

WIRELESS AC+ GIGABIT MODEM ROUTER



AC 1750



User Manual



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GETTING STARTED

What's in the Box

AC1750 DB Wireless AC+ Gigabit Router

Ethernet cable (attached to router)

Power supply (attached to router)

Network information card (attached to router)

Quick Setup Guide

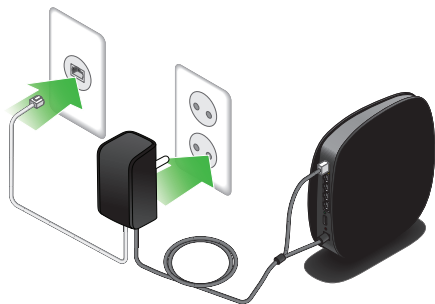
Initial Setup

Where to Place Your Router

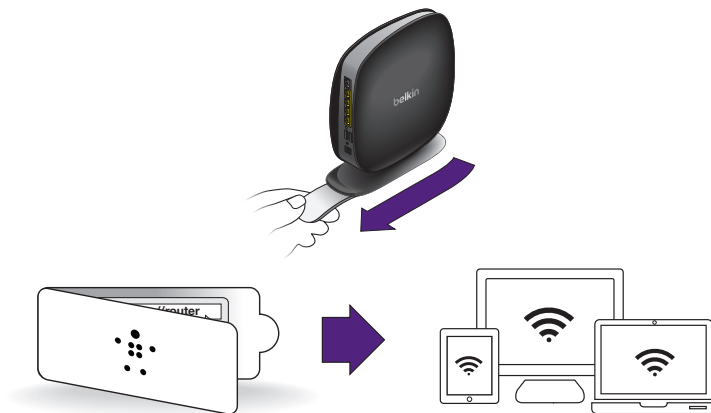
For the best results, place the Router next to your modem in an open location away from large metal objects and magnets such as those found in speakers. Raising the Router above floor level can improve the strength of your wireless signal.

GETTING STARTED

- 1** Connect Power modem to ADSL jack using supplied telephone/RJ11 cable (note: filter may be required), then plug power modem into mains socket

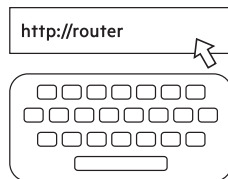


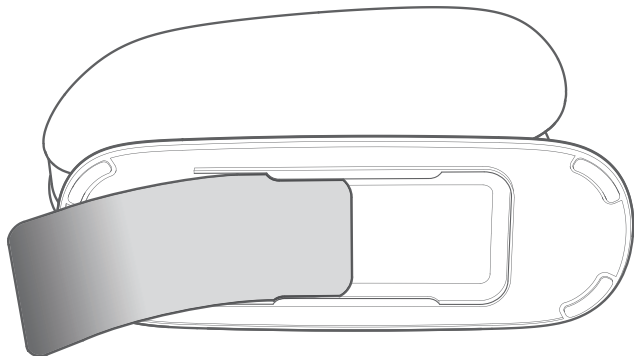
- 2** Connect to Wi-Fi® network



3

Type `http://router` to finish setup
or try `http://192.168.2.1`



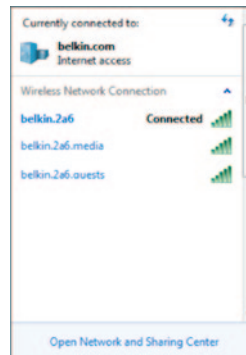


Connect to Your Modem Router

Retrieve the network ID card from the foot of your new Belkin Modem Router.

Can't find the card? The default network name and password are also printed on the foot of the Modem Router.

Use your computer, tablet, or smartphone to connect to the wireless network shown on the network ID card.

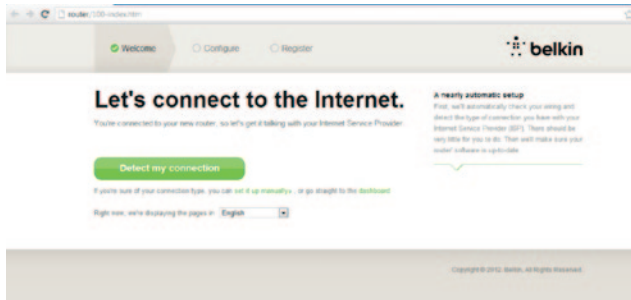


For information on how to connect your wireless devices, please see the "Connect Your Wireless Devices" section on page 21.

When requested, please enter the password (security key) provided on the card.

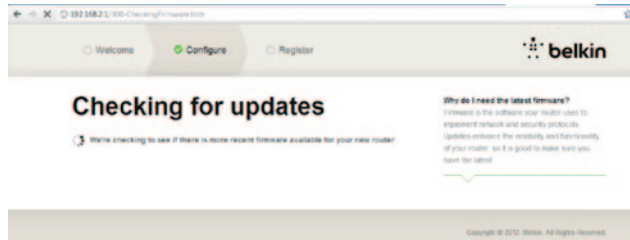
When your device has connected to the Modem Router, use a browser to visit <http://Modem Router/>. The Modem Router homepage will appear.

GETTING STARTED



If the page does not load, then try visiting <http://192.168.2.1> to see the Modem Router homepage.

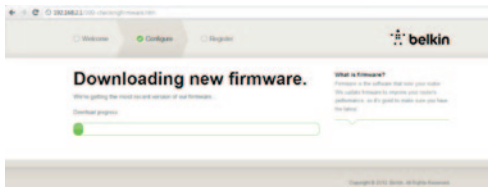
Click the “Detect my connection” button in green. (If you would rather set up the Modem Router manually, click the “set it up manually” link and proceed to page 11.)



After several moments, your Modem Router should automatically detect your Internet connection and restart. This can take anywhere from 30 seconds to 3 minutes depending on your connection type.

If your Modem Router is unable to establish an Internet connection on its own, you may be asked to restart your modem or provide a username and password if your connection requires one. Follow the on-screen instructions provided.

GETTING STARTED



Once your Modem Router is online, it will determine if there is a firmware update available and offer to install it. Please allow up to 5 minutes for the firmware to update.

If there are no updates available, then setup will proceed.



At the next screen you will be invited to change your network name and password. Re-using your previous network name (SSID) and password makes connecting your existing devices to the new Modem Router much easier.

GETTING STARTED



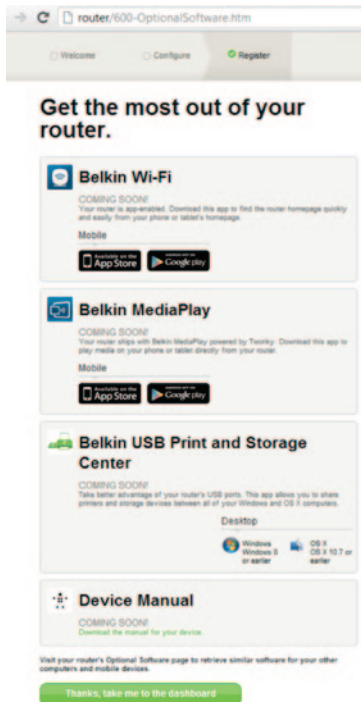
If you decide to change these settings, then enter the new values and click “Save and Continue.” (Note: The password must be at least 8 characters long.)

If you changed your network name and password, make note of it on the service card located on the foot of the Modem Router. You will then have to connect to the new network.



Please take this opportunity to register your Modem Router. This will help technical support if there is a problem with your Modem Router.

Simply complete each of the required fields and click “Complete Registration.” If you don't want to register right now, click “Register Later” to proceed.



At the next screen you can download optional software that was bundled with your Modem Router.

This screen shows you optional software that is available for your Modem Router, such as the USB software to allow you to print through the Modem Router's USB port. If you wish to download and install any of these software programs, simply click on the button appropriate for your device.

GETTING STARTED

The screenshot shows the Belkin Modem Router dashboard. At the top, it displays the model number 'belkin.276' and the password 'easT262'. Below this, a message reads 'A little more oomph.' with a sub-message: 'You can request more performance out of your internet connection by setting up Intellistream. This involves running a speed test.' There are two buttons: 'Set Up Intellistream' (highlighted in green) and 'Maybe Later'. The main dashboard area contains six large, light-gray buttons with green icons: 'Website Filter', 'Media Server', 'Connected Devices', 'Guest Access', and 'Optional Software'. At the bottom, there is a section titled 'Advanced Settings' with four sub-sections: 'LAN Settings' (Local Network Settings, Connected Devices), 'WAN Settings' (ISP Connection Type, DNS, WAN Address), 'IPv6' (IPv6 Connection), and 'WiFi' (Network Name, Security, WPA2 Protected Setup, Guest Access, Use 80.211 Address Port).

When finished installing optional software, click “Thanks, take me to the dashboard.”

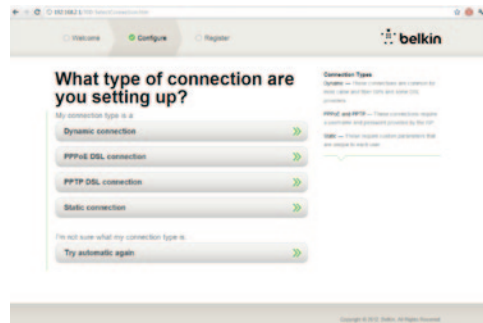
Congratulations! You are now at your Modem Router’s dashboard. Your Modem Router is set up and ready to use.

Using the WPS Button

1. Start WPS Push Button Connection (WPS PBC) on your computer or other Wi-Fi device that you would like to connect wirelessly to your Modem Router. Often there will be a button for this purpose in software that came with the device, or a physical "WPS," "PBC," or "Security" button on the device itself.
2. Within two minutes, press the WPS button on your Modem Router and hold for two seconds.

The WPS light (small light above WPS button) will blink blue while it listens for your Wi-Fi device. Once a connection is established, the light will turn blue and then go out. If a connection is not established, the light will blink amber. You may repeat the process to try again.

You can repeat this process for each WPS-enabled device you'd like to add to your network.



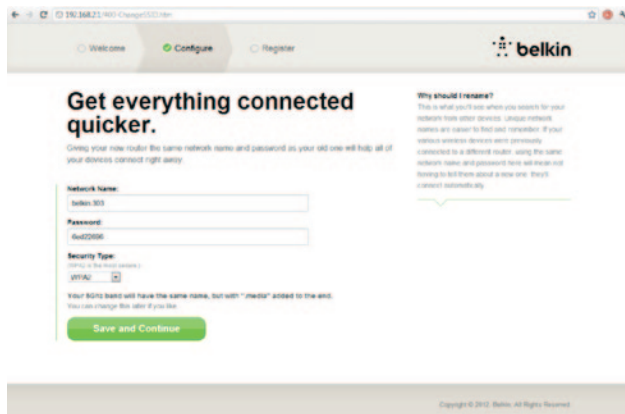
Manually Set Up Your Internet Connection

Use a browser to visit <http://Modem Router/>. You can also try visiting <http://192.168.2.1/>. The Modem Router's Welcome page should appear.

Click the "Set it up manually" link. Please select the type of connection your ISP provides. Refer to page 15 for a description of the connection types.

If the selected connection type requires additional information (such as an ISP username and password), the system will ask you for it.

GETTING STARTED



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Welcome **Configure** Register

belkin

Get everything connected quicker.

Giving your new router the same network name and password as your old one will help all of your devices connect right away.

Network Name:
belkin_503

Password:
auct0586

Security Type:
WPA2

Your 802.11n based will have the same name, but with "n" added to the end. You can change the later if you like.

Save and Continue

Why should I reuse?
This is what you'll see when you search for your network from other devices. Unique network names are easier to find and remember. If your network wireless devices were previously connected to a different router using the same network name, and you moved them all to the new device, they'll find them about as fast as they connect automatically.

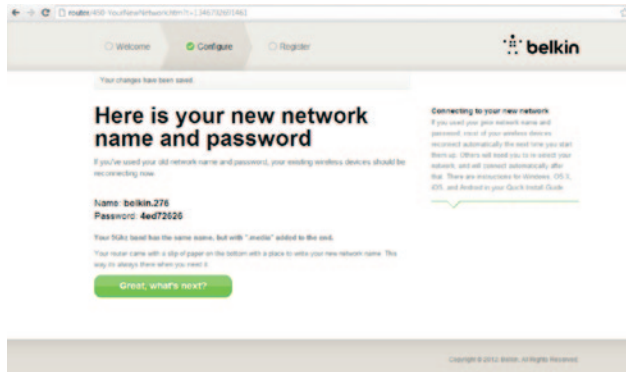
Copyright © 2012, Belkin. All Rights Reserved.

At the next screen you will be invited to change your network name and password. Reusing your previous network name (SSID) and password makes connecting your existing devices to the new Modem Router much easier.

If you decide to change these settings, then enter the new values and click “Save and Continue.” (Note: The password must be at least 8 characters long.)

If you changed your network name and password, make note of it on the service card located on the foot of the Modem Router. You will then have to connect to the new network. Please refer to page 20 to do this.

GETTING STARTED



The screenshot shows a web browser window with the URL `192.168.1.1`. The navigation bar includes "Welcome", "Configure", and "Register" (which is active). The main heading is "Here is your new network name and password". Below this, it displays the network name as `belkin.276` and the password as `4ed72026`. A green button labeled "Great, what's next?" is visible at the bottom.

Your changes have been saved.

Here is your new network name and password

If you've used your old network name and password, your existing wireless devices should be reconnecting now.

Name: `belkin.276`
Password: `4ed72026`

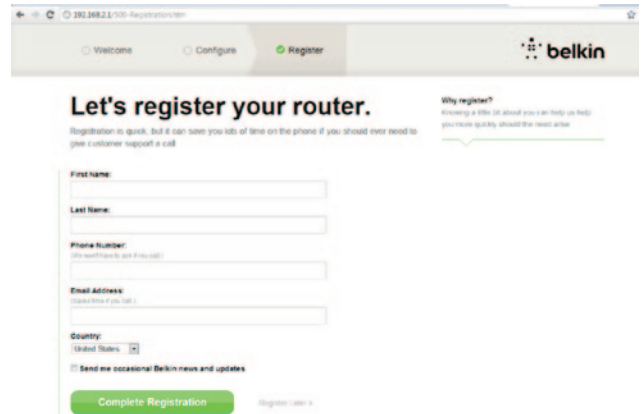
Your SSIDs based on the same name, but with "belkin" added to the end.

Your router came with a slip of paper on the bottom with a place to enter your new network name. This slip is always there when you need it.

[Great, what's next?](#)

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Click "Great, what's next?"



The screenshot shows the "Register" step of the configuration process. The navigation bar has "Register" as the active tab. The heading is "Let's register your router." Below this, there is a registration form with fields for First Name, Last Name, Phone Number, and Email Address. A "Country" dropdown menu is set to "United States". A checkbox for "Send me occasional Belkin news and updates" is checked. A green "Complete Registration" button and a "Register later" link are at the bottom.

Let's register your router.

Registration is quick, but it can save you lots of time on the phone if you should ever need to give a customer support a call.

Why register?
Getting a call, or about you can help us help you (we'll call), should the need arise.

First Name:

Last Name:

Phone Number:

Email Address:

Country:

Send me occasional Belkin news and updates

[Complete Registration](#) [Register later](#)

Please take this opportunity to register your Modem Router. This will help technical support if there is a problem with your Modem Router.

GETTING STARTED

Simply complete each of the required fields and click “Complete Registration.” If you don’t want to register right now, click “Register Later” to proceed.

At the next screen you can download optional software that was bundled with your Modem Router.

router/600-OptionalSoftware.htm

Welcome Configure Register

Get the most out of your router.

Belkin Wi-Fi

COMING SOON!
Your router is app-enabled. Download this app to find the router homepage quickly and easily from your phone or tablet's homepage.

Mobile

Available on the App Store Google play

Belkin MediaPlay

COMING SOON!
Your router ships with Belkin MediaPlay powered by Tivoli. Download this app to play media on your phone or tablet directly from your router.

Mobile

Available on the App Store Google play

Belkin USB Print and Storage Center

COMING SOON!
Take better advantage of your router's USB ports. This app allows you to share printers and storage devices between all of your Windows and OS X computers.

Desktop

Windows
Windows 8
or earlier

OS X
OS X 10.7 or
earlier

Device Manual

COMING SOON!
Download the manual for your device.

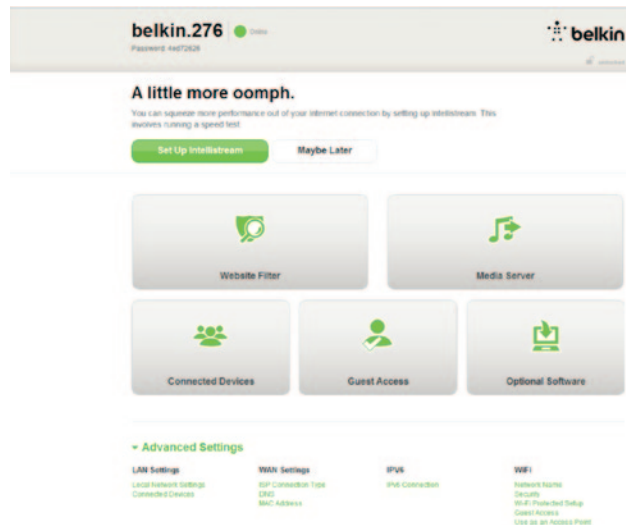
Visit your router's Optional Software page to retrieve similar software for your other computers and mobile devices.

Thanks, take me to the dashboard

GETTING STARTED

This screen shows you optional software that is available for your Modem Router, such as the USB software to allow you to print through the Modem Router's USB port. If you wish to download and install any of these software programs, simply click on the button appropriate for your device.

When finished installing optional software, click "Thanks, take me to the dashboard."

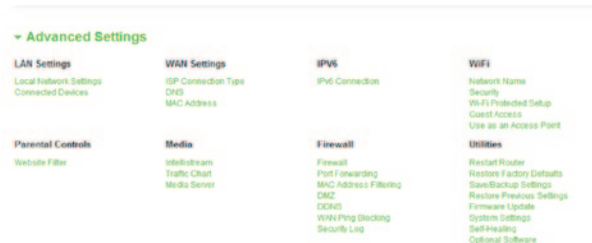


Congratulations! You are now at your Modem Router's dashboard. Your Modem Router is now set up and ready to use.

GETTING STARTED

The status of your Internet connection is shown in the upper left corner of the Router's homepage.

If it does not say "Online," troubleshooting information will be displayed.



Dynamic/Fixed IP (1483 Bridge)

Select “Dynamic/Fixed IP (1483 Bridge)” from the menu that appears and press “Next.”



In most cases the IP address is dynamic, in which case all you need to do is enter the correct VPI and VCI values and select the correct encapsulation mode (check with your ISP if you are unsure), then click “Apply Changes.”

If your connection uses a static IP address change the “IP Assigned by ISP” option to “No” and enter the address details supplied by your ISP. Then enter the above values, and click “Apply Changes.”

GETTING STARTED

[← Back to Dashboard](#)

Connection Type: **DNS** | **MAC Address**

[← Back to Connection Type](#)



To enter your Dynamic IP settings, type in your information below and click "Save".

Host Name:

Change WAN MAC Address

Save

Dynamic
A Dynamic type of connection is the most common. If you use a cable modem, then most likely you will have a dynamic connection. If you have a cable modem or you are not sure of your connection type, use this.

belkin.276   belkin

A little more oomph.
You can squeeze more performance out of your internet connection by setting up individual. This involves turning a speed test.

Set Up Speedtest | **Maybe Later**

Website Filter | **Media Server**

Connected Devices | **Guest Access** | **Optional Software**

Advanced Settings

- LAN Settings**
Your Network Settings
Connected Devices
- WAN Settings**
ISP Connection Type
DNS
WAN Address
- IPX**
IPX Connection
- WiFi**
Network Name
Security
WiFi Protected Setup
Guest Access
WiFi as an Access Point

If after a few minutes your Internet Status says “Connected,” you’re done! You can surf the Internet.

If these steps do not work, try restarting the Modem Router and repeating the process.

PPPoE/PPPoA Connection

Some ADSL providers require a PPPoE or PPPoA connection. Select either PPPoE or PPPoA (check with your ISP if you are unsure of which you need) and press “Next.”

GETTING STARTED

The screenshot shows a configuration page with a breadcrumb trail: **Back to Dashboard** > **Connection Type** > **DHCP** > **Static Address**. The main content area is titled **What are DHCP Settings?** with a sub-header **Select a connection type:**. There are five radio button options:

- Dynamic**
A Dynamic type of connection is the most common. If you use a cable modem, then most likely you will have a dynamic connection. If you have a cable modem or you are not sure of your connection type, use this.
- Static**
A Static IP address connection type is less common than others. Use this selection only if your ISP gave you an IP address that never changes.
- PPPoE**
If you use a DSL modem and/or your ISP gave you a User Name and Password, then your connection type is PPPoE. Use this connection type.
- PPPoE (European Countries Only)**
This type of connection is most common in European countries. If your ISP has specifically told you that you use PPPoE and has supplied you with the proper PPPoE information, then use this option.
- Telstra BigPond**
Use this option for Bigpond Cable and OptusNet Cable connections only.

At the bottom left, there is a green **Next** button.

Enter the username and password supplied by your Internet provider, enter the correct VPI and VCI values, and select the correct encapsulation mode (check with your ISP if you are unsure of what VPI/VCI and encapsulation values to use). Then click "Apply Changes." Ignore the other fields. The Router will restart.

GETTING STARTED

[← Back to Dashboard](#)

Connection Type DNS Static Address

[← Back to Connection Type](#)

To enter your PPPoE settings, type in your information below and click "Save".

User Name

Password

Netype Password

Service Name (Optional)



IP assigned by ISP
 Yes No

MTU (500-1500)


Disconnect after
 minutes of no activity


PPPoE Settings
To set the router to use PPPoE, type in the user name and password from your ISP in the spaces provided. If you do not have a service name or do not know it, enter the "Service Name" field blank. After you have typed in your information, click "Save". After you save, the status indicator will read "Online" if your router is set up properly.


If after a few minutes your Internet Status says "Connected," you're done! You can surf the Internet.


belkin.276  


A little more oomph.
You can squeeze more performance out of your internet connection by setting up additional. The browser running a speed test.

 Website Filter

 Media Server

 Connected Devices

 Guest Access

 Optional Software

Advanced Settings

LAN Settings
Local Network Settings
Connection Method

WAN Settings
ISP Connection Type
DNS
MTU Address

IPv6
IPv6 Connection

WiFi
Network Name
Security
WPA-PSK/AES Key
Guest Access
USB as an Access Point

If these steps do not work, try restarting your modem and repeating the process.

Connect Your Wireless Devices


iOS

(iPhone, iPad, and iPod touch)

1. Open the Settings app and select the **Wi-Fi** menu item.
2. Select your wireless network from the list that appears there. If asked to do so, enter the network password.

Mac OS® X

Your Mac® provides a menu of available wireless networks at the right end of the menu bar.

1. Click on the  icon showing wireless waves.
2. Select your wireless network from the list that appears there. If asked to do so, enter the network password.



Android™

(phones and tablets)

1. Open the **Settings** app and select **Wireless and Network**.
2. From there, select **Wi-Fi** to see the list of available networks.
3. Select your wireless network from the list. If asked to do so, enter your network password.



GETTING STARTED

Windows® 7

Your computer provides a menu of available wireless networks at the right end of the task bar.



1. Left-click on the icon that looks like signal strength bars.
2. Select your wireless network from the list. If asked, enter your network password (network key).



Windows Vista® and Windows XP

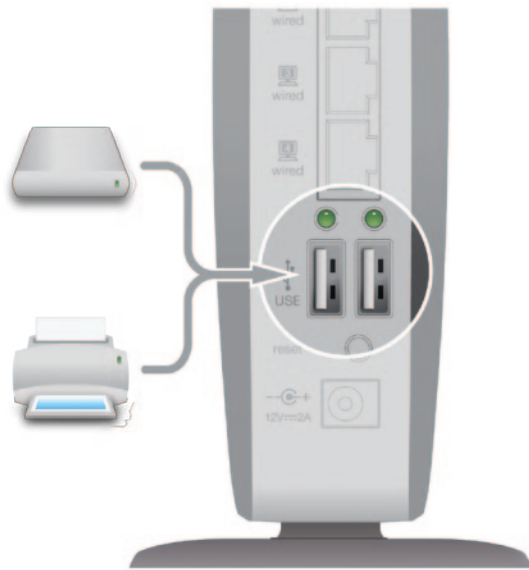
Your device provides a menu of available wireless networks at the right end of the task bar.

1. Right-click on the icon that shows a computer with wireless waves (XP) or two computers (Windows Vista).
2. Choose “View Available Wireless Networks (XP)” or “Connect to a network (Vista)” from the menu.
3. Select your wireless network from the list. If asked, enter your network password (network key).



ADDITIONAL CAPABILITIES

Adding USB Devices



Adding a Drive

You can share a USB hard drive or flash drive to your network via your Router's USB port. Once connected, you can share files and music with other computers and devices within your network.

Plug your USB hard drive into the USB port on the back of your Router.

You can manually check the status of your shared drive by visiting the USB Print and Storage Manager, found under the Belkin Router Manager icon displayed in your system tray (Windows) or menu bar (Mac). If you have difficulty sharing a drive on your network, please see the "Troubleshooting" section of this manual.

A few USB hard disks require more power than the Router's USB port provides. In these cases, you may notice the drive failing to come on or remaining on for a short time. If your disk has an optional power supply, please use it while the disk is attached to your Router.

Adding a Printer

You can add a printer to your network via your Router's USB port. Once connected, you can print from various computers and wireless devices within your network.

Plug your printer's USB cable into the USB port located on the back of your Router.

You can manually check the status of your printer by visiting the USB Print and Storage Manager, found under the Belkin Router Manager icon displayed in your system tray (Windows) or menu bar (Mac). If you have difficulty sharing a printer on your network, please see the "Troubleshooting" section of this manual.

Note: Each computer that will use the printer must have both the Belkin software and the printer's driver installed. If the print driver is not installed, you will be asked to install it by the Belkin USB Print and Storage Manager.

ADDITIONAL CAPABILITIES

Adding Other USB Devices

Other USB devices may also be shared via your Router. Plug your device into the USB port located on the back of your Router.

Computers running the Belkin USB Print and Storage Manager will be able to make use of the shared device.

Optional Software

USB Print and Storage Center

The USB Print and Storage Manager helps to manage and monitor the use of your USB printers, scanners, hard drives, and other devices that are connected to your Router's USB port and shared across your network.

Additional Capabilities

Guest Access

You can allow guests to use your Internet connection without joining your personal network. The network name and password for the guest network is located on the network information card found under the foot of your Router.

A person using your guest network will be able to join without a password, but will be shown a login page when they attempt to surf the Web. They will need to enter the guest password into this page to continue.

Media Server by myTwonky

Media Server by myTwonky lets your Router stream music, movies, and photos to different DLNA/UPnP devices on your network.

In order to use Media Server by myTwonky, you will need to insert a USB storage device with media content into a free USB port on the back of your Router. Your Router will begin to make your content available to other devices on your network automatically.

If you want to configure Media Server by myTwonky, visit

<http://router/> and choose "Media Server."

There are several settings in the configuration page:



DLNA Server: Enables or disables your media server

Server Name: The name under which other devices will see your content

Refresh: Re-scans your USB storage devices for media content

Shared Drives: Shows information about and status of each of your attached drives. You can see the name of the drive, its capacity, and whether media is being served from it or not.

When you click "Save," your Router will save your changes.



Website Filters. Powered by Norton

Web filters provide a first layer of whole-home Internet protection to guard you from unsafe and inappropriate websites on any device on your network.

There are four different filtering options:

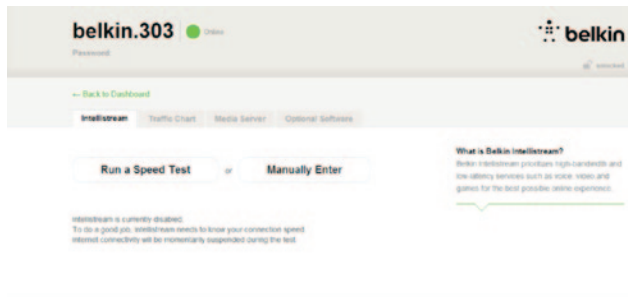
1. Block malicious, adult, and other non-family-friendly sites
2. Block malicious and adult sites
3. Block malicious sites
4. No filters

If you think a site should be added to the filtering list, submit a request at safeweb.norton.com.

Content filtering may not work as intended if:

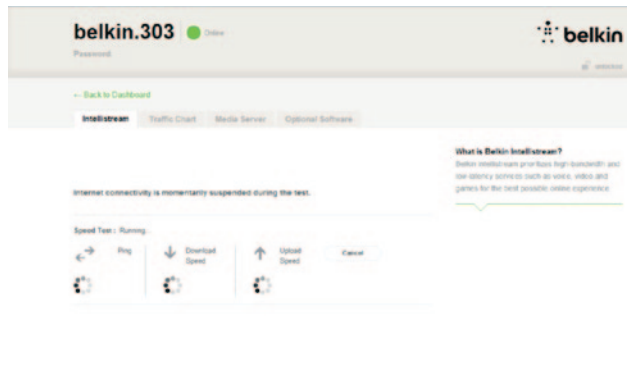
1. You are connecting through a VPN router.
2. You are routing traffic through a proxy server.
3. You have previously visited the site and it has been stored in your cache.
4. You manually set the DNS servers on your computer, tablet, or smartphone.

ADDITIONAL CAPABILITIES



IntelliStream QoS

IntelliStream prioritizes video and gaming traffic for a better online entertainment experience.



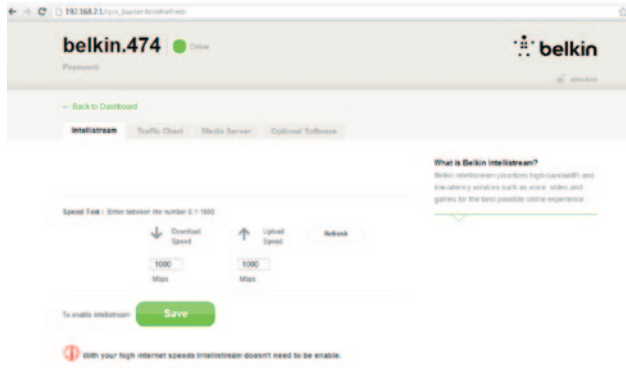
There are two ways to enable IntelliStream:

Run a Speed Test:

In order for IntelliStream to provide you the best media experience, your Router needs to know what your approximate Internet speeds are.

Click “Run a Speed Test” and the test will begin.

ADDITIONAL CAPABILITIES

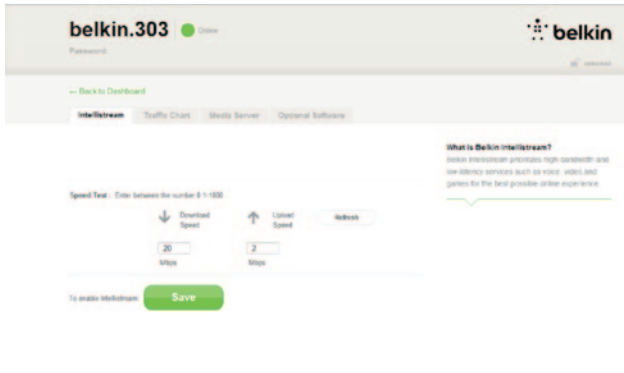


The screenshot shows a web browser window with the URL `192.168.2.1`. The page header displays **belkin.474** with a green 'Online' indicator and the Belkin logo. Below the header, there are navigation tabs for **IntelliStream**, **Traffic Chart**, **Media Server**, and **Optional Software**. The main content area is titled 'Speed Test' and includes a 'Speed Test' label with the instruction 'Enter between the number 0 - 1000'. There are two input fields: 'Download Speed' with a dropdown menu set to '1000 Mbps' and 'Upload Speed' with a dropdown menu set to '1000 Mbps'. A 'Submit' button is located to the right of the upload speed field. Below the input fields, there is a green 'Save' button with the text 'To enable IntelliStream'. A red warning icon is present with the text 'With your high internet speeds IntelliStream doesn't need to be enable.' To the right of the speed test controls, there is a section titled 'What is Belkin IntelliStream?' with a brief description: 'Belkin IntelliStream prioritizes high-priority and time-sensitive sessions such as voice, video and games for the best possible online experience.'

Once complete you will see the results.

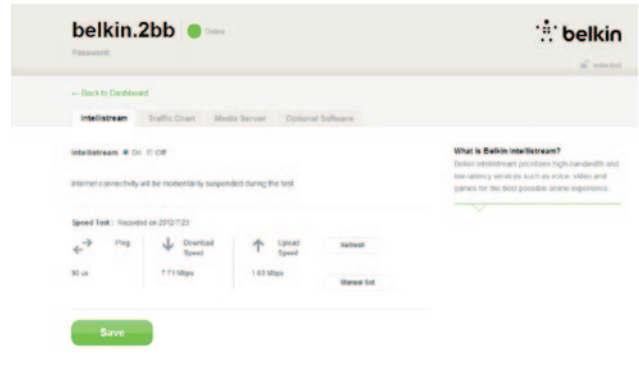
If your Internet speed is greater than 70Mbps when downloading, IntelliStream QoS will only improve your uploading experience.

ADDITIONAL CAPABILITIES



Refresh – This will retest your Internet speed.

When you click “Save,” your Router will save your changes.



Manual set – This will let you set your approximate Internet speeds. If you do not know your Internet speeds, call your ISP.

When you click “Save,” your Router will save your changes.

IntelliStream is now enabled.

ADDITIONAL CAPABILITIES



IPv6 Configuration

A new version of Internet Protocol (IP) uses a 128-bit address to implement additional features that are not present in current IP addresses.

Contact your ISP to inquire about their support for IPv6.

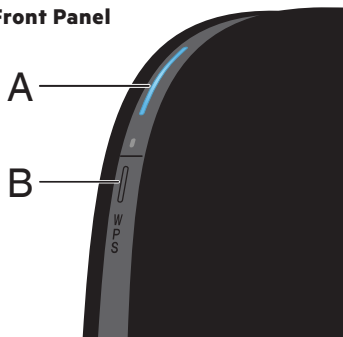


Pass-Through

Devices connected to your Router can talk to each other using native IPv6 packets, but information will be sent to all connected devices. Pass-through is not efficient and is not recommended for consistent use.

GETTING TO KNOW YOUR ROUTER

Modem Router Front Panel



A) Modem Router Status Light

Your Router's status is shown by the light on the front.

Off: The Router is not plugged into Power Modem's power source.

Blinking Blue: The Modem Router is starting up.

Solid Blue: The Modem Router is connected to the Internet.

Blinking Amber: The Modem Router can't detect the Power Modem. Either the Power Modem is unresponsive, or the ADSL (RJ11) cable is not plugged into the Power Modem, or there is no signal.

B) Wi-Fi Protected Setup (WPS) Light and Button

The WPS button on the front of your Router can be used to help establish a secure connection between your Router and other WPS-enabled Wi-Fi devices such as computers. To use the WPS feature on your Router, see "Getting Started > Adding Computers to Your Network > Using the WPS Button".

The small light near the WPS button shows what is happening while you are using WPS to establish a connection.

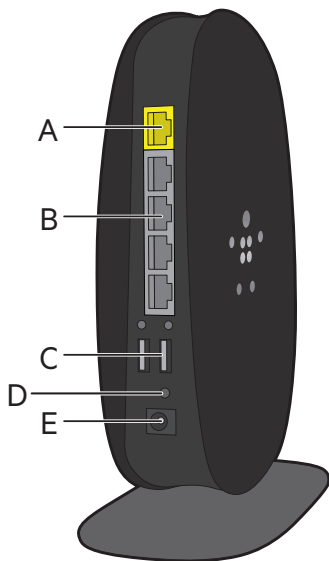
Off: Idle

Blinking Blue: The Modem Router is listening for a WPS-enabled computer or other device.

Solid Blue: The Modem Router has made a secure connection with the computer or other device.

Amber: A connection was not created.

Back Panel



A) Modem (WAN) Connector

Connect the Ethernet cable from the supplied Power Modem to this port.

B) Wired (LAN) Connectors

Connect computers and other wired network devices to these ports using Ethernet cables.

C) USB 2.0 Ports

USB printers, disks, and other USB devices plugged into these ports will be shared on your network. Each USB port has a light that indicates its status.

Off: No USB device is connected or the attached USB device is not in use.

Blinking: Please wait to unplug the device until the light turns off.

On: The USB device is connected and being shared on your network.

D) Reset Button

This button is used to restart your Router in rare cases when it functions incorrectly. Resetting the Router will preserve your settings. This button may also be used to restore the factory default settings. Please see the Troubleshooting section for more information.

E) Power Connector

Insert the power cable from the supplied Power Modem to this jack.

TECHNICAL DETAILS

Technical Features

Integrated 802.11ac Wireless Access Point

Utilizing Dual-Band Network technology, your Router creates two separate networks (one at 2.4GHz band and the other at 5GHz band), allowing increased bandwidth to all your connected wireless devices and computers.

NAT IP Address Sharing

To save you the cost of adding IP addresses per computer in your house, your Belkin Router uses Network Address Translation (NAT) technology, allowing you to share a single IP address across your network.

SPI Firewall

Your Router is equipped with a firewall that will protect your network from a wide array of common attacks and viruses.

Universal Plug-and-Play (UPnP) Compatibility

UPnP offers seamless operation of voice and video messaging, games, and other applications that are UPnP-compliant.

Web-Based Advanced User Interface

You can easily make changes to your Router's advanced settings through your web browser. These changes can be made from any computer on your network.

Integrated 4-Port Gigabit Switch

Your Router has a built-in, 4-port network switch to allow your wired computers to share: printers, data, MP3 files, digital photos, and much more.

USB Port

The USB port lets you plug in printers, hard drives, and other USB devices to share across your network.

System Requirements

Router

ADSL/ADSL2/ADSL2+ broadband connection

At least one computer with: Installed network interface card and TCP/IP networking protocol

Internet browser

Setup Software

A computer running Windows® XP SP3 or higher, Windows Vista®, or Windows 7; or Mac OS® X v10.5 or above

Minimum 1GHz processor and 512MB RAM

600MB of free hard-drive space for installation

Memory Safe and USB Print and Storage Manager

Windows XP SP3 or higher, Windows Vista, or Windows 7; or Mac OS X v10.5 or above only

Minimum 1GHz processor and 512MB RAM

50MB of free hard-drive space for installation

Auto Update on Your Belkin Router

The Router will automatically check for a newer version of firmware every time you log into the dashboard and alert you with a message at the top of the screen if there is an update available. You can choose to download the new version or ignore it.

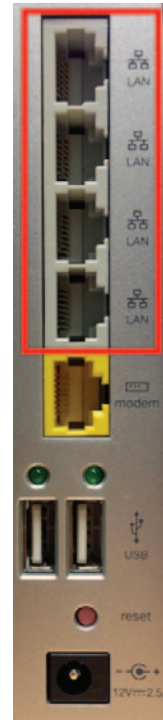
You will see a series of prompts warning you that the firmware is about to be updated. Please do not disconnect the power from the Router at this time as it could cause the system to fail.

Updating the Router's Firmware via the Web Interface

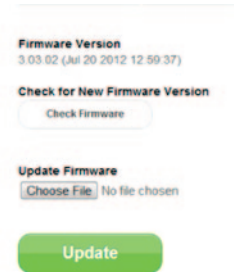
The following steps show you how to update your Router's firmware using its web interface. You do not need to be connected to the Internet as this interface is built into the Router itself.

Setup steps:

1. Locate and download the firmware file from the Belkin support site. (Type your part number into the search box in the top right corner and look for "Firmware" in the title.)
2. Save the file to a location on your computer where you can get to it easily, such as your desktop.
3. Connect the computer to one of the four LAN ports on the Router. (refer to image).



USING YOUR ROUTER



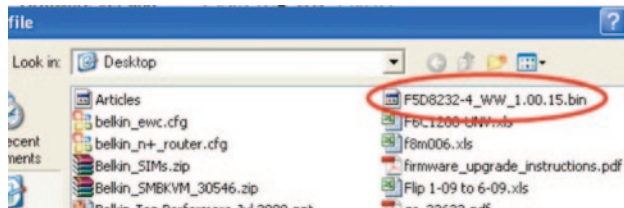
4. Open a web browser on the computer.
5. In the address bar of the web browser, type “http://router” or “http://192.168.2.1” and press “Enter” on your keyboard.
6. Click on “Firmware Update” toward the bottom.

7. Click the “Choose File” button toward the middle of the screen to search for the file you saved previously.

Note: The firmware version in the image above is depicted as an example. Your file name will vary depending on your model and version.

USING YOUR ROUTER

8. Select the firmware file by left-clicking on it and then click the “Open” button in the lower-right corner of the window. This will take you back into the Router’s interface.
9. Click the “Update” button.



USING YOUR ROUTER

10. A prompt asking, "Are you sure you want to continue with upgrading?" will appear. Click "OK".
11. A second prompt will open telling you the Router will not respond during the upgrade and warning you not to remove the power supply from the Router. Click "OK" once more.

Congratulations. The firmware has been updated successfully.

Resetting the Router

Reset Button – Red

The “Reset” button is used in rare cases when the Router may function improperly. Resetting the Router will restore the Router’s normal operation while maintaining the programmed settings. You can also restore the factory default settings by using the “Reset” button. Use the restore option in instances where you may have forgotten your custom password.

Resetting the Router

Push and release the “Reset” button. The lights on the Router will momentarily flash. The “Router” light will begin to blink. When the “Router” light becomes solid again, the reset is complete.

Restoring Your Router to Factory Defaults

Press and hold the “Reset” button for at least 5 seconds, and then release it. The lights on the Router will momentarily flash. The “Router” light will begin to blink. When the “Router” light becomes solid again, the restore is complete.

Restoring the Router to Default Settings Using the Web Interface

Symptoms

You need to restore the factory defaults using the web interface. This may be because the Router is not performing as expected or you wish to remove all previously configured settings.

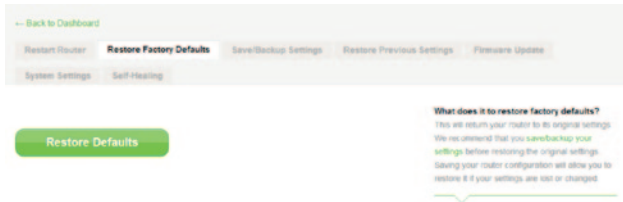
Setup steps

1. Open a web browser on the computer.
2. In the address bar of the web browser, type "http://router" or "http://192.168.2.1".

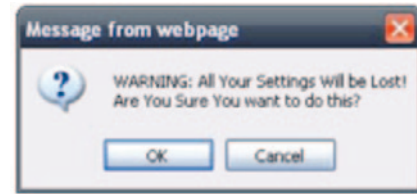


3. Click on "Restore Factory Defaults" in the left-hand column under the "Utilities" heading.

USING YOUR ROUTER



4. Click on the "Restore Defaults" button.



5. A warning box will open that says, "Warning: All your settings will be lost. Are you sure you want to do this?" Click "OK".

USING YOUR ROUTER

6. The Router will begin the restoring process. Once the restore is complete, the Router will reboot.

Note: This may take several minutes.

Your Router has successfully been restored to its factory settings.

Troubleshooting

I can't connect to the Internet wirelessly.

If the light on the front of the Router is solid blue, then your Router is connected to the Internet. You may not be connected to the Router's wireless network. Please refer to "Connect Your Wireless Devices" on page 21 of this manual for instructions.

If your Windows XP computer is running SP2, you will not be able to set up the Router via the wireless setup process. You will need to either update to Windows XP SP3 or complete the setup via a wired connection.

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

1. Verify that your Router is on and the front-panel light shows solid blue.
2. If you are far from the Router, you might try moving closer to see if you might have been out of range.
3. Using a computer attached to the Router via a network cable, visit <http://router/> and ensure that "Broadcast SSID" is ON. This setting is found on the "Channel and SSID" page.

My wireless network performance is slow, inconsistent, suffers from weak signal, or I'm having difficulty maintaining a VPN connection.

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. Note also that connection speed may decrease as you move farther away from the Router.

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

Changing the wireless channel—Depending on local wireless traffic and interference, switching the wireless channel of your network can improve performance and reliability. See the section titled "Changing the Wireless Channel" for instructions on how to choose other channels.

Limiting the wireless transmit rate—Limiting the wireless transmit rate can help improve range and connection stability. Most wireless cards have the ability to limit the transmission rate. To change this property in Windows, 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, 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.

I’ve installed this new Router and some of my network clients (computers, game consoles, etc.) are now unable to connect.

Your new Router came pre-configured with a network name and password, found printed on an attached card. All clients must use this network name and password to connect wirelessly to your Router. You will need to find the network settings on your client, select the network name printed on the card from the list of available networks, and enter the password when prompted to join the wireless network.

Does the Router support Wireless Protected Access (WPA) security?

The Router ships with WPA/WPA2 security turned on. Windows XP and some older network hardware may require a software update to support WPA/WPA2.

I am having difficulty setting up WPA security on my Router.

1. Log in to your Router by visiting “http://router/” or “http://192.168.2.1” with your web browser. Click “Security” under the WiFi heading. You should now be on the Security page.
2. Under Security Mode, select WPA/WPA2-Personal (PSK).
3. Select “WPA/WPA2” from the drop-down menu under the Authentication heading.
4. Enter a password. This can be from 8–63 characters of your choice, including spaces and punctuation, OR a 64-digit hexadecimal number (using only the numbers 0–9 and letters A–F).

5. Click “Save” to finish. Your wireless connection is now encrypted. Each computer using your wireless network will need to use the new key.

Note: If you are configuring the Router over a wireless connection, you will have to re-connect to the Router after changing any security settings.

Note: Some older networking hardware supports only WEP encryption. If your older computers cannot connect to your network, try 128-bit or 64-bit WEP, or seek software updates from their manufacturers.

I am having difficulty setting up Wired Equivalent Privacy (WEP) security on my Router.

1. Log in to your Router. Visit "http://router/" or "http://192.168.2.1" with your web browser. Click "Security" under the WiFi heading. You should now be on the Security page.
2. Under Security Mode, select the "128-bit WEP" option.
3. You may type in a WEP key manually, or generate one from a passphrase. Type a phrase in the "Passphrase" field and click the "Generate" button. A WEP key is composed of 26 hexadecimal digits (0–9, A–F). For example, C3 03 0F AF 4B B2 C3 D4 4B C3 D4 EE 74 is a valid 128-bit WEP key.

4. Click "Save" to finish. Your wireless activity is now encrypted. Each computer using your wireless network will need to use the new key.

Note: If you are configuring the Router over a wireless connection, you will have to re-connect to the Router after changing any security settings.

Note: Some older networking hardware supports only 64-bit WEP encryption. If your older computers cannot connect to your network, try 64-bit WEP.

A disk I plugged into the USB port is not showing up on my computer.

1. Try unplugging and re-plugging the disk. Please check that the USB connector is firmly plugged into the Router.
2. If your disk has an optional power supply, please use it while the disk is attached to your Router.
3. The Router supports FAT16, FAT32-, or NTFS-formatted disks. Disks in other formats will not appear in the Finder (Mac OS X) or Windows Internet Explorer®.

A disk I plugged into the USB port is not coming on or remains on only for a short time.

Some drives require more power than the Router's USB port provides. If your disk has an optional power supply, please use it while the disk is attached to your Router.

A printer I plugged into the USB port is not showing up on my computer.

1. Try unplugging and re-plugging the printer. Please check that the USB connector is firmly plugged into the Router.
2. To print to a printer attached to the Router, your computer must have that printer's driver installed. Please check that the driver is installed.
3. The printer may not be set to auto-connect. Via the Belkin Router Manager, open the USB Print and Storage Center. Check that the printer appears in the list of available devices. View the properties of the printer, and check that "auto-connect" is selected.

A different sort of USB device that I plugged into the USB port is not showing up on my computer.

Most USB devices other than disks and printers must be accessed via the USB Print and Storage Center.

1. Try unplugging and re-plugging the device. Please check that the USB connector is firmly plugged into the Router.
2. Open the USB Print and Storage Center. Check that the device appears in the list of available devices.
3. Select the device and click the "Use" button. The device will be virtually connected to your computer until you choose to "Stop Using" the device, or another person requests use of the device.

Belkin Setup cannot connect my Router to the Internet.

If Belkin Setup is not able to connect the Router to the Internet, please check the following items:

1. Use the troubleshooting suggestions within Belkin Setup.
2. If your ISP requires a user name and password, make sure that you have typed in your user name and password correctly. Some user names require that the ISP's domain may be at the end of the name. Example: "myname@myisp.com". The "@myisp.com" part of the user name may need to be typed as well as your user name.
3. If you continue to have no Internet connection, refer to "Manually Configuring Network Settings" in this manual for an alternative setup method.

Belkin Setup completed installation, but I cannot browse the Web. The light on the front of my Router is blinking amber.

1. Make sure the Router is connected to the Power Modem with an Ethernet cable via the Router's one WAN (modem) port.
2. Make sure that the Power Modem is connected to the ADSL line, via an ADSL filter if required.
3. Remove the Power Modem from the mains socket. Also unplug the power jack of the Power Modem from the back of the Router.
4. Plug the Power Modem back into the mains socket, wait 30 seconds, and then reconnect the power jack of the Power Modem into the back of the Router. This will cause the Router to try to reestablish communication with the modem.

Belkin Setup completed installation, but I cannot browse the Web. The light on the front of my Router is solid amber.

1. Use the troubleshooting suggestions within Belkin Setup.
2. If your ISP requires a user name and password, make sure that you have typed in your user name and password correctly. Some user names require that the ISP's domain may be at the end of the name. Example: "myname@myisp.com". The "@myisp.com" part of the user name may need to be typed as well as your user name.
3. If you have a static connection, your ISP will have assigned you an IP address, subnet mask, and gateway address. Please re-run Belkin Setup and enter this information when a static connection is mentioned.
4. You may need to configure your Router to meet the specific requirements of your ISP. To search our knowledge base for ISP-specific issues, go to: <http://www.belkin.com/support> and type in "ISP".
5. If you continue to have no Internet connection, refer to "Manually Configuring Network Settings" in this manual for an alternative setup method.

I can't connect to the Internet wirelessly.

If the light on the front of the Router is solid blue, then your Router is connected to the Internet. You may not be connected to the Router's wireless network. Please refer to "Adding Computers to Your Network" in this manual for instructions.

If your Windows XP computer is running SP2, you will not be able to set up the Router via the wireless setup process. You will need to either update to Windows XP SP3 or complete the setup via a wired connection.

Technical Support

US <http://www.belkin.com/support>
UK <http://www.belkin.com/uk/support>
Australia <http://www.belkin.com/au/support>
New Zealand <http://www.belkin.com/au/support>
Singapore 1800 622 1130
Europe <http://www.belkin.com/uk/support>

AUSTRIA	0820 200 766	www.belkin.com/de/networking/	NORWAY	81 50 0287	www.belkin.com/uk/networking/
BELGIUM	07 07 00 073	www.belkin.com/nl/networking/ www.belkin.com/fr/networking/	POLAND	00800 - 441 17 37	www.belkin.com/uk/networking/
CZECH REPUBLIC	239 000 406	www.belkin.com/uk/networking/	PORTUGAL	707 200 676	www.belkin.com/uk/networking/
DENMARK	701 22 403	www.belkin.com/uk/networking/	RUSSIA	495 580 9541	www.belkin.com/networking/
FINLAND	0972519123	www.belkin.com/uk/networking/	SLOVAKIA	08000 04614	www.belkin.com/networking/
FRANCE	08 - 25 54 00 26	www.belkin.com/fr/networking/	SLOVENIA	0800 80510	www.belkin.com/networking/
GERMANY	0180 - 500 57 09	www.belkin.com/de/networking/	SOUTH AFRICA	0800 - 99 15 21	www.belkin.com/uk/networking/
GREECE	00800 - 44 14 23 90	www.belkin.com/uk/networking/	SPAIN	902 - 02 43 66	www.belkin.com/es/networking/
HUNGARY	06 - 17 77 49 06	www.belkin.com/uk/networking/	SWEDEN	07 - 71 40 04 53	www.belkin.com/uk/networking/
ICELAND	800 8534	www.belkin.com/uk/networking/	SWITZERLAND	08 - 48 00 02 19	www.belkin.com/de/networking/
IRELAND	0818 55 50 06	www.belkin.com/uk/networking/			www.belkin.com/fr/networking/
ITALY	02 - 69 43 02 51	www.belkin.com/it/networking/	UNITED KINGDOM	0845 - 607 77 87	www.belkin.com/uk/networking/
LUXEMBOURG	34 20 80 85 60	www.belkin.com/uk/networking/	OTHER COUNTRIES	+44 - 1933 35 20 00	www.belkin.com/it/networking/
NETHERLANDS	0900-040 07 90 €0.10/min	www.belkin.com/nl/networking/			

Belkin International, Inc., Limited 2-Year 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 two years.

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, lightning, earthquake, 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 you must take the following steps:

1. Contact Belkin International, Inc., on the telephone number listed on page 56, within 15 days of the Occurrence.

Be prepared to provide the following information:

- a. The part number of the Belkin product.
- b. Where you purchased the product.
- c. When you purchased the product.
- d. Copy of original receipt.

2. Your Belkin Customer Service Representative will then instruct you on how to forward your receipt and Belkin product and how to proceed with your claim.

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.

Declaration of Conformity with electromagnetic compatibility and electromagnetic interference

We, Belkin International, Inc., of Schiphol-Rijk, Netherlands, declare under our sole responsibility that the device, F9J1108, complies with Directives stated in our EU declaration which can be obtained from our website given below.

Caution: Exposure to Radio Frequency Radiation.

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

CISPR 22 Interference Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to the requirements of EN 55022 and EN 55024. 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 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.

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

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

REGULATORY INFORMATION

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC, the EMC Directive 2004/108/EC, and the low-voltage Directive 2006/95/EC. A copy of the European Union CE marking “Declaration of Conformity” may be obtained at the website: www.belkin.com/doc

For information on product disposal please refer to

<http://environmental.belkin.com>

General Safety Information:

- For indoor installation only
- For installation with supplied power adapter only
- The supplied power adapter is the product's switch-off device. The base socket must be near the product and easily accessible.



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