

Polycom® VSX™ 7000s

Frequently Asked Product Questions



What is the VSX 7000s?

The VSX 7000s is Polycom's mainstream set-top video conferencing system, targeted at medium to large sized meeting rooms. Some key features included with each VSX 7000s include dual monitor capability, encryption, Polycom StereoSurround™ and Polycom Pro-Motion™ H.263. Additionally, many VSX 7000s customers will take advantage of the options available on the system, such as data sharing, multiple microphones, and integration with the SoundStation VTX 1000®.

What cables are included with the VSX 7000s base systems and what are the lengths?

Following is a list of the basic cables included with each system:

Cable Type	Length Provided
Conference Link to microphone	30 feet/9.144 meters
Base unit to subwoofer	10 feet/3.048 meters
Power Cable	10 feet/3.048 meters
(1) S-Video cable	25 feet/7.62 meters
RJ45 Cat5 network cable	12 feet/3.6576 meters

What options are available for the VSX 7000s?

Any of these options can be added to a VSX 7000s system. Each is described below.

SoundStation VTX 1000® – Attaching a SoundStation VTX 1000 conference phone enables dialing directly from the phone pad, as well as utilizes the VTX 1000 as the microphone, reducing clutter on the table. The VTX 1000 has a 20 foot radius and is embedded with Polycom's StereoSurround™ capability.

Stereo Speaker Kit – Includes subwoofer and (2) high-grade auxiliary speakers (with stands) that enable the maximum benefit of Polycom StereoSurround.

Quad BRI Module – This module is inserted into the subwoofer and provides connection for up to (4) BRI lines.

PRI Module – This module is inserted into the subwoofer and provides ISDN connectivity up to 2 Mbps bandwidths.

Serial Module – This module is inserted into the subwoofer and provides support for V.35, RS229 and RS530 connecting up to 2mbps. Need to order appropriate cable separately.

MPPlus Software License – When installed, this license key allows the user to have up to (4) sites connected.

People+Content™ – This option includes a VSX Concert™ VSX tabletop device designed to allow users to connect their laptop to the video conferencing system during a call and present high-resolution graphics.

People+Content IP – This software license enables a presenter to introduce laptop content to a video conference using only an IP network connection.

Microphone Kit – Includes (1) microphone array and one (10) foot conference link cable.

Ceiling Microphone Array – A Polycom microphone array unobtrusively mounted on conference room ceiling, providing 360° coverage. Handles rooms up to 2100 square feet.

Security Locking Cable – This (6) foot, locking steel cable ensures security for your system. Lock the VSX 7000 unit to any stationary object in seconds.

Can I try the multipoint capability before buying a license?

Yes. All systems ship with a Multipoint Software License that enables limitless (5) minute multi-point calls. This allows for sufficient time to dial three participants, over IP or ISDN or mixed, using the internal MCU capabilities. If this feature proves useful, users can purchase a permanent key from their Polycom reseller.

What, exactly, is the functionality of the internal multipoint?

The collective features of the internal MCU are called *MPPlus*. The internal MCU allows the user to dial a mix of IP and ISDN or IP and Serial Network endpoints using the internal bridging capabilities of the VSX. This feature also allows a participant to dial into a call that is already in progress. This ability is made secure by the option of adding a "dial-in" password. Four total participants (4 video and one audio) can be in a call at any one time using the internal multipoint capabilities on a single VSX 7000s. Or, for added flexibility, cascade up to (20) total video and/or audio participants in one conference.



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Is there flexibility in how participants can be viewed while in the call?

Yes. There are (4) settings from which to choose in the user interface.

- Auto will automatically switch to a single presenter if that presenter speaks for 15 seconds or greater.
- Discussion mode displays up to (4) quadrants on a single screen, seen by both far and near-end participants.
- Presentation mode allows the presenter to see up to (4) participants on a single screen, but the participants see only the presenter.
- In Full Screen mode, the speaker is seen full screen by both far and near-end participants.

What language translations are available with this product?

The graphical user interface, user documentation, Web interface, audio keypad confirmation and remote control are available in the following language translations: Chinese (Simplified), Chinese (Traditional), English, French, German, Italian, Japanese, Korean, Norwegian, Portuguese, Russian, Spanish, UK English and US English.

What features are new in VSX Release 8.0?

	V500	VSX 3000	VSX 5000	VSX 7000s	VSX 7000e	VSX 8000
H.264 up to 768Kbps	■	■	■	■	■	■
Baseline mode configuration	■	■	■	■	■	■
Adjustable bandwidth for content	■	■	■	■	■	■
Document camera and VCR/DVD as content source		■	■	■	■	■
Transparent RS-232 port now over H.323			■	■	■	■
Single monitor XGA support			■	■	■	■
Pro-Motion™ H.264						■
6-site multipoint						■
H.264 in internal multipoint calls						■

What are the warranty and software upgrade terms?

The Polycom VSX 7000s has a one year hardware warranty and the standard Polycom 90 day software warranty. In addition, we bundle with all VSX 7000 series models the following services:

- One year of software updates and upgrades- year begins at time of shipment
- One year of telephone support

Enhanced service packages are also available at time of purchase. At the end of one year, customers may renew, or upgrade their Service Package for continued service, support and upgrades. Or customers may purchase software upgrades only. To ensure timely notice of the availability of new software upgrades and updates, customers should register all systems under the "Product Registration" section at www.polycom.com. More information on Polycom Global Services Programs is available in the VSX 7000 Services Sales Guide.

What is Baseline Mode?

Baseline mode is a setting that can be made on any VSX that sets the system to the lowest common denominator, thus virtually ensuring interoperability with legacy systems or other vendors' video conferencing systems. Baseline mode is H.261 for video and G.711 for audio. There is no data setting in baseline mode. The setting is turned on or off via the web interface and is recommended only for VSX systems that are frequently in calls with legacy systems.

What is AES?

Advanced Encryption Standard (AES), standard on every VSX 7000s product, is a secure method in which both people and content are encrypted for transmission during a video call.

This means that the information cannot be "tapped" or "overheard" by anyone outside the call and both the video and content of your call is secure. Polycom's implementation of AES is FIPS 197 compliant and conforms to the prescribed AES standards as set forth by the National Institute of Standards and Technology (NIST). The implementation is 128-bit AES encryption with a standards-based (1024-bit Diffie-Hellman) key exchange. The VSX 7000s is listed on the AES Algorithm Validation List on the NIST Web page. Follow this link for info: <http://csrc.nist.gov/cryptval/aes/aesval.html>

Does AES introduce any latency or quality degradation during a call?

No. During an encrypted call, latency is negligible with no noticeable quality degradation in the supported audio and video modes. Video frame rates may be restricted in encrypted calls.

What is meant by "Polycom StereoSurround ready"?

The VSX 7000s systems have built-in software to enable patent pending Polycom StereoSurround; there is no additional software activation key. The only additional requirements are (2) total microphones (a single microphone will work, but two are preferable) and (2) additional speakers to enable the stereo sound.

Can I use Polycom StereoSurround if my system has a single microphone and the built-in speaker of the VSX 7000s?

Yes. Systems supporting VSX 7.5 and above support Polycom StereoSurround with a single VSX microphone array.

Why is the speaker built into the set-top unit?

To support the exceptional 14kHz audio the Polycom VSX systems are capable of, Polycom developed the internal speaker to provide superior, consistent and reliable audio quality and reproduce able sound that is much better than standard television speakers. All of which is possible without having to purchase expensive external speakers.

What is the benefit of the built-in speaker?

The speaker is custom designed to maximize video conferencing audio quality in a room that measures 30 x 50 x 9 feet. Their frequency response is from 80 Hz to 22 kHz.

Can external speakers be used with the system?

Yes. In fact, you will want to use external speakers to take full advantage of Polycom StereoSurround. Simply turn off the internal audio in the user interface and connect the line out connections on the back of the unit to external powered speakers or an amplifier.

Can I bypass the subwoofer?

If the VSX 7000s does not have H.320 capability (which is also located in the subwoofer), then an alternate power cord can be purchased that will plug directly from the VSX 7000s into the wall. If H.320 capability is needed, then you cannot bypass the subwoofer.

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If I add the Polycom Stereo Speaker Kit to my VSX 7000, do I use both subwoofers?

Yes. The VSX 7000s systems subwoofer provides both power and H.320 connectivity to the system and is required. The subwoofer in the Stereo Speaker Kit will provide the base for the video calls. Simply turn off the internal audio (speakers and subwoofer) on the VSX 7000s base unit when using the Stereo Speaker Kit.

Can the VSX 7000s subwoofer be used on my home stereo system?

No. The subwoofer is designed specifically for the VSX 7000s unit and will not function when attached to other equipment.

Ideally, where should the subwoofer be placed?

Recommended placement is on the floor near the base unit, away from monitors or other speakers output. The subwoofer needs to be at the lowest point in the room for optimal audio dispersion. The distance limitation is (10) feet, the distance of the cable between the base unit and the subwoofer.

Can the subwoofer be placed in an enclosure such as a cabinet?

Putting the subwoofer in an enclosure will compromise the audio performance and is not recommended. With the introduction of the Polycom Conference Room Solutions for the VSX 7000s, provisions have been made for the subwoofer inside the cabinet. The design of the enclosure allows for the proper acoustic performance of the integrated sound system of the VSX 7000s.

How are the VSX 7000s microphone arrays different than the ViewStation® mic pods?

The VSX 7000s microphones are optimized to use the Siren™ 14 audio algorithm by employing higher sampling rates than the ViewStation mic pods.

What is the significance of the soft pads on the bottom of the microphones?

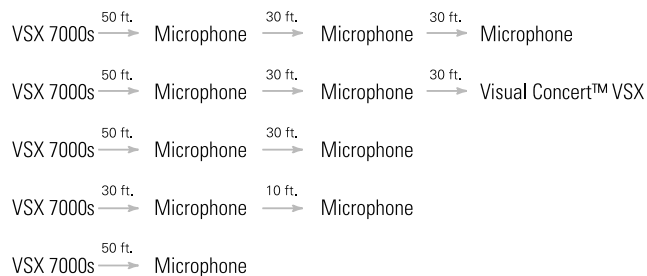
The pads serve as shock absorbers that isolate the microphone from tabletop vibrations. This means that periphery noise from tapping pencils or fingers or soft impacts to the tabletop will be filtered, allowing participants to focus on the transmission of voice

How many microphone arrays can be connected at one time?

Up to (3) microphone arrays can be connected at once. All systems ship with (1) microphone and additional microphone kits can be purchased. The additional microphone kit contains (1) microphone array and (1) 10-foot Conference Link cable. Optionally available is a 30' Conference Link cable.

What cable lengths can be used with the microphones?

The maximum total length for conference link cabling is (110) feet/33.53 meters. Two types of conference link cables are available. The first is from the codec to the first device, is available in 30 and 50 foot lengths. The other conference link cable is between devices and is available in 10 and 30 foot lengths. A Visual Concert™ VSX unit can be daisy-chained anywhere in this configuration, for a total of (3) "widgets". Following are examples of how this can be configured.



How does 14 kHz audio sound compared to 7 kHz?

Think of 14 kHz as near-CD quality audio, vs 7 kHz is like listening to an AM or FM radio. The audio is less fatiguing and words are clearer, more intelligible. This all adds up to a more natural verbal communications during a video call. A comparison audio clip is available on the Polycom Web site.

What is the difference between Siren™ 14 audio and Polycom StereoSurround audio?

Technically, Polycom StereoSurround is the use of (2) channels of Siren 14 used in parallel in the same call. This means that voices from the opposite sides of the room in a video call will be heard as if they came from that side of the room, in stereo.

What happens when the VSX 7000s calls a system that does not support Siren 14 audio?

The VSX 7000s will automatically negotiate to the highest common audio standard. For example, if both systems support G.722.1 at 128kbps, both systems will use that audio specification.

What, exactly, is Audio Error Concealment?

Audio Error Concealment is a Quality of Service implementation for audio in video calls over IP or H.320 networks. In the presence of packet loss due to traffic or instability on the network, Audio Error Concealment will activate and work to reduce the loss of sound bits during the call. This will work in any of the supported audio standards, including G.711, G.728, G.729A, G.722, G.722.1 and Siren 14. This unique method of audio error concealment is a function of the VSX decode process (receiving side of the audio), meaning that it will correct corrupted audio from the endpoint. The results are reproduced audio segments (that would have otherwise been dropped), allowing for a smoother, less distracting conversation during the video call.

How do I activate Audio Error Concealment on my system?

Audio Error Concealment was first introduced in the VSX 7000 Release 5.1 software in November, 2003, is included in every system and does not require a software activation key. The algorithm automatically activates when necessary and turns off at the point where there is no packet loss on the network. All of this works transparently to the end user.

What, exactly, is H.264 video standards and why is it important to the user?

The H.264 is an International Telecommunications Union (ITU) video coding standard and represents the newest visual technology in video communications. It is identical to the MPEG-4 Advanced Video Coding (AVC) standard. Polycom was the first in the industry to deliver the benefit of this cutting edge technology with all of our VSX products. The H.264 video compression enables video conferencing users to experience either significantly improved video quality at the same bit rate, or current quality at approximately half the bit rate required previously. Since users can use H.264 up to 768kbps, they

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can expect the same video quality as if they were calling at 1.5Mbps. That translates to a bottom line benefit: More efficient use of an existing communications infrastructure and an increase in the accessibility and cost-effectiveness of business-quality video conferencing.

When will H.264 be used in a call?

All VSX series products auto select call rates at which H.264 looks the best. If the endpoint that is being called does not support H.264, the call will revert to the H.261 or H.263 video standard and the associated standards based Annexes.

What are the specifications of the integrated PTZ camera?

The PTZ camera has a 65° Field of View, 12 x Zoom, f = 4.2 to 42 mm, F = 1.85 to 2.9 mm, auto focus, automatic white balance, pan range +/- 100 (left/right), tilt range +/- 25 (up/down).

Does the system allow users to program presets for the camera?

Yes. The system can be programmed with up to 99 user-defined preset positions for local and 17 far end presets.

What, exactly, is Video Error Concealment?

Video Error Concealment is a Quality of Service implementation designed specifically to manage video transmission during a video call over IP or H.320 networks. In the presence of packet loss due to traffic or instability on the network, Video Error Concealment will activate and work to reduce the occurrence of video drop-out during the call. This algorithm will work in with the following video standards: H.263, H.263+, H.263++ and H.264.

The results are less noticeable video blockiness and dropout during the call, lending to an improved video experience during adverse conditions.

Does the VSX 7000s support API commands for touch panel control?

Yes. In Release 7.0, Polycom introduced extensive support for touch panel control systems such as AMX® or Crestron®. Refer to the Integrator's Reference Manual for the VSX Series for more details.

Can I use either a VGA or TV as my main display?

Yes. Starting in July 2005, the VSX 7000s will include single monitor VGA capability, giving users the choice of using either a VGA or TV as their main monitor. If you want to connect two monitors, the first must be a TV and the second can be either a TV or a VGA. Second monitor VGA is recommended if content sharing is used during conferences.

Why is there a video PIP on every screen, even several layers from the main screen?

The PIP (we call this Persistent Preview) is present on every screen for security purposes so that the user always knows when a video call is connected. Also, the PIP will allow the user to navigate the interface while not losing contact with the far site.

In a single monitor configuration, what happens to the PIP when I go into the menus?

The PIP becomes the far end video and the local camera view goes away.

Can the position of the PIP view be moved?

Yes. By pressing the PIP button on the remote control several times in succession, the PIP will move counterclockwise on the screen, from one corner to the next.

What grouping mechanisms are available from the directory?

Users can choose to display the directory listing by "All", "Local", or "Global".

Is there an easy way to find a particular entry in a very large directory?

Yes. Like a cell phone address book, the "Search" mechanism prompts the user to enter an alpha character (or string) by which to search. The search is conducted on the first few letters of each word in the directory entry following the cell phone model. For example, a search for "Aus" will result in finds for "Polycom Austin", "Polycom Australia" and "Austin Conference Room." The system will then accumulate all of the findings into one window from which the user can make a selection.

Is the system capable of saving a multi-point entry?

Yes. In the directory, the user can choose to create a multi-point entry and add individual entries from the directory. A total of three endpoints can be configured in one multi-point entry.

What are the customizable camera icons?

The end user has the opportunity to assign industry specific camera icons to secondary video sources. Icon libraries are stored on the system for Corporate, Education, Justice, Manufacturing and Medical markets. Each library contains up to (6) icons that can be selected and named by the end user. These icons and their labels will then appear whenever the "Camera" button is selected from the remote control.

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