

# Polycom® iPower™ 9800 and 9400

Ultimate multimedia collaboration systems



## Benefits

**Ultimate video and audio quality** – Industry's first H.264 delivers sharpest video at low bandwidth while Pro-Motion™ continues to deliver most natural video at higher data rates. Polycom Siren™ 14 audio brings the highest audio fidelity for the most natural conversation

**Highest performance multimedia collaboration systems** – Extended microphone pickup and intelligent automatic camera pointing technology makes this the ideal conferencing system for larger rooms. And unparalleled performance with speeds of up to 4 Mbps on IP allows you to go as fast as your network will take you

**Choice of single or dual high resolution displays** – For a natural meeting environment. Coupled with the high fidelity audio system which delivers 270W of total power, with a powerful amplifier, subwoofer, and two (2) satellite speakers

**Maximum choice of controls** – Familiar point-and-click user interface gives users quick start on video collaboration. Wireless pen-based tablet brings new levels of interaction to the conferencing experience

**Increased ROI with Off-the-Call usage** – Improve productivity for every meeting whether in a video call or not. Access information from the system itself or simply plug in a laptop and share files

**Complete multimedia capabilities** – People+Content™ streaming gives full experience of the meeting to participants in non-video equipped locations. Meetings can now be recorded and stored digitally for future viewing with Digital Conference Recording. For on-demand meetings, the internal multipoint offers industry's best collaboration experience for up to 12 IP sites

Versatile, flexible and powerful, Polycom's iPower 9800 and 9400 provide an ideal platform for advanced multimedia presentations and meetings.



iPower's superior video and audio quality and comprehensive collaboration features lead to increased use of the technology and faster ROI.

The iPower 9800 and 9400 offer the first implementation of the industry's new video compression standard H.264, providing a sharper picture than ever before. And with 14 kHz fidelity audio, the highest quality audio in the industry, iPower allows for natural and clear conversation.

The iPower 9800 and 9400 are available with the flexible Polycom Media Center, which offers high-end performance, large matching displays and a 270W precision audio subsystem - create a quality video meeting environment, anywhere you need it, quickly and easily. Choose a single display to manage your entire video conference experience from one display – including high resolution meeting content, or add a two display Media Center solution for meeting content shown on one display and full screen remote video on the second display for a more natural meeting experience.

Audio and video conferencing are just the beginning. iPower offers a familiar user interface that can be accessed through a point-and-click wireless keyboard and remote controls for making presentations and accessing the Web, even when the system is not on a video call.

Polycom video conferencing and collaboration systems provide advanced technology specifically designed for video conferencing, including superior audio pickup with 360-degree microphone that enables meeting participants to be heard from anywhere in the room. Polycom's user interface is easy to use, with on-screen graphics and easy to control with color-coded remote controls. Going beyond face-to-face meetings, laptops can be quickly connected to Polycom video systems with dedicated devices that make sharing content as easy as pushing a button. These high-quality Polycom systems are all part of The Polycom Office™.

The quality of the iPower 9800 and 9400. The power of Polycom conferencing and collaboration solutions. With integrated video, voice, data, and Web capabilities, only Polycom solutions let you connect, conference, and collaborate any way you want. It's our commitment to making distance communications as natural and interactive as being there. Work faster, smarter, and more efficiently with the Polycom iPower 9800 and 9400 and other Polycom conferencing and collaboration solutions.

For more information visit [www.Howard.com](http://www.Howard.com) or call us at 888.912.3151

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# Polycom iPower 9800 and 9400 Specifications

ITU-T H.320 and H.323 compliant

## Audio

- 14 kHz with Siren™ 14
- 7 kHz with G.722.1, G.722, PT716plus, PT724
- 3.4 kHz with G.711, G.723.1, G.728, G.729, G.729A
- Integrated Dynamic Echo Cancellation (IDEC™)
- Automatic Gain Control (AGC)
- Automatic Noise Suppression (ANS)

## Video

- H.261, H.263, H.263+, H.263+++, H.264

## Data

- T.120, Integrated Microsoft® NetMeeting®
- H.281 far-end camera control for H.320
- H.323 Annex Q far-end camera control
- H.243 multipoint

## People video resolution

- CIF (352x288 pixels), SIF (352x240 pixels), QCIF (176x144 pixels), 30 fps at 256 Kbps and above
- Pro-Motion interlaced video (352x480 pixels) at 336 Kbps and above, 60 fields per second
- 4CIF (704x576), 4SIF (704x480), up to 15 fps

## Content video resolution

PC input:

- XGA (1024x768)
- SVGA (800x600)
- VGA (640x480)

S-Video or composite inputs:

- 4CIF (704x576 pixels), NTSC
- CIF (352x288 pixels)

## People+Content

- Dual Images (view people and high resolution content simultaneously)
- H.264 content up to XGA
- Synchronized content ("what you see, they see")
- Persistent previews (video thumbnails)
- Customizable video source labels
- Auto-sensing inputs
- Dynamic bandwidth allocation

## Video input

- Main camera: 4-pin mini DIN DB15 (PTZ) - people
- Auxiliary: 4-pin mini DIN DB15 (PTZ) - people or content
- Video content (document camera, etc.): 4-pin mini DIN - content or people
- PC/laptop direct input (or ImageShare™ II): 15-pin - content
- VCR (RCA) - content or people

## Audio input

- 2 microphone inputs (PowerMic), daisy-chains up to 8 microphones
- Line-level (RCA)
- 1 PC audio input (3.5 mm)
- 1 VCR input with ducking (RCA, left and right)

## Video output

- Main display/content display: SVGA or XGA (15-pin D sub)
- People display: NTSC or PAL (S-video, composite)
- VCR output (RCA)

## Audio output

- Main audio left and right (RCA)
- VCR output (RCA, left and right)

## Network interface

- IP (LAN, DSL, cable modem), Ethernet 10/100, up to 4 Mbps
- ISDN, Quad BRI S/T, up to 512 Kbps
- V.35/RS-449 with RS-366 dialing, up to 2 Mbps
- Voice-only and voice-add calls over ISDN and IP
- Optional wireless IP via USB or PCI

## Chassis

- Intel® Pentium® III, 256 MB RAM
- 4 dedicated DSP chips for conferencing application
- Windows® 2000 Professional
- DVD drive
- 40 GB hard disk
- Ethernet 10/100 interface
- 2 RS-232, 2 USB ports
- PCI slot, full length

## PowerCam™ Plus camera (with iPower 9800)

- Silent, motorized pan-tilt-zoom camera, with limelight automatic camera pointing including "dialog mode"
- Tilt range: +/-25°, Pan range: +/-100°
- Horizontal field of view: 65°
- Total field of view: 265°
- Horizontal resolution: 470 NTSC TV lines
- Zoom range: 10x
- Auto focus/brightness/white balance/iris

## PowerCam camera (with iPower 9400 NTSC systems)

- Standard pan-tilt-zoom camera (also supported as optional auxiliary camera for all iPower 9000 Series)
- Tilt range: +/-25°, Pan range: +/-100°
- Horizontal field of view: 65°
- Total field of view: 265°
- Horizontal resolution: 470 (NTSC) TV lines
- Zoom range: 10x
- Auto focus/brightness/white balance/iris

## iPower 70 camera (with iPower 9400 PAL systems)

- Standard pan-tilt-zoom camera
- Tilt range: +/-15°/-30°, Pan range: +/-100°
- Horizontal field of view: 66°
- Total field of view: 266°
- Horizontal resolution: 430 TV lines
- Zoom range: 12x
- Auto focus/brightness/white balance/iris

## PowerMic

- Smart microphone, which electronically locates the person speaking, anywhere within a full 360° radius (one included, up to eight total)

## Wireless keyboard

- Infrared wireless keyboard with trackball for point-and-click functionality and dedicated video conferencing hot keys

## Remote control

- Infrared remote control including built-in mouse functionality

## ImageShare II (option on iPower 9400)

- Laptop/PC connectivity device:
- 15-pin D sub - Video input up to XGA (1024x768 at 60, 75 Hz)
- 3.5 mm - Audio stereo input

## Internal multipoint

- Multipoint calling over IP/H.323
- Local site plus three (3) video sites at 768 Kbps each
- Full People+Content support
- Voice-activated or continuous-presence modes
- H.261, H.263, H.263+
- Pro-Motion interlaced video (352x 480 pixels) at 336 Kbps and above
- G.722, G.723.1, G.711
- Simultaneous voice-add over ISDN/IP
- T.120 data collaboration

## Optional 12-site multipoint

- Local site plus eleven (11) video sites
- Same call specifications as above

## Meeting Tool Assistant (option on iPower 9400)

- Integrated control of select document cameras, projector and VCR devices

## Supported devices

- VCR: JVC SR-S365U or JVC SR-S388E
- Document camera: ELMO EV-2000AF, ELMO EV-2500AF, Canon RE-350
- Projector: InFocus 350 and 5XX series, Sony PX/CX family

## People+Content Streaming

- View conference with content from any LAN using Microsoft® Internet Explorer
- Support up to 5 direct viewings (Windows Media® Player v9); or
- Support external Windows Media Server for large number of participants
- Voice switch and view permanent site selection supported
- Content capture as JPEGs
- On-the-Call and Off-the-Call streaming

## Optional Digital Conference Recording

- Save entire conference for archiving or later viewing
- Voice switch and view permanent site selection supported
- Content stores as JPEGs
- Support On-the-Call and Off-the-Call recording

## AES software encryption on IP

- Standards-based H.235V3 (IP)
- 128 bit automatic key generation and exchange
- Supported in People+Content
- Supported in Point-to-Point IP
- FIPS-197 - National Institute of Standards & Technology (NIST) approved

## Computer information sharing

- Plug in laptop or PC via ImageShare II
- Show iPower Desktop
- Share applications running on iPower system
- Integrated Web collaboration
- Polycom WebOffice™ directly from the iPower system
- T.120 data sharing and collaboration
- Customizable shortcut for frequently used applications

## IP and Quality of Service (QoS)

- Differentiated Services (DiffServ)
- Resource Reservation Protocol (RSVP)
- IP Precedence
- Network Address Translation (NAT) support
- Virtual Private Network (VPN) support
- Auto gatekeeper discovery
- Configurable TCP/UDP port range
- Packet reordering and de jittering
- Asymmetric speed control
- Lip synchronization
- Multiple IP adapters

## Network infrastructure

- Browser-based management
- Complete system management via Web browser, including:
  - Call control
  - Board diagnostics
  - Usage statistics
- Enterprise systems management
- Support for Polycom Global Management System™, SNMP and LDAP

## iPower Control Protocol

- RS-232 serial control
- Application interface (Active-X) for Visual Basic, Visual C++ software development
- Supports Crestron™ and AMX™ and Simtrol ONGOER™ control systems

## System diagnostics

- Built-in ISDN bit-error rate tester (BERT) application
- Board diagnostics
- Readiness monitoring
- Compatible with standard PC diagnostic tools

## Display options

- 34" XGA monitor for content display
- 34" NTSC/PAL monitor for people display
- Polycom Media Center with 270 Watt Integrated sound system, lockable storage compartment and power strip

## Electrical

- Auto-sensing power supply 110/220 Vac, 50/60 Hz

## Languages

- User interface, online help, and documentation available in English, Japanese, German, French, Spanish, Portuguese, Italian and Simplified Chinese

## Warranty

- Hardware
  - One year parts and labor (return to factory)
- Software
  - 90-day telephone support

Polycom video conferencing and collaboration systems support Polycom network infrastructure and management systems. With the Polycom MGCM™, Polycom video systems can participate in large multipoint conferences. Polycom PathNavigator™, among many other features, enables easy dialing from Polycom video systems with Polycom OneDial™. And video systems can be centrally managed and controlled with Polycom Global Management System™, and access the Global Address Book for easy access to directory services. Polycom video conferencing and collaboration deliver high quality video and integrated solutions for The Polycom Office.

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