



Accessories

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Accessories Overview for Cisco IP Phone 8800 Series with Multiplatform Firmware

Table 1: Accessory Support for the Cisco IP Phone 8800 Series with Multiplatform Firmware

Accessory	Type	Cisco IP Phone				
		8811 and 8841	8845	8851	8861	8865
Cisco Accessory						
Cisco IP Phone 8800 Key Expansion Module	Add-on module	Not supported	Not supported	Supported	Supported	Supported
				Supports up to 2 expansion modules.	Supports up to 3 expansion modules.	
Wall Mount Kit		Supported	Supported	Supported	Supported	Supported
Footstand		Supported	Supported	Supported	Supported	Supported
Cable Lock		Supported	Supported	Supported	Supported	Supported
Cisco Headset 521 and 522	USB	Not supported	Not supported	Supported	Supported	Supported
Cisco Headset 531 and Cisco Headset 532	Standard RJ9	Supported	Supported	Supported	Supported	Supported
	USB Adapter	Not supported	Not supported	Supported	Supported	Supported

Accessory	Type	Cisco IP Phone				
		8811 and 8841	8845	8851	8861	8865
Cisco Headset 561 and 562 with Standard Base	Standard RJ9 and AUX	Supported	Supported	Supported	Supported	Supported
Cisco Headset 561 and 562 with Multibase	USB	Not supported	Not supported	Supported	Supported	Supported
Third-Party Accessories						
Headsets: See Third Party Headsets, on page 13 . This section includes information about each headset type.	Analog	Supported	Supported	Supported	Supported	Supported
	Analog Wideband	Supported	Supported	Supported	Supported	Supported
	Bluetooth	Not supported	Supported	Supported	Supported	Supported
	USB	Not supported	Not supported	Supported	Supported	Supported
	Electronic Hookswitch	Supported	Supported	Supported	Supported	Supported
		See Note 1.		See Note 2.		
Microphones: See External Speakers and Microphone, on page 22 .	External PC	Not supported	Not supported	Not supported	Supported	Supported
Speakers: See External Speakers and Microphone, on page 22 .	External PC	Not supported	Not supported	Not supported	Supported	Supported


**Note**

- If you connect your headset to the phone with the Y-cable (RJ-9 connector and AUX connector), make sure that you enable **Electronic HookSwitch Control** in the **Audio Volume** area from **Voice > User** tab on the phone administration web page.
- When you use the Electronic Hookswitch (EHS):
 - The EHS connects to the Cisco IP Phone 8811, 8841, and 8845 with the auxiliary port.
 - The EHS connects to the Cisco IP Phone 8851, 8861, and 8865 with the auxiliary port, the USB port, or with Bluetooth.

View the Accessories Associated with Your Phone

You can use headset jack, Bluetooth, or USB port to connect external hardware to your phone. The accessory list, by default, contains an analog headset that can be set up to enable wideband

Procedure

- Step 1** Press **Applications** .
- Step 2** Select one of the following options:
- **Status > Accessories**
 - **Bluetooth > Devices**
- Step 3** (Optional) Select an accessory and press **Show detail**.
- Step 4** Press **Exit**.
-

Headsets

Check with the headset manufacturer to confirm whether you can use it with your Cisco phone.

If you plug a headset into the phone during an active call, the audio path automatically changes to the headset.

Important Headset Safety Information



High Sound Pressure—Avoid listening to high volume levels for long periods to prevent possible hearing damage.

When you plug in your headset, lower the volume of the headset speaker before you put the headset on. If you remember to lower the volume before you take the headset off, the volume will start lower when you plug in your headset again.

Be aware of your surroundings. When you use your headset, it may block out important external sounds, particularly in emergencies or in noisy environments. Don't use the headset while driving. Don't leave your headset or headset cables in an area where people or pets can trip over them. Always supervise children who are near your headset or headset cables.

Cisco Headsets 500 Series

You can use the Cisco Headset 500 Series with your Cisco IP Phone 8800 Series Multiplatform Phones. The Cisco Headset 500 Series offers a more enhanced experience with:

- In-call indicators: LEDs on an ear plate
- Simplified call controls
- Customized audio

The supported headsets are:

- Cisco Headset 521 and 522
- Cisco Headset 531 and 532
- Cisco Headset 561 and 562 (Standard Base and Multibase)

Cisco Headset 521 and 522

The Cisco Headset 521 and 522 are two wired headsets that have been developed for use on Cisco IP Phones and devices. The Cisco Headset 521 features a single earpiece for extended wear and comfort. The Cisco Headset 522 features two earpieces for use in a noisy workplace.

Both headsets feature a 3.5-mm connector for use on laptops and mobile devices. An inline controller with a USB connector is also available for use on the Cisco IP Phone 8851, 8861, and 8865 with Multiplatform Firmware. The controller is an easy way to answer your calls, and to access basic phone features such as hold and resume, mute, and volume control.

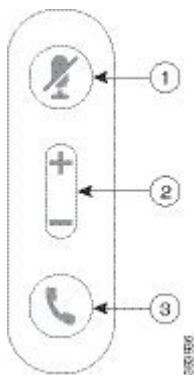
The Cisco Headset 521 and 522 require Multiplatform Firmware Release 11.2(3) or later version. Upgrade your phones to the latest firmware before using these headsets.

To check your phone model and the firmware version, press **Applications** and select **Status > Product information**. The **Product name** field shows your phone model. The **Software version** field shows the installed load where you can get the firmware version.

Cisco Headset 521 and 522 Buttons and LED

Your controller buttons are used for basic call features.


Figure 1: Cisco Headset 521 and 522 Controller



The following table describes the Cisco Headset 521 and 522 controller buttons.

Table 2: Cisco Headset 521 and 522 Controller Buttons

Number	Name	Description
1	Mute button	Toggle the microphone on and off.
2	Volume button (+ and -)	Adjust the volume on your headset.

Number	Name	Description
3	Call button 	Use to manage calls: <ul style="list-style-type: none"> • Press once to answer an incoming call. • Press and hold for 2 seconds to end a call. • Press twice to reject an incoming call. • Press once to put an active call on hold. Press again to retrieve a call from hold.

Cisco Headset 531 and 532

The Cisco Headset 531 and Cisco Headset 532 are two headsets that are developed for Cisco products and services. The 531 headset features a single earpiece, and offers lightweight comfort. The 532 headset features two earpieces for use in a noisy environment or busy office.

The Cisco Headset 531 and 532 use one of two connectors with the Cisco IP Phone 8800 Series with Multiplatform Firmware:

- RJ9 connector—Use it with Cisco IP Phones that have a headset port.
- USB headset adapter— Provides enhanced call control and currently supports the 8851, 8861, and 8865 Cisco IP Phone models.

The Cisco Headset USB Adapter is available for use with the Cisco Headset 531 and 532. With the adapter, you can test your headset, and customize your bass and treble, gain or microphone volume, and sidetone or feedback settings. The adapter also retains your settings if you switch between phones.

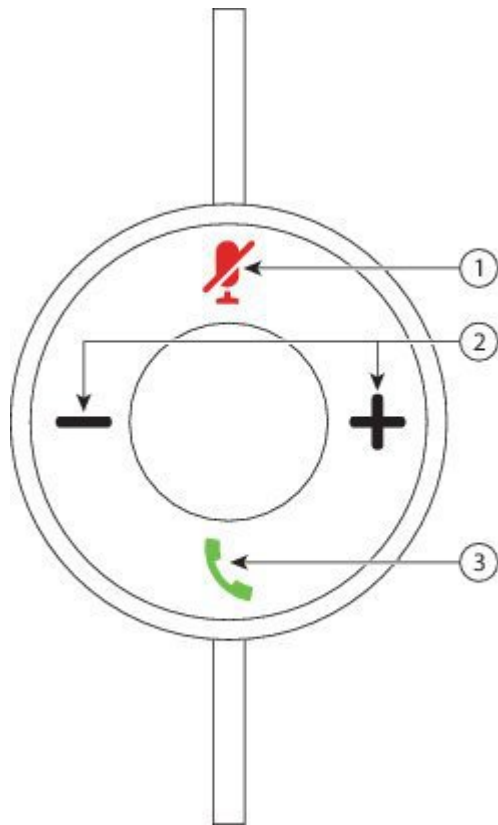
The Cisco USB adapter is supported on Cisco IP Phone 8851, 8861, and 8865 with Multiplatform Firmware. To check your phone model, press **Applications** , select **StatusProduct information**. The **Product name** field shows your phone model.

The Cisco Headset 531 and Cisco Headset 532 require Multiplatform Firmware Release 11.1(2) or a later version. Upgrade your phones to the latest firmware before using these headsets.

Cisco Headset 531 and 532 LED and Buttons



The Cisco Headset USB Adapter for Cisco Headset 531 and Cisco Headset 532 is used for the basic call features.


Figure 2: Cisco Headset USB Adapter



The following table describes the Cisco Headset 531 and 532 USB Adapter buttons.

Table 3: Cisco Headset USB Adapter Buttons

Number	Name	Description
1	Mute button 	Toggle the microphone on and off. When Mute on the USB adapter is enabled, the Mute  button on the USB adapter lights up.
2	Volume button (+ and -)	Adjust the volume on your headset.

Number	Name	Description
3	Call button 	<p>Incoming and active call management depends upon if you have one call or multiple calls.</p> <p>One call:</p> <ul style="list-style-type: none"> • Press once to answer incoming calls. • Press once to put an active call on hold. Press again to retrieve the call from hold. • Press twice to reject an incoming call. <p>Multiple calls:</p> <ul style="list-style-type: none"> • Press once to put an active call on hold, and to answer a second incoming call. • Press once to put a current call on hold and press again to resume a call. • Press and hold for 2 seconds to end the current call and press again to resume a held call. • Press and hold for 2 seconds to end an active call, and to answer another incoming call. • Press twice to stay on a current call, and to reject a second incoming call.

Cisco Headset 561 and 562


The Cisco Headset 561 and 562 are two wireless headsets that are developed for Cisco products and services. The Cisco Headset 561 features a single earpiece, and offers lightweight comfort. The Cisco Headset 562 features two earpieces for use in a noisy environment or busy office.

The Cisco Headset 561 and 562 use a headset base to connect with Cisco IP Phones and charge the headsets. The available options for the base are Standard base and Multibase. The Cisco Headset 561 and 562 with Standard Base support connection with a single source from a phone or a computer. The Cisco Headset 561 and 562 with Multibase support multiple sources from phones, computers, and Bluetooth-paired devices and provide an easy and intuitive switch among the connected sources.

You can connect the Cisco Headset 561 and 562 with any of the following:

- RJ9 and AUX connector (Y-cable)—Supported on Cisco IP Phones 8811, 8841, 8845, 8851, 8861, and 8865 with multiple platforms.
- USB connector—Supported on Cisco IP Phones 8851, 8861, and 8865 with multiple platforms.

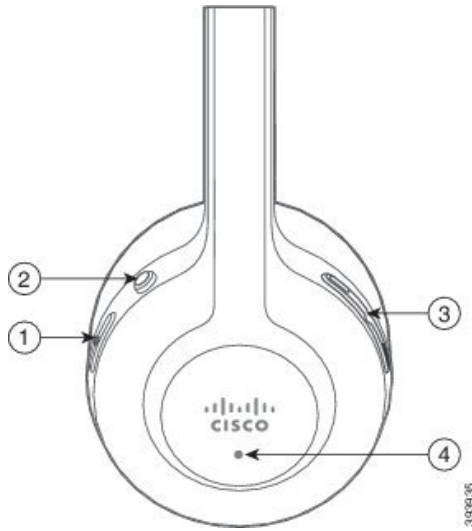
The Cisco Headset 561 and 562 require Multiplatform Firmware Release 11.2(3) and higher. Upgrade your phones to the latest firmware before using these headsets.

To check your phone model and the firmware version, press **Applications**  and select **Status > Product information**. The **Product name** field shows your phone model. The **Software version** field shows the installed load where you can get the firmware version.

Cisco Headset 561 and 562 Buttons and LED





Your headset buttons are used for basic call features.

Figure 3: Cisco Headset 561 and 562 Headset Buttons



The following table describes the Cisco Headset 561 and 562 Headset buttons.

Table 4: Cisco Headset 561 and 562 Headset Buttons

Number	Name	Description
1	Power and Call button 	<p>Use to power the headset on and off.</p> <p>Press and hold for 4 seconds to power on/off the headset.</p> <p>Incoming and active call management depends upon if you have one call or multiple calls.</p> <p>One call:</p> <ul style="list-style-type: none"> • Press once to answer incoming calls. • Press once to put an active call on hold. Press again to retrieve the call from hold. • Press twice to reject an incoming call. <p>Multiple calls:</p> <ul style="list-style-type: none"> • Press once to put an active call on hold, and to answer a second incoming call. • Press once to put a current call on hold and press again to resume a call. • Press and hold for 2 seconds to end the current call and press again to resume a held call. • Press and hold for 2 seconds to end an active call, and to answer another incoming call. • Press twice to stay on a current call, and to reject a second incoming call.
2	Mute button 	<p>Toggle the microphone on and off. When Mute on the headset is enabled:</p> <ul style="list-style-type: none"> • The Mute  button on the phone lights up. • The Mute  button on the headset base lights up. (For Multibase only)
3	Volume button (+ and -)	Adjust the volume on your headset.
4	LED	<p>Shows the headset status:</p> <ul style="list-style-type: none"> • Blinking red—Incoming call. • Steady red—Active call. • Flashing white every 6 seconds—The headset is paired and idle. • Blinking white—Firmware upgrade is in process or the headset is pairing with the base station.

Charge Cisco Headset 561 and 562

Use the headset base to charge the headset.

Procedure

Place the headset into the socket on the base.

The LEDs on the base station indicate the charging status. When the headset is fully charged, the five LEDs on the base are steady white. If the LEDs don't light up, remove the headset from the base and try again.

Upgrade the Headset 500 Series Firmware

When you connect the headset to the phone, the phone checks the headset firmware version. If a new version is available, the phone prompts you to upgrade your headset. The headset upgrade prompt displays only when you are on the home screen of the idle phone. If the phone is in use when a new version firmware is detected, the upgrade prompt displays when you return to the home screen in idle mode.




Note If you don't respond to the upgrade prompt, the upgrade automatically starts when the countdown ends.

Before you begin

Your administrator configures the upgrade rule for your headset on the phone administration web page.

Procedure

Step 1 Press **Upgrade** on the phone when prompted.

The upgrade icon  on the upper-right corner of the phone screen indicates that the headset is upgrading. The time that the upgrade process takes varies with headset models, from 10 to 15 minutes.

Step 2 (Optional) If you want to upgrade your headset later, press **Postpone**.

You will be prompted every 2 hours until you start the upgrade.

Cisco Headset 500 Series Setup

On the phone screen, you can test your headset, customize your bass and treble, gain or microphone volume, and sidetone or feedback settings when:

- The Cisco Headset 521 and 522 is connected to the phone with the inline USB controller.
- The Cisco Headset 531 and 532 is connected to the phone with the USB adapter.
- The Cisco Headset 561 and 562 Standard Base or Multibase is connected to the phone with the Y-cable or the USB cable.

You are prompted to set up your headset when you connect it to the phone. If you ignore the headset setup prompt, you can also access it from **Applications**  > **Status** > **Accessories**.




Note The settings are stored in the inline USB controller, the USB adapter, or the headset base, varying from headset models. A factory reset on the phone does not affect the headset settings.

Adjust Your Headset Bass and Treble

You can customize your headset by adjusting the bass and treble. If you prefer a headset with more bass, tune it toward the warmer setting. If you prefer more treble, tune it toward the brighter setting.


Procedure

- Step 1** Press **Applications** .
- Step 2** Select **Status**.
- Step 3** Select **Accessories**.
- Step 4** Navigate to **Setup** > **Speaker** > **Tuning**.
- Step 5** Press ◀ or ▶ to adjust the tuning.
- Step 6** Press **Save** to apply and retain your setting.

Adjust Your Headset Microphone Volume

Microphone volume is also known as gain. You can adjust the gain level when you are on a call with various loud and soft voices. This setting equalizes the voices that you hear in the earpiece by making the loud voices softer, and the quiet voices louder.




Procedure

- Step 1** Press **Applications** .
- Step 2** Select **Status**.
- Step 3** Select **Accessories**.
- Step 4** Navigate to **Setup** > **Microphone** > **Gain**.
- Step 5** Press ◀ or ▶ to adjust the gain level.
- Step 6** Press **Save** to apply and retain your setting.

Adjust Your Headset Speaker Feedback

Feedback, also called sidetone, is the term for hearing your own voice in your headset. You can adjust the sidetone level or turn it off if you find it distracting to hear your own voice during a call.


Procedure

- Step 1** Press **Applications** .
 - Step 2** Select **Status**.
 - Step 3** Select **Accessories**.
 - Step 4** Navigate to **Setup > Speaker > Sidetone**.
 - Step 5** Press  or  to adjust the sidetone.
The sidetone default value is **Off**.
 - Step 6** Press **Set** to apply and retain your settings.
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Test Your Headset Microphone

You can check if your microphone is working before you begin a call.

Procedure

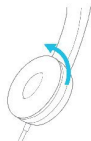
- Step 1** Press **Applications** .
 - Step 2** Select **Status**.
 - Step 3** Select **Accessories**.
 - Step 4** Navigate to **Setup > Microphone > Test**.
 - Step 5** Press **Record** and speak into the microphone.
 - Step 6** Press **Playback** when you finish speaking and listen to the test recording.
Maximum recording time is 20 seconds.
-

Replace Your Cisco Headset Ear Pads

Your headset's ear pads are an important part of its performance. They provide comfort, grip, and sound enhancement. With time, it's natural for ear pads to wear out, but you can replace them easily.

Procedure

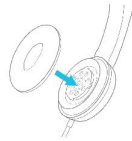
- Step 1** Rotate the old ear pad counterclockwise.



- Step 2** Pull the old ear pad away from the speaker.



Step 3 Push the new ear pad toward the speaker.



Step 4 Rotate the new ear pad clockwise.



Third Party Headsets

Cisco Systems performs internal testing of third-party headsets for use with Cisco IP Phones. But Cisco does not certify or support products from headset or handset vendors.

Headsets connect to your phone using either the USB or the auxiliary port. Depending upon your headset model, you have to adjust your phone's audio settings for the best audio experience, including the headset sidetone setting.

If you have a third-party headset, and you apply a new sidetone setting, then wait one minute and reboot the phone so the setting is stored in flash.

The phone reduces some background noise that a headset microphone detects. You can use a noise canceling headset to further reduce the background noise and improve the overall audio quality.

If you are considering a third-party headset, we recommend the use of good quality external devices; for example, headsets that are screened against unwanted radio frequency (RF) and audio frequency (AF) signals. Depending on the quality of headsets and their proximity to other devices, such as mobile phones and two-way radios, some audio noise or echo may still occur. Either the remote party or both the remote party and the Cisco IP Phone user may hear an audible hum or buzz. A range of outside sources can cause humming or buzzing sounds; for example, electric lights, electric motors, or large PC monitors.



Note Sometimes, use of a local power cube or power injector may reduce or eliminate hum.

Environmental and hardware inconsistencies in the locations where Cisco IP Phones are deployed mean that no single headset solution is optimal for all environments.

We recommend that customers test headsets in the intended environment to determine performance before making a purchasing decision to deploy on a large scale.

You can use only one headset at a time. The most-recently connected headset is the active headset.

Audio Quality

Beyond physical, mechanical, and technical performance, the audio portion of a headset must sound good to the user and to the party on the far end. Sound quality is subjective, and we cannot guarantee the performance of any headsets. However, various headsets from leading headset manufacturers are reported to perform well with Cisco IP Phones.

For additional information, see https://www.cisco.com/c/en/us/products/unified-communications/uc_endpoints_accessories.html

Wired Headsets

A wired headset works with all Cisco IP Phone features, including the Volume and Mute buttons. These buttons adjust the earpiece volume and mute the audio from the headset microphone.

When you install a wired headset, make sure you press the cable into the channel in the phone.



Caution

Failure to press the cable into the channel in the phone can lead to cable damage.

Wireless Headsets

You can use most wireless headsets with your phone. For a list of supported wireless headsets, see http://www.cisco.com/c/en/us/products/unified-communications/uc_endpoints_accessories.html

Refer to your wireless headset documentation for information about connecting the headset and using the features.

Standard Headsets

You can use a standard headset with your desk phone. Standard headsets plug into the back of the phone with an RJ-type connector.

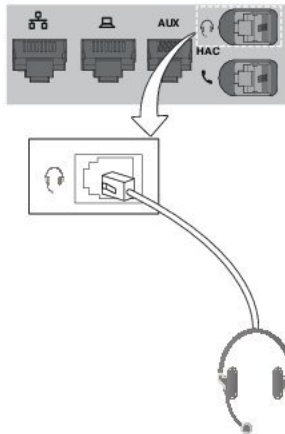
Connect a Standard Headset

Standard headsets plug into the back of the phone.

Procedure

Plug the headset into the jack on the back of the phone and press the cable into the cable channel.

Figure 4: Standard Headset Connection



Caution Failure to press the cable into the channel in the phone can damage the printed circuit board inside the phone. The cable channel reduces the strain on the connector and the printed circuit board.

USB Headsets

You can use a USB headset for your calls if your phone has a USB port.

If your phone has more than one USB port, only one USB headset can be connected at a time.

For a list of supported headsets, see [Unified Communications Endpoint and Client Accessories](#). USB headsets that are not listed may not function properly if you attach them to the USB port. For more information, see the documentation from your USB headset manufacturer.

Connect a USB Headset

When you use USB headsets with your phone, keep in mind:

- You can use only one headset at a time. The most-recently connected headset is the active headset.
- If you are on an active call and unplug a USB headset, the audio path does not change automatically. You need to press the **Speakerphone** button or pick up the handset.
- If you are on an active call and unplug a USB headset, the audio changes automatically to the speaker.
- If you are on an active call and plug in a USB headset, the audio changes to the USB headset.

Procedure

Required: Plug the USB headset plug into the USB port on the phone.

Bluetooth Wireless Headsets


Cisco IP Phone 8845, 8851, 8861 and 8865 with Multiplatform Firmware supports Bluetooth wireless headsets. For a list of supported third party headsets, see http://www.cisco.com/c/en/us/products/unified-communications/uc_endpoints_accessories.html.

Bluetooth enables low-bandwidth wireless connections within a range of 66 feet (20 meters). The best performance is in the 3- to 6-foot (1- to 2-meter) range. Bluetooth wireless technology operates in the 2.4 GHz band, which is the same as the 802.11b/g band. Interference issues can occur. We recommend that you:

- Use 802.11a, 802.11n, or 802.11ac that operates in the 5 GHz band.
- Reduce the proximity of other 802.11b/g devices, Bluetooth devices, microwave ovens, and large metal objects.

The Cisco IP Phone uses a shared key authentication and encryption method to connect with headsets. The Cisco IP Phone can connect with up to 50 headsets, one at a time. The last connected headset is used as the default. Pairing is typically performed once for each headset.

After a device is paired, the Bluetooth connection is maintained as long as both devices (phone and headset) are enabled and within range of each other. The connection typically reestablishes itself automatically if either of the devices powers down then powers up. However, some headsets require user action to reestablish the connection.

The Bluetooth icon  indicates that Bluetooth is on, whether a device is connected or not.

Potential interference issues can occur. We recommend that you reduce the proximity of other 802.11b/g devices, Bluetooth devices, microwave ovens, and large metal objects. If possible, configure other 802.11 devices to use the 802.11a channels.

For a Bluetooth wireless headset to work, it does not need to be within direct line-of-sight of the phone. But some barriers such as walls or doors can affect the connection. Interference from other electronic devices can also affect performance.

When headsets are more than 30 feet (10 meters) away from the Cisco IP Phone, Bluetooth drops the connection after a 15- to 20-second timeout. The paired headset reconnects when it comes back into range of the Cisco IP Phone. For certain phone types that operate in power-save modes, you can wake up the headset by tapping on the operational button.

Enable the headset before you add it as a phone accessory.

The phone supports various Handsfree Profile features that allow you to use devices such as Bluetooth wireless headsets for certain tasks. For example, instead of pressing Redial on the phone, you can redial a number from the Bluetooth wireless headset by following instructions from the headset manufacturer.

These hands-free features apply to Bluetooth wireless headsets that are used with the Cisco IP Phone 8845, 8851, 8861 and 8865:

- Answer a call
- End a call
- Change the headset volume for a call
- Redial
- Caller ID

- Divert
- Hold and Accept
- Release and Accept

Hands-free devices have different feature activation methods. Device manufacturers may also use different terms when referring to the same feature.




Important

Only one headset type works at any given time. If you use both a Bluetooth headset and an analog headset that are attached to the phone, enabling the Bluetooth headset disables the analog headset. To enable the analog headset, disable the Bluetooth headset. Plugging a USB headset into a phone that has Bluetooth headset enabled disables both the Bluetooth and analog headset. If you unplug the USB headset, you can either enable the Bluetooth headset or disable the Bluetooth headset to use the analog headset.


For information about how to use your Bluetooth wireless headset, see:

- *Cisco IP Phone 8800 Series Multiplatform Phones User Guide*, see [Bluetooth Headsets](#).
- User Guides provided with your headset

Turn Bluetooth On or Off


When Bluetooth is active, the Bluetooth icon  appears in the phone screen header.

Procedure

- Step 1** Press **Applications** .
- Step 2** Select **Bluetooth**.
- Step 3** Press **On** or **Off**.
- Step 4** Select **Set**.

Add a Bluetooth Headset


Procedure

- Step 1** Make your Bluetooth headset discoverable.
- Step 2** Press **Applications** .
- Step 3** Select **Bluetooth > Devices**
- Step 4** Select **Scan**.
- Step 5** Select your headset and press **Connect**.
- Step 6** (Optional) If prompted, enter the PIN for your headset.

Disconnect a Bluetooth Headset

You should disconnect your Bluetooth headset before you use it with another device.


Procedure

- Step 1** Press **Applications** .
 - Step 2** Select **Bluetooth > Devices**.
 - Step 3** Select a Bluetooth headset.
 - Step 4** Press **Disconnect**.
-

Remove a Bluetooth Headset

Remove your Bluetooth headset if you aren't going to use it with your phone again.

Procedure

- Step 1** Press **Applications** .
 - Step 2** Select **Bluetooth > Devices**.
 - Step 3** Select a Bluetooth headset and press **Delete**.
-

Wireless Headsets

You can use most wireless headsets with your phone. For a list of supported headsets, see http://www.cisco.com/c/en/us/products/unified-communications/uc_endpoints_accessories.html.

Refer to your wireless headset documentation for information about connecting the headset and using its features.

Swap Headsets While on a Call

You can connect an analog headset, a Bluetooth headset, and a USB headset simultaneously to your phone. However, you can use only one headset at a time.

When you connect multiple headsets to the phone, you can switch among the headsets during a call by pressing the **Headset** key on the phone. Though the phone is connected to multiple devices, you see a specific headset is selected as the preferred audio device in the following priority order:

- When you connect a USB headset, a Bluetooth, and an analog headset to the phone, you can make your USB headset the preferred audio device.
- When you connect a Bluetooth and an analog headset to the phone, you can make your Bluetooth device the preferred audio device. The Bluetooth headset takes priority over wired headset, so audio is sent or received from Bluetooth headset and there will be no audio on wired headset.

- When you connect only an analog headset to the phone, you make your analog headset the preferred audio device.


Procedure

- Step 1** Before you make or answer a call, press **Headset**.
- Step 2** (Optional) If you place a call, dial the number.
-

Adjust Sidetone Gain

Sidetone is the amount of feedback you hear in your ear when you speak. You can adjust the sidetone gain level for the handset and the analog headsets, but not the headsets that use 3.5-mm jack or the USB ports.

Procedure


- Step 1** Press **Applications** .
- Step 2** Select **User preferences > Audio preferences > Sidetone gain**.
- Step 3** Choose the preferred sidetone gain level.
- **Off**—Turns off the sidetone
 - **Very low**—The minimum sidetone gain level
 - **Low**—The default sidetone gain level
 - **High**—The maximum sidetone gain level
- Step 4** Press **Save** to save the setting.
-

Adjust the Microphone Gain

You can adjust the microphone gain for the handset, handsfree, and the analog headsets, but not the headsets that use 3.5-mm jack or the USB ports. You make the gain louder or softer to get a good input level.

You can change the microphone gain while you are on a call. If you save the settings during the call, the change is immediate and is used on subsequent calls. If you don't save the settings during the call, the change is only used for the current call.

Procedure

- Step 1** Press **Applications** .
- Step 2** Select **User preferences > Audio preferences > Microphone gain**.
- Step 3** Press >> to make the gain level louder and press << to make it softer.

The available options are: Softest, Softer, Soft, Default, Loud, Louder, Loudest.

Note You can also set the microphone gain based on the device that you use most frequently. Use any of the methods:



- Preferred audio device: Set the preferred audio device to what you use most frequently. For example, if you use analog headset most frequently, then set your preferred device as Headset from the phone menu **User preferences > Audio preferences > Preferred audio device**. Then adjust the microphone gain of the analog headset, listen to the effect. Then save the one you like. If you use handset most frequently, pick up the handset, ensure you cancel the incoming call. Then adjust the microphone gain.
- Last used audio device: Set the preferred audio device to **None** from the phone menu **User preferences > Audio preferences > Preferred audio device**. Then toggle the audiopath once. For example, press the microphone of the handsfree on or off once. Then when you adjust the microphone gain, the microphone of the handsfree will be used for the gain adjustment.

Step 4 Press **Save** to save the setting.

Test the Microphone

You can test your phone microphone after you configure the microphone gain. This test allows you to evaluate if the microphone gain gives the expected result.

Procedure


- Step 1** Press **Applications** .
- Step 2** Select **User preferences > Audio preferences > Microphone test**.
- Step 3** Press **Record** to start recording.
- Step 4** Press **StopRec** when you finish recording.
The maximum time for a testing recording is 20 seconds.
- Step 5** Press **Playback** to listen to the recording.
- Step 6** (Optional) To retest the microphone, repeat step 3 through step 5.
- Step 7** Press  to exit.
-

Tune the Speaker

You can tune the speaker for the handset, handsfree, and the analog headsets, but not the headsets that use 3.5-mm jack or the USB ports.

You can tune the speaker while you are on a call. If you save the settings during the call, the change is immediate and is used on subsequent calls. If you don't save the settings during the call, the change is only used for the current call.

Procedure

- Step 1** Press **Applications** .
- Step 2** Select **User preferences > Audio preferences > Tune speaker**.
- Step 3** Press >> and << to tune the speaker.

The available options are: Warmest, Warmer, Warm, Default, Bright, Brighter, Brightest.

Note You can also set the microphone gain based on the device that you use most frequently. Use any of the methods:

- **Preferred audio device:** Set the preferred audio device to what you use most frequently. For example, if you use analog headset most frequently, then set your preferred device as Headset from the phone menu **User preferences > Audio preferences > Preferred audio device**. Then tune the speaker of the analog headset, listen to the effect. Then save the one you like. If you use headset most frequently, pick up the headset, ensure you cancel the incoming call. Then tune the speaker.
- **Last used audio device:** Set the preferred audio device to **None** from the phone menu **User preferences > Audio preferences > Preferred audio device**. Then toggle the audiopath once. For example, press the speaker of the handsfree on or off once. Then when you tune the speaker, the speaker of the handsfree will be used for tuning.


- Step 4** Press **Save** to save the setting.
-

Specify an Audio Device for a Call

You can connect an analog headset, a Bluetooth headset, and a USB headset simultaneously to your phone. However, you can use only one headset at time.

When you connect multiple headsets to the phone, you can choose the audio device to use for a call. Your choice applies when you place or answer a call with a line key or the corresponding softkey.

Procedure

- Step 1** Press **Applications** .
- Step 2** Select **User preferences > Audio preferences > Preferred audio device**.
- Step 3** Press **Select** to choose one of the options:
- **None**—Selects the last used audio device.
 - **Speaker**—Selects the speakerphone as the audio device.
 - **Headset**—Selects a headset as the audio device. A headset priority order is:
 - USB (highest)
 - Bluetooth (medium)
 - analog headset (lowest)

- **Headset**—Selects a headset as the audio device.
- **Bluetooth**—Selects Bluetooth as the audio device. The priority order is Bluetooth (highest), USB (medium), and analog headset (lowest).

Step 4 Press **Set** to save the selection.

Dynamically Select an Audio Path for a Call

You can connect an analog headset, a Bluetooth headset, and a USB headset simultaneously to your phone. However, only one of them can be used at a time.

When you connect multiple headsets to the phone, the audio path that is used during a call changes based on the audio devices that are connected.

Procedure

- Step 1** (Optional) While you are on a call with an analog headset and a Bluetooth headset connected to the phone, plug in a USB headset.
The call switches to the USB headset.
- Step 2** (Optional) While you are on a call with a USB headset connected to the phone, unplug the USB headset.
If a Bluetooth headset is connected the call switches to it, else the call switches to the speaker.
- Step 3** (Optional) While you are on a call with a Bluetooth headset connected to the phone, disconnect the Bluetooth headset (that is, move out of range or power off the headset).
If a USB headset is connected the call switches to it, else the call switches to an analog headset.
- Step 4** (Optional) While you are on a call with an analog headset and a USB headset connected to the phone, plug in a Bluetooth headset.
The call switches to the Bluetooth headset.
-

External Speakers and Microphone

External speakers and microphones are plug-and-play accessories. You can connect an external PC-type microphone and powered speakers (with amplifier) on the Cisco IP Phone by using the line in/out jacks. Connecting an external microphone disables the internal microphone and connecting an external speaker disables the internal phone speaker.



Note Using poor quality external audio devices, playing loudspeakers at very loud volumes, or placing the microphone very close to the loudspeaker may result in undesirable echo for other parties on your speakerphone calls.

Cisco IP Phone Key Expansion Module Setup Overview

Figure 5: Key Expansion Module with Single LCD Screen



Figure 6: Cisco IP Phone 8851/8861 Key Expansion Module with Dual Screen



Figure 7: Cisco IP Phone 8865 Key Expansion Module with Dual Screen



The Cisco IP Phone 8800 Key Expansion Module adds extra programmable buttons to the phone. The programmable buttons can be set up as phone speed-dial buttons, or phone feature buttons.

There are 3 expansion modules available:

- Cisco IP Phone 8800 Key Expansion Module—Single LCD screen module, 18 line keys, 2 pages, two-column display only.
- Cisco IP Phone 8851/8861 Key Expansion Module—Dual LCD screen module for audio phones, 14 line keys, 2 pages, one-column display only.
- Cisco IP Phone 8865 Key Expansion Module—Dual LCD screen module for video phones, 14 line keys, 2 pages, one-column display only.



Note The Cisco IP Phone 8851/8861 Key Expansion Module and the Cisco IP Phone 8865 Key Expansion Module require Firmware Release 11.2(3) or later.

You can use more than one expansion module per phone. But each module must be the same type. You cannot mix Cisco IP Phone 8800 Key Expansion Module with a Cisco IP Phone 8851/8861 Key Expansion Module or with a Cisco IP Phone 8865 Key Expansion Module. You cannot mix audio expansion modules with video

expansion modules. You also cannot use a video expansion module on an audio phone or an audio expansion module on a video phone.

The following table lists the phones and the number of key expansion modules that each model supports.

Table 5: Cisco IP Phones and Supported Cisco IP Phone 8800 Key Expansion Module

Cisco IP Phone Model	Supported Number of Key Expansion Modules and Buttons
Cisco IP Phone 8851	2; single LCD screen, 18 line keys, two pages, providing 72 buttons
Cisco IP Phone 8861	3; single LCD screen, 18 line keys, two pages, providing 108 buttons
Cisco IP Phone 8865	3; single LCD screen, 18 line keys, two pages, providing 108 buttons,

Table 6: Cisco IP Phones and Supported Cisco IP Phone 8851/8861 Key Expansion Module and Cisco IP Phone 8865 Key Expansion Module

Cisco IP Phone Model	Supported Numbers of Key Expansion Modules and Buttons
Cisco IP Phone 8851	2; dual LCD screen, 14 line keys, two pages, providing 56 buttons
Cisco IP Phone 8861	3; dual LCD screen, 14 line keys, two pages, providing 84 buttons
Cisco IP Phone 8865	3; dual LCD screen, 14 line keys, two pages, providing 84 buttons

Key Expansion Module Power Information

If you use a key expansion module with your phone then Power over Ethernet (PoE) is enough to power your expansion modules. But a power cube is needed for smartphone or tablet charging when your key expansion module is attached.

A key expansion module uses 48V DC, 5W per module. If you are charging a smartphone or a tablet, note the following:

- Side USB: Up to 500mA/2.5W charging
- Back USB: Fast charging, Supports up to 2.1A/10.5W charging

Table 7: Power-Supply Compatibility for Cisco IP Phone 8800 Key Expansion Module

Configuration	802.3af Power over Ethernet (PoE)	802.3at PoE	Cisco IP Phone Power Cube 4
8851 with 1 key expansion module	Yes	Yes	Yes
8851 with 2 key expansion modules	No	No See the third note below	Yes

Configuration	802.3af Power over Ethernet (PoE)	802.3at PoE	Cisco IP Phone Power Cube 4
8861 with 1 key expansion module	No	Yes	Yes
8861 with 2 key expansion modules	No	Yes See the first note below	Yes
8861 with 3 key expansion modules	No	Yes See the first note below	Yes

**Note**

- The fast-charging feature on the back USB does not work when more than one key expansion module is attached to a Cisco IP Phone 8861 using 802.3at PoE.
- The fast-charging feature on the back USB doesn't work when more than one key expansion module is attached to a Cisco IP Phone 8861, unless Cisco Universal PoE (UPoE) is used.
- Cisco IP Phone 8851 with 2 key expansion modules works on 802.3at PoE only with v08 or later hardware. You can find the phone version information on the lower back of the phone as part of the TAN and PID label. Version information is also located on the individual phone packaging.

Table 8: Power-Supply Compatibility for Cisco IP Phone 8851/8861 Key Expansion Module and Cisco IP Phone 8865 Key Expansion Module

Configuration	802.3af Power over Ethernet (PoE)	802.3at PoE	Cisco IP Phone Power Cube 4
8851 with 1 key expansion module	Yes	Yes	Yes
8851 with 2 key expansion modules	No	Yes See the third note below	Yes
8861 and 8865 with 1 key expansion module	No	Yes	Yes
8861 and 8865 with 2 key expansion modules	No	Yes See the first note below	Yes
8861 and 8865 with 3 key expansion modules	No	Yes See the first note below	Yes

**Note**

- The fast-charging feature on the back USB does not work when more than one key expansion module is attached to a Cisco IP Phone 8861 and 8865 using 802.3at PoE.
- The fast-charging feature on the back USB doesn't work when more than one key expansion module is attached to a Cisco IP Phone 8861 and 8865, unless Cisco Universal PoE (UPoE) is used.
- Cisco IP Phone 8851 with 2 key expansion modules works on 802.3at PoE only with v08 or later hardware. You can find the phone version information on the lower back of the phone as part of the TAN and PID label. Version information is also located on the individual phone packaging.

Key Expansion Module Buttons and Hardware

Figure 8: Cisco IP Phone Key Expansion Module (Single LCD) Buttons and Hardware

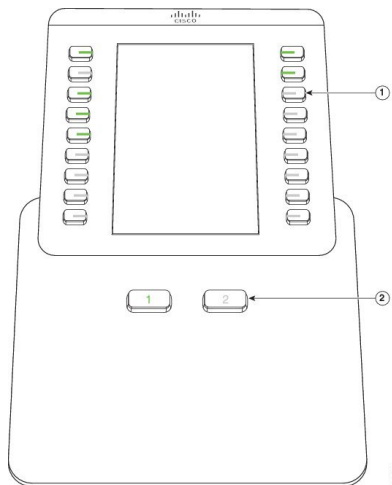
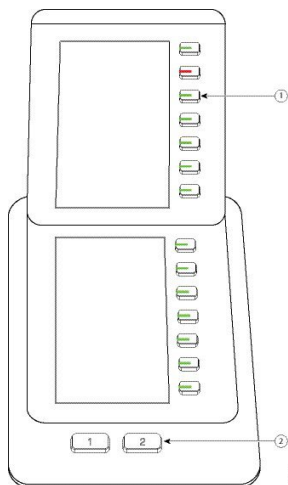









Figure 9: Cisco IP Phone Key Expansion Module (Dual LCD) Buttons and Hardware



The following table describes the features of the key expansion module.

Table 9: Key Expansion Modules Buttons and Hardware

	<p>LCD screen—Displays the phone number, speed-dial number (or name or other text label), phone service, or phone feature assigned to each button.</p> <p>Icons that indicate line status resemble (in both appearance and function) the icons on the phone to which the key expansion module is attached.</p>
1	<p>Lighted buttons—Line buttons. Each button or pair of buttons corresponds to one line. The lights beneath each button indicate the state of the corresponding line as follows:</p> <ul style="list-style-type: none"> •  light off—Button is not configured. •  green steady LED—Line is configured correctly is in idle state. •  red steady LED—Line in use and have an active call on it. •  amber steady/blinking LED—A configuration error occurred when this feature was being set up.
2	<p>Shift buttons—2 buttons. The button for page 1 is labeled as 1 and the button for page 2 is labeled as 2. The lights in each button indicate the state of the page as follows:</p> <ul style="list-style-type: none"> •  green steady LED—Page is in view. •  light off—Page is not in view. •  amber steady LED—Page is not in view with one or more alerting calls on the page.

Column Modes

If you are using the Cisco IP Phone 8800 Key Expansion Module, two-column mode is the default on the Cisco IP Phone 8800 Key Expansion Module.

The Cisco IP Phone 8851/8861 Key Expansion Module and the Cisco IP Phone 8865 Key Expansion Module only support one-column mode and these key expansion modules do not support two-column mode.

One-Column Mode

One-column mode in Cisco IP Phone 8851/8861 Key Expansion Module and Cisco IP Phone 8865 Key Expansion Module—Each button on the right of the screen is assigned to a speed-dial number (or name or other text label), phone service, or phone feature. In this configuration, the key expansion module displays up to 14 items on page 1, and up to 14 items on page 2.

Allocate a Key Expansion Module Type with the Phone Menu

Figure 10: Cisco IP Phone 8851/8861 Key Expansion Module



Figure 11: Cisco IP Phone 8865 Key Expansion Module

**Two--Column Mode**

If you are using Cisco IP Phone 8800 Key Expansion Module single-LCD screen expansion module, you can set up the module in two-column mode.


In two-column mode, each button on the left and right of the screen is assigned to a speed-dial number (or name or other text label), phone service, or phone feature. In this configuration, the key expansion module displays up to 18 items on page 1, and up to 18 items on page 2

Figure 12: Cisco IP Phone 8800 Key Expansion Module

**Allocate a Key Expansion Module Type with the Phone Menu**

You can assign the type of key expansion module that the phone supports.


Procedure

- Step 1** Press **Applications** .
 - Step 2** Select **User preferences > Attendant console preferences > KEM type**.
 - Step 3** Select the key expansion module type.
 - Step 4** Press **Save**.
-

Adjust the Screen Brightness

You can change the brightness of the key expansion module screen to make it easier to read.

Procedure

- Step 1** Press **Applications** .
 - Step 2** Select **User preferences > Attendant console preferences**.
 - Step 3** Enter a number between 4-15.
 - Step 4** Press **Set**.
-

Modify a Speed Dial on a Key Expansion Module

If one of the line keys on the key expansion module is configured as a speed dial, you can press the line key to change the speed-dial number. You can also verify this change by checking the **Unit** field on the phone web page. When the line keys on the key expansion module are configured as a blf, blf+call pickup, blf+call park, or call park, you cannot change the speed-dial number when you press the line key.

Procedure

- Step 1** Press a key expansion module speed-dial key for at least 2 seconds.
 - Step 2** In the **Define Speed Dial** window, add the speed-dial name and phone number to call when you press the key expansion module speed-dial key.
 - Step 3** Press **Save**.
-

