Trademark Information
Polycom® and the names and marks associated with Polycom’s products are trademarks and/or service marks of Polycom, Inc. and are registered and/or common law marks in the United States and various other countries. All other trademarks are property of their respective owners.

Patent Information
The accompanying product is protected by one or more U.S. and foreign patents and/or pending patent applications held by Polycom, Inc.

Customer Feedback
We are constantly working to improve the quality of our documentation, and we would appreciate your feedback. Please send email to videodocumentation@polycom.com.

© 2012 Polycom, Inc. All rights reserved.
Polycom, Inc.
6001 America Center Drive
San Jose CA 95002
USA

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Polycom, Inc. Under the law, reproducing includes translating into another language or format.

As between the parties, Polycom, Inc., retains title to and ownership of all proprietary rights with respect to the software contained within its products. The software is protected by United States copyright laws and international treaty provision. Therefore, you must treat the software like any other copyrighted material (e.g., a book or sound recording).

Every effort has been made to ensure that the information in this manual is accurate. Polycom, Inc., is not responsible for printing or clerical errors. Information in this document is subject to change without notice.
Contents

Using the Remote Control ................................................. 2
Powering the System On and Off ...................................... 3
  Power On Self Test (POST) ........................................... 3
Calling and Answering .................................................... 4
  Answering a Call ....................................................... 4
  Placing a Call .......................................................... 4
    Calling by Entering a Name or Number ......................... 4
    Calling from the Recent Calls List ............................. 5
    Calling from the Favorites Screen .............................. 6
    Calling a Speed Dial Entry ...................................... 6
    Calling from the Directory ..................................... 6
    Calling from the Calendar ...................................... 7
Ending a Call ............................................................. 7
Types of Video Calls You Can Make .................................. 8
Participating in an Encrypted Call ................................. 9
Controlling What You See ............................................... 9
  Selecting and Adjusting a Camera or Other Video Source .... 9
  Starting and Stopping Camera Tracking with EagleEye Director 12
Setting and Using Camera Presets .................................. 12
Switching Between Full-Screen Video and the Home Screen .... 13
Enabling Dual Monitor Emulation ................................... 14
Showing, Moving, and Turning Off the PIP ....................... 16
Specifying When to Display the PIP ............................... 16
Controlling What You Hear ............................................. 17
  Adjusting Volume ..................................................... 17
  Muting the Microphone .......................................... 17
  Enjoying Stereo Audio in Video Calls ......................... 18
Showing Content .......................................................... 18
  Showing Content with People+Content™ IP .................... 19
  Showing Content from a Computer Connected Directly to the HDX System ................................................. 20
    Polycom HDX 9006, Polycom HDX 8000 series, Polycom
      HDX 7000 series, and Polycom HDX 6000 series systems .... 20
Polycom HDX 9004, Polycom HDX 9002, and Polycom HDX 9001 systems ........................................ 21
Showing Content from a Document Camera, VCR, or DVD Player ........................................ 22
Showing Content with Polycom People on ContentTM ......................................................... 22
Using the Polycom UC BoardTM ...................................................................................... 23
Save and Retrieve Features ............................................................................................. 24
Controlling Recording Devices ........................................................................................ 27
Working with Directory Entries and Favorites ..................................................................... 27
Searching the Directory ..................................................................................................... 28
Adding, Editing, and Deleting Favorites .......................................................................... 28
Directory Groups ............................................................................................................... 30
Refreshing Entries from the Polycom Global Directory Server ........................................... 32
Contacts with Presence ...................................................................................................... 32
Including Multiple Sites in Calls ....................................................................................... 33
Placing a Multipoint Call .................................................................................................... 33
Passwords for Multipoint Calls .......................................................................................... 34
Multipoint Viewing Modes ................................................................................................ 35
Using Chair Control for Multipoint Calls ........................................................................... 37
Changing the Way Calls Are Answered ............................................................................. 38
Temporarily Refusing Calls ................................................................................................ 38
Answering Video Calls Automatically ............................................................................... 39
Muting Automatically Answered Video Calls .................................................................... 39
Allowing Video Display on the Web .................................................................................... 40
Logging In and Out ............................................................................................................. 40
Using a Polycom SoundStation® IP 7000 Conference Phone with a Polycom HDX System ......................................................... 41
Using Polycom Conferencing for Microsoft Outlook .......................................................... 42
Using Microsoft Office Communications Server 2007 R2 or Microsoft Lync Server 2010 Features with Video Calls .................................................................................................................. 43
Managing Contacts Using Office Communicator or Microsoft Lync .................................. 43
Viewing Microsoft Office Communications Server or Microsoft Lync Server 2010 Presence States ...................................................................................................................... 44
Multipoint Calls Using Centralized Conferencing Control Protocol (CCCP) ......................... 45
Muting in a CCCP Call ....................................................................................................... 45
Holding and Resuming CCCP Calls .................................................................................... 45
Using Avaya Network Features with Video Calls ............................................................... 46
Customizing Your Workspace ............................................................................................ 48
Allowing the Far Site to Control Your Camera .................................................................... 48
Displaying the Far Site’s Name When the Call Connects .................................................... 48
Hearing Audio Confirmation When You Dial ....................................................................... 48
Adjusting for Room Lighting .......................... 49
Polycom Solution Support .......................... 49
This guide includes overview information that you might find helpful when you’re just starting to learn about video conferencing or when you have experience, but you need a quick refresher.

Polycom® HDX® systems can be customized to show only those options used in your organization. Therefore, this guide might cover options that you cannot access on your system. To find out more about these options, please talk to the administrator of your Polycom HDX system.

This guide covers instructions for the following models:

Polycom HDX 9000 Series

Polycom HDX 8000 Series, Polycom HDX 7000 Series, and Polycom HDX 6000 Series
Using the Remote Control

You use the remote control to place calls, adjust the volume, navigate screens, and select options.
Powering the System On and Off

Caution. In order to avoid corrupting the file system, always power off a Polycom HDX system using the power button on the system or the remote control. After turning the power off in this way, wait at least 15 seconds before you unplug the system from its power source. This helps ensure that the system powers off correctly.

The Power button affects any HDX system within the range of the remote control, regardless of the Channel ID setting.

To power on the Polycom HDX system, do one of the following:
• Press the power button on the remote control.
• Press the power switch on the front of the system.

The Polycom splash screen is displayed within about 10 seconds.

To power off the Polycom HDX system, do one of the following:
• Press and hold the power button on the remote control for 2 seconds.
• Press and hold the power switch on the front of the system for 2 seconds.

After turning the power off in this way, wait at least 15 seconds before you unplug the system from its power source.

Power On Self Test (POST)

After the splash screen is displayed, the HDX system automatically performs system health checks every time the system starts. As each check begins, a message appears on Monitor 1.

If a test fails, press Hangup on the remote control to continue the startup process. However, even if the system appears to start up, Polycom recommends that you contact Technical Support before using your HDX system if any of the system tests fail.
Calling and Answering

Answering a Call

The way a Polycom HDX system handles incoming calls depends on how it is configured. It either answers the call automatically, rejects the call automatically, or prompts you to answer the call manually.

To answer the call manually:

Press Call or select Yes using the remote control.

Placing a Call

You can use your system to place a video call in any of these ways:

- Entering a name or number on the Place a Call screen.
- Choosing a site from:
  - Recent Calls list
  - Favorites screen
  - Speed Dial
  - Directory
- Calling into a scheduled meeting from the Calendar screen.

Calling by Entering a Name or Number

To place a call by entering a name or number:

1. From the Home screen select Place a Call, or start entering numbers with the remote control to go to the Place a Call screen if it is enabled on your system.

2. In the dialing field, enter the dialing information. Depending on the capabilities of your system and the system you are calling, the dialing information could look like one of these examples:
   - 10.11.12.13 (IPv4 address — include the dots)
   - 1b11:22ad:333a:444b:5cc5:66d6:e777:88f8 (IPv6 address — include the colons)
   - 2555 (E.164 extension for H.323 or SIP)
   - stereo.polycom.com (DNS name)
— 19782922854 (ISDN or phone number)
— user@domain.com (SIP)

To enter letters, press

To delete a number, press

3 Enter any additional information needed for the call. The available settings depend on the type of call and your system’s configuration. Not all calls require these settings:

— Call Quality - Specify the call rate or call type for this call. For most calls, choose Auto to let the system determine the best quality for the call. For audio-only calls, you might need to set this to Phone.

— Second ISDN number - Use two numbers only when the person you are calling instructs you to do so.

— Extension - If you need to dial an extension (E.164 address), enter the extension in the second entry field. If your system is not configured with a second entry field, you can enter the extension when the gateway prompts you. You can also specify characters in the dial string as instructed by the system administrator.

4 Press

Call

on the remote control to place the call.

Call progress indicators appear on the HDX system monitor to show that the call is in progress. When the indicators turn green, the call is connected.

For more information about using the Place a Call screen, refer to Types of Video Calls You Can Make on page 8.

Calling from the Recent Calls List

If your system administrator has allowed access to Recent Calls, you can choose a number to call from a list of the sites you have called recently. The Recent Calls screen provides details of all incoming and outgoing calls, including the time of the calls.

To place a call from the Recent Calls screen:

1 Select Recent Calls from the Home screen.

2 Scroll to the entry you want to call and press Call, or press the reference number that appears next to the entry to place the call.

You can filter the list by placed or received calls by selecting Options > Sort Options.

To see more details about a call listed on the Recent Calls screen, highlight the call and press Info on the remote control.
Calling from the Favorites Screen

You might be able to see a list of Contacts on the Favorites screen.

To place a call from the Favorites screen:

1. Select Favorites from the Home screen.
2. Highlight the contact you want to call and press Call, or press the reference number that appears next to the contact to place the call.

Calling a Speed Dial Entry

Your system administrator might have configured Speed Dial buttons on the Home screen.

To place a call to a Speed Dial entry:

1. Highlight the speed dial entry you want to call on the Home screen.
2. Press Call to place the call.

Contact your administrator for information about speed dial entries.

Calling from the Directory

The directory can include a list of sites stored locally on the Polycom HDX system. If the system is registered with a global directory, the directory includes entries from the global directory.

To place a call from the directory:

1. Press Directory on the remote control.
2. Open a specific group folder to find the entry you want to call.
3. Highlight the entry to call.
4. Press Call to place the call.

Depending on your system configuration, when you make a call using an entry with both ISDN and IP dialing information, the system might prompt you to choose which way to place the call.
Calling from the Calendar

If your HDX system is configured to connect to the Microsoft Exchange Server, and the Polycom Conferencing for Microsoft Outlook add-in is installed at your site, you can join a scheduled meeting from the Calendar screen. If the Calendar screen is blank, the system is not connected to the Microsoft Exchange Server or no meetings are scheduled.

To join a scheduled meeting from the Calendar screen:

1. Go to the Calendar screen.
   - Select Calendar on the Home screen.
   - Select System > Utilities > Calendar from the Home screen.
   - Press the Option button on the remote control and select Calendar.

2. Find a meeting scheduled with the Polycom Conferencing Add-In for Microsoft Outlook, which is indicated with 📅 on the Calendar screen.

3. Select Join Now to call into the meeting.

For more information about the Microsoft Exchange Server and the Polycom Conferencing Add-In for Microsoft Outlook, refer to Using Polycom Conferencing for Microsoft Outlook on page 42.

Ending a Call

To hang up from a call:

1. Press 📷 Hang Up on the remote control.

2. If prompted, confirm that you want to hang up.

In video calls, if you don’t confirm that you want to hang up, the system disconnects the call automatically after 60 seconds.

In audio-only calls, if the person on an analog telephone hangs up first, you need to disconnect the Polycom HDX system from the call, just as you would hang up a telephone receiver in a regular phone call.
Types of Video Calls You Can Make

Depending on your system configuration, you might be able to make calls using ISDN, H.323, SIP, or V.35/RS-449/RS-530. You can place an audio-only call from Polycom HDX systems that have Analog Phone or Voice Over ISDN enabled.

The following table lists some possible call combinations.

<table>
<thead>
<tr>
<th>From...</th>
<th>You can call...</th>
<th>By dialing...</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISDN</td>
<td>ISDN</td>
<td>Phone number</td>
</tr>
<tr>
<td>IP</td>
<td>Phone number of the far-site gateway and the extension (E.164 address) of the far site. Enter the extension after the gateway number or wait until the gateway prompts you for the extension.</td>
<td></td>
</tr>
<tr>
<td>LAN</td>
<td>Networked and Public Sites</td>
<td>SIP URI, E.164 address, DNS name, or IP address.</td>
</tr>
<tr>
<td></td>
<td>Protected and Private Sites</td>
<td>Typically, the far site's gateway number then the number of the far-site system. Consult with the far site about the best method for placing the call.</td>
</tr>
<tr>
<td>ISDN</td>
<td>Depending on the H.323 gatekeeper or SIP server, the access code of the near-site gateway, the speed code, and the ISDN number of the far site. Contact your system administrator for more information.</td>
<td></td>
</tr>
</tbody>
</table>

Points to note about special dialing scenarios:

- When you call an IP system through a gateway that requires an extension (E.164 address), enter the extension in the dialing field whenever possible. Check with your network administrator for the extension delimiter you need to enter into the dialing field. For example, some networks use ## to separate the extension from the IP address.

- When you include the extension, you are prompted to save both the number and the extension in the directory when the call ends. If you enter the extension after the gateway connects, you can save only the gateway number when the call ends.

- To place a call within your PBX system, enter the internal extension instead of the full number.

- If you need to insert a pause, add one comma in the dial string for each second you want the system to pause.
Participating in an Encrypted Call

If encryption is enabled on the system, a locked padlock icon appears on the monitor when a call is encrypted. If a call is unencrypted, an unlocked padlock appears on the monitor.

- If you are in a point-to-point call or a multipoint call hosted by another system, the padlock icon displays the state of your individual connection.
- If you are hosting a multipoint call, the padlock icon displays the combined state of all connections: encrypted if all connections in the call are encrypted, unencrypted if one or more connections in the call are not encrypted.

In one call, some connections might be encrypted while others are not. The padlock icon might not accurately indicate whether the call is encrypted if the call is cascaded or includes an audio-only endpoint. If encryption is required on your system, the far end must support encryption or the call will not be completed. To avoid security risks, Polycom recommends that all participants communicate the state of their padlock icons verbally at the beginning of a call.

Controlling What You See

Selecting and Adjusting a Camera or Other Video Source

You can use the touch control to select and adjust the main camera or other near-site or far-site video sources, such as document cameras, computers, VCRs, or DVD players. You can use the remote control to select and adjust the main camera or other near-site or far-site video sources, such as document cameras, computers, VCRs, or DVD players. You might be able to adjust other auxiliary cameras or far-site cameras that support pan, tilt, and zoom movement.

You can adjust the far-site camera only if it is configured at the far site to allow you to control it.
To select a near-site or far-site camera, or other video source:

1. If you are in a call, press Near or Far on the remote control to select either near-site or far-site control.

2. Press Camera on the remote control. Then select the camera or other video source you want to use.

To adjust a Polycom EagleEye HD, Polycom EagleEye II, Polycom EagleEye 1080, Polycom EagleEye III, or Polycom EagleEye Director using the remote control:

1. Select either a near-site or far-site video source to control. During a multipoint call being hosted by a system in the call, you can only adjust a camera at the far site that is currently speaking.

   If you are using an EagleEye Director and camera tracking is on, you must turn camera tracking off before adjusting the camera.

2. Press the arrow buttons on the remote control to move the camera up, down, left, or right.

3. Press Zoom on the remote control to zoom out or in.

To adjust a Polycom EagleEye View camera:

1. Manually swivel the camera right, left, up, or down to frame the view.
2 Turn the focus wheel to adjust the focus.

3 Select the camera, and then press Zoom on the remote control to zoom out or in.
   If you zoom in, you can pan or tilt the camera electronically by pressing the arrow buttons.

To open or close the privacy shutter on the Polycom EagleEye View camera:
   Move the slider to the right to close the privacy shutter, or to the left to open it. You can still make and receive calls when the shutter is closed, but the people at the far site cannot see you.
Starting and Stopping Camera Tracking with EagleEye Director

If EagleEye Director tracking is enabled, the camera follows the person or people who are speaking. This tracking action, also called automatic camera positioning, can be manually started or stopped.

**To start camera tracking:**

>> Press the **Option** button on the remote control and select **Start Camera Tracking**.

**To stop camera tracking:**

>> Press the **Option** button on the remote control and select **Stop Camera Tracking**.

Camera tracking can also start or stop based on the following actions:

- Camera tracking starts automatically when you make a call.
- Camera tracking stops once you hang up a call.
- Camera tracking temporarily stops when you mute the HDX system. It resumes when you unmute the HDX system.

Setting and Using Camera Presets

Camera presets are stored camera positions that you can create ahead of time or during a call. The system uses preset 0 as the default camera position.

Presets allow you to:

- Quickly point a camera at pre-defined locations in a room.
- Select a video source such as a VCR or DVD player, a document camera, or an auxiliary camera.

If your system’s camera supports pan, tilt, and zoom movement, you can create up to 100 preset camera positions (0-99) for the near site. Each preset stores the camera number, its zoom level, and the direction it points. These presets remain in effect until you delete or change them.

If far-site camera control is allowed, you can create up to 16 presets (0-15) for the far-site camera. These presets are saved only for the duration of the call. You might also be able to use presets that were created at the far site to control the far-site camera.
To move the camera to a stored preset:

1. If a call is connected, press Near or Far on the remote control, and then choose a near-site or far-site camera.
2. Press a number on the remote control. Depending on how your system is configured, you might need to press Preset before you press a number.

To view your near-site presets:

>> Press Preset on the remote control.

Icons for presets 0-9 are shown on the screen. The colored icons indicate stored camera positions, and the gray icons indicate unassigned presets.

To store a preset:

1. If you are in a call, press Near or Far on the remote control, and then choose a near-site or far-site camera or other video source.
2. With the camera in the desired position, press and hold a number to store the preset position. To store a double-digit preset, press the first digit quickly and hold the second number down. Any existing preset stored at the number you enter is replaced. Depending on how your system is configured, you might need to press Preset before you press a number.

To delete all presets:

1. If you are in a call, press Near, and then choose a near-site video source.
2. Press Preset on the remote control.
3. Press and hold Delete to delete all presets.

You cannot delete just one preset. Instead, overwrite an existing preset with the new camera position.

Switching Between Full-Screen Video and the Home Screen

When the call connects, the system automatically shows video on the whole screen. You can switch back to the home screen during a call if, for example, you need to adjust a user setting, and your system is configured to allow you to do so.

To see the Home screen:

>> Press Home on the remote control.
To see near video in the full screen:
>>> Press ✋ Near on the remote control.

To see far video in the full screen:
>>> Press ✋ Far on the remote control.

## Enabling Dual Monitor Emulation

If your system administrator has allowed access to user settings, you might be able to set your system for Dual Monitor Emulation (also called split-screen viewing). With Dual Monitor Emulation, you can display multiple windows on one monitor.

**To enable Dual Monitor Emulation:**

1. Select System from the Home screen.
2. Select User Settings from the System screen.
3. Select ✋ Next to see more settings.
4. Scroll to Dual Monitor Emulation and press ✋ on the remote control to enable the option.
5. Press ✋ Home to save your change and return to the Home screen.

During calls using Dual Monitor Emulation without content, you can press the Display button on the remote control to scroll through the following screen layouts:

1. Near and far sites, same size, side by side

   ![Near and far sites, same size, side by side](image1.png)

2. Far site big, near site small

   ![Far site big, near site small](image2.png)
The last layout viewed is used for the next call.

During calls using Dual Monitor Emulation with content, you can press the Display button on the remote control to scroll through the following screen layouts:

1. Content big, far and near sites small
2. Content big, far site small
3. Content and far site same size
4. Content full screen

3. Near site big, far site small

4. Near site full screen

5. Far site full screen
Showing, Moving, and Turning Off the PIP

Your system might be configured to display a Picture-in-Picture (PIP) window. During a call on a single-monitor system, the PIP displays what your main camera is sending to the far site. If the far site shows any type of content, the content appears in the main part of the screen, and the PIP changes to show the people at the far site.

During a call on a dual-monitor system, what you see on each monitor and in the PIP depends on how the Polycom HDX system has been configured.

To show, move, or turn off the PIP during a call:

• Press Display on the remote control to display the PIP on screen.
• While the PIP has a yellow border, press Display repeatedly to move it to different corners of the screen.
• After a brief pause, the PIP border turns blue. Then, press Display to turn the PIP off.

To swap the views shown in the PIP and the main screen:

1. If the PIP is not showing, press Display on the remote control to display the PIP on screen.
2. Press Camera and select the Swap PIP icon.

Specifying When to Display the PIP

Your system might be configured with specific default behavior for the PIP in calls. If your system administrator has allowed access to user settings, you can show, move, or hide the PIP as needed after a call connects.

To specify when to display the PIP:

1. Select System from the Home screen.
2. Select User Settings from the System screen.
3. Select Next to see more settings.
4 Scroll to PIP, press \( \text{\textbullet} \), and select one of these settings:

<table>
<thead>
<tr>
<th>Select this setting...</th>
<th>To show the PIP...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera</td>
<td>When you press any of the camera control buttons.</td>
</tr>
<tr>
<td>On</td>
<td>On connection and during the call.</td>
</tr>
<tr>
<td>Off</td>
<td>Only when you press ( \text{\textbullet} ) Display on the remote control.</td>
</tr>
</tbody>
</table>

5 Press \( \text{\textbullet} \) Home to save your change and return to the Home screen.

**Controlling What You Hear**

**Adjusting Volume**

You can raise or lower the volume of the meeting. Changing the volume affects only the sound you hear at your site.

*To adjust the volume:*

- Press \( \text{Volume} \) on the remote control.

- Press and hold \( \text{Volume} \) on the remote control to quickly increase or decrease the near-site volume.

**Muting the Microphone**

You can mute the microphone if you do not want the far site to hear conversations at your site.

*To mute or unmute the microphone:*

>> Press \( \text{Mute} \) on the remote control.

If a Polycom tabletop microphone array is connected to your system, you can also mute the call by pressing \( \text{\textbullet} \) on the microphone.

The indicators on the microphone are red when your audio is muted. The near-site mute icon also appears on the display.
Enjoying Stereo Audio in Video Calls

If your video conferencing room is configured to use stereo sound, the left and right microphone inputs are configured during system setup. It is important that you do not move the microphones as this might detract from the stereo audio experience.

Stereo audio is only available in video calls of 256 kbps or higher.

Showing Content

Depending on how your system is configured, you might be able to show content that is stored on a computer. When you show content, the far site can see you and what you see on the computer screen.

You might be able to show the following to the far sites:

• Any information stored on a computer
• Real-time annotations made using the Polycom UC Board™
• A paper document or object placed on a document camera
• A videotape or DVD

You can show one content source and one people video source at a time, and you can switch to a different type of content or people video source if you need to. Participants at other sites can also show content or people video sources. Content shown is from one site at a time; another site sharing content overrides any content being shared.
When you are showing content, the content icon appears on your main monitor. Whether you also see the content on your monitor or projector depends on how your system was configured.

**Showing Content with People+Content™ IP**

People+Content™ IP allows you to send content from a computer that is not connected directly to the Polycom HDX system.

### Points to note about People+Content IP:
- People+Content IP provides video-only content. No audio is shared.
- People+Content IP supports any computer desktop resolution with color set to 16-bit or higher.
- Your computer resolution can be set to anything, but People+Content IP scales the image to 1024x768 or 1280x720.
- The People+Content IP application must be installed on a computer.

#### To install People+Content IP on a computer:
1. On a computer with a Microsoft® Windows XP, Windows Vista, or Windows 7 operating system, open a web browser and go to www.polycom.com/ppcip.
2. Download and install the People+Content IP software.

#### To start showing content:
1. On the computer, start the Polycom People+Content IP application.
2. Enter the IP address or host name of the Polycom HDX system and the meeting password, if one is set.
3. On the computer, click **Connect**.
4. Open the content you want to show, and click in People+Content IP.

If you are using multiple screens on your computer, move the People+Content IP icon to the screen you want to share.

#### To stop showing content:
1. If the People+Content IP toolbar is minimized, maximize it by clicking the icon in the task bar.
2. Click in People+Content IP or press **Camera** and deselect the computer input.
3. Click **Disconnect**.
Showing Content from a Computer Connected Directly to the HDX System

Before you show content, check that the computer video output is configured to use one of these supported resolutions and refresh rates.

**Polycom HDX 9006, Polycom HDX 8000 series, Polycom HDX 7000 series, and Polycom HDX 6000 series systems**

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Refresh rates (Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>640 x 480</td>
<td>60, 72, 75, 85</td>
</tr>
<tr>
<td>800 x 600</td>
<td>60, 72, 75</td>
</tr>
<tr>
<td>1024 x 768</td>
<td>60, 70, 75</td>
</tr>
<tr>
<td>1280 x 720</td>
<td>50, 60</td>
</tr>
<tr>
<td>1280 x 960</td>
<td>60</td>
</tr>
<tr>
<td>1280 x 1024</td>
<td>60, 75</td>
</tr>
<tr>
<td>1680 x 1050</td>
<td>60</td>
</tr>
<tr>
<td>1920 x 1080</td>
<td>60</td>
</tr>
</tbody>
</table>
Polycom HDX 9004, Polycom HDX 9002, and Polycom HDX 9001 systems

To start showing content:

1. To show people and content at the same time, the HDX system input must be configured for content. Make sure the computer is powered on and connected to the Polycom HDX system.
   - Polycom HDX 9004: You can connect a computer to video input 4 or 5. When you connect to video input 4, you can also connect to audio input 4 to share sound from your computer.
   - Polycom HDX 9002, Polycom HDX 9001: You can connect a computer to video input 4.
   - Polycom HDX 9006 or Polycom HDX 8000 series: You can connect a computer to video input 4. You can also connect to audio input 4 to share sound from your computer.
   - Polycom HDX 7000 series: You can connect a computer to video input 3. You can also connect to audio input 3 to share sound from your computer.
   - Polycom HDX 6000 series: You can connect a computer to video input 2. You can also connect to the audio input to share sound from your computer.

2. Press [Content] on the remote control or press [Camera] and select the computer input.
   - Audio from the content input sources in step 1 is muted unless the content input is selected as a video source.

To stop showing content:

>> Press [Content] on the remote control or press [Camera] and deselect the computer input.

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Refresh rates (Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>640 x 480</td>
<td>60, 72, 75</td>
</tr>
<tr>
<td>800 x 600</td>
<td>60, 72, 75</td>
</tr>
<tr>
<td>1024 x 768</td>
<td>60, 70, 75</td>
</tr>
<tr>
<td>1280 x 720</td>
<td>50, 60</td>
</tr>
<tr>
<td>1280 x 1024</td>
<td>60</td>
</tr>
</tbody>
</table>

The way you set the resolution and refresh rate differs, depending on the type of operating system you have. Check your computer's manual or help topics for the appropriate steps.
Showing Content from a Document Camera, VCR, or DVD Player

Depending on how your system is configured, you might be able to show different types of information to other sites in a call, such as through a document camera, VCR, or DVD player.

**Before the call begins:**
- Make sure the document camera, VCR, or DVD player is connected and powered on. Refer to the setup sheet that came with your system.
- Position your document or object on the document camera or insert the videotape or DVD.

**To start showing a document, object, videotape, or DVD in a call:**
1. Press Camera on the remote control.
2. Select a content source.
3. Press on the remote control.

**To stop showing a document, object, videotape, or DVD in a call:**
1. Press Camera on the remote control.
2. Select the main camera.
3. Press on the remote control.

Showing Content with Polycom People on Content™

The Polycom People on Content™ feature allows you to show yourself on top of content that you are sharing. The effect is similar to a weather newscast on television. This feature is sent as a people source, therefore you cannot send a content source when using People on Content.
For more information on how to set up a room to maximize the People on Content feature, see the *Administrator’s Guide for Polycom HDX Systems*. You can also contact your administrator for information about enabling or configuring People on Content.

Follow these guidelines when you are presenting content with People on Content:

- Wear solid neutral-colored clothes.
- Avoid wearing black, white, or the color of your background.
- Make sure that the room is well lit.
- Stand about 3 feet in front of the background to avoid casting shadows on it.

**To show content with People on Content:**

1. Make sure that the content you want to show is ready.
2. Press Option on the remote control.
3. Select People on Content.

The icons for the foreground and background video sources move up slightly on the screen. The camera moves to the preset location. Content is displayed in place of the background.

The foreground and background video sources are configured by the administrator. You can adjust the camera or choose a different foreground video source after you start showing content with People on Content.

**To stop showing content with People on Content:**

1. Press Option on the remote control.
2. Select People on Content.

**Using the Polycom UC Board™**

By using the Polycom UC Board stylus and receiver with a USB hub and either a standard whiteboard and projector or dual-monitor setup, you can show and annotate content in real time from selected Polycom HDX systems. Integration with HDX system software means that you do not need to start an external application to use the UC Board.

For information about setting up and getting started with the UC Board, refer to the *Quick Start Guide for the Polycom® UC Board™* and the *Administrator’s Guide for Polycom HDX Systems* at support.polycom.com.

**To use the UC Board with your Polycom HDX system:**

1. Ensure that the monitors or projector is powered on.
2. Tap the stylus on the content monitor (second monitor) or whiteboard, or begin drawing with the stylus.
The following HDX systems, running software version 3.0.3 or later, support the UC Board:

- Polycom HDX 7000 HD system with Hardware Version C or D
- Polycom HDX 8000 HD system with Hardware Version B
- Polycom HDX 9006

**Save and Retrieve Features**

UC Board includes the following save and retrieve features:

- Save and retrieve up to 200 images as JPEG files on a USB storage device
- Import and annotate existing JPEG images, such as PowerPoint slides, then save changes to a USB storage device
- View saved slides and pages of thumbnail slides
- Delete slides from the USB storage device

**Importing Slides or Graphics to a USB Storage Device for Use with UC Board**

*To import graphic files or Microsoft PowerPoint slides to a USB storage device:*

1. Insert a USB storage device into a USB drive on your Macintosh or Windows computer.

2. On the USB storage device, create a new directory named *My Whiteboard*. This directory name is a requirement.

3. To save PowerPoint slides, complete the following steps. For other file types, skip to the next step.
   a. Open the PowerPoint application, then open the desired presentation file.
   b. Save the presentation to the directory you created in step 2 as JPEG File Interchange Format.

   When asked, **Do you want to export every slide in the presentation or only the current slide?**, select *Every Slide* and click OK.

   You can save .jpg files up to 512 kb or 15840 x 8640. Larger files are not saved.

4. To export graphic files, save them as .jpg format and then save the files to your USB storage device.

5. Insert the USB storage device into the HDX system’s USB port.
You can extend the reach of the USB connector on the HDX system by installing an active USB extension cable.

**Viewing and Deleting Content on the UC Board**

To view slides saved on a USB storage device:

> With a slide open on the UC Board, do one of the following:

— Hold the stylus close to the UC Board and tap the **Next Arrow** or **Previous Arrow** on the screen to navigate the slides.

— Hold the stylus close to the UC Board and click the large button shown in the following figure to go to the next slide or click the small button to go to the previous slide.

![Next Slide and Previous Slide](image)

To view thumbnails of slides saved on a USB storage device:

1. On the UC Board screen, tap the **Thumbnail** icon with your stylus.

2. Thumbnail pages are loaded onto the UC Board screen. When your presentation contains more than 20 slides, a number at the top of the UC Board screen displays your current page. You can load up to 10 pages of thumbnails with 20 slides on each page.

3. To navigate through the slides in thumbnail view, do one of the following:

— On the UC Board screen, use your stylus to tap the **Next Arrow** to view the next 20 slides or the **Previous Arrow** to view the previous 20 slides.

— Hold the stylus close to the UC Board and click the large button for the next set of 20 slides or the small button for the previous set of 20 slides.
To delete slides from a USB storage device:

1. On the UC Board screen, tap the Trash Can icon with your stylus.
   All slides on the page display X icons.

2. On the slide you want to delete, tap the X icon with your stylus.

Saving Content on the UC Board

To save changes to content on the UC Board:

>> As shown in the following figure, tap the Save icon with your UC Board stylus.
   You hear a beep tone indicating content is saved to the USB storage device.
**Controlling Recording Devices**

Depending on how your system is configured, you might be able to use the Polycom HDX remote control to control devices such as VCRs or DVD players that are in the room with the system. You might also be able to control a Polycom RSS 4000 server or Polycom RMX® system. The remote control buttons control these systems by sending audible DTMF tones across the call. The Polycom RMX must be configured to use the default DTMF codes assigned to the recording process. Contact your system administrator for more information.

**Working with Directory Entries and Favorites**

The directory on your Polycom HDX system stores dialing information that helps you make calls quickly and easily. When a site listed in the directory calls your system, the system displays the name on the screen when the call comes in. If a site that calls you is not listed in the directory, you might be prompted to save the contact information in the directory when the call ends.

If your system is registered with a global directory server, you can see information about other active sites that are registered with the same Global Directory Server. These entries are stored on the Global Directory Server, and you cannot edit them. You can, however, add a global entry to your Favorites.

Sites that you have added are stored on your Polycom HDX system as Favorites. You can remove or edit Favorites. You can also assign Favorites to groups to more easily find them. Everyone at your site who uses the system can use the entries you create, and you can use the entries created by others. Users at other sites cannot access the Favorites on your system.

Polycom HDX systems support up to 1,000 Favorites. They can also support one of the following:

- Up to 200 additional Favorites with presence when registered with Microsoft Office Communications Server or Microsoft Lync Server 2010.
- Up to 200 additional Favorites with presence when registered with a Polycom Converged Management Application™ (CMA®) system.
- Up to 4,000 contacts from up to 5 servers, which appear in the Global Directory group, when registered with to Polycom GDS server.
- Up to 20,000 contacts when the HDX system is registered with Microsoft Office Communications Server 2007 or Microsoft Lync Server 2010.

For information about using a Microsoft Office Communications Server or Microsoft® Lync™ Server 2010 directory or managing Microsoft Office Communications Server or Microsoft Lync contacts, refer to Using Microsoft Office Communications Server 2007 R2 or Microsoft Lync Server 2010 Features with Video Calls on page 43.
Searching the Directory

1. Press Directory on the remote control.
2. Open a specific group folder if you want to narrow your search results.
3. Enter a name in the search field by:
   - Spelling the name using the number buttons on the remote control
   - Spelling the name using the onscreen keyboard or by pressing Keyboard on the remote control
   Scroll through the list of names using the Up and Down arrow buttons or Zoom on the remote control.
4. If the search does not start as soon as you enter a character in the search field, select the Search button.

Adding, Editing, and Deleting Favorites

You can create Contacts and groups and save them in the Polycom HDX system directory. Any changes appear in Favorites.

To add a Contact to Favorites:

1. Press Directory on the remote control and open the Favorites group, or go to the Favorites screen.
2. If you have groups within Favorites, make sure that you have opened the group where you want the new Contact to appear. To open a group, select it. The name of the group that is open appears at the top of the screen—for example, Directory - Favorites.
3. Select Options > Add a Contact.
4. Select Create Contact.
5. Specify the following information:

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name that appears in the directory list and on incoming call messages.</td>
</tr>
<tr>
<td>Group</td>
<td>The group where the new Contact appears.</td>
</tr>
<tr>
<td>Call Type</td>
<td>Call type to use for calls to the site. Depends on the capabilities of your system. For more information about call types, refer to Types of Video Calls You Can Make on page 8.</td>
</tr>
<tr>
<td>Call Speed</td>
<td>Call speed to use for video calls to this site.</td>
</tr>
</tbody>
</table>
6 Select **Update** to add each combination of call type and number that you want to store for the site. To remove the last call type added, select **Clear**.

7 Select **Save** to save the entry.

**To edit an entry:**

You can edit any contact that was created locally.

1. Press **Directory** on the remote control and open the Favorites group, or go to the Favorites screen.
2. Open the Favorites group that contains the contact you want to edit. To open a group, select it. The name of the group that is open appears at the top of the screen.
3. Highlight the contact you want to edit.
4. Select **Options > Edit Contact**. You cannot edit a global entry.
5. Edit the information as needed.
6. Select **Save** to save your changes.

**To delete an entry:**

You can delete any contact that was created locally.

1. Press **Directory** on the remote control and open the Favorites group, or go to the Favorites screen.
2. Open the Favorites group that contains the contact you want to delete. To open a group, select it. The name of the group that is open appears at the top of the screen.
3. Highlight the contact you want to delete.
4. Press **Delete** on the remote control or select **Options > Delete Contact**. If **Delete Contact** is not available, you highlighted a global directory entry, which cannot be deleted.

**Points to note about deleting contacts:**

- If the contact is a member of more than one group, deleting it removes it from the group you are viewing. If the contact was created locally and is not a member of any other group, deleting it completely removes it from your system.
- You cannot delete a contact that was found as a result of a directory search.
- You cannot delete default Contacts that come from the global directory server, except contacts stored with the Polycom CMA presence service.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Number to use for calling the site.</td>
</tr>
<tr>
<td>Extension</td>
<td>The system’s extension (E.164 address).</td>
</tr>
</tbody>
</table>
**To add existing contacts to Favorites from the Favorites screen:**

You can add existing global or new entries to your Favorites.

1. Go to the Favorites screen.
2. Open the Favorites group to which you want to add contacts.
3. Select **Options > Add a Contact** to add contacts to the group.
4. Select **Add from Directory**.
5. Find the contact that you want to add and select it.

**To add existing contacts to Favorites from the directory:**

You can add existing global or local entries to your Favorites.

1. Press **Directory** on the remote control.
2. Open the Favorites group to which you want to add contacts.
3. Select **Options > Add a Contact** to add contacts to the new group.

**To add a contact to Favorites from the Recent Calls screen:**

1. Go to the Recent Calls screen.
2. Highlight the entry.
3. Choose **Options > Add to Favorites**.

**Directory Groups**

Grouping contacts can make them easier to find. Polycom HDX systems support global groups and Favorites groups. Global directory entries are assigned to a global group by your system administrator. You cannot edit or delete global directory groups.

The Favorites group can have one level of subgroups inside of it. Any group that you create on the Favorites screen or Directory screen is automatically added as a subgroup under Favorites.

You can put the same contact in more than one group, and you can delete it from one group at a time. To move a contact from one group to another, you must delete it from the first group and add it to the second group.
Polycom HDX systems support up to 200 Favorites groups. If the system is connected to a global directory server, it can also support one of the following:

- Up to 64 additional groups from the Microsoft Office Communications Server or Microsoft Lync Server 2010 directory, which appear in the Favorites group.
- Up to 200 additional distribution groups from a Polycom CMA system, which appear in the Global Directory group.

**Points to note about groups:**

- You cannot rename a group. To change the name of a group, delete and recreate it.
- When you place a call to a group, the system uses the call speed specified on the Preferred Speeds screen as the preferred call speed for placing calls.
- The Sample Sites group includes Loopback entries and various Polycom regional sites that you can use to place test calls. You can remove Sample Sites from the Directory by highlighting the group or individual entries and pressing \[←\] on the remote.

**To create a group in Favorites:**

1. Press \[Directory\] on the remote control and open the Favorites group, or go to the Favorites screen.
2. Select Options > New Group.
3. Enter a name for the group.

**To delete a group from Favorites:**

1. From the Favorites or Directory screen, highlight the group name.
2. Press \[←\] on the remote control or select Options > Delete Group.

When you delete a group, all entries in that group are deleted. If you want to keep these entries, be sure to assign them to a new group before you delete the old group.
To view or call a group:
From the Favorites screen or Directory screen, highlight the group name, then do one of the following:

• To view the contacts inside the group, press the center Select button on the remote control.

• To place a call to the group, press the Call button on the remote control. Depending on how your system is configured, it attempts to call the group using a pre-defined list of call types. Contact your system administrator for more information.

You cannot call a group that contains another group, and you cannot call a group that exceeds your system’s multipoint calling capability.

Refreshing Entries from the Polycom Global Directory Server
The global directory entries are periodically refreshed on systems registered to the Polycom Global Directory Server. You can also manually refresh the global directory entries on your system.

To manually refresh Polycom GDS entries:
1 Press Directory on the remote control.
2 Select Group > Polycom GDS.
3 Select Options > Refresh.

Contacts with Presence
If your system is automatically provisioned and registered to a global directory server, your Favorites might include default LDAP group members and up to 200 global Contacts stored by the presence service.

If the system is registered with a global directory, you could see the following icons next to Contacts on the Favorites screen.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Presence</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>📍</td>
<td>Available</td>
<td>The system is set to Available and is registered with a presence service.</td>
</tr>
</tbody>
</table>
| 🚫   | Do Not Disturb     | • The system is set to Do Not Disturb and is registered with a presence service. or  
|      |                    | • The system is set to Available but is in a call and is not available to receive another call. |
You can view Contact details in the system’s local interface. Highlight the Contact and press . A dialog appears with the display name, address, call speed, and group.

### Including Multiple Sites in Calls

During a multipoint call, multiple sites can see and hear each other. You can also share content in a multipoint call, just as you can in a point-to-point call.

All systems can participate in multipoint calls. To host multipoint calls, your system must have optional software installed. You can host multipoint calls using a video conferencing system with multipoint capabilities, or you can use a bridge such as the Polycom RMX 1000, Polycom RMX 2000, or Polycom MGC™.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Presence</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>📞</td>
<td>In a Call</td>
<td>The system is set to Available and is registered with a presence service. It is in a call but is available to receive another call.</td>
</tr>
<tr>
<td>📞</td>
<td>Unknown Presence</td>
<td>The presence state is unknown. The Contact was created locally or is not registered with a presence service.</td>
</tr>
<tr>
<td>🕒</td>
<td>Idle</td>
<td>The system is a desktop client that is available but is currently idle.</td>
</tr>
<tr>
<td>🚫</td>
<td>Offline</td>
<td>The system is powered off or is offline.</td>
</tr>
</tbody>
</table>

If your multipoint calls disconnect after 5 minutes, your system might be set up for the multipoint trial. To do untimed multipoint conferences, a multipoint key must be installed. Contact your administrator for assistance.

### Placing a Multipoint Call

How you place a multipoint call depends on whether you’re using a Polycom HDX system with multipoint capabilities or a bridge such as the Polycom MGC or Polycom RMX conference platform. The number of sites allowed in the call is determined by the capabilities of the system or bridge hosting the call. The call can include any combination of IP H.323, SIP, ISDN, V.35/Serial, and audio-only endpoints, although some ISDN systems might not be configured to allow mixed IP and ISDN calls. For more information about call types, refer to Types of Video Calls You Can Make on page 8.
For calls hosted by a Polycom HDX system, you can define a group in the directory to call all of the sites at one time. Alternatively, you can place a call to the first site, and then add other sites after the first call connects. The other sites can call the Polycom HDX system to join the call.

For calls hosted by a bridge, you might need to enter calling information about all of the sites before the call begins. Contact your system administrator for more information.

To place a multipoint call by adding sites to a call:
1. Call the first site.
2. When the call connects, press Call on the remote control.
3. Place a call to the next site. For more information, refer to Placing a Call on page 4.
4. Repeat steps 2 and 3 until all sites are connected.

To place a multipoint call using a directory group:
1. Press Directory on the remote control.
2. Highlight a group folder in the directory list.
3. Press Call to place the call.

Depending on how your system is configured, it attempts to call the group using a pre-defined list of call types. Contact your system administrator for more information.

To place a cascaded multipoint call:
1. Call a group from the directory, or place calls one at a time to several other sites. For more information, refer to Placing a Call on page 4.
2. Ask each site to call additional sites.

Passwords for Multipoint Calls

You might be required to enter a meeting password to join a multipoint call. And you can require that far sites enter a meeting password, to prevent unauthorized participants from joining multipoint calls hosted by your HDX system.

- If you need to generate touch tones (DTMF tones), press # on the remote control, or press and choose Touch Tones. Then use the remote control number buttons.
- SIP calls do not support meeting passwords. SIP endpoints calling into a multipoint call protected by a password might not be able to join the call.
To enter a meeting password:
• If a prompt appears on the screen, use the remote control or onscreen keyboard to enter the password.
• If you hear an audio prompt, use the remote control to generate DTMF tones.

to configure a meeting password:
1 Select System from the Home screen.
2 Select User Settings from the System screen.
3 Enter the password in the Meeting Password field in one of these ways:
   – Press the remote control number buttons, using the text-entry method commonly used with cell phones.
   – Press Keyboard to use the onscreen keyboard to enter characters.
4 Press Home to save your change and return to the Home screen.

Multipoint Viewing Modes

What you see during a multipoint call can vary depending on how the Polycom HDX system is configured, the number of sites participating, the number of monitors you are using, and whether content is shared. The multipoint viewing mode configured on the host system is the one used in the call. To find out more about these modes, please talk to the administrator of your Polycom HDX system. The following table describes the different multipoint viewing modes when an HDX system is hosting the multipoint call.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video images from multiple sites can be automatically combined on one monitor in a display known as continuous presence.</td>
<td></td>
</tr>
<tr>
<td>Auto</td>
<td>The view switches between continuous presence and full screen, depending on the interaction between the sites. If multiple sites are talking at the same time, continuous presence is used. If one site speaks uninterrupted for at least 15 seconds, that site appears in full screen on the monitor.</td>
</tr>
<tr>
<td>Setting</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Discussion</td>
<td>Multiple sites are displayed in continuous presence. The current speaker’s image is highlighted.</td>
</tr>
<tr>
<td>Systems with:</td>
<td><strong>See this:</strong></td>
</tr>
<tr>
<td>Single monitor</td>
<td>Multiple sites, each in its own window</td>
</tr>
<tr>
<td>Dual monitors</td>
<td>Speaker on second monitor with other sites on first monitor; on the hosting system, one far site on each monitor</td>
</tr>
<tr>
<td>Presentation</td>
<td>The speaker sees continuous presence while the other sites see the speaker in full screen on the monitor.</td>
</tr>
<tr>
<td>Systems with:</td>
<td><strong>See this:</strong></td>
</tr>
<tr>
<td>Single monitor</td>
<td>Speaker in full screen</td>
</tr>
<tr>
<td>Dual monitors</td>
<td>Speaker on the first monitor and near site on the second monitor</td>
</tr>
<tr>
<td>Full Screen</td>
<td>The site that is speaking is shown in full screen to all other sites. The current speaker sees the previous speaker.</td>
</tr>
</tbody>
</table>
Using Chair Control for Multipoint Calls

During some multipoint calls, you can use chair control to manage the video. In this type of call, the chair controller can choose the site whose video is sent to other sites in the conference. The chair controller can also disconnect a site or end the conference. Any participant can choose to view a specific site, request to be the broadcaster, or request to be chair controller.

Only one site at a time can be the chair controller. Before a site can become the controller, the site with control must give up control.

The type of host for the multipoint call and the systems in the call determine whether chair control is available.

<table>
<thead>
<tr>
<th>Hosted by...</th>
<th>Allows chair control if...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Conferencing</td>
<td>The call includes:</td>
</tr>
<tr>
<td>System</td>
<td>• Polycom HDX systems, ViewStation® EX, ViewStation FX, VSX®, and VS4000™ systems connected by IP H.323, ISDN H.320, or both</td>
</tr>
<tr>
<td>Bridge</td>
<td>• Other systems connected by ISDN H.320 only</td>
</tr>
</tbody>
</table>

To use the chair control options when you are in a multipoint call:

1. In the browser address line, enter the HDX system’s IP address to access its web interface.

To use the HDX web interface, you must use Internet Explorer version 6.x, 7.x, or 8.x and configure your browser to allow cookies. Enter the IP address of the HDX system using the http://IPaddress (for example, http://10.11.12.13) or https://IPaddress format. If you operate within a secure environment with the Maximum Security Profile or Security Mode enabled, you must use the https://IPaddress format.

Using the HTTPS protocol ensures that the configuration of all login information (such as user names and passwords) are transmitted using an encrypted channel, including those user names and passwords used to communicate with third-party systems on your network. Using the HTTPS protocol severely limits the ability of anyone on the network to discover these credentials.

2. Click **Place a Call**.

3. Click **Chair Control** to go to the Chair Control screen.

The Chair Control option is only available when the system is in a multipoint call. It is not available in cascaded multipoint calls.
Select a site from the list, and then use the controls in the web interface to perform one of these actions:

<table>
<thead>
<tr>
<th>If you are...</th>
<th>You can do this...</th>
<th>By selecting...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair controller</td>
<td>Pass chair control to the selected sites.</td>
<td>Release Chair</td>
</tr>
<tr>
<td></td>
<td>View the selected site’s video. This remains in effect until you choose <strong>Stop Viewing Site</strong> or you release chair control.</td>
<td>View Site</td>
</tr>
<tr>
<td></td>
<td>Return to viewing the video selected by the chair or by the host.</td>
<td>Stop Viewing Site</td>
</tr>
<tr>
<td></td>
<td>Send your site’s video to the other sites.</td>
<td>Make Me the Broadcaster</td>
</tr>
<tr>
<td></td>
<td>Send the selected site’s video to the other sites.</td>
<td>Select Broadcaster</td>
</tr>
<tr>
<td></td>
<td>Remove the selected site from the conference.</td>
<td>Disconnect Site</td>
</tr>
<tr>
<td></td>
<td>Disconnect all sites and end the call.</td>
<td>End Conference</td>
</tr>
<tr>
<td>Participant</td>
<td>Request control of the conference.</td>
<td>Acquire Chair</td>
</tr>
<tr>
<td></td>
<td>View the selected site’s video. This does not change what other sites see.</td>
<td>View Site</td>
</tr>
<tr>
<td></td>
<td>Return to viewing the video selected by the chair or the host.</td>
<td>Stop Viewing Site</td>
</tr>
</tbody>
</table>

---

**Changing the Way Calls Are Answered**

**Temporarily Refusing Calls**

If your system administrator has allowed access to the Availability Control, you can automatically refuse incoming calls if you do not wish to be disturbed. Callers get a message that the call was rejected, and you receive no notification about incoming calls. You can, however, make outgoing calls.

**To temporarily refuse incoming calls:**

> On the Home screen, set the Availability Control to **Do Not Disturb**.
Answering Video Calls Automatically

If your system administrator has allowed access to user settings, you can specify whether to answer video calls automatically or to have the system announce incoming video calls and wait for you to answer manually.

> Automatically answering calls is convenient, but it can create security issues. An unexpected caller could interrupt a meeting in progress or look at equipment and notes left in an empty room.

**To automatically answer video calls:**
1. Select **System** from the Home screen.
2. Select **User Settings** from the System screen.
3. If you want to automatically answer incoming point-to-point video calls, set **Auto Answer Point-to-Point Video** to **Yes**.
4. If you want to automatically answer incoming multipoint video calls, set **Auto Answer Multipoint Video** to **Yes**.
5. Press **Home** to save your change and return to the Home screen.

Muting Automatically Answered Video Calls

If your system administrator has allowed access to user settings, you can choose whether to mute the audio when automatically answered video calls connect. This prevents callers from overhearing conversations or meetings. After the call connects, you can press **Mute** on the remote control when you're ready to unmute the microphones.

> If you enable automatic muting during a call, the audio for the current meeting is not affected.

**To mute automatically answered video calls:**
1. Select **System** from the Home screen.
2. Select **User Settings** from the System screen.
3. Scroll to **Mute Auto Answer Calls** and press **Mute** on the remote control to enable the option.
4. Press **Home** to save your change and return to the Home screen.
Allowing Video Display on the Web

If your system administrator has allowed access to user settings, you can choose whether to allow viewing of the room where the system is located or video of calls in which the system participates. You would use the Polycom HDX web interface’s Web Director to view the room or video.

The default setting is to not allow video display. Be sure to verify whether your system administrator wants the setting to be changed. If you enable this setting, you might open your company’s computer system to hackers.

To allow the display of video on the web:

1. Select System from the Home screen.
2. Select User Settings from the System screen.
3. Scroll to Allow Video Display on Web and press  on the remote control to enable the option.
4. Press  Home to save your change and return to the Home screen.

Logging In and Out

Depending on how your system is configured, you might have to log in when the system comes out of sleep mode.

To log in:

1. When the Login screen appears, press  Keyboard or use the number buttons on the remote control to enter the User ID.
2. Enter the account password. To enter numbers, use the number buttons on the remote control. To enter letters, press  Keyboard on the remote control.
3. Select to log in.

Depending on how your system is configured, you might get locked out after a certain number of failed login attempts. Contact your system administrator for more information.

To log out:

1. Press  Option on the remote control and select Logout to log out manually.

The system automatically logs out the current account when the system goes to sleep.
Using a Polycom SoundStation® IP 7000 Conference Phone with a Polycom HDX System

When you connect a Polycom SoundStation® IP 7000 conference phone to a Polycom HDX system, the conference phone becomes another interface to dial audio or video calls. The conference phone operates as a microphone, and as a speaker in audio-only calls.

For more information, refer to the SoundStation IP 7000 documentation available on the Polycom web site.

To answer a call using a connected SoundStation IP 7000 conference phone:

Press the Answer soft key on the conference phone.

To place a point-to-point call using a connected SoundStation IP 7000 conference phone:

1. Press on the conference phone and press the Video or Phone soft key.

2. On the conference phone keypad, enter one of these:
   - The IP address (for example, 10*11*12*13) of the site you want to call
   - The phone number (for example, 19784444321) of the site you want to call

To enter letters, press the ABC soft key. To enter an asterisk, press the Video button and then press the button on the SoundStation IP 7000 keypad two times. To enter a dot or @ symbol, press the ABC soft key then key multiple times.

You can also place calls using the conference phone’s directory or the redial key.

The indicators on the conference phone are green when the system is in a call and audio is not muted.

To place a multipoint call using a connected SoundStation IP 7000 conference phone:

1. Call the first site.

2. When the call connects, press the Add Video or Add Phone soft key on the conference phone.

3. Place a call to the next site.

4. Repeat steps 2 and 3 until all sites are connected.

To control volume in a call using a connected SoundStation IP 7000 conference phone:

Press the and keys on the conference phone to adjust the volume of audio from the far site.
You can also adjust the volume using the volume buttons on the Polycom HDX system remote control.

**To mute audio in a call using a connected SoundStation IP 7000 conference phone:**

>> Press the Mute key on the conference phone.

You can also mute the audio using the mute button on the Polycom HDX system remote control or on a connected Polycom HDX microphone.

The indicators on the conference phone are red when your audio is muted. The near-site mute icon also appears on the monitor display.

**To end a call using a connected SoundStation IP 7000 conference phone:**

- Press on the conference phone to hang up the call.
- Press the More softkey then the Manage softkey to hang up one connection in a multipoint call.

**To start or stop showing content using a connected SoundStation IP 7000 conference phone:**

>> Press the Content soft key on the conference phone. Content plays from the following input if that input is configured for Content:

- Camera 4 or Camera 5 on a Polycom HDX 9004 system
- Camera 4 on a Polycom HDX 9006, Polycom HDX 9002, Polycom HDX 9001, or Polycom HDX 8000 series system
- Camera 3 on a Polycom HDX 7000 series system
- Camera 2 on a Polycom HDX 6000 series system

Contact your system administrator for more information.

---

**Using Polycom Conferencing for Microsoft Outlook**

If your system is configured to connect to the Microsoft Exchange Server, you see a list of the day’s meetings on the Calendar screen. If your system is not configured to connect to the Microsoft Exchange Server, you see the standard month-view calendar.

**To view the Polycom HDX system calendar, do one of the following:**

- Select Calendar on the Home screen.
- Select System > Utilities > Calendar from the Home screen.
- Press the Option button on the remote control and select Calendar.
To view more information about a meeting on the calendar, highlight it and press on the remote control. Depending on how your system is configured, private meeting details might not be visible, and you might see reminders displayed on the system a short time before each meeting.

If your system is configured to connect to the Microsoft Exchange Server, and the Polycom Conferencing Add-In for Microsoft Outlook is installed at your site, you have access to the following additional calendar features:

- Upcoming meetings scheduled with the Polycom Conferencing Add-In for Microsoft Outlook are indicated with on the Polycom HDX system Calendar screen. Past meetings scheduled with the Polycom Conferencing Add-In for Microsoft Outlook are indicated by .

- To join a meeting scheduled with the Polycom Conferencing Add-In for Microsoft Outlook, you can select Join Now on the Polycom HDX system without knowing the dialing information.

- You can schedule a meeting using the Polycom Conferencing Add-In for Microsoft Outlook by clicking Schedule Polycom Conference in the Microsoft Outlook toolbar.

Using Microsoft Office Communications Server 2007 R2 or Microsoft Lync Server 2010 Features with Video Calls

Depending on how your system is configured, you might be able to search a Microsoft Office Communications Server 2007 R2 or Microsoft® Lync™ Server 2010 directory, view a list of Microsoft OCS or Microsoft Lync contacts, see if the contacts are online, and call them without knowing or remembering their addresses.

Managing Contacts Using Office Communicator or Microsoft Lync

Office Communicator and Microsoft Lync contacts appear on the Polycom HDX system Favorites screen and in the Favorites group in the directory. To add or delete Office Communicator or Microsoft Lync contacts on the Polycom HDX system, use the Office Communicator or Microsoft Lync application. You
can populate groups created locally on a Polycom HDX system with existing Office Communicator or Microsoft Lync contacts, but those changes do not appear on any other device.

**To manage your contacts using Office Communicator or Microsoft Lync:**

1. Log in to Office Communicator or Microsoft Lync with the same account information specified in the SIP settings of your Polycom HDX system.
2. From Office Communicator or Microsoft Lync you can:
   - Add and remove contacts
   - Add and remove groups
   - Move contacts from group to group

Changes made to contacts and groups using Office Communicator or Microsoft Lync appear on the Polycom HDX system Favorites screen and in the Favorites group in the directory. Polycom HDX systems support up to 200 contacts and 64 groups from Office Communicator or Microsoft Lync.

---

**Viewing Microsoft Office Communications Server or Microsoft Lync Server 2010 Presence States**

Polycom HDX systems and Office Communicator or Microsoft Lync users in an integrated environment use the following presence icons to indicate presence states:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Presence State</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Icon]</td>
<td>Do Not Disturb</td>
<td>Indicates that the HDX system or Office Communicator or Microsoft Lync user is set to Do Not Disturb.</td>
</tr>
</tbody>
</table>
| ![Icon] | In a Call | Indicates that the HDX system or Office Communicator or Microsoft Lync user is in one of the following states:  
• In a call  
• Accepting urgent interruptions only  
• Busy  
• Inactive  
• In a Conference  
• In a Meeting |
### Multipoint Calls Using Centralized Conferencing Control Protocol (CCCP)

If a Polycom HDX system is deployed in a Microsoft Lync Server 2010 environment and Centralized Conferencing Control Protocol (CCCP) is enabled, you can place and participate in multipoint calls that are hosted by Microsoft audio and video servers.

Contact your system administrator and the Polycom Unified Communications Deployment Guide for Microsoft Environments for more information about CCCP multipoint calling, which is referred to as Lync Conferencing in that book.

When you add a group to a CCCP conference, only the first three contacts in the group are added to the call.

### Muting in a CCCP Call

A Microsoft Lync client acting as the call organizer can mute all of the participants in the call. You cannot unmute until the organizer unmutes the participants unless you are designated as a presenter. If the meeting organizer has muted your Polycom HDX system selectively, you can unmute your system even if the organizer does not. It is important to understand that no one else can unmute your microphone. They can only request that you unmute.

When your mute status changes due to a Microsoft Lync client organizer muting or unmuting all of the participants, notification is displayed on the Polycom HDX system monitor.

### Holding and Resuming CCCP Calls

When an HDX system is registered to a Microsoft Lync server, the HDX system can participate in Lync-hosted multipoint calls. You can place calls on hold and resume calls on the HDX system when it is on a Lync-hosted call. Certain restrictions exist:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Presence State</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Green Circle]</td>
<td>Available</td>
<td>Indicates that the HDX system or Office Communicator or Microsoft Lync user is available.</td>
</tr>
<tr>
<td>![Yellow Circle]</td>
<td>Offline</td>
<td>Indicates the HDX system or Office Communicator or Microsoft Lync user is offline.</td>
</tr>
<tr>
<td>![Gray Circle]</td>
<td>Presence Unknown</td>
<td>Indicates that the presence state of the HDX system or Office Communicator or Microsoft Lync user is unknown.</td>
</tr>
</tbody>
</table>

Polycom, Inc.
• Only one call can be on hold at a given time.
• Only SIP calls from the Microsoft server can be placed on hold. You cannot place analog calls or calls using H.323, H.320, V.35, or ISDN on hold.
• If the **Auto Answer Multipoint Video** setting is enabled, you cannot place calls on hold.

**To place a call on hold and to resume the call:**

> On the remote control, press **Options** and select **Hold**.

When a call is on hold, a dialog displays on your HDX system’s local interface allowing you to resume or add a call:

- **Resume Call**: Allows you to resume your call after you placed it on hold.
- **Add a Call**: Takes you to the **Place a Call** screen.
- **You have been placed on hold** message appears if one of the far sites places you on hold.

**To switch between an active call and a call on hold:**

1. On the remote control, press **Options**.
2. Select **Call on Hold**.

**To hang up with a call on hold:**

1. On the remote control, press **Hang up**.
2. Choose one of the following:
   - **Leave Conference**: Hangs up the active call and causes a **Resume** message to be displayed. To make the call on hold active, click **Resume**.
   - **Leave All Conferences**: Hangs up all calls.

---

**Using Avaya Network Features with Video Calls**

Depending on how your system is configured, you might be able to use Avaya® telephony network features such as call forwarding, transferring calls, and adding additional sites in an audio-only conference.

**To activate call forwarding:**

1. Make sure that the Polycom system is not in a call.
2 From the Place a Call screen on the Polycom system, dial the Feature Access Code provided by the Avaya Communication Manager administrator, followed by the E.164 extension of the system to which you want to forward the calls. For example, dial *22016 if *2 is the Feature Access Code and 2016 is the system E.164.

3 Wait for confirmation beeps.

To deactivate call forwarding:

1 From the Polycom system Place a Call screen, dial the Feature Access Code provided by the Avaya Communication Manager administrator. For example, #2 if #2 is the Feature Access Code for disabling call forwarding.

2 Wait for confirmation beeps.

To transfer a call:

1 While in a call, press # on your Polycom system remote control to access the tone pad.

2 Press Select to activate flash hook. The first far-site system is placed on hold.

3 Wait for a dial tone, and then dial the extension of the far-site system to which you want to transfer the call. The call connects both audio and video between the local system and the second far-site system. The first far-site system is still on hold.

4 Hang up the near-site system. The two far-site systems are now connected in a call with audio and video, if the capabilities are present.

To add a system to a call:

1 While in a call, press # on the Polycom system remote control to access the tone pad.

2 Press Select to activate flash hook. The far-site system is put on hold.

3 Wait for a dial tone, and then dial the extension of the system that you want to add to the call.

4 Press Select again. The call becomes an audio-only conference with all of the systems. If the system that dialed the flash hook hangs up, the other systems remain connected in a call with audio and video, if the capabilities are present.
Customizing Your Workspace

You can customize what you see on the screen, depending on how your system is configured.

Allowing the Far Site to Control Your Camera

If your system administrator has allowed access to user settings, you can allow the far site to control your camera. Far-site participants can also set and use presets for your camera, if their system supports this.

To allow the far site to control your camera:
1. Select System from the Home screen.
2. Select User Settings from the System screen.
3. Scroll to Far Control of Near Camera and press \ on the remote control to enable the option.
4. Press Home to save your change and return to the Home screen.

Displaying the Far Site’s Name When the Call Connects

If your system administrator has allowed access to user settings, you can specify whether to display the far site’s name when the call connects and how long to leave the name on the screen.

To specify when to display the name of the far site:
1. Select System from the Home screen.
2. Select User Settings from the System screen.
3. Select Next to see more settings.
4. Scroll to Far Site Name Display Time, press \ on the remote control, and select to display the far site’s name during the entire call, for a specified time, or not at all.
5. Press Home to save your change and return to the Home screen.

Hearing Audio Confirmation When You Dial

If your system administrator has allowed access to user settings, you can set up the system to speak each number as you enter it in the dialing entry field on the Place a Call screen.
To enable audio confirmation:
1 Select System from the Home screen.
2 Select User Settings from the System screen.
3 Select Next to see more settings.
4 Scroll to Keypad Audio Confirmation and press on the remote control to enable the option.
5 Press Home to save your change and return to the Home screen.

Adjusting for Room Lighting
If your system administrator has allowed access to user settings, you can use the backlight control to adjust the brightness of the video that the main camera sends to the Polycom HDX system. Adjusting this setting can be helpful when the room arrangement results in strong light coming from behind the people in the picture.

Because backlight controls adjust the main camera, these controls do not make content from a computer or a document camera appear brighter.

To turn backlight compensation on:
1 Select System from the Home screen.
2 Select User Settings from the System screen.
3 Scroll to Backlight Compensation and press on the remote control to enable the option.
4 Press Home to save your change and return to the Home screen.

Polycom Solution Support
Polycom Implementation and Maintenance services provide support for Polycom solution components only. Additional services for supported third-party Unified Communications (UC) environments integrated with Polycom solutions are available from Polycom Global Services and its certified Partners. These additional services will help customers successfully design, deploy, optimize and manage Polycom visual communications within their UC environments.
Professional Services for Microsoft Integration is mandatory for Polycom Conferencing for Microsoft Outlook, Microsoft Office Communications Server and Microsoft Lync Server 2010 integrations. For additional information and details please refer to http://www.polycom.com/services/professional_services/index.html or contact your local Polycom representative.