

Tenda

User Guide



A8/A31

Wireless N150/ N300 Portable Router

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Preface

Thank you for choosing Tenda! Please read this user guide before you start! This user guide instructs you to install and configure your device.

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

Icon	Description
 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
- 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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I Product Overview

1 Package Content

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



Wireless Router

Install Guide

Resource CD

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

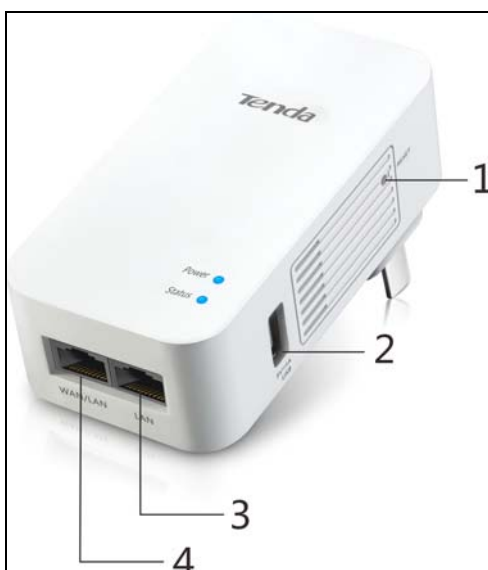
2 Getting to know your router

LED



LED	Status	Description
Power	Solid	The device is functioning correctly.
	Off	Power is not supplied to the router. Make sure the device is properly connected to power outlet.
Status	A green and blinking light	Device is currently operating in hotel mode and WAN port is NOT properly connected
	A green and solid light	Device is currently operating in hotel mode and WAN port is connected
	A blinking blue light	Device is currently operating in residence mode and WAN port is NOT properly connected
	A solid blue light	Device is currently operating in residence mode and WAN port is connected
	A light blue and blinking light	Device is currently operating in Universal Repeater Mode and is not connected to a wireless hotspot
	A light blue and solid light	Device is currently operating in Universal Repeater Mode and is connected to a wireless hotspot.

Button & Interface



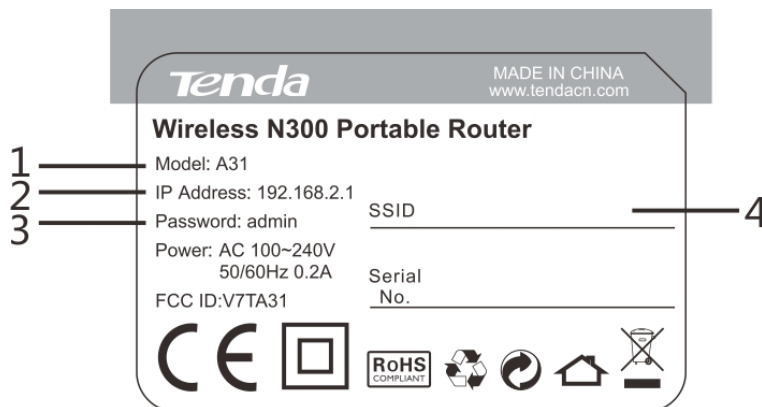
1→RST: Pressing it for over 10seconds restores the device to factory default settings. For device's factory default settings, see Appendix 3 Factory Default Settings.

2→USB: The USB port that charges terminal devices such as a smart phone or an iPad over a USB cable.

3→LAN: The local (LAN) 100M Ethernet ports are for cabling the device to local computers, switches, etc.

4→WAN/LAN: 100M LAN/WAN interchangeable interface, which functions as: a) a WAN interface for connecting to an Internet-enabled DSL modem or other uplink network device when operating in Residence Mode or Hotel Mode; or b) a LAN interface for connecting to a PC or an Ethernet switch when operating in Universal Repeater Mode.

Label



1 → Product Model

2 → 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.

3 → Default login password

4 → Default wireless network name (SSID).

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
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 Information	<p>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.</p> <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 Install



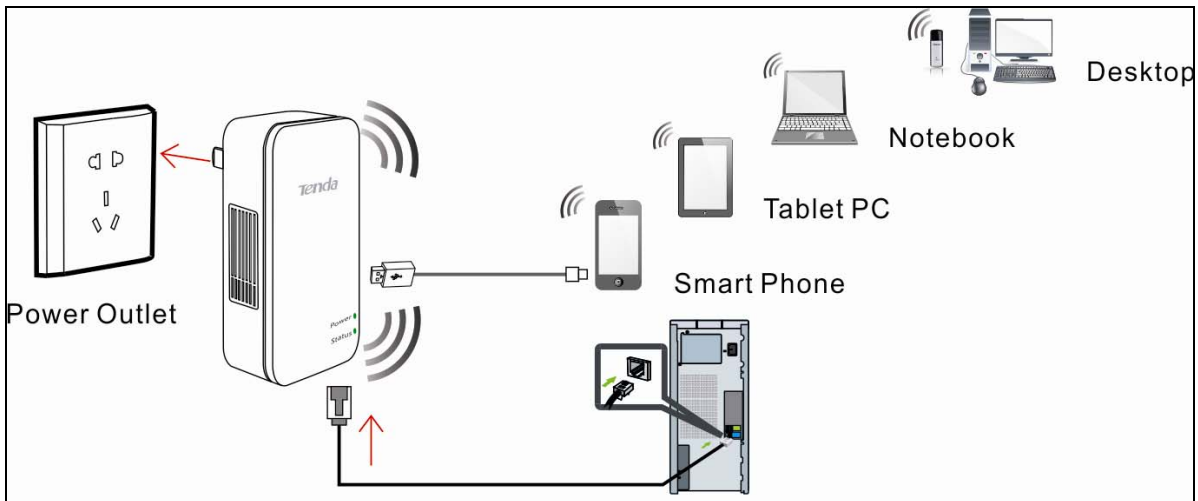
Note-----

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

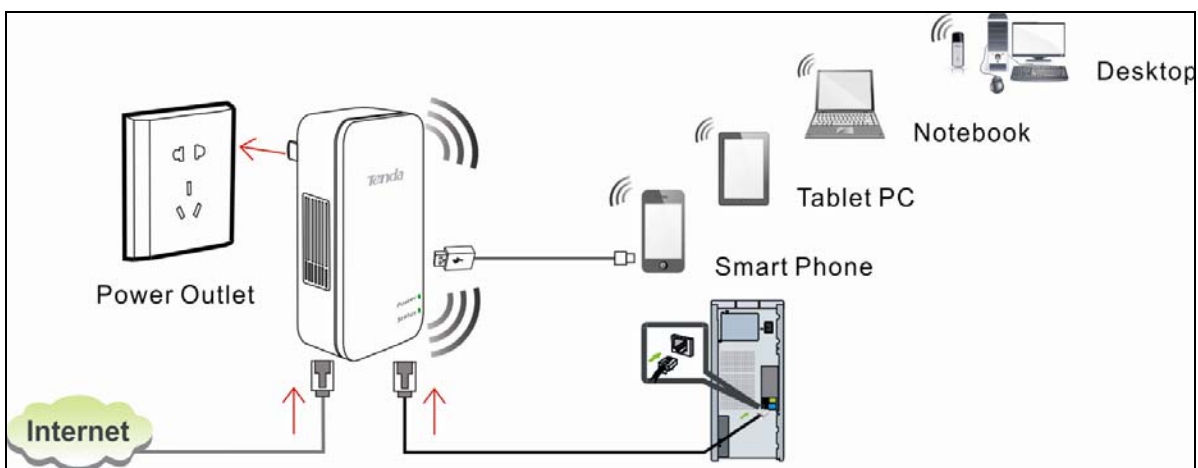
- ① Plug the device into a power outlet (For better wireless performance, place it near the center of the area where your computers, smart phones and other devices operate, and preferably within line of sight to your wireless devices.)



② Connect the NIC port on your PC to one LAN port on the router using an Ethernet cable or connect to the router wirelessly.



③ Connect the Ethernet cable from the incoming Internet side to the WAN port on the router.



3 Connect to Router

If you use a wired NIC, refer to **3.1 Configure PC TCP/IP Settings** and then **4 Auto-switch Mode**.

3.1 Configure PC TCP/IP Settings

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.

**Tip**-----

If you are unsure, see **Appendix1 Configure PC TCP/IP Settings**.

3.2 Join Your Wireless Network

**Tip**-----

1. The device's SSID is "Tenda_xxxxx" by default (You can find it on the attached label).
 2. If you secure your wireless network, you must use the security key to join it.
 3. To join your wireless network, the PC you use must have an installed wireless network adapter. If not, install one.
-
-

Windows 7

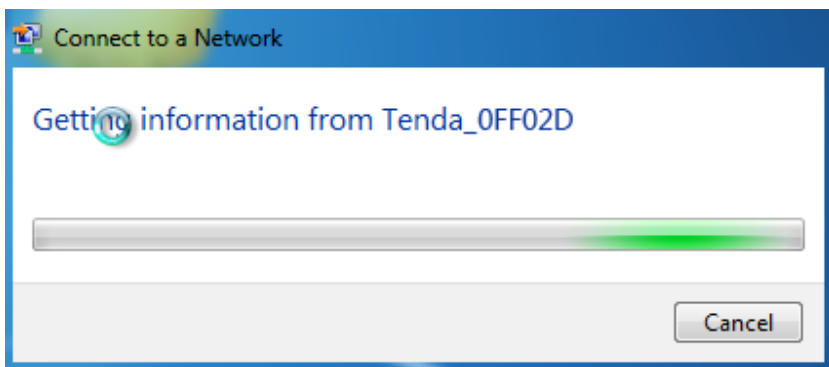
- ① Click the icon  on the notification area on the bottom right corner.



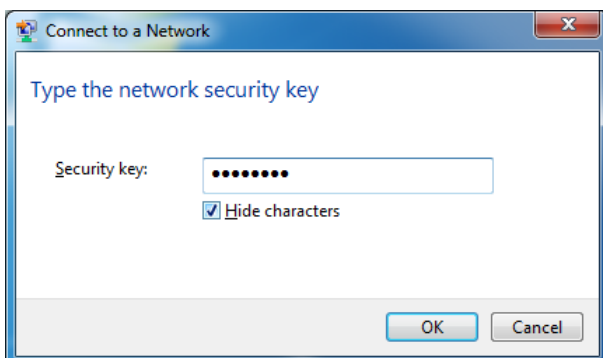
- ② Select the wireless network you wish to connect and click **Connect**.



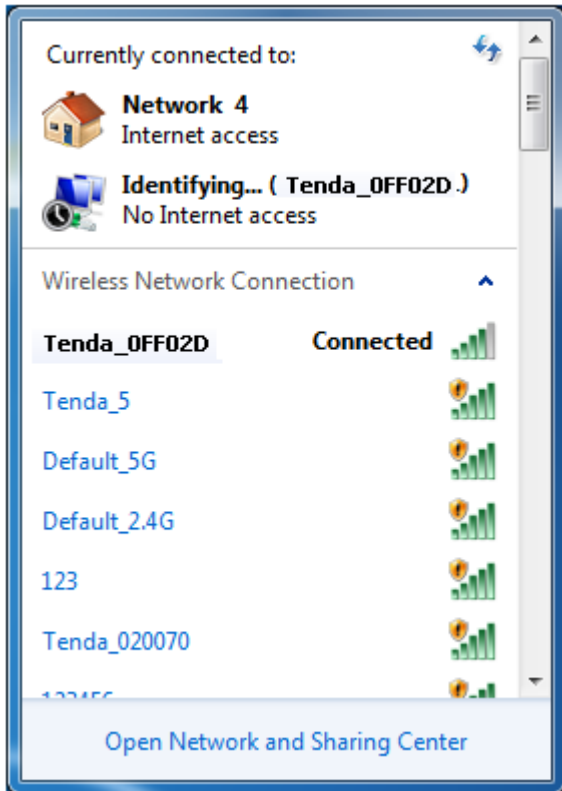
- ③ If you see the screen below, you are connecting to the wireless network.



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



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

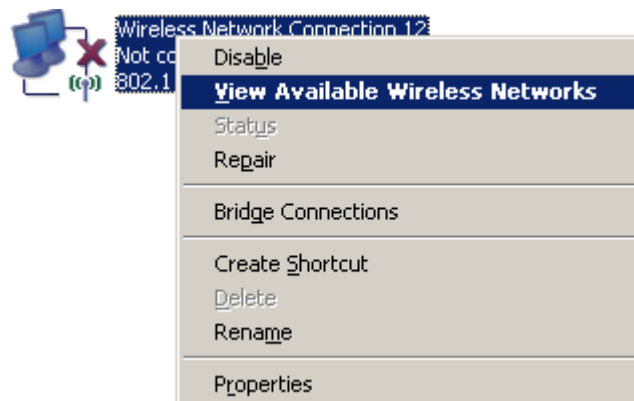


Windows XP

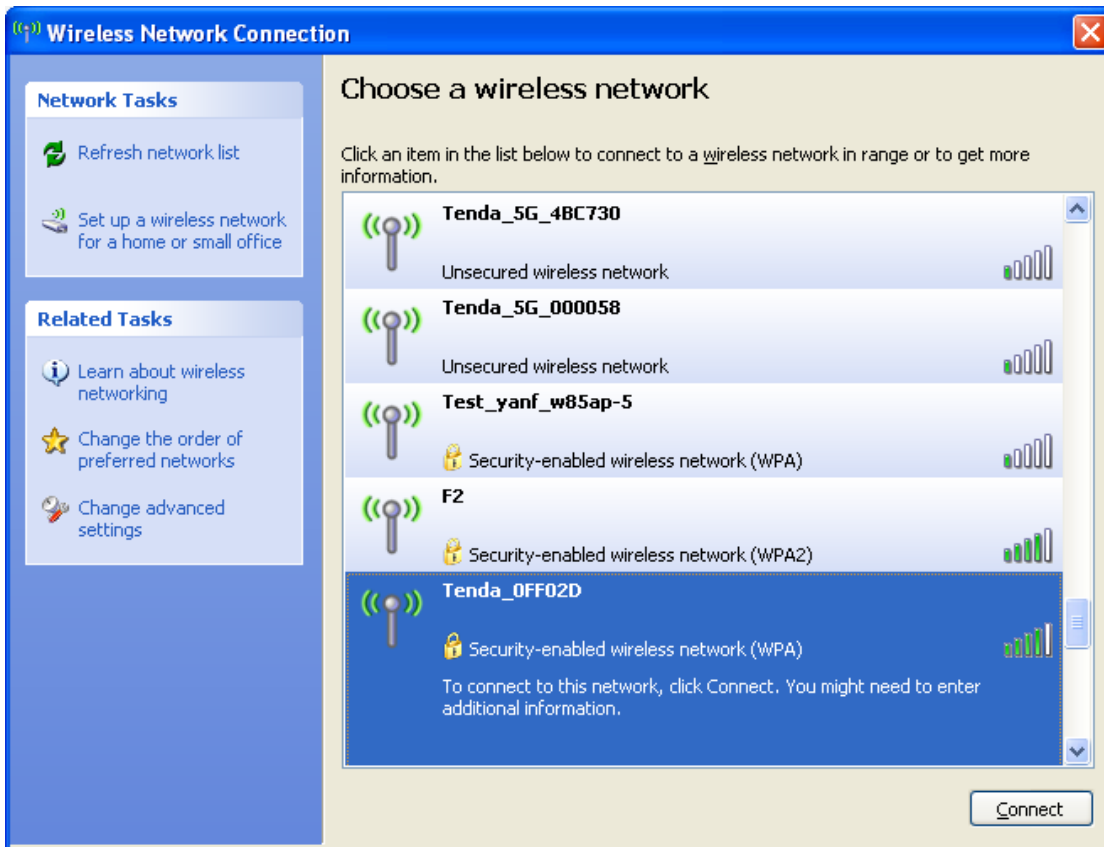
- ① Right click **My Network Places** from your PC's desktop and select **Properties**.



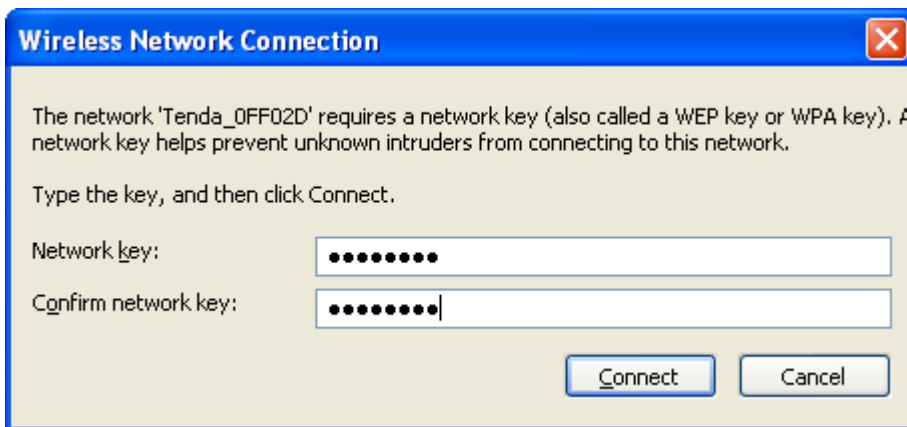
- ② Right click **Wireless Network Connection** and select **View Available Wireless Networks**.



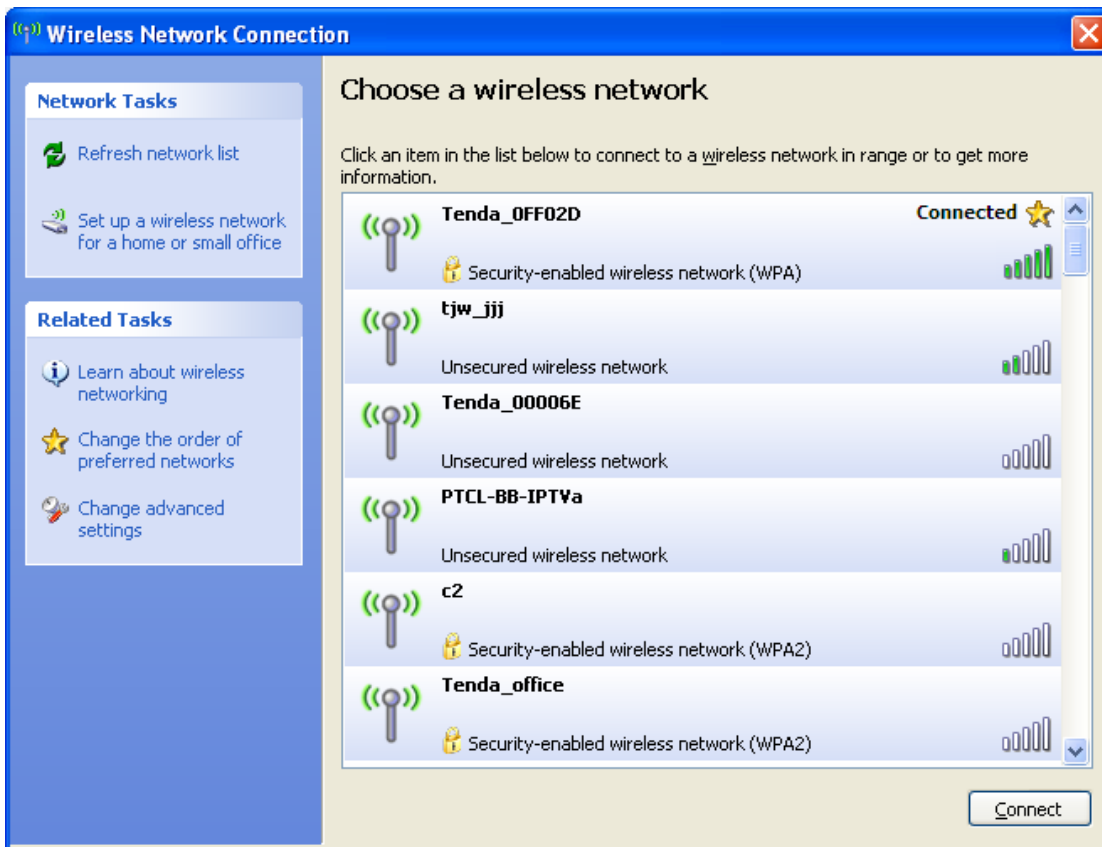
- Double click the wireless network you wish to connect.



- 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.



4 Auto-detecting Internet Connection Type

By default, this device automatically detects and switches between DHCP and PPPoE according to actual environment. To test Internet connectivity:

- ① Launch a web browser and enter the device's IP address. Input the default password (admin) and click **OK** on the login window.

The screenshot shows a "Login" window. It has a header "Login" in orange. Below the header, it says "Default: admin". There is a "Password:" label followed by a text input field containing five dots. At the bottom, there are two buttons: "OK" and "Cancel".

② The following screen appears if DHCP Internet connection type is detected. Simply specify a wireless security key, click **Save** and then close the browser.

Current Internet Connection Type: Hotel Mode (DHCP)

Encrypt it now?

Security Key

Ask me later
 Never prompt me again

The following screen appears if PPPoE Internet connection type is detected. Enter the ISP login name and password, specify a wireless security key, and then click **Save**.

Current Internet Connection Type: Residence Mode

Please enter your ISP User Name and ISP Password!

ISP User Name

ISP Password

Encrypt it now?

Security Key

Ask me later
 Never prompt me again

- ③ See whether you can access Internet (See [3.2 Join Your Wireless Network](#), if you use a wireless NIC), if not, refer to [5 Internet Setup](#).

**Tip**

If the Auto-switch feature is disabled, the device will automatically detect and switch to the right Internet connection type in case of an Internet connection failure.

5 Internet Setup

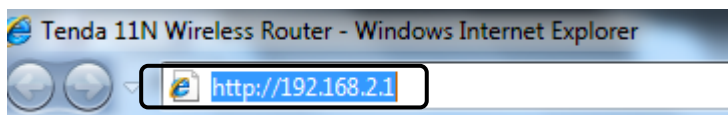
Read this section only when you fail to access Internet after you tried the above mentioned steps or you can access Internet and want to change the SSID (wireless network name) and security key of this device.

5.1 Web Login

- ① Launch a web browser, say, IE.



- ② In the address bar, input 192.168.2.1, and press "Enter".



- ③ Enter the login password and click **OK**. The default password is admin.

Login

Default: admin

Password:

- ④ Click **Home** on the appearing screen.

Current Internet Connection Type: Hotel Mode (DHCP)

Encrypt it now?

Security Key

Ask me later
 Never prompt me again

- ⑤ The Setup Wizard screen appears.

Tenda
Wizard Advanced Wireless QoS Applications Security Tools

Wizard

Setup Wizard

- Hotel Mode: Dynamic IP
- Residence Mode: PPPoE
- Universal Repeater Mode: Client+ap
- Disable Auto-switch Mode

Help

This setup wizard guides you through basic settings for Internet connection. For more or further settings, go to 'Advanced'.



Tip-----

1. If you access Internet by connecting to the Ethernet cable from the incoming Internet side, see [Static IP](#).
2. If you don't want to use the Auto-switch feature, check the **Disable Auto-switch mode** box.
3. You can also enable the Auto-switch mode feature after you manually set up Internet and your wireless network so that your router can fit different environment, eliminating manual intervention.

5.2 Manual Internet Setup& Wireless Security Setup

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

- A.** If your ISP provides you with an Ethernet cable from the incoming Internet side but no ISP login account or IP information, your ISP uses a DHCP connection. See [DHCP](#).
- B.** If your ISP provides you with an Ethernet cable from the incoming Internet side and ISP login account, your ISP uses a PPPoE connection. See [PPPoE](#).

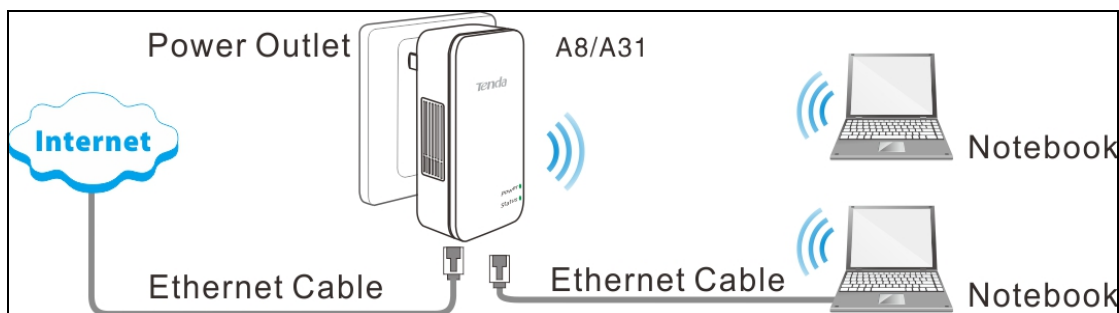
C. If your ISP provides you with an Ethernet cable from the incoming Internet side IP information (IP address, subnet mask, gateway IP address, DNS server address), your ISP uses a static IP connection. See [Static IP](#).

D. If you acquire Internet access from a remote AP on an existing network see [Universal Repeater Mode](#).

Hotel Mode (DHCP)

If your ISP does not give you any IP or user name/password info (your ISP uses a DHCP connection), simply connect the network cable from the incoming Internet side to the router and the router to your PC or simply search for and connect to your wireless router from your notebook. No configuration needed, simply plug and play.

For typical network topology, see below:

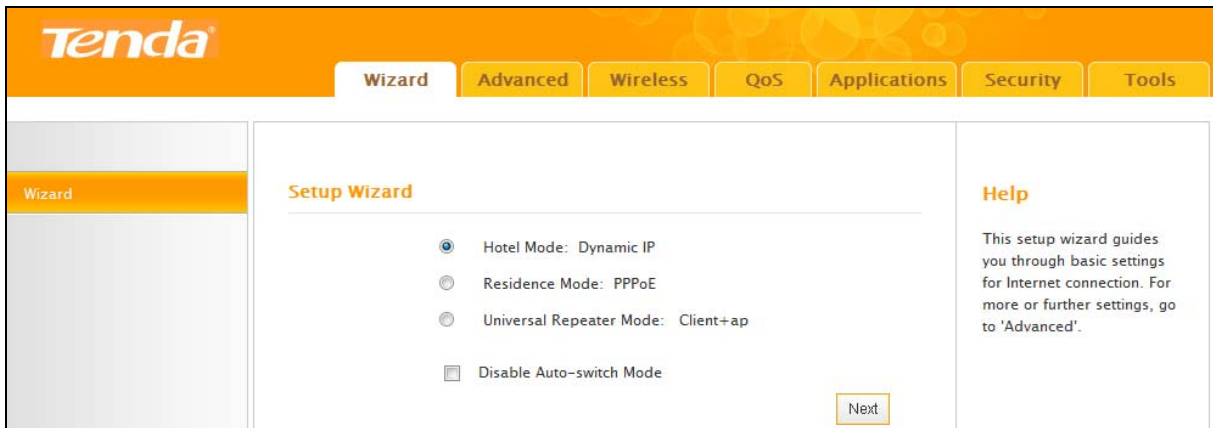


Tip

1. If you already have a wired router, you can use this wireless router (operating in this mode) to convert the wired network into a wireless network. Simply connect the WAN port on this wireless router to a LAN port on the wired router and a wireless access point will be created instantly.
2. 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. For more information, see [Appendix 1 Configure PC TCP/IP Settings](#).

Configuration Procedures:

- ① Select **Hotel Mode: Dynamic IP** and click **Next**.



- ② Configure your wireless network: SSID, channel, security settings and then click **Next**.

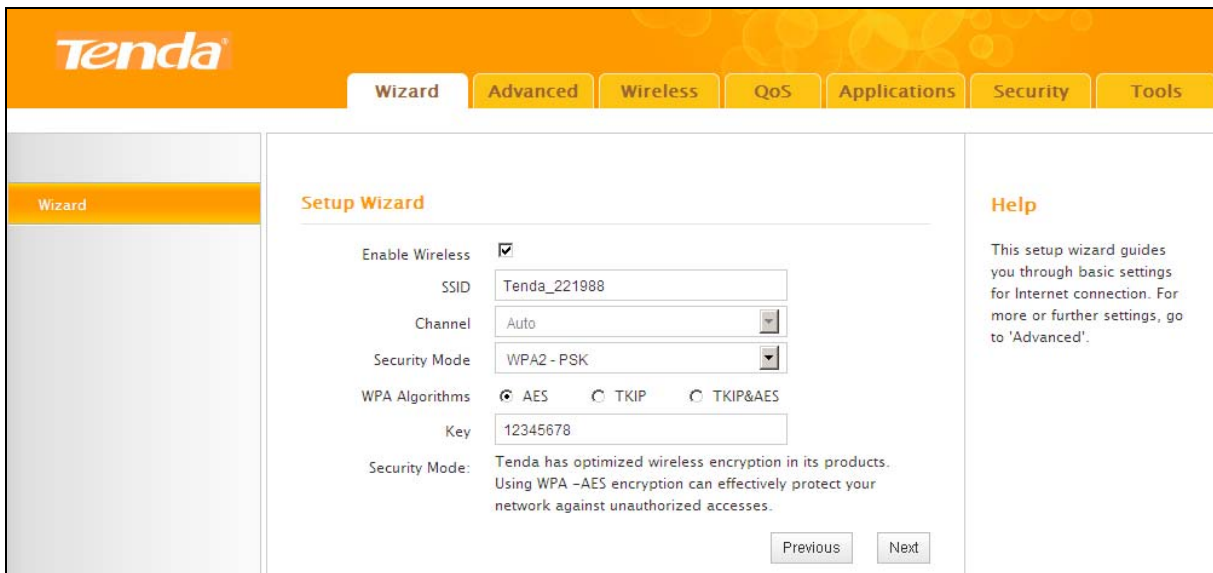
SSID: Tenda_221988

Channel: 6

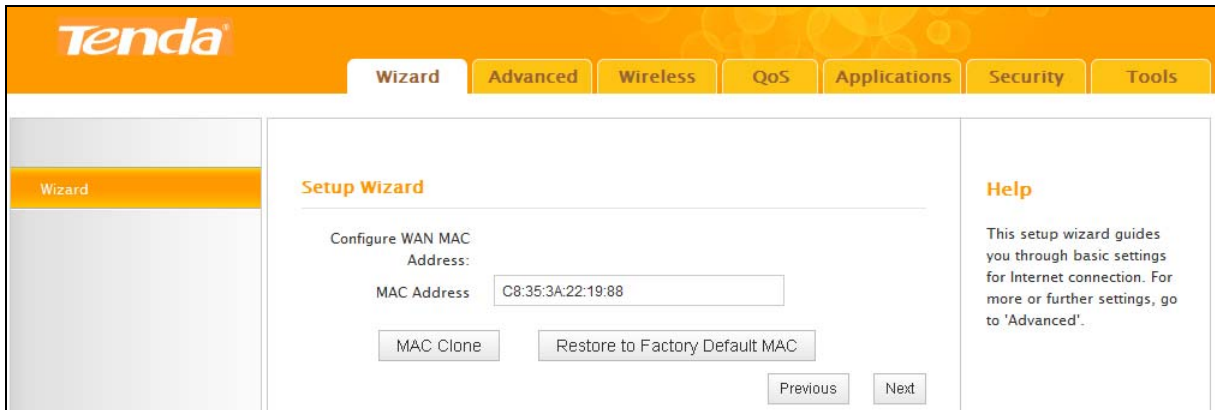
Security Mode: WPA-PSK

Cipher Type: AES

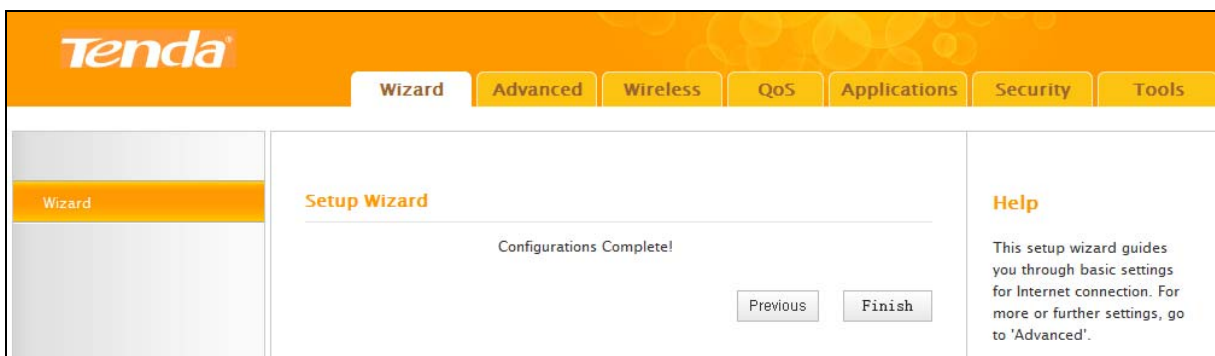
Security Key: 12345678



③ MAC Clone Setup: Enter the computer or broadband modem authorized by your ISP. Then click **Next**.



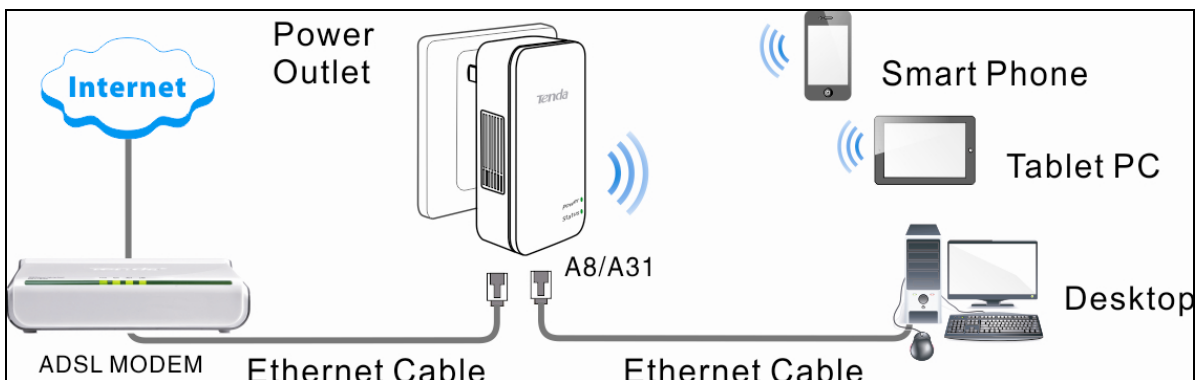
④ Click **Finish** and wait for the device to restart automatically. After reboot, reconnect to this device wirelessly or using an Ethernet cable and you will be able to access Internet.



Residence Mode

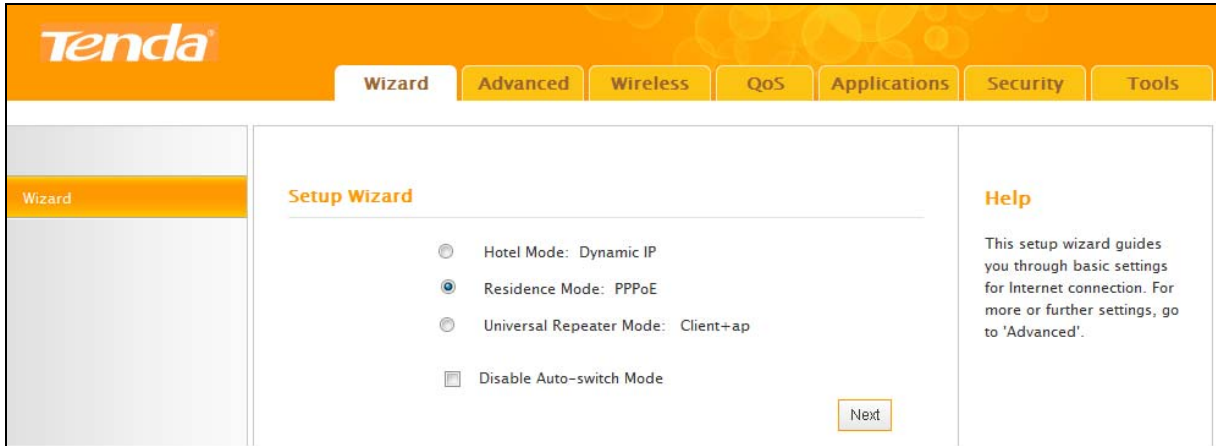
If your ISP uses a PPPoE Internet connection (Router operates in Residence Mode), you will need ISP login name and password.

For common application scenario, see below:



Configuration Procedures:

- ① Select **Residence Mode: PPPoE** and click **Next**.



- ② Configure your wireless network: SSID, channel, security settings and then click **Next**.

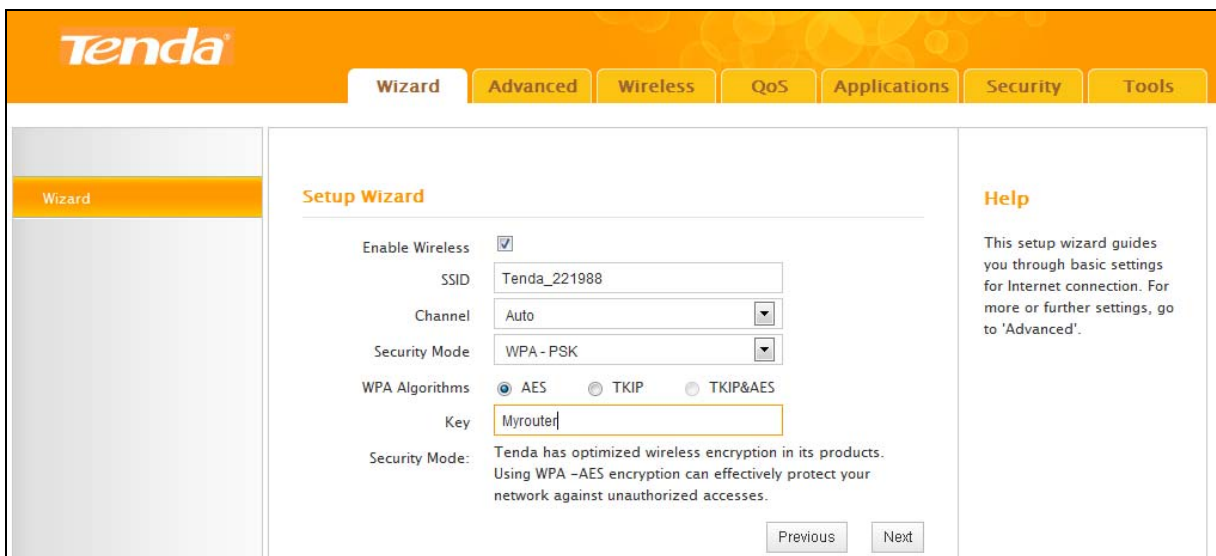
SSID : Tenda_221988

Channel: 6

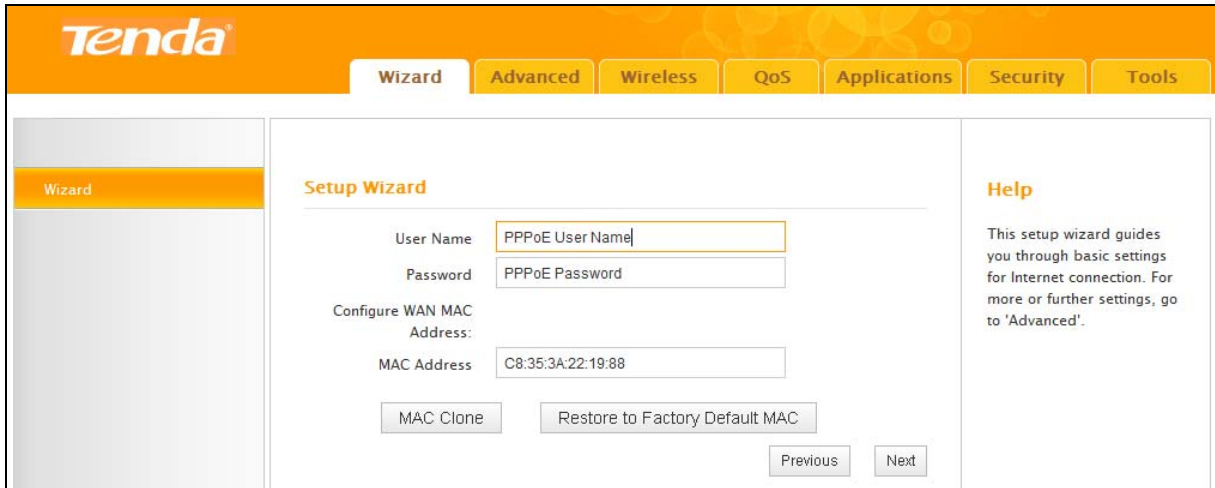
Security Mode: WPA-PSK

Cipher Type: AES

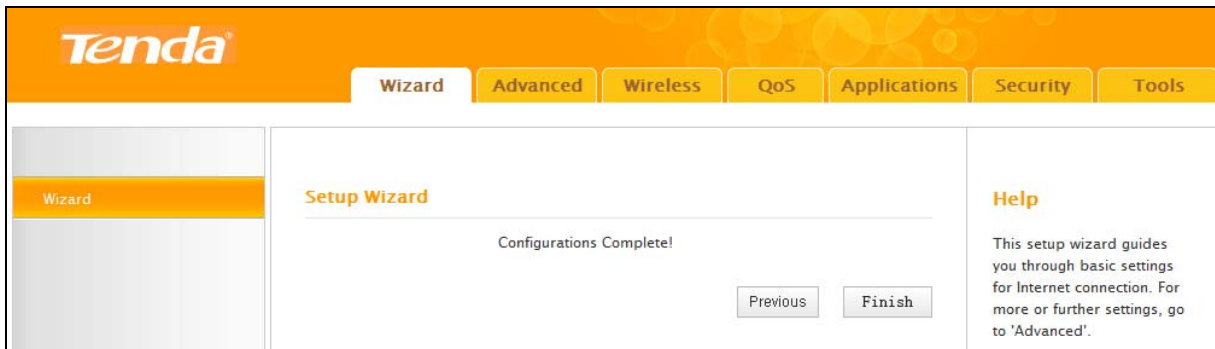
Security Key: Myrouter



③ Internet Setup & MAC Clone: Enter your ISP login user name and password (case sensitive) and the MAC address of the computer or broadband modem authorized by your ISP. Then click **Next**.



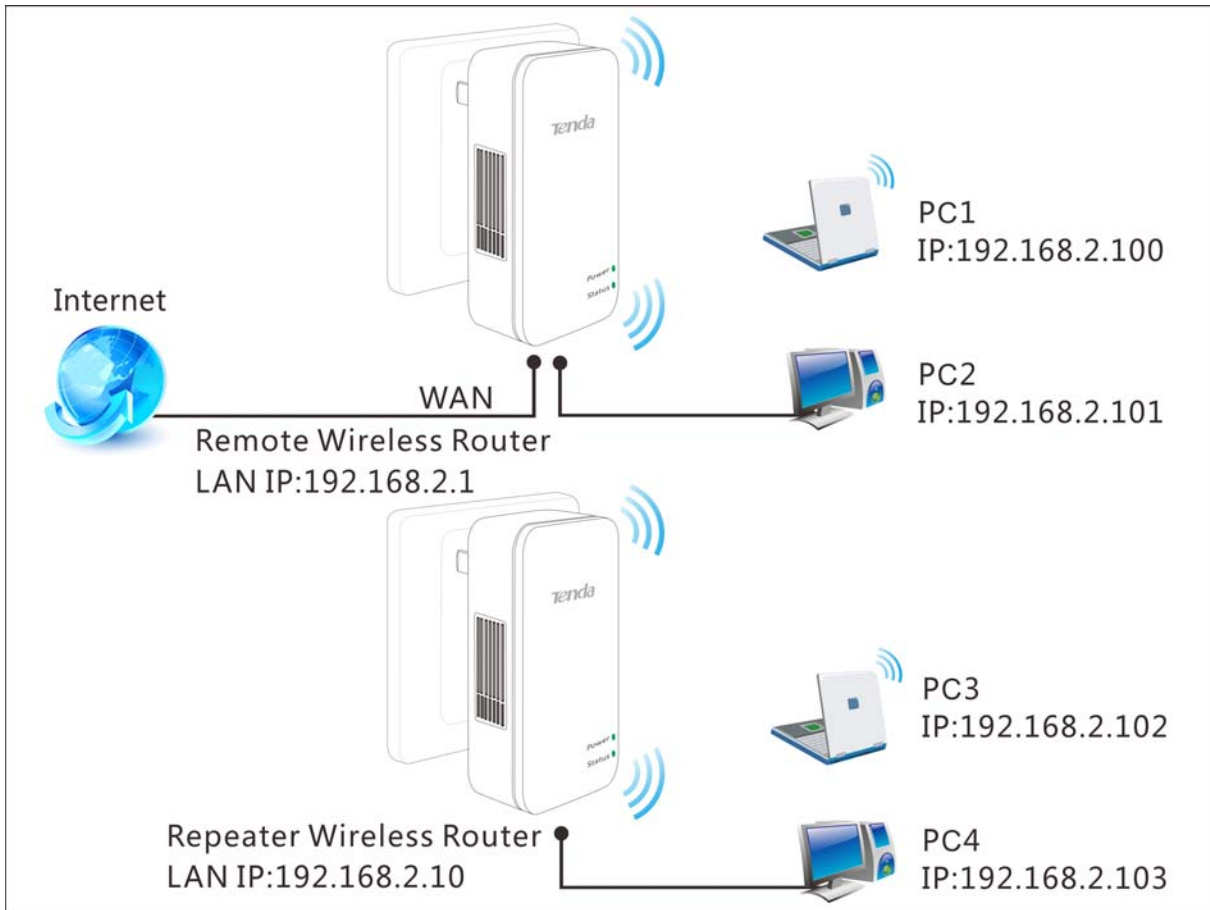
④ Click **Finish** and wait for the device to restart automatically. After reboot, reconnect to this device wirelessly or using an Ethernet cable and you will be able to access Internet.



Universal Repeater Mode

Use this universal repeater mode to extend your existing wireless network coverage.

For application scenario, see below:



In this mode, you only need to configure the following settings on the repeater wireless router:

- Configure LAN IP: Specify an IP address that is in the same subnet as yet different from the remote wireless router for this Tenda wireless router.
- Universal Repeater: Configure this router to bridge the remote wireless router for extended network coverage.



Tip

Before you start, **make sure you have the following information:**

1. Remote router's SSID, security mode, cipher type and security key.
2. Remote router's LAN IP address.
3. No Ethernet cable is connected to the Repeater wireless router's WAN port.

Universal Repeater Application Example:

Step 1 Gather information of the remote wireless router:

SSID: Tenda_888

Security Mode: WPA-PSK

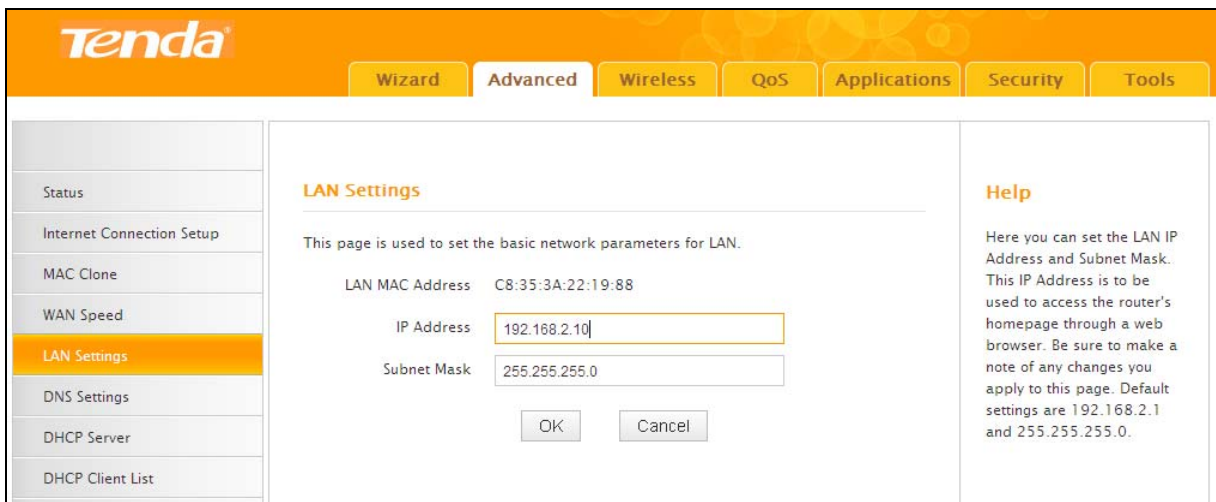
Cipher Type: AES

Security Key: 12345678

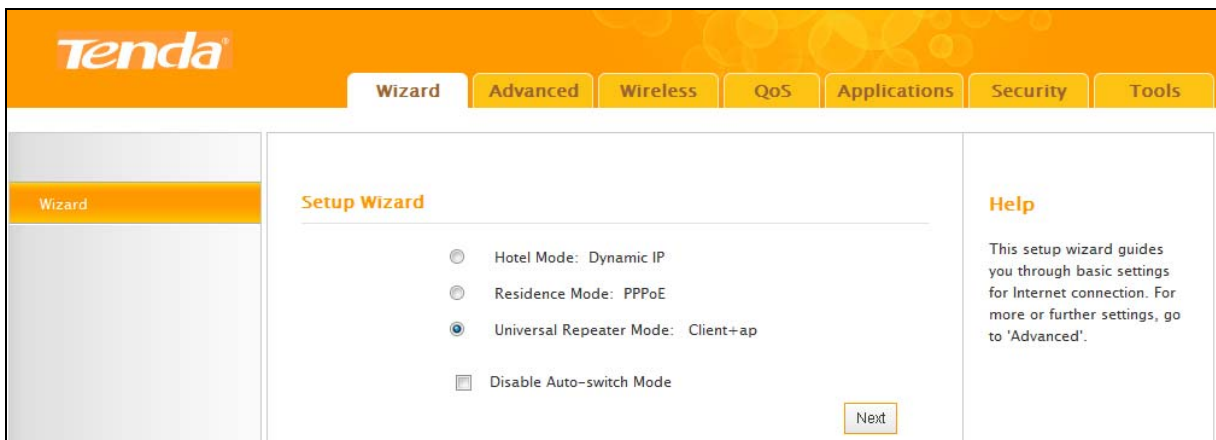
LAN IP Address: 192.168.2.1

Step 2 Configure Repeater Wireless Router:

- ① Click **Advanced** -> **LAN** Settings to configure an IP address that is in the same subnet as yet different from the remote wireless router for this Tenda wireless router.



- ② Click **OK** in the appearing screen.
- ③ Select **Universal Repeater Mode: Client +AP** and click **Next**.



- ④ Click here to search for available APs.

The screenshot shows the Tenda Setup Wizard interface. The 'Wizard' tab is selected. The 'Setup Wizard' section has the following fields:

- Remote AP's SSID: [Empty text box]
- Remote AP's Channel: [1] (dropdown menu)
- Security Mode: [Disable] (dropdown menu)

A 'Scan' button is located below these fields. Below the scan button is a table with the following columns: Selected, SSID, MAC Address, Channel, Encryption Algorithm, Signal Strength. The table is currently empty. At the bottom right, there are 'Previous' and 'Next' buttons. On the right side, there is a 'Help' section with the text: 'This setup wizard guides you through basic settings for Internet connection. For more or further settings, go to 'Advanced'.'

- ⑤ Select the wireless network you wish to connect to.

The screenshot shows the Tenda Setup Wizard interface. The 'Wizard' tab is selected. The 'Setup Wizard' section has the following fields:

- Remote AP's SSID: [Tenda_888]
- Remote AP's Channel: [5] (dropdown menu)
- Security Mode: [WPA - PSK] (dropdown menu)
- WPA Algorithms: AES TKIP TKIP&AES
- Security Key: [12345678]

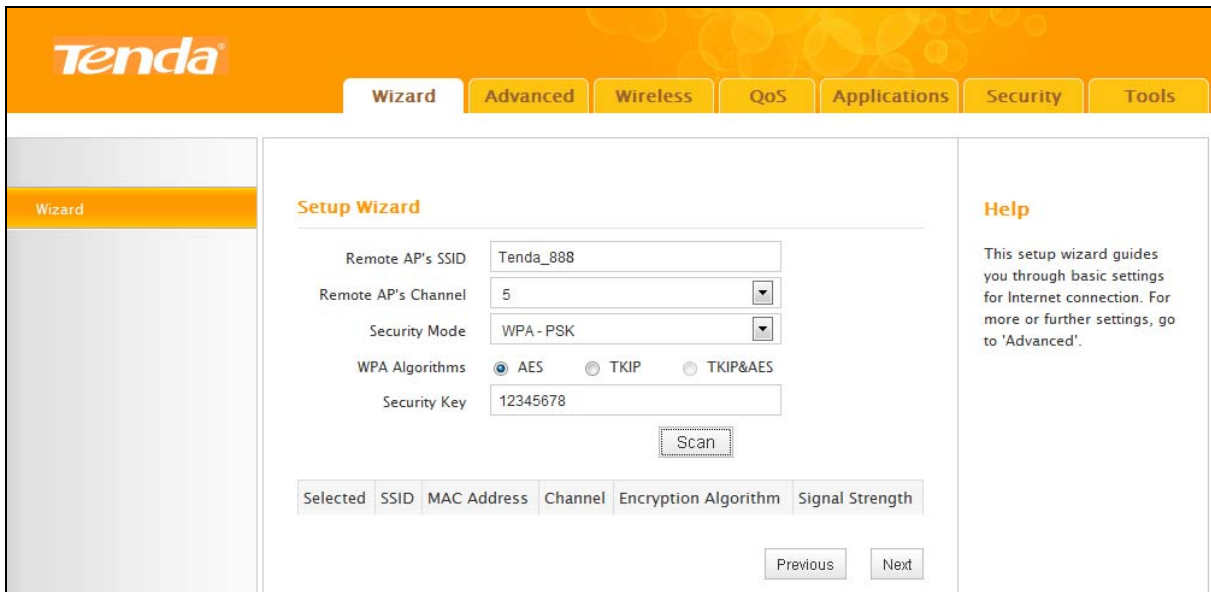
A 'Clear' button is located below these fields. Below the clear button is a table with the following columns: Selected, SSID, MAC Address, Channel, Encryption Algorithm. The table contains one row:

Selected	SSID	MAC Address	Channel	Encryption Algorithm
<input checked="" type="radio"/>	Tenda_888	00-88-88-88-CC-DD	5	WPA/AES

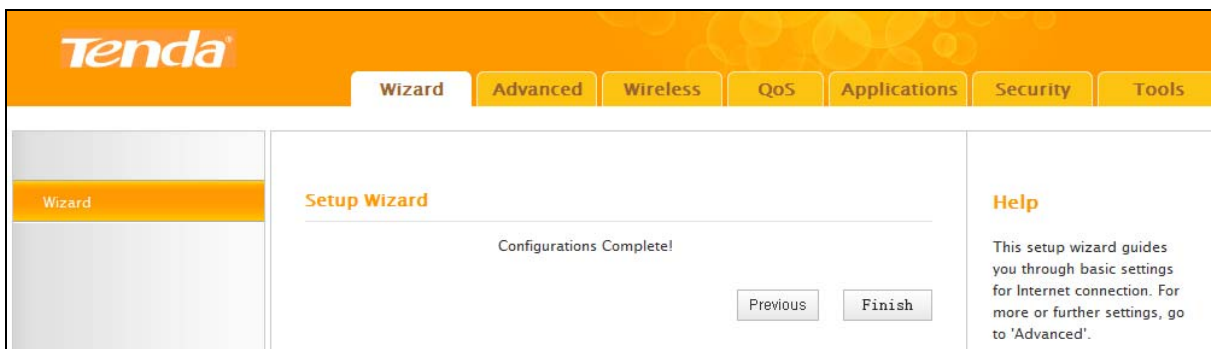
On the right side, there is a 'Help' section with the text: 'This setup wizard guides you through basic settings for Internet connection. For more or further settings, go to 'Advanced'.'

- ⑥ The information of the remote AP will be added automatically. You only need to enter the security key.

- ⑦ Click **Clear** and **Next**.



- ⑧ Click **Finish** and wait for the device to restart automatically. After reboot, reconnect to this device wirelessly or using an Ethernet cable and you will be able to access Internet.



 **Note**-----

When the Universal Repeater is configured successfully, wireless clients need to join the repeater wireless router's SSID for Internet access.

Step 3: Configure PC3 & PC4

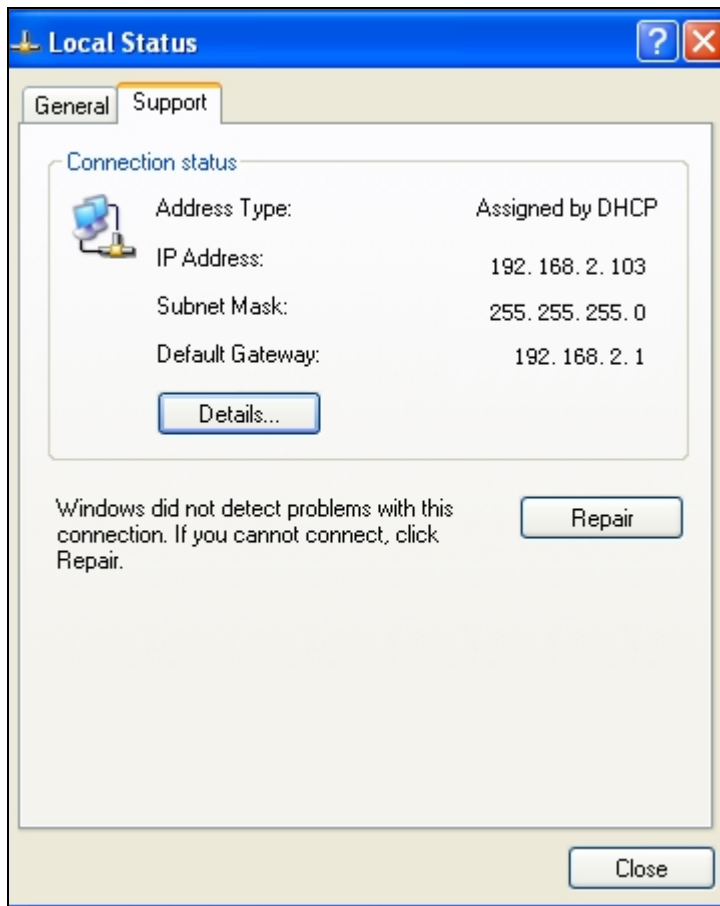
- ① If PC 3 and PC 4 are set to static or fixed IP addresses (This is uncommon), change them to "Obtain an IP address automatically" and "Obtain DNS server address automatically" from the device. For details, see [Appendix 1 Configure PC TCP/IP Settings](#).

 **Tip**-----

If PC 3 and PC 4 are already set to "Obtain an IP address automatically" and "Obtain DNS

server address automatically" from the device, click **Repair** to repair the IP settings.

- ② Wait until your PC successfully obtains an IP address.

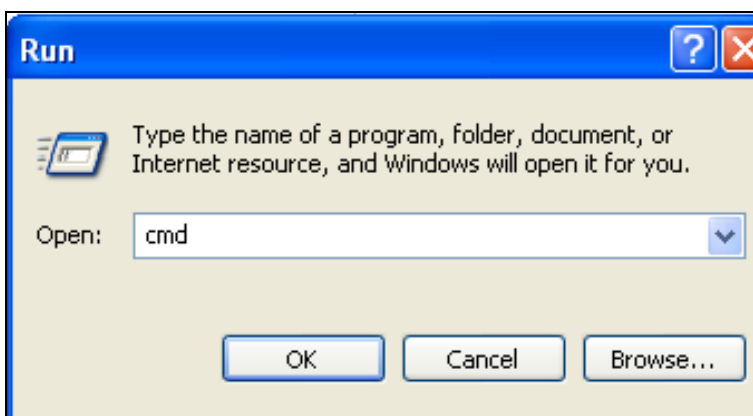


Verify Connectivity:

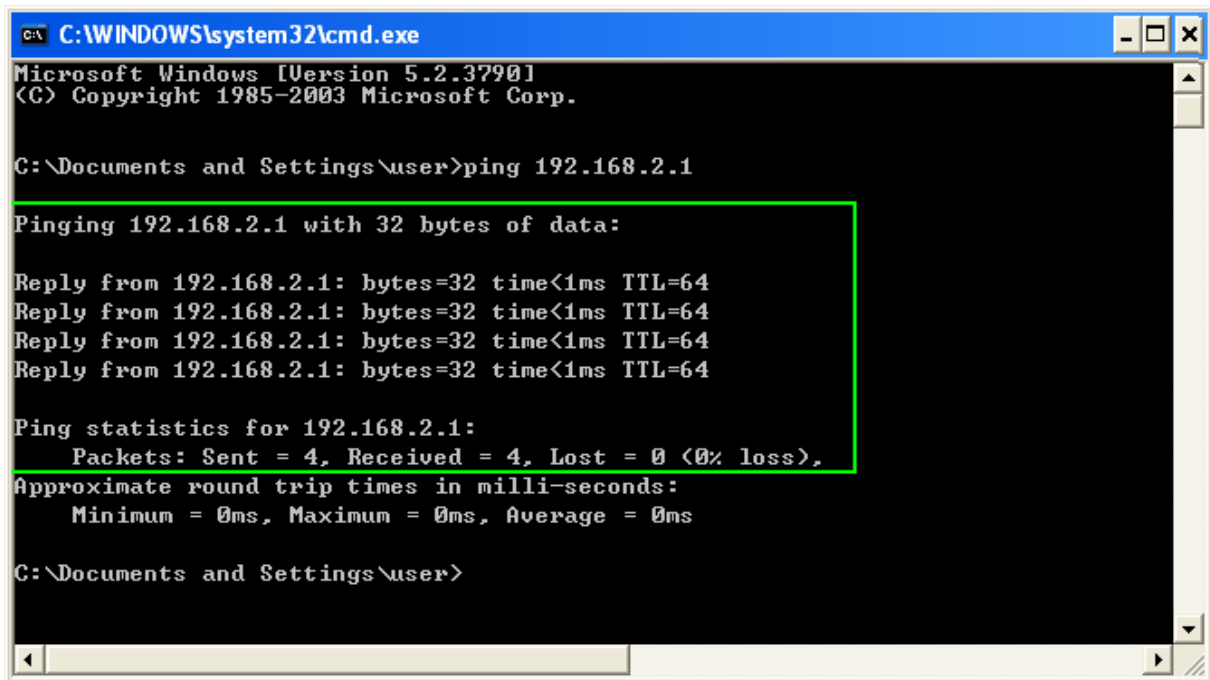
- ① On PC 3 or PC4, Click **Start -> Run**.



- ② Enter **cmd** and click **OK**.



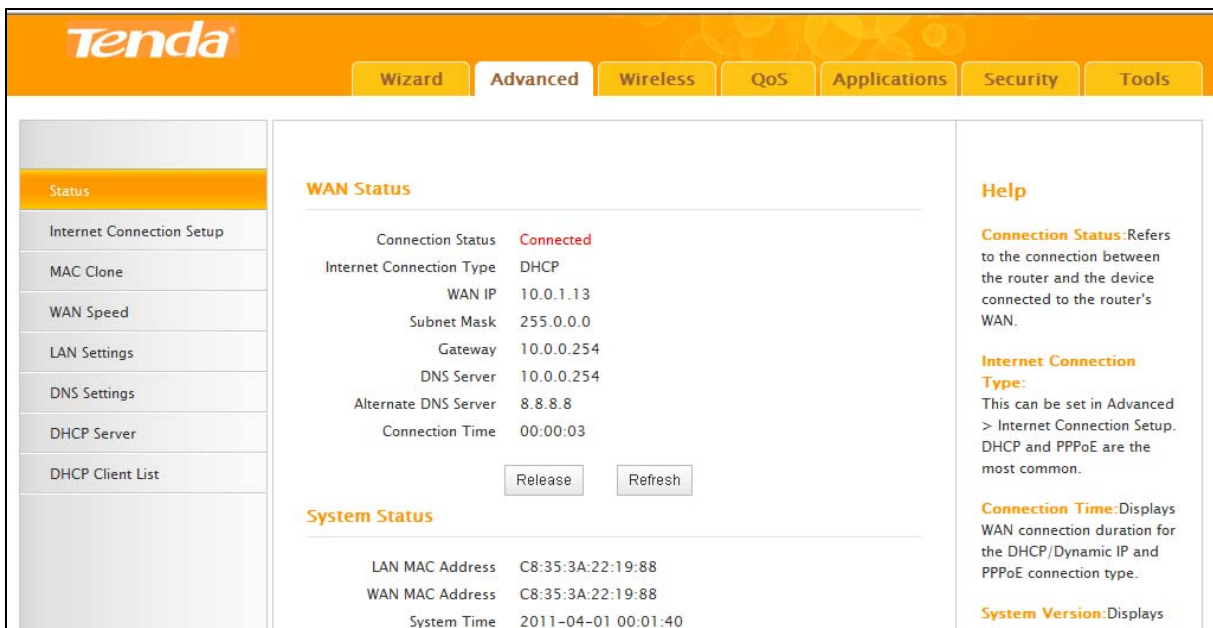
③ Input **ping 192.168.2.1** and press **Enter**. If you get a screen as seen below, you have successfully implemented WDS.



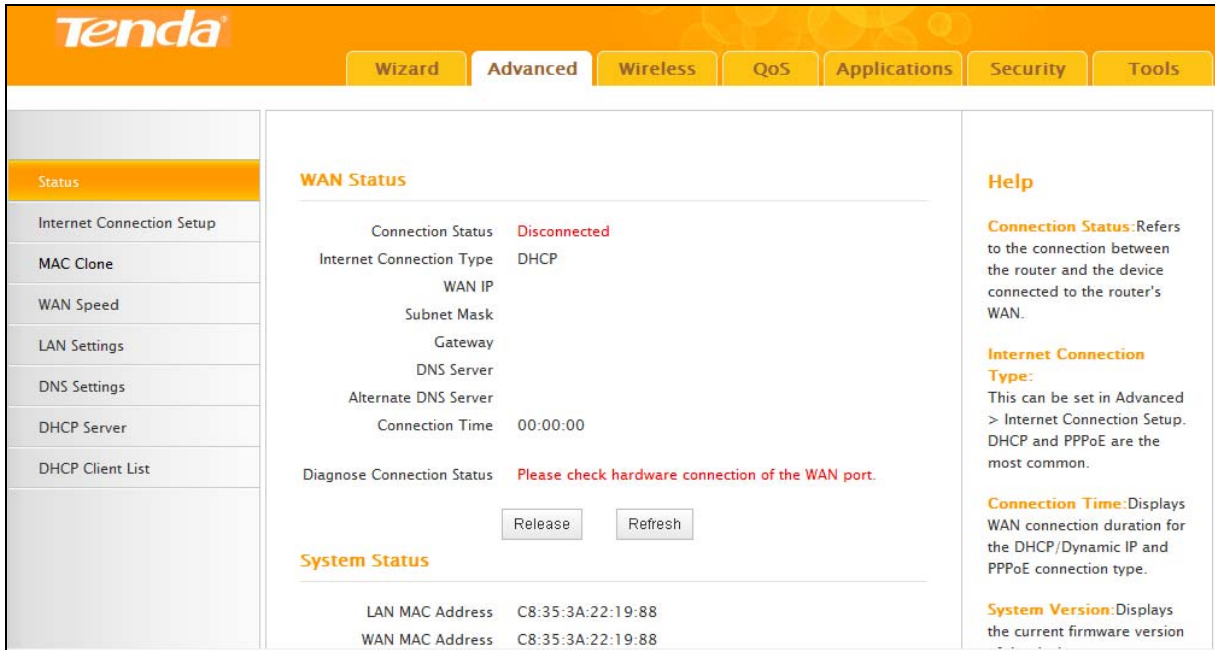
6 Verify Internet Connectivity

Click **Advanced-> Status** and check the **Connection Status**.

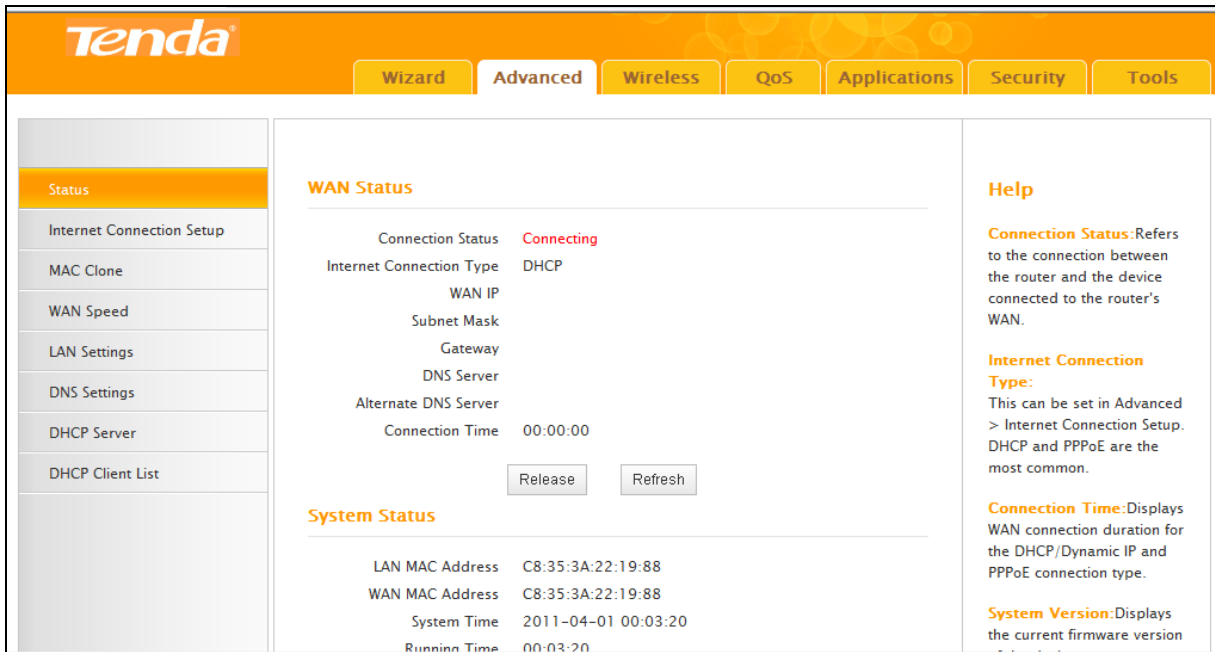
A . If connection status displays "Connected" (as shown below), you are connected to the Internet.



B. If connection status displays "Disconnected" (as shown below), the Ethernet cable from the incoming Internet side to the router's WAN port may be connected improperly or disconnected. 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.



C. If connection status displays "Connecting", wait until the webpage automatically refreshes 5 times.



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

- If you are using DHCP Internet connection type, try cloning MAC address. For more

information, see [1.3 MAC Clone](#).

- If you are using the PPPoE Internet connection type, read the diagnostic information next to the Diagnose Connection Status on the screen.

III Features & Configurations

1 Advanced Settings

1.1 Status

Click **Advanced** to enter the status screen. Here you can view the router's WAN status and system status as noted below:



Tip

1. 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.
2. 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. The top navigation bar includes 'Wizard', 'Advanced', 'Wireless', 'QoS', 'Applications', 'Security', and 'Tools'. The 'Advanced' tab is selected. On the left, a sidebar menu lists 'Status', 'Internet Connection Setup', 'MAC Clone', 'WAN Speed', 'LAN Settings', 'DNS Settings', 'DHCP Server', and 'DHCP Client List'. The main content area is divided into three sections:

- WAN Status:** Shows the router is 'Connected'. Details include: Internet Connection Type: DHCP; WAN IP: 10.0.1.13; Subnet Mask: 255.0.0.0; Gateway: 10.0.0.254; DNS Server: 10.0.0.254; Alternate DNS Server: 8.8.8.8; Connection Time: 00:00:03. There are 'Release' and 'Refresh' buttons below this section.
- System Status:** Shows: LAN MAC Address: C8:35:3A:22:19:88; WAN MAC Address: C8:35:3A:22:19:88; System Time: 2011-04-01 00:01:40.
- Help:** Provides definitions for 'Connection Status', 'Internet Connection Type', 'Connection Time', and 'System Version'.

1.2. Internet Setup

Click **Advanced** -> **Internet Connection Setup** 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 web interface with the 'Advanced' tab selected. The 'Internet Connection Setup' page is displayed, showing the following configuration options:

- Internet Connection Type:** A dropdown menu set to 'PPPoE'.
- PPPoE Username:** A text input field with the placeholder text 'Enter username provided by ISP'.
- PPPoE Password:** A text input field with the placeholder text 'Enter password provided by ISP'.
- MTU:** A text input field set to '1492'. Below it, a note states: '(The default value is 1492. Do not modify it unless required by your ISP.)'
- Service Name:** A text input field with the note: '(Only enter this information if instructed by ISP.)'
- Server Name:** A text input field with the note: '(Only enter this information if instructed by ISP.)'

At the bottom, there is a section for selecting the connection mode: 'Select the corresponding connection mode according to your situation.' with a radio button selected for 'Connect automatically: Connect automatically'.

On the right side, there is a 'Help' section titled 'PPPoE: PPPoE is a connection type associated with some DSL connections that requires Username and Password. Contact your ISP if you need assistance with these login credentials. Contact your ISP for help if you are not sure about which Internet connection type to use.'

Configuration Procedures:

- ① **Internet Connection Type:** Select PPPoE.
- ② **PPPoE Username:** Enter the ISP login name.
- ③ **PPPoE Password:** Enter the ISP login password.
- ④ Click **OK** 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. The best MTU value is often just the factory default value. 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.

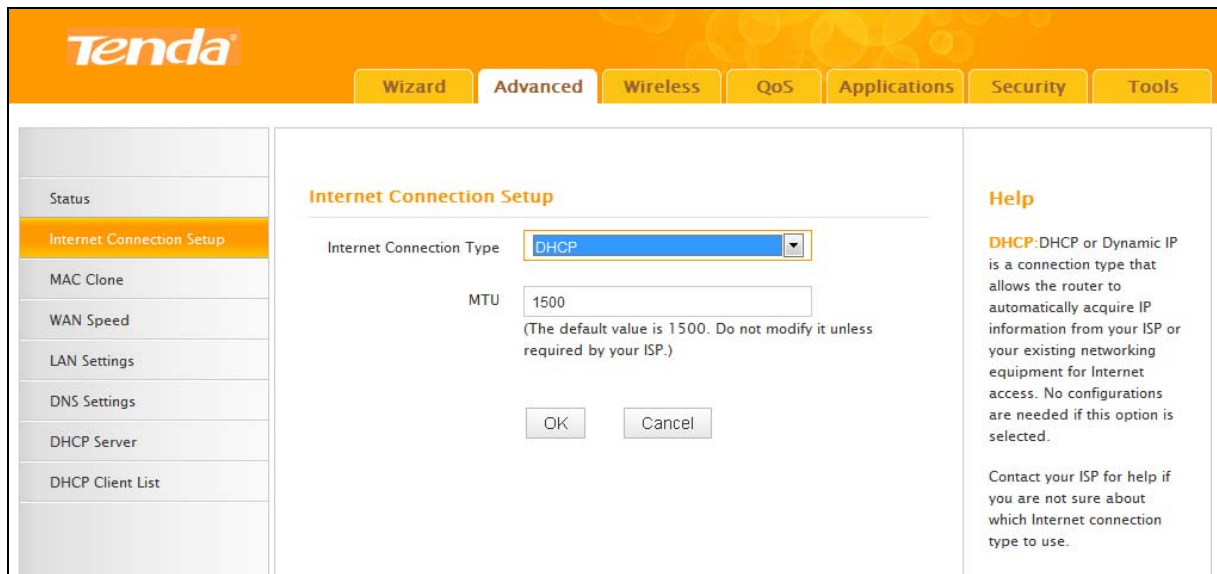
3. Server Name: This is the descriptive name of the server. Only enter it if your ISP provides it.

Static IP

Configuration Procedures:

- ① **Internet connection Type:** Select Static IP.
- ② **IP Address/Subnet Mask/WAN subnet mask/Gateway/DNS Server/Alternate DNS Server:** Enter the ISP information you gathered in [1Getting Prepared](#).
- ③ Click **OK** to save your settings.

DHCP



The screenshot shows the Tenda router's web interface. The top navigation bar includes 'Wizard', 'Advanced', 'Wireless', 'QoS', 'Applications', 'Security', and 'Tools'. The left sidebar lists various settings: Status, Internet Connection Setup (highlighted), MAC Clone, WAN Speed, LAN Settings, DNS Settings, DHCP Server, and DHCP Client List. The main content area is titled 'Internet Connection Setup'. It features a dropdown menu for 'Internet Connection Type' set to 'DHCP' and a text input field for 'MTU' set to '1500'. Below the MTU field is a note: '(The default value is 1500. Do not modify it unless required by your ISP.)'. There are 'OK' and 'Cancel' buttons at the bottom. A 'Help' section on the right explains that DHCP is a connection type that allows the router to automatically acquire IP information from the ISP. It also advises contacting the ISP for help if unsure about the connection type.

Configuration Procedures:

- ① **Internet connection Type:** Select **DHCP**.
- ② Click **OK** 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.

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.

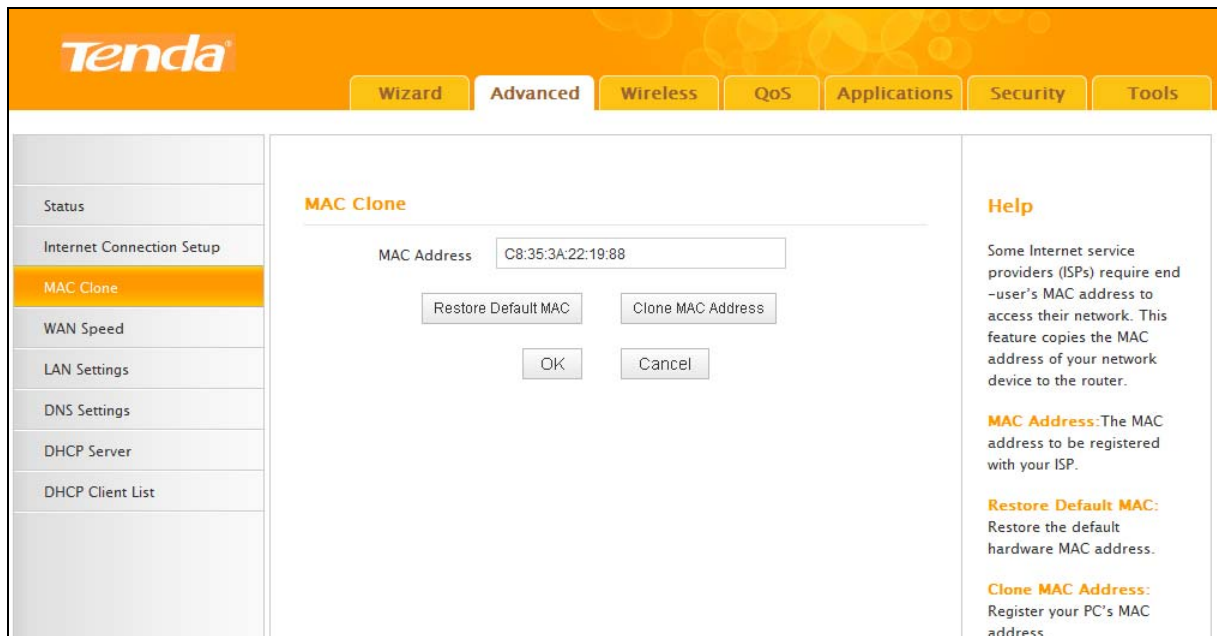


Note -----

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.

1.3 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 **Advanced -> MAC Clone** to enter the configuration screen.



Knowledge Center

1. **Restore Default MAC:** Reset the router's WAN MAC to factory default.
2. **Clone MAC Address:** 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 **OK** to save your settings.

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

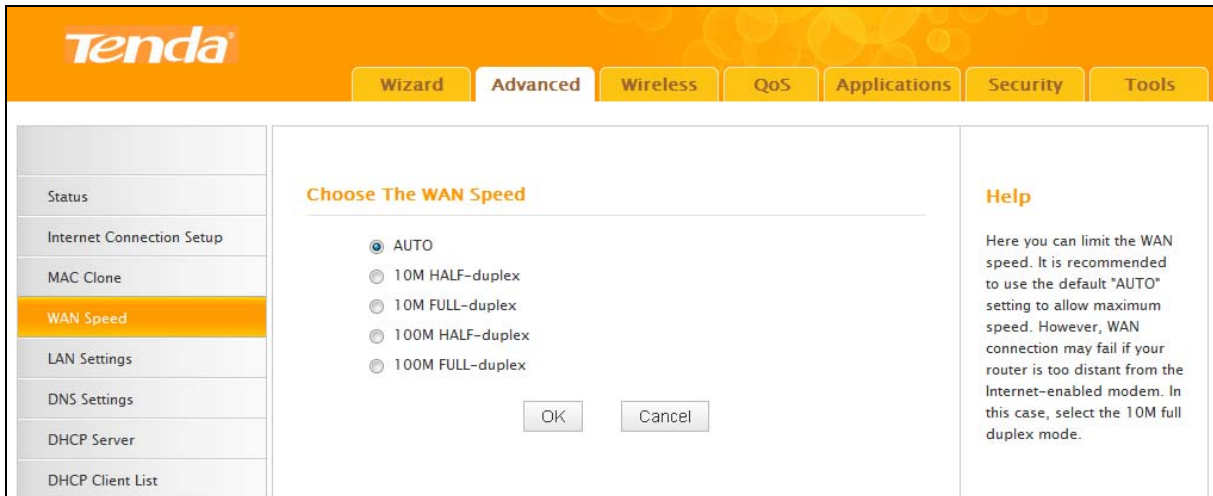
- ① Click **Clone MAC Address**.
- ② Click **OK** to save your settings.

To manually enter the MAC address allowed by your ISP:

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

1.4 WAN Speed

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



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.

1.5 LAN Settings

Click **Advanced** -> **LAN Settings** to enter the 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 192.168.2.1 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.

Tenda

Wizard Advanced Wireless QoS Applications Security Tools

Status

Internet Connection Setup

MAC Clone

WAN Speed

LAN Settings

DNS Settings

DHCP Server

DHCP Client List

LAN Settings

This page is used to set the basic network parameters for LAN.

LAN MAC Address C8:35:3A:22:19:88

IP Address

Subnet Mask

OK Cancel

Help

Here you can set the LAN IP Address and Subnet Mask. This IP Address is to be used to access the router's homepage through a web browser. Be sure to make a note of any changes you apply to this page. Default settings are 192.168.2.1 and 255.255.255.0.

Configuration Procedures:

- ① Change the IP address to the one you wish to use, for example, 192.168.10.1.
- ② Click **OK** to save your settings.

1.6 DNS Settings

Click **Advanced -> DNS Settings** to enter the configuration screen. Here you can set the DNS (Domain Name Server) settings. The DNS server is used to look up site addresses based on their names.

Tenda

Wizard Advanced Wireless QoS Applications Security Tools

Status

Internet Connection Setup

MAC Clone

WAN Speed

LAN Settings

DNS Settings

DHCP Server

DHCP Client List

DNS Settings

Enable Manual DNS Assignment

Primary DNS Address

Alternate DNS Address (Optional)

Note: To activate new settings, you must reboot the device.

OK Cancel

Help

Here you can manually set the DNS (Domain Name Server) settings or obtain them from your ISP automatically. The Alternate DNS Address is optional.

If the DNS Addresses entered are incorrect, web pages will not be able to open.

Configuration Procedures:

- ① **Enable Manual DNS Assignment:** Check to enable the DNS settings.
- ② **Primary DNS Server:** Enter the IP address of your ISP's primary DNS server.
- ③ **Alternate DNS Address:** If a secondary DNS server address is available, enter it here. This field is optional.
- ④ Click **OK** to save your settings.

**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 will be unable to open.

1.7 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 Internet.

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

Tenda

Wizard Advanced Wireless QoS Applications Security Tools

Status

Internet Connection Setup

MAC Clone

WAN Speed

LAN Settings

DNS Settings

DHCP Server

DHCP Client List

DHCP Server

DHCP Server Enable

IP Pool Start Address 192.168.2. 100

IP Pool End Address 192.168.2. 150

Lease Time One day

OK Cancel

Help

DHCP server (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 to the requesting device as long as the device is set to "Obtain an IP Address Automatically".

Configuration Procedures:

- ① **DHCP Server:** Select whether to enable or disable the DHCP server feature.
- ② **IP Pool Start IP Address / IP Pool End IP Address:** 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 **OK** 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.

1.8 DHCP Client List

Click **Advanced -> DHCP Client List**. You can know whether there are unauthorized accesses by viewing the client list.

NO.	IP Address	MAC Address	Delete

Host Name	IP Address	MAC Address	Lease Time
luckyme-PC	192.168.2.100	C8:9C:DC:3B:AC:89	23:52:45

Also, 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 last number of the IP address you want to reserve, for example, 123.
- ② Enter the MAC address of 44:37:E6:4F:37:3B.
- ③ Click **Add**.

The screenshot shows the Tenda router's web interface. The top navigation bar includes 'Wizard', 'Advanced', 'Wireless', 'QoS', 'Applications', 'Security', and 'Tools'. The left sidebar lists various settings, with 'DHCP Client List' selected. The main content area is divided into three sections:

- Static Assignment:** Contains input fields for 'IP Address' (192.168.2.123) and 'MAC Address' (44:37:E6:4F:37:3B), with an 'Add' button.
- DHCP Client List:** Features a table with columns for 'NO.', 'IP Address', 'MAC Address', and 'Delete'. Below the table is a 'Refresh' button.
- Help:** Provides instructions on how to manually assign a static IP address to a device by entering its MAC address and the desired IP address, followed by clicking 'Add'.

At the bottom of the configuration area, there are 'OK' and 'Cancel' buttons.

NO.	IP Address	MAC Address	Delete

Host Name	IP Address	MAC Address	Lease Time
luckyme-PC	192.168.2.100	C8:9C:DC:38:AC:89	23:52:45

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

Static Assignment

IP Address 192.168.2.123

MAC Address 44 : 37 : E6 : 4F : 37 : 3B

NO.	IP Address	MAC Address	Delete
1	192.168.2.123	44:37:E6:4F:37:3B	<input type="button" value="Delete"/>

DHCP Client List

Host Name	IP Address	MAC Address	Lease Time
luckyme-PC	192.168.2.100	C8:9C:DC:3B:AC:89	23:52:45

Help

DHCP Client List displays a list of devices that have obtained IP addresses from the router's DHCP Server.

You can manually assign a static IP address to a device by entering the device's MAC address and your desired IP address, and click on "Add" at last.



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 Wireless Settings

2.1 Wireless Basic Settings

Here you can configure the basic wireless settings of the router. This router supports two operating modes: **Wireless Access Point (AP)** and **WDS Bridge Mode**.

- A.** To only use the wireless network delivered by this router, select **Wireless Access Point (AP)**.
- B.** To extend an existing wireless network, select **WDS Bridge Mode**.

Wireless AP Mode



Tip

1. By default, this device operates in the **Wireless Access Point (AP)** mode.
2. The primary SSID is defaulted to Tenda_XXXXXX, where XXXXXX is the last six characters in the device's MAC address. You can find this SSID on the label attached on the bottom of the device.
3. If you are not an advanced user, it is advisable to only change the primary SSID (name of the network) and channel and leave other items unchanged.
4. The device supports two SSIDs: primary SSID and secondary SSID. The secondary SSID is optional. By default, the secondary SSID is disabled.
5. Instructions to configure the primary SSID also apply to the secondary SSID. The primary SSID is used as an example below to illustrate all wireless related features.

The screenshot displays the Tenda router's web interface for configuring wireless settings. The top navigation bar includes tabs for Wizard, Advanced, Wireless, QoS, Applications, Security, and Tools. The main content area is titled "Wireless Basic Settings" and contains the following configuration options:

- Enable Wireless:**
- Primary SSID:** Tenda_221988
- Secondary SSID:** (empty field)
- Wireless Working Mode:** Wireless Access Point(AP) WDS Bridge Mode
- Network Mode:** 11b/g/n mixed mode
- SSID Broadcast:** Enable Disable
- AP Isolation:** Enable Disable
- Channel:** AutoSelect
- Channel Bandwidth:** 20 20/40
- Extension Channel:** Auto Select
- WMM Capable:** Enable Disable

A **Help** section on the right provides additional information:

Help
In this section you can configure the wireless settings of the router such as the SSID (name of the network) and Broadcast Channel.

SSID: This is the public name of your wireless network. It is preset to "Tenda_XXXXXX" (where "XXXXXX" represents the last six characters in device MAC address.) by default. Please change it for better security. Note that this field should not be left blank.

SSID Broadcast: This

Configuration Procedures:

- ① **Primary 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. The best selection is a channel that is the least used by neighboring networks.
- ③ Click **OK** to save your settings.

**Knowledge Center**-----

1. **Secondary SSID:** This is an alternate name for your wireless network.
2. **Network Mode (802.11 Mode):** Select a correct mode according to your wireless clients.
 - **11b:** This network mode delivers wireless speed up to 11Mbps and is only compatible with 11b wireless clients.
 - **11g:** This network mode delivers wireless speed up to 54Mbps and is only compatible with 11g wireless clients.
 - **11b/g mixed:** This network mode delivers wireless speed up to 54Mbps and is compatible with 11b/g wireless clients.
 - **11b/g/n mixed:** This network mode delivers wireless speed up to 300Mbps (A31)/150Mbps (A8) and is compatible with 11b/g/n wireless clients.
3. **SSID Broadcast:** This option allows you to have your network names (SSIDs) publicly broadcast or if you choose to disable it, the SSIDs will be hidden.
4. **AP Isolation:** When enabled, devices wirelessly connected to the same SSID will not be able to intercommunicate.
5. **Channel Bandwidth:** Select a proper channel bandwidth to enhance wireless performance. This option is available only in 802.11b/g/n. Wireless speed in the channel bandwidth of 20/40 is 2 times in 20.
6. **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 channel bandwidth of 20/40.
7. **WMM Capable:** WMM is QoS for your wireless network. Enabling this option may better stream wireless multimedia data (such as video or audio).
8. **ASPD Capable:** Select to enable/disable the auto power saving mode. This option is effective only if WMM Capable is enabled. It is advisable to disable it.

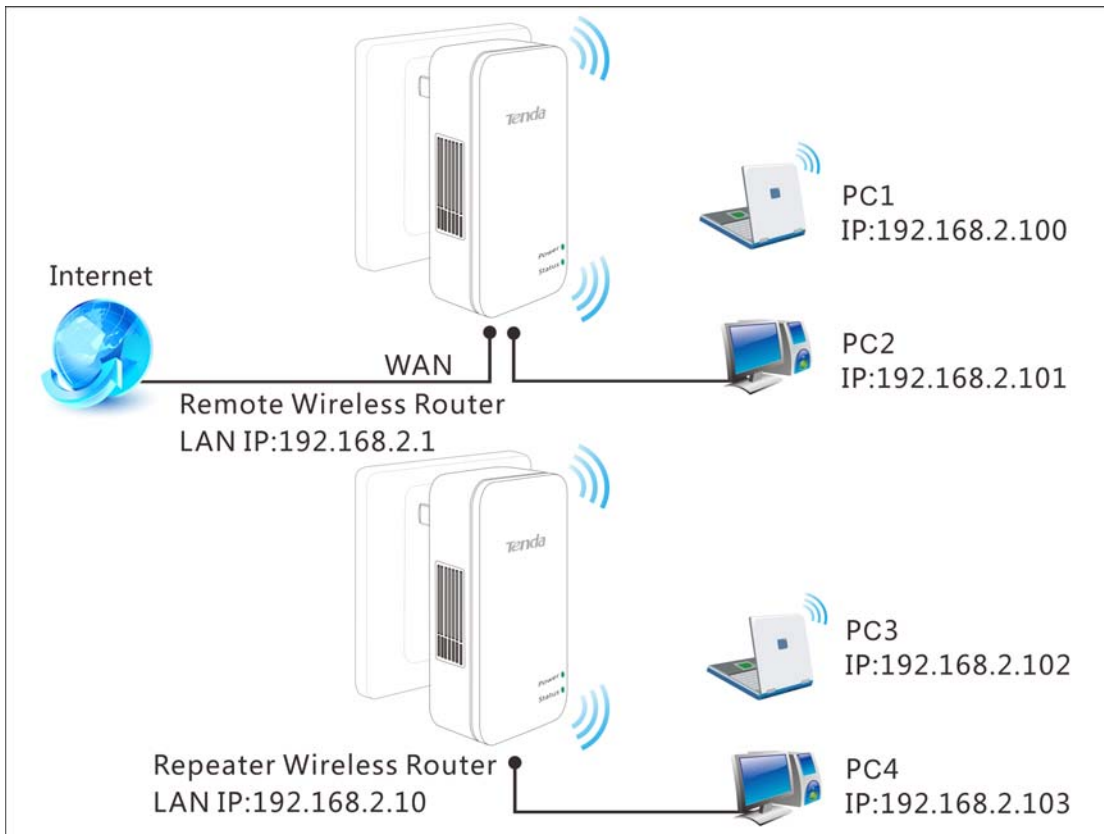
WDS Bridge Mode

WDS Bridge Mode: wireless distribution system (WDS) is a system enabling the wireless interconnection of access points in an IEEE 802.11 network. It allows a wireless network to be expanded using multiple access points without the traditional requirement for a wired backbone to link them.



Note-----

The Access Points you select MUST support WDS.



WDS Bridge Mode Application Example:

To implement WDS Bridge for the application scenario above, do as follows:

Step 1: Get Prepared

① View and note down the SSID and wireless security settings of Router 1.

Click **Wireless** -> **Wireless Basic Settings** to enter the wireless basic configuration screen. Here you can view the SSID and channel.

The screenshot displays the Tenda router's web interface for the 'Wireless Basic Settings' page. The interface includes a navigation menu on the left with options like 'Wireless Basic Settings', 'Wireless Security', 'Access Control', and 'Wireless Connection Status'. The main content area is titled 'Wireless Basic Settings' and contains the following configuration options:

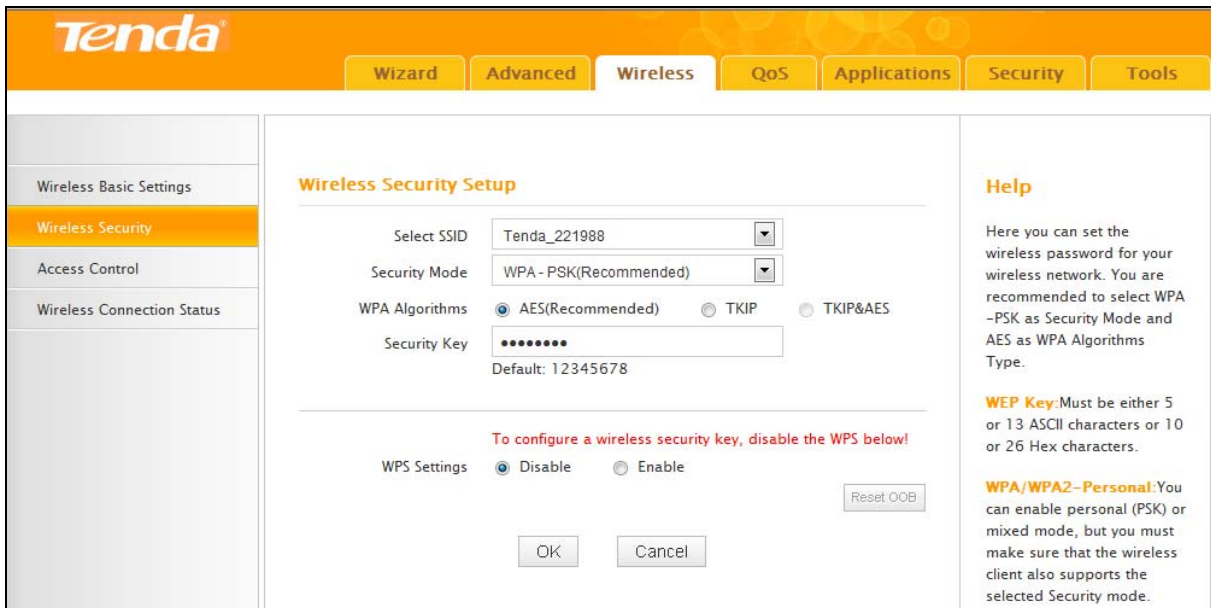
- Enable Wireless:**
- Primary SSID:** Tenda_221988
- Secondary SSID:** (empty field)
- Wireless Working Mode:** Wireless Access Point(AP) WDS Bridge Mode
- Network Mode:** 11b/g/n mixed mode
- SSID Broadcast:** Enable Disable
- AP Isolation:** Enable Disable
- Channel:** 2437MHz (Channel 6)
- Channel Bandwidth:** 20 20/40
- Extension Channel:** 2417MHz (Channel 2)
- WMM Capable:** Enable Disable
- APSD Capable:** Enable Disable

A 'Help' section on the right provides additional information:

Help
In this section you can configure the wireless settings of the router such as the SSID (name of the network) and Broadcast Channel.
SSID: This is the public name of your wireless network. It is preset to "Tenda_XXXXXX" (where "XXXXXX" represents the last six characters in device MAC address.) by default. Please change it for better security. Note that this field should not be left blank.
SSID Broadcast: This option allows you to have

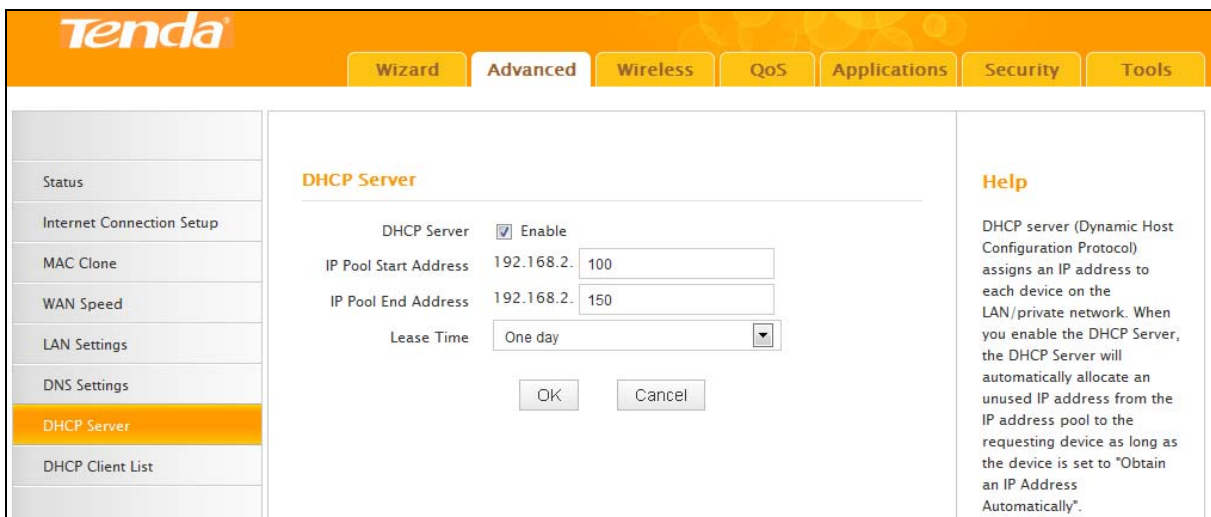
- SSID : Tenda_221988
- Channel: 6

Click **Wireless** -> **Security** to enter the wireless security configuration screen. Here you can view the security settings.



- Security Mode: WPA-PSK
- Cipher Type: AES
- Password: 12345678
- AP MAC (BSSID): C8:3A:35:00:01:20 (can be found on the label attached to the device)
- Make sure DHCP server is enabled on router 1.

Click **Advanced** -> **DHCP Server** to enter the DHCP server configuration screen. You can view and configure the DHCP server settings here.



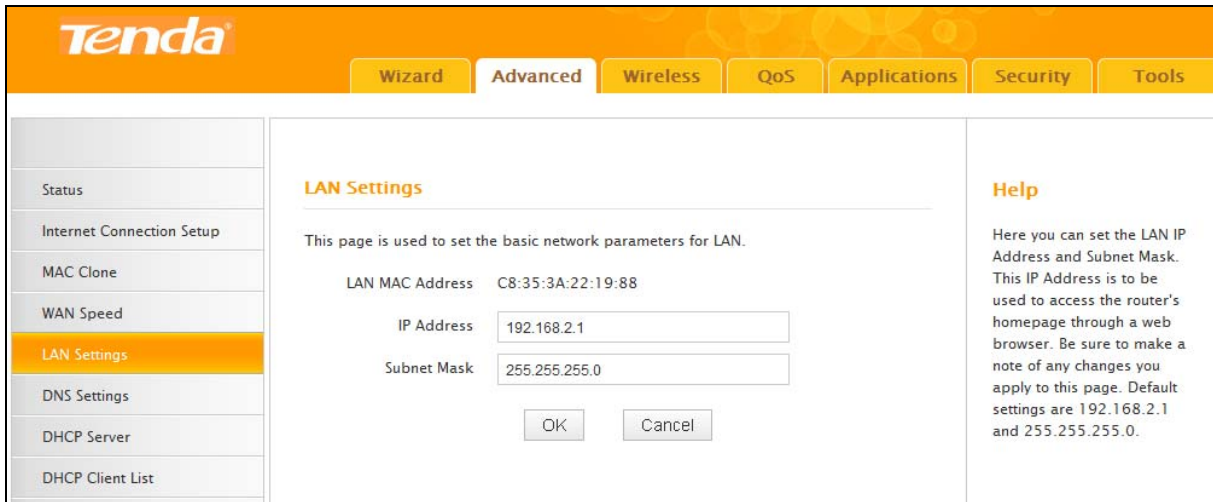
② Set the LAN IP address of Router 1 to a different address yet on the same net segment as Router 2.

For example, Router 1: 192.168.2.1, Router 2: 192.168.2.10.

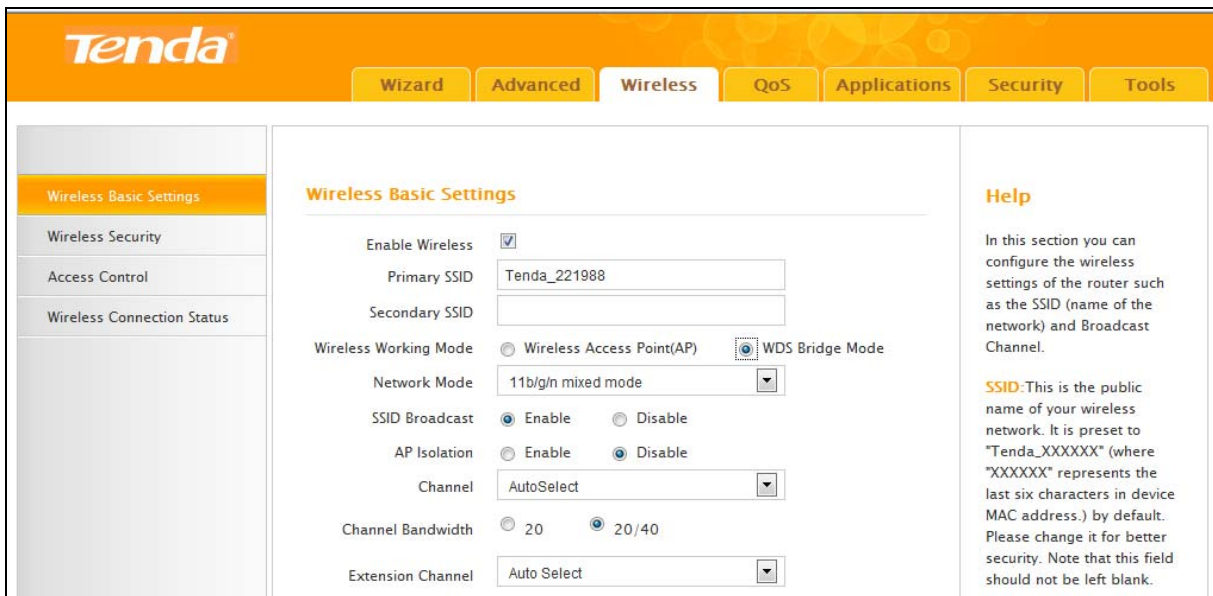
About how to configure these IP addresses, see 1.6 LAN Setting.

Step 2: Configure Router 1

- ① Set the LAN IP address of Router 1 (Set it to a different address yet on the same net segment as Router 2. For example, Router 1: 192.168.2.1, Router 2: 192.168.2.10). For more information, see [1.6 LAN Settings](#).




- ② Click **Wireless -> Wireless Basic Settings** to enter the configuration screen. Select **WDS Bridge Mode** and click **Open Scan**.



③ Select the AP you wish to connect to and click **OK** to confirm it and then click **Close Scan**.

Select	SSID	MAC Address	Channel	Security	Signal Strength
<input checked="" type="radio"/>	Tenda_0E1A78	C8:3A:35:0E:1A:78	7	WPA/AES	68
<input type="radio"/>	Tenda_0004E8	C8:3A:35:00:04:E8	7	NONE	81

Message from webpage

 Please click on OK to confirm that you want to connect to this AP!

④ Verify that the automatically populated SSID, channel and MAC address, etc. are correct and then click **OK**.

Tenda

Wizard
Advanced
Wireless
QoS
Applications
Security
Tools

Wireless Basic Settings

Wireless Security

Access Control

Wireless Connection Status

Wireless Basic Settings

Enable Wireless

Primary SSID

Secondary SSID

Wireless Working Mode Wireless Access Point(AP) WDS Bridge Mode

Network Mode

SSID Broadcast Enable Disable

AP Isolation Enable Disable

Channel

Channel Bandwidth 20 20/40

Extension Channel

WMM Capable Enable Disable

APSD Capable Enable Disable

Wireless Working Mode: WDS(Repeater mode)

AP MAC Address

Help

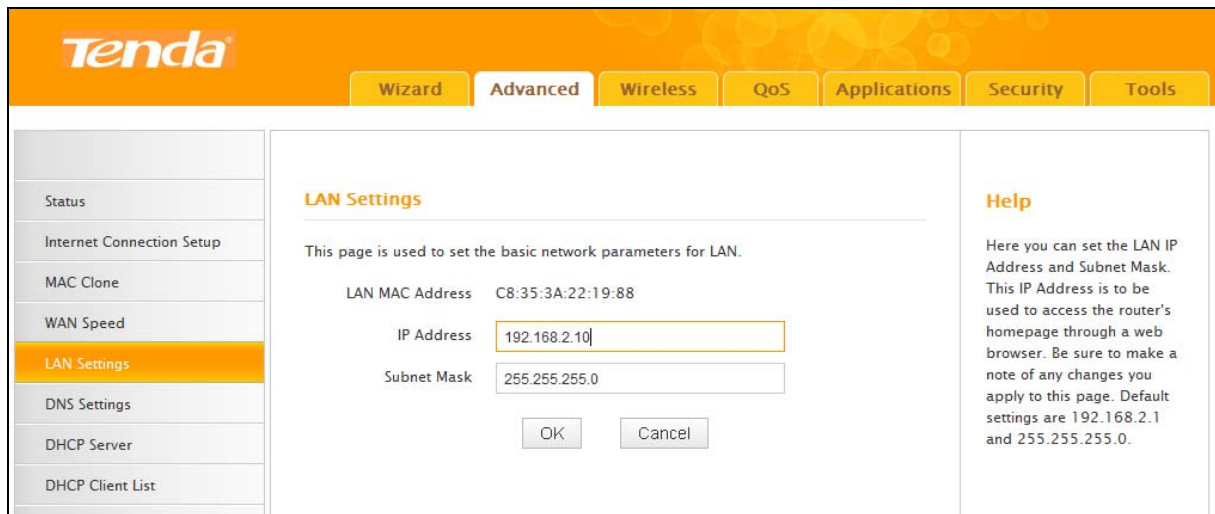
In this section you can configure the wireless settings of the router such as the SSID (name of the network) and Broadcast Channel.

SSID:This is the public name of your wireless network. It is preset to "Tenda_XXXXXX" (where "XXXXXX" represents the last six characters in device MAC address.) by default. Please change it for better security. Note that this field should not be left blank.

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

Step 3: Configure Router 2

- ① Configure the LAN IP address of Router 2



Tenda

Wizard Advanced Wireless QoS Applications Security Tools

Status

Internet Connection Setup

MAC Clone

WAN Speed

LAN Settings

DNS Settings

DHCP Server

DHCP Client List

LAN Settings

This page is used to set the basic network parameters for LAN.

LAN MAC Address C8:35:3A:22:19:88

IP Address

Subnet Mask

OK Cancel

Help

Here you can set the LAN IP Address and Subnet Mask. This IP Address is to be used to access the router's homepage through a web browser. Be sure to make a note of any changes you apply to this page. Default settings are 192.168.2.1 and 255.255.255.0.

- ② Click **Wireless** -> **Wireless Basic Settings** to enter the configuration screen. Select **WDS Bridge Mode** and click **Open Scan**.

Wireless Working Mode	<input type="radio"/> Wireless Access Point(AP)	<input checked="" type="radio"/> WDS Bridge Mode
Network Mode	11b/g/n mixed mode	
SSID Broadcast	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
AP Isolation	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
Channel	AutoSelect	
Channel Bandwidth	<input type="radio"/> 20	<input checked="" type="radio"/> 20/40
Extension Channel	Auto Select	
WMM Capable	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
APSD Capable	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable

Wireless Working Mode: WDS(Repeater mode)

AP MAC Address	<input type="text"/>
AP MAC Address	<input type="text"/>

Note: SSID and channel will automatically set to match your selected AP. Note that the AP you select MUST also support WDS. WEP is recommended for the connection for better compatibility with your selected AP.

Open Scan