

RT-N53 Dual-band Wireless-N Router





Quick Start Guide

E6780 / First Edition / July 2011

nglish

Package contents

RT-N53 Wireless Router

- Power adapter
- Support CD (User Manual/utility software)
- ✓ Network cable
- Quick Start Guide
- ☑ Warranty card



NOTES:

- If any of the items is damaged or missing, contact ASUS for technical inquiries and support. Refer to the ASUS Support Hotline list at the back of this guide.
- Keep the original packaging material in case you would need future warranty services such as repair or replacement.

Hardware features



Positioning your wireless router

For the best wireless signal transmission between the wireless router and the network devices connected to it, ensure that you:

- Place the wireless router in a centralized area for a maximum wireless coverage for the network devices.
- Keep the device away from metal obstructions and away from direct sunlight.
- Keep the device away from 802.11g or 20MHz only Wi-Fi devices, 2.4GHz computer
 peripherals, Bluetooth devices, cordless phones, transformers, heavy-duty motors,
 fluorescent lights, microwave ovens, refrigerators, and other industrial equipment to
 prevent signal interference or loss.
- For the best front-to-rear coverage, place the wireless router in an upright position.
- For the best up-and-down coverage, place the wireless router in an inclined position.
- Always update to the latest firmware. Visit the ASUS website at <u>http://www.asus.com</u> to get the latest firmware updates.



Mounting options

Mounting to the stand

- 1. Locate the mounting holes at the bottom of the wireless router.
- 2. Align and insert the stand's mounting hooks to the wireless router's mounting holes.

Dismount from the stand

- 1. Hold the wireless router with one hand on the upside and the other hand under the stand, ensuring that the I/O ports facing you.
- 2. Follow the direction of the arrow shown below to apply force and remove the stand.



NOTE:

It's normal if you hear squeaking while dismounting the RT-N53 from the stand.



Mounting on the wall

1. Locate the two holes on the stand and secure the stand to the wall with screws.



- 2. Locate the mounting holes at the back of the wireless router.
- 3. Align and insert the stand's mounting hooks to the wireless router's mounting holes.



Dismount from the wall

- 1. Hold the edge of the front cover (near the I/O ports).
- 2. Follow the direction of the arrow shown below to apply force and dismount the RT-N53.





Before you proceed

1. Unplug and disconnect the wires/cables from your existing modem setup and release your computer's outmoded IP address.



- 1. Unplug the AC adapter from the power outlet and disconnect it from your cable/ADSL modem.
- 2. Disconnect the network cable from your cable/ADSL modem.
- 3. Reboot your computer (recommended).



WARNING! Before disconnecting the wires/cables, ensure that your cable/ADSL modem has been turned off for at least two minutes. If your modem has a backup battery, remove it as well.

2. Set up your wireless environment.



- 1. Insert your wireless router's AC adapter to the DC-In port and plug it to a power outlet.
- 2. Using the bundled network cable, connect your computer to your wireless router's LAN port.



IMPORTANT! Ensure that the WAN and LAN LEDs are blinking.

- 3. Using another network cable, connect your modem to your wireless router's WAN port.
- 4. Insert your modem's AC adapter to the DC-In port and plug it to a power outlet.
 - 3. Disable some settings on your computer.
- A. Disable the proxy server, if enabled.
- B. Set the TCP/IP settings to automatically obtain an IP address.
- C. Disable the dial-up connection, if enabled.



NOTE: For more details on disabling your computer settings, refer to Frequently Asked Questions (FAQs).

Getting started

- 1. Configure your wireless settings via the wireless router's web graphics user interface (web GUI).
- a. Launch your web browser such as Internet Explorer, Firefox, Google Chrome, or Safari.





NOTE: If QIS does not launch automatically, follow these steps to manually launch QIS:

- On your web browser, key in <u>http://192.168.1.1</u>. Use the default username admin and password admin to log into the user interface.
- Click **GO** in the Quick Internet Setup field under Internet status in the Network Map page.
- b. The wireless router's Quick Internet Setup (QIS) feature automatically detects if your ISP connection type is **Dynamic IP**, **PPPoE**, **PPTP**, **L2TP**, and **Static IP**. Key in the necessary information for your connection type.



NOTES:

- The auto-detection of your ISP connection type takes place when you configure the wireless router for the first time or when your wireless router is reset to its default settings.
- If QIS does not detect your Internet connection type, click **Skip to manual setting** and manually configure your connection settings.



IMPORTANT! Obtain the necessary information about your Internet connection type from your Internet Service Provider (ISP).

c. Assign the network name (SSID) and security key for your 2.4GHz and 5GHz wireless connection.





NOTE: You can assign a network name with up to 32 characters.

d. Internet connection and wireless setup are completed.



2. Write down your router's settings.



IMPORTANT! Keep this information in a secure location.

	2.4GHz Wireless Settings
Network Name (SSID):	
Security Key:	
	5GHz Wireless Settings
Network Name (SSID):	
Security Key:	
	Router Settings
Username:	
Password:	

Frequently Asked Questions (FAQs)

After following the steps, I still cannot access the wireless router's web graphics user interface (web GUI) to configure the wireless router settings.

A. Disable the proxy server, if enabled.

Windows® 7

- 1. Click **Start** > **Internet Explorer** to launch the web browser.
- Click Tools > Internet options > Connections tab > LAN settings.

- 3. From the Local Area Network (LAN) Settings screen, untick **Use a proxy server for your LAN**.
- 4. Click OK when done.

MAC OS

- From your Safari browser, click Safari >Preferences > Advanced > Change Settings...
- 2. From the Network screen, deselect **FTP Proxy** and **Web Proxy** (**HTTP**).
- 3. Cllick Apply Now when done.



NOTE: Refer to your browser's help feature for details on disabling the proxy server.



B. Set the TCP/IP settings to automatically obtain an IP address.

Windows® 7

- 1. Click Start > Control Panel > Network and Internet > Network and Sharing Center > Manage network connections.
- 2. Select Internet Protocol Version 4 (TCP/IPv4), then click Properties.

- 3. To obtain the iPv4 IP settings automatically, tick **Obtain** an IP address automatically.
- 4. Click OK when done.

MAC OS

- Click the Apple icon Screen.
- 2. Click System Preferences > Network > Configure...
- 3. From the **TCP/IP** tab, select **Using DHCP** in the **Configure IPv4** dropdown list.
- 4. Cllick Apply Now when done.



NOTE: Refer to your operating system's help and support feature for details on configuring your computer's TCP/IP settings.



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You can get IP settings assig this capability. Otherwise, yo for the appropriate IP setting	ned automatic iu need to ask gs.	ally if your i	your n hetwor	etwork : k admin	supports istrator
Obtain an IP address au	utomatically				
O Use the following IP add	dress:				
IP address:					
Subnet mask:					
Default gateway:					
Obtain DNS server addr	ess automatica	lly			
O Use the following DNS s	erver address	5:			
Preferred DNS server:					
Alternate DNS server:					
Validate settings upon	exit			Adv	anced
			~		6



C. Disable the dial-up connection, if enabled.

<u>Windows[®] 7</u>

- 1. Click Start > Internet Explorer to launch the browser.
- 2. Click Tools > Internet options > Connections tab.
- 3. Tick Never dial a connection.
- 4. Click **OK** when done.

General	Security	Privacy	Content	Connections	Programs	Advanced
49	To set u Setup.	p an Inter	net connec	tion, dick	Set	up
Dial-up	and Virtua	l Private I	Vetwork se	ttings		
3	Access RD	Network F	lesources -	Go to vpn.as	Ad	ł
					Add	PN
	1	11		F	Remo	ve
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O D O A	al whenev ways dial r	er a netw ny default	connection	tion is not pres	ent	
	rent	None			Set d	efault
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Cu Local	- cometre		And Made and		LAN SE	ttings
Local J LAN Choc	Settings do se Setting	not apply above fo	r dial-up si	ettings.		



NOTE: Refer to your browser's help feature for details on disabling the dial-up connection settings.

D. Close all running web browsers.

The client cannot establish a wireless connection with the router.

Out of Range:

- Put the router closer to the wireless client.
- Try to change the channel settings.

Authentication:

- Use wired connection to connect to the router.
- Check the wireless security settings.
- Press the Reset button at the rear panel for more than five seconds.

Cannot find the router:

- Press the Reset button at the rear panel for more than five seconds.
- Check the setting in the wireless adapter such as SSID and encryption settings.

Cannot access the Internet via wireless LAN adapter.

- Move the router closer to the wireless client.
- Check whether the wireless adapter is connected to the correct wireless router.
- Check whether the wireless channel in use conforms to the channels available in your country/area.
- Check the encryption settings.
- Check if the ADSL or Cable connection is correct.
- Retry using another Ethernet cable.

If the ADSL "LINK" light blinks continuously or stays off, Internet access is not possible - the Router is unable to establish a connection with the ADSL network.

- Ensure that all your cables are all properly connected .
- Disconnect the power cord from the ADSL or cable modem, wait a few minutes, then reconnect the cord.
- If the ADSL light continues to blink or stays OFF, contact your ADSL service provider.

Network name or encryption keys are forgotten.

- Try setting up the wired connection and configuring the wireless encryption again.
- Press the Reset button of the wireless router for more than five seconds.
- Factory default settings:

admin / admin 192.168.1.1	User name / Password: admin / admin	IP address: 192.168.1.1	SSID: ASUS
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Where can I find more information about the wireless router?

- User Manual in the support CD
- Online FAQ site: <u>http://support.asus.com/faq</u>
- Technical Support site: http://support.asus.com/techserv
- Customer Hotline: Refer to the Support Hotline in this Quick Start Guide

	SUPPOR	T HOTLINE	
Area	Hotline Number	Support Languages	Availability
USA/Canada	1-812-282-2787	English	Mon. to Fri. 8:30-12:00am EST (5:30am-9:00pm PST) Sat. to Sun. 9:00am-6:00pm EST (6:00am-3:00pm PST)
Brazil	4003 0988 (Capital) 0800 880 0988 (demais localidades)	Portuguese	Mon. to Fri. 9:00am-18:00

et et et an alle stagt te at	Authority protection - Law	
lan u faciu rer:	ABUSTER COMPUTER INC.	
ddress, City:	No. 150, LITERD., PEITO U, TAIPEI 112, TAIMAN R.O.C	
a un try:	TARMAN	
u fhoriæd representative in Europe:	ASUS COMPUTER OmbH	
ddress, City:	HARKO RT STR. 21-23, 40550 RATING EN	
a un try:	GERMANY	
clare the following apparatus:		
roductname :	Dual-band Wirele cc-N Router	
lodel name :	RT-Na2	
2004/108/EC-EMC Directive 81.641108/EC-EMC Directive 81.6415022:2006+A1:2007 81.64150000-27:2006	EN 501 THE FOROWING CIRECTIVES: 전 EN 55124: 15564 A1: 2001+ A2: 2003 전 EN 64000-3-3: 2002	
2) EN 61000-4-2:2009 2) EN 61000-4-2:2009 2) EN 61000-4-4:2004	M EN 6100-+3:2009 A1:2008 M EN 6100-+3:2009	
2 EN 550 13/2001+A1/2003+A2/2006		
1999.5/EC-R &TTE Directive	0	
EN 300 322 (11.7.1(2006-10)) EN 301 5052 (12.2.1(2007-05)) S EN 301 5052 (12.1(2007-12)) EN 50360 2001 EN 50371 2002 EN 50371 2002	☑ EN 301 439-1: \/1.2.1 (20139-04) ☑ ☑ EN 301 439-1: \/2.1.1 (20109-05) □ □ EN 301 439-2: \/1.2.1 (2010-05) □ □ EN 302 123-2: \/1.2.22007-05) □	
8 EH 503852002	4	
2006/95/EC-LVD Directive		
EN 609-50-1 2001+ A 11 200+	EN 60065/2002+ A1 2006	
🛛 EN 609-50-12006	EN 60950-1 2006+A11:2009	
2009/125/EC-ErP Directive		
guiation (EC) No. 1275/2008	Regulation (BC) No. 278/2009	
EN 62301/2005	Ø EN 623012005	
guiation (EC) No. 642/2009		

Notices

ASUS Recycling/Takeback Services

ASUS recycling and takeback programs come from our commitment to the highest standards for protecting our environment. We believe in providing solutions for you to be able to responsibly recycle our products, batteries, other components, as well as the packaging materials. Please go to <u>http://csr.asus.com/english/Takeback.htm</u> for the detailed recycling information in different regions.

REACH

Complying with the REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals) regulatory framework, we published the chemical substances in our products at ASUS REACH website at <u>http://csr.asus.com/english/REACH.htm</u>

Federal Communications Commission Statement

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 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.

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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

For operation within 5.15 ~ 5.25GHz frequency range, it is restricted to indoor environment.

IEEE 802.11b or 802.11g operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

WARNING! The use of a shielded-type power cord is required in order to meet FCC emission limits and to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

(Reprinted from the Code of Federal Regulations #47, part 15.193, 1993. Washington DC: Office of the Federal Register, National Archives and Records Administration, U.S. Government Printing Office.)

Declaration of Conformity (R&TTE directive 1999/5/EC)

The following items were completed and are considered relevant and sufficient:

- Essential requirements as in [Article 3]
- Protection requirements for health and safety as in [Article 3.1a]
- Testing for electric safety according to [EN 60950]
- Protection requirements for electromagnetic compatibility in [Article 3.1b]
- Testing for electromagnetic compatibility in [EN 301 489-1] & [EN 301] & [EN 301 489-33]
- Effective use of the radio spectrum as in [Article 3.2]
- Radio test suites according to [EN 302 065]

CE Mark Warning

This is a Class B product, in a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Industry Canada statement:

This device complies with RSS-210 of the Industry Canada 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.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Caution:

The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems.

High power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices.

NOTE IMPORTANTE: (Pour l'utilisation de dispositifs mobiles)

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Avertissement:

Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

Les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

NCC Statement

注意!

依據 低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻 率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立 即停用,並改善至無干擾時方得繼續使用。

前項合法通信,指依電信規定作業之無線電信。低功率射頻電機須忍受合法通信或工業、科學及 醫療用電波輻射性電機設備之干擾。

在5.25-5.35秭赫(GHz)頻帶內操作之無線資訊傳輸設備,限於室內使用。

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