

N150 WIRELESS HOME NETWORK ROUTER

User Manual



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GETTING STARTED

What's in the Box

N150 Wireless Router

Ethernet cable

Power supply

Belkin CD with User Manual

Quick Installation Guide

Service Card

Initial Setup

Where to Place Your Router

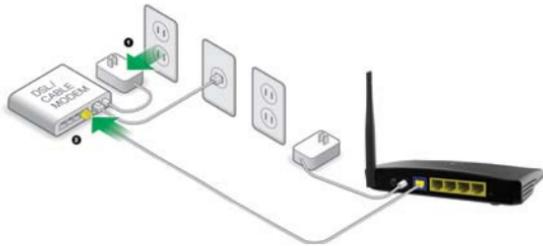
For the best results, place the Router next to your modem in an open location away from large metal objects and magnets such as those found in speakers. Raising the Router above floor level can improve the strength of your wireless signal.

GETTING STARTED

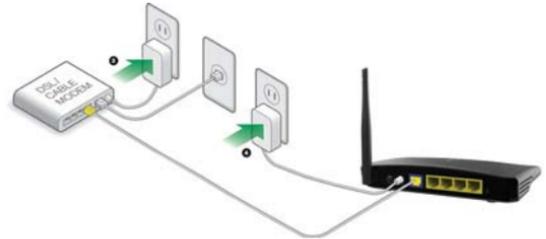
How to Set It UP

Connect Your N150 Router

1. Turn off your modem by disconnecting its power supply.
2. Connect your Router to your modem using the cable.



3. Power up your modem by plugging in its power supply.
4. Power up your Router by plugging in its power supply.



GETTING STARTED

Adding Computers to Your Network

Wireless devices such as computers, network printers, and gaming systems can connect to your Router with a few simple steps.

Manual Setup

If you know what sort of Internet service you have, you might try a manual setup. For this you will need a Wi-Fi-enabled smartphone, tablet, or computer.

Wirelessly Connect to Your Router

The default network name and password are printed on the foot of the Router.

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



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

Using the WPS Button

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

Within two minutes, press the WPS button on your Router.

The WPS indicator will blink green while it listens for your Wi-Fi device. Once a connection is established, the light will turn green for about 5 minutes and then go out. If a connection is not established, the light will blink green for 30s. You may repeat the process to try again.

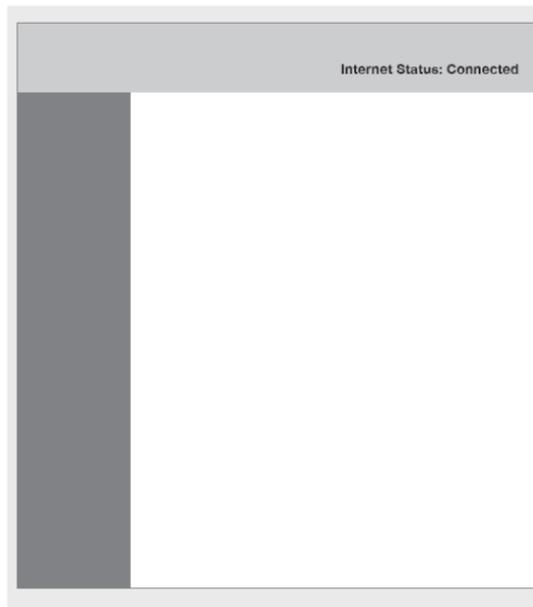
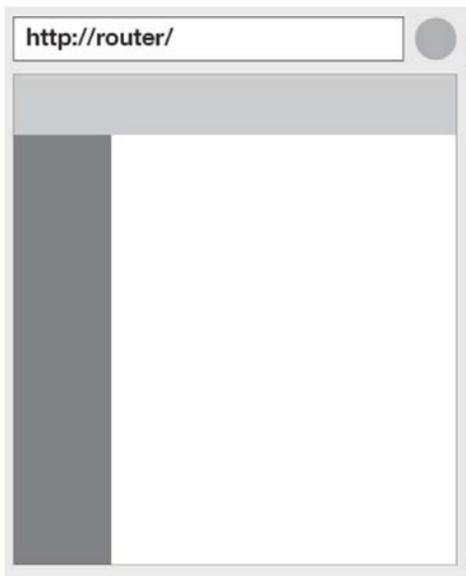
You can repeat this process for each WPS-enabled device you'd like to add to your network.

GETTING STARTED

Manually Set Up Your Internet Connection

Use a browser to visit <http://Router/>. The Router homepage should appear.

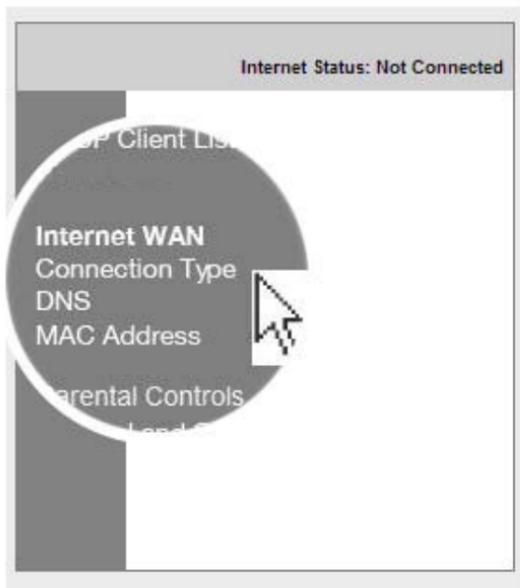
You can also try visiting <http://192.168.2.1/>.



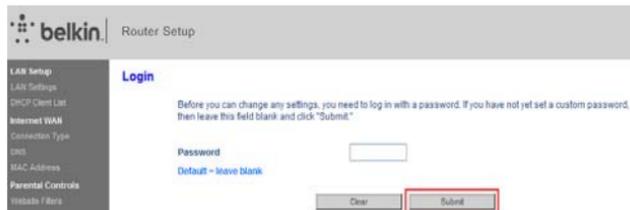
GETTING STARTED

The status of your Internet connection is shown in the upper right corner of the Router homepage.

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



If not, select “Connection Type” from the menu on the left.



GETTING STARTED

If a password screen appears, press “Submit”.

WAN > Connection Type

Select your connection type:

- Dynamic**
A Dynamic type of connection is the most common. If you use a cable modem, then most likely you will have a dynamic connection. If you have a cable modem or you are not sure of your connection type, use this.
- Static**
A Static IP address connection type is less common than others. Use this selection only if your ISP gave you an IP address that never changes.
- PPPoE**
If you use a DSL modem and/or your ISP gave you a User Name and Password, then your connection type is PPPoE. Use this connection type.
- PPTP**
[European Countries Only]. This type of connection is most common in European countries. If your ISP has specifically told you that you use PPTP and has supplied you with the proper PPTP information, then use this option.
- L2TP**
[European Countries Only]. This type of connection is most common in European countries. If your ISP has specifically told you that you use L2TP and has supplied you with the proper L2TP information, then use this option.
- Telstra Bigpond/OptusNet Cable**
Use this option for Bigpond **Cable** and OptusNet **Cable** connections only.

Next

Dynamic Connection

Cable and fiber customers generally require a dynamic connection. Some DSL customers require a PPPoE connection. Let's try dynamic first. Select “Dynamic” from the menu that appears and press “Next”.

WAN > Connection Type > Dynamic IP

To enter your Dynamic IP settings, type in your information below and click “Apply changes”.
[More Info](#)

Host Name >

Host Name = A name that some Internet Service Providers require for connection to their system.

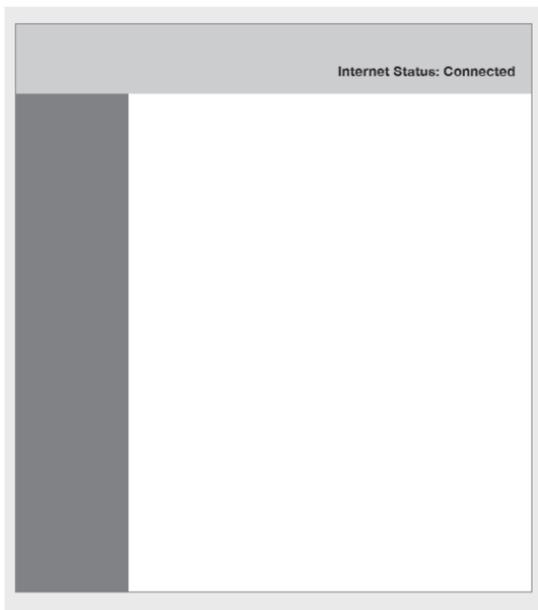
Change WAN MAC Address

Cancel Changes

Apply Changes

GETTING STARTED

Enter the host name provided by your Internet service provider. Click “Apply Changes”.



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

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

If not, we’ll try a PPPoE connection next.

WAN > Connection Type

Select your connection type:

Dynamic

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

Static

A Static IP address connection type is less common than others. Use this selection only if your ISP gave you an IP address that never changes.

PPPoE

If you use a DSL modem and/or your ISP gave you a User Name and Password, then your connection type is PPPoE. Use this connection type.

PPTP

[European Countries Only]. This type of connection is most common in European countries. If your ISP has specifically told you that you use PPTP and has supplied you with the proper PPTP information, then use this option.

L2TP

[European Countries Only]. This type of connection is most common in European countries. If your ISP has specifically told you that you use L2TP and has supplied you with the proper L2TP information, then use this option.

Telesra Bigpond/OptusNet Cable

Use this option for Bigpond **Cable** and OptusNet **Cable** connections only.

Next

GETTING STARTED

PPPoE Connection

Some DSL customers require a PPPoE connection.

Select PPPoE this time and press “Next”.

Enter the username and password supplied by your Internet provider and click “Apply Changes”. Ignore the other fields.

WAN > Connection Type > PPPoE

To enter your PPPoE settings, type in your information below and click “Apply changes”. [More Info](#)

User Name >	<input type="text"/>
Password >	<input type="password"/>
Retype Password >	<input type="password"/>
Service Name (Optional) >	<input type="text"/>
IP assigned by ISP >	<input type="button" value="YES"/>
IP Address >	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
MTU (500-1500) >	<input type="text" value="1454"/>

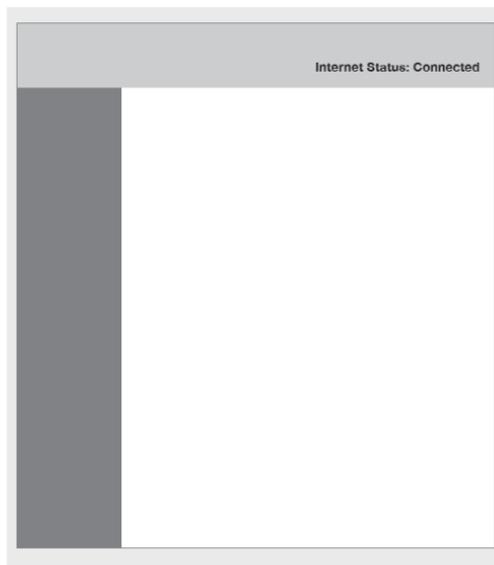
Do not make changes to the MTU setting unless your ISP specifically requires a different setting than 1454. [More Info](#)

Disconnect after minutes of no activity.

[More Info](#)

Clear Changes

Apply Changes



GETTING STARTED

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

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

Connecting Additional Devices

iOS

(iPhone, iPad, and iPod touch)

Open the “Settings” app and select the “Wi-Fi” menu item.

Select your wireless network from the list that appears there. If asked to do so, enter the network password.

Mac OS® X

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

Click on the icon showing wireless waves.

Select your wireless network from the list that appears there. If asked to do so, enter the network password.

Android

(phones and tablets)

Open the “Settings” app and select “Wireless” and “Network”.

From there, select “Wi-Fi” to see the list of available networks.

Select your wireless network from the list. If asked to do so, enter your network password.

Windows® 7

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

Right-click on the icon that looks like signal strength bars.

Select your wireless network from the list. If asked, enter your network password (network key).

Windows Vista® and Windows XP

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

Right-click on the icon that shows a computer with wireless waves (XP) or two computers (Windows Vista).

Choose “View Available Wireless Networks” (XP) or “Connect to a network” (Vista) from the menu.

Select your wireless network from the list. If asked, enter your network password (network key).



GETTING TO KNOW YOUR ROUTER

Front Panel



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

Power Light

Off: The Router is not plugged into a power source.

Solid Green: Power is supplied to the Router.

WLAN Light

Off: WLAN is disabled.

Blinking Green: Wireless data is being transmitted in the WLAN.

Solid Green: WLAN is enabled but no data transfer.

Wi-Fi Protected Setup (WPS) Light

Off: Idle

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

Successful Connection: The WPS light is SOLID GREEN for 5 minutes and then goes out when the Router has made a secure connection with the computer or other device.

Failed Connection: The WPS light is BLINKING GREEN for 30s after the WPS connection fails.

WAN Light

Off: WAN connection is not created.

Blinking Green: Data is being transmitted on the WAN port.

Solid Green: The Router is connected to the Internet.

LAN Light

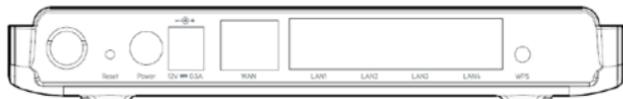
Off: LAN connection is not created.

Blinking Green: Data is being transmitted on the LAN port.

Solid Green: The Router is connected to devices through Ethernet cables.

GETTING TO KNOW YOUR ROUTER

Back Panel



Reset Button

This button is used to restore the factory default settings.

To reset the Router, press and hold this button for 8-10 seconds.

Power Connector

Connect the included power supply to this jack.

Modem (WAN) Connector

Connect your modem to this port using an Ethernet cable.

Wired (LAN) Connectors

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

WPS Button

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

TECHNICAL DETAILS

Technical Features

Integrated 802.11n Wireless Access Point

The N150 technology enhances your Router's wireless capabilities, allowing for data transfer speeds of up to 150Mbps across your network.

NAT IP Address Sharing

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

SPI Firewall

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

Universal Plug-and-Play (UPnP) Compatibility

The UPnP (Universal Plug-and-Play) feature in your Router offers seamless operation of voice and video messaging, games, and other applications that are UPnP-compliant.

Web-Based Advanced User Interface

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

Integrated 4-Port 10/100 Switch

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

TECHNICAL DETAILS

System Requirements

Router

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

USING YOUR ROUTER

Using the LAN IP Setup

The “LAN Settings” page allows changing the Router’s LAN IP address as required and configuring Dynamic Host Configuration Protocol (DHCP).

Configuring Parameters of LAN IP Setup

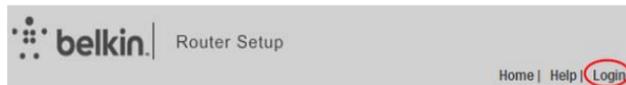
LAN IP setup parameters are advanced settings that you may require if you are a network administrator or your network requires a different IP addressing scheme. The Router is shipped with the default IP address on the LAN side and with the DHCP server enabled.

Note: If you change the default LAN IP address, you must use the new LAN IP address to log in.

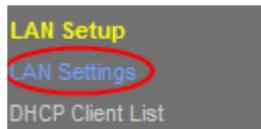
Setup steps:

Open a Web browser on the computer.

In the address bar of the Web browser, type `http://192.168.2.1`.



Click “Login” in the upper right corner of the page. The Router does not ship with a password, so just click “Submit”.



Click on “LAN Settings” in the left column under the “LAN Setup” heading.

IP Address >	<input type="text" value="192"/> <input type="text" value="168"/> <input type="text" value="2"/> <input type="text" value="1"/>
More Info	
<hr/>	
Subnet Mask >	<input type="text" value="255"/> <input type="text" value="255"/> <input type="text" value="255"/> <input type="text" value="0"/>
More Info	

USING YOUR ROUTER

Configure the IP address and subnet mask.

IP Address: The IP address that a LAN user uses to access the Router. The default IP is 192.168.2.1.

IP Subnet Mask: Subnet mask of the LAN port. You can enter a different subnet mask according to the actual network status.

Click "Apply".

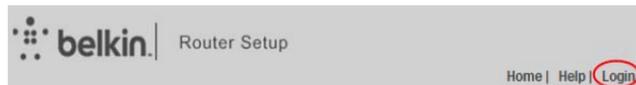
Using the Router as a DHCP Server

By default, the Router acts as a DHCP server, automatically assigning IP addresses to computers in the LAN. Users do not need to configure TCP/IP protocol parameters such as the IP address, the subnet mask, the gateway, and the DNS server information for computers connected to the Router's LAN.

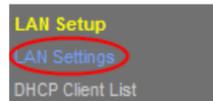
Setup steps:

Open a Web browser on the computer.

In the address bar of the Web browser, type <http://192.168.2.1>.



Click "Login" in the upper right corner of the page. The Router does not ship with a password, so just click "Submit".



Click on "LAN Settings" in the left column under the "LAN Setup" heading.



Select the "On" button to use the Router as a DHCP server.

Configure the parameters below.

IP Pool Starting Address/IP Pool Ending Address: Set the starting and ending IP addresses to specify a pool of IP addresses to be assigned by the DHCP server. After you set "Starting IP Address/Ending IP Address", hosts in the LAN obtain IP addresses that are in the range of the starting and ending IP addresses.

USING YOUR ROUTER

Lease Time: The valid time for an IP address that is automatically assigned to a device by the DHCP server to a host. The DHCP server does not assign the IP address to other hosts within the specified time. If selecting “Forever”, you save devices in the LAN with fixed addresses.

Configuring the Local Domain Name

The local domain name is a user-friendly name for your Router. At the bottom of the “LAN Settings” page, you can set a local domain name. The default name is Belkin.

There is no need to change this setting unless required.

Local Domain Name >
(Optional)

A feature that lets you assign a name to your network. [More Info](#)

Configuring Your Internet Connection

Settings related to your Internet service are specified in the “Connection Type” page under the “Internet WAN” heading.

Select a WAN connection type. Contact your ISP if you do not know your WAN connection mode.

Dynamic Connection

Cable and fiber customers generally require a dynamic connection.

Setup steps:

Click “Connection Type” in the left column under the “Internet WAN” heading.

WAN > Connection Type

Select your connection type:

- Dynamic:**
A Dynamic type of connection is the most common. If you use a cable modem, then most likely you will have a dynamic connection. If you have a cable modem or you are not sure of your connection type, use this.
- Static:**
A Static IP address connection type is less common than others. Use this selection only if your ISP gave you an IP address that never changes.
- PPPoE:**
If you use a DSL modem and/or your ISP gave you a User Name and Password, then your connection type is PPPoE. Use this connection type.
- PPTP:**
(European Countries Only) This type of connection is most common in European countries. If your ISP has specifically told you that you use PPTP and has supplied you with the proper PPTP information, then use this option.
- L2TP:**
(European Countries Only) This type of connection is most common in European countries. If your ISP has specifically told you that you use L2TP and has supplied you with the proper L2TP information, then use this option.
- TeraTru Bigpond/OptusNet Cable:**
Use this option for Bigpond Cable and OptusNet Cable connections only.

USING YOUR ROUTER

Select "Dynamic" in the "Connection Type" page that appears. Click "Next".

WAN > Connection Type > Dynamic IP

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

[More Info](#)

Host Name >

Host Name = A name that some Internet Service Providers require for connection to their system.

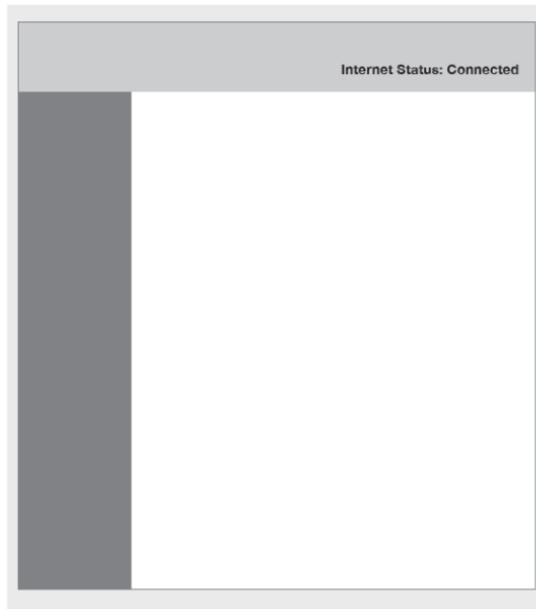
[Change WAN MAC Address](#)

Cancel Changes

Apply Changes

Enter the host name provided by your Internet provider.

Click "Apply Changes".



USING YOUR ROUTER

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

Static Connection

Select Static IP if your ISP provides the IP address, subnet mask, and information about the gateway and DNS server.

Setup steps:

Click “Connection Type” in the left column under the “Internet WAN” heading.

Select “Static” in the “Connection Type” page that appears.

WAN > Connection Type > Static IP

To enter your Static IP settings, type in your information below and click “Apply changes”. [More Info](#)

IP Address >

Subnet Mask >

ISP Gateway Address >

[Click here to enter your DNS Settings](#)

Configure the parameters below. These parameters cannot be left blank.

IP Address: Enter the WAN IP address provided by the ISP. The parameter must be entered.

Subnet Mask: Enter the WAN subnet mask provided by the ISP. It varies with the network type. It is usually 255.255.255.0 (Class C).

ISP Gateway Address: Enter the IP address of the gateway provided by the ISP. It is the IP address used for connecting to the ISP.

[Click here to enter your DNS Settings](#)

WAN > DNS

If your ISP provided you with a specific DNS address to use, enter the address in this window and click “Apply Changes”.

Automatic DNS (ISP)

DNS Address > 192 168 123 3

Secondary DNS Address >

DNS = Domain Name Server. A server located on the Internet that translates URLs (Uniform Resource Locator) like [www.yahoo.com](#) to IP addresses. You must enter the DNS settings provided by your ISP if you don't use the Automatic DNS function (More info).

USING YOUR ROUTER

Click “Click here to enter your DNS Settings” to configure DNS information.

Clear the “Automatic from ISP” check box.

In the “DNS Address” and “Secondary DNS Address” fields, enter the IP addresses of the primary DNS server and the secondary server (if available). At least enter one DNS server IP address.

Click “Apply Changes”.

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

PPPoE Connection

Most DSL providers use PPPoE (Point-to-Point Protocol over Ethernet) 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.

Setup steps:

Click “Connection Type” in the left column under the “Internet WAN” heading.

Select “PPPoE” in the “Connection Type” page that appears.

WAN > Connection Type > PPPoE

To enter your PPPoE settings, type in your information below and click “Apply changes”. [More Info](#)

User Name >	<input type="text"/>
Password >	<input type="password"/>
Retype Password >	<input type="password"/>
Service Name (Optional) >	<input type="text"/>
IP assigned by ISP >	<input type="button" value="YES"/>
IP Address >	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
MTU (500-1500) >	<input type="text" value="1454"/>

Do not make changes to the MTU setting unless your ISP specifically requires a different setting than 1454. [More Info](#)

Disconnect after minutes of no activity

[More info](#)

<input type="button" value="Clear Changes"/>	<input type="button" value="Apply Changes"/>
--	--

USING YOUR ROUTER

Configure the parameters below.

User Name and Password: Enter the user name and password provided by the ISP. The user name and password are used to log in to the ISP server.

Retype Password: Enter the password again.

Service Name: If several PPPoE servers are available, specify which server to use.

IP assigned by ISP: You can select either to an IP address assigned by your ISP, or to manually set an IP address in the "IP Address" field.

MTU: The maximum transmission unit. We strongly recommend you to use the default setting unless your ISP gives you a specific MTU setting.



Disconnect after minutes of no activity.

If you select the "Disconnect after xxx minutes of no activity" check box and specify a time interval, the system interrupts the Internet connection when there is no Internet access behavior within the specified time.

Click "Apply Changes".

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

PPTP/L2TP Connection

Some ISPs require a connection using the PPTP or L2TP protocol. Enter the account and password provided by your ISP.

The following takes PPTP connection as an example.

Setup steps:

Click "Connection Type" in the left column under the "Internet WAN" heading.

Select "PPTP" in the "Connection Type" page that appears.



WAN > Connection Type > PPTP

[More info](#)

PPTP Account >

PPTP Password >

Retype Password >

Host Name

Service Address > 0.0.0.0

IP Address Assignment > Get Dynamically From ISP

Connection ID (optional) >

Disconnect after minutes of no activity. [More info](#)

[Click here to enter your DNS Settings](#)

Cancel Apply

USING YOUR ROUTER

Configure the parameters below.

PPTP Account and PPTP Password: Enter the PPTP account and password provided by the ISP. The PPTP account and password are used to log in to the ISP server.

Retype Password: Enter the password again.

Host Name: (Optional) Enter the host name.

Service Address: Enter the IP address of the ISP server.

IP Address Assignment: You can select either to dynamically get an IP address from the ISP or to use a static IP address. If you select "Use Static IP Address", manually enter the IP address, the subnet mask, and the default gateway.

If you select the "Disconnect after xxx minutes of no activity" check box and specify a time interval, the system interrupts the Internet connection when there is no Internet access behavior within the specified time.

Disconnect after minutes of no activity. [More Info](#)

[Click here to enter your DNS Settings](#)

WAN > DNS

If your ISP provided you with a specific DNS address to use, enter the address in this window and click "Apply Changes".

Automatic from ISP

DNS Address >

Secondary DNS Address >

DNS = Domain Name Server. A server located on the Internet that translates URL's (Uniform Resource Locator) like www.belkin.com to IP addresses. You must enter the DNS settings provided by your ISP if you don't use the Automatic DNS function [More Info](#)

USING YOUR ROUTER

Click "Click here to enter your DNS Settings" to configure DNS information.

Either select or clear the "Automatic from ISP" check box. If you clear the check box, in the "DNS Address and Secondary DNS Address" fields enter the IP addresses of the primary DNS server and the secondary server (if available). At least enter one DNS server IP address.

Click "Apply Changes".

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

Telstra Bigpond/OptusNet Cable

Use this option for Bigpond Cable and OptusNet Cable connections only.

Cloning your MAC address

Belkin provides 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 if 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.

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

USING YOUR ROUTER

Enabling Website Filtering

The Router allows you to restrict website access to guard you from unsafe and inappropriate websites on any devices on your network.

Parental Controls > Website Filters

Provides a first layer of whole-home internet protection to guard you from unsafe and inappropriate websites on any device on your network.



Filtering Options >

- Block Malicious, Adult and other non-family friendly Sites**
Blocks malware, phishing, and scam sites and also sites that contain sexually explicit material, mature content, abortion, alcohol, tobacco, crime, cult, drugs, gambling, hate, suicide or violence.
- Block Malicious and Adult Sites**
Blocks malware, phishing, scam sites and sites that contain sexually explicit content.
- Block Malicious Sites**
Blocks malware, phishing and scam sites.
- No Filters**

To change your DNS address please continue to Internet (WAN) > DNS

Apply Changes

Configuring Basic Wireless Settings

You can view and specify the wireless security settings of your Router.

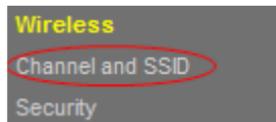
Setup steps:

Open a Web browser on the computer.

In the address bar of the Web browser, type `http://192.168.2.1`.



Click "Login" in the upper right corner of the page. The Router does not ship with a password, so just click "Submit".



USING YOUR ROUTER

Click on “Channel and SSID” in the left column under the “Wireless” heading.

Configure the following parameters.

SSID: Set the wireless network name. The SSID can contain up to 32 alphanumeric characters. The default SSID is “belkin.###”.

Broadcast SSID: If checked, the Router broadcasts its SSID in the wireless network, so that wireless clients can scan the SSID and access the wireless network under the SSID. The check box is selected by default. If the check box is cleared, only devices that know the correct SSID can connect to the Router.

For the remaining settings, use the defaults.

Wireless > Channel and SSID

To make changes to the wireless settings of the router, make the changes here. Click “Apply Changes” to save the settings.
[More info](#)

Wireless Channel >
Extension Channel >
SSID >
Wireless Mode >
Bandwidth >
Broadcast SSID >
Protected Mode >
802.11e/WMM QoS >

Auto	Current Channel > 10
Auto	Current Channel > 6
belkin.###	
802.11b & 802.11g & 802.11n	More info
20/40MHz	
<input checked="" type="checkbox"/>	More info
Off	More info
On	More info

[Clear Changes](#)

[Apply Changes](#)

belkin.###

The default channel is Auto.

It is unnecessary to change the wireless channel unless you notice interference problems with another nearby wireless Router or access point. Select a channel that is not being used by any other nearby wireless networks.

The default mode is 802.11b/g/n.

If you do not know which mode to use, select 802.11b/g/n.

The default bandwidth is 20/40MHz.

The default protected mode is Off.

In most situations, best performance is achieved with Protected Mode Off. If you are operating in an environment with HEAVY 802.11b traffic or interference, best performance may be achieved with Protected Mode On.

The default 802.11e/WMM QoS mode is On.

QoS prioritizes important data on your network such as multimedia content and voice-over-IP (VoIP) so it will not be interfered by other data being sent over the network.

Click “Apply Changes”.

USING YOUR ROUTER

Restarting Your Router

Sometimes, in order to make some changes take effect, you need to restart the Router.

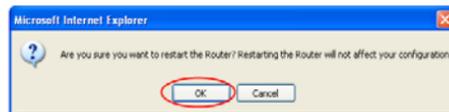
Setup Steps



Click on “Restart Router” in the left-hand column under the “Utilities” heading.



Click on the “Restart Router” button toward the middle of screen.



A dialog box appears to ask you whether to restart the Router. Click the “OK” button to restart the Router.



After clicking the “OK” button, the Router begins to restart.

USING YOUR ROUTER

Restoring Your Router to Factory Defaults

Resetting the Router will restore the Router's normal operation while maintaining the programmed settings. Reset the Router in rare cases when the Router may function improperly.

Using the Reset Button

Use the restore option in instances where you may have forgotten your custom password or when the Router may function improperly.

Push and hold the "Reset" button for 8-10 seconds, and then release it. The LAN light on the Router will momentarily flash and the WLAN light will turn out. When the LAN and WLAN lights become solid green again, the reset is complete.

Restoring the Router to Default Settings Using the Web Interface

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

Setup Steps

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



Utilities > Restore Factory Defaults

Using this option will restore all of the settings in the Router to the factory default settings. It is recommended that you backup your settings before you restore all of the defaults. To restore the factory default settings, click the "Restore Defaults" button below.



USING YOUR ROUTER

Click on the “Restore Defaults” button.

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

The Router will begin the restoration process. Once the restoration process is complete, the Router will reboot.

Note: This may take several minutes.

Your Router has been successfully restored to its factory settings.

Backing Up Your Configuration

The configuration settings of the Router are stored within the Router in a configuration file. You can back up (save) the file and retrieve it for later use.

We recommend that you back up your configuration file after you complete settings. If the Router fails or becomes corrupted, or an administrator password is lost, you can easily re-obtain your configuration by restoring the configuration file.

Setup Steps



USING YOUR ROUTER

Click on “Save/Backup Settings” in the left-hand column under the “Utilities” heading.

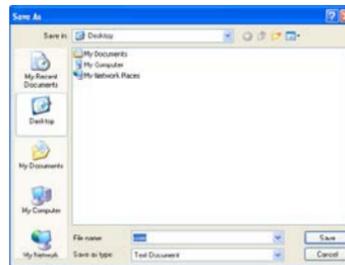
Click on the “Save” button.

A dialog box will open that says, “Do you want to open or save this file?” Click “Save”.

Utilities > Save/Backup Current Settings

You can save your current configuration using the utility. Taking your configuration can allow you to restore it later if you perhaps are lost or changed it in some way. It is recommended that you backup your current configuration before performing a firmware update.

Save

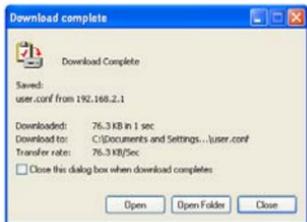


USING YOUR ROUTER

Select the location for saving the configuration file. Enter the file name and select the file type, then click the “Save” button.

When the download process is complete, click “Close”.

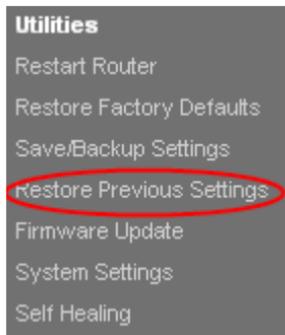
Your Router’s configurations have been successfully saved to your local PC.



Restoring Previous Settings

Sometimes, you need to restore the previous settings. This may be because the Router is not performing as expected or you wish to remove all current settings.

Setup Steps



USING YOUR ROUTER

Click on “Restore Previous Settings” in the left-hand column under the “Utilities” heading.

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

Note: The version of configuration file in the images below is depicted as an example. Your file name will vary depending on your model and version.

Utilities > Restore Previous Saved Settings

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



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

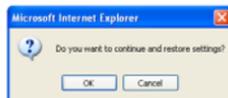
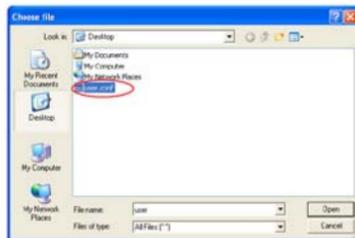
Click the “Restore” button.

Utilities > Restore Previous Saved Settings

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

C:\Documents and Settings\Administrator\Desktop Browse

Restore



USING YOUR ROUTER

A prompt asking, “Do you want to continue and restore settings?” will appear. Click “OK” and then the Router begins to restore the previous settings.

The previous settings have been restored successfully.

Enabling Auto Firmware Update for Your Router

The Router has the capability to automatically check for a newer version of firmware and alert you when it’s available. You can choose to download the new version or ignore it. By default this feature is enabled.

Note: We recommend you use a computer that has a wired connection to the Router.

Setup Steps:

Router is rebooting 38 seconds remaining.

Click on “System Settings” in the left-hand column under the “Utilities” heading.

Toward the lower-half side of the screen you will find “Auto Update Firmware Enabling”.

Select the “Enable” radio button.

Click “Apply Changes”.



Auto Update Firmware Enabling:

ADVANCED FEATURE! Allows you to automatically check the availability of firmware updates for your router. [More info](#)

- Auto Update Firmware
Enable / Disable > Enable Disable

USING YOUR ROUTER

Updating the Router's Firmware

The following steps show you how to update your Router's firmware using its Web interface.

Checking for New Firmware in the Firmware Upgrade Screen

N150 Router allows you to check for a new firmware update available for this Router.

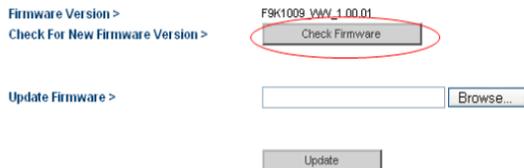
Setup steps:



Click on "Firmware Update" in the left-hand column under the "Utilities" heading.

Click "Check Firmware" to check for new firmware versions.

If a new version is found, you can directly update your firmware by following the prompts.



USING YOUR ROUTER

Updating Manually to New Router Firmware

You can also manually update your Router firmware.

Setup Steps

Locate and download the firmware file from the Belkin support site. (Type your part number into the search box in the top right corner and look for “Firmware” in the title.)

Save the file to a location on your computer where you can get to it easily, such as your desktop.

Connect the computer to one of the four LAN ports on the Router.

Open a web browser on the computer.

In the address bar of the web browser, type “http://192.168.2.1” and press “Enter” on your keyboard.

Click “Login” in the upper right-hand corner of the page. The Router does not ship with a password, so just click “Submit”.

Click on “Firmware Update” in the left-hand column under the “Utilities” heading.



Utilities > Firmware Update

From time to time, Belkin may release new versions of the Router's firmware. Firmware updates contain improvements and fixes to problems that may have existed. Click the link below to see if there is a new firmware update available for this Router.

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

Firmware Version >
Check For New Firmware Version >

FSK1009_0002_1.00.01

Check Firmware

Update Firmware >

Browse...

Update

USING YOUR ROUTER

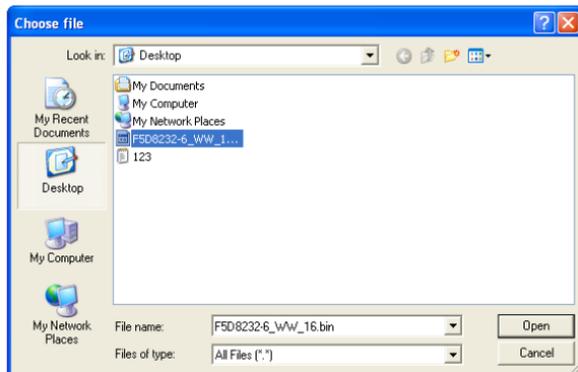
Click the “Browse...” button toward the middle of the screen to search for the file you saved previously.

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

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

Click the “Update” button

Congratulations. The firmware has been updated successfully.



Utilities > Firmware Update

From time to time, Belkin may release new versions of the Router's firmware. Firmware updates contain improvements and fixes to problems that may have existed. Click the link below to see if there is a new firmware update available for this Router.

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

Firmware Versions >

F5R000_WW_1.00.01

Check For New Firmware Version >

Check Firmware

Update Firmware >

C:\Documents and Settings\Ad... Browse

Update

Utilities > Firmware Update Successfully

Router is rebooting52seconds remaining.

USING YOUR ROUTER

Configuring Administrator Password

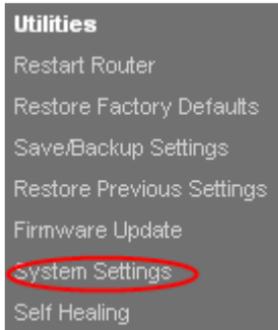
The Router ships with NO password entered. If you wish to add a password for more security, you can set a password here. Keep your password in a safe place, as you will need this password if you need to log into the Router in the future. It is also recommended that you set a password if you plan to use the remote management feature of this Router.

Setup Steps:

Click on “System Settings” in the left-hand column under the “Utilities” heading.

Configuring the administrator password and login timeout.

Click “Apply Changes”.



Utilities > System Settings

Administrator Password:

The Router ships with NO password entered. If you wish to add a password for more security, you can set a password here. [More Info](#)

Type in current Password:	<input type="password"/>
Type in new Password:	<input type="password"/>
Confirm new Password:	<input type="password"/>
Login timeout:	10 <input type="text"/> 5-99 minutes

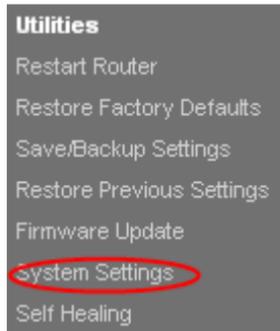
USING YOUR ROUTER

Configuring Time Zone

The Router keeps time by connecting to a Simple Network Time Protocol (SNTP) server. This allows the Router to synchronize the system clock to the global Internet. The synchronized clock in the Router is used to record the security log and control client filtering.

Select the time zone that you reside in. The system clock may not update immediately.

Setup Steps:



Click on “System Settings” in the left-hand column under the “Utilities” heading.

Select the time zone that you reside in and the NTP server.

If you reside in an area that observes Daylight Saving, then place a checkmark in the box next to “Daylight Savings”.

Click “Apply Changes”.

Time and Time Zone: January 01, 2011 9:54:47 PM

The Router ships with NO password entered. If you wish to add a password for more security, you can set a password here. [More Info](#)

- Time Zone > (GMT-08:00) Pacific Time, Tijuana

- Daylight Savings > Automatically Adjust Daylight Saving

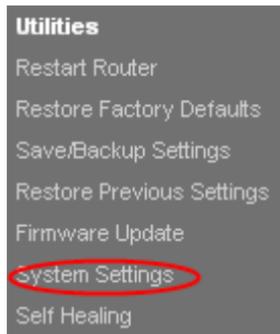
- Primary NTP Server > 192.43.244.18-North America

- Secondary NTP Server > 132.163.4.102-North America

Configuring Remote Management

Remote management allows you to make changes to your Router's settings from anywhere on the Internet. Before you enable this function, make sure you have set the administrator password.

Setup Steps:



Click on "System Settings" in the left-hand column under the "Utilities" heading.

If you select the "Any IP address can remotely manage the router" check box, you are allowed to access the Router from anywhere on the Internet by typing in your WAN IP address from any computer on the Internet.

If you do not select the "Any IP address can remotely manage the router" check box, specify an IP address to remotely manage the Router.

Note: Selecting "Only this IP address can remotely manage the router" is more secure, but less convenient.

In the "Remote Access Port" field, set the port number for accessing the router through remote Web management.

Click "Apply Changes".

Remote Management:

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

Any IP address can remotely manage the router.

- Only this IP address can remotely manage the router

 . . .

- Remote Access Port>

USING YOUR ROUTER

Configuring UPnP

UPnP (Universal Plug-and-Play) offers seamless operation of voice messaging, video messaging, games, and other applications that are UPnP compliant.

The Router ships with the UPnP feature enabled. If you are using any applications that are UPnP compliant and wish to take advantage of the UPnP features, you can enable the UPnP feature.

UPnP Enabling:

ADVANCED FEATURE! Allows you to turn the UPnP feature of the Router on or off. If you use applications that support UPnP, enabling UPnP will allow these applications to automatically configure the router. [More Info](#)

- UPnP Enable / Disable >

Enable Disable

Configuring the Eco Mode

This function allows you to dim the LEDs on the front of the Router to save power and disable the wireless radio at predetermined times.

Setup Steps:

Click on "System Settings" in the left-hand column under the "Utilities" heading.



USING YOUR ROUTER

Select the “Disable radio from” to enable the Eco mode.

Specify the days you want to use the Eco mode.

Click “Apply Changes”.

Configuring Self Healing

The self healing function allows the Router to implement regular restart, reducing equipment function failure. You can arrange a schedule for Router’s auto initialization.

Setup Steps:



Click on “Self Healing” in the left-hand column under the “Utilities” heading.

Select the “Enabled” radio button to enable automatically initialization for your Router.

Specify the days and the time for automatically initialization.

Click “Apply Changes”.

Health > Regular Maintenance

Regular router re-initialization is helpful in maintaining a more problem free network.

Auto initialize my router> Enabled Disabled

Set days>

SUN

MON

TUE

WED

THU

FRI

SAT

Set time>

03:30 AM

Clear Changes

Apply Changes

Troubleshooting

I can't connect to the Internet wirelessly.

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

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

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

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

Wireless technology is radio-based, which means connectivity and the throughput performance between devices decreases when the distance between devices increases. Other factors that will cause signal degradation (metal is generally the worst culprit) are obstructions such as walls and metal appliances. Note also that connection speed may decrease as you move farther away from the Router.

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

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

Limiting the wireless transmit rate—Limiting the wireless transmit rate can help improve range and connection stability. Most wireless cards have the ability to limit the transmission rate. To change this property in Windows, go to the Windows Control Panel, open “Network Connections”, and double-click on your wireless card’s connection. In the properties dialog, select the “Configure” button on the “General” tab, then choose the “Advanced” tab and select the rate property.

Wireless client cards are usually set to automatically adjust the wireless transmit rate for you, but doing so can cause periodic disconnects when the wireless signal is too weak; as a rule, slower transmission rates are more stable. Experiment with different connection rates until you find the best one for your environment. Note that all available transmission rates should be acceptable for browsing the Internet. For more assistance, see your wireless card’s user manual.

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

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

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

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

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

1. Log in to your Router by visiting <http://router/> with your web browser. Click on the "Login" button in the top right-hand corner of the screen. You will be asked to enter your password. If you have never set a password, leave the "Password" field blank and click "Submit".

2. Click "Wireless" in the left-hand menu. Then click "Security" just below that.

3. Select the "WPA/WPA2" option.

4. Enter a password. This can be from 8–63 characters of your choice, including spaces and punctuation, OR a 64-digit hexadecimal number (using only the numbers 0–9 and letters A–F).

5. Click "Apply Changes" to finish. Your wireless connection is now encrypted. Each computer using your wireless network will need to use the new key.

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

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

TROUBLESHOOTING, SUPPORT, AND WARRANTY

Technical Support

US

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

UK

<http://www.belkin.com/uk/support>

Australia

<http://www.belkin.com/au/support>

New Zealand

<http://www.belkin.com/au/support>

Singapore

1800 622 1130

Europe

<http://www.belkin.com/uk/support>

You can find technical-support information on our website, www.belkin.com, by navigating to the tech-support section. If you want to contact technical support by phone, please call the number you need from this list*:

*Local rates apply.

COUNTRY	NUMBER	INTERNET ADDRESS
AUSTRIA	0820 200766	www.belkin.com/de/networking/
BELGIUM	07 07 00 073	www.belkin.com/nl/networking/ www.belkin.com/fr/networking/
CZECH REPUBLIC	239 000 406	www.belkin.com/uk/networking/
DENMARK	701 22 403	www.belkin.com/uk/networking/
FINLAND	0972519123	www.belkin.com/uk/networking/
FRANCE	08 - 25 54 00 26	www.belkin.com/fr/networking/
GERMANY	0180 - 500 57 09	www.belkin.com/de/networking/
GREECE	00800 - 44 14 23 90	www.belkin.com/uk/networking/
HUNGARY	06 - 17 77 49 06	www.belkin.com/uk/networking/
ICELAND	800 8534	www.belkin.com/uk/networking/
IRELAND	0818 55 50 06	www.belkin.com/uk/networking/
ITALY	02 - 69 43 02 51	www.belkin.com/it/networking/
LUXEMBOURG	34 20 80 85 60	www.belkin.com/uk/networking/
NETHERLANDS	0900 - 040 07 90 €0.10 per minute	www.belkin.com/nl/networking/
NORWAY	81 50 0287	www.belkin.com/uk/networking/
POLAND	00800 - 441 17 37	www.belkin.com/uk/networking/
PORTUGAL	707 200 676	www.belkin.com/uk/networking/
RUSSIA	495 580 9541	www.belkin.com/networking/
SLOVAKIA	08000 04614	www.belkin.com/networking/
SLOVENIA	0800 80510	www.belkin.com/networking/
SOUTH AFRICA	0800 - 99 15 21	www.belkin.com/uk/networking/
SPAIN	902 - 02 43 66	www.belkin.com/es/networking/
SWEDEN	07 - 71 40 04 53	www.belkin.com/uk/networking/
SWITZERLAND	08 - 48 00 02 19	www.belkin.com/de/networking/ www.belkin.com/fr/networking/
UNITED KINGDOM	0845 - 607 77 87	www.belkin.com/uk/networking/
OTHER COUNTRIES	+44 - 1933 35 20 00	

Belkin International, Inc., Limited 2-Year Product Warranty

What this warranty covers.

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

What the period of coverage is.

Belkin warrants the Belkin product for two years.

What will we do to correct problems?

Product Warranty.

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

What is not covered by this warranty?

All above warranties are null and void if the Belkin product is not provided to Belkin for inspection upon Belkin's request at the sole expense of the purchaser, or if Belkin determines that the Belkin product has been improperly installed, altered in any way, or tampered with. The Belkin Product Warranty does not protect against acts of God such as flood, lightning, earthquake, war, vandalism, theft, normal-use wear and tear, erosion, depletion, obsolescence, abuse, damage due to low voltage disturbances (i.e. brownouts or sags), non-authorized program, or system equipment modification or alteration.

How to get service.

To get service for your Belkin product you must take the following steps:

1. Contact Belkin Tech Support at the number listed on page 44, within 15 days of the Occurrence. Be prepared to provide the following information:

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

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

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

REGULATORY INFORMATION

European Compliance Statement:

Belkin International hereby declares that this F9K1009 Wireless N Router is in compliance with the essential requirements and other relevant provisions of the RTT&E Directive 1999/5/EC, the EMC Directive 2004/108/EC, and the Low Voltage Directive 2006/5/EC. Conformity was assessed using a Technical Construction File.

A copy of the European Union CE marking "Declaration of Conformity" may be obtained at the website: www.belkin.com/doc



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



General Safety Information:

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

