Polycom® VSX™ 7000

A top-quality video conferencing solution that's both easy-to-use and affordable

If you've been looking for a video conferencing solution with the highest quality audio and video, and easy enough for anyone to use - Polycom VSX is the answer. For the first time, top-quality video conferencing is available in an entry-level system. With the Polycom VSX, we've combined the most technologically advanced audio, video, and processing into a single set-top system that's as easy to use as a telephone – all at an affordable price.

With unparalleled crisp, clear audio, the Polycom VSX makes an impact that's as powerful as being in the same room. The VSX brings you near CD quality audio by delivering Polycom VSX Siren™14*Plus* audio with an integrated midrange speaker and subwoofer, paired with a 360-degree microphone. That means you'll be able to speak to and hear other people in the conference as if they're sitting right next to you, no matter where in the world they're really located.

But that's not all the VSX has to offer. You asked for television-like video, and Polycom delivers. Using the industry's most advanced technology,

H.264 and Pro-Motion™, the VSX provides such exceptionally natural, smooth-motion video, that you'll feel as if you're watching your favorite movie.

And like all Polycom products, the VSX is extremely easy to use. A new graphical user interface helps you breeze through everyday video conferencing, and it's also customizable for superior manageability. Whether you prefer an interface that's simple or sophisticated, the VSX 7000 lets you design it your way by using the kiosk mode with scrolling marquee, color themes, and customizable camera icons. In addition, Polycom Dual Monitor Emulation optimizes video conferencing using just one display. Couple the VSX with a single television monitor or large plasma screen, and you'll benefit from the full video conferencing experience – with both near and far sites shown on one screen, or even both sites and shared content – all on a single display.

The Polycom VSX is the ultimate in versatility, with expandability options so you can easily configure it for any application. It gives you the option to add

displays, microphones, network interface modules, multipoint features, and much more. So in a flash, you can design a system that's a perfect fit for your specific environment.

And as we promised, the Polycom VSX integrates seamlessly into the Polycom Office™, allowing you to connect any way you want with Polycom's video, voice, data, and Web communication solutions. That includes the popular ViewStation®, iPower™, and ViaVideo® products; Global Management System™, PathNavigator™, and MGC products; and SoundStation® IP phones. And because the VSX 7000 is available at such a reasonable price, you can outfit your entire organization with video conferencing – without breaking your budget.

One thing is crystal clear: For anyone who is new to video conferencing; looking to expand their video conferencing environment; or just wants to enjoy excellent sound and images without spending a fortune – the Polycom VSX 7000 is unrivaled.

POLYCOM®

Connect. Any Way You Want.

Polycom VSX 7000

Breakthrough audio and video that
will make you look up and take notice!

Audio Features
- Full-duplex digital audio
- Instant Adaptation Echo Cancellation
- Automatic Gain Control (AGC) – Voice activated
- Automatic Noise Suppression (ANS)
- Audio mixer
- Built-in tonal speaker test
- Independent audio level meter for Polycom microphone
- Independent audio level meter for two line inputs
- Independent audio level meter for far-site audio
- Microphone and VCR input audio mixing
- Ability to talk over VCR audio

Convenience and innovation
are combined in a compact,
entry-level powerhouse.

Digital Tabletop Microphone Array
- 360˚ voice pick up, 4.8 dB less reverberant than omni microphone
- Three cardioid elements per microphone array
- Flotation feet reduce transmission of tabletop noise
- Mute button
- Can be mounted to ceiling or walls
- System ships with one microphone array
- Supports up to three microphone arrays

Integrated Speaker and Subwoofer
- Frequency response: 80 Hz to 22 kHz
- Crossover frequency to subwoofer: 216 Hz
- Customize audio for user environment
- Master volume control
- Midrange and subwoofer speakers On/Off
- Subwoofer adjustable level
- User-tuned treble and bass controls

Remote Control
- New, enhanced, grip-sensitive Polycom remote control
- Handheld, lightweight ergonomic design
- Quick buttons for most common tasks
- Color-coded buttons grouped by functionality

Expandable, with options
that can be tailored to suit
your needs.

Collaboration Solutions (Optional)
- Visual Concert™ VSX (Audio and video input from PC or Macintosh®)
- Content Input: 1280 x 1024, 60 Hz
- Content Output: Up to 1024 x 768
- 1 x audio input for laptop
- 1 x video output for projector up to 1024 x 768
- 3 x 10/100 Ethernet hub

User Interface
- User-friendly graphical interface
- Customizable home screen
- Customer logo as screen saver
- Customizable color themes (Seven to choose from)
- Home screen scrolling marquee
- Kiosk mode for custom applications
- User-selectable, industry-specific camera icons
- User-selectable ring tones for incoming calls
- Speed Dial List on home page
- Persistent Preview (Far-site PIP) on all screens
- Picture In Picture (PIP) (On/Off, Moveable)
- Dual-Monitor Emulation for displaying two Images on a single monitor
- Numerical menu navigation (Similar to mobile phone)
- Recent Calls List (Last 99 inbound and outbound calls)
- Date and Time Server accessibility
- Alert Signal on home page
- Keypad audio dialing confirmation (Translated)
- Do Not Disturb (On/Off)
- Local, Global, Sample Sites directories
- Web interface

People+Content™ features including:
- Dual images (View people and high-resolution content simultaneously)
- Dual audio (Transmits audio from room microphones and laptop simultaneously)
- Available on IP and ISDN
- Available during mixed multipoint calls from any site (Not just the host)
- Flexible Display Configurations Supported:
  - Single monitor
  - Dual monitor
  - Dual monitor with XGA display
  - Dual monitor emulation

Internal Multipoint Features (Optional)
- Mixed protocol dialing connects four endpoints (IP/ISDN/Serial) through the internal MCU
- Dial-in/Dial-out Calling (IP/ISDN/Serial)
- Password protection for incoming calls
- Supports IP telephones
- Automatic IP/ISDN down speeding
- Supports People+Content from any endpoint (Not just the host site)
- Voice Activated Switching (VAS)
- MP key installation while in a call

Embedded Encryption (Optional)
- AES software encryption on IP and Serial/V.35 up to 2 Mbps
- AES software encryption on ISDN up to 512 kbps
- Standards-based H.235V3 (IP)
- Standards-based H.233/H.234 (ISDN/Serial)
- Automatic key generation and exchange
- Supported in People+Content
- Supported in Point-to-Point IP and ISDN calls
- National Institute of Standards & Technology (NIST) approved

Customizable user interface gives you maximum flexibility. Secure, remote Web-based management tools provide maximum control.

Dual Monitor Emulation delivers ultimate convenience in a single display configuration!

Polycom VSX 7000 Specifications

ITU H.323 and H.320 compliant

Bandwidth

- Maximum Data Rate IP and Serial/V.35: Up to 2 Mbps
- Maximum Data Rate ISDN: Up to 512 kbps

Video Standards

- H.261, Annex D
- H.263+ Annexes: F, I, J, L, N, T
- H.263++ Annexes: W
- H.264
- ITU 60-fps full screen – Pro-Motion

Frame Rates (Point-to-Point)

- Intelligently selects frame rate for best performance video
- 30 fps at 56 kbps up to 2 Mbps
- 60 fields per second up to 2 Mbps

Video Inputs (Two inputs plus camera)

- Integrated main camera
- 1 x S-Video; 4-pin mini DIN (Document camera, VCR or second camera)
- 1 x Composite; RCA/Phono (Document camera, VCR or second camera)

Video Outputs (Five outputs)

- 1 x S-Video; 4-pin mini DIN (Main monitor)
- 1 x Composite; RCA/Phono (Main monitor)
- 1 x S-Video (Optional second monitor)
- 1 x Composite; RCA/Phono (Optional second monitor)
- 1 x XGA (Optional second graphics display)

Video Formats

- NTSC, PAL, SXGA, XGA, SVGA, VGA

Integrated Main Camera

- Ultra-quiet, ultra-fast action pan/tilt/zoom (PTZ)
- 65° field of view
- Tilt Range: +/- 25° (Up/Down)
- Pan Range: +/- 100° (Left/Right)
- Total Field of View: 265°
- 12x Zoom; f-4.2 to 42mm
- F=1.85 to 2.9 mm
- Auto focus
- Automatic white balance
- Camera presets (20)
    - Local camera presets (10)
    - Far-end camera presets (10)
- Standards-based, far-end camera control (FECC)

People Video Resolution

- Pro-Motion interlaced video (60/50 fields full-screen video for NTSC/PAL)
- 4SIF (704 x 480)
- 4CIF (704 x 576)
- SIF (352 x 240)
- CIF (352 x 288)
- Choice of 4:3 or 16:9 display aspect ratios

Content Video Resolution

- SXGA (1280 x 1024), XGA (1024 x 768), SVGA (800 x 600), VGA (640 x 480) for graphic displays
- Up to 4 CIF, or CIF for NTSC/PAL displays

Audio Standards

- 14 kHz bandwidth with VSX Siren™ 14*Plus* on IP, ISDN, and IP/ISDN mixed calls
- 7 kHz bandwidth with G.722, G.722.1
- 3.4 kHz bandwidth with G.711, G.728, G.729A

Audio Inputs (Three inputs)

- 1 x Conference link for microphones
    - Up to three microphone arrays
    - Nine total microphones
- 1 x RCA input for mixer or VCR
- 1 x RCA input for VCR (for mixer)

Audio Outputs (Two outputs)

- 1 x RCA for external amplifier/loudspeaker system
- 1 x RCA for VCR record

Other ITU-Supported Standards

- H.221 communications
- H.224/H.281 far-end camera control
- Annex Q standard for FECC in H.323 calls
- H.225, H.245
- H.231 in multipoint calls
- H.243 MCU password
- H.233, H.234, H.235V3 encryption standards
- Bonding, Mode 1

Network Interfaces Supported

- IP (LAN, DSL, cable modem)
- Single 10/100 Ethernet port (10 Mbps/100Mbps/Auto)
- TCP/IP, DNS, WINS, DHCP, ARP, HTTP, FTP, Telnet
- Optional Quad BRI (Basic Rate Interface) Module
- Optional Serial Module (V.35/RS-530/RS-449 with RS-366 dialing)
- Optional wireless LAN support via Ethernet port
    - Compliant with IEEE 802.11b or 802.11g, up to 54 Mbps
    - Support for 64-bit to128-bit encryption (WEP)
    - Infrastructure or ad hoc mode

Network Features

- Automatic IP/ISDN calling
- Down speeding over IP and ISDN
- IP address conflict warning
- Fast Connect IP for quick video connections
- Maximum call length digital timer
- Auto SPID detection and line number configuration
- NATO standard KG-194/KIV-7 encryptor support with on screen and address book dialing
- MGC Click & View™ for individual screen layouts
- Polycom OneDial™ intelligent call management attempts call on preferred network (IP or ISDN) and automatically rolls over to secondary network if needed
- PathNavigator support for easy call placement and network cost optimization

Conference on Demand

- Initiates unscheduled MGC calls from the endpoint
- Utilizes Polycom Office (PathNavigator and MGC)
- Auto selects either the internal or external bridge
- Dials all participants simultaneously
- Software upgradeable Inverse Multiplexer (IMUX) extends capability of the internal MCU

Security

- Independently tested for endpoint security
- Enhanced integration for independently certified, classified encryption devices
- Account validation number entry
- Secure password authentication
- Unique factory default passwords
- Administrator password
- Dial-in meeting password
- Standards-based H.243 MCU password
- Do not disturb feature
- Do not disturb feature while in a call
- Ability to disable remote interfaces (FTP, Telnet, HTTP)
- Ability to disable mixed protocol multipoint calls
- Auto-Answer Point-to-Point (On/Off)
- Auto-Answer MultiPoint (On/Off)
- Allow access to user settings (On/Off)

Directory Services

- 10,000+ number global directory
- 1,000+ number local directory
- Limitless multipoint entries
- Live address book with Polycom Global Directory Services automatically and quickly updates directory with address changes or new endpoints
- Live address book with Polycom Global Directory Services automatically and quickly removes endpoints from directory if they are turned off
- Polycom Global Directory Services integrates with Active Directory/LDAP
- Automatic ISDN localization of calls

System Management

- Diagnostics and software upgrades via PC, LAN
- Integrated Web interface for remote management
- Out-of-box setup from Web interface
- Place a call from Web interface
- Language independence between set-top interface and Web interface
- System configuration from Web interface
- Recent Calls Log – Records last 99 incoming and outgoing calls
- Call Detail Record (CDR) – Reports all calls made from the system along with call statistics
- CDR Feature On/Off
- Downloadable CDR data for processing requires no external management system
- Account number validation at call initiation integrated with Polycom Global Management System™ for billing purposes
- Administrator-configurable dialing speeds
- Complete support for The Polycom Office including:
    - Polycom Global Management System
    - Polycom OneDial
    - Polycom PathNavigator
    - Polycom Conference Suite
    - Polycom MGC

Quality of Service and Experience – iPriority™

- Video Error Concealment
- Audio Error Concealment
- IP Precedence (ToS)
- DiffServe DHCP (CoS)
- Dynamic Bandwidth Allocation
- Proactive Network Monitoring
- Packet and jitter control
- Network Address Translation (NAT) support
- Automatic NAT discovery
- Configurable video/audio/FECC service value
- Asymmetric speed control
- TCP/UDP fixed-port firewall support
- Lip synchronization
- Echo cancellation
- Echo suppression
- Auto gatekeeper discovery
- Automatic gateway dialing profiles
- Specify outbound call routing for gateway/ISDN

Language Support (11 languages)

Chinese (Simplified), Chinese (Traditional), English, French, German, Italian, Japanese, Korean, Norwegian*, Portuguese, Spanish
    - Documentation translations in all languages
    - User interface translations in all languages
    - Keypad audio dialing confirmation in all languages
    - Web interface translations in all languages
    - Remote controls labeled in all languages

Electrical

- Auto sensing power supply
- Operating voltage/power 90-260 VAC, 47-63 Hz/80 watts

Environmental Specifications

- Operating Temperature: 0-40° C
- Operating Humidity: 15-80%
- Non-Operating Temperature: -40-70° C
- Non-Operating Humidity (Non-condensing): 10-90%

Physical Characteristics

- Video Base Unit (W/H/D): 11.82"/5.83"/9.63" 300.3mm/148mm/244.5mm
- Video Base Unit Weight: 6.0 lbs/2.8 kg
- Subwoofer (W/H/D): 6.9"/10.72"/8.67" 175.2mm/272.4mm/220mm
- Subwoofer Weight: 9.0 lbs/4.08 kg

Warranty

- One-year parts and labor