

PCS-VCS Series

HD/SD Visual Communication Server

SONY
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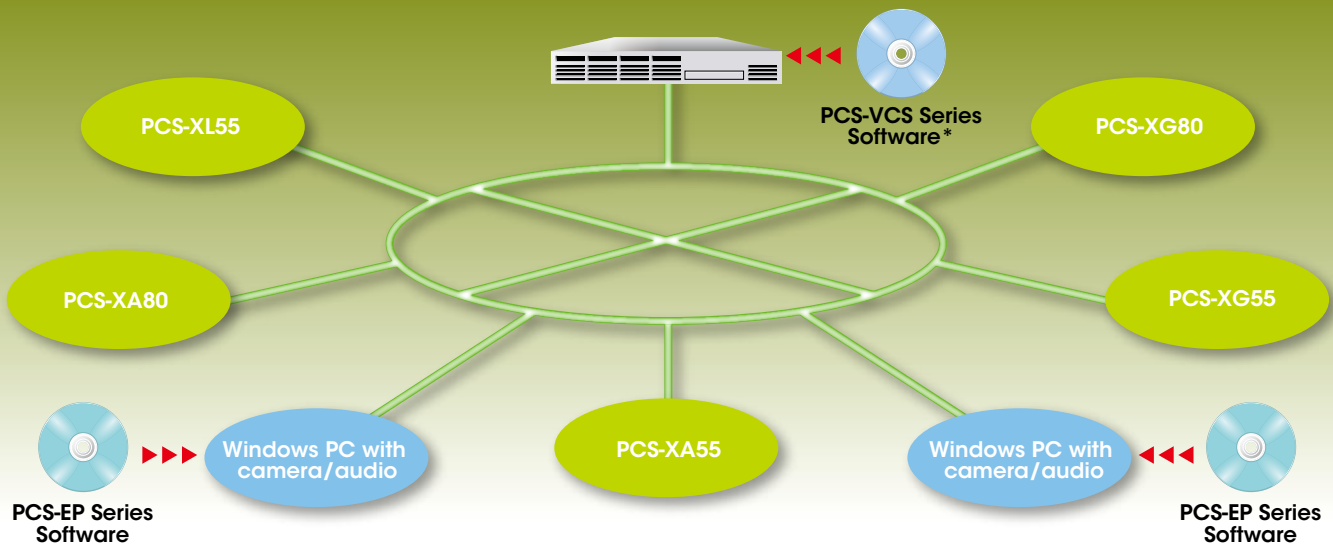
PCS-VCS HD/SD (High Definition/Standard Definition) Visual Communication Server Software provides a visual communication environment for virtual meeting experiences, and supports multi-point connection of participants in just two or three locations right up to as many as 500 different sites*.

Now, Sony is expanding these capabilities to include Windows PC support at any location where a broadband IP network is available, with its PCS-EP Series PC Endpoint Software.

With this powerful visual communication software, visual meetings can be conducted from almost any remote location - for example, from home, a temporary office, in hotels, and in large corporate conference rooms. Anywhere, at any point in time, when broadband IP network connection is available, every team member can participate in their virtual team meeting.

This flexible and expandable software allows communication to be more efficient, and can be used to connect various Sony video conference products together, such as the PCS-XG80, PCS-XG55, PCS-XL55, PCS-XA80, PCS-XA55, and PCS-G60 visual communication systems.

* Requires the HD (High Definition) software package and additional license.



PCS-VCS Series

HD Visual Communication Server (High Definition)

SD Visual Communication Server (Standard Definition)

PCS-VCS Series software products are designed to be easily installed in a server*¹ which manages the multi-point connection service with high-quality video and audio among Sony's PCS-XG80, PCS-XG55, PCS-XL55, PCS-XA80, PCS-XA55, and PCS-G60 visual communication systems. Users can select either a HD (High Definition) or SD (Standard Definition) software package.



Key Features

HD (High Definition) quality video

This server software supports HD-quality video at 720p/30 fps and 1080i/60 fps, and achieves natural, smooth video in the ITU-T H.264 compression format.

Continuous-presence mode with voice-activated switching

Multiple screen layouts - up to 16 splits

Available with the following screen layouts in HD mode: full screen, 4-split, 6-split, 8-split, 10-split, 13-split, and 16-split screen layouts.



Full-screen



4-split-screen



6-split-screen



8-split-screen



10-split-screen



13-split-screen



16-split-screen

*1 Needs server, sold separately.

Various software, including the Linux operating system, must be installed in advance.

The PC Endpoint function is supported by version V5.0 or higher.

*2 Communication bandwidth depends on the conference resolution.

*3 Supported by software version V5.0 or higher.

*4 Available for communication between PCS-XG80, PCS-XG55, PCS-XL55, PCS-XA80, PCS-XA55, and PCS-G60.

Easy expansion - up to 500 sites

With an additional license, users can hold a video conference between as many as 500 different sites.

Maximum expansion example

- Up to 500 sites using a single screen
- HD: up to 250 sites (768 kbps) / up to 200 sites (1.5 Mbps) when using a 4-split-screen
- SD: up to 400 sites (384 kbps) when using a 4-split-screen

Supports mixed HD/SD environments

Video conferences can be held with both HD endpoints and SD endpoints.*²

Built-in H.323 gatekeeper

The built-in H.323 gatekeeper enables operation using a user name, user number, or IP address.

H.235 Advanced Encryption*³*⁴

The H.235 Advanced Encryption Standard provides secure communication both to simple point-to-point and to multi-point conferences.

Other features

- QoS support - ARQ (Auto Repeat reQuest)*⁴
- ITU-T H.239 support - sends both the video and presentation data that is displayed on the PC
- Shared phone book
- Enables firmware upgrades: PCS-XG80, PCS-XG55, PCS-XL55, PCS-XA80, PCS-XA55, and PCS-G60
- Web-based management tool for easy and secure operation

PCS-EP Series

PC Endpoint Software

PCS-EP Series software products are optional accessories to PCS-VCS Series Visual Communication Server Software, and are designed to be installed on a PC*. These products allow users to join virtual meetings from any remote locations where a broadband IP network is available.

* Needs a Windows PC, sold separately.



Key Features

HD high-quality video & audio communication

Data sharing functions

- H.239 dual stream (camera image + PC screen)
- Application sharing, PowerPoint sharing (available between PC Endpoints)

Presence management with contact list

- View status of the contact (online, busy, or offline)
- Click to call a contact or meeting

Simple recording function (play with dedicated software)

SPECIFICATIONS

PCS-VCS Series	
Communication protocol	H.323, H239
Video codec format	H.261, H.263, H.264
Audio codec format	G.711, G.722, MPEG-4 AAC
Encryption	H.235 AES
Video resolution	HD 1080i (full screen Video Switch only), 720p, W432p, WCIF, 4CIF, CIF, QCIF
	SD 4CIF, CIF, QCIF
Video aspect ratio	HD 4:3 or 16:9
	SD 4:3
H.239 content sharing	Codec: H.263, H.264 Resolution: XGA
Video mode	Full screen (Video switching mode) Split screen (CPn mode) max. 16 split screen display Highlight speaker and display terminal name
Video switching mode	Voice switch, Time switch, Manual switch (Chairman, Selected user)
Audio mixing	Audio mix of 5 loudest speakers as default AGC (Automatic Gain Control)
Meeting type	Normal meeting All users have equal authority of speaker start/stop, etc. Chairman control meeting Chairman has authority of speaker start/stop, changing display layout, etc.
Access method to meeting	Calling out from endpoint (H.323 alias, E.164 number) Calling out endpoint from MCU Leaving by user operation Leaving by administrator's or chairman's operation
Access control	Setting access control for each meetings Limit by H.323 alias, E.164 number, IP address Setting for maximum connected users
Bandwidth limitation	Max. bandwidth for each meeting and each user, Max. total bandwidth setting Max. bandwidth control method Static: New endpoint cannot enter when it reaches max. bandwidth Dynamic: New endpoint can enter when it reaches max. bandwidth bandwidth is separate equally by all endpoints
Meeting scheduling	Always activate Scheduled (one time, everyday, every week, every month) Calling out from MCU at reserved starting time
Number of connected site	Single screen: Max. 500 endpoints HD CP4 conference: Max. 250 (768 kbps) Max. 200 (1.5 Mbps) SD CP4 conference: Max. 400 (384 kbps) * CPU: Intel X5680 (3.33 GHz) x 2CPU, Memory: 12 Gbyte
Administrative operation	VCONline web-based central management
Languages	Japanese, English
Meeting reservation system	Web-based meeting reservation function
Shared phone book	Embedded shared phone book server of SONY PCS series
Firmware update	Embedded firmware update function of SONY PCS-XG80/XG55/XL55/XA80/XA55/G60

Server Hardware Requirements

Processors	Intel Xeon X5680 3.33 GHz/8 M x 2
Memory	2 GB x 6 (12 GB) and more
Operating systems	Red Hat Enterprise Linux 5.0 64 bit
Storage	300 GB 3.5" SAS x 2 (RAID1)
Network I/F	GbE NIC
Optical drive	DVD-ROM drive
Power	Redundant power supply is required.

PCS-EP Series	
Communication protocol	H.323, H.239
Video codec format	H.261, H.263, H.263+ and H.264
Audio codec format	G.711, G.722
Available Bandwidth	From 64 kbps to 2 Mbps, Asymmetric transfer rate supported
Video Resolution	HD 720p, 432p
	SD 4CIF, CIF, QCIF
Video mode	Stretchable incoming video window plus optional local video Up to 16 video images synthesized in a single video window (CPn)
Audio mode	Full duplex with echo-cancellation and noise suppression when headset is used
Meeting Manager	<ul style="list-style-type: none"> • User Profiles for accessing multiple services • Personal controls to make calls or join virtual meetings • Meeting List with presence • Contact List with presence • Data sharing and collaboration controls
Functions	<ul style="list-style-type: none"> • Click-to-call a contact or join a meeting • Dial number, name or IP address • Show contacts whilst in a call or meeting • Add/delete/edit contacts and set call forwarding policies • Expand contact group, contact member and meeting trees • Call timer and network connection displays • Customize tool bars • Task tray icons showing connection status plus shortcuts through right and left clicking icon • PowerPoint sharing (Microsoft Office Power Point) - graphics mode • Application sharing and collaboration in peer to peer of multi-way meetings • Content sharing any application - video mode, including to other H.323 video conferencing room systems • Send message when logged in, even while in a call • Play media (audio/video or JPG streaming with voice over) • Record conversation, or capture screen during a call

PC Endpoint Systems Requirements

Required Software	Microsoft Windows 7, and Vista Microsoft Office 2003, 2007, and 2010
Hardware Requirements	Intel Core2 Duo 2 GHz or higher 1 GB memory or higher, WiFi or 10-100 BASE-TX network

PACKAGE CONFIGURATION

PCS-VCS Series			
	Number of License	Model Name	
		Server Software	Support Pack*
HD	3	PCS-VCS3	PCS-VCS3SP
	10	PCS-VCS10	PCS-VCS10SP
	20	PCS-VCS20	PCS-VCS20SP
	30	PCS-VCS30	PCS-VCS30SP
	40	PCS-VCS40	PCS-VCS40SP
	50	PCS-VCS50	PCS-VCS50SP
	60	PCS-VCS60	PCS-VCS60SP
	70	PCS-VCS70	PCS-VCS70SP
	80	PCS-VCS80	PCS-VCS80SP
	90	PCS-VCS90	PCS-VCS90SP
	100	PCS-VCS100	PCS-VCS100SP
	10 (for more than 100)	PCS-VCS10X	PCS-VCS10XSP
SD**	3	PCS-VCS3D	PCS-VCS3D3SP
	10	PCS-VCS10D	PCS-VCS10D3SP

* "Support Pack" is an after-sales service package. For details, please contact your nearest Sony office or authorized dealer.

** SD visual communication servers are upgradable to HD with optional software:
 - PCSVCS3UP for PCS-VCS3D/PCS-VCS3D3SP
 - PCSVCS10UP for PCS-VCS10D/PCS-VCS10D3SP

PCS-EP Series			
	Number of License*	Model Name	
		Endpoint Software	Support Pack*
HD/SD	3	PCS-EP3	PCS-EP3SP
	10	PCS-EP10	PCS-EP10SP

*All PC Endpoints require a license to connect.
 Multiple licenses are applicable (max. 500 licenses).

RECOMMENDED HD VIDEO CONFERENCING SYSTEMS



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