
Remote Web Management	WAN Port Range	80	~ 80			permission in o to statically ass	details. Be sure sign IP address			
	Туре	Both		•		for this function	ou wish to filter to be			
	Time	08 💌 :	00 🔽 ~ 18	• : 00 •		consistent. For information, se	e User Guide.			
	Day	EveryDay	🗖 Sun 🔽 Mon	🔽 Tue 🔽 Wed	🔽 Thu	Tips: To add a simply click the				
		🔽 Fri 🗖 S	at			edit an existing				
		Sav	Cancel			next to it. Deny: Disallow specified IP ad access Interne	clients at dress(es) to			

**9** Enable Client Filter: Check to enable the client filter feature.

60 Select Allow from the Default drop-down list and then click Save.

		Wizard		Status	Basic	Wireless	Advanced	Tools
DDNS Settings Bandwidth Control DMZ Host	Client Filter Enable Client Filter Default	Allow	A	ccess fron	n clients NOT included	in below list to	Help This section all the times speci or cannot acces via the devices'	fic clients can is the Internet
UPnP Client Filter Remote Web Management	Mode IP	Port	Туре	Time	Day S M T W T F	Action	addresses and numbers.You c access restricti permission in d to statically assi	an set the on or etails. Be sure
	Deny 192.168.0.110- 192.168.0.111	80- 80 E	Both	08:00- 18:00	<	Edit Del	of the devices ye for this function consistent. For information, see	to be more
		S	ave	Dele	el		Tips: To add a r simply click the edit an existing click the Edit or next to it. Deny: Disallow specified IP add access Internet	iew rule, Add button ; to rule, simply Change buttor clients at Iress(es) to

. Тір

- (1) The valid service port number range is  $1 \sim 65535$ .
- ② If you have not set up the system time for this device, click Tools -> Time & Date to configure correct time and date settings for the rule(s) to be effective.

## 5 Tools

- To configure system time, see <u>5.1 Time & Date</u>.
- To upgrade firmware, see <u>5.2 Firmware Upgrade</u>.
- To backup or restore configurations, see <u>5.3 Backup & Restore</u>.
- To restore factory default settings, see **<u>5.4 Restore to Factory Default</u>**.
- To change login password, see <u>5.5 Change Password</u>.
- To view logs, see <u>5.6 Logs</u>.
- To restart device, see <u>5.7 Reboot</u>.

### 5.1 Time & Date

Click Tools -> Time & Date to enter the configuration screen.

### 🧳 Tip

Configured time and date settings will be lost if the device gets disconnected from power supply. However, it will be updated automatically when the device reconnects to the Internet. To activate time-based features (e.g. **Client Filter**), the time and date settings should be set correctly first, either manually or automatically.

- A. To synchronize with Internet time servers:
- Internet Time Server: Check to enable the feature (If enabled, time and date will be updated automatically from the Internet).
- ② Sync Interval: Specify a time interval for periodic update of time and date information from the Internet.
- **3 Time Zone:** Select your current time zone.
- ④ Click Save to save your settings.
- 6 Go to the **Status** screen to make sure the system time is correctly updated.

Tenda							
	Wizard Status Basic	Wireless Advanced Tools					
Time & Date	Time & Date	Негр					
Firmware Upgrade	Internet Time Server 🔽 Enable	This page is used to set the					
Backup & Restore	Sync Interval 2 hours	device's system time. You can choose to set the time					
Restore to Factory Default	Time Zone (GMT+08:00)Bejing,China, Hong	manually or get the GMT time from the Internet and the					
Change Password	Input Time And Date 2013 12 16 18 43 11	system will automatically connect to NTP server to					
Logs		synchronize the time.					
Reboot	Copy Local Time	Note: System time will be lost when the device is					
	Save Cancel	disconnected from power supply. However, it will be updated automatically when the device reconnects to Internet. To activate time- based features (e.g. firewall), the time and date info shall be set correctly first, either manually or automatically.					

# <mark>∆</mark>Note

In the Universal Repeater Mode, the Internet Time Server - Enable feature is not available, so you can only set the time and date manually.

- **B.** To set time and date manually/synchronize with your PC:
- ① Internet Time Server: Uncheck to disable the feature.
- ② Specify the time and date manually or click **Copy Local Time** to automatically copy your PC's time to the device.
- 3 Click **Save** to save your settings.

Tenda			~~~				
		Wizard	Status	Basic	Wireless	Advanced	Tools
Time & Date	Time & Date					Help	
Firmware Upgrade Backup & Restore	Internet Time Server	Enable				This page is use device's system choose to set th	time. You can
Restore to Factory Default	Time Zone		0 )Bejing,China, H	_		from the Internet	the GMT time and the
Change Password	Input Time And Date			43 : 11		connect to NTP : synchronize the Note: System tin	server to time.
Reboot		Co Sav	py Local Time			when the device disconnected fro supply. However updated automa	is om power r, it will be ttically when
						the device recon Internet. To activ based features the time and dat set correctly first manually or auto	ate time- (e.g. firewall), e info shall be , either

Go to the **Status** screen to make sure the system time is correctly updated.

## 5.2 Firmware Upgrade

Click **Tools -> Firmware Upgrade** to enter the configuration screen. Firmware upgrade is released periodically to improve the functionality of your device and also to add new features. If you run into a problem with a specific feature of the device, log on to our Website (<u>http://www.tendacn.com</u>) to download the latest firmware to update your device.

## <mark>∆</mark>Note

- ① Before you upgrade the firmware, make sure you are having a correct firmware. A wrong firmware may damage the device.
- It is advisable that you upgrade the device's firmware over a wired connection. DO NOT disconnect the power connection to the device when the upgrade is in process otherwise the router may be permanently damaged.

### **Configuration Procedures:**

### 1 Click Browse.

Tenda	a ser a s	
	Wizard Status Basic Wireless	Advanced Tools
Time & Date	Fireware Upgrade	Help
Firmware Upgrade	Use this section to update your router's software for better functionality or new features.	To download latest firmware,
Backup & Restore	Select a Software File: Browse Upgrade	go to www.tendacn.com. Browse: Click to locate and
Restore to Factory Default	Current System Version: 4G630_V1.0.0.1_EN; Release Date:Dec 11 2013	select the latest firmware for update.
Change Password	Note: Do not power off the router while upgrading otherwise it may be permanently damaged.	Upgrade: Click to update the device. The device restarts
Logs		automatically when update
Reboot		completes.

2 Select the firmware file you want to use and click **Open**.

### 3 Click Upgrade.

④ Click **OK** on the appearing screen and wait for it to complete.

When upgrade is completed, check the **Current System Version** field. It should display the firmware you load.

#### 5.3 Backup & Restore

Once you have configured the device the way you want it, you can save these settings to a configuration file on your local hard drive that can later be imported to your device in case that the device is restored to factory default settings. Click **Tools -> Backup & Restore** to enter the configuration screen.

### 🦗 Тір

It is advisable to include the file name suffix of ".cfg" to avoid problems when renaming the file name.

### To backup configurations:

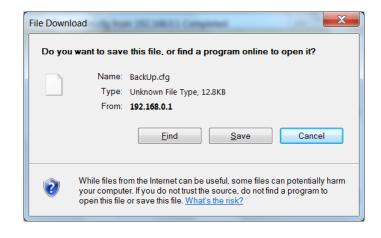
1 Click Backup.

Tenda								
	Wizard Status Basic Wireless	Advanced Tools						
Time & Date	Backup & Restore	Help						
Firmware Upgrade	Note: Use this section to backup current settings or restore previous settings.	Click "Backup" to save a copy						
Backup & Restore	Save Settings to Local Backup	of the device's current settings to your local hard drive. Click						
Restore to Factory Default	Load Settings From Local Browse Restore	the "Browse" button to locate and select a configuration file						
Change Password		that is saved previously to your local hard drive. And then click						
Logs		the "Restore" button to reset						
Reboot		your device to previous settings.						

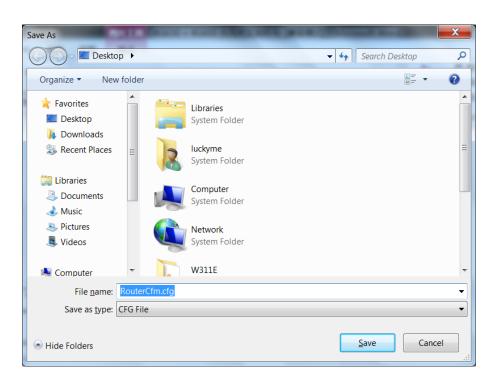
2 Click **OK** on the appearing window.



3 Click Save on the File Download window.



4 Select a local hard drive to save the file and click **Save**.

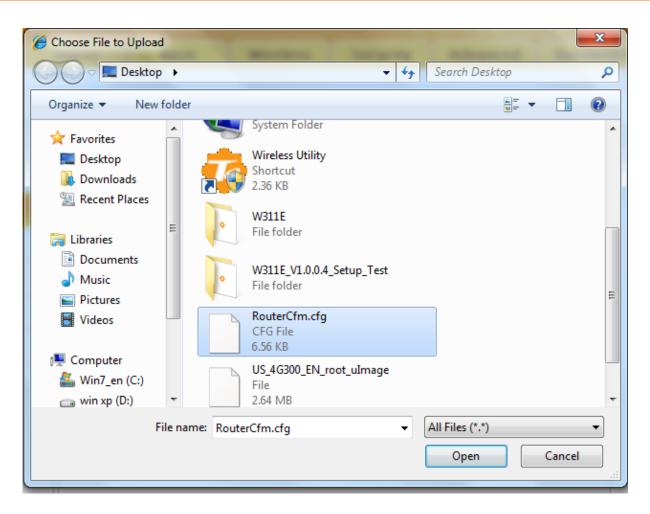


### To restore configurations:

1 Click Browse.

<b>Tend</b> a <sup>®</sup>						
	Wizard	Status	Basic	Wireless	Advanced	Tools
Time & Date	Backup & Restore				Help	
Firmware Upgrade	Note: Use this section to backup curren	t settings or restore pr	evious settings.		Click "Backup" t	
Backup & Restore	Save Settings to Local Bac	kup			of the device's c to your local har	-
Restore to Factory Default	Load Settings From Local	Bro	wse Resto	re	the "Browse" bu and select a cor	
Change Password					that is saved pre local hard drive.	eviously to your
Logs					the "Restore" bu	itton to reset
Reboot					your device to pr settings.	revious

② Select the configuration file that is saved previously to your local hard drive and click **Open**.



③ Click the **Restore** button to reset your device to previous settings.

## 5.4 Restore to Factory Default

Click Tools -> Restore to Factory Default to enter the configuration screen.

Here you can reset the device to factory default settings.

## <mark>∆</mark>Note

- If you enable this option, the device will be restored to factory default values. You will have to reconfigure Internet connection settings and wireless settings.
- 2 Do not restore factory default settings unless the following happens:
- You need to join a different network or unfortunately forget the login password.
- ✓ You cannot access the Internet and your ISP or our technical support asks

you to reset the device.

Tenda				LP.	10K	0	
		Wizard	Status	Basic	Wireless	Advanced	Tools
Time & Date Firmware Upgrade Backup & Restore Restore to Factory Default	Restore to Factory To restore factory default Restore to Factory	ts, click the "Resto	e to Factory Default	= button below.		Help The device will b factory defaults i enabled. Default Passwo	f this option is
Change Password						Default IP:192.1 Default Subnet	
Logs						Mask:255.255.2	55.0
Reboot							

The factory default settings are listed below:

- IP Address: 192.168.0.1
- Subnet Mask: Enter 255.255.255.0.
- **Password:** admin

## 5.5 Change Password

Click **Tools -> Change Password** to enter the configuration screen. It is strongly recommended that you change the factory default login password. Otherwise, anyone in your network can access this utility to change your settings.



- 1 The default login password is "admin".
- 2 A valid password must only include letters, numbers or underscore.

Tenda		Ō.				
	Wiza	rd Statu	Basic	Wireless	Advanced	Tools
Time & Date	Change Password				Help	
Firmware Upgrade	Note:Password can only include I	etters, numbers or ur	derscore.		Device's default	password is
Backup & Restore	Old Password				"admin". It is adv	
Restore to Factory Default	New Password				change it for bet Otherwise, anyo network may acc	ne in your
Change Password	Confirm New Password				to view or chang	e your
Logs		Save Ca	incel		settings. Old Password: E password. If you	
Reboot					device for the first	
					password is adr	
					Note:Password retrieved once lo	
					already changed	-
					password and u	
					forget, restore th	e device to
					factory defaults.	
					New Password:	Input a new
					password. Pass	word must
					only include 3 ~	12 characters
					except space.	
					Confirm New Pa	
					enter the new pa	issword for
					confirmation.	

### **Configuration Procedures:**

- (1) **Old Password:** Enter the current login password.
- 2 New Password: Input a new password.
- **3 Confirm New Password:** Re-enter the new password for confirmation.
- 4 Click **Save** to save your settings.

### 5.6 Logs

Click **Tools -> Logs** to enter the configuration screen. Here you can view the history of the device's actions upon system startup.

Tenda								
		Wiz	ard	Status	Basic	Wireless	Advanced	Tools
Time & Date Firmware Upgrade		m Logs lefresh clear	Type of logs	to display: All			Help The Logs option view all events ti	
Backup & Restore	Index	Log Content					system startup a whether there ar	
Restore to Factory Default	22	2013-12-16 18:59:05	system	wan1 up			present in your r	network.
Change Password	21	2013-12-16 18:59:02	system	wan1 down			Note: Logs will t automatically on	
	Page 3	221					20 pages, (nam	
Reboot	- rayes						entries).	

# 5.7 Reboot

When a certain feature does not take effect or the device is malfunctioning, try rebooting the device.

Tenda					C)K		
		Wizard	Status	Basic	Wireless	Advanced	Tools
Time & Date Firmware Upgrade Backup & Restore Restore to Factory Default Change Password Logs	Reboot Click the button below to re Reboot	start your router				Help Rebooting the o new settings. A will be disconn automatically w	II connections ected
Reboot							

# **IV** Appendix

# 1 Configure Your PC

### Windows 7

**Step 1:** Click the icon **1** on the right bottom corner of your desktop.

Step 2: Click Open Network and Sharing Center.





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

4				
🐨 🖓 📲 « Networ	k and Internet 🔸 Network and S	haring Center 🛛 👻	Search Control Pane	el 🔎
Control Panel Home	Local Area Connection Status		set up connect	e 🖉 🗠
Change adapter setti	General			See full map
Change advanced sh settings	Connection IPv4 Connectivity:	No Internet access	s Internet	
	IPv6 Connectivity: Media State:	No Internet access Enabled	Cor	nnect or disconnect
	Duration: Speed:	03:40:3 1.0 Gbp	ss type: No In	ternet access
	Details	1.0 000	s lections: 🕌 Local	Area Connection
				=
	Activity		or VPN connectio	n: or set up a
	Sent —	- 💵 — Received		.,
	Bytes: 758,61	8 8,236,680	0 I-up, or VPN netwo	ork connection.
	Properties 🛞 Disable	Diagnose		
See also HomeGroup			work computers, o	r change sharing
Internet Options		Clos	se	

Step 3: Click Local Area Connection -> Properties.

Step 4: Find and double click Internet Protocol Version 4(TCP/IPv4).

Local Area Connection Properties
Networking
Connect using:
Intel(R) PRO/1000 MT Network Connection
Configure
This connection uses the following items:
<ul> <li>✓ Client for Microsoft Networks</li> <li>✓ ■QoS Packet Scheduler</li> </ul>
Geter Flore and Printer Sharing for Microsoft Networks
Internet Protocol Version 6 (TCP/IPv6)
Internet Protocol Version 4 (TCP/IPv4)
Link-Layer Topology Discovery Mapper I/O Driver     Link-Layer Topology Discovery Responder
Install Uninstall Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK Cancel

Step 5: Select Obtain an IP address automatically and Obtain DNS server address automatically and click OK.

I	nternet Pr	otocol Version 4 (TCP/IPv4	4) Prop	erties			8	X
	General	Alternate Configuration						
	this cap	get IP settings assigned aut ability. Otherwise, you need appropriate IP settings.						
	⊚ Ob	tain an IP address automatic	cally					
	_⊚ Us	e the following IP address: –						
	IP ad	dress:						
	Subn	et mask:						
	Defa	ult gateway:						
1	Ob	tain DNS server address aut	omatica	lly				
	_⊚ Us	e the following DNS server a	ddresse	s:				
	Prefe	rred DNS server:						
ľ	Alteri	nate DNS server:						
	Va	alidate settings upon exit				Adva	anced	
					ОК		Ca	ncel

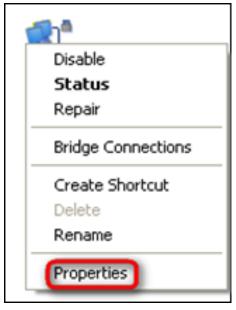
Step 6: Click OK on the Local Area Connection Properties window (see Step 4 for the screenshot).

### Windows XP

Step 1: Right click My Network Places on your desktop and select Properties.



Step 2: Right click Local Area Connection and select Properties.



Step 3: Scroll down to find and double click Internet Protocol (TCP/IP).

ieneral Advanced			
Connect using:			
Marvell Yukon 88E8057	PCI-E Gigat	Di Configu	ure
This connection uses the follow	ing items:		
Elient for Microsoft Ne     File and Printer Sharing     OS Packet Schedule     Internet Protocol (TCP	g for Microso ar	oft Networks	
Install	ninstall	Propert	ies
Description			
Transmission Control Protoco wide area network protocol t across diverse interconnecte	hat provides	communication	a one
Show icon in notification are Notify me when this connect			stivity

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

ieneral	Alternate Configuration	
this cap		utomatically if your network supports to ask your network administrator for
0	btain an IP address automat	ically
OU	se the following IP address:	
IP a	ddress:	
Subr	net mask:	
Defa	ult gateway:	
00	btain DNS server address au	utomatically
OU	se the following DNS server	addresses:
Pref	erred DNS server:	1
Alter	nate DNS server	
		Advanced

Step 5: Click OK on the Local Area Connection Properties window (see Step 3 for the screenshot).

# **2 Join Your Wireless Network**



- ① To join your wireless network, the PC you use must have an installed wireless network adapter. If not, install one.
- ② The device's SSID is "Tenda\_XXXXXX" by default (where "XXXXXX" is the last six characters of its MAC address). You can find the MAC address and/or SSID on the label attached to the device's bottom).

### Windows 7

Step 1: Click or From the right bottom of your desktop.

**Step 2:** Double click the name of the wireless network (SSID) you wish to join and then follow onscreen instructions.



When **Connected** appears next to the selected wireless network (SSID), you have successfully connected to it.

Currently connected to: Network 4 Internet access Identifying ( Te No Internet access	
Wireless Network Connec	tion 🔺
Tenda_0FF02D	Connected 🚮
Tenda_5	5.01
Default_5G	5.0
Default_2.4G	3a0
123	Sat)
Tenda_020070	Set
100456	0.a 🔨
Open Network and	Sharing Center

# Windows XP

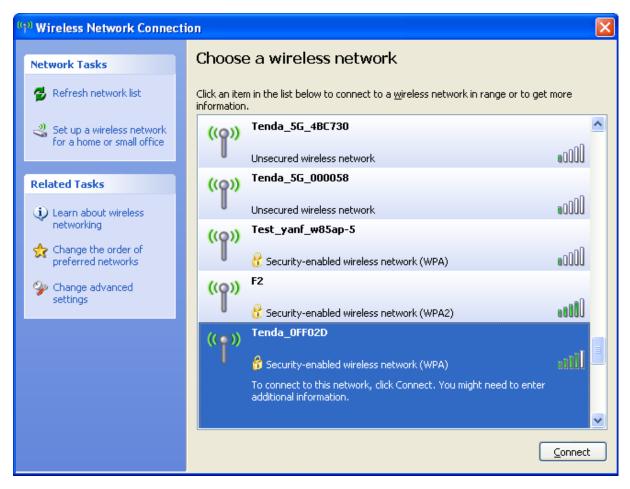
Step 1: Right click My Network Places and select Properties.



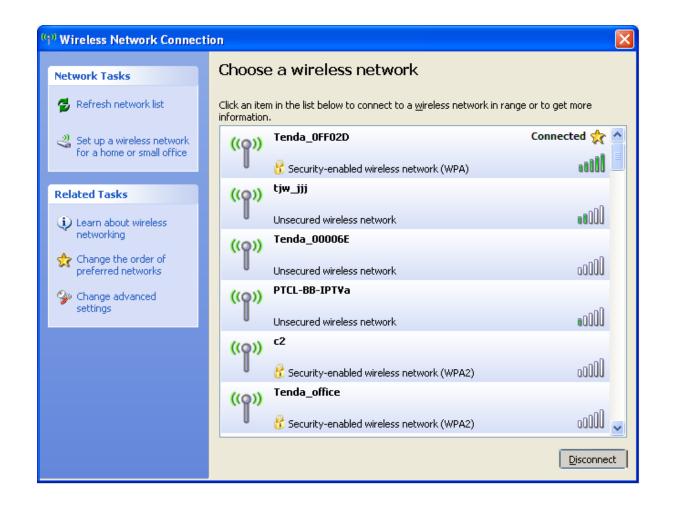
Step 2: Right click Wireless Network Connection and select View Available Wireless Networks.



**Step 3:** Double click the name of the wireless network (SSID) you wish to join and then follow onscreen instructions.



When **Connected** appears next to the selected wireless network (SSID), you have successfully connected to it.



# 3 FAQs

This section provides solutions to problems that may occur during installation and operation of the device. Read the following if you are running into problems. If your problem is not covered here, please feel free to go to <u>www.tendacn.com</u> to find a solution or email your problems to: <u>support@tenda.com.cn</u> or

support02@tenda.com.cn. We will be more than happy to help you out as soon as possible.

### 1. Q: I cannot access the device's management interface. What should I do?

- Make sure the PWR (power) LED on the device is on and the SYS LED blinks normally.
- Make sure all cables are correctly connected and the corresponding LAN LED on the device is on.
- Verify that your PC's TCP/IP settings are configured correctly. If you select the "Use the following IP address" option, set your PC's IP address to any IP address between 192.168.0.2~192.168.0.254. Or you can select the "Obtain an IP address automatically" option.
- Delete your browser cache and cookies or use a new browser. Make sure you enter 192.168.0.1 in your browser's address bar.
- Open your browser and click Tools -> Internet Options -> Connections -> LAN
   Settings, uncheck the Use a proxy server for your LAN option.
- Press the WPS/Reset button for over 6 seconds to restore your device to factory default settings. Then log in to your device again.

2. Q: I changed the login password and unfortunately forget it. What should I do?

Press the **WPS/Reset** button for over 6 seconds to restore your device to factory default settings.

### 3. Q: My computer shows an IP address conflict error when it connects to the

### device. What should I do?

- Make sure there are no other DHCP servers on your LAN or other DHCP servers are disabled.
- Make sure the device's LAN IP is not used by other devices on your LAN. The device's default LAN IP address is 192.168.0.1.
- Make sure the statically assigned IP addresses to the PC(s) on LAN are not used by others device(s).

# 4. Q: I cannot access email and the Internet/Some Websites do not open. What should I do?

This problem mainly happens to users who use the PPPoE or Dynamic IP Internet connection type. You need to change the MTU size. Try changing the MTU to 1450 or 1400. If this does not help, gradually reduce the MTU from the maximum value until the problem disappears. For details, see <u>WAN MTU Setup</u>.

# **4 Remove Wireless Network from Your PC**

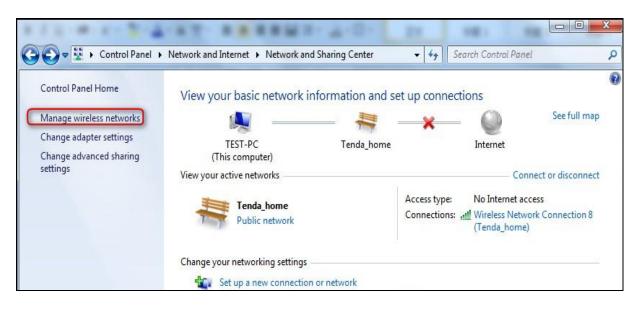
When you change your wireless network (For example, change your device's SSID or security key), the old wireless settings on your PC will not be updated accordingly, you must manually remove them from your PC; otherwise, you may not be able to wirelessly connect to the device. This section explains how to remove a wireless network from your PC.

### Windows 7



1 Right-click the **Network** icon and select **Properties**.

2 Select Manage Wireless Networks.

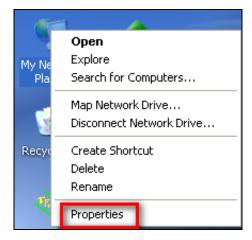


③ Select the wireless network and click Remove network.

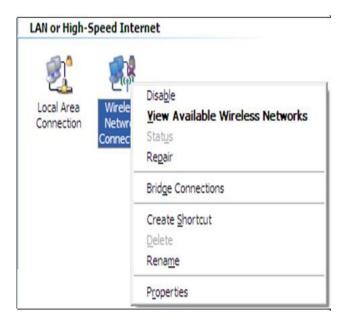
ld Adapter prope	erties Profile types	Network and Sharing Cente		
Tenda_home		rity: WPA-Personal	Type: Any supported	Automatically connect
Tenda_AAAA	ABA Secu	rrity: WPA-Personal	Type: Any supported	Automatically connect

### Windows XP

① Right-click My Network Places and select Properties.



② Right click Wireless Network Connection and then select Properties.



3 Click Wireless Networks, select the wireless network name under Preferred

networks and then click the Remove button.

📥 Local Area Connection 2 Properties 🛛 🔹 🔀
General Wireless Networks Advanced
Use Windows to configure my wireless network settings
Available <u>n</u> etworks:
To connect to, disconnect from, or find out more information about wireless networks in range, click the button below.
View Wireless Networks
Preferred networks: Automatically connect to available networks in the order listed below:
Tenda_home (Automatic) Move up
Move <u>d</u> own
<u>A</u> dd <u>R</u> emove Properties
Leam about <u>setting up wireless network</u> Ad <u>vanced</u>
OK Cancel

# **5 Safety and Emission Statement**

# CE

### **CE Mark Warning**

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures. 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 RJ-45 cable.



#### **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 RJ-45 cable.

#### **NCC Notice**

經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更

頻率、加大功率或變更設計之特性及功能。

低功率射頻電機之作用不得影響飛航安全及幹擾合法通信;經發現有幹擾現象時,應 立即停用,並改善至無幹擾時方得繼續使用。前項合法通信,指依電信規定作業之無 線電信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備 之幹擾。