



**USER GUIDE**

## **Cisco Small Business**

SPA50X and SPA51X Series SPCP IP Phones  
Models SPA501G, SPA502G, SPA504G, SPA508G,  
SPA509G, SPA512G, and SPA514G

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# Getting Started

This chapter provides an overview of this document and basic information about your Cisco Small Business IP phone.

- [About This Document, page 4](#)
- [Overview of the Cisco Small Business IP Phones, page 6](#)
- [Understanding Your Phone Lines and Buttons, page 7](#)
- [Accessing the Phone Web Interface, page 11](#)
- [Using the Cisco Attendant Console, page 12](#)

## About This Document

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

The Cisco Small Business IP Phone features vary, depending on the type of call control system that you are using. **This document describes using the Cisco Small Business IP Phones with a SPCP phone system, such as the Cisco Unified Communications 500 Series.** If you are using your Cisco Small Business IP Phone with a BroadSoft or Asterisk system, see the *Cisco Small Business IP Phone SPA50X and SPA51X SIP IP Phone User Guide*.

## Organization

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

	Title	Description
<b>Chapter 1</b>	<b>Getting Started</b>	An overview of this document and basic information about the Cisco Small Business IP phones.
<b>Chapter 2</b>	<b>Installing Your Phone</b>	How to connect and install your phone.
<b>Chapter 3</b>	<b>Using Basic Phone Functions</b>	How to perform basic phone tasks, such as placing and answering calls, transferring calls, setting up call forwarding, and picking up calls.
<b>Chapter 4</b>	<b>Using Advanced Phone Features</b>	How to use advanced phone features, such as configuring privacy and security features, speed dials, paging, and ring tones.
<b>Appendix A</b>	<b>Where to Go From Here</b>	Cisco provides a wide range of resources to help you obtain the full benefits of the Cisco SPA500 Series phones. This appendix provides links to many of these resources.

## Overview of the Cisco Small Business IP Phones

The Cisco Small Business IP Phones are full-featured VoIP (Voice over Internet Protocol) phones that provide voice communication over an IP network. The phones provide 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 over a speaker. IP phones also have special features not available in traditional phones.

The Cisco Small Business IP phones contain Ethernet ports that allow them to be linked to the computer network. They also have Ethernet ports that allow a computer to be connected to the network through the IP phone.

Cisco Small Business IP phones require a separate power source. You can power the phones by connecting them to a switch that provides Power over Ethernet (PoE), or by using the optional a Cisco PA100 power adapter.

The following table shows the Cisco Small Business IP Phones covered in this document and their respective features:

	Cisco SPA501G	Cisco SPA502G and SPA512G	Cisco SPA504G and SPA514G	Cisco SPA508G	Cisco SPA509G
<b>IP Phone Screen</b>	Paper Labels	128 X 64 monochrome LCD with backlight			
<b>Lines</b>	8	1	4	8	12
<b>Softkeys</b>	4 fixed (redial, cancel, transfer, and conference)	4 dynamic			
<b>Navigation Button</b>	None	Four-way navigation key			

## Caring for Your Phone

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

## Understanding Your Phone Lines and Buttons

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

### Phone Components





**Figure 1** Phone Components



The Cisco SPA509G shown in **Figure 1** illustrates most of the Cisco Small Business IP Phone physical features. Other models support different features. See the **“Overview of the Cisco Small Business IP Phones”** section on page 6.



Numbered objects in **Figure 1** are described in the following table.

#	Phone Feature	Description
1	Handset	Pick up to place or answer a call.
2	Message Waiting indicator	Displays solid red when you have a new voice mail message. Flashes red during an incoming call.
3	IP phone screen	Displays date and time, phone station name, line extensions, and softkey options (except on the Cisco SPA501G).
4	Line keys	<p>Indicates phone line status (not available on the Cisco SPA502G or Cisco SPA512G):</p> <p><b>Off:</b> Line is idle.</p> <p><b>Green:</b> Line is active or in use.</p> <p><b>Green (flashing):</b> There is an inbound call.</p> <p><b>Orange (flashing, UC320):</b> There is an inbound call.</p> <p><b>Red (flashing):</b> Line is on hold or there is an inbound call.</p> <p>These keys can also be programmed by your system administrator to perform differently than described here or to add functions such as speed dial, call pickup, or monitor an extension.</p>
5	Softkey buttons	<p>Press a softkey button to perform the action shown on the label on the IP phone screen above.</p> <p><b>Note:</b> The Cisco SPA501G has the following four buttons:</p> <p> Redial—Dials the last number called.</p> <p> Cancel—Cancels an action (such as a transfer).</p> <p> Conference—While on a call, press to start a conference call and dial another number. After the second party answers, press <b>Conference</b> again to create the conference.</p> <p> Transfer—Transfers a call.</p>
6	Navigation button	Press an arrow key to scroll left, right, up, or down through items shown on the IP phone screen (except on the Cisco SPA501G).

#	Phone Feature	Description
7	Messages button	Press to access voice mail. (This feature must be set up by your phone system administrator).
8	Hold button	Press to place a call either on hold or to resume.
9	Setup button	Press to access a menu to configure features and preferences (such as your directory, status, and speed dials), access your call history, set up functions (such as call forwarding), and provide phone status information.  For the Cisco SPA501G, accesses the Interactive Voice Response menu, which allows you to perform tasks like getting the IP address of the phone.
10	Mute button	Press to mute or unmute the phone. When phone is muted, the button glows red. The button also blinks or glows red if the network connection cannot be found.
11	Volume button	Press + to increase the volume and - to lower the volume of the handset, headset, speaker when the phone is off-hook, or the ringer volume when the phone is on-hook.
12	Headset button	Push to turn the headset on or off. When the headset is on, the button glows green.
13	Speaker button	Push to turn the speaker on or off. When the speaker is on, the button glows green.
14	Keypad	Use to dial phone numbers, enter letters, and choose menu items.

## Softkey Buttons

The softkey buttons on your phone display may vary depending on your phone model and the phone system setup. (Softkey buttons are not available on the Cisco SPA501G.) Press the **Right Arrow** or **Left Arrow** keys on the navigation button to view additional softkey buttons.

Below is a partial listing of softkey buttons that might be available on your phone. You might not have all of these softkey buttons on your phone, and you might have additional buttons that are not listed here, as your phone administrator might provide custom softkey buttons on your phone, such as a speed dial to a company number, or a specialized program that runs on your phone. Contact your phone administrator for more information.

Button	Function
<< or >>	Move left or right through an entry without deleting characters.
Cancel	Cancels a conference call before the callers are joined.
CFwdAll	Forwards all calls coming to your phone to a specified number.
Confrn	Initiates a conference call.
Conflx	Conferences active lines on the phone together.
Delchr	Deletes the last number or letter.
Delete	Deletes an entire item (for example, a number from the Call History list).
Dial	Dials a number.
DnD	Do Not Disturb; prevents incoming calls from ringing your phone.
Edit	Opens an item so that you can edit numbers or letters, or enable or disable a feature.
GPickUp	Allows you to answer a call ringing on an extension in a group of phones.
Ignore	Ignores an incoming call.
Login/ Logout	Log in and out of the call system to use the Extension Mobility feature. Extension mobility allows you to log in to any physical phone and retrieve your personal settings and directory number to that phone.
PickUp	Allows you to answer a call ringing on another extension by entering the extension number.
Redial	Displays a list of recently dialed numbers.
Resume	Resumes a call that is on hold.
OK	Saves your changes or confirms an action in response to a prompt on the IP phone screen.
Select	Selects the highlighted item on the IP phone screen.
Trnsfer	Performs a call transfer.
Y/N	Enters a submenu and when pressed, toggles between <b>Yes</b> or <b>No</b> to enable or disable an option.

## Using Keypad Shortcuts

When using the phone menus, you can use the keypad to enter the number shown next to the menu or sub-menu item on the IP phone screen. (Not applicable to the Cisco SPA501G.)

For example, on the Cisco SPA509G, to change your ring settings, press 3 for Settings and press 2 for Ring Type.

**NOTE** Menus and options vary depending on phone model.

## Accessing the Phone Web Interface

The Cisco IP Phone provides a phone web user interface that displays phone settings and statistics, and might be used to configure some features of your phone. Access to the phone web user interface and the features that you are allowed to configure are determined by the system administrator.

The phone web user interface has four main tabs:

- **Voice**—Contains information about the phone, including:
  - **Info**—System and phone information.
  - **System**—Password configuration and network settings.
  - **Phone**—Screen saver.
  - **User**—Call forwarding, speed dials, call waiting, privacy, and audio settings.
- **Call History**—Displays calls received and made from your phone.
- **Personal Directory**—Personal address book.
- **Attendant Console Status**— Cisco Attendant Console information (if installed).

To access the phone web user interface:

**STEP 1** Determine the IP address of the phone:

**Cisco SPA502G, Cisco SPA504G, Cisco SPA508G, Cisco SPA509G, Cisco SPA514G:**

- a. Press the **Setup** button.
- b. Scroll to **network** and press **select**.
- c. Scroll to view **Current IP**. This is the IP address of your phone.

**Cisco SPA501G:**

- a. Press the **Setup** button.
- b. Enter **110**, then press **#**. The IP address is recited. (You can also press **9** for help and follow the prompts.)

**STEP 2** On a PC connected to the same subnetwork as the IP phone, open a Web browser.

**STEP 3** Enter the IP address in the browser URL field. The phone web user interface displays.

## Using the Cisco Attendant Console

The Cisco Attendant Consoles are accessory consoles for the Cisco SPA500 Series IP phones. The Cisco SPA500S provides 32 three-color (red, green, and orange) programmable line buttons, and the Cisco SPA500DS provides 30 buttons. The Cisco Attendant Console attaches to the IP phone with the attachment arm provided. It obtains power directly from the IP phone; it does not require a separate power supply. Two Cisco Attendant Console units can be attached to a single IP phone to monitor a total of 64 (SPA500S) or 60 (SPA500DS) separate lines.

Detailed information on the installation of the Cisco Attendant Consoles are provided in the *Cisco Small Business SPA500S Attendant Console Quick Start Guide* and the *Cisco Small Business SPA500DS 15-Button Digital Attendant Console for SPA500 Family Phones Quick Start Guide*.

Configuration of the Cisco Attendant Console and assignment of the line buttons is typically performed by the phone system administrator and is not described in this document. The Cisco Attendant Console can be configured by using the same phone web user interface for the IP phone to which the Cisco Attendant Console is attached. See the *Cisco SPA300 Series, SPA500 Series, and WIP310 Administration Guide* on Cisco.com for more information.

## Changing the Cisco SPA500DS Attendant Console Display

The Cisco SPA500DS provides a backlit LCD display. The backlight is controlled by the backlight settings of the phone display and is not separately configurable; that is, the Cisco SPA500DS display is lit when the phone display is lit, and is off when the phone display is off.

You can choose the font size (10 or 12 point) of the text displayed on the Cisco SPA500DS. You can also configure the text contrast, or how dark the text appears on the display. To configure these options from the phone:

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Scroll to **Att. Cons. Preferences** and press **select**.
  - STEP 3** Choose **Font Size** or **Contrast** from the menu and press **edit**:
    - To change the font size, press **option** to switch between 10 and 12 point font. Press **ok** to save.
    - To change the display contrast, use the keypad to enter a number value from 1 to 30. The higher the number, the greater the contrast on the display. Press **ok** to save.
  - STEP 4** Press **save** to save your changes.
-

# Installing Your Phone

This chapter describes how to install your Cisco Small Business IP Phone and connect it to your network. It contains the following sections:

- [Before You Begin, page 14](#)
- [Phone Connections, page 15](#)
- [Mounting the Phone to the Wall \(Optional\), page 20](#)
- [Verifying Phone Startup, page 22](#)
- [Updating Your Phone Firmware, page 22](#)

## 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.



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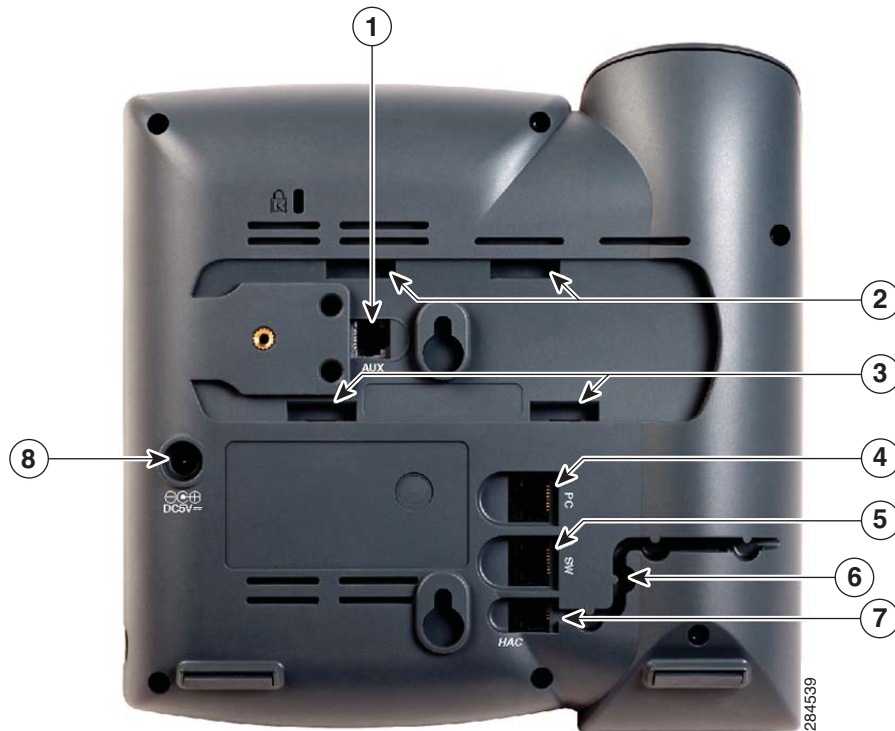
**CAUTION** Do not plug a telephone line cord into the port marked **AUX**. The RJ-11 port marked **AUX** is reserved for connection with the Cisco Attendant Console. It is not for use as a telephone line port or IP device connection.

---

## Phone Connections

The phone connections are shown in **Figure 1**.

**Figure 1** Phone Connections



Numbered objects in **Figure 1** are described in the following table.

#	Description
1	Auxiliary port. (For use only with the Cisco Attendant Console.)
2	Upper slots.
3	Lower slots.
4	PC port.
5	Network (switch) port.
6	Cable run.



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#	Description
7	Handset port.
8	Power port. (Use only with a PA100 power adapter.)

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## Connecting the Handset

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- STEP 1** Turn the phone body over to expose the ports on the back of the unit.
- STEP 2** Insert the long end of the phone cord into the RJ-11 handset port on the phone body that is marked with a phone symbol.



**CAUTION** Do not insert a telephone line cord into the RJ-11 AUX (auxiliary) port.

---

- STEP 3** (Optional) Route the phone cord through the cable slot.
- STEP 4** Insert the other end of the phone cord into the port at the bottom of the handset (not shown).
- 

## Connecting the Power

The Cisco 500 Series IP phones do not ship with power supplies. If you are not using Power over Ethernet (PoE), you must order a Cisco PA100 power supply for each phone from Cisco.

If you are using Power over Ethernet (PoE) to power the phone, the phone receives power when you connect an Ethernet cable from the phone SW port to a switch that provides PoE. If you are using a Cisco PA100 power adapter, insert one end of the power adapter into an outlet and insert the other end into the power port on the phone body.

---

## Connecting Your Phone to the Network

The phone can be connected to the network by using a Cat5e or higher Ethernet cable, or through a wireless network connection.

### Connecting Your Phone to the Wired Network

To connect the phone by using an Ethernet cable:

- 
- STEP 1** Insert one end of the Ethernet cable into the network port on the RJ-45 phone port marked “SW.”
  - STEP 2** Insert the other end of the Ethernet cable into the device, such as a switch.
- 

### Connecting the Phone to the Wireless Network

You can use a wireless device, such as a Cisco Wireless-N Bridge for Phone Adapters (WNBP), to connect the IP phone to a wireless network. This example procedure requires the Cisco PA100 power adapter to provide power to the Cisco WNBP. Cisco does not recommend connecting a PC to the network by using the phone when it is operating wirelessly.

To connect your phone to the Cisco WNBP:

- 
- STEP 1** Configure the Cisco WNBP by using the Setup Wizard.
  - STEP 2** When instructed to do so by the Setup Wizard, insert the Ethernet cable of the wireless bridge into the RJ-45 phone port marked SW, located on the back of the IP phone base station.
  - STEP 3** Connect the power cable of the Cisco WNBP to the power port on the phone base.
  - STEP 4** Connect one end of the IP phone power adapter into the power port of the wireless bridge.
  - STEP 5** Connect the other end of the IP phone power adapter into an electrical outlet.
-

---

### Connecting a PC to Your Phone

A PC can be connected to the network through the phone. Cisco does not recommend connecting a PC to the phone if the phone is connected to the network wirelessly.

To connect a PC to your phone:

- 
- STEP 1** Connect one end of a Cat5e or higher Ethernet cable (not provided) to the RJ-45 port marked **PC** on the back of the phone body. See the [Figure 1](#).
  - STEP 2** Connect the other end of the Ethernet cable to the Ethernet port on your PC.
- 

### Connecting a Wired or Wireless Headset

Cisco IP phones support headsets from other manufacturers. For the latest supported models, contact your reseller. Additional information can be found at the manufacturer websites.

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

- **Wireless**—Connect the headset telephone cord into the telephone port on the back of the IP Phone.

- **Wired headsets**—Connect the 2.5mm connector from the headset into the headset port on the right side of the IP phone:



### Installing the Desk Stand or Wall Mount (Optional)

The phone can be set on a flat surface, such as a desk, or mounted to a wall. This section describes the installation of the desk stand. If you are attaching an attendant console, attach the console before attaching the desk stand.

To mount the phone to the wall, you must use the MB100 wall mount bracket kit (available separately). Do not attach the desk stand if you intend to mount the phone to the wall. To mount the phone on the wall, follow the instructions included with the wall mount.

To install the desk stand:

- STEP 1** Connect the phone stand by lining up the tabs on the stand with the slots on the phone body.
- STEP 2** Slide the bottom tabs into the lower slots on the phone body and lightly press down on the stand. It should easily slide into the upper stand slots. Do not force it.

## Mounting the Phone to the Wall (Optional)

To mount the phone to the wall, you must use the MB100 wall mount bracket kit (available separately).

**Figure 2** MB100 Wall Mount Kit



### Reverse the Handset Retention Tab

If you mount the phone to a vertical surface, such as a wall, you must reverse the handset retention tab on the phone body so that the handset does not fall off the phone when it is placed on the cradle.

**STEP 1** Push the latch in.

**STEP 2** Slide the retention tab up until it detaches from the phone.



**STEP 3** Rotate the tab 180° and re-insert into the phone base. The tab now catches the slot in the handset when the handset is placed onto the cradle.

## Verifying Phone Startup

After receiving power and network connectivity, the phone executes a boot sequence. During this sequence, phones with IP phone screens display the Cisco logo, the message **Initializing Network** and all of the lights on the phone flash.

After your phone successfully connects to the network, it checks for and downloads an updated configuration and firmware. When the boot process is complete, the extension number appears on the IP phone screen (on models with a IP phone screen) and the phone has a dial tone.

On models with IP phone screens, the phone displays the standard menu for the phone. The date, name and number of the phone display on the top line of the IP phone screen. At the bottom of the IP phone screen, softkeys are displayed over their associated soft buttons.

On models with no IP phone screen, such as the Cisco SPA501G, the lines glow green and you hear a dial tone when the handset is picked up or when the speaker button is pressed.

If the phone does not start, confirm your installation and connections. If these are correct, try unplugging the phone and plugging it back in again. Cycling the phone connection updates the configuration and the firmware. If you still do not see the display, then contact your phone administrator or Internet Telephony Service Provider (ITSP).

## Updating Your Phone Firmware

The phone firmware is updated automatically by the Cisco Smart Business Communications System (SBCS), according to the administrative settings.

## Using Basic Phone Functions

This chapter provides instructions on using the basic phone functions. It includes the following sections:

- [Using the Speaker or a Headset, page 24](#)
- [Adjusting Call Volume and Muting, page 25](#)
- [Placing or Answering a Call, page 26](#)
- [Using Hold and Resume, page 27](#)
- [Using Mute, page 27](#)
- [Ending a Call, page 27](#)
- [Transferring Calls, page 28](#)
- [Redialing a Number, page 29](#)
- [Forwarding All Calls to Another Number, page 30](#)
- [Setting Do Not Disturb, page 30](#)
- [Picking Up a Call from Another Extension, page 31](#)
- [Placing a Three-Way Conference Call, page 31](#)
- [Using the Local Directory, page 32](#)
- [Using the Call History Lists, page 33](#)
- [Accessing Voicemail, page 33](#)

**NOTE** All the features of these phones can be modified by your phone system administrator. Not all of features described in this document may be available or they might function slightly differently on your phone. This document describes the features as they function in factory default mode.



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## Using the Speaker or a Headset

You can use the handset, headset, or speakerphone to place or receive a call. And you can switch among these devices during a call; however, only one of these devices at a time can be used.

When switching from the handset to the speakerphone, make sure the speakerphone or headset light is illuminated before placing the handset back on the hook. When switching from the handset to a wireless headset, do not replace the handset on hook or you will disconnect the call.

### Using the Speaker

To use the speakerphone, press the **Speaker** button (the handset can be either on or off hook).

### Sending Audio to the Phone Speaker

You can send the audio to the speaker when the handset is lifted. (Not available for the Cisco SPA501G.)

To send the audio to the speaker when the handset is lifted:

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Select **Preferences**.
  - STEP 3** Choose **Send Audio to Speaker > edit**.
  - STEP 4** Press **y/n** to enable or disable the feature.
  - STEP 5** Press **ok**.
  - STEP 6** Press **Save**.
- 

### Choosing Your Preferred Audio Device

This option designates the headset, handset, or speaker as the preferred audio device. (Not available for the Cisco SPA501G.)

To choose your preferred audio device:

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Select **Preferences**.
  - STEP 3** Choose **Preferred Audio Device** and press **edit**.
  - STEP 4** Press **option** to view your choices. When the option you want is displayed, press **ok**.
  - STEP 5** Press **save**.
- 

## Using the Headset with Your IP Phone

Install the headset as described in the [“Connecting a Wired or Wireless Headset” section on page 18](#)

**NOTE** The steps to install and use a headset with the IP phone can 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 an incoming call.

To use a wireless headset, lift the handset off hook to speak and listen through the wireless headset.

## Adjusting Call Volume and Muting

### Adjusting Call Volume

To adjust the volume of the handset or speaker during a call, press **+** on the **Volume** button to increase the volume, or press **-** to decrease the volume. The volume will return to the previous level when you disconnect the call. To retain the setting, press **OK** (except on the (except on the Cisco SPA501G)) and the setting is saved.

## Adjusting the Ringer Volume

To adjust the ringer volume, press **+** on the **Volume** button to increase the volume, or press **-** to decrease the volume when the handset is on-hook and the speaker is off. Retain the setting by pressing **OK** (except on the Cisco SPA501G) and the setting is saved.

## Muting a Call

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

# Placing or Answering a Call

There are several ways to place or answer a call:

- Pick up the handset.
- Press the **Speaker** button.
- Press the **Headset** button.
- Press a configured line button (to place a call) or a green flashing line button (to answer a call). (Not applicable to the Cisco SPA502G or Cisco SPA512G).

You might have to dial a number or series of numbers to reach an outside line. Ask your phone administrator for specific information.

To place a call without dialing a number:

- Press **Redial** to dial the last number.
- If you have configured speed dials, press the assigned speed dial code and then press **AbbrDial**.
- To answer a call that is ringing on another phone in the phone system, press **Pickup**. Then enter the extension number of the ringing phone.
- Choose a number from a directory. See [Using the Local Directory, page 32](#).
- Choose a number from the Call History. See [Using the Call History Lists, page 33](#).

## Using Hold and Resume

To put a call on hold, press the **Hold** button/**Hold** softkey. A series of beeps or music on hold plays for the caller to indicate that the call is on hold.

To resume a call, press the flashing red line button for that call or the **Hold** button or the **Resume** softkey.

If you are on a call and another call comes in, press the flashing red line button or the **Hold** button/**Hold** softkey to place the call on hold and answer the incoming call.

To resume the first call, press the line button for the call or select it using the **Up** or **Down** navigation button and press the **Resume** softkey or the **Hold** button.

## Using Mute

When mute is enabled you can hear other parties on a call, but they cannot hear you. You can use this feature on the handset, speakerphone, or headset.

- To toggle mute on, press the **Mute** button. The button is lit.
- To toggle mute off, press the lit **Mute** button.

## Ending a Call

To end a call:

- Press the **EndCall** button.
- 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 handset (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 whom you are transferring the call.

### Performing a Transfer

**Cisco SPA502G, Cisco SPA504G, Cisco SPA508G, Cisco SPA509G, Cisco SPA514G:**

- 
- STEP 1** During an active call, press **Transfer**. The call is placed on hold and a new line is opened to dial the number.
- STEP 2** Enter the number where you want to transfer the call and wait for the other line to ring.
- STEP 3** Do one of the following:
- To blind transfer the call, press **Transfer** after the call begins to ring and then hang up. If you hang up before the target line rings, the transfer fails and the caller is disconnected. If you misdial, press the line button again to receive a dial tone (not available on the Cisco SPA502G or Cisco SPA512G).
  - To transfer after speaking privately to the other person, press **Transfer** at any time during the conversation.
- 

**Cisco SPA501G:**

- 
- STEP 1** During an active call, press the **Transfer** button.
- STEP 2** Enter the number where you want to transfer the call.
- STEP 3** Press the **Transfer** button again.
-

---

## Redialing a Number

To redial the last number called, press the **Redial** softkey (except on the Cisco SPA501G).

To redial the last number called from a Cisco SPA501G, press the **Redial** button.

### Redialing Calls in the History List

You can view, edit, and return calls by looking the number up in a call history list. (The Cisco SPA501G does not have an IP phone screen and does not support these functions.) For example, the IP phone screen on your IP phone notifies you if a call came in that was unanswered. To return the missed call, you can press **Missed** to view a list of missed calls and dial a selected number.

To redial any call by selecting it from a call history list:

---

**STEP 1** Press **Setup**.

**STEP 2** Scroll to **Call History** and press **Select**.

**STEP 3** Scroll to the desired list, such as **Missed Calls**, and press **Select**.

If a call is from an outside line or a long distance number, it might be necessary to edit the call before returning it. For example, it might be necessary to add a prefix digit that your system requires for an outgoing call. You can:

- Press **Dial** to dial the number that called you.
- Press **EditDial** to modify the number before calling it, and then press **Dial**.

The modified number is retained in the history list.

---

---

## Forwarding All Calls to Another Number

You can forward all calls to another IP phone in your phone system. For example, calls can be forwarded to your voice mailbox or another extension. You might be able to forward calls to an external number, such as your home or cell phone number, if this is allowed by your phone system administrator. For outside numbers, be sure to include any digit that is required to access an outside line.

To forward calls:

- 
- STEP 1** Press the **CFwdAll** softkey.
  - STEP 2** Enter a number where all calls are to be forwarded. For an outside line, be sure to enter any access code or area code that is required to complete the call.
  - STEP 3** Press **EndCall**. The IP phone screen displays **Forwarded to *number***.
- 

Disable call forwarding by pressing the **CFwdAll** softkey. This procedure only cancels the **Call Forward All** feature; it does not cancel **Call Forward Busy** or **Call Forward No Answer**.

## Setting Do Not Disturb

Use the Do Not Disturb feature to prevent incoming calls from ringing your phone. The IP phone screen indicates that the call is incoming, but the phone does not ring. The unanswered call is handled according to your settings. These calls are not logged to the Missed Calls list.

To activate Do Not Disturb, press **more** and then press **DnD**. The IP phone screen indicates that Do Not Disturb is turned on for your phone.

To deactivate Do Not Disturb, press the **DnD** softkey.

## Picking Up a Call from Another Extension

You can pick up a call that is ringing at another extension. Depending on the way your phone network is configured by your system administrator, you can pick up a call in the following ways:

- To pick up a call that is ringing at an extension in your group, use the **GPickUp** softkey (except on the Cisco SPA501G). If only one pickup group is configured by your system administrator, call control is transferred to your phone. If the ringing phone and your phone are in different pickup groups, dial the pickup group number where the phone is ringing to transfer call control to your phone.
- To pick up a call that is ringing at specific extension, press the **Pickup** softkey (except on the Cisco SPA501G).
- To pick up a call ringing at an extension that is configured on one of the line buttons on your phone, press the flashing line button. (This functionality requires configuration by your phone administrator.)
- To specify the extension from where the call is to be picked up, press the **PickUp** softkey and enter the extension number of the phone from which you are picking up the call.

## Placing a Three-Way Conference Call

During an active call, you can add another caller to the conversation.

**Cisco SPA502G, Cisco SPA504G, Cisco SPA508G, Cisco SPA509G, Cisco SPA514G:**

To initiate a conference call:

- STEP 1** During an active call, press **more** and then press **Confrn**. The first call is placed on hold, a second line is opened, and you hear a dial tone.
- STEP 2** Dial the second telephone number.
- STEP 3** When the second person answers, press the **Confrn** softkey again. All three parties are connected in the conference call.

When you hang up, the other two parties are disconnected.



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**NOTE** You can cancel the conference by pressing the **Cancel** softkey before connecting the calls.

---

### Cisco SPA501G:

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- STEP 1** Press the **Conference** button during an active call. The first call is placed on hold, a second line is opened, and you hear a dial tone.
- STEP 2** Dial the second telephone number.
- STEP 3** When the second person answers, press the **Conference** button again. All three parties are connected in the conference call.

When you hang up, the other two parties are disconnected.

---

## Using the Local Directory

The local directory lists the phones and extension numbers in your company. Depending on your phone network configuration, you might have the following directories available (except on the Cisco SPA501G):

To display the local directory:

---

- STEP 1** Press the **Setup** button.
  - STEP 2** Scroll to **Directory** and press **Select**.
  - STEP 3** Scroll to **Local Directory** and press **Select**. The search form appears.
  - STEP 4** Enter a last name, a first name, or both to search for a specific entry, or leave the fields blank to display a complete list of all available records.
  - STEP 5** Click **Submit** to search for matching records.
  - STEP 6** Scroll to an entry and press **Dial** to dial the number. Press **Edit Dial** to change the number before dialing. Press **Cancel** to exit.
-

## Using the Call History Lists

You can display several call history lists:

- **Missed Calls**—Shows the last 60 missed calls.
- **Received Calls**—Shows the caller ID of the last 60 answered calls.
- **Placed Calls**—Shows the last 60 numbers dialed from your phone.

To display the Call History lists:

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Scroll to **Call History** and press **Select**.
  - STEP 3** Scroll to the Call History list that you want to view: **Missed Calls**, **Received Calls**, or **Placed Calls**.
  - STEP 4** Scroll to an entry and press **Dial** to dial the number. Press **Edit Dial** to change the number before dialing. Press **Cancel** to exit.
- 

To delete all numbers from the history lists, press the **Clear** softkey.

## Accessing Voicemail

To access voicemail, press the **Messages** button on your phone. Your system administrator should have configured your phone with the correct voicemail number so that pressing the **Messages** button automatically dials your voicemail system.

## Using Advanced Phone Features

This chapter describes how to configure advanced features on your IP Phone. It contains the following sections:

- [Logging in to Your Phone, page 34](#)
- [Creating Speed Dials, page 36](#)
- [Monitoring/Accessing Another Phone from Your Phone, page 38](#)
- [Customizing Your IP Phone Screen, page 39](#)
- [Updating Your Ring Tone, page 41](#)
- [Using the Cisco SPA501G Interactive Voice Response Menu, page 41](#)
- [Advanced Procedures for Technical Support, page 42](#)

### Logging in to Your Phone

Your phone system provides a feature called *extension mobility*. This feature allows you to log in to any physical phone and assign your personal settings and directory number to that phone. For example, if you are working at a remote location for the day, you can log in to one of the company phones on the network and make and receive calls from your phone number and access your voicemail.

To log in to your phone:

- 
- STEP 1** If you have the **Login** softkey on your phone, press it. (It might be necessary to press **More** and scroll through the IP phone screen to locate this softkey.)

If you do not have the **Login** softkey on your phone:

- Press the **Setup** button.
- Scroll to **CME Services** and press **Select**.
- Choose **Extension Mobility**.

---

**STEP 2** Enter your username.

**STEP 3** Press the **Down Arrow** key and enter your password.

**STEP 4** Press **Submit**. The phone is loaded with your user profile (for example, your configured speed dial buttons).

---

To log out of your phone:

---

**STEP 1** If you have the **Logout** softkey on your phone, press it. (It might be necessary to press **More** and scroll through the IP phone screen to locate this softkey.)

If you do not have the **Logout** softkey on your phone:

- a. Press the **Setup** button.
- b. Scroll to **CME Services** and press **Select**.
- c. Choose **Extension Mobility**.

**STEP 2** Choose **Logout**.

**STEP 3** Press **Exit**.

---

---

## Creating Speed Dials

You can configure up to 32 speed dials. Each speed dial can be a phone number, IP address or URL. You can also configure additional speed dials on unused line buttons on your phone. System-wide speed dials can be configured by the system administrator.

### Adding Speed Dials

You can use the phone menu to add a speed dial that is not associated with a line button.

**Cisco SPA502G, Cisco SPA504G, Cisco SPA508G, Cisco SPA509G, Cisco SPA514G:**

To add a speed dial:

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Scroll to **CME Services** and press **Select**.
  - STEP 3** Scroll to **My Phone Apps** and press **Select**.
  - STEP 4** Scroll to **Speed Dial Buttons** and press **Select**.
  - STEP 5** Press **Add** to add a new number.
  - STEP 6** Enter the following information:
    - **Label:** Enter a name or other identifier for this speed dial entry.
    - **Number:** Enter the destination number.
  - STEP 7** Press **Submit**.
- 

### Editing Speed Dials

To edit a speed dial entry:

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Scroll to **CME Services** and press **Select**.
  - STEP 3** Scroll to **My Phone Apps** and press **Select**.

---

**STEP 4** Scroll to **Speed Dial Buttons** and press **Select**.

**STEP 5** Scroll to the entry that you want to change.

**STEP 6** Press **Change** to edit the selected entry.

**STEP 7** Enter the following information:

- **Label:** Enter a name or other identifier for this speed dial entry.
- **Number:** Enter the destination number.

**STEP 8** Press **Submit**. The new entry appears in the list, along with the assigned speed dial number.

---

## Deleting Speed Dials

To delete a speed dial entry:

---

**STEP 1** Press the **Setup** button.

**STEP 2** Scroll to **CME Services** and press **Select**.

**STEP 3** Scroll to **My Phone Apps** and press **Select**.

**STEP 4** Scroll to **Speed Dial Buttons** and press **Select**.

**STEP 5** Scroll to the entry that you want to delete.

**STEP 6** Press **Delete**.

**STEP 7** Press **Submit**.

---

## Calling Speed Dials

To call one of your configured speed dial numbers:

---

**STEP 1** Open a phone line by using any method you would normally use to start a new call.

**STEP 2** Press the assigned number for the speed dial, then press **AbbrDial**. The phone number is dialed.

---

**NOTE** If you have configured an unused line button with a speed dial number, press the button to dial.

#### **Cisco SPA501G:**

To call one of your configured speed dial numbers, press the number for the speed dial and wait a few seconds.

## Monitoring/Accessing Another Phone from Your Phone

Your system administrator can configure your phone so that you can monitor other phones on the network from your phone if the feature is available on your system. If this feature is configured, some line buttons on your phone are assigned to display the status of another user phone. For example, if your line 4 is configured to display Bob's phone line, the button color shows you the status of that phone line:

- Green: Line is idle.
- Red (steady): Line is active or in use.
- Red (blinking): Line is ringing.
- Orange (solid): Line status cannot be monitored.
- Orange (blinking): The phone is subscribing to monitor the line status.

In addition, if your system administrator has configured it, you can press the same line button (4) to speed dial Bob's extension, or to pick up a ringing call at his extension.

**NOTE** User cannot configure BLF on the SPA502G and SPA512G phones as they have only 1 line and no line buttons, but the BLF function can be configured on the Attendant Console.

---

## Customizing Your IP Phone Screen

**NOTE** Not available on the Cisco SPA501G.

You can customize your IP phone screen in several ways.

### Changing the IP Phone Screen Contrast

To adjust the contrast of the IP phone screen:

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Scroll to **Settings** and press **Select**.
  - STEP 3** Scroll to **Screen Contrast** and press **Select**.
  - STEP 4** Use the navigation button to adjust the IP phone screen contrast:
    - To decrease the contrast: Press the **Left** navigation button.
    - To increase the contrast: Press the **Right** navigation button.
  - STEP 5** Press **OK**.
- 

### Setting the Back Light Timer

You can set a timer for your IP phone screen back light so that your IP phone screen becomes dark after a specified period of idle time on the phone.

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Scroll to **Preferences** and press **Select**.
  - STEP 3** Scroll to **Back Light Timer** and press **Select**.
  - STEP 4** Press **Option** repeatedly to view the available options: **Always On, Off, 10s, 20s,** and **30s**.
  - STEP 5** To choose a displayed option, press **OK**.
-



---

## Configuring the IP Phone Screen Saver

You can enable your IP phone screen saver and specify its appearance and the amount of time for the phone to be idle before it begins.

To configure your IP phone screen saver:

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Scroll to **Preferences** and press **Select**.
  - STEP 3** Scroll to **Screen Saver Mode** and press **Select**.
  - STEP 4** To change the status of your IP phone screen saver:
    - a. Scroll to **Enable Screen Saver** and press **Edit**.
    - b. Press **Y/N** until the desired option appears: **Yes** to enable a screen saver or **No** to disable this feature.
    - c. Press **OK** to save the changes.
  - STEP 5** To specify the amount of idle time that can elapse before the screen saver appears:
    - a. Scroll to **Screen Saver Wait Time** and press **Edit**.
    - b. Clear the displayed time by pressing **Clear**.
    - c. Enter the idle time period in seconds by pressing numbers on the keypad.
    - d. Press **OK** to save your changes.
- 

## Turning on the Screen Saver Immediately

The screen saver must be enabled to immediately activate it. To turn on your phone screen saver without waiting for the specified Screen Saver Wait Time to elapse:

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Scroll to **Screen Saver Mode**.
  - STEP 3** Press **Activate**.
-

---

## Updating Your Ring Tone

Each extension of your phone can have a different ring tone. You can also create your own ring tones.

To change a ring tone:

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Scroll to **Settings** and press **Select**.
  - STEP 3** Scroll to **Ring Type** and press **Select**. A list of available tones appears
  - STEP 4** Choose the ring tone that you want to change, and press **Select**.
  - STEP 5** Scroll through the ring tones. To hear a ring tone, press **Play**. To choose a ring tone, press **Select**.
  - STEP 6** Press **Exit** to close the IP phone screen.
- 

## Using the Cisco SPA501G Interactive Voice Response Menu

The Cisco SPA501G provides an interactive voice response (IVR) menu. You can enter options and receive information about the phone and its operation.

To access the IVR:

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Enter the IVR option by dialing the number code for the specific option, then press **#**. Some typical options that you might use are:

---

Option Number	Action
110	The IP address of the phone.
140	The MAC address (hardware address) of the phone.
150	The version of the firmware on the phone.

---

---

## Advanced Procedures for Technical Support

Technical support personnel might need to view information about your phone or phone activities. Follow these procedures if instructed to do so by the technical support person assisting you.

### Status Information and Statistics

To view status information and statistics:

- 
- STEP 1** Press the **Setup** button.
- STEP 2** Scroll to **Settings** and press **Select**.
- STEP 3** Choose from the following options:
- **Network Configuration:** Displays information about the network, including WAN connection, DHCP server, IP address, MAC address, domain name, subnet mask, default router, DNS servers, and TFTP server.
  - **Model Information:** Displays information about the phone, including model number, serial number, software version, and call control protocol.
  - **Status:** Displays information about the phone activity, including status messages, network statistics, and call statistics.
- 

### Rebooting, Restarting, and Resetting a Phone

If required, you can reboot, restart, or reset your phone. You should not do so unless directed by your phone administrator as this can negatively affect your phone function.

To reboot your phone and the firmware:

- 
- STEP 1** Press the **Setup** button.
- STEP 2** Scroll to **Reboot** and press **Select**.
- STEP 3** When the confirmation message appears, press **OK** to confirm or press **Cancel** to close the message without rebooting the phone.
-

---

To restart your phone without reloading the firmware:

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Scroll to **Restart** and press **Select**.
  - STEP 3** When the confirmation message appears, press **OK** to confirm or press **Cancel** to close the message without restarting the phone.
- 

To reset your phone to the factory default values and reboot:



**CAUTION** If you choose **factory reset**, you will return the phone to the original factory settings and will erase ALL current settings, including the directory and call logs. It is also possible that your phone extension will change.

---

- 
- STEP 1** Press the **Setup** button.
  - STEP 2** Scroll to **Factory Reset** and press **Select**.
  - STEP 3** When the confirmation message appears, press **OK** to confirm or press **Cancel** to close the message without resetting the phone.
-

## Using the Phone Web User Interface

Your Cisco IP Phone provides a web interface for the phone user that allows you to configure some features of your phone by using a web browser. Your phone system administrator can allow you to view the phone statistics and modify some or all of the parameters by using the phone web user interface. The features of the Cisco SPA phones that can be modified by the user by using the phone web user interface are described in this chapter; however, not all features are available on all phones.

This chapter contains the following sections:

- [Logging in to the Phone Web User Interface, page 44](#)
- [Saving the Configuration Profile, page 46](#)
- [Setting Voice System Parameters, page 46](#)
- [Setting Voice Phone Parameters, page 55](#)
- [Setting Voice User Parameters, page 55](#)
- [Viewing Call History Lists, page 58](#)
- [Using Your Personal Directory, page 58](#)

### Logging in to the Phone Web User Interface

To log into the phone web user interface:

---

**STEP 1** Get the IP address of your phone:

**Cisco SPA502G, Cisco SPA504G, Cisco SPA508G, Cisco SPA509G,  
Cisco SPA514G:**

- a. Press the **Setup** button.
- b. Scroll to **Settings > Network Configuration**.

- c. Scroll to view **IP Address**. This is the IP address of your phone.

### **Cisco SPA501G:**

- a. Press the **Setup** button.
- b. Enter **110**, then press **#**. The IP address is recited.

**STEP 2** On your PC, open a Web browser. Your PC must be on the same subnetwork as the phone.

**STEP 3** Enter the IP address in the browser address bar. The phone web user interface displays.

---

The phone web user interface has two main options:

- **Voice**—Contains information about your phone, including the following sub-tabs:
    - **Info**—System, reboot history, product, status, extension, and line information (read only).
    - **System**—Password and network settings.
    - **Regional**—Ring cadence.
    - **Phone**—Ring tones
    - **User**—Call forwarding, speed dials, call waiting, privacy settings, and audio settings.
    - **Ext 1**—Time of Service (ToS) and Cost of Service (CoS).
  - **Call History**—Calls placed, received, and missed on your phone.
  - **Personal Directory**—Personal address book.
  - **Attendant Console Status**—Information about Cisco Attendant Consoles, if installed.
-

## Saving the Configuration Profile

Click **Submit All Changes** when you have finished modifying the fields in the phone web user interface to update the configuration profile. The phone is rebooted and the changes are applied.

Click **Undo All Changes** if you want to clear all changes made this session and return to the parameter values set before the session began or since the last time you clicked **Submit All Changes**.

## Setting Voice System Parameters

The voice system parameters control password protection for the phone configuration profile and the values used to identify the phone to the network. Typically a user should not modify these parameters.

The table identifies and describes the parameters in the System tab.

Parameter	Description
Enable Web Server	Choose <b>yes</b> to enable the phone web server that allows a user to view the phone web user interface. Choose <b>no</b> to disable the web server.
Web Server Port	Port number for the web server.
Enable Web Admin Access	Choose <b>yes</b> to enable the phone web server that allows an administrator to modify the phone configuration by using the phone web user interface. Choose <b>no</b> to make the phone web user interface read-only.
Admin Passwd	Alphanumeric string that allows administrator access to the configuration profile.
User Password	Alphanumeric string that allows user access to the configuration profile.
Signaling Protocol	Specifies the <b>SPCP</b> or <b>SIP</b> protocol.

Parameter	Description
SPCP Auto-detect	Choose <b>yes</b> to automatically detect the Simple Phone Control Protocol (SPCP) or Session Initiation Protocol (SIP). Choose <b>no</b> to disable automatic detection.
Phone-UI-readonly	Choose <b>yes</b> to allow phone users to change the phone parameters by using the phone interface. Choose <b>no</b> to restrict ability of the phone users to modify the phone parameters through the phone interface.
Phone-UI-user-mode	Choose <b>yes</b> to restrict ability of the phone users to see the phone interface. Choose <b>no</b> to restrict ability of the phone users to see the phone interface.
PoE Power Required	Choose <b>Normal</b> to signal the switch that the expected power draw will be normal levels. Choose <b>Maximum</b> to signal the switch that the expected power draw will be normal levels.
Connection Type	Choose <b>DHCP</b> to get the IP address from a DHCP server or choose <b>Static</b> to set a static IP address.
Static IP	If you selected a Static connection type, enter the static IP address for the device.
Netmask	If you selected a Static connection type, enter the subnetwork mask.
Gateway	If you selected a Static connection type, enter the gateway IP address.
HostName	Hostname of the phone.
Domain	Network domain name.
Primary DNS	Primary DNS server IP address.
Secondary DNS	Secondary DNS server IP address.
DNS Server Order	Method for selecting the DNS server. The options are Manual (enter the IP address of the DNS server manually; do not look at the DHCP-supplied DNS table), Manual/DHCP, and DHCP/Manual.



Parameter	Description
DNS Query Mode	Parallel or Sequential DNS query. A parallel DNS query sends the same DNS lookup request to all of the DNS servers at the same time. The first incoming reply is accepted by the phone. A sequential query polls the DNS servers in sequence. Defaults to parallel.
TFTP Server	IP address or name of the primary TFTP server.
Alternate TFTP	IP address or name of the secondary TFTP server.
Syslog Server	Specify the syslog server name and port. This feature specifies the server for logging device system information and critical events. If both Debug Server and Syslog Server are specified, Syslog messages are also logged to the Debug Server.
Debug Server	The debug server name and port. This feature specifies the server for logging debug information. The level of detailed output depends on the debug level parameter setting.
Debug Level	Choose a debug level from 0-3. The higher the level, the more debug information is generated. Zero (0) means no debug information is generated. Defaults to 0.
Layer 2 Logging	Choose <b>yes</b> to enable Layer 2 Logging. Choose <b>no</b> to disable it.
NTP Enable	Choose <b>yes</b> to use Network Time Protocol (NTP) to set the time on the device. Choose <b>no</b> to disable NTP.
Primary NTP Server	IP address or name of the primary NTP server. The phones use these servers to synchronize its time.
Secondary NTP Server	IP address or name of the secondary NTP server. The phones use these servers to synchronize its time.
Enable VLAN	Choose <b>yes</b> to enable VLAN. Choose <b>no</b> to disable.
Enable CDP	Enable CDP only if you are using a switch that has Cisco Discovery Protocol (CDP). CDP is negotiation-based and determines which VLAN the IP phone resides in.

Parameter	Description
Enable LLDP-MED	<p>Choose <b>yes</b> to enable LLDP-MED for the phone to advertise itself to devices that use that discovery protocol. (By default, this setting is enabled.)</p> <p>When the LLDP-MED feature is enabled, after the phone has initialized and Layer 2 connectivity is established, the phone sends out LLDP-MED PDU frames. If the phone receives no acknowledgment, the manually configured VLAN or default VLAN is used if applicable. If CDP is used concurrently, a waiting period of 6 seconds is used. The waiting period increases the overall startup time for the phone.</p>
Network Startup Delay	Enter the delay in seconds for the switch to get to the forwarding state before the phone sends out the first LLDP-MED packet. The default delay is 3 seconds. For configuration of some switches, it might be necessary to increase this value to a higher value for LLDP-MED to work. Configuring a delay can be important for networks that use Spanning Tree Protocol.
VLAN ID	A value ranging from 0 to 4095 (default 0). The phone tags all of the untagged frames coming from the PC. (It does not tag frames with existing tags).
Asset ID	Enter a string to identify the phone in inventory.

## Setting Voice Regional Parameters

This section describes the fields for the Regional tab.

### Call Progress Tones

Parameter	Description
Dial Tone	Prompts the user to enter a phone number. Defaults to 350@-19,440@-19;10(* /0/1+2).

Parameter	Description
Outside Dial Tone	Alternative to the Dial Tone. It prompts the user to enter an external phone number, as opposed to an internal extension. It is triggered by a (comma) character encountered in the dial plan. Defaults to 420@-16;10(*0/1).
Prompt Tone	Prompts the user to enter a call forwarding phone number. Defaults to 520@-19,620@-19;10(*0/1+2).
Busy Tone	Played when a 486 RSC is received for an outbound call. Defaults to 480@-19,620@-19;10(.5/.5/1+2).
Reorder Tone	Played when an outbound call has failed or after the far end hangs up during an established call. Reorder Tone is played automatically when <Dial Tone> or any of its alternatives times out. Defaults to 480@-19,620@-19;10(.25/.25/1+2).
Off Hook Warning Tone	Played when the caller has not properly placed the handset on the cradle. Off Hook Warning Tone is played when Reorder Tone times out. Defaults to 480@10,620@0;10(.125/.125/1+2).
Ring Back Tone	Played during an outbound call when the far end is ringing. Defaults to 440@-19,480@-19;*(2/4/1+2).
Call Waiting Tone	Played when a call is waiting. Defaults to 440@-10;30(.3/9.7/1)
Confirm Tone	Brief tone to notify the user that the last input value has been accepted. Defaults to 600@-16; 1(.25/.25/1).
SIT1 Tone	Alternative to the Reorder Tone played when an error occurs as a caller makes an outbound call. The RSC to trigger this tone is configurable on the SIP IP phone screen. Defaults to 985@-16,1428@-16,1777@-16;20(.380/0/1,.380/0/2,.380/0/3,0/4/0).

Parameter	Description
SIT2 Tone	Alternative to the Reorder Tone played when an error occurs as a caller makes an outbound call. The RSC to trigger this tone is configurable on the SIP IP phone screen. Defaults to 914@-16,1371@-16,1777@-16;20(.274/0/1,,274/0/2,,380/0/3,0/4/0).
SIT3 Tone	Alternative to the Reorder Tone played when an error occurs as a caller makes an outbound call. The RSC to trigger this tone is configurable on the SIP IP phone screen. Defaults to 914@-16,1371@-16,1777@-16;20(.380/0/1,,380/0/2,,380/0/3,0/4/0)
SIT4 Tone	This is an alternative to the Reorder Tone played when an error occurs as a caller makes an outbound call. The RSC to trigger this tone is configurable on the SIP IP phone screen. Defaults to 985@-16,1371@-16,1777@-16;20(.380/0/1,,274/0/2,,380/0/3,0/4/0).
MWI Dial Tone	Played instead of the Dial Tone when there are unheard messages in the caller's mailbox. Defaults to 350@-19,440@-19;2(.1/.1/1+2);10(*/0/1+2).
Cfwd Dial Tone	Played when all calls are forwarded. Defaults to 350@-19,440@-19;2(.2/.2/1+2);10(*/0/1+2).
Holding Tone	Informs the local caller that the far end has placed the call on hold. Defaults to 600@-19*(.1/.1/1,.1/.1/1,.1/9.5/1).
Conference Tone	Played to all parties when a three-way conference call is in progress. Defaults to 350@-19;20(.1/.1/1,.1/9.7/1).

Parameter	Description
Secure Call Indication Tone	Played when a call has been successfully switched to secure mode. It should be played only for a short while (less than 30 seconds) and at a reduced level (less than -19 dBm) so it does not interfere with the conversation. Defaults to 397@-19,507@-19;15(0/2/0,.2/.1/1,.1/2.1/2). (Before attempting to use Secure Call, verify with your phone service provider that Secure Call is available.)
Page Tone	Specifies the tone transmitted when the paging feature is enabled. Defaults to 600@-16;3(.05/0.05/1).
Alert Tone	Played when an alert occurs. Defaults to 600@-19;2(.05/0.05/1).

## Tone Script

A ToneScript is a mini-script that specifies the frequency, level, and cadence of a call progress tone. It can include up to 127 characters.

Syntax: *FreqScript*;*Z1* [*;Z2*]

The section *Zi* is similar to the *Si* section in a CadScript except that each on/off segment is followed by a frequency components parameter:

```
Zi = Di(oni,1/offi,1/fi,1[,oni,2/offi,2/fi,2 [,oni,3/offi,3/
fi,3 [,oni,4/offi,4/fi,4 [,oni,5/offi,5/fi,5 [,oni,6/offi,6/
fi,6]]]]))
```

where  $fi,j = n1[+n2]+n3[+n4[+n5[+n6]]]]]$  and  $1 < nk < 6$  indicates which of the frequency components in the FreqScript shall be used in that segment. If more than one frequency component is used in a segment, the components are summed together.

### Example 1: Dial Tone

```
350@-19,440@-19;10(* / 0 / 1 + 2)
```

Number of Frequencies = 2

Frequency 1 = 350 Hz at -19 dBm

Frequency 2 = 440 Hz at -19 dBm

Number of Cadence Sections = 1

Cadence Section 1: Section Length = 10 s

Number of Segments = 1

Segment 1: On=forever, with Frequencies 1 and 2

Total Tone Length = 10s

**Example 2: Stutter Tone**

350@-19,440@-19;2(.1/.1/1+2);10(\*0/1+2)

Number of Frequencies = 2

Frequency 1 = 350 Hz at -19 dBm

Frequency 2 = 440 Hz at -19 dBm

Number of Cadence Sections = 2

Cadence Section 1: Section Length = 2s

Number of Segments = 1

Segment 1: On=0.1s, Off=0.1s with Frequencies 1 and 2

Cadence Section 2: Section Length = 10s

Number of Segments = 1

Segment 1: On=forever, with Frequencies 1 and 2

Total Tone Length = 12s

**Example 3: SIT Tone**

985@-16,1428@-16,1777@-16;20(.380/0/1,.380/0/2,.380/0/3,0/4/0)

Number of Frequencies = 3

Frequency 1 = 985 Hz at -16 dBm

Frequency 2 = 1428 Hz at -16 dBm

Frequency 3 = 1777 Hz at -16 dBm

Number of Cadence Sections = 1

Cadence Section 1: Section Length = 20s

Number of Segments = 4

Segment 1: On=0.38s, Off=0s, with Frequency 1

Segment 2: On=0.38s, Off=0s, with Frequency 2

Segment 3: On=0.38s, Off=0s, with Frequency 3

Segment 4: On=0s, Off=4s, with no frequency components

Total Tone Length = 20s

## Distinctive Ring Patterns

Parameter	Description
Cadence 1	Cadence script for distinctive ring 1. Defaults to 60(2/4).
Cadence 2	Cadence script for distinctive ring 2. Defaults to 60(.3/.2, 1/.2,.3/4).
Cadence 3	Cadence script for distinctive ring 3. Defaults to 60(.8/.4,.8/4).
Cadence 4	Cadence script for distinctive ring 4. Defaults to 60(.4/.2,.3/.2,.8/4).
Cadence 5	Cadence script for distinctive ring 5. Defaults to 60(.2/.2,.2/.2,.2/.2,1/4)
Cadence 6	Cadence script for distinctive ring 6. Defaults to 60(.2/.4,.2/.4,.2/4).
Cadence 7	Cadence script for distinctive ring 7. Defaults to 60(4.5/4).
Cadence 8	Cadence script for distinctive ring 8. Defaults to 60(0.25/9.75)
Cadence 9	Cadence script for distinctive ring 9. Defaults to 60(.4/.2,.4/2).

## Setting Voice Phone Parameters

This section describes the parameters in the Phone tab.

You can configure the characteristics of the **Ring Tones** by using a script. In a Ring Tone script, specify:

- Name (n)—Ring tone name, such as Classic, Simple, and Office
- Waveform (w)—1, 2, 3, 4, 5, 6, 7, 8, 9, 10
- Cadence (c)—1, 2, 3, 4, or 5

Under **Audio Input Gain (dB)**, you can choose a value of -6 decibels, 0 decibels, or +6 decibels. All fields default to zero.

## Setting Voice User Parameters

The voice User parameters control the phone user options, such as caller ID and speed dial numbers.

The table identifies and describes the parameters in the User tab.

Parameter	Description
<b>Cfwd Setting</b>	Choose <b>yes</b> to enable call forwarding. Choose <b>no</b> to disable the feature.
<b>Cfwd All Dest</b>	Enter the target phone number to where all calls are forwarded. When this field is anything other than blank, the phone rings once and the call is forwarded.
<b>CFWD Busy Dest</b>	Enter the target phone number to where all calls are forwarded when this phone is busy.
<b>CFWD No Ans Dest</b>	Enter the target phone number to where all calls are forwarded.
<b>CFWD No Ans Delay</b>	Enter the number of seconds to delay before forwarding calls because there is no answer at your phone.



Parameter	Description
<b>Speed Dial X</b>	Enter the target a phone number, IP address, or URL that will be called or launched when you press the speed dial number. You can configure up to eight speed dials, one for each of the numbered keys <b>2</b> through <b>9</b> .
<b>CW Setting</b>	Choose <b>yes</b> to enable call waiting. Choose <b>no</b> to disable the feature. Call waiting alerts you when you are on a call by ringing the phone and displaying a status message that you have an incoming call. If you turn call waiting off, incoming calls do not ring your phone when you are on another call, and the caller hears a busy signal or message.
<b>Block CID Setting</b>	Choose <b>yes</b> to block your caller ID from displaying on another phone. Choose <b>no</b> to disable the feature.
<b>Block ANC Setting</b>	Choose <b>yes</b> to block anonymous callers. Choose <b>no</b> to disable the feature. Blocking anonymous calls prevents a call with an unknown Caller ID from ringing your phone. For example, if a caller set their phone to not display their Caller ID, the call is considered anonymous. These callers receive a busy signal or message.
<b>DND Setting</b>	Choose <b>yes</b> to enable Do Not Disturb. Choose <b>no</b> to disable the feature. When enabled, the Do Not Disturb feature to prevents incoming calls from ringing your phone. If you have voice mail configured, incoming callers are immediately sent to voice mail. If voice mail is not configured, callers hear a busy signal or a message.
<b>Dial Assistance</b>	If dial assistance is enabled, when placing calls, you will see a list of matching, recently-dialed or received phone numbers on the IP phone screen as you begin dialing.
<b>Preferred Audio Device</b>	Choose the preferred audio device. When you answer a call by pressing the line button, the audio is directed to the headset or the speaker.
<b>Time Format</b>	Choose the time format. Choose <b>12hr</b> to display the time as am or pm. Choose <b>24hr</b> to display the time as a 24-hour clock.
<b>Date Format</b>	Choose the date format. Choose <b>month/day</b> to display the date in month-day sequence. Choose <b>day/month</b> to display the date in day-month sequence.

Parameter	Description
<b>Text Message</b>	Choose <b>yes</b> to enable text messaging from the phone. Choose <b>no</b> to disable the feature.
<b>Text Message from 3rd Party</b>	Choose <b>yes</b> to enable receiving text messaging from others on the phone. Choose <b>no</b> to disable the feature.
<b>Alert Tone Off</b>	Choose <b>yes</b> to disable the alert tone sounded when a text message is received on the phone. Choose <b>no</b> to enable the alert tone.
<b>Ringer Volume</b> <b>Speaker Volume</b> <b>Headset Volume</b> <b>Headset Volume</b>	Enter a volume between 1 and 10, with 1 being the lowest level.
<b>Handset Version</b>	Handset Version—Administrator can change the handset version manually.  Auto—Phone automatically sets the handset version based on the hardware version and model. (Default)  Original—Handset set to Version 2 and below.  V3—Handset set to Version 3.  This parameter should not be modified, unless you are requested to do so by your phone system administrator.
<b>Deep Bass</b>	Standard tone or enhanced bass tone.
<b>LCD Contrast</b>	Enter a number between 1 and 10, with 1 being the lowest contrast.

---

## Viewing Call History Lists

To view Call History Lists:

- 
- STEP 1** Log in to the phone web user interface.
  - STEP 2** Click the **Call History** tab. A window appears with the call history lists for your phone. These include:
    - **Placed**—Shows the last 100 numbers dialed from your phone.
    - **Answered**—Shows the caller ID of the last 100 answered calls.
    - **Missed**—Shows the last 100 missed calls.

Click the tab for each list to view it.

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## Using Your Personal Directory

Your IP phone provides a phone directory for you to store and view frequently dialed numbers. This directory appears on your phone, and you can dial numbers from the directory. The Cisco SPA502G, Cisco SPA504G, Cisco SPA508G, and Cisco SPA509G support up to 100 entries. The Cisco SPA512G and Cisco SPA514G support up to 150 entries. (Not available for the Cisco SPA501G.)

To view and edit your personal directory:

- 
- STEP 1** Log in to the phone web user interface.
  - STEP 2** Click the **Personal Directory** tab. A window appears with the Personal Directory listings for your phone.
  - STEP 3** To enter a new item into the directory, select the line and enter the information in the following format:

`n=entryname;p=nnnnnnnnnn`

where “n=” indicates the name for the entry and “p=” indicates the phone number (including area code), for example 5045551212.

- STEP 4** At the bottom of the page, click **Submit Changes**.

## Viewing Attendant Console Status

The attendant console user parameters are displayed in the Attendant Console Status window.

The table identifies and describes the values in the Attendant Console Status tab.

Parameter	Description
<b>Unit Enable</b>	<b>Yes</b> indicates the unit is enabled. <b>No</b> indicates it is disabled.
<b>Unit Online</b>	<b>Yes</b> indicates the unit is connected. <b>No</b> indicates it is not connected.
<b>Subscribe Expires</b>	Time in seconds when the current subscription expires. After the subscription expires, the Cisco Attendant Console automatically requests a new subscription.
<b>Subscribe Retry Interval</b>	Length of time the Cisco Attendant Console waits to try again if the subscription fails.
<b>HW Version</b>	Hardware version of the attendant console.
<b>SW Version</b>	Firmware (software) version of the attendant console.
<b>Key</b>	Name assigned to each key on the Cisco Attendant Console.
<b>Name</b>	Name identifying the entry.
<b>Type</b>	Function enabled for each key on the Cisco Attendant Console attendant console unit.
<b>Line</b>	Displays the extension assigned to each key on the Cisco Attendant Console.
<b>Station</b>	Subscribe URI (uniform resource identifier) configured for each key on the Cisco Attendant Console.
<b>Subscribed</b>	Subscription status of the unit/key. The value can be Yes, Fail, or No. No indicates that the feature/function (fnc) of that line does not require a subscription (such as speed dial).

## Where to Go From Here

Cisco provides a wide range of resources to help you obtain the full benefits of the Cisco SPA IP phones.

### Product Resources

Support	
Cisco Small Business Support Community	<a href="http://www.cisco.com/go/smallbizsupport">www.cisco.com/go/smallbizsupport</a>
Online Technical Support and Documentation (Login Required)	<a href="http://www.cisco.com/support">www.cisco.com/support</a>
Phone Support Contacts	<a href="http://www.cisco.com/en/US/support/tsd_cisco_small_business_support_center_contacts.html">www.cisco.com/en/US/support/tsd_cisco_small_business_support_center_contacts.html</a>
Software Downloads (Login Required)	Go to <a href="http://tools.cisco.com/support/downloads">tools.cisco.com/support/downloads</a> , and enter the model number in the Software Search box.
Product Documentation	
IP Phone	<a href="http://www.cisco.com/en/US/products/ps10499/tsd_products_support_series_home.html">www.cisco.com/en/US/products/ps10499/tsd_products_support_series_home.html</a>
Accessories	<a href="http://www.cisco.com/en/US/products/ps10042/tsd_products_support_series_home.html">www.cisco.com/en/US/products/ps10042/tsd_products_support_series_home.html</a>
Cisco Unified Communications 500 Series for Small Business	<a href="http://www.cisco.com/en/US/products/ps7293/tsd_products_support_series_home.html">www.cisco.com/en/US/products/ps7293/tsd_products_support_series_home.html</a>

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Regulatory Compliance and Safety Information for the Cisco SPA300 Series and Cisco SPA500 Series IP Phones	<a href="http://www.cisco.com/en/US/docs/voice_ip_comm/csbpipp/ip_phones/regulatory_compliance/guide/rcsi_500_series.pdf">www.cisco.com/en/US/docs/voice_ip_comm/csbpipp/ip_phones/regulatory_compliance/guide/rcsi_500_series.pdf</a>
<b>Cisco Small Business</b>	
Cisco Partner Central for Small Business (Partner Login Required)	<a href="http://www.cisco.com/web/partners/sell/smb">www.cisco.com/web/partners/sell/smb</a>
Cisco Small Business Home	<a href="http://www.cisco.com/smb">www.cisco.com/smb</a>
Marketplace	<a href="http://www.cisco.com/go/marketplace">www.cisco.com/go/marketplace</a>

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