



User Guide

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Chapter 1 Product Overview

1.1 Package Contents

Unpack the box and verify the package contains the following items:

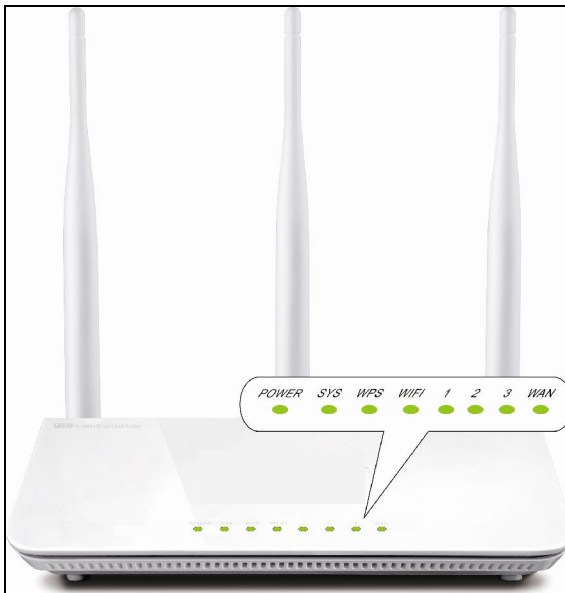
- Router inalámbrico N300
- Power Adapter
- Installation Guide
- Resource CD(including User Guide, Quick Install Guide, and setup wizard)
- Ethernet Cable

If any of the above items is incorrect, missing, or damaged, please contact your Wlink reseller for immediate replacement.

1.2 Getting to know your router

Before you cable your router, take a moment to become familiar with the front and back panels and the label. Pay particular attention to the LEDs on the front panel.

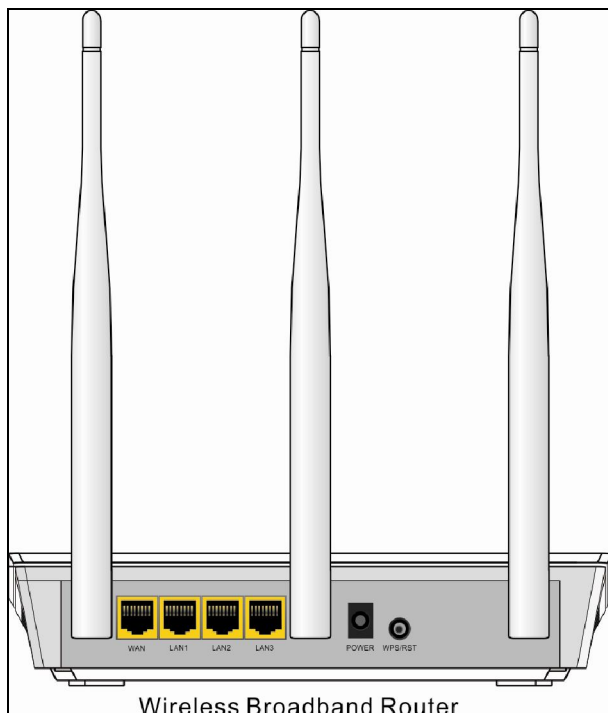
Front Panel



Front LED Overview

LED	Status	Description
Power	Solid	Indicates a proper connection to the power supply
	Off	Indicates an improper connection to the power adapter
SYS	Blinking	Indicates system is functioning properly
WPS	Solid	WPS is enabled
	Blinking	Device is performing WPS authentication on a client device
	Off	WPS is disabled or WPS negotiation is finished
WIFI	Solid	Wireless is enabled
	Blinking	Transferring data
	Off	Wireless is disabled
LAN (1/2/3)	Solid	LAN port connected correctly
	Blinking	LAN port is transferring data
	Off	LAN port connected incorrectly
WAN	Solid	WAN port connected correctly
	Blinking	WAN port is transferring data
	Off	WAN port connected incorrectly

Back Panel



Back LED Overview

Port	Description
WAN	Usually for connecting DSL MODEM, CABLE MODEM, ISP to the Internet.
LAN(1/2/3)	Usually for connecting computers, switches .etc.
POWER	The power adapter is connected and you can use the provided adapter to supply power.
WPS/ RESET	When you press this button for 7 seconds, files set by the router will be deleted and restored to default factory settings; for 1 second, WPS will be enabled and the WPS LED will be blinking accordingly.

1.3 Position your Router



The router lets you access your network from virtually anywhere within the operating range of your wireless network. However, the operating distance or range of your wireless connection can vary significantly depending on the physical placement of your router. For example, the thickness and number of walls the wireless signal passes through can limit the range. For best results, place your router:

- Near the center of the area where your computers and other devices operate, and preferably within line of sight to your wireless devices.
- So it is accessible to an AC power outlet and near Ethernet cables for wired computers.
- In an elevated location such as a high shelf, keeping the number of walls and ceilings between the router and your other devices to a minimum.
- Away from electrical devices that are potential sources of interference. Equipment that might cause interference includes ceiling fans, home security systems, microwaves, PCs, the base of a cordless phone, or a 2.4-GHz cordless phone.
- Away from any large metal surfaces, such as a solid metal door or aluminum studs. Large expanses of other materials such as glass, insulated walls, fish tanks, mirrors, brick, and concrete can also affect your wireless signal.

Chapter 2 Installation and Quick Setup Guide

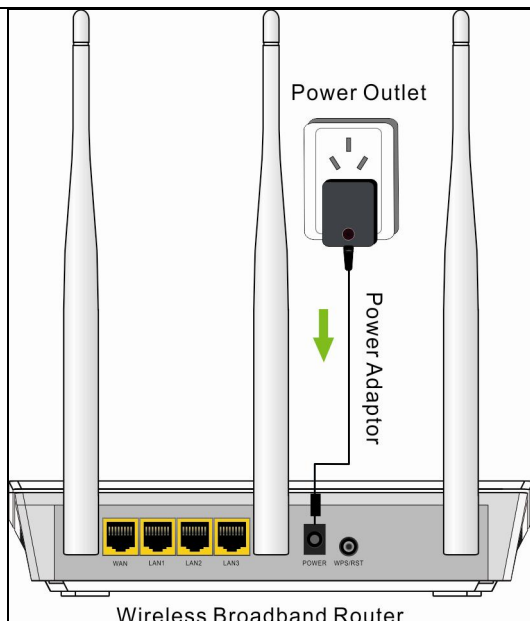
2.1 Preparation

Before connecting Ethernet cables, please verify the following items:

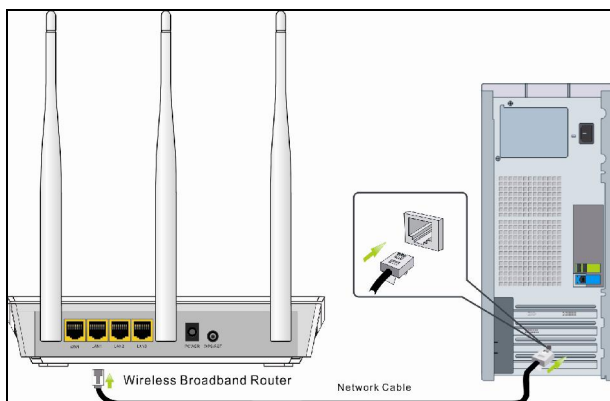
Item	Description
Wireless Router	Used with the provided power supply
PC	Installed with IE8 or other better web browsers.
Ethenet Cable	Used for linking the PC to the router
Broadband Service	Provided by ISP
Internet Connection Setup	<ul style="list-style-type: none">✧ If you connect to the Internet using a broadband connection that requires a username and a password provided by your ISP, please select PPPoE;✧ If your ISP provides all the needed information: IP address, subnet mask, gateway address, and DNS address(es), please select Static IP;✧ If you can access Internet as soon as your computer directly connects to an Internet-enabled ADSL/Cable modem, please select DHCP;✧ If your ISP uses a PPTP connection, please select PPTP;✧ If your ISP uses an L2TP connection, please select L2TP..

2.2 Physical installation

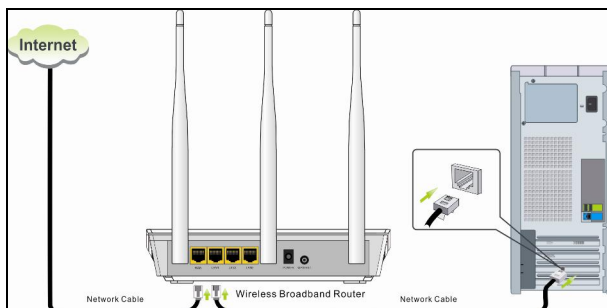
1. Connect one end of the included power adapter to the device and plug the other end into a wall outlet nearby. (Using a power adapter with a different voltage rating than the one included with the device will cause damage to the device.)



2. Connect one of the LAN ports on the Device to the NIC port on your PC using an Ethernet cable.



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



4. When connected, log in to Web manager to set up Internet connection.

2.3 Internet Connection Setup

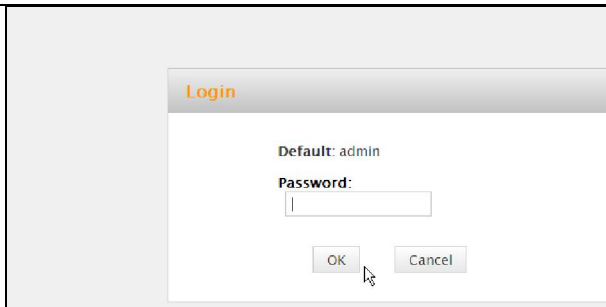
Before you start the setup process, get your ISP information and make sure the computers and devices in the network have the settings described here.

2.3.1 Use Standard TCP/IP Properties for DHCP

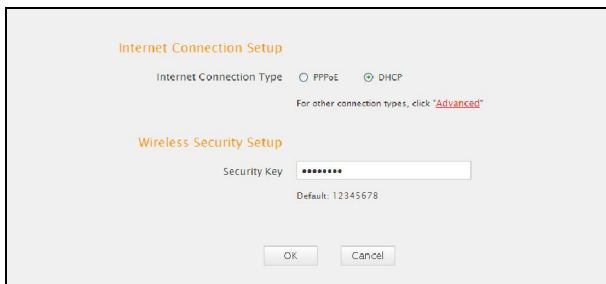
If you set up your computer to use a static IP address, change the settings so that it uses Dynamic Host Configuration Protocol (DHCP). If you are not clear about this configuration, please refer to [Appendix 1: How to Configure IP](#).

2.3.2 Log in to Web Manager

- 1). Launch a web browser; in the address bar, input 192.168.0.1 and press **Enter**;
- 2). Enter **admin** in the password field on the appearing login window and then click **OK**.



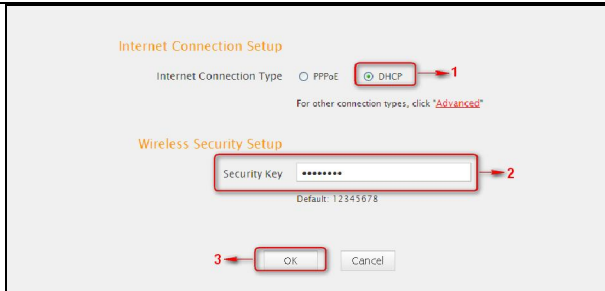
2. Now you may access the device's home page for quickly setting up Internet connection and wireless security.



2.3.3 Quick Internet Connection Setup

- 2 common Internet connection types are available on the home page: PPPoE and DHCP.

DHCP: Select DHCP (Dynamic IP) if you can access Internet as soon as your computer directly connects to an Internet-enabled ADSL/Cable modem; configure a security key (8-63 characters) to secure your wireless network and then click **OK**.



Internet Connection Setup

Internet Connection Type ☐ PPPoE ☒ DHCP (1)

For other connection types, click "Advanced"

Wireless Security Setup

Security Key (2)

Default: 12345678

OK (3) Cancel

PPPoE: Select PPPoE (Point to Point Protocol over Ethernet) if you used to connect to the Internet using a broadband connection that requires a username and a password. Enter the user name and password provided by your ISP; configure a security key to secure your wireless network and then click **OK**.



Internet Connection Setup

Internet Connection Type ☒ PPPoE ☐ DHCP (1)

PPPoE Username (2) 075502452880@163.com

PPPoE Password

For other connection types, click "Advanced"

Wireless Security Setup

Security Key (3)

Default: 12345678

OK (4) Cancel



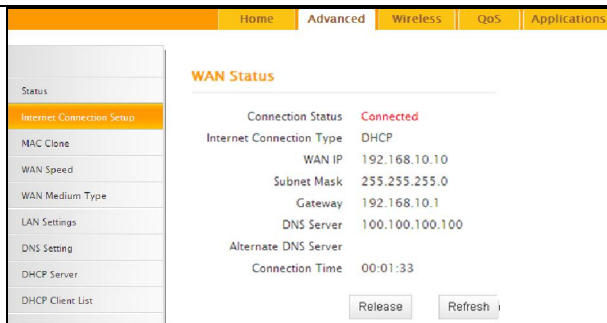
Note:

1. DHCP is the default Internet connection type;
2. If you are not sure about your PPPoE username and password, contact your Internet service provider (ISP) for help. For other Internet connection types, please go to section 3.2: Internet Connection Setup.

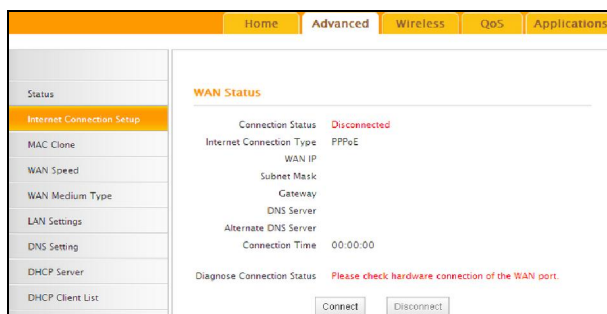
2.3.4 Verify Internet Connection Settings

System automatically skips to the status page when you finish all needed settings on the home page. Here you can see the system status and WAN connection status of the device.

1. If you find "**Connected**" and a WAN IP address displayed there (as shown below), you have got a wired internet access now.



2. If connection status displays "Disconnected" and there is no WAN IP address displayed (as seen below), connection between the Internet-enabled modem and your device may have failed. Please double check or re-connect all involved devices and cables properly and then refresh the page. If nothing is wrong, "Connecting" or "Connected" will be displayed.



3. If "**Connecting**" is displayed and no WAN IP address is seen, try refreshing the page five times. And if it still displays "**Connecting**" try steps below:
 - 1). Contact your ISP for assistance if you are using the DHCP connection type.
 - 2). Read the connection diagnostic info on WAN status.

Home		Advanced	Wireless	QoS	Applications
Status	WAN Status				
Internet Connection Setup	Connection Status: Connecting Internet Connection Type: PPPoE WAN IP: Subnet Mask: Gateway: DNS Server: Alternate DNS Server: Connection Time: 00:00:00 Diagnose Connection Status: No response from your Internet Service Provider(ISP), please consult your ISP.				
MAC Clone	<input type="button" value="Connect"/> <input type="button" value="Disconnect"/>				
WAN Speed					
WAN Medium Type					
LAN Settings					
DNS Setting					
DHCP Server					
DHCP Client List					

Note:

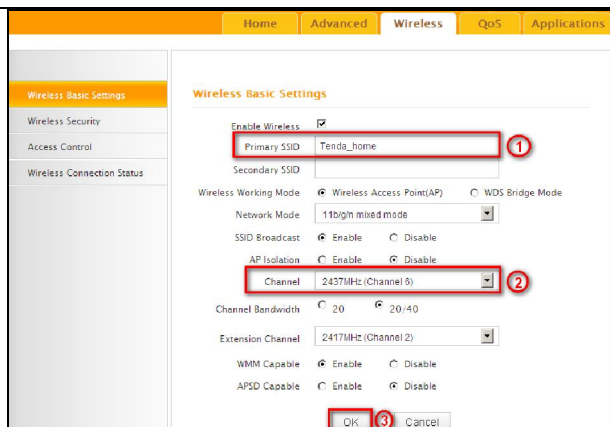
Below diagnostic info will be displayed on particular occasions for your reference:

- 1). You have connected to Internet successfully.
- 2). You might have entered a wrong user name and/or a wrong password. Please contact your ISP for the correct user name and password and enter them again.
- 3). Ethernet cable is not connected or not properly connected to the WAN port on the device. Please reconnect it properly.
- 4). No response is received from your ISP. Please verify that you can access Internet when you directly connect your PC to an Internet-enabled modem. If not, contact your local ISP for help.

2.3.5 Wireless Settings

Wireless Basic Settings

If you want to create a WLAN for sharing Internet connection, simply click Wireless-> Wireless Basic Settings. Change the SSID, you can name it whatever you like. Select 2437MHz (channel 6) and leave other options unchanged and then click OK.

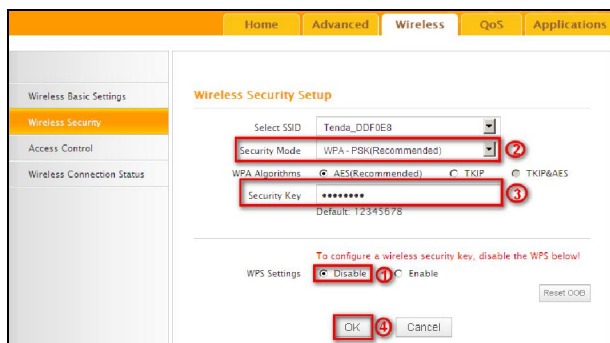


The screenshot shows the 'Wireless Basic Settings' page in a web interface. The left sidebar has 'Wireless Basic Settings' selected. The main area contains the following settings:

- Enable Wireless:** ☒ (1)
- Primary SSID:** Tenda_home (2)
- Secondary SSID:** (empty)
- 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) (3)
- Channel Bandwidth:** ☐ 20 ☒ 20/40
- Extension Channel:** 2417MHz (Channel 2)
- WMM Capable:** ☒ Enable ☐ Disable
- APSD Capable:** ☐ Enable ☒ Disable
- Buttons:** OK (4) Cancel

Wireless Security Settings

If you want to encrypt your wireless network, click **Wireless Security**, disable WPS, specify a security key of down to 8 characters, and then click OK.



The screenshot shows the 'Wireless Security Setup' page. The left sidebar has 'Wireless Security' selected. The main area contains the following settings:

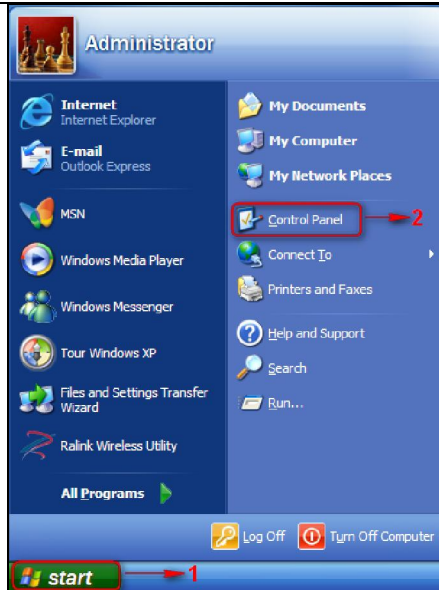
- Select SSID:** Tenda_DDF0E8 (1)
- Security Mode:** WPA-PSK(Recommended) (2)
- WPA Algorithms:** ☒ AES(Recommended) ☐ TKIP ☐ TKIP/AES
- Security Key:** ***** (3)
- Default:** 12345678
- WPS Settings:** ☒ Disable (4) ☐ Enable
- Buttons:** OK (5) Cancel
- Reset** (button)

To configure a wireless security key, disable the WPS below!

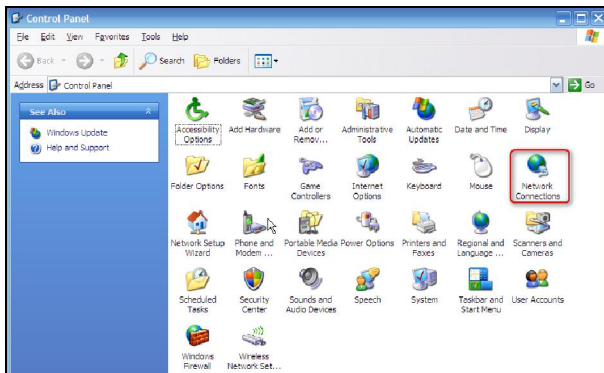
2.3.6 Connect to Device Wirelessly

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

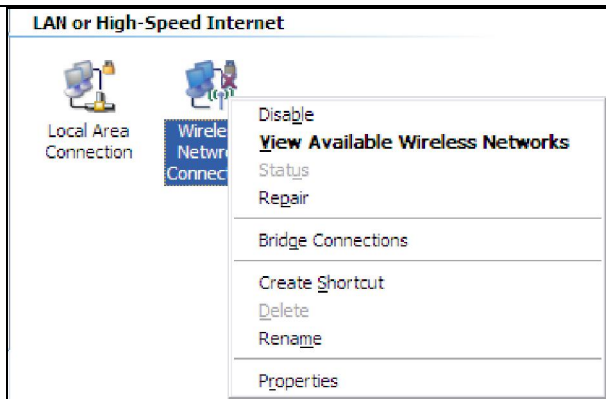
1. If you are using Windows XP OS, do as follows:
 - 1) Click **Start** and select **Control Panel**.



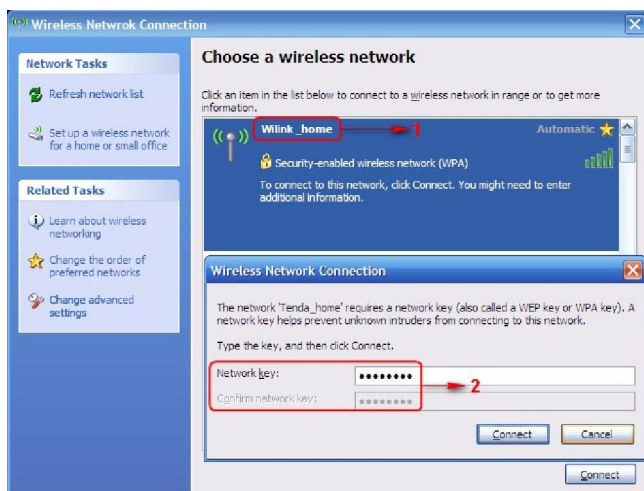
2) Click **Network Connections**.



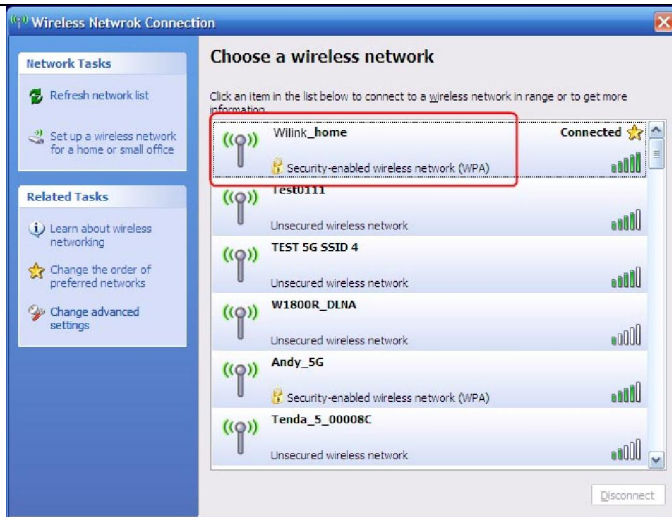
3) Right click **Wireless Network Connection** and then select **View Available Wireless Networks**.



- 4) Select the desired wireless network, click **Connect**, enter the security key and then click **OK**.

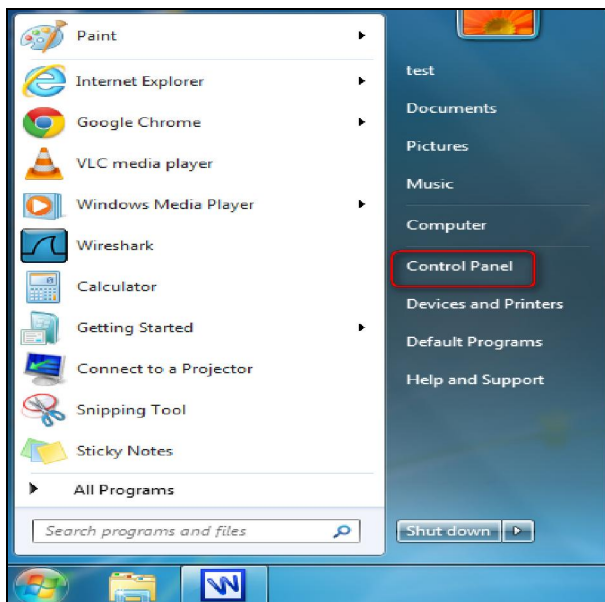


- 5) You can access Internet via the device when **"Connected"** appears next to the wireless network name you selected.

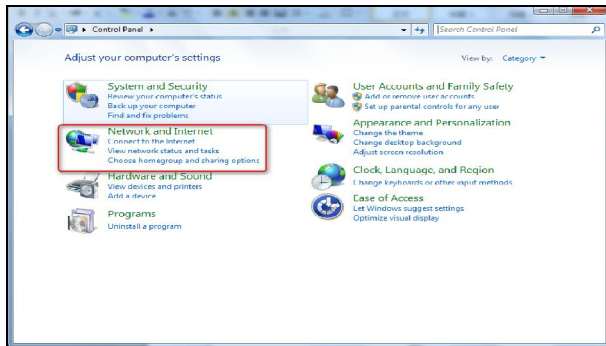


2. If you are using Windows 7 OS, do as follows:

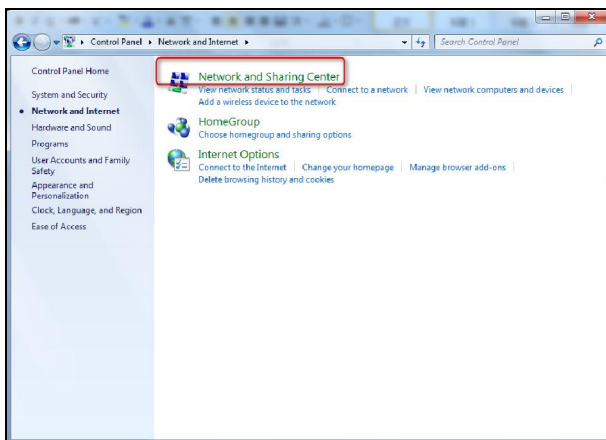
1) Click **Start** and select **Control Panel**.



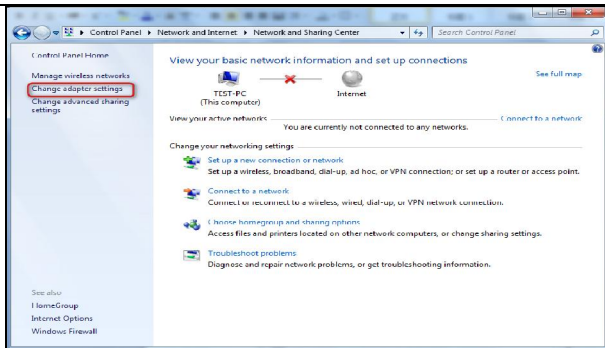
2) Click **Network and Internet**.



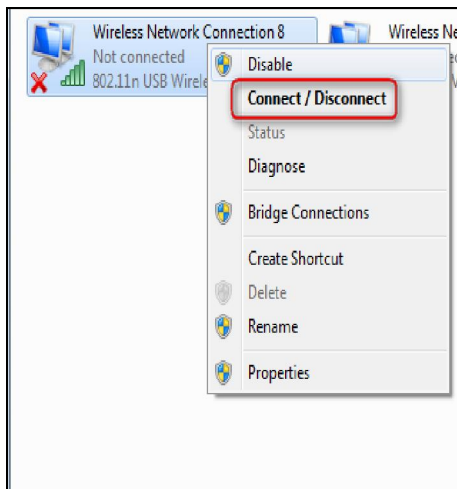
3) Click **Network** and **Sharing Center**.



4) Click **Change adapter settings**.



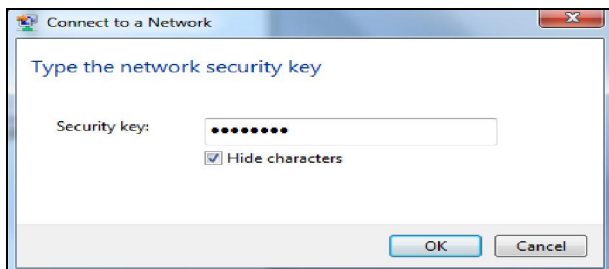
5) Select a desired wireless connection and click **Connect/Disconnect**.



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



7) Enter the security key and click **OK**.



8) You can access Internet via the device when "**Connected**" appears next to the wireless network name you selected.



Chapter 3 Advanced Settings

3.1 Status

Here you can see at a glance the operating status of the device.



1. **Connection Status:** Displays WAN connection status: Disconnected, Connecting or Connected.
2. **Disconnected:** Indicates that the Ethernet cable from your ISP side is not correctly connected to device's WAN port or the router is not logically connected to your ISP.
3. **Connecting:** Indicates that the WAN port is correctly connected and is requesting an IP address from your ISP.
4. **Connected:** Indicates that the router has been connected to your ISP.
5. **Internet Connection Type:** Displays current Internet connection type.
6. **WAN IP:** Displays the WAN IP address.
7. **Subnet Mask:** Displays WAN subnet mask provided by your ISP.
8. **Gateway:** Displays WAN gateway address.
9. **DNS Server:** Displays the preferred WAN DNS address.
10. **Alternate DNS Server:** Displays the alternate WAN DNS address if any.
11. **Connection Time:** Time duration since the device has been successfully connected to ISP.

Home			Advanced	Wireless	Tools	Applications	Security	Tools
Status Internet Connection Setup MAC Clone WAN Speed WAN Medium Type LAN Settings DNS Setting DHCP Server DHCP Client List			WAN Status <div> <div>Connection Status</div> <div>Connecting</div> </div> <div> <div>Internet Connection Type</div> <div>PPPoE</div> </div> <div> <div>WAN IP</div> <div></div> </div> <div> <div>Subnet Mask</div> <div></div> </div> <div> <div>Gateway</div> <div></div> </div> <div> <div>DNS Server</div> <div></div> </div> <div> <div>Alternate DNS Server</div> <div></div> </div> <div> <div>Connection Time</div> <div>00:00:00</div> </div> <div> <div>Diagnose Connection Status</div> <div>Authentication failed! Please check PPPoE Username and PPPoE Password.</div> </div> <div> <div>Connect</div> <div>Disconnect</div> </div>			Help <p>Connection Status: Refers to the connection between the router and the device connected to the router's WAN.</p> <p>Internet Connection Type: This can be set in Advanced > Internet Connection Setup. DHCP and PPPoE are the most common.</p> <p>Connection Time: Displays WAN connection duration for the DHCP Dynamic IP and PPPoE connection type.</p> <p>System Version: Displays the current firmware version of the device.</p>		
			System Status <div> <div>LAN MAC Address</div> <div>C8:3A:35:00:FD:E8</div> </div> <div> <div>WAN MAC Address</div> <div>C8:3A:35:00:FD:E8</div> </div> <div> <div>System Time</div> <div>2011-04-01 00:05:24</div> </div> <div> <div>Running Time</div> <div>00:05:24</div> </div> <div> <div>Connected Client</div> <div>1</div> </div> <div> <div>System Version</div> <div>V8.07.48_en</div> </div> <div> <div>Hardware Version</div> <div>V3.0</div> </div>					

1. **LAN MAC Address:** Displays device's LAN MAC address.
2. **WAN MAC Address:** Displays device's WAN MAC address.
3. **System Time:** Displays device's system time either customized or obtained from Internet.
4. **Up Time:** Displays device's uptime.
5. **Connected Client(s):** Displays the number of connected network devices (which obtain IP addresses from device DHCP server).
6. **Firmware Version:** Displays Device's current firmware version.
7. **Hardware Version:** Displays Device's current hardware version.

3.2 Internet Connection Setup

3.2.1 PPPoE

Select PPPoE (Point to Point Protocol over Ethernet) if you used to connect to the Internet using a broadband connection that requires a username and a password and enter the user name and password provided by your ISP.

Home		Advanced	Wireless	QoS	Applications
Status	Internet Connection Setup				
Internet Connection Setup	<p>Internet Connection Type: <input type="text" value="PPPoE"/></p> <p>PPPoE Username: <input type="text" value="075533263873@163.com"/></p> <p>PPPoE Password: <input type="password" value="*****"/></p> <p>MTU: <input type="text" value="1492"/> <small>(The default value is 1492. Do not modify it unless required by your ISP.)</small></p> <p>Service Name: <input type="text"/> <small>(Only enter this information if instructed by ISP.)</small></p> <p>Server Name: <input type="text"/> <small>(Only enter this information if instructed by ISP.)</small></p> <p>Select the corresponding connection mode according to your situation.</p> <p><input checked="" type="radio"/> Connect automatically: Connect automatically to the Internet after rebooting the system or connection failure.</p>				
MAC Clone					
WAN Speed					
WAN Medium Type					
LAN Settings					
DNS Setting					
DHCP Server					
DHCP Client List					

1. **Internet connection Type:** Select PPPoE.
2. **PPPoE User Name:** Enter the User Name provided by your ISP.
3. **PPPoE Password:** Enter the password provided by your ISP.
4. **MTU:** Maximum Transmission Unit. DO NOT change it from the factory default of 1492 unless necessary. You may need to change it for optimal performance with some specific websites or application software that cannot be opened or enabled; in this case, try 1450, 1400, etc.
5. **Service Name:** Description of PPPoE connection. Leave blank unless otherwise required.
6. **Server Name:** Description of server. Leave blank unless otherwise required.
7. **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 transmission.

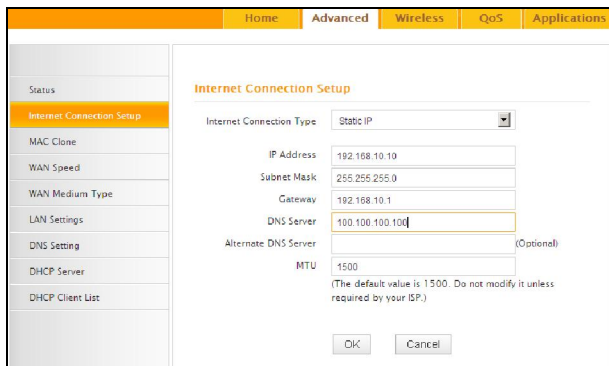
Connect During Specified Time Period: Only connect to Internet during a specified time period.

8. **OK:** Click it to save all your settings.

3.2.2 Static IP

Select **Static IP** if your ISP provides all the needed info. You will need to enter the provided IP address, subnet mask, gateway address, and DNS

address(es) in corresponding fields.

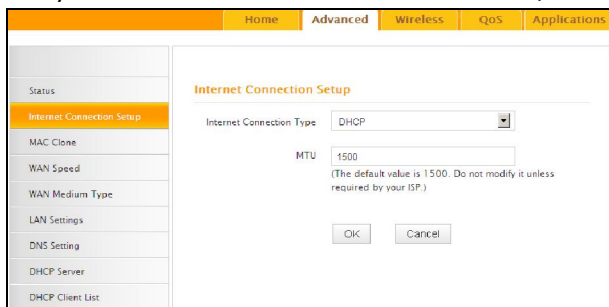


The screenshot shows the 'Internet Connection Setup' page in a web interface. The 'Internet Connection Type' is set to 'Static IP'. The following fields are filled: IP Address (192.168.10.10), Subnet Mask (255.255.255.0), Gateway (192.168.10.1), and DNS Server (100.100.100.100). The 'Alternate DNS Server' field is empty, and the 'MTU' is set to 1500. A note below the MTU field states: '(The default value is 1500. Do not modify it unless required by your ISP.)'. The 'OK' and 'Cancel' buttons are at the bottom.

1. **Internet connection Type:** Select Static IP.
2. **IP Address:** Enter the IP address provided by your ISP. Consult your ISP if you are not clear.
3. **Subnet mask:** Enter the subnet mask provided by your ISP.
4. **Gateway:** Enter the WAN Gateway provided by your ISP. Consult your ISP if you are not clear.
5. **DNS Server:** Enter the DNS address provided by your ISP.
6. **Alternate DNS Server:** Enter the other DNS address if your ISP provides 2 such addresses (optional).
7. **OK:** Click it to save all your settings.

3.2.3 DHCP

Select **DHCP** (Dynamic IP) if you can access Internet as soon as your computer directly connects to an Internet-enabled ADSL/Cable modem.



The screenshot shows the 'Internet Connection Setup' page in a web interface. The 'Internet Connection Type' is set to 'DHCP'. The 'MTU' is set to 1500. A note below the MTU field states: '(The default value is 1500. Do not modify it unless required by your ISP.)'. The 'OK' and 'Cancel' buttons are at the bottom.

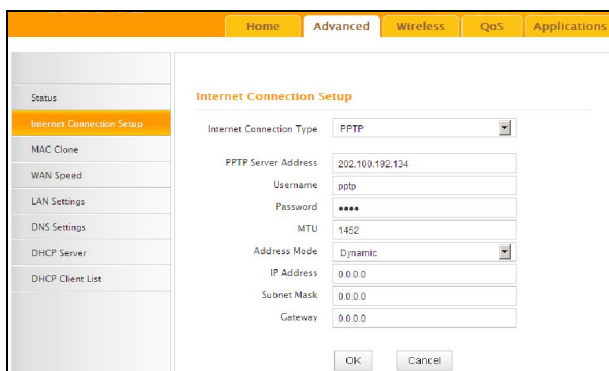
1. **Internet connection Type:** Select DHCP.
2. **MTU:** Maximum Transmission Unit. DO NOT change it from the factory default of 1500 unless instructed by your ISP. You may need to change it for optimal performance with some specific websites or application software that cannot be opened or enabled; in this case, try 1450, 1400, etc.
3. **OK:** Click it to save your settings.

3.2.4 PPTP

PPTP: Select PPTP (Point-to-Point-Tunneling Protocol) if your ISP uses a PPTP connection. The PPTP allows you to connect a router to a VPN server.

For example :

A corporate branch and headquarter can use this connection type to implement mutual and secure access to each other's resources.



1. **Internet connection Type:** Displays the current Internet connection type.
2. **PPTP Server Address:** Enter the IP address of a PPTP server.
3. **User Name:** Enter your PPTP User Name.
4. **Password:** Enter the password.
5. **MTU:** Maximum Transmission Unit. DO NOT change it from the factory default of 1492 unless instructed by your ISP. You may need to change it for optimal performance with some specific websites or application software that cannot be opened or enabled; in this case, try 1450, 1400, etc.

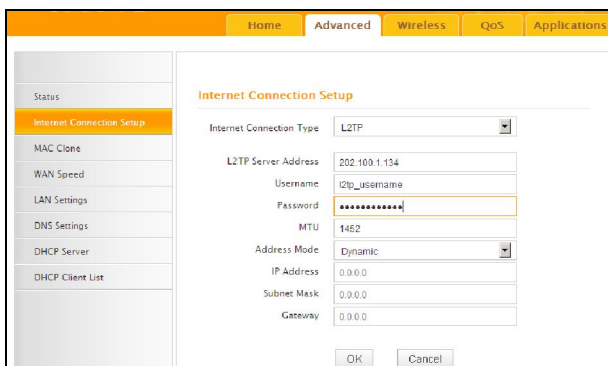
6. **Address Mode:** Select "Dynamic" if you don't get any IP info from your ISP, otherwise select "Static". Consult your ISP if you are not clear.
7. **IP Address:** Enter the IP address provided by your ISP. Consult your ISP if you are not clear.
8. **Subnet mask:** Enter the subnet mask provided by your ISP.
9. **Gateway:** Enter the WAN Gateway provided by your ISP. Consult your ISP if you are not clear.

3.2.5 L2TP

Select L2TP (Layer 2 Tunneling Protocol) if your ISP uses an L2TP connection. The L2TP connects your router to a L2TP server.

For Example :

A corporate branch and headquarter can use this connection type to implement mutual and secure access to each other's resources.



	Home	Advanced	Wireless	QoS	Applications
Status					
Internet Connection Setup					
MAC Clone					
WAN Speed					
LAN Settings					
DNS Settings					
DHCP Server					
DHCP Client List					

Internet Connection Setup

Internet Connection Type: L2TP

L2TP Server Address: 202.109.1.134

Username: l2tp_username

Password: *****

MTU: 1452

Address Mode: Dynamic

IP Address: 0.0.0.0

Subnet Mask: 0.0.0.0

Gateway: 0.0.0.0

OK Cancel

1. **Internet connection Type:** Displays the current Internet connection type.
2. **L2TP Server Address:** Enter the IP address of a L2TP server.
3. **User Name:** Enter your L2TP username.
4. **Password:** Enter the password.
5. **MTU:** Maximum Transmission Unit. DO NOT change it from the factory default of 1492 unless instructed by your ISP. You may need to change it for optimal performance with some specific websites or application software that cannot be opened or enabled; in this case, try 1450, 1400, etc.

6. **Address Mode:** Select "Dynamic" if you don't get any IP info from your ISP, otherwise select "Static". Consult your ISP if you are not clear.
7. **IP Address:** Enter the IP address provided by your ISP. Consult your ISP if you are not clear.
8. **Subnet mask:** Enter the subnet mask provided by your ISP.
9. **Gateway:** Enter the WAN Gateway provided by your ISP. Consult your ISP if you are not clear.



Note:

1. PPPOE, PPTP and L2TP cannot be used simultaneously!
2. For PPTP and L2TP Internet connections, only Static IP or Dynamic IP is available.
3. Note that PPTP and L2TP may not be available on some products.

3.3 MAC Clone

This section allows you to configure Device's WAN MAC address.

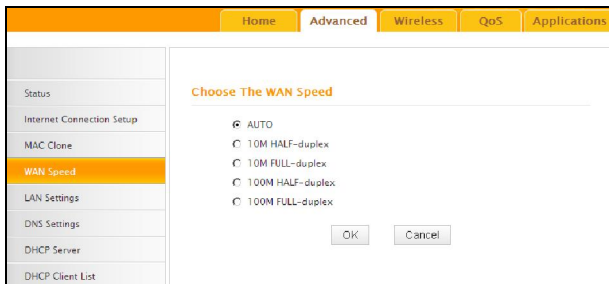


1. **MAC Address:** Config device's WAN MAC address.
2. **Clone MAC Address:** Click to copy your PC's MAC address to the device as a new WAN MAC address.
3. **Restore Default MAC:** Reset device's WAN MAC to factory default.

3.4 WAN Speed

Here you can set the speed and duplex mode for WAN port. It is advisable to

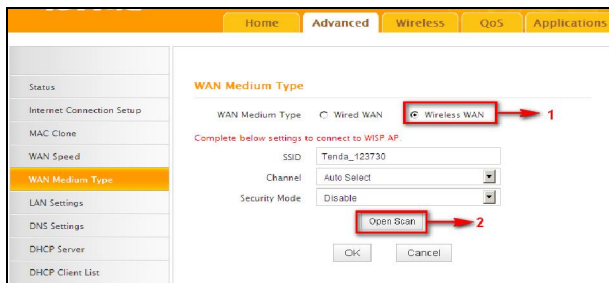
keep the default **Auto** setting to get the best speed.



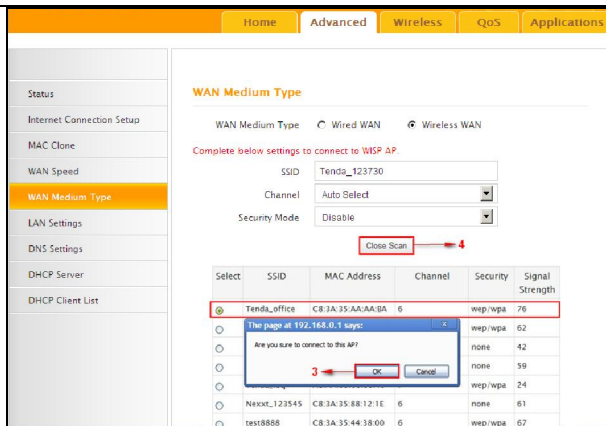
3.5 WAN Medium Type

The device supports two WAN medium types: wired and wireless. Select Wired WAN if you need to connect to your ISP via an Ethernet cable or select Wireless WAN if you directly connect to your WISP wirelessly. The default WAN Medium Type is Wired WAN, so no settings are required here if you connect to your ISP via an Ethernet cable. If you connect to your WISP wirelessly, do as follows:

1. Select **Wireless WAN** and enable the scan feature.



2. Select the wireless network you wish to connect, say, **Wilink_office**, and click **OK**. Then close scan.



WAN Medium Type

WAN Medium Type ☐ Wired WAN ☒ Wireless WAN

Complete below settings to connect to WISP AP

SSID: Tenda_123730

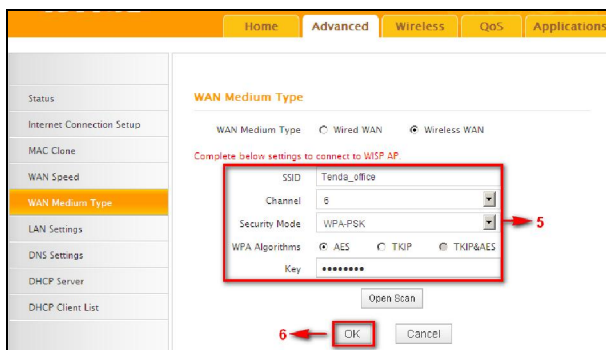
Channel: Auto Select

Security Mode: Disable

Close Scan

Select	SSID	MAC Address	Channel	Security	Signal Strength
<input checked="" type="radio"/>	Tenda_office	C8:1A:35:AA:AA:8A	6	wep/wpa	76
<input type="radio"/>	The page at 192.168.0.1 says:			wep/wpa	62
<input type="radio"/>	Are you sure to connect to the AP?			none	42
<input type="radio"/>				none	59
<input type="radio"/>				wep/wpa	24
<input type="radio"/>	Nexiot_123545	C8:1A:35:88:12:1E	6	none	61
<input type="radio"/>	test8888	C8:1A:35:44:3B:00	6	wep/wpa	67

3. 1). Verify that SSID and channel on this page are exactly the same as they are on the uplink wireless network you just selected.
- 2). Configure the same security mode, security key, cipher type (or WPA Algorithm) as they are on the uplink wireless network you just selected. Click **OK**.



WAN Medium Type

WAN Medium Type ☐ Wired WAN ☒ Wireless WAN

Complete below settings to connect to WISP AP

SSID: Tenda_office

Channel: 6

Security Mode: WPA-PSK

WPA Algorithms: ☒ AES ☐ TKIP ☐ TKIP&AES

Key: *****

Open Scan

OK

Cancel

1. **WAN Medium Type:** Select the WAN medium type you are going to use.
2. **Open Scan (or Scan):** Click to search for available wireless networks in the area and select the one you wish to connect.
3. **SSID:** The wireless network name of the uplink wireless device.
4. **Channel:** The channel used by the uplink wireless device.
5. **Security Mode:** The security mode used by the uplink wireless device.
6. **WPA Algorithms (or Cipher Type):** The WPA Algorithm (or Cipher

Type) used by the uplink wireless device.

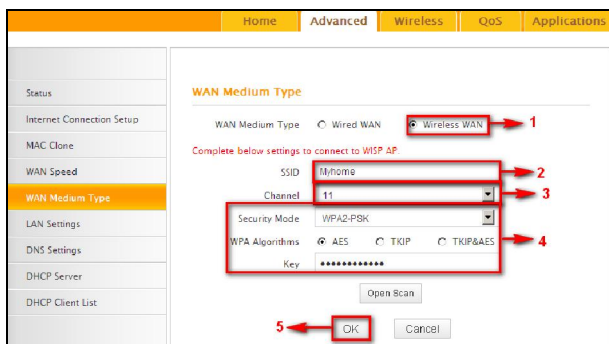
7. **Key (or Security Key):** The security key used by the uplink wireless device.

8. **OK:** Click this button and the router will restart to save your settings.

⚠ Note: If you change the device's LAN IP address, you must use the new one to log on to the web-based configuration utility.

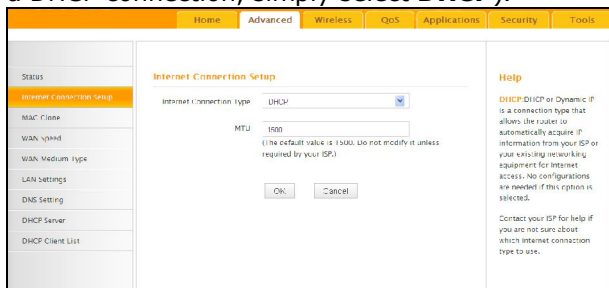
For example:

If SSID, security mode, cipher type (WPA Algorithm), security key and channel your WISP AP are respectively **Myhome**, **WPA2-PSK**, **AES**, **Wilink_router** and **11**, then simply enter them in corresponding fields as seen below.



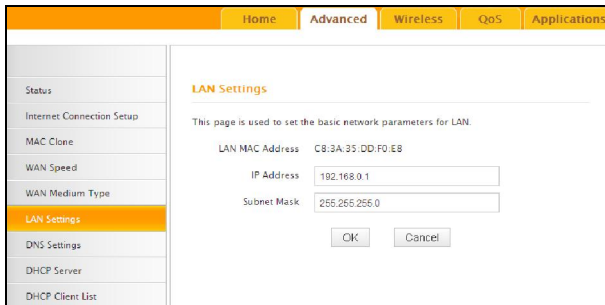
Or you can use the Open Scan (or Scan) option to have the SSID and channel of the uplink wireless device automatically copied to this page.

When you finish all these settings, go to **Advanced-> Internet Connection Setup** and select a proper Internet connection type (If your ISP is using a DHCP connection, simply select **DHCP**).



3.6 LAN Settings

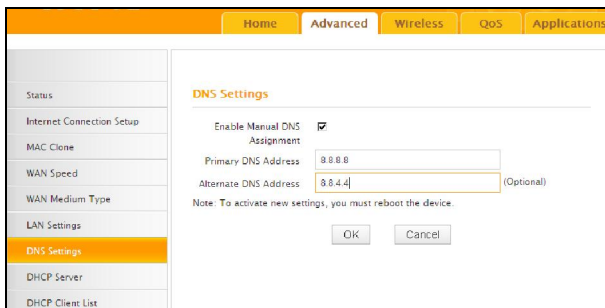
Click **Advanced** -> **LAN Settings** to enter the screen below.



1. **LAN MAC Address:** Displays device's LAN MAC address, which is NOT changeable.
2. **IP Address:** Device's LAN IP address. The default is 192.168.0.1. You can change it according to your need.
3. **Subnet Mask:** Device's LAN subnet mask, 255.255.255.0 by default.
4. **OK:** Click to save your settings.

3.7 DNS Settings

DNS is short for Domain Name System or Domain Name Service.



1. **Enable Manual DNS Assignment:** Check to activate DNS settings.
2. **Primary DNS Server :** Enter the primary DNS address provided by

your IPS.

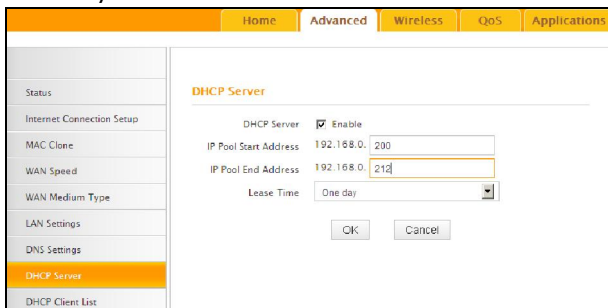
3. **Alternate DNS Server** : Enter the other DNS address if your ISP provides 2 such addresses (optional).
4. **OK**: Click to save your settings.

Note:

1. Web pages are not able to open if DNS server addresses are entered incorrectly.
2. Do remember to restart the device to activate new settings when you finish all settings.

3.8 DHCP

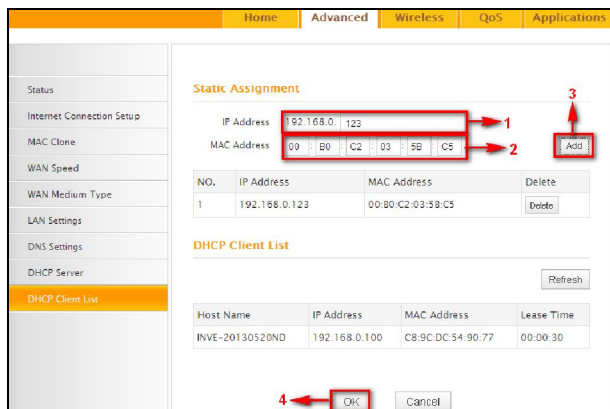
The Dynamic Host Configuration Protocol (DHCP) is an automatic configuration protocol used on IP networks. If you enable the built-in DHCP server on the device, it will automatically configure the TCP/IP settings for all your LAN computers (including IP address, subnet mask, gateway and DNS etc), eliminating the need of manual intervention. Just be sure to set all computers on your LAN to be DHCP clients by selecting "**Obtain an IP Address Automatically**" respectively on each such PC. When turned on, these PCs will automatically load IP information from the DHCP server. (This feature is enabled by default. Do NOT disable it unless necessary)



3.9 DHCP Client List

DHCP Client List displays information of devices that have obtained IP addresses from the device's DHCP Server. If you would like some devices on your network to always get the same IP addresses, you can manually add a

static DHCP reservation entry for each such device.



Static Assignment

IP Address: 192.168.0.123

MAC Address: 00 B0 C2 03 5B C5

NO.	IP Address	MAC Address	Delete
1	192.168.0.123	00:B0:C2:03:5B:C5	Delete

DHCP Client List

Refresh

Host Name	IP Address	MAC Address	Lease Time
INVE-20130520ND	192.168.0.100	C8:9C:DC:54:90:77	00:00:30

OK Cancel

1. **IP Address:** Enter the IP address for static DHCP reservation.
2. **MAC Address:** Enter the MAC address of a computer to always receive the same IP address (the IP you just specified).
3. **Add:** Click to add the entry to the MAC address reservation list.
4. **OK:** Click to save your settings.

Note:

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.

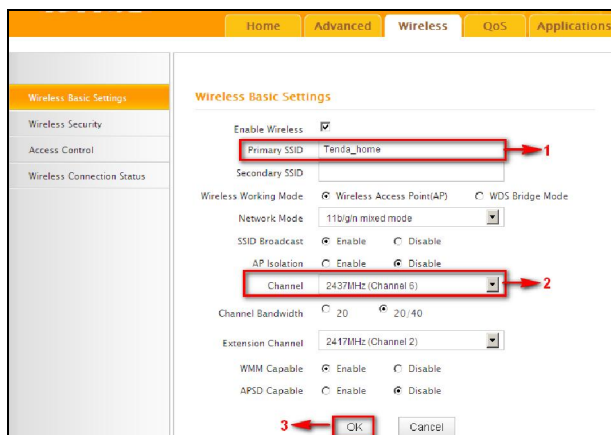
Chapter 4 Wireless Settings

4.1 Wireless Basic Settings

Here you can expand your wireless coverage with the following modes: Wireless AP (default mode) and WDS.

1. **Wireless Access Point (AP):** Select this mode if you want to convert an existing wired network to a wireless network so as to extend Internet access to wireless clients.
2. **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. Select this mode if you want to extend an existing wireless network. The two modes are described as below:

4.1.1 Wireless AP Mode

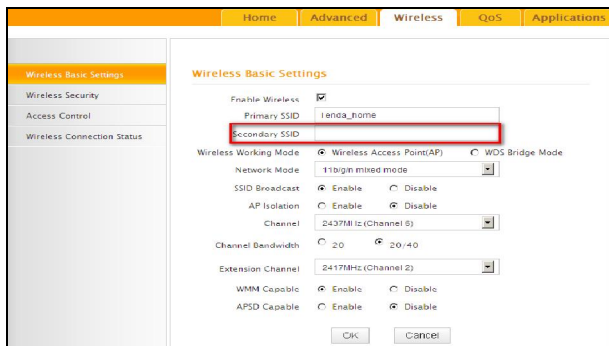


1. **SSID:** This is the public name of your wireless network. The default is Wilink_XXXXXX. XXXXXX is the last six characters in the device's MAC address. It is recommended that you change it for better security and identification.
2. **Channel:** Select a channel that is the least used by neighboring networks from the drop-down list or **Auto**. Channels 1, 6 and 11 are recommended.

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

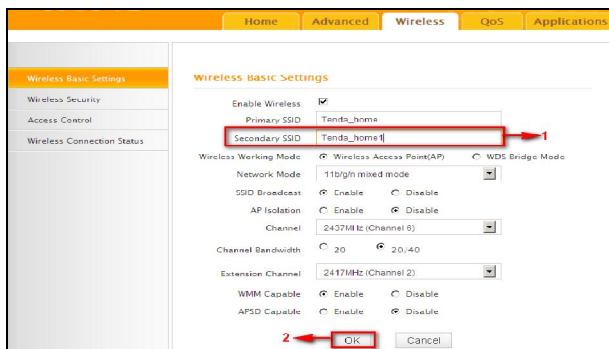
Note:

1. It is advisable to keep other items unchanged from factory default settings. For more details of other features, see Appendix 1.
2. The device supports two SSIDs: primary SSID and secondary SSID. The secondary SSID is optional, left blank and disabled by default.



The screenshot shows the 'Wireless Basic Settings' page. The 'Secondary SSID' field is highlighted with a red box. The 'Enable Wireless' checkbox is checked. The 'Primary SSID' is 'Tenda_home'. The 'Wireless Working Mode' is set to 'Wireless Access Point(AP)'. The 'Network Mode' is '11b/g/n mixed mode'. The 'SSID Broadcast' is 'Enable'. The 'AP Isolation' is 'Disable'. The 'Channel' is '2437MHz (Channel 6)'. The 'Channel Bandwidth' is '20'. The 'Extension Channel' is '2417MHz (Channel 2)'. The 'WMM Capable' and 'APSD Capable' options are both 'Enable'.

3. To enable the secondary SSID, simply specify a SSID in the field and click **OK**.

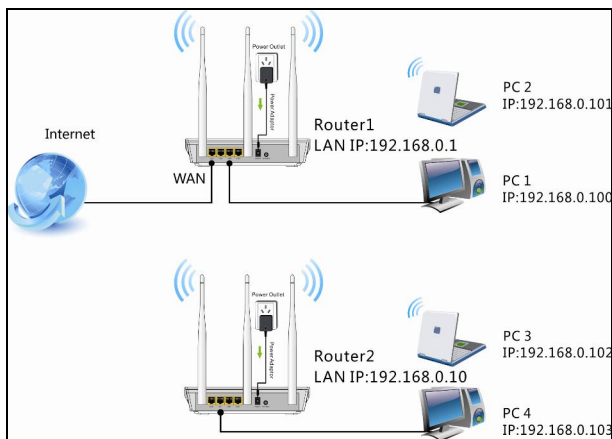


The screenshot shows the 'Wireless Basic Settings' page. The 'Secondary SSID' field is highlighted with a red box and labeled '1'. The 'OK' button is highlighted with a red box and labeled '2'. The 'Enable Wireless' checkbox is checked. The 'Primary SSID' is 'Tenda_home'. The 'Wireless Working Mode' is set to 'Wireless Access Point(AP)'. The 'Network Mode' is '11b/g/n mixed mode'. The 'SSID Broadcast' is 'Enable'. The 'AP Isolation' is 'Disable'. The 'Channel' is '2437MHz (Channel 6)'. The 'Channel Bandwidth' is '20'. The 'Extension Channel' is '2417MHz (Channel 2)'. The 'WMM Capable' and 'APSD Capable' options are both 'Enable'.

4. Instructions to configure the primary SSID also apply to the secondary SSID. The primary SSID is used below to illustrate all wireless related features.

4.1.2 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.

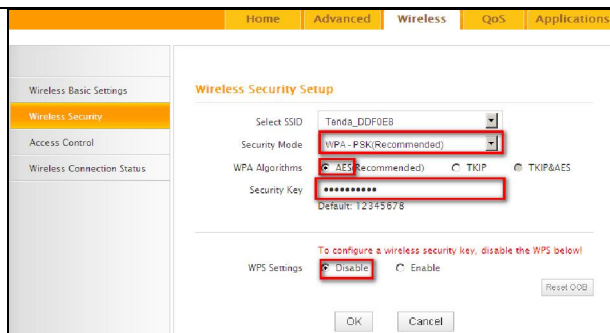


For example:

As seen in the figure above, PC1 and PC2 access Internet via a wireless connection to Router 1. While PC3 and PC4 are too far to directly connect to Router 1 for Internet access. Now you can use the WDS bridge feature to let PC3 and PC4 access Internet.

Before you get started:

1. View and note down the wireless security settings: security mode, cipher type, security key, etc. on Router 1.



The screenshot shows the 'Wireless Security Setup' page in a web interface. The left sidebar has 'Wireless Security' selected. The main area has tabs: Home, Advanced, Wireless, QoS, Applications. Under 'Wireless Security', there are sections for 'Wireless Basic Settings', 'Wireless Security', 'Access Control', and 'Wireless Connection Status'. The 'Wireless Security' section is active, showing 'Select SSID' as 'Tenda_DDF0E8', 'Security Mode' as 'WPA - PSK(Recommended)', 'WPA Algorithms' with 'AES (Recommended)' selected, and a 'Security Key' field with asterisks. Below this, 'WPS Settings' shows 'Disable' selected. A note says 'To configure a wireless security key, disable the WPS below!'. There are 'OK', 'Cancel', and 'Reset QOS' buttons.

2. Verify that DHCP server is enabled on Router 1.
3. Set the LAN IP address of Router 2 to a different address yet on the same net segment as Router 1.

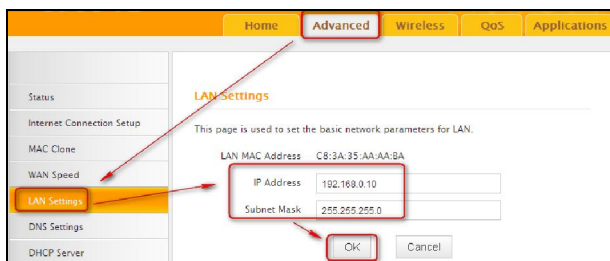
As shown below:

Router 1:

LAN IP: 192.168.0.1;
Subnet Mask: 255.255.255.0;

Router 2:

LAN IP: 192.168.0.10;
Subnet Mask: 255.255.255.0;



The screenshot shows the 'LAN Settings' page in a web interface. The left sidebar has 'LAN Settings' selected. The main area has tabs: Home, Advanced, Wireless, QoS, Applications. Under 'LAN Settings', there is a section for 'LAN Settings' with a note: 'This page is used to set the basic network parameters for LAN.' The 'LAN MAC Address' is 'C8:3A:35:AA:AA:BA'. The 'IP Address' is '192.168.0.10' and the 'Subnet Mask' is '255.255.255.0'. There are 'OK' and 'Cancel' buttons. Red arrows point from the 'Advanced' tab and the 'LAN Settings' section to the 'IP Address' and 'Subnet Mask' fields.

Then do as follows:

1. Configure Router 2:
 - 1) Wireless Working Mode: Select WDS Bridge Mode.
 - 2) Click **Open Scan** (or **Scan**) to search for Router 1.