



**USER GUIDE** 

**Cisco Small Business Pro** 

IP Phone Model SPA525G (SIP)

## **FCC and IC Statement**

#### **Federal Communication Commission Interference Statement**

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 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.

#### **IMPORTANT NOTE:**

#### **FCC 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.

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

#### **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.

#### **IMPORTANT NOTE:**

#### **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.



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**Related Documentation** 

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# **About This Document**

## **Purpose**

This guide describes the concepts and tasks necessary to use and configure your Cisco SPA525G IP Phone.



NOTE The SPA525G features vary, depending on the type of call control system that you are using. This document describes using the SPA525G with a SIP phone system, such as the Cisco SPA9000 Voice System or a Broadsoft or Asterisk system. If you are using the SPA525G with a Cisco Unified Communications 500 Series, see the Cisco Unified Communications Manager Express for Cisco Unified IP Phone 525G User Guide.

## **Organization**

This table describes the contents of each chapter in this document.

Chapter	Title	Description
Chapter 1	Getting Started	Provides an overview of the SPA525G IP phone.
Chapter 2	Installing Your Phone	Connecting your hardware and the SPA525G phone to the network.
Chapter 3	Using Basic Phone Functions	Performing basic phone functions, such as making, transferring, forwarding, and parking calls, creating conference calls, and using the phone directory and call history lists.
Chapter 4	Using Advanced Phone Features	Configuring advanced features on your phone, such as privacy and security features, speed dials, and ring tones.

Chapter	Title	Description
Chapter 5	Using the Web Interface	Accessing the web user interface for your phone to configure your address book, speed dials, and other phone features.
Chapter 6	Using the SPA932 Attendant Console	Installing and using the SPA932 Attendant Console.
Appendix A	Additional Information	Additional information for your product.
Appendix B	Where to Go From Here	Provides URLs for related product documentation and resources available on Cisco.com.

# **Finding Information in PDF Files**

The <Product Name> documents are published as PDF files. The PDF Find/Search tool within Adobe® Reader® lets you find information quickly and easily online. You can perform the following tasks:

- Search an individual PDF file.
- Search multiple PDF files at once (for example, all PDFs in a specific folder or disk drive).
- Perform advanced searches.

## Finding Text in a PDF

Follow this procedure to find text in a PDF file.

**STEP 1** Enter your search terms in the Find text box on the toolbar.



**NOTE** By default, the Find tool is available at the right end of the Acrobat toolbar. If the Find tool does not appear, choose **Edit > Find**.

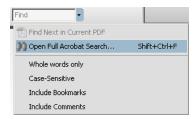


- STEP 2 Optionally, click the arrow next to the Find text box to refine your search by choosing special options such as Whole Words Only.
- **STEP 3** Press **Enter**.
- **STEP 4** Acrobat displays the first instance of the search term.
- **STEP 5** Press **Enter** again to continue to more instances of the term.

#### **Finding Text in Multiple PDF Files**

The *Search* window lets you search for terms in multiple PDF files that are stored on your PC or local network. The PDF files do not need to be open.

- STEP 1 Start Acrobat Professional or Adobe Reader.
- STEP 2 Choose Edit > Search, or click the arrow next to the *Find* box and then choose Open Full Acrobat Search.



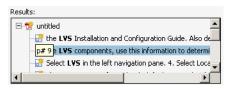
- **STEP 3** In the *Search* window, complete the following steps:
  - a. Enter the text that you want to find.
  - b. Choose All PDF Documents in.

From the drop-down box, choose **Browse for Location**. Then choose the location on your computer or local network, and click **OK**.

- c. If you want to specify additional search criteria, click **Use Advanced Search Options**, and choose the options you want.
- d. Click Search.



STEP 4 When the Results appear, click + to open a folder, and then click any link to open the file where the search terms appear.



For more information about the Find and Search functions, see the Adobe Acrobat online help.

# **Getting Started**

This chapter provides an overview of your SPA525G IP phone. contains the following sections:

- Overview of the Cisco SPA525G IP Phone, page 11
- Understanding Your Phone's Lines and Buttons, page 13
- Using the Keypad and Buttons with Menus, page 18
- **Entering Numbers and Text in Fields, page 19**
- Using Phone Hardware and Accessories, page 20



NOTE The SPA525G features vary, depending on the type of call control system you are using. This document describes using the SPA525G with a SIP phone system, such as the Cisco SPA9000 Voice System or a Broadsoft or Asterisk system. If you are using the SPA525G with a Cisco Unified Communications 500 Series, see the Cisco Unified Communications Manager Express for Cisco Unified IP Phone 525G User Guide.

#### Overview of the Cisco SPA525G IP Phone



The Cisco SPA525G IP Phone is a full-featured VoIP (Voice over Internet Protocol) phone that provide voice communication over an IP network. It provides traditional features, such as call forwarding, redialing, speed dialing, transferring calls, conference calling and accessing voice mail. Calls can be made or received with a handset, headset or speaker.

The SPA525G phone is connected to the network through its Ethernet connection or the built-in Wireless-G connection. If you are using the Wireless-G connection, a separate power adapter (PA-100) is required. The SPA525G provides an additional Ethernet port that allows a computer to be connected to the network through the IP phone. (This option is only available when phone is connected to the network via the wired Ethernet connection).

Unlike traditional phones, the Cisco SPA525G requires a separate power source. Either connect your phone to an Ethernet switch that provides Power over Ethernet (PoE), or use a separate power adapter (PA-100).

The SPA525G has a 320 x 240 color, 3.2" inch LCD screen and provides up to five telephone extensions. It provides the following hardware features:

- 2 Ethernet 10/100 Mbps ports
- 802.3af Power over Ethernet support
- USB 2.0 host port for connecting a USB memory device to play MP3 music files
- AUX port (to attach a SPA932 attendant console)
- Bluetooth capability for headset support
- 2.5mm stereo earphone jack for headset
- Wireless-G client support
- Kensington security slot support

#### **Caring for Your Phone**

The Cisco Small Business Pro IP phones are electronic devices that should not be exposed to excessive heat, sun, cold or water. To clean the equipment, use a slightly moistened paper or cloth towel. Do not spray or pour cleaning solution directly onto the hardware unit.

# **Understanding Your Phone's Lines and Buttons**

Use the following graphic and table to identify the parts of your phone.

## **Phone Components**



Figure 1 SPA525G Phone Components

**Table 1** IP Phone Components

#	Phone Feature	Description
1	Handset	Pick up to answer or place calls.
2	Speaker	Speaker for phone.
3	Message Waiting	When lit:
	Indicator	Red—You have a new voice mail message.
		Flashing Red—You have an incoming call.

**Table 1 IP Phone Components** 

#	Phone Feature	Description
4	LCD Screen	Your phone may vary, but typically displays:
		Date and time
		Phone station name
		Line extensions
		Softkey options
		<ul> <li>Startup logo, screen saver, background photo, and photo album</li> </ul>
5	Line keys	Indicates phone line status. Your phone may vary, but typically, when lit:
		Green: Line is idle.
		Red (steady): Line is active or in use.
		Red (blinking): Line is on hold.
		Orange: Line is unregistered (cannot be used).
		Flashing Orange: The phone is not connected to the network.
6	Softkey buttons	Press a softkey button to perform the action on the label on the LCD screen above.
7	Navigation button	Press in each direction to scroll through items on the LCD screen.
8	Center Select button	Press this button to select the option or menu that is highlighted on the screen.
9	Messages button	Press to access voice mail (must be set up by your phone administrator).
10	Hold button	Press to place a call on hold.
11	Setup button	Press to access the phone's configuration menu to configure features and preferences (such as your directory and speed dials), access your call history, and set up functions (such as call forwarding).
12	Mute button	Press to mute or unmute the phone. When the phone is muted, the button glows red. A flashing red mute button indicates that the phone has no network connectivity.

**Table 1** IP Phone Components

#	Phone Feature	Description
13	Volume button	Press + to increase the volume and press - to lower the volume of the handset, headset, speaker (when the handset is off hook), or ringer (when the handset is on hook).
14	Headset button	Press to turn the headset on or off. When the headset is on, the button glows green.
15	Speaker button	Press to turn the speaker on or off. When the speaker is on, the button glows green.
16	Keypad	Press keys to dial phone numbers, enter letters, and choose menu items.

## **Softkey Buttons**

The four softkey buttons have different functions depending on the phone screen or menu that is shown. The following table shows the SPA525G softkey buttons that are available (in alphabetical order).

**Table 2 SPA525G Softkey Buttons** 

Button	Function
Add	Adds a new item (for example, a new directory entry).
AddList	Creates a list (for example, of MP3 files to play).
Back	Returns you to the previous screen.
BXfer	Performs a blind call transfer. See "Performing an Unattended (Blind) Transfer," on page 45.
Call Rtn	Returns the last missed call by dialing the number that called you. See "Viewing and Returning Missed Calls," on page 46.
Clear	Deletes an entire text/number field.
Clr DND	Clears Do Not Disturb.
Conf	Initiates a conference call. See "Placing a Three-Way Conference Call," on page 53.
ConfLx	Conferences existing active calls on the phone together.

Table 2 SPA525G Softkey Buttons

Button	Function	
Connect	Connects to the selected item (for example, to the wireless network or Bluetooth device).	
Сору	Copies the selected item (for example, a contact in the Address Book).	
delChar	Deletes the last number or letter.	
Delete	Deletes an entire item (for example, a number from the Call History list).	
Dial	Dials the string of numbers that you have entered, or the number that you have highlighted in a list such as the Missed Calls screen.	
Directory	Access your personal address book. See "Using Your Personal Address Book," on page 54.	
DND	Do Not Disturb; prevents incoming calls from ringing your phone. See "Setting Do Not Disturb," on page 49.	
Edit	Opens an item so that you can edit numbers or letters, or enable or disable a feature.	
EditDial	Edits a number before dialing.	
End Call	Disconnects a call.	
Forward	Forwards calls coming to your phone. See "Forwarding Calls," on page 47.	
List	In some menus, shows a list of configured items (for example, a list of locations for weather or news).	
GrPickup	Allows you to pick up (answer) a call at that is ringing at another extension in your group. See "Picking Up a Call," on page 51.	
Hold	Places a call on hold. See "Putting a Call on Hold," on page 43.	
More	Access additional softkeys.	
Next	Moves to the next item in a list (for example, a song in the MP3 Playlist).	
Option	Enters a sub-menu.	
Paste	Pastes the item you copied into a list or field.	
Pickup	Allows you to pick up (answer) a call that is ringing at another extension. See "Picking Up a Call," on page 51.	

## Table 2 SPA525G Softkey Buttons

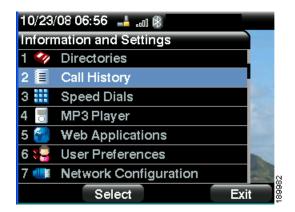
Button	Function	
Play	Plays a selected item such as a song or a ringtone.	
Previous	Moves to a previous item in a list (for example, a song in the MP3 Playlist).	
Redial	Brings up the list of recently dialed numbers. See "Redialing," on page 45.	
Refresh	Refreshes the screen. Useful after changing a configuration or when you want to update information (such as weather).	
Park	Parks a call at a designated "park" number. The call is active until you unpark it, or the caller disconnects. See "Parking a Call," on page 52.	
Play	Plays an item (for example, a ring tone).	
Resume	Resumes a call that is on hold.	
Save	Saves your changes.	
Scan	Scans for wireless networks or Bluetooth devices.	
Select	Selects the highlighted item on the LCD screen.	
Transfer	Performs a call transfer. See "Transferring Calls," on page 44.	
Unpark	Connects to a parked call. See "Parking a Call," on page 52.	
View	Displays more information about a selected item.	
XferLX	Transfers existing active calls on the phone.	

# **Using the Keypad and Buttons with Menus**

You press a softkey button or other buttons to enter menus on the LCD screen.

#### **Using Keypad Shortcuts**

Use the keypad to enter the number of the menu or sub-menu item. For example, to reach the Call History menu, press the **Setup** button and press **2**.





NOTE Menus and options can change depending on the software release.

#### **Using the Navigation Button**

Use the navigation button to scroll up or down through the menu items, and then press the **Select** softkey button or the center **Select** button to choose the highlighted item.

## **Entering Numbers and Text in Fields**

Some fields on the IP phones require you to enter numbers and text using the keypad and/or softkey buttons. In general, the following guidelines apply:

- Use the keypad to enter numbers and characters, pressing the key multiple times to select the correct number or letter.
- Press the number key multiple times to move to a different letter under that number. (For example, to enter "Mary," you would press 6 five times rapidly and then pause (for M); press 2 and then pause (for A), press 7 three times rapidly (for r), then press 9 three times rapidly (for y).

Available characters are shown in the following table:

Key	Character Set
1	1/:!;\$^
2	abc2ABC
3	def3DEF
4	ghi4GHI
5	jkl5JKL
6	mno6MNO
7	pqrs7PQRS
8	tuv8TUV
9	wxyz9WXYZ
0	Space 0 ~ ? > ' < "
*	.@*&%[]_
#/P	# + - = (){}

Use the **delChar** softkey button to backspace and delete the last character.

Use the **Option** > **Clear** softkey button to remove the entire entry.

## **Using Phone Hardware and Accessories**

#### **Using the Speakerphone**

The SPA IP Phones provide a speakerphone. To use the speakerphone, press the **Speaker** button (the handset can be either on or off hook).

#### **Using Wired and Wireless Headsets**

The SPA IP Phones support headsets from different manufacturers. For the latest supported models, contact your reseller. Additional information can be found at the manufacturer's websites:

http://www.plantronics.com

http://www.jabra.com

#### **Connecting the Headset**

Each brand and type of headset may require different steps for connection. Consult the documentation for your particular headset for more information. In general, to connect a headset:

- For Bluetooth headsets: See the "Connecting Bluetooth Headsets" section on page 21.
- For wireless, non-Bluetooth headsets (such as Plantronics or Jabra): Connect the headset's telephone cord into the telephone port on the back of the SPA IP Phone.

 For wired headsets: Connect the 2.5mm connector from the headset into the headset port on the right side of the IP phone as shown in the following graphic:



#### **Connecting Bluetooth Headsets**

Your phone is Bluetooth compatible and works with Bluetooth devices such as headsets.

To configure the phone to work with your headset, first enable Bluetooth:

- **STEP 1** Press the **Setup** button.
- **STEP 2** Select **User Preferences**.
- **STEP 3** Select **Bluetooth Configuration**.
- STEP 4 With Bluetooth selected, press the Right Arrow key to turn Bluetooth On.
- **STEP 5** Press **Save**.

After enabling Bluetooth, create a profile for your headset:

- STEP 1 In the Bluetooth Configuration screen, scroll to **Bluetooth Profiles**. Press the **Right Arrow** key to enter the profile screen.
- **STEP 2** Press **Scan** to scan for your headset.
- STEP 3 In the list of found devices, select your headset and press the **Select** button to edit the profile.

- **STEP 4** Scroll to **PIN** and enter the PIN for your Bluetooth headset.
- STEP 5 Scroll to Connect Automatically and press the Right Arrow key to turn to On.
- STEP 6 Press Connect. The profile screen displays and a check mark appears next to the headset if the connection was successful.

#### **Using a Headset with Your IP Phone**



**NOTE:** Steps to use your headset with the SPA IP Phone may vary. Consult the user documentation for your headset for more information.

- To use a wired headset, press the Headset button on your phone and dial the number to place a call, or press the headset button to answer a ringing call.
- To use a non-Bluetooth wireless headset (such as Jabra or Plantronics), lift the receiver off hook before speaking or listening through the headset.
- To use a Bluetooth headset, make sure your headset is powered on. Press the Headset button on your phone (or, if supported, press the Answer button on your Bluetooth headset twice) and dial the number to place a call. Press the Answer button on your Bluetooth headset to answer a ringing call. See the user documentation for your Bluetooth headset for more information.

# **Switching Between the Handset/Headset/Speakerphone During a Call**

Any of these audio devices can be used during a call. Only one device can be used at a time. The handset can be on the hook when using the speakerphone or headset function.

To switch from the handset to the speakerphone, press the **Speakerphone** button and place the handset back on the hook.

To switch from the speakerphone to a headset, press the **Headset** button.

To switch from the speakerphone to the handset, pick up the handset.

To switch from the headset to the speakerphone, press the **Speakerphone** button.

# **Installing Your Phone**

This chapter describes how to install and connect your Cisco SPA525G IP Phone. It contains the following sections:

- Before You Begin, page 25
- Connecting the Handset, page 25
- (Optional) Attaching the Desk Stand, page 27
- (Optional) Mounting the Phone to the Wall, page 28
- Connecting Your Phone's Power, page 30
- Connecting Your Phone to the Computer Network, page 31
- Verifying Phone Startup, page 39
- Upgrading Your Phone's Firmware, page 39

## **Before You Begin**

Before you install and connect your phone, verify with your System Administrator (if applicable) that the network is ready for the phone, read the safety notices, and make sure you have all the phone parts and documentation available.



**NOTE:** The RJ-11 port marked "AUX" is reserved for connection with the SPA932 Attendant Console that works with the SPA525G. It is not for use as a telephone line port.



**CAUTION:** Do not plug a telephone line cord into the port marked "AUX."

## **Connecting the Handset**

- STEP 1 Find the longer end of the coiled phone cord. Insert it into the back of the phone base in the slot marked with a phone symbol. This port is labeled #5 on the Cisco SPA525G IP Phone Connections graphic.
- STEP 2 Insert the short end of the handset cord into the jack at the bottom of the handset (not shown).







Number	Component
1	Auxiliary port. Only for use with the SPA932 attendant console.
2	Power port. Insert the power adapter plug into this port.
3	Additional Ethernet port. Connect an Ethernet cable to this port to provide network connectivity to a PC. (This port cannot be used when the phone is connected to the network via the built-in Wireless-G client.)
4	Switch (Ethernet) port. Connect the network cable to this port.
5	Phone cord slot. Insert one end of the phone cord into this slot and the other into the jack at the bottom of the phone handset.
6	USB port. For use with an external USB memory device (optional).

# (Optional) Attaching the Desk Stand



**NOTE:** Do not attach the desk stand if you want to mount the phone to the wall. If you are attaching a SPA932 attendant console attach the console before attaching the desk stand.

- **STEP 1** Line up the tabs on the desk stand with the slots on the back of the phone.
- STEP 2 Slide the bottom tabs into the slots
- STEP 3 Lightly press down on the top of the desk stand. It should easily slide into the top slots. Do not force.

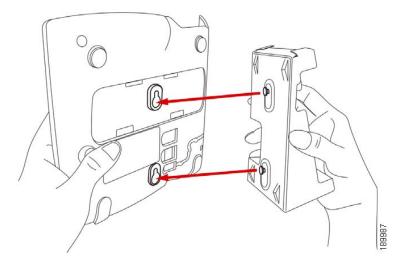
# (Optional) Mounting the Phone to the Wall

To mount the phone to the wall, you must purchase the MB100 wall mount bracket kit.

Figure 2 MB100 Wall Mount Kit

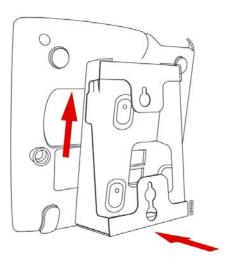


STEP 1 To attach the Mounting Bracket (MB), align the two cleats on the MB with the holes in the phone's base.

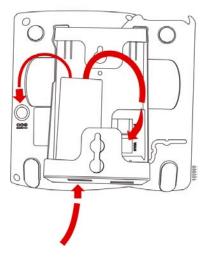


STEP 2 Orient the MB such that the phone's Ethernet and handset ports are accessible after installation.

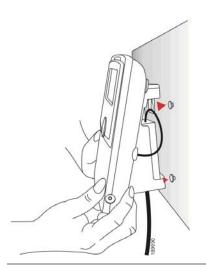
STEP 3 Push the MB onto the phone's base. Slide the MB upwards to lock it in place.



**STEP 4** Plug in the Ethernet and power cables.



STEP 5 Hang onto screws mounted in the wall.



## **Connecting Your Phone's Power**

If you are using an external power source, plug it into the building's power source, and plug the power supply into the phone base. See Figure 1 on page 26, item #2.



**NOTE:** The SPA525G does not ship with a power supply. If you are not using Power over Ethernet (PoE), you must order the PA-100 power supply separately from Cisco.

If you are using Power over Ethernet (PoE) to power the phone, the phone will receive power when you connect an Ethernet cable from the phone's WAN port to a switch in your network that provides PoE. See the "Connecting Your Phone to the Wired Network" section on page 31.

# **Connecting Your Phone to the Computer Network**

#### **Connecting Your Phone to the Wired Network**

You connect your phone to the local network by using an Ethernet cable:

- STEP 1 Plug the Ethernet cable into the back of the base station into the slot marked "SW." This port is labeled #4 on Figure 1 on page 26.
- STEP 2 Plug the other end of the Ethernet cable into the appropriate device on your network, such as a network switch.



**NOTE:** The SPA525G provides a second Ethernet port. You can connect a PC to this port to provide network access to the PC. This port is labeled #3 in the Cisco SPA525G IP Phone Connections graphic. This port cannot be used when the phone is connected to the network via the built-in Wireless-G client.

## **Connecting Your Phone to the Wireless Network**



NOTE The PC port is not supported in wireless operation. The PC port is only supported in a wired operation.

The Cisco SPA 525G phone supports a direct connection to the wireless network. Before setting up the wireless network, you need to know the wireless security type for your router. The SPA525G works with the following security types:

- WEP—Wired Equivalent Privacy. With this type of security, you need to enter a 64 or 128-bit key on the phone (or a more easily remembered passphrase to generate the key). The phone then authenticates with your router to provide a secure connection.
- WPA—Wi-Fi Protected Access. The SPA525G supports WPA PSK, WPA2 PSK, WPA Enterprise, and WPA2 Enterprise. With this type of security, you will at the very minimum be required to enter a password on the phone. The phone then authenticates with your router to provide a secure connection.

#### **Determining Your Wireless Router Security Type**

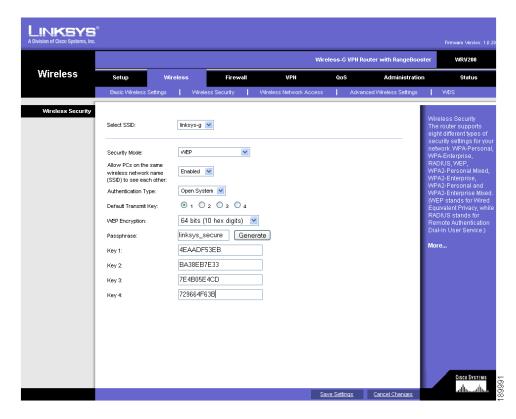
If you do not know your wireless router security type, you need to log in to the router interface to get this information. The steps below are written for a Linksys router, but procedures for other routers should be similar.

- STEP 1 Log in to your wireless router's web interface using a web browser. Your computer must be connected to your wireless network. Enter the IP address of the wireless router in the browser toolbar.
- STEP 2 If required, enter the user name and password. (By default, Linksys routers typically use "admin" for the user name and "admin" for the password.)
- STEP 3 View the Wireless tab or screen. Note the network name (SSID) and the type of security (WEP, WPA Personal, or WPA2 Personal).

If your router is using WEP, note the following:

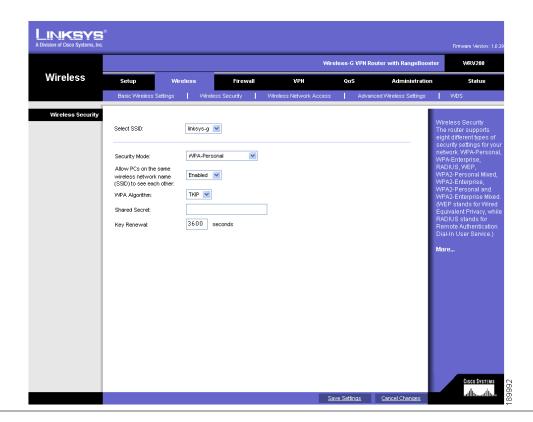
- WEP encryption: 64 bit or 128 bit. You need to choose this later.
- Default transmit key, or TX key: The default key (of the 4) that the router transmits to authenticate. This value will be 1, 2, 3, or 4.
- Passphrase and keys: You choose one of two methods to enter the WEP key. You either directly enter the WEP key, or enter a more simple passphrase to generate the WEP key.

The following example shows WEP information for a Linksys WRV200 router:



If your router is using WPA, note the WPA shared key, or passphrase that you need to enter later.

The following example shows WPA information for a Linksys WRT160N router:



To set up the SPA525G wireless connection:

- STEP 1 If you have plugged in an Ethernet cable to connect the phone to the wired network, remove it and reboot the phone. If an Ethernet connection is present on the phone, it is used instead of the Wi-Fi connection.
- **STEP 2** Press the **Setup** button on your phone.
- STEP 3 Scroll to Network Configuration and press Select.
- **STEP 4** In the Wi-Fi field, press the **Left** or **Right Arrow** key to turn Wi-Fi *On*. Press the **Save** softkey.

- STEP 5 Scroll to Wi-Fi Configuration and press the **Right Arrow** key. Choose one of the following options:
  - Wireless Profile—Use this option to add a new wireless profile (either manually or by scanning for available networks), edit an existing wireless profile, or connect to a previously configured network. See Manually Adding a Wireless Profile on the SPA525G, page 36.
  - Wi-Fi Protected Setup—If your wireless router supports Wi-Fi Protected Setup, use this method to set up your wireless connection. See Using Wi-Fi Protected Setup with the SPA525G, page 35.

#### Using Wi-Fi Protected Setup with the SPA525G

If your router has a WPS button, you can use Wi-Fi Protected Setup to add a new wireless network profile.



- **STEP 1** In the Wireless Configuration screen, select *Wi-Fi Protected Setup*.
- **STEP 2** Choose one of the following options:

#### **Push Button Configuration:**

- a. Press the WPS button on your router.
- b. On your phone, with *Push Button Configuration* highlighted, press **Select**. Your phone may reboot before the Wi-Fi connection is working.

#### **PIN Configuration**

- a. After selecting PIN Configuration on your phone, note the PIN displayed.
- b. Connect to your router's web interface using a web browser. Your computer must be connected to your wireless network. Enter the IP address of the wireless router in the browser address bar.
- c. If required, enter the user name and password. (By default, Linksys routers typically use "admin" for the user name and "admin" for the password.)
- d. View the Wireless tab or screen. Locate the Wireless Protected Setup configuration menu.

- e. Enter the PIN into the field that allows you to setup wireless devices using a PIN.
- f. Save your changes.
- g. On the SPA525G, with PIN Configuration highlighted, press Select. To add the connection as a profile, press OK. Your phone may reboot before the Wi-Fi connection is working.

#### Manually Adding a Wireless Profile on the SPA525G

To add a new wireless network profile:

- **STEP 1** In the Network Configuration screen, ensure Wi-Fi is enabled.
- STEP 2 Scroll to *Wi-Fi Configuration*. Press the **Right Arrow** key to enter the Wi-Fi Configuration screen.
- STEP 3 Select Wireless Profile. Any previously configured wireless profiles are displayed.
- STEP 4 Do one of the following:
  - Scan for available networks. See Scanning for Available Networks, page 36.
  - Manually add the network. See Manually Adding a Network, page 37.

#### Scanning for Available Networks



NOTE If your router has SSID (router name) broadcast disabled, it may not appear in the list of networks. In that case, you need to manually add it (see Manually Adding a Network, page 37).

- **STEP 1** In the Wireless Profile screen, press **Scan**.
- STEP 2 In the list of available networks, scroll to the desired network and click **Add** to select the highlighted network.

- STEP 3 (Optional) Press the **Right Arrow** key under Security Mode to set the security options:
  - WEP—Wired Equivalent Privacy: You must enter the Default Transmit Key, Key Type and Length, and the keys.
  - WPA PSK or WPA2 PSK: You must enter the Cipher Type (TKIP or AES CCMP) and the shared key.
  - WPA/WPA2 Enterprise: This type of authentication requires some advanced expertise because it involves setting up a radius server for authentication and, in some cases, creation of certificates for both the radius server and the phone. See

You must enter the Cipher Type (TKIP or AES CCMP) and the EAP Type:

- TTLS—Enter the anonymous ID, choose whether the phone should check for the server certificate, choose the TTLS Inner Protocol (MSCHV2, MSCHAP, PAP, CHAP, or MD5), and enter the User ID and password.
- LEAP—Enter the User ID and password.
- TLS—Enter the User ID, choose whether the phone should check for the server certificate, enter the User ID, and configure the Root certificate and User certificate (see the "Uploading Security Certificates to the Phone" section on page 38).
- **STEP 4** To save as a wireless profile, press **Save**.

#### Manually Adding a Network

- STEP 1 From the Wireless Profile screen, press **Option** and select **Add New** to manually add the network.
- STEP 2 (Optional) Press the **Right Arrow** key under Security Mode to set the security options:
  - WEP—Wired Equivalent Privacy: You must enter the Default Transmit Key, Key Type and Length, and the keys.
  - WPA PSK or WPA2 PSK: You must enter the Cipher Type (TKIP or AES CCMP) and the shared key.

- WPA/WPA2 Enterprise: You must enter the Cipher Type (TKIP or AES CCMP) and the EAP Type:
  - TTLS: Enter the anonymous ID, choose whether the phone should check for the server certificate, choose the TTLS Inner Protocol (MSCHV2, MSCHAP, PAP, CHAP, or MD5), and enter the User ID and password.
  - LEAP: Enter the User ID and password.
  - TLS: Enter the User ID, choose whether the phone should check for the server certificate, enter the User ID, and configure the Root certificate and User certificate (see the "Uploading Security Certificates to the Phone" section on page 38).
- **STEP 3** To save as a wireless profile, press **Save**.

#### **Uploading Security Certificates to the Phone**

If you are using some types of wireless security (for example, WPA2 Enterprise), you will need to upload security certificates to the phone. Certificates must be in the following format:

- Root certificate: DER encoded binary x.509 (CER)
- User certificate: Personal Information Exchange (PKCS#12(.PFX))
- STEP 1 Connect a USB storage device to your PC.
- STEP 2 Create a directory named "ca" on the USB device and copy the certificate files into that directory.
- STEP 3 Remove the USB device from your PC and insert it into the USB slot on the SPA525G.
- STEP 4 After creating a wireless profile, in the Profile screen, press the **Right Arrow** key under Security Mode to set the security options (WPA Enterprise or WPA2 Enterprise).
- STEP 5 Scroll to Root Certificate and press the Right Arrow key. All files in the "ca" folder are displayed.

- STEP 6 Use the **Up Arrow** or **Down Arrow** key to choose the certificate you want to install (for example, the root certificate). Press the **Select** softkey.
- **STEP 7** Press **Save** to save the profile.

### **Verifying Phone Startup**

After receiving power and network connectivity, the phone executes a boot-up sequence. During this sequence, the display shows the Cisco logo. All of the lights on the phone will flash. After the sequence, which should take about five seconds, the phone will display the standard menu for the phone. The date, name and number of the phone appear on the top line of the LCD screen. At the bottom of the LCD screen, softkeys appear over their associated soft buttons.

If the phone does not display this screen, confirm your installation and connections. If these are correct, try unplugging the phone and plugging it back in again. If you still don't see the display, then contact your Phone Administrator or Internet Telephony Service Provider (ITSP).

### **Upgrading Your Phone's Firmware**

Your phone ships with pre-installed firmware. However, later firmware versions may be available that add features and fix problems with your phone. You may need to upgrade your phone to the latest firmware for ideal performance.



IMPORTANT: If you are using your phone with an Internet Telephony Service Provider's system, do not upgrade your phone's firmware without consulting your service provider. Your provider may automatically upgrade your phones without any action on your part necessary.

There are two ways to upgrade your phone's firmware:

- Download the firmware to your PC and log in to the web interface to run the upgrade procedure. See the "Upgrading Firmware" section on page 91.
- Upgrade using the Cisco SPA9000 Voice System Setup Wizard (if your phone is part of a Cisco SPA9000 Voice System network). See the Cisco SPA9000 Voice System Setup Wizard User Guide.

# **Using Basic Phone Functions**

This chapter describes how to use the basic functions of your SPA525G IP phone. It includes the following sections:

- Placing or Answering a Call, page 42
- Adjusting Call Volume and Muting, page 43
- Putting a Call on Hold, page 43
- Resuming a Call, page 44
- Ending a Call, page 44
- Transferring Calls, page 44
- Redialing, page 45
- Viewing and Returning Missed Calls, page 46
- Turning the Missed Calls Shortcut On and Off, page 47
- Forwarding Calls, page 47
- Setting Do Not Disturb, page 49
- Picking Up a Call, page 51
- Parking a Call, page 52
- Placing a Three-Way Conference Call, page 53
- Using the Phone Directories, page 54
- Using the Call History Lists, page 58
- Setting or Changing a Phone Password, page 60
- Accessing Voicemail, page 61

## **Placing or Answering a Call**



**NOTE:** You may have to dial a number or numbers to reach an outside line. Ask your system administrator.

To place or answer a call, do one of these:

- Pick up the receiver.
- Press the Speaker button.
- Press the Headset button.
- Press a green line button (to place a call) or a red flashing line button or the Answer softkey (to answer a call).

If you are on a call and another call comes in, choose one of the following options:

- Press the Answer softkey.
- Press the flashing red line button.

The call in progress is put on hold and the incoming call is answered.

To return to the first call, select it using the **Up Arrow** or **Down Arrow** key and press the **Resume** softkey.

### **Using Dial Assistance**

If dial assistance is enabled, when placing calls, you'll see a list of closely-matched phone numbers on the screen after you begin dialing. If you want to choose one of these numbers:

- STEP 1 Use the navigation button to scroll down and highlight a phone number on the LCD screen.
- STEP 2 Press the Select button or Dial to complete the call.

See "Enabling Dial Assistance," on page 65 for more information on enabling this feature.

## **Adjusting Call Volume and Muting**

### **Adjusting Call Volume**

To adjust the volume while you are on a call, press + on the **Volume** button to increase the volume, or press - to decrease the volume. Press **Save**.

Pressing the **Volume** button while not on a call adjusts the volume of the phone's ringer.

#### **Using Mute**

To mute the phone microphone, speaker, or headset microphone, press the **Mute** button on the phone. The button lights red. Press the **Mute** button again to unmute.

## **Putting a Call on Hold**

To put a call on hold, press the **Hold** button. A series of beeps indicates the call is on hold.

## **Resuming a Call**

To resume the call, press the flashing red line button for the call. If you have multiple calls, all calls are put on hold except the active call.

### **Ending a Call**

To end a call:

- If you are using the handset, hang up.
- If you are using the speakerphone, press the Speaker button.
- If you are using the headset, either press the Headset button (wired) or replace the receiver (wireless).

## **Transferring Calls**

You can perform two types of transfers:

- Attended—You call the person to whom you are transferring the call and speak to them before transferring the call.
- Blind—You transfer the call without speaking to the other party to which you are transferring the call.

### **Performing an Attended Transfer**

STEP 1 During an active call, or a call on hold, press **Transfer**.

#### **STEP 2** Either:

- Enter the number to which you want to transfer the call; or
- Press Directory and either choose a number from the personal directory.
- STEP 3 Press **Dial** or wait a few seconds. The call is placed on hold and a new line is opened to dial the number.

#### **STEP 4** Do one of the following:

- To transfer the call without waiting for the other person to answer, press Transfer after the call begins to ring and hang up. If you hang up before the second call rings, the transfer fails and the first call is disconnected. If you misdial, press the second line button again to receive a dial tone.
- To transfer after speaking privately to the other person, press Transfer at any time during the conversation.

#### **Performing an Unattended (Blind) Transfer**

- STEP 1 During an active call, press BXfer.
- **STEP 2** Enter the number to which you want to transfer the call and press **Dial**. The call is transferred with no further action required on your part.

## Redialing

To redial a number:

- STEP 1 Press the Redial button and select the desired number.
- **STEP 2** (Optional) Press **EditDial** to select a number and modify it (for example, to add an area code).
- STEP 3 Lift the handset or press **Dial** to select a number. The number is automatically dialed.

## **Viewing and Returning Missed Calls**

The LCD screen on your IP phone notifies you if a call came in that was unanswered. (You can also turn off this feature - see the "Turning the Missed Calls Shortcut On and Off" section on page 47.)

#### **Returning a Missed Call**

To return a missed call:

- If the LCD screen shows a missed call, press the Call Rtn button to return the call.
- If the LCD screen does not show a missed call, you can return a call from the Missed Call list. See "Viewing a List of Missed Calls" on page 46. Choose the call you want to return and press Dial.



**NOTE:** If the call was from a long distance number, you may have to edit the call before returning it. Press the **Edit** button to edit the call and use the softkey buttons and keypad to edit the number.

### **Viewing a List of Missed Calls**

To view a list of all missed calls:

- If the LCD screen shows a missed call, press the Missed softkey to view a list of missed calls.
- If the LCD screen does not show a missed call:
- a. Press the **Setup** button.
- b. Scroll to Call History and press Select.

- c. Scroll to **Missed Calls** and press **Select**. You can do one of the following:
  - Press Dial to dial the number that called you.
  - Press EditDial to edit the number before calling it, then press Dial.
  - Press the Option softkey and choose one of the following:
    - Delete Entry—Delete the entry from the Missed Calls list.
    - Delete List—Delete all entries from the Missed Calls list.
    - Add to Address Book—Add the entry to your personal address book.

### **Turning the Missed Calls Shortcut On and Off**

This option controls the Missed Call notification that appears on your LCD screen when you miss a call. To access this option:

- **STEP 1** Press the **Setup** button.
- **STEP 2** Scroll to **User Preferences** and press **Select**.
- **STEP 3** Select Call Preferences.
- STEP 4 Scroll to Miss Call Shortcut.
- STEP 5 Press the Right Arrow key to turn the feature on and press the Save softkey.

### **Forwarding Calls**

You can forward all calls, forward calls when the phone is busy or forward calls when there is no answer. You can also set call forwarding options from your PC using the IP Phone Web Interface; see the "Configuring Call Forwarding" section on page 86.

To forward calls:

- STEP 1 Press the Setup button.
- STEP 2 Scroll to User Preferences and press Select.