POLYCOM®

Polycom® RealPresence® Group Series

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Contents

User's Guide for the Polycom® RealPresence® Group Series

This guide includes overview information that you might find helpful when you're just starting to learn about video conferencing or if you need a quick refresher. It also includes step-by-step instructions for everyday video conferencing tasks. The latest user information about version 4.1.3 of the Polycom® RealPresence® Group systems software is provided in this guide, which covers the following systems:

RealPresence Group 300 and RealPresence Group 500 systems

RealPresence Group 700 system

Polycom RealPresence Group systems can be configured 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 your administrator.

Using the Remote Control

You use the remote control to place calls, adjust the volume, zoom the camera, navigate screens, and select options. The RealPresence Group systems and the EagleEye cameras have infrared receivers. You can control your RealPresence Group system by pointing the remote control toward the RealPresence Group system or the EagleEye camera (if connected). You might need a special cable to connect an SDI camera to the system to receive infrared signals from the remote control. For more information about the cable, contact Polycom support.

Parts of the Remote Control

Number	Description
1	LED IR emitter
2	Decrease speaker volume
3	Increase speaker volume
4	Zoom camera out
5	Zoom camera in
6	**Select button** - Press center button to select highlighted menu item
7	Navigate through menu items using the Up, Down, Left, and Right buttons; pan/tilt the camera
8	Delete letters or numbers or go back to a previous screen
9	Display the Menu screen.
10	Return to the Home screen
11	Place or answer a call
12	End or reject a call
13	Enter letters or numbers
14	In camera control mode, move the camera to a stored preset or press and hold a number to store a preset
15	Generate touch (DTMF) tones
16	Mute a microphone
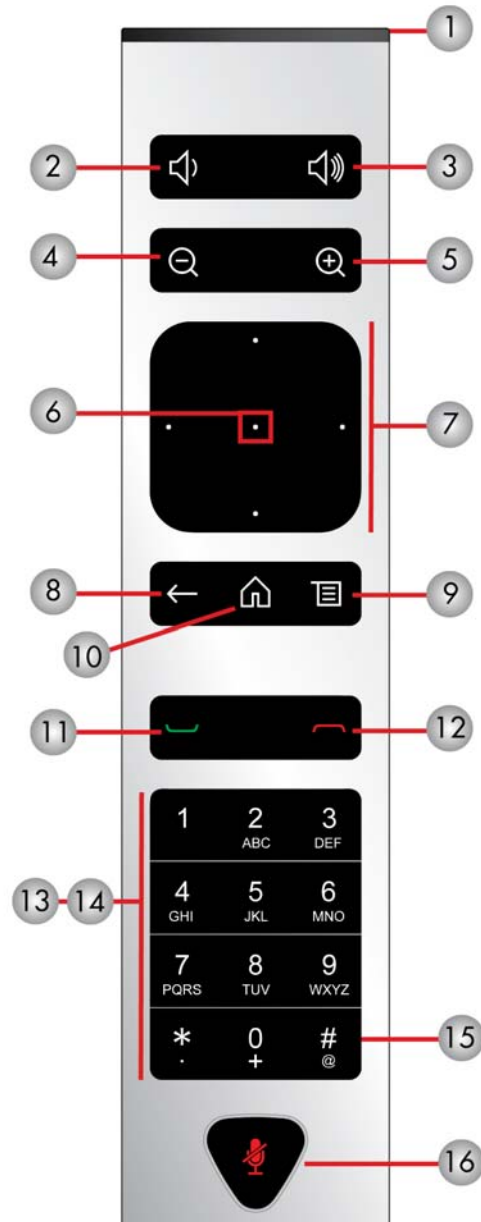
Recharging the Remote Control Battery

Your system setup sheet shows how to charge the battery in the remote control the first time. When the remote control battery power is at 10% or less, a notification is displayed on the home screen. Although other notifications override the low battery notification, the low battery notification returns after the other notifications are dismissed. The low battery notification is not displayed while the system is in a call.

To recharge the remote control battery:

1 Pull the battery out of the end of the remote control.

2 Insert the USB plug of the battery into a USB 2.0 port such as the one on your system.

The RealPresence Group 300 and RealPresence Group 500 systems have two USB 2.0 ports on the back of the system, while the RealPresence Group 700 has one USB 2.0 port on the front of the system and two USB 3.0 ports on the back of the system.

3 Wait until the status light on the battery turns green before removing it from the port.

Recharging the battery might take from 20 minutes to multiple hours.

4 Insert the charged battery into the remote control.

If you have a RealPresence Group 700 system, you can also recharge the battery using the USB port on the front of the system.

Recharging the Battery For RealPresence Group 300, 500 and 700 systems
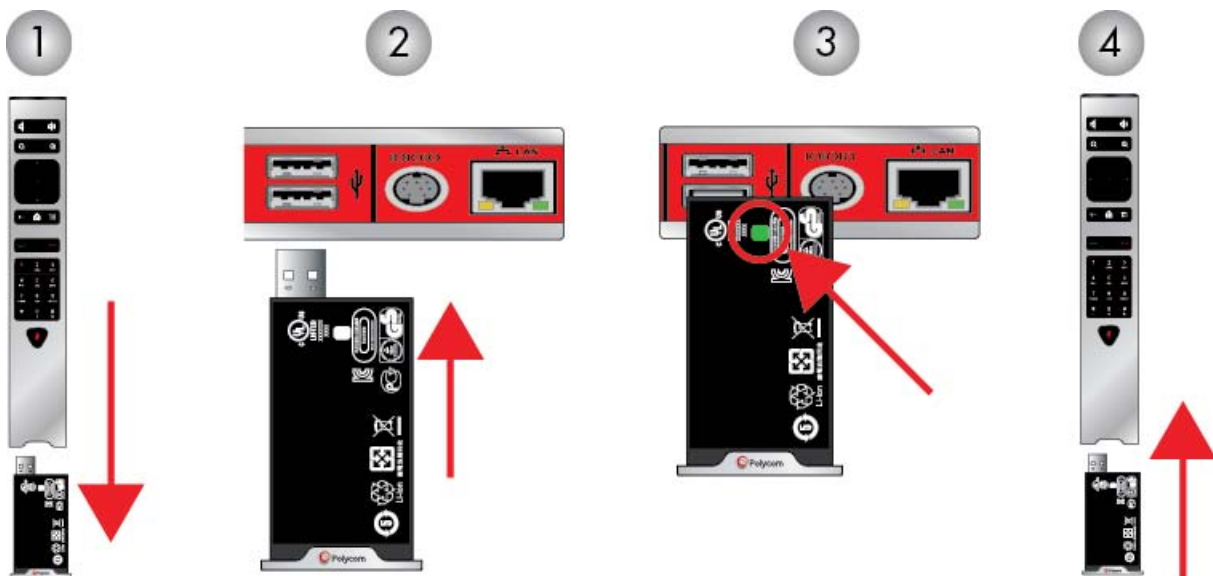
Charging the Remote Control Battery

Number	Description
1	Pull the battery out of the end of the remote control.
2	Insert the USB plug of the battery into a USB 2.0 port such as the one on your system.
3	Wait until the status light on the battery turns green before removing it from the port.
4	Insert the charged battery into the remote control.

Powering On and Off

Powering your system on and off is a simple procedure, but it is important to perform the tasks in a certain order. Make sure that the system is powered off before you connect devices to it. After you have connected all of the related equipment that you will use, connect the power and power on the RealPresence Group system.

It is also important to note that Polycom RealPresence Group systemsdo not have what you might think of as a power *button*—they have a power *proximity sensor*. Instead of pressing an actual button that moves, you touch the sensor (or near the sensor) that indicates power ⏻ on the front of the system.

To power on the RealPresence Group System:

Do one of the following:

● Press any button on the remote control or pick up the remote control to wake up the system if it is asleep.

● Touch and hold the ⏻ power sensor on the front of the system. Because the power sensor is touch sensitive, you can touch your finger on or close to the sensor.

The Polycom splash screen is displayed within several seconds.

Power On Self Test (POST)

After being powered on, the RealPresence Group systems automatically perform system health checks before the systems are initialized. This process is known as a power on self test, or POST. The status of the POST sequence is displayed with the LED indicator light on the front of the device, or for the RealPresence Group 700 system, in the text field display on the front of the system.

All test results are logged in the system's memory. For more information about what the colors of the indicator lights mean, refer to the *Administrator's Guide for Polycom RealPresence Group Series*.

When the POST sequence completes with no severe errors, the RealPresence Group system starts normally.

To view POST warnings:

If any warnings occur during POST, you can view them after the system starts.

» Go to ⚫ **> System Information > Status > Active Alerts**.

For more details, use your remote control to select **More Information**. If a severe error occurs during startup, the system will not power on. Contact Polycom technical support.

Navigating the User Interface

Cycle through the icons at the bottom of the Home screen to access system features. To accomplish tasks, you can press buttons directly on your remote control or use your remote control to navigate menus on the left side of the local user interface.

Available icons on the home screen vary based on how your administrator configured the system.

Your system's IP address, extension, and SIP address might be displayed on the home screen if your administrator has configured them to be visible.

Icon	Item	Description
	Menu	Displays the Menu screen, which allows you to place a call, change cameras, show content in a call, and show the Self View (PIP).
	Place a Call	Displays the keypad, recent calls, or contacts so that you can enter numbers, letters, or names to make a call.
	Content	Allows you to send content from a supported device. This icon appears only when a content source is detected.
	Settings	Displays the Settings screen, which allows you to open one of the following screens:
		System Information - Displays the System Information screen, which allows you to obtain system details, view system usage, run diagnostic tests, and view call statistics.
		User settings -Displays the User Settings screen, which allows you to change basic camera settings and to configure call and meeting preferences. This screen is only available if your administrator has allowed you access to the user settings.
		Administration - Displays the Administration screen, which allows you to configure location settings, specify LAN properties, and manage some user security settings. This screen is only available if your administrator has allowed you access to the administration settings. Once an admin password is configured, this icon changes to a padlock.

To return to the Home screen:

» On the remote control, press ; in the local interface, navigate to **Back** to return to the Home screen.

To open the Menu:

» Using your remote control, do one of the following:

➢ Press .

➢ On the Home screen, select .

To return to the previous screen:

» Using your remote control, do one of the following:

➢ Press .

➢ Navigate to < **Back** and select it.

Calling and Answering

To place, answer, and end calls, refer to the following sections:

Placing a Call on page 6

Calling by Entering a Name or Number on page 7

Answering a Call on page 8

Ending a Call on page 9

Placing a Call

From the Home screen, you can use your system to place a video call in any of the following ways:

Keypad

● On the Home screen, select and then enter a number or name in the dialing field.

Recent Calls

● Choose a name from the recent call list by doing the following:

➢ On the Home screen, select > .

➢ Use your remote control to select > .

Contacts

● Choose a name from the contact list by doing the following:

➢ On the Home screen, select > .

➢ Use your remote on control to select > .

Speed Dial

● Select the **Speed Dial** tab and choose a **Speed Dial** entry. This option must be configured by your administrator.

Calendar

● Choose **Join** from a meeting on your calendar. This option must be allowed by your administrator. To learn how to configure this calling method, refer to Using Microsoft Outlook Calendaring on page 28.

Calling by Entering a Name or Number

To place a call by entering a name or number:

1 To place a call, do one of the following using your remote control:
   ➢ Press [icon].
   ➢ Navigate to [icon].
2 In the dialing field, enter the dialing information as follows:

   Numbers: To enter numbers, select each number on the keypad with the remote control or enter numbers on your remote control.

   Letters: To enter letters, select **Keyboard**. Then use your remote control to select each letter on the onscreen keyboard. Or you can use the text-entry method commonly used with cell phones to select letters directly on your remote control.

   > The **Keyboard** button does not display on your system screen if a USB keyboard is plugged into the system's USB port. After you unplug the USB keyboard from the system's port, the **Keyboard** button displays.

   Backspace: To delete a number or letter, press [icon] on the remote control.

   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)
   ➢ 2555 (E.164 extension for H.323 or SIP)
   ➢ stereo.polycom.com (host name)
   ➢ user@domain.com (SIP)
3 Enter any additional information needed for the call. The available settings depend on the type of call and your system's configuration.
4 Press [icon] on the remote control to place the call or select **Place a Call**.

Calling from the Contacts Screen

If your system administrator has added directory and contacts, you can view your favorites and search for contacts registered to the same Global Directory Server.

To place a call from the Contacts screen:

1 Navigate to ![icon] > ![icon] or use your remote control to select ![icon] > ![icon]

2 With your remote control, highlight the entry on the RealPresence Group system screen and select **Call** or press ![icon].

   To see more details about an entry, select **Info**.

3 To search for an entry in the directory, enter the contact name then select the **Search** keyboard key.

Calling from the Recent Calls List

You can quickly 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 list:

1 Using your remote control, do one of the following:
   ➤ On the local interface, navigate to ![icon] and select ![icon].
   ➤ Press ![icon] and on the local interface, select ![icon].

2 Highlight the entry you want to call.

3 Press **Select** and **Call,** or to use your remote control, select ![icon].

Calling a Speed Dial Entry

If your system administrator enabled Speed Dial, you can quickly call a contact in your directory.

To place a call to a speed dial entry:

Using your remote control, do the following:

1 At the top of the Home screen, select the **Speed Dial** tab and select a Speed Dial entry to call.

2 To place the call, select **Call** or to use your remote control, select ![icon].

Answering a Call

The way a RealPresence Group 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 a call manually:

» Using your remote control, select **Answer** or press ![icon].

   For more information about answering calls, see Changing the Way Calls Are Answered on page 25.

Ending a Call

To hang up a call:

» On the remote control, press ▬ .

If prompted, confirm that you want to hang up.

Using Kiosk Mode

Kiosk Mode simplifies the Home screen by displaying only speed dial entries and calendar meetings (if enabled). In Kiosk Mode, therefore, you can call speed dial numbers, join calendar meetings, and answer calls.

Your administrator must create speed dial numbers and enable Kiosk Mode before you can use this mode. For information on adding speed dial entries, enabling speed dial and Kiosk Mode, refer to the *Administrator's Guide for the Polycom RealPresence Group Series*. For information about obtaining the Polycom Conferencing Add-In for Microsoft Outlook, refer to Polycom Solution Support on page 41.

Points to Note about Kiosk Mode:

Kiosk Mode is disabled by default. If your administrator enables Kiosk Mode:

- The Home screen menu, Out of Call menu, and other icons are disabled.
- Alerts bring the local interface out of Kiosk Mode until the alerts are cleared.
- While in a call, you can still use the remote to adjust the volume, control the camera, and mute/unmute the microphone.

You can display the In a Call menu by pressing **Menu** on the remote.

To use Kiosk Mode for speed dialing:

1 Select the **Speed Dial** tab.Use the arrow keys on the remote control to move the focus on the screen to the Speed Dial block.

2 Press the number on the remote control that corresponds to the speed dial number you want to call. You can also use the arrow keys to move the focus to the speed dial number you want to call and press **OK**.

To use Kiosk Mode for calling from the calendar:

1 Select the **Calendar** tab.

2 Use the arrow keys on the remote control to move the focus on the screen to the Calendar block.

3 Use the arrow keys to move the focus to the meeting you want to call into, and then click **Join**.

Using Call Hold and Resume

The RealPresence Group system supports call hold and resume in Microsoft Lync 2013 and H.323 calls. Putting a call on hold pauses audio and video bidirectionally between RealPresence Group systems, remote Lync clients, or Lync A/V MCUs.

Point-to-Point Hold and Resume

In a point-to-point call, you can place a call on hold, and then answer an incoming call, make an outgoing call, or switch between two calls. After you complete a call, you can resume the call you had on hold.

To place a call on hold:

» Press **Menu** on the remote control, then select **Active Call > Hold**.

When a call is on hold, **On Hold** appears on the RealPresence Group system screen for 5 seconds. After 5 seconds, the Hold icon ▐▐ appears and remains on the screen until all calls disconnect or are resumed.

To place a call on hold to answer an incoming call:

» Use your remote control to select **Hold + Answer**. If all lines are in use and you want to hang up on the call that has been on hold the longest, select **Hang Up 1 + Answer**.

To make an outgoing call while a call is on hold:

» Press ⌂ on the remote control. Place the call using your preferred method.

To switch between calls:

» Use your remote control to select **Switch To**.

To resume a held call:

» Use your remote control to select **Resume Call**.

If the far-end site puts you on hold, a message displays for 5 seconds that you have been placed on hold.

Multipoint Hold and Resume

In a multipoint call, you can do all of the point-to-point hold and resume tasks, with one exception. You cannot hold and resume individual calls in a multipoint conference. For information on point-to-point call and hold tasks, see Point-to-Point Hold and Resume .

To manage an incoming call while on a call:

» Use your remote control to select one of the following:

➢ Select **Add to Call** to add the call to the conference.

➢ Select **Hold + Answer** to hold the current call and answer the incoming call.

➢ Select **Hang Up 1 + Answer** to hang up the call that has been on hold the longest. The incoming call is added to the conference.

> ➢ Select **Hang Up All + Answer** to hang up all active and held calls and establish a point-to-point call with the incoming call.

To make an outgoing call while a call is on hold:

» Press on the remote control. Place the call using your preferred method.

. **To switch between calls:**

» Use your remote control to select **Manage**. This allows you to determine which call to make active.

To resume a call on hold:

» If you have a single call on hold with no active call, to resume the call on hold, select **Resume Call**.

Participating in Encrypted Calls

If encryption is enabled on the system, a locked padlock icon appears on the monitor screen when a call is encrypted. If a call is not encrypted, an open padlock appears on the monitor screen.

● 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. However, the lock 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.

Using Encryption Check Code on H.323 Point-to-Point Calls

To provide extra security for encrypted H.323 calls, the RealPresence Group system provides an encryption *check code*. Participants in a call can use this check code to verify that their call is not being intercepted by a third party. This mechanism is most useful for point-to-point calling; in externally-hosted multipoint calls, check code numbers do not match any other numbers in the call.

The check code is a 16-digit hexadecimal number that is calculated so that the number is the same at both sites in the call. The numbers are identical if, and only if, the calculation uses data exclusively from the two sites in the call, with no data being intercepted and modified by a third party. Polycom recommends verifying this check code at each site to protect against a third-party eavesdropping on calls.

To verify the check codes match:

1 Place an encrypted H.323 point-to-point call between two sites.

2 Select ▤ on your remote control, then navigate to **Settings > System Information > Call Statistics**.

3 At **Call Encryption**, locate the 16-digit check code as in the following example:

`ABC-123/ab-1234 / ` `1a2b34c99009d66e`

4 Verbally verify that the check code is the same at both sites.

5 Do one of the following:

➢ If the codes match, the call is secure. Proceed with the call.

➢ If the codes do not match and the call is not a multipoint call on an external MCU, the call might be compromised. Hang up the call and contact your system administrator.

Controlling What You See

You can control the following visual settings on your RealPresence Group system:

Viewing Details About Your System on page 12

Switching Between Full-Screen Video and the Home Screen on page 12

Selecting and Adjusting a Camera or Other Video Source on page 13

Enabling and Disabling Tracking in a Call on page 15

Setting and Using Camera Presets on page 15

Viewing Details About Your System

You might need to view certain system details to do video conferencing tasks, such as pairing, or to perform troubleshooting tests to provide information for your administrator or technical support.

To view your system details:

» Select 👤 **>** ⓘ **> Information**.

The following details are displayed:

➢ System Name

➢ Model

➢ Hardware Version

➢ System Software

➢ Serial Number

➢ MAC Address

➢ IP Address

Switching Between Full-Screen Video and the Home Screen

When your 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 ⌂ on the remote control.

To see the full screen:

» Press ← on the remote control.

Selecting and Adjusting a Camera or Other Video Source

You can use the remote control to select and adjust the main camera or other near-end or far-end video sources, such as document cameras or computers. You might be able to adjust other auxiliary cameras or far-end cameras that support pan, tilt, and zoom movement. You can adjust the far-end camera only if it is configured at the far end to allow you to control it.

When you are in camera control mode, you can press and hold a number to save a preset. For more information about presets, see Setting and Using Camera Presets on page 15.

To select a near-end or far-end camera, or other video source:

Out of a call:

- Using your remote control, go to 🗐 **> Cameras > Select Camera**. Then select the camera or other video source you want to use. If a single camera is connected to your system, Select Camera displays what the attached camera sees.

In a call:

- Select 🗐 **> Cameras.** Then select **Your Cameras** for near-end control or **Their Cameras** for far-end control.

- To switch between **Your Cameras** and **Their Cameras** without accessing the menu, press **Select** on the remote control while in a call.

To return to a previous screen after adjusting your or their camera settings, select ← .

To adjust a Polycom EagleEye III, Polycom EagleEye IV, Polycom EagleEye Acoustic, or Polycom EagleEye Director using the remote control:

1 Select either a near-end or far-end 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 end that has a current speaker.

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

3 On the remote control, press ⊖ to zoom out or ⊕ to zoom in.

> Before you can adjust the EagleEye Director camera, you must turn camera tracking off.

Using the Polycom EagleEye IV Camera

The Polycom EagleEye IV cameras are completely digital with a 4k sensor designed to work with RealPresence Group Series systems. These cameras support 1080p60 resolution and are available with either 12x or 4x zoom capabilities.

Polycom EagleEye IV

EagleEye IV cameras also have an available privacy cover, wide-angle lens, and digital extender. For more information, refer to *Installing the Polycom EagleEye IV Wide Angle Lens*, *Setting Up the Polycom EagleEye IV Cameras*, *Setting Up the Polycom EagleEye IV Camera Privacy Cover*, and *Setting Up the Polycom EagleEye Digital Extender* available at support.polycom.com.

Using EagleEye Director Tracking in a Call

If your administrator has enabled Administration settings for users in the local interface, you can set the tracking type to use in a call:

- **Voice**: Moves the view between the speaker and the room during a meeting.
- **Direct Cut**: Moves the view directly from speaker to speaker.

To select the camera tracking type:

» Select **Settings > Administration > Camera Tracking**.

For the **Tracking Mode** setting, do one of the following:

- Select **Voice** to track the speaker. When another speaker starts talking, the view switches from the first speaker to the room, then to the next speaker.
- Select **Direct Cut** to track directly from speaker to speaker. You must recalibrate the left camera when you select **Direct Cut** mode.

Enabling and Disabling Tracking in a Call

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.

While in a call, you might want to disable EagleEye Director tracking. When you stop camera tracking through the menu, the **Mute** and **Unmute** buttons do not affect tracking.

You must start camera tracking using the menu before the **Mute** and **Unmute** buttons will again affect tracking. After the call is complete, EagleEye Director returns to its default setting.

To disable EagleEye Director tracking in a call:

» Use the remote control to select ▤ **> Cameras > Stop Camera Tracking**. After you disable tracking in this way, the Mute and Unmute functions on the microphone and remote control no longer affect tracking.

To enable EagleEye Director tracking in a call:

» Use the remote to select ▤ **> Cameras > Start Camera Tracking**. The Mute and Unmute tracking functions on the microphone and remote now work.

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 for all preset camera positions. This default camera position is zoomed out, panned straight ahead with horizontal tilt.

Presets allow you to:

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

If your system's camera supports pan, tilt, and zoom movement, you can create up to 10 preset camera positions for the near-end camera. Each preset stores the following information:

- Camera number
- Camera zoom level
- Direction the camera points

These presets remain in effect until you change them.

If far-end camera control is allowed, you can create 10 presets for the far-end 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 end to control the far-end camera.

Points to note about camera control and layouts:
- When in a call, selecting near camera control pans and zooms the local camera without changing the layout.
- When out of a call, selecting camera control changes the Self View to full screen.
- Incoming calls override the full-screen Self View layout.

To view stored presets:

» Using your remote control, press [icon] and then on the local interface, navigate to **Cameras > Presets.** Icons for presets 0-9 are shown on the screen. A snapshot above the number means that a preset has been assigned to that number. An empty box means that no preset has been assigned to that number.

To move the camera to a stored preset:

1 If you are in a call, press **Select** on the remote control to switch between a near-end site (**Your Camera**) or far-end site (**Their Camera**) camera.

2 Press a number on the remote control.

To store a preset using your remote control:

1 If you are in a call, press Select to choose **Your** or **Their** camera.

2 If you selected a camera that supports electronic pan, tilt, and zoom, you can adjust the camera's position using your remote control:

  ➢ Press [icon] or [icon] to zoom the camera out or in.
  ➢ Press the directional buttons to move the camera up, down, left, or right.

3 To store a preset position, press and hold a number from 0 to 9 for five seconds.

Any existing preset stored at the number you entered is replaced.

You cannot delete a preset. Instead, overwrite an existing preset with a new camera position.

Controlling What You Hear

You can control the following audio settings on your RealPresence Group system:

Adjusting Volume on page 16

Muting the Microphone on page 17

Enjoying Stereo Audio in Video Calls on page 17

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:

» On the remote control, press and hold [icon] or [icon] to increase or decrease the near-end volume.

Muting the Microphone

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

To mute or unmute the microphone:

» Press [icon] on the remote control.

If a Polycom tabletop microphone array is connected to your system, you can also mute the call by touching [icon] on the microphone.

The indicators on the microphone are red when your audio is muted. This near-end [icon] icon also appears on the monitor display.

Points to note about muting the microphone:
- Muting the microphone does not mute audio coming from any device connected to the content audio inputs.
- The red mute indicator on the front of the Polycom EagleEye View camera is lit when the system is muted or when a Polycom microphone is connected and muted.

The microphone might mute when the system automatically answers an incoming call and if the system is configured to mute auto answered calls.

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 available only in video calls of 256 kbps or higher.

Showing Content

To show people and content at the same time, the RealPresence Group systems must be configured for content. You can show the following to the far-end systems:

- Any information stored on a computer connected directly to a Polycom RealPresence Group system
- A paper document or object placed on a document camera
- A DVD or DVR player connected directly to a Polycom RealPresence Group system
- Content from the Polycom People+Content™ IP application (installed on a computer and connected to the Polycom RealPresence Group system)

If you attempt to display copyright-protected content on the local interface, such as from a DVD or DVR, the following message is shown on the RealPresence Group system: "This content is protected and cannot be displayed or shared." This message appears in a call and out of a call.

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, a message appears on your main monitor. Whether you also see the content on your monitor or projector depends on how your system was configured.

> To show content on a RealPresence Group 300 system, you must use the People+Content IP application.

Showing Content with People+Content IP

The People+Content IP application allows you to send content from a computer that is not connected directly to the RealPresence Group system.

To install People+Content IP on a computer:

1 On a computer with a Microsoft® Windows XP, Windows Vista, Windows 7, Windows 8, or Apple Mac OS 10.8 operating system, go to http://www.polycom.com. In the Search box, type "PPCIP application download".

2 Download and install the People+Content IP software.

> **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 start showing content:

1 On your computer, start the Polycom People+Content IP application.

2 Enter the IP address or host name of the RealPresence Group system and the meeting password, if one is set.

To view the IP address of the RealPresence Group system, select > > **System Detail**.

3 On the computer, click **Connect**.

4 In People+Content IP, open the content you want to show, and click .

> If you are using multiple windows on your computer, move the People+Content IP icon to the window 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.

3 Click **Disconnect**.

Showing Content from a Computer Connected to RealPresence Group Systems

Before you show content, check that the computer video output is configured to use one of these supported resolutions and refresh rates. For best video quality, use refresh rates of 60 Hz or less.

Resolution	Refresh rates (Hz)
800 x 600	56, 60, 72, 75, 85
1024 x 768	60, 70, 75, 85
1280 x 720	50, 60
1280 x 768	60
1280 x 1024	60, 75
1600 x 1200	60
1680 x 1050	60
1920 x 1080	60
1920 x 1200	60

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.

To set up your RealPresence Group system to show content:

» Make sure the computer is powered on and connected to the RealPresence Group system. You can connect a computer to the HDMI or VGA video input.

Connections for a RealPresence Group 500 System

Connections for a RealPresence Group 700 System
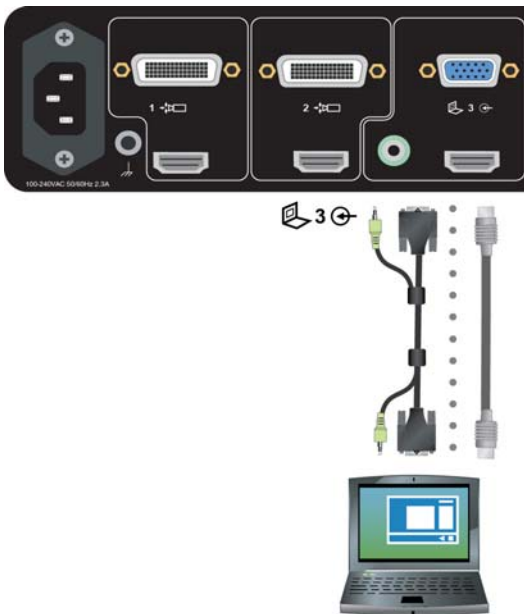
To start showing content from a source connected to a RealPresence Group System:

» Using your remote control, select ▣ and then select your content source from the list.

While in a call, you can select ▤ **> Select** on your remote to turn on and off the last used content source.

To stop showing content:

» Using your remote control, select ▣ **> Hide** and the name of your content source, such as **Hide Laptop**.

Working with Directory and Contact Entries

The directory on your RealPresence Group 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 search for 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.

> For information about using a Microsoft Office Communications Server or Microsoft® Lync™ Server directory, refer to Performing Tasks Involving Microsoft Office Communications Server or Lync Contacts on page 29.

Sites that you have added are stored on your RealPresence Group system as Contacts. Everyone at your site who uses the system can use the contact entries to place calls. Users at other sites cannot access the contacts on your system.

Polycom RealPresence Group systems support up to 2,000 contacts. They can also support the following:

- An unlimited number of contacts when the RealPresence Group system is registered with Microsoft Office Communications Server 2007 R2 or Microsoft Lync Server 2010 or 2013.
- Up to 200 additional contacts with presence when registered with a Polycom Converged Management Application™ (CMA®) system

For more information about this and other Microsoft and Polycom interoperability considerations, refer to the *Polycom Unified Communications Deployment Guide for Microsoft Environments*.

Searching for Directory Contacts

If you want to call someone who is not in your Favorites or Contacts list, you might need to perform a directory search.

To search for directory contacts:

1 With your remote control, select 📞 **>** 🔍.

2 To enter a name in the search field, do one of the following:

➢ Enter the name using the onscreen keyboard.

➢ Use the text-entry method commonly used with cell phones to select letters directly on your remote control.

3 Select **Search** to search for an entry in the directory.

> Directory searches return only entries that include last names at the start of the search string. Do not begin a search string with a first name.

Including Multiple Sites in Video Calls

Multipoint conferences involve at least three different endpoints. 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 RealPresence Group 500 or 700 system must have a multipoint video option key installed. You can host multipoint calls using a video conferencing system with multipoint capabilities, or you can use a bridge, such as the RealPresence® Collaboration Server 800s.

> You cannot host multipoint video calls with a RealPresence Group 300 system.

Placing a Multipoint Call

How you place a multipoint call depends on whether you're using a RealPresence Group system or bridge with multipoint capabilities. The number of sites allowed in the call is determined by the capabilities of the system or bridge hosting the call.

To place a multipoint call by adding sites to a call:

1 Call the first site.

2 After the call connects, press ⬜ on the remote control to open the dialing keypad.

3 Place a call to the next site. For more information, refer to Placing a Call on page 6.

4 Repeat the above steps until all sites are connected.

To place a multipoint call using Contacts:

1 Do one of the following:

➢ On your remote control, select ⬜ and navigate to 🔍 on your system screen.

➢ Navigate to 📞 and select 🔍 on your system screen.

2 Highlight an entry in the **Contacts** list.

3   To place the call, do one of the following:

  ➢ On your remote control, press ⬚ .

  ➢ On your remote control, press **Select** and navigate to **Call** on your system screen.

Your system attempts to call the site using a pre-defined list of call types, if it is configured to do so. For more information, contact your system administrator.

To place a multipoint call using Recent Calls:

1   Using your remote control, select ⬚ and select 🕐 .

2   Highlight an entry in the **Recent Calls** list.

3   To place the call, do one of the following:

  ➢ On your remote control, press ⬚ .

  ➢ On your remote control, press **Select** and navigate to **Call** on your system screen.

Your system attempts to call the site using a pre-defined list of call types, if it is configured to do so. Contact your system administrator for more information.

Hanging Up a Multipoint Call

To hang up an individual call in a multipoint call:

  » Using your remote control, navigate to the call that you want to hang up and press ⬚ .

To hang up all calls in a multipoint conference call:

  » Using your remote control, navigate to **Hang Up All**.

Passwords for Multipoint Calls

You might be required to enter a meeting password to join a multipoint call. And you can require that far-end systems enter a meeting password to prevent unauthorized participants from joining multipoint calls hosted by your RealPresence Group system.

Points to Note about Meeting Passwords:

- If you need to generate touch tones (DTMF tones) when you are in a call, press the # key on your remote control and a message displays "Touch tones enabled." Then use the number keys to enter numbers.
- Do not set a meeting password if multipoint calls include audio-only endpoints. Audio-only endpoints are unable to participate in password-protected calls.
- Microsoft Office Communicator clients are unable to join password-protected multipoint calls.
- SIP endpoints are unable to dial in to password-protected multipoint calls.
- If a meeting password has been set for a call, People+Content IP clients must enter the password before joining the meeting.

To enter a meeting password:

● If a prompt appears on the screen, use the remote control or onscreen keypad to enter the password.

● If you hear an audio prompt, use the remote control to generate DTMF tones.

To configure a meeting password:

1 From the Home screen, select ![icon] > ![icon] > **Meetings**.

2 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.

  ➢ Use the onscreen keypad to enter the password.

3 Press ![icon] to save your change and return to the Home screen.

Multipoint Viewing Modes

The multipoint viewing mode configured on the host system is the one used in the call. The default mode is **Discussion**, however, your administrator might have configured one of the other modes for your system.

To set your multipoint viewing mode:

1 In the local interface, go to ![icon] > **User Settings** > **Meetings**.

2 Select a viewing mode from the **Multipoint Mode** list.

The following table describes the available multipoint viewing modes when a RealPresence Group system is hosting the multipoint call.

Setting	Description
Video images from multiple sites can be automatically combined on one monitor in a display known as *continuous presence*.	
Auto	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.
Discussion	Multiple sites are displayed in continuous presence. The current speaker's image is highlighted.
Presentation	The speaker sees continuous presence while the other sites see the speaker in full screen on the monitor.
Full Screen	The site that is speaking is shown in full screen to all other sites. The current speaker sees the previous speaker.

Multipoint Viewing Layouts

What you see during a multipoint call can vary depending on how the RealPresence Group system is configured, the number of sites participating, the number of monitors you are using, and whether content is shared. The multipoint viewing layout configured on the host system is the one used in the call.

When you use two monitors of equal size, you can have eight-way multipoint calling, depending upon your system configuration. When you share content, one monitor is used for content and one for people. The configuration varies depending on whether your administrator has enabled Self View and how many people are participating. When you do not share content, the configuration for both monitors is spread over both monitors.

To find out more about multipoint layouts, please talk to the administrator of your RealPresence Group system.

If you are not in an RMX system call, your only layout option is **Browse**.

To change your layout during a multipoint call:

1 With your remote control, select **> Layout**.

2 Select **Browse**.

Browse takes you back to the main video so that you can cycle through the available layouts for the call. The available layouts depend upon certain factors, such as how many participants are in the call or the content status.

Multiple Layouts in Lync Calls

In a Microsoft Lync 2013-hosted multipoint or point-to-point call, you can now view multiple far-end sites in layouts. In previous RealPresence Group system releases, you could only see the dominant speaker in Voice Switching Mode. You can see five far-end sites on Lync-hosted multipoint calls.

Changing the Way Calls Are Answered

To change the way calls are answered, you might want to change the default settings of your system as described in the following sections:

Temporarily Refusing Calls

If your system administrator has allowed you access, you can automatically refuse incoming calls when you do not want 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:

1 Navigate to [icon] > **User Settings** > **Meetings.**

2 Do one of the following:

> ➢ Select **Do Not Disturb** to **Auto Answer Point-to-Point Video**.

> ➢ Clear the **Auto Answer Multipoint Video** setting.

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.

> **Caution**. 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 Navigate to [icon] > **User Settings** > **Meetings**.

2 Select one or both of the following:

> ➢ **Yes** for **Auto Answer Multipoint Video**

> ➢ **Auto Answer Multipoint Video**

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, press [icon] 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 Navigate to [icon] > **User Settings** > **Meetings**.

2 Select **Mute Auto Answer Calls**.

When a call is muted, this icon [icon] is displayed on your monitor. When a call is not muted, [icon] displays on the monitor screen.

Using a Polycom SoundStation® IP 7000 Conference Phone with a Polycom RealPresence Group System

When you connect a Polycom SoundStation® IP 7000 conference phone to a Polycom RealPresence Group 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 ⎡*/.⎤ on the SoundStation IP 7000 keypad two times.

  ➢ To enter a dot or @ symbol, press the ABC soft key then ⎡*/.⎤ 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 ⎡🔊⎤ and ⎡🔉⎤ on the conference phone to adjust the volume of audio from the far end.

You can also adjust the volume using the volume buttons on the RealPresence Group system remote control.

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

» Press ⎡🎤⎤ on the conference phone.

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

The indicators on the conference phone are red when your audio is muted. The near-end 🔇 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** soft key then the **Manage** soft key to hang up one connection in a multipoint call.

> You can show content on a RealPresence Group 300 system by using the People+Content IP application only.

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:

> ➢ RealPresence Group 500 system: You can connect a camera to video input 2.
> ➢ RealPresence Group 700 system: You can connect a camera to video input 3.

Contact your system administrator for more information.

Using Microsoft Outlook Calendaring

If your system is configured to connect to the Microsoft Exchange Server, you view scheduled meetings on the RealPresence Group Series Home screen. If you have completed configuration steps, you can also call from calendar meetings. To view or join meetings, refer to the following sections:

Viewing Scheduled Meetings

If your RealPresence Group system is configured to connect to the Microsoft Exchange Server, you can view scheduled meetings on the Home screen.

To view more information about a meeting on the calendar, highlight the meeting. Depending on how your system is configured, private meeting details might not be visible. You might also see reminders displayed on the system a short time before each meeting.

Calling From Meetings on Your Calendar

RealPresence Group systems can connect to Microsoft Exchange Server 2010 or 2013 and retrieve calendar information, including meeting details. If the meeting was created using the Polycom Conferencing Add-in for Microsoft Outlook, the RealPresence Group system can:

- Identify video-enabled meetings with a ◀ icon displayed on the system calendar.
- Let users join the meeting without knowing the connection details.

If your RealPresence Group 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 home screen does not display calendar information, the system is not registered with the Microsoft Exchange Server. If no meetings are scheduled, a "No Meetings Today" message is displayed.

To join a scheduled meeting from the Home screen:

1 In Microsoft Outlook, select the **Add-Ins** tab and click **Schedule Polycom Conference**.

2 In the calendar header, add email addresses in the **To** text box and enter a meeting **Subject**.

3 In the calendar message, under **Meeting Details**, enter the meeting **Video Number** to replace the current number in the message.

4 To send the meeting invitation, click **Send**.

5 With your remote, select a meeting on the Home screen.

6 Select **Join** to call into the meeting. If **Join** is not displayed, you must obtain the Polycom Conferencing Add-In for Microsoft Outlook.

    If the Calendar screen is blank, these criteria have not been met, or no meetings are scheduled in Microsoft Outlook.

> For information about obtaining the Polycom Conferencing Add-In for Microsoft Outlook, refer to Polycom Solution Support on page 41.

Performing Tasks Involving Microsoft Office Communications Server or Lync Contacts

Depending on how your system is configured, you might be able to search a directory, view a list of Microsoft Office Communications Server (OCS) or Microsoft Lync contacts, see if the contacts are online, and call them without knowing or remembering their addresses. RealPresence series supports Microsoft OCS 2007 R2 and Microsoft Lync Server 2010 and 2013.

Office Communicator and Microsoft Lync contacts appear on the RealPresence Group system and on the Contacts screen.

> Polycom RealPresence Group systems do not support Office Communicator or Microsoft Lync distribution list groups, which are created on the Microsoft Exchange Server and are typically used for sending email to a group of people.

Viewing Contact Presence States

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

Polycom RealPresence Group systems, OCS or Microsoft Lync users in an integrated environment use the following presence icons to indicate presence states:

Icon	Presence	Description
	Available	The user is available either in or out of a call
	Do Not Disturb	The user is set to Do Not Disturb or Busy
	Unknown Presence	The user's presence state is unknown or offline
	Idle	The user is inactive or away

Multipoint Calls Using Centralized Conferencing Control Protocol (CCCP)

If a Polycom RealPresence Group system is deployed in a Microsoft Lync Server 2010 or 2013 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.

For more information about CCCP multipoint calling, refer to the *Polycom Unified Communications Deployment Guide for Microsoft Environments* or contact your system administrator.

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 RealPresence Group 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 RealPresence Group system monitor.

Recording Calls

If a Microsoft Lync participant starts recording an active call with a RealPresence Group system, the system displays a **Recording Started** message for several seconds. When recording stops, the system displays a **Recording Stopped** message.

A Recording icon ⏺ displays while a call is being actively recorded.

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 the # key on your Polycom system remote control to access the tone pad.

2 Press the **Select** button to activate flash hook. The first far-end system is placed on hold.

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

4 Hang up the near-end system. The two far-end 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 the # key on the Polycom system remote control to access the tone pad.

2 Press the **Select** button to activate flash hook. The far-end 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 the **Select** button 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 system screen, depending on how your system is configured.

Configuring and Viewing Administration Settings

If your administrator has allowed access, you can configure some of the Administration settings, while other settings are read only. In the local interface, go to [icon] > [icon] or [icon]. Once your administrator has configured a password to protect your system, the icon changes from a [icon] icon to a [icon] icon and you must enter a User ID and password to access these settings.

For details about Administration settings, refer to the *Administrator's Guide for Polycom RealPresence Group Series.*

Allowing the Far-End System to Control Your Camera

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

To allow others in the call to control your camera:

1 From the Home screen, select ![icon] > **User Settings** > **Camera**.

2 Select **Allow Other Participants in a Call to Control Your Camera**.

> Changing this setting takes effect immediately, even if a call is in progress.

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 RealPresence Group system. Use backlight compensation in situations where the subject appears darker than the background. Enabling this setting helps to darken a bright background, which can impact the tracking performance of the Polycom EagleEye Director.

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

To turn backlight compensation on:

» From the Home screen, select ![icon] > **User Settings** > **Camera > Backlight Compensation** and enable the setting.

Configuring the Automatic Self View Control

If your administrator has allowed user access to the Automatic Self View Control, you can configure this setting so that users can display or hide the Self View window.

To enable or disable the Automatic Self View Control:

1 From the Home screen, select ![icon] > **User Settings** > **Camera**.

2 If you want users to be able to turn the Self View on or off, enable the **Automatic Self View Control** setting. If you disable it, users will not see the Self View setting at ![icon] **> Self View** and the RealPresence Group system determines whether the Self View is displayed or not.

To turn Self View on and off during a call:

1 With your remote control, select **> Self View**.

2 Select **On** to display the Self View of the near-end site in a call or **Off** to hide the Self View.

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.

> **Caution**. The default setting is to not allow video display. Be sure to verify whether your system administrator wants the setting to be changed.

To allow the display of video on the web:

1 Navigate to **> User Settings > Meetings**.

2 Select **Allow Video Display on Web**.

Using a USB Keyboard

To enter data and navigate your system's local interface, you can attach a standard English USB keyboard to one of the system's USB ports.

When a USB keyboard is connected to a RealPresence Group system, you can enter only numbers with the remote control on the local interface's **> Keypad** or **> Contacts** screens. To enter letters, unplug the keyboard from the USB port, then select the **Keyboard** button now displayed on your system screen. For more information about entering letters on the virtual keyboard, refer to Calling by Entering a Name or Number on page 7.

Recording Calls on a RealPresence Group 700 System

On a RealPresence Group 700 system, you can record a call on Monitor 3. You can either record the speaker and content or record the speaker only. Your administrator must configure the settings for this feature.

To record a call using a DVD or DVR device:

1 Power off your RealPresence Group 700 system.

2 Attach a VGA cable from the VGA video output on your RealPresence Group system to the VGA input on your DVD or DVR device.

3 Power on your RealPresence Group system.

4 On the DVD or DVR device, use the record function to record the call.

The layout option for the recorded video is the layout that your administrator configured for Monitor 3.

To record a call using a laptop or tablet:

1 Power off your RealPresence Group 700 system.

2 Attach an HDMI cable from the HDMI video output on your RealPresence Group system to the HDMI input on your laptop or tablet.

3 Power on your RealPresence Group system.

4 On the laptop or tablet, use a recording application to record the call.

   The layout option for the recorded video is the layout that your administrator configured for Monitor 3.

Incoming Call Alert for Hearing-Impaired Users

If your administrator has configured this feature, an attention-getting message displays for hearing-impaired users when an incoming call is received by the RealPresence Group system. When a call is received, the RealPresence Group system displays a message asking if you would like to answer the call.

If the feature is enabled, the enlarged message text flashes between white and yellow. Flashing text is off by default. The incoming call alert persists after powering the system off and on.

Troubleshooting

If you are having problems making a call or need to view system information, diagnostics, or configure some administration settings, refer to the following sections:

Placing a Test Call

To troubleshoot any issues making video calls, call a Polycom video site to test your setup. A list of worldwide numbers that you can use to test your Polycom RealPresence Group system is available at www.polycom.com/videotest.

Try these best practice methods:

● Make sure the number you dialed is correct, then try the call again. For example, you might need to dial 9 for an outside line or include a long distance access code or country code.

● To find out if the problem exists in your system, ask the person you were trying to reach to call you instead.

● Find out if the system you are calling is powered on and is functioning properly.

● If you can make calls but not receive them, make sure that your system is configured with the correct number.

Accessing System Information, Status, and Diagnostics Screens

You can review information about calls, network usage, and performance on the various RealPresence Group systems screens.

Available System menus vary based on how your administrator configured the system. Therefore, this section might cover options that you cannot access on your system. To find out more about these options, please talk to your administrator.

System Information

To access the System Information screens:

» Go to ⚙ > **System Information** > **Information.**

The System Information screen has the following choices:

- Information
- Status
- Diagnostics
- Call Statistics (in a call only)

Information

This screen includes the following details:

Diagnostic Screen	Description
System Detail	Displays the following system information: • System Name • Model • Hardware Version • System Software • Serial Number • MAC Address • IP Address
Network	Displays the following network information: • IP Address • Host Name • H.323 Name • H.323 Extension (E.164) • SIP Address • Link-Local • Site-Local • Global Address
Usage	Displays the following usage information: • Time in Last Call • Total Time in Calls • Total Number of Calls • System Up Time

Status

When a system device or service encounters a problem, you see an alert next to the Settings button on the menu. This screen includes the following system status details for either out of a call or in a call status:

Out of a Call Status Information

Status Screen	Description
Active Alerts	Displays the status of any device or service listed within the Status screens that has a current status indicator of red. Alerts are listed in the order they occurred. When a system device or service encounters a problem, you see an alert next to the **Settings** button on the menu.
Call Control	Displays the status of the **Auto-Answer Point-to-Point Video** and **Meeting Password** settings.
Audio	Displays the connection status of audio devices such as the microphones, SoundStation IP, and SoundStructure.
EagleEye Director	Displays the connection status of the EagleEye Director, if one is connected. If the camera system is not connected, this choice is not visible on the screen.
VisualBoard	Displays the connection status of the VisualBoard, if one is connected. If VisualBoard is not connected, this choice is not visible on the screen.
LAN	Displays the connection status of the IP Network.
Servers	• Always displays the Gatekeeper and SIP Registrar Server. • Displays the active Global Directory Server, LDAP Server, or Microsoft Server. • If enabled, displays the Provisioning Service, Calendaring Service, or Presence Service.
Log Management	Displays the status of the Log Threshold setting. Your administrator can download system logs, call detail reports, and configuration profiles using the web interface.

In a Call Status Information

Status Screen	Description
Call Statistics	Displays information about the call in progress. In multipoint calls, the Call Statistics screens show most of this information for all systems in the call. For more information on this screen, refer to Viewing Call Statistics on page 39.

Points to note about system status information:

- If the Polycom RealPresence Group system detects an EagleEye Director, a status line for the device is displayed.
- When a change occurs in the system status or a potential problem exists, you see an alert next to the **System** button on the menu.

System Diagnostics

To access information about your system diagnostics:

In your local interface, you can view system information and perform audio and video tests as follows.

» Select ⚙ > **System Information** > **Diagnostics.**

This screen includes the following system diagnostic details:

Diagnostic Screen	Description
Near End Loop	Tests the internal audio encoders and decoders, the external microphones and speakers, the internal video encoders and decoders, audio hardware, and the external microphones, speakers, cameras, and monitors. Monitor 1 displays the video and plays the audio that would be sent to the far site in a call. This test is not available when you are in a call.
PING	Tests whether the system can establish contact with a far-site IP address that you specify. PING returns abbreviated Internet Control Message Protocol results. It returns H.323 information only if the far site is configured for H.323. It returns SIP information only if the far site is configured for SIP. If the test is successful, the Polycom RealPresence Group system displays a message.
Trace Route	Tests the routing path between the local system and the IP address entered. If the test is successful, the Polycom RealPresence Group system lists the hops between the system and the IP address you entered.
Color Bars	Tests the color settings of your monitor for optimum picture quality. If the color bars generated during the test are not clear, or the colors do not look correct, the monitor needs to be adjusted.
Speaker Test	Tests the audio cable connections. A 473 Hz audio tone indicates that the local audio connections are correct. If you run the test from the system during a call, the far site will also hear the tone.

Diagnostic Screen	Description
Audio Meter	Measures the strength of audio signals from the microphone or microphones, far-site audio, and any device connected to the audio line in. • To check the microphone or microphones, speak into the microphone. • To check far-site audio, ask a participant at the far site to speak or call a phone in the far-site room to hear it ring. The Audio Meters indicate peak signal levels. Set signal levels so that you see peaks between +3dB and +7dB with normal speech and program material. Occasional peaks of +12dB to +16dB with loud transient noises are considered acceptable. A meter reading of +20dB corresponds to 0dBFS in the Polycom RealPresence Group system audio. A signal at this level is likely clipping the audio system. Meters function only when the associated input is enabled. **Note:** Some audio meters are unavailable when a SoundStructure digital mixer is connected to the Polycom RealPresence Group system.
Camera Tracking	Provides diagnostics specific to the EagleEye Director, if this camera is connected to the system. **Audio** Verifies microphone functionality. To use this feature, speak aloud and verify that you can see dynamic signal indications for two vertical microphones and five horizontal microphones. If no signal indication appears for a specific microphone, manually power off the EagleEye Director and then power it back on. Also verifies the reference audio signal: Set up a video call. Let the far side speak aloud and verify that you can see dynamic signal indications for the two reference audio meters. If no signal indication appears for a specific microphone, make sure the reference cable is connected firmly. After you verify microphone functionality, calibrate the camera again. **Video** • **Left Camera** shows video from the left camera. • **Right Camera** shows video from the right camera. • **Color Bars** displays the color bar test screen.

Diagnostic Screen	Description
Sessions	Displays the following information about each session connected to the system: • Type of connection, such as web or local interface • ID associated with the session, typically Admin or User • Remote IP address (the addresses of people logged in to the RealPresence Group system from their computers)
Reset System	**Note**: Do not use this setting unless your administrator tells you to do so. If a password is set, you must enter it to reset the system. Returns the system to its default settings. When you select this setting using the remote control, you have the option to do the following: • Keep your system settings (such as system name and network configuration) or restore system settings. • Keep or delete the directory stored on the system. System reset does not affect the global directory. • Keep or delete all PKI certificates and certificate revocation lists (CRLs). Before you reset the system, you might ask your administrator to download the Call Detail Report (CDR) and CDR archive. For more information about these reports, refer to the *Administrator's Guide for Polycom RealPresence Group Series*.

Viewing Call Statistics

The call statistics diagnostic screens allow you to view information about a call in progress. You can see details about participants in a call and about participant streams.

> As a shortcut during a call, press the **Back** button on your remote control for two or more seconds to display the Call Statistics screen.

To view information about a point-to-point call in progress:

» Go to [icon] > **System Information** > **Call Statistics**.

Streams associated with the participant are displayed beneath the participant information. To view more information about a specific stream, navigate to the desired stream and select **More Information**.

To view information about a multipoint call in progress:

1 Go to [icon] > **System Information** > **Call Statistics**.

A list of participants in the call is displayed.

2 Do one of the following:

➢ To view a participant's details, select **Participants**, navigate to the desired participant, and select **More Information**. The participants' active streams are displayed beneath the participant information.

➢ To quickly access information about a particular stream or streams associated with a particular user, navigate to **Streams** for calls using Advanced Video Coding (AVC) or **Participant Streams** for calls using Scalable Video Coding (SVC)**.** Use the **Back** and **Next Participant** buttons to navigate to the participant with the stream or streams you want to view. Navigate to the desired stream and select **More Information**.

➢ To quickly access a list of all active audio, video, and content streams within the call, navigate to **Active Streams** (available in SVC calls only). Select the desired stream, and select **More Information**.

Searching for Answers in the Product Documentation

You can find Polycom product documentation at support.polycom.com. Under **Documents and Downloads**, select **Telepresence and Video > RealPresence Group** [your system type], and then search for the document you want. The documents are grouped by version number, starting with the last version first.

Using the Knowledge Base

For more troubleshooting information, search the Knowledge Base at support.polycom.com.

Contacting Technical and Solution Support

Before you call technical support, please refer to Troubleshooting on page 34. After you have tried those solutions, you might need to contact one of the following Polycom support groups:

Polycom Technical Support on page 40

Polycom Solution Support on page 41

Polycom Technical Support

If you are not able to make test calls successfully and you have verified that the equipment is installed and set up correctly, contact your Polycom distributor or Polycom Technical Support.

To contact Polycom Technical Support, go to support.polycom.com.

Enter the following information about your RealPresence group system, then ask a question or describe the problem. This information helps us to respond faster to your issue:

System Information	User Interface Location
System serial number (14 digits)	Go to > **System Information** > **Information** > **System Detail** or locate the number on the back of the system.
Software version	Go to > **System Information** > **Information** > **System Detail**.
Active alert messages	Go to > **System Information** > **Status > Active Alerts** for messages generated by your system.
IP Address and H.323 Extension	Go to > **System Information** > **Information** > **Network**.
LAN status	Go to > **System Information** >**Status** > **LAN**.
Diagnostics	Go to > **System Information** >**Diagnostics**.

In addition, please provide any diagnostic tests or troubleshooting steps that you have already tried.

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 or 2013 integrations. For additional information and details please refer to http://www.polycom.com/services/professional_services/index.html or contact your local Polycom representative.

Regulatory Notices

Regulatory notices describe safety and legal considerations for using the following Polycom RealPresence Group systems:

- Polycom RealPresence Group 300 System (Model: Group 300; Type: P001)
- Polycom RealPresence Group 500 System (Model: Group 500; Type: P001)
- Polycom RealPresence Group 700 System (Model: Group 700; Type: P002)

> If you have an EagleEye Acoustic camera, be sure to use it only with UL-approved Information Technology Equipment (ITE) or similarly approved equipment.

For more regulatory information, refer to the *Regulatory Notices for the Polycom RealPresence Group Series* at support.polycom.com **> Documents & Downloads > Telepresence and Video.** Select your system name to navigate to the correct document.