

# **User Guide**

www.tendacn.com



300M Portable 3G/4G Wireless router +5200mAh Portable Power Source



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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 applies to 4G300, 4G301 and 4G302. The 4G301 is used as an example throughout this user guide.

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

| Icon   | Description  |
|--|--|
| This format is used to highlight information of importance or    |  |
| Note   | interest. Ignoring this type of note may result in ineffective |
|  | configurations, loss of data or damage to device.              |
| This format is used to highlight a procedure that will save till |  |
| ¥ Tip  | resources.   |
|  |  |
| Knowledge  | Description of fields on the device GUI.                       |
| Center   |  |

## **Technical Support**

Website: http://www.tendacn.comEmail: <a href="mailto:support02@tenda.com.cn">support02@tenda.com.cn</a>

Skype: tendasz

YouTube: Tendasz1999

• Hotline:

1-800-570-5892 (USA) (061) 1300787922 (Australia) (044)197-780-6119 (UK) (0852)36120883 (Hong Kong)

(064) 800787922 (New Zealand)



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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

#### 2.1 **LED**

#### 4G300





| LED           | Status      | Description   |
|---------------|-------------|---|
| Battery Meter | Red         | The amount of electrical energy capacity is less than 20% |
|               | Light Green | The amount of electrical energy capacity is more than     |
|               |             | 20%   |
|               | Dark Green  | The device is charging                                    |
|               | Blue        | The unit is fully charged up                              |

#### 4G301



| LED           | Status   | Description                               |
|---------------|----------|---|
| Battery Meter | Red      | The power level is very low               |
|               | Green    | Display real-time level of power capacity |
| System LED    | Blinking | The unit is starting up                   |
|               | Solid    | The unit is functioning correctly         |

## 4G302





| LED           | Status   | Description                               |
|---------------|----------|---|
| Battery Meter | Red      | The power level is very low               |
|               | Green    | Display real-time level of power capacity |
| System LED    | Blinking | The unit is starting up                   |
|               | Solid    | The unit is functioning correctly         |

## 2.2 Button & Interface

## 4G300

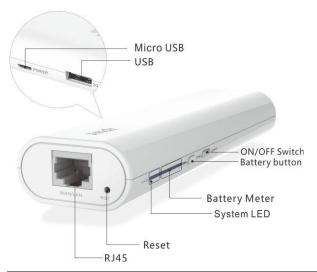




| Button/Interface | Description  |
|------------------|--|
| Micro USB        | For charging the unit via a USB cable                                  |
| USB              | For connecting to a 3G/4G Modem or charging a terminal device          |
|                  | (such as iPad, iPhone)   |
| ON/OFF Switch    | Power button to turn the unit on or off. The unit functions as a 3G/4G |
|                  | wireless router when turned on or a power bank when turned off         |
|                  |  |
| Reset            | Pressing it with a needle for about 10 seconds resets the unit to the  |
|                  | factory defaults   |
| RJ45             | Functions as a LAN port for connecting to a PC or switch in 3G/4G      |
|                  | router mode and WISP mode. In other modes, this port functions as      |
|                  | a WAN port for connecting to ISP                                       |
|                  |  |
|                  |  |



## 4G301



| Button/Interface | Description  |
|------------------|--|
| Micro USB Port   | For charging the unit via a USB cable                                  |
| USB              | For connecting to a 3G/4G Modem or charging a terminal device          |
|                  | (such as iPad, iPhone)   |
| ON/OFF Switch    | Power button to turn the unit on or off. The unit functions as a 3G/4G |
|                  | wireless router when turned on or a power bank when turned off         |
|                  |  |
| Battery Meter    | Press it to view power level   |
| Reset            | Pressing it with a needle for about 10 seconds resets the unit to the  |
|                  | factory defaults   |
| RJ45             | Functions as a LAN port for connecting to a PC or switch in 3G/4G      |
|                  | router mode and WISP mode. In other modes, this port functions as      |
|                  | a WAN port for connecting to ISP                                       |
|                  |  |



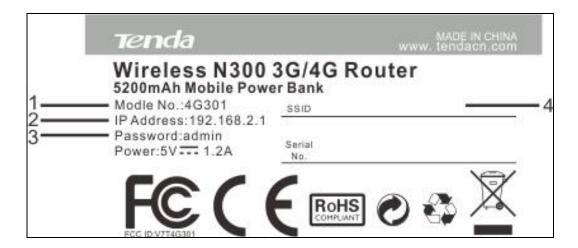
## 4G302



| Button/Interface | Description  |
|------------------|--|
| Micro USB        | For charging the unit via a USB cable                                  |
| USB              | For connecting to a 3G/4G Modem or charging a terminal device          |
|                  | (such as iPad, iPhone)   |
| ON/OFF Switch    | Power button to turn the unit on or off. The unit functions as a 3G/4G |
|                  | wireless router when turned on or a power bank when turned off         |
|                  |  |
| Battery Meter    | Press it to view power level   |
| Reset            | Pressing it with a needle for about 10 seconds resets the unit to the  |
|                  | factory defaults   |
| RJ45             | Functions as a LAN port for connecting to a PC or switch in 3G/4G      |
|                  | router mode and WISP mode. In other modes, this port functions as      |
|                  | a WAN port for connecting to ISP                                       |
|                  |  |



#### 2.3 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:

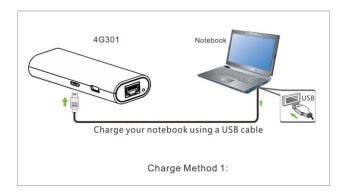
| Item                   | Description  |  |
|------------------------|--|--|
| Router                 | Find it in your package  |  |
| PC                     | Should have a installed IE8 or higher browser  |  |
| Gather ISP Information | DHCP, PPPoE or Static IP Internet Connection Type:  1. Ethernet Cable from the incoming Internet side: This is provided by your ISP  2. 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 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:  1) IP Address  2) Subnet Mask  3) Gateway  4) DNS Server  5) Alternate DNS Server (Optional)  3G/4G Internet Connection:  1. 3G/4G Modem: For 3G/4G Internet connection, you need to buy a 3G/4G modem  2. 3G/4G 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  3. Ethernet Cable: This can be found in the product package. You will need it to connect your PC to this device  WISP Internet Access:  1. Remote AP's SSID, MAC address, security mode, cipher type and security key  2. Internet connection information provided by the remote AP  3. Ethernet Cable: This can be found in the product package. You will need it to connect your PC to this device |  |

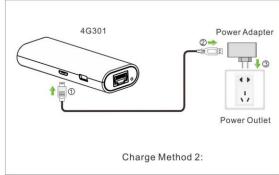


## 2. Hardware Install

## 2.1 Charging Router

Turn on the router and check the power level indicator LED. (For LED description, see <u>LED</u>) It is advisable to fully charge up the device if the amount of electrical energy capacity is less than 20%. Charge Method:





 $\Delta_{\mathsf{Note}}$ 

Please use the USB cable that comes in the package to charge this device. Using a different USB cable might cause damage to this device.

#### 2.2. Hardware Install

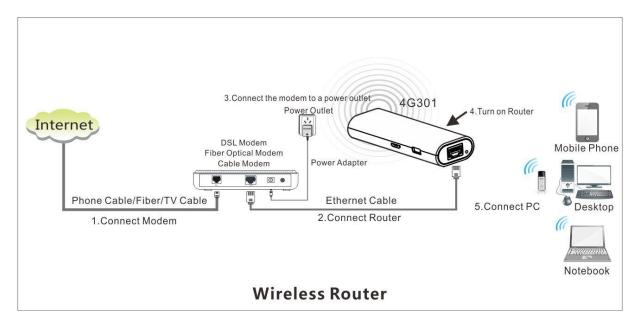
Select a hardware install method according to your environment.

- A. If you access Internet by connecting to the Ethernet cable from the incoming Internet side, see <a href="https://doi.org/10.1007/journal.org/">DHCP, PPPoE & Static IP</a> to install hardware.
- B. If you access Internet via a 3G or 4G modem, see 3G Router Mode to install hardware.
- **C.** If you acquire Internet access from your WISP AP or a wireless Access Point on an existing network see *WISP Mode* to install hardware.

#### **DHCP, PPPoE & Static IP**

In this mode, the RJ-45 port on this device functions as a WAN port. You must connect to this device wirelessly.





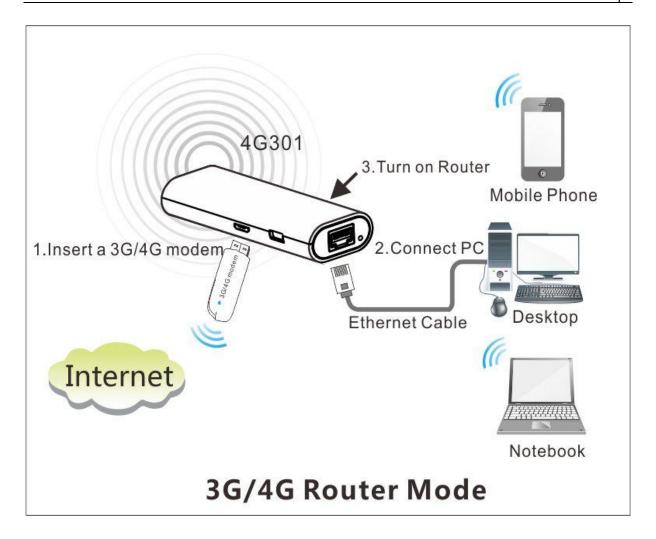


If you want to access and configure this device via a wired connection, simply attach a 3G modem to its USB port and system will automatically switch to the 3G Router mode. The RJ45 port will then function as a LAN port so that you can connect to it using an Ethernet cable. Set up Internet connection and secure your wireless network and then reconnect to this device.

#### **3G/4G Router Mode**

In this mode, the RJ-45 port on this device functions as a WAN port. You can connect to this device using an Ethernet cable.

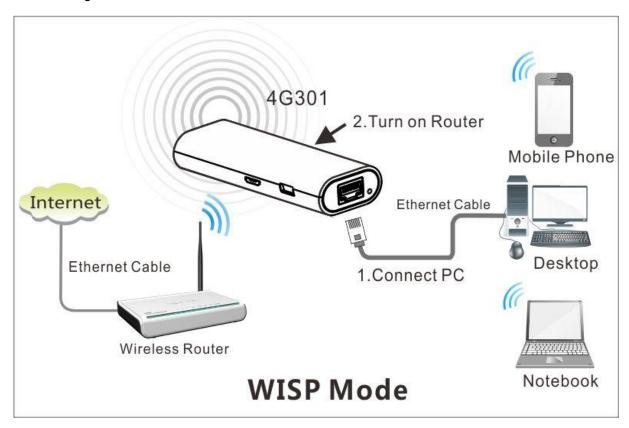






#### **WISP Mode**

In this mode, the RJ-45 port on this device functions as a WAN port. You can connect to this device using an Ethernet cable.



## 3 Connect to Router

In the Wireless Router (DHCP, PPPoE, Static IP) mode, clients (such as computers, smart phones and tablets) can only connect to this device wirelessly for sharing Internet access. In the WISP mode or 3G Router mode, computers, smart phones and tablets can access and connect to this device either wirelessly or using an Ethernet cable.

## 3.1 Connect to Device Wirelessly



ιρ-----

- 1. The device's SSID is "Tenda\_xxxxxxx" 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.

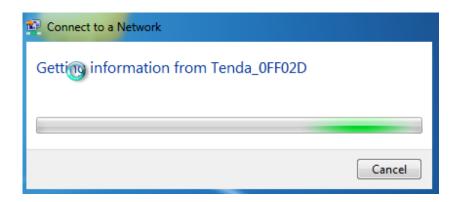


2 Select the wireless network you wish to connect and click **Connect.** 





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.



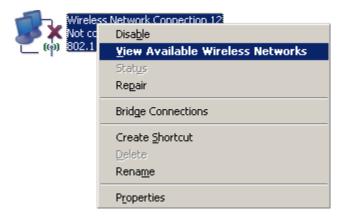


#### **Windows XP**

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

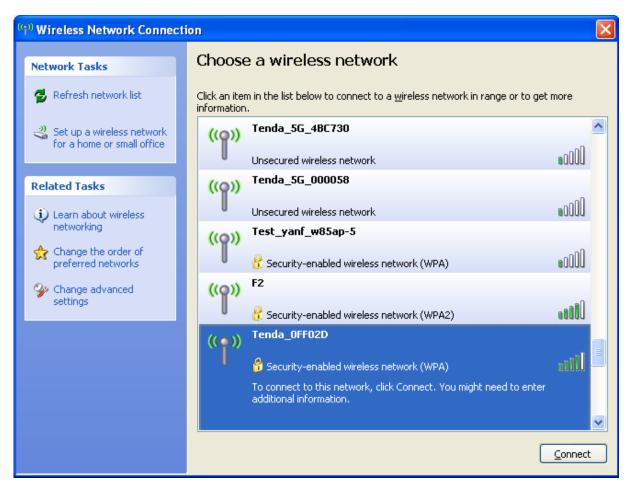


2 Right click Wireless Network Connection and select View Available Wireless Networks.

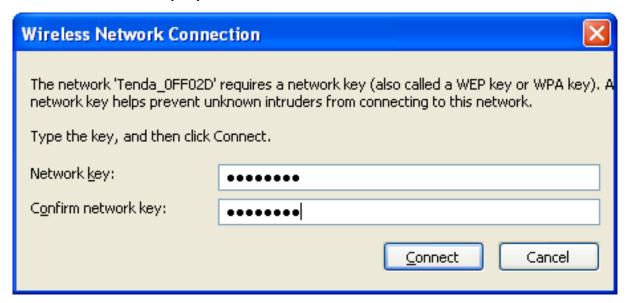




3 Double click the wireless network you wish to connect.

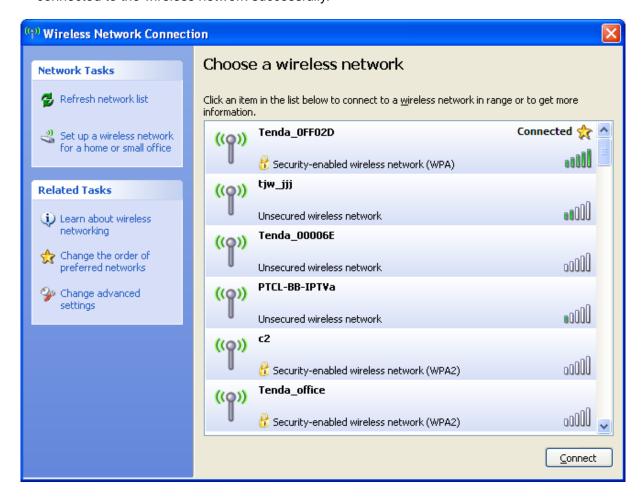


4 Enter the security key and click **Connect**.





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



## 3.2 Connect to Device Using an Ethernet Cable

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.

## 4 Smart Mode (Auto-switch between 3GRouter and Wireless Router Mode)

The device is preset to operate in the smart mode by default.

- Depending on whether there is an available 3G modem, system automatically switches to a) 3G Router mode (in the presence of a 3G modem); clients can share Internet access either through a wireless or wired connection to the device. There is no need for additional configurations!
- or b) Wireless Router mode (in the absence of a 3G modem): in the wireless router mode



and automatically detects and switches between PPPoE and DHCP. If you use the DHCP (Dynamic IP) connection type, you can simply access Internet via a wireless connection to this device, or if you use PPPoE, access this device wirelessly and then set up Internet. See **PPPoE**.

When you first time open a web page after successfully connecting to Internet, you will be prompted to customize a wireless security key to secure your wireless network. Simply follow the onscreen instructions there.



This device can automatically detect and switch among the DHCP, PPPoE and 3G router mode depending on the actual environment. 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 Manual Internet Setup**

Read this section only when you fail to access Internet after you have 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.



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



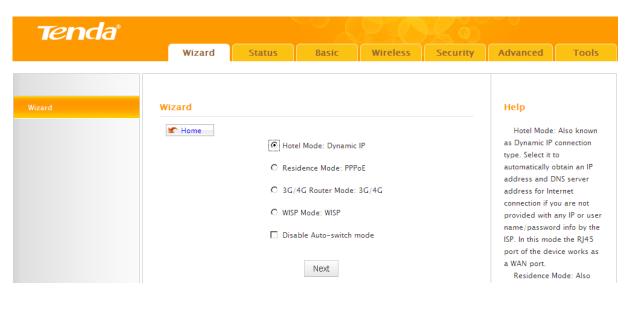


Senter the login password and click Login. The default password is admin.

# Tenda Wireless Router



4 You will come to the setup wizard interface. Here you can quickly set up Internet.





- If you access Internet by connecting to the Ethernet cable from the incoming Internet side, see <u>Static IP</u>.
- 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

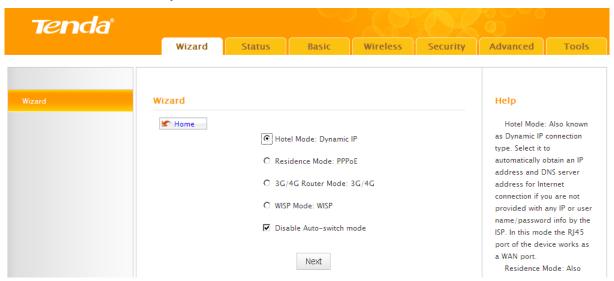
Read the following and determine your Internet connection type. Then follow the right setup wizard.

- 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 <u>DHCP</u>.
- **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 access Internet via a 3G or 4G modem, see <u>3G/4G Router Mode</u>.
- **E.** If you acquire Internet access from your WISP AP or a wireless Access Point on an existing network, see *WISP Mode*.



#### **DHCP**

① Select Hotel Mode: Dynamic IP and click Next.



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

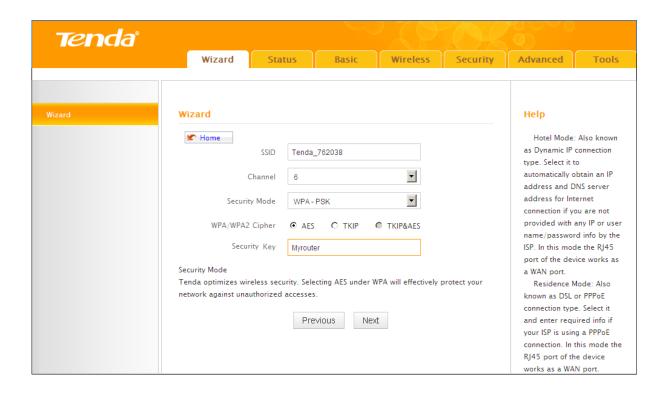
SSID: Tenda\_762038

Channel: 6

Security Mode: WPA-PSK

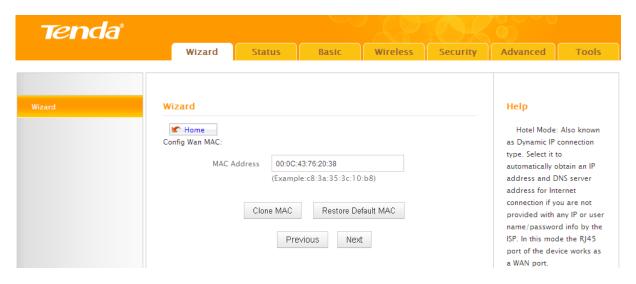
Cipher Type: AES

Security Key: Myrouter

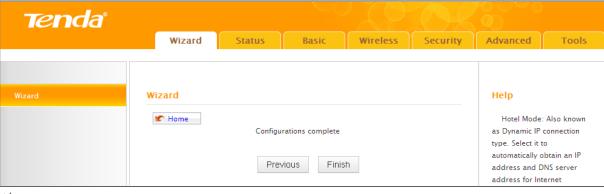




MAC Clone Setup: Enter the computer or broadband modem authorized by your ISP. Then click Next.



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



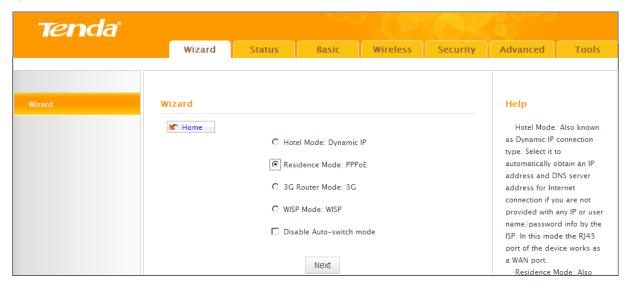


Upon successful configuration, the RJ-45 port on the device functions as a WAN port and clients must only access the device wirelessly.



#### **PPPoE**

1 Select Residence Mode: PPPoE and click Next.



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

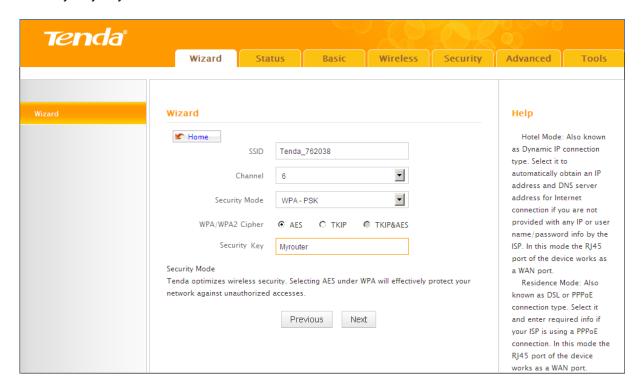
SSID: Tenda\_762038

Channel: 6

Security Mode: WPA-PSK

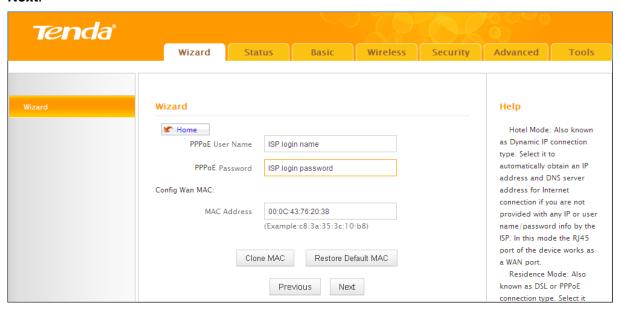
Cipher Type: AES

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 and you will be able to access Internet.

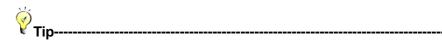




Upon successful configuration, the RJ-45 port on the device functions as a WAN port and clients must only access the device wirelessly.

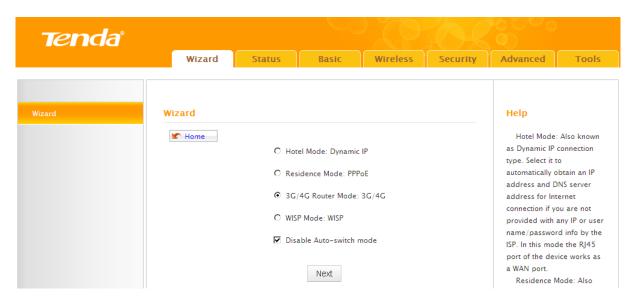


#### 3G/4G Router Mode

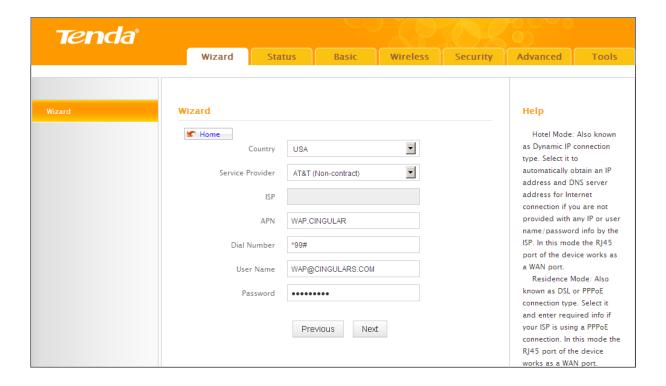


In this mode, you only need to configure the router. No additional configurations are required on the **3G/4G** modem.

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



2 Select your 3G ISP and click Next.





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

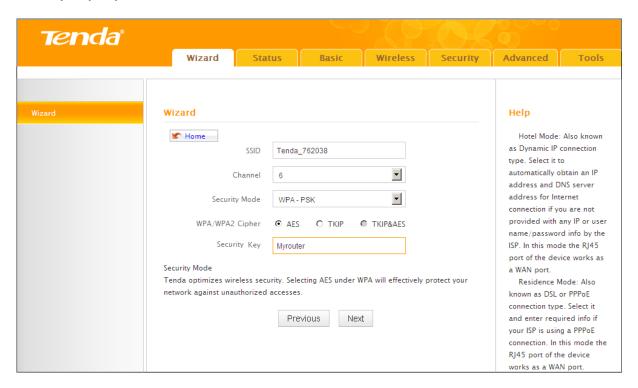
SSID: Tenda\_762038

Channel: 6

Security Mode: WPA-PSK

Cipher Type: AES

Security Key: Myrouter



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.





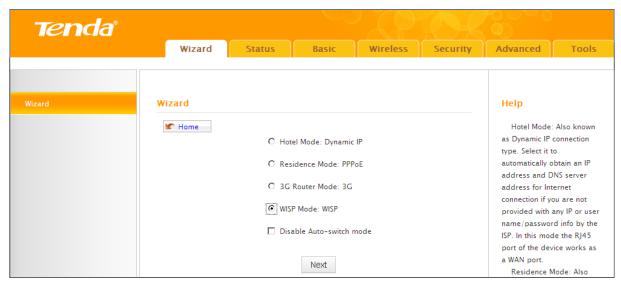
Tip-----

Upon successful configuration, the RJ-45 port on the device functions as a LAN port and clients can access the device either wirelessly or via a wired connection.

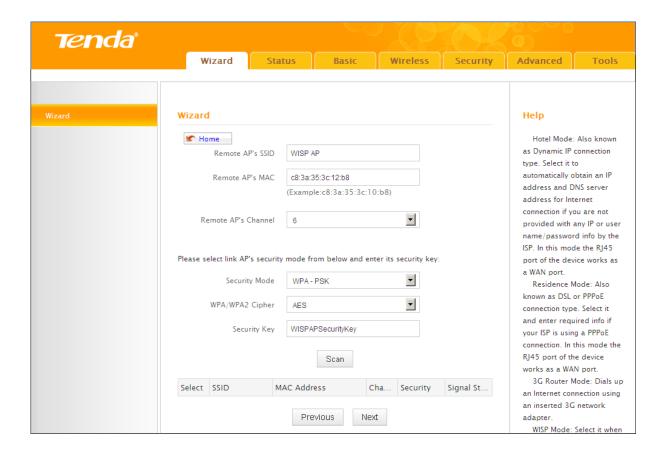


#### **WISP**

1 Select WISP Mode: WISP and click Next.



② WISP Setup: Enter or specify the SSID, MAC, channel, security settings provided by your WISP and then click **Next**.





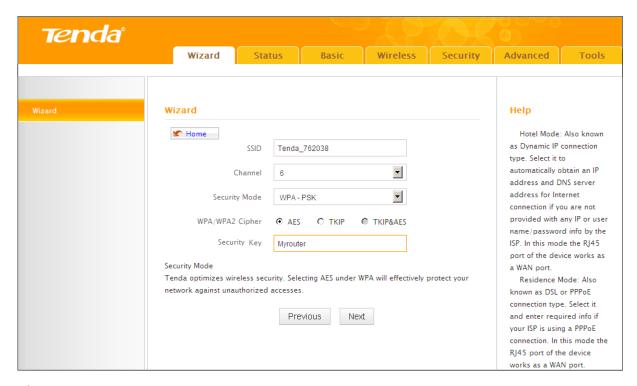
3 Configure your wireless network: SSID and security settings and then click Next.

SSID: Tenda\_762038

Security Mode: WPA-PSK

Cipher Type: AES

Security Key: Myrouter





In WISP mode, your wireless network must be set to operate on the same channel as your WISP AP.

4 Internet Setup: Configure the Internet connection settings and then click **Next**. If you are unsure, consult your WISP.





6 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.





Upon successful configuration, the RJ-45 port on the device functions as a LAN port and clients can access the device either wirelessly or via a wired connection.



## **III Features & Configurations**

## 1 Status

This section includes the following:

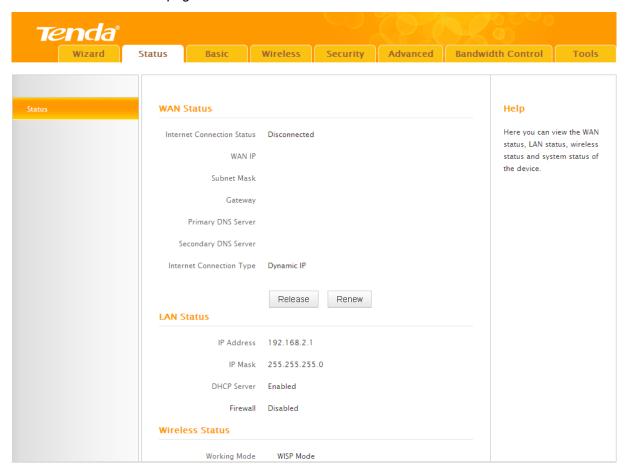
**WAN Status** 

LAN Status

Wireless Status

System Status

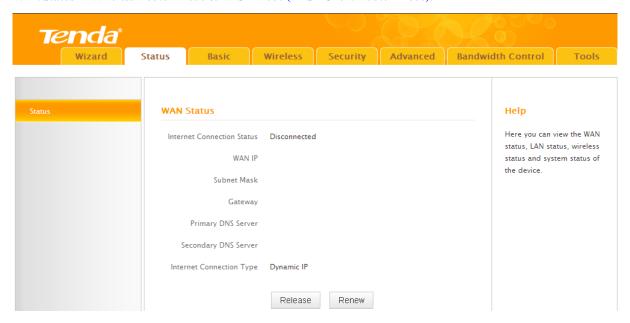
Click Status to enter the page.



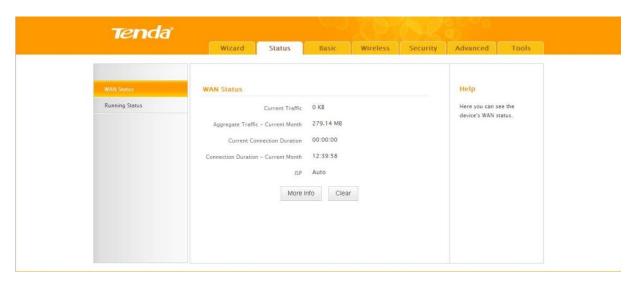


#### 1.1 WAN Status

WAN Status in Wireless Router Mode & WISP Mode (WISP Client Router Mode):



#### WAN Status in 3G/4G Router Mode:





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.

If nothing appears in the secondary DNS server field, there is no available secondary DNS server.



# 1.2 LAN Status

| LAN Status  |               |
|-------------|---------------|
| IP Address  | 192.168.2.1   |
| IP Mask     | 255.255.255.0 |
| DHCP Server | Enabled       |
| Firewall    | Disabled      |

# 1.3 Wireless Status

| Wireless Status   |               |  |
|-------------------|---------------|--|
| Working Mode      | WISP Mode     |  |
| Wireless          | Enabled       |  |
| 802.11 Mode       | 11b/g/n mixed |  |
| Current Channel   | 13            |  |
| SSID              | Tenda_762038  |  |
| Wireless Security | Disable       |  |



## 1.4 System Status

| System Status     |                     |  |  |  |
|-------------------|---------------------|--|--|--|
| System Time       | 2000-01-01 00:01:19 |  |  |  |
| Up Time           | 00:01:23            |  |  |  |
| Connected Clients | 1                   |  |  |  |
| LAN MAC Address   | C8:3A:35:76:20:38   |  |  |  |
| WAN MAC Address   | C8:3A:35:76:20:3D   |  |  |  |
| Fireware Version  | V1.01.02            |  |  |  |
| Hardware Version  | V1.0                |  |  |  |

Knowledge Center ------

- 1. WAN MAC Address: The device's current WAN MAC address.
- 2. **System Time:** Current system time on this device. The device automatically synchronizes the system time with Internet time servers.
- **3. Up Time:** Displays the time duration indicating how long the router has been up since startup. Up time is recounted and renewed upon poweroff.
- 4. Connected Clients: Displays the number of DHCP clients.

# 2 Basic Settings

This section includes the following:

LAN Setup

WAN Setup

WAN Speed

**DNS Settings** 

MAC Clone

**DHCP Server** 

**DHCP Client List** 

To change the device's login IP address, see <u>LAN Setup</u>.



- To set up Internet, see WAN Setup.
- To set up speed and duplex mode for the WAN port, see WAN Speed Setup.
- To configure DNS server, see **DNS Setup**.
- To clone MAC address, see **MAC Clone**.
- To configure DHCP server, see **DHCP Server**.
- To assign static IP addresses and view LAN device information, see **DHCP Client List**.

## 2.1 LAN Settings

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



- 1.Default IP address and subnet mask are respectively 192.168.2.1 and 255.255.255.0.
- 2. 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. Also, you have to set the default gateway addresses of all LAN PCs to this new IP address.
- 3. The router's LAN IP address and WAN IP address cannot be on the same IP segment. If not, the router will not be able to access Internet.



#### **Configuration Procedures:**

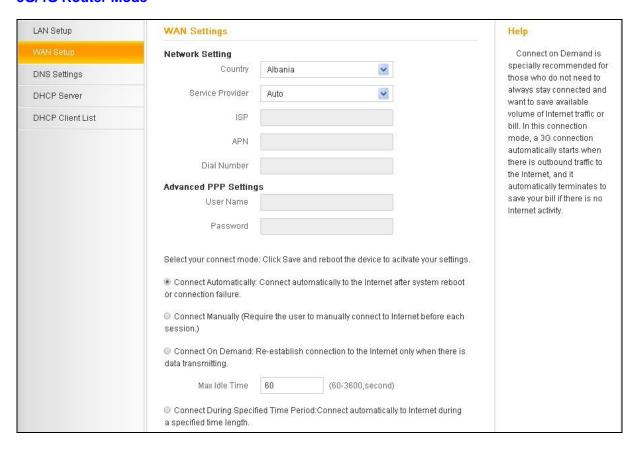
- Change the IP address to the one you wish to use, for example, 192.168.10.1.
- 2 Click Save to save your settings.



## 2.2 WAN Settings

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

#### **3G/4G Router Mode**



#### **Configuration Procedures:**

- Country: Select your country.
- Service Provider: Select your 3G/4G ISP.
- 3 User Name/Password: Enter the user name and password for 3G/4G Internet service.
- 4 Click Save.



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



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

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

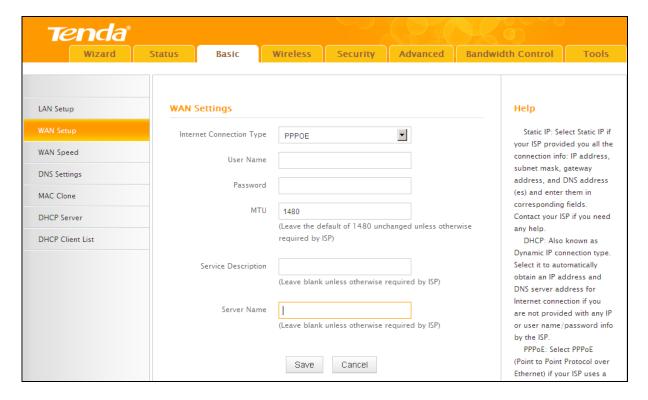
**Connect During Specified Time Period:** Connect automatically to the Internet during a specified time length.

#### **Wireless Router & WISP Client Router Mode**

- 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**



#### **Configuration Procedures:**

- 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.

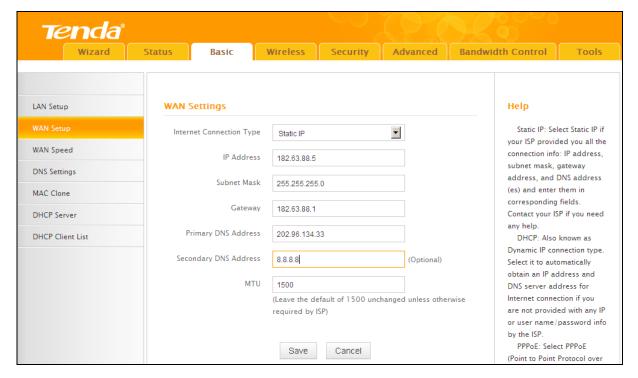
# Knowledge Center ------

- **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:**

- 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 *1GettingPrepared*.
- 3 Click Save to save your settings.



#### **DHCP**

| <b>Tenda</b> °   |        |                               |             |  |          | H       |  |                              |  |
|------------------|--------|-------------------------------|-------------|--|----------|---------|--|------------------------------|--|
| Wizard           | Status | Basic                         | Wireless    | Security   | Advanced | Bandwid | dth Control  | Tools                        |  |
|                  |        |                               |             |  |          |         |  |                              |  |
| LAN Setup        | WAN    | Settings                      |             |  |          |         | Help   |                              |  |
| WAN Setup        | Inter  | Internet Connection Type DHCP |             |  |          |         | Static IP: Select Static IP if your ISP provided you all the                               |                              |  |
| WAN Speed        |        | MT                            | U 1500      |  |          |         |  | connection info: IP address, |  |
| DNS Settings     |        |                               |             | (Leave the default of 1500 unchanged unless otherwise required by ISP) |          |         | subnet mask, gateway address, and DNS address (es) and enter them in corresponding fields. |                              |  |
| MAC Clone        |        |                               | required by |  |          |         |  |                              |  |
| DHCP Server      |        |                               | Save        | Cancel   |          |         | Contact your IS  |                              |  |
| DHCP Client List |        |                               | 0410        | Carlos   |          |         | DHCP: Also known as  |                              |  |

#### **Configuration Procedures:**

- Internet Connection Type: Select 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 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.

35



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

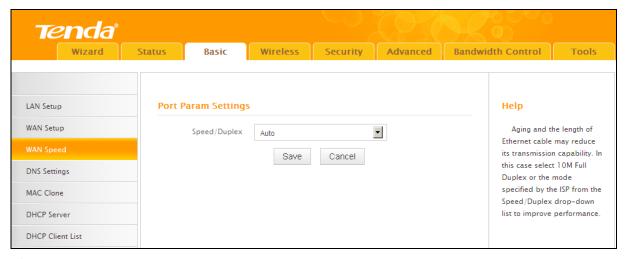
| MTU  | Application   |
|------|---|
| 1500 | Typical for connections that do not use PPPoE or VPN.             |
| 1492 | Used in PPPoE environments.                                       |
| 1472 | Maximum size to use for pinging. (Larger packets are fragmented.) |
| 1468 | Used in some DHCP environments.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

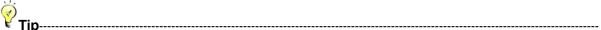


A wrong/improper MTU value may cause Internet communication problems. For example, you may be unable to access certain websites, frames within websites, secure login pages, or FTP or POP servers.

## 2.3 WAN Speed

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





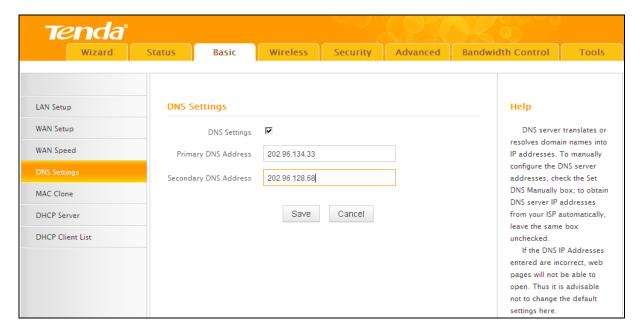
1. The router operates in "Auto-negotiation" (or Auto) mode by default. Usually, it works for most cases.

In some situations, you might need to change the port mode. For example, if the cable connected to your router's WAN port is longer than 100m, you may need to use 10M full-duplex or 10M half-duplex for better performance. Ensure that your router's WAN port operates with the same speed and duplex mode as the remote link partner. If not, your router's WAN port may not receive and send data.



## 2.4 DNS Settings

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



#### **Configuration Procedures:**

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

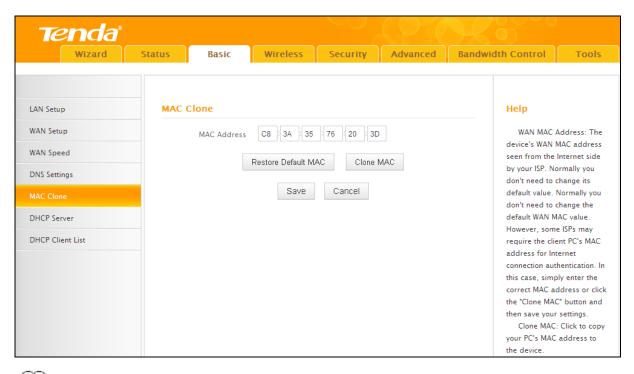


The default DNS settings are recommended. Only change the DNS default settings if you know that your ISP requires specific servers. If incorrect DNS settings are configured, webpages will be unable to open.



#### 2.5 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 **Basic -> MAC Clone** to enter the MAC Clone screen.





- 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:

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

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

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

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

Enter the MAC address allowed by your ISP.

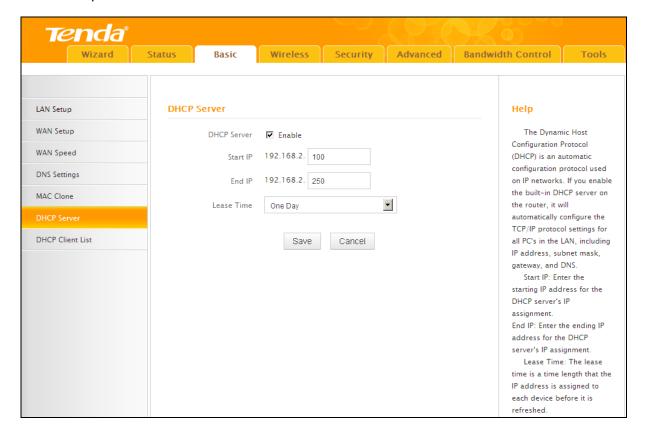


② Click Save to save your settings.

#### 2.6. 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 **Basic -> 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.



- **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.

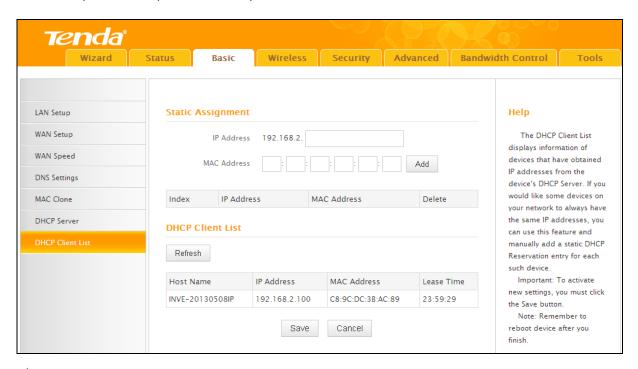


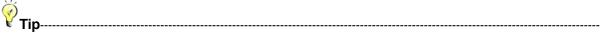
By default, the router functions as a DHCP server. Do not disable the DHCP server feature unless you want to manually configure the TCP/IP settings for all PCs on your LAN.

- 1. Lease time will be renewed automatically upon expiry. No additional configurations are needed.
- 2. If you are not an advanced user, the default DHCP server settings are recommended.

#### 2.7 DHCP Client List

Click **Basic -> DHCP Client List**. Here you can view the DHCP dynamic client list, which includes host name, IP address, MAC address, and lease time information.





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

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