

Tenda

User Guide

www.tendacn.com



High Power Wireless AC1200 Dual Band Router

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Preface

Thank you choosing Tenda! Please read this user guide before you start! This user guide instructs you to install and configure the router.

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



Note: This format is used to highlight information of importance or special interest. Ignoring this type of note may result in ineffective configurations, loss of data or damage to device.



Tip: This format is used to highlight a procedure that will save time or resources.



Knowledge Center: Description of fields on the device GUI.

Technical Support

- support02@tenda.com.cn
- Skype: tendasz
- YouTube: Tendasz1999
- Hotline:

1-800-570-5892 (USA) (061) 1300787922 (Australia)

(044)197-780-6119 (UK) (0852)36120883 (HongKong)

(064) 800787922 (New Zealand)

- Website: <http://www.tendacn.com>

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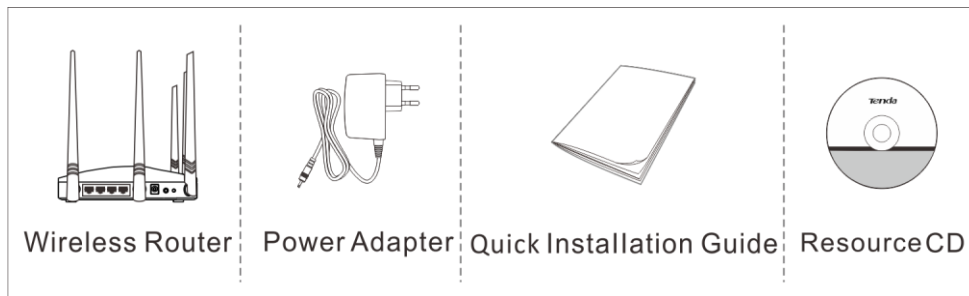
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I Product Overview

1 Package Contents

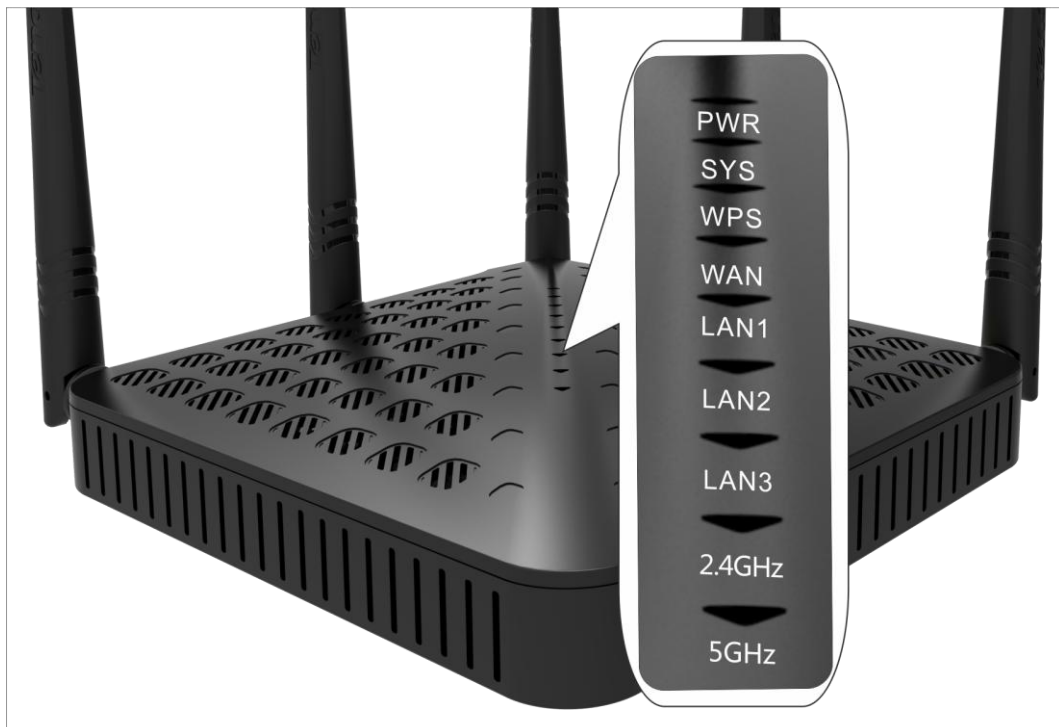
Unpack the package. Your box should contain the following items:



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.

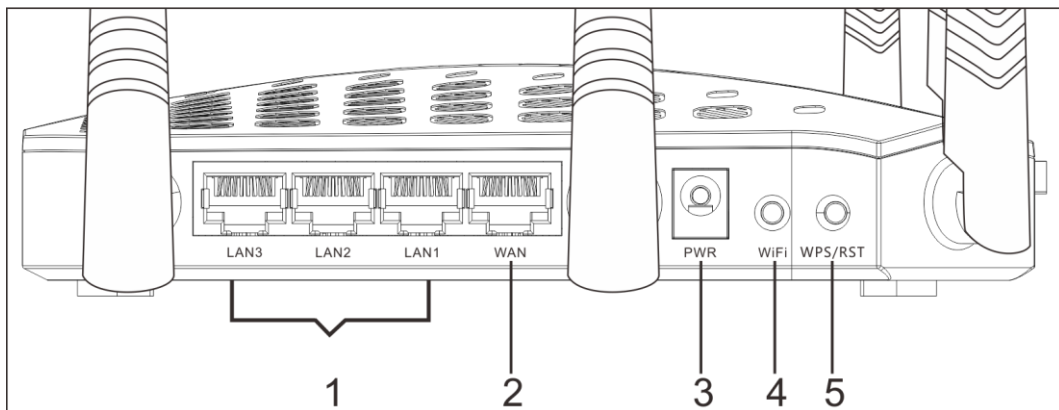
2 Getting to know your router

LEDs on Front Panel



LED	Status	Description
PWR	Solid	Indicates a proper connection to the power supply
	Off	Power is not supplied to the router. Please check the power connection between the power outlet and router.
SYS	Blinking	System is functioning correctly.
	Solid/Off	The unit is malfunctioning.
WPS	Solid	WPS is enabled
	Blinking	Device is performing WPS authentication on a client device.
	Off	WPS function is disabled or WPS authentication negotiation is completed
WAN	Solid	WAN port connected correctly
	Blinking	WAN port is transferring data
	Off	No link is detected on this port.
LAN (1/2/3)	Solid	LAN port connected correctly
	Blinking	LAN port is transferring data
	Off	No link is detected on this port.
2.4GHz	Solid	2.4G wireless radio is on
	Blinking	Data being transferred over 2.4G wireless network
	Off	2.4G wireless radio is off
5GHz	Solid	5G wireless radio is on
	Blinking	Data being transferred over 5G wireless network
	Off	5G wireless radio is off

Buttons & Interfaces on Back Panel



1→LAN (1/2/3): The local (LAN) Ethernet ports are for cabling the device to local computers, switches, etc.

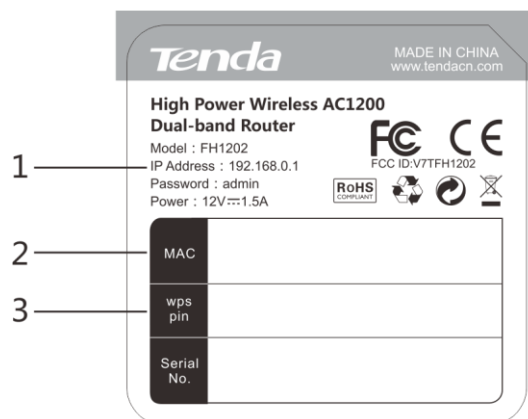
2→WAN: The Internet (WAN) Ethernet port is for cabling the router to a cable or DSL modem.

3→PWR: The power port for connecting the router to power outlet.

4→WiFi: Wireless radio ON/OFF button. Pressing the WiFi On/Off button turns the wireless radios on and off.

5→WPS/RST: Pressing it for over 7 seconds restores the device to factory default settings. For device's factory default settings, see **Appendix 3 Factory Default Settings.** Pressing it for about 1 second enables WPS-PBC and the WPS LED blinks. You can use this button to use WPS to add a wireless device or computer to your wireless network.

Label



1→Default Login IP address. This IP address is to be used to access the router's settings through a web browser. If you change it, you have to open a new connection to the new IP address and log in again.

2→MAC address.

3→WPS pin code.

3 Position Your Router

The operating distance or range of your wireless connection can vary significantly depending on the physical placement of your router. For best performance, place your router:

- Near the center of the area where your computers, smart phones and other devices operate, and preferably within line of sight to your wireless devices.

- In an elevated location such as a high shelf, keeping the number of walls and ceilings between the router and your other devices such as computers and smart phones to a minimum.
- Away from electrical devices that are potential sources of interference, such as ceiling fans, home security systems, microwaves or PCs.
- Away from any large metal surfaces, such as a solid metal door or aluminum studs.
- Away from other materials such as glass, insulated walls, fish tanks, mirrors, brick, and concrete that can also affect your wireless signal.

II Quick Internet Setup

1 Getting Prepared

Before you start the installation process, you need to prepare the following:

Item	Description
Router	Find it in your package
Power Adapter	Please use the power adapter that comes in the package. Using a power adapter with a different voltage rating than the one included with the router will cause damage to the router.
PC	Should have a installed IE8 or higher browser
Ethernet Cable	You will need it to connect your PC to the router
Ethernet Cable from the incoming Internet side	This is provided by your ISP
Gather ISP Information	Your Internet service provider (ISP) should have provided you with all of the information needed to connect to the Internet.If you cannot locate this information, ask your ISP to provide it. <ul style="list-style-type: none"> ● If your ISP uses a PPPoE Internet connection, you will need ISP login name and password. ● If you use a DHCP Internet connection, no information is needed. ● If your ISP gives you a fixed or static IP address for Internet connection, you will need to gather the following information: <ol style="list-style-type: none"> 1) IP Address 2) Subnet Mask 3) Gateway 4) DNS Server 5) Alternate DNS Server (Optional)

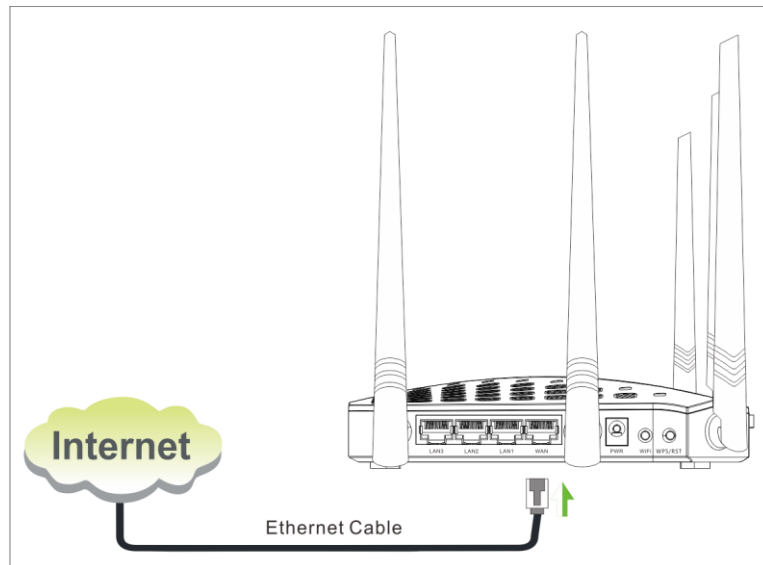
2 Hardware Install



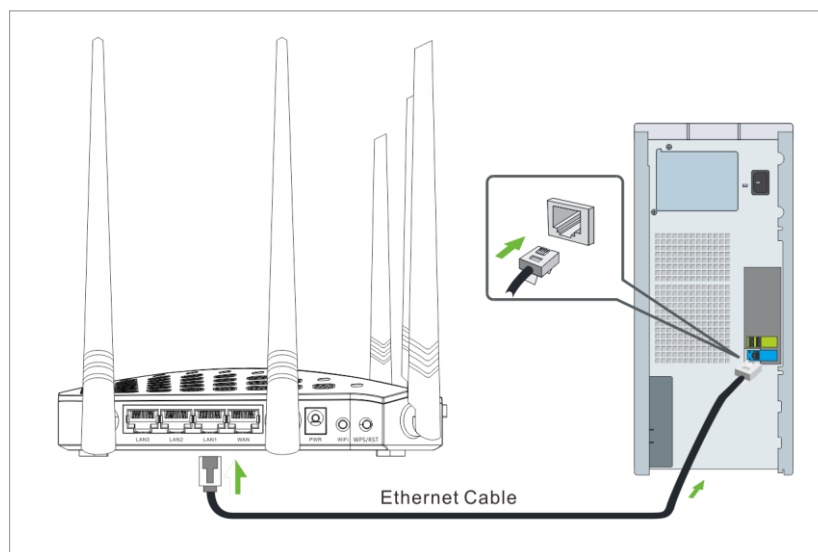
Note -----

Before you start, make sure you can access Internet by connecting the cable from the incoming Internet side to your PC.

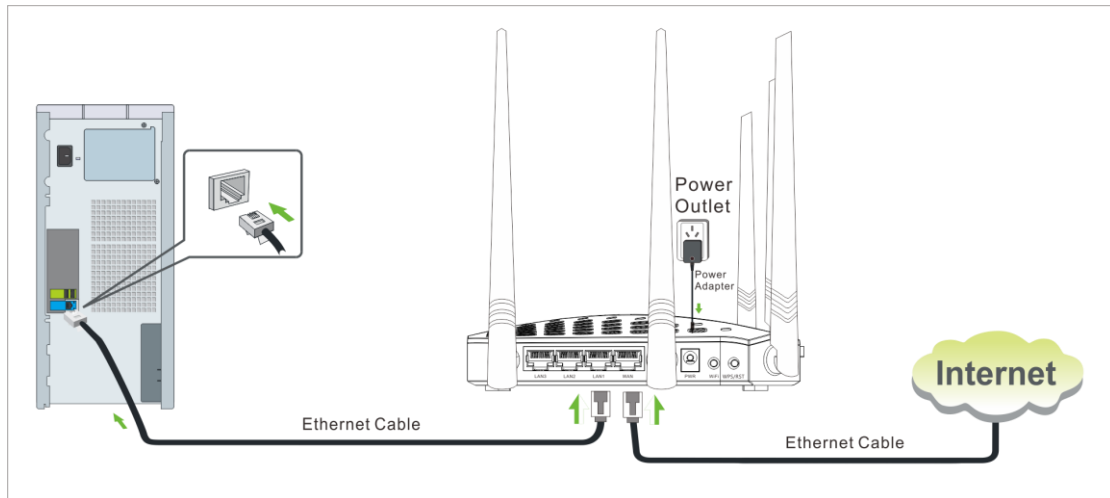
- ① Connect the cable from the incoming Internet side to the WAN port on the router.




- ② Connect one of the LAN ports on the router to the RJ45 (NIC) port on your PC using an Ethernet cable.



- ③ Connect the router to a surge protected power strip using the included power adapter.



 **Note** -----

Using a power adapter with a different voltage rating than the one included with the Device will cause damage to the Device.

3. Internet Setup

Configure PC

If your computer is set to a static or fixed IP address (this is uncommon), change it to obtain an IP address automatically from the router. If you are unsure, see [Appendix1 Configure PC TCP/IP Settings.](#)

Configure Router

Step 1. Log in to Web manager.

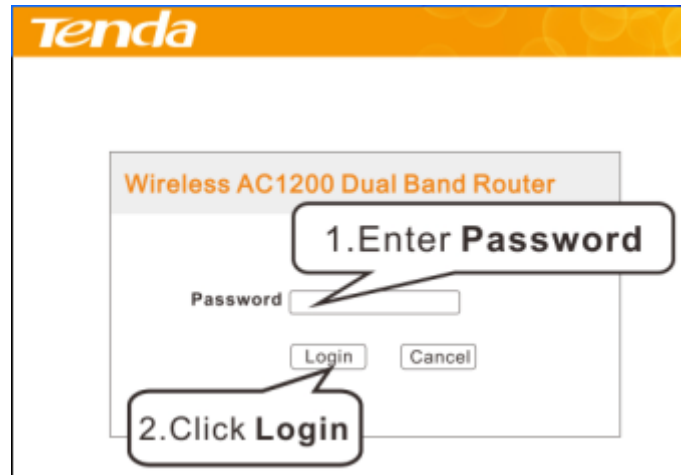
- ① Launch a web browser, say, IE.



- ② In the address bar, input 192.168.0.1, and press "Enter".



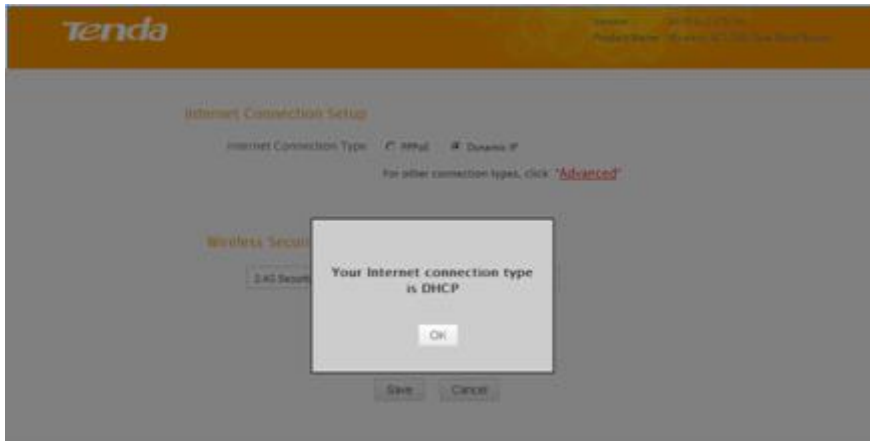
- ③ The login window appears.



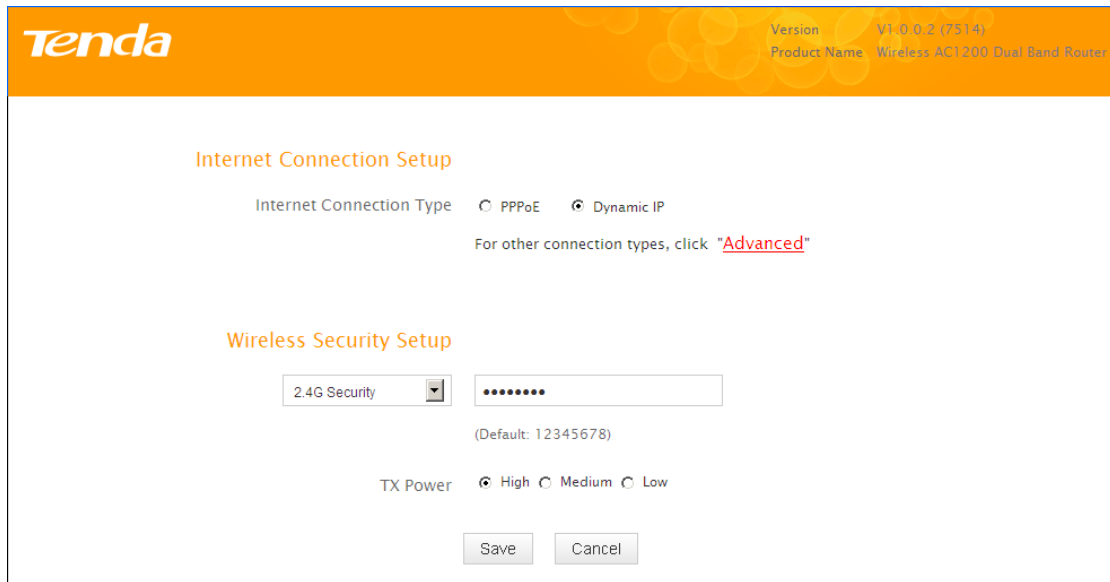
- ④ This router will automatically detect WAN connection status when you press the **Enter** key (This happens when you first time set up the router or when you restore the router to factory default settings).



- ⑤ The following screen appears when your Internet connection type is detected. Click **OK**.



⑥ And the Quick Setup screen appears after you clicked the **OK** button.



Tip -----

1. If you are not using the PPPoE or Dynamic IP (DHCP) Internet connection type, see [Static IP](#).
2. The default Internet connection type is DHCP (Dynamic IP).
3. The router has a preset wireless security key of 12345678 but it is deactivated by factory default. However if you click the **OK** button on that page, the wireless security key of 12345678 will be activated automatically.
4. Here we use the WPA-PSK/AES for explanation. If you want to use other security mode and/or cipher type, see [Security](#).

Step 2. Internet Setup & Wireless Security Setup

A. Select Dynamic IP (DHCP) to obtain IP Address information automatically from your ISP. Select this option if your ISP does not give you any IP information or

user name and password.

B. Select PPPoE if your ISP uses a PPPoE connection and gives you a PPPoE user name and a PPPoE password.

Dynamic IP (DHCP) & Wireless Security Setup

The screenshot shows the Tenda router's configuration interface. At the top, the Tenda logo is on the left, and the version (V1.0.0.2 (7514)) and product name (Wireless AC1200 Dual Band Router) are on the right. The main content area is divided into two sections: 'Internet Connection Setup' and 'Wireless Security Setup'. In the 'Internet Connection Setup' section, the 'Internet Connection Type' is set to 'Dynamic IP' (indicated by a checked radio button), with 'PPPoE' as an alternative. A note below says 'For other connection types, click [Advanced](#)'. The 'Wireless Security Setup' section features a dropdown menu for '2.4G Security' and a password field containing eight dots. Below the password field, the default key '12345678' is noted. The 'TX Power' is set to 'High' (checked radio button), with 'Medium' and 'Low' as other options. At the bottom of the form are 'Save' and 'Cancel' buttons.

- ① Select Dynamic IP (DHCP).
- ② The default wireless band is 2.4G and default wireless security key is 12345678. For better security key, please change the default security key (Security key should be 8-63 characters).
- ③ Click **Save** to save your settings.

PPPoE & Wireless Security Setup

The screenshot shows the Tenda web interface for configuring a wireless router. The top header is orange with the Tenda logo on the left and version/product information on the right. The main content area is white and contains two sections: 'Internet Connection Setup' and 'Wireless Security Setup'. In the 'Internet Connection Setup' section, 'PPPoE' is selected as the connection type. Below it are input fields for 'ISP Username' and 'ISP Password', both with placeholder text. A note below these fields says 'For other connection types, click "Advanced"'. The 'Wireless Security Setup' section has a dropdown menu set to '2.4G Security' and a password field containing seven dots. Below the password field is the text '(Default: 12345678)'. At the bottom of this section are radio buttons for 'TX Power' set to 'High'. At the very bottom of the form are 'Save' and 'Cancel' buttons.

- ① Select PPPoE.
- ② Enter the ISP login name and password.
- ③ The default wireless band is 2.4G and default wireless security key is 12345678. For better security key, please change the default security key (Security key should be 8-63 characters).
- ④ Click **Save** to save your settings.

4 Verify Internet Connectivity

System will automatically enter the Status screen after you save the settings made on the Quick Setup screen.

A. If the connection status displays "Connected" (as shown below), you are connected to the Internet.

The screenshot shows the Tenda router's web interface. The top navigation bar includes 'Home', 'Status', 'Network', 'Wireless', 'Advanced', 'Security', and 'Tools'. The 'Status' page is active, with a sidebar on the left containing 'System Status', 'WAN Status', 'LAN Status', 'Wireless Status', and 'Connection Status'. The main content area displays 'WAN Status' with the following information:

WAN Medium Type	Wired WAN
Connection Type	Dynamic IP
Connection Status	Connected
MAC Address	00:90:4C:01:61:3E
IP Address	192.168.30.176
Subnet Mask	255.255.255.0
Gateway	192.168.30.1
Primary DNS Server	192.168.30.1
Secondary DNS Server	0.0.0.0
Connection Duration	0Day(s)00:04:50

At the bottom of the WAN Status section are 'Release' and 'Refresh' buttons. To the right, a 'Helpful Hints' section states: 'This section displays WAN port status.'

B. If connection status displays "Cable improperly connected!", the connection between the router and Internet fails. Make sure the cable from the incoming Internet side is properly connected to the router's WAN port. If nothing is wrong, "Connecting" or "Connected" will be displayed.

This screenshot shows the same Tenda router web interface as above, but the WAN Status is now 'Cable improperly connected!'. The WAN IP address is also '0.0.0.0'. The rest of the interface, including the navigation bar, sidebar, and helpful hints, remains the same.

WAN Medium Type	Wired WAN
Connection Type	Dynamic IP
Connection Status	Cable improperly connected!
MAC Address	00:90:4C:01:61:3E
IP Address	0.0.0.0
Subnet Mask	0.0.0.0
Gateway	0.0.0.0
Primary DNS Server	0.0.0.0
Secondary DNS Server	0.0.0.0
Connection Duration	0Day(s)00:00:00

If the connection status displays "Connecting..." and WAN IP address displays "0.0.0.0", wait until the page updates five times.

And if it still displays "Connecting..." try the following steps:

- ① Make sure physical connections are correctly established.
- ② Make sure you can access Internet on your PC without using the router.
- ③ If your ISP uses a PPPoE Internet connection, make sure you entered the correct ISP login name and password.
- ④ If the problem is still unsolved, see [2.4 MAC Clone](#).

5 Join Your Wireless Network


Having finished above settings, you can search for the device's default wireless network (SSID) from your wireless devices (notebook, iPad, iPhone, etc) and enter a security key to connect to it wirelessly.



Tip -----


1. The router's SSID is Tenda_XXXXXX by default. You can find it on the label on the bottom of the router.
 2. Also, you can find the MAC address on label on the bottom of the router.
 3. **To join your wireless network, the PC you use must have an installed wireless network adapter. If not, install one.**
-

Join Your Wireless Network - Windows 7

- ① Click the icon  on the notification area on the bottom right corner.



Tip

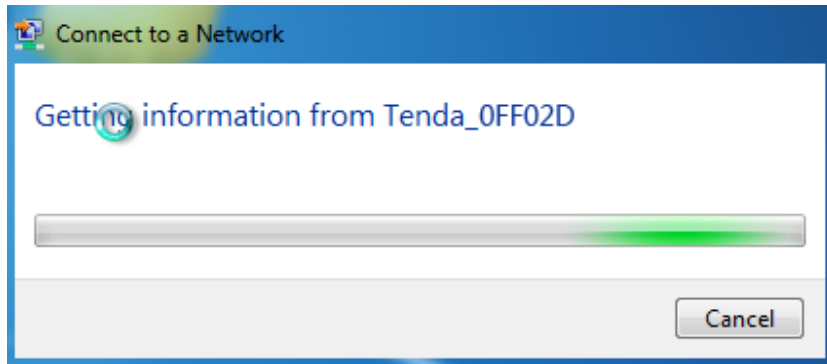
If you cannot find the  icon, try disabling the wired network adapter or unplug the Ethernet cable from the wired network adapter of your PC and refresh your desktop. If the problem remains unsolved, see [*Join Your Wireless Network - Windows 7*](#).



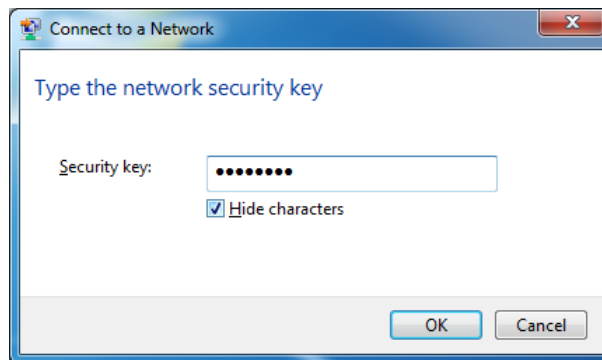
- ② Select the wireless network you wish to connect and click **Connect**.



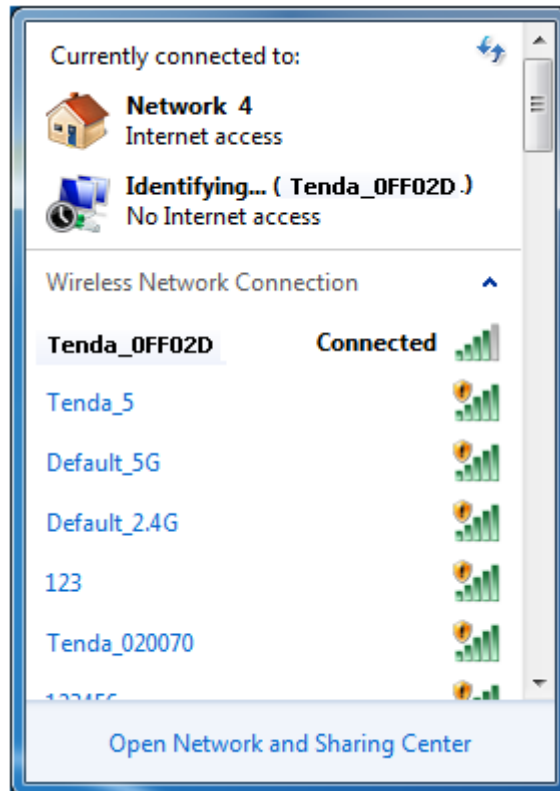
- ③ If you see the screen below, you are connecting to the wireless network.



- ④ Enter the security key and click **OK**.



- ⑤ When you see **Connected** displayed next to the wireless network you selected, you have connected to the wireless network successfully.

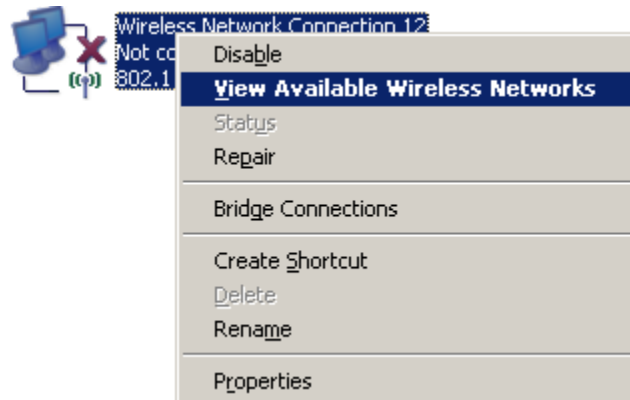


Join Your Wireless Network - Windows XP

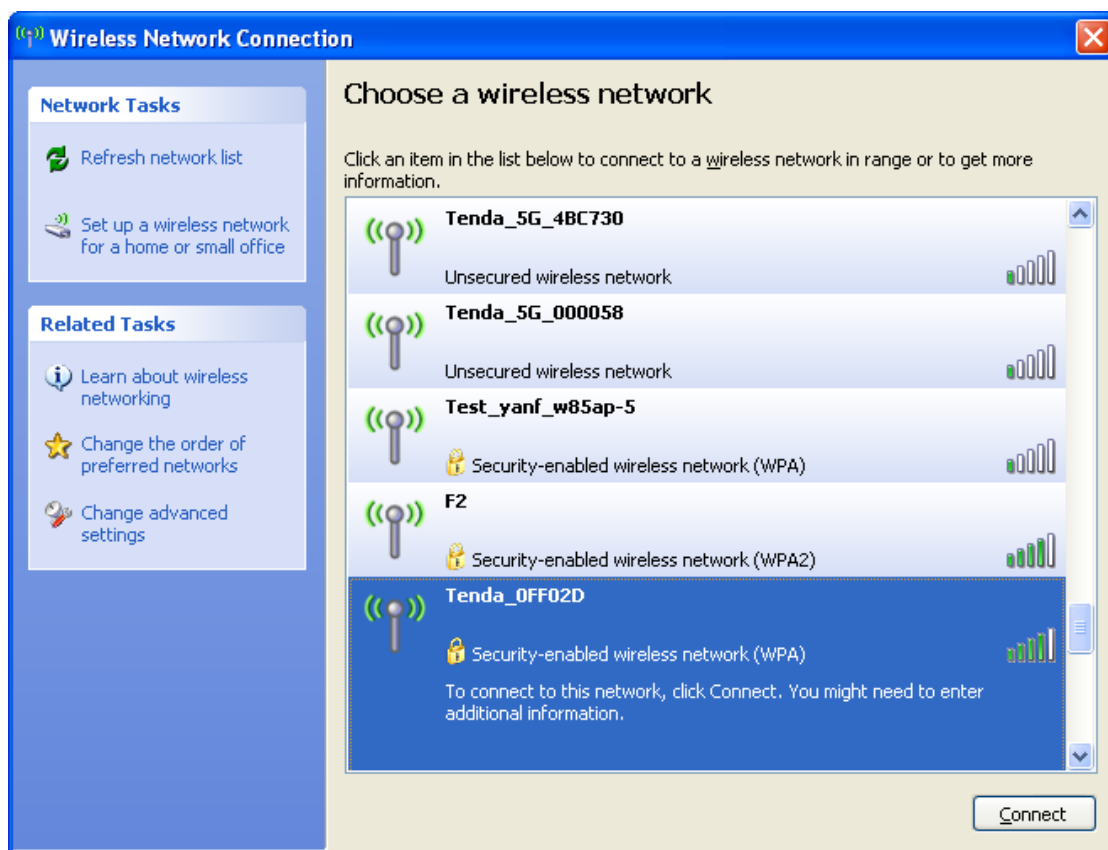
- ① Right click **My Network Places** from your PC's desktop and select **Properties**.



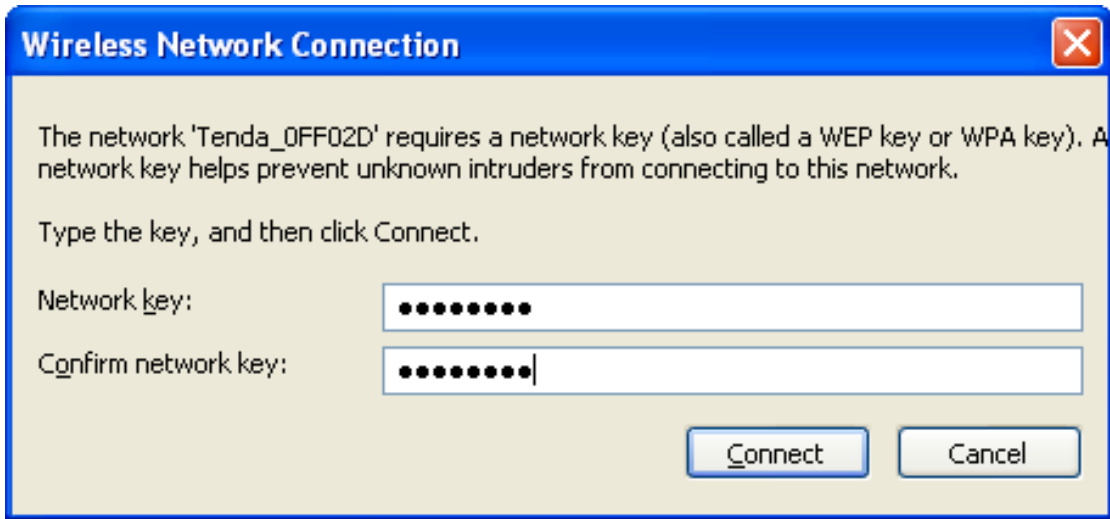
- ② Right click **Wireless Network Connection** and select **View Available Wireless Networks**.



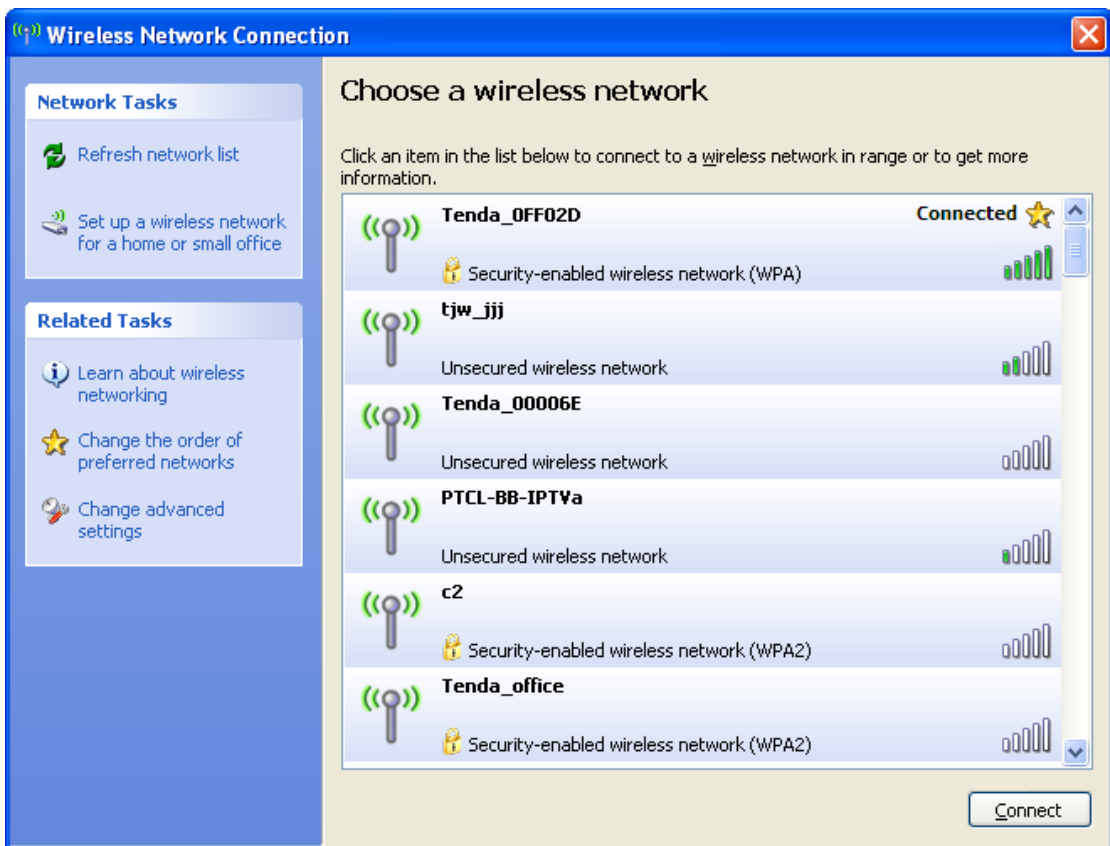
- ③ Double click the wireless network you wish to connect.



- ④ Enter the security key and click **Connect**.

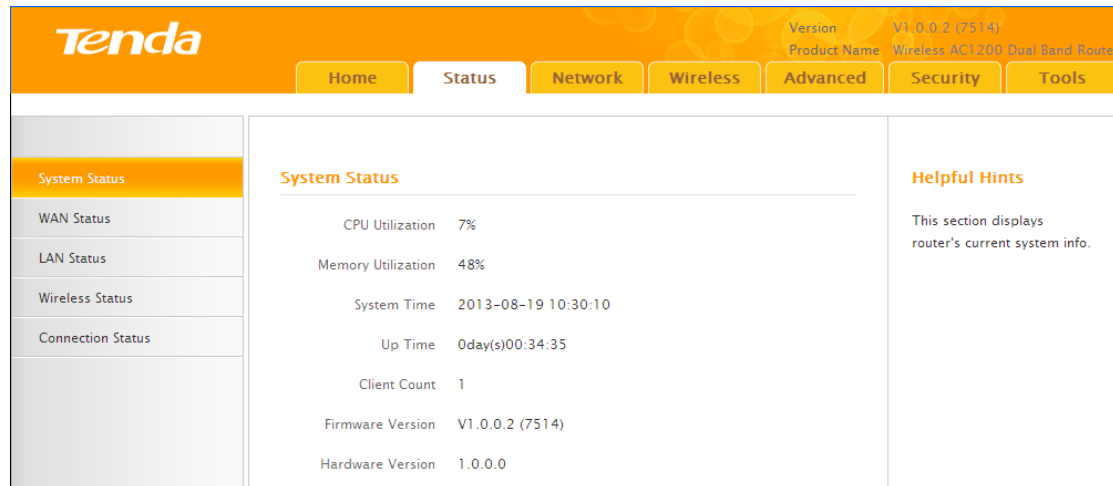


- ⑤ When you see **Connected** displayed next to the wireless network you selected, you have connected to the wireless network successfully.



III Features & Configurations

For more and advanced features, click **Advanced** on the home page.



System Status	
CPU Utilization	7%
Memory Utilization	48%
System Time	2013-08-19 10:30:10
Up Time	0day(s)00:34:35
Client Count	1
Firmware Version	V1.0.0.2 (7514)
Hardware Version	1.0.0.0

1 Status

1.1 System Status

Click **Advanced** on the home page and the **Status** screen appears. Here you can view the router's WAN status and system status as noted below:



Tip

1. **Connection Status:** Displays the router's current WAN connection status: Disconnected, Connecting, or Connected. For explanation of the 3 connection statuses, see **4 Verify Internet Connectivity**.
2. IP Address/Subnet Mask/WAN subnet mask/Gateway/Primary DNS Server/Secondary DNS Server: This type of information appears only if the router successfully connects to Internet via a PPPoE or DHCP (dynamic IP) connection. However if you connect the router to 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.
3. If nothing appears in the secondary DNS server field, there is no available secondary DNS server.

The screenshot shows the Tenda router's web interface. At the top, there is a navigation bar with the Tenda logo on the left and a menu on the right containing 'Home', 'Status', 'Network', 'Wireless', 'Advanced', 'Security', and 'Tools'. The 'Status' menu item is highlighted. Below the navigation bar, the page is divided into three columns. The left column is a sidebar with a menu containing 'System Status', 'WAN Status', 'LAN Status', 'Wireless Status', and 'Connection Status'. The 'System Status' item is selected and highlighted. The middle column displays the 'System Status' information:

CPU Utilization	7%
Memory Utilization	48%
System Time	2013-08-19 10:30:10
Up Time	0day(s)00:34:35
Client Count	1
Firmware Version	V1.0.0.2 (7514)
Hardware Version	1.0.0.0

The right column contains a 'Helpful Hints' section with the text: 'This section displays router's current system info.'

1.2 WAN Status

Click **Status** -> **WAN Status** to enter the WAN Status screen as seen below.

The screenshot shows the Tenda router's web interface with the 'WAN Status' page selected. The navigation bar and sidebar are the same as in the previous screenshot. The 'WAN Status' item in the sidebar is highlighted. The middle column displays the 'WAN Status' information:

WAN Medium Type	Wired WAN
Connection Type	Dynamic IP
Connection Status	Connected
MAC Address	00:90:4C:01:61:3E
IP Address	192.168.30.176
Subnet Mask	255.255.255.0
Gateway	192.168.30.1
Primary DNS Server	192.168.30.1
Secondary DNS Server	0.0.0.0
Connection Duration	0Day(s)00:33:47

At the bottom of the WAN Status section, there are two buttons: 'Release' and 'Refresh'. The right column contains a 'Helpful Hints' section with the text: 'This section displays WAN port status.'

1.3 LAN Status

Click **Status** -> **LAN Status** to enter the LAN Status screen as seen below.

The screenshot shows the Tenda router's web interface. At the top, there is a navigation bar with the Tenda logo on the left and a menu with buttons for Home, Status, Network, Wireless, Advanced, Security, and Tools. The Status button is selected. In the top right corner, the version (V1.0.0.2 (7514)) and product name (Wireless AC1200 Dual Band Router) are displayed. On the left side, there is a sidebar menu with options: System Status, WAN Status, LAN Status (highlighted), Wireless Status, and Connection Status. The main content area is titled 'LAN Status' and displays the following information:

MAC Address	00:90:4C:01:60:3D
IP Address	192.168.0.1
Subnet Mask	255.255.255.0

On the right side of the main content area, there is a 'Helpful Hints' section with the text: 'This section displays LAN port status.'

1.4 Wireless Status

Click **Status** -> **Wireless Status** to enter the Wireless Status screen as seen below.

The screenshot shows the Tenda router's web interface with the Wireless Status page selected. The navigation bar and sidebar are the same as in the previous screenshot. The main content area is titled 'Wireless Status' and is divided into two sections: 2.4GHz Wireless and 5GHz Wireless. The 2.4GHz Wireless section displays the following information:

Wireless Radio	Enabled
Wireless MAC Address	00:90:4C:01:70:3D
SSID	Tenda_01703D
802.11 Mode	11b/g/n mixed
Country	China
Channel	Channel 11
Security Mode	WPA-PSK/WPA2-PSK

The 5GHz Wireless section displays the following information:

Wireless Radio	Enabled
Wireless MAC Address	00:90:4C:0E:60:11
SSID	Tenda_5G_0E6011
802.11 Mode	11a/n mixed
Country	China
Channel	Channel 9
Security Mode	None

On the right side of the main content area, there is a 'Helpful Hints' section with the text: 'This section displays wireless status.'

1.5 Connection Status

Click **Status** -> **Connection Status** to enter the Connection Status screen.

The screenshot shows the Tenda web interface. At the top, there is a navigation bar with the Tenda logo and a menu with items: Home, Status, Network, Wireless, Advanced, Security, and Tools. The 'Status' menu item is selected. Below the navigation bar, there is a sidebar on the left with a menu: System Status, WAN Status, LAN Status, Wireless Status, and Connection Status (which is highlighted). The main content area is titled 'Connection Status' and contains the following text: 'This section displays client info and connection status, etc.' Below this text is a table with three columns: IP Address, MAC Address, and Medium Type(Wired/Wireless). The table has one row with the following data: IP Address: 192.168.0.100, MAC Address: C8:3A:35:DC:E1:31, Medium Type: Wired. To the right of the table is a 'Helpful Hints' section with the text: 'This section displays the info of currently connected clients (if any) including IP and MAC addresses, etc.'

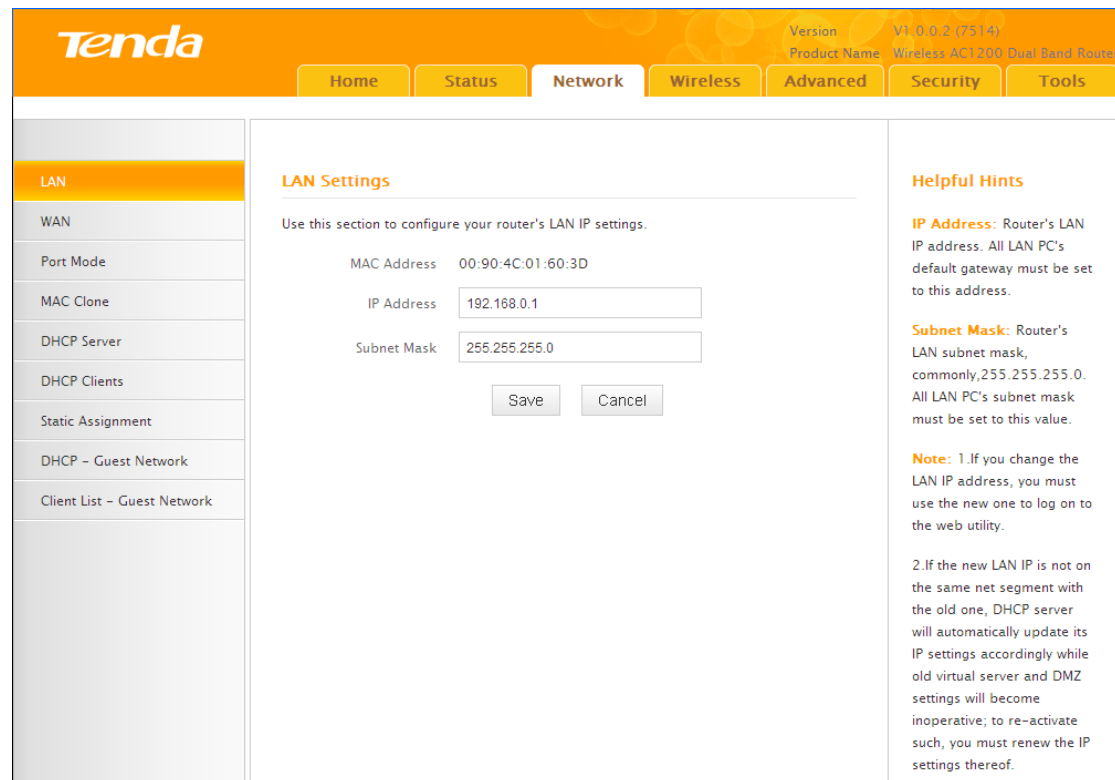
2 Network

2.1. LAN Settings

Click Network -> **LAN** to enter the LAN configuration screen. Here you can configure the LAN IP address. This IP address is to be used to access the router's settings through a web browser. Be sure to make a note of any changes you apply to this page.



- Tip -----
1. Default IP address and subnet mask are respectively 192.168.0.1 and 255.255.255.0.
 2. This router does not support VLSM.
 3. Be sure to make a note of any changes you apply to this page. If you change the LAN IP address of the router, you have to open a new connection to the new IP address and log in again.
-



Configuration Procedures :

- ① 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 **Network** -> **WAN** to configure your Internet connection settings. Select your Internet connection type:

- 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 you can access Internet simply by directly connecting your computer to an Internet-enabled ADSL/Cable modem without configuring any settings.

PPPoE

The screenshot shows the Tenda router's web interface. At the top, there is a navigation bar with tabs for Home, Status, Network, Wireless, Advanced, Security, and Tools. The 'Network' tab is selected. On the left side, there is a sidebar menu with options: LAN, WAN (highlighted), Port Mode, MAC Clone, DHCP Server, DHCP Clients, Static Assignment, DHCP - Guest Network, and Client List - Guest Network. The main content area is titled 'WAN Settings' and contains the following fields and options:

- Connection Type: A dropdown menu set to 'PPPoE'.
- ISP Username: An empty text input field.
- ISP Password: An empty text input field with a 'Display Key' checkbox to its right.
- MPPE: An unchecked checkbox.
- MTU: A text input field containing '1450' with '(Default: 1450)' to its right.

At the bottom of the settings area are 'Save' and 'Cancel' buttons. On the right side of the page, there is a 'Helpful Hints' section with the following text:

Dynamic IP: Select it to obtain IP settings automatically for Internet connection if your ISP does not give you any IP or account info.

Static IP: Select it if your ISP provides you with IP info. Enter IP address, subnet mask, Primary DNS and secondary DNS info, etc provided by your ISP in corresponding fields.

PPPoE: Select it if your ISP is using a PPPoE connection and enter PPPoE user name and password info provided by your ISP.

MTU: Maximum Transmission Unit. The default value varies according to different Internet connection types. DO NOT change it unless necessary.

Configuration Procedures:

- ① **Internet connection Type:** Select PPPoE.
- ② **ISP Username:** Enter the ISP login name.
- ③ **ISP Password:** Enter the ISP login password.
- ④ Click **Save** to save your settings.



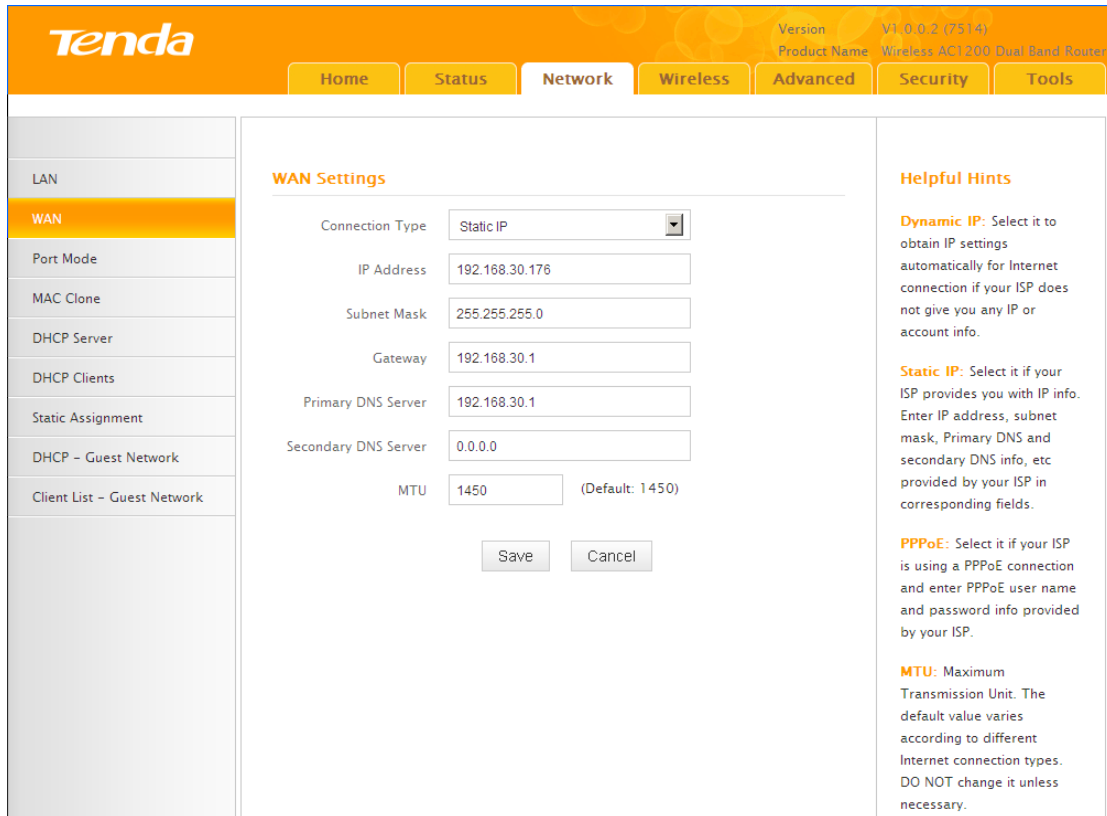
Knowledge Center

1. **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](#).

2. **Service Name:** This is the descriptive name of the current connection. Only enter it if your ISP provides it.

3. Server Name: This is the descriptive name of the server. Only enter it if your ISP provides it.

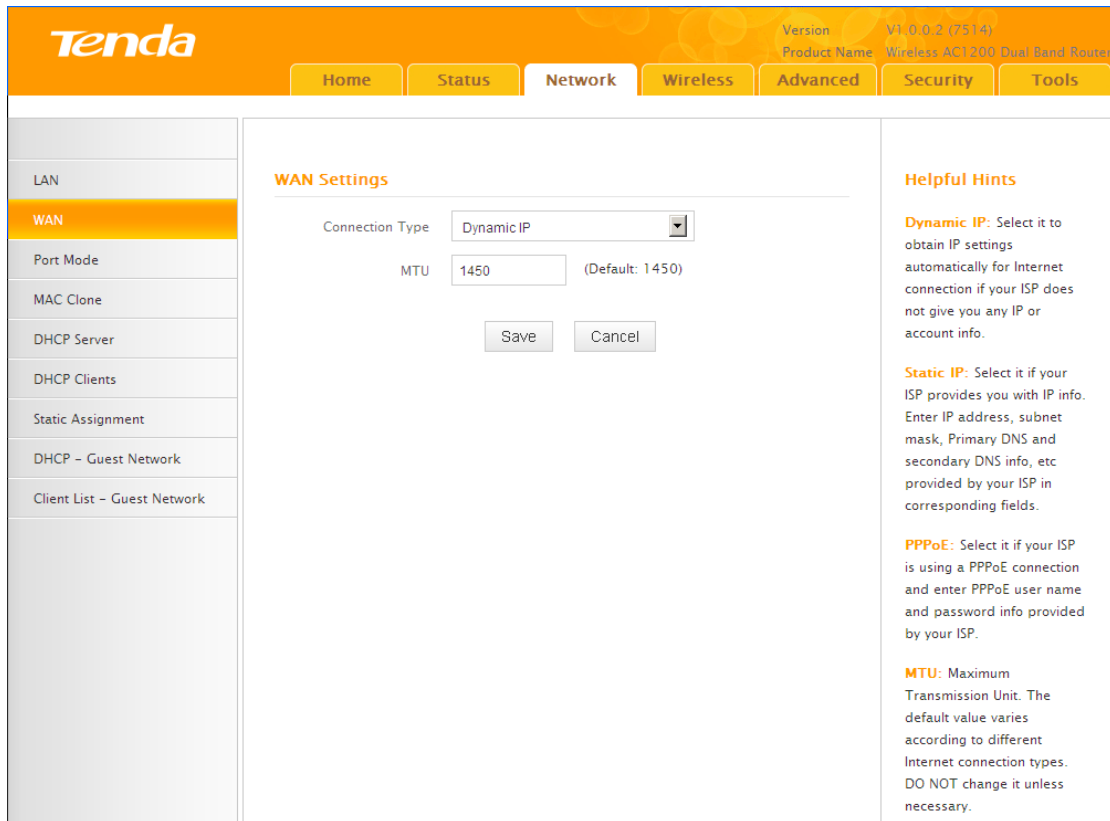
Static IP



Configuration Procedures:

- ① **Internet connection Type:** Select **Static IP**.
- ② **IP Address/Subnet Mask/WAN subnet mask/Gateway/Primary DNS Server/Secondary DNS Server:** Enter the ISP information you gathered in *Getting Prepared*.
- ③ Click **Save** to save your settings.

Dynamic IP (DHCP)



Configuration Procedures:

- ① **Internet connection Type:** Select **Dynamic IP** (DHCP).
- ② Click **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 for Tenda routers 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 the

technical support of either your ISP or Tenda 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.

MTU	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.



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, or FTP or POP servers.

2.3 Port Mode

Click **Network** -> **Port Mode** to enter the WAN port mode screen. Here you can configure the router's WAN speed and duplex mode.

The screenshot shows the Tenda router's web interface. At the top, the Tenda logo is on the left, and the version (V1.0.0.2 (7514)) and product name (Wireless AC1200 Dual Band Router) are on the right. Below this is a navigation bar with buttons for Home, Status, Network, Wireless, Advanced, Security, and Tools. The 'Network' button is highlighted. On the left side, there is a sidebar menu with options: LAN, WAN, Port Mode (highlighted), MAC Clone, DHCP Server, DHCP Clients, Static Assignment, DHCP - Guest Network, and Client List - Guest Network. The main content area is titled 'Port Mode' and contains a 'Mode Select' dropdown menu with 'Auto' selected. Below the dropdown are 'Save' and 'Cancel' buttons. On the right side of the main content area, there is a 'Helpful Hints' section with the following text: 'Default is auto, you can choose different mode.' and a 'Note: The router's WAN port must be set to match the remote link partner's working mode (speed/duplex), if not, it may be unable to send and receive data. Select Auto to let your router to negotiate an optimum working mode with the remote link partner if you are not clear.'

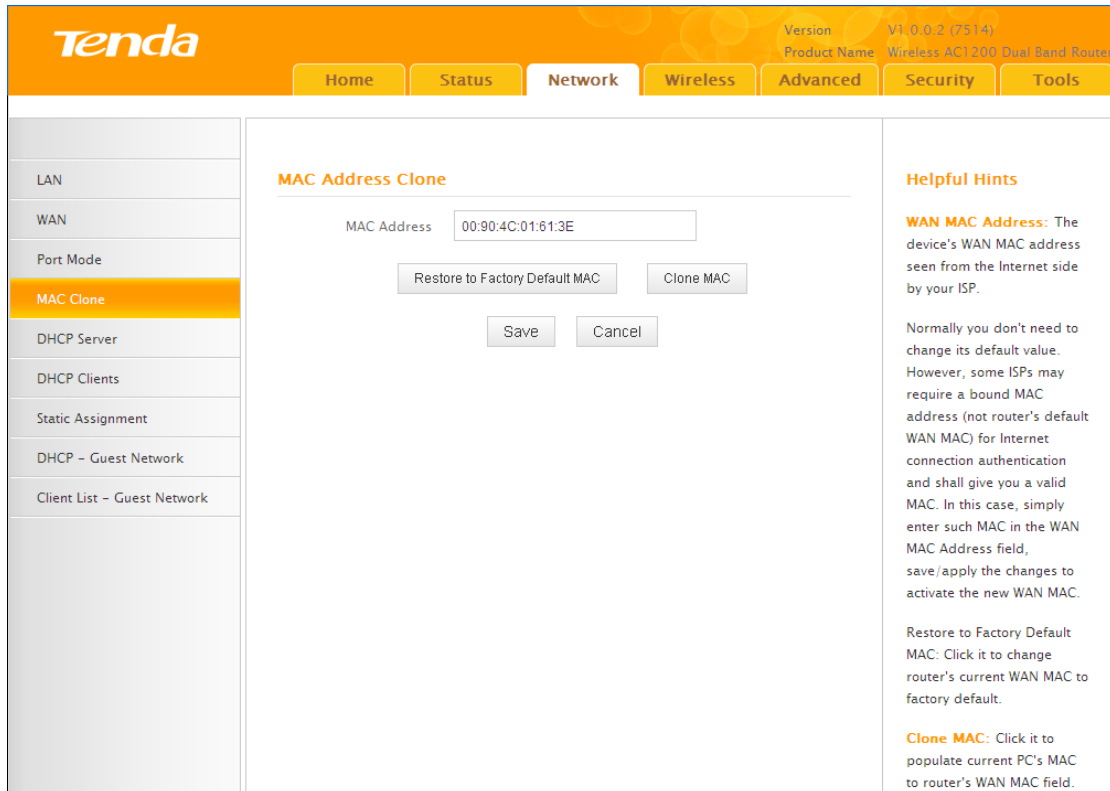


Tip

1. The best port mode is often just the factory default of "Auto".
2. In some situations, you might need to change the port mode. For example, if the cable connected to your router's WAN port is too long, you may need to use 10M full-duplex or 10M half-duplex for better performance.

2.4 MAC Clone

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 router. Click **Network -> MAC Clone** to enter the MAC Clone screen.



Knowledge Center -----

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

----- **To restore default MAC address:**

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

To clone the MAC address of the computer that you are now using to the router:

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

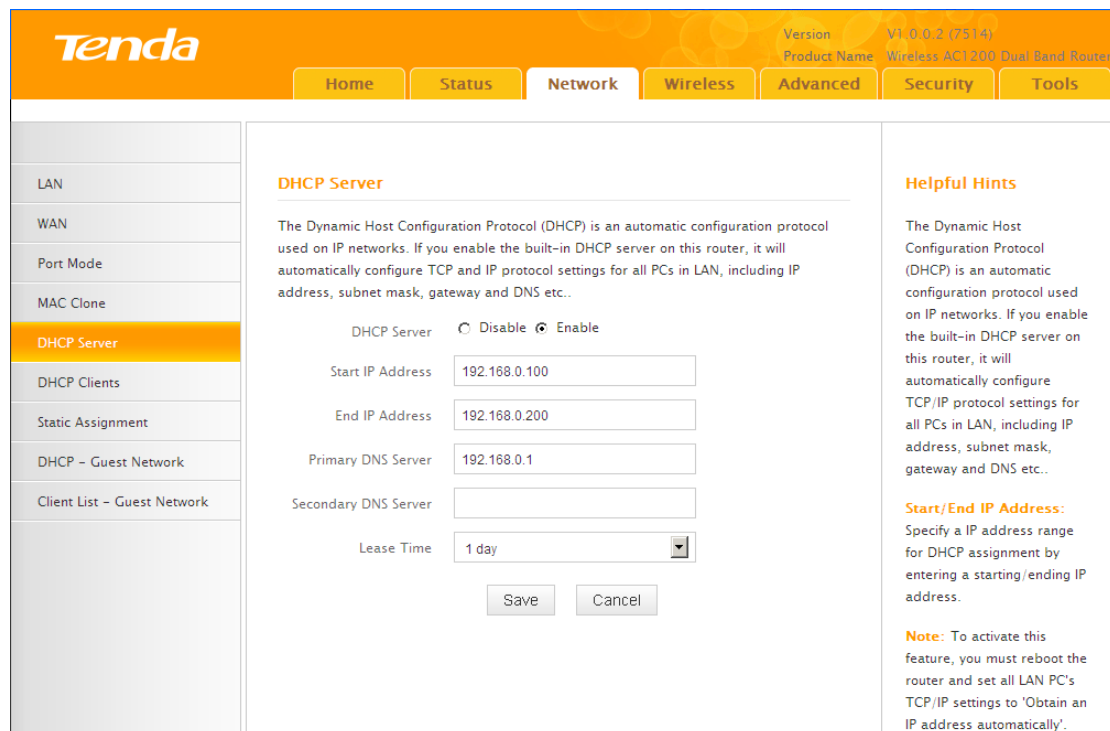
To manually enter the MAC address allowed by your ISP:

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

2.5. DHCP

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 Internet.

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



Configuration Procedures:

- ① **DHCP Server:** Select whether to enable or disable the DHCP server feature.
- ② **Start IP/End IP:** You can specify the starting and ending address of the IP address pool here. These addresses should be part of the same IP address subnet as the router'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.

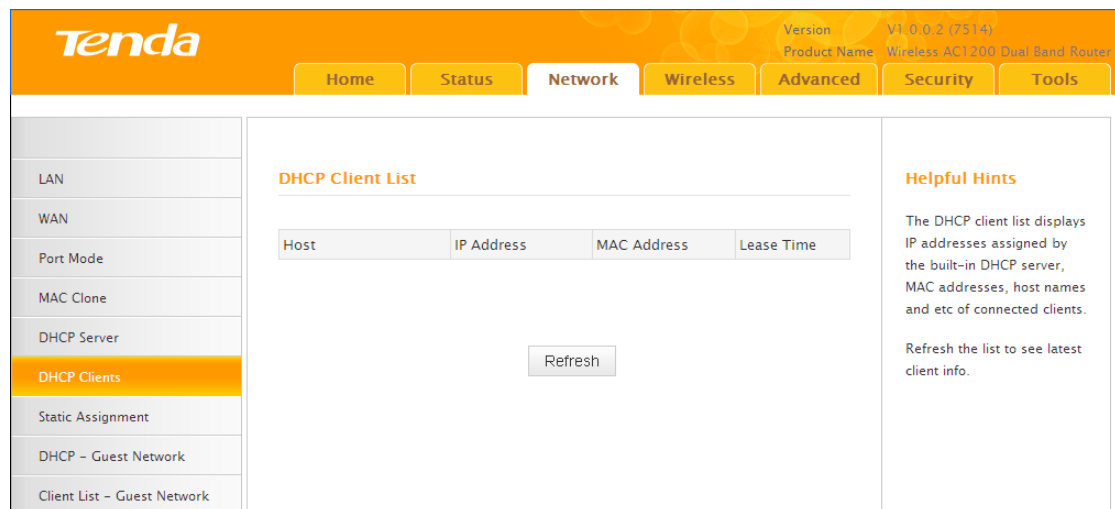


Tip -----

- 1. By default, the router functions as a DHCP server. Do not disable the DHCP server feature unless you want to manually configure the TCP/IP settings for all PCs on your LAN.
- 2. Lease time will be renewed automatically upon expiry. No additional configurations are needed.
- 3. If you are not an advanced user, the default DHCP server settings are recommended.

2.6 DHCP Client List

Click **Network -> DHCP Clients** to enter the **DHCP Clients** screen. Here you can view the host name, IP address, MAC address, and lease time information.



Tip -----

You can know whether there are unauthorized accesses by viewing the client list.

2.7 Static Assignment

Click **Network -> Static Assignment**. Here you can specify a reserved IP address for a PC in the 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:37:3B always receive the same IP address of 192.168.0.123.

Configuration Procedures:

- ① Enter the IP address: 192.168.0.123.
- ② Enter the MAC address of 44:37:E6:4F:37:3B.
- ③ Click **Add**.

The screenshot displays the Tenda router's web interface for configuring static IP assignments. The top navigation bar includes 'Home', 'Status', 'Network', 'Wireless', 'Advanced', 'Security', and 'Tools'. The 'Network' section is active, and the 'Static Assignment' option is selected in the left sidebar. The main content area shows the 'Static Assignment' configuration form with the following details:

- IP Address:** 192.168.0.123
- MAC Address:** 44 : 37 : E6 : 4F : 37 : 3B
- Buttons:** Add, Save, Cancel

Helpful Hints:

If you would like some devices on your network to always receive fixed IP addresses, you can manually add a static DHCP assignment entry for each such device. And then whenever each such host at a registered MAC address requests a IP address from the DHCP server, it will always be assigned with the same IP address (the one you specified on this section)

IP Address: Enter an IP address you want to assign to a specific computer or device.

MAC Address: Enter the MAC address of the computer or device to which you want DHCP server to assign the same IP address.

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

The screenshot shows the Tenda web interface for a Wireless ACT200 Dual Band Router. The 'Network' tab is selected, and the 'Static Assignment' sub-tab is active. The interface includes a sidebar with navigation options: LAN, WAN, Port Mode, MAC Clone, DHCP Server, DHCP Clients, Static Assignment (highlighted), DHCP - Guest Network, and Client List - Guest Network. The main content area is titled 'Static Assignment' and contains the following elements:

- Input fields for 'IP Address' and 'MAC Address' (formatted as XX:XX:XX:XX:XX:XX) with an 'Add' button.
- A table with the following data:

ID	IP Address	MAC Address	Action
1	192.168.0.123	44:37:E6:4F:37:3B	Edit Delete
- 'Save' and 'Cancel' buttons.
- 'Helpful Hints' section:

If you would like some devices on your network to always receive fixed IP addresses, you can manually add a static DHCP assignment entry for each such device. And then whenever each such host at a registered MAC address requests a IP address from the DHCP server, it will always be assigned with the same IP address (the one you specified on this section)

IP Address: Enter an IP address you want to assign to a specific computer or device.

MAC Address: Enter the MAC address of the computer or device to which you want DHCP server to assign the same IP address.



Tip

1. 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 Internet.
2. For PCs that has already obtained IP addresses, you may need to perform the Repair action to activate the configured static IP addresses.

2.8 DHCP Server - Guest Network

Click **Network -> DHCP - Guest Network** to enter the guest network DHCP server screen. If you enable the built-in DHCP server for Guest Network on this device, it will automatically configure TCP/IP protocol settings for all DHCP-Client-enabled PCs on the Guest Network, including IP address, subnet mask, gateway and DNS etc.

Configuration Procedures:

- ① Click **Enable**.
- ② **Start IP Address:** Specify the start of the range for the pool of IP addresses in the same subnet as the device.

End IP Address: Specify the end of the range for the pool of IP addresses in the same subnet as the device.

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

The screenshot shows the Tenda router's web interface. The top navigation bar includes 'Home', 'Status', 'Network', 'Wireless', 'Advanced', 'Security', and 'Tools'. The 'Network' menu is selected. On the left sidebar, 'DHCP - Guest Network' is highlighted. The main content area is titled 'DHCP Server - Guest Network'. It contains a description of DHCP, a 'DHCP Server' toggle set to 'Disable', and input fields for 'Start IP Address' (192.168.2.100), 'End IP Address' (192.168.2.200), 'Primary DNS Server' (192.168.2.1), and 'Lease Time' (1 day). There are 'Save' and 'Cancel' buttons at the bottom. A 'Helpful Hints' section on the right explains the DHCP process and provides instructions for the 'Start IP Address' and 'End IP Address' fields, along with a note about applying settings to all PCs.

Click **Network -> Client List - Guest Network** to enter the guest network DHCP client list screen. This section displays a guest network DHCP dynamic client list, which includes host name, IP address, MAC address and lease time info. **Refresh:** Click to update the page.

The screenshot shows the 'DHCP Client List - Guest Network' page. The top navigation bar is the same as in the previous screenshot. The left sidebar now has 'Client List - Guest Network' highlighted. The main content area is titled 'DHCP Client List - Guest Network' and includes a 'Refresh' button. A table header is visible with columns for 'Host', 'IP Address', 'MAC Address', and 'Lease Time'. The 'Helpful Hints' section on the right explains that this section displays info of currently connected Guest Network clients and instructs the user to click the 'Refresh' button to view the latest info.