



Cisco IP Desk Phone Hardware

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Cisco IP Phone 6800 Series Multiplatform Phones

The Cisco IP Phone 6800 Series Multiplatform Phones comprises a set of full-featured VoIP (Voice-over-Internet Protocol) phones that provide voice communication over an IP network. The phones provide all the features of traditional business phones, such as call forwarding, redialing, speed dialing, transferring calls, and conference calling. The Cisco IP Phone 6800 Series Multiplatform Phones is targeted for solutions that are centered on third-party SIP-based IP PBX.



Note This document doesn't include the DECT phones.

The Cisco IP Phone 6800 Series Multiplatform Phones deliver easy-to-use, highly-secure voice communications. In the following figure, you see (Clockwise from the top left):

- Cisco IP Phone 6841 Multiplatform Phone
- Cisco IP Phone 6851 Multiplatform Phone with Key Expansion Module
- Cisco IP Phone 6851 Multiplatform Phone
- Cisco IP Phone 6861 Multiplatform Phone
- Cisco IP Phone 6871 Multiplatform Phone
- Cisco IP Phone 6821 Multiplatform Phone

Figure 1: Cisco IP Phone 6800 Series Multiplatform Phones

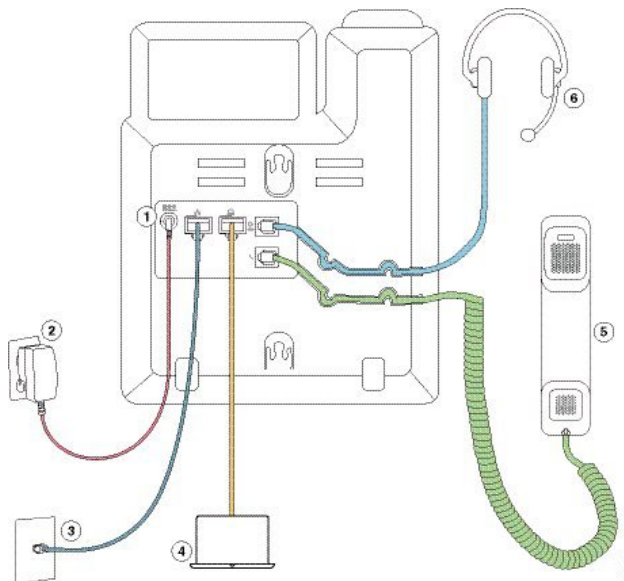


Note In this document, the terms *Cisco IP Phone*, *phone*, or *device* mean Cisco IP Phone 6800 Series Multiplatform Phones.

Cisco IP Phone 6821 Multiplatform Phones Connections

Connect your phone to your LAN with an Ethernet cable to enable full functionality of your phone. If your Ethernet port is equipped with Power over Ethernet (PoE), you can power the phone through the LAN port. If you don't have PoE available, then you need to use a power adapter to power the phone. Do not extend the Ethernet cable outside the building. For your phone to work, it must be connected to the IP telephony network.

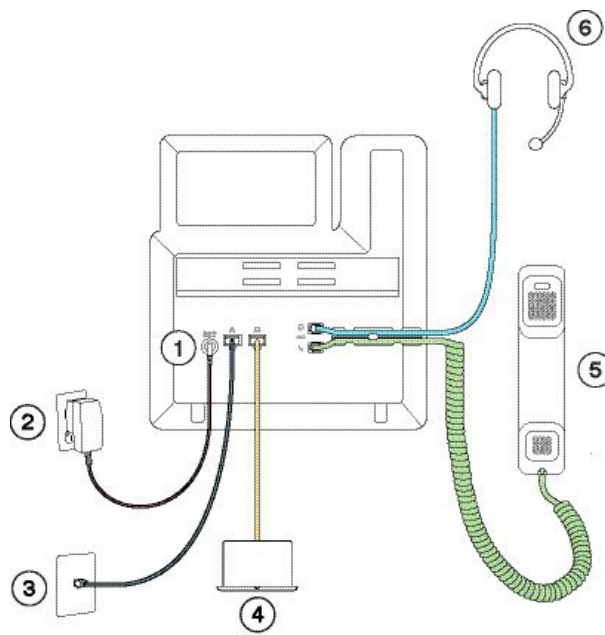
Figure 2: Cisco IP Phone 6821 Multiplatform Phones Connections



1	DC adapter port (optional)	4	Access port (10/100 PC) connection (optional)
2	Power adapter (optional)	5	Handset connection
3	Network port (10/100 SW) connection; IEEE 802.3af power enabled	6	Analog headset connection (optional)

Cisco IP Phone 6841 Multiplatform Phones Connections

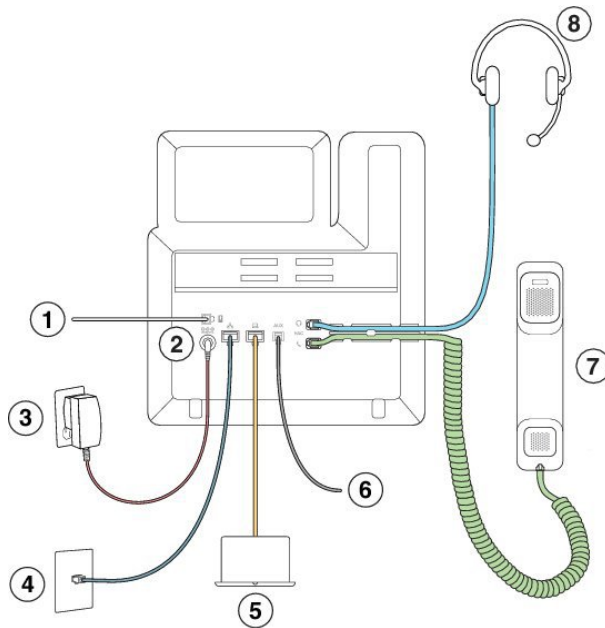
Connect your phone to your LAN with an Ethernet cable to enable full functionality of your phone. You need to use a power adapter to power the phone. Do not extend the LAN Ethernet cable outside the building. For your phone to work, it must be connected to the IP telephony network.



1	DC adapter port	4	Access port (10/100/1000 PC) connection (optional)
2	Power adapter	5	Handset connection
3	Network port (10/100/1000 SW) connection	6	Analog headset connection (optional)

Cisco IP Phone 6851 Multiplatform Phones Connections

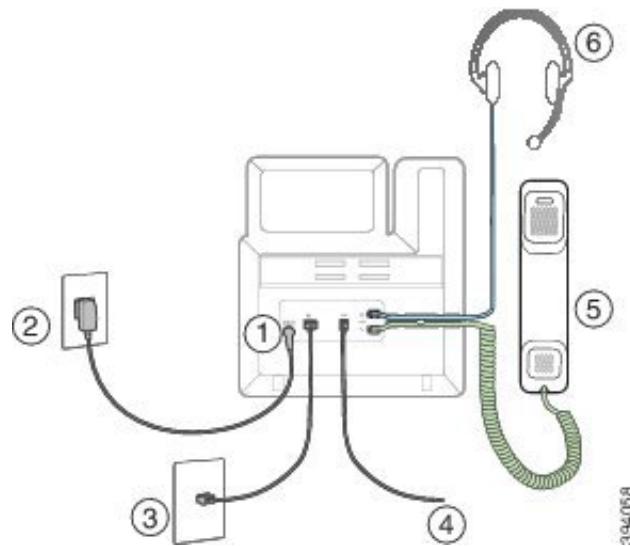
Connect your phone to your LAN with an Ethernet cable to enable full functionality of your phone. If your Ethernet port is equipped with Power over Ethernet (PoE), you can power the phone through the LAN port. If you don't have PoE available, then you need to use a power adapter to power the phone. Do not extend the LAN Ethernet cable outside the building. For your phone to work, it must be connected to the IP telephony network.



1	Key Expansion Module port	5	Access port (10/100/1000 PC) connection (optional)
2	DC adapter port (optional)	6	Auxiliary port (optional)
3	Power adapter (optional)	7	Handset connection
4	Network port (10/100/1000 SW) connection; IEEE 802.3af power enabled	8	Analog headset connection (optional)

Cisco IP Phone 6861 Multiplatform Phones Connections

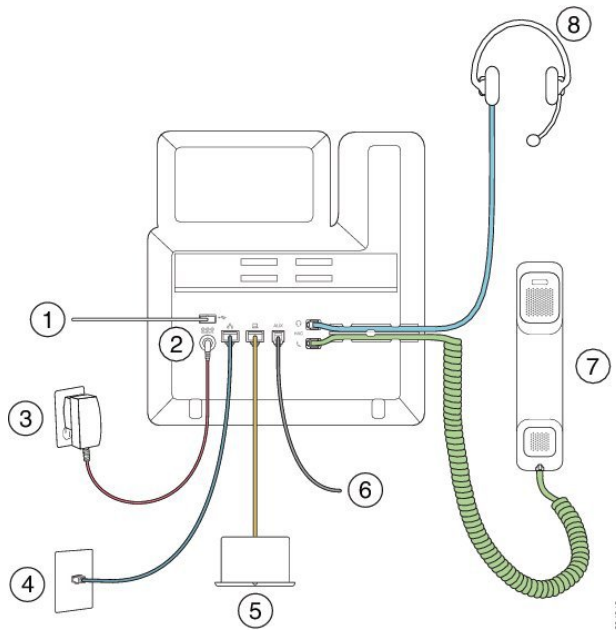
Connect your phone to your LAN with an Ethernet cable or with Wi-Fi to enable full functionality of your phone. You need to use a power adapter to power the phone. If you connect your phone to a wired network, do not extend the LAN Ethernet cable outside the building. For your phone to work, it must be connected to the IP telephony network.



1	DC adapter port	4	Auxiliary port (optional)
2	Power adapter	5	Handset connection
3	Network port (10/100 SW) connection	6	Analog headset connection (optional)

Cisco IP Phone 6871 Multiplatform Phones Connections

Connect your phone to your LAN with an Ethernet cable to enable full functionality of your phone. If your Ethernet port is equipped with Power over Ethernet (PoE), you can power the phone through the LAN port. If you don't have PoE available, then you need to use a power adapter to power the phone. Do not extend the LAN Ethernet cable outside the building. For your phone to work, it must be connected to the IP telephony network.










1	USB Headsets	5	Access port (10/100/1000 PC) connection (optional)
2	DC adapter port (optional)	6	Auxiliary port (optional)
3	Power adapter (optional)	7	Handset connection
4	Network port (10/100/1000 SW) connection; IEEE 802.3af power enabled	8	Analog headset connection (optional)


Cisco IP Phone 6821 Multiplatform Phones Buttons and Hardware

The following figure shows the Cisco IP Phone 6821 Multiplatform Phones.

Figure 3: Cisco IP Phone 6821 Multiplatform Phones



1	Light strip	Indicates whether you have an incoming call (flashing red) or a new voice message (steady red).
2	Programmable feature buttons and line buttons	 Access your phone lines, features, and call sessions. For more information, see Softkey, Line, and Feature Buttons, on page 25 .
3	Softkey buttons	 Access functions and services such as Conference and Transfer. For more information, see Softkey, Line, and Feature Buttons, on page 25 .
4	Navigation cluster	Navigation ring and Select  button. Scroll through menus, highlight items, and select the highlighted item.
5	Applications and Headset	Applications  Access call history, user preferences, phone settings, and phone model information. Headset  Toggle the headset on or off. When a headset is active, a headset icon is displayed in the header.
6	Mute and Speakerphone	Mute  Toggle the microphone on or off. When the microphone is muted, a mute icon flashes on the screen. Speakerphone  Toggle the speakerphone on or off.




7	Volume button	 Adjust the handset, headset, and speakerphone volume (off hook) and the ringer volume (on hook).
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Cisco IP Phone 6841, 6851, and 6861 Multiplatform Phones Buttons and Hardware

The following figure shows the Cisco IP Phone 6841.

Figure 4: Cisco IP Phone 6841, 6851, and 6861 Multiplatform Phones Buttons and Features



1	Handset and Handset light strip	Indicates whether you have an incoming call (flashing red) or a new voice message (steady red).
2	Programmable feature buttons and line buttons	 Access your phone lines, features, and call sessions. For more information, see Softkey, Line, and Feature Buttons, on page 25 .
3	Softkey buttons	 Access functions and services. For more information, see Softkey, Line, and Feature Buttons, on page 25 .
4	Navigation cluster	Navigation ring and Select  button. Scroll through menus, highlight items, and select the highlighted item.







5	Hold/Resume, Conference, and Transfer	<p>Hold/Resume  Place an active call on hold and resume the held call.</p> <p>Conference  Create a conference call.</p> <p>Transfer  Transfer a call.</p>
6	Speakerphone, Mute, and Headset	<p>Speakerphone  Toggle the speakerphone on or off. When the speakerphone is on, the button is lit.</p> <p>Mute  Toggle the microphone on or off. When the microphone is muted, the button is lit.</p> <p>Headset  Toggle the headset on or off. When the headset is on, the button is lit.</p>
7	Contacts, Applications, and Messages	<p>Contacts  Access personal and corporate directories.</p> <p>Applications  Access call history, user preferences, phone settings, and phone model information.</p> <p>Messages  Autodial your voice messaging system.</p>
8	Volume button	 <p>Adjust the handset, headset, and speakerphone volume (off hook) and the ringer volume (on hook).</p>








Cisco IP Phone 6871 Multiplatform Phones Buttons and Hardware

The following figure shows the Cisco IP Phone 6871.

Figure 5: Cisco IP Phone 6871 Multiplatform Phones Buttons and Features



1	Handset and Handset light strip	Indicates whether you have an incoming call (flashing red) or a new voice message (steady red).
2	Programmable feature buttons and line buttons	 Access your phone lines, features, and call sessions. For more information, see Softkey, Line, and Feature Buttons, on page 25 .
3	Softkey buttons	 Access functions and services. For more information, see Softkey, Line, and Feature Buttons, on page 25 .
4	Navigation cluster	Navigation ring and Select  button. Scroll through menus, highlight items, and select the highlighted item.
5	Hold/Resume, Conference, and Transfer	Hold/Resume  Place an active call on hold and resume the held call. Conference  Create a conference call. Transfer  Transfer a call.

6	Speakerphone, Mute, and Headset	<p>Speakerphone  Toggle the speakerphone on or off. When the speakerphone is on, the button is lit.</p> <p>Mute  Toggle the microphone on or off. When the microphone is muted, the button is lit.</p> <p>Headset  Toggle the headset on or off. When the headset is on, the button is lit.</p>
7	Contacts, Applications, and Messages	<p>Contacts  Access personal and corporate directories.</p> <p>Applications  Access call history, user preferences, phone settings, and phone model information.</p> <p>Messages  Autodial your voice messaging system.</p>
8	Volume button	 <p>Adjust the handset, headset, and speakerphone volume (off hook) and the ringer volume (on hook).</p>

Cisco IP Phone 7800 Series Multiplatform Phones

The Cisco IP Phone provides voice communication over an Internet Protocol (IP) network. The CiscoIPPhone functions much like a digital business phone, and allows you to place and receive phone calls and to access features such as mute, hold, transfer, speed dial, call forward, and more. In addition, because the phone connects to your data network, it offers enhanced IP telephony features, such as access to network information and services, and customizable features and services.

The Cisco IP Phone 7841 supports Gigabit ethernet connectivity.

When adding features to the phone line keys, you are limited by the number of line keys available. You cannot add more features than the number of line keys on your phone.

Table 1: Cisco IP Phone 7800 Series and Supported Line Keys

Phone	Supported Line Keys
Cisco IP Phone 7811	0
Cisco IP Phone 7821	2
Cisco IP Phone 7841	4
Cisco IP Phone 7861	16

A CiscoIPPhone, like other network devices, must be configured and managed. These phones encode G.711 a-law, G.711 mu-law, G.722, G.722.2/AMR-WB, G.729a, G.729ab and iLBC codecs; and decode G.711 a-law, G.711 mu-law, G.722, G.722.2/AMR-WB, G.729a, G.729ab and iLBC codecs.

**Caution**

Use of a cell, mobile, or GSM phone, or two-way radio in close proximity to a CiscoIP Phone might cause interference. For more information, see the manufacturer documentation of the interfering device.

Cisco IP Phones provide traditional telephony functionality, such as call forwarding and transferring, redialing, speed dialing, conference calling, and voice messaging system access. Cisco IP Phones also provide a variety of other features.

As with other network devices, you must configure Cisco IP Phones to prepare them to access Third-Party Call Control system and the rest of the IP network. By using DHCP, you have fewer settings to configure on a phone. If your network requires it, however, you can manually configure information such as: an IP address, TFTP server, and subnet information.

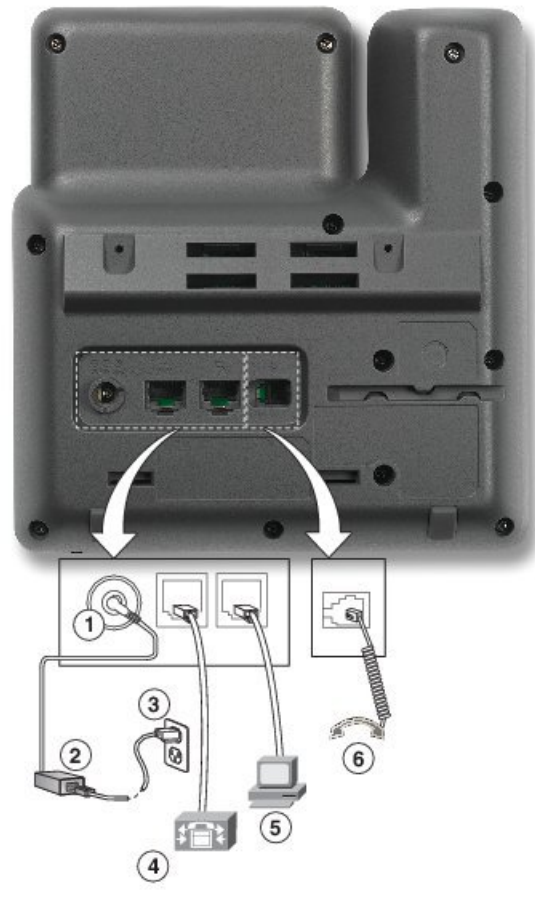
Cisco IP Phones can interact with other services and devices on your IP network to provide enhanced functionality. For example, you can integrate Third-Party Call Control system with the corporate Lightweight Directory Access Protocol 3 (LDAP3) standard directory to enable users to search for coworker contact information directly from their IP phones. You can also use XML to enable users to access information such as weather, stocks, quote of the day, and other web-based information.

Finally, because the Cisco IP Phone is a network device, you can obtain detailed status information from it directly. This information can assist you with troubleshooting any problems users might encounter when using their IP phones. You can also obtain statistics about a current call or firmware versions on the phone.

To function in the IP telephony network, the Cisco IP Phone must connect to a network device, such as a Cisco Catalyst switch. You must also register the Cisco IP Phone with a Third-Party Call Control system before sending and receiving calls.

Cisco IP Phone 7811 Multiplatform Phone Connections

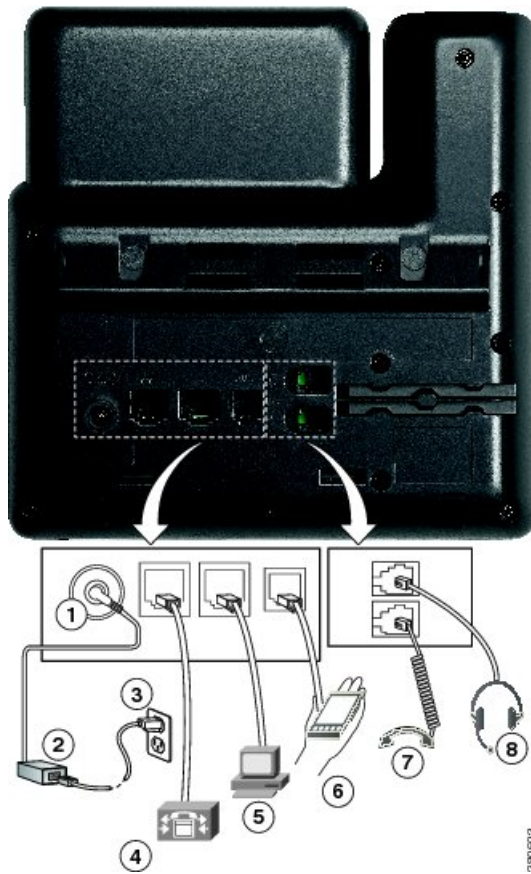
Use an Ethernet cable to connect your phone to your LAN and enable the phone's full functionality. If your Ethernet port is equipped with Power over Ethernet (PoE), you can power the phone through the LAN port. Do not extend the LAN Ethernet cable outside the building. For your phone to work, it must be connected to the IP telephony network.



1	DC adapter port (DC48V).	4	Network port (10/100 SW) connection. IEEE 802.3af power enabled.
2	AC-to-DC power supply (optional).	5	Access port (10/100 PC) connection (optional).
3	AC power wall plug (optional).	6	Handset connection.

Cisco IP Phone 7821 Multiplatform Phone Connections

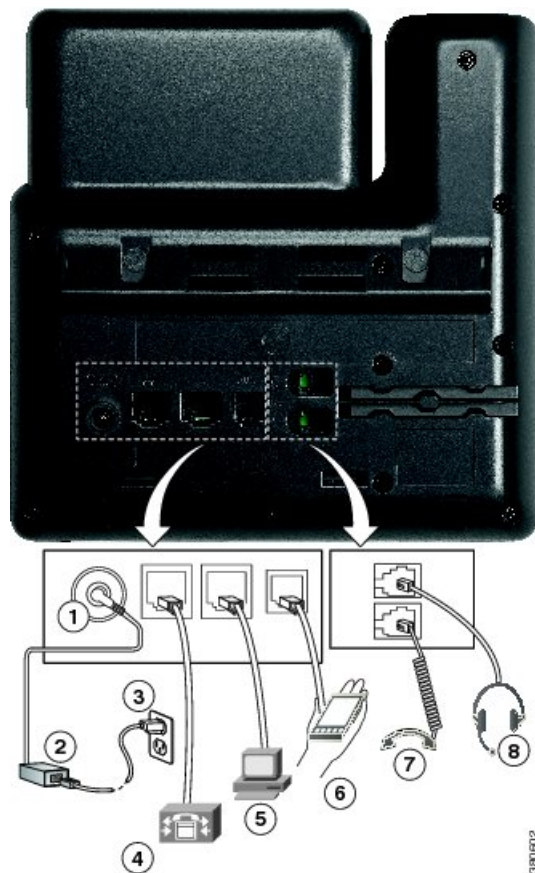
Connect your Cisco IP phone to your LAN with an Ethernet cable to enable full functionality of your Cisco IP phone. If your Ethernet port is equipped with Power over Ethernet (PoE), you can power the Cisco IP phone through the LAN port. Do not extend the LAN Ethernet cable outside the building. For your phone to work, it must be connected to the IP telephony network.



1	DC adaptor port (DC48V) (optional).	5	Access port (10/100 PC) connection (optional).
2	AC-to-DC power supply (optional).	6	Auxiliary port (optional).
3	AC power wall plug (optional).	7	Handset connection.
4	Network port (10/100 SW) connection. IEEE 802.3af power enabled.	8	Analog headset connection (optional).

Cisco IP Phone 7841 Multiplatform Phone Connections

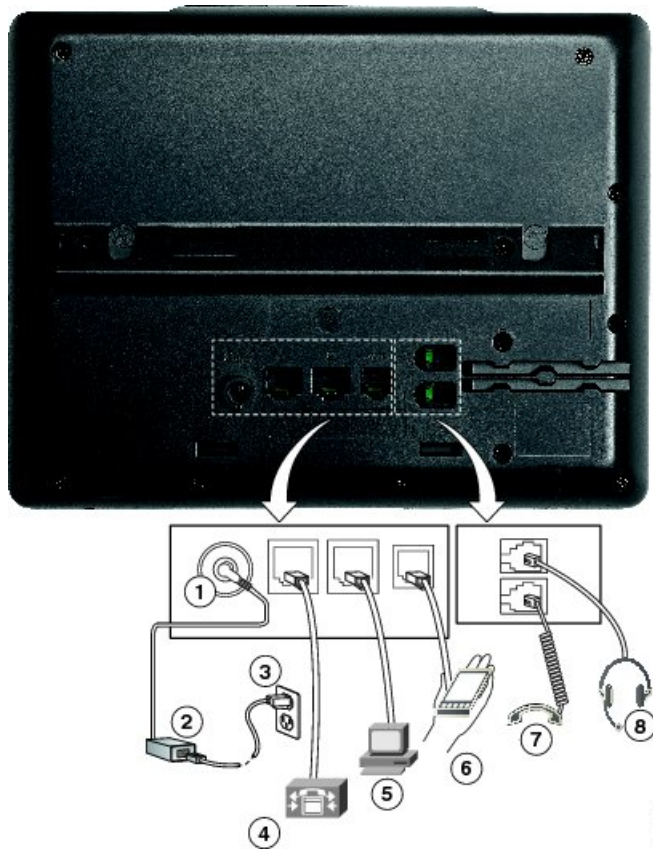
Connect your Cisco IP phone to your LAN with an Ethernet cable to enable full functionality of your Cisco IP phone. If your Ethernet port is equipped with Power over Ethernet (PoE), you can power the Cisco IP phone through the LAN port. Do not extend the LAN Ethernet cable outside the building. For your phone to work, it must be connected to the IP telephony network.



1	DC adaptor port (DC48V) (optional).	5	Access port (10/100/1000 PC) connection (optional).
2	AC-to-DC power supply (optional).	6	Auxiliary port (optional).
3	AC power wall plug (optional).	7	Handset connection.
4	Network port (10/100/1000 SW) connection. IEEE 802.3af power enabled.	8	Analog headset connection (optional).

Cisco IP Phone 7861 Multiplatform Phone Connections

Connect your Cisco IP phone to your LAN with an Ethernet cable to enable full functionality of your Cisco IP phone. If your Ethernet port is equipped with Power over Ethernet (PoE), you can power the Cisco IP phone through the LAN port. Do not extend the LAN Ethernet cable outside the building. For your phone to work, it must be connected to the IP telephony network.



1	DC adaptor port (DC48V) (optional).	5	Access port (10/100 PC) connection (optional).
2	AC-to-DC power supply (optional).	6	Auxiliary port (optional).
3	AC power wall plug (optional).	7	Handset connection.
4	Network port (10/100 SW) connection. IEEE 802.3af power enabled.	8	Analog headset connection (optional).

Buttons and Hardware







The Cisco IP Phone 7800 Series has distinct hardware types:








- Cisco IP Phone 7811 No buttons on either side of the screen
- Cisco IP Phone 7821 Two buttons on the left side of the screen
- Cisco IP Phone 7841 Two buttons on either side of the screen
- Cisco IP Phone 7861 16 buttons at the right edge of the phone

The following figure shows the Cisco IP Phone 7841.

Figure 6: Cisco IP Phone 7800 Series Buttons and Features



1	Handset and Handset light strip	Indicates whether you have an incoming call (flashing red) or a new voice message (steady red).
2	Programmable feature buttons and line buttons	 Access your phone lines, features, and call sessions. For more information, see Softkey, Line, and Feature Button on page 13.
3	Softkey buttons	 Access functions and services. For more information, see Softkey, Line, and Feature Button on page 13.
4	Navigation cluster	Navigation ring and Select  button. Scroll through menus, highlight items, and select the highlighted item.
5	Hold/Resume, Conference, and Transfer	Hold/Resume  Place an active call on hold and resume the held call. Conference  Create a conference call. Transfer  Transfer a call.

6	Speakerphone, Mute, and Headset	<p>Speakerphone  Toggle the speakerphone on or off. When the speakerphone is on, the button is lit.</p> <p>Mute  Toggle the microphone on or off. When the microphone is muted, the button is lit.</p> <p>Headset  Toggle the headset on or off. When the headset is on, the button is lit.</p>
7	Contacts, Applications, and Messages	<p>Contacts  Access personal and corporate directories.</p> <p>Applications  Access call history, user preferences, phone settings, and phone model information.</p> <p>Messages  Autodial your voice messaging system.</p>
8	Volume button	 <p>Adjust the handset, headset, and speakerphone volume (off hook) and the ringer volume(on hook).</p>

Navigation

Use the outer ring of the Navigation cluster to scroll through menus and to move between fields. Use the inner **Select** button of the Navigation cluster to select menu items.



If a menu item has an index number, you can enter the index number with the keypad to select the item.

Softkey, Line, and Feature Buttons

You can interact with the features on your phone in several ways:

- Softkeys, located below the screen, give you access to the function displayed on the screen above the softkey. The softkeys change depending on what you are doing at the time. The **More ...** softkey shows you that more functions are available.
- Feature and line buttons, located on either side of the screen, give you access to phone features and phone lines.
 - Feature buttons—Used for features such as **Speed dial** or **Call pickup**, and to view your status on another line.
 - Line buttons—Used to answer a call or resume a held call. When not used for an active call, used to initiate phone functions, such as the missed calls display.

Feature and line buttons illuminate to indicate status.

Your administrator can set up some functions as softkeys or as feature buttons. You can also access some functions with softkeys or the associated hard button.

Cisco IP Phone 8800 Series Multiplatform Phones Overview of the Cisco IP Phone

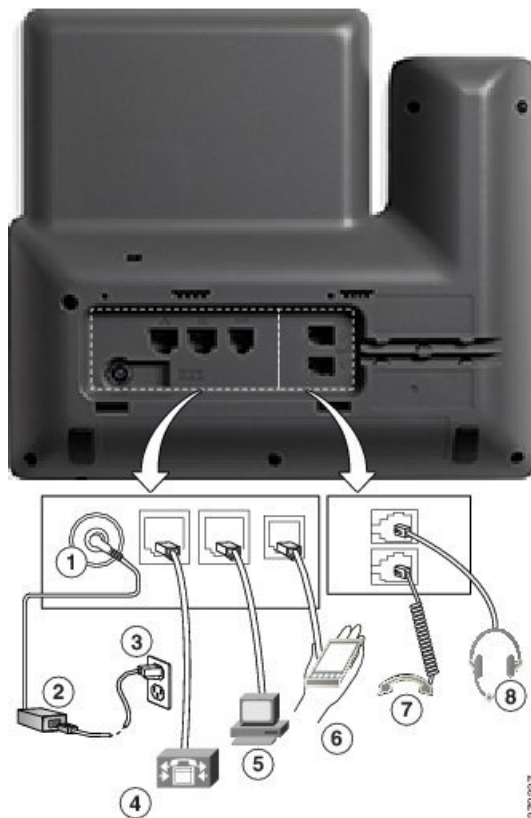
The Cisco IP Phone 8800 Series Multiplatform Phones comprises a set of full-featured VoIP (Voice-over-Internet Protocol) phones that provide voice communication over an IP network. The phones provide all the features of traditional business phones, such as call forwarding, redialing, speed dialing, transferring calls, and conference calling. The Cisco IP Phone 8800 Series Multiplatform Phones is targeted for solutions that are centered on Third-Party SIP-based IP PBX.



Note In this document, the terms Cisco IP Phone or phone means Cisco IP Phone 8800 Series Multiplatform Phones.

Cisco IP Phone 8811 Multiplatform Phone Connections

Connect your phone to your organization's IP telephony network as shown in the following diagram.



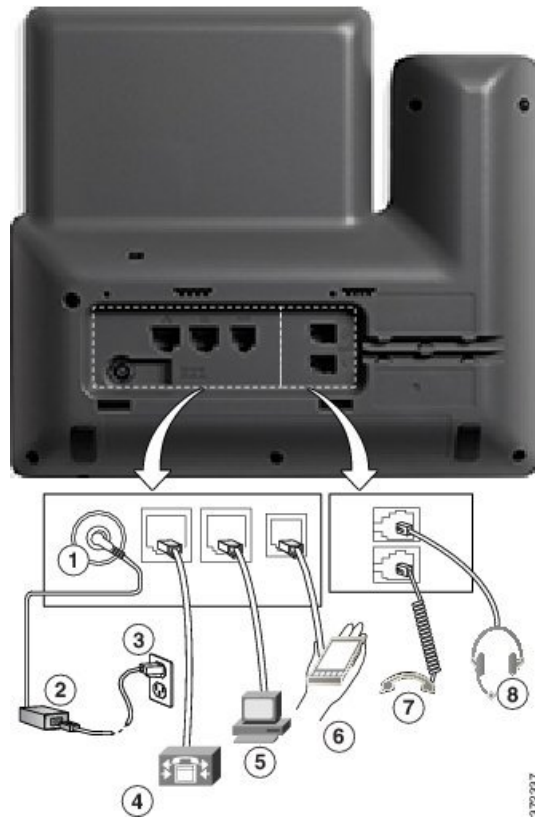
1	DC adapter port (DC48V).	5	Access port (10/100/1000 PC) connection.
2	AC-to-DC power supply (optional).	6	Auxiliary port.
3	AC power wall plug (optional).	7	Handset connection.
4	Network port (10/100/1000 SW) connection. IEEE 802.3at power enabled.	8	Analog headset connection (optional).



Note The Cisco IP Phone 8811 does not support a key expansion module.

Cisco IP Phones 8841 and 8845 Phone Connections

Connect your phone to the corporate IP telephony network, using the following diagram.



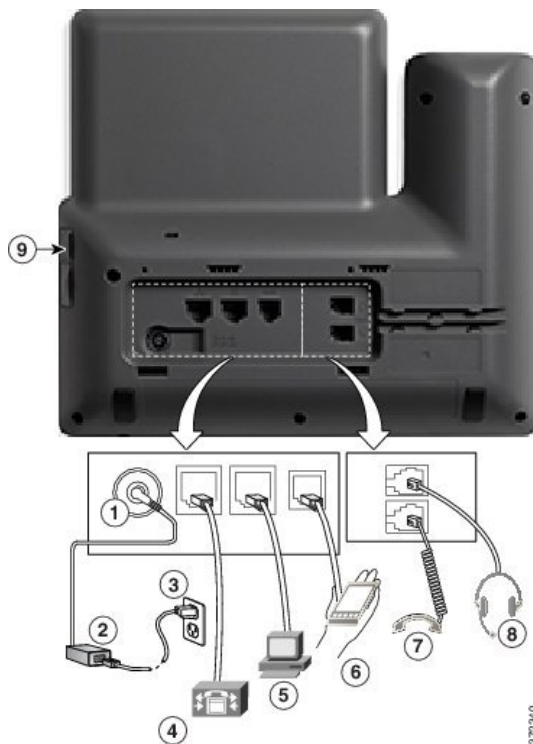
1	DC adaptor port (DC48V).	5	Access port (10/100/1000 PC) connection.
2	AC-to-DC power supply (optional).	6	Auxiliary port.
3	AC power wall plug (optional).	7	Handset connection.
4	Network port (10/100/1000 SW) connection. IEEE 802.3at power enabled.	8	Analog headset connection (optional).



Note The Cisco IP Phone 8841 and 8845 does not support a key expansion module.

Cisco IP Phone 8851 Phone Connections

Connect your phone to the corporate IP telephony network as shown in the following diagram.



1	DC adaptor port (DC48V).	6	Auxiliary port.
2	AC-to-DC power supply (optional).	7	Handset connection.
3	AC power wall plug (optional).	8	Analog headset connection (optional).
4	Network port (10/100/1000 SW) connection. IEEE 802.3at power enabled.	9	USB port
5	Access port (10/100/1000 PC) connection.		



Note Each USB port supports the connection of up to five supported and nonsupported devices. Each device connected to the phone is included in the maximum device count. For example, your phone can support five USB devices (such as two key expansion modules, one headset, one hub, and one other standard USB device) on the side port. Many third-party USB products count as multiple USB devices, for example, a device containing USB hub and headset can count as two USB devices. For more information, see the USB device documentation.

Cisco IP Phones 8861 and 8865 Phone Connections

Connect your phone to the corporate IP telephony network as shown in the following diagram.



1	DC adaptor port (DC48V).	7	Handset connection.
2	AC-to-DC power supply (optional).	8	Analog headset connection (optional).
3	AC power wall plug (optional).	9	USB port
4	Network port (10/100/1000 SW) connection. IEEE 802.3at power enabled.	10	Audio In/Out ports
5	Access port (10/100/1000 PC) connection.	11	USB port
6	Auxiliary port.		



Note Each USB port supports the connection of up to five supported and unsupported devices. Each device connected to the phone is included in the maximum device count. For example, your phone can support five USB devices (such as three key expansion modules, one hub, and one other standard USB device) on the side port and five additional standard USB devices on the back port. Many third-party USB products count as multiple USB devices, for example, a device containing USB hub and headset can count as two USB devices. For more information, see the USB device documentation.

Buttons and Hardware











The Cisco IP Phone 8800 Series has two distinct hardware types:

- Cisco IP Phones 8811, 8841, 8851, and 8861—do not have a camera.
- Cisco IP Phones 8845 and 8865—have a built-in camera.

Figure 7: Cisco IP Phone 8845 Buttons and Hardware



1	Handset and Handset light strip	Indicates whether you have an incoming call (flashing red) or a new voice message (steady red).
2	Camera Cisco IP Phone 8845 and 8865 only	Use the camera for video calls.
3	Programmable feature buttons and line buttons	Access your phone lines, features, and call sessions.
4	Softkey buttons	Access to functions and services.
5	Back , Navigation cluster, and Release	<p>Back Return to the previous screen or menu.</p> <p>If you press and hold the back button for more than 0.5 secs (long press), you return to the main screen or the call screen. When you are in the settings screens, the long press takes you to the main screen. If you are in one of the call screens, the long press takes you to the call screen.</p> <p>Navigation cluster Navigation ring and Select button—Scroll through menus, highlight items and select the highlighted item.</p> <p>Release End a connected call or session.</p>







6	Hold/Resume, Conference, and Transfer	<p>Hold/Resume  Place an active call on hold and resume the held call.</p> <p>Conference  Create a conference call.</p> <p>Transfer  Transfer a call.</p>
7	Speakerphone, Mute, and Headset	<p>Speakerphone  Toggle the speakerphone on or off. When the speakerphone is on, the button is lit.</p> <p>Mute  Toggle the microphone on or off. When the microphone is muted, the button is lit.</p> <p>Headset  Toggle the headset on or off. When the headset is on, the button is lit.</p>
8	Contacts, Applications, and Messages	<p>Contacts  Access personal and corporate directories.</p> <p>Applications  Access call history, user preferences, phone settings, and phone model information.</p> <p>Messages  Autodial your voice messaging system.</p>
9	Volume button	<p> Adjust the handset, headset, and speakerphone volume (off hook) and the ringer volume (on hook).</p>



Softkey, Line, and Feature Buttons

You can interact with the features on your phone in several ways:

- Softkeys, located below the screen, give you access to the function displayed on the screen above the softkey. The softkeys change depending on what you are doing at the time. The **More ...** softkey shows you that more functions are available.
- Feature and line buttons give you access to phone features and phone lines. On the Cisco IP Phone 6821, these are the buttons on the left side of the screen. On the Cisco IP Phone 6841, 6851, 6861, and 6871, these are the buttons on either side of the screen.
 - Feature buttons—Used for features such as **Speed dial** or **Call pickup**, and to view your status on another line.
 - Line buttons—Used to initiate or answer a call. You can also use a line key to open and close the call session window, and to navigate through the call session window. Open the call session window to see the calls on the line.

Feature and line buttons illuminate to indicate status:

-  or  Green—Line is idle.
-  or  Red, steady—Line is active or in use.
-  or  Red, flashing—Line is on hold or there is an inbound call.

-  or  Amber, steady—Line is unregistered (cannot be used).

Some functions can be set up as softkeys or as feature buttons. You can also access some functions with softkeys or the associated hard button.

The Cisco IP Phone 6821 has a limited number of hard buttons. You use the softkeys to access most call features.