

ENGLISH

# N300 WIRELESS HOME NETWORK ROUTER



**User Manual** 

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Troubleshooting	
European Compliance Statement:	

What's in the Box	Initial Setup
N300 Wireless Router	Where to Place Your Router
Ethernet cable	For the best results, place the Router next to your modem in
Power supply	an open location away from large metal objects and magnets such as those found in speakers. Raising the Router above
Belkin CD with User Manual	floor level can improve the strength of your wireless signal.
Quick Installation Guide	
Service Card	

# How to Set It UP

## **Connect Your N300 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.

PA DET



# 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.

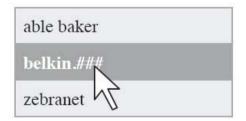
#### Manual Setup

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.

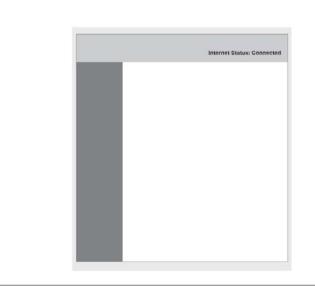
# Manually Set Up Your Internet Connection

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

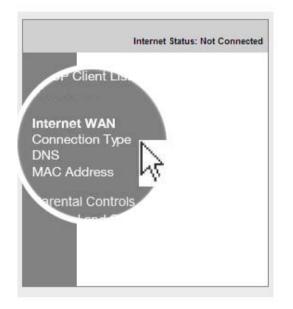
You can also try visiting http://192.168.2.1/.

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.



http://router/	



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



If a password screen appears, press "Submit".

#### WAN > Connection Type

Select your connection type:

#### Operation 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.

#### O 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.

#### О РРТР

[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.



#### **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.

О РРТР

[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.

O 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.



# **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.

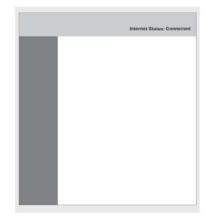
\If after a few minutes your Internet Status says "Connected", you're done! You can surf the Internet.

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

#### WAN > Connection Type > PPPoE

To enter your PPPoE settings, type in your information below and click "Apply changes". More Info

User Name >			
Password >			
Retype Passwor	rd >		
Service Name (C	ptional) >		
IP assigned by IS	SP >	YES 💌	
IP Address >			,,,,
MTU (500-1500)	>	1454	
Do not make cha setting than 1454		atting unless	s your ISP specifically requires a different
Disconnect a	after 5 minu	tes of no ac	stivity.
More Info			
	Clear Chang	es	Apply Changes



## **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.

- <u>ج</u> ۲
  - 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).

# **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 WPSenabled 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.

# **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 WPSenabled 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 Features**

#### Integrated 802.11n Wireless Access Point

Utilizing MIMO (Multiple Input Multiple Output) smartantenna technology, your Router can reach data transfer speeds of up to 300Mbps 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.

# 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 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 > More info	192 . 168 . 2 . 1
Subnet Mask > More Info	255 . 255 . 0

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 comupters in the LAN. Users do not need to configure TCP/IP protocol paramters 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.

in off mices any to that a any changes i	wie Mars 180	 signing IP addresses to each concluter on	
IF Field Starting Address +		2	
@ Fool Ending Address >		1.00	
Lease Treat	Foreiter		

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. 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 >	Belkin
A feature that lets you assign a name to your network	c. 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		

	Select your connection type:
۲	Dynamic
	A Dynamic type of connection is the most common. If you use a cable modern, then most likely you will have a dynamic connection. If you have a cable modern or you are not sure of your connection type, use this
0	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.
0	PPPol
	If you use a DSL modern and/or your ISP gave you a User Name and Password, then your connection type is PPPoE. Use this connection type
0	PPTP
	(European Countries Only). This type of connection is most common in European countries. If your SP has specificatly tool you that you use PPTP and has supplied you with the proper PPTP information, then use this option.
0	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, their use this option.
0	Telstra Eigpond/OptusNet Cable

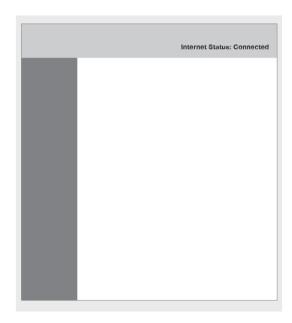
Select "Dynamic" in the "Connection Type" page that appears. Click "Next".

#### 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".



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.

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.

ter your Static IP settings, type	in your inform	ation below:	and click "A	pply change	s". More In
IP Address >					
Subnet Mask >					
ISP Gateway Address >			1		

	r Dargis		phy Chang			-
WAN > DNS						
FrourisP provided you with a spe	cRcDHS address to	000.01	e the site	tess in this	writewa	nt click 'Apple Changes'.
CAstomatic tree ISP						
(IRS Address >	1	192	968	123	3	
LITS ADDITITS P.						
Secondary DRS Address >						-
	Too must enter the D					

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 >				
Password >				
Retype Password >				
Service Name (Optional) >	_			
P assigned by ISP >	YES 💌			
P Address >				
MTU (500-1500) >	1454			
Do not make changes to the MT setting than 1454. More Info	U setting unless yo	iur ISP speci	fically requ	ires a different
Disconnect after 5 n	ninutes of no activit	γ.		
More info				
Clear Cl	anges	Apply C	hanges	

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 5 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

mically From ISP 👻
no activity. More info

Cancel Apply

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.

Disconnect after 5

minutes of no activity. More Info

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 here to enter your DNS Setting	gs
Clear Change	es Apply Changes
	Ļ
WAN > DNS	
If your ISP provided you with a specific DN	S address to use, enter the address in this window and click "Apply Changes".
Automatic from ISP	
DNS Address >	192
Secondary DNS Address >	
	ated on the Internet that translates URL's (Uniform Resource Locator) like st enter the DNS settings provided by your ISP if you don't use the Automatic DNS
	Clear Changes Apply Changes

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.

# **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.

Ø

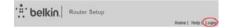
# **Configuring Basic Wireless Settings**

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".



#### Parental Controls > Website Filters

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

#### Filtering Options >

- Block Maticious, Aduit and other non-family triendy Sites Blocks makware, phishing, and scams ites and also shes that contain sexually explicit material, mature content, abortion, adorbs, tobacco, orme, cut, drugs, gambling, hairs, suicide or violence.
- Block Malicious and Adult Sites
  - Blocks malware, phishing, ocam 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



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 Wreless Channel > Auto V Current Channel a 10 Extension Channel > Auto - Current Channel + K con v mathin are

Wreless Mode >	802.110	& 802.11g & 802.11n 💌 👔	lone into
Bandwidth >	20/40M	Hz 🛩	
Broadcast SSID >	E Mor	e into	
Protected Mode >	Of 🛩	More Info	
802.11eWMM QoS >	On 🛩	More info	
	Dear Dranova	Apply Changes	1
			Palkin Std

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".

# **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.

Router is rebooting	34	seconds remaining.	

After clicking the "OK" button, the Router begins to restart.

# Utilities

Restart Router

Restore Factory Defaults Save/Backup Settings Restore Previous Settings Firmware Update System Settings Self Healing

# **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 lefthand column under the "Utilities" heading.

Utilities
Restart Router
Restore Factory Defaults
Save/Backup Settings
Restore Previous Settings
Firmware Update
System Settings
Self Healing

#### Utilities > Restore Factory Defaults

Using this sphere will control will of the sublings in the Bookers the Section (sublind), sublings. It representent that you become your sublings infrare you readors at of the instants. To reaches the Sectiony default settings when the "Newtone Defaults" failures for one.



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

Utilities Restart Router Restore Factory Defaults Save/Backup Settings Restore Previous Settings Firmware Update System Settings Self Healing

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 Sattings

The set was provided of department is using the little to the grane of department with the set of the Fund with the set of the compart is a recommender that we have one are not and profile halve performing a time are approximated.





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

# Utilities Restart Router Restore Factory Defaults Save/Backup Settings restore Previous Settings Firmware Update System Settings Self Healing

Click on "Restore Previous Settings" in the lefthand 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. 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\Desi Browse...

Restore

#### Utilities > Restore Previous Saved Settings

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

	Browse
Restore	1



Microso	ft Internet Explorer 🛛 🛛 🔀
2	Do you want to continue and restore settings?
	OK Cancel

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

# 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.

Firmware Version >	F9K1009 <u>WW_100.01</u>
Check For New Firmware Version >	Check Firmware
Update Firmware >	Browse

Update

Utilities

Restart Router Restore Factory Defaults Save/Backup Settings Restore Previous Settings Ormware Update System Settings Self Healing

#### **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
Restart Router
rimware Update

#### 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 Dave/Dackup current settings page.

Firmware Version > Check For New Firmware Version >

F961009_MM_1.00.01	
Check Firmwore	

Update Firmware >

	Browse	D
Update		

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.

Choose file						? 🔀
Look in:	🞯 Desktop		•	00	P 🛙	
My Recent Documents	My Documents My Computer My Network Pla <b>F5D8232-6_W</b>	aces				
My Computer						
My Network Places	File name: Files of type:	F5D8232-6_WW_16.bin All Files (*.*)			•	Open Cancel

Utilities > Firmware Update	
	w versions of the Router's firmware. Firmware updates contain may have existed. Click the link below to see if there is a new firmware
NOTE: Please backup your current setting Save@ackup current settings page	gs before updating to a new version of firmware. Click Here to go to the
Firmware Version >	F9K1009_VWV_1.00.01
Check For New Firmware Version >	Check Firmwate
Update Firmware >	C.\Documents and Settings\Ad Browse
	Lipdate
Utilities > Firmware	Update Successfully
Router is reboo	ting52seconds remaining.
	-

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

Configuring the administrator password and login timeout.

Click "Apply Changes".

#### Setup Steps:

#### Utilities > System Settings

Administrator Password:		
The Router ships with NO passw here. More Info	ord entered. If you wish to add a password for more security, you can set a passw	bro
- Type in current Password>		
- Type in new Password>		
- Confirm new Password>		
- Login Timeout>	10 1-99 minutes	

### Utilities

Restart Router Restore Factory Defaults

Save/Backup Settings

**Restore Previous Settings** 

Firmware Update

System Settings

Self Healing

### **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:

### Utilities

Restart Router Restore Factory Defaults Save/Backup Settings Restore Previous Settings Firmware Update System Settings Self Healing

The Router ships with NO pass nere. More Info	word entered. If you wish to add a password for more security, yo	ou can set a password
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 🔽	

January 01, 2011 9:54:47 PM

### **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:

### Utilities

Restart Router Restore Factory Defaults Save/Backup Settings Restore Previous Settings Firmware Update System Settings Self Healing 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 two

Any IP address can remotely manage the router.

- Only this IP address can remotely manage the router	
- Remote Access Port>	8080

### **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.

### **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.

#### 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

#### Utilities Restart Router Restore Factory Defai Save/Backup Settings Restore Previous Setti Firmware Update System Settings



### **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".

# Utilities Restart Router Restore Factory Defaults Save/Backup Settings Restore Previous Settings Firmware Update System Settings Self Healing



#### Health > Regular Maintenance

Regular router re-initialization is h	nelpful in maintaining a more problem free network.
Auto initialize my router>	Enabled C Disabled
Set days>	
	I SUN
	I MON
	TUE
	T WED
	THU
	E FRI
	SAT 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.
- Using a computer attached to the Router via a network cable, visit <u>http://router/</u> 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.

- Log in to your Router by visiting <u>http://router/</u> 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.
- 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).

 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	COUNTRY	NUMBER
	AUSTRIA	0820 200766
<b>US</b> http://www.belkin.com/support	BELGIUM	07 07 00 073
ик	CZECH REPUBLIC	239 000 406
http://www.belkin.com/uk/support	DENMARK	701 22 403
http://www.beikin.com/uk/support	FINLAND	0972519123
Australia	FRANCE	08 - 25 54 00 2
http://www.belkin.com/au/support	GERMANY	0180 - 500 57 0
New Zealand	GREECE	00800 - 44 14 2
	HUNGARY	06 - 17 77 49 0
http://www.belkin.com/au/support	ICELAND	800 8534
Singapore	IRELAND	0818 55 50 06
1800 622 1130	ITALY	02 - 69 43 02 5
Furene	LUXEMBOURG	34 20 80 85 60
Europe http://www.belkin.com/uk/support	NETHERLANDS	0900 - 040 07
http://www.beikin.com/uk/support	NORWAY	81 50 0287
	POLAND	00800 - 441 17
	PORTUGAL	707 200 676
You can find technical-support information on our website.		

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.

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	

www.belkin.com/de/networking/

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

#### What this warranty covers.

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

#### What the period of coverage is.

Belkin warrants the Belkin product for two years.

#### What will we do to correct problems?

#### Product Warranty.

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

#### What is not covered by this warranty?

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

#### How to get service.

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

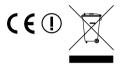
- Contact Belkin Tech Support at the number listed on page 46, within 15 days of the Occurrence. Be prepared to provide the following information:
  - a. The part number of the Belkin product.
  - b. Where you purchased the product.
  - c. When you purchased the product.
  - d. Copy of original receipt.
- 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.

### **European Compliance Statement:**

Belkin International hereby declares that this F9K1010 Wireless N Router is in compliance with the essential requirements and other revelant 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.

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