

WL-520GU/GC

Broad Range Wireless Family Router



User Manual

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Specification Summary

Network Standard	IEEE 802.11b, IEEE 802.11g, IEEE 802.3, IEEE802.3x, IEEE 802.3u, IEEE 802.1x, IEEE 802.11i, IPv4, IPv6, CSMA/CA, CSMA/CD, ICMP
Operating Frequency	2.4G ~ 2.5GHz
Date Rate	802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11b: 1, 2, 5.5, 11Mbps
Operational Channel	11 for N. America, 14 Japan, 13 Europe (ETSI)
Port	WAN x 1, LAN x 4 RJ45 for 10/100 BaseT, 1 x USB2.0 for Printer Sharing(<i>WL-520GU only</i>)
Antenna	Support Antenna Diversity, 1 x Reverse-SMA antenna connector
EZSeup Button	Automatically SSID and WEP or WPA Configuration
Power Supply *	WL-520GU: DC: +5V with max. 2A current WL-520GC: DC: +9V with max 1A current
Security	WEP-64bits, WEP-128bits, WPA-Personal, WPA2-Personal, WPA-Auto-Personal (TKIP. AES. TKIP+AES), WPA-Enterprise, WPA2-Enterprise, WPA-Auto-Enterprise (TKIP. AES. TKIP+AES), Radius with 802.1x
Access Control	MAC-level Access Control, Inbound/Outbound IP Filter
Firewall	NAT Firewall, SPI (Stateful Package Inspection) Firewall, WAN Ping Control
Quality of Service	BOD (WL-520GU only), WMM
Network Management	Support UPnP, DHCP Server, DNS Proxy, NTP Client, DDNS, Port Trigger, Virtual Server, Virtual DMZ, VPN Pass-Through
Temperature	Operating: 0~40°C Storage: -30~50°C
Humidity	Operating : 50~90% Storage : 20~90%

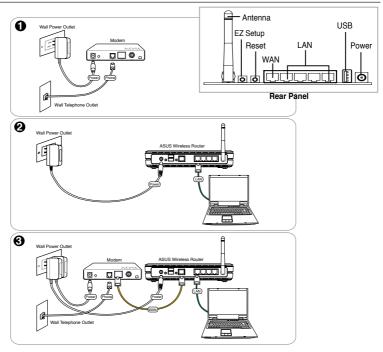
* Use only the adapter included in the package.

1. Package Contents

- WL-520GU/GC Wireless Router x 1
- Power Adapter x 1
- Utility CD x 1
- RJ45 Cable x 1
- External Antenna x 1
- Quick Start Guide x 1

2. Connecting ADSL Modem and Wireless Router

1) Cable connection



Note: Use only the adapter included in the package. Using other adapters may damage the device.

Note: The device in the above illustration is for your reference only. Please refer to your package for the real product.

2) Status Indicators

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PWR (Power)	,
Off On Flashing-slow Flashing-quick	No power System ready Firmware upgrade failed/Rescure Mode EZsetup processing/Rescure Mode
AIR (Wireless Netw	vork)
Off On Flashing	No power Wireless system ready/Radio-off Transmitting or receiving data (Through Wireless)
WAN (Wide Area N	etwork)
Off On Flashing	No power or no physical connection Has physical connection to an Ethernet network Transmitting or receiving data (Through Ethernet Cable)
LAN 1-4 (Local Are	a Network)
Off On Flashing	No power or no physical connection Has physical connection to an Ethernet network Transmitting or receiving data (Through Ethernet Cable)

3) Wall Mounting Option

Out of the box, ASUS WL-520GU/GC Wireless Router is designed to sit on a raised flat surface like a file cabinet or book shelf. The unit may also be converted for mounting to a wall or ceiling.

Follow these steps to mount the ASUS Wireless Router to a wall:

- 1. Look on the underside for the two mounting hooks.
- 2. Mark two upper holes in a flat surface.
- 3. Tighten two screws until only 1/4" is showing.
- 4. Latch the hooks of the ASUS Wireless Router onto the screws.



Note: Re-adjust the screws if you cannot latch the ASUS Wireless Router onto the screws or if it is too loose.

3. Getting Started

The ASUS WL-520GU/GC Wireless Router can meet various working scenarios with proper configuration. The default settings of the wireless router may need change so as to meet your individual needs. Therefore, before using the ASUS Wireless Router, check the basic settings to make sure they all work in your environment.

ASUS provides a utility named EZSetup for fast wireless configuration. If you would like to use EZSetup for your wireless network configuration, refer to chapter 6 for details.



Note: Wired connection for initial configuration is recommended to avoid possible setup problems due to wireless uncertainty.

1) Wired Connection

The ASUS WL-520GU/GC Wireless Router is supplied with an Ethernet cable in the package. Since the ASUS Wireless Router has integrated auto-crossover function, therefore, you can use either straight-through or crossover cable for wired connection. Plug one end of the cable to the LAN port on the rear panel of the router and the other end to the Ethernet port on your PC.

2) Wireless Connection

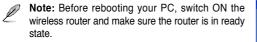
For establishing wireless connection, you need an IEEE 802.11b/g compatible WLAN card. Refer to your wireless adapter user manual for wireless connection procedures. By default, the SSID of ASUS Wireless Router is "default" (in lower case), encryption is disabled and open system authentication is used.

3) Setting IP Address for Wired or Wireless Connection

To access WL-520GU/GC Wireless Router, you must have correct TCP/IP settings on your wired or wireless clients. Set the IP addresses of the clients within the same subnet of WL-520GU/GC.

Getting IP address Automatically

The ASUS Wireless Router integrates DHCP server functions, therefore, you can make your PC get IP address automatically from the ASUS Wirelesss Router.



Setting up IP address Manually

To set IP address manually, you need to know the default settings of the ASUS Wireless Router:

- IP address 192.168.1.1
- Subnet Mask 255.255.255.0

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To set up the connection with a manually assigned IP address, the address of your PC and the wireless router must be within the same subnet:

- IP address: 192.168.1.xxx (xxx can be any number between 2 and 254. Make sure the IP address is not used by other device)
- Subnet Mask: 255.255.255.0 (same as WL-520GU/GC)
- Gateway: 192.168.1.1(IP address of WL-520GU/ GC)
- DNS: 192.168.1.1 (WL-520GU/GC), or assign a known DNS server in your network.

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4) Configuring the Wireless Router

After logging in, you can see the ASUS Wireless Router home page.

The homepage displays quick links to configure the main features of the wireless router.

5) Quick Setup

To start quick setup, click **Next** to enter the "Quick Setup" page. Follow the instructions to setup the ASUS Wireless Router.

- 1. Select your time zone and click **Next**.
- 2. ASUS Wireless Router supports five types of ISP services: cable, PPPoE, PPTP, static WAN IP, and Telstra BigPond (only WL-520GU supports this function). Select your connection type and click **Next** to continue.

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Interface

Bndge

Cable or dynamic IP user

If you are using services provided by cable ISP, select **Cable Modem or other connection that gets IP automatically**. If your ISP provides you hostname, MAC address, and heartbeat server address, fill these information into the boxes on the setting page; if not, click **Next** to skip this step.

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PPPoE user

If you use PPPoE service, select **ADSL** connection that requires username and password. It is known as PPPoE. You need to input the username and password provided by your ISP. Click **Next** to continue.

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PPTP user

If you are using PPTP services, select ADSL connection that requires username, password and IP address. Fill in the username, password and IP address provided by your ISP into the fields. Click Next to continue.

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Static IP user

If you are using ADSL or other connection type that uses static IP address, select **ADSL** or other connection type that uses static IP address. Input the IP address, subnet mask, and default gateway provided by your ISP. You can specify DNS servers, or get DNS information automatically.

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3. After the connection type setting is complete, you are to set up your wireless interface. Specify to your wireless router an SSID (Service Set Identifier), which is a unique identifier attached to packets sent over WLAN. This identifier emulates a password when a device attempts to communicate with your wireless router via WLAN.

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If you want to protect transmitted data, select a Security Level to enable encryption methods.

Medium: Only users with the same WEP key settings can connect to your wireless router and transmit data using 64bits or 128bits WEP key encryption. Configure the settings as Open System/WEP instead of Shared Key/WEP.

High: Only users with the same WPA pre-shared key settings can connect to your wireless router and transmit data using TKIP encryption.

4. Input four sets of WEP keys in the WEP Key fields (10 hexadecimal digits for WEP 64bits, 26 hexadecimal digits for WEP 128bits). You can also let the system generate the keys by inputting a Passphrase. Record the Passphrase and the WEP keys in your notebook, then click **Finish**.

For example, if we select WEP 64bits encryption mode and input 11111 as the Passphrase, the WEP Keys are generated automatically.

 Click Save&Restart to restart the wireless router and activate the new settings.

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6. Connect to the wireless router via wireless

To connect the wireless router from a wireless client, you can use Windows[®] Wireless Zero Configuration service to set up the connection. If you use ASUS Wireless Card on your computer, you can use the One Touch Wizard utility supplied in WLAN Card support CD for wireless connection.

Configuring ASUS WLAN Card with One Touch Wizard

If you have installed ASUS wireless card together with its utilities and drives on your PC, click Start -> Programes -> ASUS Utility-> WLAN Card -> One Touch Wizard to launch the One Touch Wizard utility.

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1) Select Connect to an existing wireless LAN (Station) radio button and click Next to continue.

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 Set the authentication and encryption of your WLAN card the same with those at WL-520GU/GC. In the previous steps the Key Length is 64 bits, Passphrase is 11111 Click Next to continue.

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 Setup the IP address of the WLAN Card according to your network condition. After the setup is complete, click **Finish** to exit the One Touch Wizard.



 One Touch Wizard searches and displays the available APs in the Available Networks list. Select WL-520GU/GC and press Next to continue.

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 It takes several seconds for the wireless card to associate with WL-520GU/GC. Press Next to setup TCP/IP for your WLAN Card.



Configuring WLAN card with Windows® WZC service

If you use non-ASUS wireless card, you can set up the wireless connection with Windows[®] Wireless Zero Configuration (WZC) service.

 Double-click the wireless network icon on the task bar to view available networks. Select your wireless router and click Connect.

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 Input the 10-digit keys you have set on the wireless router and click Connect. The connection is complete within several seconds.

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7. Configuring advanced features

To view and adjust other settings of the wireless router, enter the Web configuration page of WL-520GU/GC. Click on items on the menu to open a submenu and follow the instructions to setup the router. Tips show up when you move your cursor over each item.



4. Wireless Router Features

This chapter provides setup examples of some frequently used router features. You can setup these features via your Web browser.



1) Choosing an Appropriate Operation Mode

System Setup -	Operation Mode
	r supports three operation modes to meet different requirements from ople. Please select the mode that match your situation.
⊙ Home Gateway	In this mode, we suppose you use ASUS Wireless Router to connect to Internet through ADSL or Cable Modem. And, there are many people in your environment share the same IP to ISP. Explaining with technical terms, gateway mode is , NAT is enabed, WAN connection is allowed by using PPPoE, or DHCP client, or static IP. In addition, some features which are useful for home user, such as UPnP and DDNS, are supported.
O Router	In Router mode, we suppose you use ASUS Wireless Router to connect to LAN in your company. So, you can set up routing protocol to meet your requirement in office. Explaining with technical terms, router mode is, NAT is disabled, static routing protocol are allowed to set.
 Access Point 	In Access Point mode, all 5 Ethernet ports and wireless devices are set to locate in the same local area network. Those WAN related functions are not supported here. Explaining with technical terms, access point mode is, NAT is disabled, one wan port and four lan ports of ASUS Wireless Router are bridged together.
	Apply

1) Setting up Wireless Encryption

WL-520GU/GC provides a set of encryption and authentication methods to meet the different demands of home, SOHO, and enterprise users. Before setting up encryption and authentication for WL-520GU/GC, contact your network administrator for advice.

Click **Wireless -> Interface** to open the configuration page.



SSID:	W1500gP
Channelt	Aute 🖬
Wireless Mode:	Autu 👋 📑 54g Protection
Authentication Method:	WPA
WPA Encryption:	1139 v
WPA Pre-Shated Rey:	11111 - 11111
MEP Encryption:	WEP-54bts
Passplatase:	
WEP Key 1 (10 es 26 herz digits).	
WEP Key 2 (10 er 26 hex digits):	
WEP Key 3 (10 or 26 hex digits):	
WDP Key 4 (10 er 26 hex digits):	
Key Index:	0 w
Network Key Fotation Interval:	0

Encryption

The encrytion modes supported by WL-520GU/GC are: WEP-64bits, WEP-128bits, WPA-Personal, WPA2-Personal, WPA-Auto-Personal(TKIP. AES. TKIP+AES), WPA-enterprise, WPA2-enterprise, WPA-Auto-Enterprise (TKIP. AES. TKIP+AES), Radius with 802.1x

WEP stands for Wired Equivalent Privacy, it uses 64bits or 128bits static keys to encrypt the data for wireless transmission. To setup WEP keys, set WEP Encryption to WEP-64bits or WEP-128bits, then manually type in four sets WEP Keys (10 hexadicimal digits for 64-bits key or 26 hexadicimal digits for 128-bits key). You can also let the system generate the keys by entering a Passphrase.

TKIP stands for Temporal Key Integrity Protocol. TKIP dynamically generates unique keys to encrypt every data packet in a wireless session.

AES stands for Advanced Encryption Standard. This solution offers stronger protection and increases the complexity of wireless encryption.

TKIP+AES is used when both WPA and WPA2 clients co-exist in the wireless network.

WPA-Personal protects unauthorized network access by utilizing a set-up password.

WPA-enterprise verifies network users through a server.

Authentication

The authentication methods supported by WL-520GU/GC include: Open, Shared key, WPA-Personal, WPA2-Personal, WPA-Auto-Personal (TKIP. AES. TKIP+AES), WPA-Enterprise, WPA2-Enterprise, WPA-Auto-Enterprise (TKIP. AES. TKIP+AES), and Radius with 802.1x.

Open: This option disables authentication protection for wireless network. **Shared Key:** This mode uses the WEP keys currently in use for authentication.

WPA-Enterprise, WPA2-Enterprise, WPA-Personal, WPA2-Personal, WPA-Auto-Personal: WPA stands for WiFi-Protected Access. WPA provides two security modes: WPA for enterprise network, and WPA-PSK for home and SOHO users. For enterprise network, WPA uses the already existing RADIUS server for authentication; for home and SOHO user, it provides Pre-Shared Key (PSK) for user identification. The Pre-Shared Key consists of 8 to 64 characters.

Radius with 802.1x: Similar with WPA, this solution also uses RADIUS server for authentication. The difference lays on the encryption mothods: WPA adopts TKIP or AES encryption methods, while Radius with 802.1X does not provide encryption.

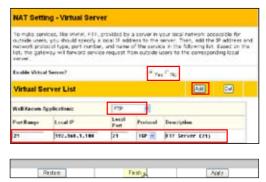
When authentication and encryption are set, click **Finish** to save the settings and restart the wireless router.

3) Setting up Virtual Server in Your LAN

Virtual Server is a Network Address Translation (NAT) function which turns a computer within a LAN into a server by allowing data packets of certain service, such as HTTP, from Internet.



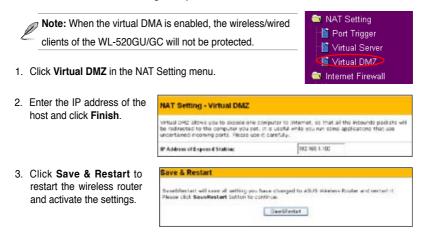
- 1. Click Virtual Server in NAT Setting folder to open the NAT configuration page.
- Select Yes to enable virtual server. For example, if host 192.168.1.100 is FTP server which is to be accessed by Internet user, it means all packets from Internet with destination port as 21 are to be directed to the host. Set Well-known Application to FTP. Port range to 21, Local IP to the host IP, Local Port to 21, Protocol to TCP.
- 3. Click Finish.
- Click Save & Restart to restart the wireless router and activate the settings.





4) Setting up Virtual DMZ in Your LAN

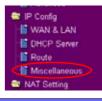
To expose an internal host to Internet and make all services provided by this host available to outside users, enable Vitural DMZ function to open all ports of the host. This function is useful when the host plays multiple roles such as HTTP server and FTP server. However, in doing this, your network becomes less secure.



5) Setting up DDNS

DNS enables host who uses static IP address to associate with a domain name; for dynamic IP user, they can also associate with a domain name via dynamic DNS (DDNS). DDNS requires registering and account-creating at DDNS service providers' website. The DDNS server updates your IP address information once you are assigned to a new IP address. Therefore, Internet user can always access your network.

1. Click Miscellaneous from IP Config folder.



 Select Yes to enable the DDNS service. If you do not have a DDNS account, click Free Trial to register for a trial account.

DDNS Setting	
Dynamic-DNS (DDHS) allows you to exp though you have no static 39 address. WLSSogN. Hou can citcle rele Trial balls	off your server to internet with an unique name, even Currently, servaral boris charts are enbedded in w to start with a free trial account.
Enable the DOHS Cilent?	A New Case

 After clicking Free Trial, you are directed to the homepage of <u>www.DynDNS.</u> org, where you can register and apply for DDNS service.

Read the policy and select "I have read...".

 Enter your user name, e-mail address, password, then click Create Account.

- A message prompts out informing that your account has been created. An E-mail is sent to your mailbox. Open your mailbox and read the mail.
- You can find the activation letter in your E-mail box. Click the hyperlink.

7. The link directs you to a login page. Click login.

8. Enter the user name and password then click Login.

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Our basic service offerings are free, but they are supported by our premium services. See http://www.dymdns.com/services/ for a full listing of all of our available services.

To confirm your account, please go to the address below

https://www.dyndms.com/account/confirm/hhitldf288hJa39HomvCrgA

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9. After logging in, you can see this welcome message.

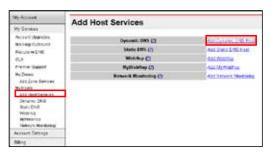
Logged In

You are currently logged in as: account Gassed

10. Select Services tab.

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	Demain Registratio				

11. Click Add Dynamic DNS Host .



12. Enter the host name then click **Add Host**.



 You can see this message when your hostname is successfully created.

Hostname Created	
The handhome you have requested has been smalled	The information new in the database and DNS system is
Postsana	Account producing
IP Address:	210.74.290.120
Wildcardt	W. Contraction of the second s
Mail Eachanges	Mister
Backup MDC	

14. Fill the account information into the DDNS setting fields of your wireless router.

DDNS Setting			
Dynamic CNS (1045) allows you to expo though you have no static IP eddress. O webseld, you can olde Pres Trial below	arrently, serveral DDNR clients are	en besided is	
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- 15. Click Finish.
- Restore Finiship, Apply
- Click Save & Restart to restart the wireless router and activate the settings.

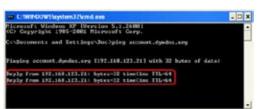
ave & Restart	
eventilestart will save all se lesse click ServeRestart bu	thing you have changed to ASUS Mindeon Router and restart it. Itom to continue.
	TankFestat

All Drograms

17. Verify whether DDNS is working. Click Start menu and select Run....Type cmd and click OK to open the CLI console.



18. Type ping account. dyndns.org (your DDNS domain name). If you can see the reply like what is shown in the right picture, DDNS is working correctly.

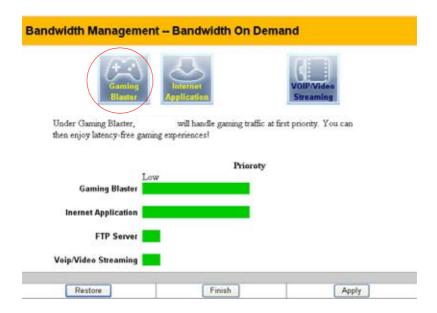


6) Setting up Bandwidth Management (for WL-520GU Only)

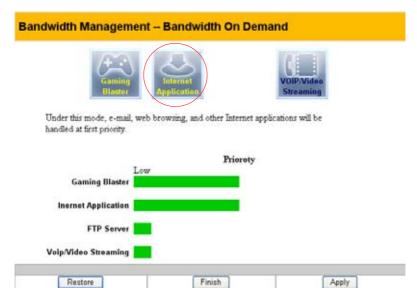
Bandwidth Management provides a mechanism that controls the traffic of your network. To set up bandwidth management:

 Click Basic Config page in Bandwidth Management folder. In this page you can see four buttons including Gaming Blaster, Internet Application, and VOIP/Video Streaming. In this page, you can click each item to set its priority higher. After you click each item, the letters on the button turns yellow (see figures below) and the green bar behind it automatically grows longer, indicating its bandwith status is the first priority. Click Finish and Apply to complete the configuration. The following figures shows different bandwith priority settings:

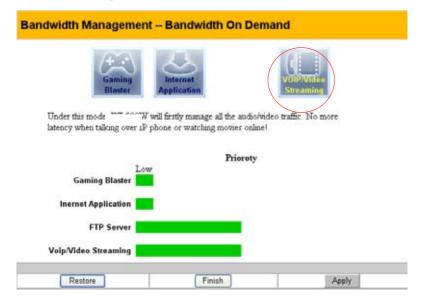
Gaming Blaster



Internet Application



VOIP/Video Streaming



 You can also configure the bandwidth manually by clicking "User Specify Services". Input the IP adress, destination port and choose the priority status from the dropdown list.

Jser Specify Rule Li	Add	Del		
A maximum 8 entries o	an be configured, 1 is the h	ighest priority and 8	is the lowe	est.
Service Name	Source IP Address	Destination Port	Priority	
		-	1 4 4 4	

The "FTP Server" mode was enabled! You can use the scroll bar to reserve more upload bandwidth for WL500W's FTP Server Service. If you set "0%", it means that FTP server has only high priority but no reserved bandwidth.

Reserved Bandwidth 0 %

Long Packet Fragmentation

5. Application Features

ASUS WL-520GU Wireless Router provides one USB2.0 port for printer sharing .

1) Sharing USB Printer (WL-520GU only)

You can connect a comptible USB printer to the USB2.0 port of WL-520GU to share the printer with your LAN users. Follow the procedures below to setup your computers to utilize the printer server function of WL-520GU.

Installing USB Printer

Plug your USB printer to the USB2.0 port on WL-520GU rear panel. To verify whether your printer is properly installed and to WL-520GU Wireless Router, click **Status & Log -> Status**. If **Printer Model** is correct and **Printer Status** is **On-Line**, you can share this printer within your LAN.

 Note: Visit ASUS Website for comaptible printer vendor and models.

Preder		
Palater Model	EP 50H Stylas Phata #210	
Privater Stature	joe-i.re	
User:		
Ardian .	(Balling)	

Status & Log

USB USB

Wireless

DHCP Leases

Port Forwarding

Setting up Printer Client under Windows XP

Follow the steps below to install network printer on your clients.

1. Run Add Printer Wizard from Start -> Printers and Faxes -> Add a printer.



2. Select Local printer attached to this computer and click Next.



3. Select Create a new port and set Type of port to Standard TCP/IP Port, then click Next.



 Input the IP address of WL-520GU in the Printer Name of IP Address field and click Next.



7. Set Protocol to LPR and type LPRServer in Queue Name field. Click Next to continue.

Parnewi		P_98010	1.1.1	
Pate New of Paid	ine i	192,1681	4	
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Residence Partnesse	- [11			1
URI Serino Quivo Name:	L/PE	Gereal		1
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 Click Next to setup TCP/IP port for accessing the network printer.

Welcome to the Add Standard TCP/IP Printer Port Wizard
Vision to equal to the part to a solution party. Sense contract to extend 1. The device is contracted 1. The neuron contracted of realized
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6. Select Custom and click Settings...

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Additional Part Internation Received The Boots and test in-contract	÷
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- Serve har	
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	(Hat Ref. Cour

8. Press **Next** to finish standard TCP/IP port setting.



9. Press **Finish** to complete the settings and return to Add Printer Wizard.



11. Click **Next** to accpt the default name for the printer.



13. The installation is complete. Click **Finish** to quit the Add Printer Wizard.

Add Printer Million	
1	Completing the Add Printer Wizard
	Nucleary accorded, constraint to red. Water Water, The product for induced points satisfy:
	Rear DFUS late Note SUI See Venture And Real Note 5, SCRUT Note DFUS late Not SUI See Debut Ven Tacaya Ven
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 Install printer driver from the vendormodel list. If your printer is not in the list, click Have Disk to manually assign the location of driver.

Add Printer Million	f		
Install Prates Salies The constal advant	and made	Share-Velicate advants on	Ŷ
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12. Select Yes to print a test page. Click Next to print.



Note: If you have already installed the printer locally on your computer, right click the printer icon and select **Property -> Port** tab to add a standard TCP/IP port. Click **Add Port** then select **Standard TCP/IP Port** and click **New Port** button. Refer to step 5-8 for setting procedures.

Note: If you use Windows[®] 98 or ME which does not support Standard TCP/IP port, you need to use Romote Port which is supported by WL-520GU.

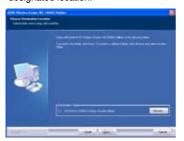
6. Setting up Using ASUS utility

1) Utility Installation for WL-520GU/GC

1. Click Install ASUS Wireless Router Utilities to run the setup installation program.



3. Click **Next** to install the utility in the designated location.



5. Press Finish to quit the installation program.



2. Click Next to continue.



4. Select a program folder and click Next.



2) EZSetup

Wireless LAN setup will complete in two easy steps. Firstly open the EZSetup utility form Start menu, then push the EZSetup button on the rear panel for 3 seconds.



1) If the Setup button is pushed without running the EZsetup wizard utility, the PWR indicator will flash and Internet connections will pause for a short period but will then return to normal operation without change.

2) To use EZSetup, we recommend using an ASUS wireless adapter such as WL-106gM, WL-100gE, and WL-169gE.



Click the EZSetup button in the utility.

Note: Use EZSetup Wizard with one wireless client at a time. If the wireless client computer cannot discover the wireless router while in EZSetup mode, please shorten the distance between the client and the router.



Wireless settings, including network name and network keys, are generated automatically. You can modify these settings manually.

Note: if your wireless router is configured before, select **Preserve original wireless router settings** to use the current value. Click **Next** to continue.

/isus	EZSetup Wizard	/isus	EZSetup Wizard
Parateure Tange Parateure Tange Parateure Tange Parateure Tange Parateure Tange Parateure Parate	Informed Connection Setting Experiment is connect to interest function (forwarder (KFF) and the "Configure (KF and tage)" * Configure (KF and tage) Proces Theory To continue.	Userweiten Linne Userweiten Linne Userweiten Linne Userweiten Linne Userweiten	Subgriefernet Connection: Over Enformation Versicheren Streicher Frankreicht 2019 eine einem Reit seren Treich segnen zu Internation European by 101 Sere Reisen Mell Addresse
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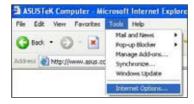
If you need to configure the ISP settings for your wireless router, select **Configure ISP** settings, click **Next** and follow the instructions to complete the settings.



Setup is complete, press **Print/Save Wireless LAN Settings** button for future reference. Click Finish to exit the EZSetup utility.

7. Troubleshooting

Cannot access to web browser for router configuration



1. Open a web browser and open "Internet Options" dialog box.



2. Click on "Delete Cookies" and "Delete Files".

- 3. Click Clear History.
- 4. Click Yes and then click the Connections tab.
- 5. Select the dial-up connection, and then click the Settings button.

6. Clear the Automatically detect settings and use proxcy server check boxes are not selected.

7. Click Ok to close the Internet Options dialog box.

Cannot Establish Connection via Wireless

Out of Range:

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

Authentication:

- · Use wired connection to connect to router.
- · Check the wireless security setting.
- Do the hard reset on the wireless router by pressing the Restore button on the rear panel for more than 5 seconds.

Couldn't find the router:

- Do the hard reset on the wireless router by pressing the Restore button on the rear panal for more than 5 seconds.
- · Check the setting in the wireless adapter such as SSID and encryption setting.

Cannot get access to the Internet via wireless LAN adapter

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

Internet is not accessible

- · Check the lights on ADSL modem and the Wireless Router
- Check whether the "WAN" LED on the Wireless Router is ON. If the LED is not ON, change the cable and try again.

When ADSL Modem "Link" light is ON (not blinking), this means Internet Access is Possible.

- · Restart your computer.
- · Refer to the Quick Setup Guide of the wireless router and reconfigure the settings.
- · Check whether the WAN LED on the router is ON or not.
- · Check wireless encryption settings.
- Check whether the computer can get the IP address or not (via both wired network and wireless network).
- Make sure your Web browser is configured to use the local LAN, and is not configured to use a proxy server.

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.

- · Make sure your cables are all correctly 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 to setup the wired connection for setup the wireless encryption again.
- Do the hard reset on the wireless router by pressing the Restore button on the rear panel for more than 5 seconds.

How to restore to defaults

The following are factory default values. If you push the Restore button on the back of the ASUS Wireless Router for over 5 seconds, or click the "Restore" button on the "Factory Default" page under " System Setting", the following default settings overwrite the old settings on your wireless router.

User Name:	admin	Subnet Mask:	255.255.255.0
Password:	admin	DNS Server 1:	192.168.1.1
Enable DHCP:	Yes	DNS Server 2:	(Blank)
IP address:	192.168.1.1	SSID:	default
Domain Name:	(Blank)		

8. Appendix

FC Warning 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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

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.

CAUTION:

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

Prohibition of Co-location

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter

Safety Information

To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body. Use on the supplied antenna.

Declaration of Conformity for R&TTE directive 1999/5/EC

Essential requirements - Article 3

Protection requirements for health and safety – Article 3.1a

Testing for electric safety according to EN 60950-1 has been conducted. These are considered relevant and sufficient

Protection requirements for electromagnetic compatibility - Article 3.1b

Testing for electromagnetic compatibility according to EN 301 489-1 and EN 301 489-17 has been conducted. These are considered relevant and sufficient.

Effective use of the radio spectrum - Article 3.2

Testing for radio test suites according to EN 300 328- 2 has been conducted. These are considered relevant and sufficient.

4!h

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.

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Version 2, June 1991

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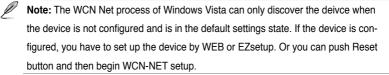
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END OF TERMS AND CONDITIONS

Configure WL-520GU/GC under Vista OS

The Windows Simple Config function, which is preinstalled in the ASUS WL-520GU/GC, enables the device to be configured via WCN Net process of Windows Vista.



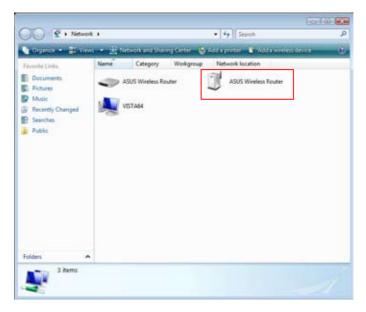
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Note: WL-520GC doesn't support WCN setup but can still works well with Vista PC by using WEB config or EZSetup.

1) Configuring the device

Follow the steps below to configure the device using WCN-Net process of Windows Vista:

- 1. Connect the device to your PC and power on it.
- Click Start >Network from the Vista desktop. The Network screen appears (as shown below).
- 3. Double click ASUS Wireless Router.



A screen prompts you to enter the PIN of your device. The PIN is located on the sticker posted on the device.

4. Enter the PIN in the PIN box, then click Next.

Configure a WCN device	belt
Configure a WUN Device	
Type the PIN for the selected device	
To configure this device for use on your network, t	
information that came with the device or on a stick	er on the device.
PIN	
12345670	
Display characters	

4. Give the network a name and type it in the Network name box, then click Next.

G (onfigure a WCN device	
0	Sive your network a name	
	and the second se	
9	hoose a name that people who connect to your network will recognize	
	letwork name (SSID):	
	ASUS_VISTA_Network	
Y	ou can type up to 32 letters or numbers.	
		No.
		Next Cancel

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A Passphrase is generated for WPA security for the network.

5. Click Next from this screen.

Help make your network more secure with a	passphrase
Windows will use the passphrase provided below to genera time that people connect to this network, they will need th	
and and people connect to one network, any and need of	e perspinere.
Passphrase:	
NGo4X6Lqv4LCE1JZ6aQ6	
The passphrase must be at least 8 characters and cannot be	egin or end with a space.
Display characters	
Create a different passphrase for me	

If you want to create a different passphrase, click **create a different passphrase for me**. If you want to use security method other than WPA-Personal, click **Show advanced network security options**.

The "Create a different passphrase" and "Security methods" screens are shown below.

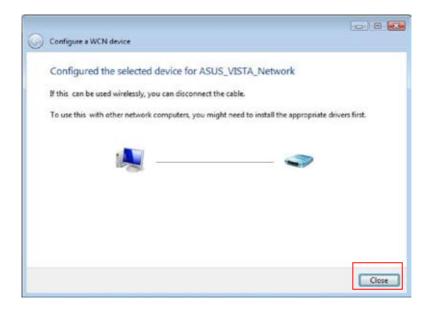
Create a different passphrase

9	Configure a WCN device
	Choose advanced network security options
	We recommend using Wi-Fi Protected Access 2 (WPA2-Personal) because it provides better security, but it is not supported by devices made before 2001.
	Security method:
	WPA-Personal -
	Security key or passphrase:
	M8d8K2IjR4t3D4hafUvk1U
	Display characters
	Create a different security key or passphrase for me
	Next

Four security methods

Configure a WCN device		
Choose advanced netwo	ork security options	
We recommend using Wi-Fi Pr security, but it is not supporte		ersonal) because it provides better 001.
Security method:		
WPA-Personal	-	
WPA-Personal		
WPA2-Personal WEP		
No Security		
Display characters		
Create a different recurity key o	r passphrase for me	

 Click Next from the above screens after the configuration is completed. The complete configuration screen appears as shown below. Click Close to finish the process and exit.



2) Setting up the network sharing center

Follow the steps below to set up a sharing center to allow the network users to share printer, file and media.

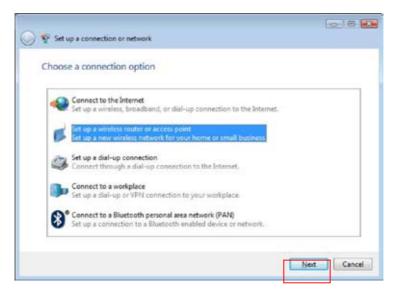
- 1. Connect the device to your PC and power it on.
- Click Network and Sharing Center in the navigation bar. The Network and Sharing Center screen appears.

Constants - Boos Provinte Links	no illation	gi uzklitan Kalu	• 4• Search	
Favorite Links	A Designation of the	and a manifold the second s	3. Add a secondary	
	Name		and the second	inite (
E Documents		Category Workgro	p Network location	
Pictures	SU ASU	15 Wireless Router	ASUS Weeless Router	
9 Music		V		
Recently Changed	a ca	for here to open	Network and Sharing Cer	ster
B Statches Public				
A PUBLIC				
Folders	^			
3 items				

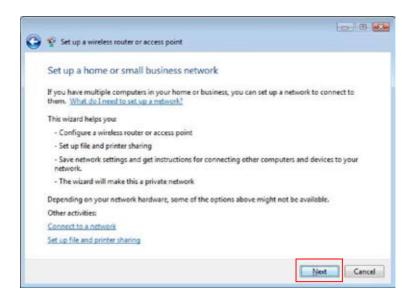
3. Click Set up a wireless router or network.

😨 🕴 Control Par	sel + Network and Sharing Center	• + Seanth	
Tasks View computers and device	Network and Sharing G	eriter	•
Concert to a network			Yops full map
Set up a connection or net		A	6
Manage net only connection	VISTAM	ASUS	Internet
Dagross an tepas	(This computer)		and an and a second sec
Click here to	setup a network.		Customize
Citen nere to .	setup a netricita.	Local only	
	Connection.	Local Area Connection	View status
		Local Area Connection	View status
	Sharing and Discovery	Local Ana Connection	Yinyi shabut
		e On	
	3 Sharing and Discovery		
	M Sharing and Discovery Network discovery	e 0n	
	 Sharing and Discovery Network discovery Fits sharing 	e On e On	
	Sharing and Discovery Network discovery File sharing Public folder sharing	# On # On # Of	
See ale Researchers See ale	Sharing and Discovery Network discovery File sharing Public folder sharing Putter sharing	 ₽ On ₽ On ₽ Off ₽ Off (ise printers installed) 	
Bietersth Devices	Sharing and Discovery Network discovery File sharing Public folder sharing Public folder sharing Puseword protected sharing	On On On On On Off (re-printers installed) On On Off	View status (*) (*) (*) (*) (*)

3. Choose Set up a wireless router or access point, then click Next.



4. Click Next.



 In the screen that appears, type a network name in the Network name box, then click Next. A passphrase is generated for the WPA security.

Give your network a name	
Choose a name that people who connect to your network w	vill recognize
Network name (SSID):	
ASUS_VISTA_Network	
You can type up to 32 letters or numbers.	

 Click Next. If you want to use security methods other than WPA-Personal, click Show advanced network security options.

Help make your ne	twork more secure	with a nacenhrad	
help make your ne	work more secure	with a passprings	
Windows will use the past time that people connect			urity key for you. The first
and the property of the second	and the second study and		
Passphrase:			
9h3AxP3AgFH9V2	L-NMTEVA		
The passphrase must be		cannot begin or end w	ith a space.
5455 a		S	
Display characters			
Create a different passph	rase for me		
	security options		



7. Choose a security method and click Next.

Y Set up a wireless router or access point	
Choose advanced network security op	tions
We recommend using Wi-Fi Protected Access 2 (V security, but it is not supported by devices made I Security method:	
WPA-Personal	
WPA-Personal WPA2-Personal	
No Security	
Display characters	
Create a different security key or passphrate for m	4

 A screen prompts you to enter the PIN for the device. Enter the PIN, which is located on the sticker posted on the device, then click Next.

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9. Choose a file and printer sharing option and click Next.

0.0
Set up a wireless router or access point
Choose file and printer sharing options
🔊 🔿 Do not allow file and printer sharing
You can set up file and printer sharing later by going to Network and Sharing Center in Control Panel.
🗑 🔿 Allow sharing with anyone with a user account and password for this computer
Files in your Public folder and shared printers attached to this computer will be accessible.
O Allow sharing with anyone on the same network as this computer
Files in your Public folder and shared printers attached to this computer will be accessible.
Keep the custom settings I currently have
ell me more about file and printer sharing
Next

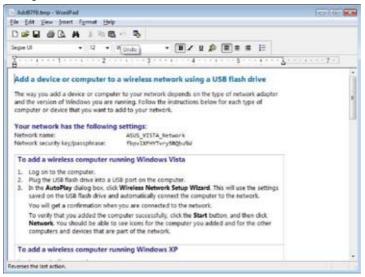
A screen appears showing that the set up is complete as shown below.



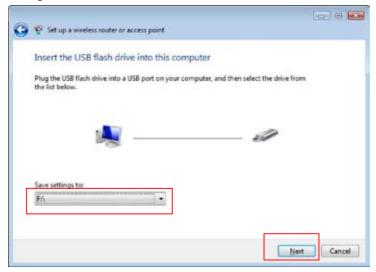
10. From the above screen you can choose to View settings or, Save settings to a USB

flash drive. The respective screens are shown below.

View settings screen



Save settings to a USB flash drive screen



11. When Save settings to a USB flash drive screen appears, plug a USB flash drive into your computer, then select the drive from the Save settings to box and click Next. The settings starts to be saved into the USB drive.

After the saving process is completed, a screen appears to instruct you to add computer or other devices into the network. Follow the instructions to add computers and devices into your network.

То	add a device or computer, follow these instructions
1	Remove the USB flash drive from this computer.
2	Insert the USB flash drive into a USB port on the device or the computer. (Computers must be running Windows XP or Windows Vista.)
3	For devices, follow the instructions in the information that came with the device, or on the LCD of the device, if applicable.
For	more detailed instructions, click here.