

Polycom[®] CX5000 and CX5000 HD Systems User's Guide



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Introduction

When you want to meet with people who are geographically separated, video conferencing gives you a greater sense of immediacy than a conventional telephone conference call. The Polycom[®] CX5000 is a next generation video conferencing system that provides a comprehensive conferencing experience through the use of 360-degree video and active speaker detection.

Polycom CX5000 System Documentation

In addition to this guide, the following documentation is available for the Polycom CX5000 system. You can find the documents inside the Polycom CX5000 system package or at <u>support.polycom.com</u>.

- **Polycom CX5000 System Release Notes**, which covers product limitations and workarounds.
- Quick Tips for the Polycom CX5000 System, a guide to basic tasks using the Polycom CX5000 system with Microsoft[®] Lync[™], Microsoft Office Live Meeting, and Microsoft Office Communicator.
- **Polycom CX5000 System Setup Guide**, which explains how to set up, configure, and begin using the Polycom CX5000 device.
- **Polycom CX5000 System Deployment Guide**, which provides device configurations, best practices, a troubleshooting guide, and Frequently Asked Questions for the Polycom CX5000 device.
- **Polycom CX5000 System Regulatory Notices**, which provides regulatory information for the countries in which the Polycom CX5000 system is approved for use.

Support and Online Documentation

(800)POLYCOM (765-9266)

http://support.polycom.com/PolycomService/support/us/support/voice/index.html

System Requirements

The following are the minimum system requirements for the Polycom CX5000 system hardware and software.

- Computer running one of the following operating systems:
 - Windows XP[™] operating system (SP2 or later, 32-bit only)
 - Windows Vista[™] operating system (32-bit and 64-bit)
 - Windows 7 (32-bit and 64-bit)
- Computer running one of the following client applications:
 - o Microsoft Lync[™] 2010
 - o Microsoft Office Communicator 2007
 - o Microsoft Office Live Meeting 2007, client version 8.0.6362.128 or later
- Computer with 2.0 gigahertz or higher processor.
- Recommended 2.0 gigabyte (GB) of RAM or higher.
- 1.5 gigabytes (GB) of available hard disk space.
- Video card with 128 MB of RAM or higher.
- Super VGA (1280 × 1024) or higher-resolution video adapter and monitor.
- Keyboard and mouse, or compatible pointing device.
- Graphics hardware running in full hardware acceleration mode.
- For conference phone use, an analog PSTN phone line.
- For remote management, an Ethernet network adapter appropriate for the type of local-area or wide-area network to which you will connect.
- For the Polycom CX5000 HD system, the computer to which a CX5000 HD device is connected must have a quad-core processor to transmit HD video to the far end. A quad core processor is not required to display HD video received *from* the far end.

How the Polycom CX5000 System Works

The Polycom CX5000 system, when used with Microsoft Lync, Microsoft Office Live Meeting 2007, and Microsoft Office Communicator 2007, is a video conferencing system. Video conferencing is a set of interactive telecommunication technologies that enable persons at two or more locations to interact using video and audio transmissions simultaneously. It has also been called visual collaboration.

With the Polycom CX5000 system, you can do all of the following:

- Place an outgoing phone call.
- Answer an incoming phone call.
- Conduct an audio-only session.
- Conduct an audio/video conference.

When you place the Polycom CX5000 system in the center of your conference table, the integrated cameras capture the entire panoramic view of your conference room, and the integrated microphones capture the voices coming from any location around the table.



The Polycom CX5000 HD System

Polycom CX5000 HD systems support HD (720 x 1280) active speaker video when connected to a quad-core computer running a Microsoft Lync client. The HD video stream is supported only for point-to-point calls. Video in Online Meetings or other collaborative calls that use the Microsoft Lync AVMCU, such as for whiteboard presentations and PowerPoint[®] slide shows, is limited in Lync Server 2010 to VGA resolution.

CX5000 HD systems also offer the active speaker modes supported by non-HD CX5000 systems on earlier releases. Except for HD active speaker video, CX5000 HD devices are functionally identical to non-HD Polycom CX5000 devices.

Polycom CX5000 HD systems can be identified by the HD marking on the product label that is located on the bottom of the tabletop console.

The Polycom CX5000 Device



- A. Mirrors. Five mirrors reflect the light into the cameras.
- B. **Cameras**. Five small cameras capture the images from around the room.
- C. Light-emitting diode (LED) status lights. Three status lights indicate phone connection, audio/video activity, mute, and incoming calls.
- D. **Control buttons**. Six buttons control speaker volume, mute, phone on/off hook, flash, and information.
- E. Liquid crystal display (LCD) touch screen. The LCD dial pad works just like your phone pad for ease of dialing and quick view of call status.
- F. **Loudspeaker**. A centrally located loudspeaker provides the audio received from the remote conference.
- G. **Microphones**. Six microphones located every 60° around the device pick up the audio in the room.

Touch-Screen Display

The Polycom CX5000 touch-screen display provides a keypad for entering phone commands, as well as buttons for adjusting the volume and other functions.



- A. **Privacy/Mute button.** Stops and resumes audio input.
- B. Volume down button. Decreases the volume for the ringer and the speaker.
- C. Volume up button. Increases the volume for the ringer and the speaker.
- D. **External Dial-pad button.** Indicates whether the external dial pad is connected to the device.
- E. **USB Status indicator.** Indicates whether the Polycom CX5000 device is connected to your computer.
- F. **Phone Status indicator.** Indicates whether the telephone connection is active.

- G. **Network Status indicator.** Indicates whether the Polycom CX5000 device is connected to the network.
- H. On/Off Hook button. Opens and closes a connection to a PSTN network.
- I. **Flash/Conference button.** Enables a phone session to be on hold so that another phone number can be dialed or a conference initiated.
- J. Information button. Provides additional information about the Polycom CX5000 device to be viewed in the keypad area.

External dial pad and satellite microphones

An external dial pad and satellite microphones are provided for accommodating the needs of a larger meeting room where people may be further from the Polycom CX5000 device than in a conventional meeting environment.



Using the Polycom CX5000 System as a Conference Phone

If the Polycom CX5000 device is not connected to your computer, it still works as a standard conference telephone. This section describes how you can use the Polycom CX5000 device to send and receive phone calls and conference calls. This section covers only the audio functions for the Polycom CX5000 device and does not require the installation of Microsoft Lync, Office Live Meeting 2007, or Office Communicator 2007.

Adjust the ringer and speaker volume

The **Volume Up** (1) and the **Volume Down** (1) buttons control ringer and speaker volume. What the buttons control depends on the state of the device. The volume levels that you set are retained from one meeting to the next until you change them. The following table summarizes the modes for volume settings.

State of device	Volume mode	Description
Not connected to computer, and	Adjusts the ringer volume	Adjust the Volume Up (1)) and the Volume Down (1) buttons to desired ringer volume level.
phone is on nook		While the device is ringing, adjust the Volume Up 印) and the Volume Down
Device not connected to computer, and	Adjusts the speaker volume	Press the Volume Up (1)) or the Volume Down (1) button to view the Call Volume screen on the touch screen display.
phone is off hook		During a phone conversation, adjust the Volume Up (1)) and the Volume Down (1) buttons to the desired speaker volume.
Connected to computer and phone is either on hook or	Simultaneously adjusts both the ringer and the	Press the Volume Up (1)) or the Volume Down (1) button to view the Call Volume screen on the touch screen display.
off hook	speaker volume	During a phone conversation, adjust the Volume Up (1)) and the Volume Down (1) buttons to the desired volume level for the call and the ringer.

Use the tutorial

The Polycom CX5000 device provides the following brief on-device tutorial:

- Quick Start
- o Place a call
- o Join a meeting
- o Start audio and video
- Call Handling
- o Answer a call
- o Place a three-way call
- o Use call waiting
- Connect and Use the External Dial Pad
- Connect and Use the Satellite Microphones

Press the 🗟 Information button on the device to access the tutorial.

Send and receive phone calls

The Polycom CX5000 loudspeaker and microphones allow for conversations as with any telephony device. The Polycom CX5000 keypad functions the same as a conventional phone, and you can correct errors in the number entry by using the **Backspace** key.

Incoming calls are displayed in the phone status display. The length of the call is displayed in the uppermost status section of the LCD display. At any point during a phone conversation you can push the **Mute** button to suspend audio transmission to the device.

Place a phone call

When the Polycom CX5000 device is on-hook (the On/Off hook button ∞ glows orange), you can use the LCD dial pad or external dial pad to enter the number, and then press the On/Off hook button to dial the call.

When the device is off-hook (the On/Off hook button 👁 glows green), the Polycom CX5000 device dials the call after you enter the last digit of the number.

Answer an incoming phone call

>> To answer an incoming call, press the On/Off hook button 🖚.

Conference calls

You can dial directly into a conference or, if necessary, dial into a conference bridge that facilitates telephone conferencing.

If your conference requires connecting to a conference bridge, dial the conference bridge phone number on the Polycom CX5000 keypad using the on-hook or off-hook methods described previously. After connecting to the conference bridge, follow the prompts for entering the conference ID and password. At any time during the conference, you can suspend audio transmission using your Polycom CX5000 device.

Note

You must use a phone system that supports multiple phone lines to place conference calls.

Three-way calls

When you need to interrupt an existing conference call to call someone who, for example, might have an answer to a question or advice for a situation, you can place a three-way call. The conference call is temporarily suspended while you call the third party. You can choose to join the third party to the conference call, or you can end the call with the third party and rejoin the conference call.

Note

You must use a phone system that supports multiple phone lines to place three-way calls.

Place a three-way call during an existing conference call

- **1.** Place a call from the Polycom CX5000 device.
- 2. Within an existing conference call, press the **Flash** button **9**.
- 3. Enter the phone number or extension of the party you want to consult.
- **4.** After the party has answered the call, begin your discussion. When finished, press the **Flash** button ⁷∕₇ to rejoin the conference call.

Add an additional phone to an existing conference call (three-way call

- **1.** Place a call from the Polycom CX5000 device.
- 2. Within an existing conference call, press the **Flash** button 𝖗.
- **3.** Enter the phone number or extension of the party you are inviting to the conference call.
- **4.** After the party has answered the call, press the **Flash** button 𝔅 again to connect the newly joined party to the conference call.

Call waiting

During an existing conference call, someone may call into the conference, resulting in a call-waiting tone broadcast from the Polycom CX5000 device speaker. You can accept the call and get back to your conference quickly by using call waiting, or you can choose to ignore the call and continue with your conference.

Accept a call during a conference

- To answer a call-waiting tone during an existing conference call, push the Flash button ⁴⁷ to talk to the incoming caller.
- 2. Press Flash button ♥ again to terminate the call and continue with the existing conference call.

Getting Started with Unified Communications Conferencing

With Microsoft Lync, Microsoft Office Communicator 2007, and Microsoft Office Live Meeting, you can add a variety of communication modes to conference sessions, including phone, video, and even full web conferencing and data sharing with Microsoft Lync and Office Live Meeting.

The conferencing capabilities described below require you to have conferencing capabilities enabled in your organization. If you are not sure whether conferencing capabilities are enabled, contact your system administrator.

Choose a conferencing method

Unified communications conferencing offers a variety of possibilities for effective communication. The following table can help you decide which conferencing method to use.

If you need to:	Use Microsoft Lync	Use Microsoft Office Live Meeting	Use Microsoft Communicator
Conduct unscheduled multi-party conferences – for example, you need to make a quick decision among coworkers.	\checkmark		\checkmark
Make an unscheduled conference call.	\checkmark		\checkmark
Present slides, share web pages, or perform desktop or application sharing during an unscheduled conference call.	\checkmark	\checkmark	
Schedule a conference call to get on everyone's calendar.	\checkmark	\checkmark	
Schedule a web conference where you present slides, share web pages, or perform desktop or application sharing.	\checkmark	\checkmark	

Using Microsoft Lync 2010

Microsoft Lync enables conferencing by audio, video, instant messaging, content collaboration, and web conferencing within a single interface.

User Operations

The following section describes how to perform basic operations with the Polycom CX5000 system and Microsoft Lync. For more information, refer to <u>lync.microsoft.com</u>.

Place an audio or video call to a single contact

- 1. In the Lync Contacts list, right-click the contact you want to call.
- 2. From the menu, select one of the following:
 - To place an audio-only call, select Call > Lync Call.
 - To place a video call, select **Start a Video Call**.

Place an audio or video call to multiple contacts

- 1. Press and hold **Ctrl**.
- 2. In the Lync Contacts list, select the contacts you want to call.
- 3. Right-click one of the selected contacts.
- 4. From the menu, select one of the following:
 - Start a Conference Call > Start Conference Call Now Using Lync.
 - Start a Video Call.

Send an instant message

>> In the Lync Contacts list, double-click the contact to whom you want to send a message.

Answer an audio call

>> In the call notification window, select Accept.

Answer a video call

>> In the call notification window, select Accept.

Answer a conference or content call

>> In the call notification window, select Join Accept.

Decline a call

>> In the call notification window, select **Decline**.

The caller is notified that you did not answer.

Redirect a call

>> In the call notification window, select one of the following:

 To decline the call and send a message to the caller, select Reply with IM.

An instant message window addressed to the caller opens.

• To decline the call and change your status, select **Set to Do Not Disturb**.

Join a meeting

- 1. Do one of the following:
 - In your email inbox, open the meeting invitation.
 - From your calendar, open the meeting item.
- 2. In the email invitation or the calendar item, click Join online meeting.

Add video to an audio call

>> In the conversation window, open the Video menu and select one of the following:

- If you placed the call, select Add Video.
- If you accepted the call, select **Start My Video**.

Add participants to a call in progress

>> In the conversation window, select **People Options**.

From the menu you can choose to select participants from the Lync Contacts list or another method.

Send a file

>> In the conversation window, click **Attachment**.

Browse to and select the file that you want to send.

Share content

>> In the conversation window, open the **Share** menu and select the type of content that you want to share or use for collaboration.

Type of Content	Method
Desktop	If you use one monitor, select Desktop .
	• If you use multiple monitors, select the monitors that you want to share.
Other running applications	Select Program .
upprioutions	In the dialog box, select the application that you want to share.
Whiteboard	Select New Whiteboard.
	A whiteboard opens on which all participants can collaborate by using the tools below the interface.
Poll	Select New Poll.
	A form opens in which you can create a poll to share with participants in the call.

Using Microsoft Office Live Meeting 2007

With Microsoft Office Live Meeting, you can share content during scheduled or unscheduled conferences.

User Operations

The following section describes how to perform basic operations with the Polycom CX5000 system and Microsoft Office Live Meeting. For more information, refer to <u>office.microsoft.com</u>.

Join a meeting

- 1. Do one of the following:
 - In your email inbox, open the meeting invitation.
 - From your calendar, open the meeting item.
- 2. In the email invitation or the calendar item, click **Join the meeting**.

Microsoft Office Live Meeting automatically opens and joins you to the meeting. If you do not have the client installed on your computer, the invitation will contain instructions on how to install it.



If you are unable to connect to the meeting, open the Microsoft Office Live Meeting client by clicking **Start > All Programs > Microsoft Office Live Meeting 2007 > Microsoft Office Live Meeting 2007**. Enter the **Meeting ID**, **Entry Code**, and **Location** listed in the email invitation or calendar item.

Start Voice and Video

Depending on how the meeting organizer has set up the meeting, you can communicate with the other attendees either through your computer or through a telephone conference call. Polycom CX5000 video also enables other attendees to see you.

- If the meeting uses **Computer Audio**, you can connect to the meeting and listen to it through your Polycom CX5000 device.
- If the meeting uses Telephone Conferencing, you can have the conferencing service call you or you can use your Polycom CX5000 device to dial into the conferencing service.

To ensure that your Polycom CX5000 audio and video work properly, press **Ctrl + T** to access **Set Up Audio and Video** after you first connect to the meeting. Follow the instructions in the wizard to specify and test your speakers, microphone, and web camera.

In the email invitation, read the **Audio Information** section to find out whether the meeting uses computer audio or telephone conferencing, and then choose the appropriate action as follows:

Connect to audio

- 1. Connect Polycom CX5000 device to your computer to listen to the meeting.
- Audio should be enabled by default. If audio is not enabled, click Voice & Video to open the Voice & Video pane, and then click Join Audio.

Note

The first time you join a meeting that uses only telephone conferencing, a dialog box is displayed that enables you to enter the phone number that the conferencing service should use to call you.

Connect to telephone conferencing by having the conferencing service call you

- 1. Click Voice & Video to open the Voice & Video pane.
- 2. Do one of the following:
 - If you are already connected to audio, click the arrow next to the End Call button, and then click End computer call and connect with my phone.
 - If you are not connected to audio, click the arrow next to the Join
 Audio button, and then click Call Me.
- If this is the first time you have joined a telephone conference, the New Phone Number dialog box is displayed. Type your area code and your phone number, and then click OK.
- 4. In the Enable Call Controls dialog box, if you are a participant, click Join. If you are the conference leader, select the Leader radio button, type the leader or PIN code, and then click Join.

Connect to telephone conferencing by dialing into the service

- 1. Click Voice & Video to open the Voice & Video pane.
- 2. Click the arrow next to Join Audio.
- **3.** Click **View Call-In Details**, and then use your telephone to dial the numbers listed.

Connect to video

- If the main video is not visible, click Voice & Video to open the Voice & Video pane, click the arrow next to the web camera icon, and then click Show Main Video,
- 2. If you want to stream video, click the Voice & Video pane, click the web camera icon, and then click Start My Video.

3. For Polycom CX5000 for panoramic video, click **Voice & Video**. In the **Voice & Video** pane, click the Web camera icon.

Using the Microsoft Office Live Meeting Client

During the meeting, you can adjust the volume of the Polycom CX5000 device by using the volume buttons on the device. You can also interact with others during the meeting through chat, or you can ask the presenter a question.

The topmost element in the Office Live Meeting client window is the Menu Bar.

Note

Depending on how the meeting is set up and whether you have permissions to use certain features, some of these menu items may not be available.



The menu items in the meeting client are moveable panes. You can click a menu item, and then drag the title bar anywhere on your screen.

Schedule a meeting in advance

You can schedule meetings using the Conferencing Add-in for Microsoft Office Outlook messaging and collaboration client.

Configure the Conferencing Add-in for Microsoft Office Outlook

- 1. Install the Conferencing Add-in for Outlook on your computer according to your administrator's instructions.
- 2. In your Outlook Calendar, click Conferencing > User Accounts.
- **3.** In the User Accounts dialog box, under Office Communications Server, in the Signin name text box, type your sign-in name.
- If necessary, click Advanced.
 In the Advanced Connection Settings dialog box, click Use these servers.
 In the Internal Server name or IP address or the External Server name or IP address text box, type the server name or the IP address of the Office Communications 2007 Server to which you will connect.
- 5. To verify your login information, click Test Connection.
- 6. Click OK.

Schedule a meeting using the Conferencing Add-in for Outlook

- 1. In your Outlook calendar, click Schedule a Live Meeting.
- 2. On the **Appointment** tab, in the **Subject** text box, type a description of your meeting. In the **To** text box, enter the email addresses for your invitees, separating each address with a semicolon.
- To designate presenters, click Attendees/Presenters.
 In the Attendees list, click a name, and then click Add.
- 4. Click OK.
- 5. Click Audio.
- 6. Do one of the following:
 - Click **Dial in to the meeting using a telephone conference service** and then fill in the audio information.
 - To enable participants to connect using a computer with a headset or microphone and speakers, click **Connect to the meeting using computer audio**.

Using Microsoft Office Communicator 2007

Office Communicator 2007 offers phone and video capabilities that enable you to easily make phone calls and send instant messages to one or more persons on your contact list.

About phone number formats

Office Communicator 2007 provides a variety of places for entering phone numbers. If you are entering a phone number to call in the Search box, Communicator enables you to enter digits or alphabetical characters. For example, you can enter a number such as 1-555-555-0101 or a 1-800 number such as 1-800-EXAMPLE.

If you are entering a phone number for call forwarding or to publish one of your phone numbers, you should use the International Number Format. Enter the country code, followed by the local number.

As a best practice, the phone numbers you enter should contain only the digits 0123456789. Communicator will automatically add the formatting to the phone number for you. Do not include the international dialing prefix.

User Operations

The following section describes how to perform basic operations with the Polycom CX5000 system and Microsoft Communicator. For more information, refer to <u>office.microsoft.com</u>.

Make a quick phone call

With the phone capabilities of Communicator, you can make outbound PSTN calls, answer inbound PSTN calls, and make computer-to-computer calls. To get started, try making a few calls with Microsoft Communicator and the Polycom CX5000 device.

Call a contact in your Contact list

>> In the Communicator contact list, click the **Call** button next to the name of the contact.

Call an outside number

- In the Communicator window, enter a number in the Search box (Type a name or phone number). You do not need to format the number.
- **2.** To dial the number, double-click the **Call** button for the number in the Search Results pane.

Place and receive phone calls

The Polycom CX5000 system, paired with Communicator, offers a rich phone communication experience that extends beyond traditional phone capabilities.

This section shows you how to use the Polycom CX5000 system and Communicator to perform tasks traditionally associated with your desktop phone.

- Place calls with one-click calling from your Contact List.
- Find optional phone numbers, including mobile phone, for contacts.
- Make calls by typing a new call number in the Search box.
- Answer an incoming phone call.
- Use Call Controls to place calls on hold or transfer calls.
- Add video to a phone call.

Place a one-click phone call

Each contact in your Contact List has a number that you can call by clicking the **Call** button associated with the contact. The number is the contact's work number by default, but can change based on the number most recently used to call the contact.

🥑 Lola Jacobsen

>> In the Contact List, click the **Call** button to the right of the contact you want to call.

Call additional numbers

Communicator users can publish additional phone numbers, such as their mobile or home phone numbers. To call an additional phone number, click the arrow next to the **Call** button.

View call options for a contact

- 1. In the Contact List, click the arrow to the right of the **Call** button associated with the contact.
- From the Call options menu, click the name or number you want to call or select New Number, and then enter the number you want to call.

Type a new number to call

 In the Office Communicator window, in the Search box, enter the number you want to call.
 For international calls, enter the country code, followed by the local phone number.
 You can also use alphabetical characters for 1-800 numbers. For example,

you can type 1-800-EXAMPLE.

2. In the Search Results pane, click the **Call** button to the right of the phone number you entered. You can also press the ENTER key to place the call.



Answer a phone call

When you receive a phone call from another Communicator contact, a Call alert appears in the bottom-right corner of your computer screen. From the alert, you can accept the call, ignore the call, or redirect the call to another number.

>> Click the left pane of the Call invitation alert.

Ignore a call

>> Click the Ignore Call button in the Call invitation alert.

Redirect a call

>> Click the **Redirect call to another phone or instant message** button, and then select an option from the menu. You can redirect a call to any of the phone numbers that you have published.

If you choose to redirect a call to an instant message, the call is ignored and the **Conversation** window opens so that you can send the contact an instant message.

Using Call Controls

When you answer a phone call from a Communicator contact, the **Conversation** window opens. The **Conversation** window offers a variety of call controls that you can use to transfer a call, put a call on hold, or adjust your speaker or microphone volume.

The following table describes the call controls and their functions.

Control	Function
€×	End call.
8	Put call on hold.
🎪 Conference 🝷	Mute your line during a conference call.
	Transfer call to:
A+	another person
	 another one of your devices (such as your cell phone).
	Display the dial pad. The dial pad is used to enter input to access voice mail and to enter pass code for conferences.
	Toggle audio from a call between the USB telephony device and other speakers. This control only appears if you have a USB telephony device attached to your computer and you have configured your audio device to play call audio on a separate device from your USB telephony device.
- 4	Mute speakers. Click the Menu button to adjust the audio volume.
R	Mute microphone.
11111	Audio level indicator.
0:00:10	Time elapsed.

Place and receive video calls

If you connect the Polycom CX5000 device to your computer, you can place a video call to a contact. The contact can see your video feed even without a webcam. If the contact has a webcam connected, you can see the contact's video feed in your Conversation window.

Place a video call

You can add video to an existing instant messaging session or phone call, or you can start a video call from the Office Communicator window.

>> In the Contact List, right-click a contact and then click **Start a Video Call**. After the video call is accepted, the **Conversation** window expands to display the video.



Receive a video call

A contact is not required to have the Polycom CX5000 device or a webcam to accept a video call; in that case, the contact can view the caller's video feed, but the caller sees a video icon placeholder instead of the contact's video feed.

>> Click the left pane of the Video Call invitation alert.

When you accept a Video Call invitation, the Communicator **Conversation** window opens and shows the caller's video stream.



Appendix A: Performance Tips

Below are a few performance tips for getting the most from your Polycom CX5000 device.

Tips for improved audio performance

Review the following tips for getting the best audio quality during your phone session.

- Place the Polycom CX5000 device in the center of the meeting table. If your room is large, consider seating the most active participants nearest to the device.
- Encourage attendees to speak in their normal voice. Speaking loudly or shouting may result in uneven audio performance.
- Ask the people located at the remote site if they can hear you. Have them introduce themselves so that you are certain to hear them.
- Because there may be a slight audio delay, you may need to pause briefly for others to answer or make comments.
- Avoid rustling papers or tapping solid objects near the microphones.

Tips for improved video performance

Review the following tips for getting the best video quality for your conference.

- Place the Polycom CX5000 device in the center of the meeting table. If your room is large, consider seating the most active participants nearest to the device.
- Distribute the lighting in your conference room evenly. Daylight is a variable light source and can conflict with interior room lighting, so consider closing drapes or blinds.
- Because there is a slight delay in sending and receiving video signals, avoid rapid movements and use natural gestures.

- When adjusting your Polycom CX5000 device prior to the meeting, try to populate the screen with meeting participants rather than with the table, chairs, or walls.
- White fluorescent light is recommended.
- Avoid rooms that allow audio to echo back and degrade speaker detection.
- Persons who are presenting should talk directly towards the device. If their back is turned towards the device, the sound capture is degraded.