Getting to know the E900

Article ID: 23417

The **Linksys E900 Wireless-N Router** lets you access the Internet via a 2.4 GHz wireless connection or through one of its four-port switch. The range of this router can reach up to **250 meters**.

NOTE: Wireless signal is greatly affected by walls and other electronic devices. This will reduce the range of the router dramatically.

Product Features:

- Wireless-N Technology
- 2.4 GHz radio frequency
- 2x2 Transmit/Receive function
- 2 internal antennas
- Guest Access feature
- 4 x 10/100 Ethernet ports
- Includes Cisco Connect Software

Top Panel:



Security features are included to help protect your data and privacy while connected online. Security features are:

- Wi-Fi Protected Access 2 (WPA2) security provides encryption for data on your wireless network.
- Stateful Packet Inspection (SPI) firewall blocks unwanted access to your Linksys E900.
- Network Address Translation (NAT) technology protects and allows your entire network to access the Internet a single Internet IP address.

Setting up the Linksys E900 is easy using the latest version of Cisco Connect software. Configuring its advanced settings is available through the router's web-based setup page. To know more about the E900, click <u>here</u>.

Back Panel:





The Internet port is where you connect the Ethernet cable from your modem. You will need to connect one end of the network cable to the Ethernet port on your cable or DSL modem and the other end to the Internet port on your Linksys E900.

The Internet LED lights up when there is a connection made through the Internet port. It flashes to indicate network activity over the Internet port.

NOTE: Rear port lights can be turned **OFF**. For instructions, click <u>here</u>.



Using Ethernet cables, these Ethernet ports connect the router to computers on your wired network and other Ethernet network devices.

The LEDs on the back panel serve two purposes. The LED stays lit when the Linksys E900 is connected to a device through one of the Ethernet ports. It flashes to indicate network activity over a certain port.

Power LED:

Lights up Green when the router is powered **ON**.



WiFi Protected Setup (WPS) Button:

If you have client devices, such as wireless adapters, that support WPS, then you can use the WiFi Protected Setup button to automatically configure wireless security for your wireless network(s). To learn more about the WPS feature, click here.



The Power port is where you connect the power adapter.

Bottom Panel:



Reset:

There are two ways to reset the Linksys E900 to its factory defaults. Either press or hold the **Reset** button for approximately five seconds, or restore the defaults from the **Administration > Factory Defaults** page on the router's web-based setup page.

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HARDWARE INFORMATION

1. What is E900?

The Linksys **E900** is a Wireless-N router with four Ethernet ports. You can also use the router to share resources such as computers, printers and files. Various security features such as SPI Firewall help protect your data and your privacy while you are online.

2. What is the default IP Address, Username and Password to login to the E900's web-based setup page?

The default IP Address is 192.168.1.1. The username and the password is "admin".

3. How do I reset the E900 to factory defaults?

There are two (2) ways on how to reset the Wireless-N router to factory defaults.

Hardware Reset

Press and hold the **Reset** button located at the bottom panel for about **five (5) seconds** then release.

Software Reset

Access the web-based setup page, go to Administration tab > Factory Defaults sub-tab, click the Restore Factory Defaults button.

4. What is the warranty period of the E900?

One (1) year limited warranty.

5. How do I reboot the E900?

You can turn **OFF** the power first then turn it back **ON** or you can click the **Reboot** button when you access the web-based setup page under the **Basic Setup** tab.

6. Does E900 support remote management?

Remote Management is a feature that allows you to access and manage your Linksys router from a remote location. You need to be connected to the Internet to be able to do remote management. The Linksys E900 supports this feature. If you want to learn more about remote management, click <u>here</u>.

SECURITY SUPPORTED

1. What is the default SSID broadcast of E900?

The default SSID of the E900 is CiscoXXXXX.

NOTE: "XXXXX" is the last **five (5)** digits of the router's serial number, which is found at the bottom of the router.

2. How many security modes are supported in E900?

The E900 supports the following wireless security options: WPA2/WPA Mixed Mode, WPA2 Personal, WPA Personal, WPA2/WPA Enterprise Mixed Mode, WPA2 Enterprise, WPA Enterprise, WEP, and RADIUS.

3. Does E900 allow VPN tunnels using IPSec, L2TP, or PPTP protocols to pass through the router?

Yes.

4. Does E900 support SPI firewall?

Yes.

5. How does the Web Filter on the E900 work?

Web Filter will filter Java, ActiveX, Cookies, and Proxy applications in the network.

FIRMWARE UPGRADE METHOD

1. How do I upgrade the Firmware of the E900?

Step 1: Access the router's web-based setup page.

Step 2: Go to Administration tab and select Firmware Upgrade.

Step 3:

Select the file to upgrade by using the **Browse...** button.

Step 4:

Click Start to Upgrade.

NOTE: Do not reset or powercycle the router until the upgrade is complete.

SPECIAL FEATURES

1. What DDNS providers does the E900 support?

DynDNS.org and TZO.com

2. How many connection types does the E900 support?

The router supports **six (6)** connection types: Automatic Configuration – DHCP, Static IP, PPPoE, PPTP, Telstra Cable, and L2TP.

3. Does E900 support AP Isolation?

No.

4. Does E900 support wireless and Internet Access Priority QOS?

Yes.

5. Does E900 support transmission of the log information to a log server?

No.

6. Does E900 lose the settings you have customized when its firmware has been updated?

Yes. Before upgrading the firmware of your E900, write down all your customized settings. After upgrading its firmware, you will have to re-enter all of your configuration settings.

7. What is Radio Band, Standard and Wide?

The **Radio** Band gives you **two (2)** options: **Auto** and **Standard** - 20MHz channel, Standard channel is what all B/G/N devices use. If you select Wide channel for the Radio Band setting, then Wireless-N can use two channels: a primary one (Auto) and a secondary one (Standard Channel). This will improve Wireless-N performance.

8. What is "MAC address clone" and what is it for?

Some Internet Service Providers, especially Cable companies, require you to register the **MAC Address** of the modem, router or Ethernet adapter of the computer in order to access the Internet. If you do not wish to re-register the MAC address currently registered with your ISP, you may assign the MAC address you have currently registered with your ISP to the router using the **MAC Address Clone** feature.

If you want to clone the MAC address of the computer that you are using to configure the router, and then click the **Clone My MAC Address** button. The router will automatically detect your computer's MAC address, so you do **NOT** have to call your ISP to change the registered MAC address to the router's MAC address. It is recommended that the computer registered with the ISP is used to enable this feature on the router.

9. What is Diagnostics and what is it for?

Diagnostics is used to check internet connect and application "ping", "traceroute" command to check your network's connectivity to the Internet.

10. What is Port Forwarding?

Port Forwarding allows you to set up public services on your network, such as web servers, ftp servers, e-mail servers, or other specialized Internet applications.

11. What is Port Triggering?

Port Triggering will forward port based on the incoming port specified. Check your software application to find out what is necessary to enter in these fields.

NOTE: You can set up to ten (10) port triggering entries.

12. What is "DMZ" and what is it for?

Demilitarized Zone (DMZ) allows one local user to be exposed to the Internet for use of a special-purpose service such as Internet gaming and videoconferencing. DMZ hosting forwards all the ports at the same time to one computer. However, Port Range Forwarding is more secure because it only opens the ports you want to forward, while DMZ hosting opens all the ports of one computer, exposing the computer to the Internet.

13. How many Network modes supported in E900?

It supports three (3) Network Modes - 802.11b, 802.11g, 802.11n.

14. What is wireless MAC Filter and what is it for?

Wireless MAC Filter prevents or allows connectivity to the wireless network with the use of the MAC address of the wireless device.

15. What is UPnP?

Universal Plug and Play (UPnP) allows Windows to automatically configure the router for various Internet applications, such as gaming and videoconferencing.

16. Can I configure Guest access and Parental controls feature using the web-based setup page?

Yes. To know how to set up the Guest Access feature of the E900 using the web-based setup page, click <u>here</u>.

To know how to set up the Parental controls of the E900 using the web-based setup page, click <u>here</u>.

17. What software does the E900 come with?

The E900 comes with Cisco Connect Software version 1.3. To learn how to set up your Linksys Wireless-N Router for the first time using Cisco Connect, click <u>here</u>.

NOTE: Older versions of Cisco Connect for Mac computers have compatibility issues with the latest release of Mac OS X (10.7 "Lion"). Only Cisco Connect versions 1.4.11222 and newer are compatible with the Lion operating system. For more information, click <u>here</u>.

Setting Up Your E-Series Router

Where to find more help

In addition to this User Guide, you can find help at these locations:.

- <u>Linksys.com/support</u> (documentation, downloads, FAQs, technical support, live chat, forums).
- Setup CD (Troubleshooting Guide, legal and regulatory notices).
- Cisco Connect help (run Cisco Connect, then click Learn More where available).
- Browser-based utility context-sensitive help (open the utility, then click **Help** in the right-side column.).

How to set up your router

The easiest and fastest way to set up your router is to run the Cisco Connect setup software.

How to start Cisco Connect

When you run the setup CD, Cisco Connect (your router's setup software) is automatically installed onto your computer. You can then use Cisco Connect to easily manage your router.

NOTE:

If you lose your setup CD, you can download the software from Linksys.com/support

To start Cisco Connect for the first time:

- 1. Insert the CD into your CD or DVD drive.
- 2. Click Set up your Linksys Router

If you do not see this:

- For Windows, click **Start**, **Computer**, then double-click the **CD** drive and the **Setup** icon.
- For Mac, double-click the **CD** icon on your desktop, then double-click the **Setup** icon.
- 3. Follow the on-screen instructions to complete your router setup.

Use Cisco Connect to manage your router

After your router has been set up and Cisco Connect has been installed, you can use Cisco Connect to easily manage many of your router's settings such as:.

- · Connect devices to your network.
- Test your Internet connection speed.
- Configure parental controls.
- Set up guest access.
- · Change your router's name and password.

How to manually set up your router

After setting up the router with the setup software (located on the CD), the router will be ready for use. If you would like to change its advanced settings, or if the software does not run, use the router's browser-based utility.You can access the utility with a web browser on a computer connected to the router. For more information on using the utility, see "How to open the browser-based utility" on page 4.

Advanced Configuration.

How to open the browser-based utility

To access some advanced settings, you need to open the browser-based utility.

To open the browser-based utility:

1. Run Cisco Connect, click **Change** under *Router settings*, click **Advanced settings**, then click **OK**

– or –

Open a web browser on a computer connected to your network, then go to **192.168.1.1**

The router prompts you for a user name and password.

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2. Enter the user name and password, then click **OK** The utility's main menu opens.

TIPS

If you set up your router without using Cisco Connect, your router's default password is **admin** (You can leave the user name blank.).

If you used Cisco Connect to set up your router, you can see your router's user name and password by running Cisco Connect, then clicking **Router settings**

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Setup > Basic Setup

The first screen that appears is the *Basic Setup* screen. This allows you to change the router's general settings.

Language		2				
Select your language	Englah	•]:				
Internet Setup						
Internet Connection Type	Automatic Configurat	ion - DHCP	•			
Optional Settings required by some Internet Service Providers)	Host Name: Domain Name: NTU:	Auto	• Size	[t]00		
Network Setup						
Router Address	P Address	192	. 160		1.11	
	Subret Mask	255.25	5.255.0	•		
	Device Name:	Ciaco00	009	2		
DIICP Server Setting	DHCP Server:	e Ene	bled O D	sabled	DHCP	Reservation
	Start P Address	182.10	18. t. 100			
	Maximum Number of Users	50	Ĵ			
	IP Address Range:	192.16	8 . 1. 100 to	549		
	Clert Lease Time:	0	minutes	C means	one day)	
	Static DNS 1:	0	0	.0	. 0	
	Static DNS 2:	0	. 0	. 0	0	
	Static DHS 3:	0	. 0 .	.0	. 0	-1
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Time Zone	(GMT-08:00) Pacific	Time (USA)	& Canada)		•]	
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Language

Select your language To use a different language, select one from the dropdown menu. The language of the browser-based utility will change five seconds after you select another language.

Internet Setup

The *Internet Setup* section configures the router to your Internet connection. Most of this information can be obtained through your Internet Service Provider (ISP).

Internet Connection Type

Select the type of Internet connection your ISP provides from the drop-down menu. The available types are:.

- •. Automatic Configuration DHCP.
- •. Static IP.
- •. PPPoE.
- •. PPTP.
- •. L2TP.
- •. Telstra Cable.

Automatic Configuration - DHCP

The default Internet Connection Type is **Automatic Configuration - DHCP** (Dynamic Host Configuration Protocol). Keep the default only if your ISP supports DHCP or if you connect using a dynamic IP address. (This option usually applies to cable connections.).

Static IP

If you are required to use a fixed IP address to connect to the Internet, select **Static IP**

ΡΡΡοΕ

If you have a DSL connection, check whether your ISP uses Point-to-Point Protocol over Ethernet (PPPoE) If so, select PPPoE.

PPTP

Point-to-Point Tunneling Protocol (PPTP) is a service that generally applies to connections in Europe. If your PPTP connection supports DHCP or a dynamic IP address, then select **Obtain an IP Address Automatically** If you are required to use a fixed IP address to connect to the Internet, then select **Specify an IP Address** and configure the options below.

L2TP

Layer 2 Tunneling Protocol (L2TP) is a service that generally applies to connections in Israel.

Telstra Cable

Telstra Cable is a service that generally applies to connections in Australia.

Connect on Demand or Keep Alive

The Connect on Demand and Keep Alive options let you choose whether the router connects to the Internet only as needed (useful if your ISP charges for connect time), or if the router should always be connected. Select the appropriate option.

Wireless > Basic Wireless Settings

The basic settings for wireless networking are set on this screen.

NOTE

After you set up the wireless network(s), set up the wireless security settings.

Wireless Settings

Network Mode:	Mixed -	
Network Name (SSD):	Cisce00056	
Channel Width:	20 MHz Only +	
Channel	Auto 💌	
SSID Broadcast:	Enabled Oisabled	

Network Mode Select the wireless standards your network will support.

- **Mixed** If you have Wireless-N (2.4 GHz), Wireless-G, and Wireless-B devices in your network, keep the default, **Mixed**
- Wireless-B/G Only If you have both Wireless-B and Wireless-G (2.4 GHz) devices in your network, select Wireless-B/G Only
- Wireless-B Only If you have only Wireless-B devices, select Wireless-B Only
- Wireless-G Only If you have only Wireless-G devices, select Wireless-G Only
- Wireless-N Only If you have only Wireless-N (2.4 GHz) devices, select
 Wireless-N Only
- **Disabled** If you have no Wireless-B, Wireless-G, and Wireless-N (2.4 GHz) devices in your network, select **Disabled**

NOTE

If you have a dual-band router, you can select Mixed, Wireless-A Only, Wireless-N Only, or Disabled for the 5 GHz band.

If you are not sure which mode to use, keep the default, Mixed

Network Name (SSID) The Service Set Identifier (SSID) is the network name shared by all devices in a wireless network. It is case-sensitive and must not exceed 32 keyboard characters. The default is **Cisco** followed by the last 5 digits of the router's serial number, which is found on the bottom of the router. If you used the setup software for installation, then the default Network Name is changed to an easy-to-remember name.

NOTE

If you restore the router's factory default settings (by pressing the Reset button or using the *Administration* > *Factory Defaults* screen), the Network Name will return to its default value Change the Network Name back to its original name, or you will have to reconnect all devices on your wireless network to the new network name.

Channel Width For best performance in a network using Wireless-B, Wireless-G and Wireless-N (2.4 GHz) devices, select **Auto (20 MHz or 40 MHz)** For a channel width of 20 MHz, keep the default, **20 MHz only**

Channel Select the channel from the drop-down list for Wireless-B, Wireless-G, and Wireless-N (2.4 GHz) networking. If you are not sure which channel to select, then keep the default, **Auto**

SSID Broadcast When wireless clients survey the local area for wireless networks to associate with, they will detect the SSID broadcast by the router. To broadcast the router's SSID, keep the default, **Enabled** If you do not want to broadcast the router's SSID, then select **Disabled**

Wireless Security.

Wireless > Wireless Security

The wireless security settings configure the security of your wireless network(s). The router supports the following wireless security options: WPA2/WPA Mixed Mode, WPA2 Personal, WPA Personal, WPA2/WPA Enterprise Mixed Mode, WPA2 Enterprise, WPA Enterprise, WEP, and RADIUS. (WPA stands for Wi-Fi Protected Access. WEP stands for Wireless Equivalent Privacy. RADIUS stands for Remote Authentication Dial-In User Service.).

Personal options

Security Option	Strength
WPA2 Personal.	Strongest.
WPA2/WPA Mixed Mode.	WPA2: Strongest. WPA: Strong.
WPA Personal.	Strong.
WEP.	Basic.

Office options

The office options are available for networks that use a RADIUS server for authentication. The office options are stronger than the personal options because WPA2 or WPA provides encryption while RADIUS provides authentication.

Security Option	Strength
WPA2 Enterprise.	Strongest.
WPA2/WPA Enterprise Mixed Mode.	WPA2: Strongest. WPA: Strong.
WPA Enterprise.	Strong.
RADIUS.	Basic.

Option settings

WPA2/WPA Mixed Mode, WPA2 Personal, WPA Personal

NOTES

If you select WPA2/WPA Mixed Mode as your Security Mode, each device in your wireless network MUST use WPA2/WPA and the same passphrase.

If you select WPA2 Personal as your Security Mode, each device in your wireless network MUST use WPA2 Personal and the same passphrase.

If you select WPA Personal as your Security Mode, each device in your wireless network MUST use WPA Personal and the same passphrase.

Security Mode:	WPA2/WPA Mixed Mode	٠
Passphrase:)(

Passphrase Enter a passphrase of 8-63 characters. The default is **password** If you used the setup software for installation, then the default is changed to a unique passphrase, which you can find by running Cisco Connect, then clicking **Router settings**

WPA2/WPA Enterprise Mixed Mode, WPA2 Enterprise, WPA Enterprise

These option is used in coordination with a RADIUS server. (These should only be used when a RADIUS server is connected to the router.)

NOTES

If you select WPA2/WPA Enterprise Mixed Mode as your Security Mode, each device in your wireless network MUST use WPA2/WPA Enterprise and the same shared key.

If you select WPA2 Enterprise as your Security Mode, each device in your wireless network MUST use WPA2 Enterprise and the same shared key.

If you select WPA Enterprise as your Security Mode, each device in your wireless network MUST use WPA Enterprise and the same shared key.

Security Mode:	WPA	2///P/	Enterp	rise Mixe	d Mode	•
RADUS Server:	0	. 0	.0	.0	1	
RADIUS Port:	1812	8				
Shared Key:						

RADIUS Server Enter the IP address of the RADIUS server.

RADIUS Port Enter the port number of the RADIUS server. The default is **1812 Shared Key** Enter the key shared between the router and the server.

WEP

WEP is a basic encryption method, which is not as secure as WPA.

NOTE:

If you select WEP as your Security Mode, each device in your wireless network MUST use WEP and the same encryption and shared key.

Security Mode:	WEP	•
Encryption:	40/64-bit (10 hex digits)	•
Passphrase:		Generate
Key 1:		37
Key 2		
Key 3		10
Key 4:		10
TX Key	1.	

Encryption Select a level of WEP encryption, **(40/64-bit 10 hex digits)** or **104/128-bit (26 hex digits)** The default is **40/64-bit (10 hex digits)**

Passphrase Enter a passphrase to automatically generate WEP keys. Then click **Generate**

Key 1-4 If you did not enter a passphrase, enter the WEP key(s) manually.

TX Key Select a default TX (Transmit) Key to use. The default is 1

RADIUS

This option features WEP used in coordination with a RADIUS server. (This should only be used when a RADIUS server is connected to the router.)

NOTE:

If you select RADIUS as your Security Mode, each device in your wireless network MUST use RADIUS and the same encryption and shared key.

Security Mode:	RADUS	•
RADUS Server:	0,0,0,0	
RADIUS Port.	1812	
Shared Key:		
Encryption.	40/64-bit (10 hex digits)	
Pasaphrase		Generate
East 1		
may in		
Key 2		
Key 2. Key 3.		
Key 2: Key 3: Key 4:		

RADIUS Server Enter the IP address of the RADIUS server.

RADIUS Port Enter the port number of the RADIUS server. The default is **1812**

Shared Secret Enter the key shared between the router and the server.

Encryption Select a level of WEP encryption, **(40/64-bit 10 hex digits)** or **104/128-bit (26 hex digits)** The default is **40/64-bit (10 hex digits)**

Passphrase Enter a passphrase to automatically generate WEP keys. Then click Generate

Key 1-4 If you did not enter a passphrase, enter the WEP key(s) manually.

TX Key Select a default TX (Transmit) Key to use. The default is 1

Disabled

If you choose to disable wireless security, you will be informed that wireless security is disabled when you first attempt to access the Internet. You will given the option to enable wireless security, or confirm that you understand the risks but still wish to proceed without wireless security.

 Anterios 	120100	
Security Mode:	Disabled	

Troubleshooting

This chapter can help you solve common setup issues and connect to the Internet. Your router's CD includes Cisco Connect, the router setup software that makes it easy to connect network devices, change router settings, control guest access, enable parental controls, and connect to the Internet. Cisco Connect is also installed onto your computer during setup. If Cisco Connect is prevented from completing the setup, this chapter will guide you through finding solutions.



You can find more help from our award-winning customer support at. **linksys.com/support.**

How to run Cisco Connect after setup

When you run the setup CD, Cisco Connect is automatically installed onto your computer. You can then use Cisco Connect to easily manage your network.

To start Cisco Connect on a Windows computer:

1. Click Start, All Programs, then click Cisco Connect



The Cisco Connect main menu opens.

To start Cisco Connect on a Mac OS X computer:

1. Open **Finder** and click **Applications** in the left panel.

Applications

2. Double-click the Cisco Connect icon.



The Cisco Connect main menu opens.

Your router was not successfully set up



If Cisco Connect did not complete the setup, you can try the following:

 Press and hold the **Reset** button on your router with a paperclip or pin for 10-15 seconds, then run the **Setup** program again on the router's CD





Your router's appearance may vary

- Temporarily disable your computer's firewall (see the security software's instructions for help), then run the **Setup** program again on the router's CD.
- •. If you have another computer, use that computer to run the **Setup** program again on the router's CD.

Get Windows XP Service Pack 3 message

On Windows XP computers, Cisco Connect requires Service Pack 3 in order to work. If you receive a "Get Windows Service Pack 3".message when setting up your router for the first time, follow these troubleshooting steps.

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If the currently installed Service Pack is older than version 3, you need to download and install Service Pack 3.

TIP

To temporarily connect to the Internet and download the required Service Pack, you can use the included Ethernet cable to connect your computer directly to your modem.

To install Service Pack 3:

- Click the link in the Cisco Connect error message or connect to the Microsoft Update website (update.microsoft.com/windowsupdate).
- **2.** Follow the instructions on the website or contact Microsoft if you need further help.
- **3.** After downloading and installing Service Pack 3, run the **Setup** program on your router's.CD.

Your Internet cable is not plugged in **message**

If you get a "Your Internet cable is not plugged in".message when trying to set up your router, follow these troubleshooting steps.



To fix the problem:

 Make sure that an Ethernet or Internet cable (or a cable like the one supplied with your router) is securely connected to the yellow Internet port on the back of the router and to the appropriate port on your modem. This port on the modem is usually labeled Ethernet, but may be named Internet or WAN





Back view of cable modem



Back view of DSL modem

- 2. Make sure that your modem is connected to power and is turned on. If it has a power switch, make sure that it is set to the **ON** or **I** position.
- **3.** If your Internet service is cable, verify that the cable modem's **CABLE** port is connected to the coaxial cable provided by your ISP.

Or, if your Internet service is DSL, make sure that the DSL phone line is connected to the modem's **DSL** port.

- **4.** If your computer was previously connected to your modem with a USB cable, disconnect the USB cable.
- Return to the Cisco Connect window and click Next to try again. If the window has already been closed, run the Setup program again on the router's CD.



Back view of router

Cannot access your router message

If you cannot access your router because your computer is not connected to your network, follow these troubleshooting steps.

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To access your router, 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.

To fix the problem on Windows computers:

1. On your Windows desktop, right-click the wireless icon in the system tray.



2. Click View Available Wireless Networks A list of available networks appears.



3. Click your own network name, then click **Connect** 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 shown selected.

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((0))	myhome	
1	Geounty-enabled wireless network	.03Å
(())	BronzeEogle	
1 8	Security-enabled versions network (WPA2)	
	To connect to this network, click Connect. You might need to additional information.	orter
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4. If you are prompted to enter a network key, type your password (Security Key) into the **Network key** and **Confirm network key** fields, then click **Connect**

Wireless Network Conne	ction 🛛		
The network 'BronzeEagle' requires a network key (also called a WEP key or WPA key). A network key helps prevent unknown intruders from connecting to this network.			
Type the key, and then click Connect.			
Network <u>k</u> ey:	•••••		
Confirm network key:	•••••		
	<u>C</u> onnect Cancel		

Your computer connects to the network, and you should now be able to access the router.

To fix the problem on Mac computers:

1. In the menu bar across the top of the screen, click the **AirPort** icon. A list of wireless networks appears. Cisco 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 shown selected



- 2. Click the wireless network name of your Linksys E-Series router (*BronzeEagle* in the example).
- 3. Type your wireless network password (Security Key) into the **Password** field, then click **OK**



Device not found message

If you get a "Device not found".message when trying to connect a network device (such as an iPhone, iPod, or smartphone), follow these troubleshooting steps.

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TIP

For a stronger signal during initial setup, move your wireless devices near your router Long distances make it harder for the router to detect the devices.

To fix the problem:

1. Run Cisco Connect.



- 2. Click **Computers and devices** The *Computers and other devices* window appears.
- 3. Click Other Wireless devices



4. Enable your wireless network device's Wi-Fi connection, then search for your wireless network name See your device documentation for help.

NOTE

Your wireless device must support WPA/WPA2.

- 5. On the wireless network device, select the network name of your router and enter the password (Security Key).
- 6. In Cisco Connect, click Next



Example: On your Smartphone or other wireless device, locate the Wi-Fi menu and search for available wireless networks. In this example, using the network information provided by Cisco Connect shown in the previous screen, click **BronzeEagle**



7. Enter the password (Security Key) provided by Cisco Connect. In this example, the security key is **B6eM9UkCjz**

NOTE

The password is case sensitive Make sure that you enter letters in the correct case.

8. When your wireless device is successfully connected to your wireless network, enter a name for the device in Cisco Connect, then click **Finish**



Specifications

Linksys E1200

Model Name.	Linksys E1200.
Description.	Wireless-N Router.
Model Number.	E1200.
Standards.	802.11n, 802.11g, 802.11b, 802.3u.
Ports.	Power, Internet, and Ethernet (1-4).
Buttons.	Reset, Wi-Fi Protected Setup™.
LEDs.	Power/Wi-Fi Protected Setup,. Internet, Ethernet (1-4).
Cabling Type.	CAT 5e.
Transmitted Power.	802.11n (20 MHz): 15.0 ± 1.5dBm @ CH6, MCS 0~4, MCS 8~12. 13.5 ± 1.5dBm @ CH6, MCS 5~7, MCS 13~15
	802.11n (40 MHz): 14.0 ± 1.5dBm @ CH6, MCS 0~4, MCS 8~12. 13.5 ± 1.5dBm @ CH6, MCS 5~7, MCS 13~15
	802.11g: 14.5 ± 1.5dBm @ CH6, all rates.
	802.11b: 16.5 ± 1.5dBm @ CH6, all rates.
Antenna Gain.	≤2.5 dBi, ≤4.0 dBi (2 antennas).
UPnP.	Supported.
Wireless Security.	Wi-Fi Protected Access™ 2 (WPA2),. WEP, wireless MAC filtering.
Security Key Bits.	Up to 128-bit encryption.

Environmental

Dimensions.	188.7 × 151.7 × 31.2 mm. (7.43" × 5.97" × 1.23").	
	Unit Weight. 252.7g (8.91 oz.).	
Power.	12V, 0.5A.	
Certifications.	FCC, UL/cUL, ICES-003, RSS210,. CE, Wi-Fi (IEEE 802.11b/g/n), WPA2™, WMM®, Wi-Fi Protected. Setup, Windows 7.	
Operating Temp.	0 to 40°C (32 to 104°F).	
Storage Temp.	-20 to 60°C (-4 to 140°F)	
Operating Humidity.	10 to 80% non-condensing.	
Storage Humidity.	5 to 90% non-condensing.	

NOTES

For regulatory, warranty, and safety information, see the CD that came with your router or go to **Linksys.com/support**

Specifications are subject to change without notice.

Model Name.	Linksys E1500.
Description.	Wireless-N Router with SpeedBoost.
Model Number.	E1500.
Standards.	802.11n, 802.11g, 802.11b, 802.3u.
Ports.	Power, Internet, and Ethernet (1-4).
Buttons.	Reset, Wi-Fi Protected Setup.
LEDs.	Power/Wi-Fi Protected Setup,. Internet, Ethernet (1-4).
Cabling Type.	CAT 5e.
Transmitted Power.	802.11n (20 MHz): 17.0 ± 1.5 dBm @ CH6, MCS 0~4, MCS 8~12. 16.0 ± 1.5 dBm @ CH6, MCS 5~7, MCS 13~15.
	802.11n (40 MHz): 15.5 ± 1.5 dBm @ CH6, MCS 0~4, MCS 8~12. 14.0 ± 1.5 dBm @ CH6, MCS 5~7, MCS 13~15.
	802.11g: 18.0 ± 1.5 dBm @ CH6, 6 Mbps. 17.0 ± 1.5 dBm @ CH6, 54 Mbps.
	802.11b: 18.0 ± 1.5 dBm @ CH6, all rates.
Antenna Gain.	≤3.0 dBi, ≤4.0 dBi, ≤4.5 dBi. (3 antennas).
UPnP.	Supported.
Wireless Security.	Wi-Fi Protected Access 2 (WPA2),. WEP, wireless MAC filtering.
Security Key Bits.	Up to 128-bit encryption.

Environmental

Dimensions.	188.7 × 151.7 × 31.2 mm (7.43" × 5.97" × 1.23").
Unit Weight.	254.1g (8.96 oz.).
Power.	12V, 0.5A.
Certifications.	FCC, UL/cUL, ICES-003, RSS210,. CE, Wi-Fi (IEEE 802.11b/g/n), WPA2, WMM, Wi-Fi Protected. Setup, Windows 7.
Operating Temp.	0 to 40°C (32 to 104°F).
Storage Temp.	-20 to 60°C (-4 to 140°F).
Operating Humidity.	10 to 80% non-condensing.
Storage Humidity.	5 to 90% non-condensing.

NOTES

For regulatory, warranty, and safety information, see the CD that came with your router or go to **Linksys.com/support**

Specifications are subject to change without notice.

Model Name.	Linksys E2500.
Description.	Advanced Dual-Band N Router.
Model Number.	E2500.
Standards.	802.11n, 802.11a, 802.11g, 802.11b, 802.3, 802.3u, 802.3ab.
# of Antennas.	4 total, 2 internal antennas per each 2.4 GHz & 5 GHz radio band.
Detachable (y/n).	No.
Modulation.	802.11b: CCK, QPSK, BPSK 802.11g: OFDM. 802.11a: OFDM. 802.11n: BPSK, QPSK, 16-QAM, 64-QAM.
Receive Sensitivity. (Typical).	2.4 GHz. 802.11b: -87 dBm @ 11 Mbps. 802.11g: -70 dBm @ 54 Mbps 802.11n 20 MHz: -70 dBm @ MCS15. 802.11n 40 MHz: -66 dBm @ MCS15.
	5 GHz. 802.11a: -70 dBm @ 54 Mbps. 802.11n 20 MHz: -66 dBm @ MCS23. 802.11n 40 MHz: -62 dBm @ MCS23.
Antenna Gain in dBi.	2.4 GHz:. Antenna 1 (right rear): ≤2.94 dBi. Antenna 2 (front right): ≤3.78 dBi.
	5 GHz:. Antenna 1 (right front): ≤5.86 dBi. Antenna 2 (front left): ≤4.88 dBi.
UPnP.	Supported.
Security features.	WEP, WPA, WPA2.
Security key bits.	Up to 128-bit encryption.

Environmental

Dimensions.	225 x 35 x 180 mm (8.86″ x 1.38″ x 7.09″).
Unit Weight.	452 g (15.94 oz).
Power.	12V, 1A.
Certifications.	FCC, IC, CE, Wi-Fi A/B/G/N
Operating Temp.	0 to 40°C (32 to 104°F).
Storage Temp.	-20 to 60°C (-4 to 140°F)
Operating Humidity.	10 to 80%, relative humidity, non-condensing.
Storage Humidity.	5 to 90% non-condensing.

NOTES

For regulatory, warranty, and safety information, see the CD that came with your router or go to **Linksys.com/support**

Specifications are subject to change without notice.

Model Name.	Linksys E3200.
Description.	High Performance Dual-Band N Router.
Model Number.	E3200.
Standards.	802.11n, 802.11a, 802.11g, 802.11b, 802.3, 802.3u, 802.3ab.
# of Antennas.	6 total, 3 internal antennas per each 2.4 GHz & 5 GHz radio band
Detachable (y/n).	No
Switch Port Speed.	10/100/1000 Mbps
Ports.	Internet, Ethernet (1-4), USB, Power
Buttons.	Reset, Wi-Fi Protected Setup
LEDs.	Power, Ethernet (1-4)
Modulation.	802.11b: CCK, QPSK, BPSK 802.11g: OFDM 802.11a: OFDM 802.11n: BPSK, QPSK, 16-QAM, 64-QAM
Receive Sensitivity.	2.4 GHz 802.11b: -87 dBm @ 11 Mbps (Typical) 802.11g: -77 dBm @ 54 Mbps (Typical) 802.11n (20 MHz): -71 dBm @ MCS15 (Typical) 802.11n (40 MHz): -68 dBm @ MCS15 (Typical)
	5 GHz 802.11a: -75 dBm @ 54 Mbps (Typical) 802.11n 20 MHz: -70 dBm @ MCS15 (Typical) 802.11n 40 MHz: -67 dBm @ MCS15 (Typical)
Antenna Gain.	2.4 GHz (Dipole Antennas) Antenna $1 \le 3$ dBi Antenna $2 \le 4$ dBi Antenna $3 \le 4$ dBi
	5 GHz (Dipole Antennas) Antenna $1 \le 4.5$ dBi Antenna $2 \le 4.5$ dBi Antenna $3 \le 4.5$ dBi
UPnP.	Supported

Security features.	WEP, WPA, WPA2
Security key bits.	Up to 128-bit encryption.
Storage File System Support.	FAT, and NTFS, and HFS+.

Environmental

Dimensions.	170 x 25 x 190 mm (6.69″ x 0.98″ x 7.48″).
Unit Weight.	216 g (7.62 oz).
Power.	12V, 2A.
Certifications.	FCC, IC, CE, Wi-Fi A/B/G/N
Operating Temp.	0 to 40°C (32 to 104°F).
Storage Temp.	-20 to 60°C (-4 to 140°F).
Operating Humidity.	10 to 80% relative humidity, non-condensing.
Storage Humidity.	5 to 90% non-condensing.

NOTES

For regulatory, warranty, and safety information, see the CD that came with your router or go to Linksys.com/support

Specifications are subject to change without notice.

Maximum performance derived from IEEE Standard 802.11 specifications Actual performance can vary, including lower wireless network capacity, data throughput rate, range and coverage Performance depends on many factors, conditions and variables, including distance from the access point, volume of network traffic, building materials and construction, operating system used, mix of wireless products used, interference and other adverse conditions.

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Model Name.	Linksys E4200.
Description.	Maximum Performance Wireless-N Router.
Model Number.	E4200.
Standards.	802.11n, 802.11a, 802.11g, 802.11b, 802.3, 802.3u, 802.3ab.
Radio Frequency.	2.4 and 5 GHz.
Switch Port Speed.	10/100/1000 Mbps (Gigabit Ethernet).
Ports.	Power, USB, Internet, Ethernet (1-4).
Buttons.	Reset, Wi-Fi Protected Setup.
LEDs.	Top panel: Power. Back panel: Internet, Ethernet (1-4).
Number of Antennas.	6 total, 3 internal antennas per each 2.4 GHz and 5 GHz radio band.
Detachable (y/n).	No.
Modulations.	802.11b: CCK, QPSK, BPSK. 802.11g: OFDM. 802.11a: OFDM. 802.11n: BPSK, QPSK, 16-QAM, 64-QAM.
Receive Sensitivity.	2.4 GHz. 802.11b: -87 dBm @ 11 Mbps (Typical). 802.11g: -77 dBm @ 54 Mbps (Typical). 802.11n: 20 MHz: -71 dBm @ MCS15 (Typical). 802.11n: 40 MHz: -68 dBm @ MCS15 (Typical). 5 GHz.
	802.11a: -71 dBm @ 54 Mbps (Typical). 802.11n: 20 MHz: -70 dBm @ MCS23 (Typical). 802.11n: 40 MHz: -68 dBm @ MCS23 (Typical).
Antenna Gain in dBi.	2.4 GHz (3 internal PIFA antennas). PIFA $1 \le 3.6$ dBi (Right). PIFA $2 \le 3.8$ dBi (Left). PIFA $3 \le 3.8$ dBi (Front). 5 GHz (3 internal PIFA antennas). PIFA $1 \le 4.8$ dBi (Right). PIFA $2 \le 5.3$ dBi (Left). PIFA $3 \le 5.2$ dBi (Front).

Suppo	rted File Systems
for Sto	rage Device.
UPnP.	
Securit	y Features.
Securit	y Key Bits.

Environmental

Dimensions.	225 x 25 x 160 mm (8.86″ x 0.98″ x 6.30″).
Unit Weight.	355 g (12.52 oz).
Power.	12V, 2A.
Certifications.	FCC, IC, CE, Wi-Fi a/b/g/n, Windows.7.
Operating Temp.	0 to 40°C (32 to 104°F).
Storage Temp.	-20 to 60°C (-4 to 140°F).
Operating Humidity.	10 to 80% relative humidity, non-condensing.
Storage Humidity.	5 to 90% non-condensing.

NOTES

For regulatory, warranty, and safety information, see the CD that came with your router or go to **Linksys.com/support**

FAT32, NTFS, and HSF+

Up to 128-bit encryption.

WEP, WPA, WPA2.

Supported

Specifications are subject to change without notice.

Industry Canada statement:

This device complies with RSS-210 of the Industry Canada 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.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Radiation Exposure Statement:

This equipment complies with IC 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.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

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.
- ^tFCC 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. **Radiation Exposure Statement:**

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.

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