LifeSize® Icon 600™
Video System Guide

LifeSize Icon Video Systems

This guide explains how to use and configure LifeSize Icon video systems. For installation instructions, refer to the *LifeSize Icon 600 Installation Guide*.

Deploying Your LifeSize Icon Video System	Describes setup for your system after installation, such as configuring firewalls and passwords. Refer to the online help for details about configuration preferences.
Using Your LifeSize Icon Video System	Describes how to place and manage calls; start a presentation; and create a recording.
Preferences	Lists configuration preferences and their default values.
Maintaining and Troubleshooting	Describes how to upgrade, restore default settings, and reboot your video system. This section also describes symptoms, possible causes, and potential solutions to issues you might encounter with your video system.
LifeSize Icon Video System API	Provides an overview of using shell commands to control your video system.

Extend the capabilities of your LifeSize system by integrating these LifeSize products:

LifeSize Bridge	Enables multiway video conferences. When LifeSize Bridge is integrated with your video system, you can access scheduled and on demand calls hosted by the bridge directly from your video system.
LifeSize UVC Video Center	Allows video recording and publishing when integrated with your LifeSize video system. Viewers access these videos from the LifeSize Video Center server through a browser.
LifeSize UVC Manager	Enables IP management of video systems and infrastructure devices. Administrators use LifeSize UVC Manager to maintain licenses, schedule calls, and generate reports in a secure environment. With your video system managed by LifeSize UVC Manager, calls scheduled on LifeSize UVC Manager appear in your video system's schedule.
LifeSize UVC Transit	Firewall and NAT traversal solution that enables video calls within and across enterprises and organizations.
LifeSize UVC Access	Standalone H.323 gatekeeper that provides address translation, network access control, bandwidth management, and routing management for H.323 calls to gateways, video systems, and MCUs.
LifeSize UVC ClearSea	Client and server solution for desktop and mobile video collaboration. Users can connect from their desktops or mobile devices to H.323 or SIP devices, including video systems, MCUs, and gateways.
LifeSize UVC Multipoint	Flexible capacity MCU that allocates port resources according to the video system's capability, allowing direct access to calls hosted by the MCU.

To access the full set of features available with your LifeSize Icon video system, your environment must include LifeSize UVC Platform with the UVC suite of applications and LifeSize Bridge. Refer to the documentation that accompanies these products for detailed configuration information.

Related information is available from lifesize.com/support.

Section 1: Deploying Your LifeSize Icon Video System

At installation, configure your video system by opening a web browser and navigating to the system IP address that appears in ⓘ on the main screen of the video system's display.

> NOTE   Read more about configuration preferences in the online help available when you access your video system from a browser.

- Manage administrator passwords. Read more at System Access and Passwords.

- Configure your video system for firewall traversal. Read more at Configuring Your Firewall.

- Set up video systems to discover an available provisioning server and to configure themselves with settings that are specified on the server. Read more at Enabling Auto Provisioning.

- Set the location and time zone.

- Define the system name.

- Select the language for onscreen text. You can also select ⚙ > 💬 to select a language from your video system's display.

- If the day, date, and time are not fully shown in the upper right corner of your video system's display, select ⚙ > ▭ to adjust the safe area.

- By default, DHCP is enabled on LifeSize systems. If you disable DHCP, you must specify the system's IP address, subnet mask, and default gateway. Refer to *LifeSize Icon 600 Installation Guide* for more information.

- If you are using H.323 gatekeepers in your environment and want to place calls using a name or extension with the H.323 protocol, configure your LifeSize system to use H.323.

- If you are using Session Initiation Protocol (SIP) servers, configure your LifeSize system to use SIP.

- Configure call, audio, and video preferences.

- Integrate your LifeSize video system with LifeSize Bridge, LifeSize UVC Manager, LifeSize UVC Video Center, or LifeSize UVC Transit. Read more at Configuring Integrations.

System Access and Passwords

Remote control	Select ⚙ > 🔒 and enter the passcode (by default, 1234) to access a limited set of administrator functions from the video system's display: 📟 Reset network settings. 📟 Reset all settings. 📟 Revert to the alternate software version and reset all settings to their default values.
Browser	Open a web browser and enter the IP address of the LifeSize system. Log in with administrator credentials The default username and password are *admin*. The IP address of the system appears in 🛈 on the main screen of the video system's display. By default, remote management of a LifeSize video system over HTTP is enabled at **Preferences > Security > Enable HTTP and JSON Access**. CAUTION: Disabling HTTP logs you out and prevents you from logging back in to the system. Read more at LifeSize Icon Video System API.
SSH	Log in with administrator credentials in an SSH session and enter commands to manage your LifeSize system remotely. The default username and password are *admin*. By default, remote management over SSH is enabled at **Preferences > Security > Enable SSH Access**. CAUTION: Disabling SSH prevents you from managing the system remotely over SSH.
LifeSize UVC Manager	With LifeSize UVC Manager, administrators can manage your LifeSize video system and other video systems across the enterprise.

Access your video system from a web browser and navigate to **Preferences > Passwords** to manage passwords:

User	Access	Username	Default Password
Administrator	Browser, SSH	*admin*	*admin*
	Remote control through the video system's display	none	*1234*
Support	Browser, SSH	*support*	*support*

Passwords can be up to 16 characters in length and contain any combination of the numbers 0-9, the letters a-z and A-Z, and the symbols * (star) and # (pound). The passcode must be one to 32 characters in length and contain any combination of the numerals 0-9.

You cannot change the username.

Configuring Integrations

You can integrate your LifeSize Icon video system with the following LifeSize applications:

- LifeSize Bridge
- LifeSize UVC Manager
- LifeSize UVC Video Center
- LifeSize UVC Multipoint

Available options depend on the applications configured in your environment:

Option	Description	Configuration
Schedule ▭	Appears when LifeSize UVC Manager manages your video system.	Manage your video system in LifeSize UVC Manager.
Directory ▬	Entries appear when your video system is integrated with a directory server or when LifeSize UVC Manager manages your system.	Configure the directory server integration in **Preferences > Directory**. Manage your video system in LifeSize UVC Manager.
Meetings ♟	Appears when your video system is integrated with LifeSize Bridge or LifeSize UVC Multipoint, or is managed by LifeSize UVC Manager.	Configure LifeSize Bridge integration in **Preferences > MCUs > Enable MCU Integration**. Manage your video system in LifeSize UVC Manager.
Record ◉	Appears when you configure your video system to record to a LifeSize UVC Video Center.	Configure LifeSize UVC Video Center integration in **Preferences > Record and Stream**.

Learn more about configuration in the online help available when you access your video system from a browser. Refer also to the technical documentation for LifeSize UVC Manager.

Configuring Your Firewall

This section explains how to configure your LifeSize video systems for firewall traversal, assuming you are not using firewall traversal products such as LifeSize UVC Transit. If you are using LifeSize UVC Transit, refer to the *LifeSize UVC Transit Deployment Guide*.

Placement Behind a Firewall

LifeSize recommends that you place your system behind a firewall. Use one of the following options:

DMZ with public IP address	Placing your video systems in the DMZ allows you to assign public IP addresses. This configuration makes it easier for your system to connect with public video systems on the Internet.
Private LAN with NAT	Placing your video systems in the private LAN with Network Address Translation (NAT) obscures their private IP addresses, but makes calls with systems outside of your network more complicated.

Firewall Settings for Ports

At a minimum, block external or inbound access to the following ports:

- 22 (SSH)
- 80 (HTTP)
- 443 (HTTPS)
- 554 (RTSP)

LifeSize recommends that these ports remain open for internal administrator access. Ensure that you change the default administrator password to be secure. Change the administrator password in **Preferences > Passwords**.

You can disable SSH and web access on the system in **Preferences > Security**.

Call Setup and Media Ports

To place calls to other systems through the firewall, you must configure your firewall to allow incoming and outgoing traffic to the system through the following:

UDP port 1719 TCP port 1720	Gatekeeper registration. H.323 call negotiation.
UDP port 5060	SIP call negotiation.
TCP port 5060	SIP call negotiation if TCP signaling is enabled for SIP calls.
TCP port 5061	TLS signaling in SIP calls if TLS signaling is enabled. NOTE: TLS is the only transport that is supported for encrypted calls.
Required TCP and UDP ports	Range specified in **Preferences > Network > Reserved Ports**.

Restricting Reserved Ports

To place calls to other devices through a firewall, you must configure your firewall to allow incoming and outgoing traffic to the LifeSize system through the reserved ports. Users placing calls through a firewall to systems with public IP addresses may experience one-way audio or video if the firewall is not properly configured to allow two-way audio and video traffic.

By default, LifeSize systems communicate through TCP and UDP ports in the range 60000 - 64999 for video, voice, presentations, and camera control. LifeSize systems use a subset of these ports during a call.

NOTE   The minimum number of required ports is 100.

To minimize the number of UDP and TCP ports that are available for communication, restrict the range by changing values in **Preferences > Network > Reserved Ports**. LifeSize recommends that the range you choose, if other than a subset of the default range, begins with a port number greater than 49151. The range must start with an even number and end with an odd number to include an even number of total ports. For a range that starts at 62000, set the lower end to 62000 and the upper end to 62099 to allocate a range of 100 ports, the minimum.

Using LifeSize Systems in a Private LAN with NAT

If you choose to place your video systems in a private LAN, you must use NAT to communicate with outside systems. This may include enabling static NAT on your LifeSize system.

On your firewall, whether standalone or built into your router, you must complete one of the following tasks:

- Use one-to-one NAT and open the Call Setup and Media Ports over that connection bidirectionally with an access list.

- Forward the Call Setup and Media Ports to your LifeSize system.

Refer to Restricting Reserved Ports and your firewall vendor's documentation for more information.

Enabling Static NAT

NAT enables communication between devices on your LAN that have private IP addresses and devices that are accessed through a public IP network. Static NAT ensures that the same public IP address always maps to a system's private IP address so that data from the public network intended for the private system can be routed to the system reliably.

If you are using static NAT to associate a public IP address with the private IP address of your LifeSize system, you must configure your LifeSize system to work with your static NAT server. Navigate to **Preferences > Network** and select **Static NAT**. Enter the public IP address, hostname, or fully qualified domain name of your system in **NAT Public IP Address**.

NOTE   You cannot upgrade the system from a web browser outside a firewall when static NAT is enabled. Instead, perform the upgrade from within the firewall.

Testing your NAT Environment

If your firewall does not employ a feature set that performs H.323 or SIP NAT, you must enable NAT on your private LifeSize system.

1. Place a call from a system on the Internet to your system in the private LAN. If your private system connects within the first 2 seconds after answering, your NAT configuration is working properly. If the call does not connect after answering and disconnects after 30 to 50 seconds, the reserved port settings on your codec do not match the settings on your firewall. Ensure that the system and firewall settings for UDP/TCP ports match.

2. If you still cannot place a successful call, you may have to disable the stateful packet inspection feature on the firewall. Some firewall vendors may call this feature dynamic packet filtering. Refer to your firewall vendor's documentation for more information.

Enabling Auto Provisioning

LifeSize UVC Platform provides an *auto provisioning* service that allows a LifeSize video system to discover a *provisioning server* and to configure itself with settings that are specified on the server.

Specifying Provisioning Settings

When auto provisioning is enabled, the LifeSize UVC server functions as the provisioning server. Whenever a LifeSize video system discovers this server, it retrieves the hosted configuration settings and applies them locally.

Refer to *LifeSize UVC Platform Installation and Deployment Guide* for instructions on specifying provisioning settings.

Discovering the Provisioning Server

Use one of the following methods to enable discovery of the provisioning server:

DHCP option 157	Retrieves the IP address of the server.	Refer to *LifeSize UVC Platform Installation and Deployment Guide*.
DNS, based on local search domains	Devices use a preconfigured DNS name that represents the server side home.	Refer to *LifeSize UVC Platform Installation and Deployment Guide*.
Update the settings manually	This option overwrites any IP address for the provisioning server that might have been obtained through the DHCP or DNS options. Use this method when you possess little or no control over the DHCP and DNS servers.	Access your video system from a browser and select **Maintenance > Auto Provisioning**. Read more in the video system's online help.

Select ⚙ > ⚙ to view the Auto Provisioning status in the Communications section of the table. If auto provisioning has been enabled successfully, the IP address of the provisioning server is shown.

Ports

If no explicit ports are available, LifeSize video systems attempt to communicate through the following defaults:

- HTTP requests are sent to port 80. Failed requests fall back to port 8180.

- HTTPS requests are sent to port 443. Failed requests fall back to port 8181.

Section 2: Using Your LifeSize Icon Video System

Placing, answering, and ending a call	Select **Call** 📞 on your video system or LifeSize Phone and navigate to one of the available calling options: **Favorites** ⭐ **Recents** 📞 **Directory** ▤ **Meetings** 👥 **Dialer** ⊹ To place a call scheduled on LifeSize UVC Manager, select **Schedule** ▢ and an entry in the list. Select **Answer** to answer a call and ☟ to end a call.	Placing a Call Managing Your Video System In a Call
Initiating a presentation	Select **Presentation** 💻 on your video system or LifeSize Phone to start a presentation. If you connect a laptop to a video input on the system during a call, a presentation starts automatically.	Initiating a Presentation
Controlling a near or far end camera	To adjust the near end camera when the system is idle, select **View** 📷 on your video system or LifeSize Phone. During a call, select 📷 to adjust the near end camera. Select 📷 to adjust the far end camera.	Camera Control
Creating a recording	With LifeSize UVC Video Center configured, select ◉ on your video system or LifeSize Phone to create a recording.	Recording with LifeSize UVC Video Center

When your LifeSize video system is idle, the screen shows camera video. When the LifeSize video system is sleeping, the screen is black. An incoming call, showing a presentation, or pressing any button on the remote control activates the system. Point the remote control at the IR receiver (located on both the camera and the codec), not the screen, and tap a button to activate the system.

Additional options include:

My Info ⓘ	Shows the system name and numbers that callers use to dial into the video system.
Do Not Disturb ⊘	Select to reject incoming calls. When enabled, ⊘ appears.
Volume 🔊	Opens a volume navigation bar for you to select a volume level from 0 to 100. The level represents the volume as a percentage. Use the remote control to adjust the level. Tap ◄ or ► to adjust the level in 1% increments. Press ◄ or ► to rapidly and continuously adjust the volume.
Sleep ◑	Select to put the video system (including camera and display) to sleep. Read more at Sleep.
System ⚙	Select to show system status and information. Read more at System Options.

Sleep

Select ◑ on your video system or LifeSize Phone to put the system, camera, and display to sleep. The video system automatically sleeps under the following conditions:

• Ten minutes elapse without user interaction.

• A voice call connects.

Tap any key on the remote control to wake the system. When the system wakes, one of the following options is highlighted, depending on the state of the video system:

⚙ – A system issue is present. Select ⊞ for more information about the issue.

⊘ – The do not disturb feature is enabled.

▭ – A call scheduled on LifeSize UVC Manager is available on your video system.

☎ – No other conditions are present.

Navigation and Search

Your LifeSize video system shows call entries and other system information in lists that you can navigate with the remote control.

Navigate to the top or bottom of a list	Tap ▶ to quickly navigate to the top or bottom of the list. A bar to the right of the list shows your current position and the total number of entries in the list.
Search call entries	Tap ◀ to open a search box to locate call entries. As you select values, the list is filtered to match any word in an entry's name that starts with the filter string. Search box options include: • Tap ◀ to delete a value in the search box. • Select the # symbol to represent any numeral. • Select the ⎵ symbol to insert a space between search entries, allowing you to use multiple words in your filter.

NOTE When you select Russian for the language of the video system's display, the search uses the Cyrillic alphabet. Select **abc** to show the Latin alphabet.

Placing a Call

Place a call using one of the following methods.

Schedule ☐	Select ☐ to show calls scheduled on LifeSize UVC Manager for your video system. Select an entry in the list to dial the number.	Joining a Call From the Video System's Schedule
Favorites ★	Select ☎ **>** ★ on your video system or LifeSize Phone to show your Favorites. Select an entry in the list to dial the number. You can also delete an entry or all entries in Favorites from this view.	Placing a Call From Favorites
Recents ☎	Select ☎ **>** ☎ to show recent calls. Select an entry in the list to dial the number or add the number to your favorites. You can also delete an entry or all entries in Recents from this view. NOTE: Recents is limited to 50 entries.	Placing a Call From Recents
Directory ▦	Select ☎ **>** ▦ on your video system or LifeSize Phone to show entries in your company directory (or from LifeSize UVC Manager, if LifeSize UVC Manager manages your system). Select an entry in the list to dial the number or add the number to your Favorites.	Placing a Call From the Directory
Meetings ♔	Select ☎ **>** ♔ to show available calls scheduled on LifeSize Bridge (or on LifeSize UVC Manager). Select an entry in the list to dial the number.	Joining a Meeting
Dialer ◀▷	Select ☎ **>** ◀▷ on your video system (or ☎ **>** ▦ on LifeSize Phone) to enter calling information manually. Specify alphanumeric characters, call bandwidth, and protocol.	Placing a Call Manually

When you select an entry in Favorites, Recents, or Directory, calling options can include:

Dial as Video **Dial as Voice**	Available when the original call was a video call.
Dial Now	Available when the original call was a voice call. To initiate a video call through your system, select **Advanced Dialing** ◀▷, navigate to advanced dialing options, and select **video**.
Advanced Dialing	Opens the dialer for you to specify alphanumeric characters, call bandwidth, and protocol.

Available calling options also depend on the applications configured in your environment:

- **Schedule** ☐ appears only when LifeSize UVC Manager manages your video system.

- Entries appear in **Directory** ▦ only when your video system is integrated with a directory server or managed by LifeSize UVC Manager.

- **Meetings** ♔ appears only when your video system is integrated with LifeSize Bridge or LifeSize UVC Multipoint, or is managed by LifeSize UVC Manager.

A video icon 🖵 represents a video call in progress. A voice icon ☎ represents a voice call. Select ⬇ to end the call.

Joining a Call From the Video System's Schedule

Select ☐ to show upcoming calls that are scheduled for your video system by LifeSize UVC Manager. Details about the call can include the start time, title, description, and participants. Calls that require a passcode show a lock icon 🔒. The schedule also shows time periods during which no calls are scheduled.

A call begins at its scheduled start time and connects the participants either automatically or after one or more of them accepts an invitation to join the call.

Placing a Call From Favorites

1. Select 📞 > ★ on your video system or LifeSize Phone to show entries in your video system's Favorites.

2. Select an entry.

3. *Optional*:

    - Select **Advanced Dialing** to open the dialer.

    - Select **Remove** or **Remove All** to manage the entries in Favorites.

4. Select **Dial as Video** (or **Dial as Voice**).

Placing a Call From Recents

1. Select 📞 > 📞 on your video system or LifeSize Phone to show recently dialed 📲, received 📲, or missed 📞 calls.

2. Select an entry.

3. *Optional*:

    - Select **Advanced Dialing** to open the dialer.

    - Select **Add to Favorites**.

    - Select **Remove** or **Remove All** to manage the entries in Recents.

4. Select **Dial as Video** (or **Dial as Voice**).

Placing a Call From the Directory

1. Select 📞 > 📇 on your video system or LifeSize Phone to show entries in your company directory.

2. Select an entry from the list.

3. *Optional*:

    - Select **Advanced Dialing** to open the dialer.

    - Select **Add to Favorites**.

4. Select **Dial as Video** (or **Dial as Voice**).

Joining a Meeting

Select 📞 > 👥 to show a list of scheduled and on demand meetings available to your video system from LifeSize Bridge, LifeSize UVC Multipoint, or LifeSize UVC Manager. Details about the meeting can include the start time, title, and description. Calls that require a passcode show a lock icon 🔒.

The status for a meeting can be:

Live	The meeting has started.
Live in <minutes>	The meeting starts within 10 minutes, at the shown time.
Ready	Ready to join. The meeting has no participants.
Active	Participants have already joined the meeting. If an active meeting is full, LifeSize Bridge does not accept new participants.
Unavailable	No resources are available.
Full	No ports are free because the conference is full.

Select an entry from the list to join the meeting. If the meeting has not yet started, a counter shows the time remaining until the meeting is live. You can join the meeting ten minutes before the start time; the bridge connects you automatically when the meeting is live.

Placing a Call Manually

1. Select 📞 > ✛ on your video system (or 📞 > ⌗ on LifeSize Phone) to enter calling information manually. Specify alphanumeric characters, call bandwidth, and protocol. As you enter each character, the corresponding touch tone is audible for the values 0-9, #, and *. A key click is audible for any other character.

2. Navigate to advanced options to enter alphabetic characters or select a call bandwidth or protocol.

   Select the shift character ⇧ to enter an uppercase letter. Select the shift character twice for caps lock.

   The list of available bandwidth values adjusts to the maximum bandwidth preference set by your administrator. Similarly, only enabled call protocols appear.

3. To place the call, select **Call**.

Managing Your Video System In a Call

Hide onscreen text	Select ▲ **Hide**.
Mute audio	Press 🎤 on the remote control or LifeSize Phone to mute audio to the far end. When enabled, 🎤 appears. If audio at the far end is muted, 🎤 appears. You can also mute audio to the far end by pressing 🎤 on your audio device.
Mute video	Select ⚙ **>** 📷 to mute video to the far end. When enabled, 📷 appears.
Show picture in picture	Select ⚙ **>** ⬜ to show picture in picture video when the video system is in a call. When enabled, ⬜ appears.
Change the presentation layout	During a call, select 🖼 and navigate to the desired layout. Read more at Initiating a Presentation.
Change the call layout	*Available in LifeSize Bridge calls only:* Select 🖼 and navigate to the desired layout. If your video system is integrated with a LifeSize Bridge are a presentation is running, available layouts for the call appear. If your video system is a participant in a call hosted by LifeSize Bridge or LifeSize UVC Multipoint but is not integrated with the bridge, navigate to the desired layout by selecting **Next** or **Previous**. NOTE: 🖼 is not available if the call has only one available layout.
Move the cameras	During a call, select 📷 on your video system or LifeSize Phone to adjust the near end camera. Select 📷 to adjust the far end camera. Read more at Camera Control.
Swap camera input	If two cameras are connected, select 📷 or 📷 to swap the primary camera input. By default, the HD camera is the primary input, camera 1, and the DVI camera is camera 2. Selecting 📷 adjusts the current camera. NOTE: Presentations are not available with two cameras connected to the video system.
Use the keypad	Select ⌗ to show a keypad to enter tones if required by the far end.
Show caller information	Select ⚙ **>** 📷 to show details about the caller, including the system name and number. Call statistics also appear and include the call type and protocol, connection time, and direction of the call.
Show recording information	Select ⚙ **>** 🔴 on your video system (or simply 🔴 on LifeSize Phone) while recording with LifeSize UVC Video Center to show details about the recording, including video and audio statistics.
End the call	Select 📞 on your video system or LifeSize Phone.

By default, you must manually answer or ignore incoming calls. Administrators can set the **Auto Answer** and **Auto Answer Mute** preferences.

Initiating a Presentation

Select **Presentation** 🔖 on your video system or LifeSize Phone to start a presentation before or during a call. If you connect a laptop to a video input on the system, a presentation starts automatically, and 🔖 appears. To stop the presentation, select 🔖 . Stopping a presentation ends any active recording.

If your video system is already receiving a presentation, you cannot connect a laptop and start your own presentation without first stopping the current presentation to all callers. Further, you cannot take control of a remote presentation.

The transmitted resolution during presentation mode defaults to 1920 x 1080p30. If recording is enabled during a presentation, the resolution defaults to 1920 x 1080p15.

Select from the following layout options during a call:

🔖👤 – Presentation input and video from the far end appear side by side.

🔖▦ – Presentation input and video from multiple callers appear. This layout is available with tightly integrated bridge calls from **Meetings** 👥. For bridges that are not tightly integrated, select **<** or **>** to choose a layout.

🔖 – Presentation input appears.

👤 – Video from the far end appears.

If the video call does not support presentations simultaneous with video, the video system automatically swaps the primary and presentation inputs to send the presentation. The near end shows both the camera and presentation input, and the far end shows only the presentation.

Camera Control

Your LifeSize video system allows you to adjust a camera during and before a call. To prevent far end users from adjusting the near end camera, your administrator can disable **Far Control of Near Camera** (enabled by default) in **Preferences > Video**. To prevent far end users from using and configuring camera presets for the near end camera, disable **Far Control of Near Camera** or **Far Set of Camera Presets**.

Pan, Tilt, and Zoom

1. Use LifeSize Phone or your LifeSize Icon video system to select the camera that you want to control:

   📷 – Adjust the near end camera anytime the system is not in a call.

   📷 – Adjust the near end camera during a call. The near end video appears in the PIP window.

   📷 – Adjust the far end camera.

2. To pan and tilt, select 📷 to activate the feature.

   Tap ▶ and ◀ to pan, and tap ▲ and ▼ to tilt. Select **Pan/Tilt** again to exit.

3. To zoom, select ⊕ to activate the feature.

    Tap ▲ and ▼ to zoom in and out. Select ⊕ again to exit.

    NOTE   With the zoom feature active, tap ◀ to access **Pan/Tilt**.

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4. To end your camera control session, select 👤.

Camera Presets

A camera preset is a predefined camera position that is associated with a numeral. Camera presets enable you to quickly change the position of a camera during a call.

1. Use LifeSize Phone or your LifeSize Icon video system to select the camera you want to control: 👤, 👤, or 👤 .

2. Navigate to the presets and select a numeral. A preset might have two available options:

    -   If a preset shows **Select to move**, select the preset to adjust the camera position as defined by the preset.

    -   If a preset shows **Hold to set**, select the preset and hold until **Preset saved** appears. This action associates the camera's position with the numeral.

Recording with LifeSize UVC Video Center

With LifeSize UVC Video Center configured in your environment, you can initiate a recording at any time. Select ⚙ > 🔴 on your LifeSize Icon video system (or simply 🔴 on LifeSize Phone) during a recording to show video and audio statistics.

Recording During a Call

Select 🔴 on your video system or LifeSize Phone to start recording during a call. If prompted, enter a valid recording key. If successful, the recording begins and the recording icon appears.

By default, all callers are recorded. To record only the near or far video, access your video system from a web browser, navigate to **Preferences > Record and Stream**, and change the default recording layout.

To stop a recording, end the call or presentation, or select 🔴.

Recording Outside a Call

1. Select ⊚ on your video system or LifeSize Phone.

2. Select from one of the available recording options to start the recording session:

    ⊚ – Record input from the camera.

    ⊚ – Record input from the presentation.

    ⊚ – Record two streams: input from the presentation and camera.

    ⊚ – Record input from both cameras. Select 🎥 or 🎥 to select the camera that provides the primary input. This option is available only with two connected cameras.

3. Select ⊙ to start recording. If prompted, enter a valid recording key. If successful, the recording begins and the recording icon appears.

4. *Optional:* If you are recording input from the camera or from a presentation, select ⬘ to toggle the input: presentation or camera. If you are recording two streams, select ⬘ to toggle between recording two streams (presentation and camera) and a single stream (camera).

5. To stop recording, select 🔴.

> NOTE   If you placed a call or started a presentation after the recording started, you can stop the recording and the session by ending the call or presentation.

6. To end the recording session, select the appropriate option: ⊚, ⊚, ⊚, or ⊚, depending on your selection in step 2.

Managing Calls Hosted by LifeSize Bridge

When LifeSize Bridge is integrated with your LifeSize video system, scheduled and on demand conferences available to your video system appear in ☏ **>** ⚇. When you join a call from **Meetings** ⚇, all of the LifeSize Bridge layouts that are available for the current call scenario appear. (Calls hosted on an integrated bridge provide additional layouts as necessary.) If the current call scenario supports more than one layout, ▦ appears. To change the call layout, select ▦ and navigate to the desired layout. For bridges that are not integrated, select **<** or **>** to choose a layout.

When you join a call that is hosted by a LifeSize Bridge that is not integrated with your LifeSize video system, select ⚇ to access options in LifeSize Bridge:

1. Tap ▼ and ◀, and then select **Menu** to show bridge options:

Self View	The view from a participant's camera appears on their screen.
Speaker Order	When enabled, the most recent speaker appears in the prominent window.
Status Indicators	When enabled, status icons appear.
Mute Video	When enabled, mutes video.
Announcements	Voice prompts and system sounds indicate the current system status or action required.
Camera Control Navigation **Touch Tone Navigation**	Toggles far end camera control and DTMF tones.
Language	The language of the onscreen text and voice prompts for LifeSize Bridge.
Text Inset	How far the text is offset from the sides of the screen.

2. Navigate the menu by selecting onscreen touch tones:

   2 – Up
   8 – Down
   6 – Select

   -or-

   Use the arrows on the navigate button.

If the LifeSize Bridge Virtual Operator answers the call, you are prompted to select a conference to join.

Dual Displays

When you connect a second display, access your video system from a web browser, navigate to **Preferences > Appearance > Physical Display Arrangement**, and select a dual display layout option.

NOTE   Connecting a second display requires a license key. Contact your LifeSize Representative for details.

Option	Display 1	Display 1
Default	Cameras, callers, local presentation, in-call presentation, composite callers + in-call presentation	Mirror, in-call presentation
Adjacent	Cameras, callers, local presentation	In-call presentation only
Adjacent (Never Blank)	Similar to Adjacent, but mirrors local view or presentation when not in a call	Local view when in a video call without a presentation
Apart	Cameras, callers, local presentation	Mirror, in-call presentation
Mirrored	Cameras, callers, local presentation, in-call presentation, composite callers + in-call presentation	Cameras, callers, local presentation, in-call presentation, composite callers + in-call presentation

LifeSize video system automatically configures the second display according to your selection and the state of the video system.

System Options

Select ⚙ to access system options:

🔋	Shows the status of the system, including communications, audio, system inputs and outputs, DHCP, auto provisioning, temperature sensors, and fan speeds.
⚙	Shows detailed system information, including communications, audio, network, system inputs and outputs, DHCP, auto provisioning, and cameras.
▢	Allows you to configure the safe area of your display.
📋	Shows the system's IP address for your administrator to configure the system. If the system is not configured or inoperable, serial port information appears.
💬	Select the language for onscreen text.
🔑	Shows licenses applied to the system.
⏻	After confirmation, reboots the system.
🔒	Provides access to administrative tasks: – Resets network settings to their default values: enables DHCP, resets the VLAN tag to 0, and enables HTTP and SSH. – Resets all settings to their default values and reboots the system. – Reverts the system to an alternate software version, resetting all preferences to their default values, and then reboots the system. This area requires a numeric passcode. Select 🔒 to log out.

Section 3: Preferences

To configure preferences, access your system from a browser by entering the system's IP address and logging in. The default username and password are *admin*.

Preferences for the following categories are in **Preferences**:

Appearance	Diagnostics	Network	SIP Registrar 2
Audio	Directory	Passwords	System
Calls	H.323	Record and Stream	LifeSize UVC Transit
Date and Time	MCUs	Security	USB
		SIP Registrar 1	Video

Preferences for Camera Diagnostics are in **Diagnostics**.

Appearance
Preferences > Appearance

Preference	Default Value
Language	English
Physical Display Arrangement	Default

Audio
Preferences > Audio

Preference	Default Value
Video Call Output	HD Out
Voice Call Output	Phone
Analog Mic Gain	Line Level

Calls
Preferences > Calls

Preference	Default Value
Auto Answer	Disabled
Auto Answer Mute	Enabled
Auto Bandwidth	Enabled
Maximum Call Bandwidth	6000 kb/s
Maximum Call Transmit Bandwidth	6000 kb/s
Default Call Bandwidth	1152 kb/s
Presentations	Enabled

Date and Time
Preferences > Date and Time

Preference	Default Value
System Time	Greenwich Mean Time (GMT) value
System Date	GMT value
Time Zone	GMT
Clock Format	12-Hour
NTP Server Hostname	No default

Diagnostics
Preferences > Diagnostics

Preference	Default Value
Syslog Server	No default
Audio	Debug
Communications	Debug
Database	Information
License Manager	Information
System Administration	Information
System Information	Information
System Status	Information
Timer	Information
User Interface	Information
Video Hardware	Debug
Video In	Information
Video Out	Information

Directory
Preferences > Directory

Preference	Default Value
LDAP	
Hostname	No default
Username	No default
Password	No default
Base	No default
Port	No default

Preference	Default Value
Encryption	None

H.323
Preferences > H.323

Preference	Default Value
General	
Use H.323	Enabled
Gatekeeper	
Name	Number randomly generated by the system
Extension	Same value as **Name**
Gatekeeper Mode	Off
Available Preferences with Gatekeeper Mode: *Auto*	
Gatekeeper ID	No default
Gatekeeper Authentication	Disabled
Gatekeeper Username	No default
Gatekeeper Password	No default
Available Preferences with Gatekeeper Mode: *Manual* or *Manual H.460*	
Gatekeeper Address	No default
Gatekeeper Port	1719
Gatekeeper Authentication	Disabled
Gatekeeper Username	No default
Gatekeeper Password	No default

MCUs
Preferences > MCUs

Preference	Default Value
Status	Disconnected
Enable MCU Integration	Disabled
IP Address	No default
Username	No default
Password	No default

Network
Preferences > Network

Preference	Default Value
Ethernet	
IP Address	No default
Subnet Mask	No default
Use DHCP	Enabled
Auto negotiate speed and duplex settings	Enabled
Speed	No default
Duplex	No default
VLAN Tag	0
Gateway	
Default Gateway	No default
DNS	
DNS Server	8.8.8.8
DNS Domain	No default
Search Domains	No default
Reserved Ports	
TCP and UDP Lowest Port Value	60000
TCP and UDP Highest Port Value	64999
Network QoS	
Network QoS	None
Video	
Video Maximum Transmission Unit (MTU)	1440
Static NAT	
Static NAT	Disabled
NAT Public IP Address	No default

Passwords
Preferences > Passwords

Preference	Default Value
Administrator Password	admin
Video System Passcode	1234
Support Password	support

Record and Stream
Preferences > Record and Stream

Preference	Default Value
Recorder	Disabled
Recorder Hostname	No default
Recorder Port	443
Recording Key	No default
Default Recording Layout	All Callers

Security
Preferences > Security

Preference	Default Value
Enable SSH Access	Enabled
Enable Remote Management Over HTTP	Enabled
SIP Security	Off
H.323 Security	Off

SIP Registrar 1
Preferences > SIP Registrar 1

Preference	Default Value
General	
Use SIP	Enabled
Identification	
SIP Username	LifeSize
Authorization Username	No default
Authorization Password	No default
Server	
SIP Server Type	Auto
SIP Registrar	Disabled
Registrar Hostname	No default
SIP Registration	Direct
SIP Proxy	Disabled
Proxy Hostname	No default
SIP Signaling	Auto

SIP Registrar 2
Preferences > SIP Registrar 2

Preference	Default Value
General	
Use SIP	Disabled
Identification	
SIP Username	No default
Authorization Username	No default
Authorization Password	No default
Server	
SIP Server Type	Auto
SIP Registrar	Disabled
Registrar Hostname	No default
SIP Registration	Direct
SIP Proxy	Disabled
Proxy Hostname	No default
SIP Signaling	Auto

System
Preferences > System

Preference	Default Value
System Name	Conference Room

LifeSize UVC Transit
Preferences > LifeSize UVC Transit

Preference	Default Value
UVC Transit	Disabled
UVC Transit Hostname	No default
UVC Transit Username	No default
UVC Transit Password	No default
Enable for SIP	Disabled
SIP Username	No default
Enable H.323 Tunneling	Disabled
H.323 Extension	Same value as **Preferences > H.323 > Name**

USB
Preferences > USB

Preference	Default Value
USB 1	
Shell	None
Speed	115200 bps
Flow Control	No flow control
USB 2	
Shell	None
Speed	115200 bps
Flow Control	No flow control

Video
Preferences > Video

Preference	Default Value
Video Control	
Far Control of Near Camera	Enabled
Far Set of Camera Presets	Disabled
Far Move to Camera Presets	Enabled
Video Quality	
Presentation Video Bandwidth	20%
Adaptive Motion Control	Enabled
HD Display	
HD Display Resolution	Highest resolution supported by the display
DVI Display	
DVI Display Resolution	No default
Consumer Electronics Control	
Enable CEC	Disabled
Enable Sleep	Disabled

Camera Diagnostics
Diagnostics > Camera

Preference	Default Value
Anti-Flicker	Auto
Auto Exposure Method	Full-frame
Brightness	0
Auto Focus	Enabled
White Balance	Auto
IR Receiver	Enabled

Auto Provisioning
Maintenance > Auto Provisioning

Preference	Default Value
Status	
Auto Provisioning	No default
Auto Provisioning Server Address	No default
General	
Auto Provisioning Server	No default

Section 4: Maintaining and Troubleshooting

This section describes how to maintain your system and use diagnostic tools for troubleshooting.

System Maintenance

Log in to your video system from a web browser to perform system maintenance.

Save	**Maintenance > System Reset > System Save**	Saving a System Configuration
Restore	**Maintenance > System Reset > System Restore**	Restoring a System Configuration
Reset	**Maintenance > System Reset > System Reset**	Resetting the System
Revert	**Maintenance > System Reset > System Revert**	Reverting the System to the Alternate Software Version
Update license keys	**Maintenance > License Keys**	Updating License Keys
Upgrade	**Maintenance > System Upgrade**	Upgrading Your System Software
Reboot	**Diagnostics > System Reboot**	Rebooting the System

To shut down your video system, select **Diagnostics > System Reboot > System Shutdown** .

Saving a System Configuration

1. Select **Maintenance > System Reset > System Save** .

2. Choose a location to save the configuration file and click **Save**.

Restoring a System Configuration

1. Ensure that a current, saved configuration file exists before performing a restore.

> NOTE   Configuration preferences and options vary across software releases. Restoring a system configuration by using a file saved from a different software release can produce unexpected results. Only restore a configuration that was saved from the same software release.

2. Hang up all calls connected to the system. If calls are connected when you perform a restore, you are prompted to continue or cancel the restore. If you continue, the system restore process terminates the calls.

3. Select **Maintenance > System Reset > System Restore** .

   You must have a current system configuration saved prior to executing the system restore function or you will be unable to return to the previous state.

4. Choose a location to save the configuration file and click **Save**.

Resetting the System

1. Select **Maintenance > System Reset > System Reset** .

2. *Optional*: Enter the reason for the reset.

3. Click **Yes** to confirm setting the system to its default state.

   The system automatically reboots and the administrator password is reset to the default value (*admin*).

   NOTE   You can also reset the system by pressing the red reset button on the back of the codec for a length of time between 10 and 15 seconds.

Reverting the System to the Alternate Software Version

1. Select **Maintenance > System Reset > System Revert** .

2. *Optional*: Enter the reason for reverting the system.

3. *Optional*: **Select Reset to defaults** to reset the system to its default values.

4. Click **Yes**.

   The system automatically reboots.

   NOTE   You can also revert the system by pressing the red reset button on the back of the codec for a length of time between 15 and 20 seconds.

Rebooting the System

The system reboots when you complete any of the following tasks:

Manually reboot the system.	**Diagnostics > System Reboot**
Reset the system to its default state.	**Maintenance > System Reset > System Reset**
Revert the system to the previous state.	**Maintenance > System Reset > System Revert**
Restore the system to a saved state.	**Maintenance > System Reset > System Restore**
Change the **VLAN Tag** preference.	**Preferences > Network > VLAN Tag**
Upgrade the system software.	**Maintenance > System Upgrade**

   NOTE   You can also reboot the system by pressing the red reset button on the back of the codec for a length of time between 5 and 10 seconds.

Updating License Keys

You must have current license keys to enable the following:

- software upgrades
- dual display
- 1080p video resolution

NOTE   The expiration date for a license key appears in **Maintenance > License Keys**. Contact your LifeSize Partner for details about license keys.

If your system has HTTP access through port 80 to the LifeSize license key server, update your license keys from a browser. Otherwise, refer to Installing a License Key Manually.

1. Navigate to **Maintenance > License Keys**.

2. Click **Update**.

    If the update is successful, **Success** appears along with the current license keys and their expiration dates.

    Update failures might be caused by one of the following conditions:

    -   A current maintenance agreement for the device does not exist. Contact your LifeSize Partner to renew your maintenance agreement.

    -   The system failed to connect. The server might be down or your system might not have HTTP access. Contact LifeSize Technical Services if this condition persists and you have HTTP access, or install a key manually following the steps in Installing a License Key Manually.

    -   A license key exists, but it is in valid. Contact LifeSize Technical Services.

Installing a License Key Manually

1. From lifesize.com/support click **Download Software**.

2. Log in to your support account. If this is your first visit, create the account.

3. Enter the serial number of your LifeSize video system (located in **Diagnostics > System Information**) and follow the instructions to obtain a license key. You might have multiple keys.

4. Download a license key.

5. Access your video system from a web browser and navigate to **Maintenance > License Keys**.

6. Click **Add** and paste the license key that you obtained in step 3 in **Enter License Key**.

7. Click **Add**.

8. Repeat steps 3 through 7 for each license key listed for your video system.

Upgrading Your System Software

Before you upgrade your system software, ensure that the system meets the following prerequisites:

- A current license key for upgrading exists on the system. The expiration date for the maintenance license appears in **Maintenance > License Keys**. Read more at Updating License Keys.

  An upgrade fails if a current license key does not exist on the system or has expired. Contact your LifeSize Partner to renew your maintenance agreement.

- All cameras that you intend to use with the video system are properly connected to the codec. Cameras not connected to a LifeSize system before an upgrade may not function properly after an upgrade.

- Terminate all calls prior to upgrading.

LifeSize recommends you save your system configuration before upgrading. Read more at Saving a System Configuration.

1. From lifesize.com/support click **Download Software**.

2. Log in to your support account. If this is your first visit, create the account.

3. Enter your serial number (located in **Diagnostics > System Information**). Follow the instructions to find the software version you want for your product, and download it to a local directory on your computer.

4. Navigate to **Maintenance > System Upgrade**.

5. Browse for the upgrade file you downloaded in step 3.

   The system validates the file. To re-validate the same file or if you manually entered a path to a file, click **Validate** for the verification to occur.

6. If the validation succeeds and your upgrade requires you to reset the system to the original default settings, select **Reset to Default State**.

7. Click **Upgrade Now**.

   The upgrade can take several minutes; do not disrupt the upgrade process. During an upgrade, a status screen appears. Keep the browser window open to monitor the upgrade process. If you close the window before the file upload completes, the upload is cancelled. If you close the window after the file upload completes, the upgrade process continues, but you are no longer able to monitor the upgrade process.

   A system upgrade status message appears when the upgrade is complete and the system automatically reboots.

   If the software you are attempting to install is an older version than what is currently installed, **Downgrade Now** appears.

8. Your video system is ready to use. If you selected **Reset to Default State** in step 6, you must first reconfigure your system.

9. To access all options from a browser after an upgrade (or downgrade), refresh the browser before logging in again.

Troubleshooting Upgrade Failures

If attempts to upgrade software fail, follow these steps:

1. Ensure you have a valid upgrade image.

2. Reboot the system.

3. Attempt the upgrade again.

4. If a second attempt fails, note the error code returned.

5. If problems persist, contact your LifeSize Partner or LifeSize Technical Services.

Upgrade Error Codes

Following are the error codes you might receive when an upgrade fails.

Code	Problem
1	An upgrade is in progress. The system supports only one upgrade at a time.
2	The image is corrupt. This typically occurs because of a bad image or errors during upload to the device.
3	The encryption signature is invalid. This typically occurs if the image is corrupt or compromised.
4	The image is missing an upgrade script. After the image has been successfully uploaded, the system runs an upgrade script for final processing. This error indicates a failure in that script.
5	The manifest is corrupt or missing.
6	The serial number is invalid.
7	The build date is invalid.
8	Image is for a different system.
9	Unable to downgrade to the image version.
10	The upgrade license expired. A current license key for upgrading the system software does not exist on the device. Contact your LifeSize Partner to renew your maintenance agreement.
11	You cannot upgrade while calls are connected.
12	A restore to defaults is required. The upgrade requires a reset. Navigate to **Maintenance > System Reset** and reset the system to its default state before proceeding with the upgrade.
13	A system error occurred.
16	Insufficient space to store the image.
17	Failed to verify the image.

Diagnostic Tools

System Information	Details about your system, including serial numbers and versions, are available in **Diagnostics > System Information**.
System Logs	Set log levels in **Preferences > Diagnostics**. LifeSize recommends using a syslog server for integrated configurations.
Diagnostic Report	Support personnel might request that you capture a diagnostic report from your system to identify the cause of a problem with your system. When you are instructed to gather information, select **Diagnostics > Diagnostic Report > Generate Diagnostic Report**.
Camera	Use the camera diagnostics to adjust camera brightness and to white balance and correct some types of flicker. Read more at Camera Issues.
Call Records	To download call history, select **Diagnostics > Call Records > Download Call Records**. Read more in the video system's online help.
System Health Indicator	The health icon that appears on the main screen is an indicator of a system issue. Read more at System Health.

Troubleshooting

The following sections describe symptoms, possible causes, and potential solutions for common problems you may encounter with your LifeSize system.

When experiencing a problem, visually inspect the unit. Ensure that the system has not been exposed to water or heat sources or was physically damaged.

Improperly connected or loose cables are common problems with hardware units. When investigating a system problem, first inspect the external controls and cable connections. Ensure that connections are correct and secure and that nothing is obstructing the cables. Contact your administrator for information about proper cabling.

System Health

From your video system's display, navigate to > to view the status of the system, temperature, and fans. When a system issue arises that might require your attention, the health icon appears on the main screen. The shading behind the icon reflects the severity of the issue:

- Yellow shading indicates a warning.
- Red shading indicates a critical issue.

System issues might include the following:

Communications	Network	**Warning**: the system is binding to the network.
		Critical: the system is disconnected or no DHCP server is present.
	H.323	**Warning**: the system is registering with the H.323 gatekeeper.
		Critical: registration failed, or the gatekeeper is unreachable.
	SIP Registrars	**Warning**: the system is registering with the SIP registrar.
		Critical: the registration failed, or the registrar is unreachable.
	LifeSize UVC Transit	**Warning**: the system failed to connect with LifeSize UVC Transit; the system is registering with the H.323 gatekeeper or SIP registrar.
		Critical: the system failed to connect with LifeSize UVC Transit; the system failed to register with the gatekeeper or registrar.
	LifeSize Bridge	**Warning:** communication with the integrated bridge is interrupted
	LifeSize Phone	**Warning:** the phone is initializing.
System I/O	Active Microphone	**Warning**: no active microphone is present.
	LifeSize Link Power	**Critical**: an error occurred with the power to LifeLink.
Thermal	Fan Speed	**Critical**: the system is overheated.
	Temperature Sensors	**Warning**: the system is above normal operating temperature.
		Critical: the system is overheated and approaching the maximum allowed operating temperature.
Processes	System Status	**Critical**: a process failed.

Adjusting Room Lighting

Ensure that the system maintains the best possible image quality by altering the lighting and background colors of your environment. If light levels are too low, you may consider adding artificial lighting. Indirect light from shaded sources or reflected light from pale walls often produces excellent results.

Avoid the following:

- Direct sunlight on the subject matter, the background, or the camera lens, which creates harsh contrasts
- Direct illumination of the subject matter and camera lens
- Colored lighting
- Harsh side lighting or strong light from above

Camera Issues

If you are unable to pan, tilt, or zoom a camera, ensure that the remote control contains two AAA batteries that are in good working condition. Verify that no objects are obstructing the sensor on the front of the camera and that the LED on the front of the camera flashes bright blue when you use the remote control to perform a task.

If the camera does not show video, ensure that the camera is connected to the LifeSize system with a camera cable to the appropriate camera input or contact your administrator.

Verify that the blue LED on the front of the camera is lit, which indicates that power is active, and reboot the system if necessary to verify that the camera turns on. If a system reboot does not resolve the problem, you might need to reapply power to the camera.

Administrators can also configure preferences for the following camera conditions:

- Anti-Flicker
- Auto Exposure
- Brightness
- White Balance

Read more about these settings in the online help available when you access the video system with a browser.

Packet Loss

Packet loss can result in noticeable video or audio performance issues and can be caused by signal degradation over the network medium, oversaturated network links, corrupted packets rejected in-transit, faulty networking hardware, and misconfigured system drivers or network applications. Refer to the technical note *Troubleshooting Packet Loss* for steps you may take to address packet loss.

Display Issues

If data does not appear on the display, ensure cables are properly connected on the display and that the display cable is connected to the HD 1 output on the back panel of the codec.

If the video image and user interface appear washed out or too bright, examine your HDTV input settings to make sure the HDTV has the appropriate resolution. Some HDTVs, particularly plasma displays, allow you to configure the native resolution of the input device from the HDTV administration interface.

Administrators only: Access the video system from a browser and navigate to **Preferences > Video** to ensure that the display resolution is correct for your display.

Problematic Sound Quality

If the far side is hearing an echo or distortion, the microphone connected to your LifeSize system may be too close to the speakers. Repositioning the microphone may solve this problem.

Muffled audio reception from the far end may be caused by highly reverberant rooms. If you are experiencing poor audio reception, add more sound absorbency to the room and speak in close proximity to the phone or microphone.

Degradation in the audio quality can also be caused by faulty microphones or dust and debris on the microphones. Do not use any kind of liquid or aerosol cleaner on LifeSize devices that include microphones. A soft, slightly damp cloth should be sufficient to clean the top surface of the units.

Power and Connectivity Issues

If a call does not successfully connect, verify that you dialed a working number and that the far end is powered on and available. Verify that the network is ready and available by navigating to ⚙ > 🔧 to view the network status.

Presentations

Administrators only: Consider disabling the presentation function in **Preferences > Calls** if your system experiences interoperability issues with third party systems that do not support presentations.

Section 5: LifeSize Icon Video System API

The LifeSize API provides a command line based entry point for automating access and control of LifeSize Icon video systems. The API supports a REST method for accessing a set of resources, or objects, through a fixed set of operations. API calls are made by sending a request to an API resource and specifying a method and arguments. A formatted response details the operation's outcome.

This section provides an introduction to the LifeSize API. Complete documentation is available at:

https://*<videoSystemIPAddress>*/docs/json/

Authentication

The same authentication policies that are enforced on a browser also apply to API calls. Log in to your LifeSize video system through an SSH connection over the network as follows:

1. Open a client, such as Cygwin or Putty, and enter the IP address of your LifeSize video system.

2. Log in to the system with administrator credentials. The default username and password are *admin*.

Command Syntax

Commands take the following form:

```
<actor> <command> <parameters>
```

Use commas to separate multiple parameters. Access help from a command prompt as follows:

`help`	Shows a brief introduction to using the API.
Press the **Tab** key.	Shows a list of actors.
`<actor> ?`	Shows commands for an actor. For example: `audio ?`
`<actor> <command> ?`	Shows help for a command. For example: `sysadmin gettimezone ?`