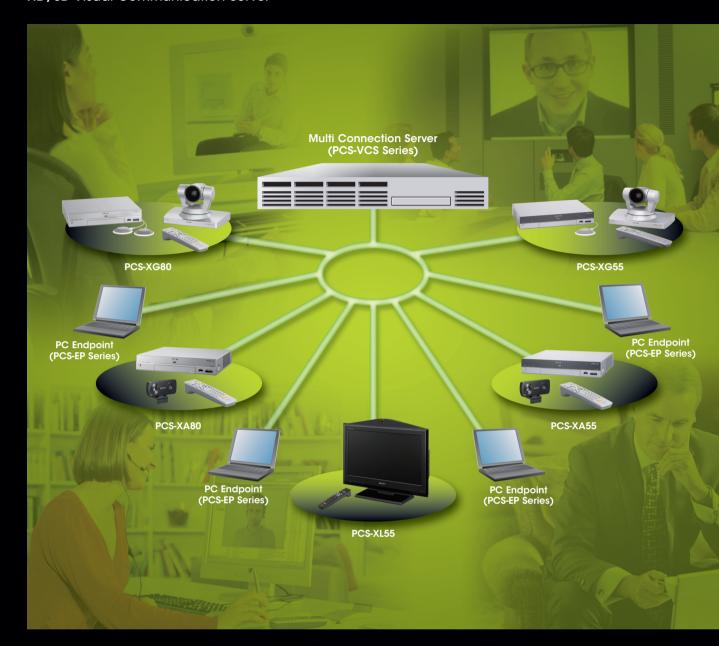
## **PCS-VCS Series**

**HD/SD Visual Communication Server** 





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\*.

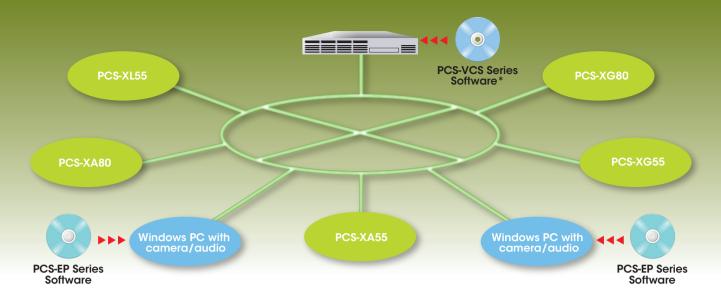
Now, Sony is expanding these capabilities to include Windows PC support at any location where a broadband IP network is available, with its PCS-EP Series PC Endpoint Software.

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.



<sup>\*</sup> 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**

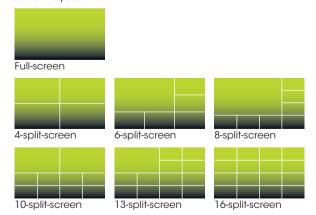
#### HD (High Definition) quality video

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.



- \*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.  $^{\ast 2}$ 

#### 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 multipoint 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.

## **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 protoco	ol	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 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			
3		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			
9		AGC (Automatic Gain Control)			
Meeting type		Normal meeting			
0 //		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 meet	ing	Calling out from endpoint (H.323 alias, E.164 number)			
	Ŭ	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 s	ite	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	า	VCOnline web-based central management			
Languages		Japanese, English			
Meeting reservation sys	tem	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			

Processers	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		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		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) - graphnics 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

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

<sup>\*</sup> Needs a Windows PC, sold separately.

## **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-VCSD3	PCS-VCSD3SP			
	10	PCS-VCSD10	PCS-VCSD10SP			

* "Support I	Pack" is an afte	r-sales servic	e package.	For details,	please co	ntact your	nearest Sony	office or
authorizon	doglor.							

authorized dealer.

\*\*S D visual communication servers are upgradable to HD with optional software:

- PCSVCS3UP for PCS-VCSD3/PCS-VCSD3SP

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

<sup>\*</sup>All PC Endpoints require a license to connect. Multiple licenses are applicable (max. 500 licenses).

## RECOMMENDED HD VIDEO CONFERENCING SYSTEMS



#### Distributed by



©2011 Sony Corporation. All rights reserved. Reproduction in whole or in part without written permission is prohibited. Features and specifications are subject to change without notice. The values for weight and dimension are approximate. Some images in this brochure are simulated. "SONY", "make.believe" and "IPELA" are registered trademarks of Sony Corporation.

All other trademarks are the property of their respective owners.

This product includes software designed for use with an MS Windows® operating system (OS). U.S. export control regulations may require an export license for export/re-export of the Windows OS (for details, contact Microsoft Corporation).

<sup>-</sup> PCS-VCS10UP for PCS-VCSD10/PCS-VCSD10SP