BELKIN

Wireless Cable/DSL Gateway Router

Share your broadband Internet connection without cables

User Manual

F5D6231-4

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INTRODUCTION

Thank you for purchasing the Belkin Wireless Cable/DSL Gateway Router (the Router). In minutes you will be able to share your Internet connection and network your computers. The following is a list of features that make your new Router an ideal solution for your home or small office network.

Key Features

Easy Install Wizard

The Easy Install Wizard takes the guesswork out of setting up your Router. This automatic software determines your network settings for you and sets up the Router for connection to your Internet Service Provider (ISP). In a matter of minutes, your Router will be up and running on the Internet.

NOTE: *Easy Install Wizard software is compatible with Windows 98, Me, 2000, and XP. If you are using another operating system, the Router can be set up using the Alternative Method described in this manual.*

Integrated Wireless Connectivity

The Router has an integrated 802.11b Wi-Fi Access Point that allows you to connect wireless-equipped computers to the network without wires.

Works with Both PCs and Mac® Computers

The Router supports a variety of networking environments including Mac® OS 8.x, 9.x, X v10.x, AppleTalk®, Linux®, Windows® 95, 98, Me, NT®, 2000, and XP, and others. All that is needed is an Internet browser and a network adapter that supports TCP/IP (the standard language of the Internet).

Front-Panel Connected LED Display

Lighted LEDs on the front of the Router indicate which functions are in operation. You'll know at-a-glance whether your Router is connected to the Internet. This feature eliminates the need for advanced software and status-monitoring procedures.

Vertical or Horizontal Desktop Application

Your Router can stand vertically on the desktop to save space, or lay down flat on a shelf or under your modem. The included vertical mounting base lets you decide how to position the Router.

Web-Based Advanced User Interface

You can set up the Router's advanced functions easily through your web browser, without having to install additional software onto the computer. There are no disks to install or keep track of and, best of all, you can make changes and perform setup functions from any computer on the network quickly and easily.

NAT IP Address Sharing
Your Router employs Network Address Translation (NAT) to share the single IP address assigned to you by your Internet Service Provider while saving the cost of adding additional IP addresses to your Internet service account.

SPI Firewall
Your Router is equipped with a firewall that will protect your network from a wide array of common hacker attacks including IP Spoofing, Land Attack, Ping of Death (PoD), Denial of Service (DoS), IP with zero length, Smurf Attack, TCP Null Scan, SYN flood, UDP flooding, Tear Drop Attack, ICMP defect, RIP defect, and fragment flooding.

Integrated 10/100 4-Port Switch
The Router has a built-in, 4-port network switch to allow your wired computers to share printers, data and MP3 files, digital photos, and much more. The switch features automatic detection so it will adjust to the speed of connected devices. The switch will transfer data between computers and the Internet simultaneously without interrupting or consuming resources.

Universal Plug-and-Play (UPnP) Compatibility
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.

Support for VPN Pass-Through
If you connect to your office network from home using a VPN connection, your Router will allow your VPN-equipped computer to pass through the Router and to your office network.

Built-In Dynamic Host Configuration Protocol (DHCP) on-board makes for the easiest possible connection of a network. The DHCP server will assign IP addresses to each computer automatically so there is no need for a complicated networking setup.

MAC Address Filtering
For added security, you can set up a list of MAC addresses (unique client identifiers) that are allowed access to your network. Every computer has its own MAC address. Simply enter these MAC addresses into a list using the web-based user interface and you can control access to your network.

Applications and Advantages

- Economically connect multiple computers to a single Internet connection
- SOHO (Small Office/Home Office) networking needs
  Provides the easy and quick small network installation SOHO users need.

INTRODUCTION

Package Contents

- Belkin Wireless Cable/DSL Gateway Router
- Vertical Mounting Base (optional use)
- Category 5 Networking Cable
- Power Supply
- Belkin Easy Install Wizard Software CD
- User Manual

System Requirements

- Broadband Internet connection such as a cable or DSL modem with RJ45 (Ethernet) connection
- At least one computer with an installed network interface adapter
- TCP/IP networking protocol installed on each computer
- CAT5 networking cable (or better)
- Microsoft® Internet Explorer 4.0 or later, or Netscape® 4.0 or later

Easy Install Wizard Software System Requirements

- A PC running Windows 98, Me, 2000, or XP
- Minimum 64MB RAM
- Internet Browser

NOTE: *At the time of printing, a version of the Easy Install Wizard was not available for Mac OS users. Please check www.networking.belkin.com to see if a Mac OS version of the Easy Install Wizard is now available.*

KNOWING YOUR BELKIN ROUTER

The Router has been designed to be placed on a desktop vertically or horizontally, or it may be mounted to a wall. The slim design minimizes the desktop space required when placed vertically. All of the cables exit from the rear of the Router for better organization and utility. The LED indicators are easily visible on the front of the Router to provide you with information about network activity and status.

1. **Power/Ready LED**
   When you apply power to the Router or restart it, a short period of time elapses while the Router boots up. During this time, the "Power/Ready" LED blinks. When the Router has completely booted up, the Power/Ready LED becomes a SOLID light, indicating the Router is ready for use.

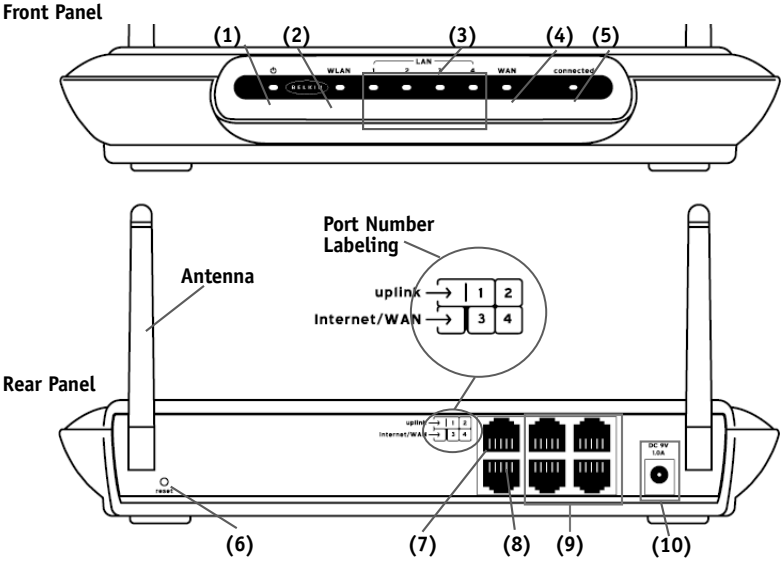
OFF	Router is OFF
Blinking Green	Router is Booting Up
Solid Green	Router is Ready

2. **Wireless Network-Ready LED**

OFF	Wireless Network is OFF
Solid Green	Wireless Network is Ready

3. **LAN Port-Status LEDs**
   These LEDs are labeled 1–4 and correspond to the numbered ports on the rear of the Router. When a computer is properly connected to one of the LAN ports on the rear of the Router, the LED will light. GREEN means a 10Base-T device is connected, AMBER means a 100Base-Tx device is connected. When information is being sent over the port, the LED blinks rapidly.

OFF	No Device is Linked to the Port
Green	10Base-T Device Connected
Orange	100Base-Tx Device Connected
Blinking (Orange or Green)	Port Activity



4. WAN Status LED

This LED lights in GREEN to indicate that your modem is connected properly to the Router. It blinks rapidly when information is being sent over the port between the Router and the modem.

OFF	No WAN Link
Solid Green	Good WAN Link
Blinking Green	WAN Activity

5. Connected LED

This unique LED shows you when the Router is connected to the Internet. When the light is OFF, the Router is NOT connected to the Internet. When the light is blinking, the Router is attempting to connect to the Internet. When the light is solid GREEN, the Router is connected to the Internet. When using the "Disconnect after x minutes" feature, this LED becomes extremely useful in monitoring the status of your Router's connection.

OFF	Router is not Connected to the Internet
Blinking Green	Router is Attempting to Connect to the Internet
Solid Green	Router is Connected to the Internet

6. Reset Button

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.

a. Using the Reset Button to Reset the Router

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

b. Using the Reset Button to Restore the Factory Defaults

Press and hold the Reset button for five seconds then release it. The lights on the Router will momentarily flash. The Power/Ready light will begin to blink. When the Power/Ready light becomes solid again, the restore is complete.

7. Shared Uplink Port

The shared uplink port is provided for connection to a hub or a switch for expanding the number of network ports on the Router. If you are connecting a switch or hub to the Router, connect a straight-through (standard) network cable to this port and to a port on the switch or hub. *Note: The uplink port is shared with port 1 of the Router. You cannot connect a device to the uplink port and to port 1 at the same time.*

8. Internet/WAN Port

This port is for connection to your cable or DSL modem. To ensure proper functioning, use the cable that was provided with your modem to connect the modem to this port.

NOTE: Using a cable other than the cable supplied with your cable or DSL modem may cause malfunctioning.

9. LAN Ports

The LAN ports are RJ45, 10/100 auto-negotiation ports for standard UTP category 5 or 6 Ethernet cable. The ports are labeled 1–4. These ports correspond to the numbered LEDs on the front of the Router. Note that Port 4 can be made into an uplink port. This means that by pressing the uplink button in, Port 4 will become an uplink port for the addition of a switch or hub. For more information about the uplink button, see "Uplink Button" below.

10. Uplink Button

The "Uplink" button is provided for use of Port 4 to connect to a hub or a switch for expanding the number of network ports on the Router. If you are connecting a switch or hub to the Router, connect a straight-through (standard) network cable to this port and to a port on the switch or hub. Press the Uplink button IN. This will switch Port 4 into an uplink port. NOTE: If you connect a computer to Port 4, and the link LED for Port 4 will not turn on, check the Uplink button to make sure that it is in the "Normal" position (OUT).

9. Power Jack

Connect the included 5V DC power supply to this jack.

PLACEMENT OF YOUR WIRELESS ROUTER

Proper placement of your Router is important to ensure the best performance of your wireless network. Typically, indoors your Wireless Router can provide a circular coverage area of 250 feet or more. However, different types of construction materials and other obstructions in a building can greatly affect the wireless signal and decrease the range. Whenever possible, your Router should be placed as close as possible to the center of the area that you want to cover. In multi-story homes, place the Router on a floor that is as close to the center of the home as possible; this may mean placing the Router on an upper floor.

Use care when choosing the location of your Router

- Be aware of appliances or large objects such as a refrigerator or washer/dryer unit that may be on the opposite side of a wall from where you decide to place your Router.
- Place the Router on top of a desk and away from metal cabinets and computer cases.
- Do not place objects or components on top of the Router.
- Make sure that both antennas are pointing UP at all times.
- Metallic-based UV window tint can affect wireless performance. Do not place the Router next to a tinted window.

We realize that in the real world, it may not be possible to place your Router in the center of your coverage area. In cases where you may experience difficulty covering the entire area you want, try placing the Router as high as possible. Wireless devices work best in a line-of-sight situation where there are no obstacles between the wireless computer and the Router. The Router may also be mounted to a wall with the antennas facing UP. There are other options for expanding your wireless coverage area. Visit www.networking.belkin.com for solutions.

The wireless signal can be affected by many things including neighboring wireless networks, microwave ovens in operation, and 2.4GHz cordless phones. While these things can affect the network performance, your wireless network typically will work fine under most conditions where these devices exist.

CONNECTING AND CONFIGURING YOUR CABLE/DSL ROUTER

Verify the contents of your box. You should have the following:

- Belkin Cable/DSL Gateway Router
- Vertical Mounting Base (optional use)
- Category 5 Networking Cable (for connection of the Router to the computer)
- Power Supply
- Belkin Easy Install Wizard Software CD
- User Manual

Modem Requirements

Your cable or DSL modem must be equipped with an RJ45 Ethernet port. Many modems have both an RJ45 Ethernet port and a USB connection. If you have a modem with both Ethernet and USB, and are using the USB connection at this time, you will be instructed to use the RJ45 Ethernet port during the installation procedure. If your modem has only a USB port, you can request a different type of modem from your ISP, or you can, in some cases, purchase a modem that has an RJ45 Ethernet port on it.

Ethernet

USB

Easy Install Wizard

Belkin has provided our Easy Install Wizard software to make installing your Router a simple and easy task. You can use it to get your Router up and running in minutes. The Easy Install Wizard requires that your Windows 98, Me, 2000, or XP computer be connected directly to your cable or DSL modem and that the Internet connection is active and working at the time of installation. If it is not, you must use the “Alternative Setup Method” section of this manual to configure your Router. Additionally, if you are using an operating system other than Windows 98, Me, 2000, or XP, you must set up the Router using the “Alternative Setup Method” section of this manual.

CONNECTING AND CONFIGURING YOUR CABLE/DSL ROUTER

IMPORTANT: Run the Easy Install Wizard from the computer that is directly connected to the cable or DSL modem.
DO NOT CONNECT THE ROUTER AT THIS TIME.

Step 1: Run the Easy Install Wizard Software

1.1 Shut down any programs that are running on your computer at this time.

2.2 Make sure you have the following items at the computer that is now directly connected to the cable or DSL modem. DO NOT CONNECT THE ROUTER AT THIS TIME.

- The Easy Install Wizard CD-ROM
- The Router
- The Router power supply
- Category 5 networking cable
- This User Manual

1.3 Turn off any firewall or Internet connection sharing software on your computer.

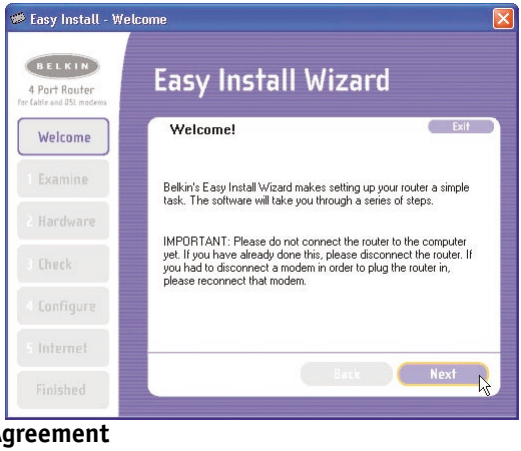
1.4 Insert the Easy Install Wizard software CD into your CD–ROM Drive. The Easy Install Wizard screen will automatically appear on your screen within 15 seconds. If it does not, select your CD-ROM drive from “My Computer” and double-click on the file named “Setup” on the CD-ROM.

Step 2: Follow the Easy Install Wizard to Complete the Installation

2.1 Click on "Set Up the Router" to begin.

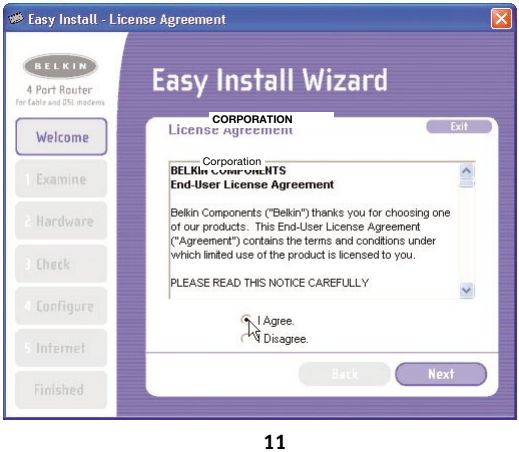
2.2 Welcome Screen

The Wizard welcome screen will appear. Make sure you have not connected the Router at this point. If you have connected your Router, please reconnect your computer directly to the modem. Click "Next" when you are ready to move on.



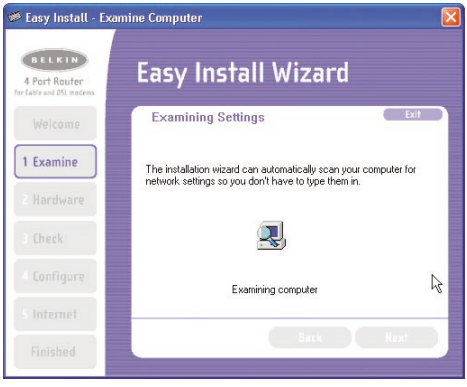
2.3 License Agreement

Please read the license agreement in the window. When you are finished, select "I agree" if you want to continue using the software. Click "I disagree" if you do not want to continue. Click "Next" to move on.



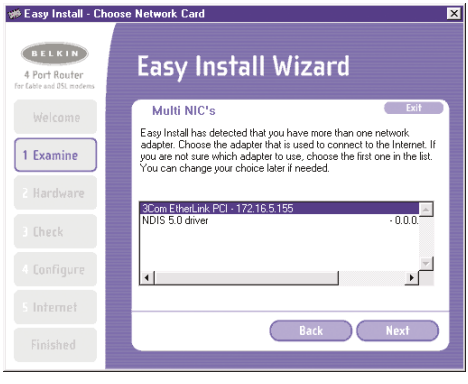
2.4 Examining Settings

The Wizard will now examine your computer's settings and gather information needed to complete the Router's connection to the Internet.



2.5 Multi-NICs Screen

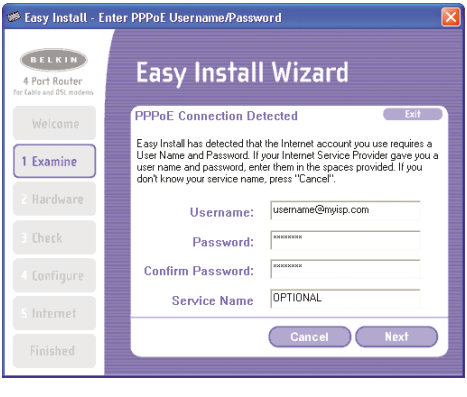
This screen will appear ONLY if you have more than one network adapter installed in your computer. If you have more than one network adapter installed in your computer, the Wizard will need to know which adapter is connected to your modem. Select the network card that is connected to your modem from the list and click "Next". If you are not sure which adapter to choose, select the adapter at the top of the list. If you mistakenly choose the wrong adapter now, you will be able to choose a different one later.



2.6 PPPoE Connection Detected

If you have a connection type that requires a user name and a password, the Wizard will ask you to type in your user name and password. If your connection type does not require a user name and password, you will not see this screen.

Your user name and password is provided to you by your Internet Service Provider. If you have to type in a user name and password to connect to the Internet, then type that same user name and password in here. Your user name looks something like “myname@myISP.com” or simply “myname”. The service name is optional and is very rarely required by your ISP. If you don’t know your service name, leave this blank. When you have entered your information, click “Next” to move on.



Step 3: Connect the Router to your Modem and Computer

The Wizard will ask you to connect your Router. Follow the steps on the screen, or do the following:

3.1 Turn off the power to your modem by unplugging the power supply from the modem.

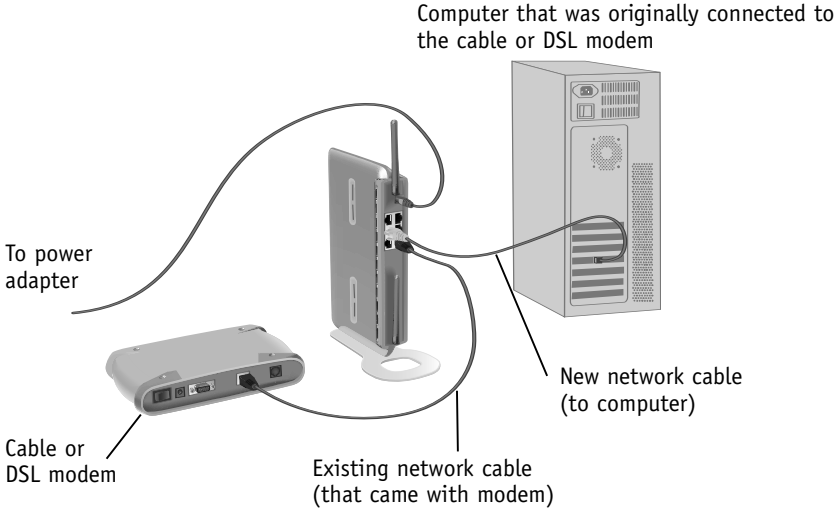
3.2 Locate the network cable that is connected between your modem and your computer and unplug it from your computer, leaving the other end connected to your modem.

3.3 Plug the loose end of the cable you just unplugged into the port on the back of the Router labeled “Internet/WAN”.

3.4 Connect the new network cable from the back of the computer to one of the ports labeled “1–4”. Note: It does not matter which numbered port you choose.

3.5 Turn on your cable or DSL modem by reconnecting the power supply to the modem.

3.6 Before plugging the power cord into the Router, plug the cord into the wall, then plug the cord into the Router’s power jack.



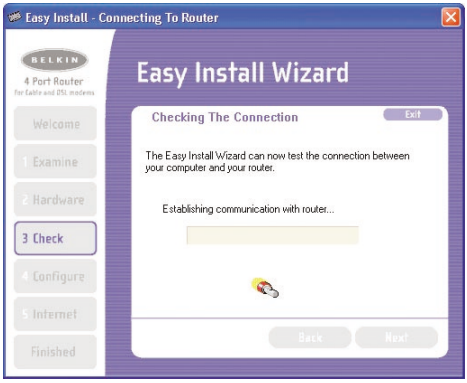
3.7 Verify that your modem is connected to the Router by checking the lights on the front of the Router. The green light labeled “WAN” should be ON if your modem is connected correctly to the Router. If it is not, recheck your connections.

3.8 Verify that your computer is connected properly to the Router by checking the lights labeled “LAN 1,2,3,4”. The light which corresponds to the numbered port that you connected your computer to should be ON if your computer is connected properly.

Step 4: Continue Following the Wizard's Instructions

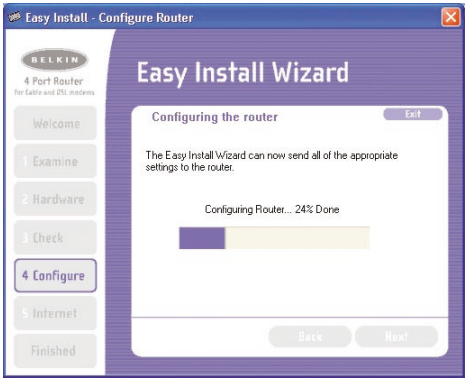
4.1 Checking the Connection

Once you have completed the connection of your Router, the Wizard will check the connection to the Router. If the Router is not detected, use the "Troubleshooting" button or refer to the "Troubleshooting" section of this guide to obtain help about how to correct the problem. If the Wizard is able to communicate with the Router, the Wizard will move on to the next step.

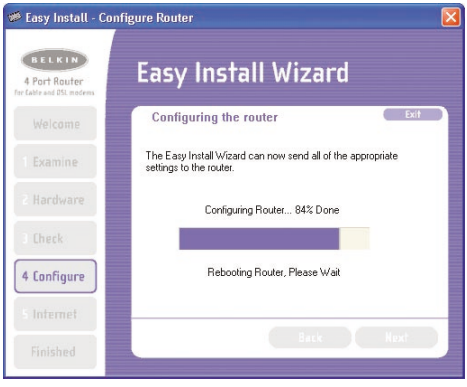


4.2 Configuring the Router

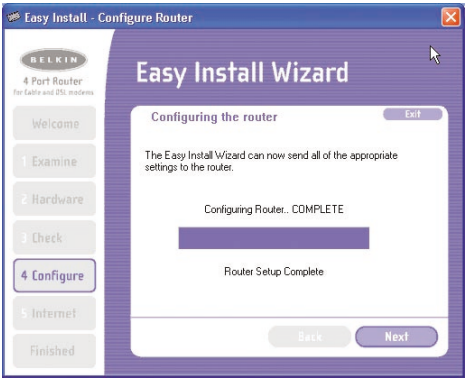
The Wizard will now transfer all of the configuration information to the Router. This will take approximately one minute.



4.3 When the transfer is complete, the Wizard will tell you that it is done and may reboot (restart) the Router.



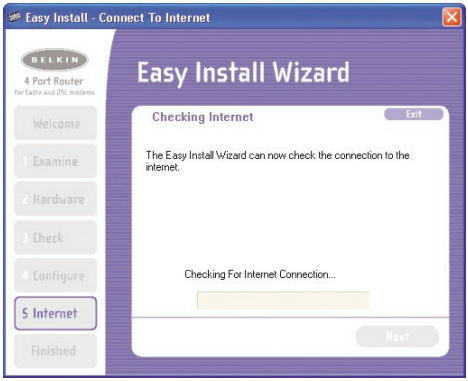
4.4 When configuration is complete, the Wizard will tell you "Router Setup Complete" and it will move to the next step.



4.5 Checking Internet

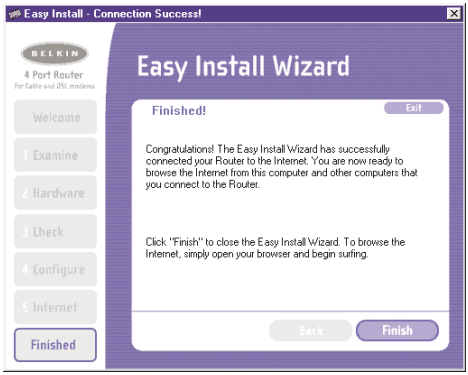
The Wizard will now check for an Internet connection. This can take a few minutes. The Wizard may not detect a connection right away. If not, it will retry a number of times. The "Connected" light on the front panel of the Router will flash during this time. Please be patient through this process. If at the end of this process the Wizard cannot connect to the

Internet, use the Troubleshooting button or refer to the Troubleshooting section of this guide to obtain help about how to correct the problem.



4.6 Finished

When the Internet connection is complete, the Wizard will tell you that you are finished. The "Connected" LED on the front of the Router will be solid GREEN, indicating that the Router is now connected to the Internet.



Your Router is now connected to the Internet. Now you can begin surfing the Internet by opening your browser and going to your favorite web page.

Congratulations! You have finished installing your new Belkin Router. You are ready to set up the other computers in your home. You can also add computers to your Router any time you want. Simply follow step 5 to learn how to add more computers.

Step 5: Adding Other Computers to your Network Using the Easy Install Wizard

If you have other computers in your home that are already equipped with a wired or wireless network adapter, you can use the Easy Install Wizard to set up those computers to connect to your Router. If you are adding a Belkin wired or wireless network adapter to your other computers, install the adapter per the instructions for the adapter. When the installation of the adapter is finished, your computer will be set up to connect to the Router. You do not need to use the Easy Install Wizard to set up the computer.

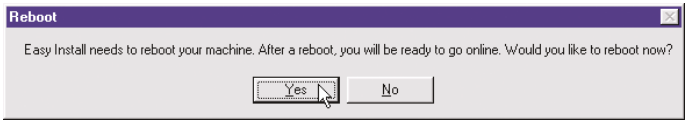
For Computers Already Equipped with a Wired or Wireless Network Adapter

5.1 For wired computers, connect an Ethernet cable between the computer you want to add to the network and the Router. For wireless-equipped computers, make sure your wireless adapter is installed and working. Set your wireless adapter to connect to a wireless network SSID named "WLAN" or "ANY". In many cases you will find that you do not have to make any changes. Refer to the documentation of your wireless network adapter for information on making this change. Go to the next step.

5.2 Insert the CD into your CD-ROM drive. The Easy Installation Wizard screen will automatically pop-up on your screen within 15 seconds. If it does not, select your CD-ROM drive and double-click on the file named "Setup" on the CD-ROM.

5.3 Click "Add computers" .

5.4 The Wizard will make the changes needed to add your computer to the network. When finished, it will prompt to reboot your computer. Click “Yes”.



5.5 When your computer reboots, your computer will be connected to the network. To begin surfing the Internet, open your browser and go to your favorite web page.

You are finished adding the computer to the network. To add more computers, repeat this process on each computer you wish to add.

ALTERNATE SETUP METHOD

The Advanced User Interface is a web-based tool that you can use to set up the Router if you don't want to use the Easy Install Wizard. You can also use it to manage advanced functions of the Router. From the Advanced User Interface, you can perform the following tasks:

- View the Router's current settings and status.
- Configure the Router to connect to your ISP with the settings that they provided you change the current network settings such as the Internal IP address, the IP address pool, DHCP settings and more.
- Set the Router's firewall to work with specific applications (port forwarding).
- Set up security features such as client restrictions and MAC address filtering.
- Enable the DMZ feature for a single computer on your network.
- Change the Router's internal password.
- Enable/Disable UPnP (Universal Plug-and-Play).
- Reset the Router.
- Back up your configuration settings.
- Reset the Router's default settings.
- Update the Router's firmware.

Alternative Method Step 1: *Connecting your Gateway/Router*

1.1 Turn off the power to your modem by unplugging the power supply from the modem.

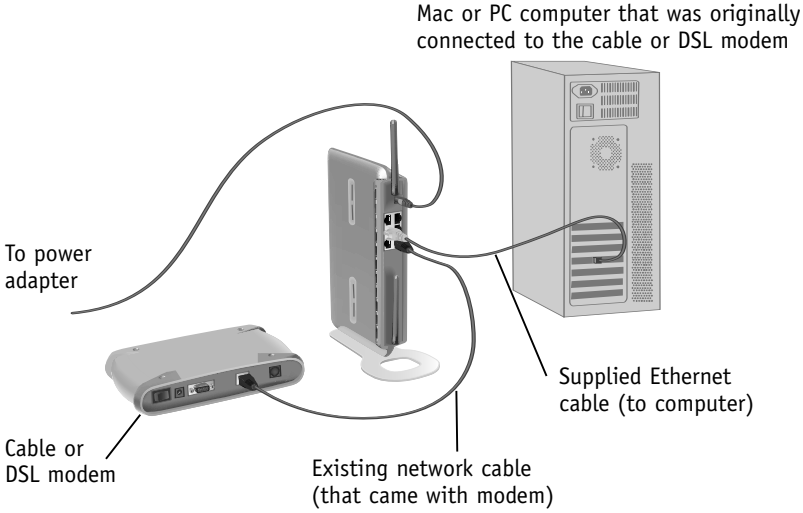
1.2 Locate the network cable that is connected between your modem and your computer and unplug it from your computer, leaving the other end connected to your modem.

1.3 Plug the loose end of the cable you just unplugged into the port on the back of the Router labeled "Internet/WAN".

1.4 Connect a new network cable (not included) from the back of the computer to one of the ports labeled "1–4". Note: It does not matter which numbered port you choose.

1.5 Turn your cable or DSL modem on by reconnecting the power supply to the modem.

1.6 Before plugging the power cord into the Router, plug the cord into the wall, then plug the cord into the Router's power jack.



1.7 Verify that your modem is connected to the Router by checking the lights on the front of the Router. The green light labeled "WAN" should be ON if your modem is connected correctly to the Router. If it is not, recheck your connections.

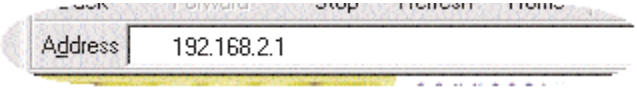
1.8 Verify that your computer is connected properly to the Router by checking the lights labeled "LAN 1,2,3,4". The light which corresponds to the numbered port connected to your computer should be ON, if your computer is connected properly. If it is not, recheck your connections.

Alternative Method Step 2: *Set your Computer's Network Settings to Work with a DHCP Server*

See the section in this manual called "Manually Configuring Network Settings" for directions.

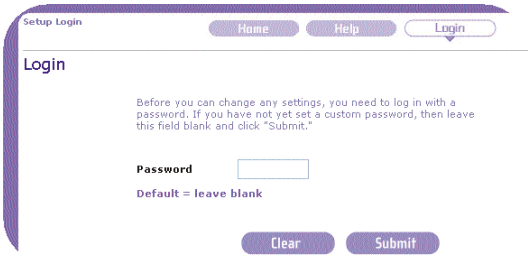
Alternative Method Step 3: *Configuring the Router Using the Web-Based Advanced User Interface*

Using your Internet browser, you can access the Router's Web-Based Advanced User Interface. In your browser, type "192.168.2.1" (do not type in anything else such as "http://" or "www"). Then press the "Enter" key.



Logging into the Router

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

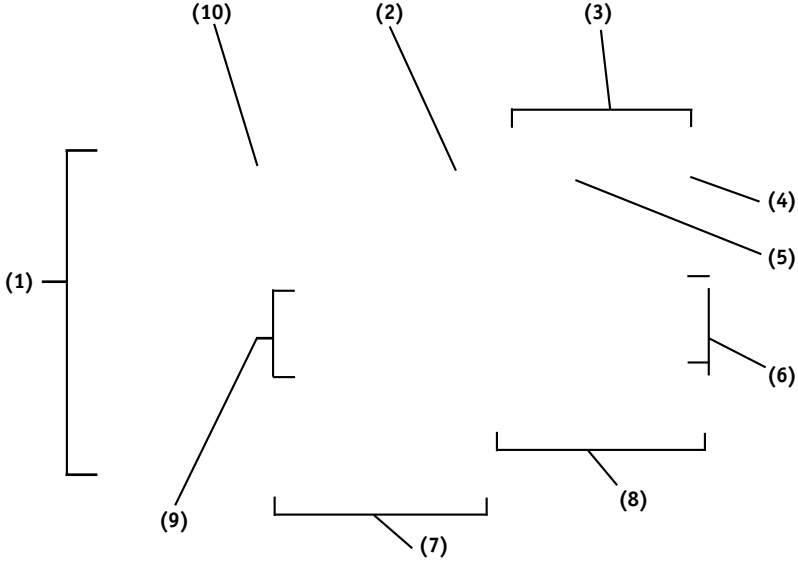


Logging out of the Router

One computer at a time can log in to the Router for the purposes of making changes to the settings of the Router. Once a user has logged in to make changes, there are two ways that the computer can be logged out. Clicking the "Logout" button will log the computer out. The second method is automatic. The login will time out after a specified period of time. The default login time out is 10 minutes. This can be changed from 1 to 99 minutes. For more information, see the section in this manual titled "Changing the Login Timeout Setting".

Understanding the Web-Based Advanced User Interface

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



1. **Quick-Navigation Links**
   You can go directly to any of the Router's advanced UI pages by clicking directly on these links. The links are divided into logical categories and grouped by tabs to make finding a particular setting easier to find. Clicking on the purple header of each tab will show you a short description of the tab's function.
2. **Home Button**
   The home button is available in every page of the UI. Pressing this button will take you back to the home page.
3. **Internet Status Indicator**
   This indicator is visible in all pages of the Router, indicating the connection status of the Router. When the indicator says "connection OK" in GREEN, the Router is connected to the Internet. When the Router is not connected to the Internet, the indicator will read "no connection" in

RED. The indicator is automatically updated when you make changes to the settings of the Router.

4. **Login/Logout Button**
   This button enables you to log in and out of the Router with the press of one button. When you are logged into the Router, this button will change to read “Logout”. Logging into the Router will take you to a separate login page where you will need to enter a password. When you are logged in to the Router, you can make changes to the settings. When you are finished making changes, you can log out of the Router by clicking the “Logout” button. For more information about logging into the Router, see the section called “Logging into the Router”.

5. **Help Button**
   The “Help” button gives you access to the Router’s help pages. Help is also available on many pages by clicking “more info” next to certain sections of each page.

6. **LAN Settings**
   Shows you the settings of the Local Area Network (LAN) side of the Router. Changes can be made to the settings by clicking on any one of the links (IP Address, Subnet Mask, DHCP Server) or by clicking the “LAN” Quick Navigation link on the left side of the screen.

7. **Features**
   Shows the status of the Router’s NAT, firewall, and wireless features. Changes can be made to the settings by clicking on any one of the links or by clicking the “Quick Navigation” links on the left side of the screen.

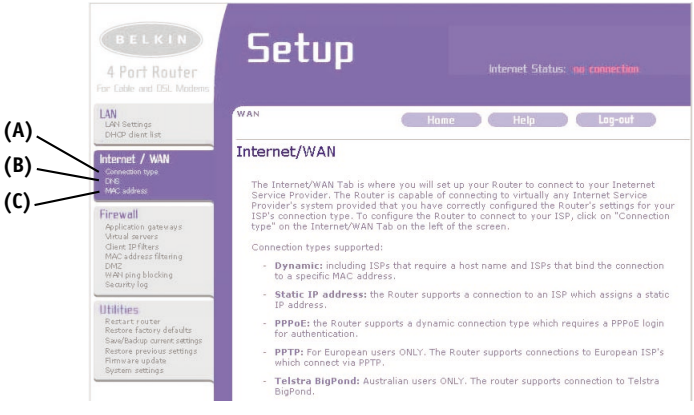
8. **Internet Settings**
   Shows the settings of the Internet/WAN side of the Router that connects to the Internet. Changes to any of these settings can be made by clicking on the links or by clicking on the “Internet/WAN” Quick Navigation link on the left side of the screen.

9. **Version Info**
   Shows the firmware version, boot-code version, hardware version, and serial number of the Router.

10. **Page Name**
    The page you are on can be identified by this name. This manual will sometimes refer to pages by name. For instance “LAN > LAN Settings” refers to the “LAN Settings” page.

Alternative Method Step 4: *Configuring your Router for Connection to your ISP*

The "Internet/WAN" tab is where you will set up your Router to connect to your Internet Service Provider. The Router is capable of connecting to virtually any Internet Service Provider's system provided you have correctly configured the Router's settings for your ISP's connection type. Your ISP connection settings are provided to you by your ISP. To configure the Router with the settings that your ISP gave you, click "Connection Type" **(A)** on the left side of the screen. Select the connection type you use. If your ISP gave you DNS settings, clicking "DNS" **(B)** allows you to enter DNS address entries for ISPs that require specific settings. Clicking "MAC address" **(C)** will let you clone your computer's MAC address or type in a specific WAN MAC address, if required by your ISP. When you have finished making settings, the "Internet Status" indicator will read "connection OK" if your Router is set up properly.

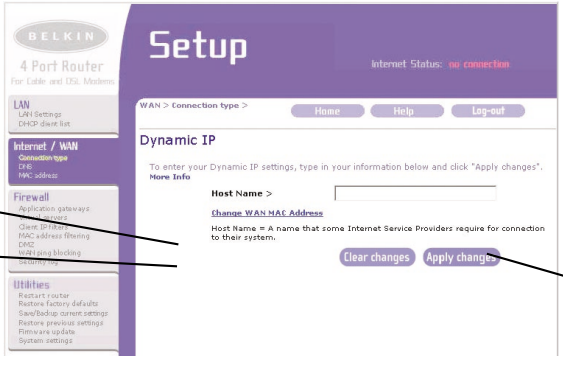


Setting your Connection Type
From the connection type page, you can select the type of connection you use. Select the type of connection you use by clicking the radio button **(1)** next to your connection type and then clicking "Next" **(2)**.

(1)

(2)

Setting your ISP Connection Type to Dynamic IP
A dynamic connection type is the most common connection type found with cable modems. Setting the connection type to "dynamic" in many cases is enough to complete the connection to your ISP. Some dynamic connection types may require a host name. You can enter your host name in the space provided if you were assigned one. Your host name is assigned by your ISP. Some dynamic connections may require that you clone the MAC address of the PC that was originally connected to the modem.



(1)

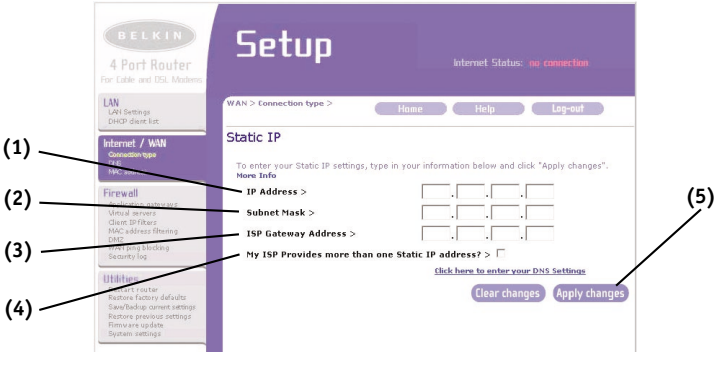
(2)

(3)

1. **Host Name**
   This space is provided to enter a host name that needs to be visible to your ISP. Enter your host name here and click “Apply Changes” (3). If your ISP did not assign you a host name, or you are not sure, leave this blank.
2. **Change WAN MAC Address**
   If your ISP requires a specific MAC address to connect to the service, you can enter a specific MAC address or clone the current computer’s MAC address through this link.

Setting your ISP Connection Type to Static IP

A static IP address connection type is less common than other connection types. If your ISP uses static IP addressing, you will need your IP address, subnet mask, and ISP gateway address. This information is available from your ISP or on the paperwork that your ISP left with you. Type in your information, then click “Apply Changes” **(5)**. After you apply the changes, the Internet Status indicator will read “connection OK” if your Router is set up properly.



1. **IP Address**
   Provided by your ISP. Enter your IP address here.
2. **Subnet Mask**
   Provided by your ISP. Enter your subnet mask here.
3. **ISP Gateway Address**
   Provided by your ISP. Enter the ISP gateway address here.
4. **My ISP Provides More Than one Static IP Address**
   If your ISP assigns you more than one static IP address, your Router is

capable of handling up to five static WAN IP addresses. Select "My ISP provides more than one static IP address" and enter your additional addresses.

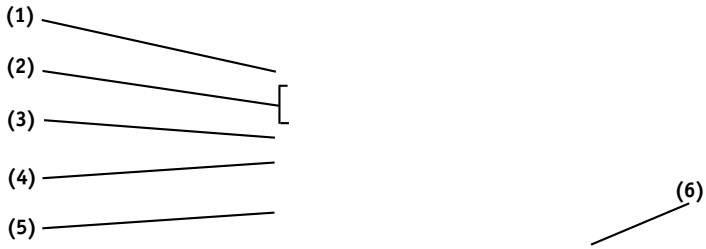
Setting your ISP Connection Type to Point-to-Point Protocol over Ethernet (PPPoE)

Most DSL providers use PPPoE as the connection type. If you use a DSL modem to connect to the Internet, your ISP may use PPPoE to log you into the service. If you have an Internet connection in your home or small office that doesn't require a modem, you may also use PPPoE.

Your connection type is PPPoE if:

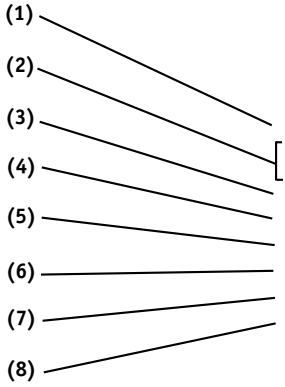
1. Your ISP gave you a user name and password that is required to connect to the Internet;
2. Your ISP gave you software such as WinPOET, Enternet300 that you use to connect to the Internet; or,
3. You must double-click on a desktop icon other than your browser to get on the Internet.

To set the Router to use PPPoE, type in your user name and password in the spaces provided. If you do not have a service name or do not know it, leave the "Service Name" field blank. After you have typed in your information, click "Apply Changes" **(6)**. After you apply the changes, the Internet Status indicator will read "connection OK" if your Router is set up properly.



1. **User Name**
   This space is provided to type in your user name that was assigned by your ISP.
2. **Password**
   Type in your password and retype it into the "Retype Password" box to confirm it.
3. **Service Name**
   A service name is rarely required by an ISP. If you are not sure if your ISP requires a service name, leave this blank.
4. **MTU**
   The MTU setting should never be changed unless your ISP gives you a specific MTU setting. Making changes to the MTU setting can cause problems with your Internet connection including disconnection from the Internet, slow Internet access, and problems with Internet applications working properly.
5. **Disconnect after X....**
   The "Disconnect" 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.

Setting your ISP Connection Type to Point-to-Point Tunneling Protocol (PPTP) *[European Countries Only]*. Some ISPs require a connection using PPTP protocol, a type of connection most common in European countries. This sets up a direct connection to the ISP's system. Type in the information provided by your ISP in the space provided. When you have finished, click "Apply Changes". After you apply the changes, the Internet Status indicator will read "connection OK" if your Router is set up properly.



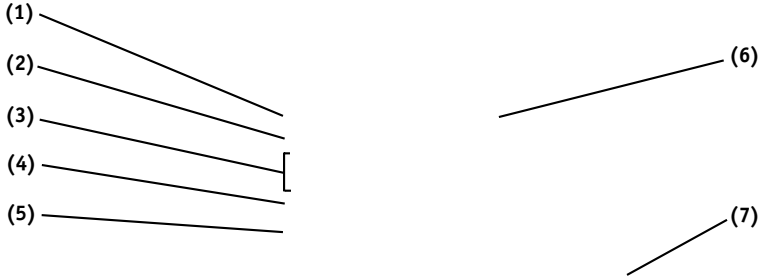
1. **PPTP Account**
   Provided by your ISP. Enter your PPTP account name here.
2. **PPTP Password**
   Type in your password and retype it into the “Retype Password” box to confirm it.
3. **Host Name**
   Provided by your ISP. Enter your host name here.
4. **Service IP Address**
   Provided by your ISP. Enter your service IP address here.
5. **My IP Address**
   Provided by your ISP. Enter the IP address here.
6. **My Subnet Mask**
   Provided by your ISP. Enter the IP address here.
7. **Connection ID (optional)**
   Provided by your ISP. If your ISP did not give you a connection ID, leave this blank.

8. Disconnect after X....

The Disconnect 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.

Setting your Connection Type if you are a Telstra Big Pond User

[Australia Only] Your user name and password are provided to you by Telstra Big Pond. Enter this information below. Choosing your state from the drop-down menu **(6)** will automatically fill in your login server IP address. If your login server address is different than one provided here, you may manually enter the login server IP address by placing a check in the box next to "Manually Enter Server IP Address" **(4)** and type in the address next to "Login Server" **(5)**. When you have entered all of your information, click "Apply Changes" **(7)**. After you apply the changes, the Internet Status indicator will read "connection OK" if your Router is set up properly.



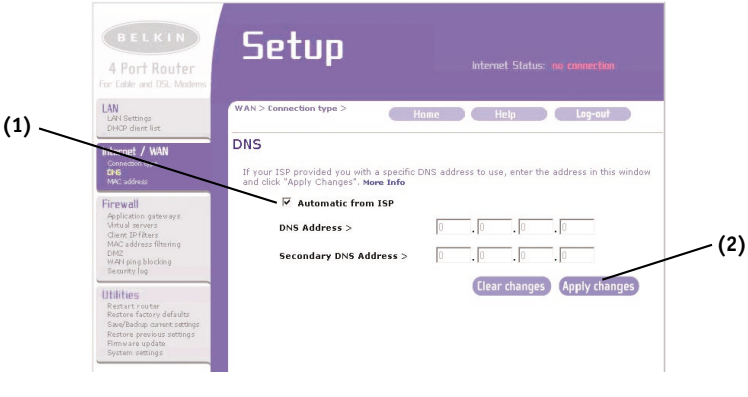
1. Select your State

Select your state from the drop-down menu **(6)**. The "Login Server" box will automatically be filled in with an IP address. If for some reason this address does not match the address that Telstra has given you, you can manually enter the login server address. See "Manually Enter Server IP Address" **(4)**.

2. **User Name**
   Provided by your ISP. Type in your user name here.
3. **Password**
   Type in your password and retype it into the “Retype Password” box to confirm it.
4. **Manually Enter Server IP Address**
   If your login server IP address is not available in the “Select Your State” drop-down menu (6), you may manually enter the login server IP address by placing a check in the box next to “Manually Enter Server IP Address” and type in the address next to “Login Server” (5).

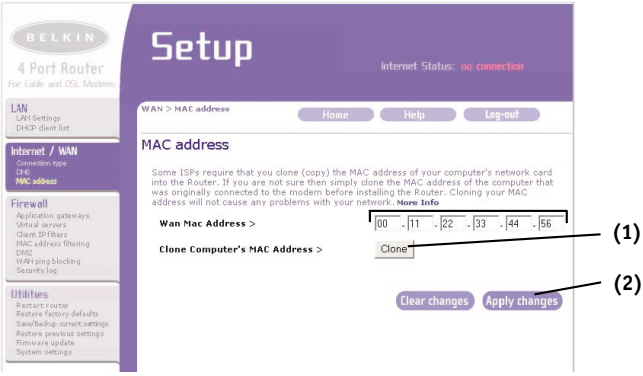
Setting Custom Domain Name Server (DNS) Settings

A “Domain Name Server” is a server located on the Internet that translates Universal Resource Links (URLs) like “www.belkin.com” to IP addresses. Many ISPs do not require you to enter this information into the Router. The “Automatic from ISP” box **(1)** should be checked if your ISP did not give you a specific DNS address. 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. Leave the “Automatic from ISP” box checked. To enter the DNS address settings, uncheck the “Automatic from ISP” box and enter your DNS entries in the spaces provided. Click “Apply Changes” **(2)** to save the settings.



Configuring your WAN Media Access Controller (MAC) Address

All network components including cards, adapters, and routers, have a unique "serial number" called a MAC address. Your ISP may record the MAC address of your computer's adapter and only let that particular computer connect to the Internet service. When you install the Router, its own MAC address will be "seen" by the ISP and may cause the connection not to work. Belkin has provided the ability to clone (copy) the MAC address of the computer into the Router. This MAC address, in turn, will be seen by the ISP's system as the original MAC address and will allow the connection to work. If you are not sure whether your ISP needs to see the original MAC address, simply clone the MAC address of the computer that was originally connected to the modem. Cloning the address will not cause any problems with your network.



Cloning your MAC Address

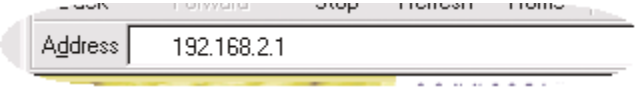
To clone your MAC address, make sure that you are using the computer that was ORIGINALLY CONNECTED to your modem before the Router was installed. Click the "Clone" button **(1)**. Click "Apply Changes" **(2)**. Your MAC address is now cloned to the Router.

Entering a Specific MAC Address

In certain circumstances you may need a specific WAN MAC address. You can manually enter one in the "MAC Address" page. Type in a MAC address in the spaces provided and click "Apply Changes" to save the changes. The Router's WAN MAC address will now be changed to the MAC address you specified

Using the Web-Based Advanced User Interface

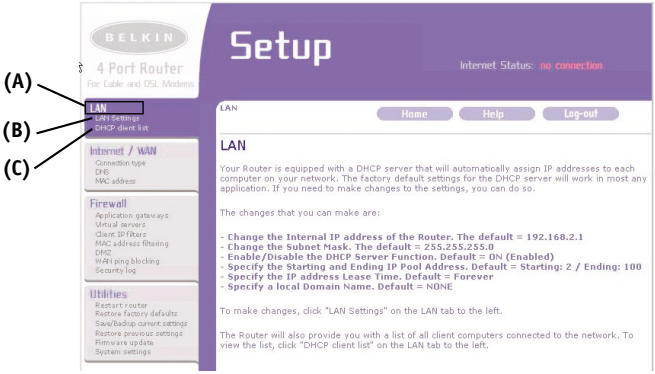
Using your Internet browser, you can access the Router's Web-Based Advanced User Interface. In your browser, type "192.168.2.1" (do not type in anything else such as "http://" or "www") then press the "Enter" key.



You will see the Router's home page in your browser window.

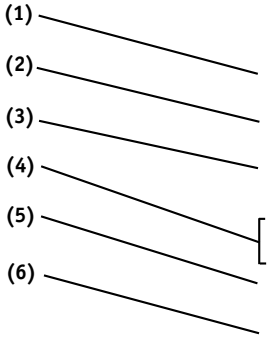
Viewing the LAN Settings

Clicking on the header of the LAN tab **(A)** will take you to the LAN tab's header page. A quick description of the functions can be found here. To view the settings or make changes to any of the LAN settings, click on "LAN Settings" **(B)** or to view the list of connected computers, click on "DHCP client list" **(C)**.



Changing LAN Settings

All settings for the internal LAN setup of the Router can be viewed and changed here.

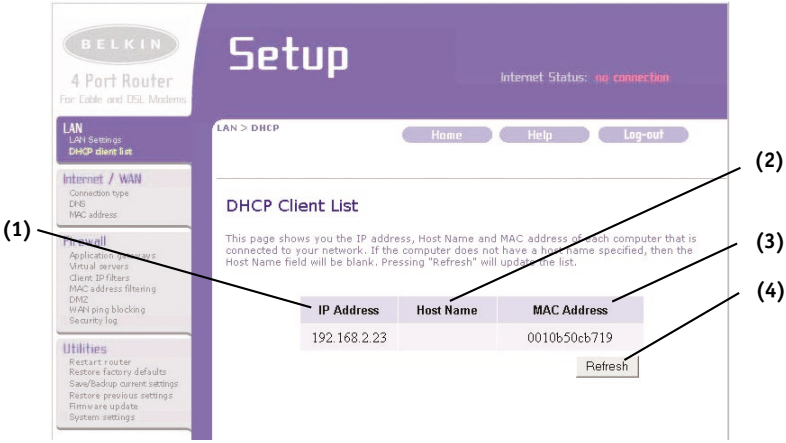


1. **IP Address**
   The "IP address" is the internal IP address of the Router. The default IP address is "192.168.2.1". To access the advanced setup interface, type this IP address into the address bar of your browser. This address can be changed if needed. To change the IP address, type in the new 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)
2. **Subnet Mask**
   There is no need to change the subnet mask. This is a unique, advanced feature of your Belkin Router. It is possible to change the subnet mask if necessary, however, do NOT make changes to the subnet mask unless you have a specific reason to do so. The default setting is "255.255.255.0".

3. **DHCP Server**
   The DHCP server function makes setting up a network very easy by assigning IP addresses to each computer on the network automatically. The default setting is “On”. The DHCP server can be turned OFF if necessary, however, in order to do so you must manually set a static IP address for each computer on your network. To turn off the DHCP server, select “Off” and click “Apply Changes”.
4. **IP Pool**
   The range of IP addresses set aside for dynamic assignment to the computers on your network. The default is 2–100 (99 computers). If you want to change this number, you can do so by entering a new starting and ending IP address and clicking on “Apply Changes”. The DHCP server can assign 100 IP addresses automatically. This means that you cannot specify an IP address pool larger than 100 computers. For example, starting at 50 means you have to end at 150 or lower so as not to exceed the 100-client limit. The starting IP address must be lower in number than the ending IP address.
5. **Lease Time**
   The length of time the DHCP server will reserve the IP address for each computer. We recommend that you leave the lease time set to “Forever”. The default setting is “Forever”, meaning that any time a computer is assigned an IP address by the DHCP server, the IP address will not change for that particular computer. Setting lease times for shorter intervals such as one day or one hour frees IP addresses after the specified period of time. This also means that a particular computer’s IP address may change over time. If you have set any of the other advanced features of the Router such as DMZ or client IP filters, these are dependent on the IP address. For this reason, you will not want the IP address to change.
6. **Local Domain Name**
   The default setting is “Belkin”. You can set a local domain name (network name) for your network. There is no need to change this setting unless you have a specific advanced need to do so. You can name the network anything you want such as “MY NETWORK”.

Viewing the DHCP Client List Page

You can view a list of the computers (known as clients), which are connected to your network. You are able to view the IP address **(1)** of the computer, the host name **(2)** (if the computer has been assigned one), and the MAC address **(3)** of the computer's network interface card (NIC). Pressing the "Refresh" **(4)** button will update the list. If there have been any changes, the list will be updated.

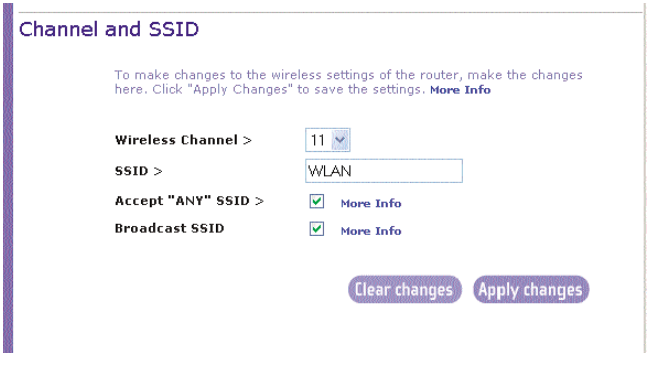


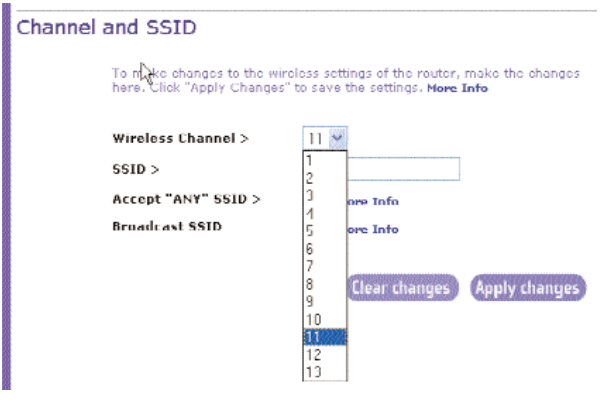
Configuring the Wireless Network Settings

The Wireless tab lets you make changes to the wireless network settings. From this tab you can make changes to the wireless network name (SSID), operating channel, encryption security settings, and configure the Router to be used as an access point.

Changing the Wireless Network Name (SSID)

To identify your wireless network, a name called the SSID (Service Set Identifier) is used. The default SSID of the Router is "WLAN". You can change this to anything you want to or you can leave it unchanged. If there are other wireless networks operating in your area, you will want to make sure that your SSID is unique (does not match that of another wireless network in the area). To change the SSID, type in the SSID that you want to use and click "Apply Changes". The change is immediate. If you make a change to the SSID, your wireless-equipped computers may also need to be reconfigured to connect to your new network name. Refer to the documentation of your wireless network adapter for information on making this change.



Changing the Wireless Channel

There are a number of operating channels you can choose from. In the United States, there are 11 channels. In the United Kingdom and most of Europe, there are 13 channels. In a small number of other countries, there are other channel requirements. Your Router is configured to operate on the proper channels for the country you reside in. The default channel is 11. The channel can be changed if needed. If there are other wireless networks operating in your area, your network should be set to operate on a channel that is different than the other wireless networks. For best performance, use a channel that is at least five channels away from the other wireless network. For instance, if another network is operating on channel 11, then set your network to channel 6 or below. To change the channel, select the channel from the drop-down list. Click “Apply Changes”. The change is immediate.