

# User Guide

F9K1127/F9K1126

## Introduction

This User Guide can help you connect the extender to your network and solve common setup issues. You can find more help from our award-winning, 24/7 customer support at [Linksys.com/support](http://Linksys.com/support).

## Contents

Overview .....	1
How to install the range extender.....	2
How to access the browser-based utility .....	5
Using range extender settings .....	X
Using Wi-Fi Protected Setup.....	7
How to use Site Survey.....	9
Cross-Band	
AC Power Pass-Through	
Wireless Music Playback	
Troubleshooting.....	10
Specifications.....	13

# Overview

## Front



The light on the front of the range extender gives you information about power, updating and signal strength.

Power Light	Status/ description
Blinking blue	<ul style="list-style-type: none"><li>• Booting up</li><li>• Resetting to factory defaults</li><li>• Upgrading firmware</li></ul>
Solid blue	<ul style="list-style-type: none"><li>• Ready to use</li></ul>
Solid Orange	<ul style="list-style-type: none"><li>• Weak connection with the router</li></ul> <p><i>Fix: Unplug the extender, and move it closer to the router</i></p>
Blinking Orange	<ul style="list-style-type: none"><li>• Not connected to the router</li><li>• Other error</li></ul> <p><i>Fix: Unplug the extender, plug it back in, wait two seconds, reconnect to your network</i></p>

## Side



**Power Switch** European versions only.

**Wi-Fi Protected Setup Button and LED** Use Wi-Fi Protected Setup to automatically and securely add compatible wireless devices to your network. Refer to Using Wi-Fi Protected Setup on page 7.

**Reset** Press and hold for about five seconds to reset to factory defaults. You can also restore the defaults from the Administration > Factory Defaults screen in the extender's browser-based utility.

## How to install the range extender

Before setup, unplug or disconnect any range extenders on the network.

1. **Plug in the range extender midway between your router and the area without Wi-Fi.**  
Be sure you have at least 50% of your router's Wi-Fi signal at that point on the device you will use for setup. The setup software will help you find the best spot if you have trouble.  
<Diagram>
2. Wait for a solid light on the cover of the range extender. It could take up to two minutes.  
On a computer, phone or tablet, connect to the Wi-Fi network "Belkin Extender Setup."  
<diagram2>
3. If setup doesn't start automatically, open a browser to <http://extender.belkin.com>.

Linksys's Spot finder technology will help you find the right location for your range extender if you have trouble. You will be guided to place the range extender closer or

farther from your router to improve the signal. If you nailed it with your first placement you will not see Spot finder screens.

<screenshot of Too Far page>

4. During setup you will be asked whether you want the range extender to update itself automatically. If you allow automatic updates, the range extender will download and install updates when released by Linksys. Automatic updates will take place overnight so they do not disrupt your network activity.

You also can decide to manually update your range extender at your convenience.

<screen shot>

Post set-up LED behavior mention here as well and in the QSG

#### **TIP**

You can also connect the range extender by using Wi-Fi Protected Setup. For more information, see “Using Wi-Fi Protected Setup” on page 7.

## **How to access the browser-based utility**

After setting up the extender use the extender’s browser-based utility to change any settings.

On a computer or device that is connected to your range extender, open any browser (Internet Explorer, Chrome, Firefox, Safari, etc.), and enter `extender.linksys.com` in the address bar.

You will be prompted to enter a user name and password. If you did not change them during setup, leave the user name blank and enter “admin” in the password field. If you customized the SSID and password, enter those credentials.

If you are connected to your local network, but not to the range extender, you will need to enter the range extender’s IP address in your browser to access the extender’s settings.

#### **TIP**

If you are unable to access the range extender’s settings, do one of the following:

Find the range extender’s IP address by going to your router’s administration page and looking for the range extender under connected devices.

Or

## Windows XP:

1. Enable UPnP:
  - a) Click Start, Control Panel, Add or Remove Program, then click Add/Remove Windows Components.
  - b) Select Network Services, then click Details.
  - c) Select UPnP User Interface, then click OK.
  
2. Open Windows Explorer. Click **My Network Places** on the left panel.
  
3. Look for the F9K1127/F9K1126 icon on the right panel. (You might be required to change the firewall settings to allow the display of networked computers. Refer to your operating system's help for instructions.)

## Windows 8, Windows 7, or Vista:

1. Open Windows Explorer (File Explorer in Windows 8). Click **Network**. Look for the F9K1127/F9K1126 icon on the right panel. (You might be required to change the firewall settings to allow the display of networked computers. Refer to your operating system's help for instructions.)
2. Right-click the **F9K1127/F9K1126** icon. Click **Properties**. Click on the address link in **Device webpage**.

## Mac OS X:

1. Open **Safari**. Be sure that Bonjour is included in the Bookmarks menu and Favorites bar.
  - a. Go to Safari Preferences > Advanced and be sure each Bonjour box is selected.
2. Find Bonjour in the Bookmarks menu or Favorites bar and choose "Belkin Range Extender." If you have changed your network name and password, choose the network name and enter the password you created.

## Using range extender settings

Click **Help** on the right side of the screen for additional information on the screen's options.

Changes to settings will not be effective until you click **Save** at the bottom of the screen. You also can click **Cancel** to clear any changes.

## Using Wi-Fi Protected Setup

Wi-Fi Protected Setup™ makes it easy to connect your extender to your network, and connect other devices to your network through the extender.

### Wi-Fi Protected Setup light activity



<WPSButtonOnly.PNG>

WPS Light	Status/ description
	<ul style="list-style-type: none"><li>•</li></ul>
Solid (10 seconds)	<ul style="list-style-type: none"><li>• WPS connection was successful</li></ul>
Blinking slowly (two minutes)	<ul style="list-style-type: none"><li>• WPS connection in process</li></ul>
Blinking quickly (two minutes)	<ul style="list-style-type: none"><li>• When WPS cannot establish connection or encounters a problem</li></ul> <p><i>Fix: wait a few seconds after LED stops blinking and try again</i></p>

### Connecting the extender to an existing access point

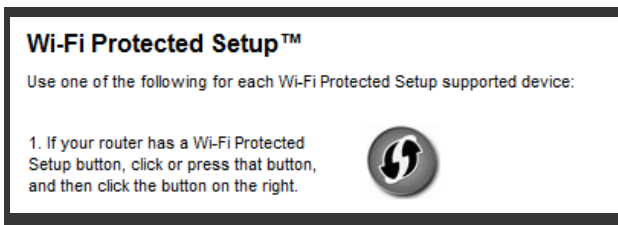
If your access point or router supports it, you can use Wi-Fi Protected Setup to connect the range extender to the access point or router. Log in to the browser-based utility and click on **WPS** in the left navigation bar. Choose from the setup methods below to connect the extender.

#### NOTE

If you have an access point or a router that does not support Wi-Fi Protected Setup, note the wireless settings, and then manually configure the extender.

## Connecting with the Wi-Fi Protected Setup Button

Use this method if your router or access point has a **Wi-Fi Protected Setup** button



1. Press the **Wi-Fi Protected Setup** button on the extender. If you have a dual-band router you will do this again to extend the second network. The 2.4 GHz band will be extended first.
2. Click the **Wi-Fi Protected Setup** button on the router's Wi-Fi Protected Setup screen (if available), OR press and hold the Wi-Fi Protected Setup button on the router for one second. When the connection is complete, the Wi-Fi Protected Setup light on the extender will be solid.
3. If you used the extender's Wi-Fi Protected Setup screen, click **OK** in that screen within two minutes.

TIP



You can also access WPS in the browser-based utility by clicking **WPS** in the left navigation bar.

## Connecting with the range extender's PIN

The Wi-Fi Protected Setup PIN (Personal Identification Number) can be found on the product label on the back of the extender. You can use this method only if your router's administration utility has a Wi-Fi Protected Setup menu.

2. If your router asks for the client's PIN number, enter this number **14727030** in your router device.

1. Enter the extender's PIN into the appropriate field on the router's Wi-Fi Protected Setup screen. Click Register. When the connection is complete, the Wi-Fi Protected Setup light on the extender will be solid.
2. Click **OK**.

## Connecting devices to your network through the extender

Choose from the methods below to connect devices that support Wi-Fi Protected Setup to your network.

Delete the screen below

### NOTE

Repeat the instructions for each client device that supports Wi-Fi Protected Setup.

## Connecting with the Wi-Fi Protected Setup Button

Use this method if your client device has a Wi-Fi Protected Setup button.



1. Press the Wi-Fi Protected Setup button on the client device.
2. Click the **Wi-Fi Protected Setup** button on the extender's Wi-Fi Protected Setup screen, OR press and hold the Wi-Fi Protected Setup button on the side of the extender for one second. When the connection is complete, the Wi-Fi Protected Setup light on the extender will be solid.
3. If using the extender's Wi-Fi Protected Setup screen, be sure to click OK within two minutes or you will have to start over.

## Connecting with the client device's PIN

Use this method if your client device has a Wi-Fi Protected Setup PIN (Personal Identification Number).



1. Enter the PIN from the client device in the field on the extender's Wi-Fi Protected Setup screen.
2. Click **Register** on the extender's Wi-Fi Protected Setup screen. When the connection is complete, the Wi-Fi Protected Setup light on the extender will be solid.
3. Click **OK** on the extender's Wi-Fi Protected Setup screen within two minutes or you will have to start over.

## Connecting with the extender's PIN

Use this method if your client device asks for the extender's PIN.

1. On the client device, enter the PIN listed on the extender's Wi-Fi Protected Setup screen. (It is also listed on the product label on the back of the extender.) When the connection is complete, the Wi-Fi Protected Setup light on the extender will be solid.
2. Click **OK** on the extender's Wi-Fi Protected Setup screen within two minutes.

## How to use Site Survey

Site Survey gives a snapshot of all neighboring access points and wireless routers within range of the extender.

To open the Site Survey page:

1. Log in to the browser-based utility (see "How to access the browser-based utility" on page 5).
2. Click the **Wireless** tab. Click the **Site Survey** page.
3. **Select**—To connect to a wireless network, click the button next to the wireless network name (SSID) in the Select column, and click Connect.
4. **SSID**—Displays the name of neighboring wireless networks.
5. **GHz**—Displays the radio band (in GHz) of the neighboring wireless networks.
6. **Signal Strength**—Displays the relative position of the neighboring access points by indicating the power of the wireless signal received: dot only = 25%, dot + one wave = 50%, dot + two waves = 75%, dot + three waves = 100%. If no waves are displayed, your extender is too far from the upstream access point or the signal is

blocked. Try to keep the signal strength between 60% and 100% for optimum performance.

7. **Security**—Displays the mode of security in use by the neighboring APs. If a network supports Wi-Fi Protected Setup, the Wi-Fi Protected Setup icon is also displayed.

**To connect your extender with an access point or router in Site Survey, you will need to know the password or passphrase of the network on that device.**

1. Select the network name (SSID) that you want to repeat with your extender by clicking the corresponding button in the Select column.
2. Click **Connect**. When prompted, enter the password or passphrase used to secure your wireless network. The type of security information required in this screen must match your access point or router's wireless security settings.

TIP: For dual-band networks, be sure to connect to both bands, 2.4 GHz and 5 GHz.

3. Click **Save**. Your extender wireless parameters should be configured. The wireless interface will restart, and the extender will connect to the access point or router you have chosen.

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## Cross-Band

Cross-Band is the simultaneous use of both bands for high-speed data transfer and uninterrupted streaming and gaming.

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## Troubleshooting

**NOTE** Your F9K1127/F9K1126 works on 2.4GHz and 5 GHz networks.

### You cannot get your extender connected

Check the position of your router and extender

- For first-time setup, you may need to place the extender closer to the router. After you've set up your extender, you can unplug it and move it to the final location.
- To reduce signal obstructions, try alternate locations for the router and extender.
- Avoid placing the router and extender near metal objects, masonry walls, and reflective surfaces such as glass or mirrors.
- Avoid placing the router and extender near other electronics that may cause signal interference.

If you're using Wi-Fi Protected Setup to connect, wait until the Wi-Fi Protected Setup indicator stops blinking before trying to make the connection again.

### You cannot access your range extender

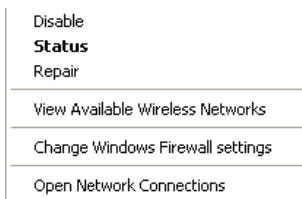
To access your range extender, you must be connected to your own network. If you currently have wireless Internet access, the problem may be that you have accidentally connected to a different wireless network.

For Mac instructions, see "To fix the problem on Mac computers:" on page 12.

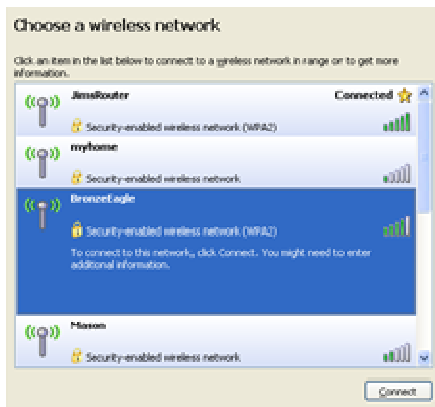
To fix the problem on Windows computers:



1. On your Windows desktop, right-click the wireless icon in the system tray. The icon might look different depending on which version of Windows you are running.
2. Click View Available Wireless Networks.



3. Select your network name. Click Connect. In the example below, the computer was connected to another wireless network named JimsRouter. The name of the correct network, BronzeEagle in this example, is selected.



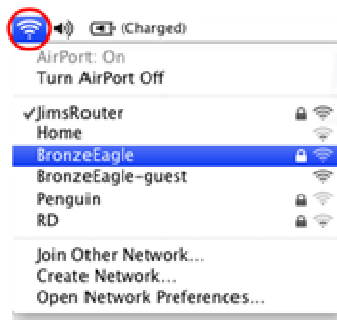
4. If you are prompted to enter a network key, type your password (Security Key) into the Network key and Confirm network key fields. Click **Connect**.

You should now be able to access the range extender's browser-based utility.

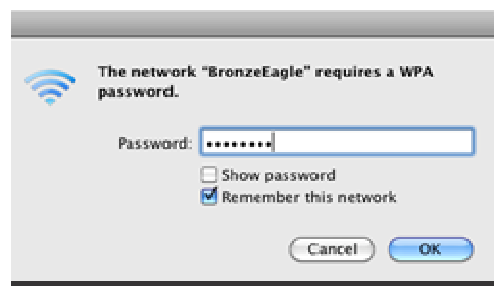
To fix the problem on Mac computers:

1. In the menu bar across the top of the screen, click the Wi-Fi icon. Linksys Connect has automatically assigned your network a name.

In the example below, the computer was connected to another wireless network named JimsRouter. The name of the Linksys E-Series network, BronzeEagle in this example, is selected.



2. Select the wireless network name of the router you want to connect to.
3. Type your wireless network password (Security Key) into the Password field. Click **OK**.



You should now be able to access the range extender's browser-based utility.

### **You have intermittent connection problems**

Plug in the range extender midway between your router and the area without Wi-Fi. Be sure you have at least 50% of your router's Wi-Fi signal at that point on the device you used for setup.

## Specifications

F9K1127/F9K1126

Model Name	Belkin F9K1127/F9K1126
Model Description Number	Dual-band Wi-Fi Range Extender Model F9K1127/F9K1126
Standards	IEEE 802.11ac, 802.11a, 802.11n, 802.11g, 802.11b,
Ports	
Buttons	Reset, Wi-Fi Protected Setup™, Power (European model only)
LEDs	Power/Wi-Fi Protected Setup, Ethernet (link, activity)
Antennas	2 internal (non-detachable)
Wireless Security	Wi-Fi Protected Access™ 2 (WPA2), Wi-Fi Protected Access™ (WPA), WEP
Security Key Bits	Up to 128-bit encryption

### Environmental

Dimensions	(67 x 38 x 105 mm)
Weight	(125 g)
Power	100-240V / 0.5A

Certification	FCC, ICES-003, RSS-247, CE, Wi-Fi (IEEE 802.11a/b/g/n), WPA2™, WMM®, Wi-Fi Protected Setup™
Operating Temperature	32 to 104°F (0 to 40°C)
Storage Temperature	-4 to 140°F (-20 to 60°C)
Operating Humidity	10 to 80% noncondensing
Storage Humidity	5 to 90% noncondensing

Specifications are subject to change without notice.

Visit [linksys.com/support](http://linksys.com/support) for award-winning 24/7 technical support

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#### Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference

to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

#### Radiation Exposure Statement:

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

Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.



## Canada Statement

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage;
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur. Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems

les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;