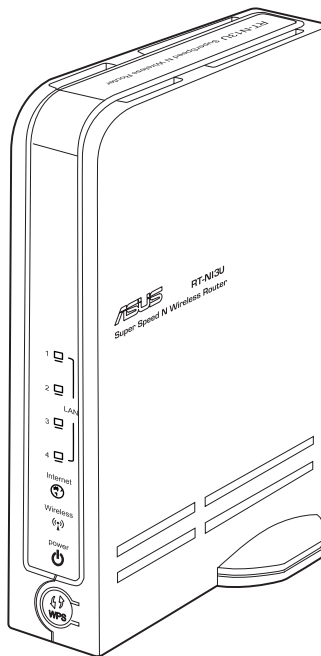




RT-N13U

ASUS Wireless N Router with All-in-One Printer Server



User Manual

E4713

First Edition V1

May 2009

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About this guide

This user guide contains information that you need to install and configure the ASUS Wireless Router.

How this guide is organized

This guide contains the following parts:

- **Chapter 1: Knowing your wireless router**

This chapter provides information on the package contents, system requirements, hardware features, and LED indicators of the ASUS Wireless Router.

- **Chapter 2: Setting up the hardware**

This chapter provides instructions on setting up, accessing, and configuring the ASUS Wireless Router.

- **Chapter 3: Configuring the network clients**

This chapter provides instructions on setting up the clients in your network to work with your ASUS Wireless Router.

- **Chapter 4: Configuring via the web GUI**

This chapter provides instructions on configuring the ASUS Wireless Router using its web graphics user interface (web GUI).

- **Chapter 5: Installing the utilities**

This chapter provides information on the utilities that are available from the support CD.

- **Chapter 6: Troubleshooting**

This chapter provides you with a troubleshooting guide for solving common problems you may encounter when using the ASUS Wireless Router.

- **Appendices**

This chapter provides you with the regulatory Notices and Safety Statements.

Conventions used in this guide



WARNING: Information to prevent injury to yourself when trying to complete a task.



CAUTION: Information to prevent damage to the components when trying to complete a task.



IMPORTANT: Instructions that you **MUST** follow to complete a task.



NOTE: Tips and additional information to aid in completing a task.

1

Knowing your wireless router

Package contents

Check the following items in your ASUS Wireless Router package.

- RT-N13U Wireless Router
- Power adapter
- Support CD (manual, utilities)
- RJ45 cable
- Quick Start Guide



Note: If any of the items is damaged or missing, contact your retailer.

System requirements

Before installing the ASUS Wireless Router, ensure that your system/network meets the following requirements:

- An Ethernet RJ-45 port (10Base-T/100Base-TX)
- At least one IEEE 802.11b/g/n device with wireless capability
- An installed TCP/IP and Internet browser

Before you proceed

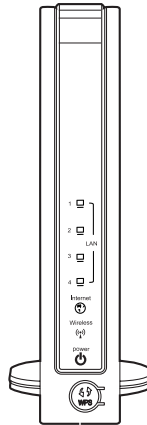
Take note of the following guidelines before installing the ASUS Wireless Router:

- The length of the Ethernet cable that connects the device to the network (hub, ADSL/cable modem, router, wall patch) must not exceed 100 meters.
- Place the device on a flat and stable surface as far from the ground as possible.
- Keep the device clear from metal obstructions and away from direct sunlight.
- Keep the device away from transformers, heavy-duty motors, fluorescent lights, microwave ovens, refrigerators, and other industrial equipment to prevent signal loss.
- Install the device in a central area to provide ideal coverage for all wireless mobile devices.





- Install the device at least 20cm from a person to insure that the product is operated in accordance with the RF Guidelines for Human Exposure adopted by the Federal Communications Commission.

Hardware features


Front panel



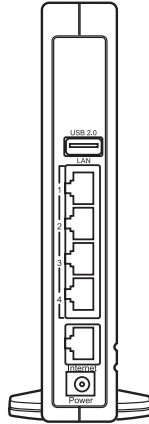
Status indicators

LED	Status	Indication
 (Power)	Off	No power
	On	System ready
	Flashing-slow	Rescue mode
	Flashing-quick	WPS processing
 (Wireless)	Off	No power
	On	Wireless system ready
	Flashing	Transmitting or receiving data (wireless)
 LAN 1-4 (Local Area Network)	Off	No power or no physical connection
	On	Has physical connection to an Ethernet network
	Flashing	Transmitting or receiving data (through Ethernet cable)
 (Internet)	Off	No power or no physical connection
	On	Has physical connection to an Ethernet network
	Flashing	Transmitting or receiving data (through Ethernet cable)

Buttons

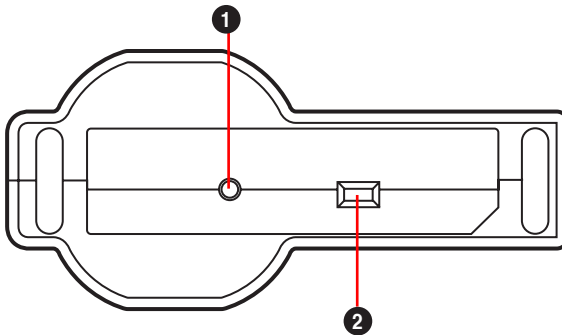
Button	Indication
 (WPS)	This button launches the WPS wizard.

Rear panel



Label	Description
Internet	Connect an RJ-45 Ethernet cable to this port to establish WAN connection.
LAN1-LAN4	Connect RJ-45 Ethernet cables to these ports to establish LAN connection.
USB 2.0	Insert USB 2.0 devices such as USB hard disks and USB flash drives (at least 2GB capacity) into these ports.
Power	Insert the AC adapter into this port to connect your router to a power source.

Bottom panel



Item	Description
1	Restore button Press this button to restore the system to its factory default settings.
2	Operation mode selector Use this selector to choose an operation mode: Router (IP Sharing mode): In this mode, RT-N13U connects to WAN (Internet) by PPPoE, Automatic IP, or Static IP, and provides wireless radio, NAT, firewall, and IP sharing services in LAN. Repeater: In this mode, RT-N13U extends your wireless network and provides higher quality wireless radio to users. NAT, firewall, and IP sharing services are disabled automatically. AP (Access Point): In this mode, RT-N13U receives the WAN IP address from the router connected to the WAN port and provides wireless radio to users. NAT, firewall, and IP sharing services are disabled automatically.

2 Setting up the hardware

Setting up the wireless router

The ASUS Wireless Router meets various working scenarios with proper configurations. You may need to change the wireless router's default settings so as to meet the requirements in your wireless environment. It also provides you with WPS, a utility that enables you to easily set up a secure wireless network.



Notes:

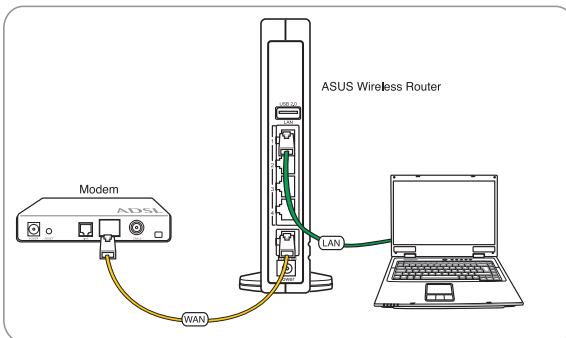
- We recommend that you use wired connection for initial configuration to avoid possible setup problems due to wireless uncertainty.
- For more details on WPS, refer to the section **WPS Wizard** in Chapter 5 of this user manual.

Setting up a wired connection

The ASUS Wireless Router is supplied with an Ethernet cable in the package. The wireless router has integrated auto-crossover function, so use either straight-through or crossover cable for wired connection.

To set up the wired connection:

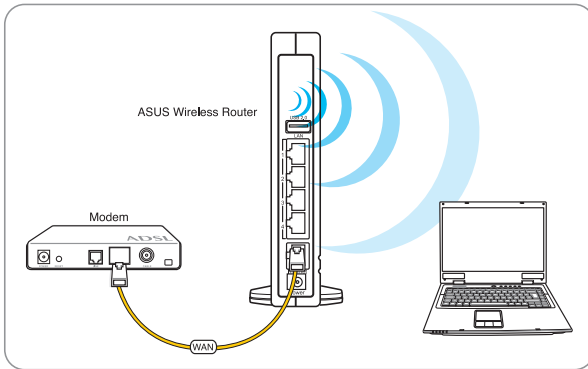
1. Turn on your router and the modem.
2. Using an Ethernet cable, connect the router's Internet port to the modem.
3. Using another Ethernet cable, connect the router's LAN port to your PC's LAN port.



Setting up a wireless connection

To set up a wireless connection:

1. Turn on your router and the modem.
2. Using an Ethernet cable, connect the modem to the router's Internet port.
3. Connect an IEEE 802.11b/g/n compatible WLAN adapter. Refer to your wireless adapter user manual for wireless connection procedures. By default, the SSID of ASUS Wireless Router is "ASUS" (in upper case), encryption is disabled and open system authentication is used.



Configuring the wireless router

The ASUS Wireless Router includes a web graphics user interface (web GUI) that allows you to configure the wireless router using your web browser on your computer.

Using the web GUI

If your PC connects to the router using a cable, launch your web browser and the login page of the router's web GUI automatically launches.

If your PC connects to the router wirelessly, you have to select the network first.

To select the network:

1. Click **Start > Control Panel > Network Connections > Wireless Network Connection**.
2. Select a network from the **Choose a wireless network** window. Wait for it to connect.



Note: By default, the SSID of wireless router is **ASUS**. Connect to this default SSID.

3. After establishing a wireless connection, launch a web browser.



Notes:

- You may also manually key in the router's default IP address (**192.168.1.1**) to launch the router's web interface.
 - For more details on configuring your wireless router using the web GUI, refer to **Chapter 4: Configuring via the web GUI**.
-

3 Configuring the network clients

Accessing the wireless router

Setting an IP address for wired or wireless client

To access the ASUS Wireless Router, you must have the correct TCP/IP settings on your wired or wireless clients. Ensure that the clients' IP addresses are within the same subnet as the ASUS Wireless Router.

By default, the ASUS Wireless Router integrates the DHCP server function, which automatically assigns IP addresses to the clients in your network.

But in some instances, you may want to manually assign static IP addresses on some of the clients or computers in your network rather than automatically getting IP addresses from your wireless router.

Follow the instructions below that correspond to the operating system installed on your client or computer.

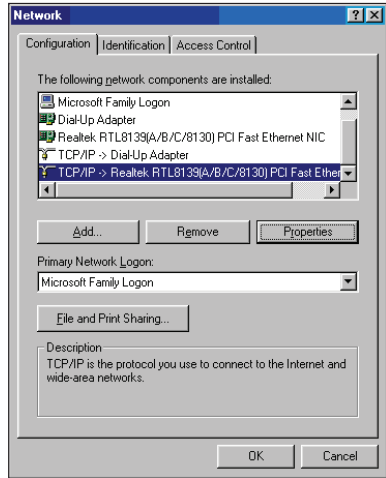


Note: If you want to manually assign an IP address to your client, we recommend that you use the following settings:

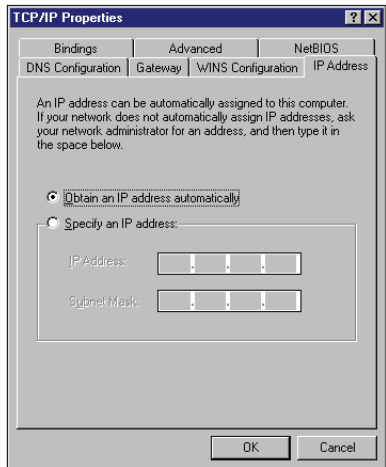
- **IP address:** 192.168.1.xxx (xxx can be any number between 2 and 254. Ensure that the IP address is not used by another device)
 - **Subnet Mask:** 255.255.255.0 (same as the ASUS Wireless Router)
 - **Gateway:** 192.168.1.1 (IP address of the ASUS Wireless Router)
 - **DNS:** 192.168.1.1 (ASUS Wireless Router) or assign a known DNS server in your network
-

Windows® 9x/ME

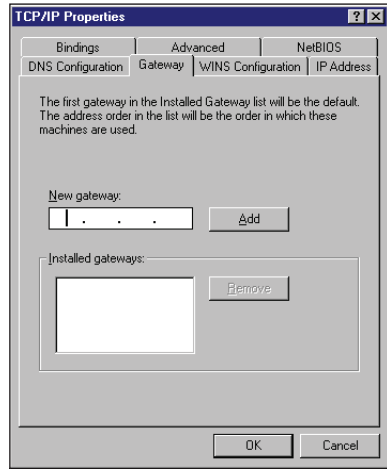
1. Click **Start > Control Panel > Network** to display the Network setup window.
2. Select **TCP/IP** then click **Properties**.



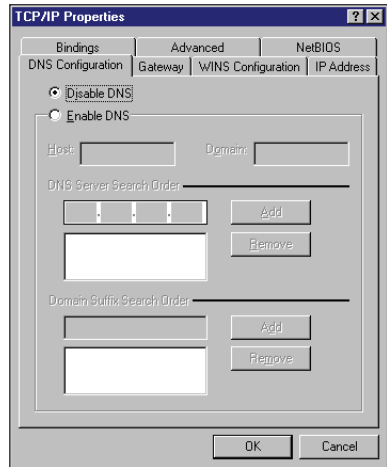
3. If you want your computer to automatically obtain an IP address, click **Obtain an IP address automatically** then click **OK**. Otherwise, click **Specify an IP address**, then key in the **IP address** and **Subnet Mask**.



4. Select the **Gateway** tab, and key in **New gateway** then click **Add**.

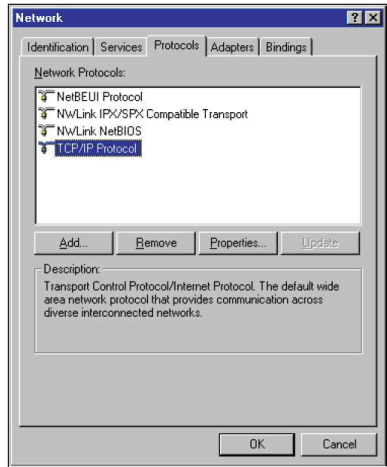


5. Select the **DNS configuration** tab and click **Enable DNS**. Key in **Host**, **Domain**, and **DNS Server Search Order**, then click **Add**.
6. Click **OK**.

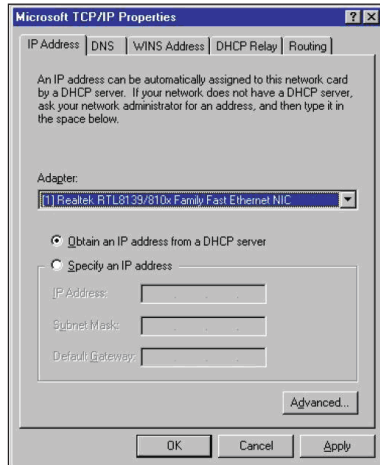


Windows® NT4.0

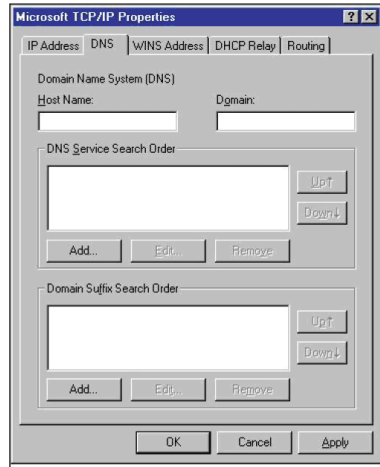
1. Go to **Control Panel > Network** to display the Network setup window then select the **Protocols** tab.
2. Select **TCP/IP Protocol** from the Network Protocols list then click **Properties**.



3. From the IP Address tab of the Microsoft TCP/IP Properties window, you can:
 - Select the type of network adapter installed in your system.
 - Set the router to assign IP address automatically.
 - Manually set up the IP address, subnet mask, and default gateway.

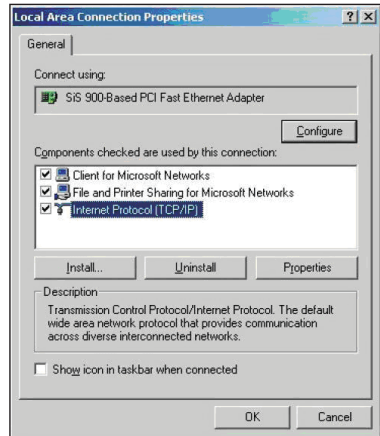


4. Select the **DNS** tab then click **Add** under the **DNS Service Search Order** and key in DNS.

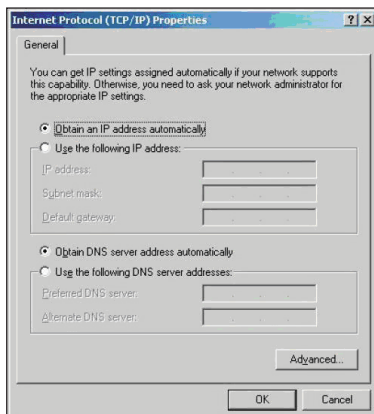


Windows® 2000

1. Click **Start > Control Panel > Network and Dial-up Connection**. Right-click **Local Area Connection** then click **Properties**.

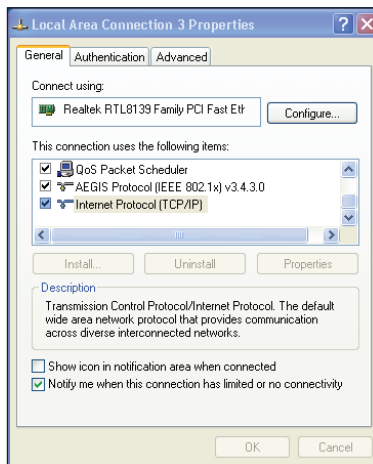


2. Select **Internet Protocol (TCP/IP)**, then click **Properties**.
3. Select **Obtain an IP address automatically** if you want the IP settings to be assigned automatically. Otherwise, select **Use the following IP address**: and key in **IP address**, **Subnet mask**, and **Default gateway**.
4. Select **Obtain DNS server address automatically** if you want the DNS server settings to be assigned automatically. Otherwise, select **Use the following DNS server addresses**: and key in the **Preferred** and **Alternate DNS server**.
5. Click **OK** when done.

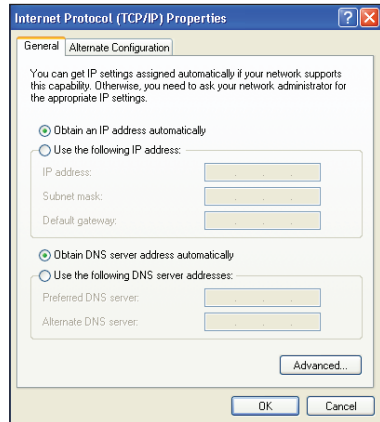


Windows® XP

1. Click **Start > Control Panel > Network Connection**. Right-click **Local Area Connection** then select **Properties**.

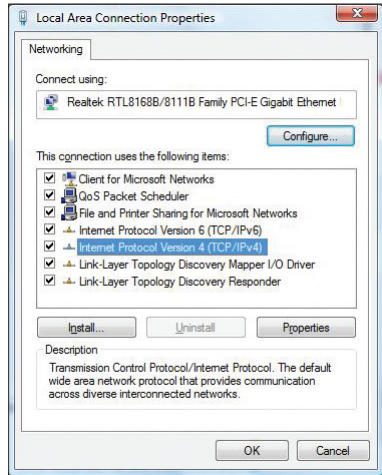


2. Select **Internet Protocol (TCP/IP)**, then click **Properties**.
3. Select **Obtain an IP address automatically** if you want the IP settings to be assigned automatically. Otherwise, select **Use the following IP address:** and key in **IP address**, **Subnet mask**, and **Default gateway**.
4. Select **Obtain DNS server address automatically** if you want the DNS server settings to be assigned automatically. Otherwise, select **Use the following DNS server addresses:** and key in the **Preferred and Alternate DNS server**.
5. Click **OK** when done.



Windows® Vista

1. Go to **Start > Control Panel > Network and Internet > Network and Sharing Center**. Click **View status > Properties > Continue**.



2. Select **Internet Protocol Version 4 (TCP/IPv4)**, then click **Properties**.
3. Select **Obtain an IP address automatically** if you want the IP settings to be assigned automatically. Otherwise, select **Use the following IP address:** and key in **IP address** and **Subnet mask**.
4. Select **Obtain DNS server address automatically** if you want the DNS server settings to be assigned automatically. Otherwise, select **Use the following DNS server addresses:** and key in the **Preferred and Alternate DNS server**.
5. Click **OK** when done.

