Wireless-G Broadband Router

User Manual (GWA502)

IOGEAR®

Welcome

Thank you for choosing IOGEAR® to serve your wireless needs. Soon, you will be sharing files or surfing the Internet wirelessly. We hope you will have as much fun using your IOGEAR® Wireless-G Broadband Router, as we had designing it.

Rest assured, your IOGEAR® Wireless-G Broadband Router is built rock-solid to ensure maximum up-time for you to stay up-and-running. If for any reason you have a problem, we stand behind our products with an industry-leading 3 year factory warranty, so you can have peace-of-mind with your current and future IOGEAR® purchases.

We want you to be happy with your purchase, so we have made every effort to ensure product quality, reliability, and ease-of-use.

©2004 IOGEAR. All Rights Reserved. PKG-M0108

IOGEAR®, the IOGEAR® logo, are trademarks or registered trademarks of IOGEAR®, Inc. Microsoft and Windows are registered trademarks of Microsoft® Corporation. IBM is a registered trademark of International Business Machines, Inc. Macintosh, G3/G4 and iMac are registered trademarks of Apple Computer, Inc. IOGEAR® makes no warranty of any kind with regards to the information presented in this document. All information furnished here is for informational purposes only and is subject to change without notice. IOGEAR®, Inc. assumes no responsibility for any inaccuracies or errors that may appear in this document.

Table of Contents

Package Contents 03
Introduction 04
Features 05
Requirements 06
Pictorial Introduction 07
Installation 10
Quick Installation 14
Configuration Utility 22
- System Page 23
- LAN Page 28
- Wireless Page 33
- Internet Page 46
- Firewall Page 52

- NAT Page 57
- Summary Page 59
Specification 62
Technical Support 64
Radio and TV Interference Statement 65
Limited Warranty 66
Regulatory Compliance FCC Warning 67

Package Contents

This package contains:

- IOGEAR Wireless-G Broadband Router
- Category-5 Ethernet Patch Cable
- AC Power Adapter
- Quick Start Guide
- User Manual CD
- Warranty & Registration Card

Introduction

IOGEAR's Ultra-Fast Wireless-G Broadband Router is an all-in-one wireless access point, router, and 4-port Ethernet switch for both small and home office users. With IOGEAR, you can surf the Internet, share files, and chat with your friends....Wirelessly!

Our simple, easy-to-use, web-based setup wizard will have you up-and-running in minutes.
Moreover, our turn-key Firewall and Wireless Security packages keep you safe on the Internet.

Remember, IOGEAR's Wireless Broadband Router gives you the same connectivity and security that big companies use...all in a small, cost-effective, reliable setup. Go with IOGEAR, and go Wireless!

Features

• Built-in…
  - 4-port 10/100 Base T Ethernet Switch
  - Internet Router
  - Wireless Access Point

• 802.11g and 802.11b Compliant

• Advanced Wireless Security Package
  - Wireless Protected Access (WAP)
  - Wired Equivalent Privacy (WEP)
  - MAC and IP Address Filtering

• Built-in High-Gain Directional Antenna —— Super signal transceiving

• NAT and SPI FireWall

• Solid Three Year Limited Warranty

System Requirements

• PC system
- 200MHz or faster CPU
- Internet browser
- Microsoft Windows 98/ME/2000/XP
- Ethernet interface card or WLAN client card installed

• Mac system
- G3 Power Mac or higher
- Mac OS 9.2 and above
- Open Ethernet Prot or Airport card installed

Pictorial Introduction

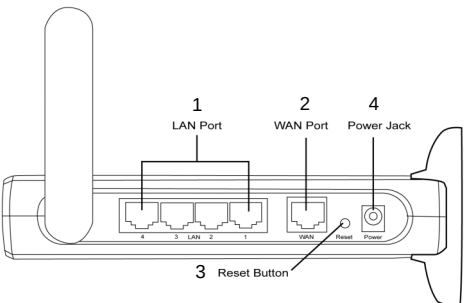
Back View

1. **LAN ports**: Ethernet Ports. Allows connections of up to four computers or daisy-chain out to more hubs and switches.

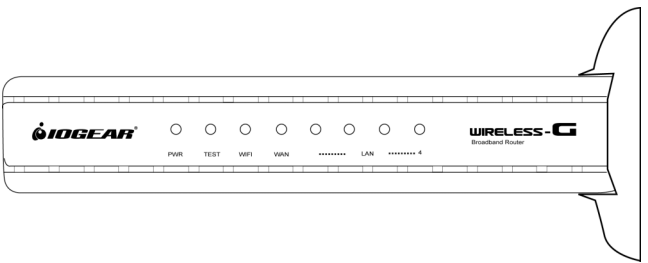
2. **WAN port:** The WAN port is where you connect your Cable or DSL modem through an ethernet cable. It's the only port that connects to the Internet.

3. **Reset button:** The reset button can reboot the router or set back to factory default setting. Pess about 2 seconds to reboot the router; press over 5 seconds to go back to factory setting.

4. **Power Jack:** Power cable connection for 12V adapter.



Front View



Pictorial Introduction

Front View

LED Indication

	On	Blink	Off
PWR	➢ Unit is plugged in and working normally ➢ Steady red.	➢ N/A	➢ Unit is not plugged in and it is OFF.
Test	➢ N/A	➢ The unit is resetting. ➢ Flashes amber	➢ The unit is OFF. ➢ Successful completion of testing.
WLAN	➢ Detecting a valid WLAN link. ➢ Steady amber.	➢ Detecting Wireless LAN network activities.	➢ No Wireless LAN network available in the vicinity.
WAN	➢ Detecting a valid WAN link. ➢ Steady amber	➢ Detecting Internet activities.	➢ Ethernet cable is not plugged in, or no Internet connection available.
LAN 1-4	➢ Ethernet Cable is plugged in and there is a valid network connection. ➢ Steady green.	➢ Detecting LAN activities.	➢ Ethernet cable is not plugged in or the unit is OFF.

Configuring your PC

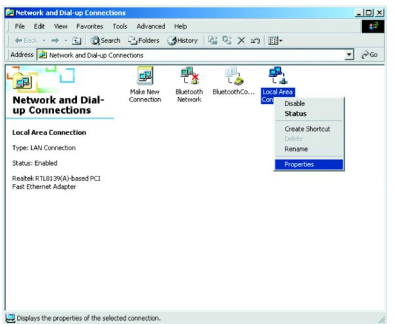
The instructions in this section will help you configure each of your computers to be able to communicate with the Wireless-G Broadband Router.

Note: *The following screenshots are taken in Windows 2000. For other OS, the configuration procedure will be exactly the same but the screenshots will vary.*

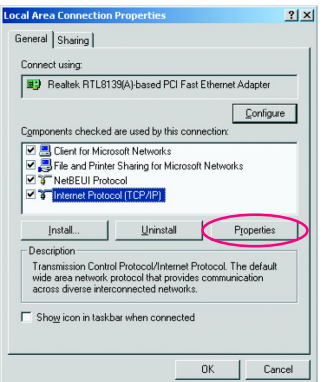
1. Right-click mouse button on the **My Network Place** icon on your Windows desktop and select **Properties** from the short-cut menu.

Installation

2. Right-click the **Local Area Connection** for the Ethernet Adapter equipped on your computer and select **Properties** from the shortcut menu.



3. Click the **General** tab of the Location Area Connection dialog box, select Internet Protocol (TCP/IP) and click **Properties**.

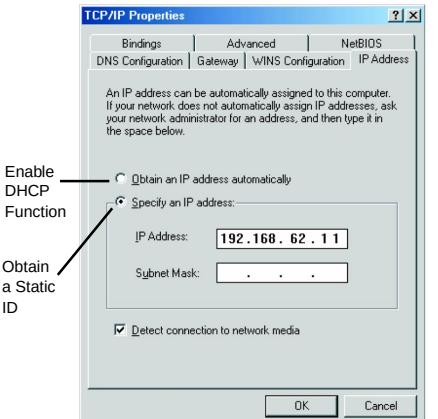


4. In the **General tab**, you can choose either obtain an IP address automatically or Use the following IP address.

   - **Enable DHCP**: Click the button of **Obtain an IP address automatically**.

   - **Use static IP address**: Click the button of Use the following IP address. For example, in the IP address field, enter in the following IP address: 192.168.62.11.

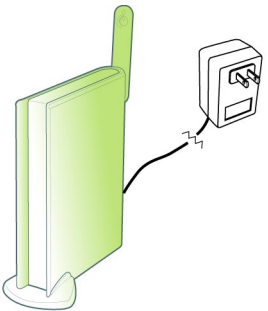
Note: The default IP address of the router is 192.168.62.10 so the IP address for the Ethernet Adapter must follow the 192.168.62.x IP address format and the IP should not be the same IP address assigned to any other devices in the network.



5. Under Subnet mask, input the following IP address: 255.255.255.0.

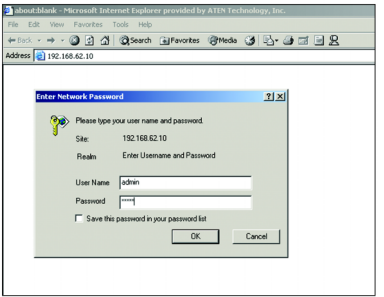
6. Click **OK** to save your settings and close the dialog box.

1. Take your IOGEAR® Wireless-G Broadband Router out of box. Simply plug-in the included AC Adapter to the wall outlet, then to the Broadband Router. Make sure the power LED illuminates; otherwise, try another AC Wall Outlet.



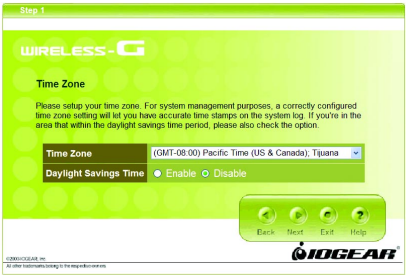
2. For initial setup, plug your desktop or notebook computer directly into the LAN Port #1 with the included CAT5 patch cable. Please make sure that your computer LAN setting is DHCP or 192.168.62.x. Submask: 255.255.255.0.

3. Open your Internet Browser (Internet Explorer, Netscape, or Safari), and type in the following URL in your browser's address bar: **192.168.62.10.** You will be brought to Enter Network Password prompt window. The default User Name is **admin**; Password is **admin**.

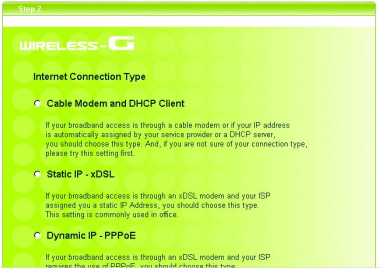


4. To proceed to the basic setup options, click on the **Typical** button.

5. You will now be asked for the Time Zone you are in. Select your Time Zone, and select whether you wish to enable Daylight Savings Time. Click **Next** to continue.



6. You will now be asked for which Internet Connection Type you are using. When you select the connection type, you will be asked for your ISP's configuration settings (if applicable).



a. **Cable Modem and DHCP Client** - If your broadband access is through a cable modem, or if your IP address is automatically assigned by your service provider or a DHCP server, you should choose this type.
   • If your ISP gave you a Host Name or a MAC address, you can enter them on the following page.

b. **Static IP** - xDSL - If your broadband access is through an xDSL modem and your ISP assigned you a static IP Address, you should choose this type.
   • Please enter the necessary information such as the IP Address, Subnet Mask, Default Gateway and DNS server that your ISP provided in the following page.

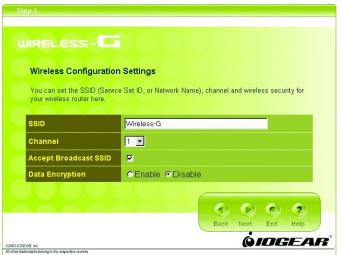
c. **Dynamic IP** - If your broadband access is through an xDSL modem and your ISP did not assign you a static IP Address, you should choose this type.
   • Please enter the necessary information such as username and password your ISP provided in the following page. If your ISP gave you a service name, you should enter it in the following page.

d . **Dynamic IP (European countries)** - If your broadband access is through an xDSL modem and your ISP did not assign you a static IP Address, you should choose this type.
   • If your Internet Service Provider requires the use of PPTP, enter the information. (PPTP is generally more popular in Europe.)

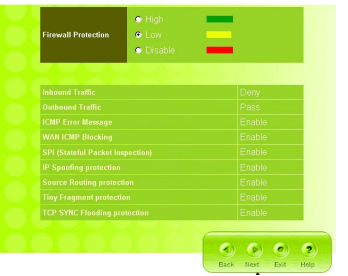
After you have entered your ISP's configuration settings, click **Next**.

7. You will now see the Wireless Configuration Settings. You can set the SSID, channel, and wireless security for your wireless gateway here. Click **Next** when you are done.

   (For more information on SSID, channel, and wireless security, you can move the mouse cursor over the highlighted feature and an explanation will appear.)



8. You will now see the Firewall settings. IOGEAR® offers you an easy set-up package to configure a Firewall. Please note high Firewall protection will make your network securer, but may cause wireless gateway's performance to be lower. Click **Next** when you are done.

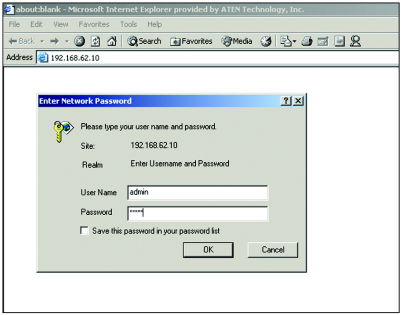


9. This is the summary page showing all configurations you've set. Click **Next** when you are done.

10. You can click the test button to see whether your Internet connection is functioning. Please make sure your WAN port has been connected (to a xDSL, Cable modem, or Ethernet). Click **Finish** when you are done. When you have finished the configuration, you will be brought to the main window.

Advanced Setup

After going through all the steps in Typical Configuration, your wireless router is ready to connect to your ISP and allow internal clients to access to the Internet. If you want to customize your wireless router for specific purposes, you may perform the configuration in this section.



1. Log-in to your Wireless Broadband Router (Default as http://**192.168.62.10**)

2. You will now be asked for User Name and Password. Unless you have changed them, they should be default as **admin** (user name); **admin** (Password).

3. After you have logged in, click on the **Custom** button.

4. The Customized Configuration menu is separated into seven categories.

System It includes all the basic configuration tools, such as options to control management access, upgrading system firmware and restart system.

LAN The router must have an IP address for the local network. You can also enable DHCP service for dynamic IP address allocation to your clients, or configure filtering functions based on specific clients or protocols.

Wireless In this section, you can configure all wireless related settings for your wireless access point.

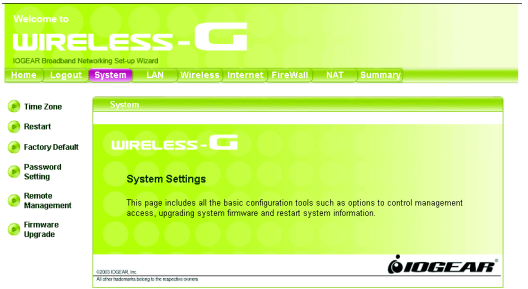
Internet In Internet settings, you can configure the way your router connects to you ISP.

Firewall Your Wireless-G Broadband Router features powerful and flexible Firewall protection to keep your network secure. You can configure the strength of Firewall protection to a high or low level. If you are an advanced user, you can configure Firewall policies to meet on your needs.

NAT Network Address Translation allows multiple users at your local site to access the internet over a single user account. It can also prevent hacker attacks by mapping local addresses to public addresses for key services such as Web or FTP.

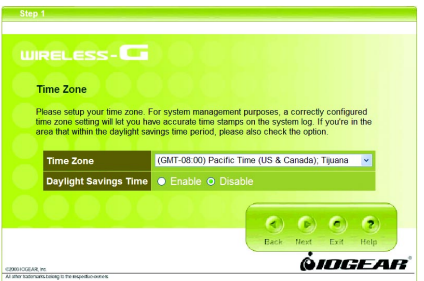
Summary In this section, you can check all system status, network statistics and Event Log.

System Page


Welcome to
WIRELESS-G
IOGEAR Broadband Networking Set-up Wizard
Home
Logout
System
LAN
Wireless
Internet
FireWall
NAT
Summary
Time Zone
Restart
Factory Default
Password Setting
Remote Management
Firmware Upgrade
System
WIRELESS-G
System Settings
This page includes all the basic configuration tools such as options to control management access, upgrading system firmware and restart system information.
IOGEAR

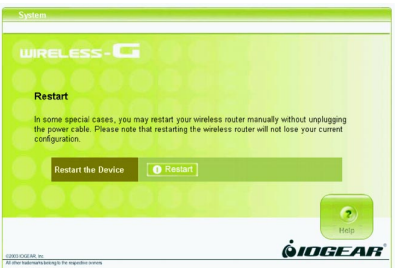
Time Zone

For system management purposes, a correctly configured time zone setting will let you have accurate time stamps on the system log. If you're in an area that is within the daylight savings time period, please also check the option.



Restart

In some special cases, you may restart your Wireless-G Broadband Router manually without unplugging the power cable. Please note that restarting the Wireless-G Broadband Router you will not lose your current configuration. Click **Restart** button to restart the router.

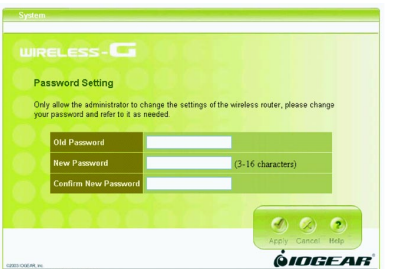


Factory Default

Click the **Restore** button to set your configuration back to factory settings.

Password Setting

This is where you can change your administration password for the Wireless-G Broadband Router. For better security, you should give a new password because password setting is disabled by default. Don't forget to Click **Apply** button to make your configuration take effect.



Remote Management

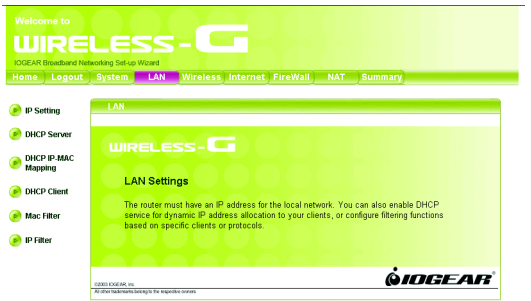
This setting allows you to manage your Wireless-G Broadband Router through a WAN connection (Internet). Click the button to enable or disable this function. If you enable this function you can use the specified port on your PC to remotely control the router. The default port is 8080.

Firmware Update

From time to time, a new and updated firmware will be released, which has either feature improvements or bug fixes. Once you download the new firmware patch, you can update the firmware of your Wireless-G Broadband Router from here.

- **Upgrade Steps:**
  To update the firmware by web page, click the **Browse** button first to select the file that had been saved in your laptop or PC. Then click the **Upgrade** button to update the firmware. Please do not power off the router while upgrading and there will be a sequence of screen descriptions to inform you the status of the upgrade process. If the upgrade process is successful, the utility will go back to homepage.

LAN Page


Welcome to
WIRELESS-G
IOGEAR Broadband Networking Set-up Wizard
Home
Logout
System
LAN
Wireless
Internet
FireWall
NAT
Summary
IP Setting
DHCP Server
DHCP IP-MAC Mapping
DHCP Client
Mac Filter
IP Filter
LAN
WIRELESS-G
LAN Settings
The router must have an IP address for the local network. You can also enable DHCP service for dynamic IP address allocation to your clients, or configure filtering functions based on specific clients or protocols.
IOGEAR

IP Setting

You can setup IP address information for the LAN ports of your wireless router.

DHCP Server

Your wireless router can act as a DHCP server, and assign IP addresses to your clients automatically. This function is enabled by default. The assigned IP addressed will be within the range of IP pool that you specify. It is a good security practice to set just enough range of IP pool for the devices you want to connect to this wireless network. This can block other unintended devices to enter your network.

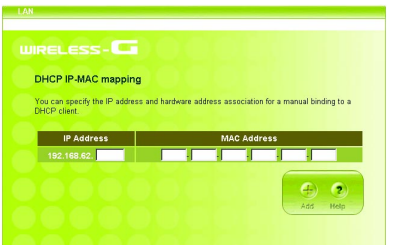
- **IP Pool Starting Address**: Enter a value for the DHCP server to start with when issuing IP addresses. The default value is 192.168.62.12.

- **IP Pool Ending Address**: The maximum number of PCs that you want the DHCP server to assign IP addresses to. This number cannot be greater than 253.

- **Lease Time**: Setting Lease Time for shorter period, such as one day or several hours, can free up IP addresses frequently. However, you may experience brief network performance drag down or stall when DHCP reassigning IP addresses to clients. It also causes a computer's IP address changed over time. If you will use some advanced router features, such as DMZ or client IP filters, you may select longer time to avoid frequent re-set, or you can use Static Host setting described below.

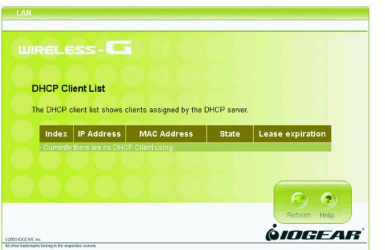
DHCP IP MAC Mapping

This setting will permanently associate the MAC address of a LAN client to an IP address. The client is assigned the same IP address every time. Changes to a currently assigned LAN client IP will take effect only after expiration of current lease. To create a new association, enter the information on the field and click **Add** button. To delete an association, press **Delete** button on the list.



DHCP Client

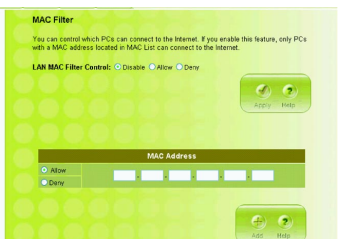
The DHCP client list shows clients assigned by the DHCP server. Click **Refresh** button to refresh the list.



MAC Filter

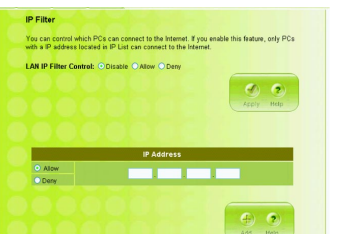
You can control which PCs can connect to the Internet. If you enable this feature, only computers with a MAC address located in MAC List can connect to the Internet.

To add a MAC address, enter the MAC address in the MAC address field, specify **Allow** or **Deny** and click **Add** button. Click **Delete** button will delete a MAC Address.



IP Filter

You can control which PCs can connect to the Internet. If you enable this feature, only computers with an IP address located in IP List can connect to the Internet. To add an IP address, click the radio button of **Allow**, type the IP address and click **Add**. The allowed IP address will be added. To delete an IP address, click **Delete** button on the list.



Wireless Page