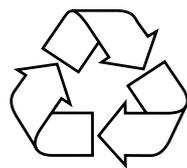




Wireless Router WR-150

Quick Installation Guide



RECYCLABLE

Federal Communications Commission (FCC) Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device should be installed and operated with a minimum distance of 20 cm between the antenna and all persons.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications made to this device not expressly approved by SHENZHEN MTN ELECTRONICS CO., LTD. may void the FCC authorization to operate this device.

Note: The manufacturer is not responsible for any radio or tv interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

LEDS Description

The Router's LEDs are located on the front panel(View from left to right).

Name	Status	Indication
PWR	Off	No Power
	On	Power on
Status	Off	The Router has an error
	On	The Router is initializing
	Flashing	The Router is working properly
WLAN	Off	The Wireless function is disabled
	Flashing	The Wireless function is enabled
WAN/LAN(1~4)	Off	There is no device linked to the corresponding port
	On	There are devices linked to the corresponding ports but no data transmitted or received.
	Flashing	Sending or receiving data over corresponding port

Reset Button

There are two ways to reset the router's factory defaults:

- 1) Use the Factory Defaults function on Management -> Save/Reload Settings page in the router's Web-based Utility.
- 2) Use the Factory Default Reset button: With the router powered on, use a pin to press and hold the Reset button(about 5 seconds) until the SYS LED becomes quick-flash from slow-flash. And then release the button and wait the router to reboot to its factory default settings.

Configuring the Router

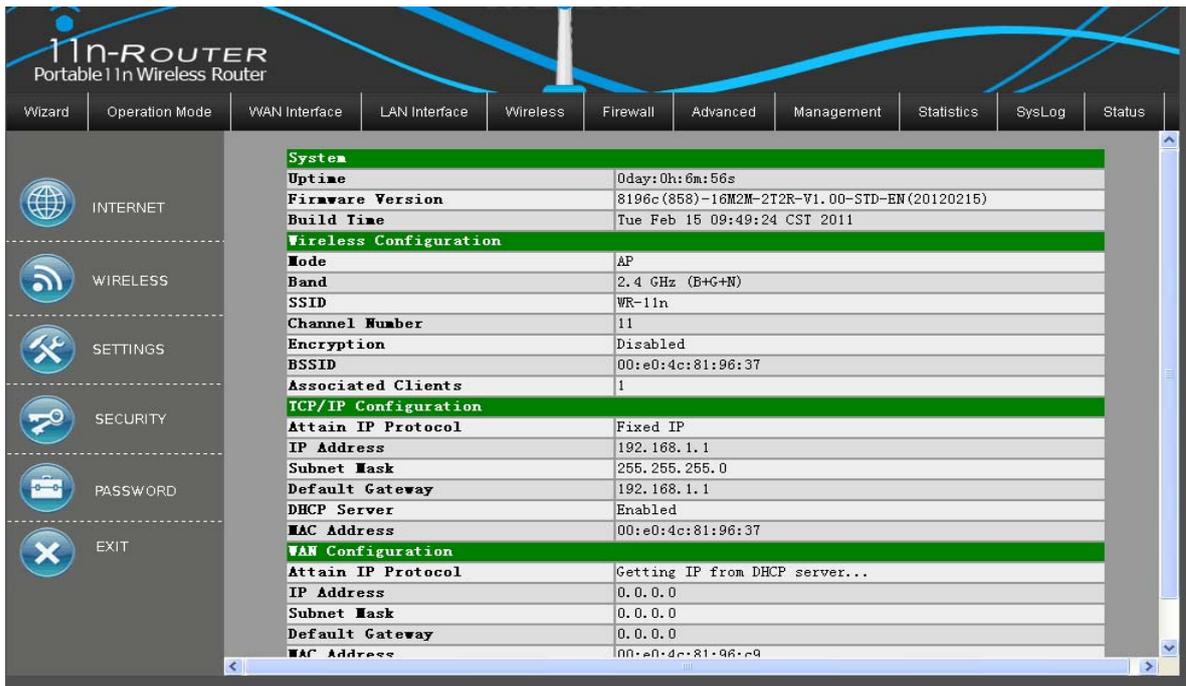
In the IE browser,type "192.168.1.1" into the login screen.



Enter you username and password,the default username is "admin",and the default password is "admin".



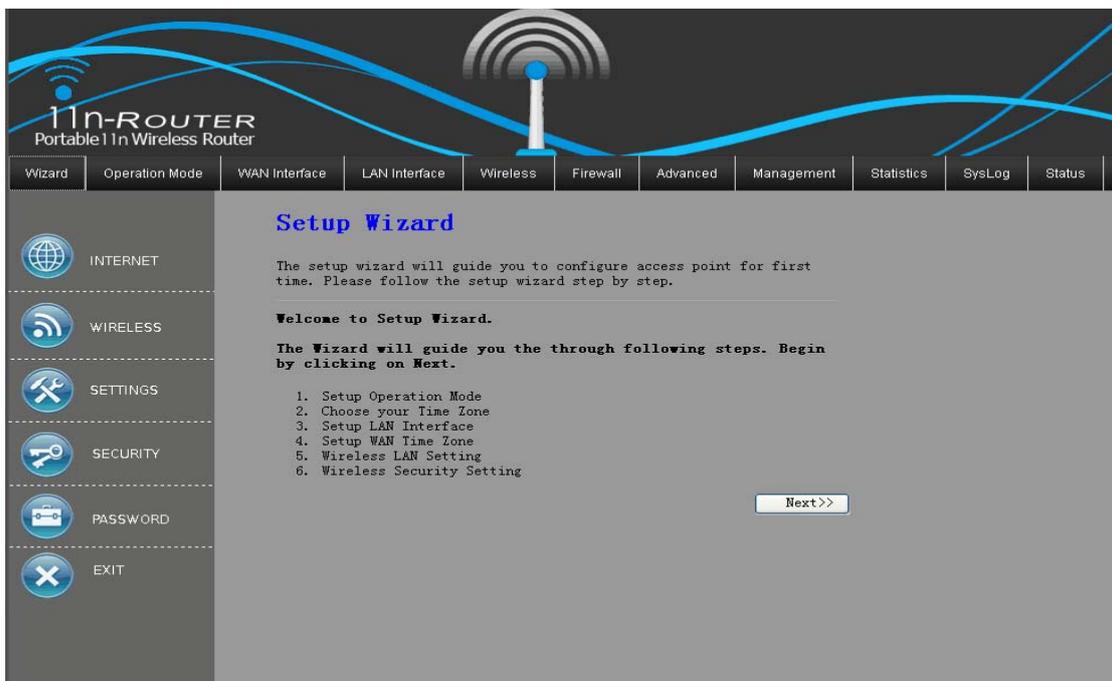
After your successful login,you can see the interface as follows:



You can configure and manage the router. There are seven main menus on the left of the Site contents. Submenus will be available after you click one of the main menus. The seven main menus are: Setup Wizard, Operation Mode, Wireless, TCP/IP Settings, Firewall, Management, Logout. To apply any settings you have altered on the page, please click the Apply Change button.

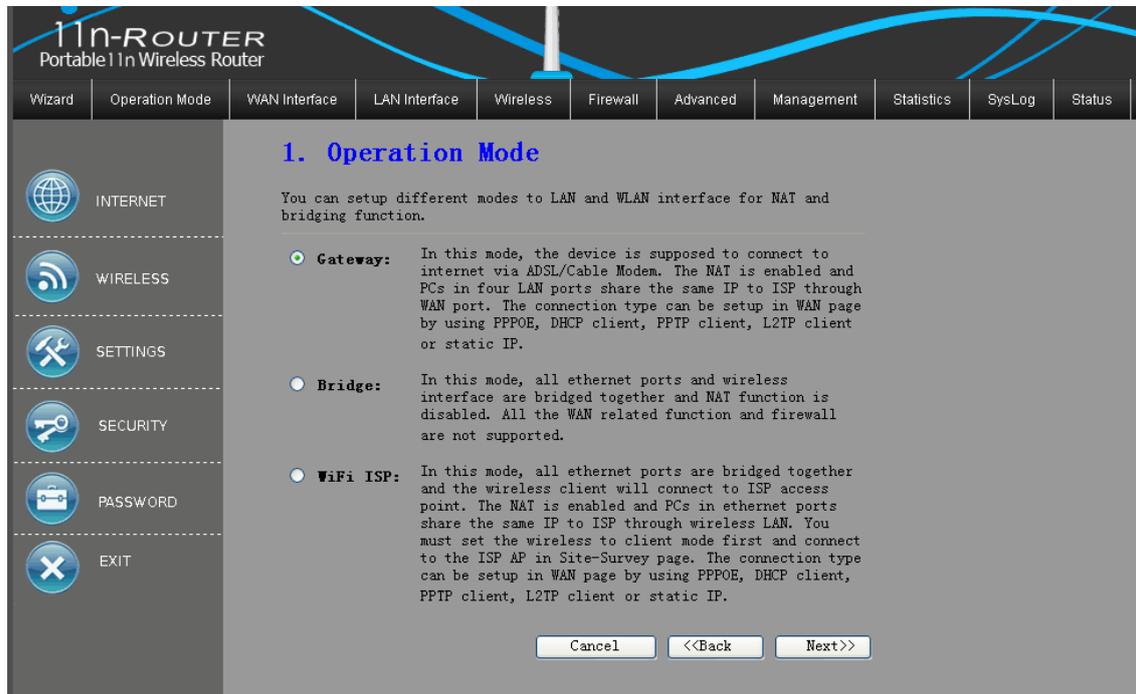
1. Setup Wizard

The setup wizard will guide you to configure access point for first time. Please follow the setup wizard step by step.



1.1 Operation Mode

You can setup different modes to LAN and WLAN interface for NAT and bridging function.



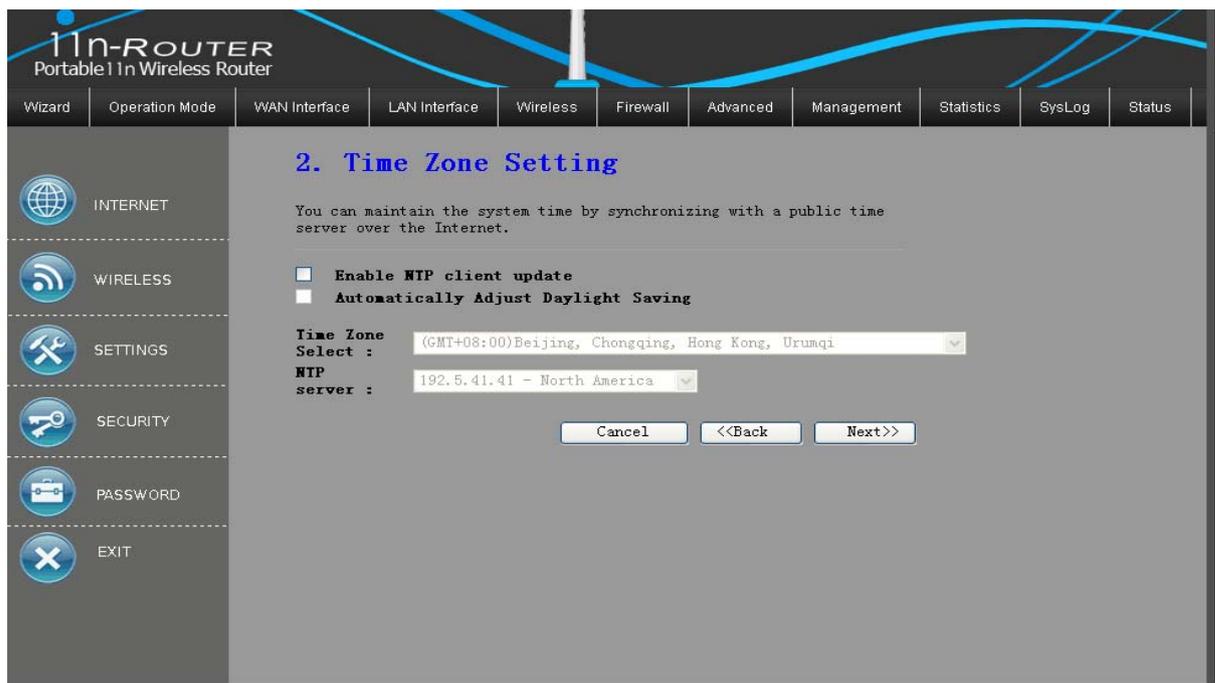
Click the "cancel" button to cancel the setting.

Click the "Back" button to return to top-level directory.

Click the "Next" button to get into the next-level directory.

1.2 Time Zone Setting

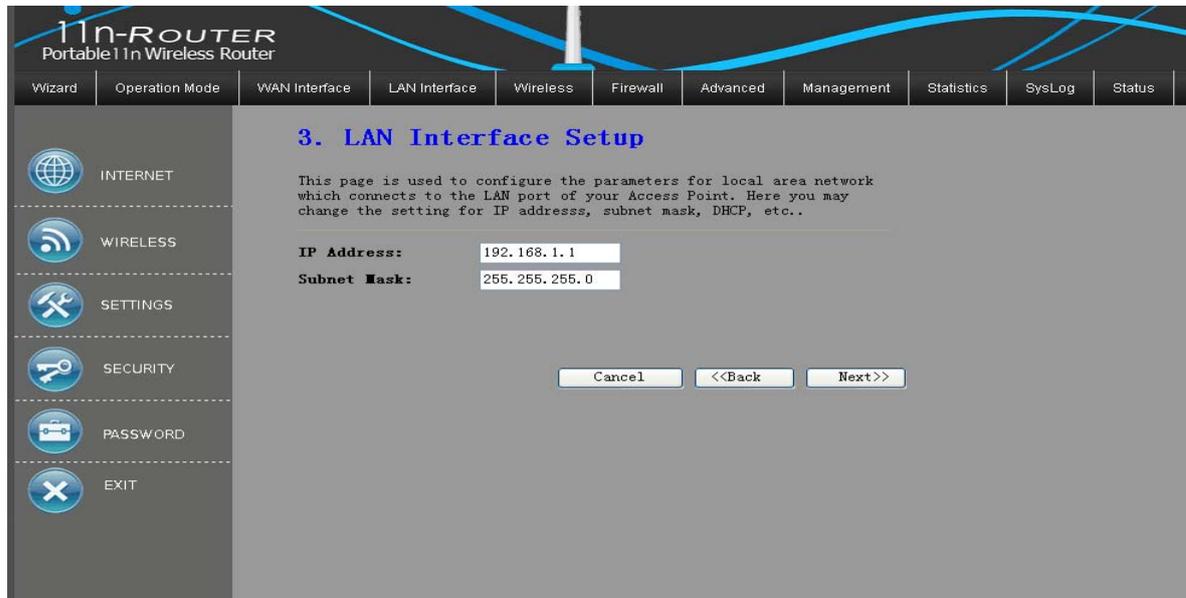
You can maintain the system time by synchronizing with a public time server over the Internet.



Click the "cancel" button to cancel the setting.
Click the "Back" button to return to top-level directory.
Click the "Next" button to get into the next-level directory.

1.3 LAN Interface Setup

You can configure the parameters for local area network which connects to the LAN port of your Access Point. Here you may change the setting for IP address, subnet mask, DHCP, etc.



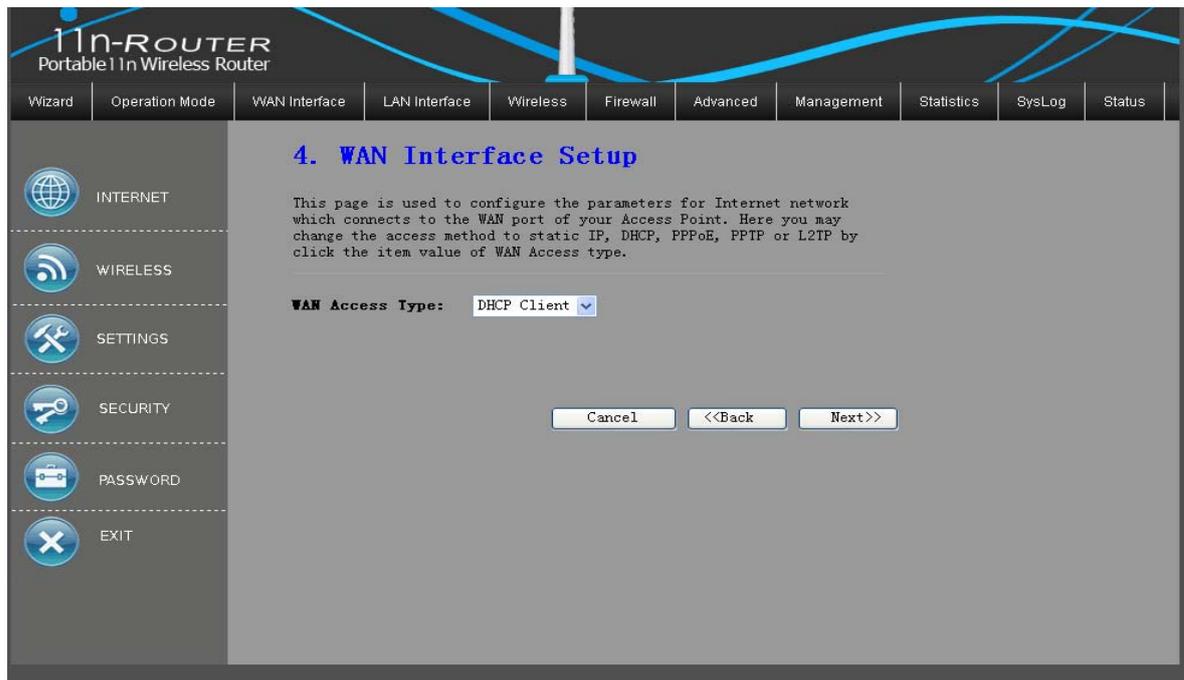
IP Address – Enter the IP address of your router in dotted-decimal notation (factory default: 192.168.1.1).

Subnet Mask – An address code that determines the size of the network. Normally use 255.255.255.0 as the subnet mask.

Click the "cancel" button to cancel the setting.
Click the "Back" button to return to top-level directory.
Click the "Next" button to get into the next-level directory.

Note: If you change the IP Address of LAN, you must use the new IP Address to login the router.

1.4 WAN Interface Setup



a. If you choose the DHCP Client, you must have another DHCP server within your network or else you must manually configure the computer.

b. If you choose Static IP, you should have fixed IP Parameters specified by your ISP. You should type the following parameters into the spaces provided:

IP Address – Enter the IP address in dotted–decimal notation provided by your ISP.

Subnet Mask – Enter the subnet Mask in dotted–decimal notation provided by your ISP, usually is 255.255.255.0.

Default Gateway – (Optional) Enter the gateway IP address in dotted–decimal notation provided by your ISP.

MTU Size – The normal MTU (Maximum Transmission Unit) value for most Ethernet networks is 1500 Bytes. For some ISPs you may need to modify the MTU. But this is rarely required, and should not be done unless you are sure it is necessary for your ISP connection.

DNS 1 – (Optional) Enter the DNS address in dotted–decimal notation provided by your ISP.

DNS 2 – (Optional) Type another DNS address in dotted–decimal notation provided by your ISP if provided.

DNS 3 – (Optional) Type the third DNS address in dotted–decimal notation provided by your ISP if provided.

c. If you choose PPPoE, you should enter the following parameters.

User Name/Password – Enter the User Name and Password provided by your ISP. These fields are case–sensitive.

Connection Type:

Connect on Demand – You can configure the router to disconnect your Internet connection after a specified period of inactivity (Max Idle Time). If your Internet connection has been terminated due to inactivity, Connect on Demand enables the router to automatically re–establish your connection as soon as you attempt to access the Internet again. If you wish to activate Connect on Demand, click the radio button. If you want your Internet connection to remain active at all times, enter 0 in the Max Idle

Time field. Otherwise, enter the number of minutes you want to have elapsed before your Internet connection terminates.

Manually – You can configure the router to make it connect or disconnect manually. After a specified period of inactivity (Max Idle Time), the router will disconnect from the Internet connection, and you will not be able to re-establish your connection automatically as soon as you attempt to access the Internet again. To use this option, click the radio button. If you want your Internet connection to remain active at all times, enter "0" in the Max Idle Time field. Otherwise, enter the number time in minutes that you wish to have the Internet connecting last unless a new link is requested.

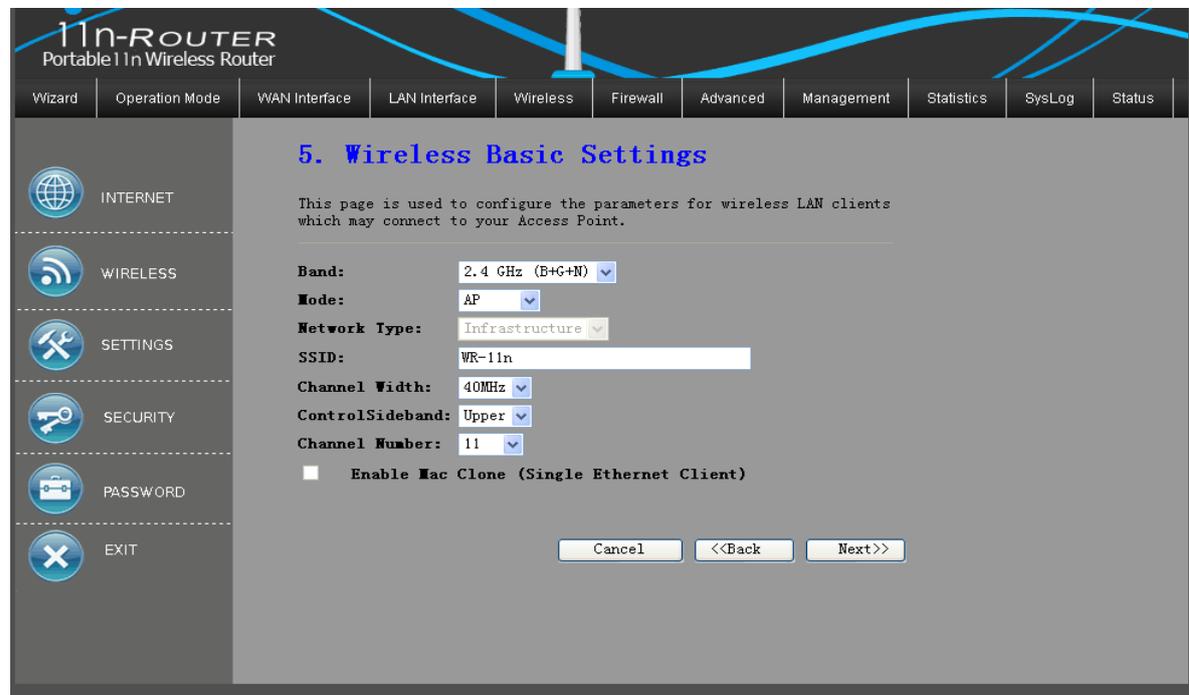
Click the "cancel" button to cancel the setting.

Click the "Back" button to return to top-level directory.

Click the "Next" button to get into the next-level directory.

1.5 Wireless Basic Settings

You can configure the parameters for wireless LAN clients which may connect to your Access Point.



The screenshot shows the configuration interface for a 11n-Router. The top navigation bar includes: Wizard, Operation Mode, WAN Interface, LAN Interface, Wireless, Firewall, Advanced, Management, Statistics, SysLog, and Status. The main content area is titled "5. Wireless Basic Settings" and contains the following fields and options:

- Band:** 2.4 GHz (B+G+N)
- Mode:** AP
- Network Type:** Infrastructure
- SSID:** WR-11n
- Channel Width:** 40MHz
- Control Sideband:** Upper
- Channel Number:** 11
- Enable Mac Clone (Single Ethernet Client)**

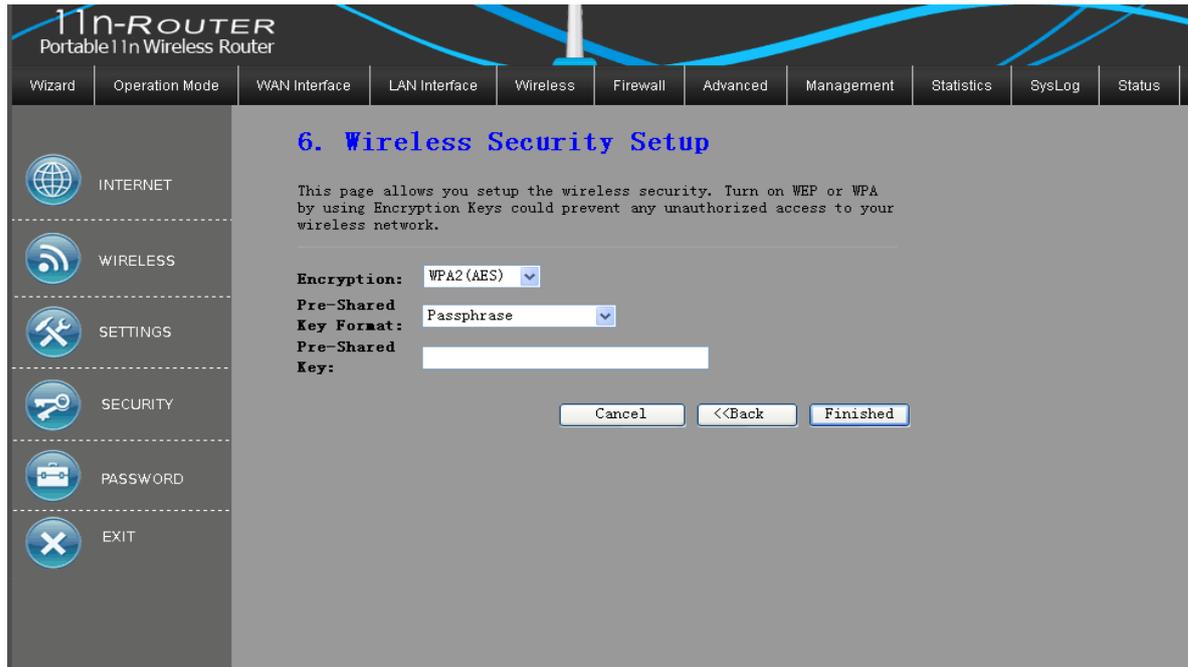
At the bottom of the form are three buttons: Cancel, <<Back, and Next>>.

Click the "Next" button to get into the next-level directory.

1.6 Wireless Security Setup

You can setup the wireless security. Turn on WEP, WPA, WPA 2 or WPA 2 Mixed by using Encryption Keys could prevent any unauthorized access to your wireless network.

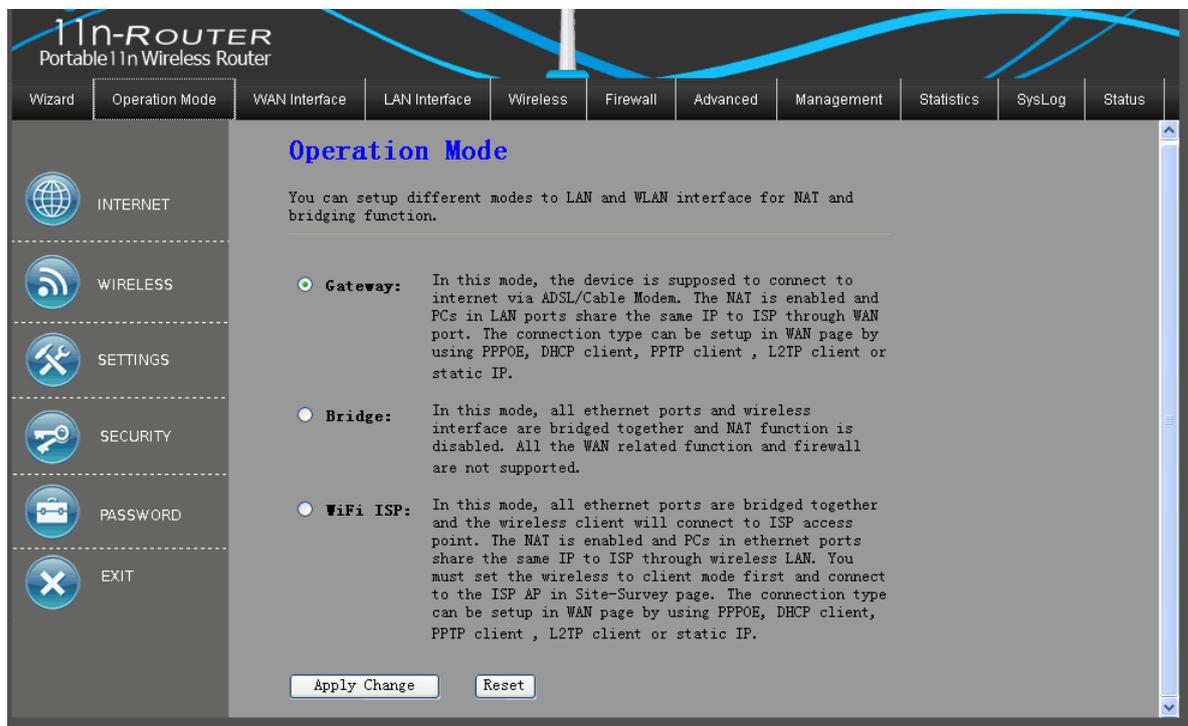
While you choose one of the encryption mode, you should set the encryption key.



Click the "Next" button to get into the next-level directory.
 Click the "Finished" button to enable configuration to take effect.

2. Operation Mode

As the following screenshots ,you can setup different modes to LAN and WLAN interface for NAT and bridging function.



Gateway: In this mode,the device is supposed to connect to internet via ADSL/Cable Modem.The NAT is enabled and PCs in LAN ports share the same IP to ISP through WAN port.The connection type can be setup in WAN page by using PPPOE,DHCP client,PPTP client,L2TP client or static IP.

Bridge: In this mode, all ethernet ports and wireless interface are bridged together and NAT function is disabled. All the WAN related function and firewall are not supported.

Wireless: In this mode, all ethernet ports are bridged together and the wireless client will connect to ISP access point. The NAT is enabled and PCs in ethernet ports share the same IP to ISP through wireless LAN. You must set the wireless to client mode first and connect to the ISP AP in Site-Survey page. The connection type can be setup in WAN page by using PPPOE, DHCP client, PPTP client, L2TP client or static IP.

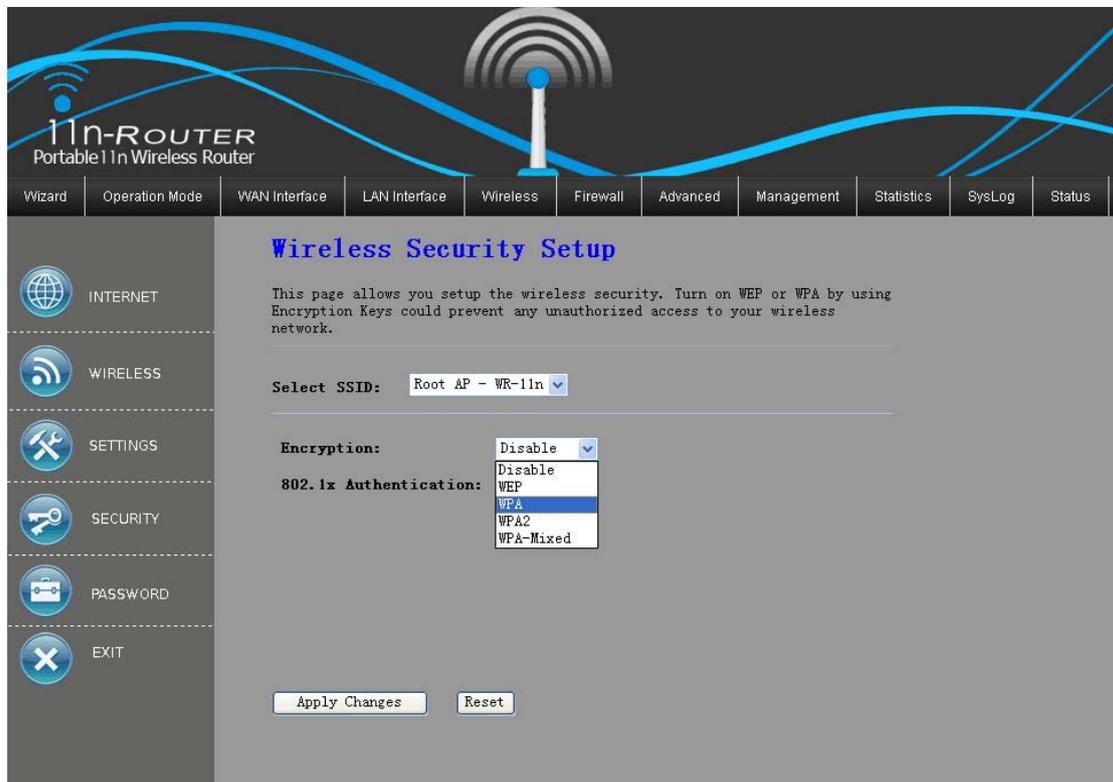
Click "Apply Change" button to enable configuration to take effect.

Click "Reset" button to reset.

3. Wireless Security Setup

Select Wireless---->Wireless Security Setup, get into the wireless security setup interface.

You can setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.



Encryption —if you select "Disable" the wireless stations will be able to connect the router without encryption. The encryption settings are described below.

Authentication Type – You can select one of the following authentication types: WEP 、 WPA 、 WPA2 、 WPA-Mixed

Note :When you select one of the four authentication types, you must set the key value.

4. TCP/IP Settings

There are two submenus under the TCP/IP Settings menu : LAN Interface and WAN Interface setting. Click one of them, and you will be able to configure the corresponding function.

4.1 LAN Interface Setup

You can configure the parameters for local area network which connects to the LAN port of your Access Point. Here you may change the setting for IP address, subnet mask, DHCP, etc..

The screenshot shows the 'LAN Interface Setup' page of a 11n-Router. The page has a navigation menu on the left with icons for INTERNET, WIRELESS, SETTINGS, SECURITY, PASSWORD, and EXIT. The main content area is titled 'LAN Interface Setup' and contains a description: 'This page is used to configure the parameters for local area network which connects to the LAN port of your Access Point. Here you may change the setting for IP address, subnet mask, DHCP, etc..'. Below the description are several configuration fields: IP Address (192.168.1.1), Subnet Mask (255.255.255.0), Default Gateway (0.0.0.0), DHCP (Server), DHCP Client Range (192.168.1.100 - 192.168.1.200), Static DHCP (Set Static DHCP), Domain Name (Realtek), 802.1d Spanning Tree (Disabled), and Clone MAC Address (000000000000). There are 'Apply Changes' and 'Reset' buttons at the bottom.

Note:

- If you change the IP Address of LAN, you must use the new IP Address to login the router and you must change the DHCP Client Range at the same time.
- If the new LAN IP Address you set is not in the same subnet, the IP Address pool of the DHCP server will not take effect, until they are re-configured.
- If the new LAN IP Address you set is not in the same subnet, the Virtual Server and DMZ Host will change accordingly at the same time.

The screenshot shows the 'Active DHCP Client Table' page. It contains a description: 'This table shows the assigned IP address, MAC address and time expired for each DHCP leased client.' Below the description is a table with three columns: IP Address, MAC Address, and Time Expired(s). The table contains one row of data: IP Address: 192.168.0.100, MAC Address: 00:0d:60:8e:03:5b, Time Expired(s): 861776. There are 'Refresh' and 'Close' buttons below the table.

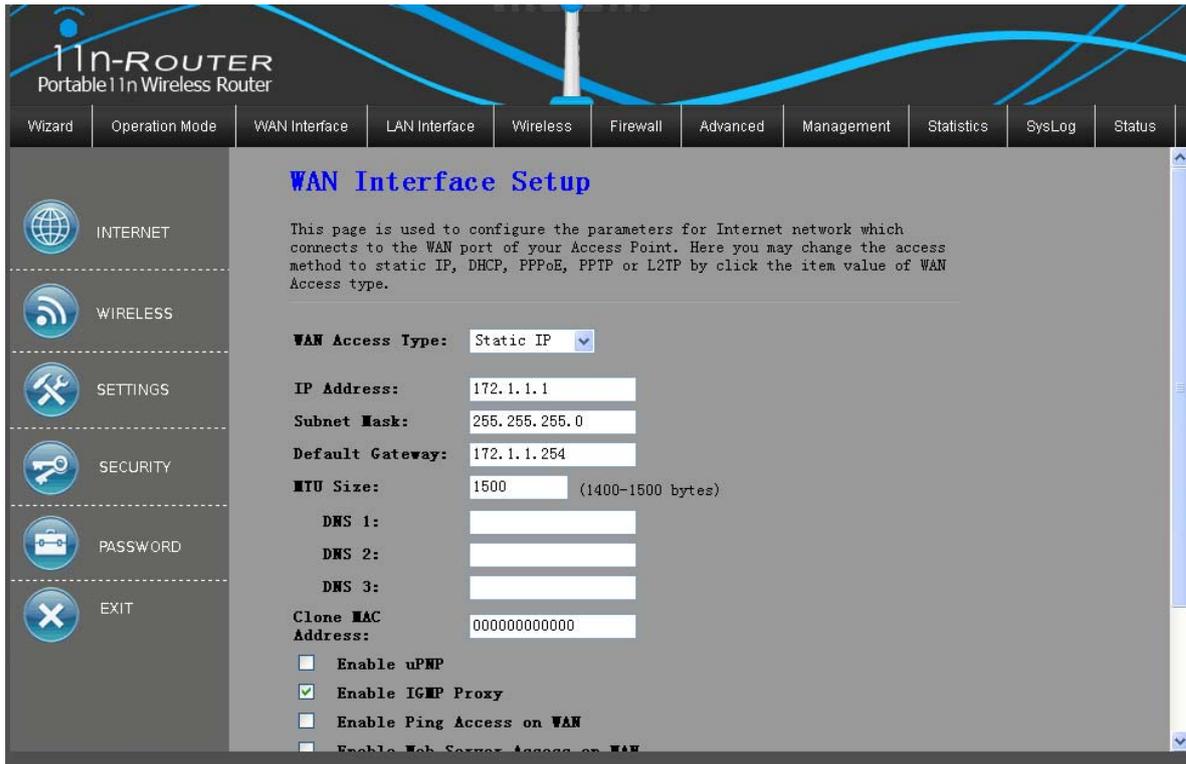
IP Address	MAC Address	Time Expired(s)
192.168.0.100	00:0d:60:8e:03:5b	861776

Click the "Show Client" button, you can see the active DHCP client table.

4.2 WAN Interface Setup

You can configure the parameters for Internet network which connects to the WAN port of your Access Point.

- If you choose Static IP, you should have fixed IP Parameters specified by your ISP.

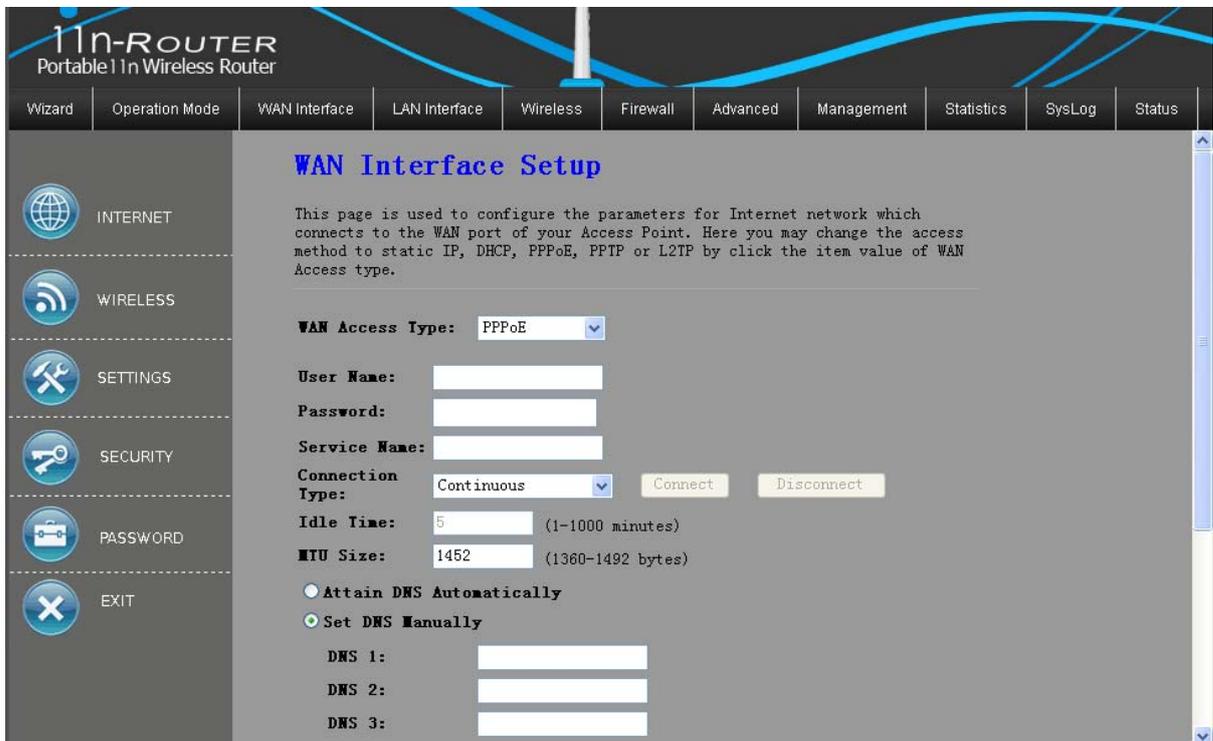


You should type the following parameters into the spaces provided:

IP Address – Enter the IP address in dotted–decimal notation provided by your ISP.

DNS 1 – (Optional) Enter the DNS address in dotted–decimal notation provided by your ISP.

b. If you choose PPPoE, you should enter the following parameters.



User Name/Password – Enter the User Name and Password provided by your ISP. These fields are case–sensitive.

Appendix A: FAQ

1. How do I configure the router to access Internet by ADSL users?

- 1) First, configure the ADSL Modem configured in RFC1483 bridge model.
- 2) Connect the Ethernet cable from your ADSL Modem to the WAN port on the router. The telephone cord plugs into the Line port of the ADSL Modem.
- 3) Login to the router, click the "Tcp/IP setting" menu on the left of your browser, and click "WAN Interface" submenu. On the WAN Interface page, select "PPPoE" for WAN Connection Type. Type user name in the "User Name" field and password in the "Password" field, finish by clicking "Apply Changes".

2. How do I configure the router to access Internet by Ethernet users?

- 1) Login to the router, click the "Tcp/IP setting" menu on the left of your browser, and click "WAN Interface" submenu. . On the WAN Interface page, select "Dynamic IP" for "WAN Connection Type", finish by clicking "Apply Changes".
- 2) Some ISPs require that you register the MAC Address of your adapter, which is connected to your cable/DSL Modem during installation. If your ISP requires MAC register, login to the router and click the "Network" menu link on the left of your browser, and then click "MAC Clone" submenu link. On the "MAC Clone" page, if your PC's MAC address is proper MAC address, click the "Clone MAC Address" button and your PC's MAC address will fill in the "WAN MAC Address" field. Or else, type the MAC Address into the "WAN MAC Address" field. The format for the MAC Address is XX-XX-XX-XX-XX-XX. Then click the "Apply Changes" button. It will take effect after rebooting.

3. The wireless stations cannot connect to the router.

- 1) Make sure that the wireless stations' SSID accord with the router's SSID.
- 2) Make sure the wireless stations have right KEY for encryption when the router is encrypted.
- 3) If the wireless connection is ready, but you can't access the router, check the IP Address of your wireless stations.