

Quick Installation Guide

Wireless-N | 300M Router

LV-WR07



REV 1.01

Chapter 1. Introduction

1.1 Overview of the Router

The Wireless-N Router is a combined wired and wireless network connection device designed specifically for small business and home office networking requirements. The Wireless-N Router is a high speed solution that is compatible with IEEE 802.11b/g/n. Based on 802.11n technology, It gives users wireless performance at up to 300Mbps, which can meet your most demanding home networking needs, such as HD streaming, online gaming and large files downloading.

1.2 Main Features

- Complies with IEEE 802.11n to provide a wireless data rate of up to 300Mbps.
- One 10/100M Auto-Negotiation RJ45 WAN port, four 10/100M Auto-Negotiation RJ45 LAN ports, supporting Auto MDI/MDIX.
- Provides WPA/WPA2, WPA-PSK/WPA2-PSK encryption security.
- Shares data and Internet access for users, supporting Dynamic IP/Static IP/PPPoE/PPTP/L2TP Internet access.
- Supports DMZ host, Dynamic DNS, Static Routing.
- Provides Automatic-connection and Scheduled Connection on certain time to the Internet.
- Built-in DHCP server supporting static IP address distributing.
- Built-in firewall supporting IP address filtering, Domain Name filtering, and MAC address filtering.
- Connects Internet on demand and disconnects from the Internet when idle for PPPoE.
- Supports firmware upgrade and Web management.

1.3 Package Contents

The following items should be found in your package:

1 x Wireless-N Router	1 x Power Adapter
1 x Quick Installation Guide	1 x Ethernet Cable

1.4 Panel Layout

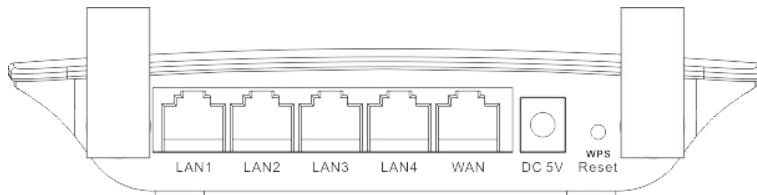
1.4.1 The Front Panel



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

Name	Status	Indication
Status	Off	Power is off or the Wireless function is disabled.
	On	The router is booting or upgrading.
	Flash	The router has finished booting or the Wireless function is enabled.
LAN	Off	There is no device linked to the corresponding port.
	On	There is at least one device linked to the corresponding port.
WAN	Off	There is no device linked to the WAN port.
	On	A device is connected to the WAN port, and is active.

1.4.2 The Rear Panel



The following parts are located on the rear panel (View from left to right).

POWER: The Power socket is where you will connect the power adapter. Please use the power adapter provided with this Wireless N Router.

WAN: This WAN port is where you will connect the DSL/cable Modem, or Ethernet.

LAN: These ports connect the Router to the local PC(s).

RESET: This button is used for both WPS and Reset function. To use the WPS function, press it for less than five seconds; to use the RESET function, press it for more than five seconds.

● **Used as RESET button:**

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

Use the Factory Defaults function on System Tools -> Factory Defaults page in the Router's Web-based Utility.

2) Use the WPS/RESET button: With the router powered on, press and hold the WPS/Reset button for approximately 8 seconds. And then release the button and wait the router to reboot to its factory default settings.

● **Used as WPS button:**

If you have client devices, such as wireless adapters, that support Wi-Fi Protected Setup, then you can press this button to quickly establish a connection between the Router and client devices and automatically configure wireless security for your wireless network.

Wireless antenna: To receive and transmit the wireless data.

Chapter 2. Connecting the Router

2.1 System Requirements

- Broadband Internet Access Service (DSL/Cable/Ethernet)
- One DSL/Cable Modem that has an RJ45 connector (which is not necessary if the router is connected directly to the Ethernet.)
- PCs with a working Ethernet Adapter and an Ethernet cable with RJ45 connectors
- TCP/IP protocol on each PC
- Web browser, such as Microsoft Internet Explorer, Mozilla Firefox or Apple Safari

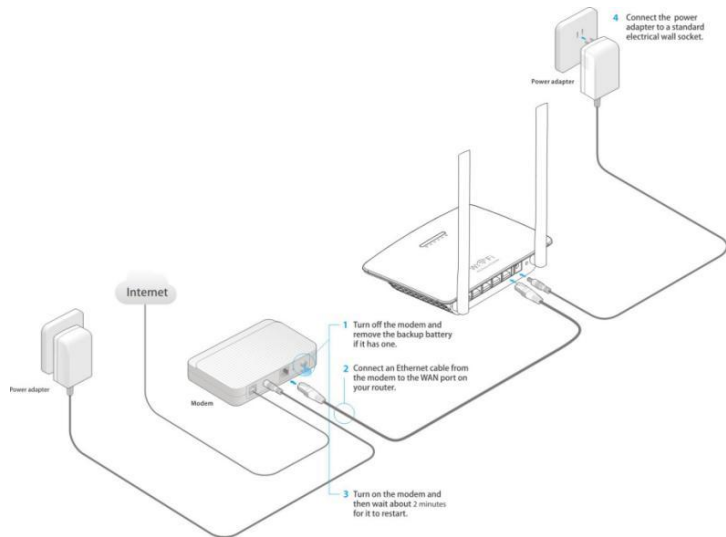
2.2 Installation Environment Requirements

- Place the router in a well ventilated place far from any heater or heating vent
- Avoid direct irradiation of any strong light (such as sunlight)
- Keep at least 2 inches (5 cm) of clear space around the router
- Operating Temperature: 0°C~40°C (32°F~104°F)
- Operating Humidity: 10%~90%RH, Non-condensing

2.3 Connecting the Router

If your Internet connection is through an Ethernet cable from the wall instead of through a DSL / Cable / Satellite modem, connect the Ethernet cable directly to the router's Internet port, then follow steps 4 and 5 to complete the hardware connection.

1. Turn off the modem and remove the backup battery if it has one.
2. Connect the modem to the Internet port on your router with an Ethernet cable.
3. Turn on the modem, and then wait about 2 minutes for it to restart.
4. Turn on the router.



5. Verify that the hardware connection is correct by checking these LEDs.



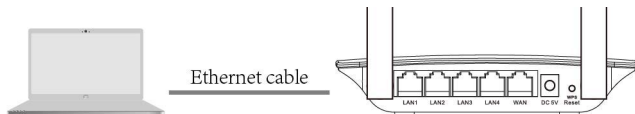
Chapter 3. Quick Installation Guide

This chapter will show you how to configure the basic functions of your Wireless-N Router using **Quick Setup Wizard** within minutes.

3.1 Connect your computer to the router (Wired or Wireless)

Wired

Turn off Wi-Fi on your computer and connect the devices as shown below.



Wireless

Connect wirelessly by using the SSID (Network Name) and Wireless Password/PIN printed on the product label at the bottom of the router.

3.2 TCP/IP Configuration

The default domain name of the Wireless-N Router is <http://192.168.1.1>, the default IP address is 192.168.1.1, and the default Subnet Mask is 255.255.255.0. These values can be changed as you desire. In this guide, we use all the default values for description.

Connect the local PC to the LAN ports of the router. And then you can configure the IP address for your PC in the following two ways.

➤ Configure the IP address manually

- 1) Set up the TCP/IP Protocol for your PC. If you need instructions as to how to do this, please refer to Appendix A: [Configuring the PC](#).

2) Configure the network parameters. The IP address is 192.168.1.xxx ("xxx" is any number from 2 to 254), Subnet Mask is 255.255.255.0, and Gateway is 192.168.1.1 (The router's default IP address)

➤ Obtain an IP address automatically

1) Set up the TCP/IP Protocol in "Obtain an IP address automatically" mode on your PC. If you need instructions as to how to do this, please refer to Appendix A: [Configuring the PC](#).

2) Then the built-in DHCP server will assign IP address for the PC.

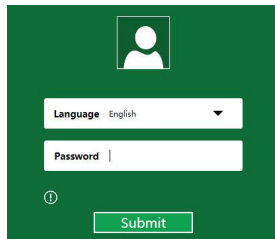
3.3 Quick Installation Guide

With a Web-based utility, it is easy to configure and manage the Wireless-N Router. The Web-based utility can be used on any Windows, Macintosh or UNIX OS with a Web browser, such as Microsoft Internet Explorer, Mozilla Firefox or Apple Safari.

1. To access the configuration utility, open a web-browser and type in the default address <http://192.168.1.1> in the address field of the browser.



After a moment, a login window will appear. Select the language for the installation, and then enter **admin** for the Password. Then click the Submit button or press the Enter key.



Language - Select the Language from the drop-down list. The default setting is English.

Password - Enter the password for Login. The default password is **admin**.

Note: If the above screen does not pop-up, it means that your Web-browser has been set to a proxy.

Go to Tools>Internet Options>Connections>LAN Settings, in the screen that appears, cancel the Using Proxy checkbox, and click OK to finish it.

2. After successful login, you can click the **Wizard** to quickly configure your router.



3. Click drop-down menu of WAN Mode, and then WAN Connection Type will appear.

WAN Settings



Note:

A. The router supports five popular ways Dynamic IP, Static IP, PPPoE, L2TP and PPTP to connect to the Internet. But here only provides three Modes Dynamic IP, Static IP, PPPoE, If your ISP provides connection type is L2TP or PPTP, Please go to Advance-Internet-Wan Settings page to configuring.

B. Before continuing, please make sure the cable of the WAN port is well connected to your device.

4. Select the very type go on configuring.


1) If the connection type is **Dynamic IP Address**, Please click **Next** to continue.



- 2) If the connection type is **Static IP Address**, the next screen will appear as shown below. Configure the following parameters and then click **Next** to continue.

WAN Mode	Static IP Address ▼
IP address	<input type="text"/>
Subnet mask	<input type="text"/>
Gateway	<input type="text"/>
Primary DNS	<input type="text"/>
Secondary DNS	<input type="text"/>

option


Next

IP Address - This is the WAN IP address as seen by external users on the Internet (including your ISP). Enter the IP address into the field.

Subnet Mask - The Subnet Mask is used for the WAN IP address, it is usually 255.255.255.0.


Gateway - Enter the gateway IP address into the box if required.

Primary DNS - Enter the DNS Server IP address into the box if required.

Secondary DNS(option) - If your ISP provides another DNS server, enter it into this field.

- 3) If the connection type is **PPPoE**, the next screen will appear as shown below. Configure the following parameters and then click **Next** to continue.

WAN Mode	PPPoE ▼
PPPoE User Name	<input type="text"/>
PPPoE Password	<input type="password"/>


Next

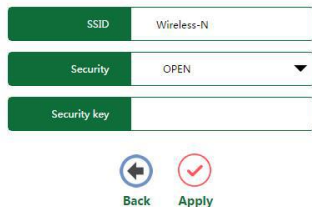
PPPoE User Name - Enter the User Name provided by your ISP.

PPPoE Password - Enter the Password provided by your ISP.

These fields are case sensitive. If you have difficulty with this process, please contact your ISP.

5. The Wireless settings page will appear as shown below. Enter SSID and Security, then click **Apply** to complete setup.

Wireless Settings



The image shows a 'Wireless Settings' form with three input fields and two buttons. The first field is 'SSID' with the value 'Wireless-N'. The second field is 'Security' with a dropdown menu showing 'OPEN'. The third field is 'Security key' which is empty. Below the fields are two buttons: 'Back' with a left arrow icon and 'Apply' with a checkmark icon.

SSID	Wireless-N
Security	OPEN
Security key	

Back Apply

SSID - Enter a value of up to 32 characters. The same name of SSID (Service Set Identification) must be assigned to all wireless devices in your network.

The default SSID is set to be **Wireless-n**.

Security - you can choose the security type on the drop-down list. The default setting is **OPEN**.

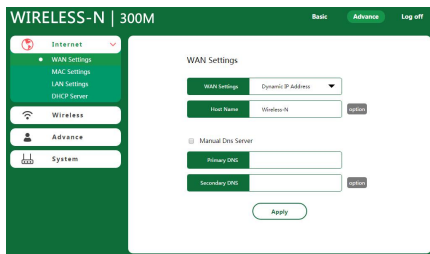
Security key - Wireless Password, When **WPA/WPA2PSK** is set as the Security Type, You can enter ASCII characters between 8 and 63 characters or 8 to 64 Hexadecimal characters.

Click the **Apply** button to save your settings.

Note: Do not close this window, the window will automatically close when setup is complete.

Chapter 4. Advance setting

After your successful login, click the “**Advance**” button on the top-right of the Web-based utility, the Advance setting page will appear as shown below. you will see the main menus on the left of the Advance setting page. On the right, there are the corresponding explanations and instructions.



The image shows the 'WIRELESS-N | 300M' page with the 'Advance' tab selected. The left sidebar contains a menu with 'Internet', 'Wireless', 'Advance', and 'System'. The main content area is titled 'WAN Settings' and contains fields for 'WAN Settings' (Dynamic IP Address), 'Host Name' (Wireless-N), and 'Manual Dns Server' (Primary DNS, Secondary DNS). There are 'option' buttons next to the Host Name and Secondary DNS fields, and an 'Apply' button at the bottom.

WIRELESS-N | 300M Basic Advance Log off

Internet

- WAN Settings
- MAC Settings
- LAN Settings
- DHCP Server

Wireless

Advance

System

WAN Settings

WAN Settings: Dynamic IP Address

Host Name: Wireless-N

Manual Dns Server

Primary DNS

Secondary DNS

Apply

4.1 WAN Settings

Step 1: Choose menu “**Internet→WAN Settings**”, you can configure the type of the WAN on the screen below.

Step 2: Click drop-down menu of WAN Mode, Select the very type go on configuring.

Step 3: Enter the information like the screen shown below.

Step 4: Click the **Apply** button to save your settings.

4.2 Wireless Basic Settings

Choose menu “**Wireless→Basic Settings**”, you can configure the basic settings for the wireless network on this page.

Wireless Status 

SSID	Wireless-N	<input checked="" type="checkbox"/> Broadcast SSID
Security	12345678	<input checked="" type="checkbox"/> Not encrypted
Channel	Auto	
Band	802.11 BGN	
BandWidth	Auto	
Signal	High	

Apply

channel automatically. It is not necessary to change the wireless channel unless you notice interference problems with another nearby access point.

Band - Select the desired mode. The default setting is 802.11 BGN.

Wireless Status (ON/OFF) - Enable or Disable the wireless Network.

SSID - Wireless Network Name, Enter a value of up to 32 characters. The same name of SSID (Service Set Identification) must be assigned to all wireless devices in your network. Considering your wireless network security, the default SSID is set to be **Wireless-N**.

Broadcast SSID - When wireless clients survey the local area for wireless networks to associate with, they will detect the SSID broadcast by the router. If you select the Broadcast SSID checkbox, the Wireless router will broadcast its name (SSID) on the air.

Security - Wireless Password, You can enter ASCII characters between 8 and 63 characters or 8 to 64 Hexadecimal characters.

Not encrypted - If you do not want to use wireless security, select this checkbox.

Channel - This field determines which operating frequency will be used. The default channel is set to Auto, so the AP will choose the best

BandWidth - Select the bandwidth from the drop-down list. The default setting is auto, which can adjust the bandwidth for your clients automatically.

Note:

If 11n only, 11gn mixed, or 11bgn mixed is selected in the Mode field, the Channel Width selecting field will turn grey and the value will become 20M, which is unable to be changed.

Signal - Here you can specify the transmit power of router. You can select High, Middle or Low which you would like. High is the default setting and is recommended.

Click the **Apply** button to save your settings.

4.3 Upgrade firmware

Choose menu "**System** → **Upgrade firmware**", you can update the latest version of firmware for the router on the following screen.

Firmware upgrade

Select Upgrade firmware, then click "Upload" button to upgrade:



Current firmware version : v28K.Router.20160626

To upgrade the router's firmware, follow these instructions below:

1. Type the path and file name of the update file into the File field. Or click the Choose File button to locate the update file.
2. Click the **Upload** button.

Note:

1. When you upgrade the router's firmware, you may lose its current configurations, so before upgrading the firmware please write down some of your customized settings to avoid losing important settings.
2. Do not turn off the router or press the Reset button while the firmware is being upgraded, otherwise, the router may be damaged.
3. The router will reboot after the upgrading has been finished.

4.4 Load default

Choose menu “**System**→**Load default**”, and you can restore the configurations of the router to factory defaults on the following screen.

Click the **Load default** button to reset all configuration settings to their default values.

- The default Password: admin
- The default IP Address: 192.168.1.1
- The default Subnet Mask: 255.255.255.0

Note: Any settings you have saved will be lost when the default settings are restored.

4.5 Save/Reload settings

Choose menu “**System**→**Save/Reload settings**”, you can save the current configuration of the router as a backup file and restore the configuration via a backup file as shown below.

Save settings

Click this button to backup the current configuration of the router.

Save...

Load settings

Please select the configuration file and then click the button to load configuration.

Browse

Upload

Click the **Save...** button to save all configuration settings as a backup file in your local computer.

To upgrade the router's configuration, follow these instructions.

- Click the **Brows** button to locate the update file for the router, or enter the exact path to the Setting file in the text box.
- Click the Upload button.

Note:

The current configuration will be covered by the uploading configuration file. The upgrade process lasts for 20 seconds and the router will restart automatically. Keep the router on during the upgrading process to prevent any damage.

4.4.5 Reboot Device

Choose menu “**System**→**Reboot Device**”, you can click the **Reboot** button to reboot the router via the next screen.

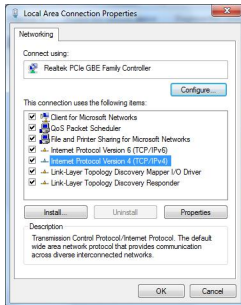
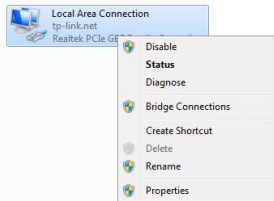
Some settings of the router will take effect only after rebooting, which include

Appendix A: Configuring the PC

In this section, we'll introduce how to install and configure the TCP/IP correctly in Windows 7. First make sure your Ethernet Adapter is working, refer to the adapter's manual if needed.

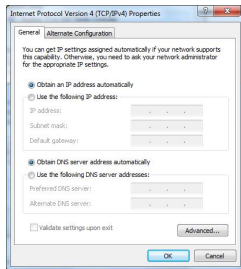
Install TCP/IP component

- 1) On the Windows taskbar, click the **Start** button, and then click **Control Panel**.
- 2) Click the **Network and Internet**, and click the **Network and Sharing Center**, then click **Change adapter settings**.
- 3) Right click the icon that showed below, select **Properties** on the prompt page.
- 4) In the prompt page that showed below, double click on the **Internet Protocol Version 4 (TCP/IPv4)**.



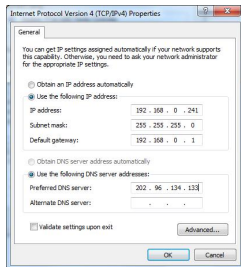
5) The following **TCP/IP Properties** window will display and the **IP Address** tab is open on this window by default. Now you have two ways to configure the **TCP/IP** protocol below:

◆ Setting IP address automatically



Select **Obtain an IP address automatically**, Choose **Obtain DNS server address automatically**, as shown in the Figure below:

◆ Setting IP address manually



- 1 Select **Use the following IP address** radio button. And the following items available
- 2 If the router's LAN IP address is 192.168.0.1, specify the IP address as 192.168.0.x (x is from 2 to 254), and **Subnet mask** is 255.255.255.0.
- 3 Type the router's LAN IP address (the default IP is 192.168.0.1) into the **Default gateway** field.
- 4 Select **Use the following DNS server addresses** radio button. In the **Preferred DNS Server** field you can type the DNS server IP address, which has been provided by your ISP