

# Administrator's Guide for the VSX Series

Version 8.6.2 for SCCP

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# About This Guide

The *Administrator's Guide for the VSX Series* is for administrators who need to configure, customize, manage, and troubleshoot VSX™ systems. The guide covers the VSX 3000A, VSX 5000, VSX 6000A, VSX 7000s, VSX 7000e, and VSX 8000 systems.

The following related documents for VSX systems are available at [www.polycom.com/videodocumentation](http://www.polycom.com/videodocumentation):

- *Setting Up the System*, which describes how to set up the hardware
- *Getting Started Guide for the VSX Series*, which describes how to perform video conferencing tasks
- Setup Sheets for your optional hardware
- Release Notes
- *Integrator's Reference Manual for the VSX Series*, which provides cable information and API command descriptions

For support or service, please contact your Polycom® distributor or go to Polycom Support at [www.polycom.com/support](http://www.polycom.com/support).

Polycom recommends that you record the serial number and option key of your VSX system here for future reference. The serial number for the system is printed on the unit.

System Serial Number: \_\_\_\_\_

Option Key: \_\_\_\_\_



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# Introducing the VSX Series

Your Polycom video conferencing system is a state-of-the-art visual collaboration tool. With crisp, clean video and crystal-clear sound, VSX systems provide natural video conferencing interaction through the most advanced video communications technology.

## VSX Models

This section describes the standard components that come with the VSX Series systems. For technical specifications and detailed descriptions of features available for VSX models, please refer to the product literature available at [www.polycom.com](http://www.polycom.com). Models with additional options are also available. For more information, please contact your Polycom distributor.

This guide covers instructions for the following models.

VSX set-top systems	VSX component systems	VSX desktop systems
		

## VSX 3000A Desktop Systems



The VSX 3000A systems deliver high-quality, video communication in an all-in-one appliance that includes the camera, LCD screen, speakers, and microphone. Save space in your office by using the VGA cable to connect your computer to the system's 17" high-resolution XGA display.

## VSX 5000 Set-top System



The VSX 5000 is a compact, entry-level system with an all-electronic, built-in camera.

## VSX 6000A Set-top Systems



The VSX 6000A systems are entry-level video conferencing systems for IP and SIP networks only.

## VSX 7000s Set-top Systems



The VSX 7000s systems provide cutting-edge video conferencing technology for IP and other networks. The subwoofer provides additional depth to the sound, creating a high-quality sonic space comparable to a home theater system.

## VSX 7000e Component System



The VSX 7000e is a video component system for medium-sized conferencing rooms.

## VSX 8000 Component System



The VSX 8000 system is a compact component system for custom integration.

## Setting Up Your System Hardware

This manual provides information to supplement the setup sheets provided with your system and its optional components. A printed copy of the system setup sheet is provided with each VSX system. PDF versions of the system setup sheets are available at [www.polycom.com/videodocumentation](http://www.polycom.com/videodocumentation).

## Positioning the System

Position the system so that the camera does not face toward a window or other source of bright light.

Place the camera and display together so that people at your site face the camera when they face the far site display.

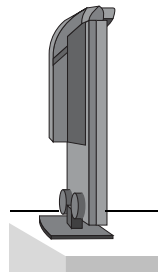


## Positioning Desktop Systems

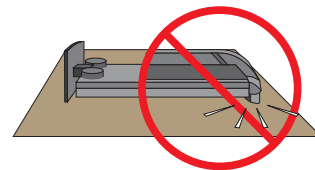
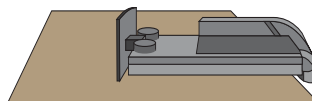
The VSX 3000A systems are personal video conferencing systems for the desktop.

### To position the system:

- Place the VSX 3000A system on your desktop or on a table in a small conference room, leaving enough space so that you can connect the cables easily.



If you need to place the system face-down to connect the cables, make sure that the camera does not touch the work surface. The weight of the system can damage the camera mount.

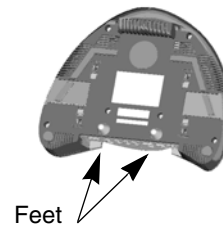


## Positioning Set-top Systems

The VSX 5000, VSX 6000A, and VSX 7000s systems are designed to be placed on top of a monitor. You can order a shelf that can be mounted on a wall or placed on top of a flat-panel monitor.

### To position the system:

1. The hardware kit you received with the system includes a pair of self-adhesive feet. If the monitor's chassis slopes back sharply, install the feet on the bottom of the system to stabilize it.



2. Place the system in the desired location, with the rounded front portion hanging over the front of the monitor or shelf. Leave enough space to work, so that you can connect the cables easily.



3. Remove the packaging collar from around the VSX system camera.

## Positioning Component Systems

The VSX 7000e and VSX 8000 systems are designed to be placed on a tabletop or in an equipment rack.

If you received a network interface module with your system, you may find it convenient to install it before positioning the system. Refer to the installation sheet that you received with the network interface module.

**To position the system:**

1. Install the mounting brackets on the system if you need to mount it in an equipment rack, or install the self-adhesive feet if you will place the system on a table or shelf.



2. Place the system in the desired location. Leave enough space to work, so that you can connect the cables easily.
3. Place the camera on or near the monitor displaying the far site so that people look towards the camera during calls.

## Powering On

Connect power and power on the system after you have connected the rest of the equipment that you will use with it.



Do not use any power supply other than the one supplied with your VSX system. Using the wrong power supply will void the warranty and may damage your system.

## VSX 3000A Desktop System

The VSX 3000A systems have three power switches.

**To power on the VSX 3000A:**

1. Press the power switch near the connectors on the back of the system.
2. Press the power switch on the lower back corner of the monitor.
3. Press the power button on the front of the monitor.

## Powering On Set-top and Component Systems

For set-top systems, the power switch is on the back panel.

For component systems, the power switch is on the front. The indicator light in the switch provides this information:

- Light is green — system is powered on
- Light changes to from green to red, then to blue — system is powering off
- Light is blue — system is powered off
- Light is off — system is not connected to power

## Configuring with the Setup Wizard

When you power on your system for the first time, the setup wizard detects the system's SCCP connections and leads you through the minimum configuration steps required to place a call. This guide covers only the SCCP setup. Although the VSX SCCP system can be connected only to SCCP networks, you can use the system to call users on other types of networks if the CallManager is configured to allow this. Please note that not all network types are available in all countries.

The setup wizard allows you to set a room password, which allows you to limit access to the Admin Settings. The default room password is the 14-digit system serial number.



Make sure you can recall the room password if you set one. If you forget the password, you will have to reset the system, delete the system files, and run the setup wizard again in order to access the Admin Settings and reset the password. If Security Mode is enabled, the room password is required to access the Reset System screen. If you forget the room password while the system is in Security Mode, contact your Polycom distributor or Polycom Technical Support.

You can run the setup wizard or view the configuration screens in either of these two ways.

- **In the room with the system** — Use the remote control to navigate the screens and enter information. You can use the number pad on the remote control to enter text just like you can with a cell phone.
- **From a remote location** — Use a web browser to access VSX Web. For more information about using VSX Web, refer to [Accessing VSX Web](#) on page 9-1.



# Networks

This guide covers network types used worldwide. Please note that not all network types are available in all countries.

## Getting the Network Ready

Before you begin configuring the network options, you must make sure your network is ready for video conferencing.

To begin, refer to the *Preparing Your Network for Video Conferencing* document, available at [www.polycom.com/videodocumentation](http://www.polycom.com/videodocumentation). This document contains information you need to prepare your network, such as worksheets that will help you order ISDN.

## Network Connectivity Checklist

You will need this information to make and receive video calls at your site:

If...	This information:	Should be provided by your:
Your system is using a static IP address	IP address	IP Network Service Provider or system administrator
	System name	System administrator

## Connecting to the LAN

You must connect the system to a LAN to:

- Make IP calls
- Access VSX Web

- Use People+Content IP
- Update system software using the Polycom Softupdate program

## Configuring LAN Properties

To configure LAN properties:

1. Go to **System > Admin Settings > LAN Properties**.
2. Configure these settings:

Setting	Description
<b>Connect to my LAN</b>	Specifies whether the system is part of the LAN. Changing this setting causes the system to restart.
<b>Host Name</b>	Indicates the system's DNS name. Changing this setting causes the system to restart.
<b>IP Address</b>	Specifies how the system obtains an IP address. <ul style="list-style-type: none"> <li>• <b>Obtain IP address automatically</b> — Select if the system gets an IP address from the DHCP server on the LAN.</li> <li>• <b>Enter IP address manually</b> — Select if the IP address will not be assigned automatically.</li> </ul> Changing this setting causes the system to restart.
<b>Your IP Address is</b> or <b>Use the Following IP Address</b>	If the system obtains its IP address automatically, this area displays the IP address currently assigned to the system. If you selected <b>Enter IP Address Manually</b> , enter the IP address here. Changing the IP address causes the system to restart.
<b>Domain Name</b>	Displays the domain name currently assigned to the system. If the system does not automatically obtain a domain name, enter one here.

3. Select  and configure these settings:

Setting	Description
<b>DNS Servers</b>	Displays the DNS servers currently assigned to the system. If the system does not automatically obtain a DNS server address, enter up to four DNS servers here. Changing this setting causes the system to restart.
<b>Default Gateway</b>	Displays the gateway currently assigned to the system. If the system does not automatically obtain a gateway IP address, enter one here. Changing this setting causes the system to restart.
<b>Subnet Mask</b>	Displays the subnet mask currently assigned to the system. If the system does not automatically obtain a subnet mask, enter one here. Changing this setting causes the system to restart.
<b>WINS Server</b>	Displays the WINS server currently assigned to the system. If the system does not automatically obtain a WINS server IP address, enter one here. Changing this setting causes the system to restart.
<b>WINS Resolution</b>	Sends a request to the WINS server for WINS name resolution.
<b>LAN Speed</b>	Specify the LAN speed to use. Note that the speed you choose must be supported by the switch. Choose <b>Auto</b> to have the network switch negotiate the speed automatically. If you choose <b>10 Mbps</b> or <b>100 Mbps</b> , you must also select a duplex mode. <b>Note:</b> Be sure that the device and the switch settings match. Typically, selecting <b>Auto</b> for both is sufficient. The <b>LAN Speed</b> setting for the VSX system and the switch must match. Polycom strongly recommends that you do not select <b>Auto</b> for either just the VSX system or just the switch; the settings for both must be the same. Changing this setting causes the system to restart.
<b>Duplex Mode</b>	Specify the Duplex mode to use. Note that the Duplex mode you choose must be supported by the switch. Choose <b>Auto</b> to have the network switch negotiate the Duplex mode automatically. Changing this setting causes the system to restart.

## Configuring the VSX System to Use SCCP

When the VSX system is configured to use SCCP for calls, you can call another SCCP-enabled system by entering the system's extension on the Place a Call screen.



Polycom VSX software release 8.6.2 supporting the Cisco SCCP protocol has been certified with Cisco CallManager 4.2(3) and 5.1(1). Additionally, Polycom has successfully deployed VSX software version 8.6.2 with other versions of the Cisco CallManager, including versions 4.1(x) and 5.0(x).

Polycom will work with joint customers in deploying the Polycom/Cisco solution on Cisco CallManager 4.1(3) and higher. For pre-sales support, please contact your Polycom sales representative. For post-sales support, please refer to Polycom Global Services at [www.polycom.com](http://www.polycom.com).

### To configure the VSX system to use SCCP:

1. On the Cisco CallManager, provision a SCCP extension for each VSX system.
2. On the VSX System, go to **System > Admin Settings > Network > Call Preference**, and enable **Enable SCCP**.
3. On the VSX System, go to **System > Admin Settings > General Settings > System Settings > Call Settings**, and set **Auto-Answer Point-to-Point** to **Yes**.
4. On the VSX System, go to **System > Admin Settings > Network > SCCP Settings**, and configure these settings on the Cisco CallManager screen:

Setting	Description
<b>CallManager Address</b>	Specifies the IP address of the Cisco CallManager.
<b>Auto Discover TFTP Address</b>	Allows the system to discover the Primary, Secondary, and Tertiary TFTP server addresses. When you choose this setting, the system restarts and the fields are populated.
<b>TFTP Server Address</b>	Allows you to specify the Primary, Secondary, and Tertiary TFTP server addresses manually.
<b>Local Extension</b>	Displays the extension assigned to this system by the Cisco CallManager.

---

## Configuring the Cisco CallManager for Use with the VSX System

To support SCCP video calls, you must install a video plug-in on the Cisco CallManager server. Signed and unsigned plug-ins are available for Cisco CallManager at [http://www.polycom.com/resource\\_center/1,,pw-17246,FF.html](http://www.polycom.com/resource_center/1,,pw-17246,FF.html).

You must also configure the Video Extensions in the Cisco CallManager. To place multipoint video calls using the Conference feature, the Cisco CallManager needs to be provisioned with video bridge resources.

### To install the video plug-in:

1. On the Cisco CallManager server, double-click the plug-in file to start the installation.
2. Follow the instructions on the wizard screens to complete the installation.
3. Restart the system to activate the plug-in you just installed.

### To configure the Cisco CallManager:

1. In the Cisco CallManager, go to the **Phone Configuration > Directory Number Configuration** screen.
2. Provision these settings for each Polycom Video Extension:
  - Maximum Number of Calls: 1
  - Busy Trigger: 1

After you have configured the VSX system and installed the plug-in, you can place SCCP calls.



# Displays and Cameras

## Connecting Monitors and Projectors

If you have a set-top or component system, you need to connect a monitor to the system to see the people at the far site. Refer to your system's setup sheet for connection details. The following table shows the different ways you can connect monitors to a VSX system. The main monitor is the monitor that displays the VSX system user interface.

VSX System	Main Monitor	Second Monitor
VSX 5000, VSX 6000A, VSX 7000s, VSX 7000e, VSX 8000	TV (NTSC or PAL)	None
VSX 5000, VSX 6000A, VSX 7000s, VSX 7000e, VSX 8000	TV (NTSC or PAL)	TV (NTSC or PAL)
VSX 5000, VSX 6000A, VSX 7000s, VSX 7000e, VSX 8000	TV (NTSC or PAL)	VGA monitor
VSX 5000, VSX 6000A, VSX 7000s, VSX 7000e, VSX 8000	VGA monitor	Not available

## Connecting Monitors to Set-Top Systems

### Additional TV Monitor

The set-top systems provide a second S-Video output for a TV monitor.

Because of their screen resolution, TV monitors are best for showing people and for playing recorded material from VCR or DVD players.

### VGA Monitor or Projector

The set-top systems provide a VGA output for a computer monitor or projector.

Because of their screen resolution, VGA monitors and projectors are best for showing content from computers.

## Connecting Monitors to Component Systems

You can connect either a TV monitor or a VGA monitor to your VSX system. The component systems provide S-video connections for the main TV monitor. On the VSX 8000 system, the main monitor uses BNC connectors.

### Additional TV Monitor

The component systems provide a second S-Video output for a TV monitor. This uses a standard mini-DIN connector.

### VGA Monitor or Projector

The component systems provide a VGA output for a computer monitor or projector.

## Using a Desktop System as the Monitor for a Computer

You can use the VSX 3000A system as a high-resolution XGA display for your computer, as shown on the system setup sheet.

### To use the VSX 3000A system as the monitor for a computer:



1. Connect the VGA cable from the VGA connector on the back of the VSX 3000A system to the VGA connector on your computer.
2. To use the system's built-in speakers for your computer's audio, connect an audio cable from your computer to the audio input connector on the left side of the VSX 3000A system.




## Configuring Monitor and Projector Settings

### To configure monitors:

1. Go to **System > Admin Settings > Monitors > Monitors**.
2. Configure these settings:

Setting	Description
<b>Monitor 1</b> VSX 5000 VSX 6000A VSX 7000s VSX 7000e VSX 8000	<p>Specifies the monitor's aspect ratio:</p> <ul style="list-style-type: none"> <li>• <b>4:3</b> — Select if you are using a regular TV monitor.</li> <li>• <b>16:9</b> — Select if you are using a wide-screen monitor.</li> </ul> <p>Specifies the monitor's format:</p> <ul style="list-style-type: none"> <li>• <b>S-Video</b> — Select if the main monitor is connected to a VSX 8000 system using an S-Video cable.</li> <li>• <b>Composite</b> — Select if the main monitor is connected to a VSX 8000 system using a composite video cable and S-Video to RCA adapter.</li> <li>• <b>VGA</b> — Select if you are using a VGA monitor as the primary display device for a VSX 5000, VSX 7000s, VSX 7000e, or VSX 8000. If you select VGA, your VGA monitor must be set to SVGA (800 x 600) or XGA (1024 x 768) at 60 Hz, and Monitor 2 is disabled.</li> </ul> <p><b>Note:</b> If you select <b>16:9</b>, you will also need to set up the monitor for full-screen display. In the monitor's setup menu, choose the setting that stretches the picture uniformly without clipping the edges, which is usually called Full, Wide screen, or 16x9.</p> <p>Use this setting:  Not this setting: </p>
<b>Output upon Screen Saver Activation</b> VSX 5000 VSX 6000A VSX 7000s VSX 7000e VSX 8000	<p>Specifies the screen saver output for Monitor 1:</p> <p>Specifies whether black video or no signal is sent to the monitor when the system goes to sleep and the screen saver activates.</p> <p>Select <b>Black</b> if you want to display screen saver text or a screen saver news feed. This is the recommended setting to prevent burn-in for TV monitors.</p> <p>Select <b>No Signal</b> if you want the display to react as if it is not connected when the system goes to sleep. This is the recommended setting for VGA monitors and projectors.</p>



Setting	Description
<p><b>Monitor 2</b>                      VSX 5000                      VSX 6000A                      VSX 7000s                      VSX 7000e                      VSX 8000</p>	<p>Specifies the second monitor's aspect ratio:</p> <ul style="list-style-type: none"> <li>• <b>Off</b> — Select if you do not have a second monitor.</li> <li>• <b>4:3</b> — Select if you are using a regular TV monitor as the second monitor.</li> <li>• <b>16:9</b>—Select if you are using a wide-screen monitor as the second monitor. On the monitor, select the display mode that uniformly stretches the video from side to side, which is usually called Full, Wide screen, or 16x9.</li> </ul> <p>Specifies the second monitor's format:</p> <ul style="list-style-type: none"> <li>• <b>S-Video</b> — Select if you have a second monitor connected to the system's S-Video output using an S-Video cable.</li> <li>• <b>Composite</b> — Select if you have a second monitor connected to the system using a composite video cable.</li> <li>• <b>VGA</b> — Select if you are using a VGA monitor as the second display device.</li> </ul>
<p><b>Output upon Screen Saver Activation</b>                      VSX 5000                      VSX 6000A                      VSX 7000s                      VSX 7000e                      VSX 8000</p>	<p>Specifies the screen saver output for Monitor 2:</p> <p>Specifies whether black video or no signal is sent to the monitor when the system goes to sleep and the screen saver activates.</p> <p>Select <b>Black</b> if you want to display screen saver text or a screen saver news feed. This is the recommended setting to prevent burn-in for TV monitors.</p> <p>Select <b>No Signal</b> if you want the display to react as if it is not connected when the system goes to sleep. This is the recommended setting for VGA monitors and projectors.</p>

3. Select  and configure these settings:

Setting	Description
<b>Monitor 1</b> VSX 5000 VSX 7000 VSX 7000s VSX 7000e VSX 8000	Select the video source(s) to display on Monitor 1. For more information about how this setting can affect your display, refer to <a href="#">Video Source Output Examples for Multiple Monitors</a> on page B-1.
<b>Monitor 2</b> VSX 5000 VSX 6000A VSX 7000s VSX 7000e VSX 8000	Select the video source(s) to display on Monitor 2. For more information about how this setting can affect your display, refer to <a href="#">Video Source Output Examples for Multiple Monitors</a> on page B-1.
<b>Visual Concert VGA Out</b> VSX 5000 VSX 6000A VSX 7000s	Specifies whether to show content on the Visual Concert VSX display.
<b>VGA Out</b> VSX 7000e VSX 8000	Specifies whether to show content on the display connected to the system's VGA output.
<b>VCR Record Source</b> VSX 7000s VSX 7000e VSX 8000	Specifies the video source to be recorded to videotape or DVD. If <b>Far</b> is enabled, the recorded video will switch to the current far site speaker. If both <b>Near</b> and <b>Far</b> are enabled, the recorded video will switch between near and far sites depending on the current speaker. This selection is available only when you are using a single monitor.

4. Select  and configure these settings:




Setting	Description
<b>VCR</b> VSX 7000s VSX 7000e VSX 8000	Specifies the VCR/DVD Player output format: <ul style="list-style-type: none"> <li>• <b>S-Video</b> — Select if you have a VCR or DVD player connected to the system's S-Video output using an S-Video cable.</li> <li>• <b>Composite</b> — Select if you have a VCR or DVD player connected to the system output using a composite video cable.</li> </ul>

Setting	Description
<p><b>PIP</b></p>	<p>Specifies PIP (Picture-in-Picture) behavior:</p> <ul style="list-style-type: none"> <li>• <b>Camera</b> — The PIP window is displayed when the call is first connected and when a user moves the camera, uses presets, or switches to a different camera source.</li> <li>• <b>On</b> — The PIP window stays on for the duration of the call.</li> <li>• <b>Off</b> — The PIP window is not displayed during the call.</li> <li>• <b>Auto</b> — The PIP window is displayed when a user picks up the remote.</li> </ul> <p><b>Note:</b> PIP settings are also available in the User Settings screen. Users can turn the PIP on or off and change its location on the screen using  <b>PIP</b> on the remote control.</p>
<p><b>Zoom Video to Fit Screen</b></p> <p>VSX 5000 VSX 6000A VSX 7000s VSX 7000e VSX 8000</p>	<p>Specifies whether the video image is displayed full screen on a wide-screen monitor.</p> <p>If this setting is enabled, video is shown full screen with a portion of the top and bottom clipped off. If this setting is disabled, video is centered with black margins on each side.</p> <p>This setting applies to either Monitor 1 or Monitor 2, if they are set to <b>16:9</b>. This setting does not apply if Dual Monitor Emulation is enabled.</p>
<p><b>Display Icons in a Call</b></p>	<p>Specifies whether to display all on-screen graphics, including icons and help text, during calls.</p>
<p><b>Snapshot Timeout</b></p>	<p>Lets you choose whether to have slides and snapshots time out, after a period of four minutes.</p>
<p><b>Dual Monitor Emulation</b></p>	<p>Specifies whether the system can show multiple views on a single display. If content is being viewed, different views can be displayed by pressing  <b>PIP</b> on the remote control.</p> <p>For more information, refer to <a href="#">Using Dual Monitor Emulation</a> on page 3-7.</p>

## Using Dual Monitor Emulation

Dual Monitor Emulation is designed for rooms or offices with one monitor only. Users see both near and far sites on one monitor in two different views. During presentations, users see content *and* the near and far sites. What you see during a call can depend on factors such as the VSX system monitor configuration, the number of sites in the call, and whether content is being shared.

### Examples of Dual Monitor Emulation

	Far site	Near site
<p><b>Call connects</b></p> <p>Near and far site are the same size and appear side by side.</p>		
<p><b>Near site presses PIP</b></p> <p>Size of far site window increases.</p>		
<p><b>Near site presents to far site</b></p> <p>Content, near site, and far site are displayed in dual monitor emulation mode.</p>		

### Using Dual Monitor Emulation in a Call

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

1. Near and far sites, same size, side by side
2. Far site big, near site small
3. Near site big, far site small
4. Near site, full screen
5. Far site, full screen

The last layout viewed is used for the next call.

## Adjusting the Monitor's Color Balance, Sharpness, and Brightness

In most cases, the monitor you connect to your system may be set to a configuration that is appropriate for video conferencing applications. Depending on your environment and model of monitor, however, the video may exhibit one of these problems:


- Picture is too dark or too bright
- Colors appear faded
- Picture has too much of one color — for example, the picture may appear greenish
- Picture has blocky or softened edge detail

If you notice any of these problems, adjust the monitor until the display seems acceptable. Use the video diagnostics test as described in the following steps, or purchase a calibration program DVD tool to help you fine-tune the display settings.

### To adjust the monitor for natural color:

1. Go to **System > Diagnostics > Video**.
2. Select the color bars icon to display the color bar test screen.
3. Adjust the color using the monitor's controls for color, contrast, and brightness. Your monitor may also have controls for tint and temperature.

The colors from left to right should be white, yellow, cyan, green, magenta, red, and blue. Make sure that the white is not tinted red, green, or blue, and that the red is not tinted pink or orange.

4. When the colors look right on the test screen, press  **Near** on the remote control to stop the color bars test and show video of the room.
5. If the color appears natural, you do not need to make further adjustments.

If the color still needs adjustment, use the monitor's controls to make small adjustments until the picture appears natural.

## Preventing Monitor Burn-In

Monitors and VSX systems provide display settings to help prevent image burn-in. Plasma televisions can be particularly vulnerable to this problem. Refer to your monitor's documentation or manufacturer for specific recommendations and instructions. The following guidelines help prevent image burn-in:

- Set **Output upon Screen Saver Activation** to **Black**.
- Use the monitor's burn-in prevention features, if available.
- Ensure that static images are not displayed for long periods.
- Set the **Screen Saver Wait Time** to 3 minutes or less.
- To keep the screen clear of static images during a call, disable the following settings:
  - **Display Icons in a Call** described on page 3-6
  - **Display Time in Call** described on page 6-2
  - **Far Site Name Display** described on page 6-2
- Be aware that meetings that last more than an hour can have the same effect as a static image.
- Consider decreasing the monitor's sharpness, brightness, and contrast settings if they are set to their maximum values.

## Connecting Cameras

### Connecting Document Cameras to Desktop Systems

You can connect a document camera to show detailed close-up views of printed documents or other small items. The VSX 3000A systems provide one composite video input.

Refer to the system setup sheet for information about connecting a document camera.

### Connecting Cameras to Set-top Systems

VSX 7000s systems provide an S-Video input for a second camera. You can use the RS-232 serial port on the VSX 7000s system for camera control.

You can connect a camera to the VCR video input on the VSX 5000, or VSX 6000A system. On the VSX 6000A systems, the video input is for a composite video signal. VSX 5000 and VSX 6000A systems do not provide pan/tilt/zoom (PTZ) control for a second camera.

Refer to your system's setup sheet for connection details. Refer to the release notes for a list of supported PTZ cameras.

## Connecting Cameras to Component Systems

If you have a component system, you need to connect a camera to the system so that people at other sites can see your site. Refer to your system's setup sheet for connection details.

The component systems provide S-video connections for two cameras. The VSX 8000 system provides the S-video signal to the main camera through BNC connectors. Refer to the release notes for a list of supported PTZ cameras.

You can configure a VSX 7000e or VSX 8000 system with a Polycom PowerCam Plus to track to the speaker's voice or to camera presets.



### Points to note about automatic camera tracking with the PowerCam Plus camera:

- Automatic camera tracking works best at distances of 15 feet (4.6 m) or less.
- Automatic camera tracking works best if you face the camera when you speak.
- Leave at least one foot (0.3 m) of space above, behind, to the right, and to the left of the camera. Echoes from nearby surfaces interfere with tracking.
- Automatic camera tracking works best in rooms with good acoustics.
- For information about user interface settings required for automatic camera tracking, refer to [Configuring Automatic Camera Tracking](#) on page 3-13.



## Configuring Camera Settings and Video Quality Options



### To configure camera and video settings:

1. Go to **System > Admin Settings > Cameras**.
2. Configure these settings:



Setting	Description
<b>Far Control of Near Camera</b> VSX 5000 VSX 6000A VSX 7000s VSX 7000e VSX 8000	Specifies whether the far site can control the position of the near-site camera. When this option is selected, a user at the far site can control the framing and angle of the camera for the best view of the near site.
<b>Backlight Compensation</b>	Specifies whether to have the camera automatically adjust for a light background. Backlight compensation is best used in situations where the subject appears darker than the background.
<b>Camera Brightness</b> VSX 3000A	Specifies how much light is let into the camera's iris. A low number allows in less light; a high number allows in more light.
<b>Primary Camera</b>	Specifies which camera is the main camera.
<b>Camera Direction</b> VSX 5000 VSX 6000A VSX 7000s VSX 7000e VSX 8000	Specifies the direction the camera moves when using the arrow buttons on the remote control.
<b>Power Frequency</b> VSX 3000A VSX 5000	Specifies the frequency of the electrical power used for the camera. <ul style="list-style-type: none"> <li>• <b>50 Hz</b>—Select if you have a PAL system.</li> <li>• <b>60 Hz</b>—Select if you have an NTSC system.</li> </ul>
<b>VCR/DVD Audio Out Always On</b> VSX 7000s VSX 7000e VSX 8000	Allows you to record a call using one VCR or DVD, while playing recorded content into the call from a second VCR or DVD.  Do not select this setting if you have only one VCR or DVD player connected.

3. Select  to go to Camera Settings:
  - Specify the name, icon, and format for each video source.
  - VSX 7000s, VSX 7000e, VSX 8000: Specify whether secondary camera sources are **People** or **Content**. Camera sources specified as **Content** are sent at a higher resolution and lower frame rate.
4. Select  to go to Video Quality.
5. Select **Motion** or **Sharpness** for the video inputs:
  - **Motion** — This setting is for showing people or other video with motion.

- **Sharpness** — The picture will be sharp and clear, but motion will not be smooth. Choose this setting for document cameras. Sharpness is available in point-to-point H.263 calls only.
6. Set **Pro-Motion Video** to specify when to use Pro-Motion for video inputs set for motion. Pro-Motion provides 50/60 fields per second interlaced video for TV-like quality at higher bandwidths.
    - VSX 3000A systems send Pro-Motion video for the DVD/VCR input only.
    - VSX 5000 and VSX 6000A systems can receive Pro-Motion video but cannot transmit it.
  7. Select  to go to **Camera Calibration**. Only VSX 7000e and VSX 8000 systems with a PowerCam Plus camera can be calibrated for automatic camera tracking. Follow the instructions on the screen to calibrate the camera for automatic camera tracking if it consistently moves too far in one direction when tracking is enabled. Press  **Near** on the remote control so that you can zoom the camera in on your mouth.




For the best calibration results, make sure the camera and system are set up as described in [Configuring Automatic Camera Tracking](#) on page 3-13 and [Connecting Cameras to Component Systems](#) on page 3-10.

#### To configure a second camera:

1. Go to **System > Admin Settings > Cameras**.  
Designate this as the **Primary Camera**, if desired.  
VSX 5000, VSX 6000A, VSX 7000s, VSX 7000e, VSX 8000 Set **Camera Direction** to specify which way the camera moves when you control it with the remote control.
2. Go to **System > Admin Settings > Cameras > Next**.  
Name the camera.  
Select a camera icon.
3. Go to **System > Admin Settings > Cameras > Next > Next**.  
If you used an RCA to mini-DIN adapter to connect the camera cable, change the **Video Format** to **Composite**.  
Set the video quality (**Motion** for people video or **Sharpness** for still images).
4. Go to **System > Admin Settings > General Settings > Serial Port**. If it is a PTZ camera:  
VSX 7000s, VSX 7000e, VSX 8000 Set the **RS-232 Mode** to **Sony PTZ** camera control.  
Specify which camera is associated with this port.

## Configuring Automatic Camera Tracking

You can configure a VSX 7000e or VSX 8000 with a Polycom PowerCam Plus to track to the speaker's voice or to camera presets. During a call, users can press  Auto on the remote control to toggle between Automatic Camera Tracking, Automatic Camera Tracking to Presets, and Automatic Camera Tracking Off.

When Automatic Camera Tracking to Presets is enabled and no one speaks for 30 seconds, the camera automatically moves to preset 0. When Automatic Camera Tracking is enabled and no one speaks for 30 seconds, the camera automatically moves to a position to include all of the people who have spoken.

If the camera consistently moves too far in one direction when tracking is enabled, follow the instructions on the Camera Calibration screen to calibrate the camera for better tracking.



### Points to note about using automatic camera tracking:

- You must have a VSX 7000e or VSX 8000 with a Polycom PowerCam Plus camera.
- If you are using Polycom microphones, make sure they are properly connected and unmuted, and that the **Enable Polycom Microphones** and **Echo Canceller** settings are selected.
- If you are using a Polycom Vortex, disable the **Enable Polycom Microphones** and **Echo Canceller** settings.

For more information about setting up the PowerCam Plus for automatic camera tracking, refer to the section [Connecting Cameras to Component Systems](#) on page 3-10.

## Configuring Camera Presets



Camera presets are stored camera positions that you can create ahead of time or during a call.


Presets allow users to:


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

If your system's main camera supports electronic pan, tilt, and zoom movement, you can create up to 100 preset camera positions for the near site. Each preset stores the camera number, its zoom level, and the direction it points (if appropriate). Near-site presets are available for VSX set-top and component systems. They remain in effect until you delete or change them.

**To store a preset:**

1. If you are in a call, press  **Near** or  **Far** on the remote control to choose a near-site or far-site camera or other video source.
2. If you selected a camera that supports electronic pan, tilt, and zoom, you can adjust the camera's position:
  - Press the arrow buttons on the remote control to move the camera up, down, to the left, or to the right.

- Press  **Zoom** to zoom the camera out or in.




3. Press  **Preset** on the remote control.
4. Press and hold a number to store the preset position.

To store a double-digit preset (10-99), hold the second number down.

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

If Automatic Camera Tracking to Presets will be used during calls, set preset 0 to a wide shot of the room. When Automatic Camera Tracking to Presets is enabled and no one speaks for 30 seconds, the camera automatically moves to preset 0.

**To delete all presets:**

1. If a call is connected, press  **Near** to choose a near-site video source.
2. Press  **Preset** on the remote control.
3. Press  **Delete** to delete all presets.

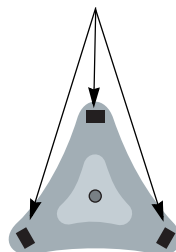
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# Microphones and Speakers

## Connecting Microphones SoundStation VTX 1000

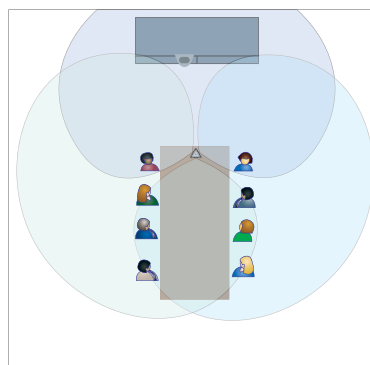
Polycom microphones each contain three microphone elements for 360° coverage.

**Microphone elements in the Polycom microphone**

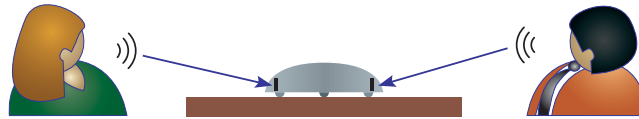


**Microphone coverage shown from above**

**Monaural operation**



The microphone picks up sound from the sides.



For best audio, place the microphone:

- On a hard, flat surface (table, wall, or ceiling) away from obstructions, so the sound will be directed into the microphone elements properly.
- Near the people closest to the monitor.
- In large conference rooms, you may need more than one microphone.

## Connecting Polycom Microphones to Set-Top or Component Systems

To pick up audio from your site, you must connect a microphone to the system. Refer to your system's setup sheet for connection details.

You may place the microphones on the table, or you may mount them to the ceiling. A ceiling mount kit is available for Polycom microphones.

You can connect two additional Polycom microphones to a VSX 7000s or component VSX system.

The following diagram shows microphone connection options for VSX set-top systems.

**Any set-top or component system**



**Any component system**



**Any component system**



50 ft (15 m)  
2457-20910-050  
or 30 ft (9 m)  
2457-20910-001

30 ft (9 m)  
2457-20910-003  
or 10 ft (3 m)  
2457-20910-002

30 ft (9 m)  
2457-20910-003  
or 10 ft (3 m)  
2457-20910-002

The ferrite bead  
must be at the  
end connected  
to the system.

## Connecting Powered Microphones to a Set-top System

In addition to the Polycom microphone or SoundStation VTX 1000® conference phone, you can connect other powered microphones directly to the system's audio inputs.

## Connecting Powered Microphones or a Mixer to a VSX 8000 Component System

You can connect two powered microphones directly to the VSX 8000 system, or you can connect several studio-type microphones to the VSX 8000 system through an audio mixer.

Connecting a Polycom Vortex mixer to VSX set-top or component systems provides flexibility in audio set-up. For example, it allows you to provide a microphone for each call participant in a boardroom.

The VSX 8000 is designed to work with Polycom Vortex mixers. For top performance, you need Vortex firmware 2.5.2 or later, Conference Composer™ version 2.7.0 or later, and VSX system software version 8.5 or later. Refer to your system's setup sheet for connection details.

## Connecting Speakers

### Connecting Speakers or Headphones to Desktop Systems

You can connect desktop speakers to provide better audio for the VSX 3000A system if you place it in a large room, or you can connect headphones to listen to calls privately. The system's speaker connector is on the system's right side panel, and the headphone connector is on the front of the system.

Refer to your system's setup sheet for connection details.

### Connecting Speakers to Set-top Systems

If you have a VSX 5000, you must connect speakers to play audio from the far site. You can use the speakers built into the main monitor.

The other set-top systems have built-in speakers. You can connect an external speaker system such as the Polycom StereoSurround kit to provide more volume and richer sound in large rooms. Refer to your system's setup sheet for connection details.



## Connecting Speakers to Component Systems

You must connect at least one speaker to play audio from the far site. You can use the speakers built into the main monitor, or you can connect an external speaker system such as the Polycom StereoSurround kit to provide more volume and richer sound in large rooms. Refer to your system's setup sheet for connection details.

# Configuring Audio Settings

## General Audio Settings

To configure general audio settings:

1. Go to **System > Admin Settings > Audio Settings**.
2. Configure these settings:

Setting	Description
<b>Sound Effects Volume</b>	Sets the volume level of the ring tone and user alert tones.
<b>Incoming Video Call</b>	Specifies the ring tone used for incoming calls.
<b>User Alert Tones</b>	Specifies the tone used for user alerts.
<b>Mute Auto-Answer Calls</b>	Specifies whether to mute incoming calls. Incoming calls are muted by default until you press the mute on the microphone or on the remote control.
<b>Enable Internal Ringer</b> VSX 3000A	Specifies an additional ring tone when receiving an incoming call. The internal ringer is built into the system and alerts you to incoming calls.
<b>Enable Polycom Microphones</b> VSX 3000A VSX 5000 VSX 6000A VSX 7000s VSX 7000e VSX 8000	Specifies whether integrated and attached Polycom microphones are enabled. You can disable this option to turn off: <ul style="list-style-type: none"> <li>• VSX 3000A system's integrated microphone</li> <li>• VSX 7000e and VSX 8000 microphones</li> </ul> Disable this setting in the following situations: <ul style="list-style-type: none"> <li>• You have an external handset, headset, or lapel microphone attached to a VSX system line input.</li> </ul> This option is automatically disabled if a line input is set to Audio Mixer, and echo cancellation is enabled on a line set for Audio Mixer.

3. Select  and enter VCR/DVD settings for the VSX 7000e system:


Setting	Description
<b>VCR/DVD In Level</b>	Sets the volume at which the VCR/DVD player plays, relative to other audio from the system.
<b>VCR/DVD Out Level</b>	Sets the volume at which the call is recorded.

Setting	Description
<b>VCR/DVD Audio Out Always On</b>	<p>Allows you to record a call using one VCR or DVD, while playing recorded content into the call from a second VCR or DVD.</p> <p>Do not select this setting if you have only one VCR or DVD player connected. If this setting is disabled, the VCR audio output is disabled when VCR is the selected camera source.</p>

4. Select  and enter line input settings:

Setting	Description
<b>Line Input (Red and White)</b> VSX 3000A VSX 5000 VSX 6000A	<p>Specifies how audio is heard from equipment you connect to the audio input connectors on the back of the system.</p> <ul style="list-style-type: none"> <li>• <b>Audio Mixer</b>—Audio input is heard at the far site only, not at the near site. Use this setting for microphone signals.</li> <li>• <b>VCR</b>—Audio input is heard at both the far site and near site. This setting requires that the video source is set to VCR; otherwise, no audio is heard. Select <b>VCR</b> when playing a VCR/DVD into the system.</li> </ul>
<b>Line Input</b> VSX 7000e	<p>Specifies the type of equipment that is connected to the audio input connectors. Choose <b>Audio Mixer</b> if connected to a mixer. Select <b>Visual Concert</b> when sharing content using an ImageShare II, Visual Concert VSX, or laptop connected directly to the system.</p>
<b>Input Type</b> VSX 8000	<p>Specifies the type of equipment that is connected to the balanced audio inputs. Choose <b>Line Input</b> unless you have connected microphones directly to the balanced audio inputs.</p>
<b>Level</b>	<p>Sets the volume level for the line with which it is associated.</p> <p>For a VCR/DVD player, sets the playback volume of the VCR/DVD player relative to other audio from the system.</p>
<b>Echo Canceller</b>	<p>Lets you specify whether to use the system's built-in echo canceller.</p> <p>Do not enable this option if you have connected a Polycom Vortex mixer. This option is not available on some systems when the line input type is set to VCR.</p>
<b>Line Out 2 Phono</b> VSX 7000e	<p>Specifies whether volume for a device connected to the audio line out connectors is variable or fixed.</p> <ul style="list-style-type: none"> <li>• <b>Variable</b>—Allows users to set the volume with the remote control.</li> <li>• <b>Fixed</b>—Sets the volume to the Audio Level specified in the system interface.</li> </ul>

Setting	Description
<b>Enable Phantom Power</b> VSX 8000	Allows the system to supply power to microphones connected directly to the balanced audio inputs. <b>Note:</b> This selection is only available when you set <b>Input Type</b> to <b>Microphone</b> .
<b>VCR/DVD In Level</b> VSX 7000s	Sets the playback volume of the VCR/DVD player relative to other audio from the system.
<b>VCR/DVD Out Level</b> VSX 7000s	Sets the volume at which the call is recorded.
<b>VCR/DVD Audio Out Always On</b> VSX 7000s	Allows you to record a call using one VCR or DVD, while playing recorded content into the call from a second VCR or DVD.  Do not select this setting if you have only one VCR or DVD player connected. If this setting is disabled, the VCR audio output is disabled when VCR is the selected camera source.

5. Select  and enter audio output settings for the VSX 8000 system:

Setting	Description
<b>Balanced Out (600 ohms)</b>	Specifies whether volume for a device connected to the balanced audio output connectors is variable or fixed. <ul style="list-style-type: none"> <li>• <b>Variable</b>—Allows users to set the volume with the remote control.</li> <li>• <b>Fixed</b>—Sets the volume to the Audio Level specified in the system interface.</li> </ul>
<b>Line Out 2 Phono</b>	Specifies whether volume for a device connected to the audio line out connectors is variable or fixed. <ul style="list-style-type: none"> <li>• <b>Variable</b>—Allows users to set the volume with the remote control.</li> <li>• <b>Fixed</b>—Sets the volume to the Audio Level specified in the system interface.</li> </ul>

6. Select  and enter VCR/DVD settings for the VSX 8000 system:

Setting	Description
<b>Line Input (Red)</b> <b>Line Input (White)</b>	Select <b>VCR</b> when playing a VCR into the system. Select <b>Visual Concert</b> when sharing content using an ImageShare II, Visual Concert VSX, or laptop connected directly to the system.
<b>Level</b>	Sets the playback volume of the VCR/DVD player relative to other audio from the system

Setting	Description
<b>VCR/DVD Out Level</b>	Sets the volume at which the call is recorded.
<b>VCR/DVD Audio Out Always On</b>	Allows you to record a call using one VCR or DVD, while playing recorded content into the call from a second VCR or DVD.  Do not select this setting if you have only one VCR or DVD player connected. If this setting is disabled, the VCR audio output is disabled when VCR is the selected camera source.

7. Select  and enter speaker settings:

Setting	Description
<b>Master Audio Volume</b>	Sets the volume level for audio from the far site.
<b>Midrange Speaker</b> VSX 6000A VSX 7000s	Specifies whether to use the system's built-in midrange speaker.  You may prefer to turn off the midrange speaker if you connect the audio output to Monitor 1 or if you connect an external speaker system.
<b>Subwoofer Speaker</b> VSX 7000s	Specifies whether to use the system's subwoofer.  You may prefer to turn off the subwoofer speaker if you connect the audio output to Monitor 1. The system will not operate if you disconnect the subwoofer.
<b>Subwoofer Level</b> VSX 7000s	Sets the volume level for the subwoofer without changing the master audio volume.
<b>Bass</b>	Sets the volume level for the lower frequencies without changing the master audio volume.
<b>Treble</b>	Sets the volume level for the higher frequencies without changing the master audio volume.
<b>Line Outputs</b> VSX 6000A VSX 7000	Specifies how the audio output behaves. The default selection, <b>Monitor - Far Site Audio</b> , supplies audio to the Monitor 1 audio outputs only when the system is receiving audio from the far site.  If you have connected a VCR to record the conference, select <b>VCR - Far and Near Audio</b> to supply audio from both the far site and the system's microphones to the VCR.

## VSX Systems Settings for a Polycom Vortex Mixer

**To configure VSX systems to use a Polycom Vortex mixer:**

1. Go to **System > Admin Settings > Audio Settings**.  
Disable the **Enable Polycom Microphones** setting if you have integrated both a Vortex and a SoundStation VTX 1000 conference phone with the VSX system.
- VSX 5000, VSX 7000e 2. Go to **System > Admin Settings > Audio > Audio Settings > Next**.  
Configure **Balanced In**:  
Set **Input type** to **Line Input**.  
Disable **Echo Canceller**.
- VSX 8000 3. Go to **System > Admin Settings > Audio > Audio Settings > Next**.  
Configure **Audio I/O**:  
Set **Line Input** to **Audio Mixer**.  
Disable **Echo Canceller**.
4. Go to **System > Admin Settings > General Settings > Serial Ports**.  
Set **RS-232 Mode** to **Vortex Mixer** for the appropriate port.

Refer to the Polycom Vortex documentation for details on configuring the mixer.

## Settings for Microphones Connected to Audio Inputs

**To configure the VSX system to use microphones connected directly to the RCA audio inputs:**

1. Go to **System > Admin Settings > Audio > Audio Settings > Next**.  
Configure **Balanced In**:  
Set **Line Input** to **Audio Mixer**. (except VSX 7000s)  
Enable **Echo Canceller**.  
Adjust the audio **Level** if necessary. You can test this setting using the **Audio Meter**.
2. Go to **System > Diagnostics > Audio Meter**.  
Speak into the microphones that are connected to the audio line inputs. The audio meter should peak at about 10dB for normal speech.

## Settings for Microphones Connected to Balanced Audio Inputs on a VSX 8000 System

To configure the VSX 8000 system to use microphones connected directly to the balanced audio inputs:

1. Go to **System > Admin Settings > Audio > Audio Settings > Next**.  
Configure Balanced In:

Set **Input type** to **Microphone**.

Select **Echo Canceller**.

Select **Enable Phantom Power** to supply power to microphones.

Adjust the audio **Level** if necessary. You can test this setting using the Audio Meter.

2. Go to **System > Diagnostics > Audio Meter**.

Speak into the microphones that are connected to the balanced audio inputs. The audio meter should peak at about 10dB for normal speech.





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# Content and Closed Captions

You can present content during calls on a TV monitor when you use:

- A VCR or DVD player connected directly to a Polycom VSX system.
- A Visual Concert VSX data collaboration unit, with any VSX set-top system
- An ImageShare II device, with any VSX component system
- People+Content IP installed on a computer, with any VSX system
- A computer connected directly to a VSX component system

Sites in SCCP calls can send either people video or content. When a site is sending content, the other site(s) do not see that site's people video. When the site stops sending video, the people video is resumed. Note that sending content is supported only in H.261 and H.263 calls. Content is not supported in H.264 calls.

For information about ordering the People+Content IP option, Visual Concert VSX unit, or ImageShare II device, please contact your Polycom distributor.

## Connecting VCR/DVDs

You can connect a VCR/DVD to any VSX system to play VCR tapes or DVDs into calls.

With VSX 7000s, VSX 7000e, and VSX 8000 systems, you can connect a VCR or DVD player to record your video conference. You can also connect two VCRs or DVD players, to play material and record the call at the same time.

## Configuring VCR/DVD Player Settings

### Playing a Videotape or DVD

The VCR/DVD inputs are active when you select the camera source configured as VCR. The microphone inputs remain active while the VCR/DVD is playing. Call participants may wish to mute the microphones while playing VCR/DVD content.

#### To configure VCR/DVD audio settings for playing a videotape or DVD:

VSX 3000A, VSX 5000,  
VSX 6000A, VSX 7000s

1. Go to **System > Admin Settings > Audio > Audio Settings > Next > Next**.

Ensure that **Midrange Speaker** is **On**.

VSX 3000A, VSX 5000,  
VSX 6000A, VSX 8000

2. Go to **System > Admin Settings > Audio > Audio Settings > Next**.  
Set **Line Input(s)** to **VCR**.

Adjust the **Level** for playback volume, if necessary.

VSX 7000s, VSX 7000e

3. Go to **System > Admin Settings > Audio > Audio Settings > Next**.

Adjust the **VCR/DVD In Level** for playback volume, if necessary.

### Recording a Call to Videotape or DVD

All audio from the near site and far site is recorded, along with the video source configured on the Monitors screen.

#### To configure VCR/DVD video settings for recording a call:

1. Go to **System > Admin Settings > Monitors > Monitors**.

Choose a setting for **Monitor 2**.

When **Monitor 2** is set to **Off**, you can specify which video sources to record.

When **Monitor 2** is enabled, the VCR or DVD player records what is shown on **Monitor 1**.

2. Go to **System > Admin Settings > Monitors > Monitors > Next**.

Select one or more sources for the **VCR Record Source**.

If you select both near and far, the VSX system automatically switches recording to the site that is talking. If you select content as a record source, it is recorded (when available) regardless of who is talking.



The VSX systems cannot be configured to simultaneously record content and show it on the VGA output of a VSX 7000e, VSX 8000, or attached Visual Concert VSX.

**To configure VCR/DVD audio settings for recording a call:**

1. Go to **System > Admin Settings > Audio > Audio Settings > Next > Next**.

Set **Line Outputs** to **VCR - Far and Near Audio**.

2. Go to **System > Admin Settings > Audio > Audio Settings > Next > Next**.

Adjust the **VCR/DVD Out Level** if necessary.

Enable **VCR/DVD Audio Out Always On** unless you have the VCR/DVD inputs and outputs both connected to the same device to play and record.

## Connecting a Visual Concert VSX to Set-top Systems

To show material from your computer, you may connect a Visual Concert VSX unit to any set-top system in the VSX series. Refer to *Setting up the Visual Concert VSX* for connection details.

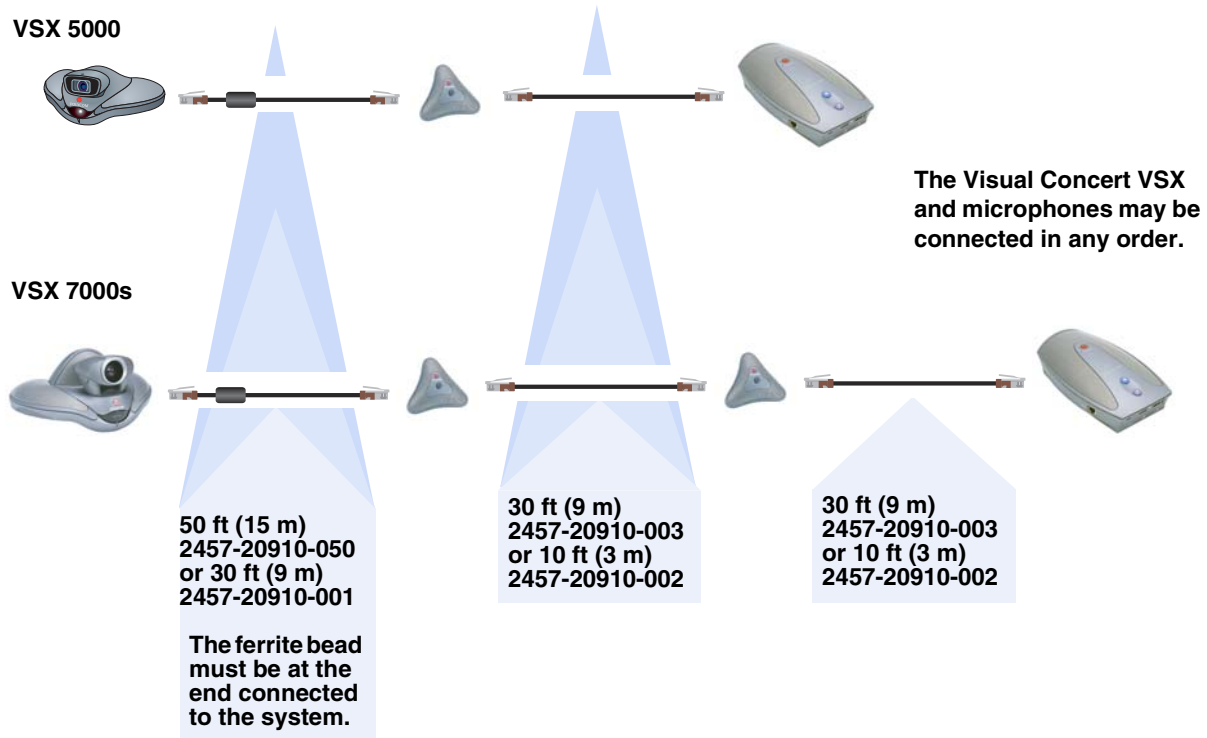
The *Quick Tips for Visual Concert VSX* provides information for people using the device in meetings.



**Points to note about Visual Concert VSX:**

- You can use Visual Concert VSX with two Polycom microphones if you have a VSX 7000s system.
- The Visual Concert VSX and the VSX system require separate LAN connections. The Visual Concert VSX provides LAN connections for three computers, including the one sharing content.
- You can connect a VGA monitor or projector directly to the Visual Concert VSX. This lets the people at your site see content from your computer at its original resolution. The resolution may be reduced if you display it on a VGA monitor connected to the VSX system.
- You will need to set the computer's screen resolution to match the VGA output of the Visual Concert VSX.

The following diagram shows supported cable configurations for connecting a Visual Concert VSX with one microphone or two microphones.



## Connecting an ImageShare II to Component Systems

To show material from your computer, you may connect an ImageShare II unit to any component system in the VSX series. The ImageShare II gives you control over whether others can see what is displayed on your computer.

Refer to your system's setup sheet for connection details.

## Connecting Computers to Component Systems

You can connect your computer directly to a VSX 7000e or VSX 8000 system. When you do this, other call participants see everything that you see on your computer.


Refer to your system's setup sheet for connection details.

## Configuring Content Display with a Visual Concert VSX or ImageShare II


To configure the content display:

1. Go to **System > Admin Settings > Monitors > Graphics VGA**.
2. Configure these settings:

Setting	Description
<b>VGA Output with No Graphics</b>	Indicates that the screen appears black when there is no content to display.
<b>VGA Resolution</b>	Specifies the VGA resolution for your monitor. Select the maximum VGA resolution that your monitor or projector can support. Consult the user manual provided with the VGA monitor or projector for performance information.
<b>Send Content When PC Connects</b>	Specifies whether to send content automatically when the computer is connected to the Visual Concert VSX or ImageShare II.  If this option is not selected, the presenter must press the Play button on the Visual Concert VSX or ImageShare II to send content to the far sites.

3. Go to **System > Admin Settings > Monitors > Monitors**.
4. Select  and select where to display **Content**.

To configure the content audio (VSX 7000e, VSX 8000):

1. Go to **System > Admin Settings > Audio > Audio Settings**.
2. Select  two times and configure this setting:

Settings	Description
<b>Line Input</b>	Set <b>Line Input</b> to <b>Visual Concert</b> to share audio content.

## Configuring Content Display with People+Content IP

People+Content IP is included with the VSX 8000 system and is optional for other VSX systems. It enables a presenter to show content from a computer to other sites in a video conference using only an IP network connection.

The presenter can show PowerPoint® slides, video clips, spreadsheets, or any other type of content from a computer. Supported resolutions include 640x480, 800x600, 1024x768, and 1280x1024.

Before a presenter can use a computer to show content with People+Content IP, you need to:

- Enable People+Content IP on the VSX system.

When you purchase this option, you receive a software activation key. This key allows you to enable People+Content IP on a VSX system.

- Go to [www.polycom.com/support](http://www.polycom.com/support), and navigate to your product page. Download the People+Content IP software application to the computer(s) that the presenter will use to show content.

You don't need to change the computer resolutions and you don't need special cables or hardware, but the computer(s) must meet these requirements:

- Operating System: Windows 2000, Windows XP Home, or Windows XP Professional
- Minimum computer: 500 MHz Pentium® III (or equivalent); 256 MB memory  
Recommended computer: 1 GHz Pentium III (or equivalent); 512 MB memory

Note that, although you use the license key on only one VSX system, you can install the presenter software on an unlimited number of computers.

- Connect the computer(s) to the IP network.

For information about purchasing the People+Content IP option, please contact your Polycom distributor.

### To enable People+Content IP on a VSX system:

1. On a computer, open a web browser. Go to [www.polycom.com/support](http://www.polycom.com/support), and navigate to your product page.
2. Enter the license number you received when you purchased the People+Content IP option.
3. Enter the serial number of the VSX system onto which you want to install People+Content IP. You will then receive a People+Content IP software activation key.
4. Go to **System > Admin Settings > General Settings > Options** on the VSX system.
5. Enter the People+Content IP software activation key.

**To install People+Content IP on a computer:**

1. On a computer, open a web browser. Go to [www.polycom.com/support](http://www.polycom.com/support), and navigate to your product page.
2. Locate the People+Content IP application and click the link to download the file locally.
3. Double-click `setup.exe`.
4. Follow the steps in the Setup Wizard to finish installing the application on the computer.

Anyone using that computer can then double-click on the People+Content IP icon to present content during video conferences using the VSX system. Make the application available to all users in your organization by downloading the `setup.exe` file to a local location that everyone can access.

## Configuring Closed Captioning

You can provide real-time text transcriptions or language translations of the video conference by displaying closed captions on your system. When you provide captions for a conference, the captioner may be present, or may use a telephone or web browser to listen to the conference audio. When the captioner sends a unit of text, all sites see it on the main monitor for 15 seconds. The text then disappears automatically.

Closed captions are supported between VSX systems with software version 7.0 or later.

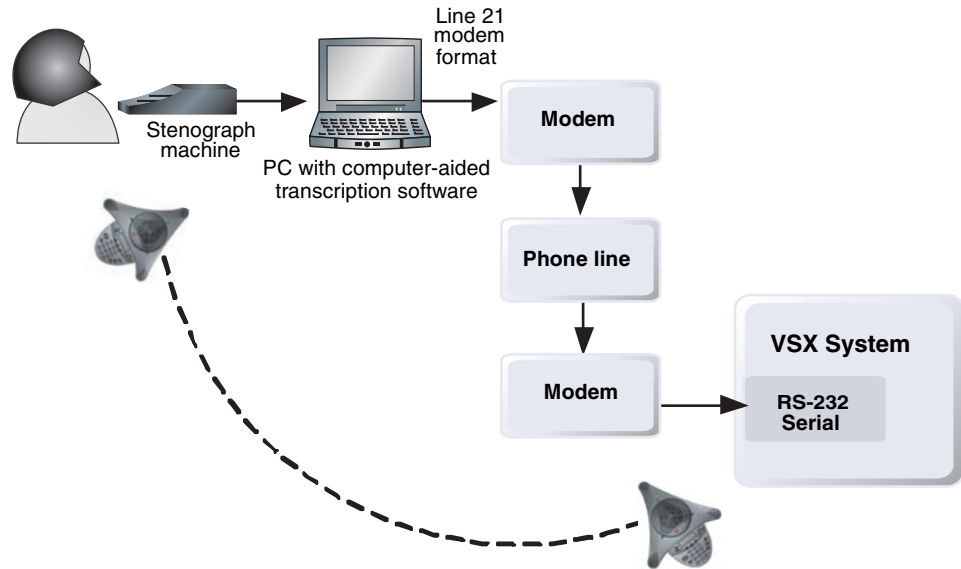
Captions may be provided in any language that uses the Latin alphabet.

The captioner may enter caption text using one of the following methods:

- Remotely, via a dial-up connection to the system's serial RS-232 port
- In the room using equipment connected directly to the serial port
- In the room or remotely, using VSX Web
- In the room or remotely, using a Telnet session

## Via a Dial-Up Connection to the Systems' RS-232 Serial Port

Closed captioners can provide captions from inside the conference room, or from a remote location, via a dial-up connection to the serial port of the VSX system, as shown in the following diagram.



### To supply closed captions via a dial-up connection:

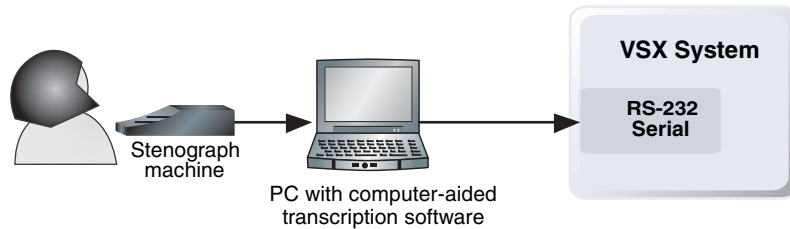
1. Ensure that the computer and the VSX system are configured to use the same baud rate and parity settings.
2. Go to **System > Admin Settings > General Settings > Serial Port** and set the RS-232 Mode to **Closed Caption**.
3. Establish a dial-up connection between the computer and the VSX system.
  - a. Connect a null modem adapter to the RS-232 serial port.
  - b. Connect an RS-232 cable to the modem and to the null modem adapter.
  - c. Connect the modem to a phone line.
  - d. Configure the modem for 8 bits, no parity.

You may need to configure the modem to answer automatically. You may also need to configure it to ignore DTR signals.
4. On the computer, start the transcription application.
5. Enter text using the stenographic machine connected to the computer.
6. To stop sending closed captions, close the transcription application.



## Via the System's Serial RS-232 Port

Closed captioners can provide captions from inside the conference room, using equipment connected directly to the serial port of the VSX system, as shown in the following diagram.

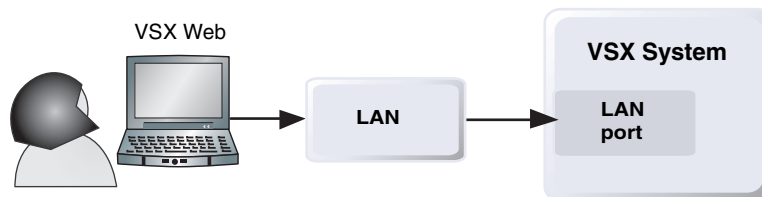


**To supply closed captions using equipment connected directly to the serial port:**

1. Ensure that the computer and the VSX system are configured to use the same baud rate and parity settings.
2. Go to **System > Admin Settings > General Settings > Serial Port** and set the RS-232 mode to **Closed Caption**.
3. On the computer, start the transcription application.
4. Enter text using the stenographic machine connected to the computer.
5. To stop sending closed captions, close the transcription application.

## Via VSX Web

Closed captioners can provide captions from inside the conference room, or from a remote location, by entering the captions directly into VSX Web, as shown in the following diagram.

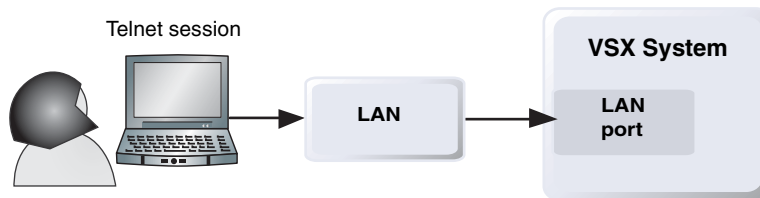


### To supply closed captions for a conference using VSX Web:

1. On a computer, open a web browser.
2. In the browser address line, enter the IP address of the system, for example, `http://10.11.12.13`, to go to the system's web interface.
3. Go to **Utilities > Closed Caption**.
4. Log in using this information:  
**User Name:** Your name.  
**Password:** Meeting password defined for your video conferencing system.
5. In the Closed Caption screen, type the caption text into the text field. Text wraps to the next line after 59 characters.
6. Press **Enter** to send the text to the sites in the conference.

## Via a Telnet Session

Closed captions can provide captions from inside the conference room, or from a remote location, by entering captions via a Telnet session, as shown in the following diagram.



### To supply closed captions for a conference via a Telnet session:

1. On a computer, open a command line interface.
2. Start a Telnet session using the VSX system IP address and port 24 — for example, `telnet 10.11.12.13 24`.
3. Enter the command `cc` to start captioning.
4. Press **Enter** to send the text.
5. To stop sending closed captions, enter **Ctrl-z**.

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# Calling and Answering


## Configuring Call Settings

The Call Settings screens provide access to high-level options for the entire system. For convenience, some of the User Settings options are repeated on these screens.

**To configure call settings:**

1. Go to **System > Admin Settings > General Settings > System Settings > Call Settings**.
2. Configure these settings:

Setting	Description
<b>Maximum Time in Call</b>	Enter the maximum number of minutes allowed for call length.  When that time has expired, you see a message asking you if you want to hang up or stay in the call. If you do not answer within one minute, the call automatically disconnects. If you choose to stay in the call at this time, you will not be prompted again.  Choosing 0 removes any limit.
<b>Auto-Answer Point to Point</b>	Specifies whether to answer incoming point-to-point calls automatically.

3. Select  and configure these settings:

Setting	Description
<b>Display Time in Call</b>	Specifies whether to display the elapsed time or the local time during a call. You can also choose not to display the time.
<b>Call Detail Report</b>	Specifies whether to collect call data for the Call Detail Report and Recent Calls list. When selected, information about calls can be viewed through VSX Web and downloaded as a .csv file.  <b>Note:</b> If this setting is disabled, applications such as the Polycom Global Management System will not be able to retrieve Call Detail Report (CDR) records.
<b>Recent Calls</b>	Specifies whether to display the <b>Recent Calls</b> button on the home screen. The Recent Calls screen lists the site number or name, the date and time, and whether the call was incoming or outgoing.  <b>Note:</b> If the Call Detail Report option is not selected, the Recent Calls option is not available.
<b>Far Site Name Display Time</b>	Turns the far site name display on or off, or specifies the time period the far site name appears on screen when calls first connect.

## Setting the Call Answering Mode

### To set the call answering mode:

1. Go to **System > Admin Settings > General Settings > System Settings > Call Settings**.
2. Select **Auto-Answer Point to Point** to set the answer mode for calls with one site.
3. Select one of the following:
  - **Yes** – Answers calls automatically.
  - **No** – Enables you to answer calls manually.
  - **Do Not Disturb** – Refuses incoming calls automatically. The caller receives a message that the site is unavailable.
  - **Forward** – Lets you send calls to another system.

If you have a VSX 3000A system that you are using as your computer monitor, Polycom recommends that you set up the system so that you have to answer calls manually. If you receive a call while using the system as a computer, you hear a ringing sound and you can switch to video to answer the call manually. Alternatively, you can ignore the call and it will

not connect, thereby preventing the caller from seeing or hearing you at your desk.

## Configuring Directory Settings

To configure system settings:

1. Go to **System > Admin Settings > General Settings > System Settings > Directory**.
2. Configure these settings:

Setting	Description
<b>System Name</b>	Enter or change the system name in this field. This name appears on the screen for the far site when you are making calls.
<b>Localized System Name</b>	<p>Displays the localized system name, if you have entered one. You can enter a <b>Localized System Name</b> for Simplified Chinese on this screen using the Chinese Virtual Keyboard. You must use the VSX Web interface to enter localized system names for other languages.</p> <p>The localized system name is sent to the far site and displayed as the caller ID by VSX systems using version 8.0 or later, when the user interface is set to that language. When you enter a localized system name, it is also entered in English/Pinyin. The English/Pinyin name is the name used by the Global Directory Server, the gatekeeper, and other systems that do not support this feature, and it is also the name that shows up in the Recent Calls list.</p>

### Creating a Localized System Name with VSX Web


To create a localized system name using VSX Web:

1. On a computer, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.
3. Go to **Admin Settings > General Settings > System Settings**.
4. Enter the localized system name in the appropriate language field.

## Enabling Call Forwarding

You can allow users to forward all calls to another system. Users can forward calls from the Do Not Disturb icon on the Place a Call screen.

### To enable call forwarding:

1. Go to **System > Admin Settings > Network > SCCP Settings**.
2. Select  :
3. Specify the extension to which all calls should be forwarded.
4. Select **Enable**.

### Managing Directories with VSX Web

VSX Web import/export directory feature allows you to maintain consistency of VSX system directories in your organization efficiently. It is particularly useful for administrators managing multiple systems that call the same locations. You can:

- Transfer existing directory entries between VSX systems
- Develop directory entries on one system, save them to your computer, and then distribute them to other systems
- Create localized directory entries

Only local directories can be downloaded. The directory file is in .csv format.

### To download a VSX system directory to your computer:

1. On a computer, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.
3. Go to **Utilities > Import/Export Directory**.
4. Click **VSX → PC** to download the .csv file from the VSX system.
5. Save the file to a location on your computer.

**To upload VSX system directory entries:**

1. On a computer, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.
3. Go to **Utilities > Import/Export Directory**.
4. Click **PC —> VSX**.
5. Click **Browse** and browse to the location of the .csv file on your computer.
6. Click **Export Directory** to upload the .csv file to the VSX system.

**To create a localized directory entry using the VSX Web interface:**

1. On a computer, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.
3. Go to **Place a Call > Directory**.

Edit an entry to enter a localized directory entry name in the **Localized Name** field, and specify the language for the localized directory entry.





# Appearance and Tones

## Setting Date, Time, and Location

You can update the system with regional settings, including the location-specific language and calling parameters.


**To set the date, time, and location:**

1. Go to **System > Admin Settings > General Settings > Location**.
2. Configure these settings:

Setting	Description
<b>Country</b>	Specifies the country where the system is located. Changing the country automatically adjusts the country code associated with your system number.
<b>Language</b>	Sets the language for the user interface.

3. Select  and configure these settings:

Setting	Description
<b>Date Format and Time Format</b>	Specifies your format preference for the date and time display and lets you enter your local date and time.
<b>Display Time in Call</b>	Specifies the time display in a call: <ul style="list-style-type: none"> <li>• <b>Elapsed Time</b> – Displays the amount of time in the call.</li> <li>• <b>Local Time</b> – Displays the local time on the screen during a call.</li> <li>• <b>Off</b> – Time is not displayed.</li> </ul>

4. Select  and configure these settings:

Setting	Description
<b>Auto Adjust for Daylight Saving Time</b>	Specifies the daylight savings time setting. When you enable this setting, the system clock automatically changes for daylight saving time.
<b>Time Zone</b>	Specifies the time difference between GMT (Greenwich Mean Time) and your location.
<b>Time Server</b>	Specifies connection to a time server for automatic system time settings.

# Customizing the Home Screen

## Designing the Home Screen

Customize the system functionality according to your users' needs, skill levels, and environments.

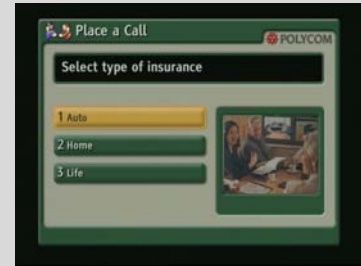
### Infrequent Users (Kiosk Mode)

Provide a simple workspace so no training is needed:

- Let users make calls to pre-defined numbers with one button click.
- Include instructions on screen.

Include a short list of specific items for users to select

Use the marquee to add instructions



### New Users

Provide more options but keep it simple:

- Dialing entry field
- Directory numbers
- Recent Calls

Add features for users as needed



### Advanced Users

Provide additional options for advanced video conferencing users:


- Call Quality (bandwidth and call type)
- Multipoint dialing
- User Settings, Diagnostics, and System Information
- Speed Dial list of frequently called sites
- Alerts

Add more features as users gain experience



**To design the home screen:**

1. Go to **System > Admin Settings > General Settings > Home Screen Settings**.
2. Configure these settings:

Setting	Description
<b>Dialing Display</b>	Specifies which dialing option to display: <ul style="list-style-type: none"> <li>• <b>Dialing entry field</b> — Allows users to enter numbers manually.</li> <li>• <b>Display marquee</b> — Displays text in the dialing entry field. Can be used to display user instructions. Users cannot enter numbers manually when this option is selected.</li> <li>• <b>None</b> — Removes the dialing entry field from the screen.</li> </ul>
<b>Contact List</b>	Specifies whether to display the contact list home screen.
<b>Directory</b>	Allows users to access the directory.
<b>System</b>	Allows users to access the System screen, which includes User Settings, Diagnostics, and System Information. If you remove the <b>System</b> button, you can still access the System screen by navigating to the home screen, pressing  on the remote, and selecting <b>System</b> .

3. Select  and configure these settings:

Setting	Description
<b>System Name</b>	Specifies whether to display the name of the system on the home screen above the PIP window.
<b>Local Date and Time</b>	Specifies whether to display the local date and time on the home screen.

Setting	Description
<b>Do Not Disturb Icon</b>	Allows users to set the system to automatically accept or ignore incoming calls using the <b>Do Not Disturb</b> button on the home screen. Users can also access the call forwarding function from this icon.
<b>Call Detail Report</b>	Specifies whether to generate a report of all calls made with the system. When selected, all calls can be viewed through VSX Web and downloaded as a .csv file. <b>Note:</b> If this setting is disabled, applications such as the Polycom Global Management System will not be able to retrieve Call Detail Report (CDR) records.
<b>Recent Calls</b>	Specifies whether to display the <b>Recent Calls</b> button on the home screen. The Recent Calls screen lists the site number or name, the date and time, and whether the call was incoming or outgoing. <b>Note:</b> If the Call Detail Report option is not selected, the Recent Calls option is not available.


4. Select  and configure these settings:

Setting	Description
<b>Sites</b>	Allows users to access any pre-defined sites from a My Contacts/Speed Dial list on the home screen.
<b>Last Number Dialed</b>	Specifies whether to display the last number dialed or clear the dialing field on the home screen.

## Displaying Contacts on the Home Screen

Sites configured for speed dial are displayed on the home screen. You can also display them, along with any Microsoft LCS contacts, on the contact list home screen.

### To configure speed dial sites:

1. Make sure that the site information is entered in the directory.
2. Go to **System > Admin Settings > General Settings > Home Screen Settings**.
3. Select  three times to access the Sites screen.
4. Select **Add** and choose the sites to add from the directory.
5. Select either **Speed Dial** or **Contacts** as the name you want to appear on the button.

**To display the contact list home screen:**

1. Go to **System > Admin Settings > General > Home Screen Settings**.
2. Select **Contact List**.

## Adding Marquee Text

You can create marquee text to display in the dialing entry field on the home screen. You can create context-specific instructions for your users or, if the home screen has Site buttons, the marquee text can provide information that helps users choose which site to call.

**To enter marquee text in the VSX system interface:**

1. Go to **System > Admin Settings > General Settings > Home Screen Settings**.
2. In **Dialing Display**, select **Display marquee** and enter the text.

You can also add marquee text through the VSX Web. For some languages such as Russian, Korean, Japanese, Simplified Chinese, and Traditional Chinese, you must use VSX Web to add marquee text.

**To enter marquee text using VSX Web:**

1. On a computer, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.
3. Enter the user name and administrator's password, if a password has been established.
4. Click **Admin Settings > General Settings > Home Screen Settings** and enter.
  - **Dialing Display**— Set to Display marquee.
  - **Enter Marquee Text** — Type the text to display on the home screen.
5. Click **Update**.

## Changing System Appearance

Different system appearance options are available, allowing you to coordinate the system interface with the meeting room décor.

### To change the system appearance:

1. Go to **System > Admin Settings > General Settings > System Settings > Appearance**.
2. Configure the color scheme.

You can allow users to change color schemes by allowing user access to the User Settings screen.

## Setting Ring Tones and Alert Tones

### To set ring tones and alert tones:

1. Go to **System > Admin Settings > Audio > Audio Settings**.
2. Select a tone, as desired.

### To set the VSX 3000A system's internal ringer:


1. Go to **System > Admin Settings > Audio > Audio Settings**.
2. Select **Enable Internal Ringer** to specify an additional ring tone when receiving an incoming call. The ringer is built into the system and will alert you to incoming calls.

## Customizing Camera Names and Icons

Customizing the way cameras appear on screen helps users select the correct camera input during a call. You can enter camera names and assign icons. You can choose camera icons from categories including Corporate, Education, Justice, Manufacturing, and Medical.



### To customize camera names and icons:

1. Go to **System > Admin Settings > Cameras**, then select  to go to **Camera Settings**.
2. Enter camera names and select the appropriate icon for each video source.

## Screen Savers

### Adding Screen Saver Text

You can customize the VSX system to display text when the system is in sleep mode. For instance, you can display on-screen instructions to assist users with what steps they should take next.



**Output upon Screen Saver Activation** on the Monitors screen must be set to **Black** if you want to display screen saver text.

### To enter screen saver text:

1. On a computer, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.
3. Enter the user name and administrator's password, if a password has been established.



4. Click **Utilities > Screen Saver** and enter:
  - **Screen Saver Text** — Appears as scrolling text when the system is in sleep mode. You can use this scrolling text to provide instructions or next steps for users of the system.
  - **Logo Screen Text** — Appears underneath the logo before the system goes into sleep mode.
5. Click **Update**.

## Adding a Screen Saver News Feed

You can customize the VSX system to display a news feed when the system is in sleep mode.



**Output upon Screen Saver Activation** on the Monitors screen must be set to **Black** if you want to display a screen saver news feed.

### To configure a screen saver news feed:

1. On a computer, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.
3. Enter the user name and administrator's password, if a password has been established.
4. Click **Utilities > Screen Saver**, and paste a feed URL into the **News Feed** field.
5. Select a stream content, click **Submit**, and close the stream content window.
6. Click **Update**.

## Adding a Screen Saver Logo

You can customize the VSX system to display your own logo instead of the Polycom logo.

### To upload a screen saver logo:

1. On a computer, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.
3. Enter the user name and administrator's password, if a password has been established.

4. Click **Utilities > Screen Saver**, click **Next**, and follow the onscreen instructions for uploading a logo file.

## Changing the Screen Saver Wait Time

**To change the screen saver wait time:**

1. Go to **System > Admin Settings > General Settings > System Settings > Appearance**.
2. Configure the screen saver wait time to specify how long the system remains awake during periods of inactivity. The default is 3 minutes. Setting this option to **Off** prevents the system from going to sleep.


## Configuring Remote Control Behavior

You can customize the behavior of the remote control to support the users' environment.

**To configure remote control behavior:**

1. Go to **System > Admin Settings > General Settings > System Settings > Remote Control**.
2. Configure these settings:

Setting	Description
<b>Keypad Audio Confirmation</b>	Specifies whether to play a voice confirmation of numbers selected with the remote control.
<b>Remote Control Keypad</b>	Specifies whether pressing remote control keypad buttons moves the camera to presets or generates DTMF tones. If this is set to <b>Presets</b> , users can generate DTMF tones by pressing <b>#</b> on the remote control while on a video screen.

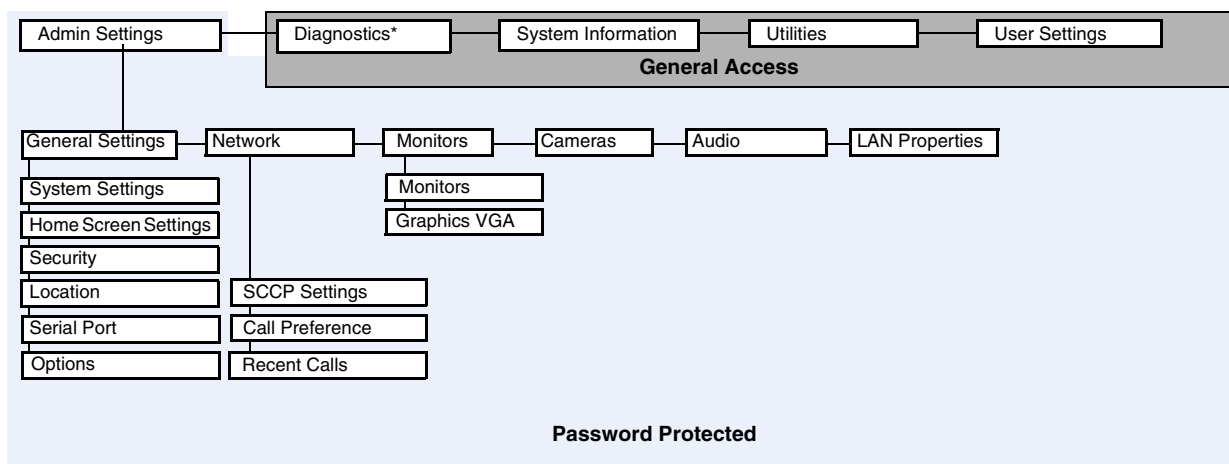
Setting	Description
<b>Snap Button Option</b>	Specifies alternative uses for the  <b>Snap</b> button on the remote control. Choose from <b>Calendar</b> , <b>Recent Calls</b> , <b>System Info</b> , <b>Call Statistics</b> , or <b>Off</b> .
<b>Chinese Virtual Keyboard</b>	Specifies the type of onscreen keyboard to display for Chinese. <ul style="list-style-type: none"><li>• <b>Computer</b>—Sets the Chinese Virtual Keyboard to an English computer keyboard without number keys.</li><li>• <b>Cell</b>—Sets the Chinese Virtual Keyboard to a cell phone keypad.</li></ul>
<b>Use Non-Polycom Remote</b>	Configures the system to accept input from a programmable, non-Polycom remote control. In most cases the Polycom remote works as designed, even when this feature is enabled. However, try disabling this feature if you experience difficulty with the Polycom remote. For more information about VSX system IR codes, refer to the <i>Integrator Reference Manual for the VSX Series</i> .



# Security

## Screens that Require the Room Password for Access

The following illustration shows which screens require the room password.



\*Reset System is password-protected when Security Mode is enabled

## Configuring Security Options

**To set passwords and security options:**

1. Go to **System > Admin Settings > General Settings > Security**.
2. Configure these settings:

Setting	Description
<b>Security Mode</b> VSX 3000A VSX 5000 VSX 6000A VSX 7000s VSX 7000e VSX 8000	Specifies whether the system uses Security Mode, which prevents unsecured access to the system. Every time you enable Security Mode, you must configure a new password for the system.
<b>Use Room Password for Remote Access</b>	Specifies whether the room password and remote access password are the same.
<b>Room Password</b>	Enter or change the room password.  When the room password is set, you must enter it to configure the system Admin Settings using the remote control. The room password must not contain spaces.
<b>Remote Access Password</b>	Enter or change the remote access password.  When the remote access password is set, you must enter it to upgrade the software or manage the system from a computer. The remote access password must not contain spaces.

3. Select  and configure these settings:

Setting	Description
<b>Enable Remote Access</b>	<p>Specifies whether to allow remote access to the system by:</p> <ul style="list-style-type: none"> <li>• FTP</li> <li>• Web</li> <li>• Telnet</li> </ul> <p>You may select any of these, or any combination of them.</p> <p><b>Note:</b> The system restarts if you change the remote access settings. This setting does not deactivate the associated port, only the application. Use <b>Web Access Port</b> to disable the port.</p>
<b>Allow Access to User Settings</b>	<p>Specifies whether the User Settings screen is accessible to users via the System screen.</p> <p>Select this option if you want to allow users to change limited environmental settings.</p>
<b>Allow Video Display on Web</b>	<p>Specifies whether to allow viewing of the room where the system is located, or video of calls in which the system participates, using VSX Web.</p> <p><b>Note:</b> This feature activates both near site and far site video displays in Web Director.</p>
<b>Web Access Port</b>	<p>Specifies the port to use when accessing the system using VSX Web.</p> <p>If you change this from the default (port 80), specify a port number of 1025 or higher, and make sure the port is not already in use. You will need to include the port number with the IP address when you use VSX Web to access the system. This makes unauthorized access more difficult.</p> <p><b>Note:</b> The system restarts if you change the web access port.</p>

## Setting the Room and Remote Access Passwords

You can set the room password to restrict who can configure system Admin Settings using the remote control. You can set the remote access password to restrict who can upgrade the VSX Series system software or perform other remote management from a computer.

### To set or change the room password:

1. Go to **System > Admin Settings > General Settings > Security**.
2. Enter or change the password.

The default room password is the 14-digit system serial number.

**To set or change the remote access password:**

1. Go to **System > Admin Settings > General Settings > Security**.
2. Clear the **Use Room Password for Remote Access** setting if it is selected. By default, the remote access password is the same as the room password.
3. Enter a **Remote Access** password.

To access Admin Settings using VSX Web when a remote access password is set, enter "admin" for the user name.

**To use the same password for both local and remote access:**

1. Go to **System > Admin Settings > General Settings > Security**.
2. Select **Use Room Password for Remote Access**.

**To reset a forgotten password:**

1. Get the system's serial number from the system or from the System Information screen.
2. Go to **System >Diagnostics > Reset System**.



If Security Mode is enabled, the room password is required to access the Reset System screen. If you forget the room password while the system is in Security Mode, contact your Polycom distributor or Polycom Technical Support.

3. Enter the system's serial number and select **Delete System Settings**.
4. Select **Reset System**.

After the system resets, it leads you through the setup wizard. You can enter a new password when you set up the system.



## Managing User Access to Settings and Features

You can manage user access to settings and features by using passwords and by configuring the system to show only those options you want your users to see.

To maintain this security level:	You can allow users to:
High (Kiosk mode)	Call only the numbers you specify on the home screen. See <a href="#">Designing the Home Screen</a> on page 7-3.
Medium	Place calls using the restrictions you specify for length of call, type of call, and use of the directory.
Low	Configure user settings.
Very low	Configure all system settings.

## Letting Users Customize the Workspace

You can allow users to change common user preferences by providing access to the User Settings screen.

### To allow users to customize the workspace:

1. Go to **System > Admin Settings > General Settings > Security**.
2. Select the **Allow Access to User Settings** option to make the **User Settings** button available to users on the System screen.

User Settings contains the following options, which are also available to administrators on the Admin Settings screens:

- Backlight Compensation
- Camera Brightness (VSX 3000A)
- Far Control of Near Camera
- Meeting Password
- Auto-Answer Point to Point
- Auto-Answer Multipoint
- Mute Auto-Answer Calls
- PIP
- Keypad Audio Confirmation
- Color Scheme

- Far Site Name Display Time
- Dual Monitor Emulation
- Allow Video Display on Web

## Limiting What Users Can Do With the System

You can limit what you allow users to do with the system by configuring the following:

- **Maximum Time in Call** — If you want to specify the maximum time a call can last, go to **System > Admin Settings > General Settings > System Settings > Call Settings** and enter the maximum call length allowed.

## Configuring Security Mode

You can configure VSX 3000A, VSX 7000s, VSX 7000e, and VSX 8000 systems to use Security Mode, which provides secure access to the system. Security Mode is based on Transport Layer Security (TLS) 1.0 using 168-bit Triple-DES. These protocols encrypt management communication over IP, preventing access by unauthorized users.

Every time you enable Security Mode, you must configure a new password for the system. The password cannot be blank and it cannot be the default value (serial number).

Security Mode requires secure access and a password for Web, Telnet, and FTP access:

- To access a VSX system in Security Mode using VSX Web, enter the IP address of the system using secure HTTPS access, for example, `https://10.11.12.13`. Click **Yes** in the security dialogs that appear. This access uses port 443. To access Admin Settings using VSX Web when a remote access password is set, enter "admin" for the user name.
- To access a VSX system in Security Mode using Telnet, you must use a Telnet client that supports TLS. This access uses port 992 or 993.
- To access a VSX system in Security Mode using FTP, use FTPS, or FTPS-TLS, to implement a secure session. This access uses port 990.

**To configure the system to use Security Mode:**

1. Go to **System > Admin Settings > General Settings > Security**.
2. Enable **Security Mode**.

When you change this setting, the VSX system restarts. Every time a VSX system is powered on or restarts in Security Mode, it verifies that the system software is authentic Polycom software.



**Points to note about Security Mode:**

- Global Management System™ and ReadiManager™ SE200 are not compatible with VSX systems in Security Mode.
- Software images for version 8.5 and later are digitally signed by Polycom. To install an earlier version of system software, you must disable Security Mode.
- If Security Mode is not enabled, the system first attempts to use a secure protocol (such as HTTPS), but reverts to the non-secure form of the protocol if the management system does not have a secure client.
- If Security Mode is enabled, you must enter the room password to reset the system (**System > Diagnostics > Reset System**).



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# Managing the System Remotely

You can configure, manage, and monitor the system from a computer using the system's web interface, VSX Web. You can also use the API commands.

- VSX Web requires only a web browser.
- For more information about the API commands, refer to the *Integrator's Reference Manual for the VSX Series*.

## Using VSX Web

You can use VSX Web to perform most of the calling and configuration tasks you can perform on the local system.

## Accessing VSX Web

### To configure your browser to use VSX Web:

1. Be sure that you use Microsoft Internet Explorer 6.0 or later as your web browser and that you have Java 1.2 or later installed.
2. Configure these settings:
  - Allow cookies: Enabled
  - Force pages to reload on every visit to a page: Enabled

### To access the system using VSX Web:

1. On a computer, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.

If Security Mode is enabled on the system, you must use secure HTTPS access, for example, `https://10.11.12.13`. Click **Yes** in the security dialog boxes that appear.


3. Enter `admin` as the user name, and enter the remote access password, if one is set.

You can use VSX Web to configure all of the system settings except the remote management settings. For security reasons, these settings must be configured on the local system by an administrator.

## Monitoring a Room or Call with VSX Web

The monitoring feature within VSX Web allows administrators of VSX systems to view a call or the room where the system is installed. For security reasons, this feature can only be enabled on the local system by an administrator.

### To enable room and call monitoring:

1. Go to **System > Admin Settings > General Settings > Security**.
2. Select  and enable **Allow Video Display on Web** to allow the room or call to be viewed remotely.

**To view a room or call:**

1. On a computer, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.
3. Go to **Utilities > Web Director**.
4. Perform any of the following tasks:
  - Place or end a call
  - View near and far sites
  - Change camera sources
  - Adjust camera position
  - Zoom cameras
  - Adjust system volume settings
  - Mute and unmute the microphones

You can view near and far sites without opening Web Director by selecting **Tools > Remote Monitoring**.

## Managing System Profiles with VSX Web

Administrators managing systems that support multiple applications can change system settings quickly and easily using profiles. You can store a VSX system profile on a computer as a .csv file using VSX Web. There is no limit to the number of profiles you can save.

The following settings are included in a profile:

- Home Screen settings
- User access levels
- Icon selections
- Option keys
- System behaviors

Passwords are not included when you store a profile.



Polycom recommends using profiles only as a way to back up system settings. Attempting to edit a stored profile or upload it to more than one system on the network can result in instability or unexpected problems.

**To store a profile:**

1. On a computer, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.
3. Go to **Utilities > Profile Center**.
4. Click **VSX** → **PC** to download the .csv file from the VSX system.
5. Save the file to a location on your computer.

**To upload a profile:**

1. Reset the VSX system to restore default settings.
2. On a computer, open a web browser.
3. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.
4. Go to **Utilities > Profile Center**.
5. Click **Browse** and browse to the location of the .csv file on your computer.
6. Click **PC** → **VSX** to upload the .csv file to your system.

## Keeping your Software Current

If you have Internet access and a software key, you can use the web-based Softupdate application to update the VSX Series software. If you do not have Internet access, your reseller can supply you with the VSX Series software update on CD-ROM.



Do not power off the system during the software upgrade process. If the upgrade is interrupted, the system may become unusable.

**To update your software via the Internet:**

1. Using a web browser, go to [www.polycom.com/support](http://www.polycom.com/support).
2. Navigate to your product page.

Refer to the *Release Notes* for information about the latest software version. Refer to *Upgrading Polycom Video Software* for detailed information about obtaining software key codes and using the SoftUpdate program.

3. Download the VSX Series software update file in .zip format.



4. Double-click the software.zip file to extract the file.
5. Double-click **Softupdate.exe** to run the update program.



If you install version 8.5 or later on a VSX system that has Security Mode enabled, the system verifies that the software being installed is authentic Polycom software. To install a version earlier than 8.5, you must disable Security Mode on the VSX system.



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# Control Devices

## Connecting Control and Accessibility Equipment

The VSX 5000 and VSX 7000s systems provide one RS-232 port; the VSX 7000e and VSX 8000 systems provide two. You can use the RS-232 serial ports to:

- Connect a modem and use a closed captioning service
- Pass data from a device connected to your system to a device connected to the far site system
- Control the system through a touch-panel using the API
- Provide control signals for an additional camera
- Provide control signals for a Polycom Vortex mixer (VSX 8000)



You will need to configure the RS-232 equipment according to the manufacturer's instructions, and you will need to configure the RS-232 serial port on the system exactly the same way.

## Connecting Touch-Panel Controls

You can connect an AMX or Crestron control panel to the system's RS-232 serial port as part of a custom room installation. You will need to program the control panel. Refer to the *Integrator's Reference Manual for the VSX Series* for information about the API commands.

## Connecting IR Sensors to VSX 8000 Systems

The VSX 8000 system provides a connector for an external IR sensor. Refer to your system's setup sheet for connection details.

The VSX 8000 system is compatible with the following IR sensors:

- Xantech® 480-00
- Xantech 490-90
- Xantech 780-80
- Xantech 780-90



The VSX 8000 system is not compatible with the external IR sensor for the VS4000™ system.

## Configuring RS-232 Serial Port Settings

The VSX 5000, VSX 6000A, and VSX 7000s systems provide one RS-232 port; the VSX 7000e and VSX 8000 systems provide two.

1. Go to **System > Admin Settings > General Settings > Serial Port**.
2. Configure these settings:

Setting	Description
<b>Baud Rate</b>	Set the baud rate to the same value that it is set on the serial device.
<b>RS-232 Mode</b>	<p>Specifies the mode used for the serial port. Available settings depend on the VSX system model.</p> <ul style="list-style-type: none"> <li>• <b>Control</b>—Receives control signals from a touch-panel control. Allows any device connected to the RS-232 port to control the system using API commands.</li> <li>• <b>Sony PTZ</b>—Provides control signals to a PTZ camera. (VSX 7000s, VSX 7000e, VSX 8000)</li> <li>• <b>Closed Caption</b>—Receives closed captions from a captioning service using a modem, or directly from a captioner's computer via Telnet.</li> <li>• <b>Vortex Mixer</b>—Provides control signals to a Polycom Vortex mixer.</li> <li>• <b>Pass Thru</b>—Passes data to an RS-232 device connected to the serial port of the far-site system.</li> <li>• <b>Polycom Annotation</b>—Provides control signals to the Polycom Instructor <i>RP</i>™.</li> <li>• <b>Debug</b>—Provides a Telnet trace for debugging. You can only set one RS-232 port at a time to Debug mode.</li> </ul>

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# Statistics and Diagnostics

The VSX system provides various screens that allow you to review information about calls made by the system and to review network usage and performance.

## Diagnostics Screens




### To access the Diagnostics screens on the system:

- Go to **System > Diagnostics**.

### To access the Diagnostics screens from the VSX Web:

1. On a computer, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.
3. Click **System Setup**.
4. Enter `admin` as the user name, and the admin password, if a password has been established.
5. Click **Diagnostics** from any page in VSX Web.

The following diagnostic screens and tools are available.

<b>Status Tools</b>		
<b>Diagnostic Tool</b>	<b>In the system's user interface</b>	<b>In the VSX Web</b>
<p><b>System Status</b> screen</p> <p>Displays system status information, including auto-answer point to point, remote control battery, time server, Global Directory, IP network, gatekeeper, and ISDN BRI lines.</p>	<p>On the Diagnostics screen, select <b>System Status</b>.</p>	<p>Select <b>Diagnostics &gt; System Status</b>.</p>
<p><b>Call Summary</b> screen</p> <p>Displays calling information, such as time spent in calls, total number of IP and ISDN calls, and percentage of time spent in IP and ISDN calls.</p>	<ol style="list-style-type: none"> <li>1. On the Diagnostics screen, select <b>System Status</b>.</li> <li>2. Select  to go to the Call Summary screen.</li> </ol>	<p>Select <b>Diagnostics &gt; System Status &gt; Call Summary</b>.</p>
<p>For more information about this screen, see on page <a href="#">11-6</a>.</p>		
<p><b>Call Status</b> screen</p> <p>Displays call type, data speed, and number dialed for the current call.</p>	<p>On the <b>Diagnostics</b> screen, select <b>Call Statistics</b>.</p> <p>For more information about this screen, see <a href="#">Call Status</a> on page <a href="#">11-7</a>.</p>	<p>Not available.</p>
<p><b>Call Statistics</b> screen</p> <p>Displays call speed, audio and video protocols, annexes, and error count for the call in progress.</p> <p>In multipoint calls, the <b>Call Statistics</b> screen shows most of this information for all systems in the call.</p>	<ol style="list-style-type: none"> <li>1. On the <b>Diagnostics</b> screen, select <b>Call Statistics</b>.</li> <li>2. Select  to go to the Call Statistics screen.</li> </ol>	<p>Select <b>Diagnostics &gt; Call Statistics</b>.</p>
<p>For more information about this screen, see <a href="#">Call Statistics</a> on page <a href="#">11-6</a>.</p>		
<p><b>Content Statistics</b> screen</p> <p>Displays content format, data rate, frame rate, and packet loss for the call in progress. Also provides information about the far site systems.</p>	<ol style="list-style-type: none"> <li>1. On the <b>Diagnostics</b> screen, select <b>Call Statistics</b>.</li> <li>2. Select  three times to go to the <b>Content Statistics</b> screen.</li> </ol>	<p>Not available.</p>
<p><b>Call Detail Report</b> screen</p> <p>Displays the current Call Detail Report (CDR) and provides access to the archived CDR.</p>	<p>Not available.</p>	<p>Select <b>Utilities &gt; Call Detail Report</b>.</p>
<p>For more information about this screen, see <a href="#">Call Detail Report (CDR)</a> on page <a href="#">11-8</a>.</p>		


<b>Network Tools</b>		
<b>Diagnostic Tool</b>	<b>In the system's user interface</b>	<b>In the VSX Web</b>
<p><b>Near End Loop test</b> Tests the internal audio encoders and decoders, the external microphones and speakers, the internal video encoders and decoders, and the external cameras and monitors. Monitor 1 displays the video and plays the audio that would be sent to the far site in a call. This test is not available when you are in a call.</p>	<ol style="list-style-type: none"> <li>1. On the <b>Diagnostics</b> screen, select <b>Network</b>.</li> <li>2. Select <b>Near End Loop</b> to start the test.</li> <li>3. Press any button on the remote control to stop the test.</li> </ol>	<ol style="list-style-type: none"> <li>1. Select <b>Diagnostics &gt; Network &gt; Near End Loop</b>.</li> <li>2. Click <b>Near End Loop</b> to start the test.</li> <li>3. Click <b>Near End Loop</b> again to end the test.</li> </ol>
<p><b>PING test</b> Tests whether the system can establish contact with a far-site IP address that you specify.</p>	<ol style="list-style-type: none"> <li>1. On the <b>Diagnostics</b> screen, select <b>Network &gt; PING</b>.</li> <li>2. Enter the IP address that you wish to test.</li> <li>3. Select <b>Start</b>. If the test is successful, the VSX system displays a message indicating that the IP address under test is available.</li> </ol>	<ol style="list-style-type: none"> <li>1. Select <b>Diagnostics &gt; Network &gt; PING</b>.</li> <li>2. Enter the IP address that you wish to test.</li> <li>3. Click the <b>PING</b> icon. If the test is successful, the VSX system displays a message indicating that the IP address under test is available.</li> </ol>
<p><b>Trace Route test</b> Tests the routing path between the local system and the IP address entered.</p>	<ol style="list-style-type: none"> <li>1. On the <b>Diagnostics</b> screen, select <b>Network &gt; Trace Route</b>.</li> <li>2. Enter the IP address that you wish to trace.</li> <li>3. Select <b>Start</b>. If the test is successful, the VSX system lists the hops between the system and the IP address you entered.</li> </ol>	<ol style="list-style-type: none"> <li>1. Select <b>Diagnostics &gt; Network &gt; Trace Route</b>.</li> <li>2. Enter the IP address that you wish to test.</li> <li>3. Click <b>Trace Route</b>. If the test is successful, the VSX system lists the hops between your computer and the IP address you entered.</li> </ol>

<b>Video and Audio Tools</b>		
<b>Diagnostic Tool</b>	<b>In the system's user interface</b>	<b>In the VSX Web</b>
<p><b>Color Bar test</b> Tests the color settings of your monitor for optimum picture quality. If the color bars generated during the test are not clear, or the colors do not look correct, the monitor needs to be adjusted.</p>	<ol style="list-style-type: none"> <li>1. On the <b>Diagnostics</b> screen, select <b>Video</b>.</li> <li>2. Select the <b>Color Bars</b> icon.</li> <li>3. Press any button on the remote control to stop the test.</li> </ol>	<ol style="list-style-type: none"> <li>1. Select <b>Diagnostics &gt; Video</b>.</li> <li>2. Click the <b>Color Bars</b> icon to start the test.</li> <li>3. Click the <b>Color Bars</b> icon again to end the test.</li> </ol>
<p><b>Speaker test</b> Tests the audio cable connections. A 400 Hz audio tone indicates that the local audio connections are correct.</p>	<ol style="list-style-type: none"> <li>1. On the <b>Diagnostics</b> screen, select <b>Audio</b>.</li> <li>2. Select the <b>Speaker Test</b> to go to the Speaker Test screen.</li> <li>3. Select the <b>Speaker Test</b> icon.</li> <li>4. Press any button on the remote control to stop the test. If you are in a call, the far site will also hear the tone.</li> </ol>	<ol style="list-style-type: none"> <li>1. Select <b>Diagnostics &gt; Audio &gt; Speaker Test</b>.</li> <li>2. Click the <b>Speaker Test</b> icon to start the test.</li> <li>3. Click the <b>Speaker Test</b> icon again to end the test. The people at the site you are testing will hear the tone, but you will not. You can send a message to tell them how to notify you when they hear the speaker test.</li> </ol>
<p><b>Audio Meter test</b> Measures the strength of audio signals from:</p> <ul style="list-style-type: none"> <li>• Microphone(s)</li> <li>• Far-site audio</li> <li>• VCR audio</li> <li>• Any device connected to the audio line in</li> </ul>	<ol style="list-style-type: none"> <li>1. On the <b>Diagnostics</b> screen, select <b>Audio</b>.</li> <li>2. Select <b>Audio Meter</b>. The audio meter should register between 0 and 15 dB for each active input.</li> <li>3. To check the microphone(s), speak into the microphone.</li> <li>4. To check far-site audio, ask a participant at the far site to speak or call a phone in the far-site room to hear it ring.</li> <li>5. To check a VCR or DVD, connect it to the VCR inputs and play the VCR or DVD to test the audio.</li> </ol>	<p>Select <b>Diagnostics &gt; Audio &gt; Audio Meter</b> to start the test.</p>



Reset and Restart		
Diagnostic Tool	In the system's user interface	In the VSX Web
<p>Reset System</p> <p>Cycles power to the system.</p> <p>When you reset the system using the remote control, the system's user interface allows you to:</p> <ul style="list-style-type: none"> <li>Keep your system settings (such as system name and network configuration) or restore factory settings.</li> <li>Keep or delete the directory stored on the system.</li> </ul> <p><b>Note:</b> If Security Mode is enabled, you must enter the room password to reset the system.</p>	<ol style="list-style-type: none"> <li>On the <b>Diagnostics</b> screen, select <b>Reset System</b>.</li> <li>Enter the system's serial number.</li> <li>If you wish to restore the original factory settings, select <b>Delete System Settings</b>. This deletes the system passwords, CDR, and CDR archive along with the other system settings. You may wish to download the CDR and CDR archive before you reset the system. See <a href="#">Call Detail Report (CDR)</a> on page 11-8. If you delete system settings, the setup wizard will lead you through the initial configuration after the system restarts.</li> <li>If you wish to remove the directory, select <b>Delete Directory Entries</b>. This only deletes the system's local directory. System reset does not affect the global directory.</li> <li>Select <b>Reset System</b>.</li> </ol>	<ol style="list-style-type: none"> <li>Select <b>Diagnostics &gt; Reset System</b>.</li> <li>Click the <b>Reset System</b> icon.</li> </ol>

## Checking System Status



The **System Status** screen provides detailed information about system settings, IP and ISDN connections, time server connections, and other information that is important to the functioning of the system. For an explanation of any of the status items, select the item and press  on the remote.

When there is a change in system status or a potential problem, you see an alert at the bottom of the **Place a Call** screen.

### To view System Status information:

- Go to **System > Diagnostics > System Status**.

**To get information about a status message:**



- Select the status message and press  or  on the remote control.

## Call Summary

The Call Summary screen provides details about the calls placed by the system, including:

- Duration of the last call
- Total number of calls placed and received
- Number, total time, and percentage of IP calls

**To view the Call Summary screen:**




- Go to **System > Diagnostics > Call Statistics** and then select  four times.
- View Call Summary during a call by pressing  **Help** on the remote.

## Call Statistics

The two Call Statistics screens provide information about the call in progress, including:

This screen:	Displays this information:
Call Statistics (1)	<ul style="list-style-type: none"> <li>• Call speed (transmit and receive)</li> <li>• Video protocol, annexes, and format in use (transmit and receive). The video protocol is shown in green if the system is currently using error concealment.</li> <li>• Audio protocol in use (transmit and receive)</li> <li>• Number of packets lost and percentage packet loss (transmit and receive) in IP calls</li> <li>• Far site details and call type</li> </ul>
Call Statistics (2)	<ul style="list-style-type: none"> <li>• Audio and video data rates specified (transmit and receive)</li> <li>• Video data rate and frame rate in use (transmit and receive)</li> <li>• Video packet loss and jitter in IP calls</li> <li>• Audio packet loss and jitter in IP calls</li> <li>• Far site details and call type</li> </ul>


**To view the Call Statistics screen:**

- Go to **System > Diagnostics > Call Statistics** and then select .
- View Call Statistics during a call by pressing  **Help** on the remote.
- Press the  **Snap** button on the remote if it is configured to display the Call Statistics screen.

## Call Status

The Call Status screen provides call connection information. The spheres on the screen provide details for each line. When you place a call, you'll see the status change as the call connects.

**To view the Call Status screen:**



- Go to **System > Diagnostics > Call Statistics**.
- View Call Status during a call by pressing  **Help** on the remote.

You can highlight the spheres on this screen to see the number dialed, the relevant status code, and details of any errors.

## Content Statistics

The Content Statistics screen shows statistics for content shared during a call. This screen does not display transmit statistics for People+Content IP.

**To view the Content Statistics screen:**

- Go to **System > Diagnostics > Call Statistics** and then select  three times.
- View Content Statistics during a call by pressing  **Help** on the remote.

## Recent Calls

When the **Call Detail Report** setting is enabled, Recent Calls shows a list of up to 99 calls made by the system. It includes the following information:

- Site name or number
- Date and time

- Call in or out


The Recent Calls list shows incoming and outgoing calls that connect, as well as outgoing calls that do not connect.



If Do Not Disturb has been enabled, any incoming calls attempted by other sites will not be listed.

The home screen can be configured to include Recent Calls. For more information about including the Recent Calls list on the home screen, see [Designing the Home Screen](#) on page 7-3.

#### To view the Recent Calls screen:

- Go to **System > Admin Settings > Network > Recent Calls**.

You can see more detail about any call by highlighting an entry and pressing  **Help** on the remote. Information includes the far site's number and name, and the type, speed (bandwidth), and duration of the call.

You can call any site on the Recent Calls list by highlighting the entry and pressing  **Call** or  **Select** on the remote to place the call.

If you need even more detail about calls, you can download the Call Detail Report (CDR) from VSX Web. For more information about the CDR, see [Call Detail Report \(CDR\)](#).

You can save an entry in the Recent Calls list by highlighting the entry and pressing **9** on the remote.

## Call Detail Report (CDR)

When enabled, the Call Detail Report (CDR) provides the system's call history. You can view the CDR from VSX Web, and you can download the data in CSV format for sorting and formatting. CSV (Comma Separated Value) files can be imported into spreadsheet and database programs.

Every call that connects is added to the CDR, whether it is a call that you make or that you receive. If a call does not connect, the report shows the reason. In multipoint calls, each far site is shown as a separate call, but all have the same conference number.

The CDR does not include incoming calls that the VSX system does not answer, so if calls were missed while Do Not Disturb was enabled, details will not be included in the CDR.

#### To view and download the CDR via VSX Web:

1. On a PC, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.

3. Enter `admin` as the user name, and the admin password, if a password has been established.
4. Click **Utilities > Call Detail Report** to view the details of the file.
5. Click **Save** and then specify a location on your computer to save the file.

## Information in the CDR

The following table describes the data fields in the CDR.

Data	Description
Row ID	Each call is logged on the first available row. A call is a connection to a single site, so there may be more than one call in a conference.
Start Date	The call start date, in the format dd-mm-yyyy.
Start Time	The call start time, in the 24-hour format hh:mm:ss.
End Date	The call end date.
End Time	The call end time.
Call Duration	The length of the call.
Account Number	If Require Account Number to Dial is enabled on the system, the value entered by the user is displayed in this field.
Remote System Name	The far site's system name.
Call Field Number 1	The number dialed from the first call field, not necessarily the transport address. For incoming calls — The caller ID information from the first number received from a far site.
Call Field Number 2 (If applicable for call)	For outgoing calls — The number dialed from the second call field, not necessarily the transport address. For incoming calls — The caller ID information from the second number received from a far site.
Call Rate	The bandwidth negotiated with the far site.
System Manufacturer	The name of the system manufacturer, model, and software version, if they can be determined.
Call Direction	In — For calls received. Out — For calls placed from the system.
Conference ID	A number given to each conference. A conference can include more than one far site, so there may be more than one row with the same conference ID.

<b>Data</b>	<b>Description</b>
Call ID	Identifies individual calls within the same conference.
Endpoint Alias	The alias of the far site.
Endpoint Additional Alias	An additional alias of the far site.
Endpoint Type	Terminal, gateway, or MCU.
Endpoint Transport Address	The actual address of the far site (not necessarily the address dialed).
Audio Protocol (Tx)	The audio protocol transmitted to the far site, such as G.728 or G.722.1.
Audio Protocol (Rx)	The audio protocol received from the far site, such as G.728 or G.722.
Video Protocol (Tx)	The video protocol transmitted to the far site, such as H.263 or H.264.
Video Protocol (Rx)	The video protocol received from the far site, such as H.261 or H.263.
Video Format (Tx)	The video format transmitted to the far site, such as CIF or SIF.
Video Format (Rx)	The video format received from the far site, such as CIF or SIF.
Disconnect Reason	The description of the Q.850 (ISDN) cause code showing how the call ended.
Q.850 Cause Code	The Q.850 cause code showing how the call ended.
Total H.320 Errors	The number of errors during an H.320 call.
Average Percent of Packet Loss (Tx)	The combined average of the percentage of both audio and video packets transmitted that were lost during the 5 seconds preceding the moment at which a sample was taken. This value does not report a cumulative average for the entire H.323 call. However, it does report an average of the sampled values.
Average Percent of Packet Loss (Rx)	The combined average of the percentage of both audio and video packets received that were lost during the 5 seconds preceding the moment at which a sample was taken. This value does not report a cumulative average for the entire H.323 call. However, it does report an average of the sampled values.
Average Packets Lost (Tx)	The number of packets transmitted that were lost during an H.323 call.
Average Packets Lost (Rx)	The number of packets from the far site that were lost during an H.323 call.

Data	Description
Average Latency (Tx)	The average latency of packets transmitted during an H.323 call based on round-trip delay, calculated from sample tests done once per minute.
Average Latency (Rx)	The average latency of packets received during an H.323 call based on round-trip delay, calculated from sample tests done once per minute.
Maximum Latency (Tx)	The maximum latency for packets transmitted during an H.323 call based on round-trip delay, calculated from sample tests done once per minute.
Maximum Latency (Rx)	The maximum latency for packets received during an H.323 call based on round-trip delay, calculated from sample tests done once per minute.
Average Jitter (Tx)	The average jitter of packets transmitted during an H.323 call, calculated from sample tests done once per minute.
Average Jitter (Rx)	The average jitter of packets received during an H.323 call, calculated from sample tests done once per minute.
Maximum Jitter (Tx)	The maximum jitter of packets transmitted during an H.323 call, calculated from sample tests done once per minute.
Maximum Jitter (Rx)	The maximum jitter of packets received during an H.323 call, calculated from sample tests done once per minute.

## Call Detail Report Archives

Calls are added to the CDR until the file size reaches 50 KB, which is equivalent to about 150 calls. The system then automatically archives the CDR and creates a new CDR file. If an archive is already present, the new archive overwrites it.

The CDR starts with Row 1, but the conference numbers continue from the file most recently archived. Conference numbering restarts at 1 after the system assigns conference number 100,000.

### To get an archived CDR:

1. From your computer, open an FTP client.
2. FTP into the VSX system.
3. Enter this FTP command:  

```
GET localcdr_archive.csv
```
4. Close your FTP session.





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# Troubleshooting

This chapter covers the diagnostic screens of the VSX system. It is organized by category to help you troubleshoot any issue.

## General Troubleshooting

This section presents problems, likely causes, and corrective actions.

- [Power and Start-up](#)
- [Controls](#)
- [Access to Screens and Systems](#)
- [Calling](#)
- [Displays](#)
- [Cameras](#)
- [Audio](#)
- [Error Indications](#)
- [System Lights](#)
- [How to Contact Technical Support](#)

## Implementing Basic Mode

Basic Mode is a limited operating mode that uses H.261 and H.263 for video and G.711 for audio. It provides administrators with a workaround for interoperability issues that cannot be solved using other methods. The Basic Mode setting stays in effect until you change it.

**To enable Basic Mode using VSX Web:**

1. On a computer, open a web browser.
2. In the browser address line, enter the system's IP address, for example, `http://10.11.12.13`, to go to VSX Web.
3. Go to **Admin Settings > Network > Call Preference**.
4. Select **Enable Basic Mode**.

**To enable Basic Mode in the Polycom VSX system interface:**

1. Go to **System > Admin Settings > Network > Call Preferences**.
2. Select **Basic Mode**.

## Power and Start-up



Symptom	Problem	Corrective action
The system does not start or respond in any way.	The power switch is off. <b>Note:</b> VSX 3000A systems have three power switches.	Turn on the power switches for the system and all equipment connected to it.
	The power cord is not connected.	<b>VSX 3000A, VSX 5000, VSX 6000A:</b> Make sure the power pack is connected to a power outlet, and that its power cords are seated securely. <b>VSX 7000s:</b> Make sure that the system is connected to the subwoofer and that the subwoofer is connected to a power outlet. The power for the system is supplied by the subwoofer, so it must be connected in order for the system to work. <b>VSX 7000e, VSX 8000:</b> Make sure that the system's power cord is in place, and that it is connected to a power outlet.
	The power outlet is not active, or the system's power supply is not operating properly.	If you connect the system's power cord to a power strip, be sure the power strip is connected to a power outlet and its power switch is on. Check the power outlet by unplugging the system and plugging in a lamp, radio, or other small appliance. If it does not operate, the outlet is not active — connect the system to a different outlet. If the outlet is active, the problem could be in the system's power supply. In this case, call Polycom Technical Support and arrange to return the system for service.

Symptom	Problem	Corrective action
The system starts in the software update screen.	The power switch was pressed for too long. (VSX 7000e, VSX 8000) This is normal.	To power up the system, press and release the power button.
	The system software is corrupted or not loaded properly.	Load the system software from your computer. For instructions on how to do this, refer to <a href="#">Keeping your Software Current</a> on page 9-4.
The system restarts over and over.	The power plug is not fully seated.	Make sure the power plug is seated securely.
	The socket is corroded.	Unplug and reseal the power plug 5 times.
	The power plug is damaged or the power supply is bad.	Call service for an RMA to return the defective part.
The system does not power off when you press the power switch. (VSX 7000e, VSX 8000)	The power switch was not pressed for long enough. This is normal.	Press and hold the power switch for one second to power off. The indicator light changes to blue when the system is powered off.
The system does not power off when you press and hold the power switch. (VSX 7000e, VSX 8000)	The power switch is bad.	Call service for an RMA to return the defective part.

## Controls

Symptom	Problem	Corrective action
The system does not respond to the remote control.	No, low, or dead batteries in the remote control.	Install three AAA batteries in the remote control.
	The batteries are installed incorrectly in the remote control.	Insert the batteries in the correct +/- position.
	The room lights operate in the 38 Khz range and interfere with the remote control signals.	Turn off the lights in the room and try the remote control again.
	The infrared sensor is not receiving signals from the remote control.	To check the remote control: Point the remote control directly at the camera and press a button. If the light on the system flashes, the remote control works properly. Make sure the transparent protective strip has been removed from the infrared sensor on the front of the system. Make sure you are pointing the remote control at the infrared sensor on the front of the system or the camera.
	VSX 8000: The external infrared sensor is not operating properly.	Check the connections between the rear panel, cable adapter, and infrared sensor cable.
The monitor screen remains blank when you pick up the remote control.	The monitor's power cord is not plugged in.	Connect the monitor's power cord and then power on the monitor.
	The monitor is powered off.	Power on the monitor.
	The monitor is not connected correctly to the system.	Verify that the monitor is connected correctly according to the manufacturer's instructions and the setup sheet you received with the system.
	The monitor is not set to use the signal input that is connected to the VSX system.	On the monitor, change the signal input. The image may take a few seconds to synchronize after you select the signal input that is connected to the VSX system.
The system does not respond to the touch-panel control.	The RS-232 serial port is not configured as a touch-panel input.	Go to <b>Admin Settings &gt; General Settings &gt; Serial Port</b> and verify the following: <ul style="list-style-type: none"> <li>• <b>Baud Rate</b> is set to the same value on the system as on the touch-panel.</li> <li>• <b>RS-232 Mode</b> is set to <b>Control</b>.</li> <li>• VSX 7000e, VSX 8000: The touch-panel is connected to the port that is configured as a touch-panel port.</li> </ul>

## Access to Screens and Systems


Symptom	Problem	Corrective action
Cannot navigate to Admin screens — System button is not displayed.	The home screen is not configured to display the <b>System</b> button.	Press the  button on the remote and select <b>System</b> at the end of the help message, or access the system remotely using VSX Web, FTP, Telnet. From VSX Web, you can add the <b>System</b> button back to the home screen. Click <b>System Setup</b> and navigate to <b>Admin Settings &gt; General Settings &gt; Home Screen Settings</b> , then select <b>System</b> . The change takes effect after you navigate away from the home screen and then back again on the system.
Cannot navigate to Admin screens without a password.	The system administrator has set a password, or The default password was not deleted.	Enter the password. The default password is the system's serial number.
Cannot access the system remotely.	The system does not allow remote access.	On the system, go to <b>Admin Settings &gt; General Settings &gt; Security &gt;</b>  and enable access.
	The system or your computer is not connected to the LAN.	Check the LAN cable to the LAN port on the rear of the system. Check the LAN cable to your computer.
	The LAN cable to the system or to your computer is bad.  To verify this, check the lights on the system. There should be a steady green light indicating a connection to the LAN, and a flashing orange light indicating LAN traffic if the cable is good.	Replace the appropriate LAN cable.
	<b>DHCP Client</b> is ON and no DHCP server is available.	Contact your network administrator.
	There is a firewall between your computer and your system.	Contact your network administrator.
	Your computer is on a different network and there is not connectivity between the networks.	Place your computer and system on the same subnet. If this corrects the problem, check your router configuration. If it does not, contact your network service provider.
	The system is in Security Mode, which requires secure access.	Use secure modes of Telnet, FTP, Web, and serial access. For more information, refer to <a href="#">Configuring Security Mode</a> on page 8-6.

Symptom	Problem	Corrective action
Cannot manage the system remotely.	You have not entered the correct password.	Enter the correct user name and remote access password. <b>Note:</b> For web access, the user name is <b>admin</b> , and the default password is the unit's serial number.
	Too many managers are logged into the system.	Only five system managers are allowed at any one time. To log everyone out, restart your system.

## Calling


Symptom	Problem	Corrective action
Voice-only calls cannot be placed using a set-top VSX system.	This is normal.	Place voice-only calls using the SoundStation VTX 1000 conference phone.
Voice-only calls cannot be placed using a VSX 7000e or VSX 8000 system.	The system might not have a good connection to a phone line.	Use a telephone to verify that there is a dial tone on the line connected to the input on the VSX system.
Hanging up the SoundStation VTX 1000 conference phone does not end the video call.	This is normal.	Use the SoundStation VTX 1000 conference phone <b>END VIDEO</b> soft key or the VSX system remote control to end video calls.


## Displays

Symptom	Problem	Corrective action
Screen is blank; start music plays and Polycom logo appears briefly.	The system is starting. This is normal.	No action required.
Monitor goes blank after displaying the splash screen.	The system goes to "sleep" after a period of inactivity.	The system is sleeping. The system wakes up on any action from the remote control or on an incoming call.
Picture is blank on the main monitor.	The system is sleeping. This is normal.	Pick up the remote control to wake up the system.
The monitor screen remains blank when you pick up the remote control.	The monitor's power cord is not plugged in.	Connect the monitor's power cord and then power on the monitor.
	The monitor is powered off.	Power on the monitor.
	The monitor is not connected correctly to the system.	Verify that the monitor is connected correctly according to the manufacturer's instructions and the setup sheet you received with the system.
The call connects but you cannot see or hear people at the far site although they can see and hear you.	The system is set for dual monitors with the far site on monitor 2, but it is not actually equipped for this configuration.	Make sure that the monitors and configuration match.
When using two monitors, the second monitor or projector is blank.	VSX set-top and component systems: Only one monitor is enabled.	Enable the system for two monitors on the <b>Admin Settings &gt; Monitors &gt; Monitors</b> screen.
When using two monitors, the same picture is seen on the first and second monitor.	The second monitor is connected to the VCR video output.	Connect Monitor 2 to the Monitor 2 connection on the rear panel of the system.
	You are the only participant in a call placed through an external MCU.	MCUs generally loop the first participant back to itself. Wait for others to join the conference.
	The system is performing a Near End Loop test.	Press  <b>Select</b> on the remote to end the test.
The people at the far site cannot see you.	VSX 3000A, VSX 5000: The privacy shutter is closed.	Open the privacy shutter.
	You have selected a camera that is not connected.	Select the main camera.

Symptom	Problem	Corrective action
Video is in black and white.	The monitor is connected using the composite monitor connector, but it is configured as S-Video.	Go to <b>Admin Settings &gt; Monitors &gt; Monitors</b> and change the setting to Composite.
	The monitor cable is not connected properly.	Verify that the monitor is connected correctly according to the manufacturer's instructions and the setup sheet you received with the system.
	The monitor cable is bad.	Replace the cable.
VCR/DVD records in black and white.	VCR video format setting ( <b>S-Video</b> or <b>Composite</b> ) does not match the VCR connection.	Go to <b>Admin Settings &gt; Monitors &gt; Monitors</b> and change the <b>VCR</b> setting. If you use the composite video adapter (RCA to mini-DIN), set <b>VCR</b> to <b>Composite</b> .
The people at your site show up in silhouette in the PIP.	The camera is pointing toward a source of bright light, such as a window.	If it is practical to do so, have the call participants sit in a location where there is no light source behind them. Otherwise, go to <b>Admin Settings &gt; Cameras</b> and select <b>Backlight Compensation</b> .
Video from your site is too dark or too light in the PIP.	Lighting at your site has changed within the past few minutes. During calls, the camera adjusts for the lighting at five-minute intervals.	Pan the camera. It adjusts for the lighting whenever it is moved.
The system does not receive closed captions correctly.	The modem is not connected correctly, or is not configured correctly.	Verify that the modem is connected correctly according to the manufacturer's instructions and the setup sheet you received with the system. Go to <b>Admin Settings &gt; General Settings &gt; Serial Port</b> and verify that <b>RS-232 Mode</b> is set to <b>Closed Caption</b> . Verify that the modem is configured for 8 bits, no parity.
Graphics are displayed on Monitor 1 at all sites even if Monitor 2 has been specified for content.	At least one site does not have dual-stream, People+Content, or H.239 capability. This can occur in calls to older systems that do not support this feature.	ViewStation owners can upgrade to the latest version of software.
	MCUs, which support this feature, must have the conference configured for this feature.	Configure the MCU for this feature.




Symptom	Problem	Corrective action
Edges of picture are cut off when viewing graphics.	Graphics from the far site are displayed on an NTSC monitor.	Use a VGA monitor to display graphics.
	The laptop's display resolution or refresh rate does not match the settings for the Visual Concert VSX.	Be sure the laptop's refresh rate is set to 60 Hz, and that the laptop and the Visual Concert VSX use the same display resolution.
Call participants cannot see or hear what is being played on the VCR or DVD.	The VCR or DVD is not selected.	Select the VCR (Camera 3): Press  <b>Camera</b> , then press 3.
	The VCR or DVD is not set up correctly.	Check that the VCR or DVD is connected according to the instructions in the section <a href="#">Connecting VCR/DVDs</a> on page 5-1. Refer to the manufacturer's instructions to set up the VCR or DVD correctly.
Picture is slow or jerky.	The system is receiving video that includes a large amount of motion.	A background with less motion provides a better, smoother video picture.
	Too many network line transmission errors. Check the error count on the <b>Diagnostics &gt; Call Statistics</b> screen to verify this.	Try the call again, possibly at a lower network speed.
The system is not using Pro-Motion video.	The call speed is lower than the minimum speed you have configured for Pro-Motion video.	Try the call again at a higher speed, or Go to <b>System &gt; Admin Settings &gt; Cameras &gt; &gt; &gt; Video Quality</b> . Change the <b>Pro-Motion Video</b> setting to the desired minimum call speed.
	The video quality for the camera in use is set for Sharpness. This setting is for images with no motion.	Go to <b>System &gt; Admin Settings &gt; Cameras &gt; &gt; &gt; Video Quality</b> . Change the <b>Camera</b> setting to Motion.
	VSX 3000A systems send Pro-Motion video for VCR/DVD input only. VSX 5000, and VSX 6000A systems can receive Pro-Motion video but cannot transmit it.	This is normal.
Video and audio are not synchronized.	The video quality for the camera in use is set for Sharpness. This setting is for images with no motion.	Go to <b>System &gt; Admin Settings &gt; Cameras &gt; &gt; &gt; Video Quality</b> . Change the <b>Camera</b> setting to Motion.


Symptom	Problem	Corrective action
No picture in the PIP window.	VSX 3000A, VSX 5000: The privacy shutter is closed.	Open the privacy shutter.
Blue screen in the PIP window.	The VCR input is selected and the VCR is not running. Most VCRs generate a blue screen when the tape is not playing.	Select a different camera or play a tape on the VCR.
	The camera selection is incorrect.	Select the appropriate camera: Press  <b>Camera</b> on the remote, then press the number of the camera you wish to use.
	No video input.	Check that there is a video source connected to the selected input.
	Main camera not working and VSX system displays camera alert.	Restart the VSX system.
PIP goes out of focus when there is no motion for several minutes.	The camera is pointing at an area with no contrasting features.  To focus properly, the camera must be able to detect an edge.	Point the camera to an area with limited objects, at different distances, which are moving.


## Cameras

Symptom	Problem	Corrective action
Camera does not pan or tilt.	You are attempting to move a camera that does not have pan/tilt/zoom capabilities.	Make sure you have selected a pan/tilt/zoom camera.
	Camera control cable is not connected properly.	Check that the camera is connected according to the manufacturer's instructions and the setup sheet you received with the system.
	The RS-232 port is not configured for camera control.	Go to <b>Admin Settings &gt; General Settings &gt; Serial Port</b> and verify that <b>RS-232 Mode</b> is set to <b>Camera PTZ</b> .
	The remote control is not working.	Check that the remote control is functioning according to the instructions in the section <a href="#">Controls</a> on page <a href="#">12-4</a> .

Symptom	Problem	Corrective action
Separate camera does not work.	The camera is not connected correctly or its power pack is not plugged in.	Check that the camera is connected according to the manufacturer's instructions and the setup sheet you received with the system.
The camera does not track to the person who is speaking. Automatic camera tracking is available only on a VSX 7000e or VSX 8000 system with a Polycom PowerCam Plus camera.	Participants at the far site have been controlling your camera.	Camera tracking is turned off when the near or far site moves your camera. Press  <b>Auto</b> on the remote control to restore tracking.
	More than one person at the near site is speaking, or the near site is noisy.	Reduce the noise in the room.
	The person who is speaking is moving around the room.	Ask participants to remain in one place when speaking.
	The camera is tracking to presets that are at similar angles — for example, a view of the whole room and a close-up view of a seat in the center of the room.	Clear the presets. When setting new presets, do not set them at similar pan angles.
	The room setup interferes with voice tracking. Large windows, uncarpeted floors, and the way the unit is mounted on a wall or alcove can interfere with voice tracking.	Consider room treatments that provide acoustic damping, such as carpeting and curtains. Ensure that the camera has at least 3 ft (1 m) clearance above, behind, and to each side. Verify that the room is small enough for automatic camera tracking to work properly. Polycom recommends that you use this feature only if the room is 20 x 25 x 9 feet (6.1 x 7.6 x 2.7 m) or smaller.
One site cannot control the other site's camera.	Far-site camera control is not enabled.	Go to <b>System &gt; Admin Settings &gt; Cameras &gt; Camera Settings</b> and enable <b>Far Control of Near Camera</b> .
	One of the systems does not have the far-site camera control capability.	Ask the participants at the far site to aim the camera.

## Audio

Symptom	Problem	Corrective action
No audio at your site.	The far site is muted.	Look for the far site <b>Mute</b> icon. Ask the far site to unmute the microphone. <b>Note:</b> The far site's microphone may be muted even if you do not see a far site <b>Mute</b> icon.
	The volume may be turned all the way down on the monitor or external audio system.	Turn up the volume on the appropriate device. Use the remote control to turn up the volume. Check the monitor's or external audio system's volume setting. Then check the system's audio output using the <b>Speaker Test</b> under <b>Diagnostics &gt; Audio</b> . You should hear a 400 Hz tone.
	VSX 6000A, VSX 7000s: The midrange speaker and subwoofer may be turned off.	Go to <b>System &gt; Admin Settings &gt; Audio Settings</b> and select  twice. Make sure that <b>Midrange Speaker</b> and <b>Subwoofer Speaker</b> are both On.
	The far site's microphones are not placed correctly.	Ensure that each person who speaks is facing a microphone and is close enough to it.
	The far site's microphone is not connected or does not have power.	Ask the far site to check the cable to the microphone.
	Too many line errors.	Try the call again later.
	A single monitor VGA configuration does not have an external audio system.	Check the system's audio connections to the external audio system.
	The monitor's audio inputs are not connected properly.	Check audio output using the <b>Speaker Test</b> screen under <b>Diagnostics &gt; Audio</b> . You should hear a 400 Hz tone. Ask someone at the far site to speak into the microphone, and check the <b>Far Site Audio</b> meter on the <b>Audio Meter</b> screen under <b>Diagnostics &gt; Audio</b> to determine whether your system is receiving audio.
	The system's audio outputs are not connected properly.	Check the system's audio connections to the monitor, or to the external audio system if one is connected. Verify that the system is connected to the correct audio connectors on the monitor.

Symptom	Problem	Corrective action
The people at the far site cannot hear you.	The people at your site are too far from the microphone.	Move closer to the microphone.
	Your system's microphone is muted.	Check your system for one or more of these mute indications: <ul style="list-style-type: none"> <li>Near site mute icon on the screen</li> <li>VSX 3000A: System indicator is red</li> <li>VSX systems using Polycom microphones: Microphone mute light is on</li> </ul> To unmute the system, press the  <b>Mute</b> button on the remote control.
	Your system's microphone is not enabled.	Go to <b>System &gt; Admin Settings &gt; Audio &gt; Audio Settings</b> . Select <b>Enable Polycom Microphones</b> if it is not selected.
	No power to near site microphone.	Mute the microphone. If the light remains off, there is no power to the microphone. Check that the conference link cable is properly seated. Replace the conference link cable if the people at the far site still cannot hear you.
	Your system's microphone is not connected, or is connected incorrectly.	Check to be sure the microphone is installed correctly. Check the <b>Polycom Mic</b> or <b>Line Input</b> meter on the <b>Audio Meter</b> screen under <b>Diagnostics &gt; Audio</b> to determine whether your system is sending audio.
	Your system's microphone is connected using the wrong cable.	Refer to <a href="#">Connecting Polycom Microphones to Set-Top or Component Systems</a> on page 4-2 for details on supported hardware configurations.
	Your system's microphone does not work.	Contact your Polycom reseller.
Not enough volume during a call.	The people at the far site are too far from the microphone.	Ask the people at the far site to move closer to the microphone.
	The volume is set too low on the system.	Turn up the volume using the remote control.
	The volume is set too low on the monitor.	Turn up the volume on your monitor or external audio system.

Symptom	Problem	Corrective action
Sound effects such as the incoming call ring are too loud or too soft.	The sound effects volume is not set at desired level.	Adjust the sound effects volume on the <b>Audio Settings</b> screen. If you do not want to hear sound effects, set the volume to 0.
You hear the incoming call ring when you have set sound effects volume to 0.	VSX 3000A: The internal ringer is enabled.	On the <b>Audio Settings</b> screen, clear the <b>Enable Internal Ringer</b> option.
You can hear yourself on your system's monitor or external audio system.	The far site microphone is too close to the system's audio speaker. (Far-site systems with separate microphones only)	At the far site, make sure the microphone is placed away from the system's audio speaker.
	The far site audio volume may be too loud.	Turn down the audio volume at the far site.
	The monitor or external audio system is connected to the VCR audio output.	Verify that all equipment is connected correctly according to the manufacturer's instructions and the setup sheet you received with the system.
There is audio feedback when a VCR is connected.	A single VCR is connected so that it can play or record, no tape is present, and <b>VCR - Far and Near Audio</b> or <b>VCR Audio Out Always On</b> is selected.	Place a tape in the VCR.
Startup music plays through the built-in speaker but not through the monitor speakers.	The audio system or monitor speakers are not properly connected.	Check audio connections and volume level on your monitor.
	The monitor's volume is turned all the way down.	Turn up the volume on the monitor.
When music is played during the call, it sounds distorted at the other sites.	The music source is not connected to the system. The system's echo cancellation and noise suppression features may interfere with music that the microphone picks up.	Connect the music source to the system's audio input.
	The network is experiencing packet loss.	Turn off the music. Retry the call.
Audio is not in stereo.	Encryption is selected.	Stereo audio is disabled when encryption is selected.

Symptom	Problem	Corrective action
Video and audio are not synchronized.	The video quality for the camera in use is set for Sharpness. This setting is for images with no motion.	Go to <b>System &gt; Admin Settings &gt; Cameras &gt; &gt; ▶ &gt; Video Quality</b> . Change the <b>Camera</b> setting to Motion.
The <b>Audio Meter</b> screen shows a reading for <b>Polycom Mic</b> but no microphone is connected - the system receives local audio from a mixer.	Echo cancellation is in use. The system displays the audio line input level in this case.	This is normal.

## Error Indications

Symptom	Problem	Corrective action
The <b>System Information</b> screen shows “waiting” in the IP Video Number field.	The LAN is not working.	Check the LAN connection. Contact your network administrator.
	The DHCP server is not available.	Contact your network administrator to correct the problem with the server or to assign a static IP address.
The home screen shows “0.0.0.0” as the system’s IP address.	The LAN cable is not connected.	Check the LAN cable connection to the LAN port on the system.
	The system was configured for a static IP address of 0.0.0.0.	Go to <b>System &gt; Admin Settings &gt; LAN Properties</b> and correct the IP address settings.
	The system is configured for DHCP, and no DHCP server is available or responding on the network.	Contact your network administrator to correct the problem with the server or to assign a static IP address.
	The system is partially or incorrectly configured for firewall/NAT operation.	Go to <b>System &gt; Admin Settings &gt; Network &gt; IP &gt; Firewall &gt; ▶</b> and verify the <b>NAT (WAN) Public Address</b> setting.
Low battery icon on the screen.	Low batteries in the remote control.	Replace the batteries in the remote control with 3 AAA batteries.

## System Lights

The system lights are located on the front of your VSX system.

Model	When the VSX system...	It means...
VSX 3000A	Indicators are off	No power to the system.
VSX 5000	Green indicator blinks slowly	The system is sleeping.
VSX 6000A	Green indicator flashes when you use the remote control	The system is not in a call, and is receiving signals from the remote control.
VSX 7000s		The system is in a call, and is receiving signals from the remote control.
VSX 7000e	Green indicator is on	The system is ready to make a call.
	Amber indicator is on	The system is in a call.
	VSX 3000A: Red indicator is on VSX 5000, VSX 6000A, VSX 7000s: Mute indicator on the Polycom microphone is red	The system microphone is muted.
VSX 7000e	Blue indicator is on	The system is connected to power but powered off.
VSX 8000	Green indicator is on	The system is powered on.
	Green indicator blinks	The remote control has been picked up or set down.
	Red indicator turns on momentarily	The system is powering off.
	Mute indicator on the Polycom microphone is red	The system microphone is muted.



## How to Contact Technical Support

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

To contact Polycom Technical Support, go to [www.polycom.com/support](http://www.polycom.com/support).

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

- The 14-digit serial number in the System Information screen (also present on the bottom of the system)
- The software version (from the home screen, select **System > System Information**)
- Information about your network
- Troubleshooting steps you have already tried



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# Regulatory Notices

## Important Safeguards

Read and understand the following instructions before using the system:

- Close supervision is necessary when the system is used by or near children. Do not leave unattended while in use.
- Only use electrical extension cords with a current rating at least equal to that of the system.
- Always disconnect the system from power before cleaning and servicing and when not in use.
- Do not spray liquids directly onto the system when cleaning. Always apply the liquid first to a static free cloth.
- Do not immerse the system in any liquid or place any liquids on it.
- Do not disassemble this system. To reduce the risk of shock and to maintain the warranty on the system, a qualified technician must perform service or repair work.
- Connect this appliance to a grounded outlet.
- Only connect the system to surge protected power outlets.
- Keep ventilation openings free of any obstructions.
- If the system or any accessories are installed in an enclosed space such as a cabinet, ensure that the air temperature in the enclosure does not exceed 40°C (104° F). You may need to provide forced cooling to keep the equipment within its operating temperature range.

SAVE THESE INSTRUCTIONS.

## Electrical Specifications

Polycom VSX 3000A System: 100-240V, 47-63Hz, 1.9A, 80W max  
Polycom VSX 5000 System: (Potrans) 100-240VAC, 50-60Hz, 1.8A  
(Ault power supply) 100-240VAC, 50-60Hz, 1.3A  
Polycom VSX 7000 System: (Subwoofer) 100-240VAC, 50/60Hz, 1.1A  
Polycom VSX 7000e System: 90-250VAC, 50/60Hz, 4A  
Polycom VSX 8000 System: 90-250VAC, 50/60Hz, 4A

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### Warranty Information

**LIMITED WARRANTY.** Polycom warrants to the end user ("Customer") that the product will be free from defects in workmanship and materials, under normal use and service, for one year, or such longer period as Polycom may announce publicly from time to time for particular products, from the date of purchase from Polycom or its authorized reseller. This warranty covers the product acquired by the consumer including all of its accessories, components, and parts there to.

Polycom's sole obligation under this express warranty shall be, at Polycom's option and expense, to repair the defective product or part, deliver to Customer an equivalent product or part to replace the defective item, or if neither of the two foregoing options is reasonably available, Polycom may, in its sole discretion, refund to Customer the purchase price paid for the defective product. All products that are replaced will become the property of Polycom. Replacement products or parts may be new or reconditioned. Polycom warrants any replaced or repaired product or part for ninety (90) days from shipment, or the remainder of the initial warranty period, whichever is longer.

Products returned to Polycom must be sent prepaid and packaged appropriately for safe shipment, and it is recommended that they be insured or sent by a method that provides for tracking of the package. Responsibility for loss or damage does not transfer to Polycom until the returned item is received by Polycom. The repaired or replaced item will be shipped to Customer, at Polycom's expense, not later than thirty (30) days after Polycom receives the defective product, and Polycom will retain risk of loss or damage until the item is delivered to Customer.

**Warranty Information**

EXCLUSIONS. POLYCOM WILL NOT BE LIABLE UNDER THIS LIMITED WARRANTY IF ITS TESTING AND EXAMINATION DISCLOSE THAT THE ALLEGED DEFECT OR MALFUNCTION IN THE PRODUCT DOES NOT EXIST OR RESULTS FROM:

- FAILURE TO FOLLOW POLYCOM'S INSTALLATION, OPERATION, OR MAINTENANCE INSTRUCTIONS.
- UNAUTHORIZED PRODUCT MODIFICATION OR ALTERATION.
- UNAUTHORIZED USE OF COMMON CARRIER COMMUNICATION SERVICES ACCESSED THROUGH THE PRODUCT.
- ABUSE, MISUSE, NEGLIGENT ACTS OR OMISSIONS OF CUSTOMER AND PERSONS UNDER CUSTOMER'S CONTROL; OR
- ACTS OF THIRD PARTIES, ACTS OF GOD, ACCIDENT, FIRE, LIGHTING, POWER SURGES OR OUTAGES, OR OTHER HAZARDS.

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GOVERNING LAW. This Limited Warranty and Limitation of Liability shall be governed by the laws of the State of California, U.S.A., and by the laws of the United States, excluding their conflicts of laws principles. The United Nations Convention on Contracts for the International Sale of Goods is hereby excluded in its entirety from application to this Limited Warranty and Limitation of Liability.

## Regulatory Notices

### Warning

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

### USA and Canadian Regulatory Notices

#### FCC Notice

##### Class A Digital Device or Peripheral

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

In accordance with Part 15 of the FCC rules, the user is cautioned that any changes or modifications not expressly approved by Polycom Inc. could void the user's authority to operate this equipment.

The socket outlet to which this apparatus is connected must be installed near the equipment and must always be readily accessible.

#### Part 15 FCC Rules

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference, and
- 2) this device must accept any interference received, including interference that may cause undesired operation.

#### Part 68 FCC Rules

This equipment complies with part 68 of the FCC rules and the rules adopted by the ACTA. On the Network Interface Module of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ#TXXX. If requested, this number must be provided to the telephone company.

This equipment may not be used on a coin service or party line.

If you experience trouble with your VSX system, disconnect it from the telephone line to determine if the registered equipment is malfunctioning. For repair or warranty information, please contact Polycom Inc. at 1-888-248-4143 or 4750 Willow Road, Pleasanton, CA 94588-2708, USA. Contact information may also be found at <http://www.polycom.com>. If the system is causing harm to the network, the telephone company may request that you disconnect it until the problem is corrected.

If your VSX system causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. However, if advance notice is not practical, you will be notified as soon as possible. You will be advised of your right to file a complaint with the FCC if you believe it is necessary.

Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of your equipment. If they do, you will be given advance notice so that you may make any changes necessary to maintain uninterrupted service.

The REN is useful to determine the quantity of devices that may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of RENs of all devices that may be connected to a line, is determined by the total RENs, contact the local telephone company.

**Regulatory Notices**

FCC compliant telephone cords and modular plugs are provided with this equipment. This equipment is designed to be connected to the telephone network or premises' wiring using a compatible modular jack, which is Part 68 compliant. See installation instructions for details.

**WHEN PROGRAMMING EMERGENCY NUMBERS AND/OR MAKING TEST CALLS TO EMERGENCY NUMBERS:**

- 1) Remain on the line and briefly explain to the dispatcher the reason for the call.
- 2) Perform such activities in the off-peak hours, such as early morning or late evening.

**Industry Canada (IC)**

This Class [A] digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la Classe [A] est conforme à la norme NMB-003 du Canada.

The Industry Canada label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations. Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

The Ringer Equivalence Number (REN) assigned to each relevant terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the RENs of all the devices does not exceed 5.

The REN of this equipment is either marked on the unit or included in the new style USA FCC registration number. In the case that the REN is included in the FCC number, the user should use the following key to determine the value:

The FCC number is formatted as US:AAAEQ#TXXX.

# is the Ringer Equivalence Number without a decimal point (e.g. REN of 1.0 will be shown as 10, REN of 0.3 will be shown as 03). In the case of a Z ringer, ZZ shall appear. In the case of approved equipment without a network interface or equipment not to be connected to circuits with analog ringing supplied, NA shall appear.

## Regulatory Notices

### Mexican Regulatory Notices

Información del contacto para el importador de México

Polycom MÉXICO

Paseo de los Tamarindos

# 400-A 5to piso Suite: 21

Bosques de las Lomas

Cuajimalpa 05120 México, D.F.

Teléfono: +52-55-5091-4341

Fax: +52-55-5091-4472

### EEA Regulatory Notices

#### CE Mark R & TTE Directive

This VSX system has been marked with the CE mark. This mark indicates compliance with EEC Directives 89/336/EEC, 73/23/EEC 1999/5/EC. A full copy of the Declaration of Conformity can be obtained from Polycom Ltd., 270 Bath Road, Slough UK SL1 4DX.

#### Declaration of Conformity:

Hereby, Polycom Ltd. declares that this VSX system is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

#### Konformitetserklæring:

Hermed erklærer Polycom Ltd., at indestående VSX system er i overensstemmelse med de grundlæggende krav og de relevante punkter i direktiv 1999/5/EF.

#### Konformitätserklärung:

Hiermit erklärt Polycom Ltd., dass der VSX system die grundlegenden Anforderungen und sonstige maßgebliche Bestimmungen der Richtlinie 1999/5/EG erfüllt.

#### Δήλωση Συμμόρφωσης:

Δια του παρόντος, η εταιρεία Polycom Ltd. δηλώνει ότι η παρούσα συσκευή (δρομολογητής) VSX System; πληροί τις βασικές απαιτήσεις και άλλες βασικές προϋποθέσεις της Οδηγίας 1999/5/EK.

#### Vaatimustenmukaisuusvakuutus:

Polycom Ltd. vakuuttaa täten, että VSX system on direktiivin 1999/5/EC keskeisten vaatimusten ja sen muiden tätä koskevien säännösten mukainen.

#### Déclaration de conformité:

Par la présente, Polycom Ltd. déclare que ce VSX system est conforme aux conditions essentielles et à toute autre modalité pertinente de la Directive 1999/5/CE.

#### Dichiarazione di conformità:

Con la presente Polycom Ltd. dichiara che il VSX system soddisfa i requisiti essenziali e le altre disposizioni pertinenti della direttiva 1999/5/CE.

#### Verklaring van overeenstemming:

Hierbij verklaart Polycom Ltd. dat diens VSX system voldoet aan de basisvereisten en andere relevante voorwaarden van EG-richtlijn 1999/5/EG.



## Regulatory Notices

### Declaração de Conformidade:

Através da presente, a Polycom Ltd. declara que este VSX system se encontra em conformidade com os requisitos essenciais e outras disposições relevantes da Directiva 1999/5/CE.

### Declaración de conformidad:

Por la presente declaración, Polycom Ltd. declara que este VSX system cumple los requisitos esenciales y otras cláusulas importantes de la directiva 1999/5/CE.

### Överensstämmelseförklaring:

Polycom Ltd. förklarar härmed att denna VSX system överensstämmer med de väsentliga kraven och övriga relevanta stadganden i direktiv 1999/5/EG.

### CE Mark LVD and EMC Directive

This VSX system has been marked with the CE mark. This mark indicates compliance with EEC Directives 89/336/EEC and 73/23/EEC. A full copy of the Declaration of Conformity can be obtained from Polycom Ltd., 270 Bath Road, Slough UK SL1 4DX, UK.

### Mains Powered POTS Voice Telephony Without Emergency 000 Dialing

Warning: This equipment will be inoperable when mains power fails.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

### 声 明

此为A级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施。

### A급 기기 (업무용 정보통신기기)

이 기기는 업무용으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이 점을 주의하시기 바라며, 만약 잘못판매 또는 구입하였을 때에는 가정용으로 교환하시기 바랍니다.

### Underwriters Laboratories Statement

The system is intended to be powered only by the supplied power supply unit.

### Special Safety Instructions

Follow existing safety instructions and observe all safeguards as directed.

### Installation Instructions

Installation must be performed in accordance with all relevant national wiring rules.

### Plug Acts as Disconnect Device

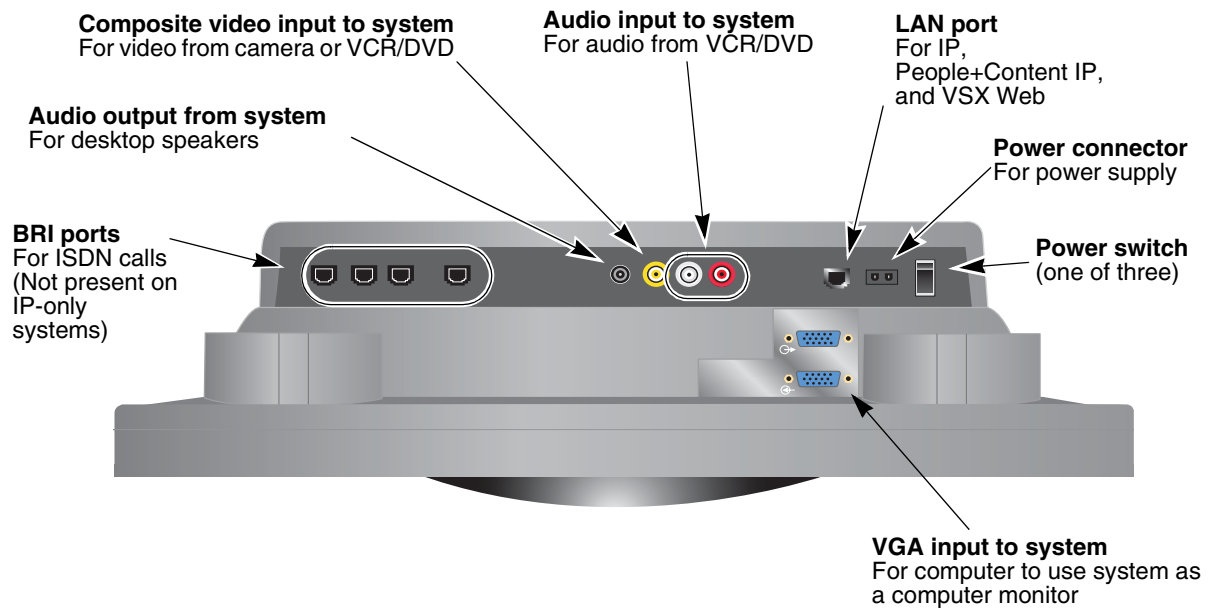
The socket outlet to which this apparatus is connected must be installed near the equipment and must always be readily accessible.



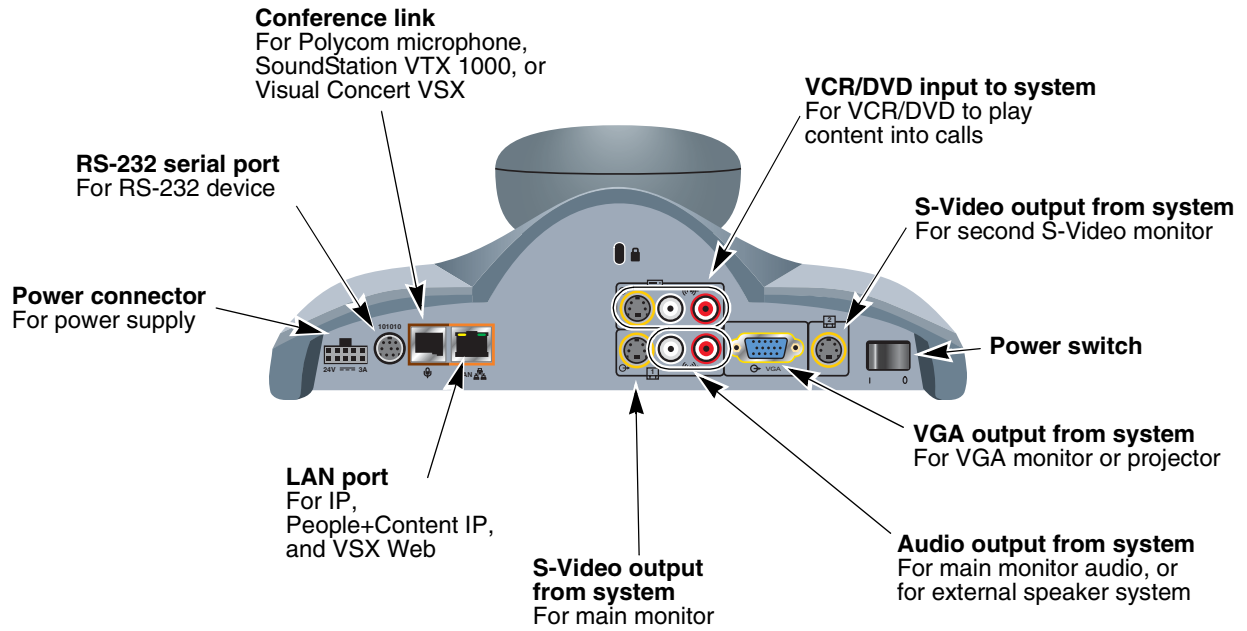
## System Back Panel Views

### VSX 3000A Connector Panel

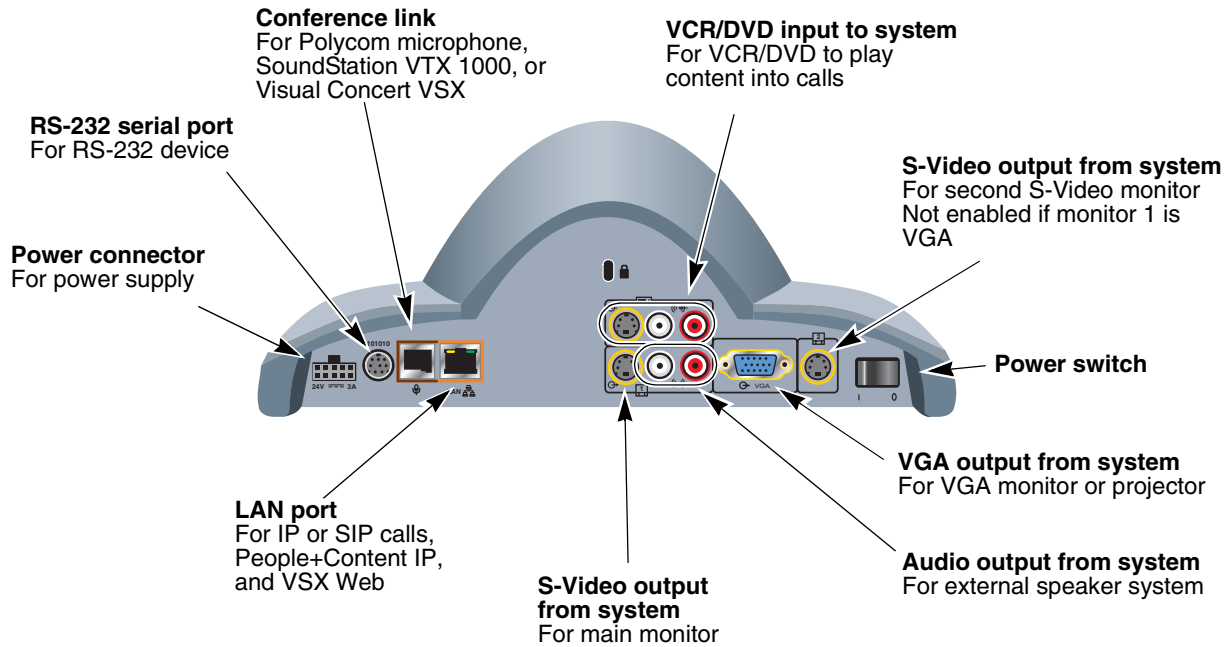
The connectors face downward on the VSX 3000A systems. This is a view from underneath the system.



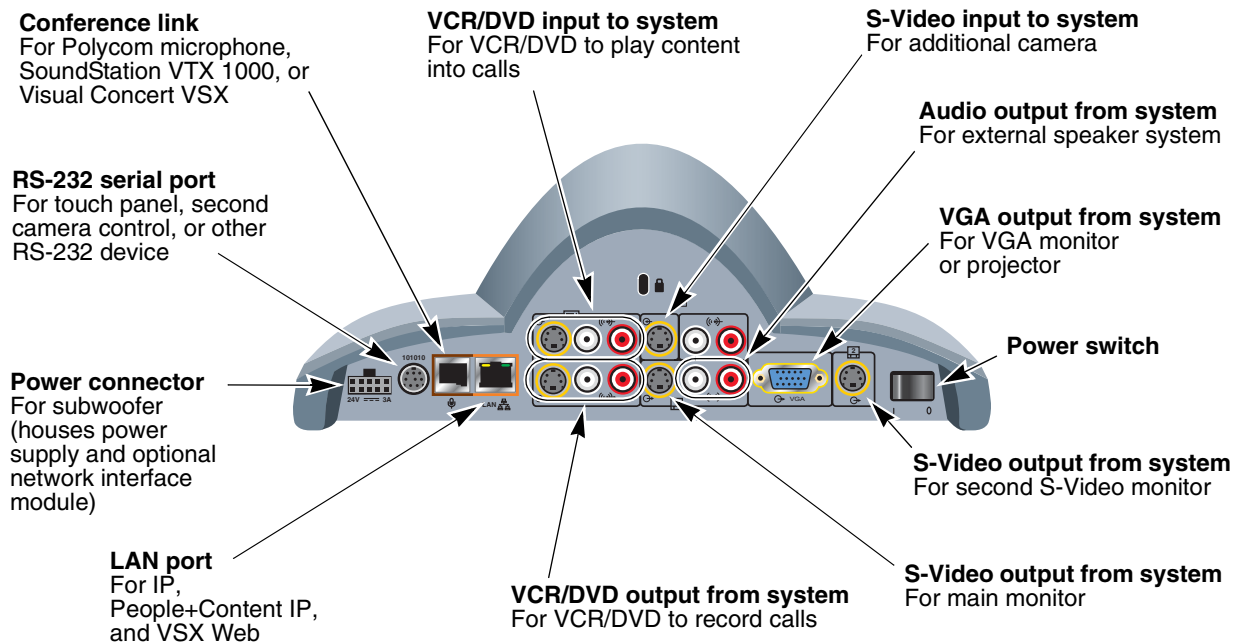
## VSX 5000 Back Panel



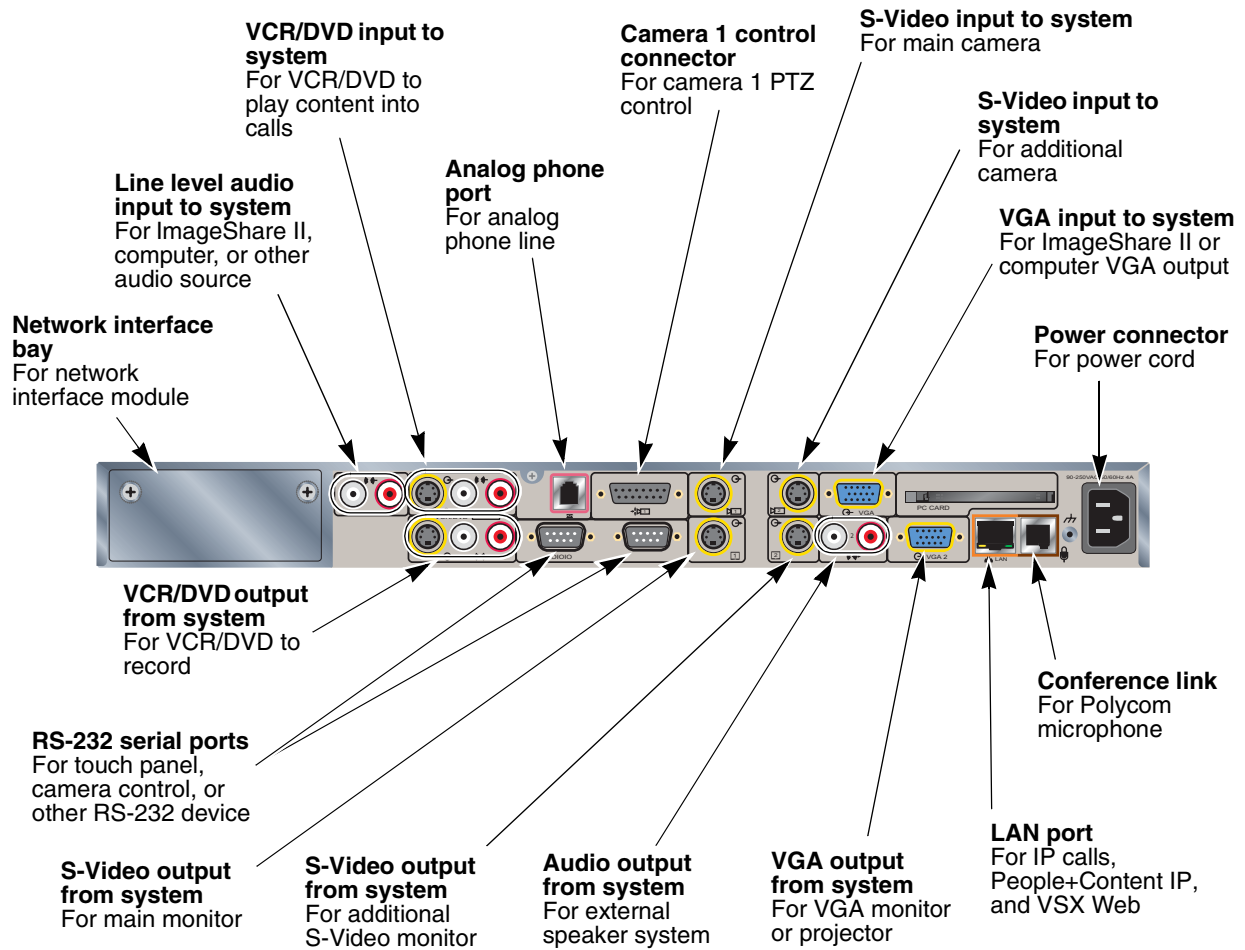
## VSX 6000A Back Panel



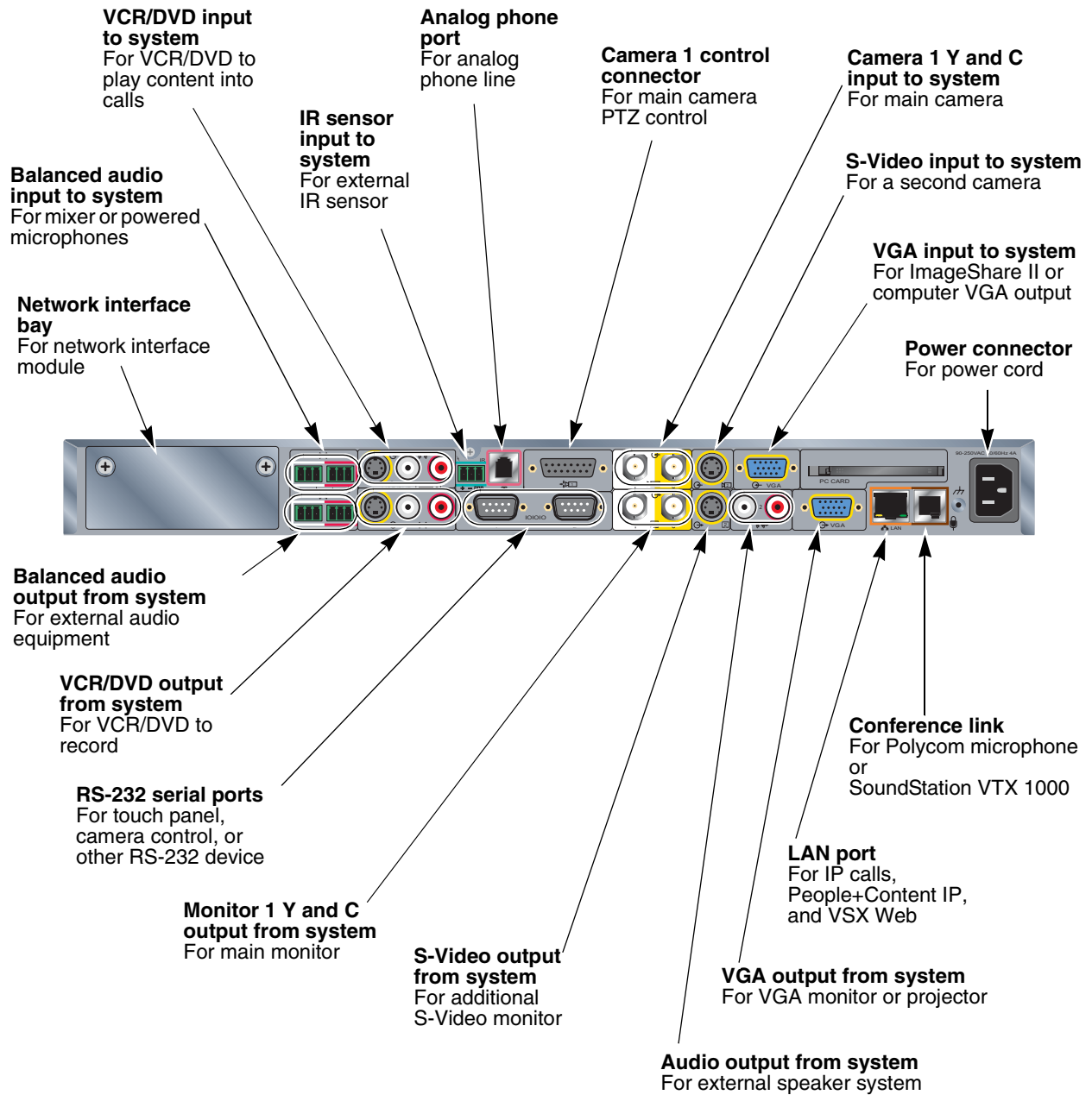
## VSX 7000s Back Panel



## VSX 7000e Back Panel



## VSX 8000 Back Panel






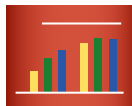




















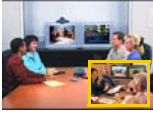


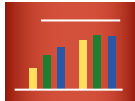
## Video Source Output Examples for Multiple Monitors


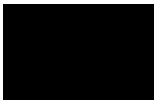



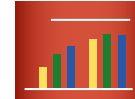
The following tables show how the monitor settings on your VSX system can affect what you see on your displays. You can configure the video sources for your displays in many ways; these tables show only a few typical configurations that are available on certain systems for point-to-point calls. Keep in mind that what you see on your displays can also be affected by multipoint display modes, dual monitor emulation, PIP settings, and so on. For more information about configuring video sources for each display, refer to the Monitor 1 and Monitor 2 video source settings described on page 3-3.


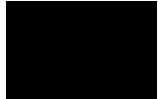



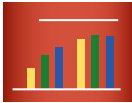
Select this:				To see this:		
	Near	Far	Content		Monitor 1 and PIP	Monitor 2
Monitor 1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Not in a call	Home screen and near video 	Near video 
Monitor 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	In a call without content	Far video 	Near video 
				In a call with content	Content and far video 	Content 







Select this:				To see this:		
	Near	Far	Content		Monitor 1 and PIP	Monitor 2
Monitor 1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not in a call	Home screen with near video 	Near video 
Monitor 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	In a call without content	Far video 	Near video 
				In a call with content	Far video and near video 	Content 


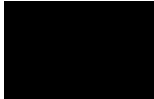

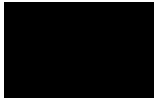

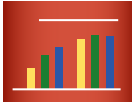
Select this:				To see this:		
	Near	Far	Content		Monitor 1 and PIP	Monitor 2
Monitor 1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not in a call	Home screen with near video 	Near video 
Monitor 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	In a call without content	Far video 	Near video 
				In a call with content	Far video 	Near video 


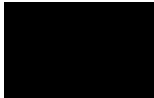



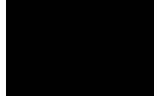
Select this:				To see this:		
	Near	Far	Content		Monitor 1 and PIP	Monitor 2
Monitor 1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not in a call	Home screen with near video 	Black screen 
Monitor 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	In a call without content	Far video and near video 	Black screen 
				In a call with content	Far video and near video 	Content 

Select this:				To see this:		
	Near	Far	Content		Monitor 1 and PIP	Monitor 2
Monitor 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not in a call	Home screen 	Black screen 
Monitor 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	In a call without content	Far video 	Black screen 
				In a call with content	Far video 	Content 

Select this:				To see this:		
	Near	Far	Content		Monitor 1 and PIP	Monitor 2
Monitor 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not in a call	Home screen 	Black screen 
Monitor 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	In a call without content	Near video 	Far video 
				In a call with content	Near video 	Content 

Select this:				To see this:		
	Near	Far	Content		Monitor 1 and PIP	Monitor 2
Monitor 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not in a call	Home screen 	Black screen 
Monitor 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	In a call without content	Near video 	Black screen 
				In a call with content	Near video 	Far video 

Select this:				To see this:		
	Near	Far	Content		Monitor 1 and PIP	Monitor 2
Monitor 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not in a call	Home screen 	Black screen 
Monitor 2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	In a call without content	Near video 	Black screen 
				In a call with content	Near video 	Content 

Select this:				To see this:		
	Near	Far	Content		Monitor 1 and PIP	Monitor 2
Monitor 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not in a call	Home screen 	Black screen 
Monitor 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	In a call without content	Near video 	Black screen 
				In a call with content	Near video 	Black screen 



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# Port Usage

You may need this information when you configure your network equipment for video conferencing.

The following table shows IP port usage.

Port	Function
80-Static	TCP HTTP interface (optional)
389-Static	TCP ILS registration (LDAP)
1503-Static	TCP T.120
1718-Static	TCP Gatekeeper discovery (must be bidirectional)
1719-Static	TCP Gatekeeper RAS (must be bidirectional)
1720-Static	TCP H.323 call setup (must be bidirectional)
1731-Static	TCP Audio call control (must be bidirectional)
5060-Static	UDP/TCP SIP call setup (must be bidirectional)
8080-Static	TCP HTTP server push (optional)
1024-65535	Dynamic TCP H245. Can be set to "Fixed Ports" on Polycom systems.
1024-65535	Dynamic UDP - RTP (video data). Can be set to "Fixed Ports" on Polycom systems.
1024-65535	Dynamic UDP - RTP (audio data). Can be set to "Fixed Ports" on Polycom systems.
1024-65535	Dynamic UDP - RTCP (control information). Can be set to "Fixed Ports" on Polycom systems.

The following table shows Global Management System port usage.

Port	Function
21	(FTP) Software upgrades and provisioning for VSX systems and ViewStations
24	(FTP) FTP Telnet trace log
80	(HTTP) Pulling VSX system, ViewStation, and VS4000 information
80	(HTTP) Software upgrades and provisioning for iPower™
3601	(Proprietary - data traffic) - Global directory data
3603	TCP - Pulling ViaVideo® information (since might be non-web server computer)
389	LDAP and ILS
1002	ILS

The following table shows other VSX port usage.

Port	Function
21	(FTP) Software upgrades and Global Management System provisioning
23	(Telnet) For diagnostics
24	(FTP) API control



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