

Polycom® VSX™ 7000s

Frequently Asked 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 a base system and what are the lengths?

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

Cables Provided with VSX 7000s

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

What packaged solutions are available for the VSX 7000s?

VSX 7800s Presenter MP – Includes VSX 7000s, Visual Concert™ VSX, People+Content™ IP, 4-way MPPlus

VSX 7400s Presenter – Includes VSX 7000s, Visual Concert VSX, People+Content IP

VSX 7000s – Includes VSX 7000s

Note: All bundles can ship with the SoundStation VTX 1000 conference phone in place of the VSX microphone array

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, RS-449 and RS-530 connecting up to 2Mbps. It provides an RS-366 dialing interface. Need to order appropriate cable separately.

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

VSX 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. Also included is People+Content IP, a software license which enables a presenter to introduce laptop content to a video conference using only an IP network

connection.

People+Content™ IP – A simple software key activates the People+Content IP application on the VSX 7000s, allowing you to show content in a video conference over an IP network connection! Download a simple Polycom application and convert your laptop/PC into a presentation device for video conferencing. Your Content choices are unlimited – present anything that is running on your PC and all participants during a video conference can see the material.

Peripheral Bundles – Polycom offers a wide range of packaged solutions with our endpoints. This includes the Polycom Media Cart, the Polycom Media Center (which can be purchased with or without built-in speakers), and Wall Mount solutions. Any of these offerings can be purchased with single or dual 32" LCD displays which have built-in speakers. Additionally, the Polycom Media Center can be purchased with single or dual 42" plasma displays (no built-in speakers).

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

Can I try the multipoint capability before buying a license?

Yes. All systems ship with a Multipoint Software License that enables five (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.

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.

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

Yes. The VSX 7000s includes VGA monitor capability, giving users the choice of using either a VGA or TV as their main monitor. If you want to connect two monitors, the 2nd monitor can be VGA, if the first is S-video/composite or both can be s-video/composite. Second monitor VGA is recommended if content sharing is used during conferences.

What is Polycom StereoSurround and what is the benefit to the end user?

Polycom StereoSurround is a unique technology that uses two audio channels to provide stereo sound in a videoconference. Both audio channels use Siren 14 audio, so with Polycom StereoSurround the customer gets the benefit of 2 channels of Siren 14 audio. In a conference with StereoSurround enabled, the sound comes from either the left or right speaker, depending on where the person talking is located. If they are walking from one side of the room to the other, the audio will switch from one speaker to the other. This gives a very life-like audio quality to the conference and makes it just like being in the same room with all the conference participants!

Note that StereoSurround can only be enabled if all sites participating in the conference have Polycom StereoSurround on their systems and enabled. StereoSurround ships with all VSX series

What is Basic Mode?

Basic 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. Basic mode is H.261 for video and G.711 for audio. There is no data setting in basic 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 cameras are supported with the VSX 7000s?

Cameras supported on the VSX 7000s include:

- Polycom PowerCam
- Polycom PowerCam Plus
- Sony EVI-D30/EVI-D31
- Sony EVI-D70, native mode
- Sony EVI-D100/EVI-D100P
- Sony BRC-300

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.

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.

If I add the Polycom Stereo Speaker Kit to my VSX 7000s, 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 bass 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.

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, and can not be extended. 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

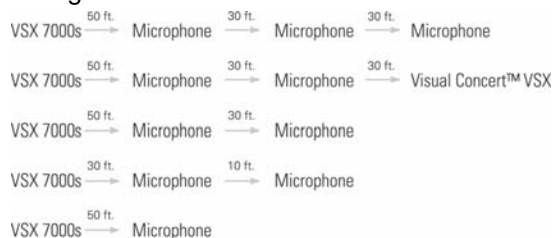
enclosure allows for the proper acoustic performance of the integrated sound system of the VSX 7000s

How many VSX microphone arrays can be connected at one time?

Up to (3) VSX microphone arrays can be connected at once. All systems ship with (1) VSX microphone array and additional microphone array kits can be purchased. The additional VSX microphone array kit contains (1) VSX 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 VSX microphone array?

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 and has a ferrite on it. 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.



What 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, G.722.1 Annex C 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 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 are the specifications of the Polycom PowerCam?

Presets	100 local / 17 far end
Image Sensor	1/4" Super HAD CCD
Tilt Range	±25°
Pan Range	±100°
Horizontal field of view	65°
Total field of view	265°
Horizontal resolution	470 HTVL
Zoom Range	12x
Illumination	3.5 lx (F1.8)
Auto white balance	Yes
Auto focusing	Yes

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 16 far end presets.

What 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, leading to an improved video experience during adverse conditions.

on Polycom Global Services Programs is available in the VSX 7000s Sales Services Guide.

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

Yes. In VSX 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.

When registered to a Cisco Call Manager and using SCCP protocol, what audio and video codecs are supported?

Audio codecs are G.711, G.722, G.728 and G.729; Video codecs are H.261 and H.263 up to 2Mbps and H.264 up to 768 Kbps.

What is VSX™ Release 8.7?

VSX Release 8.7 is a combination of new features and enhancements for all V-series and VSX systems, including: monitor configuration changes, H.323/SIP switch, QoS enhancements, video overlay, gatekeeper enhancements, SNMP enhancements, video freeze, and Finnish language support

For more information on the features included in VSX Release 8.7, see the VSX Release 8.7 FAQ.

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. This includes:

- 90 days of software updates and upgrades
- One year of return-to-factory hardware support

Enhanced service packages are also available at time of purchase. Customers are encouraged to renew or upgrade their service package at the end of the warranty period, if not before. To ensure timely notice of the availability of new software updates and upgrades, customers should register all products under the "Register Your Product" link at www.polycom.com. More information