The About Screen

The **About** screen displays the AirCruiser G Wireless Router name as well as the firmware version.

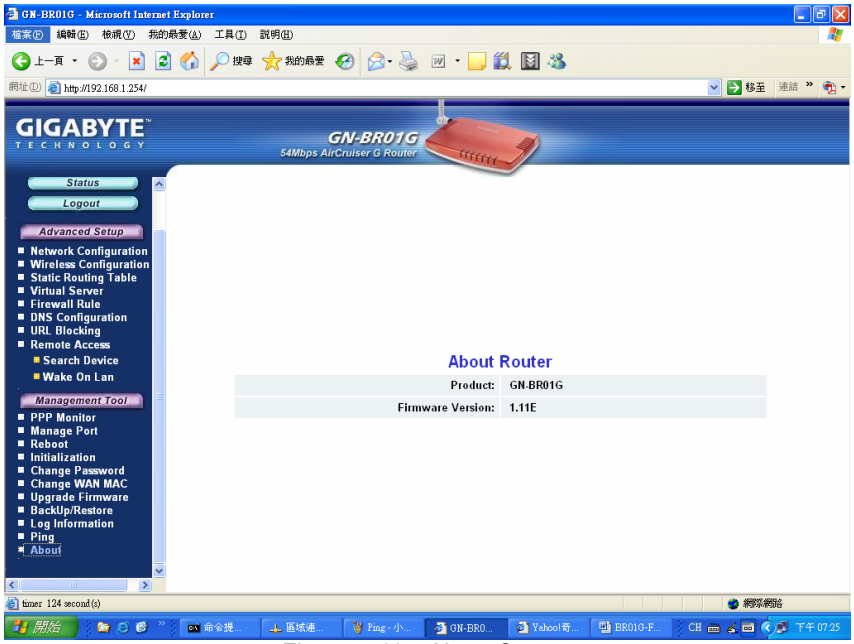

Figure 7-11 – About Screen

Configuration Buttons

There are four buttons on the top left panel of the configuration menu; SmartSetup, Setup Wizard, Status, and Logout. These buttons are useful for accessing status information or setup wizard.

Smart Setup Button

SmartSetup automatically detects your ISP connection type, and opens the proper ISP login screen.

Setup Wizard Button

Setup Wizard is similar to Smart Setup, but also presents you with a LAN setup screen which allows you to set basic LAN configuration.

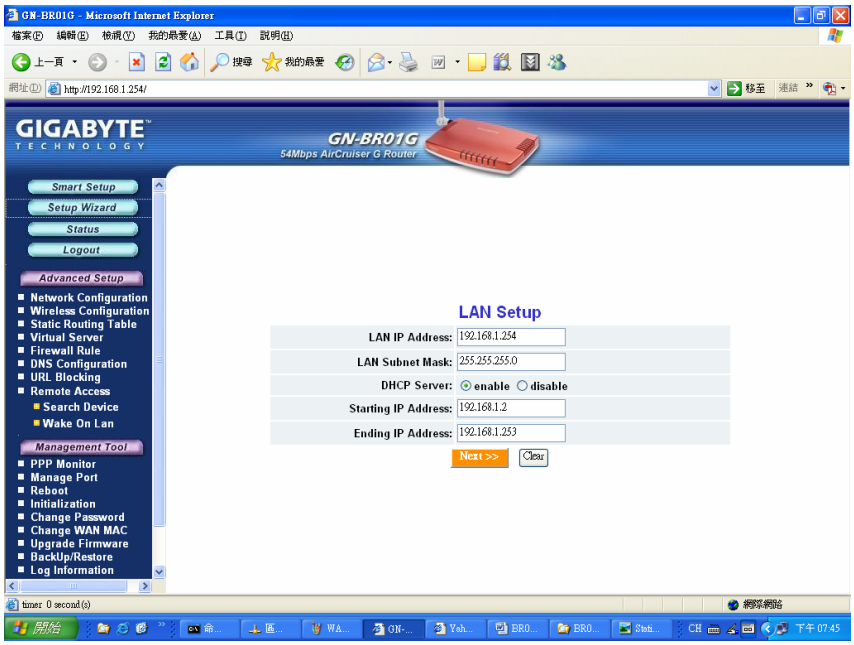

Figure 7-12 – Setup Wizard/LAN Setup

The Status Button

On the **Status** page the router's current connection and configuration information is displayed for the following; LAN Ethernet, WAN Ethernet, ARP Table, DHCP Lease Table, Routing Table, UPnP Port Mapping Table.

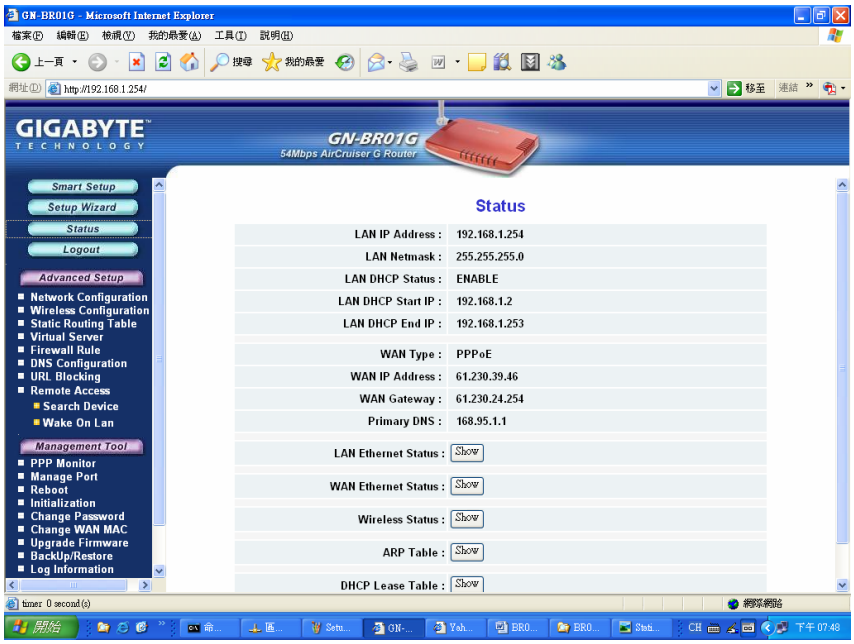

Figure 7-13 – Status

LAN IP Address

Displays the primary IP address being used by the Local (LAN) port of the Router. The default is 192.168.1.254

LAN Netmask

Displays the IP Subnet Mask being used by the Local (LAN) port of the router. Default is 255.255.255.0

LAN DHCP Status

Identifies if the Router's built-in DHCP server is active for the attached devices on the LAN.

LAN DHCP Start IP

The starting IP number in the range possible IP addresses issued by the DHCP server.

LAN DHCP End IP

The last IP number in the range possible IP addresses issued by the DHCP server.

ISP Number

The number of ISP accounts configured in the current session.

ISP Name

System assigned name given to the ISP.

WAN Ethernet Status

The **WAN Status** displays the associated MAC address and IP address pairs of your LAN devices. In the example below, only the AirCruiser G Router is in the ARP Table.

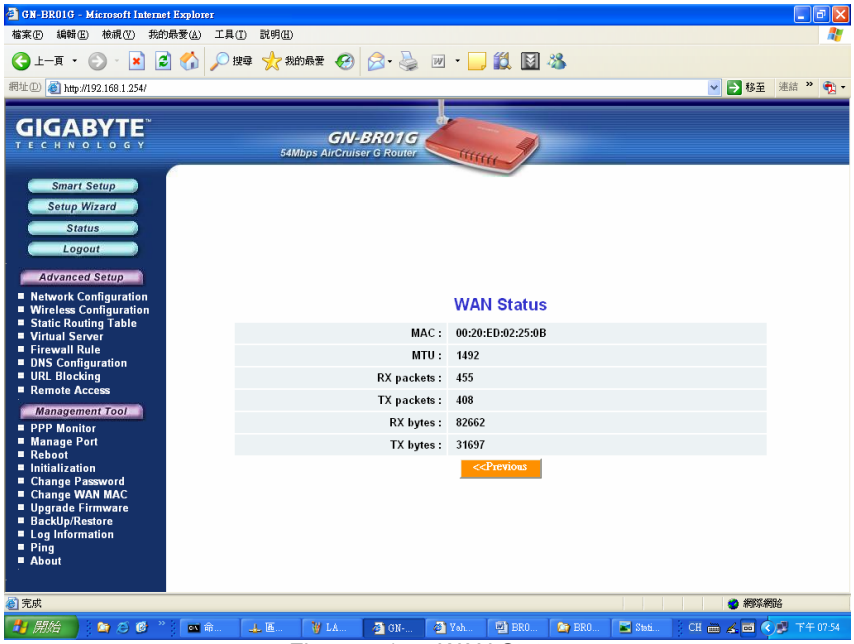

Figure 7-14 – WAN Status

MAC

The field displays the MAC address used by the WAN port of the router.

MTU

The maximum size of the packet sent from your computer to the Internet.

Rx packets

The number of received packets of this port after resetting or manually initializing.

Tx packets

The number of transmitted packets of this port after resetting or manually initializing.

Rx bytes

The current bandwidth (receive) on the WAN port.

Rx bytes

The current bandwidth (transmit) on the WAN port.

ARP Table

The **ARP Table** displays the associated MAC address and IP address pairs of your LAN devices. In the example below, only the AirCruiser G Router is in the ARP Table.

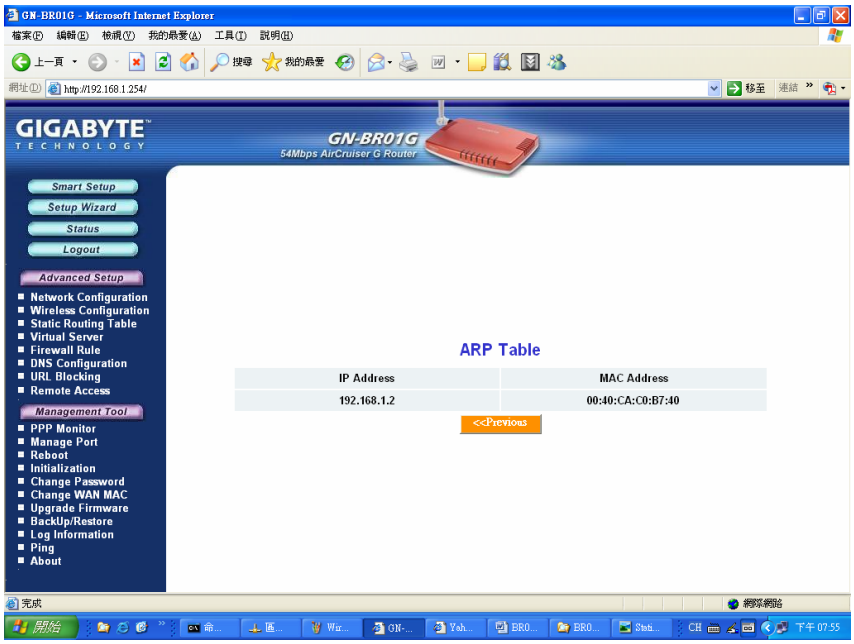

Figure 7-15 – ARP Table

Routing Table

The **Routing Table** displays the AirCruiser G RIP routing details.

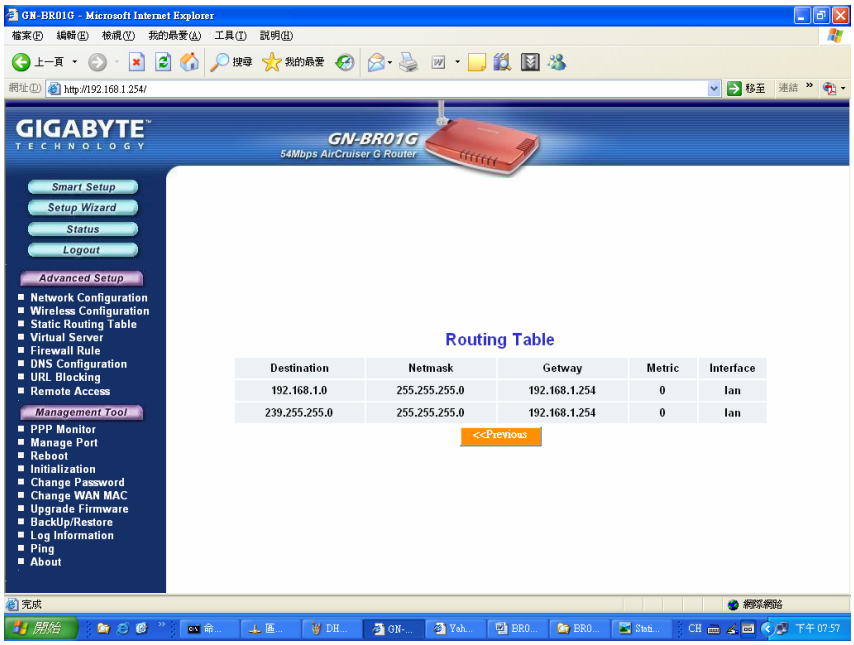

Figure 7-16 – Routing Table

Destination	The IP address of the destination network address.
Netmask	The subnet of that destination IP address.
Gateway	Gateway of the destination IP address.
Metric	Hop count to the destination network.
Interface	Type of interface used.

The Logout Button

On the **Logout** page confirms that you have successfully logged out of the AirCruiser G Configuration.

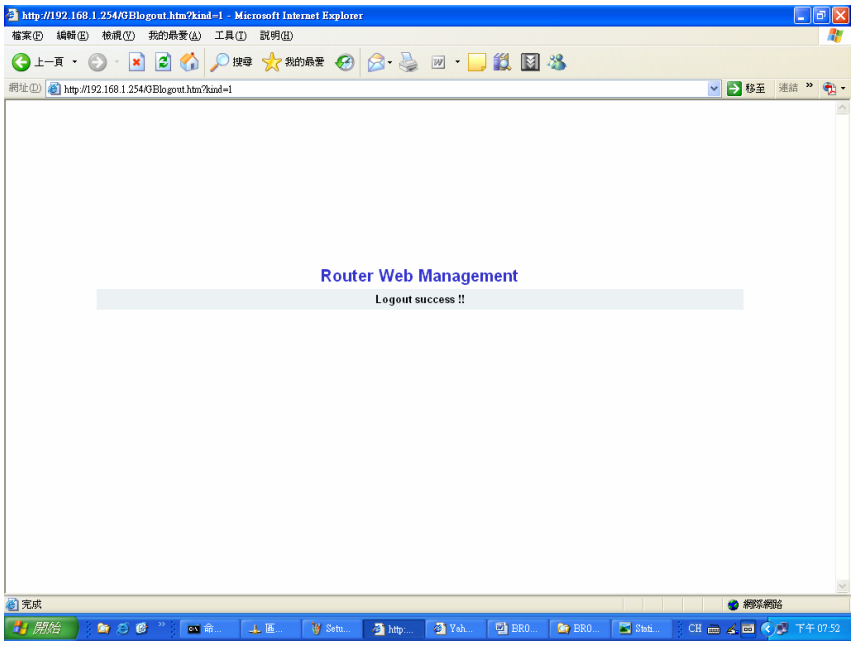

Figure 7-17 – Logout confirmation screen

Chapter 8 Troubleshooting

This section provides solutions to common problems that may occur during installation, configuration or use of the AirCruiser G Wireless Router.

Q: I can't remember the password or IP address of the router.
A: You can resolve this by pressing the "**Init**" button on your Router. The Router will reboot and all settings (including the default password) will be restored to their default values.

Q: I can't connect to the Internet.
A:
1. Check that the power cord is connected properly, and the router's power LED is lit green.
2. Verify that all the configuration settings are correct.
3. Check that your ADSL/Cable Modem is operating normally, and/or you have ISP service available.
4. Check that all network cabling is properly connected.

Q: I can't access the AirCruiser G Wireless Router Web Configuration Utility.
A:
1. Please check the Ethernet cable between the PC and the Router is properly connected.
2. Make sure your computer's IP address is on the subnet where the Router locates.
3. In your PC's TCP/IP settings, try checking the setting "Obtain and IP address automatically" and try again.
4. Make sure you are using the correct login information. The default value is 'admin' for both username and password.

Q: Where in the network do I connect the router?
A: In a typical environment, the AirCruiser G Wireless Router is installed directly onto the ADSL/Cable Modem. Plug the RJ45 Ethernet cable of the ADSL or Cable Modem into the WAN port of the Router.

Q: Can the AirCruiser G Wireless Router work as a DHCP server?
A: Yes. The AirCruiser G Wireless Router has a built-in DHCP server function so that apart from all the standard DHCP functions, it helps prevent IP conflicts.

Q: What is WEP?
A: Wired Equivalent Privacy (WEP) is a security mechanism defined within the 802.11 standard. It is designed to make the link integrity of the wireless medium equal to wired cable. Data privacy mechanism based on a 40 bits (128 bit optional) shared key algorithm, as described in the IEEE 802.11 standard.

Q: What is the IEEE 802.11g standard?

A: The IEEE 802.11g standard specifies data rates of up to 54 Mbps in the 2.45-GHz band. It uses Orthogonal Frequency Division Multiplexing (OFDM), which is provided by this standard and is compatible with 802.11b standard offering speeds of about 11 Mbps. This standard uses Complementary Code Keying (CCK) modulation. Both 11g and 11b can operate at a range of up to 300 feet.

Appendix A: Connection Troubleshooting

Problem: I get a timeout when trying to access the Router administration screen.

Answer: Verify the router's IP address as it sometimes will change depending on your network configuration. Open up a command terminal by clicking Start > Run, then type 'cmd' and click ok. At the DOS prompt, type `ipconfig`. The "Default Gateway" IP address is the address of your AirCruiser G. Use this number instead of 192.168.1.245 when logging in.

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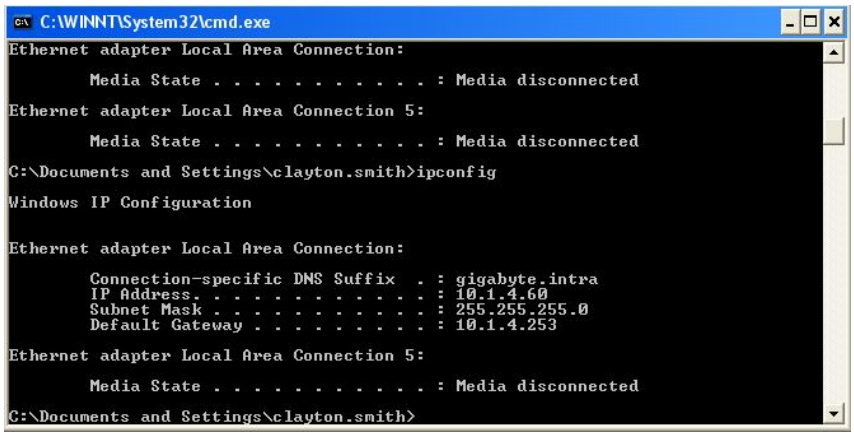
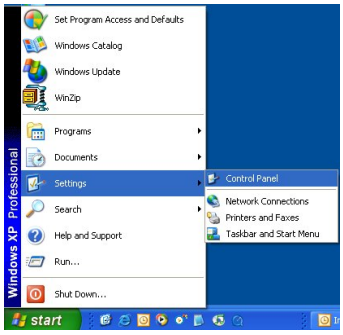


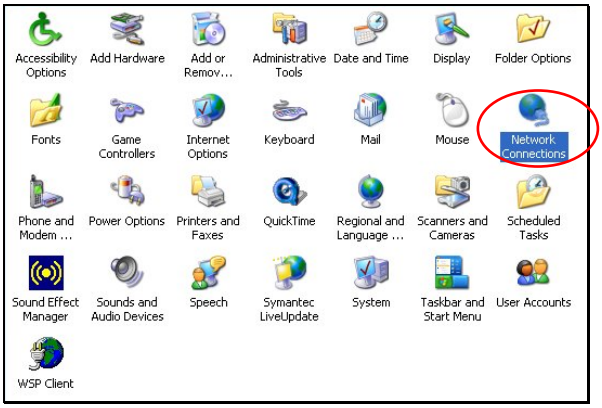
Problem: I can login to the router administration screen, and everything seems fine, but I can't connect to the Internet.

Answer: If you have trouble connecting to the internet, often times its due to settings in your TCP/IP settings or your web browser.

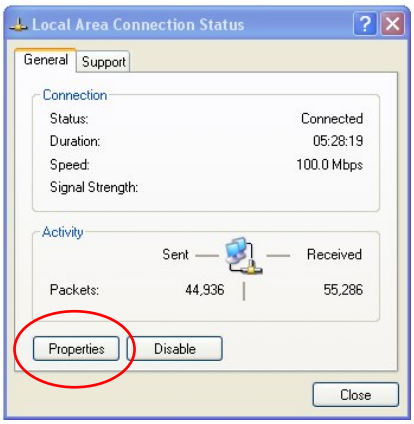
Step 1 Click the **Start** button. Select **Settings** and then **Control Panel** icon.



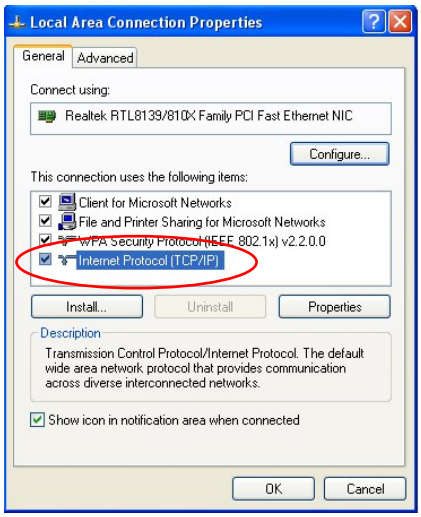
Step 2 Double-click the **Network and Dial-up Connection** icon.



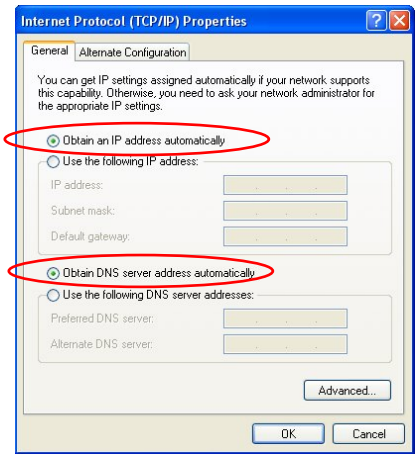
Step 3 Double-click the **Local Area Connection** icon, and then click the **Properties** button.



Step 4 The **Local Area Connection Properties** window will appear. For the applicable Ethernet / wireless adapter, make sure that there is a check in the **Internet Protocol (TCP/IP)** checkbox, then double-click on "**Internet Protocol (TCP/IP)**"



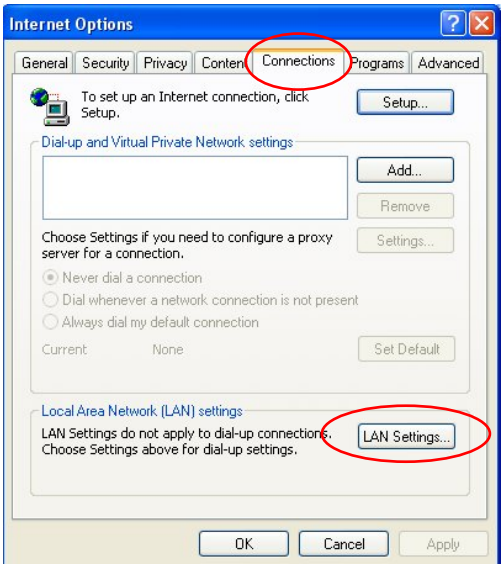
Step 5 Select both the **Obtain IP address automatically** and **Obtain DNS server address automatically**, options and then click **OK**. Continue clicking on the **OK** button to complete the PC configuration.



Your computer has been configured to obtain an IP address automatically from the AirCruiser G Wireless Router.

Step 6 Open **Internet Explorer.** From the menu select **Tools** and then click **Internet Options**.

Step 7 From the **Internet Options** window, click the **Connections** tab, and then click the **LAN Settings** button (see figure below).



Step 8 Now verify that none of the checkboxes have been ticked, and click on the **OK** button. Now you will be able to login to the Router and configure or change network settings.

Appendix B
Glossary

ADSL
Asymmetric digital subscriber line (ADSL) is a new modem technology that converts existing twisted-pair telephone lines into access paths for high-speed communication of various sorts.

Auto-MDI/MDIX
On a network hub or switch, an auto-MDI/MDIX port automatically senses if it needs to act as a MDI or MDIX port. The auto- MDI/MDIX capability eliminates the need for crossover cables.

Auto-negotiate
To automatically determine the correct setting. The term is often used with communications and networking

DHCP
The Dynamic Host Configuration Protocol (DHCP) is an Internet protocol for automating the configuration of computers that use TCP/IP. DHCP can be used to automatically assign IP addresses, to deliver TCP/IP stack configuration parameters such as the subnet mask and default router, and to provide other configuration information such as the addresses for printer, time and news servers.

DMZ
In computer networks, a DMZ (demilitarized zone) is a computer host or small network inserted as a "neutral zone" between a company's private network and the outside public network. It prevents outside users from getting direct access to a server that stores company data. Typically, the DMZ contains devices accessible to Internet traffic, such as Web (HTTP) servers, FTP servers, SMTP (e-mail) servers and DNS servers.

DNS
The Domain Name System (DNS) is a distributed Internet directory service. DNS is used mostly to translate between domain names and IP addresses, and to control Internet email delivery. Most Internet services rely on DNS to work. If DNS fails, web sites cannot be located and email delivery service will be suspended.

Dynamic IP Address
An IP address is automatically assigned to a user’s AP in a TCP/IP network typically by a DHCP server.

Firewall
A system designed to prevent unauthorized access to or from a private network. Firewalls can be implemented in both hardware and software, or a combination of both. Firewalls are frequently used to prevent unauthorized Internet users from accessing private networks connected to the Internet, especially intranets. All messages entering or leaving the intranet pass through the firewall, which examines each message and blocks those that do not meet the specified security criteria.

Gateway
A device, usually a Router, that connects hosts on a local network to other networks.

IP Address
Every PC on the Internet has a unique identifying number, called an IP Address. A typical IP address looks like this: 216.27.61.137

IPSec
IPSec stands for IP Security. It provides authentication and encryption over the Internet. It functions at Layer 3 and thus secures everything on the network. It has become a standard protocol used for virtual private networks (VPNs).

MAC Address
On a local area network (LAN) or other network, the MAC (Media Access Control) address is your computer's unique hardware number. Usually written as: 01:23:45:67:89:ab

MTU
The size in bytes of the largest packet that can be sent or received.

NAT
A technique by which several hosts share a single IP address for accessing the Internet.

Ping (Packet Internet Groper)
A utility to determine whether a specific IP address is accessible. It works by sending a packet to the specified address and waiting for a reply. PING is used primarily to troubleshoot Internet connections.

SSID
SSID is the name representing the Router in WLAN.

PPPoE
Point-to-Point over Ethernet is a protocol for connecting remote hosts to the Internet over an always-on connection by simulating a dial-up connection.

Router
A device that forwards data packets along networks. A router is connected to at least two networks, commonly two LANs or WANs or a LAN and its ISP network. Routers are located at gateways, the places where two or more networks connect.

Subnet Mask
A mask used to determine which subnet an IP address belongs to. An IP address has two components, the network address and the host address. Subnetting enables the network administrator to further divide the host part of the address into two or more subnets.

TCP/IP
TCP/IP (Transmission Control Protocol/Internet Protocol), the suite of communications protocols used to connect hosts on the Internet.

VPN
Virtual private networks are secured private network connections, built on top of publicly accessible infrastructure, such as the Internet or the public telephone network. VPNs typically employ some combination of encryption, digital certificates, strong user authentication and access control to provide security to the traffic they carry. They usually provide connectivity to many machines behind a gateway or firewall.

WAN
Wide Area Network, a communication network that covers a relatively broad geographic area, consisting of two or more LANs. Broadband communication over the WAN is often through public networks such as the ADSL or Cable systems, or through leased lines or satellites. To simplify it, please image network as a WAN.

WEP
WEP (Wired Equivalent Privacy) is a data privacy mechanism based on a 64/128-bit shared key algorithm, as described in the IEEE 802.11 standard.

Appendix C
Regulatory

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.

FCC 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.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user authority to operate this equipment.

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.

IMPORTANT NOTE:
GIGABYTE declares that GN-BR01G (FCC ID: JCK-GN-BR01G) is limited in CH1~CH11 2.4GHz for by specified firmware controlled in U.S.A.

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. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Europe - Declaration of Conformity

CE	This device is a 2.4 GHz low power RF device intended for home and office use in EU and EFTA member states. In some EU / EFTA member states some restrictions may apply. Please contact local spectrum management authorities for further details before putting this device into operation.

GIGA-BYTE Technology, Inc. declares that the product: **Wireless Broadband Router Model Number: GN-BR01G** is in conformity with and in accordance with the European Directive of EMC, 89/336 EEC for the following sections:

EN 61000-3-2, EN 61000-3-3, EN 55024, and EN 55022 Disturbances and Immunities

GIGA-BYTE Technology, Inc. also declares the conformity of above mentioned product with the actual required safety standards in accordance with LVD Directive 73/23 EEC:

EN 60950 Safety

In accordance with R&TTE Directive 1995/5/EC, Part 17: Requirements for Operation in the European Community, GIGA-BYTE Technology, Inc declares the conformity of the above mentioned products for:

EN 300 328-2 V1.4.1 (2003), ETSI EN 300 328-1：V1.3.1, EN 301 489-1, and EN 301 489-17
Technical Requirements for Radio Equipment

Countries of Operation and Conditions of Use in the European Community
The user should run the configuration utility program provided with this product to check the current channel of operation and confirm that the device is operating in conformance with the spectrum usage rules for European Community countries as described in this section. European standards dictate a maximum radiated transmit power of 100mW EIRP and a frequency range of 2.400 - 2.4835 GHz.

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Appendix D
Specifications

General	
Standards	IEEE 802.3(10Base-T), IEEE 802.3u(100Base-TX), IEEE 802.11b/g(Wireless)
Ports / Buttons	LAN – 10/100 Ethernet (auto-MDIX), RJ-45 WAN - 10/100 Ethernet (auto-MDIX), RJ-45 One Init (Reset) button
Power	External, 7.5V DC 800mA
Wireless	
Frequency Band	2412 ~ 2484 MHz (subject to local regulation)
Modulation Technology	OFDM and DSSS
Modulation Techniques	64QAM, 16QAM, QPSK, BPSK, DBPSK, DQPSK, CCK
Data Rates	54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 Mbps (auto fallback)
Output power	18 dBm @ Nominal Temp Range
Receive Sensitivity	-70 dBm @ 54Mbps date rate at nominal temperature
Antenna	One external antenna
Wireless Range	*Outdoor:* 100 to 300m *Indoor:* 30 to 100m
Regulatory and Environmental Compliance	
EMC certification	FCC part (USA) CE(Europe) DGT (Tawiwan) SRRC (China)
Temperature Range	*Operating*: 0 to 40 °C, *Storage*: -20 to 65 °C
Humidity	10% ~ 85% Non-condensing
Protocols	
Routing Protocols	Dynamic, Static Routing with TCP/IP NAT, PPPoE VPN Pass-Through (IPSec, L2TP) DHCP (Client & Server)
Security	64/128-bit WEP; WPA-PSK; WPA
Mechanical	
LEDs	Power/Status; LAN; WAN
Gross Weight	240 ± 5g
Dimensions	110x 160 x 25mm

Appendix G
Warranty

Limited Warranty Statement (1-Year Warranty)

Thank you for purchasing the GIGABYTE Product. This limited warranty statement will provide you one year warranty starting from the purchase date. Of which if any defect is occurred due to accidents or any man-made factors, or any unauthorized torn-off or damage to GIGABYTE's sticker on the product, GIGABYTE Technology will not provide after-sale services, such as:

- Products are damaged due to any violation of instructions on user manual.
- Hardware is damaged due to inappropriate assembling.
- Products are damaged due to the use of illegal accessory.
- Products are damaged due to parts disassembling without authorization.
- Products are damaged due to exceeding environment limits.
- Products are damaged due to unexpected external force.
- Products are damaged due to nature disasters.
- Products are copies or illegally smuggled goods.

PLEASE RECORD THE FOLLOWING INFORMATION REGARDING YOUR WARRANTY

Name of Customer:	
Phone No:	
Address:	
Email:	
Model:	
Serial:	
Date of Purchase:	
Place of Purchase:	
From Whom:	
Distributor:	

Customer Service

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