BELKIN®

N1 Wireless Router

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BELKIN

| N1 Wireless Router

N1 Wireless Router

User Manual

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Table of Contents

Introduction

Thank you for purchasing the Belkin N1 Wireless Router (the Router). Following are two short sections—the first discusses the benefits of home networking, and the other outlines best practices that maximize your wireless home network range and performance. Please be sure to read through this User Manual completely, and pay special attention to the section entitled "Placement of your N1 Wireless Router" on the next page. By following our simple setup instructions you will be able to use your Belkin Home Network to:

• Share one high-speed Internet connection with all the computers in your home

• Share resources, such as files and hard drives among all the connected computers in your home

• Share a single printer with the entire family

• Share documents, music, video, and digital pictures

• Store, retrieve, and copy files from one computer to another

• Simultaneously play games online, check Internet email, and chat

Advantages of a Wireless Network

Here are some of the advantages of setting up a Belkin Wireless Network:

• **Mobility –** you'll no longer need a dedicated "computer room"—now you can work on a networked laptop or desktop computer anywhere within your wireless range

• **Easy installation –** Belkin's Easy Installation Wizard makes setup simple

• **Flexibility –** set up and access printers, computers, and other networking devices from anywhere in your home

• **Easy expansion –** the wide range of Belkin networking products let you expand your network to include devices such as printers and gaming consoles

• **No cabling required –** you can spare the expense and hassle of retrofitting Ethernet cabling throughout the home or office

• **Widespread industry acceptance –** choose from a wide range of interoperable networking products

Introduction

Revolutionary N1 Wireless Technology with MIMO (N1 MIMO)
Your Belkin N1 Wireless Router uses a new smart-antenna technology called Multiple Input Multiple Output (MIMO). N1 MIMO complies with the IEEE draft 802.11n specification. It increases speed, range, reliability, and spectral efficiency for wireless networking systems.

The element that makes Belkin's N1 MIMO technology different from a conventional radio is the use of multiple antennas and two simultaneous data streams to deliver wireless transfers around your home or office. A conventional radio uses one antenna to transmit a data stream. Belkin's N1 MIMO, on the other hand, uses three antennas. This design helps combat distortion and interference. Belkin's N1 MIMO is multidimensional. It builds on one-dimensional smart-antenna technology by simultaneously transmitting two data streams through the same channel, which increases wireless capacity.

Another element that enhances Belkin's N1 MIMO is the use of aggregation as specified in the draft 802.11n specification. By shortening the space between packets and combining multiple smaller packets into one larger packet, Belkin's N1 MIMO can transmit more data through available bandwidth.

Think of conventional radio transmission as a two-lane highway. The speed limit governs the maximum allowable flow of traffic through that lane. Compared with conventional radios, one-dimensional smart antenna systems help move traffic through that lane faster and more reliably—analogous to a four-lane road on which traffic consistently moves at a rate closer to the speed limit. Belkin's N1 MIMO helps traffic move at the speed limit and opens more lanes—to become the superhighway in this example. The rate of traffic flow is multiplied by the number of lanes that are opened.

Introduction

Placement of your N1 Wireless Router

Important Factors for Placement and Setup

Your wireless connection will be stronger the closer your computer is to your Router. Typical indoor operating range for wireless devices is between 100 and 200 feet.

In the same way, your wireless connection and performance will degrade somewhat as the distance between your Router and connected devices increases. This may or may not be noticeable to you. As you move further from your Router, connection speed may decrease. Factors that can weaken signals simply by getting in the way of your network's radio waves are metal appliances or obstructions, and walls.

If you have concerns about your network's performance that might be related to range or obstruction factors, try moving the computer to a position between five and 10 feet from the Router in order to see if distance is the problem. If difficulties persist even at close range, please contact Belkin Technical Support.

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

1. **Router Placement**

   Place your Router, the central connection point of your network, as close as possible to the center of your wireless network devices.

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

   • Ensure that your Router's networking antennas are parallel to each other, and are positioned vertically (toward the ceiling). If your Router itself is positioned vertically, point the antennas as much as possible in an upward direction.

   • In multistory 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.

   • Try not to place the Router near a cordless 2.4GHz phone.

Introduction

2. **Avoid Obstacles and Interference**

    Avoid placing your Router near devices that may emit radio "noise," such as microwave ovens. Dense objects that can inhibit wireless communication include:

    • Refrigerators

    • Washers and/or dryers

    • Metal cabinets

    • Large aquariums

    • Metallic-based, UV-tinted windows

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

3. **Cordless Phones**

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

    • Try moving cordless phones away from your Router and your wireless-enabled computers.

    • Unplug and remove the battery from any cordless phone that operates on the 2.4GHz band (check manufacturer's information). If this fixes the problem, your phone may be interfering.

    • If your phone supports channel selection, change the channel on the phone to the farthest channel from your wireless network. For example, change the phone to channel 1 and move your Router to channel 11. See your phone's user manual for detailed instructions.

    • If necessary, consider switching to a 900MHz or 5GHz cordless phone.

4. **Choose the "Quietest" Channel for your Wireless Network**

    In locations where homes or offices are close together, such as apartment buildings or office complexes, there may be wireless networks nearby that can conflict with yours.

    Use the Site Survey capabilities found in the Wireless Utility of your wireless adapter to locate any other wireless networks that are available (see your wireless adapter's user manual), and move your Router and computers to a channel as far away from other networks as possible.

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

• For Belkin wireless networking products, use the detailed Site Survey and wireless channel information included with your wireless network card. See your network card's user guide for more information.

These guidelines should allow you to cover the maximum possible area with your Router. Should you need to cover an even wider area, we suggest the Belkin Wireless Range Extender/Access Point.

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

• Virtual Private Network (VPN) connections, often used to connect remotely to an office network

• The "Bring Your Own Access" program from America Online (AOL), which lets you use AOL through broadband provided by another cable or DSL service

• Most online banking websites

• Many commercial websites that require a user name and password to access your account

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

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

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

Introduction

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

US:	**877-736-5771**
	310-898-1100 ext. 2263
UK:	**0845 607 77 87**
Australia:	**1800 235 546**
New Zealand:	**0800 235 546**
Singapore:	**800 616 1790**
Europe:	**www.belkin.com/support**

Product Overview

Product Features

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 Belkin N1 Wireless Router an ideal solution for your home or small office network.

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, Linux®, Windows® 98, Me, NT®, 2000, XP, Vista™, and others. All that is needed is an Internet browser and a network adapter that supports TCP/IP (the standard language of the Internet).

Patent-Pending Network Status 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.

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.

Product Overview

Integrated 10/100 4-Port Switch
The Router has a built-in, four-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)
UPnP 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)
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.

Setup Assistant
The Setup Assistant, second generation of Belkin's renowned 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: Setup Assistant software is compatible with Windows 2000 and XP. If you are using another operating system, the Router can be set up using the Alternate Setup Method described in this User Manual (see page 23).

Product Overview

Integrated N1 Wireless Access Point
N1 MIMO is an exciting new wireless technology based on the draft
IEEE 802.11n specification. It employs MIMO (Multiple Input Multiple
Output) smart-antenna technology that achieves data rates of up to
300Mbps.* Actual throughput is typically lower than the connected
data rate and will vary depending on your networking environment.

****NOTE**: The standard transmission rate—300Mbps—is the physical
data rate. Actual data throughput will be lower.

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 Advanced User Interface
and you can control access to your network.

Knowing your Router

Package Contents

- Belkin N1 Wireless Router
- Quick Installation Guide
- Belkin Setup Assistant Software CD
- RJ45 Ethernet Networking Cable
- Power Supply
- User Manual
- Network Status Display Guide
- Wireless Security Setup Guide

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
- RJ45 Ethernet networking cable
- Internet browser

Setup Assistant Software System Requirements

- A PC running Windows® 2000, XP, or Vista™
- Minimum 500MHz processor and 128MB RAM
- Internet browser

Knowing your Router

The Router has been designed to be placed on a desktop. All of the cables exit from the rear of the Router for better organization and utility. The Network Status Display is easily visible on the FRONT of the Router to provide you with information about network activity and status. See the Network Status Display Guide for more detailed information.

(A)   (B)   (C)   (D/E)   (F)   (G)

BELKIN
N1 Wireless Router
security   wireless   wired   router   modem   internet
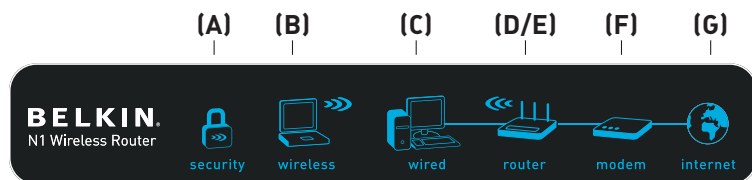
A.   Wireless Security

OFF	Wireless security is off
Solid Blue	Wireless security is on

B.   Wireless-Computer Status

OFF	Wireless computer is not present
Solid Blue	Wireless computer is connected to the Router
Blinking Amber	Problem with wireless computer connecting properly to the Router

C.   Wired-Computer Status

OFF	Wired computer is not present
Solid Blue	Wired computer is connected to the Router
Blinking Amber	Problem with wired computer connecting properly to the Router

D. Router/Power Status
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 "router" icon blinks. When the Router has completely booted up, the "router" icon becomes a solid light, indicating the Router is ready for use.

OFF	Router is off
Blinking Blue	Router is booting up
Solid Blue	Router is on and ready

E. Wireless Status

OFF	Wireless is off
Solid Blue	Wireless is on

F. Modem Status
This icon lights in blue to indicate that your modem is connected properly to the Router. It turns amber when problem is detected.

OFF	Router is NOT connected to modem
Solid Blue	Router is connected to modem and functioning properly
Blinking Amber	Problem with modem

G. Internet Status
This unique icon 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 amber, the Router is attempting to connect to the Internet. When the light is solid blue, the Router is connected to the Internet. When using the "Disconnect after x minutes" feature, this icon becomes extremely useful in monitoring the status of your Router's connection.

OFF	Router is NOT connected to the Internet
Blinking Amber	Router is attempting to connect to the Internet
Solid Blue	Router is connected to the Internet

(L)   **(H)**   **(I) (J)**   **(K)**
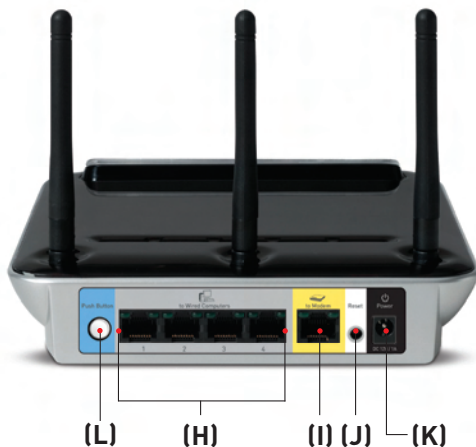
H.   Connections to Wired Computers **- Gray**

Connect your wired (non-wireless) computers to these ports. These ports are RJ45, 10/100 auto-negotiation, auto-uplinking ports for standard UTP category 5 or 6 Ethernet cable. The ports are labeled 1 through 4, with onboard LEDs on the connectors.

I.   Connection to Modem **- Yellow**

This port is for connection to your cable or DSL modem. Use the cable that was provided with the modem to connect the modem to this port. Use of a cable other than the one supplied with the cable modem may not work properly.

J.   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.

i.   Resetting 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.

ii.   Restoring the Factory Defaults
Press and hold the "Reset" button for at least 10 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.

K.   Power Jack – Black
Connect the included 12V/1A DC power supply to this jack.

L.   Push Button
This button is set aside for future upgradeable features. Please check for the latest firmware updates at www.belkin.com/support.

Connecting and Configuring your Router

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

• Belkin N1 Wireless Router

• RJ45 Ethernet Networking Cable

• Power Supply

• Belkin Setup Assistant Software CD

• User Manual

• Network Status Display Guide

• Wireless Security Setup Guide

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**

Setup Assistant

Belkin has provided our Setup Assistant 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 Setup Assistant requires that your Windows 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 "Alternate Setup Method" section of this User Manual to configure your Router. Additionally, if you are using an operating system other than Windows 2000 or XP, you must set up the Router using the "Alternate Setup Method" section of this User Manual.

Connecting and Configuring your Router

| Step 1 | Hardware Connections – Follow the Quick Installation Guide (QIG) |
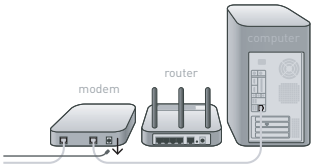
A. Unplug your modem's power cord. Put the Router next to the modem. Raise the Router's antennas.
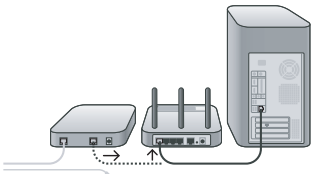
**B.** Locate the networking cable that connects your modem and computer. Unplug that cable from your modem, and plug it into any gray port on the back of the Router.
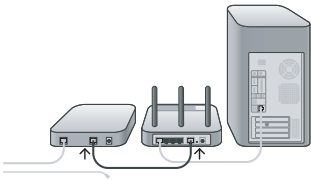
C. Find your new networking cable (included in the box with your Router) and connect it to the yellow port on the back of the Router. Connect the other end to your modem, in the port that's now free.
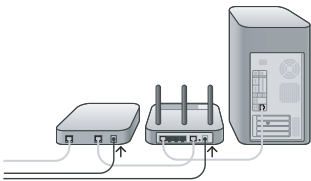
D. Plug in your modem's power cord. Wait 60 seconds for the modem to start up. Plug the Router's power supply into the black port on the back. Plug the other end into the wall outlet.
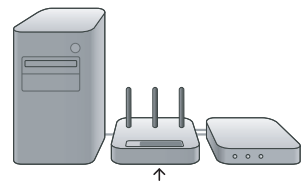
E. Wait 20 seconds for the Router to start up. Look at the display on the front of the Router. Make sure the "Wired" and "Router" icons are lit up in blue. If they are not, recheck your connections.

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Connecting and Configuring your Router

| Step 2 | Set Up the Router – Run the Setup Assistant Software |

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

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

B. Insert the CD into your computer. The Setup Assistant will automatically appear on your computer's screen within 15 seconds. Click on "Go" to run the Setup Assistant. Follow the instructions there.

IMPORTANT: Run the Setup Assistant from the computer that is directly connected to the Router from Step 1 – B.

Note for Windows Users: If the Setup Assistant does not start up automatically, select your CD-ROM drive from "My Computer" and double-click on the file named "SetupAssistant" to start the Setup Assistant.

Connecting and Configuring your Router

Confirmation Screen

Verify that you have completed all QIG steps by checking the box to the right of the arrow. Click "Next" to continue.
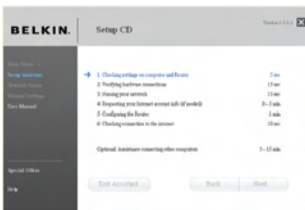
Progress Screen

Setup Assistant will show you a progress screen each time a step in the setup has been completed.
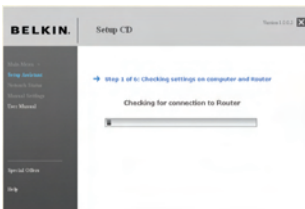
1.1 Checking Settings

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

1.2 Verifying Hardware Connections
The Setup Assistant will now verify your hardware connection.

1.3 Naming your Wireless Network
The Setup Assistant will display the default wireless network name or Service Set Identifier (SSID). This is the name of your wireless network to which your computers or devices with wireless network adapters will connect. You can either use the default or change it to something unique. Write down this name for future reference. Click "Next" to continue.

1.4 Requesting Internet Account Info (if needed)

If your Internet account requires a login and password, you will be prompted with a screen similar to the one on the left. Select your country or ISP from the drop-down boxes.

1.5 Configuring the Router

The Setup Assistant will now configure your Router by sending data to the Router and restarting it. Wait for the on-screen instructions.

Note: Do not disconnect any cable or power off the Router while the Router is rebooting. Doing so will render your Router inoperable.
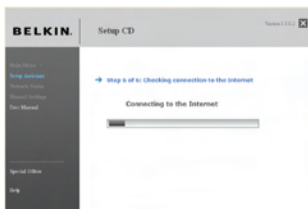
1.6 Checking Internet Connection
We are almost done. The Setup Assistant will now check your connection to the Internet.

Congratulations
You have finished installing your new Belkin Router. You will see the Congratulations screen when your Router can connect to the Internet. You can begin surfing by opening your browser and going to any website.

You can use the Setup Assistant to set up your other wired and wireless computers to connect to the Internet by clicking "Next". If you decide to add computers to your Router later, select "Exit the Assistant" and then click "Next".

Troubleshooting
If the Setup Assistant is not able to connect to the Internet, you will see this screen. Follow the on-screen instructions to go through the troubleshooting steps.

Connecting and Configuring your Router
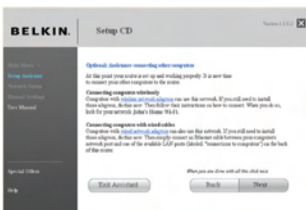
1.7 Optional: Assistance Connecting Other Computers
This optional step will help you to connect additional wired and wireless computers to your network. Follow the on-screen instructions.

Congratulations
Once you have verified that your other wired and wireless computers are properly connected, your network is set up and working. You can now surf the Internet. Click "Next" to take you back to the main menu.

Alternate Setup Method

Step 1	**Hardware Connections – Follow the Quick Installation Guide (QIG)**

See the QIG or Step 1: Hardware Connections from the previous section.

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

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

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.

Address | 192.168.2.1

Alternate Setup Method

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.
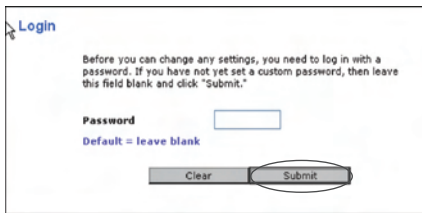
Logging out of the Router

One computer at a time can log into 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 one to 99 minutes. For more information, see the section in this manual titled "Changing the Login Time-Out 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.

Alternate Setup Method
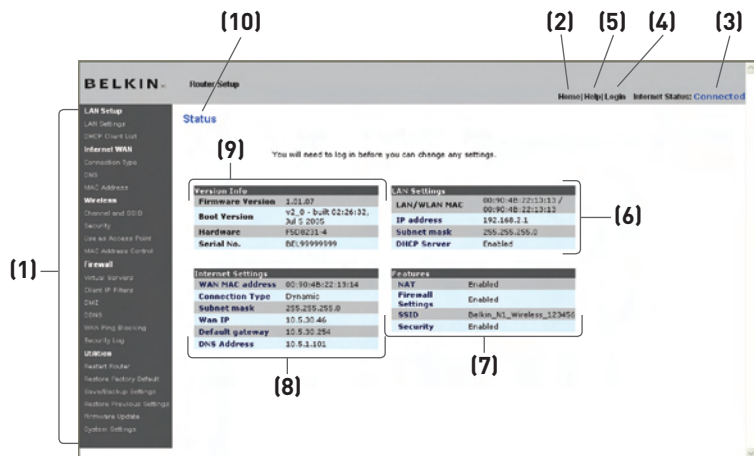
1. **Quick-Navigation Links**
   You can go directly to any of the Router's advanced UI pages by clicking directly on these links. The links are divided into logical categories and grouped by tabs to make finding a particular setting easier to find. Clicking on the purple header of each tab will show 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 "Connected" in blue, 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 into 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 User Manual will sometimes refer to pages by name. For instance "LAN > LAN Settings" refers to the "LAN Settings" page.

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section

Alternate Setup Method

Step 4	Configuring your Router for Connection to your Internet Service Provider (ISP)

The "Internet/WAN" tab is where you will set up your Router to connect to your Internet Service Provider (ISP). The Router is capable of connecting to virtually any ISP'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.
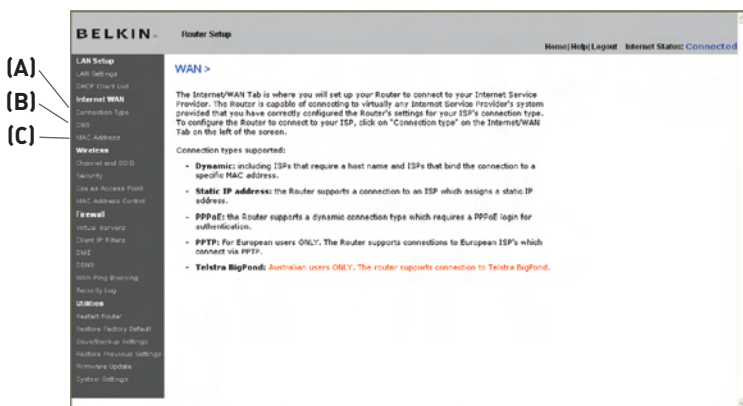
Setting your Connection Type

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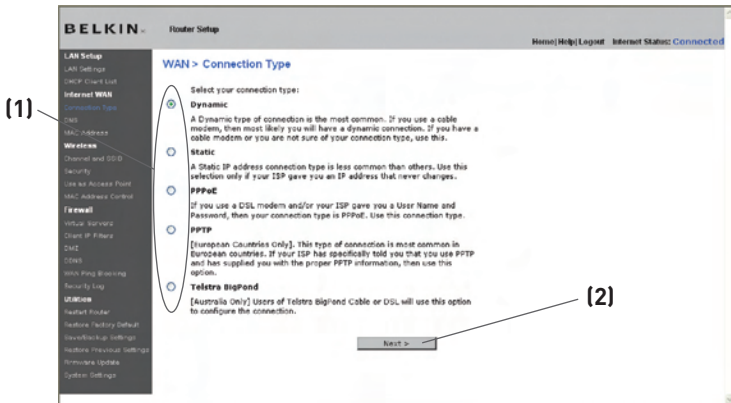
Setting your Internet Service Provider (ISP) Connection Type to Dynamic IP

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.   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.

Alternate Setup Method
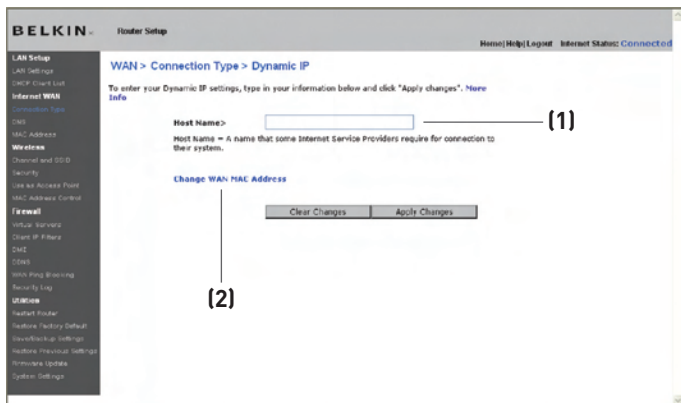
Setting your Internet Service Provider (ISP) Connection Type to Static IP
A static IP address connection type is less common than other connection types. If your ISP uses static IP addressing, you will need your IP address, subnet mask, and ISP gateway address. This information is available from your 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.
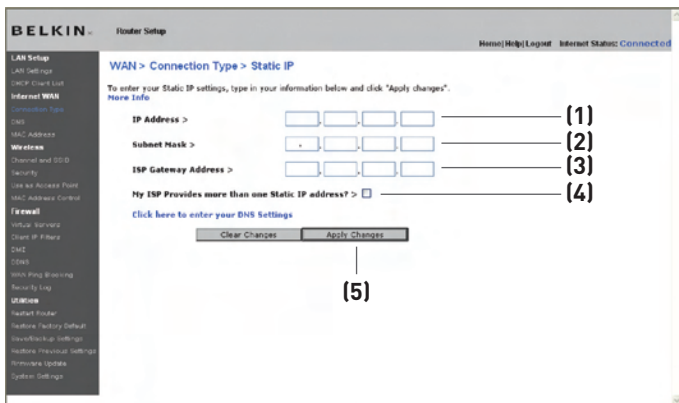
Alternate Setup Method

Setting your ISP Connection Type to 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, which is required to connect to the Internet.

2) Your ISP gave you software such as WinPOET or Enternet300 that you use to connect to the Internet.

3) You have to double-click on a desktop icon other than your browser to get on the Internet.

Alternate Setup Method

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 Internet Service Provider (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" **(9)**. 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.

Alternate Setup Method

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® BigPond User
[Australia Only]. Your user name and password are provided to you by Telstra BigPond. Enter this information below. Choosing your state from the drop-down menu **(1)** 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 "User decide login server manually" **(4)** and type in the address next to "Login Server" **(5)**. When you have entered all of 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. **Select your State**
    Select your state from the drop-down menu **(1)**. 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 can manually enter the login server address. See "User decide login server manually" **(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.

Alternate Setup Method

4. User Decide Login Server Manually
   If your login server IP address is not available in the "Select Your State" drop-down menu **(1)**, you may manually enter the login server IP address by placing a check in the box next to "User decide login server manually" 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 Locaters (URLs) like "www.belkin.com" to IP addresses. Many Internet Service Providers (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.