

MANUALLY CONFIGURING YOUR ROUTER

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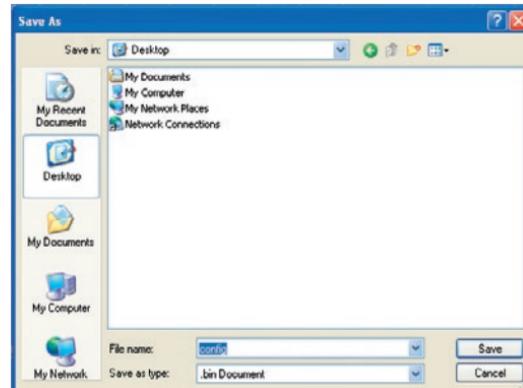
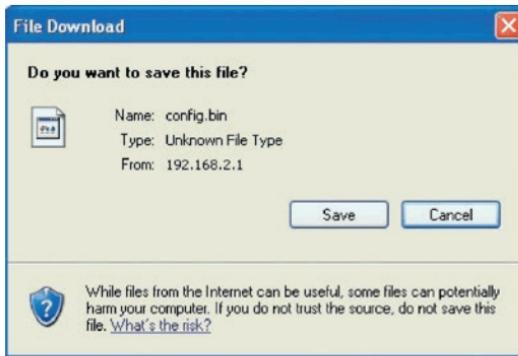
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Saving/Backing up Current Settings

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.

1. Click "Save". A window called "File Download" will open. Click "Save".
2. A window will open that allows you to select the location in which to save the configuration file. Select a location. There are no restrictions on the file name; however, be sure to name the file so you can locate it yourself later. When you have selected the location and entered the file name, click "Save".



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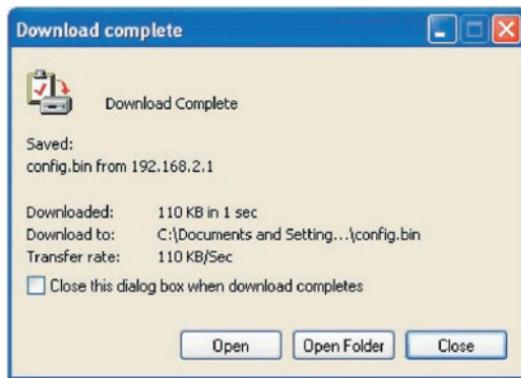
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3. When the save is complete, you will see the window below. Click "Close". The configuration is now saved.



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 previously saved configuration. Please select the configuration file and press the "Restore" button below.



1. Click "Browse". A window will open that allows you to select the location of the configuration file. Locate the configuration file, "config.bin", and double-click on it.
2. Then, click "Open".

Updating Firmware

From time to time, Belkin may release new versions of the Router's firmware. Firmware updates contain feature improvements and fixes to problems that may have existed. When Belkin releases new firmware, you can download the firmware from the Belkin website and update your Router's firmware to the latest version.

Checking for a New Version of Firmware

The "Check Firmware" (1) button allows you to instantly check for a new version of firmware. When you click the button, a new browser window will appear informing you that either no new firmware is available or that there is a new version available. If a new version is available, you will have the option to download it.

Utilities > Firmware Update

From time to time, Belkin may release new versions of the Router's firmware. Firmware updates contain improvements and fixes to problems that may have existed.

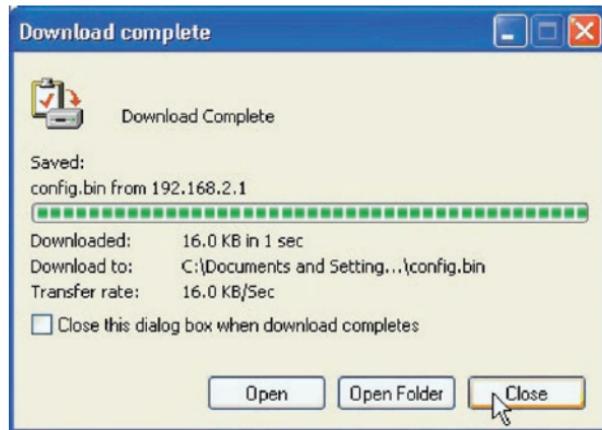
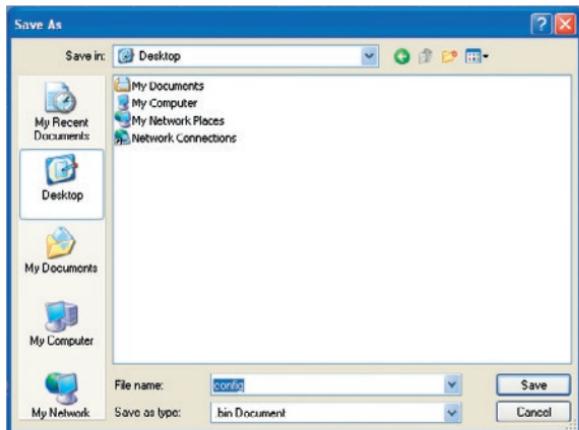
NOTE: Please backup your current settings before updating to a new version of firmware. [Click Here](#) to go to the Save/Backup current settings page.

The screenshot shows a user interface for updating router firmware. At the top, it displays the current 'Firmware Version' as '9.00.02'. Below this is a 'Check for new firmware version' button, which is highlighted with a grey border and has the number '(1)' next to it. A mouse cursor is hovering over this button. To the right of the button is a 'Check Firmware' button. Further down the page, there is a 'Update Firmware' section. It includes a file input field labeled 'Browse...', a 'Browse...' button, and an 'Update' button. A mouse cursor is also hovering over the 'Update' button. The number '(2)' is placed next to the 'Update' button.

Downloading a New Version of Firmware

If you click the “Check Firmware” button and a new version of firmware is available, you will see a screen similar to the one below.

1. To download the new version of firmware, click “Download”.
2. A window will open that allows you to select the location where you want to save the firmware file. Select a location. You can name the file anything you want, or use the default name. Be sure to locate the file in a place where you can locate it yourself later. When you have selected the location, click “Save”.
3. When the save is complete, you will see the following window. Click “Close”. The download of the firmware is complete. To update the firmware, follow the next steps in “Updating the Router’s Firmware”.



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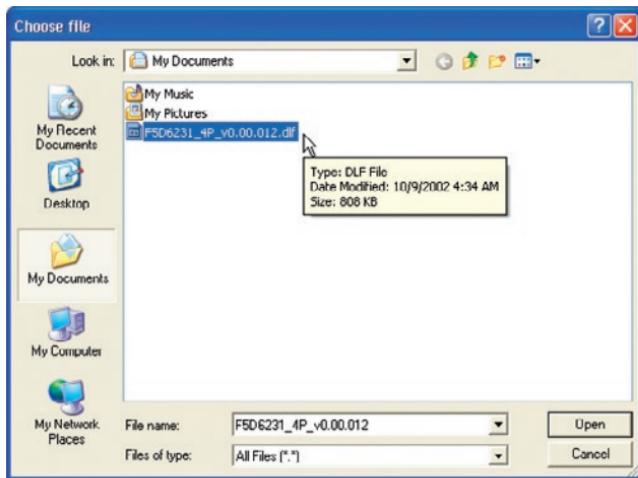
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Updating the Router's Firmware

1. In the "Firmware Update" page, click "Browse" (2). A window will open that allows you to select the location of the firmware update file.



2. Browse to the firmware file you downloaded. Select the file by double-clicking on the file name.
3. The "Update Firmware" box will now display the location and name of the firmware file you just selected. Click "Update".
4. You will be asked if you are sure you want to continue. Click "OK".



5. You will see one more message. This message tells you that the Router may not respond for as long as one minute as the firmware is loaded into the Router and the Router is rebooted. Click "OK".



A 60-second countdown will appear on the screen. When the countdown reaches zero, the Router firmware update will be complete. The Router home page should appear automatically. If not, type in the Router's address (default = 192.168.2.1) into the navigation bar of your browser.

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System Settings

The “System Settings” page is where you can enter a new administrator password, set the time zone, enable remote management, and turn on and off the UPnP function of the Router.

Setting or Changing the Administrator Password

The Router 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 in to the Router in the future. It is also recommended that you set a password if you plan to use the remote-management feature of your Router.

Changing the Login Time-Out Setting

The login time-out option allows you to set the period of time that you can be logged into the Router’s advanced setup interface. The timer starts when there has been no activity. For example, you have made some changes in the advanced setup interface, then left your computer alone without clicking “Logout”. Assuming the time-out is set to 10 minutes, then 10 minutes after you leave, the login session will expire. You will have to log in to the Router again to make any more changes. The login time-out option is for security purposes and the default is set to 10 minutes. **Note:** Only one computer can be logged in to the Router’s advanced setup interface at one time.

Setting the Time and Time Zone

The Router keeps time by connecting to a Simple Network Time Protocol (SNTP) server. This allows the Router to synchronize the system clock to the global Internet. The synchronized clock in the Router is used to record the security log and control client filtering. Select the time zone in which you reside. If you reside in an area that observes daylight saving time, then place a check mark in the box next to “Daylight Savings”. The system clock may not update immediately. Allow at least 15 minutes for the Router to contact the time servers on the Internet and get a response. You cannot set the clock yourself. You now have the option to select a primary and a backup NTP server to keep your Router’s clock synchronized with different NTP time servers on the Internet. Select your desired NTP server from the drop-down boxes, or simply keep it as is.

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Enabling Remote Management

Before you enable this advanced feature of your Belkin Router, **MAKE SURE YOU HAVE SET THE ADMINISTRATOR PASSWORD**. Remote management allows you to make changes to your Router's settings from anywhere on the Internet.

There are two methods of remotely managing the Router. The first is to allow access to the Router from anywhere on the Internet by selecting, "Any IP address can remotely manage the Router". By typing in your WAN IP address from any computer on the Internet, you will be presented with a login screen where you need to type in the password of your Router. The second method is to allow a specific IP address only to remotely manage the Router. This is more secure, but less convenient. To use this method, enter the IP address from which you know you will be accessing the Router in the space provided and select, "Only this IP address can remotely manage the Router".

Before you enable this function, it is **STRONGLY RECOMMENDED** that you set your administrator password. Leaving the password empty will potentially open your Router to intrusion. The remote-access port defaults to port 8080. You can choose a different port by entering a new port number in the "remote port" field. Click on the "Apply Changes" button to save your settings.

Remote Management:

ADVANCED FEATURE! Remote management allows you to make changes to your Router's settings from anywhere on the Internet. Before you enable this function, **MAKE SURE YOU HAVE SET THE ADMINISTRATOR PASSWORD**. [More Info](#)

Any IP address can remotely manage the router.
Only this IP address can
remotely manage the router >
remote port > 8080

Apply Changes

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Enabling/Disabling Network Address Translation (NAT)

Note: This advanced feature should be employed by advanced users only. Before enabling this function, MAKE SURE YOU HAVE SET THE ADMINISTRATOR PASSWORD. NAT is the method by which the Router shares the single IP address assigned by your ISP with the other computers on your network. This function should only be used if your ISP assigns you multiple IP addresses or you need NAT disabled for an advanced system configuration. If you have a single IP address and you turn off NAT, the computers on your network will not be able to access the Internet. Other problems may also occur. Turning off NAT will disable your firewall functions.

Enabling/Disabling Universal Plug-and-Play (UPnP)

UPnP is yet another advanced feature offered by your Belkin Router. It is a technology that offers seamless operation of voice messaging, video messaging, games, and other applications that are UPnP-compliant.

Some applications require the Router's firewall to be configured in a specific way to operate properly. This usually requires opening TCP and UDP ports, and in some instances, setting trigger ports. An application that is UPnP-compliant has the ability to communicate with the Router, basically "telling" the Router which way it needs the firewall configured. The Router ships with the UPnP feature disabled. If you are using any applications that are UPnP-compliant, and wish to take advantage of the UPnP features, you can enable the UPnP feature. Simply select "Enable" in the "UPnP Enabling" section of the "Utilities" page. Click "Apply Changes" to save the change.

Enabling/Disabling Auto Firmware Update

This innovation provides the Router with the built-in capability to automatically check for a new version of firmware and alert you that the new firmware is available. When you log into the Router's Web-Based Advanced User Interface, the Router will perform a check to see if new firmware is available. If so, you will be notified. You can choose to download the new version or ignore it. The Router ships with this feature disabled. If you want to disable it, select "Enable" and click "Apply Changes".

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Setting up your Computers

In order for your computer to properly communicate with your Router, you will need to change your computer's "TCP/IP/Ethernet" settings to "Obtain an IP address automatically/Using DHCP". This is normally the default setting in most home computers.

You can set up the computer that is connected to the ADSL modem FIRST using these steps. You can also use these steps to add computers to your Router after the Router has been set up to connect to the Internet.

Windows XP, 2000, or NT

1. Click "Start", "Settings", then "Control Panel".
2. Double-click on the "Network and dial-up connections" icon (Windows 2000) or the "Network" icon (Windows XP).
3. Right-click on the "Local Area Connection" associated with your network adapter and select "Properties" from the drop-down menu.
4. In the "Local Area Connection Properties" window, click "Internet Protocol (TCP/IP)" and click the "Properties" button. The following screen will appear:



5. If "Use the following IP address" (2) is selected, your Router will need to be set up for a static IP connection type. Write the address information in the table below. You will need to enter this information into the Router.
6. If not already selected, select "Obtain an IP address automatically" (1) and "Obtain DNS server address automatically" (3). Click "OK". Your network adapter(s) are now configured for use with the Router.

IP address:

Subnet Mask:

Default gateway:

Preferred DNS server:

Alternate DNS server:

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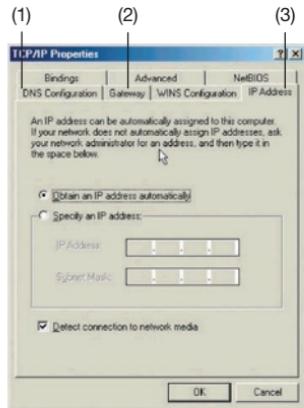
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Windows 98SE or Me

1. Right-click on "My Network Neighborhood" and select "Properties" from the drop-down menu.

2. Select "TCP/IP -> settings" for your installed network adapter. You will see the following window.



3. If "Specify an IP address" is selected, your Router will need to be set up for a static IP connection type. Write the address information in the table below. You will need to enter this information into the Router.
4. Write down the IP address and subnet mask from the "IP Address" tab (3).
5. Click the "Gateway" tab (2). Write down the gateway address in the chart.
6. Click the "DNS Configuration" tab (1). Write down the DNS address(es) in the chart.
7. If not already selected, select "Obtain an IP address automatically" on the "IP Address" tab. Click "OK". Restart the computer. When the computer restarts, your network adapter(s) are now configured for use with the Router. Set up the computer that is connected to the cable or DSL modem by FIRST using these steps. You can also use these steps to add computers to your Router after the Router has been set up to connect to the Internet.

IP address:

Subnet Mask:

Default gateway:

Preferred DNS server:

Alternate DNS server:

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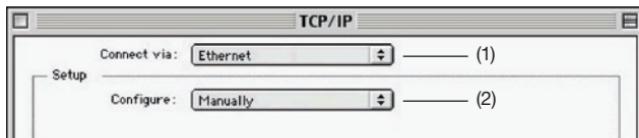
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Mac OS up to 9.x

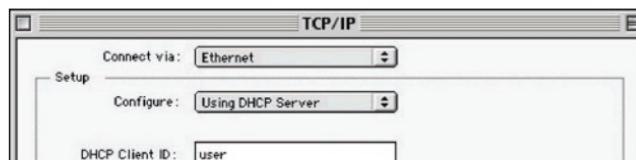
In order for your computer to properly communicate with your Router, you will need to change your Mac computer's TCP/IP settings to DHCP.

1. Pull down the Apple menu. Select "Control Panels" and select "TCP/IP".
2. You will see the TCP/IP control panel. Select "Ethernet Built-In" or "Ethernet" in the "Connect via:" drop-down menu (1).
4. If not already set, at "Configure:", choose "Using DHCP Server". This will tell the computer to obtain an IP address from the Router.

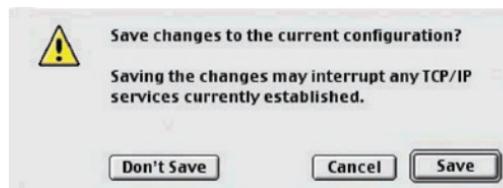


3. Next to "Configure" (2), if "Manually" is selected, your Router will need to be set up for a static IP connection type. Write the address information in the table below. You will need to enter this information into the Router.

IP Address:	<input type="text"/>
Subnet Mask:	<input type="text"/>
Router Address:	<input type="text"/>
Name Server Address:	<input type="text"/>



5. Close the window. If you made any changes, the following window will appear. Click "Save".



Restart the computer. When the computer restarts, your network settings are now configured for use with the Router.

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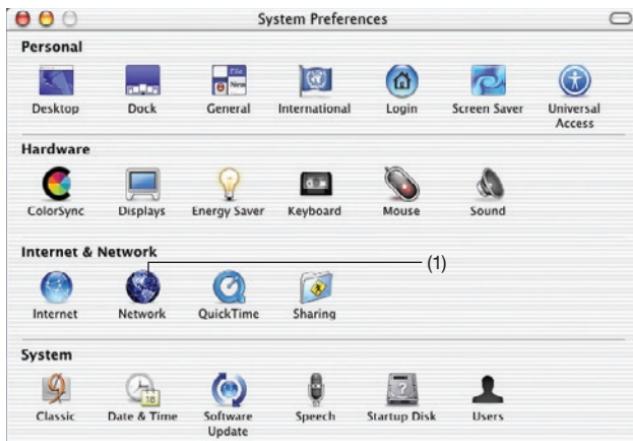
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Mac OS X

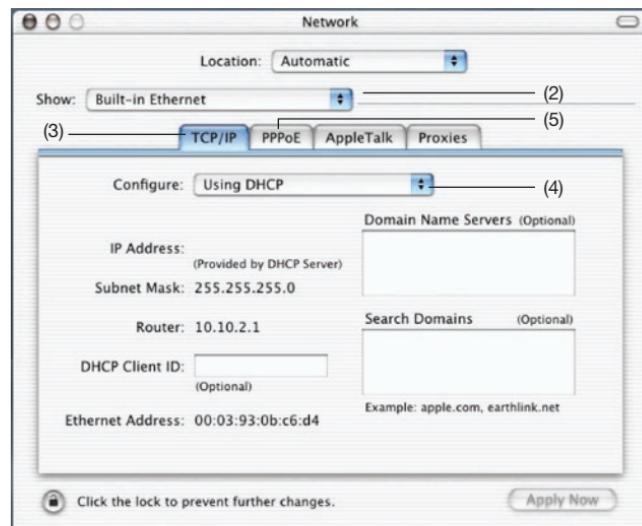
1. Click on the "System Preferences" icon.



2. Select "Network" (1) from the "System Preferences" menu.



3. Select "Built-in Ethernet" (2) next to "Show" in the "Network" menu.



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4. Select the “TCP/IP” tab **(3)**. Next to “Configure” **(4)**, you should see “Manually” or “Using DHCP”. If you do not, check the PPPoE tab **(5)** to make sure that “Connect using PPPoE” is NOT selected. If it is, you will need to configure your Router for a PPPoE connection type using your user name and password.
5. If “Manually” is selected, your Router will need to be set up for a static IP connection type. Write the address information in the table below. You will need to enter this information into the Router.
6. If not already selected, select “Using DHCP” next to “Configure” **(4)**, then click “Apply Now”.

IP address:	<input type="text"/>
Subnet Mask:	<input type="text"/>
Router Address:	<input type="text"/>
Name Server Address:	<input type="text"/>

Your network adapter(s) are now configured for use with the Router.

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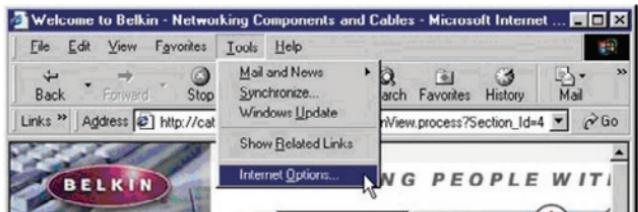
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In most cases, you will not need to make any changes to your web browser's settings. If you are having trouble accessing the Internet or the Web-Based Advanced User Interface, then change your browser's settings to the recommended settings in this section.

Microsoft Internet Explorer 4.0 or Higher

1. Start your web browser. Select "Tools" then "Internet Options".



2. In the "Internet Options" screen, there are three selections: "Never dial a connection", "Dial whenever a network connection is not present", and "Always dial my default connection". If you can make a selection, select, "Never dial a connection". If you cannot make a selection, go to the next step.

3. Under the "Internet Options" screen, click on "Connections" and select "LAN Settings...".



4. Make sure there are no check marks next to any of the displayed options: "Automatically detect settings", "Use automatic configuration script", and "Use a proxy server". Click "OK". Then, click "OK" again in the "Internet Options" page.



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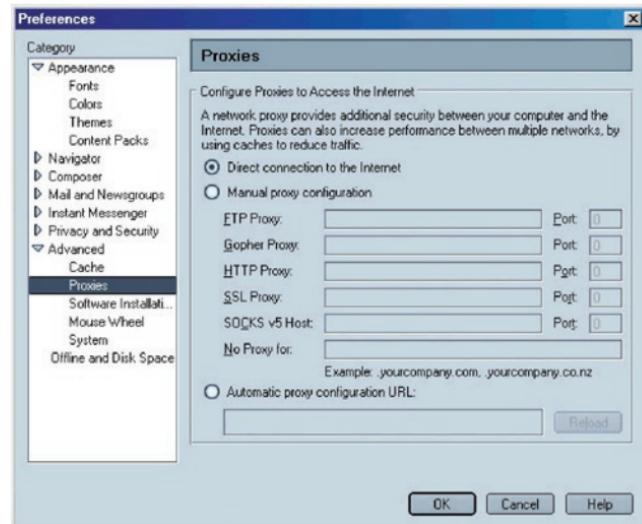
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Netscape® Navigator® 4.0 or Higher

1. Start Netscape. Click on "Edit", then "Preferences".
2. In the "Preferences" window, click on "Advanced", then select "Proxies". In the "Proxies" window, select "Direct connection to the Internet".



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Problem:

The ADSL LED is not on.

Solution:

1. Check the connection between the Router and ADSL line. Make sure the cable from the ADSL line is connected to the port on the Router labeled "DSL Line".
2. Make sure the Router has power. The  Power LED on the front panel should be illuminated.

Problem:

The Internet LED is not on.

Solution:

1. Make sure the cable from the ADSL line is connected to the port on the Router labeled "DSL Line" and the  ADSL LED is on.
2. Make sure you have the correct VPI/VCI, user name, and password from your ISP provider.

Problem:

My connection type is static IP address. I cannot connect to the Internet.

Solution:

Since your connection type is static IP address, your ISP must assign you the IP address, subnet mask, and gateway address. Instead of using the Wizard, go to "Connection Type", and then select your connection type. Click "Next", select "Static IP", and enter your IP address, subnet mask, and default gateway information.

Problem:

I've forgotten or lost my password.

Solution:

Press and hold the "Reset" button on the rear panel for at least six seconds to restore the factory defaults.

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Problem:

My wireless PC cannot connect to the Router.

Solution:

1. Make sure the wireless PC has the same SSID settings as the Router, and you have the same security settings on the clients such as WPA or WEP encryption.
2. Make sure the distance between the Router and wireless PC are not too far away.

Problem:

The wireless network is often interrupted.

Solution:

1. Move your wireless PC closer to the Router to find a better signal.
2. There may also be interference, possibly caused by a microwave oven or 2.4GHz cordless phones. Change the location of the Router or use a different wireless channel.

Problem:

I can't connect to the Internet wirelessly.

Solution:

If you are unable to connect to the Internet from a wireless computer, please check the following items:

1. Look at the lights on your Router. If you're using a Belkin 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.
2. Open your wireless utility software by clicking on the icon in the system tray at the bottom right-hand corner of the screen. If you're using a Belkin Wireless Card, the tray icon should look like this (the icon may be red or green):

3. The exact window that opens will vary depending on the model of wireless card you have; however, any of the utilities should have a list of "Available Networks"—those wireless networks it can connect to.

Does the name of your wireless network appear in the results?

Yes, my network name is listed—go to the troubleshooting solution titled "I can't connect to the Internet wirelessly, but my network name is listed".

No, my network name is not listed—go to the troubleshooting solution titled "I can't connect to the Internet wirelessly, and my network name is not listed".

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Problem:

I can't connect to the Internet wirelessly, but my network name is listed.

Solution:

If the name of your network is listed in the "Available Networks" list, please follow the steps below to connect wirelessly:

1. Click on the correct network name in the "Available Networks" list. If the network has security (encryption) enabled, you will need to enter the network key. For more information regarding security, see the page entitled "Changing the Wireless Security Settings".
2. Within a few seconds, the tray icon in the lower left-hand corner of your screen should turn green, indicating a successful connection to the network.

Problem:

I can't connect to the Internet wirelessly, and my network name is not listed.

Solution:

If the correct network name is not listed under "Available Networks" in the wireless utility, please attempt the following troubleshooting steps:

1. Temporarily move computer, if possible, five to 10 feet from the Router. Close the wireless utility, and re-open it. If the correct network name now appears under "Available Networks", you may have a range or interference problem. Please see the suggestions discussed in Appendix B entitled "Important Factors for Placement and Setup".
2. Using a computer that is connected to the Router via a network cable (as opposed to wirelessly), ensure that "Broadcast SSID" is enabled. This setting is found on the Router's wireless "Channel and SSID" configuration page.

If you are still unable to access the Internet after completing these steps, please contact Belkin Technical Support.

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Problem:

My wireless network performance is inconsistent.

Data transfer is sometimes slow.

Signal strength is poor.

Difficulty establishing and/or maintaining a Virtual Private Network (VPN) connection.

Solution:

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 farther from the Router or Access Point.

In order to determine if wireless issues are related to range, we suggest temporarily moving the computer, if possible, five to 10 feet from the Router.

Changing the wireless channel - Depending on local wireless traffic and interference, switching the wireless channel of your network can improve performance and reliability. The default channel the Router is shipped with is channel 11, you may choose from several other channels depending on your region; see the section entitled "Changing the Wireless Channel" on page 32 for instructions on how to choose other channels.

Limiting the wireless transmit rate - Limiting the wireless transmit rate can help improve the maximum wireless range, and connection stability. Most wireless cards have the ability to limit the transmission rate. To change this property, go to the Windows Control Panel, open "Network Connections" and double-click on your wireless card's connection. In the "Properties" dialog, select the "Configure" button on the "General" tab (Windows 98 users will have to select the wireless card in the list box and then click "Properties"), then choose the "Advanced" tab and select the rate property. Wireless client cards are usually set to automatically adjust the wireless transmit rate for you, but doing so can cause periodic disconnects when the wireless signal is too weak; as a rule, slower transmission rates are more stable. Experiment with different connection rates until you find the best one for your environment; note that all available transmission rates should be acceptable for browsing the Internet. For more assistance, see your wireless card's user manual.

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Problem:

How do I extend the range of my wireless network?

Solution:

Belkin recommends using one of the following products to extend wireless network coverage throughout large homes or offices:

- Wireless Access Point: A wireless access point can effectively double the coverage area of your wireless network. An access point is typically placed in the area not currently covered by your wireless router, and connected to the router using either an Ethernet cable, or through your home's power lines using two powerline Ethernet adapters.
- For 802.11g (54g) wireless networks, Belkin offers a Wireless Range Extender/Access Point that can be connected wirelessly to a Belkin 802.11g Wireless Router, without requiring an Ethernet cable or powerline Ethernet adapters.

These Belkin products are available at your local retailer, or can be ordered from Belkin directly.

For network/range extension information, please visit: www.belkin.com/networking to find out more about:
Wireless G Range Extender/Access Point (F5D7132)

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Problem:

I am having difficulty setting up Wired Equivalent Privacy (WEP) security on a Belkin Router or Belkin Access Point.

Solution:

1. Log into your Wireless Router or Access Point.
2. Open your web browser and type in the IP address of the Wireless Router or Access Point. (The Router default is 192.168.2.1, the 802.11g Access Point is 192.168.2.254.) Log into your Router by clicking on the “Login” button in the top right-hand corner of the screen. You will be asked to enter your password. If you never set a password, leave the password field blank and click “Submit”.
3. Click the “Wireless” tab on the left of your screen. Select the “Encryption” or “Security” tab to get to the security settings page.
4. Select “128-bit WEP” from the drop-down menu.
5. After selecting your WEP encryption mode, you can type in your hex WEP key manually, or you can type in a passphrase in the “Passphrase” field and click “Generate” to create a WEP key from the passphrase. Click “Apply Changes” to finish. You must now set all of your clients to match these settings. A hex (hexadecimal) key is a mixture of numbers and letters from A–F and 0–9. For 128-bit WEP, you need to enter 26 hex keys.
6. Click “Apply Changes” to finish. Encryption in the Wireless Router is now set. Each of your computers on your wireless network will now need to be configured with the same security settings.

WARNING: If you are configuring the Wireless Router or Access Point from a computer with a wireless client, you will need to ensure that security is turned on for this wireless client. If this is not done, you will lose your wireless connection.

Note to Mac users: Original Apple AirPort products support 64-bit encryption only. Apple AirPort 2 products can support 64-bit or 128-bit encryption. Please check your Apple AirPort product to see which version you are using. If you cannot configure your network with 128-bit encryption, try 64-bit encryption.

For example: C3 03 0F AF 4B B2 C3 D4 4B C3 D4 E7 E4 = 128-bit key

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Problem:

I am having difficulty setting up Wired Equivalent Privacy (WEP) security on a Belkin Wireless Card.

Solution:

The Wireless Card must use the same key as the Wireless Router or Access Point. For instance, if your Wireless Router or Access Point uses the key 00112233445566778899AABBCC, then the Wireless Card must be set to the exact same key.

1. Double-click the "Signal Indicator" icon to bring up the "Wireless Network" screen.
2. The "Advanced" button will allow you to view and configure more options of the card.
3. Once the "Advanced" button is clicked, the Belkin Wireless LAN Utility will appear. This Utility will allow you to manage all the advanced features of the Belkin Wireless Card.
4. Under the "Wireless Network Properties" tab, select a network name from the "Available networks" list and click the "Properties" button.
5. Under "Data Encryption" select "WEP".
6. Ensure the check box "The key is provided for me automatically" at the bottom is unchecked. If you are using this computer to connect to a corporate network, please consult your network administrator if this box needs to be checked.
7. Type your WEP key in the "Network key" box.

IMPORTANT: A WEP key is a mixture of numbers and letters from A–F and 0–9. For 128-bit WEP, you need to enter 26 keys. This network key needs to match the key you assign to your Wireless Router or Access Point.

For example: C3 03 0F AF 4B B2 C3 D4 4B C3 D4 E7 E4 = 128-bit key

8. Click "OK", and then "Apply" to save the settings.

If you are NOT using a Belkin Wireless Card, please consult the manufacturer for that card's user manual.

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Problem:

Do Belkin products support WPA?

Solution:

Note: To use WPA security, all your clients must be upgraded to drivers and software that support it. At the time of this FAQ publication, a security patch download is available, for free, from Microsoft. This patch works only with the Windows XP operating system.

Download the patch here:

<http://www.microsoft.com/downloads/details.aspx?FamilyID=009d8425-ce2b-47a4-abec-274845dc9e91&displaylang=en>

You also need to download the latest driver for your Belkin 802.11g Wireless Desktop Network Card or Notebook Network Card from the Belkin support site. Other operating systems are not supported at this time. Microsoft's patch only supports devices with WPA-enabled drivers such as Belkin 802.11g products.

Download the latest driver at

<http://www.belkin.com/uk/support/tech/index.asp>

Problem:

I am having difficulty setting up Wi-Fi Protected Access (WPA) security on a Belkin Wireless Router or Belkin Access Point for a home network.

Solution:

1. From the "Security Mode" drop-down menu, select "WPA-PSK (no server)".
2. For "Encryption Technique", select "TKIP" or "AES". This setting will have to be identical on the clients that you set up.
3. Enter your pre-shared key (PSK). This can be from eight to 63 characters and can be letters, numbers, or symbols or spaces. This same key must be used on all of the clients that you set up. For example, your PSK might be something like: "Smith family network key".
4. Click "Apply Changes" to finish. You must now set all clients to match these settings.

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Problem:

I am having difficulty setting up Wi-Fi Protected Access (WPA) security on a Belkin Wireless Router or Belkin Access Point for a business.

Solution:

If your network uses a radius server to distribute keys to the clients, use this setting. This is typically used in a business environment.

1. From the “Security Mode” drop-down menu, select “WPA (with server)”.
2. For “Encryption Technique”, select “TKIP” or “AES”. This setting will have to be identical on the clients that you set up.
3. Enter the IP address of the radius server into the “Radius Server” fields.
4. Enter the radius key into the “Radius Key” field.
5. Enter the key interval. Key interval is how often the keys are distributed (in packets).
6. Click “Apply Changes” to finish. You must now set all clients to match these settings.

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Problem:

I am having difficulty setting up Wi-Fi Protected Access (WPA) security on a Belkin Wireless Card for a home network.

Solution:

Clients must use the same key that the wireless router or access point uses. For instance if the key is “Smith Family Network Key” in the wireless router or access point, the clients must also use that same key.

1. Double-click the “Signal Indicator” icon to bring up the “Wireless Network” screen.
2. The “Advanced” button will allow you to view and configure more options of the Card.
3. Once the “Advanced” button is clicked, the Belkin Wireless LAN Utility will appear. This Utility will allow you to manage all the advanced features of the Belkin Wireless Card.
4. Under the “Wireless Network Properties” tab, select a network name from the “Available networks” list and click the “Properties” button.
5. Under “Network Authentication” select “WPA-PSK (no server).
6. Type your WPA key in the “Network key” box.

IMPORTANT: WPA-PSK is a mixture of numbers and letters from A-Z and 0-9. For WPA-PSK you can enter eight to 63 characters. This network key needs to match the key you assign to your wireless router or access point.

7. Click “OK, then “Apply” to save the settings.

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Problem:

I am having difficulty setting up Wi-Fi Protected Access (WPA) security on a Belkin Wireless Card for a business.

Solution:

1. Double-click the “Signal Indicator” icon to bring up the “Wireless Network” screen.
2. The “Advanced” button will allow you to view and configure more options of the Card.
3. Once the “Advanced” button is clicked, the Belkin Wireless LAN Utility will appear. This Utility will allow you to manage all the advanced features of the Belkin Wireless Card.
4. Under the “Wireless Network Properties” tab, select a network name from the “Available networks” list and click the “Properties” button.
5. Under “Network Authentication” select “WPA”.
6. In the “Authentication” tab, select the settings that are indicated by your network administrator.
7. Click “OK, then “Apply” to save the settings.

Problem:

I am having difficulty setting up Wi-Fi Protected Access (WPA) security and I am NOT using a Belkin Wireless Card for a home network.

Solution:

If you are not using a Belkin Wireless Desktop or Wireless Notebook Network Card that is not equipped with WPA-enabled software, a file from Microsoft called “Windows XP Support Patch for Wireless Protected Access” is available for free download. Download the patch from Microsoft by searching the knowledge base for Windows XP WPA.

Note: The file that Microsoft has made available works only with Windows XP. Other operating systems are not supported at this time. You also need to ensure that the wireless card manufacturer supports WPA and that you have downloaded and installed the latest driver from their support site.

Supported Operating Systems:

- Windows XP Professional
- Windows XP Home Edition

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Enabling WPA-PSK (no server)

1. Under Windows XP, click “Start > Control Panel > Network Connections”.
2. Right-clicking on the “Wireless Networks” tab will display the following screen. Ensure the “Use Windows to configure my wireless network settings” box is checked.
3. Under the “Wireless Networks” tab, click the “Configure” button.
4. For a home or small business user, select “WPA-PSK” under “Network Administration”.
5. Select “TKIP” or “AES” under “Data Encryption”. This setting will have to be identical to the wireless router or access point that you set up.
6. Type in your encryption key in the “Network Key” box.

IMPORTANT: Enter your PSK. This can be from eight to 63 characters and can be letters, numbers, or symbols. This same key must be used on all of the clients that you set up.

7. Click “OK” to apply settings.

Note: Select WPA (with radius server) if you are using this computer to connect to a corporate network that supports an authentication server such as a radius server. Please consult your network administrator for further information.

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Belkin Wireless Comparison Chart

Wireless Technology	G (802.11g)	Enhanced (1x1 draft 802.11n)	N MIMO (draft 802.11n with MIMO)	N1 MIMO (draft 802.11n with MIMO)
Speed/Data Rate*	Up to 54Mbps*	Up to 150Mbps*	Up to 300Mbps*	Up to 300Mbps*
Frequency	Common household devices such as cordless phones and microwave ovens may interfere with the unlicensed band 2.4GHz	Common household devices such as cordless phones and microwave ovens may interfere with the unlicensed band 2.4GHz	Common household devices such as cordless phones and microwave ovens may interfere with the unlicensed band 2.4GHz	Common household devices such as cordless phones and microwave ovens may interfere with the unlicensed band 2.4GHz
Compatibility	Compatible with 802.11b/g	Compatible with 802.11b/g, draft 802.11n, and Belkin G+ MIMO	Compatible with draft 802.11n** and 802.11b/g	Compatible with draft 802.11n** and 802.11b/g
Coverage*	Up to 400 ft.*	Up to 600 ft.*	Up to 1,200 ft.*	Up to 1,400 ft.*
Advantage	Common—widespread use for Internet sharing	Better coverage and consistent speed and range	Enhanced speed and coverage	Leading edge—best coverage and throughput

*Distance and connection speeds will vary depending on your networking environment.

**This Router is compatible with products based on the same version of the draft 802.11n specifications and may require a software upgrade for best results.

Technical-Support Information

For latest software updates or if you have any further questions regarding installation of this product, please visit:

<http://www.belkin.com/uk/support/tech/index.asp>

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Appendix A: Glossary

IP Address

The “IP address” is the internal IP address of the Router. To access the advanced setup interface, type this IP address into the address bar of your browser. This address can be changed if needed. To change the IP address, type in the new IP address and click “Apply Changes”. The IP address you choose should be a non-routable IP. Examples of a non-routable IP are:

192.168.x.x (where x is anything between 0 and 255)
10.x.x.x (where x is anything between 0 and 255)

Subnet Mask

Some networks are far too large to allow all traffic to flood all its parts. These networks must be broken down into smaller, more manageable sections, called subnets. The subnet mask is the network address plus the information reserved for identifying the “subnetwork”.

DNS

DNS is an acronym for Domain Name Server. A Domain Name Server is a server located on the Internet that translates URLs (Universal Resource Links) like www.belkin.com to IP addresses. Many ISPs do not require you to enter this information into the Router. If you are using a static IP connection type, then you may need to enter a specific DNS address and secondary DNS address for your connection to work properly. If your connection type is Dynamic or PPPoE, it is likely that you do not have to enter a DNS address.

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PPPoE

Most ADSL providers use PPPoE as the connection type. If you use an ADSL modem to connect to the Internet, your ISP may use PPPoE to log you into the service.

Your connection type is PPPoE if:

1. Your ISP gave you a user name and password which is required to connect to the Internet.
2. Your ISP gave you software such as WinPoET or Enternet300 that you use to connect to the Internet.
3. You have to double-click on a desktop icon other than your browser to get on the Internet.

To set the Router to use PPPoE, type in your user name and password in the spaces provided. After you have typed in your information, click "Apply Changes".

After you apply the changes, the "Internet Status" indicator will read "connection OK" if your Router is set up properly.

PPPoA

Enter the PPPoA information in the provided spaces, and click "Next". Click "Apply" to activate your settings.

1. User name - Enter the user name. (Assigned by your ISP).
2. Password - Enter your password. (Assigned by your ISP).
3. Retype Password - Confirm the password. (Assigned by your ISP).
4. VPI/VCI - Enter your Virtual Path Identifier (VPI) and Virtual Circuit Identifier (VCI) parameter here. (Assigned by your ISP).

Disconnect after X...

This feature is used to automatically disconnect the Router from your ISP when there is no activity for a specified period of time. For instance, placing a check mark next to this option and entering "5" into the minute field will cause the Router to disconnect from the Internet after five minutes of no Internet activity.

This option should be used if you pay for your Internet service by the minute.

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Channel and SSID

To change the channel of operation of the Router, select the desired channel from the drop-down menu and select your channel. Click "Apply Changes" to save the setting. You can also change the SSID. The SSID is the equivalent to the wireless network's name. You can make the SSID anything you want to. If there are other wireless networks in your area, you should give your wireless network a unique name. Click inside of the SSID box and type in a new name. Click "Apply Changes" to make the change.

ESSID Broadcast

Many wireless network adapters currently on the market possess a feature known as site survey. It scans the air for any available network and allows each computer to automatically select a network from the survey. This occurs if the computer's SSID is set to "ANY". Your Belkin Router can block this random search for a network. If you disable the "ESSID Broadcast" feature, the only way a computer can join your network is by its SSID being set to the specific name of the network (like WLAN). Be sure that you know your SSID (network name) before enabling this feature. It is possible to make your wireless network nearly invisible. By turning off the broadcast of the SSID, your network will not appear in a site survey. Obviously, turning off the broadcast feature of the SSID helps increase security.

Encryption

Setting encryption can help keep your network secure. The Router uses Wired Equivalent Privacy (WEP) encryption to protect your data and features two rates of encryption: 64-bit and 128-bit. Encryption works on a system of keys. The key on the computer must match the key on the Router, and there are two ways to make a key. The easiest is to let the Router's software convert a passphrase you've created into a key. The advanced method is to enter the keys manually.

Application Gateways

Application gateways let you specify specific ports to be open for specific applications to work properly with the Network Address Translation (NAT) feature of the Router. A list of popular applications has been included. You can select an application from the popular choices included in the drop-down list. Your selections will be programmed into the Router. From the drop-down list, select the row that you want to copy the settings from, and the row you want to copy to, and then click "Copy To". The settings will be transferred to the row you specified. Click "Apply Changes" to save the setting for that application. If your application is not here, you will need to check with the application vendor to determine which ports need to be configured. You can manually input this port information into the Router.

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Virtual Servers

This function will allow you to route external (Internet) calls for services such as a web server (port 80), FTP server (Port 21), or other applications through your Router to your internal network. Since your internal computers are protected by a firewall, machines from the Internet cannot get to them because they cannot be "seen". If you need to configure the virtual server function for a specific application, you will need to contact the application vendor to find out which port settings you need.

To manually enter settings, enter the IP address in the space provided for the internal machine, the port type (TCP or UDP), and the LAN and public port(s) required to pass. Then select "Enable" and click "Set". You can only pass one port per internal IP address. Opening ports in your firewall can pose a security risk. You can enable and disable settings very quickly. It is recommended that you disable the settings when you are not using a specific application.

Client IP Filters

The Router can be configured to restrict access to the Internet, email, or other network services at specific days and times. Restriction can be set for a single computer, a range of computers, or multiple computers.

URL Blocking

To configure the URL-blocking feature, specify the websites (www.somesite.com) and/or keywords you want to filter on your network. Click "Apply Changes" to activate the change. To complete this configuration, you will need to create or modify an access rule in the client IP filters section. To modify an existing rule, click the "Edit" option next to the rule you want to modify. To create a new rule, click on the "Add PC" option. From the "Access Control Add PC" section, check the option for "WWW with URL Blocking" in the "Client PC Service" table to filter out the websites and keywords specified.

Schedule Rule

To configure the schedule rule, specify the name, comment, start time, and end time that you want to filter on your network. This page defines schedule rule names and activates the schedule for use in the "Access Control" page.

MAC-Address Filtering

The MAC-address filter is a powerful security feature that allows you to specify which computers are allowed on the network. Any computer attempting to access the network that is not specified in the filter list will be denied access. When you enable this feature, you must enter the MAC address of each client on your network to allow network access to each or copy the MAC address by selecting the name of the computer from the "DHCP Client List". To enable this feature, select "Enable". Next, click "Apply Changes" to save the settings.

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DMZ

If you have a client PC that cannot run an Internet application properly from behind the firewall, you can open the client up to unrestricted two-way Internet access. This may be necessary if the NAT feature is causing problems with an application such as a game or video conferencing application. Use this feature on a temporary basis. **The computer in the DMZ is not protected from hacker attacks.** To put a computer in the DMZ, enter the last digits of its LAN IP address in the “Static IP” field and click “Apply Changes” for the change to take effect. If you have only one public (WAN) IP address, then you can leave the public IP to “0.0.0.0”. If you are using multiple public (WAN) IP addresses, it is possible to select which public (WAN) IP address the DMZ host will be directed to. Type in the public (WAN) IP address you wish the DMZ host to direct to, enter the last two digits of the IP address of the DMZ host computer, and click “Apply Changes”.

Administrator Password

The Router ships with NO password entered. If you wish to add a password for more security, you can set a password from your Router's web-based user interface. Keep your password in a safe place as you will need this password if you need to log into the Router in the future. It is **STRONGLY RECOMMENDED** that you set a password if you plan to use the remote management feature.

The login time-out option allows you to set the period of time that you can be logged into the Router's advanced setup interface. The timer starts when there has been no activity. For example, you have made some changes in the advanced setup interface, then left your computer alone without clicking “Logout”.

Assuming the time-out is set to 10 minutes, then 10 minutes after you leave, the login session will expire. You will have to log into the Router again to make any more changes. The login time-out option is for security purposes and the default is set to 10 minutes. Note, only one computer can be logged into the Router's advanced setup interface at a time.

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Time and Time Zone

The Router keeps time by connecting to a Simple Network Time Protocol (SNTP) server. This allows the Router to synchronize the system clock to the global Internet. The synchronized clock in the Router is used to record the security log and control client filtering. Select the time zone that you reside in. If you reside in an area that observes daylight saving time, then place a check mark in the box next to "Enable Daylight Saving". The system clock may not update immediately. Allow at least 15 minutes for the Router to contact the time servers on the Internet and get a response. You cannot set the clock yourself.

Remote Management

Before you enable this function, **MAKE SURE YOU HAVE SET THE ADMINISTRATOR PASSWORD**. Remote management allows you to make changes to your Router's settings from anywhere on the Internet.

UPnP

UPnP (Universal Plug-and-Play) is a technology that offers seamless operation of voice messaging, video messaging, games, and other applications that are UPnP-compliant. Some applications require the Router's firewall to be configured in a specific way to operate properly. This usually requires opening TCP and UDP ports and in some instances setting trigger ports. An application that is UPnP-compliant has the ability to communicate with the Router, basically "telling" the Router which way it needs the firewall configured. The Router ships with the UPnP feature disabled. If you are using any applications that are UPnP-compliant, and wish to take advantage of the UPnP features, you can enable the UPnP feature. Simply select "Enable" in the "UPnP Enabling" section of the "Utilities" page. Click "Apply Changes" to save the change.

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Appendix B: Important Factors for Placement and Setup

Note: While some of the items listed below can affect network performance, they will not prohibit your wireless network from functioning; if you are concerned that your network is not operating at its maximum effectiveness, this checklist may help.

1. Wireless Router (or Access Point) Placement

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 (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 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).

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3. Cordless Phones

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 manufacturer's 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 farthest channel from your wireless network. 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.

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 found in the Wireless LAN Utility of your wireless adapter to locate any other wireless networks that are available (see your wireless adapter's manual), 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 Belkin wireless networking products, use the detailed Site Survey and wireless channel information included in your User Manual.

These guidelines should allow you to cover the maximum possible area with your wireless router (or access point). Should you need to cover an even wider area, we suggest the Belkin Wireless Range Extender/Access Point.

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5. Secure Connections, VPNs, and AOL

Secure connections typically require a user name and password, and are used where security is important. Secure connections include:

- Virtual Private Network (VPN) connections, often used to connect remotely to an office network
- The “Bring Your Own Access” program from America Online (AOL), which lets you use AOL through broadband provided by another cable or DSL service
- Most online banking websites
- Many commercial websites that require a user name and password to access your account

Secure connections can be interrupted by a computer’s power management setting, which causes it to “go to sleep.” The simplest solution to avoid this is to simply reconnect by rerunning the VPN or AOL software, or by re-logging into the secure website.

A second alternative is to change your computer’s power management settings so it does not go to sleep; however, this may not be appropriate for portable computers. To change your power management setting under Windows, see the “Power Options” item in the Control Panel.

If you continue to have difficulty with Secure Connections, VPNs, and AOL, please review the steps above to be sure you have addressed these issues.

INFORMATION

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Technical Support

You can find technical-support information on our website, www.belkin.com, by navigating to the tech-support section.

If you want to contact technical support by phone, please call the number you need from the list below*:

*Local rates apply.

COUNTRY	Number	Internet Address
AUSTRIA	0820 200766	http://www.belkin.com/uk/networking/
BELGIUM	07 07 00 073	http://www.belkin.com/nl/networking/
CZECH REPUBLIC	239 000 406	http://www.belkin.com/uk/networking/
DENMARK	701 22 403	http://www.belkin.com/uk/networking/
FINLAND	00800 - 22 35 54 60	http://www.belkin.com/uk/networking/
FRANCE	08 - 25 54 00 26	http://www.belkin.com/fr/networking/
GERMANY	0180 - 500 57 09	http://www.belkin.com/de/networking/
GREECE	00800 - 44 14 23 90	http://www.belkin.com/uk/networking/
HUNGARY	06 - 17 77 49 06	http://www.belkin.com/uk/networking/
ICELAND	800 8534	http://www.belkin.com/uk/networking/
IRELAND	0818 55 50 06	http://www.belkin.com/uk/networking/
ITALY	02 - 69 43 02 51	http://www.belkin.com/it/support/tech/issues_more.asp
LUXEMBOURG	34 20 80 85 60	http://www.belkin.com/uk/networking/
NETHERLANDS	0900 - 040 07 90 €0.10 per minute	http://www.belkin.com/nl/networking/
NORWAY	81 50 0287	http://www.belkin.com/uk/networking/
POLAND	00800 - 441 17 37	http://www.belkin.com/uk/networking/
PORTUGAL	707 200 676	http://www.belkin.com/uk/networking/
RUSSIA	495 580 9541	http://www.belkin.com/networking/
SOUTH AFRICA	0800 - 99 15 21	http://www.belkin.com/uk/networking/
SPAIN	902 - 02 43 66	http://www.belkin.com/es/support/tech/networkingsupport.asp
SWEDEN	07 - 71 40 04 53	http://www.belkin.com/se/support/tech/networkingsupport.asp
SWITZERLAND	08 - 48 00 02 19	http://www.belkin.com/uk/networking/
UNITED KINGDOM	0845 - 607 77 87	http://www.belkin.com/uk/networking/
OTHER COUNTRIES	+44 - 1933 35 20 00	

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Modifications

The FCC requires the user to be notified that any changes or modifications to this device that are not expressly approved by Belkin International, Inc., may void the user's 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 apparatus complies with Canadian ICES-003.

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

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EU DECLARATION OF CONFORMITY

Český [Czech]	[Belkin Ltd] tímto prohlašuje, že tento [F5D7634-4] je ve shodě se základními požadavky a dalšími příslušnými ustanoveními Směrnice 1999/5/EÚ.
Dansk [Danish]	Undertegnede [Belkin Ltd] erklærer herved, at følgende udstyr [F5D7634-4] overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EØF.
Deutsch [German]	Hiermit erklärt [Belkin Ltd], dass sich das Gerät [F5D7634-4] in Übereinstimmung mit den grundlegende Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]	Käesolevaga nimetatud [Belkin Ltd] seadme [F5D7634-4]-t vastavust direktiivi 1999/5/EÜ põhimõudele ja nimetatud direktiivist tulenevatele leistele asjakohastele sätetele.
English	Hereby, [Belkin Ltd], declares that this [F5D7634-4] is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]	Por medio de la presente [Belkin Ltd] declara que el [F5D7634-4] cumple con los requisitos esenciales y cualesquier otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΙΑ [Belkin Ltd] ΔΗΛΩΝΕΙ ΟΤΙ [F5D7634-4] ΣΥΜΜΟΦΟΠΟΕΙΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΓΙΔΑΣΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΓΗΓΑΣ 1999/5/EK.
Français [French]	Par la présente [Belkin Ltd] déclare que l'appareil [F5D7634-4] est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Italiano [Italian]	Con la presente [Belkin Ltd] dichiara che questo [F5D7634-4] è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabiliti dalla direttiva 1999/5/CE.
Latviešu [Latvian]	Ar šo [Belkin Ltd] Belkin Ltd deklarē, ka [F5D7634-4] iekārtas tipā atbilst Direktīvas 1999/5/EK būtiskajām prasībām un cilīem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo [Belkin Ltd] deklaruoju, kad šis [F5D7634-4] atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaar ik [Belkin Ltd] dat het toestel [F5D7634-4] in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Malti [Maltese]	Hawnhekk, [Belkin Ltd], jiddikkira li dan [F5D7634-4] jikkonforma mal-ittgħiġiet essemjan u ma provvedimenti ohraji relevanti li hemm fid-Direttiva 1999/5/EC.
Magyar [Hungarian]	Alulrott, [Belkin Ltd] nyilatkozom, hogy a [F5D7634-4]-ig megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Polski [Polish]	Niniejszym [Belkin Ltd] oświadczam, że [F5D7634-4]-j jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/WE.
Português [Portuguese]	[Belkin Ltd] declara que este [F5D7634-4] está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	[Belkin Ltd] izjavlja, da je ta [F5D7634-4] v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/EZ.
Slovensky [Slovak]	[Belkin Ltd] tímto vyhlasuje, že [F5D7634-4] spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/EÚ.

Suomi [Finnish]	[Belkin Ltd] vakuuttaa täten että [F5D7634-4] tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar [Belkin Ltd] att denna [F5D7634-4] står i överensstämmelse med de väsentliga egenskaperna och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
Íslenska [Icelandic]	Hér með lýsir [Belkin Ltd] yfir því að [F5D7634-4] er í samarsam við grunnkröfur og árarr kröfur, sem gerðar eru í tilskipun 1999/5/EC.
Norsk [Norwegian]	[Belkin Ltd] erkærer herved at utstyret [F5D7634-4] er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.

<http://www.belkin.com/doc/>

For information on product disposal please refer to
<http://environmental.belkin.com>



FOR USE IN	AT	BE	CY	CZ	DK	EE	FI	FR	DE	GR	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	SK	SI	ES	SE	GB
NO	CH	BG	RO	TR							IS	LI

OPERATES ON CHANNELS 1-13

Restricted Use in Certain Countries.....Class 2 Equipment

Belkin International, Inc., Limited Lifetime Product Warranty

What this warranty covers.

Belkin International, Inc. ("Belkin") warrants to the original purchaser of this Belkin product that the product shall be free of defects in design, assembly, material, or workmanship.

What the period of coverage is.

Belkin warrants the Belkin product for the lifetime of the product.

What will we do to correct problems?

Product Warranty.

Belkin will repair or replace, at its option, any defective product free of charge (except for shipping charges for the product). Belkin reserves the right to discontinue any of its products without notice, and disclaims any limited warranty to repair or replace any such discontinued products. In the event that Belkin is unable to repair or replace the product (for example, because it has been discontinued), Belkin will offer either a refund or a credit toward the purchase of another product from Belkin.com in an amount equal to the purchase price of the product as evidenced on the original purchase receipt as discounted by its natural use.

What is not covered by this warranty?

All above warranties are null and void if the Belkin product is not provided to Belkin for inspection upon Belkin's request at the sole expense of the purchaser, or if Belkin determines that the Belkin product has been improperly installed, altered in any way, or tampered with.

The Belkin Product Warranty does not protect against acts of God such as flood, earthquake, lightning, war, vandalism, theft, normal-use wear and tear, erosion, depletion, obsolescence, abuse, damage due to low voltage disturbances (i.e. brownouts or sags), non-authorized program, or system equipment modification or alteration.

How to get service.

To get service for your Belkin product contact tech support on the numbers shown earlier in the user manual.

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Belkin reserves the right to review the damaged Belkin product. All costs of shipping the Belkin product to Belkin for inspection shall be borne solely by the purchaser. If Belkin determines, in its sole discretion, that it is impractical to ship the damaged equipment to Belkin, Belkin may designate, in its sole discretion, an equipment repair facility to inspect and estimate the cost to repair such equipment. The cost, if any, of shipping the equipment to and from such repair facility and of such estimate shall be borne solely by the purchaser. Damaged equipment must remain available for inspection until the claim is finalized. Whenever claims are settled, Belkin reserves the right to be subrogated under any existing insurance policies the purchaser may have.

How state law relates to the warranty.

THIS WARRANTY CONTAINS THE SOLE WARRANTY OF BELKIN. THERE ARE NO OTHER WARRANTIES, EXPRESSED OR, EXCEPT AS REQUIRED BY LAW, IMPLIED, INCLUDING THE IMPLIED WARRANTY OR CONDITION OF QUALITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND SUCH IMPLIED WARRANTIES, IF ANY, ARE LIMITED IN DURATION TO THE TERM OF THIS WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

IN NO EVENT SHALL BELKIN BE LIABLE FOR INCIDENTAL, SPECIAL, DIRECT, INDIRECT, CONSEQUENTIAL OR MULTIPLE DAMAGES SUCH AS, BUT NOT LIMITED TO, LOST BUSINESS OR PROFITS ARISING OUT OF THE SALE OR USE OF ANY BELKIN PRODUCT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

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

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

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

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

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

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

FCC Part 68 REQUIREMENTS

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the bottom of this equipment is a label that contains, among other information, a product identifier in the format US: BKCDL01BF5D7634V2. If requested, this number must be provided to the telephone company.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US: BKCDL01BF5D7634V2. The digits represented by 01 are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

If your equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC. Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If you experience trouble with this telephone equipment, Please contact the following address and phone number for information on obtaining service or repairs.

The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

COMPANY:

Belkin International, Inc.

ADDRESS:

501 West Walnut Street, Compton, CA 90220-5221

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