

Wireless G Ethernet Adapter

Connect your gaming console or Ethernet-equipped PC to a FASTER wireless network



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	Benefits of a Home Network

Thank you for purchasing the Belkin 802.11g Wireless Ethernet Adapter (the Adapter). Now you can take advantage of this great new technology and gain the freedom you need around the home or office without using cables. The 802.11g Wireless Ethernet Adapter works like a conventional network card, but without the wires. The easy installation and setup will have you networking wirelessly in minutes.

To get the most out of your Wireless Ethernet Adapter, please be sure to read carefully through this User Manual, and pay special attention to the section entitled "Placement of your Wireless Networking Hardware for Optimal Performance" below.

Benefits of a Home Network

By following our simple setup instructions, your Belkin Home Network will allow you to:

- Share one high-speed Internet connection with all the computers in your home
- Share resources, such as files, and hard drives among all the connected computers in your home
- Share a single printer among the entire family
- Share documents, music, video, and digital pictures
- Store, retrieve, and copy files from one computer to another
- Simultaneously play games online, check Internet e-mail, and chat

Advantages of a wireless network

- Mobility you no longer need a dedicated "computer room" now you can work on a networked laptop or desktop computer anywhere within your wireless range
- **Easy installation** Belkin Easy Installation Wizards make setup simple
- Flexibility set up and access printers, computers, and other networking devices from anywhere in your home
- Easy Expansion the wide range of Belkin networking products let you expand your network to include devices such as printers and gaming consoles
- **No cabling required** you can spare the expense and hassle of retrofitting Ethernet cabling throughout the home or office
- Widespread industry acceptance choose from a wide range of interoperable networking products

section

Placement of your Wireless Networking Hardware for Optimal Performance

Your wireless connection will be stronger the closer your computer is to your Wireless Router (or Access Point). Typical indoor operating range for your wireless devices is between 100 and 200 feet. Your wireless connection speed and performance will degrade somewhat as the distance between your Wireless Router (or Access Point) and connected devices increases. This may or may not be noticeable to you. Factors that can weaken signals simply by getting in the way of your network's radio waves are metal appliances or obstructions, and walls.

To test whether performance issues are related to range or obstruction factors, try moving the computer to a position between five and ten feet from the Wireless Router or Access Point. If difficulties persist even at close range, please contact Belkin Technical Support.

Note: While some of the factors suggested below can affect network performance negatively, they will not prohibit your wireless network from functioning. In fact, you may not notice any problem at all. If you are concerned that your network is not operating at its maximum effectiveness, this checklist may help.

1. Placement of your Wireless Router or Access Point

Place your Wireless Router (or Access Point), the central connection point of your network, as close as possible to the center of your wireless network devices.

To achieve the best wireless network coverage for your "wireless clients," (i.e. computers enabled by Belkin Wireless Notebook Network Cards, Wireless Desktop Network Cards, and Wireless USB Adapters):

- Ensure that your Wireless Router's (or Access Point's) networking antennas are parallel to each other, and are positioned vertically (pointing toward the ceiling). If your Wireless Router (or Access Point) itself is positioned vertically, point the antennas as much as possible in an upward direction.
- In multistory homes, place the Wireless Router (or Access Point) on a floor that is as close to the center of the home as possible. This may mean placing the Wireless Router (or Access Point) on an upper floor.
- Try not to place the Wireless Router (or Access Point) near a cordless 2.4GHz phone.

2. Avoid Obstacles and Interference

Avoid placing your Wireless Router (or Access Point) near devices that may emit radio "noise", such as microwave ovens. Dense objects that can inhibit Wireless communication can include:

- Refrigerators
- Washers and/or dryers
- Metal cabinets
- Large aquariums
- Metallic-based UV tinted windows

If your wireless signal seems weak in some spots, make sure that objects such as these are not blocking the signal's path between your computers and Wireless Router (or Access Point)

3. Cordless Phone Placement

If the performance of your wireless network is impaired after attending to the above issues, and you have a cordless phone:

- Try moving cordless phones away from Wireless Routers (or Access Points) and your wireless-enabled computers
- Unplug and remove the battery from any cordless phone that operates on the 2.4GHz band (check manufacturers information). If this fixes the problem, your phone may be interfering.
- If your phone supports channel selection, change the channel on the phone to the furthest channel from your wireless network, as possible. For example, change the phone to channel 1 and move your Wireless Router (or Access Point) to channel 11. See your phone's user manual for detailed instructions.
- If necessary, consider switching to a 900MHz or 5GHz cordless phone.

0 0 0

4. Choose the "quietest" channel for your wireless network

In locations where homes or offices are close together, such as apartment buildings or office complexes, there may be wireless networks nearby that can conflict with yours. Use the Site Survey capabilities of your Wireless LAN Utility to locate any other wireless networks, and move your Wireless Router (or Access Point) and computers to a channel as far away from other networks as possible.

Experiment with more than one of the available channels, in order to find the clearest connection and avoid interference from neighboring cordless phones or other wireless devices.

For more Belkin wireless networking products, use the detailed Site Survey and wireless channel information included in your User Guide.

For more information regarding our networking products, visit our website at www.belkin.com/networking or call Belkin Technical Support.

Product Features

The Adapter complies with the IEEE 802.11g standard in order to communicate with other 802.11b and 802.11g-compliant wireless devices at 11Mbps and 54Mbps. 802.11g products run at speeds of up to 54Mbps and operate on the same 2.4GHz frequency band as 802.11b Wi-Fi products.

- 2.4GHz ISM (Industrial, Science, and Medical) band operation
- Integrated easy-to-use Wireless Ethernet Adapter Utility
- Wireless interface compliance with the IEEE 802.11g standard products
- Ethernet interface, for operation in virtually all Ethernet-equipped computers
- 64-bit WEP (Wired Equivalent Privacy), or 128-bit encryption
- Wireless access to networked resources
- Support for both Infrastructure and Ad-Hoc (peer-to-peer) networking modes
- Data rate of up to 54Mbps
- Supports 54, 48, 36, 24, 18, 12, 9, or 6 Mbps rates (802.11g)
- Supports 11, 5.5, 2, or 1Mbps rates (802.11b)
- Easy installation and use
- External antenna
- LED power, network link, and wireless indicators

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section

Applications and Advantages

- Wireless roaming around the home or office
 Offers the freedom of networking without cables
- Connection rates of up to 54Mbps Provides immediate, higher-speed wireless connectivity at home, work, and hot spot locations without compromising the use of existing 802.11b products
- Compatibility with 802.11b products 802.11g wireless LAN solutions are backward-compatible with existing Wi-Fi (IEEE 802.11b) products and with other 802.11g products
- **Difficult-to-wire environments** Enables networking in buildings with solid or finished walls, or open areas where wiring is difficult to install
- Frequently changing environments Adapts easily in offices or environments that frequently rearrange or change locations
- **Temporary LANs for special projects or peak time** Sets up temporary networks, (such as at trade shows, exhibitions and constructions sites), on a short-term basis; also companies who need additional workstations for a peak activity period.
- **SOHO** (Small Office/Home Office) networking needs Provides the easy and quick, small network installation SOHO users need.

Product Specifications

Standards:	IEEE 802.11g, IEEE 802.11b, IEEE 802.3u, IEEE 802.3
Wireless:	
Radio Technology	Direct Sequence Spread Spectrum (DSSS)
Data Rate	802.11g: 54, 48, 36, 24, 18, 12, 9, 6Mbps 802.11b: 11, 5.5, 2, 1Mbps
Modulation	802.11g: OFDM 802.11b: CCK, DQPSK, DBPSK
Operating Frequency	2.412-2.497GHz ISM band
Operating Channels	802.11g: 11 for North America, 14 for Japan, 13 for Europe 802.11g: 11 for North America, 13 for Japan, 13 for Europe
Security	64-bit WEP, 128-bit encryption
Protocol Supported:	CSMA/CD, TCP, IP, UDP, AppleTalk®
Management:	Software & Browser-based
Ports:	1-10/100Base-T RJ45 port
1-power jack	
1 waa at builtan	

1-reset button

System Requirements

- Computing device such as a computer (PC and Mac®) or any device with an available Ethernet port
- (Installation Wizard) Windows® 98SE, Me, 2000, XP

Package Contents

- Belkin Wireless G Ethernet Adapter
- Quick Installation Guide
- Installation Software CD
- User Manual
- Ethernet Cable

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Connecting the Wireless G Ethernet Adapter



(a) Power Link LED

Solid:	Adapter is ON		
Off:	Adapter is OFF		
(b) Ethernet Link LED			
Solid:	Connected to Ethernet		
Off:	Ethernet disconnected		
Blinking:	Transferring data		
Green:	10Mbps device connected		
Amber:	100Mbps device connected		
(c) WAN Link LED			
Solid:	Wireless card is ON		
Blinking:	Transferring data wirelessly		
Off:	Wireless card in OF		

Knowing your Wireless G Ethernet Adapter

Install the Hardware

 Connect the included Ethernet network cable into the LAN port on the back of the Wireless G Ethernet Adapter and plug the other end of the cable to the back of your computer or any other Ethernet-enabled device.



- 2. Turn on your Adapter by connecting the power supply cable to your Adapter. Then plug the other end into a power outlet.
- 3. If used for Internet gaming play, the Adapter will work out-ofthe-box in most instances. In cases where you need to set up the Adapter for head-to-head play or special settings, you need to run the setup wizard from a PC or configure it using a webbased setup. Non-Windows users, please refer to the "Setting Up your Computer to Use Web-Based Setup" on page 16 of this manual.

Important: Your Adapter should work out-of-the-box. You only need to run the Wizard for special settings such as head-to-head play or wireless security.

- 1. Insert the CD into your CD-ROM drive.
- 2. The "Wireless Ethernet Adapter Setup Wizard" screen should automatically appear.

Note: If the Easy Setup Wizard does not start up automatically, select your CD-ROM drive from "My Computer" and double-click on the file named "Setup" on the CD-ROM.

3. The Wizard will start. Click "Setup" to proceed.



4. Ensure the Adapter is connected to your network correctly and click "Next".



5. Select the Adapter you wish to set up and click "Next".

Select Adapter One or more Wireless Eth Select the Device that you		
Available Devices	Device Settings	
F5D7330	Device Name: Ethernet MAC: Wireless MAC: IP Address: Operating Mode: SSID: Channel: WEP (On/Off):	00:30:bd:93:d9:1d 192.168.2.225
Refresh Bekin Corporation 2003		Back Next

6. Leave the password blank and click "Next" to continue for initial setup.

Note: If this is not your first time setting up this Adapter and you already were assigned a password, enter your password and click "Next".

BELKIN
Wireless Setup Wizard
Enter Password
Your Wircless Ethernet Bridge/Gaming Adaptor is protected by a password to prevent unathranized access to the Device's settings. Enter your password below. If you have not set a password, leave the password blank and click "Next".
Default – Leave Blank
Back Noxt
(c) Bekin Coporation 2003

7. Your Adapter ships with no password entered. You can set the password now or make no changes to the password field to keep your password blank. Click "Next" to continue.

BELKIN
Wireless Setup Wizard
Set or Change Password
Your Wireless Ethernet Bridge/Gaming Adapter ships with no password entered. If you vish, you can set or change the password now. Entering a password will prevent manhenized access to your Device. If you do not want to set or change the password, make no change to the password fields below and click 'Text'. To set or change the password, by en your password for ne retype it again. Click 'Next' to set your password, be sure to remember your password for future.
Enter New Password
Re-Type Password
Back Next
(C) Belkin Corporation 2003
Quit

8. Select "Access point" or "Ad-Hoc" and click "Next" to continue.

a. Access Point:

When this option is selected, the Adapter will attempt to connect to an available network (wireless router or access point) in the area.

b. Ad-Hoc (Computer-to-Computer):

When this option is selected, the Adapter will attempt to connect to an available computer or device in the area that's also using (Ad-Hoc). Access points will be excluded from the list of available networks when this option is selected.



9. Enter the settings for the wireless network that you will be connecting to. The default SSID of "ANY" will connect your Adapter to the closest network automatically. After you finish entering the settings, click "Next" to continue.

a. SSID:

The SSID is the wireless network name. This field lets you type in the network name (SSID) you want this Adapter to connect to. For instance, if the name (SSID) of the wireless network that you will be connecting to is "belkin54g", enter "belkin54g" in the SSID field.

b. Channel:

If you chose to connect in Ad-Hoc mode, you will need to specify the channel number.

c. Device (Adapter) Name:

Enter a name for this Adapter.

	BELKIN
	Wireless Setup Wizard Network Settings
a 🔨	Below, enter the settings for the wireless network that you will be connecting to. For instance, if the name (SSID) of the wireless network that you will be connecting to is WLAN, enter WLAN in the SSID field. If you chose to connect in
b	Ad.Hoc mode, you will specify the channel. You can also give this Wireless Ethernet Bridge/Gaming Adapter a unique name to help identify it later. SSID ANY Enter the name (SSID) of the network that
·	You will be connecting to. Channel 1 If you chose to connect in Ad-Hoc mode, enter the channel to use.
	Device Name F5D7330 Name the Device so you can easily identify it on the network later.
	(C) Bellin Corporation 2003
	Cuit

10. Enter the IP address settings for your Adapter. The current settings will usually work. Click "Next" to continue.

Warning: It is recommended that you only make changes to this page if you have a specific reason to do so.

a. IP address:

IP address must be unique to your network. Default IP address is 192.168.2.225.

b. Subnet Mask:

The Adapter's Subnet Mask must be the same as your network's subnet mask.

c. Router:

Enter the IP address of your network's gateway (also known as router).



11. From the Encryption drop-down menu, select "Disabled", "64-bit", or "128-bit" according to your wireless network's setting. Select "Disabled" if you have not configured your wireless network to use encryption. All wireless devices on your network must share the same network key. Click "Next" to continue.

a. Encryption:

There are two types of encryption to choose from: 64-bit and 128-bit. Using encryption will make your network more secure, but will slow down the network performance. Although network performance will be reduced, it is likely the change will not be detectable to users of the network.

b. Network Key:

Enter a network key only if you have encryption enabled in your wireless network. Type your WEP key in the Network Key box using passphrase or hex key format. All wireless devices on your network must share the same network key.

c. Passphrase:

For 64-bit encryption, your key lengths will be five characters (ASCII text). For 128-bit encryption, your key length will be 13 characters (ASCII text).

d. Hex Key:

For 64-bit encryption, your key lengths will be 10 hexadecimal characters. For 128-bit encryption, your key length will be 26 hexadecimal characters.

a	Wireless Setup W	X Vizard
b	If the network you are connecting to has WEP Encryption enabled, enter the WEP Encryption settings here.	ion. key is di 7485- here. If y is in x Key, ay here.
	Quit	

12. Confirm all your settings are correct then click "Finish".Setup is complete.



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13. You can now connect the Adapter to any Ethernet-equipped device on your wireless network



Setting up your computer to use the Web-Based User Interface

The default IP address of the Adapter is 192.168.2.225. You will need to set your computer's IP address to the same subnet such as 192.168.2.224 before you can access the Web-Based Setup Interface. Perform the following steps from Windows 98SE, Me, 2000, or XP:

- 1. Go to the Windows Control Panel and double-click on the Network icon or the Network Connections icon.
- 2. Right-click on the Local Area Connection for your Wireless Adapter and select "Properties".
- **3.** In the General tab, select the Internet Protocol TCP/IP settings for your Wireless Adapter and click on "Properties".
- 4. Select the "Use the following IP address" radio button.
- 5. Enter an IP address in the same subnet as the access point (for example, 192.168.2.224).

	automatically if your network supports
this capability. Otherwise, you ne the appropriate IP settings.	ed to ask your network administrator for
O <u>O</u> btain an IP address autor	natically
	\$\$.
IP address:	192.168.2.224
S <u>u</u> bnet mask:	255 . 255 . 255 . 0
Default gateway:	
C. 014 1 0240	
 Obtain DNS server address Use the following DNS server 	
Preferred DNS server:	/ei addiesses.
Alternate DNS server:	· · ·
	Ad <u>v</u> anced
	0K Cancel

6. Enter the following subnet mask: 255.255.255.0 then click "OK".

Warning: Once you have completed configuring your Adapter, you must repeat steps 1 through 3 above and select "Obtain an IP automatically" or set a valid IP for your computer on the same subnet as the network you are connecting to.

Connecting the Adapter

Using your Internet browser, you can access the web-based user interface. In your browser, type "192.168.2.225" (do not type in anything else such as "http://" or "www"). Then press the "Enter" key.



Logging into the Web-Based Setup

You will see the Web-Based Setup home page in your browser window. The home page is visible to any user who wants to see it. To make any changes to the Adapter's settings, you have to log in. Clicking the Login button or clicking on any one of the links on the home page will take you to the login screen. The Adapter ships with no password entered. In the login screen, leave the password blank and click "Submit" to log in.

Login:	
	settings, you need to log in with a password. If you have ord, then leave this field blank and click "Submit".
Password >	
	Default = leave blank
	Clear Submit

Logging Out of the Web-Based Setup

One computer at a time can log in to the Adapter for the purposes of making changes to the settings of the Adapter. Once a user has logged in to make changes, there are two ways that the computer can be logged out. Clicking the Logout button will log the computer out. The second method is automatic. The login will time out after a specified period of time.

Understanding the Advanced Web-Based User Interface

The home page is the first page you will see when you access the Web-Based User Interface (UI). The home page shows you a quick view of the Adapter's status and settings. All setup pages can be reached from this page.

Status



(a) Quick Navigation Links

You can go directly to any of the pages by clicking directly on these links. The links are divided into logical categories and grouped by tabs to make finding a particular setting easier to find.

(b) Version Information

Shows the firmware version, boot-code version, and hardware version.

(c) LAN Settings

Shows you the settings of the Local Area Network (LAN) side of the Adapter. Changes can be made to the settings by clicking the Quick Navigation links on the left side of the screen.

(d) WLAN Settings

Shows the status of the Adapter's wireless setting. Changes can be made to the settings by clicking the Quick Navigation links on the left side of the screen.

2

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Adapter Settings



(a) Bridge (Adapter) Name:

Enter the name of your Wireless Ethernet Adapter here.

(b) IP Configuration:

- Manually set the Adapter's IP address The default IP address of your Adapter is 192.168.2.225. You can modify it to match your network subnet if needed. For example, if your network subnet is under 192.168.1.xxx, then you can configure the Adapter to use 192.168.1.225.
- Obtain an IP address from a DHCP server If you have a DHCP server or a router in your network, you can choose to "obtain an IP address automatically from a DHCP server". The IP address of your Adapter might change after selecting this option.

(c) IP Address:

IP address must be unique to your network. Default IP address is 192.168.2.225.

(d) Subnet Mask:

The Adapter's subnet mask must be the same as your network's subnet mask.

e) Gateway IP Address

Enter the IP address of your network's gateway (also known as router).

(f) SSID

The SSID is the name of your wireless network. This field lets you type in the network name (SSID) you want this Adapter to connect to. For instance, if the name (SSID) of the wireless network that you will be connecting to is "belkin54g", enter "belkin54g" in the SSID field. The default SSID of "ANY" will connect your Adapter to the closest network automatically. You can also click the Site Survey button to see available networks around you.

(g) Mode

- Infrastructure When this option is selected, the Adapter will attempt to connect to an available network (access point) in the area.
- Ad-Hoc (Computer-to-Computer) When this option is selected, the Adapter will attempt to connect to an available computer or device in the area that's also using (Ad-Hoc). Wireless Routers and Access Points will be excluded from the list of available networks when this option is selected.

(h) Channel

If you connect in Ad-Hoc mode, you will need to specify the channel number. All computers in the network need to use the same channel.

Adapter Settings (con't)



(i) WEP Encryption

From the Encryption drop-down menu, select "none", "64-bit", or "128-bit" according to your wireless network's setting. Select "none" if you have not configured your wireless network to use encryption. All wireless devices on your network must share the same network key. There are two types of encryption to choose from: 64-bit and 128-bit. Using encryption will make your network more secure, but will slow down the network performance. Although network performance will be reduced, it is likely the change will not be detectable to users of the network.

(j) Authentication Mode

This setting allows the Adapter to authenticate communication with the wireless devices in your network. With "Shared only" mode, all wireless devices must have the same WEP keys so that all wireless devices can authenticate each other and start transmitting data.

The default "Open + Shared" setting will automatically detect whether a wireless device is set to "Open" or "Shared Key" and transmit data using the appropriate authentication type. You will need to select "Shared only" mode if your wireless network is also set to "Shared only" mode.

(k) Key ID:

Select the network key (1-4) that will be used to authenticate.

(l) Network Key:

Enter a network key only if you have encryption enabled in your wireless network. Type your WEP key in the Network Key box using passphrase or hex key format. All wireless devices on your network must share the same network key.

- Passphrase For 64-bit encryption, your key lengths will be five characters (ASCII text). For 128-bit encryption, your key length will be 13 characters (ASCII text).
- Hex Key For 64-bit encryption, your key lengths will be 10 hexadecimal characters. For 128-bit encryption, your key length will be 26 hexadecimal characters.

Site Survey



(a) SSID

The SSID is the wireless network name.

(b) Refresh

Clicking the Refresh button will give you the most up-to-date data.

(c) Join

You can connect to a specific wireless network by selecting the check box and click "Apply Changes".

Restart Wireless Adapter

You can restart your Wireless Adapter without losing any of your configuration settings by clicking "Restart Wireless Adapter".

Utilities > Restart Wireless Bridge

Sometimes it may be necessary to Restart or Reboot the Wireless Bridge if it begins working improperly. Restarting or Rebooting the Wireless Bridge will not delete any of your configuration settings. Click the "Restart Wireless Bridge" button below to restart the Wireless Bridge.

Restart Wireless Bridge

Using the Web-Based User Interface

Restore Factory Defaults

Clicking "Restore Defaults" will erase all your current settings.

Restore Defaults

Utilities > Restore Factory Defaults Using this option will restore all of the settings in the Wireless Bridge to the factory (default) settings. Click the "Restore Defaults" button below.

Save Current Settings

You can save your current configuration by using this feature. Saving your configuration will allow you to restore it later if your settings are lost or changed. It is recommended that you back up your current configuration before performing a firmware update.

Utilities > Save Current Settings

You can save your current configuration by using this feature. Saving your configuration will allow you to restore it later if your settings are lost or changed. It is recommended that you backup your current configuration before performing a firmware update.

Save Current Setting

Using the Web-Based User Interface

Restore Previous Settings

This option will allow you to restore a previously saved configuration.

Utilities > Restore Previous Settings

This option will allow you to restore a previo	usly saved configuration
	Browse
Clear Changes	Apply Changes

Firmware Update

From time to time, Belkin may release new versions of the Adapter's firmware. Updates contain improvements and fixes to problems that may have existed. For the latest firmware, go to the support section of www. belkin.com/networking.

a. Browse:

Clicking on "Browse" will open a window that allows you to select the location of the firmware update file.

b. Upgrade:

Clicking on "Upgrade" will update your Adapter to the latest firmware.

	Utilities > Upgrade Firmware		
	From time to time, Belkin may relec Bridge's firmware. Firmware update fixes to problems that may have ex NOTE: Please backup your current :	es contain improvements and «isted.	
	version of firmware. Click "Save Cu current settings page.		(a)
	Upgrade Firmware >		Browse.
(b)		Upgrade	

Password

The Adapter ships with NO password entered. If you wish to add a password for greater security, you can set a password here. Write down your password and keep it in a safe place, as you will need it if you need to log into the router in the future.

Utilit	ies > Password	
	The Wireless Bridge ships with N add a password for more securit More Info	O password entered. If you wish to y, you can set a password here.
	Type in current Password >	
	Type in new Password >	
	Confirm new Password >	

Login Timeout

The login timeout option allows you to set the period of time that you can be logged into the Adapter's Web-Based Setup Interface. The timer starts when there has been no activity. For example, you have made some changes in the Web-Based Setup Interface, and then left your computer alone without clicking "Logout". Assuming the timeout is set to 10 minutes, then 10 minutes after you leave, the login session will expire. You will have to log in to the Adapter again to make any more changes. The login timeout option is for security purposes and the default is set to 10 minutes.

Note: Only one computer can be logged into the Adapter's Web-Based Setup Interface at one time.

I can't connect to a Wireless Network or Router

If you are unable to connect to the Internet from a wireless computer and your adapter appears to be functioning properly, please check the following items:

Look at the lights on your Wireless Router. If you're using a Belkin Wireless Router, the lights should be as follows:

- The "Power" light should be on.
- The "Connected" light should be on, and not blinking.
- The "WAN" light should be either on or blinking.

If your Belkin Wireless Router's lights do not have the above characteristics, please contact Belkin technical support.

If you are not using a Belkin Wireless Router, consult that router manufacturer's user guide.

Check the network name (SSID) settings to see if they match. The SSID is case-sensitive and the spelling on each computer must be exactly the same in order for the adapter to connect to the Wireless Router or Access Point. If security is enabled on the Wireless router or Access Point, you will need to enter the encryption network key.

Note: to check the SSID settings, open an Internet browser and type 192.168.2.225 in the address bar to bring up the Adapter's setup home page. Click on Bridge Settings under the Settings menu to the left of the window. The SSID setting is located under the Wireless Settings status information.

Power LED does not come ON; Adapter is not working

If the LED indicators are not ON, the problem may be that the Adapter's power supply is not connected or installed properly.

Verify that the Adapter's power supply is connected to the power port on the Adapter and that the power supply is firmly connected into a working power outlet.

Installation CD-ROM does not start Setup Utility

If the CD-ROM does not start the Setup Utility automatically, it could be that the computer is running other applications that are interfering with the CD drive.

If the Setup Utility screen does not appear within 15-20 seconds, open up your CD-ROM drive by double-clicking on the "My Computer" icon. Next, double-click on the CD-ROM drive that the Installation CD has been placed in to start the installation. Then, double-click on the icon named "setup.exe".

Ethernet Link LED does not come ON

If the Ethernet Link LED does not come ON, the problem may be that the Adapter is not connected or installed properly.

Verify that the Adapter's Ethernet cable is plugged firmly into the RJ-45 port of the Adapter and to your computer or gaming console.

WAN Link LED is OFF; Cannot connect to a wireless network or the Internet

If your Adapter appears to be functioning properly, but you cannot connect to a network and the WAN link LED is OFF, the problem may be that there is a mismatch between the network name (SSID) in your wireless settings.

Check the SSID settings to see if they match. The SSID is casesensitive and the spelling on each computer must be exactly the same in order for the adapter to connect to the Wireless Router or Access Point. If the network has security (encryption) enabled, you will need to enter the network key.

Note: To check the SSID settings, open an Internet browser and type 192.168.2.225 in the address bar to bring up the Adapter's setup home page. Click on Bridge Settings under the Settings menu to the left of the window. The SSID setting is located under the Wireless Settings status information.

WAN Link LED is solid but cannot connect to the Internet

If you have a signal but can't get online or obtain an IP address, the problem may be that there is a mismatch between the Encryption key settings in your computer and Wireless Router or Access Point.

Check the WEP key settings to see if they match. The key is casesensitive and the spelling on each computer and Wireless Router or Access Point must be exactly the same in order for the Adapter to connect to the router. For more information about encryption please go to page 21 of this manual.

If issues persist even at close range, please contact please contact Belkin Technical Support.

Data transfer is sometimes slow

Wireless Technology is radio-based, which means connectivity and the throughput performance between devices decreases when the distance between devices increases. Other factors that will cause signal degradation (metal is generally the worst culprit) are obstructions such as walls and metal appliances. As a result, the typical indoor range of your wireless devices will be between 100 to 200 feet. Note also that connection speed may decrease as you move further from the Wireless Router or Access Point.

In order to determine if wireless issues are related to range, we suggest temporarily moving the computer, if possible, to five to ten feet from the Wireless Router or Access Point. Please see the section titled "Placement of your Wireless Networking Hardware for Optimal Performance" on page 2 of this manual.

If issues persist even at close range, please contact please contact Belkin Technical Support.

Signal strength is poor

Wireless Technology is radio-based, which means connectivity and the throughput performance between devices decreases when the distance between devices increases. Other factors that will cause signal degradation (metal is generally the worst culprit) are obstructions such as walls and metal appliances. As a result, the typical indoor range of your wireless devices will be between 100 to 200 feet. Note also that connection speed may decrease as you move further from the Wireless Router or Access Point. Please see the section titled "Placement of your Wireless Networking Hardware for Optimal Performance" on page 2 of this manual.

In order to determine if wireless issues are related to range, we suggest temporarily moving the computer, if possible, to five to ten feet from Wireless Router or Access Point. Please see the section of this manual titled "Placement of your Wireless Networking Hardware for Optimal Performance".

If issues persist even at close range, please contact please contact Belkin Technical Support.

What's the difference between 802.11b, 802.11g and 802.11a?

Currently there are three levels of wireless networking standards, which transmit data at very different maximum speeds. Each is based on the designation 802.11(x), so named by the IEEE, the board that is responsible for certifying networking standards. The most common wireless networking standard, 802.11b, transmits information at 11Mbps; 802.11a and 802.11g work at 54Mbps. See the following chart for more detailed information.

Wireless Technology	802.11b	802.11g	802.11a
Speed	11Mbps	54Mbps	54Mbps
Frequency	Common household devices such as cordless phones and microwave ovens may interfere with the 2.4GHz unlicensed band	Common household devices such as cordless phones and microwave ovens may interfere with the 2.4GHz unlicensed band	5GHz - uncrowded band
Compatibility	Compatible with 802.11g	Compatible with 802.11b	Incompatible with 802.11b or 802.11g
Range	Depends on interference - typically 100-200 ft. indoors	Depends on interference - typically 100-200 ft. indoors	Less interference - range is typically 50-100 feet
Adoption	Mature - widely adopted	Expected to continue to grow in popularity	Slow adoption for consumers - more popular in business environments
Price	Inexpensive	More expensive	Most expensive

Wireless Comparison

Technical Support

You can find technical support information at **www.belkin.com** or **www. belkin.com/networking**. If you want to contact technical support by phone, please call:

> US: 877-736-5771 Europe: 00 800 223 55 460 Australia: 1800 666 040

FCC Statement

DECLARATION OF CONFORMITY WITH FCC RULES FOR ELECTROMAGNETIC COMPATIBILITY

We, Belkin Corporation, of 501 West Walnut Street, Compton, CA 90220, declare under our sole responsibility that the product,

F5D7330

to which this declaration relates,

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.

Caution: Exposure to Radio Frequency Radiation.

The radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such manner that the potential for human contact normal operation is minimized.

When connecting an external antenna to the device, the antenna shall be placed in such a manner to minimize the potential for human contact during normal operation. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

Federal Communications Commission Notice

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. If not installed and used in accordance with the instructions, it may 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 and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment to 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.

Modifications

The FCC requires the user to be notified that any changes or modifications to this device that are not expressly approved by Belkin Corporation may void the users authority to operate the equipment.

Canada-Industry Canada (IC)

The wireless radio of this device complies with RSS 139 & RSS 210 Industry Canada. This Class B digital complies with Canadian ICES-003.

Cet appareil numérique de la classe B conforme á la norme NMB-003 du Canada.

Europe-European Union Notice

Radio products with the CE 0682 or CE alert marking comply with the R&TTE Directive (1995/5/EC) issued by the Commission of the European Community.



Compliance with this directive implies conformity to the following European Norms (in brackets are the equivalent international standards).

- EN 60950 (IEC60950) Product Safety
- EN 300 328 Technical requirement for radio equipment
- ETS 300 826 General EMC requirements for radio equipment.

To determine the type of transmitter, check the identification label on your Belkin product.



Section

Products with the CE marking comply with the EMC Directive (89/336/EEC) and the Low Voltage Directive (72/23/EEC) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms (in brackets are the equivalent international standards).

- EN 55022 (CISPR 22) Electromagnetic Interference
- EN 55024 (IEC61000-4-2,3,4,5,6,8,11) Electromagnetic Immunity
- EN 61000-3-2 (IEC610000-3-2) Power Line Harmonics
- EN 61000-3-3 (IEC610000) Power Line Flicker
- EN 60950 (IEC60950) Product Safety

Products that contain the radio transmitter are labeled with CE 0682 or CE alert marking and may also carry the CE logo.

Belkin Corporation Limited Lifetime Product Warranty

Belkin Corporation warrants this product against defects in materials and workmanship for its lifetime. If a defect is discovered, Belkin will, at its option, repair or replace the product at no charge provided it is returned during the warranty period, with transportation charges prepaid, to the authorized Belkin dealer from whom you purchased the product. Proof of purchase may be required.

This warranty does not apply if the product has been damaged by accident, abuse, misuse, or misapplication; if the product has been modified without the written permission of Belkin; or if any Belkin serial number has been removed or defaced.

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No Belkin dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

BELKIN IS NOT RESPONSIBLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO, LOST PROFITS, DOWNTIME, GOODWILL, DAMAGE TO OR REPROGRAMMING OR REPRODUCING ANY PROGRAM OR DATA STORED IN, OR USED WITH, BELKIN PRODUCTS.

Some states do not allow the exclusion or limitation of incidental or consequential damages or exclusions of implied warranties, so the above limitations of exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state. Sectio



Wireless G Ethernet Adapter



Belkin Ltd.

Express Business Park • Shipton Way Rushden • NN10 6GL • United Kingdom Tel: +44 (0) 1933 35 2000 Fax: +44 (0) 1933 31 2000

Belkin B.V.

Starparc Building • Boeing Avenue 333 1119 PH Schiphol-Rijk • The Netherlands Tel: +31 (0) 20 654 7300 Fax: +31 (0) 20 654 7349

Belkin GmbH

Hanebergstraße 2 80637 München • Germany Tel: +49 (0) 89 143405 0 Fax: +49 (0) 89 143405 100

Belkin SAS

5 Rue du Petit Robinson • 3ème étage 78350 Jouy en Josas • France Tel: +33 (0) 1 34 58 14 00 Fax: +33 (0) 1 39 46 62 89

Belkin Tech Support

Europa: 00 800 223 55 460

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