

INTEGRATOR REFERENCE GUIDE

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# Polycom<sup>®</sup> RealPresence<sup>®</sup> Group Series



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# **Before You Begin**

This guide is for system integrators who need to configure, customize, manage, and troubleshoot Polycom<sup>®</sup> RealPresence<sup>®</sup> Group Series systems.

### **Get Help**

For more information about installing, configuring, and administering Polycom products, refer to **Documents and Downloads** at Polycom Support.

#### **Polycom and Partner Resources**

To find all Polycom partner solutions, see Strategic Global Partner Solutions.

#### The Polycom Community

The Polycom Community gives you access to the latest developer and support information. Participate in discussion forums to share ideas and solve problems with your colleagues. To register with the Polycom Community, simply create a Polycom online account. When logged in, you can access Polycom support personnel and participate in developer and support forums to find the latest information on hardware, software, and partner solutions topics.

# **Room Integration**

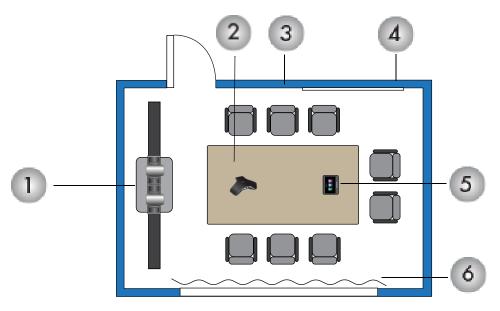
### Set Up a Room for Video Conferencing

For detailed information about setting up a room for video conferencing, refer to Room Design and Layout.

#### **Room Layout Examples**

Use the following diagrams as examples for setting up a conference room with Polycom RealPresence Group systems. Polycom recommends that you contract an experienced contractor to ensure all the components operate as a single cohesive system.

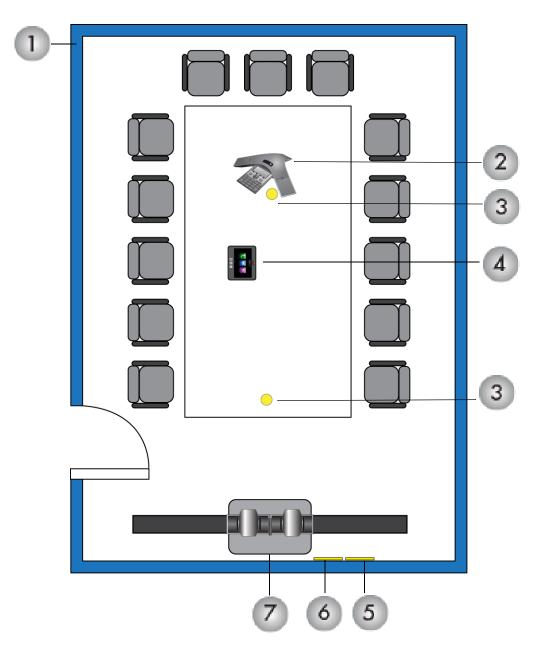
#### **Small Conference Room**



Ref. Number	Description	
1	Polycom RealPresence Group System Media Center with dual 42" displays an Polycom EagleEye Director	
2 Polycom RealPresence Group Microphone		
3	Acoustic panels	

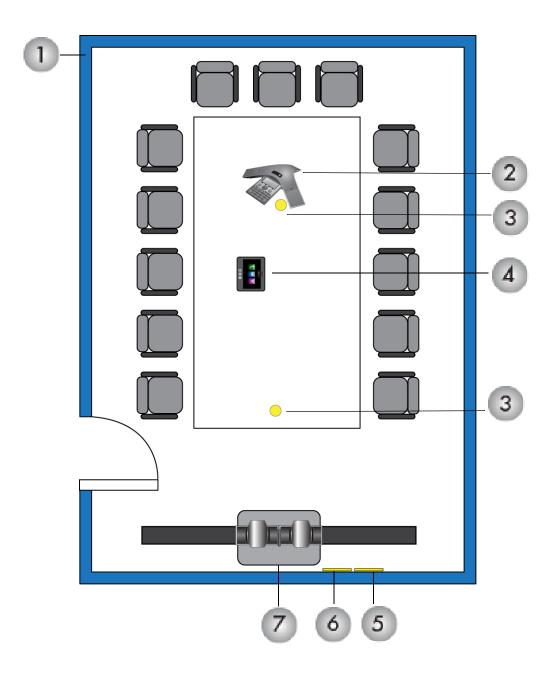
Ref. Number	Description
4	Whiteboard
5	Polycom touch device (RealPresence Touch or Polycom Touch Control) Note: You may experience a low signal strength when connecting a touchscreen monitor with a USB cable that is longer than five feet. Polycom recommends that you use an externally powered USB hub or a USB cable that is shorter than five feet.
6	Acoustic-quality drapes

### Large Conference Room



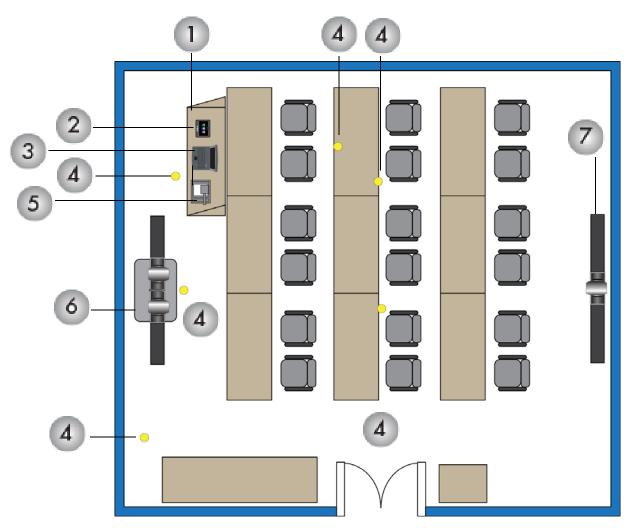
Large Conference Room	
Ref. Number	Description

Ref. Number	Description
1	Acoustic panels
2	Polycom SoundStation IP 7000 phone
3	Ceiling microphone
4	Polycom touch device (RealPresence Touch or Polycom Touch Control)
	Note: You may experience a low signal strength when connecting a touchscreen monitor with a USB cable that is longer than five feet. Polycom recommends that you use an externally powered USB hub or a USB cable that is shorter than five feet.
5	Power outlets
6	Network outlets
7	Polycom RealPresence Group System Media Center with dual 65" displays and Polycom EagleEye Director



Ref. Number	Description
1	Acoustic panels
2	Polycom SoundStation IP 7000 phone
3	Ceiling microphone
4	Polycom touch device (RealPresence Touch or Polycom Touch Control)
	Note: You may experience a low signal strength when connecting a touchscreen monitor with a USB cable that is longer than five feet. Polycom recommends that you use an externally powered USB hub or a USB cable that is shorter than five feet.
5	Power outlets
6	Network outlets
7	Polycom RealPresence Group System Media Center with dual 65" displays and Polycom EagleEye Director





Ref. Number	Description
1	Teacher's podium
2	Polycom touch device
	Note: You may experience a low signal strength when connecting a touchscreen monitor with a USB cable that is longer than five feet. Polycom recommends that you use an externally powered USB hub or a USB cable that is shorter than five feet
3	Computer
4	Ceiling microphone

Room Integration

Ref. Number	Description
5	Document camera
6	Polycom RealPresence Group Media Center with dual displays, EagleEye Director, and Polycom SoundStructure
7	Wall-mounted displays with EagleEye camera

### **Video Integration**

The following sections describe how to connect cameras to RealPresence Group Series systems. After you connect a camera to a system, refer to the *Polycom RealPresence Group Series Administrator Guide* for information about configuring the camera options in the user interface.

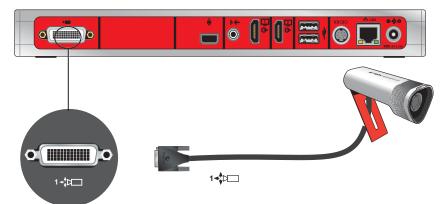
### **Connect Polycom Cameras**

You can connect RealPresence Group systems to a Polycom EagleEye Acoustic, Polycom EagleEye IV, Polycom EagleEye III, Polycom EagleEye Director, Polycom EagleEye HD, Polycom EagleEye 1080, Polycom EagleEye View, or Polycom EagleEye II camera. Refer to the release notes for the software release installed on the system for a list of supported PTZ cameras.

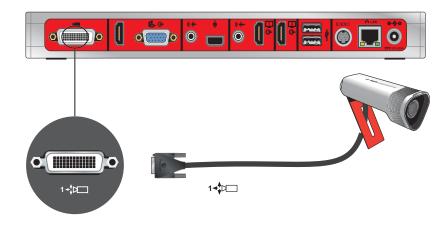
#### Use the Polycom EagleEye Acoustic Camera as the Main Camera

You can connect a Polycom EagleEye Acoustic camera (part number 2624-65058-001) to a RealPresence Group system as the main camera.

### Connect a Polycom EagleEye Acoustic Camera as the Main Camera to a RealPresence Group 300 System:



Connect a Polycom EagleEye Acoustic Camera as the Main Camera to a RealPresence Group 310 or 500 System:



Connect a Polycom EagleEye Acoustic Camera as the Main Camera to a RealPresence Group 700 System:



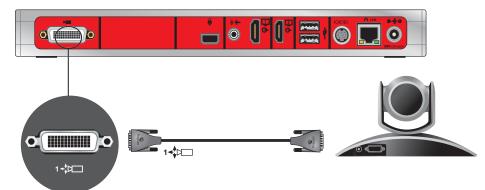
#### Use the Polycom EagleEye III Camera as the Main Camera

You can connect a Polycom EagleEye III camera (part number 1624-08283-002, 8200-63730-001 or 8200-63740-001) to a Polycom RealPresence Group Series system as the main camera using:

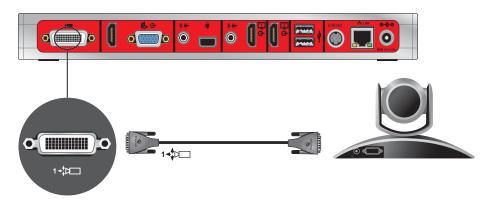
#### **Option 1**

- HDCI Analog Camera Cable
- Power supply. Power supply is only required if you want to use the IR remote to wake the system when it is in sleep mode on RealPresence Group 700 systems. Use only the approved power supply from Polycom (part number 1465-52748-040). Do not exceed 12 Volts at 3 Amps. Verify the polarity of the power supply as shown on the Polycom camera next to the power supply input.

Connect a Polycom EagleEye III Camera to a Polycom RealPresence Group 300 System as the Main Camera (Option 1):



Connect a Polycom EagleEye III Camera to a Polycom RealPresence Group 310 or 500 System as the Main Camera (Option 1):



Connect a Polycom EagleEye III Camera to a Polycom RealPresence Group 700 System as the Main Camera (Option 1):

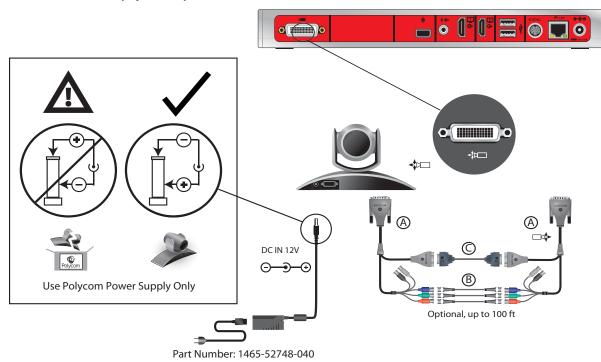


#### **Option 2**

- HDCI Camera Break-Out Analog CableHDCI Camera Break-Out Analog Cable
- B—Coaxial analog video cables
- C—DB-9 serial cable
- Power supply. Power supply is required when the camera is not connected directly to the RealPresence Group Series system using HDCI, or when the HDCI cable is longer than 10 meters. Use only the approved power supply from Polycom (part number 1465-52748-040). Do not exceed 12 Volts at 3 Amps. Verify the polarity of the power supply as shown on the Polycom camera next to the power supply input.

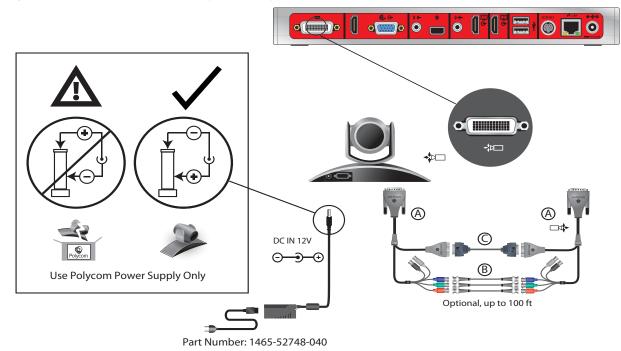


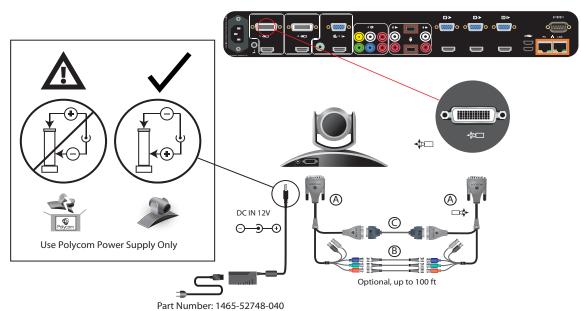
Polycom recommends this configuration when a custom cable length is required. The BNC and serial cables can be built to custom lengths.



Connect a Polycom EagleEye III Camera to a Polycom RealPresence Group 300 System as the Main Camera (Option 2):

Connect a Polycom EagleEye III Camera to a Polycom RealPresence Group 310 or 500 System as the Main Camera (Option 2):





Connect a Polycom EagleEye III Camera to a Polycom RealPresence Group 700 System as the Main Camera (Option 2):

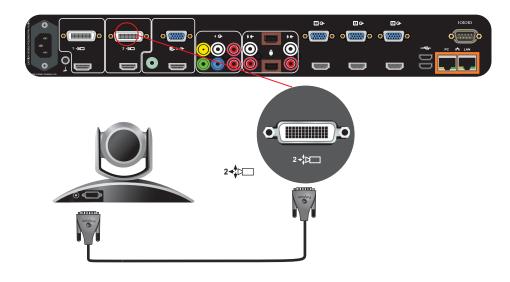
#### Polycom EagleEye III Camera as the Second Camera

You can connect a Polycom EagleEye III camera (part number 1624-08283-002, 8200-63730-001, or 8200-63740-001) to a Polycom RealPresence Group 700 system as the second camera.

#### **Option 1**

- HDCI Analog Camera Cable
- Power supply. Power supply is required when the camera is not connected directly to the RealPresence Group Series system using HDCI, or when the HDCI cable is longer than 10 meters. Use only the approved power supply from Polycom (part number 1465-52748-040). Do not exceed 12 Volts at 3 Amps. Verify the polarity of the power supply as shown on the Polycom camera next to the power supply input.

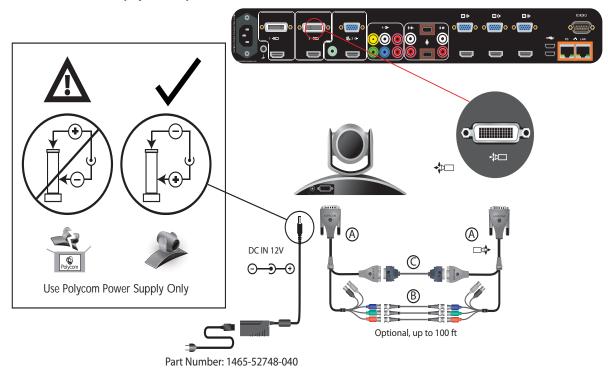
Connect to a Polycom EagleEye III Camera to a Polycom RealPresence Group 700 System as a Second Camera (Option 1):



#### Option 2

- A—Two HDCI Camera Break-Out Analog Cable
- B—Coaxial analog video cables
- C—DB-9 serial cable
- Power supply. Power supply is required when the camera is not connected directly to the RealPresence Group Series system using HDCI, or when the HDCI cable is longer than 10 meters. Use only the approved power supply from Polycom (part number 1465-52748-040). Do not exceed 12 Volts at 3 Amps. Verify the polarity of the power supply as shown on the Polycom camera next to the power supply input.

Connect a Polycom EagleEye III Camera to a Polycom RealPresence Group 700 System a Second Camera (Option 2):



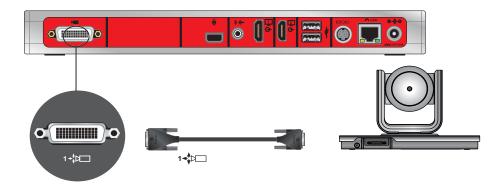
#### Polycom EagleEye IV Camera as the Main Camera

You can connect a Polycom EagleEye IV camera (part number 1624-66057-001 or 1624-66061-001) to a RealPresence Group system as the main camera.

#### Option 1:

- HDCI Polycom EagleEye IV Digital Camera Cable
- Power supply. Power supply is required only if you want to use the IR remote to wake the system when it is in sleep mode on RealPresence Group 700 systems. Use only the approved power supply from Polycom (part number 1465-52748-040). Do not exceed 12 Volts at 3 Amps. Verify the polarity of the power supply as shown on the Polycom camera next to the power supply input.

Connect a Polycom EagleEye IV Camera to a Polycom RealPresence Group 300 System as the Main Camera (Option 1):



Connect a Polycom EagleEye IV Camera to a Polycom RealPresence Group 310 or 500 System as the Main Camera (Option 1):



Connect a Polycom EagleEye IV Camera to a Polycom RealPresence Group 700 System as the Main Camera (Option 1):



#### Option 2:

For installations requiring distances of farther than 10m between the camera and system, use the Polycom EagleEye Digital Extender. The EagleEye Digital Extender (part number 2215-64200-001) supports distances from 3m to 100m.

You can use an HDCI Polycom EagleEye IV Digital Camera Cable to connect an EagleEye Producer when it is being used with an EagleEye IV camera that is connected to a system.

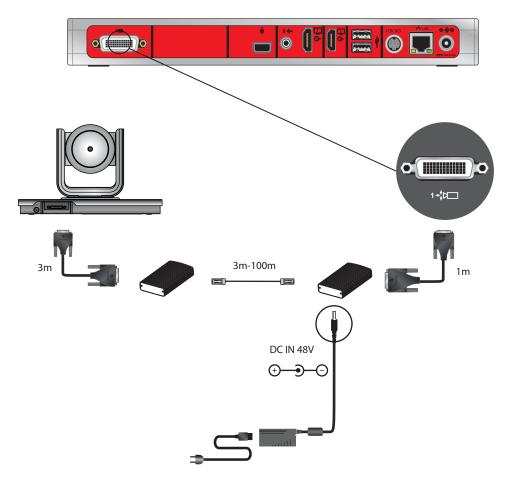
Connect the camera and system using the following cables:

- Polycom EagleEye Digital Extender (includes a 1m HDCI Polycom EagleEye IV Digital Camera Cable and a power source)
- HDCI Polycom EagleEye IV Digital Camera Cable (3m or 10m)
- A user-supplied CAT 5e/6a or better solid conductor LAN Cable. See <a href="http://hdbaset.org/cables">http://hdbaset.org/cables</a> for recommended cables. For optimal performance, use a high quality shielded CAT6A cable (CAT 6A F/UTP). This cable must be terminated according to the TIA/EIA T 568B wiring standard.

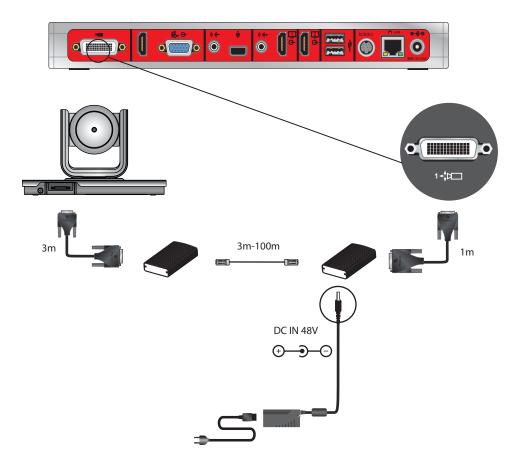
For EagleEye Digital Extender installation recommendations and precautions, see Install the EagleEye Digital Extender.

Another application is to use the Digital Breakout Adapter (DBA) with an HDCI Polycom EagleEye IV Digital Camera Cable to connect the EagleEye IV camera to the codec. See Option 3:.

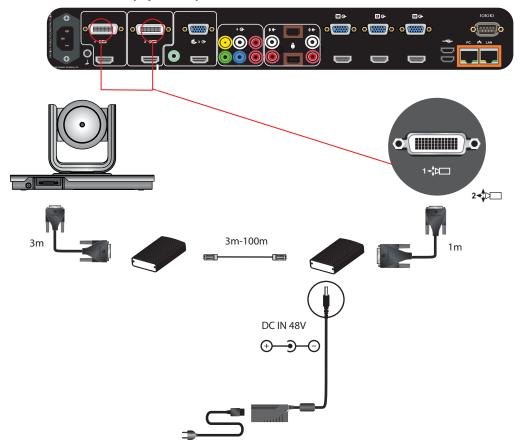
Connect a Polycom EagleEye IV Camera to a Polycom RealPresence Group 300 System as the Main Camera (Option 2):



Connect a Polycom EagleEye IV Camera to a Polycom RealPresence Group 310 or 500 System as the Main Camera (Option 2):



Connect a Polycom EagleEye IV Camera to a Polycom RealPresence Group 700 System as the Main Camera (Option 2):



#### Option 3:

For installations where the use of HDMI cables is preferred, the Polycom Digital Breakout Adapter (DBA) is recommended. There are two versions of this adapter. One version is for use at the camera and requires a power transformer. The other version is for use at the codec, which does not require additional power.

You can use the DBA with a standard HDMI cable and a DB9 cable to connect the camera with a DBA to another DBA at the codec. Instead of an HDMI cable, the configuration can include HDMI switchers between the DBAs. Use one of the following cables to connect the DBA:

- Mini-HDCI to connect the EagleEye IV or EagleEye Acoustic to a DBA, and another mini-HDCI at the coded to the DBA
- User-supplied HDCI and DB9 cables would be used between the DBAs and/or user-supplied equipment

Another application allows the HDCI to be broken out to HDMI, and if needed DB9, to connect the HDMI sources on the code or the input of another device.

For additional configurations of the DBA, including the DB9 connector, see Polycom RealPresence Digital Brkout, Codec Adapter or Polycom RealPresence Digital Brkout, Camera Adapter in the Cables section of this guide.

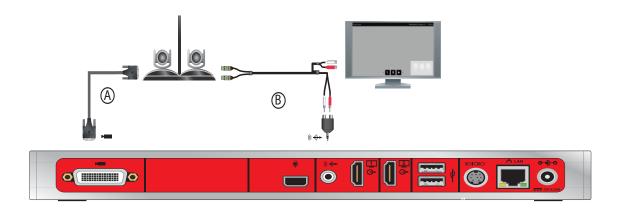
#### Use an EagleEye Director as the Main Camera or Second Camera

EagleEye Director can be connected to Polycom RealPresence systems as the main camera. Polycom EagleEye Director can be connected to a Polycom RealPresence Group 700 system as the main camera or second camera.

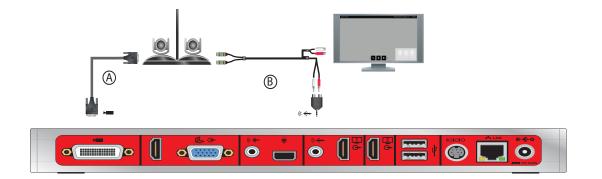
# Connect an EagleEye Director (part number 7200-82632-001, 7200-82631-001, or 2200-82559-001) to RealPresence Group system as the main camera using:

- A—HDCI Analog Camera Cable. Both the 3m and 10m cables are supported.
- B—Polycom EagleEye Director Audio Feedback Phoenix to RCA Cable

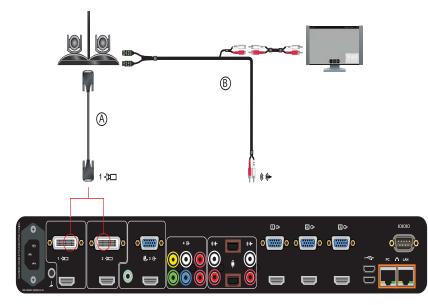
Connect a Polycom EagleEye Director to a Polycom RealPresence Group 300 System as the Main Camera:



Connect a Polycom EagleEye Director to a Polycom RealPresence Group 310 or 500 System as the Main Camera:



Connect a Polycom EagleEye Director to a Polycom RealPresence Group 700 System as the Main Camera:





The RealPresence Group Series 700 system can support only one EagleEye Director.

#### Polycom EagleEye Producer

An EagleEye Producer can be connected to one Polycom RealPresence Group system as the main camera. EagleEye Producer supports EagleEye III (part number 1624-08283-002, 8200-63730-001, or 8200-63740-001) and EagleEye IV (part number 1624-66057-001 or 1624-66061-001) cameras.



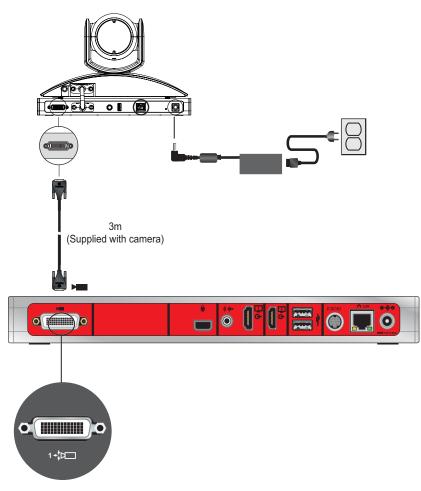
The Polycom EagleEye Producer Ethernet port is reserved for future use and is not enabled.

**Option 1** 

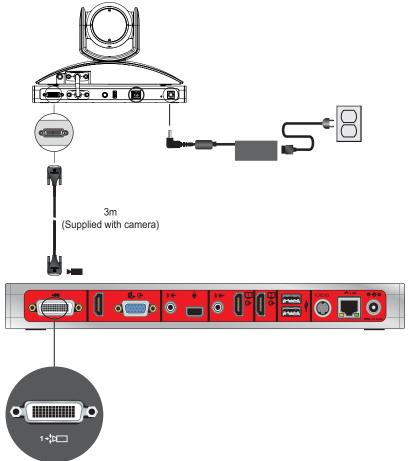
Connect a Polycom EagleEye Producer with Polycom EagleEye III to a Polycom RealPresence Group system using:

• A—HDCI Polycom EagleEye Producer Camera Digital Cable Adapter. Both the 3m and 10m cables are supported.

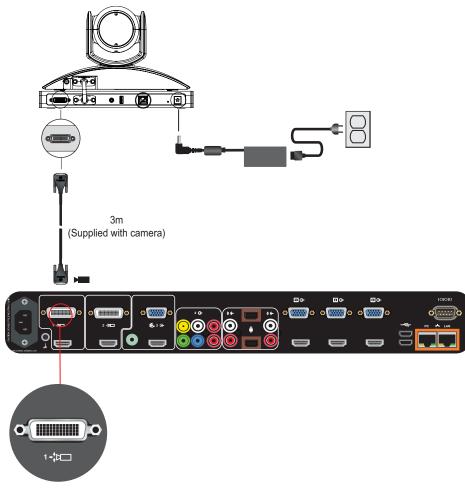
Connect a Polycom EagleEye Producer with a Polycom EagleEye III Camera to a Polycom RealPresence Group 300 System:



Connect a Polycom EagleEye Producer with a Polycom EagleEye III Camera to a Polycom RealPresence Group 310 or 500 System:



Connect a Polycom EagleEye Producer with a Polycom EagleEye III camera to a Polycom RealPresence Group 700 system:

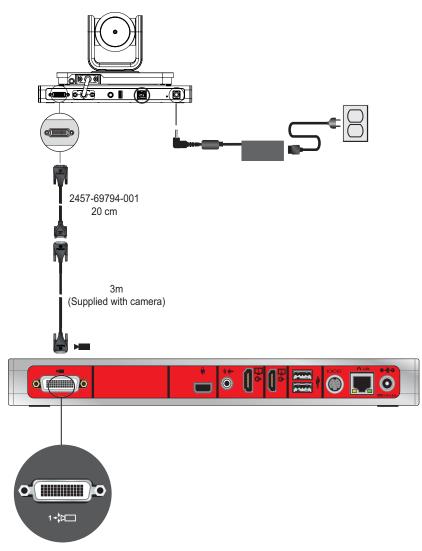


**Option 2** 

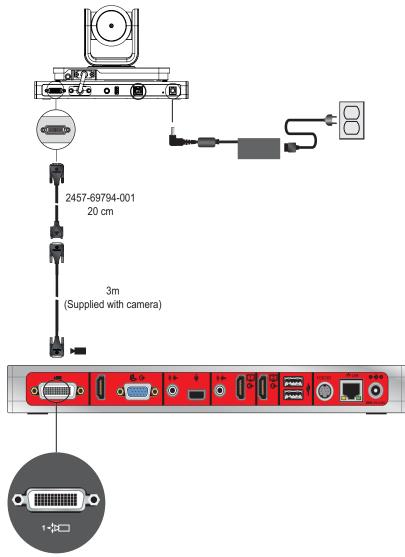
# Connect a Polycom EagleEye Producer with Polycom EagleEye IV camera to a Polycom RealPresence Group system using:

- A—HDCI Polycom EagleEye Producer Camera Digital Cable Adapter
- B—HDCI Polycom EagleEye IV Camera to Polycom EagleEye Producer Digital Cable

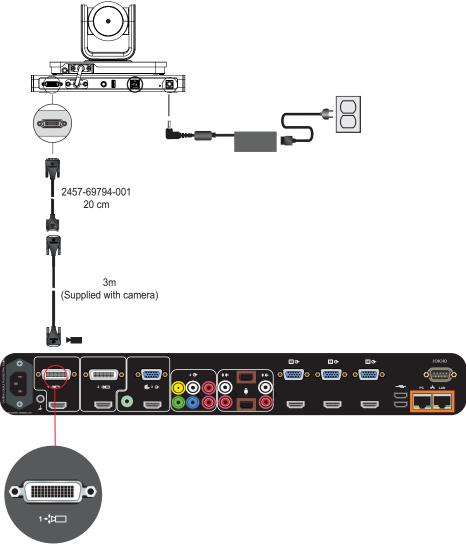
Connect a Polycom EagleEye Producer with a Polycom EagleEye IV Camera to a Polycom RealPresence Group 300 System:



Connect a Polycom EagleEye Producer with a Polycom EagleEye IV Camera to a Polycom RealPresence Group 310 or 500 System:



Connect a Polycom EagleEye Producer with a Polycom EagleEye IV Camera to a Polycom RealPresence Group 700 System:



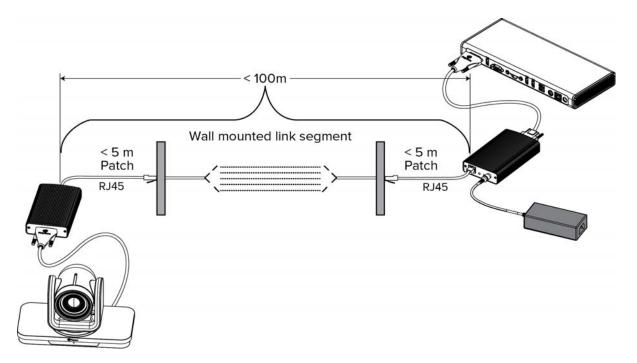
#### Install the EagleEye Digital Extender

For installations requiring distances of farther than 3m between the Polycom EagleEye IV camera and RealPresence Group system, use the Polycom EagleEye Digital Extender. See option 2 under Polycom EagleEye IV Camera as the Main Camera for an example of a configuration that uses the EagleEye Digital Extender

Use the guidelines and recommendations in this section when installing the EagleEye Digital Extender.

**Maximum cable length** The maximum cable length for the user provided cable for the Polycom EagleEye Digital Extender is 100 meters. This maximum length refers to the length between the two Polycom EagleEye Digital Extender boxes.

#### EagleEye Digital Extender three segment installation



**Cable Bundling** Polycom EagleEye Digital Extender is based on HDBaseT technology, which limits how many data cables can be bundled together. The following table shows the maximum number of data cables permitted in a bundle.

#### Maximum number of cables per bundle

Type of Cable	30m	50m	70m	100m
CAT 5e/6	6	4	2	1
CAT 6a/7	6	6	6	6

**Recommended Cable** Polycom EagleEye Digital Extender is based on HDBaseT technology. Cat 5e cable was used for all FCC and CE regulatory testing. For best performance, use HDBaseT recommended Cat 6A solid conductor shielded cable (CAT 6A F/UTP) found at http://hdbaset.org/cables.

**EagleEye Digital Extender Installation Best Practices** When installing the EagleEye Digital Extender, follow these installation recommendations:



Implementation of these recommendations is not required for the following cabling systems:

- Augmented Cat6a F/UTP (sometimes referred to as ScTp) or Cat7 S/FTP (fully shielded) cabling systems.
- Augmented Cat6a UTP systems, such as those with cable diameter design enhancements that increase cable-to-cable separation.

- Do not loop excess cable.
- Do not comb or pinstripe cables in the first 20m.
- Separate path and equipment cords in the first 20m.
- Avoid tie-wraps.
- Use horizontal wire management techniques, such as routing odd ports to upper management and even ports to lower management.
- Loosely place cables in vertical wire management.
- Reduce maximum conduit fill density to 40%.
- Avoid routing or bundling the CATx cable close to any high noise source cable; for example, the power cable of a fluorescent lamp, the power line of an air conditioner or a wifi access router
- Avoid routing the CATx cable close to high noise source equipment such as fluorescent lamps, air conditioners or wifi access points.

#### **Supported Third Party Cameras**

The following table lists third-party cameras supported with Polycom RealPresence Group Series systems and shows the types of connectors the cameras use.

Camera	Video Output Connector
Sony BRC-H700	VGA (RGB or Component)
Sony BRC-Z330	VGA (RGB or Component)
Sony EVI-D70 (SD camera)	S-Video, Composite <b>Note:</b> Use only the Composite connector and use the connector only with the RealPresence Group 700 system.
Sony EVI-H100S	HD-SDI
Sony EVI-HD1	VGA (Component)
Sony EVI-HD7	DVI (RGB or Component)
Vaddio ClearVIEW HD-19	VGA/BNC

#### **Supported Third-Party Camera**

#### Connect a Camera through the RS-232 Serial Port

Camera control through the RS-232 serial port is supported for third-party cameras.

To configure these cameras, go to the RealPresence Group system web interface and select Admin Settings > Audio/Video > Video Inputs. For more information about configuring cameras, refer to the Polycom RealPresence Group Series Administrator Guide.

If your camera has a breakout cable that allows the video to be connected to the HDCI port, you can use the external serial port to get the serial data to and from the camera:

- 1 On the system's back panel, connect the camera to the serial port.
- 2 In the web interface, select Admin Settings > General Settings > Serial Ports.

- 3 For the RS-232 Mode setting, select Camera Control to enable the external serial port.
- 4 Configure the **Serial Port Options**. Use the following settings:

Setting	Value
Baud Rate	9600
Parity	None
Data Bits	8
Stop Bits	1
RS-232 Flow Control	None

You can use the external serial port with any one of the following video inputs:

RealPresence Group System	Video Input 1	Video Input 2	Video Input 3	Video Input 4
RealPresence Group 500 System	Yes	Yes	N/A	N/A
RealPresence Group 700 System	Yes	Yes	Yes	Yes

## **Audio and Content Integration**

# Connect a Polycom RealPresence Group Microphone to a Polycom RealPresence Group System

You can connect a Polycom RealPresence Group Series microphone to a Polycom RealPresence Group system using the RealPresence Group Microphone Array Walta-Walta Cable.



#### Warning: Improper connection may cause severe damage

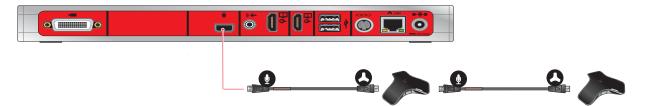
Be very careful to plug in the microphone array with the correct plug orientation. If while plugging in the connector you feel undue pressure or that you need to "force" the cable for it to connect, the cable is likely being inserted in an incorrect manner. This is a serious issue because an improper connection causes the current to flow in a reverse polarity manner leading to high current that can result in severe damage to the RealPresence Group system. For the correct cable orientation, refer to the graphics below and the setup sheet that shipped with your system.

When connecting a Polycom RealPresence Group Series microphone to a Polycom RealPresence Group Series system, ensure that the cable is inserted correctly. When connecting the cable to a microphone, the

Sicon must be facing up. When connecting the cable to a RealPresence Group Series system or

Polycom SoundStation IP 7000 phone, the equation = 1
eq

#### Connect a RealPresence Group Series Microphone to a RealPresence Group 300 System:



Connect a RealPresence Group Series Microphone to a RealPresence Group 310 System:



**Connect a RealPresence Group Series Microphone to a RealPresence Group 500 System:** 



Connect a RealPresence Group Series Microphone to a RealPresence Group 700 System:



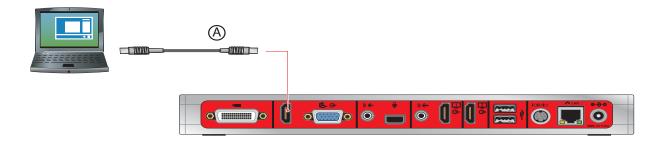
#### **Connect a Computer to a Polycom RealPresence Group System**

You can connect Polycom RealPresence Group series 500 and 700 systems to a computer. Polycom RealPresence Group 300 and 310 systems use People+Content IP to share content.

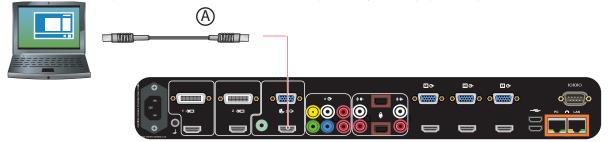
#### Option 1

• A—HDMI Monitor Cable

Connect a Computer to a RealPresence Group 500 System (Option 1):



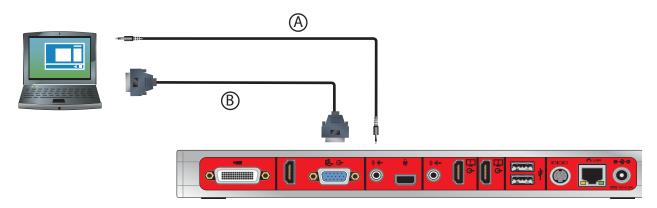
#### Connect a computer to a RealPresence Group 700 system (Option 1):



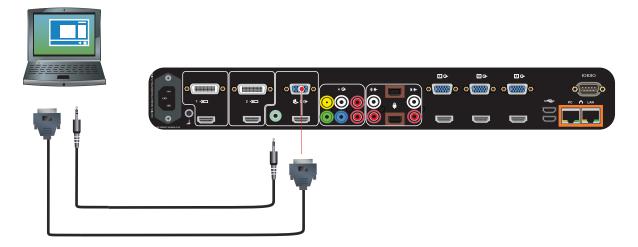
#### Option 2:

- A—VGA male to VGA male cable
- B—3.5mm stereo male to 3.5mm stereo male

#### Connect a computer to a RealPresence Group 500 system (Option 2):



Connect a computer to a RealPresence Group 700 system (Option 2):

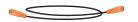


## Cables

This section includes information about cables that can be used with a RealPresence Group system. Please note that drawings and part numbers are provided for reference only. Compliance information is provided for the Restriction of certain Hazardous Substances Directive (RoHS).

## **Network Cables**

#### CAT 5e LAN Cable



This cable connects RealPresence Group a system to the LAN. It has orange RJ-45 connectors on both ends. It meets category 5e requirements and is wired according to EIA/TIA-568B. The maximum approved length for this cable is 328 ft (100 m) on an 802 network.

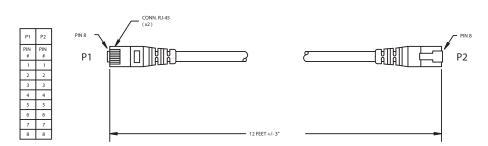
Length		Part Number	RoHS Compliant
12 ft (3.6 m)		2457-23537-001	Yes
	-2X RJ-45 NG LIST COLOR CODE WHITE/ORANGE ORANGE WHITE/GREEN BLUE WHITE/BLUE GREEN WHITE/BROWN BROWN		x MOLDED TRAIN RELIEF



#### **LAN Cable**

This cable connects a RealPresence Group system to the LAN. It has orange RJ-45 connectors on both ends and is used with all systems. The maximum approved length for this cable is 100 ft (30 m).

Length	Part Number	RoHS Compliant
12 ft (3.6 m)	2457-08343-001	Yes



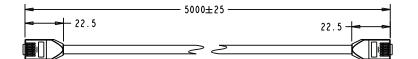


#### **Polycom Touch Device LAN Cable**



This cable connects a Polycom<sup>®</sup> RealPresence<sup>®</sup> Touch Device or Polycom<sup>®</sup> Touch Control to the LAN.

Length	Part Number	RoHS Compliant
25 ft (7.62 m)	2457-26994-001	Yes



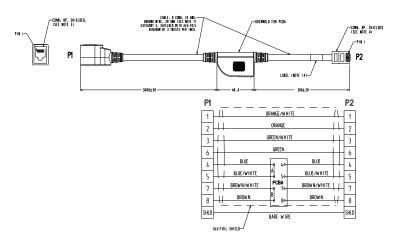
WIRING LIST				
PI	PI P2 COLOR CODE			
1	1	WHITE/ORANGE		
2	2	ORANGE/WHITE		
3	3	WHITE/GREEN		
4	4	BLUE/WHITE		
5	5	WHITE/BLUE		
6	6	GREEN/WHITE		
7	7	WHITE/BROWN		
8	8	BROWN/WHITE		

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#### **Polycom Touch Device Power Adapter**

This adapter connects the Polycom RealPresence Touch Device or Polycom Touch Control to the LAN and a power supply (part number 2200-42740-001) for rooms that do not have Power over Ethernet (PoE)

Length	Part Number	RoHS Compliant	
2.1 ft (0.61m)	2457-40054-001	Yes	



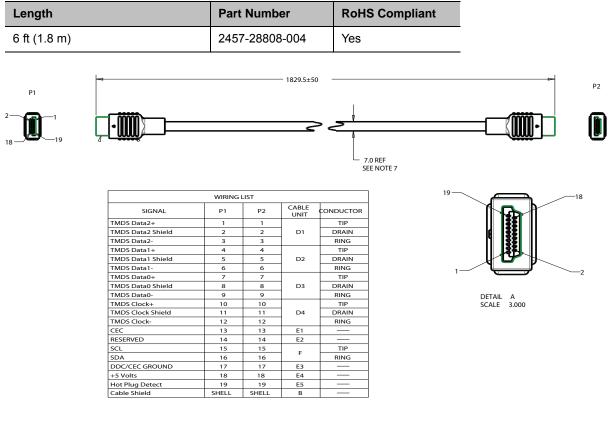


## **Video and Camera Cables**

#### **HDMI Monitor Cable**

#### 

This cable connects the RealPresence Group system HDMI output to an HDMI monitor. It is HDMI to male HDMI.



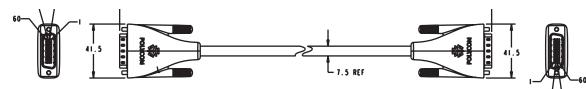


### **HDCI Analog Camera Cable**

#### 

This cable connects a RealPresence Group Series system to a Polycom EagleEye HD, Polycom EagleEye II, Polycom EagleEye III, or Polycom EagleEye Director (3 m and 10 m lengths only). This cable can be connected to the EagleEye View camera, but does not support audio. It has male HDCI connectors on both ends. The over-mold connectors of the 2457-27453-001 and 2457-27454-001 cables are black.

Length	Part Number	RoHS Compliant
9 ft 10 in (3 m)	2457-23180-003	Yes
9 ft 10 in (3 m)	2457-65015-003	Yes
33 ft (10 m)	2457-65015-010	Yes
33 ft (10 m)	2457-23180-010	Yes
50 ft (15 m)	2457-23180-015	Yes
100 ft (30 m)	2457-23180-030	Yes



		WIR	ING LIST		
SIGNAL NAME	PI PIN#	P2 PIN#	CABLE UNIT	CONDUCTOR	COLOR
Y	47	47	D.	CENTER	
Y SHIELD	46	46	DI	SHIELD	
Pb	13	13	D2	CENTER	
Pb SHIELD	12	12	υz	SHIELD	
Pr	14	14	D3	CENTER	
Pr SHIELD	15	15	03	SHIELD	
+12 VDC	4	4	EI	-	
+12 VDC	5	5	E 2	-	
+12 VDC	10	10	E 3	-	
+12 VDC	11	11	E 4	-	
GND	1	7	E 5	-	
GND	8	8	E 6	-	
GND	48	48	E 7	-	
GND	58	58	E8	-	
Rx	I	I	E 9	-	
Tx	2	2	EIO	-	

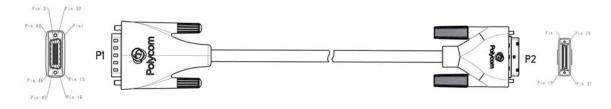
E.			
	-		1
	10	1	1
		1	
	12		

### HDCI Polycom EagleEye IV Digital Camera Cable

#### 

This cable is a male HDCI to male mini HDCI. It connects a system to a Polycom EagleEye IV camera. It also connects an EagleEye Producer that is used with an EagleEye IV camera or an EagleEye Digital Extender to a system.

Length	Part Number	RoHS Compliant
3 ft 7 in (1m)	2457-64356-100	Yes
9 ft 10 in (3m)	2457-64356-001	Yes
18 ft (457mm)	2457-64359-018	Yes
32 ft 9.7 in (10m)	2457-64356-101	Yes



P1		Wire Run			P2
			1	Cable	
N/C	DDC_P5V			N	N/C
N/C	HPD/HEAC-			N	N/C
N/C	DDC_GND/HEAC_shield	30 awg 100 ? STP	100 Mbps ethernet	N	N/C
N/C	UtiLity/HEAC+			N	N/C
N/C					N/C
N/C	DDC_SDA		120	N	N/C
N/C	DDC_SCL		120	N	N/C
1	232Rx	28 awg wire	RS232	Y	23
2	232Tx	28 awg wire	RS232	Y	5
3	IR/CEC	28 awg wire		Y	24
7	GND	28 awg wire		Y	6
29	TMDS-1 CLK-				25
33	TMDS-1 CLK shield	30 awg 100 ? STP	TMDS-HDMI up to 1080P60(148,5Mhz)	Y	7
30	TMDS-1 CLK+		1000P00(140,00112)	Y	26
8	GND	28 awg wire		Y	8
31	TMDS-1 Data0-		TMDS-HDMI up to	Y	27
57	TMDS-1 Data0 shield	30 awg 100 ? STP	1080P60(1.48	Y	9
32	TMDS-1 Data0+		Gbps)	Y	28
48	GND	28 awg wire		Y	10
28	TMDS-1 Data-		TMDS-HDMI up to	Y	29
34	TMDS-1 Data1 shield	30 awg 100 7 STP	1080P60(1.48	Y	11
27	TMDS-1 Data+		Gbps)	Y	30
58	GND	28 awg wire		Y	12
26	TMDS-1 Data2-		TMDS-HDMI up to	Y	31
35	TMDS-1 Data2 shield	30 awg 100 ? STP	1080P60(1.48	Y	13
25	TMDS-1 Data2+		Gbps)	Y	32
4	+12VDC	28 awg wire		Ŷ	14
5	+12VDC	28 awg wire		Y	33
10	+12VDC	28 awg wire		Y	15
11	+ 12 VDC	28 awg wire		Y	34
N/C	Aud2-	Lucia CTD		N	N/C
N/C	Aud2+	Audio STP		N	N/C
N/C	Aud2 shield				N/C
N/C	Aud1-	1		N	N/C
N/C	Aud1+	Audio STP		N	N/C
N/C	Aud1 shield				N/C
N/C					N/C
Shell	GND	Outer braid			Shell

E.			
	-		1
	10	1	1
		1	
	12		

#### HDCI Polycom EagleEye IV Camera to Polycom EagleEye Producer Digital Cable

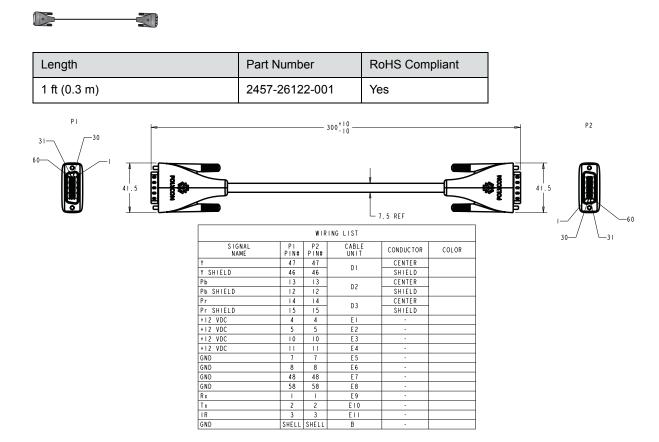
#### 

This cable connects a Polycom EagleEye Producer to a Polycom EagleEye IV camera. It is male HDCI to male mini HDCI.

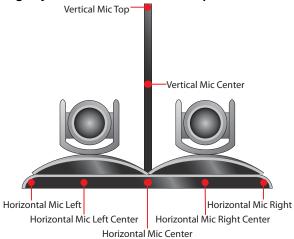
Length				Part Number	RoHS Compliar	nt			
1 ft (0.3m)				2457-64356-030	Yes		_		
			]		2457-44136-000 2457-44136-000 2000 2000 2000 2000 2000 2000 2000	6*2		Polycom	PIN 1 - PIN 20 29.2 PIN 19 - PIN 37
	12	LABLE	121G0-000998	VIYNL,L*W=55*25MM,BLACK TEXT/WHITE E	BACKGROUND(SEE DETAIL A)	1	PC	-	
	11	ADHESIVE	122G0-000164	HOT MELT ADHESIVE, YEL, 3M		A/R	g	_	
	10	GLUE	122G0-000153-01	GLUE,CLEAR,;3M#DP-100		A/R	ML		
	9	TUBE	120G0-000437	H.S.TUBE,Φ1.5,L=10MM,CLEAR,300V,125°C	,FUE-5,NO MARK;SCALE:2:1	8	PC	1	
	8	TUBE	120G0-001615-01	Н.S.TUBE,Ф0.4,BLK,300V,125℃,FUE-5,NO M	IARK,2:1,VW-1,L=6MM	8	PC	1	
	7	COPPER FOIL	121G0-002439	COPPER FOIL: L*W=32*77MM		1	PC		
	6	SCREW	119G0-004111-01	MOULD SCREW,NI-PLATED,M2*0.4,L28.5MM	,BLK,WEIXIANG	2	PC	1	
	5	CONN	115G0-003222-01	CONN,SCSI37P,MALE,SOLDER,8U",BLK,SHEL	L NI,HRS#DH40-37S	1	PC	1	
	4	FOIL	121G0-001112	COPPER FOIL,L*W=75*37MM		1	PC		
	3	SCREW	119G0-004112-01	MOULD SCREW,#4-40UNC,L38.9,NI-PLATED	,PVC,BLK,WEIXIANG	2	PC	1.	
	2	CONN	115H0-014464-R1	CONN,DMS60,MALE,30U",BLACK,NI-PLATED	BC#420-60SDDBSFBNE	1	PC	1▲	
	1	CABLE	114G0-012441-R1	CBL,UL20276[(30#*1P+EAM)*4+28#*11C]+AE	3,100ohm,OD7.0,BLK,	A/R	м	1	
				BRAID:85%MIN,BIZLINK TY				1	
	NO	NAME	PART NO	DESCRIPTION		Q'TY	UNIT	1	

#### HDCI Polycom EagleEye Director Analog Cable

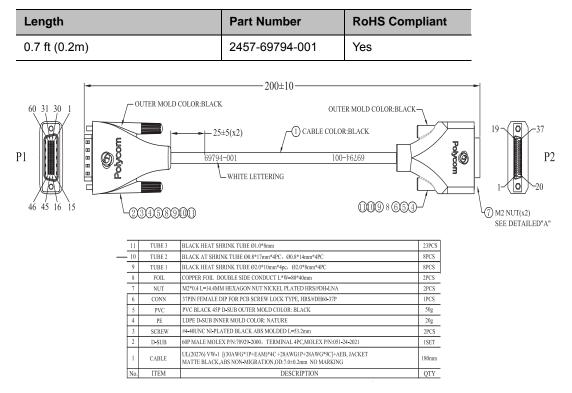
This cable connects a Polycom EagleEye II or Polycom EagleEye III camera to the Polycom EagleEye Director base. It has male HDCI connectors on both ends.



As shown in the following figure, the EagleEye Director has seven microphones embedded in the base. **EagleEye Director embedded microphones** 



This cable connects the HDCI output of a Polycom EagleEye Producer to a mini-HDCI digital camera cable. It is male HDCI to male mini HDCI.





Polycom, Inc.

Drawings and part numbers are provided for reference only. Polycom claims no responsibility or liability for the quality, performance, or reliability of cables based on these reference drawings, other than cables provided by Polycom. Contact your Polycom distributor or Polycom Custom/Vertical Products to order cables that meet the appropriate manufacturing tolerances, quality, and performance parameters for your application.

Cables

### Polycom EagleEye Acoustic Digital Cable

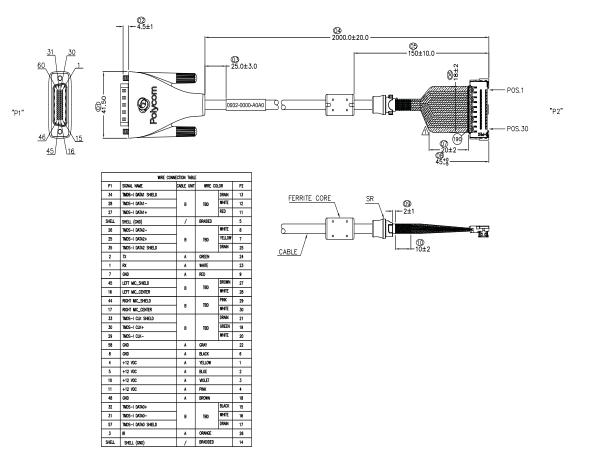
This cable connects a Polycom EagleEye Acoustic camera to a RealPresence Group Series system.



Length	Part Number	RoHS Compliant
6 ft 5 in (2 m)	0932-0000-A0A0	Yes



**Warning: Conditions when Polycom EagleEye Acoustic Digital cable will not be serviced** The cable can only be extended with the EagleEye Digital Extender (which does not support audio). The Polycom EagleEye Acoustic cable will not be under any type of serviceability from Polycom if any change, modification, or addition is made to the Polycom EagleEye Acoustic cable.

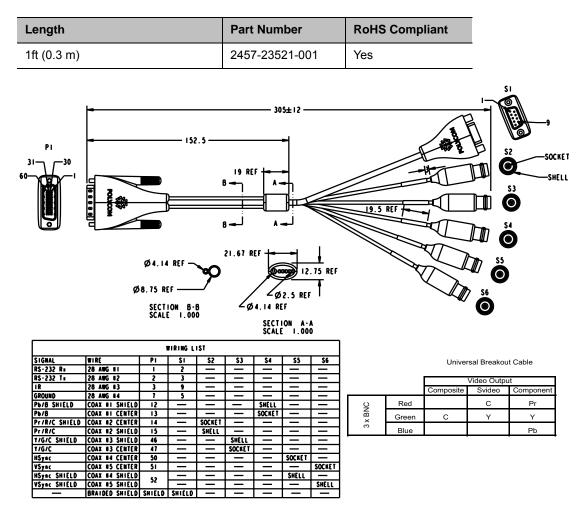


Ľ			
	-		1
	10	1	1
		1	
	12		

#### HDCI Camera Break-Out Analog Cable



This cable breaks out the HDCI camera cable video and control signals to standard interfaces. This cable can be connected to the EagleEye HD, EagleEye II, EagleEye III, or EagleEye View camera, but does not support audio. The five BNC connectors can be used to carry YPbPr component video. The DB-9 connector is used to connect to PTZ camera control interfaces. It is male HDCI to five female BNC and one female DB-9.



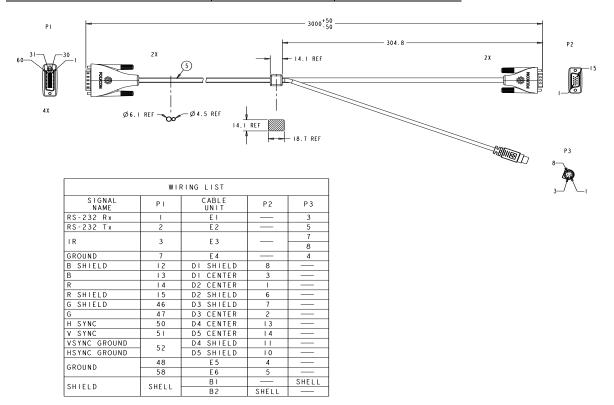


#### HDCI Polycom EagleEye 1080 Camera Cable

#### 

This cable connects a Polycom system HDCI video input to the Polycom EagleEye 1080 camera. It is HDCI to 8-pin mini-DIN and HD-15. The maximum approved length for this cable is 100 ft (30 m).

Length	Part Number	RoHS Compliant
1 ft (0.3 m)	2457-23548-001	Yes
9 ft 10 in (3 m)	2457-28153-001	Yes
33 ft (10 m)	2457-28154-001	Yes
50 ft (15m)	2457-28154-050	Yes
100 ft (30m)	2457-28154-100	Yes





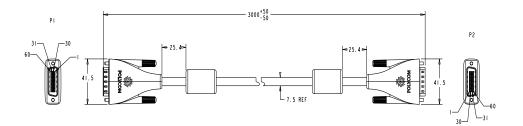
#### HDCI Polycom EagleEye View Camera Analog Cable

#### 

This cable connects a RealPresence Group system HDCI video input to a Polycom EagleEye View camera. It has male HDCI connectors on both ends.

The over-mold connectors of the 2457-09729-001 cable are brown.

Length	Part Number	RoHS Compliant
1.5 ft (457 mm)	2457-09729-001	Yes
9 ft 10 in (3 m)	2457-29759-001	Yes
33 ft (10 m)	2457-29759-010	Yes



WIRING LIST						
S I G NAL NAME	PI PIN#	P2 PIN#	CABLE UNIT	CONDUCTOR		
Y	47	47	DI	CENTER		
Y SHIELD	46	46	וע	SHIELD		
РЬ	13	13	D2	CENTER		
Pb SHIELD	12	12	υz	SHIELD		
Pr	14	14	D3	CENTER		
Pr SHIELD	15	15	03	SHIELD		
LEFT MIC	16	16	D4	CENTER		
LEFT MIC SHIELD	45	45	04	SHIELD		
RIGHT MIC	17	17	05	CENTER		
RIGHT MIC SHIELD	44	44	0.5	SHIELD		
+12 VDC	4	4	EI			
+12 VDC	5	5	E2			
+12 VDC	10	10	E 3	•		
+12 VDC	11	Ш	E4			
GND	7	1	E5	•		
GND	8	8	E6	•		
GND	48	48	E7			
GND	58	58	E8	•		
Rx	Î.	-	E9			
Τı	2	2	EIO	•		
1 R	3	3	ETT	•		
GND	SHELL	SHELL	8			



#### Polycom RealPresence Digital Brkout, Codec Adapter



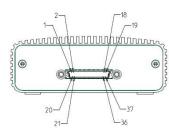
The Polycom RealPresence Digital Brkout, Codec adapter allows the input of HDMI and Serial for control into an HDCI input on the RealPresence Group Series codecs. You can also use this adapter with the Polycom RealPresence Digital Brkout, Camera to extend the distance between an EagleEye IV camera and a RealPresence Group Series codec.

#### **Recommendations for Use**

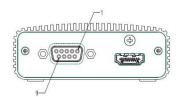
- Use with HDCI Polycom EagleEye IV camera cable. Either 2457-64356-001 (3 m), 2457-64365-100 (1m), or 2457-64356-018 (457 mm).
- Use with certified HDMI compliant cable.
- Use with certified EIA/TIA-RS-232 cable. Use straight-through type, not crossover.
- Do not hot plug the serial cable. Disconnecting or connecting the RS-232 cable during operation may
  cause unexpected system behavior. If this happens, cycle the power to the codec or camera to
  eliminate this issue.
- Polycom tested with cables less than 3 meters in a normal environment. The maximum cable length
  possible depends on the signal quality of the HDMI and serial signals at the output of the DBA and
  associated cables, if the mating device has an equalizer, and the electrical noise in the installed
  environment. To ensure proper operation with all devices, the HDMI and EIA/TIA-RS-232 specs
  should be met at the input to all mating devices.
- The following HDMI features are not provided: DDC for EDID support, HDCP, and CEC.
- Without EDID support, digital (HDMI) sources connected to the system must have a mechanism for bypassing EDID detection, for setting up the video resolution manually, or using a fixed video resolution. Refer to the Video Format Resolutions table below for supported resolutions.
- The signal quality is dependent on the quality of the HDMI and serial signals at the output of the DBA and associated cables, if the mating device has an equalizer, and the electrical noise in the installed environment. To ensure proper operation with all devices, the HDMI and EIA/TIA-RS-232 specs should be met at the input to all mating devices.

Mode	Active Pixels	Active Lines	Vertical Refresh Hz	Pixel Clock MHz	Video Standard
480i	720	480	59.94	27	CEA-861-D:6
576i	720	576	50	27	CEA-861-D:21
480p60	720	480	59.94	27	CEA-861-D:2
576p50	720	576	50	27	CEA-861-D:17
720p50	1280	720	50	74.25	CEA-861-D:19
720p60	1280	720	59.94	74.25(1.001)	CEA-861-D:4
1080i50	1920	1080	50	74.25	CEA-861-D:39
1080i60	1920	1080	59.94	74.25(1.001)	CEA-861-D5
1080p50	1920	1080	50	148.50	CEA-861-D:31
1080p60	1920	1080	59.94	148.50(1.001)	CEA-861-D:16

#### **Supported Video Format Resolutions**







Cienal	Codec		Other Devices
Signal	HDCI Connector(J1)	DB9(P1)	HDMI TYPE A(J2)
RS232-RX	23	2	
RS232-TX	5	3	
IR	24	9	
HDMI TMDS	25-32		1–12
HDMI_DDC_5V	NC		connect to HDMI_DDC_HPD
HDMI_DDC_HPD	NC		connect to HDM1_DDC_5V
HDMI_DDC_SDA	NC		NC
HDMI_DDC_SCL	NC		NC

Length	Part Number	RoHS Compliant
_	3820-68473-001	—



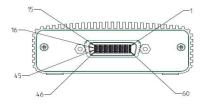
#### Polycom RealPresence Digital Brkout, Camera Adapter



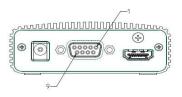
This breakout adapter allows Polycom EagleEye IV and Polycom EagleEye Acoustic digital cameras to be broken out into HDMI and Serial (DB9) signals.You can also use this adapter with the Polycom RealPresence Digital Brkout, Codec adapter to extend the distance between an EagleEye IV camera and a Group Series codec

#### **Recommendations for Use**

- Use the supplied Polycom power supply (part number 1465-52748-040).
- Verify the polarity of the power supply as shown on the DBA next to the power supply input.
- Use with HDCI Polycom EagleEye IV Camera Cable. Either 2457-64356-001 (3m); 2457-64356-100 (1m), or 2457-64356-018 (457mm).
- Use with certified HDMI compliant cable.
- Use with certified EIA/TIA-RS-232 cable. Use straight-through type, not crossover.
- Do not hot plug the serial cable. Disconnecting or connecting the RS-232 cable during operation may
  cause unexpected system behavior. If this happens, cycle the power to the codec or camera to
  eliminate this issue.
- The signal quality is dependent on the quality of the HDMI and serial signals at the output of the DBA and associated cables, if the mating device has an equalizer, and the electrical noise in the installed environment. To ensure proper operation with all devices, the HDMI and EIA/TIA-RS-232 specs should be met at the input to all mating devices.







Cine al	Camera	Other Devices		
Signal	HDCI Connector(J1)	DB9(P1)	HDMI TYPE A(J2)	
RS232-RX	1	2		
RS232-TX	2	3		
IR	3	9		
HDMI TMDS	25-32		1-12	
HDMI_DDC_5V	NC		5V	
HDMI_DDC_HPD	NC		NC	
HDMI_DDC_SDA	NC		pull up to 5V	
HDMI_DDC_SCL	NC		pull up to 5V	

Length	Part Number	RoHS Compliant
_	3820-68485-001	—

L	-			
L		7		
L		10	1	
	1	an		

## **Audio Cables**



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### **RealPresence Group Microphone Array Walta-Walta Cable**



This cable connects two RealPresence Group microphone arrays. This cable can also be used to connect a RealPresence Group system to a RealPresence Group microphone array or to a SoundStation IP 7000 phone. When attaching a system to a device, this cable cannot be used to chain additional devices to the first device. This cable is male Walta to male Walta.

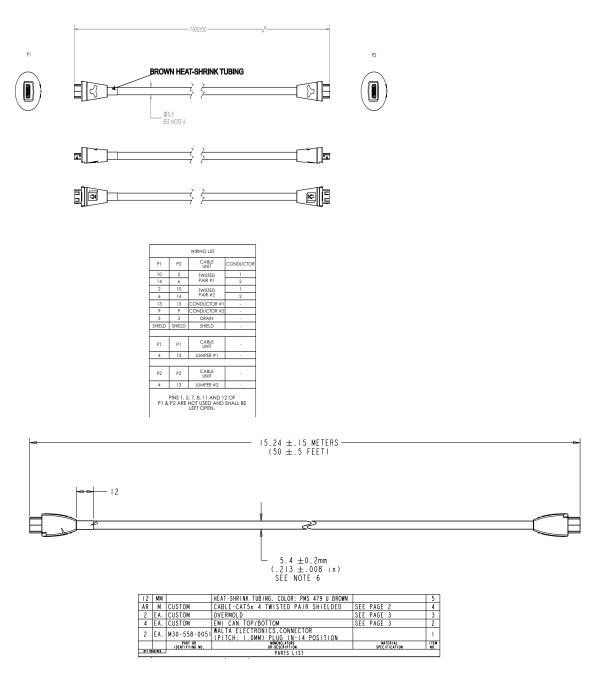


#### Warning: Improper connection may cause severe damage

Be very careful to plug in the microphone array with the correct plug orientation. If while plugging in the connector you feel undue pressure or that you need to "force" the cable for it to connect, the cable is likely being inserted in an incorrect manner. This is a serious issue because an improper connection causes the current to flow in a reverse polarity manner leading to high current that can result in severe damage to the RealPresence Group system. For the correct cable orientation, refer to the graphic below and the setup sheet that shipped with your system.



Length	Part Number	RoHS Compliant
15 ft (4.6 m)	2457-23215-001	Yes
25 ft (7.6 m)	2457-23216-001	Yes
25 ft (7.6 m)	2457-23216-002	Yes
33 ft (10 m)	2457-28978-001	Yes
50 ft (15.24 m)	2457-29051-001	Yes

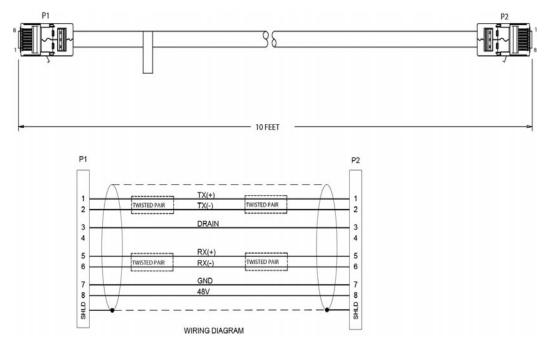




### **Ceiling Microphone Straight-Through Cable**

This straight-through cable is part of the Ceiling Microphone Array package. It is RJ-45 male to RJ-45 male. This cable must be used with a cross-over cable for proper operation.

Length	Part Number	RoHS Compliant
10 ft (3 m)	2457-24011-001	Yes



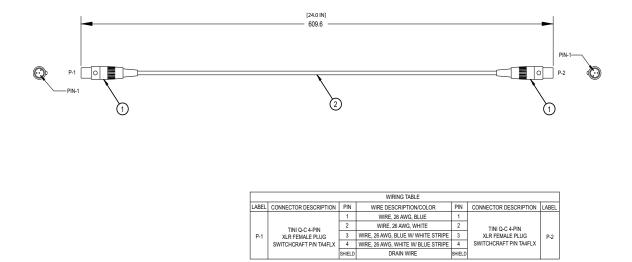


#### Polycom Ceiling Microphone Drop Cable (4-to-4 Pin)

### 

Extended length drop cable for connecting Spherical Ceiling Microphone Array element to an electronics interface. It is 4-pin mini-DIN to 4-pin mini-DIN.

Length	Part Number	RoHS Compliant
6 ft (1.8m)	2457-24701-001	Yes
6 ft (1.8m)	2457-24701-003	Yes
2 ft (0.6m)	2457-23986-001	Yes
2 ft (0.6m)	2457-23986-002	Yes



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# Polycom Ceiling Microphone Drop Cable (4-to-6 Pin)

Extended length drop cable for connecting Spherical Ceiling Microphone Array element to an electronics interface. It is 4-pin mini-DIN to 6-pin mini-DIN.

Length	Part Number	RoHS Compliant	
6 ft (1.8m)	2457-26764-072	Yes	-
6 ft (1.8m)	2457-26764-072	Yes	-
2 ft (0.6m)	2457-26759-024	Yes	-
2 ft (0.6m)	2457-26761-024	Yes	-
4	[72.0 IN] 1828.8 mm		

	WIRING TABLE							
LABEL	CONNECTOR DESCRIPTION	PIN	WIRE DESCRIPTION/COLOR	PIN	CONNECTOR DESCRIPTION	LABEL		
					WIRE, 26 AWG, BLUE	2		
	TINI Q-C 4-PIN	2	WIRE, 26 AWG, WHITE	3				
P-1	XLR FEMALE PLUG	3	WIRE, 26 AWG, BLUE W/ WHITE STRIPE	4	TINI Q-C 6-PIN			
	SWITCHCRAFT P/N TA4FLX	4	WIRE, 26 AWG, WHITE W/ BLUE STRIPE	6	XLR FEMALE PLUG	P-2		
			NO CONDUCTOR - N/C	1	SWITCHCRAFT P/N TA6FLX			
			NO CONDUCTOR - N/C	5				
		SHIELD	DRAIN WIRE	SHIELD				



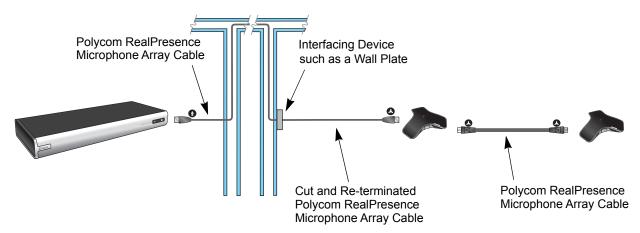
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## Custom Cabling for Polycom RealPresence Group Microphone Arrays

You can create a custom-length cable that connects a RealPresence Group system to a RealPresence Group microphone array or SoundStation IP 7000 phone. Start with the microphone cable (part number 2457-23216-002), and cut off the P1 end. Using the wiring tables shown, create a custom cable from the microphone to a wall plate or other interfacing device. Next, from the wall plate or other interfacing device, run shielded CAT5 or better cable to the RealPresence Group system, terminating with a shielded RJ-45 plug connector.

The total length from the RealPresence Group system to the first Polycom microphone array or SoundStation IP 7000 phone can vary between 18 in and 100 ft. The maximum length between subsequent microphone arrays is 25 ft.

The following diagram shows an example of longer custom cabling from a RealPresence Group system to a Polycom microphone array or a Polycom SoundStation IP 7000 Phone.



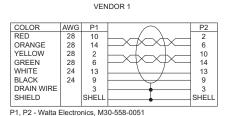
The following steps explain how to wire this custom cable configuration.



Refer to Connect a Polycom RealPresence Group Microphone to a Polycom RealPresence Group System for instructions on how to use the icons on the RealPresence Microphone Array Cable to ensure the cable is connected correctly.

1 Identify the P1 connector on the Polycom RealPresence microphone cable according to the location of the brown heat-shrink tubing as shown on the RealPresence Group Microphone Array Walta-Walta Cable. Remove the P1 connector and skip to step 4. Note that two separate vendors manufacture these cables, which are electrically equivalent but have different color coding. If you cannot identify the P1 connector, remove either connector from the cable and continue with step 2.

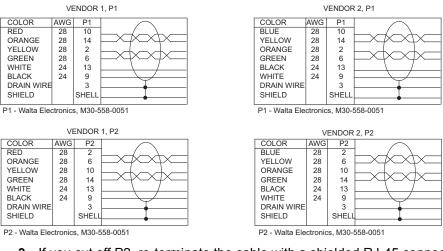
The following tables show the color coding for the cable wiring.



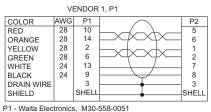
COLOR AWG P1 P2 BLUE 28 10 2 YELLOW 28 14 6 ORANGE 10 28 2 GREEN 28 6 14 13 BLACK 13 24 WHITE 24 9 9 DRAIN WIRE SHIELD SHELL SHELL P1, P2 - Walta Electronics, M30-558-0051

VENDOR 2

2 If you are not sure which connector you need to cut off, use the following tables to perform a continuity check between the connector and the cable colors. If you cut off P1, skip to step 4. If you cut off P2, continue with step 3.

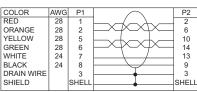


If you cut off P2, re-terminate the cable with a shielded RJ-45 connector using the following tables, 3 then skip to step 5.

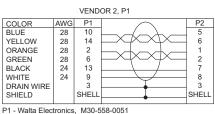


P2 - RJ-45 shielded plug, Tyco 5-569552 or equivalent

VENDOR 1



P1- RJ-45 shielded plug, Tyco 5-569552 or equivalent P2 - Walta Electronics, M30-558-0051



P2 - RJ-45 shielded plug, Tyco 5-569552 or equivalent

If you cut off P1, re-terminate the cable with an RJ-45 8-pin plug using the following tables, then 4 continue with step 5.

VENDOR 2

COLOR	AWG	P1	P2
BLUE	28	1	2
YELLOW	28	2	6
ORANGE	28	5	10
GREEN	28	6	14
BLACK	28	7	13
WHITE	24	8	9
DRAIN WIRE	24	3	3
SHIELD	24	SHELL	SHELL

P1- RJ-45 shielded plug, Tyco 5-569552 or equivalent P2 - Walta Electronics, M30-558-0051

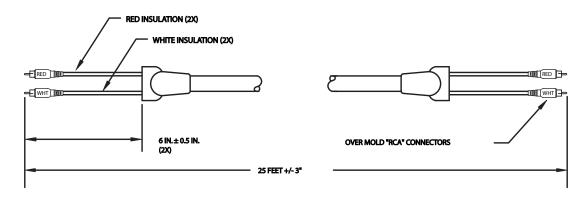
Whether you re-terminated the P1 or P2 end of the cable, at this point the cable can be connected directly to the system and to the first microphone. If it is necessary to install an extension to the system's microphone array cable connection on a wall plate or panel, create a custom pinout cable using shielded CAT5 cable. The cable is terminated on one end to either a shielded CAT5 keystone jack or, if using a shielded panel coupler, a shielded RJ-45 plug connector. The other end terminates to a Walta connector that connects to the RealPresence Group system.

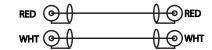
#### **Audio Cable**



This cable connects a system to an external audio system. It has dual RCA connectors (red/white) on both ends. The maximum approved length for this cable is 100 ft (30 m).

Length	Part Number	RoHS Compliant
25 ft (7.6 m)	2457-09212-002	Yes
9 ft 10 in (3 m)	2457-09212-010	Yes



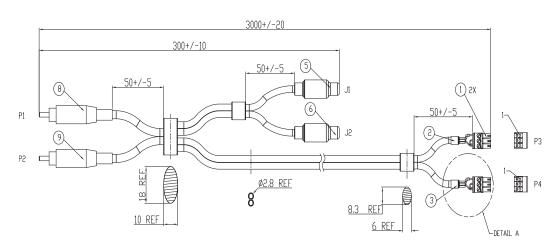


## Polycom EagleEye Director Audio Feedback Phoenix to RCA Cable



This cable connects a RealPresence Group Series system to the Polycom EagleEye Director and the room audio playback system. It is dual male Phoenix connectors (for RealPresence Group Series systems) to dual male RCA connectors (for the EagleEye Director) with dual female RCA connectors (for the room audio playback system).

Length	Part Number	RoHS Compliant
9.10 ft (3 m)	2457-82587-001	Yes



WIRING LIST								
PLUG	CONTACT	CONDCTOR	PLUG	CONTACT	CONDCTOR	JACK	CONTACT	CONDCTOR
	1	CENTER		1	A		1	CENTER
P1	2	SHELL	P3	3	A DRAIN	J1	2	SHELL
	_	—		2	—		—	_
	1	CENTER		1	В		1	CENTER
P2	2	SHELL	P4	3	B DRAIN	J2	2	SHELL
2								
INSTALL JUMPER BETWEEN CONTACT 2 AND CONTACT 3 OF BOTH P3%P4 AS SHOWN IN DETAIL "A"								

### **Serial Cables**

The available serial cables include the following:

- Polycom RealPresence Group Series Serial Cable
- Straight-Through Cable
- Null Modem Adapter

#### **Polycom RealPresence Group Series Serial Cable**



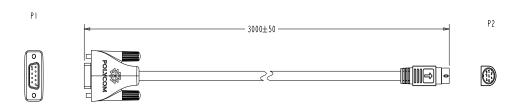
This cable connects a Polycom RealPresence Group Series system to a serial device. It is 8-pin mini-DIN to DB-9.



#### Restrictions for the Polycom RealPresence Group Series serial cable:

- The 8-pin mini-DIN RS232 connection is wired per Polycom RS-232 and does not follow VISCA pinout convention. Do NOT try to use a cable meant to support VISCA in this application as it will not work correctly.
- Do not use this adapter DIRECTLY CONNECTED to multi-purpose AMX serial ports. AMX systems support both RS-232 and RS-422. Therefore, for the most reliable RS-232 support with this adapter, use an additional null modem cross-over cable in-line that only carries only pins 2, 3, and 5, with pins 2 and 3 crossed.

Length	Part Number	RoHS Compliant
10 ft (3 m)	2457-63542-001	Yes



	WIRING LIST				
P	1	P 2			
SIGNAL	PIN	PIN	SIGNAL		
RXD	2	2	RXD		
TXD	3	3	ТХD		
DTR	4	4	DTR		
GND	5	5	GND		
DSR	6	6	DSR		
RTS	7	8	CTS		
CTS	8	7	RTS		
BRAIDED SHIELD	SHELL	SHELL	BRAIDED SHIELD		

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#### Straight-Through Cable

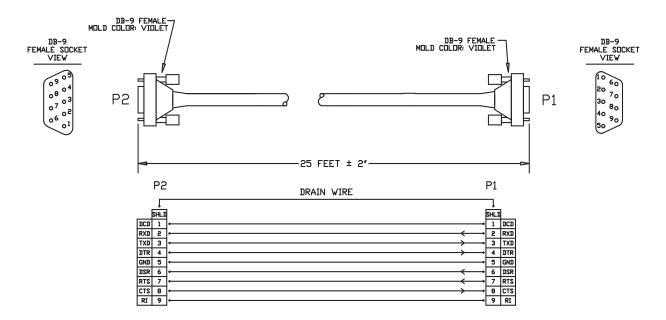
This cable connects a RealPresence Group Series system to a serial device. It has a DB-9 connector on each end. The maximum approved length for this cable is 100 ft (30 m).

#### **Recommendations for Use**

Polycom does not recommend using this straight-through serial cable for RS-232 communication from a computer, Crestron system, or AMX device. Instead, for RS-232 communication, Polycom recommends using a cross-over cable with pin 2 wired to pin 3, pin 3 wired to pin 2, and pin 5 wired to pin 5. The other pins are not used.

If you choose to use this straight-through serial cable for RS-232 communication from a computer or Crestron system, the Null Modem Adapter is required. However, the null modem adapter does not work for RS-232 communication from AMX devices and causes problems if you try to use it.

Length	Part Number	RoHS Compliant
25 ft (7.6 m)	2457-09172-001	_



#### **Null Modem Adapter**

#### 

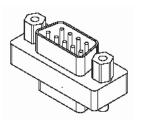
This adapter is used when connecting RealPresence Group 700 system to a serial device that transmits on pin 3 such as Crestron Pro2 processor. It is a male to female DB-9 adapter plug.



Do not use this adapter with an AMX device. AMX systems support both RS-232 and RS-422. Therefore, for RS-232 support, use a null modem cross-over cable that carries only pins 2, 3, and 5, with pins 2 and 3 crossed.

Length	Part Number	RoHS Compliant
-	1517-61577-001	Yes

DB9F	DB9M
PIN 1&6	PIN 4
PIN 2	PIN 3
PIN 3	PIN 2
PIN 4	PIN 1&6
PIN 5	PIN 5
PIN 7	PIN 8
PIN 8	PIN 7
PIN 9	N/C





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## **Using the API**

The Application Programming Interface (API) is a set of commands for advanced users who want to automate a Polycom RealPresence Group Series system. You can use the API by connecting a control system or computer RS-232 serial port to a RealPresence Group Series system. You can also use Telnet over the LAN to use the API with RealPresence Group Series systems.

### Using the API with an RS-232 Interface

If you use an RS-232 interface to send API commands, you must connect and configure the control system or computer and the RealPresence Group Series system for serial communication.

#### **Configuring the RS-232 Interface**

If you use the API with a serial connection, make sure that the RS-232 interfaces of the RealPresence Group Series system and your computer are configured appropriately.

To access the RS-232 settings on your system, go to Admin Settings > General Settings > Serial Port from the web interface.

Option	Configure this way on your computer	Configure this way on the RealPresence Group Series system
Baud Rate	Must be the same rate for both o 9600 14400 19200 38400 57600 115200	devices. Available rates are:
RS-232 Mode	—	Control

Configure the Baud Rate and RS-232 Mode options as follows:

The RS-232 port on the RealPresence Group Series system supports the following modes:

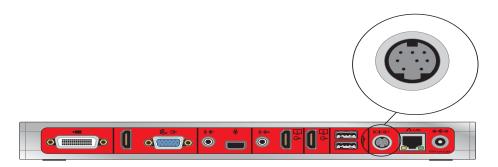
- Off Disables the serial port.
- **Pass Thru** Passes data to an RS-232 device, such as a serial printer or certain types of medical devices, connected to the serial port of the far-site system. Only available in point-to-point calls. In this mode, he operational modes of both devices' RS-232 ports depend on the port configuration of each device.

- **Closed Caption** Receives closed captions from a dial-up modem or a stenographer machine through the RS-232 port.
- Camera Control Passes data to and from a third-party camera.
- **Control** Receives control signals from a touch-panel control. Allows any device connected to the RS-232 port to control the system using API commands.

#### **Understanding the RealPresence Group Series RS-232 Interfaces**

The serial ports on RealPresence Group 300, 310, and 500 systems are mini-DIN-8 connectors.

#### RealPresence Group Series 300, 310, and 500 serial port



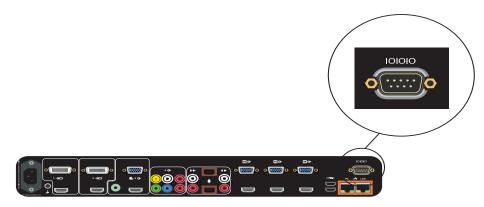
Use an 8-pin mini-DIN to DB-9 cable such as the Polycom RealPresence Group Series Serial Cable to connect to the RS-232 interface. The pinouts for this type of cable are listed in the following table:

WIRING LIST			
P		P	2
SIGNAL	PIN	PIN	SIGNAL
R X D	2	2	RXD
ТХD	3	3	ТХD
DTR	4	4	DTR
GND	5	5	GND
DSR	6	6	DSR
RTS	7	8	CTS
CTS	8	7	RTS
BRAIDED SHIELD	SHELL	SHELL	BRAIDED SHIELD

#### RealPresence Group Series 300, 310, and 500 serial port pinouts

The serial port on a RealPresence Group 700 system is a DB-9 connector:

#### **RealPresence Group Series 700 serial port**



Use a DB-9 to DB-9 cable such as the Straight-Through Cable to connect to the RS-232 interface. The pinouts for this type of cable are listed in the following table:

	P2	DRAIN WIRE	P1	
	- <b>Г</b>			
	SHLI		SHLI	
DCD	1	] <del>•</del>	• 1	DCD
RXD	2	<u> </u> ⊷−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−	5	RXD
TXD	З	⊷────────────────────────────────────	• 3	TXD
DTR	4	← >	• 4	DTR
GND	5	e	5	GND
DSR	6	¢	6	DSR
RTS	7	← ← ← ← ← ← ← ← ← ← ← ← ← ← ← ← ← ← ←	• 7	RTS
CTS	8	]•	8	CTS
RI	9	]e	9	RI

#### Starting an API Session using an RS-232 Interface

RealPresence Group Series systems can run API sessions from the RS-232 interface.

After you have verified that the RealPresence Group Series system and your computer or control system are both configured appropriately, set up both devices as follows:

1 Use an RS-232 cable to connect the computer or control system RS-232 port to an RS-232 port on the RealPresence Group Series system as shown in the following illustrations. This connection may require the Null Modem Adapter.

#### Connecting a computer to a RealPresence Group 300 system



#### Connecting a computer to a RealPresence Group 310 or 500 system



#### Connecting a computer to a RealPresence Group 700 system



- 2 From the computer or control system, start a serial session using HyperTerminal or another appropriate utility.
- 3 If prompted for a password, log in with the local admin account's remote access password. If prompted for admin or user name, see Using the API with the Maximum Security Profile Enabled.

#### Using the API with the Maximum Security Profile Enabled

When configured for the Maximum security profile, API sessions using a LAN Connection (Telnet) are not available, and API sessions using an RS-232 port or SSH require you to log on using a valid user ID and password. The system will accept either the local admin account user ID (and associated remote access password) or the local user account user ID (and associated remote access password).

In addition, if Active Directory External Authentication is enabled, then Active Directory account credentials can also be used. In this case, however, the local user account is disabled and so cannot be used. See the *Polycom RealPresence Group Series Administrator Guide* for details on the use of Active Directory External Authentication.

### Using the API with a LAN Connection

If you have a computer connected to the LAN, you can send API commands to the RealPresence Group Series system through telnet port 23 or port 24 and SSH.



If your computer is running the Windows 7 operating system, you might need to install the telnet client before starting a telnet session. The telnet client is not installed by default with Microsoft Windows 7 operating systems.

#### To use the API with a LAN connection:

- 1 On the computer, open a command line interface.
- 2 Start a Telnet session using the RealPresence Group Series system IP address and port number that is currently configured for telnet API— for example, telnet 10.11.12.13 24.
- 3 Login, if prompted, using the local admin account's remote access password.

#### Using the API Controller Code

With their cooperation, Polycom has provided AMX, Crestron, and Extron the complete RealPresence Group Series API for development of their Partner modules. These modules are available and can be obtained from the manufacturer's websites.

### **Secure API Access**

You can access a RealPresence Group Series system using the Secure Shell (SSH) protocol. Secure API access is authenticated for local and Active Directory (AD) accounts.



When a password is empty, SSH will not validate credentials and allow a user to log in. Polycom recommends that you consistently use passwords for secure access.

#### **Enable and Disable Secure API Access**

Secure API access using SSH is enabled by default. The sshenable API command and **Enable SSH** Access web interface option can be used to enable or disable the feature.

To enable SSH for secure API access, do one of the following:

- In the system web interface, go to Admin Settings > Security > Global Security > Access and enable the Enable SSH Access setting.
- In an API session, enter sshenable true.

To disable SSH for secure API access, do one of the following:

- In the system web interface, select Admin Settings > Security > Global Security > Access and disable the Enable SSH Access setting.
- In an API session, enter sshenable false.

#### Access the API with SSH

To obtain secure access to the API, you must use an SSH client and connect to the IP address configured for the system on port 22.



The system allows three attempts to enter correct login credentials. The SSH client program closes after the third failed attempt.

#### To access the API with SSH:

- 1 Enable remote access.
- 2 If necessary, enable external authentication.
- 3 Enable the SSH feature.
- 4 Start an SSH session using the RealPresence Group Series system IP address and port 22.
- 5 When prompted, enter the remote access credentials.

For information on configuring local or AD accounts, refer to the *Polycom RealPresence Group Series Administrator Guide* at support.polycom.com.

### **Additional API Resources**

The following online resources are available for your reference as you use the API.

#### **Technical Support Contact Information**

To contact Polycom Technical Support, go to support.polycom.com. This web site provides you with contact information for Polycom technical support. Use this web site when you need help using the API.

#### **Feature Enhancement Request**

Please contact your Sales Engineer to submit a feature request with Polycom.

#### **Video Test Numbers**

Refer to www.polycom.com/videotest. This website provides you with test numbers of various Polycom systems worldwide. Use this website when you need to access video test numbers to use when testing your Polycom system.

#### **Knowledge Base**

Refer to the Knowledge Base at support.polycom.com. This tool allows you to search for user guides, release notes, and other forms of product documentation. You can also search for troubleshooting information and technical briefs. Use this website when you need to access Polycom product documentation or tips.

## **System Commands**

This chapter describes the API commands for RealPresence Group Series systems.

For an alphabetical list of all the commands, refer to the table of contents for this document. For a list of commands by category, refer to Categorical List of API Commands on page 341.



While every attempt has been made to ensure that the expected results of executing the API commands are accurate and complete, Polycom cannot be responsible for system behaviors and control actions that are not explicitly documented in this publication.

### **About the API Commands**

### Definitions

Each API command is defined on one or more reference pages. The definitions are based on terms that are listed in the following table.

Terms	Description
Command Description	Brief statement about the purpose of the command.
Syntax	Format required to execute the command.
Parameter	A list of parameters that are defined for the command.
Description (parameter)	A description of each parameter that is defined for the command.
User Accessible	Indicates (with a check mark) that user role API sessions are permitted to execute the command or command parameter combination. Otherwise, the field is empty to indicate user role API sessions are not permitted.
	The role of an API session is determined when the API session is created.All API sessions can be created as <b>admin</b> sessions and thus have permission to use all API commands. API sessions can also be created as <b>user</b> sessions, which are permitted to use only a subset of the API commands that are authorized for normal users. For more information on user roles, refer to the "Manage System Access" topic in the <i>Polycom RealPresence Group Series Administrator Guide</i> .
	Note: User sessions are available only via SSH or on the serial port (when the configured serial port Login Mode is <b>username/password</b> ).

Terms	Description
Additional Restrictions	Additional restrictions that apply to using the command or command/parameter combination. Otherwise, the field is empty to indicate there are no additional restrictions.
Feedback Examples	Examples of expected results when a command and variant are executed.
Limitations	Important notes about support for the command on RealPresence Group Series systems.
Comments	Important notes about the command.

#### **Syntax Conventions**

The following conventions are used for the API command descriptions in this chapter. All of the commands are case sensitive.

Convention	Meaning
<param1 param2 param3></param1 param2 param3>	Multiple valid parameters are enclosed in angle brackets and separated by the pipe (" ") character. Example: allowdialing <yes no get> shows that the allowdialing command must be followed by one of the parameters listed.</yes no get>
[param] ["param"]	Optional parameters are enclosed in square brackets. Quotation marks indicate strings to be supplied by the user. Example: teleareacode set ["telephone_area_code"] shows that you can supply a value for the area code, or omit it and let the default value apply. You do not need to enclose the actual value in quotes unless it contains a space.
{az}	A range of possible alphanumeric values is enclosed in braces. Example: abk letter {az} shows that the abk command can be used to return address book entries that begin with an alphanumeric character in the range specified. Example: camera near {14} shows that the camera command can be used to select Camera 1, 2, 3, or 4 at the near site.
"x"	Quotation marks indicate strings to be supplied by the user. You do not need to enclose the value in quotes unless it contains a space.

Although the API command parser may accept the minimum number of characters in a command that makes it unique, you should always use the full command string.

#### **Availability of Commands**

The availability of API commands depends on the type of system optional equipment installed or connected, security settings and the software version installed on the system. If a particular command is not supported on the system, the command returns feedback such as "error: this command is not supported on this model" Or "command is not available in current system configuration". If a setting is configured by a provisioning service, the command may return feedback such as "this setting is controlled by a provisioning service and cannot be changed. For more information about provisioned settings, refer to your provisioning service administrator."

Commands that are not listed in this chapter are not supported by Polycom. Commands might change or be removed at any time. Polycom discourages integrators from using unpublished commands.



API support is not available for software versions for the Joint Interoperability Test Command (JITC) certification.

#### **Command Response Syntax**

When you send a command, the system returns responses using the syntax described in the following sections, where <CR> indicates a carriage return and <LF> indicates a line feed.

#### When Not Registered to Receive Notifications

When your system is not registered to receive any notifications and you send an API command, a single API acknowledgement is returned.

For example:

camera near 2 <CR>API command returns camera near 2<CR><LF>API acknowledgement

In the example above, the command was sent with an end of line character of a carriage return <CR>.

The API expects a carriage return <CR> as well as the standard end of line characters carriage return/line feed <CR><LF>. All API responses end in carriage return/line feed <CR><LF>.

#### When Registered to Receive Notifications

Registering for notifications adds extra line responses in the form of API registration responses. The number of additional lines depends on the specific registration. In the following example, the response shows an API acknowledgement and an API registration response returned:

```
camera near 1 <CR>API command
returns
camera near 1<CR><LF>API acknowledgement
notification:vidsourcechange:near:1:Main:people<CR><LF>
API registration response
```

When your system is registered for notifications, always use the API registration response for status.

#### **Commands that Restart the System**

#### Commands that Restart the System without a Prompt

- reboot now
- resetsystem

#### **Additional Tips**

- The system does not provide flow control. If the connection is lost through restarting the system or other means, you must re-establish the connection.
- The API processes one command at a time.
- Polycom does not recommend sending multiple commands simultaneously without a pause or delay between them.
- For commands with a single action and a single response: A delay of 200 milliseconds between commands is usually sufficient. Examples of these commands include the commands for switching cameras (camera near 1), sending content (vcbutton play), and checking the status of the audio mute (mute near get).
- For commands with a single action and a more extensive response: The time required to receive the response, and thus the time between commands, may be longer than 200 milliseconds. The response length, which can vary in size, determines the time required to receive the response. Examples of these commands include the commands for retrieving the local address book (addrbook all), the global address book (gaddrbook all), the list of system settings, and system session information (such as whoami).
- When developing your program, always allow enough time for the response to the requested command to complete before sending another command.
- Polycom does not recommend that you send any commands while an incoming or outgoing call is being established.
- The API provides feedback status in two ways: registrations or polling.
- Send registration and notification API commands only once. Registrations are written to Flash memory and retained when the system restarts.
- Polycom recommends putting registrations in the initialization or startup of Crestron and AMX systems.
- Registrations are recommended over polling since they will provide status updates without having to query for changes.
- Never poll for registrations.
- Registrations are specific to the port from which they are registered. If you register for notifications from com port 1, registration will not be sent to com port 2 or Telnet port 24.

### addrbook

Returns local directory (address book) entries.

#### Syntax

#### **Commands for local directory**

```
addrbook all
addrbook batch {0..59}
addrbook batch search "pattern" "count"
addrbook batch define "start_no" "stop_no"
addrbook letter {a..z}
addrbook range "start no" "stop no"
```

#### **Commands for groups**

Parameter	Description	User Accessible	Additional Restrictions
all	Returns all the entries in the local directory.	1	
batch	Returns a batch of 10 local directory entries. Requires a batch number, which must be an integer in the range $\{059\}$ .	1	
search	Specifies a batch search.	1	
"pattern"	Specifies a pattern to match for the batch search.	1	
"count"	Specifies the number of entries to list that match the pattern.	1	
define	Returns a batch of entries in the range defined by "start_no" to "stop_no."	1	
letter	Returns entries beginning with the letter specified from the range {az}. Requires one or two alphanumeric characters. Valid characters are: / ; @ , . \ 0 through 9 a through z	<i>✓</i>	

Parameter	Description	User Accessible	Additional Restrictions
range	Returns local directory entries numbered "start_no" through "stop_no". Requires two integers.	1	
"start_no"	Specifies the beginning of the range of entries to return.	1	
"stop_no"	Specifies the end of the range of entries to return.	1	
names	Returns a list of system names in the local address book. Also returns the system type: video, multicodec, phone, or multisite. A multicodec system will appear as a single row. The response is in the following format: addrbook names {0n}. name:"sys_name" sys_label:"sys_label" type: <video multicodec phone group>  addrbook names <all video phone> done</all video phone></video multicodec phone group>		
<all video></all video>	Specifies the type of entries to return. video returns entries that have video addresses. all returns entries with video numbers or phone numbers or both.	1	
size	Returns the size of the result set that will be returned by the command. The size parameter can be used with the names and the names search commands. The response is in the following format: addrbook names <all video phone> size {0n} addrbook names search "search_pattern" <all video phone> size {0n}</all video phone></all video phone>	/	
range_start	For the names, names search, and group commands, specifies the beginning of the range of entries to return.	J	

Parameter	Description	User Accessible	Additional Restrictions
range_end	For the names, names search, and group commands, specifies the end of the range of entries to return. If a range_start is specified without a range_end, then the single range_start entry will be returned. If range_end is -1, all entries starting with range_start will be returned.	<i>J</i>	
search	Returns a list local directory names that match the search criteria. The response is similar to the names command described above: addrbook search {0n}. name:"sys_name" sys_label:"sys_label" type: <video multicodec phone group>  addrbook names search "search_pattern" <all video phone> done</all video phone></video multicodec phone group>	1	
search_pattern	Specifies the string pattern for which to search. Wildcard characters are not supported. The search string is used to match the beginning of any of the attributes listed using descriptions for the names and search parameters. For example, the search string "Jo" would match any name that begins with Jo, such as John or Jones. The search is not case sensitive.	1	
group	Returns a list of the names of all the sites included in a local directory group in this format: addrbook group {0n}. name:"site_sys_name" sys_label:"site_sys_label"  addrbook group "group_name" [range] done addrbook group size <num_entries></num_entries>	1	
group_name	A local address book group name.	1	

Parameter	Description	User Accessible	Additional Restrictions
address	Obtains the address information for a specified entry. If the entry is an ITP system, the results will include the addresses for all codecs. If codecs support multiple protocols, the different addresses will be returned on separate lines. This command is not supported for multisite entries.	1	
sys_name	The friendly name for an address book entry. It is the name of the person or the room. It is surrounded by quotes if it contains spaces.	1	
sys_label	If a person/room has more than one system, the result set will include a row for each system. If those systems are of the same type the client will consider that entry to be a telepresence system with multiple codecs rather than separate systems. If the systems are of different types, then this sys_label attribute will be included to differentiate the systems.	1	
type	The type of local address book entry. Possible values are: video, multicodec, phone, group	J	
site_sys_name	The name of a site in a group. It is surrounded by quotes if it contains spaces	1	
site_sys_label	The label associated with a site name in a local group. It is surrounded by quotes if it contains spaces.	1	
codec:<14>	If the entry is a telepresence system, each codec will include a codec number attribute.	1	
h323_spd	The preferred speed for an H.323 call to this entry. If no speed is associated with the entry, then the value of the configuration variable globaladdrmaxh323 is returned. The default is 384.	J	
h323_num	H.323 address or alias.	1	
h323_ext	H.323 extension or E.164 number.	1	
sip_spd	The preferred speed for a SIP call to this entry. If no speed is associated with the entry, then this is the same as the h323_spd.	1	
sip_num	IP address.	1	
xmpp_addr	XMPP address, also known as the Jabber ID (JID).	1	

#### Feedback Examples

```
• addrbook all
  returns
  addrbook 0. "Polycom Group Series Demo 1" isdn spd:384
  isdn num:1.700.5551212 isdn ext:
  addrbook 1. "Polycom Group Series Demo 2" h323 spd:384
  h323 num:192.168.1.101 h323 ext:7878
  addrbook 2. "Polycom Group Series Demo 3" sip spd:384
  sip num:polycomgroupseries@polycom.com
  addrbook 3. "Polycom Group Series Demo 3" phone num:1.512.5121212
  (and so on, until all entries in the local directory are listed, then:)
  addrbook all done
• addrbook batch 0
  returns
  addrbook 0. "Polycom Group Series Demo 1" isdn spd:384
  isdn num:1.700.5551212 isdn ext:
  addrbook 1. "Polycom Group Series Demo 2" h323 spd:384
  h323 num:192.168.1.101 h323 ext:7878
  addrbook 2. "Polycom Group Series Demo 3" sip spd:384
  sip num:polycomgroupseries@polycom.com
  addrbook 3. "Polycom Group Series Demo 3" phone num:1.512.5121212
  (and so on, through the last entry in the batch of 10 directory entries,
  such as:)
  addrbook 9. "Polycom Group Series Demo 20" h323 spd:384
  h323 num:192.168.1.120 h323 ext:
  addrbook batch 0 done
• addrbook batch define 0 2
  returns
  addrbook 0. "Polycom Group Series Demo 1" isdn spd:384
  isdn num:1.700.5551212 isdn ext:
  addrbook 1. "Polycom Group Series Demo 2" h323 spd:384
  h323 num:192.168.1.101 h323 ext:7878
  addrbook 2. "Polycom Group Series Demo 3" sip spd:384
  sip num:polycomgroupseries@polycom.com
  addrbook batch define 0 2 done

    addrbook names all size

  returns
  addrbook names all size 21
• addrbook names all size 21
  returns
  addrbook names all size 21
  addrbook names 0. name:"Eng RPX" sys label:"Group Series" type:multicodec
  addrbook names 1. name:"Doe" sys_label:"" type:video
  addrbook names 2. name:"Gen Group" sys label:"" type:group
  addrbook names 3. name:"John Doe" sys label:"" type:video
  addrbook names 4. name:"John Doe" sys label:"" type:video
  addrbook names 5. name:"Lab TPX" sys label:"" type:video
  addrbook names 6. name: "Minuteman RPX" sys label: "" type: multicodec
  addrbook names 7. name: "Monday Staff Mtg" sys label: "" type:group
  addrbook names 8. name: "Polycom Austin Stereo" sys label: "" type: video
  addrbook names 9. name: "Polycom Austin HD" sys label: "" type: video
  addrbook names all 0 9 done
```

```
• addrbook names all
  returns
  addrbook names 0. name:"Eng RPX" sys label:"HDX" type:multicodec
  addrbook names 1. name:"Doe" sys label:"" type:video
  addrbook names 2. name: "Gen Group" sys label: "" type: group
  addrbook names 3. name:"John Doe" sys label:"" type:video
  addrbook names 4. name:"John Doe" sys_label:"" type:video
  addrbook names 5. name:"Lab TPX" sys_label:"" type:video
  addrbook names 6. name: "Minuteman RPX" sys label: "" type: multicodec
  addrbook names 7. name: "Monday Staff Mtg" sys label: "" type:group
  addrbook names 8. name: "Polycom Austin Stereo" sys label: "" type: video
  addrbook names 9. name: "Polycom Austin HD" sys label: "" type: video
  addrbook names 10. name: "Polycom Austin USA IP" sys label: "" type: video
  addrbook names 11. name: "Polycom Japan" sys label: "" type: video
  addrbook names 12. name:"Scott CMAD IP" sys_label:"" type:video
  addrbook names 13. name:"Scott Phone" sys label:"" type:phone
  addrbook names 14. name: "Scott PVX" sys label: "" type: video
  addrbook names 15. name: "Scott Quasar 19" sys label: "" type: video
  addrbook names 16. name:"SQA Group SeriesCentro" sys label:"" type:video
  addrbook names 17. name:"John Doe" sys_label:"" type:video
  addrbook names 18. name:"Test System 1" sys label:"" type:video
  addrbook names 19. name:"Test System 2A" sys label:"" type:video
  addrbook names 20. name:"Test System 2B" sys label:"" type:video
  addrbook names all done
• addrbook names search "p" all
  returns
  addrbook search 0. name: "Polycom Austin HD" sys label: "" type: video
  addrbook search 1. name: "Polycom Austin Stereo" sys label: "" type: video
  addrbook search 2. name: "Polycom Austin USA IP" sys label: "" type: video
  addrbook search 3. name: "Polycom Japan" sys label: "" type: video
  addrbook search 4. name:"Scott Phone" sys label:"" type:phone
  addrbook search 5. name:"Scott PVX" sys label:"" type:video
  addrbook search search p all done
• addrbook names search "p" all 0 2
  returns
  addrbook search 0. name: "Polycom Austin HD" sys label: "" type: video
  addrbook search 1. name: "Polycom Austin Stereo" sys label: "" type: video
  addrbook search 2. name: "Polycom Austin USA IP" sys label: "" type: video
  addrbook search search p all 0 2 done

    addrbook group "Monday Staff Mtg"

  returns
  addrbook group 0. name:"Eng RPX" sys_label:"HDX"
  addrbook group 1. name:"John Doe" sys label:""
  addrbook group 2. name:"John Doe" sys_label:""
  addrbook group 3. name:"TPW" sys label:"HDX"
  addrbook group "Monday Staff Mtg" done
• addrbook address "John Doe"
  return
  addrbook address 0. name:"John Doe" sys label:"" codec:1
                       h323 spd:384 h323 num:172.25.137.101 h323 ext:
  addrbook address name:"John Doe" sys label:"" done
```

#### Limitations

None

#### Comments

None

#### See Also

See the gaddrbook command on page 180 and speeddial command on page 269.

#### advnetstats

Gets advanced network statistics for a call connection.

#### Syntax

advnetstats [{0..n}]

Parameter	Description	User Accessible	Additional Restrictions
{0n}	Specifies a connection in a multipoint call, where n is the maximum number of connections supported by the system. 0 is call #1, 1 is call #2, 2 is call #3, and so on. Select a number from this range to specify a remote site call for which you want to obtain advanced network statistics. Omit this parameter when retrieving statistics for a point-to-point call.	~	

#### Feedback Examples

```
    advnetstats 1
        returns
        call:1 tar:24k rar:24k tvr:64.3k rvr:104k
        tvru:63.8k rvru:114.6k tvfr:15.0 rvfr:15.0 vfe ---
        tapl:66 rapl:0 taj:46mS raj:40mS tvpl:122 rvpl:0
        tvj:21mS rvj:60mS dc:--- rsid:Polycom_4.2 ccaps:E9P
```

```
• Returned parameters are:
```

```
tar=Transmit audio rate
rar=Receive audio rate
tvr=Transmit video rate
rvr=Receive video rate
tvru=Transmit video rate used
rvru=Receive video rate used
tvfr=Transmit video frame rate
rvfr=Receive video frame rate
vfe=Video FEC errors
tapl=Transmit audio packet loss (H.323 calls only)
tlsdp=Transmit LSD protocol (H.320 calls only)
rapl=Receive audio packet loss (H.323 calls only)
rlsdp=Receive LSD protocol (H.320 calls only)
taj=Transmit audio jitter (H.323 calls only)
tlsdr=Transmit LSD rate (H.320 calls only)
raj=Receive audio jitter (H.323 calls only)
rlsd=Receive LSD rate (H.320 calls only)
tvpl=Transmit video packet loss (H.323 calls only)
tmlpp=Transmit MLP protocol (H.320 calls only)
rvpl=Receive video packet loss (H.323 calls only)
rmlpp=Receive MLP protocol (H.320 calls only)
tvj=Transmit video jitter (H.323 calls only)
tmlpr=Transmit MLP rate (H.320 calls only)
rvj=Receive video jitter (H.323 calls only)
```

```
rmlpr=Receive MLP rate (H.320 calls only)
dc=Encryption information
rsid=Remote system id
ccaps=Content capability, where possible responses include "9" (H.239),
"E" (enterprise dual streams), "N" (none), and "P" (content over the people
stream)
```

#### Limitations

None

#### Comments

None

#### See Also

To return network statistics for a call, use the nearloop command.

### all register

Registers for most commonly used user registration events.

#### Syntax

all register

#### **User Accessible**

Yes

#### **Additional Restrictions**

None

#### **Feedback Examples**

```
    all register
        returns
        callstate registered
        camera registered
        chaircontrol registered
        mute registered
        preset registered
        screen registered
        vcbutton registered
        volume registered
```

#### Comments

Registers changes to any of the following types of parameters:

- Current near-site or far-site source
- State of privacy
- Current volume level
- Active camera presets
- Status of point-to-point or multipoint calls
- IP connection to codec
- System information

This command is particularly useful when two different control systems are being used simultaneously, such as the web and API commands. The system maintains the registration changes through restarts.

To register for events not included in this feedback, refer to the specific registration command.

This is a one-time registration command that is retained in flash memory. Sending the command a second time results in the following feedback response:

 info: event/notification already active:callstate info: event/notification already active:camera
 info: event/notification already active:linestate info: event/notification already active:mute info: event/notification already active:preset info: event/notification already active:screen info: event/notification already active:vcbutton info: event/notification already active:volume

The all register command does not return local camera movements if the camera is moved using the remote control, the web interface, or the Polycom Touch Control virtual remote.

Use the notify command for camera notifications.

#### Limitations

None

### all unregister

Simultaneously unregisters all registered user feedback so that the API no longer reports changes to the parameters.

#### **Syntax**

all unregister

#### **User Accessible**

Yes

#### **Additional Restrictions**

None

#### **Feedback Examples**

• all unregister returns callstate unregistered linestate unregistered mute unregistered preset unregistered screen unregistered vcbutton unregistered volume unregistered

#### Limitations

None

#### Comments

The following types of parameters are unregistered:

- Current near-site or far-site source
- State of privacy
- Current volume level
- Active camera presets
- Status of point-to-point or multipoint calls
- IP connection to codec
- System information

### amxdd

Sets or gets the AMX Device Discovery beacon.

#### Syntax

amxdd get amxdd <on|off>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
on	Turns on the AMX Device Discovery beacon.		
off	Turns off the AMX Device Discovery beacon.		

#### **Feedback Examples**

- amxdd get returns amxdd off
- amxdd on returns amxdd on

#### Limitations

None

#### Comments

The default setting for this signal is  ${\tt off.}$ 

#### answer

Answers incoming video calls.

#### Syntax

answer <video>

Parameter	Description	User Accessible	Additional Restrictions
video	Answers incoming video calls when Auto Answer Point-to-Point Video or Auto Answer Multipoint Video is set to No.	<i>√</i>	

#### **Feedback Examples**

- answer video returns answer incoming video call failed
- answer video returns answer incoming video call passed

#### Limitations

None

#### Comments

None

# apiport

Gets or sets the telnet API port.

#### Syntax

apiport get apiport <23|24>

Parameter	Description	User Accessible	Additional Restrictions
get	Turns on the test tone.		
23	Sets the telnet API port to port 23		
24	Sets the telnet API port to port 24. Default setting.		

### **Feedback Examples**

- apiport get returns apiport 24
- apiport 23 returns apiport 23

#### Limitations

None

#### Comments

After sending the command to change the port, you must exit the current session and reconnect on the new port.

# audiotransmitlevel

Sets or gets the audio volume transmitted to the far site, or notification of transmit level changes.

#### **Syntax**

audiotransmitlevel <get|up|down|register|unregister>
audiotransmitlevel set {-20..30}

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
up	Sets the volume 1 decibel higher than the current setting.	1	
down	Sets the volume 1 decibel lower than the current setting.	1	
register	Registers to receive notification when audio transmit level changes.	1	
unregister	Unregisters to receive notification when audio transmit level changes.	1	
set	Sets the volume to the specified dB level. Valid values are: {-2030}.	1	

#### **Feedback Examples**

- audiotransmitlevel set 2 returns audiotransmitlevel 2
- audiotransmitlevel get returns audiotransmitlevel 2
- audiotransmitlevel up returns
- audiotransmitlevel 3audiotransmitlevel down returns
  - audiotransmitlevel 2
- audiotransmitlevel register returns audiotransmitlevel registered
- audiotransmitlevel unregister returns audiotransmitlevel unregistered

### Limitations

None

#### Comments

### autoanswer

Sets or gets the Auto Answer Point-to-Point Video mode, which determines how the system handles an incoming call in a point-to-point video conference.

#### Syntax

autoanswer <get|yes|no|donotdisturb>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
yes	Allows any incoming video call to be connected automatically. This is the default setting.		User role has access only if the Allow Access to User Settings option in the local or web interface is enabled. See the Polycom RealPresence Group Series Administrator Guide for more information.
no	Prompts the user to answer incoming video calls.		
donotdisturb	Notifies the user of incoming calls, but does not connect the call. The site that placed the call receives a Far Site Busy (H.320) or Call Rejected (H.323) code.		

#### **Feedback Examples**

- autoanswer yes returns autoanswer yes
- autoanswer no returns autoanswer no
- autoanswer get returns autoanswer no
- autoanswer donotdisturb returns autoanswer donotdisturb

#### Limitations

None

#### Comments

If autoanswer is set to no or donotdisturb, you must rely on API session notifications to answer inbound calls.

## autoshowcontent

Specifies whether to send content automatically when a computer is connected to the system.

#### Syntax

autoshowcontent <get|on|off>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
on	Sets the system to send content automatically when a computer is connected to the system.		
off	Sets the system to not send content automatically.		

#### **Feedback Examples**

- autoshowcontent on returns autoshowcontent on
- autoshowcontent off
- **returns** autoshowcontent off
- autoshowcontent get returns autoshowcontent off

#### Limitations

None

#### Comments

# basicmode

Sets or gets the Diagnostic Mode configuration, a limited operating mode that uses H.261 for video and G.711 for audio. Basic mode provides administrators with a workaround for interoperability issues that cannot be solved using other methods.

### **Syntax**

basicmode <get|on|off>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
on	Enables diagnostic mode.		
off	Disables diagnostic mode.		

### **Feedback Examples**

- basicmode on returns basicmode on
- basicmode off returns basicmode off
- basicmode get returns basicmode off

#### Limitations

None

#### Comments

# button

Simulates Polycom remote control buttons.

### Syntax

button <#|\*|0|1|2|3|4|5|6|7|8|9|.> button <down|left|right|select|up> button <back|call|graphics|hangup> button <help|mute|volume+|volume-> button <camera|delete|directory|home|keyboard|period|pip|preset> button info

Parameter	Description	User Accessible	Additional Restrictions
	Types a period (dot) if the cursor is on a text field.	1	
#	Sends the # button signal to the user interface.	1	
*	Sends the * button signal to the user interface.	1	
0 1 2 3 4 5 6 7 8 9	Sends the corresponding numeric button signal to the user interface.	1	
back	Simulates the Back button on multiple-page screens.	1	
call	Sends the Call button signal to the user interface.	1	
camera	Sends the Camera button signal to the user interface.	1	
delete	Sends the Delete button signal to the user interface.	1	
directory	Sends the Directory button signal to the user interface.	1	
down	Sends the down arrow button signal to the user interface.	1	
graphics	Sends the Content button signal to the user interface.	1	
hangup	Sends the Hang Up button signal to the user interface.	1	
help	Sends the Help button signal to the user interface.	V	

Parameter	Description	User Accessible	Additional Restrictions
home	Sends the Home button signal to the user interface.	1	
info	Sends the Info button signal to the user interface.	1	
keyboard	Brings up the on-screen keyboard if the cursor is on a text field.	1	
left	Sends the left arrow button signal to the user interface.	1	
mute	Sends the <b>Mute</b> button signal to the user interface, causing a toggle of mute state.	1	
period	Types a period (dot) if the cursor is on a text field.	1	
pip	Sends the <b>Display</b> button signal to the user interface.	1	
preset	Sends the <b>Preset</b> button signal to the user interface.	1	
right	Sends the right arrow button signal to the user interface.	1	
select	Sends the <b>Select</b> (center button) button signal to the user interface.	1	
up	Sends the up arrow button signal to the user interface.	1	
volume-	Sends the volume - button signal to the user interface.	1	
volume+	Sends the volume + button signal to the user interface.	1	

### **Feedback Examples**

• button up sends the up arrow command to the user interface and returns button up

The command checks for invalid input and reports button responses as they are processed. One of three status values is returned when the command is issued for multiple buttons:

- succeeded all buttons are valid
- failed all input is invalid and none can perform a valid action
- completed some are invalid, and responses specify each as valid or invalid

For example:

```
    button camera right center select
returns
button camera
button right
error: button center not a recognized command
button select
button completed
```

Long button command sequences will complete before a second command is considered. Feedback for button command sequences that include multiple buttons show only the first button name.

#### Limitations

None

#### Comments

Several parameters can be combined in the same command in any order.

Use the camera command for camera control. Do not use the following commands for camera control:

- button left
- button right
- button down
- button up

# calendardiscovery

Gets the Microsoft<sup>®</sup> Exchange Server address based on the email address associated with a Microsoft 365 account or registered SIP server address that is configured for the system.

#### **Syntax**

calendardiscovery get calendardiscovery emaildomain calendardiscovery sipdomain

Parameter	Description	User Accessible	Additional Restrictions
get	Gets the current Microsoft Exchange server address that the calendaring service is using to connect to a Microsoft 365 account.		
emaildomain	Gets the Microsoft Exchange Server address based on an email address.		
sppdomain	Gets the Microsoft Exchange Server address based on a SIP server address.		

### **Feedback Examples**

•	calendardiscovery returns	sipdomain get
	calendardiscovery	192.168.44.168
•	calendardiscovery returns	emaildomain get
	calendardiscovery	mail.exchangeserver.local.com
•	calendardiscovery returns	get
	calendardiscovery	not available (if not configured or not found)
•	calendardiscovery returns	emaildomain get
	calendardiscovery	not available (if not configured or not found)
•	calendardiscovery <b>returns</b>	get
	error: command nee	eds more parameters to execute successfully
•	calendardiscovery <b>returns</b>	

error: command needs more parameters to execute successfully

#### Limitations

### Comments

### calendardomain

Gets or sets the domain used by the calendaring service to log in to the Microsoft Exchange Server.

#### Syntax

```
calendardomain get
calendardomain "domain"
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the domain used by the calendaring service.		
"domain"	The domain to be used by the calendaring service.		

### **Feedback Examples**

- calendardomain get returns calendardomain smithfield
- calendardomain fairview returns calendardomain fairview

#### Limitations

None

#### Comments

None

#### See Also

To enable or disable the calendaring service, use the calendarregisterwithserver command.

To configure the Microsoft Exchange server address used by this service, use the calendarserver command.

To set the resource mailbox to be monitored, use the calendarresource command.

# calendarmeetings

Retrieves scheduled meetings within the given time span or with the given meeting ID.

#### **Syntax**

```
calendarmeetings list "starttime" ["endtime"]
calendarmeetings info "meetingid"
```

Parameter	Description	User Accessible	Additional Restrictions
list	Returns the meeting id or ids for meetings that start at or after the specified start time and end time.	<i>s</i>	
"starttime"	The start time of meetings to be retrieved. The start time can be entered in one of the following formats: • YYYY-MM-DD:HH:MM • today:HH:MM • today • tomorrow:HH:MM • tomorrow The times are interpreted to be local times in the time zone the system was configured for.		
"endtime"	<ul> <li>The end time of meetings to be retrieved.</li> <li>This parameter can be given in the following format.</li> <li>YYYY-MM-DD:HH:MM</li> <li>today:HH:MM</li> <li>today</li> <li>tomorrow:HH:MM</li> <li>tomorrow</li> <li>The times are interpreted to be local times in the time zone the system was configured for.</li> </ul>		
info	Retrieves meeting details for scheduled meetings when the system is registered with the calendaring service. Returns information such as the location, subject and organizer of the meeting.	1	
"meetingid"	The ID of the meeting for which you want to find details.		

#### **Feedback Examples**

• calendarmeetings list tomorrow returns calendarmeetings list begin

meeting | AAAaAEFsZXquTWFjRG9uYWxkQHBvbH1jb20uY29tAVEACIjMne2/ndqARqAAAADr9 GlhsSiWEZBcAAKzMphJBwA4wicbtr3UEZArAKAk09LtAAACZpKWAADe7hJleQIOS7j2mzRJxk LKAAADI/F8BAAA|2010-03-30:08:30|2010-03-30:09:00|Discuss Budget meeting|AAAaAEFsZXguTWFjRG9uYWxkQHBvbHljb20uY29tAVEACIjMne2/ndgARgAAAADr9 GlhsSjWEZBcAAKzMphJBwA4wicbtr3UEZArAKAk09LtAAACZpKWAADe7hJleQIOS7j2mzRJxk LKAAAA/9PhAAAQ|2010-03-30:09:00|2010-03-30:09:30|Program Review meeting|AAAaAEFsZXquTWFjRG9uYWxkQHBvbHljb20uY29tAVEACIjMne2/ndqARqAAAADr9 GlhsSjWEZBcAAKzMphJBwA4wicbtr3UEZArAKAk09LtAAACZpKWAABZ29fOU0S5Q6xzZ11zDD NnAABFQAQ3AAAQ|2010-03-30:10:00|2010-03-30:11:00|Customer Care Commitment Meeting calendarmeetings list end • calendarmeetings list 2010-03-30:08:00 2010-04-01:17:00 returns calendarmeetings list begin meeting|AAAaAEFsZXguTWFjRG9uYWxkQHBvbHljb20uY29tAVEACIjMne2/ndgARqAAAADr9 GlhsSjWEZBcAAKzMphJBwA4wicbtr3UEZArAKAk09LtAAACZpKWAADe7hJleQIOS7j2mzRJxk LKAAADI/G8AAAQ|2010-03-30:08:30|2010-03-30:09:00|Bug Scrub meeting|AAAaAEFsZXguTWFjRG9uYWxkQHBvbH1jb20uY29tAVEACIjMne2/ndgARgAAAADr9 GlhsSjWEZBcAAKzMphJBwA4wicbtr3UEZArAKAk09LtAAACZpKWAABZ29fOU0S5Q6xzZ1lzDD NnAABFQARCAAAQ|2010-03-30:11:30|2010-03-30:12:30|groupseries/IP7000/Confe rence Coordination meeting|AAAaAEFsZXquTWFjRG9uYWxkQHBvbH1jb20uY29tAVEACIjMne2/ndqARqAAAADr9 GlhsSjWEZBcAAKzMphJBwA4wicbtr3UEZArAKAk09LtAAACZpKWAABZ29fOU0S5Q6xzZ11zDD NnAABFQAQ3AAAQ|2010-04-01:16:30|2010-04-01:17:00|Customer Care Commitment Meeting calendarmeetings list end calendarmeetings info AAAaAEFsZXquTWFjRG9uYWxkQHBvbHljb20uY29tAVEACIjMne2/ndqARqAAAADr9GlhsSjWE ZBcAAKzMphJBwA4wicbtr3UEZArAKAk09LtAAACZpKWAADe7hJleQIOS7j2mzRJxkLKAAADI/ G8AAAO returns calendarmeetings info start id|AAAaAEFsZXguTWFjRG9uYWxkOHBvbH1jb20uY29tAVEACIjMne2/ndgARgAAAADr9GlhsS jWEZBCAAKzMphJBwA4wicbtr3UEZArAKAk09LtAAACZpKWAADe7hJleQIOS7j2mzRJxkLKAAA DI/G8AAAO 2010-03-30:08:30/2010-03-30:09:00/dialable/public organizer | Russell Bell location | Russell's RMX Meeting Room - IP Video Number: 123456 (if registered to corp GK); 888-123-4567/978-123-4567 with passcode: #760900 subject|Bug Scrub dialingnumber/video/733397@vsgwstdma01.r13.vsg.local2/sip dialingnumber | video | 733397 | h323 dialingnumber|audio|48527 meetingpassword|none attendee | Russell Bell attendee|Rebecca Sharp calendarmeetings info end • calendarmeetings info AAAaAEFsZXquTWFjRG9uYWxkQHBvbHljb20uY29tAVEACIjMn4AUcVqARqAAAADr9GlhsSjWE ZBcAAKzMphJBwA4wicbtr3UEZArAKAk09LtAAACZpKWAADe7hJleQIOS7j2mzRJxkLKAAAA30 GwAAAO returns

calendarmeetings info start

```
id|AAAaAEFsZXguTWFjRG9uYWxkQHBvbHljb20uY29tAVEACIjMn4AUcVgARgAAAADr9GlhsS
jWEZBcAAKzMphJBwA4wicbtr3UEZArAKAk09LtAAACZpKWAADe7hJleQIOS7j2mzRJxkLKAAA
A30GwAAAQ
2010-04-01:10:30|2010-04-01:11:00|nondialable|private
organizer|Rebecca Sharp
location|Red River conference room
subject|Escalations Review
attendee|Roslin Adam
attendee|Conf.AUS.Red River
attendee|Claudia Nevarez
calendarmeetings info end
```

#### Limitations

None

#### Comments

If the meeting's end time is more than 31 days from the meeting's start time, the response is shortened to starttime+31days, and meetings that start in that time span are returned.

If an API client is logged in with user-level credentials and if the system is configured to hide private meeting information on the web interface, the API hides the information from the API client and shows the subject of the meeting as "Private Meeting"; for example:

```
calendarmeetings list begin
meeting|AAAAAEFsZXguTWFjRG9uYWxkQHBvbHljb20uY29tAVEACIjMn4AUcVgARgAAAADr9GlhsS
jWEZBcAAKzMphJBwA4wicbtr3UEZArAKAk09LtAAACZpKWAADe7hJleQIOS7j2mzRJxkLKAAAA30Gw
AAAQ|2009-09-25:08:30|2009-09-25:09:15|private meeting
calendarmeetings list end
```

If a RealPresence Group Series system is configured to provide private meeting information on the web interface, the API provides the same information to the API client; for example:

```
calendarmeetings list begin
meeting|AAAZAGV4Y2H1C2VYMDFACJEZLNZZZY5SB2NHBDIARGAAAAAAKQKC8WW3CUWGCPM+AP66WQ
CASOLXUYMOMEKYBQJJ1Z0MBWASDQANHQAASOLXUYMOMEKYBQJJ1Z0MBWASDQASVGAA|2009-09-25:0
8:30|2009-09-25:09:15| Demo
calendarmeetings list end
```

If the API client is logged in with admin-level credentials, the API provides private meeting information to the API client, regardless of the RealPresence Group Series configuration for displaying private meeting information; for example:

calendarmeetings list begin

```
meeting|AAAZAGV4Y2H1C2VYMDFACJEZLNZZZY5SB2NHBDIARGAAAAAKQKC8WW3CUWGCPM+AP66WQ
CASOLXUYMOMEKYBQJJ1Z0MBWASDQANHQAASOLXUYMOMEKYBQJJ1Z0MBWASDQASVGAA|2009-09-25:0
8:30|2009-09-25:09:15|Release plan
```

```
meeting|AAAZAGV4Y2H1C2VYMDFACJEZLNZZZY5SB2NHBDIARGAAAAAKQKC8WW3CUWGCPM+AP66WQ
CASOLXUYMOMEKYBQJJ1Z0MBWASDQANHQAASOLXUYMOMEKYBQJJ1Z0MBWASDQASVGAA|2009-09-23:1
1:00|2009-09-23:11:45|Product roadmap for 2010
calendarmeetings list end
```

The calendaring service must be registered with Microsoft Exchange Server for the calendarmeetings command to work successfully. If the calendar credentials are invalid, the server address is not valid, or the configured user credentials don't have access permissions to the resource mailbox calendar, the service will fail to register.

This command has multiline output.

The following characters in the meeting subject will not be displayed:

- | (vertical bar)
- CR (carriage return)
- LF (line feed)

#### See Also

To enable or disable the calendaring service, use the calendarregisterwithserver command.

To configure the Microsoft Exchange Server address that is used by this service, use the calendarserver command.

## calendarpassword

Sets the password used by the calendaring service to log in to the Microsoft Exchange Server.

#### Syntax

calendarpassword "password"

Parameter	Description	User Accessible	Additional Restrictions
"password"	The password used by the calendaring service to log in to the Microsoft Exchange Server.		

#### **Feedback Examples**

• calendarpassword Dscalend@r returns calendarpassword Dscalend@r

#### Limitations

None

#### Comments

The password is case-sensitive and can contain a maximum of 15 characters. Use strong passwords that combine uppercase and lowercase letters, numbers, and symbols.

#### See Also

To enable or disable the calendaring service, use the calendarregisterwithserver command.

# calendarplaytone

Gets or sets the reminder alert tone that plays with the meeting reminder when the RealPresence Group Series system is registered with the calendaring service.

#### **Syntax**

calendarplaytone get
calendarplaytone <yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Gets the current setting for the alert tone.	1	
yes	Enables the alert tone.		
no	Disables the alert tone.		

### **Feedback Examples**

- calendarplaytone get returns calendarplaytone yes
- calendarplaytone yes
- **returns** calendarplaytone yes
- calendarplaytone no returns calendarplaytone no

#### Limitations

None

#### Comments

None

#### See Also

See calendarremindertime command.

# calendarregisterwithserver

Enables or disables the calendaring service.

#### Syntax

calendarregisterwithserver get
calendarregisterwithserver <yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current server registration status.	1	
yes	Enables the calendaring service.		
no	Disables the calendaring service.		

### **Feedback Examples**

- calendarregisterwithserver get returns calendarregisterwithserver no
- calendarregisterwithserver yes returns calendarregisterwithserver yes
- calendarregisterwithserver no returns calendarregisterwithserver no

#### Limitations

None

#### Comments

To configure the Microsoft Exchange Server address used by the calendaring service, use the calendarserver command.

# calendarremindertime

Gets or sets the reminder time for meetings in the calendar when the system is registered with the calendaring service.

#### **Syntax**

calendarremindertime <get|1|5|10|15|30|none>

Parameter	Description	User Accessible	Additional Restrictions
get	Gets the current reminder time.	1	
1 5 10 15 30 none	The number of minutes before a meeting starts that a meeting reminder is given. The default is 5.		

#### **Feedback Examples**

- calendarremindertime get returns calendarremindertime 5
- calendarremindertime 15 returns
  - calendarremindertime 15
- calendarremindertime none returns calendarremindertime none

#### Limitations

None

#### Comments

None

#### See Also

Use the notify command to register for meeting reminders.

See also calendarplaytone command.

### calendarresource

Gets or sets the mailbox account being monitored for calendar events. The mailbox account is called a resource.

#### Syntax

```
calendarresource get
calendarresource "resource"
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the resource being monitored for calendar events.		
"resource"	The resource to monitor for calendaring events.		

#### **Feedback Examples**

- calendarresource get returns calendarresource radam@abcde.com
- calendarresource jmcnulty@abcde.com returns calendarresource jmcnulty@abcde.com

#### Limitations

None

#### Comments

A resource can be a user mailbox or a resource mailbox. A resource mailbox is a mailbox specifically assigned to a meeting room.

#### See Also

Use the calendarregisterwithserver command to enable or disable the calendaring service. See the calendarserver command to configure the Microsoft Exchange Server address used by the calendaring service.

### calendarserver

Gets or sets the Microsoft Exchange Server used by the calendaring service.

#### Syntax

```
calendarserver get
calendarserver "server"
```

Parameter	Description	User Accessible	Additional Restrictions
get	Gets the current Microsoft Exchange Server used by the calendaring service.		
"server"	The IP address or DNS name of the Microsoft Exchange Server to be used by the calendaring service.		

#### **Feedback Examples**

- calendarserver get returns calendarserver 192.168.44.168
- calendarserver 192.168.23.221 returns calendarserver 192.168.23.221
- calendarserver get returns calendarserver mail.exchangeserver.local.com
- calendarserver mail2.exchserver.local.com returns calendarserver mail2.exchserver.local.com

#### Limitations

None

#### Comments

None

#### See Also

Use the calendarregisterwithserver command to enable or disable the calendaring service.

# calendarshowpvtmeetings

Enables or disables the display of private meetings in the calendar when the system is registered with the calendaring service.

#### **Syntax**

```
calendarshowpvtmeetings get
calendarshowpvtmeetings <yes|no>
```

Parameter	Description	User Accessible	Additional Restrictions
get	Gets the current setting for private meeting display.		
yes	Enables the display of private meetings.		
no	Blocks the display of private meetings.		

#### **Feedback Examples**

- calendarshowpvtmeetings get returns calendarshowpvtmeetings no
- calendarshowpvtmeetings yes
  - returns calendarshowpvtmeetings yes
- calendarshowpvtmeetings no
- returns calendarshowpvtmeetings no

#### Limitations

None

#### Comments

## calendarstatus

Returns the status of the Microsoft Exchange Server connection.

#### Syntax

calendarstatus get

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the Microsoft Exchange Server connection status.	1	

#### **Feedback Examples**

- calendarstatus get returns calendarstatus established
- calendarstatus get returns calendarstatus unavailable

#### Limitations

None

#### Comments

None

#### See Also

Use the calendarregisterwithserver command to enable or disable the calendaring service.

## calendaruser

Gets or sets the user name the calendaring service uses to log in to the Microsoft Exchange Server.

#### **Syntax**

```
calendaruser get
calendaruser "username"
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the user name being used by the calendaring service.		
username	The user name the calendaring service uses to log in to the Microsoft Exchange Server.		

### **Feedback Examples**

• calendaruser get returns calendaruser jpolycom

#### Limitations

None

#### Comments

None

#### See Also

See the calendarserver command to configure the Microsoft Exchange Server address used by this service.

## callinfo

Returns information about the current call. If you are in a multipoint call, this command returns one line for each site in the call.

### **Syntax**

```
callinfo all
callinfo callid "callid"
```

Parameter	Description	User Accessible	Additional Restrictions
all	Returns information about each connection in the call.	1	
callid	Returns information about the connection with the specified call ID.	<b>\$</b>	

### **Feedback Examples**

```
    callinfo all
returns
callinfo begin
callinfo:43:Polycom Group Series Demo:192.168.1.101:384:connected:
notmuted:outgoing:videocall
callinfo:36:192.168.1.102:256:connected:muted:outgoing:videocall
callinfo end
```

- callinfo callid 36 returns callinfo:36:192.168.1.102:256:connected:muted:outgoing:videocall
- callinfo all returns system is not in a call when no call is currently connected

#### Limitations

#### None

#### Comments

The callid information is returned using the following format:

callinfo:<callid>:<far site name>:<far site number>:<speed>:
<connection status>:<mute status>:<call direction>:<call type>

### callstate

Sets or gets the call state notification for call state events.

#### Syntax

callstate <get|register|unregister>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
register	Registers the system to give notification of call activities.	1	
unregister	Disables the register mode.	1	

#### **Feedback Examples**

- callstate register returns callstate registered
- callstate unregister returns callstate unregistered
- callstate get returns callstate unregistered

After registering, the following callstate (cs:) data is returned when connecting an IP call:

```
cs: call[34] chan[0] dialstr[192.168.1.103] state[ALLOCATED]
cs: call[34] chan[0] dialstr[192.168.1.103] state[RINGING]
cs: call[34] chan[0] dialstr[192.168.1.103] state[COMPLETE]
active: call[34] speed [384]
```

After registering, the following response occurs when disconnecting an IP call:

```
cleared: call[34]
dialstr[IP:192.168.1.103 NAME:Polycom Group Series Demo]
ended: call[34]
```

#### Limitations

None

### Comments

None

#### See Also

You can also use the notify command and the nonotify command for notifications.

### camera

Sets or gets the near-site or far-site camera settings.

#### **Syntax**

```
camera near {1..4}
camera far {1..4}
camera far {1..4}
camera <near|far> move <left|right|up|down|zoom+|zoom-|stop>
camera <near|far> source
camera <near|far> stop
camera near (getposition|setposition "x" "y" "z">
camera near (getposition|setposition "x" "y" "z">
camera near for stop
camera near tracking statistics
camera near tracking statistics
camera near tracking <get|on|off>
camera for-people {1..4}
camera for-content {1..4}
camera list-content
```

Parameter	Description	User Accessible	Additional Restrictions
near	Specifies that the command selects or controls the near camera.	1	
far	Specifies that the command selects or controls the far camera.	1	
{14}	Specifies a near or far camera as the main video source.	1	
move	Changes the near or far camera's direction or zoom. Valid directions are: left, right, up, down, zoom+, zoom-, and stop.	J	
left	Starts moving the camera left.	1	
right	Starts moving the camera right.	1	
up	Starts moving the camera up.	1	
down	Starts moving the camera down.	1	
zoom+	Starts zooming in.	1	
zoom-	Starts zooming out.	1	
stop	Stops the near or far camera. Returns no feedback.	1	
source	Returns the number of the near or far camera source currently selected.	1	

Parameter	Description	User Accessible	Additional Restrictions
getposition	Gets the pan, tilt, and zoom coordinates of the currently selected PTZ camera in the format of pan tilt zoom.	1	
setposition "x" "y" "z"	Sets the pan (x), tilt (y), and zoom (z) coordinates of the currently selected PTZ camera. Camera PTZ range:	1	
	-5000<= pan <= 5000 -5000 <= tilt <= 5000 5000 <= zoom <= 5000 <b>Notes:</b> The camera PTZ range applies to the Polycom EagleEye HD camera. Different cameras might have different PTZ values. Some D30 cameras might not be able to reach the full range limit. For example, although the pan limit is 5000, the camera might only be able to reach a nearby value.		
ppcip	Specifies People+Content IP as the main video source if it is running and connected to the system.	✓	
<pre>for-people {14}</pre>	Sets the source for the specified camera to People. Camera 3 and Camera 4 are available on RealPresence Group 700 systems only.	1	
<pre>for-content {14}</pre>	Sets the source for the specified camera to Content. Camera 3 and Camera 4 are available on RealPresence Group 700 systems only.	1	
list-content	Gets a list of cameras configured as Content.	1	
tracking statistics	<ul> <li>Gets EagleEye Director tracking statistics. Tracking statistics measure:</li> <li>the amount of time tracking is turned off divided by the total call time in the most recent 100 calls lasting more than five minutes.</li> <li>the amount of room and close-up view switches divided by the total call time in the most recent 100 calls lasting more than five minutes.</li> </ul>		
tracking <get on off></get on off>	Enables or disables the Polycom EagleEye Director tracking feature. on turns the tracking feature on, off turns the tracking feature off, and get returns the current tracking feature setting.	1	

#### Feedback Examples

- camera far 2 specifies camera 2 at the far-site and returns camera far 2
- camera far move left causes the far-site camera to start panning to the left and returns event: camera far move left
- camera near move zoom+
   causes the near-site camera to zoom in and returns
   event: camera near move zoom+
- camera near tracking statistics
   returns
   EagleEye Director Tracking Statistics begin
   Tracking Disable Percentage: 3%
   View Switching Frequency (Per Hour): 50
   EagleEye Director Tracking Statistics end
- camera near tracking off returns camera near tracking off
- camera near tracking on returns camera near tracking on
- camera near tracking get returns camera near tracking Voice
- camera near setposition 100 100 219 returns camera near setposition 100 100 219
- camera near getposition returns camera near getposition 100 99 218

#### Limitations

camera near 2 is not supported on RealPresence Group 300 and 310 systems.
camera near 3 is not supported on RealPresence Group 300, 310, and 500 systems.
camera near 4 is not supported on RealPresence Group 300, 310, and 500 systems.
camera for people 2 is not supported on RealPresence Group 300 and 310 systems.
camera for people 3 is not supported on RealPresence Group 300, 310, and 500 systems.
camera for people 4 is not supported on RealPresence Group 300, 310, and 500 systems.
camera for content 1 is not supported on RealPresence Group 300 and 310 systems.
camera for content 2 is not supported on RealPresence Group 300 and 310 systems.
camera for content 3 and 4 are not supported on RealPresence Group 300, 310, and 500 systems.

#### Comments

If the camera near  $\{1, 4\}$  API command is used for an input configured as content, the command becomes a toggle. You must send the command once to send the content source and a second time to stop the content source.

As of release 4.1.1, the camera register and camera unregister commands are no longer available. Use the notify vidsourcechanges command instead.

### camera near tracking

Enables or disables camera tracking. This command applies to EagleEye Director and EagleEye Producer.

The camera near tracking get command returns one of the following values that corresponds to the product setting that is currently in use:

- GroupFrame Polycom EagleEye Producer
- Voice EagleEye Director

#### **Syntax**

camera near tracking <get|off|on>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
on	Enables camera tracking.	1	
off	Disables camera tracking.	1	

#### **Feedback Examples**

- camera tracking get returns camera near tracking GroupFrame
- camera near tracking off returns camera near tracking off
- camera near tracking on returns camera near tracking on

#### Limitations

None

#### Comments

# camerainput

Gets or sets the format for a video source.

#### Syntax

camerainput <1..4> <get|component|composite|hdmi|vga>

Parameter	Description	User Accessible	Additional Restrictions
<14>	Specifies the video source. Camera 3 and camera 4 are available on RealPresence Group 700 systems only	1	
get	Returns the current setting.	1	
composite	Specifies that the video source is connected using a composite connector. Available on camera 4 only.	1	
component	Specifies that the video source is connected using a component connector. Available on cameras 1, 2 and 4 only.	1	
hdmi	Specifies that the video source is connected using HDMI. Available on camera 1 on Groups Series 700 systems. Available on cameras 2 and 3 on all RealPresence Group Series systems.	1	
vga	Specifies that the video source is connected using VGA. Available on cameras 2 and 3 only.	1	

#### **Feedback Examples**

- camerainput 1 get returns camerainput 1 component
- camerainput 4 composite returns camerainput 4 composite
- camerainput 2 hdmi returns camerainput 2 hdmi

#### Limitations

camera 3 and camera 4 are available on RealPresence Group 700 systems only.

 $\tt hdmi$  is available on camera 1 on Group Series 700 systems, and available on cameras 2 and 3 on all RealPresence Group systems.

### Comments

# configdisplay

Gets or sets the video format, aspect ratio, and resolution for Monitor 1 or Monitor 2.

#### **Syntax**

configdisplay [<monitor1|monitor2>] get configdisplay <monitor1|monitor2> <component|vga|dvi|hdmi|> configdisplay <monitor1|monitor2> <component|vga|dvi|hdmi|> [<50hz1280x720p|60hz1280x720p|60hz1280x1024p|60hz1024x768p|60hz1920x1080p|50hz1920x108 0i|60hz1920x1080i|50hz1920x1080p>] configdisplay monitor2 off

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
monitor1	Specifies Monitor 1.	1	
monitor2	Specifies Monitor 2.	1	
vga	Sets the specified display to VGA format.	1	
dvi	Sets the specified display to DVI format.	1	
component	Sets the specified display to Component format.	1	
hdmi	Sets the specified display to HDMI format.	1	
50hz1280x720p	Sets the resolution to 1280x720p, 50 Hz.	1	
60hz1280x720p	Sets the resolution to 1280x720p, 60 Hz.	1	
60hz1280x1024p	Sets the resolution to 1280x1024p, 60 Hz.	1	
60hz1024x768p	Sets the resolution to 1024x768p, 60 Hz.	1	
60hz1920x1080p	Sets the resolution to 1920x1080p, 60 Hz.	1	
50hz1920x1080i	Sets the resolution to 1920x1080i, 50 Hz.	1	
60hz1920x1080i	Sets the resolution to 1920x1080i, 60 Hz.	1	
50hz1920x1080p	Sets the resolution to 1920x1080p, 50 Hz.	1	
off	Sets Monitor 2 to off.	1	

#### **Feedback Examples**

- configdisplay get returns configdisplay monitor1 hdmi 1920x1080p 60Hz
- configdisplay monitor2 get returns configdisplay monitor2 hdmi 1920x1080p 60Hz

- configdisplay monitor2 off returns configdisplay monitor2 off
- configdisplay monitor2 hdmi returns configdisplay monitor2 hdmi

### Limitations

RealPresence Group 300 and 500 systems support HDMI and DVI outputs only.

The following resolutions are available for RealPresence Groups 300 and 500 systems on Monitor 1:

- 50hz1280x720p
- 60hz1280x720p
- 50hz1920x1080i
- 60hz1920x1080i
- 50hz1920x1080p
- 60hz1920x1080p

The following resolutions are available for RealPresence Group 300 and 500 systems on Monitor 2:

- 60hz1024x768p
- 50hz1280x720p
- 60hz1280x720p
- 50hz1920x1080i
- 60hz1920x1080i
- 50hz1920x1080p
- 60hz1920x1080p

RealPresence Group 700 systems support HDMI, DVI, VGA and Component outputs. The following resolutions are available on Monitor 1.

HDMI, DVI, and Component:

- 50hz1280x720p
- 60hz1280x720p
- 50hz1920x1080i
- 60hz1920x1080i
- 50hz1920x1080p
- 60hz1920x1080p

VGA:

- 50hz1280x720p
- 60hz1280x720p
- 50hz1920x1080p
- 60hz1920x1080p

The following resolutions are available on monitor 2.HDMI and DVI:

• 60hz1024x768p

- 50hz1280x720p
- 60hz1280x720p
- 60hz1280x1024p
- 50hz1920x1080i
- 60hz1920x1080i
- 50hz1920x1080p
- 60hz1920x1080p

#### VGA:

- 60hz1024x768p
- 60hz1280x1024p
- 50hz1280x720p
- 60hz1280x720p
- 50hz1920x1080p
- 60hz1920x1080p

### Component:

- 50hz1280x720p
- 60hz1280x720p
- 50hz1920x1080i
- 60hz1920x1080i
- 50hz1920x1080p
- 60hz1920x1080p

### Comments

# configlayout

Gets or sets the Self View (PIP) location.

### Syntax

```
configlayout monitor1 <get|list>
configlayout monitor1
<pip_lower_left|pip_lower_right|pip_upper_left|pip_top|pip_right|pip_bottom
|side_by_side|fullscreen>
```

Parameter	Description	User Accessible	Additional Restrictions
get	Turns on the test tone.	1	
monitor1	You cannot specify a monitor in release 4.2. This parameter is required, but ignored.	1	
list	Lists the available Self View location choices.	1	
pip_lower_left	Sets the Self View (PIP) to appear in the lower left of the monitor.	1	
pip_lower_right	Sets the Self View (PIP) to appear in the lower right of the monitor.	1	
pip_upper_left	Sets the Self View (PIP) to appear in the upper left of the monitor	1	
pip_upper_right	Sets the Self View (PIP) to appear in the upper right of the monitor.	1	
pip_top	Sets the Self View (PIP) to appear at the top of the monitor.	1	
pip_right	Sets the Self View (PIP) to appear on the right of the monitor.	1	
pip_bottom	Sets the Self View (PIP) to appear at the bottom of the monitor.	1	
side_by_side	Sets the Self View (PIP) to appear next to far site or content.	1	
fullscreen	Sets the Self View (PIP) to appear full screen.	1	

### **Feedback Examples**

```
    configlayout monitorl get
        returns
        configlayout monitorl pip_lower_right
    configlayout monitorl list
        returns
        configlayout monitorl pip_lower_right
        configlayout monitorl pip_lower_left
        configlayout monitorl pip_upper_right
        configlayout monitorl pip_upper_left
    configlayout monitorl pip_right
        returns
        configlayout monitorl pip_right
        returns
        configlayout monitorl pip_right
        returns
        configlayout monitorl pip_right
        returns
        configlayout monitorl pip right
```

### Limitations

None

#### Comments

The number of monitors, Self View setting, content, point-to-point, and multipoint calls all impact the layouts that are supported.

# configparam

Gets or sets the video quality setting for the specified video input for motion or sharpness.

### **Syntax**

```
configparam <"parameter"> get
configparam <"parameter"> set <"value">
```

Parameter	Possible Values	Description	User Accessible	Additional Restrictions
get	NA	Gets the video quality setting for the specified video input.	<i>✓</i>	
camera_video_quality <1 2 3 4>	motion sharpness	Sets the video quality setting for the specified video input for motion or for sharpness (for images without motion).	V	

### **Feedback Examples**

- configparam camera\_video\_quality 1 set motion returns camera1\_video\_quality motion
- configparam camera\_video\_quality 1 get returns cameral video quality sharpness

### Limitations

None

### Comments

# configpresentation

Gets or sets the content presentation settings for Monitor 1, Monitor 2, or Monitor 3.

#### **Syntax**

```
configpresentation get
configpresentation <monitor1|monitor2|monitor3> get
configpresentation monitor1 <auto|all|near-or-far>
configpresentation monitor2 <all|near|far|content>
configpresentation monitor3 <rec-all|rec-far-or-near|near|far|content>
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current settings for the active monitors	1	
monitor1	Specifies settings for Monitor 1	1	
	<b>Note</b> : If Monitor 1 is set to auto, all other monitor configurations are disabled.		
monitor2	Specifies settings for Monitor 2	1	
monitor3	Specifies settings for Monitor 3	1	
auto	Sets monitors to show content and the current speakers based on a variety of factors. If Monitor 1 is set to auto, Monitor 2 and Monitor 3 are unavailable. If you later choose a different setting, the original values persist. <b>Note</b> : When auto is enabled, all other monitor settings are disabled.	1	
all	Sets the monitor to show available content. Otherwise, the monitor shows the person speaking at the far end.	1	
near-or-far	Sets the monitor to show current people speaking at the far end.	1	
near	Selects near-site video as the video source to display on the specified monitor	1	
far	Selects far-site video as the video source to display on the specified monitor	1	
content	Selects content as the video source to display on the specified monitor	1	

Parameter	Description	User Accessible	Additional Restrictions
rec-all	Sets Monitor 3 to show available content or the person speaking to support recording with a DVR. The showing of content takes priority over the showing of a person speaking. This setting is available only with RealPresence Group 700 systems. Select this setting to record near, far, and content audio. If there is content, the video is recorded in full screen. If there is no content, the speaker is recorded in full screen.		
rec-far-or-near	Sets Monitor 3 to show the current person speaking, regardless of the speaker's location, to support recording with a DVR. This setting is available only with RealPresence Group 700 systems.	1	

### **Feedback Examples**

- configpresentation monitor1 get returns configpresentation monitor1:all
   configpresentation monitor3 rec-all returns configpresentation monitor3 rec-all succeeded
- configpresentation monitor3 content returns configpresentation monitor3 content succeeded
- configpresentation monitor1 all returns configpresentation monitor1 all succeeded

### Limitations

None

### Comments

The monitor configurations and the number of monitors configured with your system determine the available monitor profiles.

## contentauto

Gets or sets the automatic bandwidth adjustment for people and content in point-to-point H.323 calls. Automatic adjustment maintains equal image quality in the two streams.

### **Syntax**

contentauto <get|on|off>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
on	Enables automatic bandwidth adjustment for people and content.	1	
off	Disables automatic bandwidth adjustment for people and content. The system Quality Preference settings is used instead.	1	

### **Feedback Examples**

- contentauto off returns contentauto off
- contentauto on returns contentauto on
- contentauto get returns contentauto on

### Limitations

None

### Comments

# daylightsavings

Gets or sets the daylight saving time setting. When you enable this setting, the system clock automatically changes for daylight saving time.

### Syntax

daylightsavings <get|yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
yes	Enables automatic adjustment for daylight savings time.		
no	Disables automatic adjustment for daylight savings time.		

### **Feedback Examples**

- daylightsavings no returns daylightsavings no
- daylightsavings yes returns daylightsavings yes
- daylightsavings get returns daylightsavings yes

### Limitations

None

### Comments

## defaultgateway

Gets or sets the default gateway.

### Syntax

```
defaultgateway get
defaultgateway set "xxx.xxx.xxx.xxx"
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the default gateway IP address.		
set	Sets the default gateway when followed by the "xxx.xxx.xxx" parameter.		
"xxx.xxx.xxx.xxx"	IP address to use as the default gateway.		

### **Feedback Examples**

• defaultgateway set 192.168.1.101 returns defaultgateway 192.168.1.101

### Limitations

None

## Comments

You can only change the defaultgateway setting if DHCP is turned off.

You must restart the system after making a change to a setting.

# dhcp

Gets or sets DHCP options.

### Syntax

dhcp <get|off|client>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the selected DHCP option.	1	
off	Disables DHCP.		
client	Enables DHCP client, setting the system to obtain an IP address from a server on your network.		

### **Feedback Examples**

- dhcp off returns dhcp off
- dhcp client returns dhcp client
- dhcp get returns dhcp client

### Limitations

None

### Comments

You must restart the system after making a change to a setting.

# dial

Dials video or audio calls either manually or from the directory.

### Syntax

```
dial addressbook "addr book name"
dial auto "speed" "dialstr"
dial manual "speed" "dialstr1" ["dialstr2"] [h323|ip|sip]
dial phone <sip_speakerphone> "dialstring"
```

Parameter	Description	User Accessible	Additional Restrictions
addressbook	Dials a directory (address book) entry. Requires the name of the entry.	1	
"addr book name"	The name of the directory (address book) entry. The name may be up to 25 characters. Use quotation marks around strings that contain spaces. For example: "John Doe".	1	
auto	Dials a video call number dialstr1 at speed of type h323. Requires the parameters "speed" and "dialstr". Allows the user to automatically dial a number. Deprecated. Instead of this command, Polycom recommends using dial manual and not specifying a call type.	1	
"speed"	Valid data rate for the network.	1	
"dialstr", "dialstr1", "dialstr2"	IP directory number.	J	
manual	Dials a video call number dialstr1 at speed of type h323. Requires the parameters "speed" and "dialstr1". Use dial manual "speed" "dialstr" "type" when you do not want automatic call rollover or when the dialstring might not convey the intended transport.	1	
h323 ip sip	Type of call.	1	

Parameter	Description	User Accessible	Additional Restrictions
sip_speakerphone	Specify to dial SIP call.		
"dialstring"	Numeric string specifying the phone number to dial. Enclose the string in quotation marks if it includes spaces. Example: "512 555 1212"		

#### **Feedback Examples**

```
• If registered for callstate notifications (callstate register), the API returns
  cs: call[44] chan[0] dialstr[5551212] state[ALLOCATED]
  cs: call[44] chan[0] dialstr[5551212] state[RINGING]
  cs: call[44] chan[0] dialstr[5551212] state[CONNECTED]
  cs: call[44] chan[0] dialstr[5551212] state[CONNECTED]
  cs: call[44] chan[0] dialstr[5551212] state[COMPLETE]
  cs: call[44] chan[0] dialstr[5551212] state[COMPLETE]
  active: call[44] speed[64]

    dial addressbook "John Polycom"

  returns
  dialing addressbook "John Polycom"

    dial phone sip speakerphone 123456

  returns
  dialing sip speakerphone
• If registered for callstate notifications (callstate register), the API returns
  cs: call[44] chan[0] dialstr[192.168.1.101] state[ALLOCATED]
  cs: call[44] chan[0] dialstr[192.168.1.101] state[RINGING]
  cs: call[44] chan[0] dialstr[192.168.1.101] state[COMPLETE]
  active: call[44] speed[384]
  Notes: The [BONDING] responses in IP calls are extraneous text that will be removed in a
  subsequent software version.
```

Call ID (call [44]) is an example of the response. The Call ID number depends upon the call type.

```
• If registered for callstatus notifications (notify callstatus), the API returns, notification:callstatus:outgoing:45:null 1::opened::0:videocall notification:callstatus:outgoing:45: Polycom Austin: 192.168.1.101:connecting:384:0:videocall notification:callstatus:outgoing:45: Polycom Austin: 192.168.1.101:connected:384:0:videocall
```

Note: The call ID number (45) is an example of the response. The Call ID number depends upon the call type.

#### Limitations

None

## Comments

None

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### See Also

You can use callstate register or notify callstatus to obtain updated information on the status of a call. For example, when using dial manual to place a call, both registration commands will tell you when the call is connected. Refer to the callstate command and the notify command.

## dial addressbook\_entry

Dials a system using a unique identifier retrieved by the globaldir command.

### Syntax

dial addressbook\_entry "UID"

Parameter	Description	User Accessible	Additional Restrictions
"UID"	Unique identifier associated with a site or group, for example: ldap#g#f82be96eea3bd644a1963dc7fdf45011 The complete UID must be specified	1	

## Feedback Examples

dial addressbook\_entry ldap#g#35086aa0ecc9014facdcaa89bd34ccf6
 returns

dialing addressbook entry ldap#g#35086aa0ecc9014facdcaa89bd34ccf6Comments

### Limitations

None

### Comments

The "UID" value must be retrieved by the globaldir command.

## dns

Gets or sets the configuration for up to four DNS servers.

### Syntax

```
dns get {1..4}
dns set {1..4} "xxx.xxx.xxx.xxx"
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current IP address of the specified server. A server identification number {14} is required.	V	
{14}	Specifies the server identification number.	1	
set	Sets the IP address of the specified DNS server when followed by the "xxx.xxx.xxx.xxx" parameter. A server identification number {14} is required.	<i>J</i>	
"xxx.xxx.xxx.xxx"	Specifies the IP address for the specified server.	1	

### **Feedback Examples**

dns set 1 192.168.1.205
 returns
 dns 1 192.168.1.205

### Limitations

None

### Comments

After making a change, you must restart the system for the setting to take effect.

You cannot set these values if the system is in DHCP client mode.

# dynamicbandwidth

Gets or sets the use of dynamic bandwidth allocation for Quality of Service.

### Syntax

dynamicbandwidth <get|yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
yes	Enables the dynamic bandwidth option.		
no	Disables the dynamic bandwidth option.		

### **Feedback Examples**

- dynamicbandwidth yes returns dynamicbandwidth yes
- dynamicbandwidth no returns dynamicbandwidth no
- dynamicbandwidth get returns dynamicbandwidth no

### Limitations

None

### Comments

The system's dynamic bandwidth function automatically finds the optimum line speed for a call. If you experience excessive packet loss while in a call, the dynamic bandwidth function decrements the line speed until there is no packet loss. This is supported in calls with endpoints that also support dynamic bandwidth.

## e164ext

Gets or sets an H.323 (IP) extension, also known as an E.164 name.

### **Syntax**

```
el64ext get
el64ext set "e.164name"
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
set	Sets the E.164 extension when followed by the "e.164name" parameter. To erase the current setting, omit "e.164name".		
"e.164name"	A valid E.164 extension (usually a four-digit number).		

### **Feedback Examples**

- e164ext set returns e164ext <empty>
- e164ext set 7878 returns e164ext 7878
- e164ext get 7878 returns e164ext 7878

### Limitations

None

### Comments

The extension number is associated with a specific LAN device.

## echocanceller

Gets or sets the configuration of line-input port echo cancellation, which prevents users from hearing their voices loop back from the far site.

### **Syntax**

echocanceller <get|yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
yes	Enables the echo canceller option. Default.		
no	Disables the echo canceller option.		

### **Feedback Examples**

- echocanceller yes returns echocanceller yes
- echocanceller no returns echocanceller no
- echocanceller get returns echocanceller no

### Limitations

The echocanceller command is not supported on RealPresence Group 300 and 310 systems.

### Comments

Polycom strongly recommends that you do not turn off echo cancellation except when you are using an external microphone system with its own built-in echo cancellation.

# echoreply

Gets or sets the system's ability to send an Echo Reply message in response to an Echo Request message sent to an IPv4 multicast/anycast address.

### Syntax

echoreply <get|yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
yes	Enables the echo reply option.		
no	Disables the echo reply option.		

### **Feedback Examples**

- echoreply get returns echoreply yes
- echoreply no returns echoreply no

### Limitations

None

### Comments

The number of responses may be traffic-conditioned to limit the effect of a denial of service attack.

You must restart the system after making a change to a setting.

## enablefirewalltraversal

Gets or sets the **Enable H.460 Firewall Traversal** setting. This feature requires an Edgewater session border controller that supports H.460.

### Syntax

enablefirewalltraversal <get|on|off>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
on	Enables the firewall traversal feature.		
off	Disables the firewall traversal feature.		

### **Feedback Examples**

- enablefirewalltraversal on returns enablefirewalltraversal on
- enablefirewalltraversal off returns enablefirewalltraversal off
- enablefirewalltraversal get returns enablefirewalltraversal off

### Limitations

None

### Comments

# enablekeyboardnoisereduction

Gets or sets the Enable Keyboard Noise Reduction setting.

### Syntax

enablekeyboardnoisereduction <get|yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
yes	Enables keyboard noise reduction.	1	
no	Disables keyboard noise reduction.	1	

### **Feedback Examples**

•	enablekeyboardnoisereduction returns	yes
	${\tt enablekeyboardnoisereduction}$	yes
•	enablekeyboardnoisereduction returns	no
	enablekeyboardnoisereduction	no
•	enablekeyboardnoisereduction returns	get
	enablekeyboardnoisereduction	no

### Limitations

None

### Comments

## enablelivemusicmode

Gets or sets the Enable MusicMode setting.

### Syntax

enablelivemusicmode <get|yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
yes	Enables live music mode.		
no	Disables live music mode.		

### **Feedback Examples**

- enablelivemusicmode yes returns enablelivemusicmode yes
- enablelivemusicmode no returns enablelivemusicmode no

### Limitations

None

#### Comments

# enablepvec

Gets or sets the Polycom Video Error Concealment (PVEC) setting on the system.

### Syntax

enablepvec <get|yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	✓	
yes	Enables the PVEC option.		
no	Disables the PVEC option.		

### **Feedback Examples**

- enablepvec yes returns enablepvec yes
- enablepvec no returns enablepvec no
- enablepvec get returns enablepvec no

### Limitations

None

### Comments

This option is enabled by default.

# enablersvp

Gets or sets the Resource Reservation Protocol (RSVP) setting on the system, which requests that routers reserve bandwidth along an IP connection path.

### **Syntax**

enablersvp <get|yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
yes	Enables the RSVP option.		
no	Disables the RSVP option.		

### **Feedback Examples**

- enablersvp yes returns enablersvp yes
- enablersvp no returns enablersvp no
- enablersvp get returns enablersvp no

### Limitations

None

### Comments

This option is enabled by default.

## enablesnmp

Gets or sets the SNMP configuration.

### Syntax

enablesnmp <get|yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
yes	Enables the SNMP option.		
no	Disables the SNMP option.		

### **Feedback Examples**

- enablesnmp yes returns enablesnmp yes
- enablesnmp no returns enablesnmp no
- enablesnmp get returns enablesnmp no

### Limitations

None

### Comments

After making a change, you must restart the system for the setting to take effect.

# encryption

Gets or sets the AES encryption mode for the system.

### Syntax

encryption <get|yes|no|requiredvideocallsonly|requiredallcalls>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
yes	Use encryption when the far site is capable of encryption. Note: This parameter is called <b>When Available</b> in the user interface.		
no	Disables encryption. Note: This parameter is called <b>Off</b> in the user interface.		
requiredvideocallsonly	Enforces encryption on all video endpoints. Any video calls to or from systems that do not have encryption enabled are not connected. Audio-only calls are connected.		
requiredallcalls	Enforces encryption on all endpoints. Any video or audio calls to or from systems that do not have encryption enabled are rejected and are not connected.		

### **Feedback Examples**

- encryption yes returns encryption yes
- encryption no returns encryption no
- encryption get returns encryption no
- encryption requiredvideocallsonly returns encryption requiredvideocallsonly

• encryption requiredallcalls returns encryption requiredallcalls

#### Limitations

None

#### Comments

You cannot execute the encryption command while a call is in progress. Using this command while the system is in a call returns the following message:

error: command has illegal parameters

# exit

Ends the API command session.

### Syntax

exit

### **User Accessible**

Yes

### **Additional Restrictions**

None

### **Feedback Examples**

• exit returns Connection to host lost.

### Limitations

None

### Comments

For serial sessions, this command starts a new session.

## exportdirectory

Exports a directory in XML format.

#### Syntax

exportdirectory

#### **User Accessible**

No

#### **Additional Restrictions**

None

#### Feedback Example

```
• exportdirectory
returns
exportdirectory started
<?xml version="1.0" encoding="UTF-8" ?>
<addresses>
<entrytype type="entry" name="dawn" filename="dawn" uniqueid="local:26">
<address filename="dawn
" langid="
" displayname="dawn
" name="dawn">
<h323 address="192.168.1.120"
speed="0"/>
<sip address="192.168.1.120"
speed="0"/>
<category category="CONTACTS"/>
</address>
</entrytype>
<entrytype type="entry" name="dawn " filename="dawn " uniqueid="local:28">
<address filename="dawn
" langid="
" displayname="dawn
" name="dawn ">
<h323 address="192.168.1.120"
speed="0"/>
<sip address="192.168.1.120"
speed="0"/>
<category category="CONTACTS"/>
</address>
</entrytype>
<address filename="testGroup
" langid="
" displayname="testGroup
" name="testGroup ">
```

```
<multisitename meeting name="testGroup " />
<multisitespeed meeting speed="auto"/>
<multisitename0 site name 0="dawn "/>
<mulitsitetype0 site type 0="2" type 0="1000"/>
<mulitsiteprefcalltype0 pref call type 0="H323"/>
<multisiteuniqueid0 unique id 0="local:28"/>
<multisitename1 site name 1="dawn2 "/>
<mulitsitetype1 site type 1="2" type 1="1000"/>
<mulitsiteprefcalltype1 pref call type 1="H323"/>
<multisiteuniqueid1 unique id 1="local:30"/>
<multisitename2 site name 2="dawn3 "/>
<mulitsitetype2 site type 2="2" type 2="1000"/>
<mulitsiteprefcalltype2 pref call type 2="H323"/>
<multisiteuniqueid2 unique id 2="local:29"/>
</address>
</entrytype>
<entrytype type="group" name="testGroup1" filename="testGroup1"</pre>
uniqueid="local:38">
<address filename="testGroup1
" langid="
" displayname="testGroup1
" name="testGroup1">
<multisitename meeting name="testGroup1" />
<multisitespeed meeting speed="auto"/>
</address>
</entrytype>
</addresses>
</xml>
exportdirectory done
```

#### Limitations

None

### Comments

exportdirectory done indicates that all directory data has been exported.

When the system uses the Maximum security profile, this command is available only to Administrators.

Do not use the exportdirectory command to interpret the data that is returned. Simply store and use the data as input to the importdirectory command or import directory utility in the web interface. The format of the exported directory data might change in future software releases and any application attempting to interpret the data could find its ability to do so compromised in later releases of Polycom RealPresence Group Series software.

Exporting a directory on one system model and importing the directory on another model is not supported. Attempts to export and import directory information between different systems might also fail. The message importdirectory failed indicates that the system was not able to import the information.

When importing directory data back into the system, use the data in its entirety (not edited in any form). There is information that is used by the system to determine what type (XML or CSV) of data is being imported.

### See Also

See the importdirectory command.

## exportprofile

Exports system and user profile information in a CSV format. The output is available through a telnet or serial port connection.

### Syntax

exportprofile

#### **User Accessible**

No

#### **Additional Restrictions**

None

### **Feedback Example**

• exportprofile returns exportprofile started profileversion,0.2 system.info.eulafile,eula system.info.hardwareversion,9 system.info.humanreadablemodel, RealPresence Group 500 system.info.humanreadableplatform, GROUPSERIES system.info.humanreadableversion, Dev - 4.1.3-0 system.info.plcmstandardversion, Dev - 4.1.3-0 system.info.serialnumber,8213130FE433CV audio.lineIO.lineinechocanceller, "False" audio.volume.speakervolume,"46" comm.Firewall.fixedportstcphigh,"3241" comm.Firewall.fixedportsudphigh,"3301" comm.NICs.H323Nic.h323extension,"177704997" comm.NICs.H323Nic.h323name, "Group Series 177704997" comm.NICs.SipNic.bfcptransportprotocol,"Prefer UDP" comm.NICs.SipNic.thirdpartyinterop.ocs.sipuuid,"d503b976-c62f-5484-82c0-64a479 18d1" 63 comm.Qos.tos.tosaudio,"5" comm.Qos.tos.tosfecc,"3" comm.Qos.tos.tosoam,"0"

```
comm.Qos.tos.tosvideo,"4"
location.country, "United States"
location.language,"ENGLISHUS"
pm.monRoleAuto, "True"
pm.monitor[1].enable,"True"
softupdate.url,"http://builds.softupdate.com/~test/softupdate
                                                                     /"
sourceman.camera[1].autowhitebalancegainb,"33"
sourceman.camera[1].autowhitebalancegainr,"37"
sourceman.camera[1].backlightcomp,"False"
sourceman.camera[1].brightness,"11"
sourceman.camera[1].contrast,"13"
sourceman.camera[1].name, "Main"
sourceman.camera[1].role,"People"
sourceman.camera[1].saturation,"6"
sourceman.camera[1].sharpness,"3"
sourceman.camera[1].videoquality, "Sharpness"
sourceman.camera[1].whitebalancemode,"atw"
video.monitor[1].Resolution,"1920x1080p 60Hz"
video.monitor[2].Resolution,"1920x1080p 60Hz"
exportprofile done
```

### Comments

exportprofile done indicates that all the profile data has been exported.

When the system uses the Maximum security profile, this command is available only to administrators.

Do not use exportdirectory to interpret the data that is returned. Simply store and use the data as input to the importdirectory command or import directory utility in the web interface. The format of the exported directory data might change in future software releases and any application attempting to interpret the data could find its ability to do so compromised in later releases of Polycom RealPresence Group Series software.

Exporting a directory on one system model and importing the directory on another model is not supported. Attempts to export and import directory information between different systems might also fail. The message importdirectory failed indicates that the system was not able to import the information.

When importing directory data back into the system, use the data in its entirety (not edited in any form). There is information that is used by the system to determine what type data (XML or CSV) is being imported.

### See Also

See the importprofile command.

## farcontrolnearcamera

Gets or sets far control of the near camera, which allows far sites to control the camera on your system.

### Syntax

farcontrolnearcamera <get|yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
yes	Allows the far site to control the near camera if the far site has this capability.		User role has access only if the <b>Allow Access to</b> <b>User Settings</b> option in the local or web interface is enabled. See the <i>Polycom RealPresence</i> <i>Group Series</i> <i>Administrator Guide</i> for more information.
no	Disables far control of the near camera.		

### **Feedback Examples**

- farcontrolnearcamera yes returns
- farcontrolnearcamera yes
- farcontrolnearcamera no returns farcontrolnearcamera no
- farcontrolnearcamera get returns farcontrolnearcamera no

### Limitations

None

### Comments

# farnametimedisplay

Enables or disables the name that is displayed on a far site monitor.

### Syntax

farnametimedisplay <get|on|off>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
on	Enables the name to be displayed for defined amount of time.		
off	Disables the name on a far site monitor.		

### **Feedback Examples**

- farnametimedisplay get returns farnametimedisplay on
- farnametimedisplay on returns
  - farnametimedisplay on
- farnametimedisplay off returns farnametimedisplay off

### Limitations

None

### Comments

The name will time out in 10 seconds after displayed.

## gaddrbook

Returns global directory entries. Use this command for GDS. For support of all directory types, including LDAP, you must use the globaldir command.

### **Syntax**

```
gaddrbook all
gaddrbook batch {0..59}
gaddrbook batch define "start_no" "stop_no"
gaddrbook batch search "pattern" "count"
gaddrbook letter {a..z}
gaddrbook range "start no" "stop no"
```

#### Commands for Groups

```
gaddrbook grouplist [<range_start>] [<range_end>]
gaddrbook grouplist size
gaddrbook group "group_name" [<range_start>] [<range_end>]
gaddrbook group "group_name" size
gaddrbook names search "search_pattern" [<range_start>] [<range_end>]
gaddrbook names search "search_pattern" size
gaddrbook address "sys_id_string"
```

Parameter	Description	User Accessible	Additional Restrictions
all	Returns all the entries in the global directory.	1	
batch	Returns a batch of 20 global directory entries. Requires a batch number, which must be an integer in the range {059}.	1	
define	Returns a batch of entries in the range defined by "start_no" to "stop_no."	1	
search	Specifies a batch search.	1	
"pattern"	Specifies a pattern to match for the batch search.	1	
"count"	Specifies the number of entries to list that match the pattern.	1	
letter	Returns entries beginning with the letter specified from the range $\{az\}$ . Requires one or two alphanumeric characters. Valid characters are: / ; @ , . \ 0 through 9 a through z	J	

Parameter	Description	User Accessible	Additional Restrictions
range	Returns global directory entries numbered "start_no" through "stop_no". Requires two integers.	1	
"start_no"	Specifies the beginning of the range of entries to return.	1	
"stop_no"	Specifies the end of the range of entries to return.	1	
grouplist	Returns a list of group names in this format: gaddrbook grouplist {0n}. group:"group_name"  gaddrbook grouplist done	1	
size	Returns the size of the result set that will be returned by the command. The size parameter can be used with the grouplist, group, and names search commands. The response is in the following format: gaddrbook <command/> size {0n}	1	
range_start	For the grouplist, group, and names search commands, specifies the beginning of the range of entries to return.	1	
range_end	For the grouplist, group, and names search commands, specifies the end of the range of entries to return. If a range_start is specified without a range_end, then the single range_start entry will be returned. If range_end is -1, all entries starting with range_start will be returned. Note that the LDAP server will limit the maximum number of entries that may be returned.	/	

_		User	
Parameter	Description	Accessible	Additional Restrictions
group	Returns a list of the members of a specified group. A multicodec system will appear as a single row with a sys_id_string field containing multiple sys_id entries. (See the sys_id_string description below.) The response is in the following format, one row for each address book entry: gaddrbook system {0n}. name:"sys_name" sys_label:"sys_label" sys_id:"sys_id_string" phone_num:"phone_num" type: <video multicodec phone> </video multicodec phone>	1	
	gaddrbook group "group_name" done		
group_name	Returns summary information for the people or rooms that match the search criteria. The search looks for a match at the beginning of any of these attributes: first name, last name, display/friendly name, or room name. The response is similar to the group command: gaddrbook search {0n}. name:"sys_name" sys_label:"sys_label" sys_id:"sys_id_string" phone_num:"phone_num" type: <video multicodec phone>  gaddrbook names search "search_pattern" done</video multicodec phone>	<i>,</i>	

Parameter	Description	User Accessible	Additional Restrictions
names search	Returns summary information for the people or rooms that match the search criteria. The search looks for a match at the beginning of any of these attributes: first name, last name, display/friendly name, or room name. The response is similar to the group command: gaddrbook search {0n}. name:"sys_name" sys_label:"sys_label" sys_id:"sys_id_string" phone_num:"phone_num" type: <video multicodec phone> </video multicodec phone>		
search_patt ern	Specifies the string pattern for which to search. Wildcard characters are not supported.	5	

Parameter	Description	User Accessible	Additional Restrictions
address	Obtains the address information for a specified entry. For a multi-codec system, there will be separate lines for each codec, distinguished by the codec's sys_id. The codecs will be retuned in order, starting with the primary codec. If codecs support multiple protocols, the different addresses will be returned on separate lines. The response is in the following format: gaddrbook address {0n}. sys_id:"sys_id" h323_spd:"h323_spd" h323_num:"h323_num" h323_ext:"h323_ext" gaddrbook address {0n}. sys_id:"sys_id" sip_spd:"sip_spd" sip_num:"sip_num" gaddrbook address {0n}. sys_id:"sys_id" xmpp:xmpp_addr gaddrbook address {0n}. sys_id:"sys_id" isdn_spd:"isdn_spd" isdn_num:"isdn_num" isdn_ext:"isdn_ext"  gaddrbook address "sys_id string" done		
			I

Demonst	Description	User	
Parameter	Description	Accessible	Additional Restrictions
sys_id_stri ng	The unique identifier string for an endpoint. When the client retrieves the members of a group or searches by name, the results will include a list of people or rooms and the endpoints or systems associates with each of those entries. Each endpoint will have a sys_id_string which can be used to query for the endpoint's address information. For multi-codec systems, the sys_id_string will include multiple sys_id_entries, one for each codec, separated by a # delimiter. For LDAP, the sys_id will be the LDAP commUniqueID. It should be a quoted string. See examples below.		
sys_id	This is the unique identifier for a codec. If an entry has just a phone number and no video codecs, this attribute will be blank.	1	
sys_name	The friendly name for an address book entry. It is the name of the person or the room. It is surrounded by quotes if it contains spaces.	1	
sys_label	If a person/room has more than one system, the result set will include a row for each system. If those systems are of the same type, the client will consider that entry to be a telepresence system with multiple codecs rather than separate systems. If the systems are of different types, then this sys_label attribute will be included to differentiate the systems.	J	
type	The type of global address book entry. Possible values are: video, multicodec, phone.	1	
h323_spd	The preferred speed for an H.323 call to this entry. If no speed is associated with the entry, then the value of the configuration variable "globaladdrmaxh323" is returned. The default is 384.	1	
h323_num	For LDAP entries systems currently do not use this field. It is always blank.	1	

Parameter	Description	User Accessible	Additional Restrictions
h323_ext	If an LDAP entry has a value for the H.350.1 h323Identityh323-ID attribute (H.323 alias), it will be returned as the h323_ext. If there is no h323Identityh323-ID, then if there is a value for the H.350.1 h323IdentitydialedDigits attribute (E.164 number), it will be returned.	<i>J</i>	
sip_spd	The preferred speed for a SIP call to this entry. If no speed is associated with the entry, then this is the same as the h323_spd.	1	
sip_num	SIP address. For LDAP this is the H.350.4 SIPIdentitySIPURI attribute.	1	
xmpp_addr	XMPP address, also known as the Jabber ID (JID). For LDAP this is the H.350.7 XmppIdentityURI attribute.	1	

#### **Feedback Examples**

```
• gaddrbook all
  returns
  gaddrbook 0. "Polycom Group Series Demo 1" isdn spd:384
  isdn num:1.700.5551212 isdn ext:
  gaddrbook 1. "Polycom Group Series Demo 2" h323 spd:384
  h323 num:192.168.1.101 h323 ext:7878
  gaddrbook 2. "Polycom Group Series Demo 3" sip spd:384
  sip num:polycomgroupseries@polycom.com
  gaddrbook 3. "Polycom Group Series Demo 3" phone_num:1.512.5121212
  (and so on, until all entries in the global directory are listed, then:)
  gaddrbook all done

    gaddrbook batch 0

  returns
  gaddrbook 0. "Polycom Group Series Demo 1" isdn spd:384
  isdn num:1.700.5551212 isdn ext:
  gaddrbook 1. "Polycom Group Series Demo 2" h323 spd:384
  h323 num:192.168.1.101 h323 ext:7878
  gaddrbook 2. "Polycom Group Series Demo 3" sip spd:384
  sip num:polycomgroupseries@polycom.com
  gaddrbook 3. "Polycom Group Series Demo 3" phone num:1.512.5121212
  (and so on, through the last entry in the batch of 20 directory entries,
  such as:)
  gaddrbook 19. "Polycom Group Series Demo 20" h323 spd:384
  h323 num:192.168.1.120 h323 ext:
  gaddrbook batch 0 done
 gaddrbook batch define 0 2
  returns
  gaddrbook 0. "Polycom Group Series Demo 1" isdn spd:384
```

```
isdn num:1.700.5551212 isdn ext:
  gaddrbook 1. "Polycom Group Series Demo 2" h323 spd:384
  h323 num:192.168.1.101 h323 ext:7878
  gaddrbook 2. "Polycom Group Series Demo 3" sip spd:384
  sip num:polycomgroupseries@polycom.com
  gaddrbook batch define 0 2 done

    gaddrbook batch search Polycom 3

  returns
  gaddrbook 0. "Polycom Group Series Demo 1" isdn spd:384
  isdn num:1.700.5551212 isdn ext:
  gaddrbook 1. "Polycom Group Series Demo 2" h323 spd:384
  h323 num:192.168.1.101 h323 ext:7878
  gaddrbook 2. "Polycom Group Series Demo 3" sip spd:384
  sip num:polycomgroupseries@polycom.com
  gaddrbook batch search Polycom 3 done
• gaddrbook letter p
  returns
  gaddrbook 0. "Polycom Group Series Demo 1" isdn spd:384
  isdn_num:1.700.5551212 isdn ext:
  gaddrbook 1. "Polycom Group Series Demo 2" h323 spd:384
  h323_num:192.168.1.101 h323_ext:7878
  gaddrbook 2. "Polycom Group Series Demo 3" sip spd:384
  sip num:polycomgroupseries@polycom.com
  gaddrbook 3. "Polycom Group Series Demo 3" phone num:1.512.5121212
  gaddrbook 19. "Polycom Group Series Demo 20" h323 spd:384
  h323 num:192.168.1.120 h323 ext:
  gaddrbook letter p done
• gaddrbook range 0 2
  returns
  gaddrbook 0. "Polycom Group Series Demo 1" isdn spd:384
  isdn num:1.700.5551212 isdn ext:
  gaddrbook 1. "Polycom Group Series Demo 2" h323 spd:384
  h323 num:192.168.1.101 h323 ext:7878
  gaddrbook 2. "Polycom Group Series Demo 3" sip spd:384
  sip num:polycomgroupseries@polycom.com
  gaddrbook range 0 2 done
  gaddrbook grouplist size
  returns
  gaddrbook grouplist size 6
• gaddrbookgrouplist size 0 3
  returns
  gaddrbook grouplist 0. group:"Andover ITP"
  gaddrbook grouplist 1. group:"ITP Test Systems"
  gaddrbook grouplist 2. group:"Support"
  gaddrbook grouplist 3. group:"SW Group"
  gaddrbook grouplist 0 3 done
• gaddrbook grouplist
  returns
  gaddrbook grouplist 0. group:"Andover ITP"
  gaddrbook grouplist 1. group:"ITP Test Systems"
  gaddrbook grouplist 2. group:"Support"
  gaddrbook grouplist 3. group:"SW Group"
```

```
gaddrbook grouplist 4. group: "Video Group"
  gaddrbook grouplist 5. group: "VSG Software"
  gaddrbook grouplist done
 gaddrbook group "Andover ITP" size
  returns
  gaddrbook group "Andover ITP" size 5
• gaddrbook group size 0 3
  returns
  gaddrbook system 0. name:"AVKit TPX 306" sys label:"groupseries"
  sys_id:"10062#10055#10056" phone_num:""type:multicodec
  gaddrbook system 1. name: "John Doe" sys label: "groupseries" sys id: "10006"
  phone num:"978.292.5478" type:video
  gaddrbook system 2. name: "Minuteman RPX" sys label: "groupseries"
  sys id:"10074#10020" phone num:"" type:multicodec
  gaddrbook system 3. name:"Support 400" sys label:"groupseries"
  sys id:"10058#10059#10060#10061" phone num:""type:multicodec
  gaddrbook group "Andover ITP" 0 3 done
  In the example above, the multicodec systems have sys id strings with multiple sys_id entries,
  one for each codec, separated by a # delimiter.

    gaddrbook group "Video Group"

  returns
  gaddrbook system 0. name:"John Doe" sys label:"groupseries" sys id:"10002"
  phone num: type:video
  gaddrbook system 1. name: "John Doe" sys label: "groupseries" sys id: "10006"
  phone num:"978.292.5478" type:video
  gaddrbook system 2. name: "John Doe" sys label: "groupseries" sys id: "10047"
  phone num:"978.292.5347" type:video
  gaddrbook system 3. name:"Simbalab" sys label:"groupseries"
  sys id:"10037#10038#10077" phone num: type:multicodec
  gaddrbook system 4. name:"John Doe"
  sys label: "groupseries" sys id: "10031#10035" phone num: type: multicodec
  qaddrbook system 5. name:"John Doe" sys label:"VSeries"
  sys_id:"10032#10033" phone_num: type:multicodec
  gaddrbook system 6. name: "Vineyard"
  sys label:"groupseries"sys id:"10065#10009#10010" phone num:
  type:multicodec
  gaddrbook system 7. name:"VSG SW Lab" sys label:"groupseries"
  sys id:"10018#10082" phone num: type:multicodec
  gaddrbook group "Video Group" done

    gaddrbook names search "s" size

  returns
  gaddrbook names search s size 5
 gaddrbook names search "s"
  returns
  gaddrbook search 0. name:"John Doe" sys label:"groupseries"
                       sys id:"10094" phone num:"" type:video
  gaddrbook search 1. name:"John Doe" sys label:"CMADesktop"
                       sys id:"10111" phone num:"978.292.5347" type:video
  gaddrbook search 2. name:"John Doe" sys label:"groupseries"
                       sys id:"10047" phone num:"978.292.5347" type:video
  qaddrbook search 3. name:"Simbalab" sys label:"groupseries"
                       sys id:"10037#10038#10077" phone num:""
```

```
type:multicodec
  gaddrbook search 4. name: "Support 400" sys label: "groupseries"
                       sys id:"10058#10059#10060#10061" phone num:""
                       type:multicodec
  gaddrbook names search s done
• gaddrbook names search "s" 0 3
  returns
  gaddrbook search 0. name:"John Doe" sys label:"groupseries" sys id:"10094"
  phone num:"" type:video
  gaddrbook search 1. name:"John Doe" sys label:"CMADesktop" sys id:"10111"
  phone num:"978.292.5347" type:videogaddrbook search 2. name:"John Doe"
  sys label:"Group Series" sys id:"10047" phone num:"978.292.5347"
  type:video
  gaddrbook search 3. name: "Simbalab" sys label: "Group Series"
  sys id:"10037#10038#10077" phone num:"" type:multicodec
  gaddrbook names search s 0 3 done
• gaddrbook address "10047
  returns
  gaddrbook address 0. sys id:"10047" h323 spd:Auto h323 num:
  h323 ext:1246540010
  gaddrbook address 10047 done
• gaddrbook address "10065#10009#10010"
  returns
  gaddrbook address 0. sys id:"10065" h323 spd:Auto h323 num:
  h323 ext:44041gaddrbook address 1.
  sys id:"10009" h323 spd:Auto h323 num: h323 ext:44042
  gaddrbook address 2. sys id:"10010" h323 spd:Auto h323 num: h323 ext:44043
  gaddrbook address 10065#10009#10010 done
```

#### Limitations

None

#### Comments

Entries with multiple addresses (for example, an H.323 address and a SIP number) return each address type on separate lines with an incremented record number. When the system is registered with the LDAP directory server, only the gaddrbook batch search "pattern" "count" is supported. All other gaddrbook commands return the response command not supported.

When the system is registered with the Polycom GDS directory server, all of the gaddrbook commands and parameters are supported.

gaddrbook entries are stored in the global directory (address book).

Polycom recommends using the globaldir command for LDAP.

#### See Also

See the addrbook command.

See the globaldir command.

# gatekeeperip

Gets or sets the IP address of the gatekeeper.

#### **Syntax**

```
gatekeeperip get
gatekeeperip set ["xxx.xxx.xxx"]
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
set	Sets the gatekeeper IP address when followed by the "xxx.xxx.xxx" parameter. To erase the current setting, omit "xxx.xxx.xxx.xxx".		
"xxx.xxx.xxx"	IP address of the gatekeeper.		

#### **Feedback Examples**

- gatekeeperip set 192.168.1.205 returns gatekeeperip 192.168.1.205
- gatekeeperip get returns gatekeeperip 192.168.1.205

#### Limitations

None

#### Comments

The gatekeeperip get command feedback may include the port number after the IP address.

# gendial

Generates DTMF dialing tones.

#### Syntax

gendial <{0..9}|#|\*>

Parameter	Description	User Accessible	Additional Restrictions
{09}	Generates the DTMF tone corresponding to telephone buttons 0-9.	1	
#	Generates the DTMF tone corresponding to a telephone # button.	1	
*	Generates the DTMF tone corresponding to a telephone * button.	1	

### **Feedback Examples**

 gendial 2 returns gendial 2 and causes the system to produce the DTMF tone corresponding to a telephone's 2 button

### Limitations

None

#### Comments

## generatetone

Turns the test tone on or off. The tone is used to check the monitor audio cable connections or to monitor the volume level.

#### Syntax

generatetone <on|off>

Parameter	Description	User Accessible	Additional Restrictions
on	Turns on the test tone.	1	
off	Turns off the test tone.	~	

### Feedback Examples

- generatetone on returns generatetone on and the system produces a test tone
- generatetone off returns generatetone off and the system stops producing a test tone

#### Limitations

None

#### Comments

# getcallstate

Gets the state of the calls in the current conference.

### Syntax

getcallstate

#### **User Accessible**

Yes

### **Additional Restrictions**

None

### **Feedback Examples**

```
    getcallstate
        returns
        cs: call[34] speed[384] dialstr[192.168.1.101] state[connected]
        cs: call[1] inactive
        cs: call[2] inactive
```

### Limitations

None

#### Comments

None

#### See Also

To register the shell session to receive notifications about call state activities, see the callstate command.

# getconfiguredipaddress

Retrieves the currently configured IPv4 address from the system.

#### Syntax

getconfiguredipaddress

#### **User Accessible**

Yes

#### **Additional Restrictions**

None

#### **Feedback Examples**

• getconfiguredipaddress returns getconfiguredipaddress 1.2.3.4

#### Limitations

None

#### Comments

getconfiguredipaddress returns the currently configured IPv4 address of the system regardless of the status of the LAN connection. This differs from the ipaddress get command, which returns the current IP address of the system if it has an active LAN connection, else it returns 0.0.0.0.

The definition of "currently configured IPv4 address" depends on the IPv4 address configuration settings:

- If the IP address is set manually the configured IP address is returned, regardless of whether the LAN connection is currently active.
- If the IP address is obtained automatically, the currently-assigned address is returned, or 0.0.0.0 is returned if there is no active connection.

# globaldir

Retrieves global directory entries. This command supports all global directory types, including GDS, Skype for Business, and LDAP.

#### Syntax

```
globaldir "search_string"
globaldir "search_string" "size"
globaldir entry "UID"
globaldir range "start_no" "end_no"
globaldir "search_string" range "start_no" "end_no"
```

#### **Multi-Tiered Directory Commands**

```
globaldir grouplist
globaldir grouplist "UID"
globaldir grouplist "UID" "search_string"
globaldir grouplist "UID" range "start_no" "end_no"
globaldir grouplist "UID" "search_string" range "start_no" "end_no"
```

Parameter	Description	User Accessible	Additional Restrictions
"search string"	The name or string to use for the search. If the string has a space, you must enclose it in quotations.	1	
"size"	Specifies the maximum number of entries to return in the search.	1	
entry	Retrieves information about a specific site.	1	
grouplist	Retrieves the top tier of the group list when using a multi-tiered directory on Polycom <sup>®</sup> RealPresence <sup>®</sup> Resource Manager.	1	
"UID"	Unique identifier associated with a site or group. For example: Idap#g#f82be96eea3bd644a1963dc7fdf4 5011 The complete UID must be specified.	1	
range	Returns local directory entries numbered "start_no" through "stop_no". Requires two integers.	1	

Parameter	Description	User Accessible	Additional Restrictions
"start_no"	Specifies the beginning of the range of entries to return.	1	
"stop_no"	Specifies the end of the range of entries to return.	1	

#### Feedback Examples

#### LDAP

• globaldir sd 5

#### returns

globaldir 0. SD-Austin-01@polycom.com: ldap#g#840780b28ef4234f84f64298909aca07:site globaldir 1. SD-Austin-02@ polycom.com: ldap#g#8852f4c7cb6d9b4fab7e53e2730a5219:site globaldir 2. SD-Dallas-01@ polycom.com: ldap#g#83840767145bf04a9ce2b307af6d5688:site globaldir 3. SD-Dallas-02@ polycom.com: ldap#g#158aa86dd780ca4f8731fcfd627e05ad:site globaldir 4. SD-Houston-01@ polycom.com: ldap#g#e2859e0318bca145ba9b6f641e7f39d2:site globaldir 5. SD-Houston-02@ polycom.com: ldap#g#f82be96eea3bd644a1963dc7fdf45011:site globaldir sd 5 done

• globaldir sd returns

```
globaldir 0. SD-Austin-01@polycom.com:
ldap#g#840780b28ef4234f84f64298909aca07:site
globaldir 1. SD-Austin-02@ polycom.com :
ldap#g#8852f4c7cb6d9b4fab7e53e2730a5219:site
through
globaldir 401. SD-Wyoming-01@ polycom.com:
ldap#g#3e98beb689622445af6f35bb0634ea02:site
globaldir 402. SD-Wyoming-02@ polycom.com:
ldap#g#81b735ce3111c445b85c0d0ddf3fd7a4:site
globaldir sd done
```

#### Skype for Business

```
• globaldir HDX 3

returns

globaldir 0. HDX0, hdx0 WAVE5 : hdx0@wave5.eng:site

globaldir 1. HDX1, hdx1 WAVE5 : hdx1@wave5.eng:site

globaldir 2. HDX2, hdx2 WAVE5 : hdx2@wave5.eng:site

globaldir HDX 3 done
```

```
    globaldir entry hdx3@wave5.eng

    returns
    globaldir 0. "HDX3, hdx3 WAVE5" sip spd:Auto sip num: hdx3@wave5.eng
    globaldir entry sdavis5@wave5.eng done
GDS
  • globaldir gro 5
    returns
    globaldir 0. Group Conf Room : gds#485:site
    globaldir 1. Group Series 500: gds#484:site
    globaldir 2. Group Series 300 : gds#466:site
    globaldir 3. Group Series 700 : gds#512:site
    globaldir 4. GroupSeriesAustin : gds#474:site
    globaldir 5. GroupSeriesBoston : gds#394:site

    globaldir entry gds#485

    returns
    globaldir 0. " Group Conf Room " h323 spd:1024 h323 num:10.223.17.147
    h323 ext: : site
    globaldir entry gds#485 done
RANGE
  • globaldir range 0 9
    returns
    globaldir 0. AUSTIN LAB : ldap#g#2f83d8e0542dc74fac5c2f6e55035cff:group
    globaldir 1. Admin Admin : ldap#g#589feda2e097073b52134c7984ca6b44:site
    globaldir 2. Admin2 Admin2 : ldap#g#e6b660a112b25d4cb2067243e73da458:site
    globaldir 3. Group Series: ldap#g#0410894cfa213c418df5bd1226d46491:group
    globaldir 4. GS700 : ldap#g#d62644529aae1643ac7b418b1e404fe4:site
    globaldir 5. HDX : ldap#g#011d8db58de14d48838549c5e0ec7465:group
    globaldir 6. HDX8000 : ldap#g#38317b15022dc94f83650937c8aa0a48:group
    globaldir 7. HDX9000 : ldap#g#5b97459113158744a3989d0bb40ce89e:group
    globaldir 8. HDX MISC : ldap#g#2331576d60cf9948a09860946f38a42b:group
    globaldir 9. Sams 700 : ldap#g#35086aa0ecc9014facdcaa89bd34ccf6:site
    globaldir range 0 9 done
  • globaldir gro range 0 9
    returns
    globaldir 0. Group 700: ldap#g#35086aa0ecc9014facdcaa89bd34ccf6:site
    globaldir 1. Group 9006 : ldap#g#e64ffc28a13917488dec8ac97959c80f:site
    globaldir 2. Group GS300 : ldap#g#f7474445f7a8cc4d8221e7f452233446:site
    globaldir 3. Group GS700 : ldap#g#7922434fc77b6442bd74643f337f7a8e:site
    globaldir 4. Group HDX8006A : ldap#g#578b37ab9167d343853e4200145e119c:site
    globaldir 5. Group HDX8006B : ldap#g#2ce9b1cf64090e41a0b3e9b42a11edd5:site
    globaldir 6. Group HDX8006C : ldap#g#4275fd987e12e445bde9bcbb551dc7e8:site
    globaldir 7. Group HDX9004A : ldap#g#f3030565ec10bf4bbbfd1f77e1bdc483:site
    globaldir 8. Group HDX9004B : ldap#g#3e0b4c247225014682dbdebc5d6d935b:site
    globaldir 9. Group Saturn : ldap#g#5cb47f04e402d7478631ad45b5e6b493:site
    globaldir group range 0 9 done
MULTI-TIERED DIRECTORY
```

```
• globaldir grouplist returns
```

```
globaldir 0. Admin Admin:ldap#g#589feda2e097073b52134c7984ca6b44:site
globaldir 1. Admin2 Admin2:ldap#g#e6b660a112b25d4cb2067243e73da458:site
globaldir 2. Group Series:ldap#g#0410894cfa213c418df5bd1226d46491:group
```

```
globaldir 3. HDX:ldap#g#011d8db58de14d48838549c5e0ec7465:group
  globaldir 4. HDX MISC:ldap#g#2331576d60cf9948a09860946f38a42b:group
  globaldir 5. Sams 9006:ldap#g#e64ffc28a13917488dec8ac97959c80f:site
  globaldir 6. Sams Saturn:ldap#g#5cb47f04e402d7478631ad45b5e6b493:site
  globaldir grouplist done
• globaldir grouplist ldap#g#011d8db58de14d48838549c5e0ec7465
  returns
  globaldir 0. HDX8000:ldap#g#38317b15022dc94f83650937c8aa0a48:group
  globaldir 1. HDX9000:ldap#g#5b97459113158744a3989d0bb40ce89e:group
  globaldir grouplist ldap#g#011d8db58de14d48838549c5e0ec7465 done
  globaldir grouplist ldap#g#0410894cfa213c418df5bd1226d46491 boston
  returns
  globaldir 0. Boston GS300:ldap#g#f7474445f7a8cc4d8221e7f452233446
  qlobaldir grouplist ldap#g#0410894cfa213c418df5bd1226d46491 boston done

    globaldir grouplist range 0 6

  returns
  globaldir 0. Admin Admin:ldap#g#589feda2e097073b52134c7984ca6b44:site
  globaldir 1. Admin2 Admin2:ldap#g#e6b660a112b25d4cb2067243e73da458:site
  globaldir 2. Group Series:ldap#g#0410894cfa213c418df5bd1226d46491:group
  globaldir 3. HDX:ldap#g#011d8db58de14d48838549c5e0ec7465:group
  globaldir 4. HDX MISC:ldap#g#2331576d60cf9948a09860946f38a42b:group
  globaldir 5. Sams 9006:ldap#g#e64ffc28a13917488dec8ac97959c80f:site
  globaldir 6. Sams Saturn:ldap#g#5cb47f04e402d7478631ad45b5e6b493:site
  globaldir grouplist range 0 6 done
  globaldir grouplist ldap#g#0410894cfa213c418df5bd1226d46491 range 0 1
  returns
  globaldir 0. GS700:ldap#g#d62644529aae1643ac7b418b1e404fe4:group
  globaldir 1. Sams GS300:ldap#g#f7474445f7a8cc4d8221e7f452233446:site
  globaldir grouplist ldap#g#0410894cfa213c418df5bd1226d46491 range 0 1 done
• globaldir grouplist ldap#g#e6b660a112b25d4cb2067243e73da458 austin range 0 9
  returns
  globaldir 0. Austin 700 : ldap#g#35086aa0ecc9014facdcaa89bd34ccf6:site
  globaldir 1. Austin 9006 : ldap#g#e64ffc28a13917488dec8ac97959c80f:site
  globaldir 2. Austin GS300 : ldap#g#f7474445f7a8cc4d8221e7f452233446:site
  globaldir 3. Austin GS700 : ldap#g#7922434fc77b6442bd74643f337f7a8e:site
  globaldir 4. Austin HDX8006A :
  ldap#g#578b37ab9167d343853e4200145e119c:site
  globaldir 5. Austin HDX8006B :
  ldap#g#2ce9b1cf64090e41a0b3e9b42a11edd5:site
  globaldir 6. Austin HDX8006C :
  ldap#g#4275fd987e12e445bde9bcbb551dc7e8:site
  globaldir 7. Austin HDX9004A :
  ldap#g#f3030565ec10bf4bbbfd1f77e1bdc483:site
  globaldir 8. Austin HDX9004B :
  ldap#g#3e0b4c247225014682dbdebc5d6d935b:site
  globaldir 9. Austin Saturn : ldap#g#5cb47f04e402d7478631ad45b5e6b493:site
  globaldir grouplist ldap#g#e6b660a112b25d4cb2067243e73da458 austin range 0
  9 done
```

#### Limitations

#### Comments

Multi-tiered directory commands are supported only when using the LDAP function of RealPresence Resource Manager configured for multitiered directory.

Using multitiered directory commands on a system that does not support multitiered directory returns the following message: error: command not supported in current configuration.

# h239enable

Gets or sets the H.239 People+Content setting.

#### Syntax

h239enable get h239enable <yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
yes	Enables H.239 People+Content on the system.		
no	Disables H.239 People+Content on the system.		

#### **Feedback Examples**

- h239enable yes returns h239enable yes
- h239enable no returns h239enable no
- h239enable get returns h239enable no

#### Limitations

None

#### Comments

# h323name

Gets or sets the system's H.323 name.

#### **Syntax**

h323name get h323name set ["H.323name"]

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
set	Sets the H.323 name when followed by the "H.323name" parameter. To erase this setting, omit the "H.323name" parameter.		
"H.323name"	Character string specifying the H.323 name. Use quotation marks around strings that contain spaces. For example: "RealPresence Group Series Demo"		

#### **Feedback Examples**

- h323name set My returns h323name my
- h323name set "RealPresence Group SeriesR Demo" returns
  - h323name "RealPresence Group Series Demo"
- h323name get returns h323name "RealPresence Group SeriesR Demo"

#### Limitations

None

#### Comments

# hangup

Hangs up the current video call.

#### Syntax

```
hangup video ["callid"]
hangup all
```

Parameter	Description	User Accessible	Additional Restrictions
video	Disconnects the current video call. If the "callid" parameter is omitted, the system disconnects all video far sites in the call.	1	
all	Disconnects all video and audio sites in the call.	1	

#### **Feedback Examples**

- hangup video returns hanging up video
- hangup video 42 returns hanging up video and disconnects the specified site, leaving other sites connected

```
    If callstate register is used for notifications,
hangup video 42
returns
hanging up video
cleared: call[42]
dialstring[IP:192.168.1.101 NAME:RealPresence Group Series Demo]
ended: call[42]
and disconnects the specified site, leaving other sites connected
```

#### Limitations

None

#### Comments

After sending the hangup command, if registered for notification, the feedback response will notify that the call has ended. The feedback response can take up to 15 seconds.

### hostname

Gets or sets the LAN host name, which is assigned to the system for TCP/IP configuration and can be used in place of an IP address when dialing IP calls.

#### **Syntax**

```
hostname get
hostname set ["hostname"]
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the system's LAN host name when followed by the "hostname" parameter.		
"hostname"	Character string specifying the LAN host name of the system. The LAN host name follows these format rules: Starts with a letter (A-a to Z-z). It is not case sensitive. Ends with a letter (A-a to Z-z) or a number (0 to 9). May include letters, numbers, and a hyphen. May not be longer than 63 characters. Note: The LAN host name is initialized during the setup wizard sequence. The LAN host name is the same as the system name, if the system name conforms to the rules above. If the system name does not conform to these rules, the invalid characters are removed from the system name.		

#### **Feedback Examples**

- hostname set returns hostname ADMIN
- hostname set "My" returns hostname My
- hostname get returns hostname My

#### Limitations

### Comments

A LAN host name is required; it cannot be deleted or left blank.

After making a change, you must restart the system for the setting to take effect.

# importdirectory

Imports local directory information in XML format.

### Syntax

```
importdirectory
<import data line 1>
<import data line 2>
<import data line 3>
.
.
importcomplete
```

#### **User Accessible**

No

#### **Additional Restrictions**

#### Feedback Example

```
• importdirectory
  returns
  <?xml version="1.0" encoding="UTF-8" ?>
  <addresses>
  <entrytype type="entry" name="dawn" filename="dawn" uniqueid="local:26">
  <address filename="dawn" langid="" displayname="dawn" name="dawn">
  <h323 address="192.168.1.120"
  speed="0"/>
  <sip address="192.168.1.120"
   speed="0"/>
  <category category="CONTACTS"/>
  </address>
  </entrytype>
  <entrytype type="entry" name="dawn " filename="dawn "</pre>
  uniqueid="local:28">
  <address filename="dawn
  " langid="
  " displayname="dawn
  " name="dawn ">
  <h323 address="192.168.1.120"
   speed="0"/>
  <sip address="192.168.1.120"
   speed="0"/>
  <category category="CONTACTS"/>
  </address>
  </entrytype>
  <address filename="test
  " langid="
  " displayname="test
  " name="test ">
  <multisitename meeting name="test " />
  <multisitespeed meeting speed="auto"/>
  <multisitename0 site name 0="dawn "/>
  <mulitsitetype0 site type 0="2" type 0="1000"/>
  <mulitsiteprefcalltype0 pref call type 0="H323"/>
  <multisiteuniqueid0 unique id 0="local:28"/>
  <multisitename1 site_name_1="dawn2 "/>
```

```
<mulitsitetype1 site type 1="2" type 1="1000"/>
<mulitsiteprefcalltype1 pref_call_type_1="H323"/>
<multisiteuniqueid1 unique id 1="local:30"/>
<multisitename2 site<?xml version="1.0" encoding="UTF-8" ?>
<addresses>
<entrytype type="entry"</pre>
                         name="dawn" filename="dawn" uniqueid="local:26">
<address filename="dawn
" langid="
" displayname="dawn
" name="dawn">
<h323 address="192.168.1.120"
 speed="0"/>
<sip address="192.168.1.120"
 speed="0"/>
<category category="CONTACTS"/>
</address>
</entrytype>
<entrytype type="entry" name="dawn " filename="dawn "</pre>
uniqueid="local:28">
<address filename="dawn
" langid="
" displayname="dawn
" name="dawn ">
<h323 address="192.168.1.120"
 speed="0"/>
<sip address="192.168.1.120"</pre>
 speed="0"/>
<category category="CONTACTS"/>
</address>
</entrytype>
<address filename="test
" langid="
" displayname="test
" name="test ">
<multisitename meeting name="test " />
<multisitespeed meeting speed="auto"/>
<multisitename0 site name 0="dawn "/>
<mulitsitetype0 site type 0="2" type 0="1000"/>
```

```
<mulitsiteprefcalltype0 pref call type 0="H323"/>
<multisiteuniqueid0 unique id 0="local:28"/>
<multisitename1 site name 1="dawn2 "/>
<mulitsitetype1 site type 1="2" type 1="1000"/>
<mulitsiteprefcalltype1 pref call type 1="H323"/>
<multisiteuniqueid1 unique id 1="local:30"/>
<multisitename2 site name 2="dawn3 "/>
<mulitsitetype2 site type 2="2" type 2="1000"/>
<mulitsiteprefcalltype2 pref_call_type_2="H323"/>
<multisiteuniqueid2 unique id 2="local:29"/>
</address>
</entrytype>
<entrytype type="group" name="test1" filename="test1"</pre>
uniqueid="local:38">
<address filename="test1
" langid="
" displayname="test1
" name="test1">
<multisitename meeting name="test1" />
<multisitespeed meeting speed="auto"/>
</address>
</entrytype>
</addresses> name 2="dawn3 "/>
<mulitsitetype2 site type 2="2" type 2="1000"/>
<mulitsiteprefcalltype2 pref_call type 2="H323"/>
<multisiteuniqueid2 unique id 2="local:29"/>
</address>
</entrytype>
<entrytype type="group" name="test1" filename="test1"</pre>
uniqueid="local:38">
<address filename="test1
" langid="
" displayname="test1
" name="test1">
<multisitename meeting name="test1" />
<multisitespeed meeting speed="auto"/>
</address>
</entrytype>
```

```
</addresses>
```

• importcomplete returns import succeeded

#### Limitations

None

### Comments

A restart of the system is required after successfully importing directory information and occurs automatically after the import is complete.

When importing XML-formatted data, the imported data must be in the same format as was obtained from the system through the exportdirectory command or the export directory utility in the web interface. When importing data back into the system, use the data in its entirety (not edited in any form). The system may use the checksum utility to verify of integrity of the data when it is imported back into the system.

Duplicate entries are overwritten; other entries in the imported directory are added into the system's local directory.

All of the lines entered into the session after import directory is issued are interpreted as directory data.

You must include the import complete command as the last entry. Issuing the import complete command on its own line indicates that the directory import is complete.

If no data is received for 60 seconds during import, the import ends, and an import directory timed out error response is sent to the API session. All previous data entered is ignored.

Attempts to export and import directory information between different systems might fail. The message import failed indicates that the system was not able to import the information.

#### See Also

See the exportdirectory command.

# importprofile

Imports system and user profile information in a CSV format. The input is submitted through the telnet or serial port.

### Syntax

```
importprofile
<import data line 1>
<import data line 2>
<import data line 3>
...
importcomplete
```

### **User Accessible**

No

### **Additional Restrictions**

#### Feedback Example

```
• importprofile
```

#### returns

```
import started
profileversion,0.2
system.info.eulafile,eula
system.info.hardwareversion,9
system.info.humanreadablemodel, RealPresence Group 500
system.info.humanreadableplatform, GROUPSERIES
system.info.humanreadableversion, Dev - 4.1.3-0
system.info.plcmstandardversion, Dev - 4.1.3-0
system.info.serialnumber,8213130FE433CV
audio.lineIO.lineinechocanceller, "False"
audio.volume.speakervolume,"46"
comm.Firewall.fixedportstcphigh,"3241"
comm.Firewall.fixedportsudphigh,"3301"
comm.NICs.H323Nic.h323extension,"177704997"
comm.NICs.H323Nic.h323name, "Group Series 177704997"
comm.NICs.SipNic.bfcptransportprotocol,"Prefer UDP"
comm.NICs.SipNic.thirdpartyinterop.ocs.sipuuid, "d503b976-c62f-5484-82c0-6
             18d1"
4a47963
comm.Qos.tos.tosaudio,"5"
comm.Qos.tos.tosfecc,"3"
comm.Qos.tos.tosoam,"0"
comm.Qos.tos.tosvideo,"4"
location.country, "United States"
location.language,"ENGLISHUS"
pm.monRoleAuto, "True"
pm.monitor[1].enable, "True"
softupdate.url,"http://builds.softupdate.com/~test/softupdate
                                                                     /"
sourceman.camera[1].autowhitebalancegainb,"33"
sourceman.camera[1].autowhitebalancegainr,"37"
sourceman.camera[1].backlightcomp,"False"
sourceman.camera[1].brightness,"11"
sourceman.camera[1].contrast,"13"
sourceman.camera[1].name, "Main"
sourceman.camera[1].role, "People"
sourceman.camera[1].saturation,"6"
```

```
sourceman.camera[1].sharpness,"3"
sourceman.camera[1].videoquality,"Sharpness"
sourceman.camera[1].whitebalancemode,"atw"
video.monitor[1].Resolution,"1920x1080p 60Hz"
video.monitor[2].Resolution,"1920x1080p 60Hz"
```

importcomplete

importprofile succeeded

#### Limitations

None

#### Comments

When importing profile data, the imported data must be in the same format as was obtained from the system using the exportprofile command or the export profile utility in the web interface. When importing profile data back into the system, use the data in its entirety (not edited in any form). The system may use the checksum utility to verify of integrity of the data when it is imported back into the system.

importprofile done indicates that all the profile data has been imported.

When the system uses the Maximum security profile, this command is available only to Administrators.

A restart of the system is required after successfully importing system and user profile information and occurs automatically after the import is complete.

You must include the import complete command as the last entry. Issuing the import complete command on its own line indicates that the profile import is complete. If no data is received for 60 seconds during import, the import ends, and an import profile timed out error response displays. All previous data entered is ignored.

The system might not allow certain parameters, such as passwords or software build information, to be updated during the import process. Logs messages indicate if a parameter is ignored during the import process.

Exporting a profile on one system model and importing the profile on another model is not supported. Attempts to export and import profile information between different systems might also fail. The message importprofile failed indicates that the system was not able to import the information.

#### See Also

See the exportprofile command.

# ipaddress

Gets or sets the LAN IP address (IPv4) of the system.

#### Syntax

```
ipaddress get
ipaddress set "xxx.xxx.xxx.xxx"
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
set	Sets the LAN IP address to the "xxx.xxx.xxx.yxx" parameter. This setting can only be changed when DHCP is off.		
"xxx.xxx.xxx"	IP address of the system.		

### **Feedback Examples**

- ipaddress set 192.168.1.101 returns ipaddress 192.168.1.101
- ipaddress get returns ipaddress 192.168.1.101

### Limitations

None

#### Comments

Use this command when you need to allocate a static IP address to your system.

After making a change, you must restart the system for the setting to take effect.

# lanport

Gets or sets the LAN port settings of the system.

#### Syntax

lanport <get|auto|10hdx|10fdx|100hdx|100fdx|1000hdx|1000fdx>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
auto 10hdx 10fdx  100hdx 100fdx  1000hdx 1000fdx	Sets the LAN speed and duplex mode. This parameter is not allowed while in a call. auto: Automatically negotiates the LAN speed and duplex mode. 10hdx: 10 Mbps, half duplex 10fdx: 10 Mbps, full duplex 100hdx: 100 Mbps, half duplex 100fdx: 100 Mbps, full duplex 1000hdx: 1000 Mbps, half duplex 1000fdx: 1000 Mbps, full duplex		

#### **Feedback Examples**

```
    lanport auto
returns
lanport auto
restart system for changes to take effect. restart now? <y,n>
```

• lanport get returns lanport auto

#### Limitations

None

#### Comments

After making a change, you are prompted to restart the system.

# Idapauthenticationtype

Gets or sets the authentication type required to authenticate with an LDAP server.

#### **Syntax**

ldapauthenticationtype get
ldapauthenticationtype set <anonymous|basic>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the authentication type of an LDAP server. Note: This parameter does not change the setting on the server. Instead, this parameter changes how the Polycom system recognizes the server.		
anonymous	Specifies "anonymous" as the authentication type of an LDAP server.		
basic	Specifies "basic" as the authentication type of an LDAP server.		
ntlm	Specifies "ntlm" as the authentication type of an LDAP server. This is the default setting.		

#### **Feedback Examples**

- ldapauthenticationtype get returns ldapauthenticationtype anonymous
- ldapauthenticationtype set basic returns ldapauthenticationtype basic
- ldapauthenticationtypeset ntlm returns ldapauthenticationtype ntlm

#### Limitations

None

#### Comments

# Idapbasedn

Gets or sets the base distinguished name (DN) of an LDAP server.

#### **Syntax**

ldapbasedn get ldapbasedn set ["base dn"]

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the base DN of an LDAP server. To erase the current setting, omit the "base dn" parameter. Note: This parameter does not change the setting on the server. Instead, this parameter changes how the Polycom system recognizes the server.		
"base dn"	Specifies the base DN of an LDAP server. Valid characters include: Unicode (ISO-10646) characters, including IA5/ASCII characters and extended characters such as é, Ø, and å.		

### **Feedback Examples**

- ldapbasedn get returns ldapbasedn dc=hardware,dc=domain,dc=Polycom,dc=com where: dc=domain component
- ldapbasedn set dc=software,dc=domain,dc=Polycom,dc=com returns ldapbasedn dc=software,dc=domain,dc=Polycom,dc=com where: dc=domain component

#### Limitations

None

#### Comments

# Idapbinddn

Gets or sets the bind DN for LDAP Simple Authentication.

## Syntax

ldapbinddn get ldapbinddn set ["bind dn"]

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the bind DN for LDAP Simple Authentication. To erase the current setting, omit the "bind dn" parameter. Note: This parameter does not change the setting on the server. Instead, this parameter changes how the Polycom system recognizes the server.		
"bind dn"	Specifies the bind DN of an LDAP server. Valid characters include: Unicode (ISO-10646) characters, including IA5/ASCII characters and extended characters such as é, Ø, and å.		

# **Feedback Examples**

```
    ldapbinddn get
        returns
        ldapbinddn cn=plcm admin1,ou=plcmsupport,ou=plcmhelp,
        dc=hardware,dc=domain,dc=polycom,dc=com
        where:
        cn=common name
        ou=organizational unit
        dc=domain component
        ldapbinddn set cn=plcm admin2,ou=plcmaccounts,ou=plcmservice,
        dc=hardware,dc=domain,dc=polycom,dc=com
        returns
        ldapbinddn cn=plcm admin2,ou=plcmaccounts,ou=plcmservice,
        dc=hardware,dc=domain,dc=polycom,dc=com
        where:
        cn=common name
```

```
ou=organizational unit dc=domain component
```

#### Limitations

# Comments

# Idapdirectory

Gets or sets the LDAP directory server setting.

# Syntax

ldapdirectory <get|yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
yes	Enables the LDAP directory server.		
no	Disables the LDAP directory server. This is the default setting.		

# **Feedback Examples**

- ldapdirectory get returns ldapdirectory yes
- ldapdirectory no returns ldapdirectory no

# Limitations

None

#### Comments

Each Polycom system supports a single global directory server at any given time. Therefore, enabling the LDAP directory server automatically disables any other global directory server, such as the Polycom GDS directory server, that is enabled.

If the Polycom GDS directory server and another directory server are defined on the system, the Polycom GDS directory server becomes the default directory server after upgrading the system software.

# IdapntImdomain

Gets or sets the domain in which authentication takes place in the Active Directory server.

## Syntax

ldapntlmdomain get
ldapntlmdomain set ["domain"]

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the domain in which authentication takes place in the Active Directory server. To erase the current setting, omit the "domain" parameter. Note: This parameter does not change the setting on the server. Instead, this parameter changes how the Polycom system recognizes the server.		
"domain"	Specifies the domain in which authentication takes place in the Active Directory server. Valid characters include: 0 through 9, a through z, A through Z, hyphen (-), and period (.) Note: The domain name cannot begin or end with a hyphen or a period.		

# **Feedback Examples**

- ldapntlmdomain get returns ldapntlmdomain AUSTIN
- ldapntlmdomain set ANDOVER returns ldapntlmdomain ANDOVER

# Limitations

None

#### Comments

# Idappassword

Sets the password for Simple or NT LAN Manager (NTLM) authentication of an LDAP server.

## Syntax

ldappassword set ["password"]

Parameter	Description	User Accessible	Additional Restrictions
set	Sets the password for Simple authentication of an LDAP server. To erase the current setting, omit the "password" parameter. Note: This parameter does not change the setting on the server. Instead, this parameter changes how the Polycom system recognizes the server.		
ntlm	Specifies setting the password for NTLM authentication of an LDAP server.		
basic	Specifies setting the password for Simple authentication of an LDAP server.		
"password"	Specifies the password for Simple or NTLM authentication of an LDAP server. Valid characters include: Unicode (ISO-10646) characters, including IA5/ASCII characters and extended characters such as é, Ø, and å. Note: The server administrator may specify additional restrictions for password creation.		

## **Feedback Examples**

- ldappassword set ntlm P!cmp@s5wd returns
  - ldappassword NTLM P!cmp@s5wd
- ldappassword set basic P0!yc0mp@s5 returns ldappassword BASIC P0!yc0mp@s5

### Limitations

None

#### Comments

# Idapserveraddress

Gets or sets the LDAP server address.

#### **Syntax**

ldapserveraddress get
ldapserveraddress set ["address"]

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the IP address or the DNS name of an LDAP server. To erase the current setting, omit the "address" parameter. Note: This parameter does not change the setting on the server. Instead, this parameter changes how the Polycom system recognizes the server.		
"address"	Specifies the IP address or the DNS name of an LDAP server. The DNS name requires alphanumeric characters. Valid characters include: 0 through 9 a through 2 - Note: The "-" character cannot be used as the first or last character in the DNS name.		

# **Feedback Examples**

- ldapserveraddress get returns ldapserveraddress hardware.domain.polycom.com
- ldapserveraddress set software.domain.polycom.com returns

## ${\tt ldapserveraddress \ software.domain.polycom.com}$

#### Limitations

None

#### Comments

# Idapserverport

Gets or sets the port number of an LDAP server.

## Syntax

```
ldapserverport get
ldapserverport set ["port number"]
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the port number of an LDAP server. To erase the current setting, omit the "port number" parameter. Note: This parameter does not change the setting on the server. Instead, this parameter changes how the Polycom system recognizes the server.		
"port number"	Specifies the port number of an LDAP server. The default setting is 389.		

# **Feedback Examples**

- ldapserverport get returns ldapserverport 389
- ldapserverport set 636 returns ldapserverport 636

#### Limitations

None

#### Comments

# Idapsslenabled

Gets or sets the Secure Sockets Layer (SSL)/Transport Layer Security (TLS) encryption state for LDAP operations.

## **Syntax**

ldapsslenabled get
ldapsslenabled set [on|off]

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the SSL encryption state for LDAP operations. Note: This parameter does not change the setting on the server. Instead, this parameter changes how the Polycom system recognizes the server.		
on	Specifies "on" as the encryption state for LDAP operations. This is the default setting.		
off	Specifies "off" as the encryption state for LDAP operations.		

# **Feedback Examples**

- ldapsslenabled get returns ldapsslenabled off
- ldapsslenabled set on returns ldapsslenabled on

#### Limitations

None

# Comments

# Idapusername

Gets or sets the user name for NTLM authentication of an LDAP server.

## Syntax

```
ldapusername get
ldapusername set ["user name"]
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the user name for NTLM authentication of an LDAP server. To erase the current setting, omit the "user name" parameter. Note: This parameter does not change the setting on the server. Instead, this parameter changes how the Polycom system recognizes the server.		
"user name"	Specifies the user name for NTLM authentication of an LDAP server. Valid characters include: Unicode (ISO-10646) characters, including IA5/ASCII characters and extended characters such as é, Ø, and å.		

# **Feedback Examples**

- ldapusername get returns ldapusername jpolycom
- ldapusername set mpolycom returns ldapusername mpolycom

#### Limitations

None

# Comments

# listen

Registers the API session to listen for incoming video calls or system sleep/awake state, and provide notification when the registered state occurs.

## Syntax

listen <video|sleep>

Parameter	Description	User Accessible	Additional Restrictions
video	Instructs the session to listen for incoming video calls. When this event occurs, the message "listen video ringing" is received.	<i>✓</i>	
sleep	Instructs the session to listen for when the system goes into sleep mode. When this event occurs, the message "listen going to sleep" is received. When the system wakes up, the message "listen waking up" is received. Deprecated. Polycom recommends using sleep register instead of this command.	<i>J</i>	

## **Feedback Examples**

- listen sleep returns listen sleep registered to acknowledge that the session is now registered to listen for sleep mode
- listen video returns listen video registered to acknowledge that the session is now registered to listen for incoming video calls

#### Limitations

None

#### Comments

# loglevel

Gets or sets the minimum log level of messages stored in the system's flash memory.

#### Syntax

```
loglevel get
loglevel set <debug|info|warning|error|critical>
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the debug level.		
debug	Sets debug level to log all messages. The default.		
info	Sets debug level to log all informational messages		
warning	Sets debug level to log all informational and warning messages		
error	Sets debug level to log all informational, warning, and error messages		
critical	Sets debug level to log all informational, warning, error, and critical messages		

#### **Feedback Examples**

- loglevel get returns loglevel info
- loglevel set warning returns loglevel warning
- loglevel set error returns loglevel error

# Limitations

None

#### Comments

warning logs the fewest number of messages.

Polycom recommends leaving this setting at the default value of  ${\tt debug}$  .

# maxtimeincall

Gets or sets the maximum number of minutes allowed for call length.

## **Syntax**

```
maxtimeincall get
maxtimeincall set [{0..2880}]
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
set	Sets the maximum time for calls when followed by a parameter from $\{02880\}$ . To erase the current setting, omit the time parameter or set it to 0. The call will then stay up indefinitely.		
{02880}	Maximum call time in minutes. Must be an integer in the range {02880}. The value in minutes will be rounded up to hours in the system, the valid hour values are 1_hour, 2_hours to 12_hours, 24_hours and 48_hours.		

## **Feedback Examples**

- maxtimeincall set returns maxtimeincall <empty>
- maxtimeincall set 180 returns maxtimeincall 180
- maxtimeincall get returns maxtimeincall 180

#### Limitations

None

# Comments

When the time has expired in a call, a message asks you if you want to hang up or stay in the call. If you do not answer within one minute, the call automatically disconnects.

# monitor1screensaveroutput

Gets the current setting or sets whether to send either black video or "No Signal" to Monitor 1 when the screen saver activates.

## Syntax

monitor1screensaveroutput <get|black|no\_signal>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
black	Sends black video to Monitor 1 when the system goes to sleep and the screen saver activates.		
no_signal	Sends no signal to Monitor 1 when the system goes to sleep and the screen saver activates.		

## **Feedback Examples**

- monitor1screensaveroutput black returns monitor1screensaveroutput black
- monitor1screensaveroutput no\_signal returns monitor1screensaveroutput no signal
- monitorlscreensaveroutput get returns monitorlscreensaveroutput no signal

# Limitations

None

# Comments

Setting Monitor 1 automatically sets Monitor 2 to the same setting.

# See Also

See the monitor2screensaveroutput command.

# monitor2screensaveroutput

Gets the current setting or sets whether to send either black video or "No Signal" to Monitor 2 when the screen saver activates.

## Syntax

monitor2screensaveroutput <get|black|no\_signal>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
black	Sends black video to Monitor 2 when the system goes to sleep and the screen saver activates.		
no_signal	Sends no signal to Monitor 2 when the system goes to sleep and the screen saver activates.		

## **Feedback Examples**

• monitor2screensaveroutput black returns

 $\verb|monitor2screensaveroutput|| \verb|black||$ 

- monitor2screensaveroutput no\_signal returns monitor2screensaveroutput no signal
- monitor2screensaveroutput get returns monitor2screensaveroutput no signal

# Limitations

The monitor2screensaveroutput command is not supported on RealPresence Group 300 and 310 systems.

# Comments

Setting Monitor 2 automatically sets Monitor 1 to the same setting.

#### See Also

See the monitor1screensaveroutput command.

# mpautoanswer

Gets or sets the Auto Answer Multipoint mode, which determines how the system will handle an incoming call in a multipoint video conference.

## Syntax

mpautoanswer <get|yes|no|donotdisturb>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
yes	Connects incoming video calls automatically. The screen will split into a multipoint call progress screen as the incoming call is answered.		User role has access only if the <b>Allow Access to</b> <b>User Settings</b> option in the local or web interface is enabled. See the <i>Polycom RealPresence</i> <i>Group Series</i> <i>Administrator Guide</i> for more information.
no	For an incoming video call, the user will be notified and given the choice to answer the call. If the user selects Yes, the call is added to the ongoing conference. If the user selects No, the call is rejected. The default is No.		
donotdisturb	The user is not notified of incoming video calls. The sites that placed the calls receive a Call Rejected (H.323) code.		

## **Feedback Examples**

- mpautoanswer yes returns mpautoanswer yes
- mpautoanswer no returns mpautoanswer no
- mpautoanswer get returns mpautoanswer no
- mpautoanswer donotdisturb returns mpautoanswer donotdisturb

# Limitations

The mpautoanswer command is not supported on RealPresence Group 300 and 310 systems.

# Comments

If mpautoanswer is set to no or donotdisturb, you must rely on API session notifications to answer inbound calls.

Polycom, Inc.

# mpmode

Gets or sets the multipoint conference viewing mode for the system in a multipoint call. The multipoint mode can be set to auto, discussion, presentation, or fullscreen. By default, it is set to auto.

## **Syntax**

mpmode <get|auto|discussion|presentation|fullscreen>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
auto	In Auto mode, the system switches between Full Screen Mode and Discussion mode, depending on the interaction between the sites. If one site is talking uninterrupted for 15 seconds or more, the speaker appears full screen.	J	
presentation	In Presentation mode, the person who is speaking appears full screen to the far sites, while the person who is speaking sees all the other sites on a split screen.	1	
discussion	In Discussion mode (also called Continuous Presence mode), every site sees all the sites in the meeting at the same time, on a split screen.	1	
fullscreen	In Full Screen mode, every site in the call sees the current speaker, or the latest person to speak, on the full screen.	1	

#### **Feedback Examples**

- mpmode auto returns mpmode auto
- mpmode discussion returns mpmode discussion
- mpmode get returns mpmode discussion

# Limitations

None

# Comments

This option is not available unless the multipoint option is enabled.

What you see during a multipoint call can depend on many factors such as the system's monitor configuration, the number of sites in the call, whether content is shared, and whether dual monitor emulation is used.

# mute

Gets or sets the near or far site mute settings.

#### Syntax

```
mute <register|unregister>
mute near <get|on|off|toggle>
mute far get
```

Parameter	Description	User Accessible	Additional Restrictions
register	Registers to receive notification when the mute mode changes.	1	
unregister	Disables register mode.	1	
near	Sets the command for the near site. Requires on, off, toggle, or get.	1	
get	Returns the current setting for the near or far site.	1	
on	Mutes the near site (mute near on).	1	
off	Unmutes the near site (mute near off).	1	
toggle	If mute near mode is mute near on, this switches to mute near off, and vice versa.	1	
far	Returns the mute state of the far site system. Requires the parameter get.	1	

# **Feedback Examples**

- mute register returns mute registered
- mute near on returns mute near on
- mute far get returns mute far off

#### Limitations

None

#### Comments

In register mode, the system sends notification to the API session when the far or near site is muted or unmuted.

# muteautoanswer

Gets or sets the Mute Auto Answer Calls mode. When this setting is selected, the microphone is muted to prevent the far site from hearing the near site when the system answers automatically.

#### Syntax

muteautoanswer <get|yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
yes	Enables Mute Auto Answer Calls mode. The microphone will be muted when the system receives a call while in Auto Answer mode.		User role has access only if the Allow Access to
no	Disables Mute Auto Answer Calls mode. The microphone will not be muted when the system receives a call while in Auto Answer mode.		User Settings option in the local or web interface is enabled. See the Polycom RealPresence Group Series Administrator Guide for more information.

# **Feedback Examples**

- muteautoanswer yes returns muteautoanswer yes
- muteautoanswer no returns muteautoanswer no
- muteautoanswer get returns muteautoanswer no

# Limitations

None

#### Comments

# natconfig

Gets or sets the NAT configuration.

#### Syntax

natconfig <get|auto|manual|off>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
auto	Specifies that the system is behind a NAT; specifies that the system will automatically discover the public (WAN) address.		
manual	Specifies that the system is behind a NAT. Requires the WAN address to be assigned using the wanipaddress command on page 323.		
off	Disables the option when the system is not behind a NAT.		

# **Feedback Examples**

- natconfig auto returns natconfig auto
- natconfig manual returns natconfig manual
- natconfig off returns natconfig off
- natconfig get returns natconfig off

#### Limitations

None

#### Comments

# nath323compatible

Gets or sets the NAT is H.323 Compatible setting.

#### Syntax

nath323compatible <get|yes|no>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
yes	Specifies that NAT is capable of translating H.323 traffic.		
no	Specifies that NAT is not capable of translating H.323 traffic.		

## **Feedback Examples**

- nath323compatible yes returns nath323compatible yes
- nath323compatible no returns

nath323compatible no

 nath323compatible get returns nath323compatible no

## Limitations

None

#### Comments

# nearloop

Activates or deactivates the Near End Loop test.

# Syntax

nearloop <on|off>

Parameter	Description	User Accessible	Additional Restrictions
on	Activates the Near End Loop, a complete internal test of the system.	1	
off	Deactivates the Near End Loop.	1	

# **Feedback Examples**

- nearloop on returns nearloop on
- nearloop off returns nearloop off

#### Limitations

None

# Comments

When Near End Loop is on, you can test the encoder/decoder on the system. This test is not available when you are in a call.

# netstats

Returns network statistics for each call.

## Syntax

netstats [{0..n}]

Parameter	Description	User Accessible	Additional Restrictions
{0n}	Call in a multipoint call, where n is the maximum number of calls supported by the system. 0 is the first site connected. If no call is specified, netstats returns information about the near site.	<i>√</i>	

## **Feedback Examples**

• netstats 2

```
returns
call:1 txrate:128 K rxrate:128 K pktloss:0 %pktloss:0.0 % tvp:H.263
rvp:H.263 tvf:CIF rvp:CIF tap:G.722.1 rap:G.722.1 tcp:H.323 rcp:H.323
where:
txrate=transmit clock rate
rxrate=receive clock rate
pktloss=number of packet loss/errors
%pktloss=percentage of packet loss/errors
tvp=transmit video protocol
rvp=receive video protocol
tvf=transmit video format
rvf=receive video format
tap=transmit audio protocol
rap=receive audio protocol
tcp=transmit comm protocol
rcp=receive comm protocol
```

#### Limitations

None

#### Comments

Both pktloss and %pktloss report only numbers related to packet loss on the transmit. These numbers are not affected by packet loss on the Real-time Transport Protocol (RTP) that is received.

The number listed for <code>%pktloss</code> is not cumulative and is calculated every 5 seconds. The number listed for <code>pktloss</code> is calculated every 5 seconds and is cumulative.

# nonotify

Unregisters the API client to receive status notifications.

## Syntax

nonotify <callstatus|linestatus|mutestatus|screenchanges>
nonotify <sysstatus|sysalerts|vidsourcechanges>

Parameter	Description	User Accessible	Additional Restrictions
calendarmeetin gs	Stops the system from receiving meeting reminders.	1	
callstatus	Stops the system from receiving changes in call status, such as a connection or disconnection.	1	
linestatus	Stops the system from receiving line status notifications.	1	
mutestatus	Stops the system from receiving changes in audio mute status.	1	
screenchanges	Stops the system from receiving notification when a user interface screen is displayed.	1	
sysstatus	Stops the system from receiving system status notifications.	1	
sysalerts	Stops the system from receiving system alerts.	1	
vidsourcechang es	Stops the system from receiving notification of camera source changes.	1	

# **Feedback Examples**

- nonotify callstatus returns nonotify callstatus success
- If entered again, nonotify callstatus returns info: event/notification not active:callstatus
- nonotify calendarmeetings returns nonotify calendarmeetings success

### Limitations

None

#### Comments

None

Polycom, Inc.

# See Also

See the related notify command.

# notify

Lists the notification types that are currently being received, or registers to receive status notifications.

# Syntax

```
notify
notify <callstatus|linestatus|mutestatus|screenchanges>
notify <sysstatus|sysalerts|vidsourcechanges>
notify calendarmeetings
```

Parameter	Description	User Accessible	Additional Restrictions
notify	Lists the notification types that are currently being received, in the following format: registered for <num> notifications[:notification type&gt;]</num>	<i>√</i>	
calendarmeetings	Registers the API client to receive meeting reminders.	1	
callstatus	Registers the system to receive changes in call status, such as a connection or disconnection, in the following format: notification:callstatus: <call direction&gt;:<call id="">:<far site<br="">name&gt;:<far site<br="">number&gt;:<connection status&gt;:<call speed&gt;:<status-specific cause<br="">code from call engine&gt;:<calltype></calltype></status-specific></call </connection </far></far></call></call 	<i>√</i>	
linestatus	Registers the system to receive line status notifications as they occur, in the following format: notification:linestatus: <dire ction&gt;: <call id="">:<line id="">:<channel id&gt;: <connection status=""></connection></channel </line></call></dire 	1	
mutestatus	Registers the system to receive changes in audio mute status, in the following format: notification:mutestatus: <near or<br="">far&gt;:<call id="">:<site name="">:<site number&gt;:<mute status=""></mute></site </site></call></near>	1	

Parameter	Description	User Accessible	Additional Restrictions
screenchanges	Registers the system to receive notification when a user interface screen is displayed, in the following format: notification:screenchange: <scree n name&gt;:<screen def="" name=""></screen></scree 	V	
sysstatus	Registers the system to receive system status notifications, in the following format: notification:sysstatus: <sys parameter name&gt;:<value1>[:<value2>]</value2></value1></sys 	<i>J</i>	
sysalerts	Registers the system to receive system alerts, in the following format: notification:sysalert: <alert name&gt;:<value1>[:<value2>]</value2></value1></alert 	1	
vidsourcechanges	Registers the system to receive notification of camera source changes, in the following format: notification:vidsourcechange: <ne ar or far&gt;:<camera index="">:<camera name&gt;:<people content="" or=""></people></camera </camera></ne 	1	

#### **Feedback Examples**

- notify mutestatus
   returns
   notify mutestatus success
   acknowledging that the session is now registered to receive mutestatus notifications
- notify callstatus
   returns
   notify callstatus success
   acknowledging that the session is now registered to receive callstatus notifications
- If entered again,

```
notify callstatus
returns
info: event/notification already active:callstatus
```

- notify returns registered for 2 notifications:mutestatus:
- notify calendarmeetings returns notify calendarmeetings success

The following are examples of notifications that may be returned after registering to receive them.

- notification:callstatus:outgoing:34:Polycom Group Series Demo:192.168.1.101:connected:384:0:videocall
- notification:mutestatus:near:near:near:muted

- notification:screenchange:systemsetup:systemsetup\_a
- notification:vidsourcechange:near:1:Main:people
- notification:linestatus:outgoing:32:0:0:disconnected
- notification:vidsourcechange:near:6:ppcip:content
- notification:vidsourcechange:near:none:none:content
- notification: calendarmeetings: AAAaAEFsZXguTWFjRG9uYWxkQHBvbHljb20uY29tAVEACIjMne2/ndgARgAAAADr9GlhsSjWE ZBcAAKzMphJBwA4wicbtr3UEZArAKAk09LtAAACZpKWAADe7hJleQIOS7j2mzRJxkLKAAADI/ G8AAAQ:Product Planning:10

#### Limitations

None

#### Comments

The notify callstatus command registers the current API session for call status notifications. The API client receives call status notifications as a call progresses.

Registration for status notifications is session-specific. For example, registering for alerts in a Telnet session does not return alerts in a simultaneous RS-232 session with the same system.

Duplicate registrations produce another success response. The notify setting remains in effect, even if you restart the system or update the software with system settings saved.

#### See Also

See also the nonotify command and the callinfo command.

# oobcomplete

Completes the setup wizard and restarts the Polycom system.

## Syntax

oobcomplete

#### **User Accessible**

No

# **Feedback Examples**

• oobcomplete returns oobcomplete

## Limitations

None

# Comments

The obcomplete command is processed only when the Polycom system is in setup wizard mode. To execute obcomplete successfully, the Polycom system name must be configured.

# powerdown

Turns the RealPresence Group Series system off.

# **Syntax**

powerdown

Parameter	Description	User Accessible	Additional Restrictions
powerdown	Turns the system off.	~	

# **Feedback Examples**

powerdown
 returns
 powerdown

## Limitations

None

# Comments

The powerdown command does not prompt the user to confirm and turns off the system with no other feedback returned.

After the system turns off, it cannot be restarted remotely. The system must be restarted manually.

# popupinfo

Gets the current setting or registers or unregisters the session to receive popup text and button choices text.

#### Syntax

popupinfo <get|register|unregister>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
register	Registers to receive popup information.	1	
unregister	Unregisters to receive popup information.	1	

## **Feedback Examples**

- popupinfo register returns popupinfo registered
- popupinfo unregister returns popupinfo unregistered
- popupinfo get returns popupinfo unregistered

The following examples show notifications that may be returned after registering to receive popup text and button choices text.

- popupinfo: question: Sorry. Cannot dial number because you are already in a call with the site.
- popupinfo: choice0: Ok is returned if a call fails
- popupinfo: question: Save Changes? popupinfo: choice0: Yes popupinfo: choice1: No popupinfo: answered: Yes is returned if the user edits the password field

# Limitations

None

#### Comments

# preset

Sets the presets or goes (moves) to the presets for the near or far camera source. Also registers or unregisters the API session to give notification when the user sets or goes to presets.

#### **Syntax**

preset <register|unregister>
preset register get
preset far <go|set> <{0..15}>
preset near <go|set> <{0..99}>

Parameter	Description	User Accessible	Additional Restrictions
register	Registers the system to give notification when the user or far site sets or goes to a preset. Returns the current preset registration state when followed by the get parameter.		
unregister	Disables register mode.		
far	Specifies the far camera. Requires a set or go parameter and a preset identifier.		
go	Moves the camera to a camera preset. Requires a "preset" parameter.		
set	Sets a camera preset. Requires a "preset" parameter.		
{015}, {099}	Camera preset identifier. Must be an integer in the range {015} for a far-site camera or {099} for a near-site camera.		
near	Specifies the near camera. Requires a set or go parameter and a preset identifier.		

# **Feedback Examples**

- preset register returns preset registered
- preset near go 1
   returns
   preset near go 1
   and moves the near-site camera to the preset 1 position
- preset near set 2 returns preset near set 2 and saves the current location/position of the near-site camera as preset 2

# Comments

Up to 100 preset camera positions can be set. These camera presets can be distributed across the far camera and up to four near-site cameras.

# reboot

Restarts the system.

## Syntax

reboot [now]

Parameter	Description	User Accessible	Additional Restrictions
now	restarts the system without prompting you.	1	

# Feedback Examples

• reboot now does not prompt the user to confirm and restarts the system with no other feedback returned.

# Limitations

None

## Comments

The preferred format is reboot now.

# remotemonenable

Gets the state of remote room and call monitoring.

## Syntax

remotemonenable <get>

#### **User Accessible**

Yes

# **Additional Restrictions**

None

# **Feedback Examples**

- remotemonenable get returns remotemonenable on
- remotemonenable get returns remotemonenable off

## Limitations

None

#### Comments

# resetsystem

Resets the system and, optionally, deletes system settings or local address book entries.

#### Syntax

```
resetsystem [deletesystemsettings]
[deletelocaldirectory][deletecdr][deletelogs][deletecertificates]
```

Parameter	Description	User Accessible	Additional Restrictions
deletesystemsettings	Resets all configuration settings to default values.		
deletelocaldirectory	Deletes all local directory entries from the address book.		
deletecdr	Deletes the CDR file from the /opt/polycom/cdr directory after copying the contents of the file to the trace log.		
deletelogs	Deletes the system logs.		
deletecertificates	Deletes all certificates from the system.		

#### **Feedback Examples**

- resetsystem
   returns
   resetsystem
- resetsystem deletesystemsettings returns resetsystem deletesystemsettings
- resetsystem deletelocaldirectory returns
  - resetsystem deletelocaldirectory
- resetsystem deletecdr returns resetsystem deletecdr
- resetsystem deletesystemsettings deletelocaldirectory deletecdr returns
  - resetsystem deletesystemsettings deletelocal directory deletecdr
- resetsystem deletelogs returns resetsystem deletelogs
- resetsystem deletecertificates returns resetsystem deletecertificates

# Limitations

None

# Comments

# rs232 baud

Gets or sets the baud rate for the first RS-232 port.

# Syntax

rs232 baud <get|9600|14400|19200|38400|57600|115200>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current baud rate setting.	1	
9600 19200 38400 5 7600 115200	Sets the RS-232 port to this baud rate.		

# **Feedback Examples**

- rs232 baud 9600 returns rs232 baud 9600
- rs232 baud get returns rs232 baud 9600

## Limitations

None

# Comments

# rs232 mode

Gets or sets the operational mode of the first RS-232 port.

## Syntax

rs232 mode <get|off|control|passthru|control|debug|camera\_ptz|closed\_caption>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current mode setting.	1	
passthru	Sets the RS-232 port to Pass Thru mode.		
off	Sets the operational mode of the RS-232 port to off.		
control	Sets the RS-232 port to Control mode.		
camera_ptz	Sets the RS-232 port to Camera PTZ mode.		
closed_caption	Sets the RS-232 port to Closed Caption mode.		

# **Feedback Examples**

- rs232 mode control returns rs232 mode control
- rs232port1 mode closed\_caption returns rs232port1 mode closed caption

# Limitations

None

# Comments

# screen

Returns the name of the current user interface screen on the system, registers or unregisters for screen changes, or goes to a specific user interface screen.

#### Syntax

```
screen
screen register get
screen [register|unregister]
screen "screen name"
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the registration state for screen change events when followed by the get parameter.		
screen	Returns the name of the current user interface screen if not followed by other parameters.		
register	Registers for user interface screen changes. In register mode, the name of every screen accessed is listed.		
unregister	Unregisters from user interface screen changes.		
"screen_name"	Changes the user interface to display the specified screen. The supported screens depend on the system configuration. To determine the name to use for a specific screen, navigate to that screen in the user interface and send the screen command.		

# **Feedback Examples**

```
    screen
returns
screen: adminsettings
if the Admin Settings screen is currently displayed in the user interface
```

- screen register returns screen registered
- screen monitors
   returns
   screen: monitors
   and displays the Monitors screen in the user interface

### Limitations

None

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# Comments

Only a small number of user interface screens are available using this command.

# serialnum

Returns the serial number of the system.

### **Syntax**

serialnum

#### **User Accessible**

Yes

# **Additional Restrictions**

None

# **Feedback Examples**

• serialnum returns serialnum 82065205E72E1

### Limitations

None

## Comments

# session

Names or finds an active API session.

#### Syntax

```
session name "session-name"
session find "session-name"
```

Parameter	Description	User Accessible	Additional Restrictions
name	Names the current API session.	1	
find	Finds an active API session for this system.	1	
session-name	Unique string that identifies the session.		

# **Feedback Examples**

- session name sessionone returns session name sessionone success
- If entered again, session name sessionone returns info: the supplied session name is already in use session name sessionone failed
- session find sessionone
   returns
   info: session sessionone attached
- session find sessiontwo

returns
info: session sessiontwo not connected

### Limitations

None

#### Comments

# setpassword

Sets the admin password for the Polycom system local admin account.

#### **Syntax**

setpassword admin room "currentacctpasswd" "newacctpasswd"

Parameter	Description	User Accessible	Additional Restrictions
admin	Specifies the Polycom system local admin account.		
room	Changes the room password.		
"currentacctpasswd"	The current account password.		
"newacctpasswd"	The new account password.		

# **Feedback Examples**

- setpassword admin room 123 456 returns password changed
- setpassword admin room `' 456 returns
- password changed
- setpassword admin room 123 '' returns

password changed

### Limitations

None

### Comments

If the account has no administrator room password, enter a pair of single quotes (") to denote an empty password.

# sleep

Places the system in sleep mode. Also registers or unregisters the system for sleep or wake notifications.

## **Syntax**

```
sleep
sleep <register|unregister>
```

Parameter	Description	User Accessible	Additional Restrictions
sleep	Puts the system in sleep mode if not followed by other parameters	1	
register	Registers for sleep or wake events	1	
unregister	Unregisters from sleep or wake events	1	

## **Feedback Examples**

- sleep returns sleep This command puts the system into sleep mode.
- sleep register returns sleep registered
- If entered again, sleep register returns info: event/notification already active:sleep
- sleep unregister
   returns
   sleep unregistered
- If entered again,

sleep unregister
returns
info: event/notification not active:sleep

### Limitations

None

### Comments

None

### See Also

To wake the system from sleep mode, use the wake command.

# sleeptime

Gets or sets the wait time value before the system goes to sleep and displays the screen saver.

# Syntax

sleeptime <get|0|1|3|15|30|60|120|240|480>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
off 1 3 15 30 45  60 120 240 480	Sets the number of minutes from last user interaction to entering sleep mode. The default value is 3. A value of 0 indicates that the system will never go to sleep.		

# **Feedback Examples**

• sleeptime 30 returns sleeptime 30

## Limitations

None

### Comments

# snmpadmin

Gets or sets the SNMP administrator name.

### **Syntax**

```
snmpadmin get
snmpadmin set ["admin name"]
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the administrator name when followed by the "admin name" parameter. To erase the current setting, omit "admin name".		
"admin name"	SNMP administrator contact name. Character string. Enclose the character string in quotation marks if it includes spaces. Example: "John Admin"		

# **Feedback Examples**

- snmpadmin get returns snmpadmin "John Admin"
- snmpadmin set "John Admin" returns snmpadmin "John Admin"
- snmpadmin set returns error: command needs more parameters to execute successfully

### Limitations

None

# Comments

# snmpcommunity

Gets or sets the SNMP community name.

## Syntax

snmpcommunity get
snmpcommunity set ["community name"]

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the SNMP community name when followed by the "community name" parameter. To erase the current setting, omit the parameter.		
"community name"	SNMP community name. Character string. Enclose the character string in quotation marks if it includes spaces.		

# **Feedback Examples**

- snmpcommunity set returns snmpcommunity <empty>
- snmpcommunity set Public returns snmpcommunity Public
- snmpcommunity get returns snmpcommunity Public

### Limitations

None

# Comments

# snmpconsoleip

Gets or sets the SNMP console IP address.

# Syntax

```
snmpconsoleip get
snmpconsoleip set ["xxx.xxx.xxx"]
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the SNMP console IP address when followed by the "xxx.xxx.xxx.xxx" parameter. To erase the current setting, omit the parameter.		
"xxx.xxx.xxx.x xx"	IP address of the console.		

## **Feedback Examples**

- snmpconsoleip set returns snmpconsoleip <empty>
- snmpconsoleip set 192.168.1.111 returns snmpconsoleip 192.168.1.111
- snmpconsoleip get returns snmpconsoleip 192.168.1.111

# Limitations

None

# Comments

# snmplocation

Gets or sets the SNMP location name.

# **Syntax**

snmplocation get
snmplocation ["location name"]

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
"location name"	SNMP location name. Enclose the location name in quotation marks if it includes spaces. To erase the current setting, omit the parameter.		

# **Feedback Examples**

- snmplocation returns snmplocation <empty>
- snmplocation set "Mary\_Polycom in United States" returns snmplocation "Mary Polycom in United States"
- snmplocation get returns snmplocation "Mary Polycom in United States"

# Limitations

None

### Comments

You must restart the system after making a change to the SNMP setting.

# snmpsystemdescription

Gets or sets the SNMP system description.

## **Syntax**

snmpsystemdescription get
snmpsystemdescription set ["system description"]

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the SNMP system description when followed by the "system description" parameter. To erase the current setting, omit the parameter.		
"system description"	SNMP system description.		

## **Feedback Examples**

- snmpsystemdescription set returns
  - snmpsystemdescription <empty>
- snmpsystemdescription set "videoconferencing system" returns snmpsystemdescription "videoconferencing system"
- snmpsystemdescription get returns snmpsystemdescription "videoconferencing system"

### Limitations

None

### Comments

# snmptrapversion

Gets or sets the SNMP trap version.

## Syntax

snmptrapversion get
snmptrapversion set <v1|v2c>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
set	Sets the SNMP trap protocol that the system uses.		
v1 v2c	SNMP trap version 1 or version 2c.		

## **Feedback Examples**

- snmptrapversion get returns snmptrapversion v2c
- snmptrapversion set v2c returns snmptrapversion v2c
- snmptrapversion set v1 returns error: command has illegal parameters

### Limitations

None

# Comments

# speeddial

Returns speed dial (Sites) entries.

### **Syntax**

```
speeddial names <all|video|phone> [<range_start>] [<range_end>]
speeddial names <all|video|phone> size
speeddial group "group_name" [<range_start>] [<range_end>]
speeddial group "group_name" size
speeddial address "sys_name" ["sys_label"]
```

Parameter	Description	User Accessible	Additional Restrictions
names	Returns a list of system names in the speed dial (Sites) list. Also returns the system type: video, multicodec, phone, or multisite. A multicodec system appears as a single row. The response is in the following format: speeddial names {0n}. name:"sys_name" sys_label:"sys_label" type: <video multicodec phone group>  speeddial names <all video phone> done</all video phone></video multicodec phone group>	<i>√</i>	
<all video></all video>	Specifies the type of entries to return. video returns entries that have video addresses. all returns entries with video numbers or phone numbers or both.	V	
size	Returns the size of the result set that will be returned by the command. The size parameter can be used with the names command. The response is returned in the following format: speeddial names <all video phone> size {0n}</all video phone>	1	
range_start	For the names and group command, specifies the beginning of the range of entries to return.	✓	

Parameter	Description	User Accessible	Additional Restrictions
range_end	For the names and group command, specifies the end of the range of entries to return. If a range_start is specified without a range_end, then the single range_start entry is returned. If range_end is -1, all entries starting with range_start are returned.	<i>J</i>	
group	Returns a list of the names of all the sites included in a local directory group in this format: speeddial group {0n}. name:"site_sys_name" sys_label:"site_sys_label"  speeddial group "group_name" [range] done speeddial group size <num_entries> Note: For ITP version 2.5 and later a "group" is a local directory multisite entry.</num_entries>	1	
group_name_mul tisite_entry_n ame	A local directory group name.	1	
address	Obtains the address information for a specified entry. If the entry is an ITP system, the results include the addresses for all codecs. If the codecs support multiple protocols, the different addresses are returned on separate lines. This command is not supported for multisite entries.	1	
sys_name	The friendly name for a speed dial entry. It is the name of the person or the room. It is surrounded by quotes if it contains spaces.	1	
sys_label	If a person/room has more than one system, the result set includes a row for each system. If those systems are of the same type, such as all RealPresence Group Series systems, the client considers that entry to be a telepresence system with multiple codecs rather than separate systems. If the systems are of different types, such as a RealPresence Group Series system and a CMA Desktop system, then this $sys_label$ attribute is included to differentiate the systems.	1	
type	The type of speed dial entry. Possible values are: video, multicodec, phone, group.	1	

Parameter	Description	User Accessible	Additional Restrictions
site_sys_name	The name of a site in a group. It is surrounded by quotes if it contains spaces.	1	
site_sys_label	The label associated with a site name in a group. It is surrounded by quotes if it contains spaces.	1	
codec: <14>	If the entry is a telepresence system, each codec includes a codec number attribute.	1	
h323_spd	The preferred speed for an H.323 call to this entry. If no speed is associated with the entry, then the value of the configuration variable globaladdrmaxh323 is returned. The default is 384.	1	
h323_num	H.323 address or alias.	1	
h323_ext	H.323 extension or E.164 number.	1	
sip_spd	The preferred speed for a SIP call to this entry. If no speed is associated with the entry, then this is the same as the h323_spd.	1	
sip_num	SIP address.	1	
xmpp_addr	XMPP address, also known as the Jabber ID (JID).	1	

#### **Feedback Examples**

```
    speeddial names all size 4
        returns
        speeddial names 0. name:"Evergreen" sys_label:"groupseries" type:video
        speeddial names 1. name:"ITP Staff Mtg" sys_label:"" type:group
        speeddial names 2. name:"Magnolia" sys_label:"groupseries" type:video
        speeddial names 3. name:"Vineyard" sys_label:"groupseries" type:multicodec
        speeddial names all done
```

Speed dial entries can link to either local or global directory entries and can be a local group.

```
speeddial names all 0 1
returns
speeddial names 0. name:"Evergreen" sys_label:"groupseries" type:video
speeddial names 1. name:"ITP Staff Mtg" sys_label:"" type:group
speeddial names all 0 1 done
speeddial group
returns
speeddial group "Monday Staff Mtg"speeddial multi sites 0. name:"Eng RPX"
sys_label:"groupseries"
speeddial multi sites 1. name:"John Doe" sys_label:""
speeddial multi sites 2. name:"John Doe" sys_label:""
speeddial multi sites 3. name:"TPW" sys_label:""
speeddial multi sites 3. name:"TPW" sys_label:"groupseries"
speeddial multi sites "Monday Staff Mtg" done
```

The group query is the same as that for the local directory. It returns all the sites in the group.

If the entry is an ITP system, the results include address information for each codec. If the entry has multiple endpoints of different types, the addresses for each endpoint are returned including a sys\_label attribute to distinguish the endpoints. For Polycom RealPresence Resource Manager, sys\_label is the type of endpoint, such as CMA Desktop.

#### Limitations

None

#### Comments

You do not need to enclose a value in quotes unless it contains a space.

#### See Also

See the addrbook command and the gaddrbook command.

# sshenable

Sets secure access to the API.

## Syntax

sshenable <true | false>

Parameter	Description	User Accessible	Additional Restrictions
true	Enables SSH		
false	Disables SSH		

## **Feedback Examples**

- sshenable true returns
  - sshenable true
- sshenable false

returns

sshenable false

# Limitations

None

### Comments

# subnetmask

Gets or sets the subnet mask of the system.

# **Syntax**

```
subnetmask get
subnetmask set ["xxx.xxx.xxx."]
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current subnet mask.		
set	Sets the subnet mask of the system when followed by the "xxx.xxx.xxx.xxx" parameter. To erase the current setting, omit "xxx.xxx.xxx.xxx". This parameter is not allowed while in a call.		
"xxx.xxx.xxx.x xx"	Subnet mask of the system.		

# **Feedback Examples**

- subnetmask set 255.255.255.0
   returns
   subnetmask 255.255.255.0
- subnetmask get returns subnetmask 255.255.255.0

# Limitations

None

### Comments

# systemname

Gets or sets the name of the system.

## **Syntax**

systemname get systemname set "system name"

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
set	Sets the system name to "system name".		
"system name"	Character string specifying the system name. Enclose the string in quotation marks if it includes spaces. Example: "Polycom Group Series Demo"		

# **Feedback Examples**

- systemname set "RealPresence Group Series Demo" returns systemname "RealPresence Group Series Demo"
- systemname set get returns systemname "RealPresence Group Series Demo"

# Limitations

None

### Comments

The first character must be a numeric (a digit) or an alphabetic (a letter) character including foreign language characters. The name can be any combination of alphanumeric characters and may be up to 30 characters in length. The system name cannot be blank.

# systemsetting 323gatewayenable

Get the current setting or enables IP-to-IP calling through a gateway.

#### **Syntax**

```
systemsetting 323gatewayenable <True|False>
systemsetting get 323gatewayenable
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
True	Enables IP gateway calls.		
False	Disables IP gateway calls.		

# **Feedback Examples**

- systemsetting 323gatewayenable True returns systemsetting 323gatewayenable True
- systemsetting get 323gatewayenable returns systemsetting 323gatewayenable True

### Limitations

None

#### Comments

# systemsetting bfcptransportprotocol

Gets the current setting or indicates the Binary Floor Control Protocol (BFCP) connection and provides an option to set the connection preference to UDP or TCP.

# **Syntax**

systemsetting bfcptransportprotocol <Prefer\_UDP|Prefer\_TCP|UDP\_Only|TCP\_Only>
systemsetting get bfcptransportprotocol

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
Prefer_TCP	Specifies TCP as the BFCP connection preference.		
Prefer_UDP	Specifies UDP as the BFCP connection preference.		
UDP_Only	Specifies UDP as the BFCP transport protocol.		
TCP_Only	Specifies TCP as the BFCP transport protocol.		

# Feedback Examples

•	systemsetting returns	get	bfcptransportproto	ocol	
	systemsetting	bfc	ptransportprotocol	Prefer	UDP

- systemsetting bfcptransportprotocol Prefer\_TCP returns systemsetting bfcptransportprotocol Prefer TCP
- systemsetting get bfcptransportprotocol returns systemsetting bfcptransportprotocol Prefer TCP
- systemsetting bfcptransportprotocol UDP\_Only returns systemsetting bfcptransportprotocol UDP Only

# Limitations

None

# Comments

The BFCP Transport Protocol in which your RealPresence Group system is operating determines which protocol is required.

Gets the current setting or specifies Camera 1 as a People or Content source.

#### **Syntax**

```
systemsetting cameracontent <People|Content>
systemsetting get cameracontent
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
People	Specifies camera as a People source.		
Content	Specifies camera as a Content source.		

# **Feedback Examples**

- systemsetting cameracontent People returns systemsetting cameracontent People
- systemsetting cameracontent Content returns systemsetting cameracontent Content
- systemsetting get cameracontent returns systemsetting cameracontent Content

### Limitations

The systemsetting cameracontent command is not supported on RealPresence Group 300 and 310 systems.

### Comments

Gets the current setting or specifies Camera 2 as a People or Content source.

### **Syntax**

```
systemsetting cameracontent1 <People|Content>
systemsetting get cameracontent1
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
People	Specifies camera as a People source.		
Content	Specifies camera as a Content source.		

# **Feedback Examples**

- systemsetting cameracontent1 People returns systemsetting cameracontent1 People
- systemsetting cameracontent1 Content returns systemsetting cameracontent1 Content
- systemsetting get cameracontent1 returns

# systemsetting cameracontent1 Content

# Limitations

The  ${\tt systemsetting\ cameracontent1\ command\ is\ not\ supported\ on\ RealPresence\ Group\ 300\ and\ 310\ systems}$ 

### Comments

Gets the current setting or specifies Camera 3 as a People or Content source.

#### **Syntax**

```
systemsetting cameracontent2 <People|Content>
systemsetting get cameracontent2
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
People	Specifies camera as a People source.		
Content	Specifies camera as a Content source.		

# **Feedback Examples**

- systemsetting cameracontent2 People returns systemsetting cameracontent2 People
- systemsetting cameracontent2 Content returns systemsetting cameracontent2 Content
- systemsetting get cameracontent2 returns systemsetting cameracontent2 Content

# Limitations

The systemsetting cameracontent2 command is not supported on RealPresence Group 300, 310, and 500 systems.

### Comments

Gets the current setting or specifies Camera 4 as a people or content source.

### Syntax

```
systemsetting cameracontent3 <People|Content>
systemsetting get cameracontent3
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
People	Specifies camera as a people source.		
Content	Specifies camera as a content source.		

# **Feedback Examples**

- systemsetting cameracontent3 People returns systemsetting cameracontent3 People
- systemsetting cameracontent3 content returns systemsetting cameracontent3 Content
- systemsetting get cameracontent3 returns systemsetting cameracontent3 People

# Limitations

The  ${\tt systemsetting\ cameracontent3\ command\ is\ not\ supported\ on\ RealPresence\ Group\ 300,\ 310,\ and\ 500\ systems.}$ 

### Comments

# systemsetting connectionpreference

Gets the current setting or specifies whether the system uses the Video Dialing Order or the Audio Dialing Order first when placing calls.

### **Syntax**

systemsetting connectionpreference <VIDEO\_THEN\_AUDIO|AUDIO\_THEN\_VIDEO> systemsetting get connectionpreference

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
VIDEO_THEN_AUD IO	Sets Video as the preferred call choice before Audio calls.		
AUDIO_THEN_VID EO	Sets Audio as the preferred call choice before Video calls.		

# **Feedback Examples**

- systemsetting connectionpreference VIDEO\_THEN\_AUDIO returns systemsetting connectionpreference VIDEO THEN AUDIO
- systemsetting get connectionpreference returns
   systemsetting connectionpreference VIDEO THEN AUDIO

# Limitations

None

### Comments

# systemsetting dialingmethod

Gets or sets the preferred method for dialing various call types.

### **Syntax**

systemsetting dialingmethod <Auto|Manual>
systemsetting get dialingmethod

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
Auto	Sets the dialing mode to Auto. Calls use the configured dialing order.		
Manual	Sets the dialing mode to Manual. The system prompts the user to select the call type from a list when placing a call.		

# **Feedback Examples**

- systemsetting dialingmethod Auto returns
  - systemsetting dialingmethod Auto
- systemsetting get dialingmethod returns systemsetting dialingmethod Auto

# Limitations

None

### Comments

# systemsetting displayiconsincall

Gets or specifies whether to display icons on the info bar when the system is in a call.

#### **Syntax**

```
systemsetting displayiconsincall <True|False>
systemsetting get displayiconsincall
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
True	Specifies to display the icons on the info bar while in a call.		
False	Specifies to not display the icons on the info bar while in a call.		

### **Feedback Examples**

- systemsetting displayiconsincall True returns systemsetting displayiconsincall True
- systemsetting get displayiconsincall returns systemsetting displayiconsincall True

### Limitations

None

### Comments

# systemsetting enablepolycommics

Gets or specifies whether the Polycom C-Link 2 microphone arrays attached to the system are enabled.

### **Syntax**

```
systemsetting enablepolycommics <True|False>
systemsetting get enablepolycommics
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
True	Enables Polycom microphones.		
False	Disables Polycom microphones.		

# **Feedback Examples**

- systemsetting enablepolycommics True returns systemsetting enablepolycommics True
- systemsetting get enablepolycommics returns

systemsetting enablepolycommics True

### Limitations

None

### Comments

# systemsetting iph323enable

Gets the current setting or specifies whether IP calls are or are not allowed.

### **Syntax**

```
systemsetting iph323enable <True|False>
systemsetting get iph323enable
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
True	Enables IP call capability.		
False	Disables IP call capability.		

# **Feedback Examples**

- systemsetting iph323enable True returns systemsetting iph323enable True
- systemsetting get iph323enable returns systemsetting iph323enable True

### Limitations

None

### Comments

# systemsetting lineinlevel

Gets the current setting or returns the volume level for audio input 1.

#### **Syntax**

```
systemsetting lineinlevel {0..10}
systemsetting get lineinlevel
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
010	Sets the volume level for input 1. Valid range is 0 to 10.		

# **Feedback Examples**

- systemsetting lineinlevel 5 returns systemsetting lineinlevel 5
- systemsetting get lineinlevel returns systemsetting lineinlevel 5

### Limitations

The systemsetting lineinlevel command is not supported on RealPresence Group 300, 310, and 500 systems.

### Comments

# systemsetting lineoutmode

Gets the current setting or specifies whether the volume for a device connected to the audio line out connectors is variable or fixed.

### **Syntax**

systemsetting lineoutmode <fixed|variable>
systemsetting get lineoutmode

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
fixed	Sets the volume to the audio level specified in the system interface.		
variable	Allows users to set the volume with the remote control.		

## **Feedback Examples**

- systemsetting lineoutmode fixed returns systemsetting lineoutmode fixed
- systemsetting get lineoutmode returns systemsetting lineoutmode fixed

### Limitations

The systemsetting lineoutmode command is not supported on RealPresence Group 300, 310, and 500 systems.

### Comments

# systemsetting maxrxbandwidth

Gets the sets the maximum receive line speed between 64 kbps and 6144 kbps.

#### **Syntax**

```
systemsetting maxrxbandwidth [speed]
systemsetting get maxrxbandwidth
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
speed	Sets the maximum speed for receiving calls.		

# Feedback Examples

- systemsetting maxrxbandwidth 1920 returns systemsetting maxrxbandwidth 1920
- systemsetting get maxrxbandwidth returns
  - systemsetting maxrxbandwidth 1920

#### Limitations

None

#### Comments

# systemsetting maxtxbandwidth

Gets or sets the maximum transmit line speed between 64 kbps and 6144 kbps.

#### **Syntax**

```
systemsetting maxtxbandwidth [speed]
systemsetting get maxtxbandwidth
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
speed	Sets the maximum speed for placing calls.		

## Feedback Examples

- systemsetting maxtxbandwidth 1920 returns systemsetting maxtxbandwidth 1920
- systemsetting get maxtxbandwidth returns
  - systemsetting maxtxbandwidth 1920

#### Limitations

None

#### Comments

# systemsetting mediainlevel

Gets or specifies the volume level for the media audio 3.5mm input.

#### **Syntax**

```
systemsetting mediainlevel <auto|0..10>
systemsetting get mediainlevel
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
auto	Allows the system software to adjust the input level.		
010	Sets the volume level of the media input to the specified value.		

#### **Feedback Examples**

- systemsetting mediainlevel 5 returns systemsetting mediainlevel 5
- systemsetting get mediainlevel returns systemsetting mediainlevel 5

## Limitations

The  ${\tt systemsetting mediainlevel}$  command is not supported on RealPresence Group 300, 310, and 500 systems.

#### Comments

# systemsetting model

Returns the model of the RealPresence Group system.

### **Syntax**

systemsetting get model

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	>	

### **Feedback Examples**

• systemsetting get model returns systemsetting model "RealPresence Group 700"

#### Limitations

None

#### Comments

# systemsetting primarycamera

Gets or specifies which camera is the main camera.

#### Syntax

```
systemsetting primarycamera {1..4}
systemsetting get primarycamera
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
14	Sets the specified input as the primary camera (numbering convention matches the numbering in the on-screen user interface). Camera 3 and Camera 4 are available on Polycom RealPresence Group 700 systems only.		

## **Feedback Examples**

- systemsetting primarycamera 1 returns
  - systemsetting primarycamera 1
- systemsetting get primarycamera returns systemsetting primarycamera 1

## Limitations

None

#### Comments

The systemsetting primarycamera command causes the system to restart.

The primary camera is active when the RealPresence Group Seriessystem initializes, and its source is automatically set to **People**.

# systemsetting remotechannelid

Gets or specifies the IR identification channel to which the RealPresence Group Series system responds.

#### **Syntax**

```
systemsetting remotechannelid {0..15}
systemsetting get remotechannelid
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
015	Sets the channel ID to be used with the remote control.		

# **Feedback Examples**

- systemsetting remotechannelid 7 returns systemsetting remotechannelid 7
- systemsetting get remotechannelid returns systemsetting remotechannelid 7

## Limitations

None

## Comments

# systemsetting selfview

Gets or sets the Automatic Self View Control setting.

#### **Syntax**

systemsetting selfview <on|off|auto>
systemsetting get selfview

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
on	Enables self-view. This setting is not available if systemsetting selfview is set to auto.	1	
off	Disables self-view. This setting is not available if systemsetting selfview is set to auto.	1	
auto	Sets self-view to auto mode.	1	

#### **Feedback Examples**

- systemsetting selfview on returns
  - systemsetting selfview on
- systemsetting selfview off returns systemsetting selfview off
- systemsetting get selfview returns systemsetting selfview on

#### Limitations

None

#### Comments

# systemsetting sipaccountname

Gets or sets the SIP user account name.

#### **Syntax**

systemsetting sipaccountname <"sipuser">
systemsetting get sipaccountname

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
"sipuser"	Specifies the user account name.		

# **Feedback Examples**

- systemsetting sipaccountname polycom\_user returns systemsetting sipaccountname polycom\_user
- systemsetting get sipaccountname
  - returns systemsetting sipaccountname polycom user

#### Limitations

None

#### Comments

# systemsetting sipdebug

Gets or sets the state of SIP debug tracing in the system log.

#### **Syntax**

systemsetting sipdebug <True|False>
systemsetting get sipdebug

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
True	Enables SIP debug tracing in the system log.		
False	Disables SIP debug tracing in the system log.		

# **Feedback Examples**

- systemsetting sipdebug True returns systemsetting sipdebug True
- systemsetting get sipdebug returns systemsetting sipdebug True

## Limitations

None

#### Comments

# systemsetting sipenable

Enables or disables SIP calling.

#### Syntax

systemsetting sipenable <True|False>
systemsetting get sipenable

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
True	Enables SIP calling.		
False	Disables SIP calling.		

## **Feedback Examples**

- systemsetting sipenable True returns systemsetting sipenable True
- systemsetting get sipenable returns systemsetting sipenable True

#### Limitations

None

#### Comments

# systemsetting sippassword

Sets the SIP server password.

#### Syntax

systemsetting sippassword <"password">

Parameter	Description	User Accessible	Additional Restrictions
"password"	Password used to register with SIP server.		

#### **Feedback Examples**

• systemsetting sippassword secret returns systemsetting sippassword secret

#### Limitations

None

#### Comments

# systemsetting sipproxyserver

Gets or sets the address of the SIP proxy server.

#### **Syntax**

systemsetting sipproxyserver <address>
systemsetting get sipproxyserver

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
address	Address of the proxy server. Format can be either an actual IP address or a valid DNS hostname (PQP or FQP).		

## **Feedback Examples**

- systemsetting sipproxyserver pserver.abc.com returns
  - systemsetting sipproxyserver pserver.abc.com
- systemsetting get sipproxyserver returns systemsetting Sipproxyserver pserver.abc.com

#### Limitations

None

#### Comments

# systemsetting sipregistrarserver

Gets or sets the address of the SIP registrar server.

#### Syntax

systemsetting sipregistrarserver <address>
systemsetting get sipregistrarserver

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
address	Address of the registrar server. Format can be either an actual IP address or a valid DNS hostname (PQP or FQP).		

#### **Feedback Examples**

- systemsetting sipregistrarserver pserver.abc.com returns
  - systemsetting sipregistrarserver <code>pserver.abc.com</code>
- Ssystemsetting get sipregistrarserver returns systemsetting sipregistrarserver pserver.abc.com

#### Limitations

None

#### Comments

# systemsetting siptransportprotocol

Gets or sets the protocol the system uses for SIP signaling.

#### **Syntax**

```
systemsetting siptransportprotocol <Both|TCP|UDP>
systemsetting get siptransportprotocol
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
Both	Specifies to use both TCP and UDP as the SIP protocol.		
TCP	Specifies to use TCP as the SIP protocol.		
UDP	Specifies to use UDP as the SIP protocol.		

#### **Feedback Examples**

- systemsetting siptransportprotocol TCP returns systemsetting siptransportprotocol TCP
- systemsetting get siptransportprotocol returns systemsetting siptransportprotocol TCP

## Limitations

None

## Comments

# systemsetting sipusername

Gets or sets the system's SIP name.

#### **Syntax**

```
systemsetting sipusername ["name"]
systemsetting get sipusername
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
"name"	Specifies the SIP URI for SIP registration.		

### Feedback Examples

- systemsetting sipusername Polycom returns systemsetting sipusername Polycom
- systemsetting get sipusername
  - returns systemsetting sipusername Polycom

#### Limitations

None

#### Comments

# systemsetting stereoenable

Gets the current setting or specifies whether Polycom StereoSurround is used for all calls.

#### Syntax

```
systemsetting stereoenable <True|False>
systemsetting get stereoenable
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
True	Enables Polycom stereo.		
False	Disables Polycom stereo.		

# **Feedback Examples**

- systemsetting stereoenable True returns systemsetting sstereoenable True
- systemsetting get stereoenable returns systemsetting stereoenable True

## Limitations

None

#### Comments

# systemsetting telnetenabled

Gets or sets the Telnet ports.

#### **Syntax**

```
systemsetting telnetenabled <on|off|port24only>
systemsetting get telnetenabled
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
on	Enables port 23 and port 24.		
off	Disables port 23 and port 24.		
port24only	Enables port 24 and disables port 23.		

#### **Feedback Examples**

- systemsetting get telnetenabled returns systemsetting telnetenabled True
- systemsetting telnetenabled on returns systemsetting telnetenabled on
- systemsetting telnetenabled returns error: command needs more parameters to execute successfully

#### Limitations

None

#### Comments

After making a change, you must restart the system for the setting to take effect.

# systemsetting transcodingenabled

Gets or specifies whether the system allows each far-site system to connect at the best possible call rate and audio/video algorithm.

#### **Syntax**

systemsetting transcodingenabled <True|False>
systemsetting get transcodingenabled

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
True	Enables transcoding.		
False	Disables transcoding.		

### **Feedback Examples**

- systemsetting transcodingenabled True returns
  - systemsetting transcodingenabled True
- systemsetting get transcodingenabled returns systemsetting transcodingenabled True

#### Limitations

None

#### Comments

# systemsetting uspairingenabled

Gets the current setting or detects and unpairs a RealPresence Group Series system from the RealPresence Mobile application on an Apple<sup>®</sup> iPad tablet.

#### **Syntax**

systemsetting uspairingenabled <Disabled|Manual|Auto>
systemsetting get uspairingenabled

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
Disabled	Disables SmartPairing in automatic mode. You can still enter the IP address and admin password in the RealPresence Mobile application in order to pair with the system.		
Manual	Enables SmartPairing in manual mode. You must enter the admin password in the RealPresence Mobile application in order to pair with the system.		
Auto	Enables a RealPresence Mobile application to automatically detect and pair with the system when in range. The application automatically unpairs when out of range.		

## **Feedback Examples**

- systemsetting uspairingenabled Manual returns systemsetting uspairingenabled Manual
- systemsetting get uspairingenabled returns systemsetting uspairingenabled Auto

## Limitations

None

#### Comments

# systemsetting webenabled

Gets or specifies whether to allow remote access to the system using the web interface.

#### **Syntax**

```
systemsetting webenabled <True|False>
systemsetting get webenabled
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
True	Enables remote access from the web interface.		
False	Disables remote access from the web interface.		

### **Feedback Examples**

- systemsetting webenabled True returns
  - systemsetting webenabled True
- systemsetting get webenabled returns systemsetting webenabled True

#### Limitations

None

#### Comments

# systemsetting whitebalancemode

Gets or sets the user white balance mode for a Polycom camera on Camera port 1.

#### **Syntax**

systemsetting whitebalancemode <Auto|Manual|3200K|3680K|4160K|4640K|5120K|5600K>
systemsetting get whitebalancemode

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
Auto Manual 3200K 3680K  4160K 4640K 5120K 5600K	Auto - Automatic white balance Manual - Manual one touch white balance 3200K—3200° Kelvin 3680K—3680° Kelvin 4160K—4160° Kelvin 4640K—4640° Kelvin 5120K—5120° Kelvin 5600K—5600° Kelvin		

#### Feedback Examples

- systemsetting whitebalancemode Auto returns systemsetting whitebalancemode Auto
- systemsetting get whitebalancemode returns

systemsetting whitebalancemode Auto

#### Limitations

None

#### Comments

# systemsetting whitebalancemode1

Gets or sets the user white balance mode for a Polycom camera on Camera port 2.

#### **Syntax**

systemsetting whitebalancemode1 <Auto|Manual|3200K|3680K|4160K|4640K|5120K|5600K>
systemsetting get whitebalancemode1

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.		
<auto manual 3200k 3680k  4160K 4640K 5120K 5600K</auto manual 3200k 3680k 	Auto - Automatic white balance Manual - Manual one touch white balance 3200K—3200° Kelvin 3680K—3680° Kelvin 4160K—4160° Kelvin 4640K—4640° Kelvin 5120K—5120° Kelvin 5600K—5600° Kelvin		

#### Feedback Examples

- systemsetting whitebalancemodel Auto returns systemsetting whitebalancemodel Auto
- systemsetting get whitebalancemodel returns systemsetting whitebalancemodel Auto

## Limitations

The systemsetting whitebalancemodel command is not supported on RealPresence Group 300, 310, and 500 systems.

## Comments

# uptime

Returns the total time the RealPresence Group Series system has been running since the last system start.

# Syntax

uptime get

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	~	

# Feedback Example

• uptime get returns 1 Hour, 10 Minutes

# Limitations

None

## Comments

# usegatekeeper

Gets or sets the gatekeeper mode.

#### Syntax

usegatekeeper <get|off|specify|auto>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
off	Select this option if no gatekeeper is required.		
specify	Specifies a gatekeeper. If this option is selected, you must enter the gatekeeper IP address or name using the gatekeeperip command.		
auto	Sets the system to automatically find an available gatekeeper.		

## **Feedback Examples**

- usegatekeeper off returns usegatekeeper off
- usegatekeeper specify returns usegatekeeper specify
- usegatekeeper auto returns usegatekeeper auto
- usegatekeeper get returns usegatekeeper auto

## Limitations

None

#### Comments

None

#### See Also

See the gatekeeperip command.

# vcbutton

Controls a content video source. It can also register or unregister the API session to receive notification of content events.

#### Syntax

```
vcbutton play {1..6}
vcbutton <get|stop|register|unregister>
vcbutton map <get|{1..6}>
vcbutton source get
```

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting (play or stop).	1	
play	Starts sending the content from the specified content video source. If no content video source is specified, starts sending content from the default content video source. Starts content from any content video source without the need to change source mapping and without needing to stop the currently playing content video source. Fails and does not stop the current content video source if the specified content video source is not valid. Stops the current content video source if the specified content video source is valid but is currently unavailable.	1	
{16}	Specifies a content video source. 5 is not supported.	1	
stop	Stops sending content from the content video source that is currently playing.	1	
register	Registers the API session to receive notifications about content events.	1	
unregister	Unregisters the API session to receive notifications about content events.	1	
map get	Gets the content video source currently specified for control.	1	
map {16}	Specifies the content video source to control. Note: This parameter is only necessary if no video source was specified when using the vcbutton play command. 5 is not supported.	1	
source get	Gets the content video source that is currently playing.	1	

### **Feedback Examples**

If not registered for notifications:

vcbutton play 4
 returns
 vcbutton play 4
 vcbutton play succeeded
 camera near 4

If registered for notifications:

- vcbutton play 4 returns Control event: vcbutton play Control event: vcbutton source 4 Control event: vcbutton play vcbutton play 4 vcbutton play succeeded camera near 4 • vcbutton play 3 returns vcbutton play failed • vcbutton play returns Control event: vcbutton play vcbutton play succeeded • vcbutton play returns vcbutton play failed • vcbutton play 2 returns error: input 2 is not a content source vcbutton play failed • vcbutton play 7 returns error: invalid value! (valid ranges 2..6) vcbutton play failed • vcbutton register returns vcbutton registered • vcbutton stop returns Control event: vcbutton stop Camera near none vcbutton stop vcbutton stop succeeded
- vcbutton get returns vcbutton stop vcbutton get succeeded

- vcbutton source get returns vcbutton source get 1 vcbutton source get succeeded
   vcbutton source get
- **returns** vcbutton source get none vcbutton source get succeeded

Polycom recommends registering for notifications. If vcbutton register is used for notifications, the following responses occur.

- Pressing the play button at the far site returns Control event: vcbutton farplay
- Pressing the stop button on the local system returns Control event: vcbutton stop

#### Limitations

vcbutton 1 and vcbutton 2 are not supported on RealPresence Group 300 and 310 systems.vcbutton 3 and vcbutton 4 are not supported on RealPresence Group 300, 310, and 500 systems.

#### Comments

vcbutton 6 specifies sending ppcip as content.

vcbutton map defaults to input 6.

vcbutton map is only required if you do not specify the input number when sending vcbutton play.

# version

Returns the current system's version information.

#### **Syntax**

version

### **User Accessible**

User role does not have access when the Security Profile is set to Maximum.

#### **Additional Restrictions**

None

# **Feedback Examples**

• version returns version 5.1.0

#### Limitations

None

#### Comments

# vgaqualitypreference

Gets or sets the bandwidth split for people and content video.

#### **Syntax**

vgaqualitypreference get
vgaqualitypreference <content|people|both>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
content	Sets the VGA quality preference to content video.	1	
people	Sets the VGA quality preference to people video.	1	
both	Sets the VGA quality preference to both people and content video.	1	

#### **Feedback Examples**

- vgaqualitypreference people returns vgaqualitypreference people
- vgaqualitypreference content returns vgaqualitypreference content
- vgaqualitypreference both returns
   vgaqualitypreference both
- vgaqualitypreference get returns vgaqualitypreference both

#### Limitations

None

#### Comments

# videocallorder

Gets or sets the video call order of the specified protocol to the specified slot.

#### **Syntax**

videocallorder <h323|sip> <1|2|3|4>

Parameter	Description	User Accessible	Additional Restrictions
h323	Specifies IP protocol.		
sip	Specifies SIP protocol.		
1 2 3 4	Sets the order in which the specified protocol is attempted when a video call is placed.		

#### **Feedback Examples**

- videocallorder h323 1 returns videocallorder h323 1
- videocallorder sip 2 returns videocallorder sip 2

#### Limitations

None

#### Comments

None

#### See Also

To set the dialing order for audio-only protocols, use the volume command.

# videomute

Gets or sets the transmission of local video to far site.

#### Syntax

videomute near <get|on|off>

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the current setting.	1	
near	Specifies local video.	1	
on	Enables information.	1	
off	Returns the current setting.	1	

# **Feedback Examples**

- videomute get returns vidoemute off
- videomute near on returns videomute near on
- videomute near off returns

videomute near off

## Limitations

None

#### Comments

# volume

Gets or sets the call audio volume (not sound effects) on the system or registration for volume changes.

#### **Syntax**

```
volume <register|unregister>
volume <get|up|down|set {0..50}>
volume range
```

Parameter	Description	User Accessible	Additional Restrictions
register	Registers to receive notification when the volume changes.	1	
unregister	Disables register mode.	1	
get	Returns the current volume level.	1	
up	Increases the audio volume by 1.	1	
down	Decreases the audio volume by 1.	1	
set	Sets the volume to a specified level. Requires a volume setting from {050}.	1	
range	Returns the valid volume range available to the user.	1	

## **Feedback Examples**

- volume register returns volume registered
- If entered again, volume register returns info: event/notification already active:volume
- volume set 23 returns volume 23
- volume up returns volume 24
- volume get returns volume 24

# Limitations

# Comments

Changes the call audio volume (not sound effects) on the system.

# wake

Wakes the system from sleep mode.

# Syntax

wake

#### **User Accessible**

Yes

# **Additional Restrictions**

None

# **Feedback Examples**

 wake returns wake and wakes the system from sleep mode

## Limitations

None

#### Comments

None

## See Also

To put the system in sleep mode, use the sleep command.

# wanipaddress

Gets or sets the WAN IP address.

#### Syntax

wanipaddress get
wanipaddress set ["xxx.xxx.xxx."]

Parameter	Description	User Accessible	Additional Restrictions
get	Returns the WAN IP address.	1	
set	Sets the WAN IP address when followed by the "xxx.xxx.xxx" parameter. To erase the current setting, omit the "xxx.xxx.xxx.xxx" parameter.		
"xxx.xxx.xxx.xxx"	WAN IP address.		

# **Feedback Examples**

- wanipaddress set 192.168.1.101 returns wanipaddress 192.168.1.101
- wanipaddress get returns wanipaddress 192.168.1.101

## Limitations

None

## Comments

The **NAT Configuration** option on the Firewall screen must be set to **Auto**, **Manual**, or **UPnP** for this option to be available.

# webmonitoring

Enables or disables the ability to view video from a RealPresence Group Series system via the web interface. This command is available in serial API sessions only.

## Syntax

webmonitoring "remoteaccesspasswd" <yes|no>

Parameter	Description	User Accessible	Additional Restrictions
"remoteaccessp asswd"	Current remote access password.		
yes	Allows RealPresence Group Series video to be viewed via the web interface.		
no	Disables RealPresence Group Series video from being viewed via the web interface.		

#### **Feedback Examples**

- webmonitoring "1234" yes returns webmonitoring yes
- webmonitoring "1234" no returns webmonitoring no

## Limitations

None

#### Comments

The webmonitoring setting can be controlled by a provisioning server. For this reason, provisioned systems do not allow modification to the webmonitoring setting.

webmonitoring has no get operation. Use the remotemonenable command instead.

If the system has no remote access password, enter a pair of single quotes (") to denote an empty password.

### whoami

Displays the same initial banner information as when the RS-232/Telnet session was started with the system.

#### **Syntax**

whoami

#### **User Accessible**

No

#### **Additional Restrictions**

None

#### **Feedback Examples**

```
• whoami
```

```
returns
Hi, my name is: RealPresence Group Series Demo
Here is what I know about myself:
Model: Group Series 500
Serial Number: 82065205E72E1
Software Version: 1.0
Build Information: root on domain.polycom.com
Contact Number: <empty>
Time In Last Call: 0:43:50
Total Time In Calls: 87:17:17
Total Calls: 819
SNTP Time Service: auto insync ntpl.polycom.com
Local Time is: Wed, 30 Nov 2008 10:41:46
Network Interface: NONE
IP Video Number: 192.168.1.101
MP Enabled: AB1C-2D34-5EF6-7890-GHI1
H323 Enabled: True
HTTP Enabled: True
SNMP Enabled: True
```

#### Limitations

None

#### Comments

The response can vary depending on your system configuration.

# **Room Design and Layout**

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For clarity of discussion, we have divided this section into the following sub-sections:

- · Room construction, including wall construction, windows and window treatments, ceilings and HVAC;
- Interior design and finishes;
- · Furniture design, including placement and layout;
- · Room acoustics and acoustic treatment; and
- Room lighting.

The initial layout and construction of the space affects all the elements that are discussed in other sections of this book [*Basics of Audio and Visual Systems Design*], including acoustic characteristics and performance, general and ambient light control, and overall comfort.

### **Room Requirements**

We begin with general room requirements. The total floor space required for VC is much greater than we have become used to for general local presentation and meeting. In architectural terms it is not uncommon to find a rule-of-thumb applied that allows for up to 15 square feet of floor space per participant in a traditional presentation or meeting room. If there is a front-of-room presenter position at a podium, and if there is some use of in-room technology (projection devices, whiteboards, etc.), then this figure may increase to as much as 20 square feet of floor space per participant, but rarely any more than that.

It is here that we have our first conflict. In videoconferencing we have to consider not only the issues related to local viewing and hearing but also the issues of being seen and heard by people at the far-end of the connection. This means that we must consider sight lines and angles of participant interaction that go beyond traditional presentation environments. As a rule we should allow not less than 30 square feet and generally not more than 45 square feet of floor space per participant in a videoconference space. Though two to three times what we are used to allowing, this amount ensures that local participants will see one another and the display of local and remote electronic images. It also ensures that participants at the far-end will see and hear everyone arriving at their location via the connection, and that all will see and hear at a level of quality that does not detract and, in the best deployment, even enhances the communications.

Having determined the required size of the space, we can move on to the actual renovation or construction of the space itself. Again the requirements here are generally less forgiving than those applied in local-only meeting spaces. In the most basic sense this is because, by sheer definition, at least some of the participants in a conference-based meeting are not actually in the room. As such, we cannot count on the typical human mechanisms (the human ears and brain and our ability to locate sound in three-dimensional space) to manage any acoustic anomalies.

If we are, for example, in a room that is adjacent to a double-door entry to the building, then knowing this we can take the inevitable doorway noise into account as we filter the sounds we hear both inside the meeting room and coming from that adjacent entryway. Within our own physical and local environment we have the ability to isolate local unwanted noise from local "sound of interest" (voices of other people, etc.), and place the unwanted noise in an inferior position in our conscious thought pattern. We are able to do this because we know where the noise is coming from and (usually) what is causing it. We may be annoyed by the noise, but we generally are able to ignore it. As soon as we add conferencing to the meeting equation, however, we add the element of electronic pickup and reproduction of all sounds. For the people at the far-end, the unwanted noise is much more difficult (if not impossible) to ignore. They do not have the ability to isolate it in three-dimensional space (the microphones eliminate the spatial reference) and they often do not know what is making the noise. The brain of the far-end participant will devote more and more conscious observation and thought energy to trying to work out these elements, in an attempt to isolate and finally "ignore" the unwanted sound. We have already stated that they cannot do this, however, due to the electronic separation between the locations. Thus they are left with an impossible task that takes up more and more thought energy, eroding the perceived quality of the spoken communication over time. Frustration and exasperation quickly set in, and the communication flow quickly falls apart.

This, then, is one reason we must pay even greater attention to the acoustic and visual issues for any presentation space that will be connected via conference to another. Minor, seemingly insignificant anomalies we often ignore in the local environment become significant impediments to smooth communication with people at the far-end of any connection. In short, we must always ask ourselves, "What does this look like and sound like to the people at the farend?"

In order to guarantee that the final conference environment will have a solid foundation, we begin with the construction of the walls, floors and ceilings for videoconference spaces.

### Walls

Conference room walls should be built from slab to slab. That is, there should be no gaps from the concrete of one floor to the concrete of the next floor. Resilient, gypsum board mountings should be used to close any gaps. The thickness of the gypsum board should be 5/8" or more (one layer of 5/8" and one layer of 1/2" bonded together would be ideal) on the inside of the room, with 1/2" thick (or as required by local building codes) appropriate for the outside of the walls. There should always be a difference in thickness between the materials used on the inner versus the outer walls. That difference in thickness subdues mechanical coupling (vibration) between the two layers. A good overall wall thickness is 6". It is recommended that "offset stud" construction be used, typically a 6" header and footer with 3.5" verticals attached in an alternating pattern one toward the outside of the footer, the next toward the inside and so on.

Fiberglass dense batting or mineral rock wool, 4" to 6" thick (the equivalent of R-11 to R-13) should be placed in the wall space. The thickness of the batting is not critical. The critical aspect is that it must be loosely placed in the wall space, not compacted to fit. The resultant wall will have excellent acoustic isolation from the outside world. More significant acoustic isolation can be achieved by placing an additional barrier layer within the wall space. Typically this barrier will be made of a dense polymer material, about 1/8" thick, and the improvement regarding loss of sound transmitted through the wall will be roughly a factor of 10. These materials are available from a variety of manufacturers.

### Windows

Windows usually present the equivalent of an acoustic nightmare (as well as altering the way a camera renders colors and brightness). They not only transmit room sound, but also allow unwanted outside noise to intrude on the conference space. In the event that windows cannot be avoided, it becomes essential that window treatment of some sort be used. This treatment should match the interior look and feel of the space,

while providing a high level of sound and light block. Typically a heavyweight drape (24 ounces or more) of heavy fullness (not less than 6" fullness on not less than 8" centers per fold) is preferred. In all cases, the use of sheer draperies or standard vertical or horizontal blinds should be avoided, due to their inherent inefficiency in blocking sound and light, and the fine lines they create within the camera field of view.

### **Ceiling Tiles**

These should be high-quality acoustic tiles, ideally 1"- thick compressed densecore fiberglass. An added benefit of this kind of ceiling tile is that it works well with the indirect lighting as specified elsewhere in this section. To reduce any extraneous noise from leaving or entering the room via the ceiling space, the ceiling tiles can be blanketed completely from the plenum side, with a minimum of 6"- thick unfaced dense fiberglass batting or mineral rock wool, (the equivalent of R-15 to R-19). Here again, a barrier layer will improve the performance, but all local building codes must be followed for allowable materials in the various aspects of room acoustic modifications. To make entry and exit from the ceiling space easier, the blanket and barrier do not need to rest on the ceiling tiles, but may be suspended above it.

### **Air Conditioning**

It is critical that all air-handling equipment (blowers, heat exchangers, solenoid valves, etc.) be located outside the physical meeting room space. This will prevent the noise burden associated with such equipment from affecting the participants of any meetings held in the room. Location of air-handling equipment within the ceiling space of a conference room often renders that room unusable for video or audio-only conferencing.

The air vents should be of open construction to eliminate "wind noise" while the system is running. These vents normally are specified as "low-velocity" diffusers. The number of air vents within the room should be sufficient to maintain a consistent temperature throughout the space. All HVAC ducts and diffusers should be oversized for the general application in the space, with minimum 2' diameter insulated flexible ducts and matching 2' noise dampening diffusers generally best. All ducts should be installed with gradual bends and curves rather than rigid 90-degree corners. This will minimize "thunder" sounds as the initial air pushes through the ductwork and into the room.

There should be a thermostat to control this specific room system independently of the rest of the building, and that control should be located within the room.

*Important:* Allow an additional 5,000 BTU of cooling capacity for a standard "roll-about" singlemonitor VC system with extended in-room peripherals (PC, document camera, scan converter, etc.) and a minimum of 10,000 BTU for a dual display multimedia presentation system with large screen displays. For the comfort of the participants, the room must accommodate these heat loads, plus the heat load of a room full of people, with minimal temperature rise.

## **Interior Design and Finishes**

Wall colors within the field of view of the camera have a significant impact on the far-end perception of the room video quality. Certain colors are better suited to video rooms than others. The electronics and software of the videoconferencing system "builds" the images at the far-end from a gray/blue reference image. When there is a minimal difference between the room background and the reference image color, the codec has an easier time turning the image into numbers, with the result that the far-end will see a much higher quality video presentation. In general, light gray with just a touch of blue seems to work best. For rooms that have marginal lighting, slightly darker colors are quite useful.

In keeping with these color recommendations, the acoustic panels (discussed elsewhere in this section) should be ordered in light colors such as silver-gray, quartz or champagne for panels within the camera field of view. For aesthetics, however, panels may be alternated in color along the wall.

### Furniture

As we have noted, VC rooms should be slightly on the large side for the typical number of attendees. The placement of furniture should present a natural rapport with the videoconference system, but shouldn't preclude the local interaction of conference participants. Doorways used for access to the space usually should be within the view of one of the camera presets to prevent the perception from the far-end that people could come into their meeting unseen. Doorways should not, however, be in constant, direct view of the camera system, as this may cause unwanted distractions and movement of people in the picture field.

Any tables within the conference environment should have a light top surface. Glossy tops should be avoided, as should strong colors or any bold wood grain. If glossy or saturated color surfaces are unavoidable, then proper lighting can help reduce (but not necessarily eliminate) their ill effects. The best table surface color is a flat satin finish, in neutral gray. In cases where the worst possible surfaces are present, the proper surface color effect can be achieved by using a table covering, put in place only when the room is being used for videoconferencing. This will, however, create problems related to the use of access ports in the tables or movement of end-user items across the surface.

## Acoustics

Additional general elements related to the interior finish details for the space include acoustics. In terms of ambient noise level, the acoustic design goal for any conference- enabled room is at least NC-30 (NoiseCriteria-30). This level of specification dictates a very quiet space (somewhere around 40-dBCSPL ambient noise level). A room built to the description found elsewhere in this section will usually fall between NC-30 and NC-35. The actual NC value is not critical; what is important is that the room be built with the intent and care required to achieve the low noise rating. Typically in architectural design, a site evaluation and analysis are required to certify the noise performance of a given space. The quieter the room, the easier it is to hear others in the same room as well as be heard by others who are participating via conference connection to a far-end location (or locations).

Almost every conference room of medium to large size (larger than 12'x15') requires some level of acoustic treatment to provide good speech-rendering to other conference sites. The quality differences lie in the areas of intelligibility and consistency of loudness as presented to the far-end. While the people at the far-end may hear the sounds coming to them, it may be hard for them clearly to distinguish all of the vowels, consonants, inflections and nuances of actual human speech communication. (We all know that it is not simply what you say but how you say it—i.e., the inflections and intonations—that makes the difference in perceived meaning in human communications.)

Good audio practice dictates that the treated surfaces be composed of at least two nonparallel walls. And, as the VCS hardware is a potential source of distracting fan noises, the walls to be treated should include the wall immediately behind the VCS hardware, whenever this hardware is within the conference room proper. To help prevent meeting audio from leaking into adjoining hallways or offices, the walls along those areas also should be treated.

Approximately 50 percent of the wall area needs be covered with acoustic panels. The type recommended is 1" thick compressed, dense-core fiberglass, fabric-covered, or equivalent, with a SABIN (sound absorption index) value of 0.9 average. This specification is sometimes referred to as NRC (noise reduction coefficient). If reduction of sound passing through is required, then an additional barrier layer is laminated to the dense-core material, usually 3/8" thick fiber compression board. The barrier layer is placed against

the existing wall material, then the acoustic absorption panels are placed on the interior-room side of that. The barrier panels will have a SABIN of 0.9, but will have an additional specification of an STC (sound transmission coefficient) of 20. STC is a measure of the amount of reduction in loudness of sound passing through the material. Having an STC rating of 20 means there is a factor of 10 reduction in the amount of sound passing through that material. A high-quality conference room wall usually has an STC of 60 or more—that is, less than 1/1,000 of the sound in the room leaks through the wall.

# **Room Lighting**

The brightness of the lighting in a videoconference room plays an important role in determining the far-end view of the meeting. When there are low to moderate amounts of light—20fc to 35fc (footcandles), typical office lighting—the distance range of "in focus" objects (depth-of-field) usually is only 2' or 3' from nearest in-focus to furthest in-focus. With bright light (70fc or more) the range of in-focus objects can more than double. Participants at the far-end will see more people in sharp focus, and the codec will have an easier time encoding the image.

Bright standard direct fluorescent lighting has the undesirable side effect of being harsh for the local participants. In addition, the direct down lighting casts significant "drop shadows." The result is undue stress among participants.

The best plan for videoconferencing is to use indirect lighting for 80 to 85 percent of the light, and evenly distributed direct lighting for the remaining 15 to 20 percent. The indirect light will help minimize shadows on the faces of the participants, and make the room more comfortable for viewing the far-end on the TV monitor. The direct light can be used to create backlight separation between foreground and background objects or surfaces.

There should be not less than 55fc and ideally as much as 75fc of light (770lux) on the faces of the participants in the facial field as viewed by the camera in the conference space. The light should be completely even across the field of measure or view, and of one consistent color temperature.

To best meet these requirements, indirect fluorescent lighting most often is recommended. This type of lighting works by using the upper walls and ceiling as diffuse reflectors for the light. The usual recommended color temperature for these is 3,000 to 3,800 degrees Kelvin. If there is a significant quantity of outdoor light entering the room, the lamps should be more than 5,500 degrees Kelvin.

### **Light Fixtures**

The light fixtures generally recommended for indirect lighting are available from a number of manufacturers. They typically are three-tube, 8" oval indirect up-lights, though they may take the form of chandelier-style pendant lights, wall sconces, cove lights or flushmounted specialized troughs. Many manufacturers work closely with contractors and lighting designers to ensure that the correct light levels and shadow-free zones are designed into the room, especially when used for videoconferencing. Lamps for these fixtures are available in a variety of specified color temperatures from numerous manufacturers, including Sylvania, General Electric and Osram/Phillips. Indirect fixtures are available in a number of different designs or "looks," and can be purchased in configurations that will complement and not detract from the interior design of the space.

Lighting layout recommendations and determination of the number of fixtures needed are handled either by the architectural design firm or by submitting a complete floor plan, including reflected ceiling, walls and furniture placement, to fixture vendors. The vendors will analyze the plans and return a finished lighting layout to the customer, detailing the number of fixtures, placement and required wiring.

It is important to remember that the use of traditional meeting room downcans—even those that have color-corrected light sources—for any lighting in the field of view that may include human faces is to be avoided at all costs. These will result in extremely uneven fields of light, or pools, and heavy, unnatural shadows on the faces of the participants.

### **Room Preparation Conclusion**

When we follow the above guidelines we dramatically improve the odds for success in the final deployment of live bi-directional conference-based human communications. An added benefit is that this approach dramatically enhances the effectiveness of the room as it operates for more traditional meetings and presentations. The environment is more comfortable and flexible, and less dependent on specialized electronics for "fixing" deficiencies in the environment.

# **Audio Elements**

Once the space is prepared, we can focus on integration of the various audiovisual tools within the environment: audio, video and control.

### **Audio Input**

The primary input device for the audio portion of any conference system is the microphone. Elsewhere in this book [*Basics of Audio and Visual Systems Design*] we have discussed how these devices operate within a given acoustic environment. We turn now to a short discussion of how these elements operate within a conference environment, where such factors as "three-to-one" rules and "critical distance" often are pushed to the limit or violated entirely.

When sound travels in a room, it follows "the inverse square law." This means that the sound level heard at a microphone drops by a factor of four every time the distance doubles. Another important consideration in room audio design is the concept of "critical distance," or the distance at which the loudness of the room background noise plus reverberation is less than one tenth of the loudness of voices getting to a particular microphone. (This definition is the result of research conducted by Don and Carolyn Davis. that is referenced in the chapter "Designing for Intelligibility" in the Handbook for Sound Engineers.<sup>1</sup>)

As an example, we will work with a room having an ambient noise level of approximately 60dBA-SPL. A person speaking in a normal voice is 72dBA-SPL at about 2' distance. At 4' the loudness drops to approximately 66dBA-SPL. This already is farther than the critical distance criteria allow, given the ambient noise level. At 8' distance, a normal speaking voice is approximately 60dBA-SPL. Now the voice energy and the room background noise are about equal. For "send" audio systems in a room to work correctly, therefore, the room noise level would have to be below 40-45dBA-SPL at the microphones at all times. This gives us some measure by which we can begin to plan the microphone within a space, including selection based on pickup pattern, sensitivity, noise rejection and signal-to-noise in relation to the ambient noise floor or level within the space. The good news is that a room designed and built as described in this section will provide an acoustic space where almost any properly configured and installed audio system can operate with very good results.

<sup>1.</sup> Davis, Don and Carolyn. "Designing for Intelligibility" in Handbook for Sound Engineers: The New Audio Cyclopedia, ed. Glen Ballou (Indianapolis: Howard Sams & Co., 1991), 1279-1297.

Perhaps the most difficult issue for any room designer or system planner is actual microphone placement within the space. Given the fact that many people view conference table space as sacred (to be used for papers, laptops, coffee cups and other end-user items), there often is a great deal of pressure to place the local microphones on the ceiling instead of on the table surface. But this approach must be taken with great caution. We have already seen the dramatic impact of changes in the distance between people (their mouths) and the microphone. Ceiling systems generally place microphones farther away from the participants' mouths, not closer; critical distance calculations may eliminate ceiling placement from consideration for this reason alone. In addition, the ceiling surface generally is one of the noisiest areas of the room. Proximity to HVAC ducts and vents, attachment of tiles and runners to building members that are prone to vibration and shaking, and proximity to noise from other spaces migrating through the plenum make this area one of the least desirable for placement of microphones. This doesn't, however, keep people from looking at this broad open surface as the best place for microphones, to "get them off the table."

If ceiling placement is chosen, the system planner must select the components with great care from a manufacturer that specializes in this type of audio voice reinforcement. The manufacturer must be skilled in live audio and capable of installing the components (that is, being both able and willing to locate microphones at precisely measured distances from speakers, and locating those speakers at precisely measured intervals from each other and from the walls) to extremely tight tolerances. The system provider must fully inform the endusers of the potential downside effects of this approach. In any event, simply mounting a standard tabletop microphone on the ceiling tiles or implementing this solution in an ambient noise environment of 45dBA-SPL or greater will all but guarantee costly failure. No amount of post-microphone processing will fix the problems.

### **Audio Output**

For conference communication we do not really care about producing the thundering roar of jet aircraft engines, or other sounds reproduced on TV or in the movies. We are interested in reproducing the human voice. The tone, intonation, pitch and level of people speaking from the far-end should sound as much as possible like the sound they would make if they were speaking in the room. Given what has been covered in other sections of this book [*Basics of Audio and Visual Systems Design*], we will touch base here on a couple of simple, basic elements of the speaker technology we deploy in the conference room. These basics fall into three subcategories: direction, power and range/frequency response.

### Direction

As human beings, we feel most comfortable when the voice we hear appears to come from the same direction as the image of the person speaking. This means that reliance on ceiling speakers alone is not an ideal practice when the system is used for videoconferencing. In many small and medium-sized systems, front-firing speakers alone can provide proper direction and adequate coverage. Larger rooms (greater than 12'x15') probably need both front-firing and side or top-fill speakers in order to maintain proper coverage at nominal power levels.

In planning systems for larger rooms, we need to take advantage of the HAAS effect. Basically stated, this is the human brain's interpretation of sound direction when the same sound arrives at the ear from two or more directions within a certain time period. We attribute the direction of the sound to the direction from which the sound is first perceived, even if it is mixed with that same sound arriving from a completely different direction, as long as the two (or more) instances of the sound are within about 30ms of one another. Since sound travels faster electronically than it travels through the open air we may need to add audio delay to the side firing or ceiling speaker arrays in order to keep the primary perceived point source as the front of room/front-firing speakers.

### Power

Power is a function of loudspeaker efficiency and total available system power. Most speakers operate in a power range that is broader than the range in which they operate without distortion. For the purpose of conference communication, we are interested in sound that has little or no distortion. Sound that is reproduced accurately (with no distortion) will most accurately represent the voice of the people from the far-end (our primary goal). Accurate reproduction also will aid the echo-cancellation circuitry in the system, minimizing the amount of echo that the system sends back to the people at the far-end, and thereby increasing perceived ease of intelligibility and understanding. Remember that any distortions present in the playback audio system—whether harmonic, amplitude (gain compression) or temporal (time delays)—will be recognized by the echo canceller as "new audio information," and it will send those distortions to the far-end, perhaps wreaking havoc on the system audio quality. In short, speaker power should be matched to overall audio subsystem power. The speakers should provide adequate coverage and be able to present approximately 80 to 85dBA-SPL (continuous) at the local site with the system operating at nominal power utilization, and have a peak reserve of 15 to 20dB before distortion.

### **Range/Frequency Response**

The human ear is able to hear sounds in a very wide range of frequencies (as low as 70Hz and as high as 12,000Hz). The human voice is able to produce sounds in a narrower range (100Hz to 8,000Hz). Most spoken communication occurs, however, in a range that is only 150Hz to about 6,000Hz. This means that we need to select speakers that operate with ideal performance in a fairly narrow range for human voice (as opposed to speakers used for music, that may have ranges of 20Hz to 20,000Hz). We must also be alert to the crossover characteristics of the speakers we select. Many coaxial and paraxial speakers have their crossover within the middle audio frequencies, thereby inducing potential distortion within the spoken frequency range and creating anomalies within the system that hinder voice communication.

# **Video Elements**

As a general rule, any display used in a videoconferencing environment should be sized for the number of attendees, the physical distances involved and the type of material presented onscreen. The screen size should allow for clear and easy viewing at the various distances experienced within the room. A measure of required screen size that often is applied to projection technology is: no closer than 1.5 times the diagonal measure and no farther than 7 times that measure. Nobody should have to sit closer than 2 times the screen diagonal measure, nor farther than 8 times that measure.

Direct viewed tube-type displays (monitors) almost always are sharpest and brightest in a videoconferencing environment. "Retro-projector cabinet" displays (which look like largescreen TVs) are next in sharpness and brightness, and "front-screen" projectors come in last. Glare and uncontrolled ambient room lighting adversely affect the quality of the image most with front-screen projectors and least with direct view tubes. A very limited number of frontscreen projection systems have sufficient brightness and contrast to be useful in a properly lit videoconference room.

### Video Projection for Use in Videoconference

Many installations make use of video projection devices. The most important thing to remember in the planning of video projection for a videoconference space is that front projection is vastly inferior to rear projection. Front projection systems are less expensive and easier to implement, but the conflicting interest between the camera and the projection display makes this form of display a very poor choice. Front projection setups operate best when the lighting in the room is dimmed or doused. When this is done, the

videoconference cameras can no longer operate, since they require even, bright, color-corrected light. A direct conflict between these two technologies is clear. In the event that a rear projection room cannot be set aside, retro-projection units can be purchased from a number of manufacturers. These units normally are available in sizes ranging from 40" to 72" diagonal measure. To display high-quality video while maintaining optimum lighting for interactive video meetings will require a projector of the "light-valve" or DLP™ class.

Regardless of the exact type of projector selected and the exact nature of "front versus rear," there are certain essential rules for projector placement. The goal in projection is to get the image beam to aim directly into the audience's eyes. In Western cultures the average distance from the floor to a seated person's eye is 4'. That distance becomes the target for the direct beam of the projector. Again keep in mind that front projection should be avoided except in the most extreme cases. If it is employed at all it must be used with an extremely bright projector (2,500 lumens or greater for any space smaller than 25'x40').

### Cameras

There usually is a "main" or "local people" camera positioned on top center of the display, so that it can "see" the participants and anything necessary at the sides of the room, using pan and tilt features. If individual presentations may be made from the side or "front of audience" area of the room, an additional camera should be located at the back of the room, also mounted to allow a view of the presenters when necessary. Some cameras contain an active camera pointing system that also can be used effectively, given proper care in the mounting of the camera assembly. The area immediately surrounding the camera assembly needs to be acoustically "dead" to ensure that the voice tracking and pointing algorithms work correctly. This is another reason to pay close attention to the acoustic environment and acoustic treatment of any space intended for use with this type of camera system.

If local presentation is blended with VC for any events, we must consider the needs of the presenter who will not be "facing" the local image or inbound image displays used by the main body of the local audience. One or two monitors (and a camera) should be mounted at the back of the "audience-end" of the room, with the horizontal centerline at approximately 5' from the floor for ease of presentation interaction between the presenter and the group(s) at the farend(s). Remember that, with the exception of PC-based information that is not in a standard composite narrowband video format, any information we wish to "show" or "view" must be translated to video, most often with some sort of camera mechanism. Document cameras, 35mm slide-to-video units, video scanners and scan conversion devices all are designed to take one format of source material and convert it to a standard video signal that can be digitized, shipped to the far-end(s), and converted back to composite video for display. Which devices are selected and how they are used depends entirely on the needs and goals of the end-users of the system(s) and the format of their source materials.

# **Room Control Elements**

To give all participants the easiest use of the room for any and all presentation or conference purposes, a fully integrated room controller is recommended. It is important that one controller operate all devices in the room so that only one user interface needs to be learned by those managing the facility. The common controller also makes it much easier to expand and enhance room capabilities over time by adding or upgrading equipment. A proper room controller can operate and coordinate the use of lighting, curtains, displays, audio devices, VCRs and slide projectors, as well as all the conferencing equipment, including any network-related control needed. In lieu of a complete control system, a limited functionality controller can be located at the presentation interface panel to control the switching and routing of the computer graphics and configure the overhead camera video paths.

It is strongly advised that at least 20 percent of the time spent developing a videoconferencing room be devoted to this important sub-system, as it will complete the integration of the conference and presentation environment.

And remember that simpler is always better. People do not pay for technology. They pay for the benefits that technology can bring. The doorway to those benefits is a simple, straightforward and intuitive user control.

# **Polycom RealPresence Group Series Specifications**

This chapter includes information about system specifications. For back panel views of systems and for details about the various connections available on each back panel connector, refer to the *Polycom RealPresence Group Series Administrator Guide* at support.polycom.com

### Inputs/Outputs

The table below contains audio specifications for RealPresence Group Series systems.

Audio Specifications for RealPresence Group 500 Systems

Characteristic	Value
Maximum Input Level 0 dBFS, Analog Inputs	0 dBV (1.0 V <sub>RMS</sub> ), ± 1 dB
Input Impedance Analog Inputs	20kW, ± 5%
Maximum Output Level Line Output (≥600 W load):	+6 dBV (2.0 V <sub>RMS</sub> ), 1 dB
Output Impedance Line Output	150, ±5% Ohms
Signal-to-Noise Ratio Either analog audio input routed to Main Output: Any digital audio input routed to any digital output:	>85 dB, A-weighted >95 dB, A-weighted
Dynamic Range Either analog audio input routed to Main Output: Any digital audio input routed to any digital output:	>85 dB, A-weighted >95 dB, A-weighted
Crosstalk and Feed-Through Any input or output channel to any other channel	≤-80 dB, 20 Hz to 20 kHz

Characteristic	Value
Frequency Response Any input to any output, Relative to 997 Hz	+1, -3 dB, 50 Hz to 20 kHz
Total Harmonic Distortion + Noise vs. Frequency	
-1 dBFS Input Level	-60 dB, 50 Hz to 20 kHz
-20 dBFS Input Level	-65 dB, 50 Hz to 20 kHz
-1 dBFS input level	-95 dB, 50 Hz to 20 kHz
-20 dBFS input level	-75 dB, 50 Hz to 20 kHz

Characteristic	Value
Maximum Input Level 0 dBFS, Analog Inputs 0 dBFS for Line Inputs	0 dBV (1.0 V <sub>RMS</sub> ), ± 1 dB +6 dBV (2.0 V <sub>RMS</sub> ), ± 1 dB
Input Impedance Analog Inputs	20kW, ± 5%
Maximum Output Level Line Output (≥600 W load):	+6 dBV (2.0 V <sub>RMS</sub> ), 1 dB
Output Impedance Line Output	150 W, ± 5%
Signal-to-Noise Ratio Any analog audio input routed to the analog output Any digital audio input routed to any digital output:	>90 dB, >95 dB, A-weighted
Dynamic Range Either analog audio input routed to Main Output: Any digital audio input routed to any digital output:	>90 dB >95 dB
Crosstalk and Feed-Through Any input or output channel to any other channel	≤-90 dB, 20 Hz to 20 kH
Frequency Response Any input to any output, Relative to 997 Hz	+1, -3 dB, 20 Hz to 20 kHz
Total Harmonic Distortion + Noise vs. Frequency -1 dBFS Input Level -20 dBFS Input Level -1 dBFS input level -20 dBFS input level	-80 dB, 50 Hz to 20 kHz -70 dB, 50 Hz to 20 kHz -95 dB, 50 Hz to 20 kHz -75 dB, 50 Hz to 20 kHz

#### Audio Specifications for Polycom RealPresence Group 700 Systems

# **DTMF** Dialing

RealPresence Group Series systems generate the following tip/ring signal levels:

- Low-frequency tone: -10.2 dBV, -8.0 dBm when AC termination of the line is 600 Ohms
- High-frequency tone: -8.2 dBV, -6.0 dBm when AC termination of the line is 600 Ohms
- The system seizes the line and waits 1.5 seconds. The number is then dialed with a 80 ms tone period followed by a 80 ms silence period for each digit.

### **Remote Control**

This section provides information about the IR signals for RealPresence Group Series systems.



This information is provided for reference only. Polycom claims no responsibility or liability for programmed third-party remote control devices.

#### Notes

- Wake up 2.6 ms on; 2.6 ms off.
- 0–559 μs (22 pulses at 38 KHz) on; 845 μs (33 pulses at 38 KHz) off.
- 1–845 μs (33 pulses at 38 KHz) on; 1192 μs (46 pulses at 38 KHz) off.
- EOM-559 µs (22 pulses at 38 KHz) on.
- System Code consists of a User ID field (upper nibble) and the Polycom Vender Code (lower nibble) with value 0x5. The default User ID value is 0x3, so the default System Code value is 00110101 or 0x35.
- Parity is a 2-bit field consisting of a parity bit (b1) and a toggle bit (b0). Parity is even.
- Inter-burst timing is 2200 pulse times at 38.062 KHz or 57.8 ms.
- 38.062 KHz signal is at 1/3 duty cycle to LED.
- Multi-bit fields are transmitted most significant bit first.
- Bits are labeled b0..bn, where b0 is the least significant bit.

Key Name	Key Code	Key Code	Parity
4	1100	0CH	Even
	1011	0BH	Odd
	110000	30H	Even
	110001	31H	Odd
	110010	32H	Odd
	110011	33H	Even
	110100	34H	Odd
	110101	35H	Even
	110110	36H	Even
	110111	37H	Odd
	111000	38H	Odd
	111001	39H	Even
uto	11001	19H	Odd

Protocol is: <Wake up> + <System Code> + <Key Code> + <Parity> + <EOM>

Key Name	Key Code	Key Code	Parity
Call	100101	25H	Odd
Call/Hang Up	11	03H	Even
Delete	100010	22H	Even
Down Arrow	110	06H	Even
Home	11011	1BH	Even
Left Arrow	1001	09H	Even
Low Battery	10111	17H	Even
Menu (Back)	10011	13H	Odd
Mute	111010	ЗАН	Even
Return	111	07H	Odd
Right Arrow	1010	0AH	Even
Up Arrow	101	05H	Even
Volume Down	111100	3CH	Even
Volume Up	111011	3BH	Odd
Zoom In	1101	0DH	Odd
Zoom Out	1110	0EH	Odd

# **RS-232 Serial Interface**

The RS-232 serial port is implemented by an FPGA-based UART (Universal Asynchronous Receiver/Transmitter) that supports the following values.

Mode	Baud Rate	Parity	Stop Bits	Data Bits	Flow Control
Control	9600 (default), 19200, 38400, 57600, 115200	None	1	8	Off
Camera Control	NA	NA	NA	NA	NA
Closed	9600 (default), 19200, 38400, 57600, 115200	None	1	8	Off
Pass Thru	9600 (default), 19200, 38400, 57600, 115200	None (default), Even, Odd	1 (default), 2	8	Off (default), On

# **Categorical List of API Commands**

You can view the table of contents for this book to see an alphabetical list of available API commands. These commands are categorized into the following sections:

- Directory Commands
- Call Function Commands
- Conference Setting Commands
- Global Services Commands
- LAN, WAN, and IP Commands
- Video and Audio Commands
- Content Commands
- Registration Commands
- System Commands

### **Directory Commands**

#### **LDAP Commands**

- addrbook
- gaddrbook

### **Call Function Commands**

#### **Calling Commands**

- answer
- dial
- gendial
- hangup
- speeddial

#### **Call Status Request**

- advnetstats
- callinfo

- getcallstate
- nearloop

#### **Call Setting Data**

- systemsetting connectionpreference
- systemsetting dialingmethod
- videocallorder

# **Conference Setting Commands**

#### **Conference Settings**

- autoanswer
- dynamicbandwidth
- enablefirewalltraversal
- encryption
- enablepvec
- enablersvp
- maxtimeincall
- h239enable
- mpmode
- muteautoanswer
- systemsetting displayiconsincall
- systemsetting maxrxbandwidth
- systemsetting maxtxbandwidth
- systemsetting transcodingenabled

## **Global Services Commands**

#### **Calendar Commands**

- calendardiscovery
- calendarmeetings
- calendarpassword
- calendarplaytone
- calendarregisterwithserver
- calendarremindertime
- calendarresource
- calendarserver

- calendarshowpvtmeetings
- calendarserver
- calendarstatus
- calendaruser

#### **LDAP Commands**

- Idapauthenticationtype
- Idapbasedn
- Idapbinddn
- Idapdirectory
- IdapntImdomain
- Idappassword
- Idapserveraddress
- Idapserverport
- Idapsslenabled
- Idapusername

### **SNMP Commands**

- enablesnmp
- snmpadmin
- snmpcommunity
- snmpconsoleip
- snmplocation
- snmpsystemdescription
- snmptrapversion

## LAN, WAN, and IP Commands

#### H323 Commands

- e164ext
- gatekeeperip
- h323name
- nath323compatible
- systemsetting 323gatewayenable
- systemsetting iph323enable
- usegatekeeper

### LAN and WAN Commands

- defaultgateway
- dhcp
- dns
- hostname
- ipaddress
- lanport
- natconfig
- subnetmask
- wanipaddress

#### **SIP Commands**

- systemsetting sipaccountname
- systemsetting sipdebug
- systemsetting sipenable
- systemsetting sippassword
- systemsetting sipproxyserver
- systemsetting sipregistrarserver
- systemsetting siptransportprotocol
- systemsetting sipusername

# **Video and Audio Commands**

### **Audio Adjustment Commands**

- audiotransmitlevel
- mute
- volume

### **Audio Setting Commands**

- echocanceller
- enablekeyboardnoisereduction
- enablelivemusicmode
- systemsetting lineinlevel
- systemsetting lineoutmode
- systemsetting mediainlevel
- systemsetting stereoenable

## **Content Commands**

### **Content Control Commands**

• vcbutton

### **Content Setting Commands**

- autoshowcontent
- contentauto
- systemsetting cameracontent
- •
- systemsetting cameracontent2
- systemsetting cameracontent3
- vgaqualitypreference

### **Camera Control Commands**

• camera

#### **Camera Setting Commands**

- camerainput
- camera near tracking
- configparam
- farcontrolnearcamera
- systemsetting primarycamera
- systemsetting whitebalancemode
- systemsetting whitebalancemode1

### **Monitor Video Output Setting Commands**

- configdisplay
- configpresentation
- farnametimedisplay
- maxtimeincall
- monitor2screensaveroutput
- sleeptime

### **Registration Commands**

- all register
- all unregister

- callstate
- listen
- nonotify
- notify
- popupinfo
- sleep

## **System Commands**

#### **System Commands**

- powerdown
- version
- wake

#### System Query Commands

- screen
- serialnum
- systemsetting model
- uptime
- whoami

### System Setting Commands

- amxdd
- daylightsavings
- echoreply
- exit
- oobcomplete
- remotemonenable
- rs232 baud
- rs232 mode
- session
- setpassword
- systemname
- systemsetting remotechannelid
- systemsetting sippassword
- systemsetting telnetenabled
- systemsetting webenabled

### **Diagnostic Commands**

- basicmode
- generatetone
- loglevel
- oobcomplete
- reboot
- resetsystem

### **Miscellaneous Commands**

- exportdirectory
- exportprofile
- importdirectory
- importprofile
- button