

Release Notes

LifeSize Video Communications Systems:

LifeSize Room, LifeSize Team, and LifeSize Express series models

Release: v4.7.10

Contents

Product Documentation

For the most current version of product documentation, refer to <u>lifesize.com/support</u>. If you are using LifeSize Video Center with this release, ensure that you read the release notes for LifeSize Video Center for additional information. If you are using other LifeSize products with this release, ensure that you read the latest release notes for those products for additional information.

Supported Models

This software release is not supported on LifeSize Team or LifeSize Passport. For more information about LifeSize Passport, refer to the release notes for LifeSize Passport.

Upgrading from a Previous Release

If you are upgrading, ensure that all LifeSize cameras and adapters you intend to use are connected to your LifeSize system before you perform the upgrade. Cameras and adapters not connected before you perform the upgrade may not function properly if connected to the system after the upgrade.

If you are upgrading from a release earlier than v4.0.0, you must upgrade to v4.0.0 before upgrading to this release. Software release v4.0.0 implements upgrade license keys to ensure that a current maintenance agreement is in effect when upgrading the software on a LifeSize video communications system. If you are upgrading from software release v4.0.0 or later, ensure that a current license key exists on the system before performing the upgrade. The expiration date for the license key appears on the **System Information** page in **Upgrade License**. Audio levels for the active microphone volume and line in volume preferences were recalibrated in v4.1.1. If you are upgrading from a previous release, LifeSize recommends that you check these levels after performing the upgrade.

Downgrading from this Release

To view and access all options in the web interface after upgrading or downgrading a LifeSize system, close your web browser, clear the browser cache, and then reopen your web browser.

LifeSize recommends you reset to the factory defaults after performing a downgrade.

Web Browser and Flash Player Support

The LifeSize web administration interface is supported in this release with the Adobe Flash Player v9 and v10 and the following web browsers:

- Microsoft Internet Explorer for Windows, v7 and v8
- Apple Safari for Mac v4.0.4

New Features and Resolved Issues

Following are the major new features and resolved issues in this release. Refer to your LifeSize product documentation for more information about using the product. Numbers in parentheses following a summary are used for internal tracking purposes only.

Feature	Description	
New Features and Enhancemen	ts:	
Support for firewire on LifeSize Camera 200.	This release supports LifeSize Camera 200 firewire connectivity to LifeSize systems. Refer to <u>Using LifeSize Cameras with the</u> <u>Documentation Set</u> and <u>Documentation Errata</u> for more information.	
Support for LifeSize Camera 10x.	LifeSize Camera 10x is now available for LifeSize Room 220, LifeSize Team 220 and LifeSize Express 220. LifeSize Camera 10x produces 720p60 and 1080p30 video and has 10x optical zoom capability. Refer to <u>Using LifeSize Cameras with the Documentation</u> <u>Set</u> and <u>Documentation Errata</u> for more information	
Support for LifeSize Desktop v2.0.	LifeSize Desktop 2.0 is supported in this release. Refer to the LifeSize Desktop 2.0 documentation for more information.	
Resolved Issues:		
Settings for secondary display change when the system comes out of sleep mode. (END-15880)	Secondary displays set to 1080p30 and Call+Presentation+DVI were reset to Auto/720p and Presentation+DVI when they emerged from sleep mode. This issue has been resolved in this release.	
Incoming call not recognized over serial connection to control panels. (END-16072)	Occasionally, calls initiated from control panels connected to LifeSize systems through the serial port were not recognized. This issue is resolved in this release.	
Upgrading from v4.5.1 changed primary video input. (END-16099)	When upgrading from version 4.5.1, the video primary input preference changed to the default value of $hd0$. This issue is resolved in this release.	

Known Issues and Workarounds

The following table lists known issues and their solutions or workarounds, if available. Numbers in parentheses following an issue are used for internal tracking purposes only.

Issue/Problem	Description/Workaround
Video Issues:	
LifeSize Camera 10x auto white balance can change in mixed color temperature lighting conditions. (END-16270, END-16061)	In rooms with mixed lighting sources, the auto white balancing feature on LifeSize Camera 10x can change its setting periodically. Workaround: Change the White Balance preference from <i>Auto</i> to an acceptable manual setting.
Cameras do not upgrade in the background. (END-16275, END-16295)	LifeSize Camera 200 using a firewire cable and LifeSize Camera 10x do not upgrade in the background when attached to LifeSize video communications systems. This is only an issue if the software on the camera is older than the software on the LifeSize system. Workaround: Ensure the camera and codec are at the same software version by upgrading the system to the desired software version while the camera is attached.
Horizontal line in video on LifeSize Express 220. (END-15906, END-16007)	On LifeSize Express 200, a line may appear and rise horizontally in the video.
PC as primary input on LifeSize Express 220 distorted on secondary display and on far side. (END-15891)	When the primary input on a LifeSize Express 220 is switched to the DVI-I input set to 1080p, the video is corrupted on the near side secondary display and on the far side participant.
Bandwidth slider may not work as expected. (END-15884)	When you set Administrator Preferences : Video : Video Preferences : Video Bandwidth Balance to <i>10% / 90%</i> , the presentation bandwidth is not actually 90% of the total, but is closer to 55%.
1080p30 call resolution changes when LifeSize Passport joins the call. (END-15768)	The resolution in a call between LifeSize Room 220 and LifeSize Team 220 changes from 1080p30 to 1652x928 when a LifeSize Passport joins the call.
Video from LifeSize Camera as presentation input is distorted. (END-15506)	Video from LifeSize Camera as the presentation input on a LifeSize Team with dual displays set to 1080p and a LifeSize Camera 200 as primary input is distorted on the secondary display. Workaround: Set the displays to 720p60.
On LifeSize Express, a small strip appears at the bottom of the video when call speed is 128k to 320k. (END-8353)	When two LifeSize Express systems call each other at 128 kb/s and the monitor is set to full screen, video from the far side appears with a line at the bottom. This issue only occurs when LifeSize Express receives a low resolution video.
LifeSize Camera 200 Only: Blue and green lines appear in a 128kb/s call. (END-10451)	Blue and green vertical lines appear at the side of the screen in video from a LifeSize Camera 200 in a 128kb/s IP call. Workaround: Connect at 192kb/s or greater.
Green video appears when changing to component input in a low bandwidth call. (END-10589)	When you change the main video to component input in a two-way call at 720p60, the other end receives green video.
Placing a call with the OCS client on hold, then resuming, results in both audio and video failure. (END-10850)	After placing a call from a LifeSize system to the Microsoft OCS client on hold (using the hold button in the OCS client) and then resuming the call, audio and video freeze.

Issue/Problem	Description/Workaround	
Three camera inputs show video in primary input and presentation input selection screens when four cameras are attached to LifeSize Room 200 or LifeSize Room 220. (END-10375)	When four cameras are attached to LifeSize Room 200 or LifeSize Room 220, the primary and presentation input selection screens may show video only from three of the cameras. Video from one of the LifeSize Camera 200 cameras connected to the HD inputs may appear black in the selection for this input on these screens. The video appears on screen when the device is selected.	
LifeSize Express 200 in a multiway call is not showing the active speaker. (END-16046)	In some cases a participant in a multiway call from a LifeSize Express 200 system may temporarily lose video from the active speaker.	
Audio Issues:		
Voice dialing with IP address is successful even if voice dialing is set to <i>ISDN</i> . (END-9307)	For audio only calls, dialing an IP address is successful despite voice dialing being set to <i>ISDN</i> . Even if voice calls are set to pulse, you can place an IP H.323 voice call.	
Echo with HDMI out speakers. (END-14046)	You may experience echoes if HDMI out speakers are configured on both ends of a call. HDMI introduces a variable delay into the audio signal, resulting in acoustic echo.	
Network Issues:		
LifeSize systems fail to initialize when IPv6 is enabled and set to auto configuration on a network that does not support IPv6 (END-13225)	If your network does not support IPv6 auto configuration and you set the IPv6 preference to <i>Enabled</i> and the IPv6 Configuration preference to <i>Auto</i> in Administrator Preferences : Network : General , upon reboot, the system fails to complete the initialization process. Use the reset button on the back of the codec to restore the system configuration to default values. Refer to the <i>LifeSize Video Communications Systems Administrator Guide</i> for more information about using the reset button.	
Changing the UDP port range requires a system reboot. (END-12524)	Changing the UDP port range in Administrator Preferences : Network : Reserved Ports requires a system reboot to take effect. The system automatically reboots when the TCP port range is changed on this screen, but not the UDP port range. Workaround: If you are changing only the UDP port range, reboot the system after making the change.	
Missing or invalid hostname causes H.460 calls to fail. (END-9642)	An H.460 call fails if the LifeSize system does not have a valid hostname. Ensure that a valid hostname is configured for the Hostname preference in Administrator Preferences : Network : General .	
Presentation Issues:		
Presentation fails while recording in a call with Codian MCU. (END-15484)	Presentation fails on a Codian MCU in a call with LifeSize 220 systems, when recording is started before sending the presentation. This is caused by the third party device requiring a different resolution for the presentation than that produced for LifeSize Video Center. Workaround: Start the presentation first and then begin recording.	
DVD presentation garbled on LifeSize Room 200. (END-15878, END-15877, END-15876)	When you switch the presentation input on a LifeSize Room 200 to DVD, the near end video is blank on a single display configuration and garbled on the secondary display of a dual display configuration. The video to the far end is not affected.	

Issue/Problem	Description/Workaround
Some older laptops display presentations at low resolution when connected to VGA/DVI-I input. (END-15429)	Some older laptops using Intel or Nvidia graphics chipsets do not support the full set of resolutions that LifeSize supports and therefore, the resolution used on the LifeSize system will be lower than that selected on the laptop.
Presentation at 640x480 resolution from LifeSize Room to LifeSize Passport displays flashing colored lines. (END-15228)	In a call between LifeSize Room and LifeSize Passport, a presentation at 640x480 resolution results in flashing colored lines in the bottom half of the presentation on LifeSize Room only. Workaround: Change the presentation resolution.
Presentation fails in a two way SIP call through OCS R2 Standard Edition. (END-10769)	When you start a presentation in a SIP call through Microsoft Office Communicator R2, the Starting Presentation dialog window appears but the presentation fails.
Presentation bandwidth is not reduced when a third participant with a low bandwidth joins the call. (END-10820)	A presentation started at the participant's end does not downspeed when the MCU dials a third participant at a lower bandwidth. The total bandwidth transmitted to the third participant is more than the dialed bandwidth. This problem is more visible when the video balance on the MCU is set at a higher presentation bandwidth (50/50).
Presentation is unable to start from the MCU immediately after participant joins the conference. (END-12306)	A presentation cannot start from the MCU immediately after a participant joins the conference. Workaround: Start the presentation a few seconds after participants join the call, or before new participants join the call.
Command Line Interface Issues:	
File error returned when unset preset called in automation command line interface. (END- 16273)	Error 02, file error is returned in the automation command line interface if you use set camera position -P to a preset that has not been set. The proper error code is Od, No data available.
Serial port becomes unresponsive. (END-15916)	The USB serial port can become unresponsive to the automation command line interface. Workaround: Remove the USB serial adapter and attach it again to restore responsiveness.
Cannot deregister SIP registrar through CLI. (END-15517)	A system remains registered to a SIP registrar even if you issue the commands to deregister it from the automation command line interface. Workaround: Deregister the system through its native user interface.
SILK audio codec erroneously included in audio codec list in CLI. (END-15164)	The get audio codec command erroneously lists silk.24, silk.16, silk.12, and silk.8 in the list of supported audio codecs. These are not supported.
Command line interface incorrectly reports call statistics in a multiway call. (END-13668)	The status call statistics command in the automation command line interface returns incorrect statistics in a multiway call that includes H263/H263+ video or low-bandwidth (less than or equal to 384 kb/s) H.264 video.
Meetings placed from the command line interface may not connect all participants. (END-13657)	If a call placed from the meetings directory using the command line interface is not answered within three seconds by the first participant dialed, all other participants in the meetings entry are then dialed but become unavailable. If the first participant subsequently answers, the call becomes a two-way call. Workaround: Add the remaining participants to the call manually.

Issue/Problem	Description/Workaround		
LifeSize Room in sleep state does not wake when called from the CLI. (END-10581)	A LifeSize Room in the sleep state with auto answer disabled and called using the command line interface remains asleep until you press a key on the remote control. However, a blank screen with the Call Status window appears.		
Unable to dismiss an invalid call from the command line. (END-12246)	You are unable to dismiss a rejected or invalid call from the command line, even though entry 0 is present. Workaround : Dismiss the call from the user interface.		
Recording/Streaming Issues:			
No warning when trying to record a call with too many participants. (END-15881)	When you try to record a call from a LifeSize Room 220 or LifeSize Team 220 with more than the allowed participants, no indication that there are too many participants or that LifeSize Video Center cannot record the call appears. LifeSize Room 220 can record a call with no more than 7 participants.		
When the MCU is recording a multiway call, the recording may get blank video for a presentation started before a previous presentation ends. (END-15604)	When the MCU is recording a multiway call, the recording may produce blank video for a presentation started on one non-MCU system before an initial presentation from another non-MCU system has ended. Workaround: When sharing multiple presentations from different non-MCU systems while recording a multiway call, ensure that one presentation ends before starting the next one.		
Choosing the last speaker multiway call layout option disables recording and streaming. (END-14767)	Choosing the last speaker multiway call layout option disables recording and streaming, and prevents you from enabling recording and streaming. To restore recording and streaming, you must switch to the All Callers layout option and then enable recording and streaming.		
User Interface Issues:	User Interface Issues:		
Call history may report incorrect resolutions. (END-16039)	On some LifeSize systems, the call history file you download from the Diagnostics : Call History page of the web administration interface sometimes reports -1x-1 as the resolution in the Rx Res column.		
Snapshot from LifeSize Express 220 in multiway call is black. (END-15543)	Snapshots of received presentation on LifeSize Express 220 in a multiway call may be black.		
Virtual multiway unavailable when recording in a multiway SIP call.	When recording a multiway SIP call, virtual multiway is not available after a presentation ends. Workaround: On the systems on which virtual multiway is unavailable, press the mute button on the remote control twice (mute and unmute). Virtual multiway layout data reappears.		
Earliest speaker in six way SIP call loses virtual multiway. (END-15602)	The earliest speaker in a six-way SIP call loses virtual multiway. Workaround: When the system that has lost virtual multiway becomes the active speaker, virtual multiway is restored.		
User interface reports incorrect display resolution in call statistics. (END-15552)	In a call between two LifeSize systems in which the display resolution of both systems is set to 1080p30 and one system is using the current release and the other is using the previous release, the call statistics report the resolution incorrectly.		

Issue/Problem	Description/Workaround	
Call statistics in the user interface do not match the call statistics reported in the web administration interface in a virtual multiway call. (END-13946)	The call statistics in the user interface of a LifeSize system that is participating in a multiway call hosted by another LifeSize system do not match the call statistics that appear in the web administration interface. The call statistics that appear in the web administration interface show the received resolution and bandwidth for the connection between the participant and the MCU. The statistics that appear in the call and bandwidths that are the result of dividing the received bandwidth by the number of participants in the call.	
LifeSize systems in a call with LifeSize Room, LifeSize Room 200, and LifeSize Room 220 as the MCU and Multiway Call Layout set to <i>Last Speaker</i> transmit video at a lower resolution after receiving a presentation. (END-13458)	LifeSize systems participating in a call with LifeSize Room, LifeSize Room 200, or LifeSize Room 220 as the MCU, and the Multiway Call Layout preference set to <i>Last Speaker</i> , transmit video at a lower resolution after they receive a presentation.	
LifeSize Phone displays the Diagnostics page after setting DND. (END-9939)	When setting the system to Do Not Disturb , LifeSize Phone displays the Diagnostics screen after approximately 90-120 seconds and the only action you can take is to reboot. Workaround: Use the remote control to cancel Do Not Disturb .	
A multiway meeting dialed from the web administration interface fails. (END-11501, END-13657)	A multiway meeting dialed from the web administration interface directory fails. Workaround: Initiate the meeting from the main system interface.	
Primary Audio Output Test preference not sending test tones from the web administration interface. (END-11029)	The Primary Audio Output Test preference in the web administration interface does not send test tones to the LifeSize system. Workaround: Use the preference from the user interface that appears in the display connected to the system.	
Upgrade Issues:		
Upgrading from releases that do not include SILK audio codecs to version 4.6 or higher causes audio codec order to be reset. (END- 16100)	If you are running a build earlier than v4.6.0, your system does not include the SILK audio codecs. When upgrading to 4.6.0 or higher, which includes support for these codecs, your audio codec order will be reset to defaults. Any custom configuration of audio codec ordering will be lost.	
Communications Issues:		
PSTN calls allowed despite disabling PSTN. (END-10910)	Disabling PSTN does not prevent the system from receiving PSTN calls.	
IP address for H.460 server not recognized if H.460 enabled before registering with the gatekeeper. (END-9556)	 A LifeSize system may fail to recognize the IP address in the Gatekeeper IP Address 1 preference for the H.460 server if you enable the H.460 preference before registering the system to the gatekeeper. Workaround: Navigate to Administrator Preferences : Communications : H.323 and do the following: Set the Gatekeeper Mode preference to Manual. For the Gatekeeper IP Address 1 and Gatekeeper Port 1 preferences, enter the IP address and port number of the H.460 server that is configured in your environment. Navigate to Register and click OK. Choose Enabled for the H.460 preference. 	

Issue/Problem	Description/Workaround
The Register button is available to re-register a system with the SIP server only after you make a change to a SIP preference. (END-9001)	 The Register button in Administrator Preferences : Communications : SIP is available to re-register the system in the event SIP registration fails only after you make a change to a SIP preference. To re-register the system, do the following: 1) Choose <i>Disabled</i> for the SIP Registrar preference. 2) Navigate to the Register button and press OK on the remote control. 3) Return to the SIP Registrar preference and choose <i>Enabled</i>. 4) Return to the Register button and press OK on the remote control.
Adding PSTN participant to a 5-way SIP call with LifeSize Room 200 through IP PBX system fails. (END-9486)	Adding a PSTN participant during a 5-way SIP call using the PSTN line connected to a LifeSize Room 200 system fails. Workaround: To add the PSTN participant, place the call through an IP PBX system.

Product Limitations

The following table lists known limitations with this LifeSize product. Numbers in parentheses following an issue are used for internal tracking purposes only.

Feature	Support or Limitation
Video Limitations	
Multiway calling is limited to 6 participants with LifeSize Room 220 when the display resolution is set to 1080p. (END-13660)	When the display resolution in LifeSize Room 220 is set to 1080p, multiway calling is limited to six participants. To place a 7- or 8-way call, set the display resolution to 720p60.
LifeSize systems not showing 1280x720 video full screen under certain conditions. (END-9679)	LifeSize systems that support and are set to the 1920x1080 display resolution do not show 1280x720 video full screen when the video is sent from a device connected to the DVI-I input or an HD input. Workaround: On a LifeSize Room 200 or LifeSize Room 220, connect the 1280x720 video source to the auxiliary video input.
LifeSize systems that support 1920x1080p support 30Hz refresh rate. (END-11533)	LifeSize systems that support a maximum resolution of 1920x1080p support this resolution at a refresh rate of 30Hz. Choose <i>1920x1080i60</i> for the Display Resolution preference if your 1080p TV does not support 1080p at a refresh rate of 30Hz.
Limitations with SIP dual video (END-10870)	 Support for SIP dual video in this release is subject to the following limitations: Dual video is available in calls between LifeSize systems only. In calls with bandwidth at 192 and 256 kb/s, the bandwidth for SIP dual video is 64 kb/s. In calls with bandwidth at 320 kb/s or greater, SIP dual video bandwidth is 128 kb/s. Adjusting bandwidth allocated to the presentation stream using the Video Bandwidth Balance preference has no effect. SIP dual video is not available during a call if the TLS Signaling preference in Administrator Preferences : Communications : SIP is set to <i>Enabled</i> unless the device is registered to Microsoft OCS over TLS.

Feature	Support or Limitation
Transcoding limitations (END-10994) (END-10743)	 In releases earlier than v4.0.0, a LifeSize system hosting a multiway video call could only encode and send one primary video stream to participants. Consequently, the resolution of the video was limited to the greatest common resolution of all devices in the call. When a device with lower resolution capabilities (either by design or due to network limitations) joined a call, video resolution degraded for all participants. LifeSize systems with software release v4.0.0 or later hosting a multiway video call can open a second primary video stream when a device with significantly different video capabilities joins an existing call. Support for this feature (transcoding) includes the following limitations: Transcoding applies only to a second primary video stream. One of the primary video streams must be H.264. Both primary video streams cannot be H.263 or H.261. On LifeSize Room, LifeSize Room 200, and LifeSize Room 220, transcoding is supported with continuous presence calls only (Multiway Call preference set to <i>All Callers</i>). In calls with LifeSize Room 200, LifeSize Room 220, and LifeSize Team 220, if the resolution of the primary stream, both streams will be transmitted at standard definition resolutions.
Video image from another LifeSize participant who is not the MCU disappears during a presentation in a four-way call with LifeSize Room or LifeSize Team MP as the MCU. (END-10426) (END-10430)	When a LifeSize system in a four-way call connected to LifeSize Team MP or LifeSize Room as the MCU starts a presentation, the video from the fourth participant in the call is removed by the MCU to accommodate the presentation video. The video of that participant, depending on the screen layout chosen, may appear when that participant becomes the dominant speaker and replace the video of the earliest speaker.
Digital zoom support. (END-9474)	Digital zoom is not supported on LifeSize cameras using an HDMI cable, but is supported with a firewire cable. Digital zoom is not supported at all on LifeSize Room and LifeSize Team MP.
A LifeSize system in a two-way call with another LifeSize system with a different display resolution shows 1280x720 or slightly larger video at 30 f/s.(END-9626)	When a LifeSize system with a display resolution set to <i>1920x1080i60</i> or <i>1920x1080p30</i> calls another LifeSize system with a display resolution set to <i>1280x720p60</i> or <i>1280x768p60</i> , the video resolution in the call is 1280x720 (or slightly larger) at 30 f/s.
Far end camera control with voice- activated switching of video. (END-6188)	Participants can only control the far end camera of the MCU and not the active talker when voice-activated switching of video is enabled on the MCU (Multiway Call Layout preference set to <i>Last Speaker</i>).
Audio Limitations	
LifeSize Room 220 limited to G.711 (µ/A-Law) audio codec for participants in eight-way calls. (END-15127)	After the fourth participant is added to a call in which LifeSize Room 220 is the MCU, each new participant and one of the original participants is negotiated to the G.711 (μ /A-Law) audio codec. Therefore, in an eight-way call, all participants use the G.711 (μ /A-Law) audio codec.
G.728 audio codec not negotiated when 1080 display resolution is chosen. (END-13544)	LifeSize systems that are set to a 1080 display resolution do not negotiate the G.728 audio codec.

Feature	Support or Limitation	
Terminating calls from the phone may result in a delay in ending the call. (END-16060)	When placing a call to an unavailable address or adding a participant to a conference that does not exist, and you press the Voice button on the phone to terminate the call, the unavailable call remains on the display and the dial tones sound for approximately 30 seconds. Workaround: Use the remote control to terminate calls.	
Network Limitations:		
Far end camera control (FECC) from a public to private device is unsupported. (END-12129)	When placing a call from a system behind a firewall (or without a static NAT configuration in the firewall) the call may complete, and camera control from the system behind the firewall (the private system) to the system on the public internet (the public system) will work, but FECC from the public system to the private system will not work, or may work intermittently. LifeSize recommends deploying LifeSize Transit servers for this configuration.	
Link from LAN port to switch may fail when both devices set to auto negotiate speed. (END-6539)	The LAN port may be unable to establish a link when you connect the codec to a switch and both devices are set to auto negotiate the speed. If this occurs, set the speed on the switch or the Network Speed preference on the codec to either 100 Mb/s (full duplex) or 10 Mb/s (full duplex). In rigid configurations, LifeSize recommends you connect a switch to the network and then connect the device to this switch.	
Presentation Limitations:		
Presentations from a far end participant in an H.460 six-way call with LifeSize Room as the MCU may fail. (END-11376)	Presentations started from a far end participant in an H.460 six-way call with LifeSize Room as the MCU may fail and the MCU may reboot. Try the call again without a presentation or limit H.460 calls to four participants.	
Recording/Streaming Limitations:		
Ten-digit recording keys from LifeSize Video Center not accepted by LifeSize video communications systems. (END-15471)	Although LifeSize Video Center can generate 10-digit recording keys, LifeSize video communications systems cannot accept them and instead produce an error message. Workaround: Limit your recording keys to 9 digits.	
User Interface Limitations		
Virtual multiway disabled at some resolutions. (END-5835)	If the LifeSize system serving as the MCU sends a 16:9 resolution below 528x304 or a 4:3 resolution below 352x288, virtual multiway is disabled. LifeSize participants see the video layouts of a two-way call. If the resolution increases during the call, LifeSize participants automatically switch back to virtual multiway. This is typically encountered when the bandwidth of the call drops below 256 kb/s.	
LifeSize v3.5.x with Flash Player v10 fails during upgrades. (END-9548)	LifeSize v3.5.x with Flash Player v10 fails during upgrades. If you are using Flash Player v10 with LifeSize v3.5.x, downgrade to Flash Player v9 before upgrading to LifeSize v4.x.	

Feature	Support or Limitation
Virtual multiway behavior not available to LifeSize participants with an earlier release during a five- or six-way call with LifeSize Room or LifeSize Room 200 as the MCU when participant is not the dominant speaker. (END-9489)	In a five- or six-way call with LifeSize Room or LifeSize Room 200 as the MCU with this release, virtual multiway is not available to any LifeSize participant with a software release earlier than 4.0.0 and who is not the dominant speaker. In this case, LifeSize participants can only control the MCU's camera; view only 3 screen layouts; see only one participant in the call statistics screen; and not see their near end video in the video sent from the MCU. When any of these participants become the dominant speaker, virtual multiway behavior is available.
Caller ID support. (END-1201)	Caller ID of PSTN calls during call waiting is not supported.
Calls placed from the web administration interface Call Manager always appear in the Redial list with <i>Auto</i> as the bandwidth and protocol. (END-6497)	Calls placed from the Call Manager in the web administration interface always appear on the Redial list with <i>Auto</i> as the bandwidth and protocol, regardless of the actual bandwidth and protocol specified when the call was first placed.
Call statistics show incorrect value for packet loss of transmitted video in IPv6 calls. (END-6127)	In calls with systems using IPv6 addresses, call statistics incorrectly show zero as the value of the packet loss for transmitted video.

Interoperability

LifeSize video communications systems with this software release are supported with the following third party devices.

Supplier	Products
Asterisk	Asterisk 1.4.22.1
Avaya	SIP Enablement Services: v5.1.x Communication Manager: v5.1.x
BroadSoft	BroadWorks; 13,14 SP5
Cisco	Unified Communications Manager: 7.0.2.20000-5 CallManager 4.x for audio calls and CallManager Express for both video and audio calls. Users can register LifeSize systems as H.323 extensions through the Cisco IOS Gatekeeper. The Cisco IOS Gatekeeper must be installed in the network. For more information about IP PBX configuration and support, contact your product distributor or LifeSize Technical Services.
ClearOne	EX 1.2 (PSTN Phone)
Codian	MCU 4220: 2.4 (1.20) MCU 4505: 3.1 (2.13) ISDN Gateway 3240: 1.5 (1.15)N

Supplier	Products
LifeSize	Multipoint: 5.7 Multipoint Extension: 5.7, 7.1 Multipoint 230: 7.1 Gatekeeper: 5.7, 7.1 Gateway (PRI and Serial): 5.6 Phone: 4.5.2 Networker: 3.1.1 Transit: 3.0 Control: 4.6 Desktop 1.0.3, 2.0 Video Center 1.0.2
Microsoft	Office Communications Server 2007 Standard Edition: 3.0.6362.0 (R1), 3.5.6907.0 (R2) Office Communicator 2007: 2.0.6362.0 (R1), 3.5.6907.0 (R2)
Mirial	SoftPhone 7.0.7
Polycom	HDX 9002: 2.6.0 HDX 9004: 2.6.0 HDX 4000: 2.6.0 VSX 7000: 9.0.5.1 VSX 8000: 9.0.5.1 ViewStation MP: 7.5.4 ViewStation: EX: 6.0.5 ViaVideo PVX: 8.0.4 IP 3000: 2.2 (speakerphone) IP 4000: 2.2 (speakerphone) MGC 50/100: 9.0.1 Path Navigator 7.0.12 SoundStation Premier
Radvision	ECS Gatekeeper: 5.6 Pathfinder: 5.6 SCOPIA 100 12/24 MCU: 5.7 SCOPIA 100 PRI Gateway: 5.6 SCOPIA Desktop 5.7
ShoreTel	Shoregear 9.2
Siemens	8000 12.00.02.ALL.15 HiPath 8000 Assistant v3.1 R0.0.0 (Build 277) Latest Patch Set of hipath5 PS0011.E01 Deployment Service V2 R0.40.0-345.12 (Build 0) MediaServerCommon 3.0 V3.0 (Build 301) MediaServer_portlet 3.0 V3.0 R0.0.0 (Build 301) MediaServer 3.0 v3.0 (Build 301)
Sony	PCS-1: 3.31 PCS-TL: 2.42 PCS-G70: 2.62
sipX	sipXecs: 3.10

Supplier	Products
Tandberg	Edge, Centric, and Set-top MXP: F8.0 6000: B10.3 880: E5.3 1000: E5.3 Gateway: G3.2 Border Controller: Q5.2 GK: N5.2 MCU: J4.3

Interoperability Limitations

The following table lists known limitations with third party products. Numbers in parentheses following an issue are used for internal tracking purposes only.

Feature	Limitation
General Third Party Issues:	
Standard definition video systems produce poor video images in calls with LifeSize systems. (END-15971)	Standard definition video systems set to use H.261 may produce poor video images when in calls with LifeSize systems.
Presentation from far end participant appears as black video when sent to LifeSize system as MCU and one far end participant accepts H.261 video only. (END-11372)	A presentation sent by a far end participant in a multiway video call with a LifeSize system as the MCU appears as black video if one of the devices in the call is configured to accept H.261 video only. To avoid this problem, LifeSize recommends using default configuration settings for video codecs for all devices in the call.
Video issues in calls when static NAT enabled on LifeSize systems and calls placed through routers with application-level gateways. (END-6920)	Enabling static NAT on a LifeSize system and then placing a call through a router with an application-level gateway or protocol fixup that modifies call control traffic may result in no video and/or audio at either the near end or far end of the call. Depending on the router, disabling static NAT on the LifeSize system may resolve this issue. LifeSize recommends disabling fixup on the router; refer to issue END-1161.
Mute button on third party microphone may not function properly. (END-8860)	The mute button on a third party microphone connected to the microphone input on a LifeSize codec may not function properly. For best results use a LifeSize MicPod when connecting a microphone to the microphone input.
Video fails when low bandwidth third party joins the call. (END-11557)	In a three-way ISDN call with LifeSize systems and a Polycom or Tandberg device as a participant, the video on the LifeSize system goes blank as soon as the third party device joins the call. This problem only occurs when the call is dialed at 256 kb/s and when both participants are dialed as ISDN. Virtual multiway becomes disabled due to the low bandwidth third party participant, forcing the video to fail. Workaround: Set both LifeSize participants to continuous presence.

Feature	Limitation
BroadSoft:	
SIP dual video not supported in SIP calls between LifeSize systems connected through BroadWorks. (END-10644)	A presentation with SIP dual video fails to start in SIP calls between LifeSize systems connected through BroadWorks. To work around this issue, send the presentation video as primary video by selecting <i>Disabled</i> for the Presentations preference in Administrator Preferences : Communications : General before placing the call.
Cisco:	
Support for multiway SIP calls through Cisco Unified Communications Manager. (END-13541)	Support for multiway SIP calls with LifeSize Room 200 and LifeSize Room 220 as the MCU through Cisco Unified Communications Manger is limited to a three-way call when the resolution is 1080p30 and a five-way call when the resolution is 720p60.
6000 kb/s SIP call placed between two LifeSize systems through Cisco Unified Communications Manager connects at 1000 kb/s. (END-11127)	A 6000 kb/s SIP call placed from a LifeSize Room or LifeSize Room 200 system to another LifeSize Room or LifeSize Room 200 system through Cisco Unified Communications Manager connects at 1000 kb/s. To work around this issue set the Incoming Maximum Bandwidth preference in Administrator Preferences : Calls on the LifeSize system to <i>6000 kb/s</i> .
Call forward and voicemail on CME works only with Cisco Phones. (END-3320)	LifeSize does not currently support the Cisco proprietary SCCP protocol required to use call forwarding or voicemail with the Cisco IP Phone.
SIP dual video not available in SIP calls through Cisco Unified Communications Manager. (END-10870)	SIP dual video is not available in SIP calls between LifeSize video communications systems connected through Cisco Unified Communications Manager.
H.239 may not work through your CISCO PIX or ASA (Adaptive Security Appliance) firewall/ASA device. (END-1611)	The Cisco fixup protocol did not recognize H.239 and terminated a call if it attempted to open an H.239 stream. Upgrade to ASA v8.2.1 or later to eliminate this issue.
Codian:	
Video and text is cropped on bottom or sides in multiway call with Codian MCU 4505 (END-9248)	In a multiway call with a Codian MCU, video and text that appear in the display may appear cropped on the bottom or sides of the image. Workaround: Add the LifeSize system to the directory on the Codian MCU and adjust the border size to 2 or 3 depending on your display. You can adjust the border size from the LifeSize system during a call using far end camera control. With the far end camera of the Codian MCU selected, press the zoom out key on the remote control, ensure that Border width is selected and then press the right arrow key to change the border width.
Poor quality audio in calls with Codian MCU 42XX at software version earlier than v2.1. (END-5858)	You may experience poor quality audio in calls with a Codian MCU 42XX that has system software earlier than v2.1. To resolve this issue, upgrade the Codian MCU to v2.1 or later.
When more than two LifeSize systems join a call with a Codian MCU, all participants past the first two are reduced to 256k. (END-12277)	When creating a dial-out conference on the Codian MCU, the first two systems connect without issues, but any participant after that is reduced to 256k.

Feature	Limitation
Unable to place a 1080p30 call with Codian 4504 MCU. (END-12220)	The Codian 4505 MCU does not support 1080p decode. It can support 1080p encode only if the peer device supports it. LifeSize systems can receive 1080p30 video from the Codian MCU only if it is in 2x2 layout. If video is set to full screen, it displays 1280x720p30 receive and transmit.
Distorted video displays on LifeSize Room 200 in a 40-device call to a Codian 4520 MCU. (END-10794)	A known issue with the Codian MCU results in distorted video on LifeSize Room 200 in a 40-device conference to the Codian 4520.
Polycom:	
Video goes blank on Polycom HDX 9002 in mulitway call. (END-15426)	Video goes blank on Polycom HDX 9002 in a multiway call when video is renegotiated from H263+ to H264.
No far end camera control of Polycom VSX 8000. (END-15854)	LifeSize video communications systems may not have far end camera control on Polycom VSX 8000 in two way or multiway calls.
LifeSize Room 200 video cropped in a 4-way VAS call hosted by the Polycom VSX8000. (END-11952)	In a four-way VAS call hosted by a Polycom VSX8000, LifeSize Express systems display in 16:9 format and LifeSize Room 200 systems display as 4:3. However, all systems report sending the same resolution. Due to letter-boxing issues, the video must display as 4:3.
Presentation from LifeSize system as the MCU in a multiway call with Polycom HDX stops if another participant leaves the call. (END-10898) (END-11355)	When a LifeSize system is the MCU in a multiway call and sending a presentation, the presentation stops if a Polycom HDX system is a participant and another participant leaves the call or a third party device joins the call. Workaround: Hang up the call, place the call again, and restart the presentation, or ensure that all participants are in the call during the presentation.
Green patches appear in video when video switching configured on Polycom MGC 50 and AES Security enabled. (END-8679)	Green patches appear in video in LifeSize systems during an AES encrypted call with Polycom MGC 50 when the Polycom system is configured to use video switching.
Video freezes in Polycom VSX 7000 in encrypted multiway call when presentation is shared from LifeSize system as the MCU. (END-8909)	Polycom VSX 7000 may fail to receive a presentation started by a LifeSize system as the MCU during an encrypted multiway call. The presentation is received if the call is placed without encryption enabled.
Presentation from Polycom HDX fails with LifeSize Room as MCU if another participant does not support H.264 video. (END-13681)	A presentation from a Polycom HDX participant in a multiway call with LifeSize Room as the MCU fails if another participant in the call does not support H.264 ancillary video. Workaround: Stop the presentation and start it again.
LifeSize system unable to send presentation from SD input with Polycom VSX 8000 as MCU in multiway call. (END-7611) (END-9357)	A LifeSize system in a multiway call with Polycom VSX 8000 or VSX 7000 as the MCU cannot send a presentation from a device connected to the SD input due to limitations in negotiating a compatible resolution for the video. The same issue occurs if the presentation device is connected to the VGA input on the LifeSize system. Workaround: If the VGA input is used, change the resolution on the VGA input device to 1024x768 or greater.
Concurrent H.239 presentations unsupported with MGC. (END-3802)	If a presentation is in progress during a call with a Polycom MGC as the MCU and another participant starts a presentation, the new presentation does not appear in the display. Workaround: Stop the current presentation before starting the new presentation.

Feature	Limitation	
No presentation from Polycom VSX 7000 with Polycom MGC as the MCU. (END-6513) (END-10310)	LifeSize systems do not receive a presentation from Polycom VSX 7000 when Polycom MGC is the MCU due to features sent from the MCU that are not supported on LifeSize systems.	
Audio codec G.722 negotiated in a call with Polycom MGC. (END-6029)	LifeSize systems negotiate only the G.722 audio codec in calls with Polycom MGC systems.	
No video when H.263-4CIF is set on the Polycom MGC. (END-10935)	LifeSize systems are not sending or receiving video to the Polycom MGC when H.263-4CIF resolution is selected. This occurs when the line rate is set above 1152kb/s and the participants dial into the conference at auto bandwidth. If you must set H.263-4CIF resolution on the MGC, you must then also dial a bandwidth higher than 1152 kb/s from the LifeSize device.	
Not achieving 60 f/s in a call between LifeSize Room 200 and Polycom HDX 8006. (END-11806)	In a call between LifeSize Room 200 and Polycom HDX 8006, the LifeSize system does not send 60 f/s. On the Polycom HDX 8006 there is a maximum 30f/s mode by selecting <i>sharpness</i> at the camera properties, and 60f/s mode by selecting <i>motion</i> . In 30f/s mode the system can send a maximum 1080p30, in the other case it can send a maximum 720p60. Workaround: To achieve 60 f/s, ensure the HDX is set to <i>motion</i> .	
Distorted video between LifeSize Room 200 and Polycom devices. (END-12002)	Distorted video displays on LifeSize Room 200 when calling a Polycom device (for encoded resolutions that do not match the source aspect ratio).	
LifeSize Express cannot send its video to the far end when connecting to a VSX7000 internal multipoint. (END-11701)	In a two-way call between LifeSize Express and Polycom VSX 7000 with H.264, adding a Polycom VSX 6000 results in no video displaying for LifeSize Express.	
Radvision:		
Poor quality audio with G.728 audio codec in calls with LifeSize v3.5 systems and Radvision SCOPIA 100 12/24 MCU. (END-7609)	You may experience poor quality audio when the G.728 audio codec is used in calls with LifeSize systems v3.5 and Radvision SCOPIA 100 12/24 MCU with software versions earlier than 5.5.3. To resolve this issue, upgrade the Radvision SCOPIA 100 12/24 MCU to version 5.6 or later.	
SipX:		
LifeSize can successfully register to SipXecs despite no authorization. (END-11883)	LifeSize system registers successfully with SipXecs PBX despite being unauthorized.	
Sony:		
Second presentation started from LifeSize system in two-way call with Sony PCS-G70 fails. (END-10874, END-15411, END-15332)	A LifeSize system in a two-way call with Sony PCS-G70 (v2.63) can start and stop only one presentation during the call. Attempting to start a subsequent presentation fails. The same issue occurs if the presentation is started and restarted on the Sony PCS-G70. Workaround: Hang up the call, place the call again, and start the presentation.	
Tandberg:		
Cannot change primary input from Tandberg 880 MXP. (END-15730)	While in a call with a LifeSize Room 200 with two LifeSize Cameras attached, Tandberg 880 MXP could not switch between the LifeSize Camera 200s as primary input.	

Feature	Limitation
Tandberg VCS Expressway prevents presentations from H.460 registered LifeSize Systems. (END-14559)	 H.460 enabled LifeSize systems registered to Tandberg VCS Expressway had their presentations blocked. Workaround: Enable H.460.19 demultiplexing mode in Tandberg VCS Expressway" 1. Navigate to VCS Configuration : Expressway : Locally registered endpoints. 2. Set H.460.19 demultiplexing mode to On.
Far end image from Tandberg 880 or Tandberg 1000 has pink hue. (END-15041)	When in a two way call with Tandberg 880 or Tandberg 1000, the far end camera image on the Lifesize system has a pink hue, especially on objects in motion.
Audio not synchronized with video in call to Tandberg Edge 95 MXP. (END-14795)	Audio not synchronized with video in call to Tandberg Edge 95 MXP.
In a multiway call with LifeSize Room 220 as the MCU and all systems registered to Tandberg Border Controller, video freezes on one of the non-MCU systems after a second presentation is started in the call. (END-15404)	In a multiway call with LifeSize Room 220 as the MCU and all systems registered to Tandberg Border Controller, video freezes on one of the non-MCU systems after a second presentation is started in the call. The first presentation was sent from the MCU. The second presentation originated from a non-MCU system and the main video froze on a third system.
SIP call placed from LifeSize system using UDP/TCP signaling to Tandberg device using TLS and security set to auto fails. (END-10462)	A SIP call placed from a LifeSize system configured to use UDP/TCP signaling for SIP calls to a Tandberg MXP device using TLS and security set to auto fails. Workaround: Place the call from the Tandberg device or disable the auto feature on the Tandberg device.
LifeSize Room, LifeSize Room 200, or LifeSize Room 220 using voice- activated switching of video and Tandberg 880 or 1000 in a two-way call connect as audio only call. (END-8967)	A LifeSize Room, LifeSize Room 200, or LifeSize Room 220 system using voice-activated switching of video (Multiway Call Layout preference set to <i>Last Speaker</i>) and a Tandberg 880 or 1000 system in a two-way call fail to negotiate a video codec. The call connects as an audio call. Workaround: Upgrade the Tandberg system to software release E5.3 NTSC (Rev. 1.20, 2002-02-08) and then set System Configuration : Call Quality : Advanced Call Quality : Video to <i>Auto</i> on the Tandberg system.
No video in Tandberg 1000 MXP from LifeSize system after Tandberg adds another caller. (END-7648)	 In a call with a LifeSize system, no video appears in the Tandberg 1000 MXP display from the LifeSize system after the Tandberg system adds another caller. Workaround: From the Tandberg system do the following: Place the call to the LifeSize system. Add another LifeSize participant. After the call connects, disconnect the last participant.
No video on LifeSize systems when Tandberg 1000 joins a three-way call with Polycom VSX8000. (END-10995)	When a Tandberg 1000 joins a three-way H.263+ call from a Polycom VSX8000 to LifeSize Room and LifeSize Room 200, both LifeSize systems stop sending video.
Low bandwidth results in poor audio in a call with LifeSize Team MP and Tandberg Edge 95. (END-10241)	In a call between LifeSize Team MP and Tandberg Edge95, the bandwidth utilization was poor and resulted in unusable audio. Reducing speed to 384K improves but does not resolve the problem.

Feature	Limitation
"No incoming video" message appears on the Tandberg 6000 MXP just after call setup. (END-9724)	When a two-way ISDN call is dialed from a LifeSize system to a Tandberg 6000 MXP, the message "No incoming video" flashes on the Tandberg side just after call setup. After a couple of seconds this message is cleared and video shows.
Maximum resolution of 720x400 sent to Tandberg Edge 95 systems (END-12440, END-15849)	Tandberg Edge 95 systems receive a maximum resolution of 720x400 in calls with LifeSize systems.

Documentation Errata

The following table lists known issues in the technical documentation available in this release and software release v4.0.

Erratum Summary	Description
Installation Guides:	
Second display connected to LifeSize Express 200 and LifeSize Express 220 can show call video in addition to presentations. (END-13912)	The section titled <i>Configuring a Second Display</i> in the installation guides for LifeSize Express 200 and LifeSize Express 220 states that only the <i>None</i> and <i>Presentations</i> + <i>DVI-I Input</i> options are available for the Display 2 Layout preference for configuring a second display connected to these systems. Software release v4.5.1 adds the <i>Calls</i> + <i>Presentations</i> + <i>DVI-I Input</i> and <i>Simulcast Calls</i> + <i>DVI-I Input</i> options to this preference for these models. For a description of these options and the limitations that accompany their selection with these systems, refer to <i>Configuring a Second Display on LifeSize Express 200/220</i> on page 20.
LifeSize Video Communications S	ystems User Guide:
Encryption icons in virtual multiway. (END-9246)	In previous releases, the encryption icons that appeared in video images sent from a LifeSize system serving as the MCU to another LifeSize system in a multiway video call reflected the encryption status of the data transmitted and received in the call connection between the MCU and the LifeSize participant only. The encryption status of the call connection from another participant to the LifeSize system serving as the MCU was available only to the MCU. In this release, if your LifeSize system is a participant in a multiway call with another LifeSize system that is serving as the MCU and your connection to the host is not encrypted, all participants' connections appear as unencrypted. If your connection to the LifeSize host is encrypted, the video icon that appears in your display for the other participants shows the actual encryption status of the connection for that participant to the host. Both your system and the LifeSize system hosting the call must be installed with software release v4.5.0 or later to show the actual encryption status between the host and the other participants in the call. The User Guide indicates that if your connection to the LifeSize host is encrypted, both the video and voice icon that appears in your
	is encrypted, both the video and voice icon that appears in your display for the other participants shows the actual encryption status of the connection for that participant to the host. However, this is true only for the video icon and does not pertain to multiway voice calls since they do not display statistics.

Erratum Summary	Description	
LifeSize Video Communications S	ystems Administrator Guide:	
The Restoring Default Settings section revised by improvement in v4.6. (END-14346)	The Restoring Default Settings section indicates that if you release the reset button when the LED turns solid blue, the system stops and that you must hold the reset button for 5 to 10 seconds to reboot. In the release, the system immediately reboots without changes to the configuration if you release the reset button when the LED turns solid blue.	
Managing Bandwidth section revised by improvement in v4.6.0.	Software release v4.6.0 included changes to options for managing bandwidth and how the system behaves when negotiating bandwidth in an outgoing call. These changes are not reflected in the <i>Managing Bandwidth</i> section of the Administrator Guide for software release v4.5. In software release v4.6, Maximum Outgoing Bandwidth has been renamed Outgoing Call Bandwidth , and Maximum Incoming Bandwidth is now Incoming Call Bandwidth . Choosing a bandwidth other than <i>Auto</i> for the Outgoing Call Bandwidth preference places a limit on the maximum bandwidth that a user can select when placing a call. If the user chooses <i>Auto</i> for the bandwidth when placing a call, a LifeSize system uses the appropriate bandwidth based on the display mode of the device, 1080p30 or 720p60, in combination with the capability of the input device, but not to exceed the limit set in Outgoing Call Bandwidth .	
Priority order of default input device listed for the Default Primary Input preference when <i>Auto</i> is selected on LifeSize Room 200 or LifeSize Room 220 is missing component input. (END-12119)	The section titled <i>Specifying Primary and Presentation Input</i> <i>Defaults</i> includes a table that specifies the default priority order for the primary input when the Default Primary Input preference is set to <i>Auto</i> . For LifeSize Room 200 and LifeSize Room 220, the component input is missing from the priority order. The component input is the fourth priority in the list if a Sony EVI-HD1 camera is connected to the component input, the VISCA Input preference is set to <i>Auxiliary Input</i> , and the VISCA cable is connected to the serial port on the codec.	
Changing the option for a network preference from the user interface takes effect when you navigate to a different screen. (END-13292)	Changing the option for a preference in Administrator Preferences : Network takes effect only after you navigate to a different screen. This detail is not mentioned in the Administrator Guide.	
LifeSize Video Communications Systems Automation Command Line Interface:		
Commands deprecated. (v4.6.0) (END-15144, END-15532)	The following commands appear in the automation command line interface guide, but have been deprecated in v4.7: get video h241-mbps get camera serial-control set camera serial-control To set up VISCA camera control, refer to the get serial set serial commands.	
Argument added to set camera autoexposure-method command. (END-15917)	The set camera autoexposure-method command now accepts the argument $-N$ 1 when LifeSize Camera 200 is connected through the firewire cable.	

Erratum Summary	Description
Support for setting automatic background upgrades of camera images. (END-15788)	The get/set camera background-upgrade command has been added to turn the background upgrade settings for specified cameras on and off.

Technical Services

LifeSize Communications welcomes your comments regarding our products and services. If you have feedback about this or any LifeSize product, please send it to feedback@lifesize.com. Refer to <u>lifesize.com/support</u> for additional ways to contact LifeSize Technical Services.

Configuring a Second Display on LifeSize Express 200/220

Software release v4.5.1 includes support for showing video on the second display connected to LifeSize Express 200 and LifeSize Express 220. Previous releases supported only presentations or DVI-I input on the second display connected to these systems.

If you connect a second display to either of these systems during installation, you must configure the display. From the main screen of the user interface, access the **System Menu** by pressing **O** on the LifeSize remote control. Navigate to **Administrator Preferences : Appearance : Layout** and choose **Display 2 Layout**. The default setting for this preference is *None*. Choose one of the following:

- *Presentations* + *DVI-I Input* to display presentations (local and remote) during a call that is sending or receiving a presentation. When not in a call, DVI-I input appears in the display.
- Calls + Presentations + DVI-I Input to display:
 - o video images from video calls
 - o presentations (local and remote) in a call that is sending or receiving a presentation
 - DVI-I input when not in a call
- Simulcast Calls + DVI-I Input to show the same output on Display 2 as shown on Display 1 during calls

The following conditions apply when using two displays with LifeSize Express 200 or LifeSize Express 220:

- The presentation icon that appears on screen during a call to indicate that a near or far end presentation is in progress appears in display 1. For a presentation sent from a far end participant, the receiving presentation icon appears in the upper left corner of display 1; for a presentation sent from the near end, the sending presentation icon appears in the lower right corner of display 1.
- If you choose Calls + Presentations + DVI-I Input or Simulcast Calls + DVI-I Input for the Display 2 Layout preference, the following status icons and information do not appear in video images in the second display during calls:
 - o caller ID information and call type (voice or video) icons
 - camera selection icons
 Note: Selecting a camera to control by pressing the near/far camera button on the remote control during a call shows no indication of which participant's camera is selected if the participant's video image appears only in the second display.
 - encryption icons
 - o mute icon
- Background image and color preferences that appear in User Preferences : Backgrounds and Administrator Preferences : Appearance : Backgrounds are available for display 1 only. The user interface appears only in display 1.
- When the logo screen saver is active on the primary display, the second display shows the background image instead of the screen saver.

Creating a Recording

Software release v4.6.0 includes support for recording and streaming on LifeSize Room 220, LifeSize Team 220 and LifeSize Express 220. All these systems can record while not in a call or in a call.

Note: On LifeSize Express 220, in-call recording only works during a video call; recording is disabled if you are in an audio call on this system.

The recording and streaming preferences must be enabled on your LifeSize video communications system to record. Refer to the *LifeSize Video Center Administrator Guide* for information about setting these preferences.

Recording While Not in a Call

To record while not in a call, complete the following steps:

- 1. From the main screen, press the **D** button on the remote control.
- Press the O button on the remote control to start recording.
- 3. If prompted, enter a valid recording key.

If successful, the recording begins and the recording indicator appears. To end the recording, press the • button on the remote control.

Recording in a Call

To record while in a call, press the • button on the remote control. If prompted, enter a valid recording key. If successful, the recording begins and the recording indicator appears. To end the recording, press the • button on the remote control, or end the call.

Using LifeSize Cameras with the Documentation Set

Software release v4.7.10 includes support for the new LifeSize Camera 10x and for LifeSize Camera 200 with a firewire cable. However these cameras are undocumented in the current documentation set. The descriptions of capabilities, limitations and usage are still accurate, as follows:

- If your camera comes with a firewire cable, all mentions of LifeSize Camera apply to your camera.
- If your camera comes with an HDMI cable and power supply, all mentions of LifeSize Camera 200 apply to your camera.

Caution: Do not attempt to connect LifeSize Camera 200 to a LifeSize system by both an HDMI cable and a firewire cable. You must use either firewire alone or HDMI with a power supply.

Installing LifeSize Camera 10x

Lifesize Camera 10x includes the following components:

- LifeSize Camera 10x with lens cap installed
- 3 meter (9.8 foot) HDMI cable
- Power supply
- Optional glare visor
- Quick reference card

The numbers on the quick reference card correspond to the following installation steps.

- 1. Remove the lens cap.
- 2. Insert the HDMI cable into the HD port on the back of the camera and plug the opposite end into the port marked with the HD in 1 symbol on the back of the codec.
- 3. Insert the power adapter cable into the power port on the back of the camera and plug the power adapter into a power outlet.

Optionally you can install the glare visor, using the notches on the lens barrel to guide the visor into its correct position. Only use the visor if it is needed to improve the image in your environment.

Caution: Do not attempt to pick up the camera by the glare visor as it may pull loose, subjecting the camera to damage or destruction from a fall.