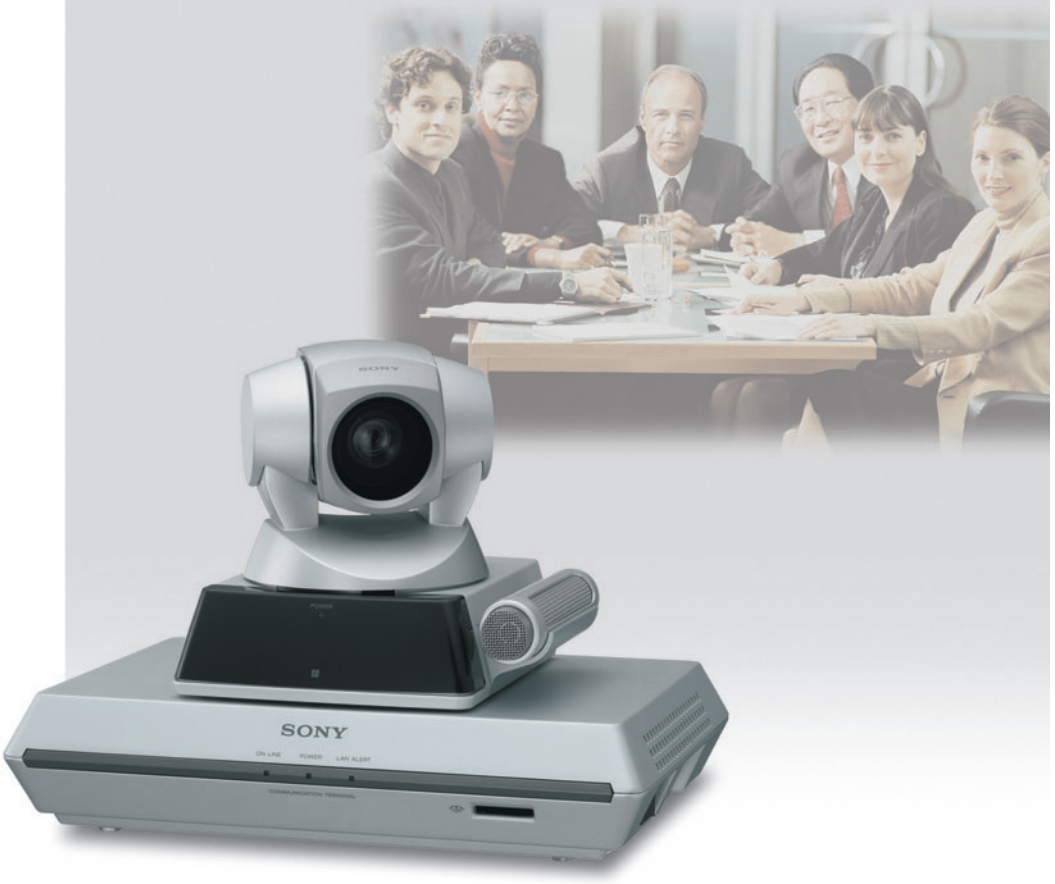
SONY

Video Communication System

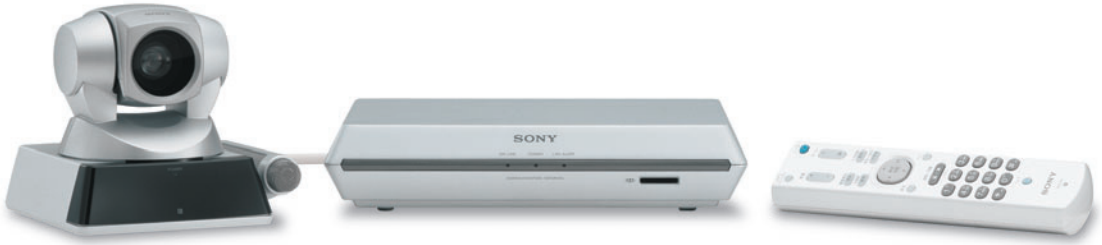
PCS-11
PCS-11P



A New Entry to Powerful Network-based Videoconferencing — The Sony PCS-11/11P

Inheriting the compact and stylish two-piece design from the PCS-1/1P Video Communication System, the PCS-11/11P provides high-performance networking capabilities at an affordable price. Connecting to a network, the PCS-11/11P provides the high picture quality of up to 1 Mb/s and advanced quality of service (QoS) enhancement functions such as adaptive rate control and auto repeat request (ARQ) to maintain the picture quality even in unstable network conditions. Configured in a system hosted by the PCS-1/1P, the PCS-11/11P supports data-sharing capabilities that allow you to view presentation documents transferred from the PCS-1/1P unit at a remote location.

The PCS-11/11P Video Communication System can expand the benefits offered by powerful network-based videoconferencing, allowing you to engage in simple, immediate, and face-to-face communication with your business partners.



FEATURES

Excellent Video Quality

The PCS-11/11P is equipped with encoding capabilities compliant with the ITU-T H.323 standard for network-based videoconferencing at up to 1 Mb/s and 30 frames/s. With connection to an optional PCS-B768 or PCS-B384 ISDN Unit, it is possible to hold a videoconference compliant with the ITU-T H.320 standard at up to 768 kb/s or 384 kb/s respectively, via an ISDN line. The PCS-11/11P provides advanced video-coding capabilities compliant with the new ITU-T H.264 standard. Its coding algorithm can lower video bit rates to almost half compared with the conventional ITU-T H.263 standard, while maintaining the same picture quality as the ITU-T H.263 standard.

Flexible Installation

The PCS-11/11P consists of a Camera Unit and Communication Terminal (main unit).
This unique two-piece design provides the flexibility to meet various installation needs.
Integrated with the optional PCS-STG1 or PCS-STP1 Camera Stand, its compact and stylish configuration provides the convenience of using a projector and flat-panel display (FPD) together, making a great impression on conference participants. Its small size of 147 (W) x 130 (H) x 138 (D) mm (5 7/8 x 5 1/8 x 5 1/2 inches) and light weight of 1.1 kg (2 lb 7 oz) allows the Camera Unit to be easily installed in space-critical environments.
Positioned on top of the Communication Terminal, the combined unit has a footprint of just 258 (W) x 171 (D) mm (10 1/4 x 6 3/4 inches), which is small enough to sit on top of any TV monitor.

Data-sharing Capabilities

The PCS-11/11P can receive and display presentation documents originated from a PC, or hand-written content on a whiteboard of fellow videoconference attendees within an audio- and video-based conference - as if all participants are in the same room. Configured in a system hosted by the PCS-1/1P, the PCS-11/11P provides two major capabilities to achieve this benefit:

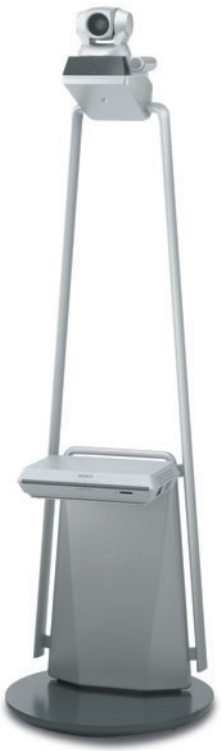
Viewing Presentation Documents in 4CIF Resolution

The PCS-11/11P can receive screen shots transferred from the PCS-1/1P through a network or an ISDN line in 4CIF resolution. This allows users to view presentation documents created in software applications such as Microsoft® PowerPoint®, Microsoft Excel, and Microsoft Word, as well as other still images from the PC screens of your videoconferencing counterparts.

Viewing Notes and Drawings on a Digital Whiteboard

Using a digital whiteboard recorder*1, notes and drawings on a whiteboard can be electronically converted and then transferred in real time to remote sites via the PCS-1/1P. The PCS-11/11P can then receive this digital whiteboard data and display it on a monitor screen.

*1 Digital whiteboard recorders cannot be connected to the PCS-11/11P.



QoS Enhancement Functions

When holding a videoconference via a network, a common concern is how to maintain picture quality in varying levels of performance. The PCS-11/11P provides two advanced functions to enhance quality of service on the network:

Adaptive Rate Control

The adaptive rate control function varies the bit rate of A/V data in relation to changing network conditions and selects the most appropriate frame rates. When network traffic becomes congested, it automatically lowers the video bit rate, and when the network condition recovers, it raises the bit rate up to the initial value. This function can help prevent the picture quality from degrading.

Auto Repeat Request

The ARQ function recovers lost packets by resending the same packets, buffered in the encoder. This helps to avoid picture collapse.

Secure Meetings by AES (Advanced Encryption Standard)

When holding a videoconference via a network, video, audio, and graphics*2 can be encrypted by the AES during the meeting process. Initiating a meeting by AES requires participants to input the same password to the PCS-11/11P with the supplied Remote Commander® unit.

*2 Notes and drawings on a digital whiteboard cannot be encrypted.

Super Acoustic System Support

The optional CTE-600 Communication Transducer is an acoustic system that comprises six radially arranged uni-directional microphones and one omni-directional speaker. Each microphone constantly detects the audio level in the conference room; however, only the microphone that detects the largest audio level sends a signal to the PCS-11/11P. This allows the active speaker's voice to be clearly transmitted, while minimizing background noise. The speaker system is designed such that sound is projected horizontally in all directions, providing clear sound quality in meetings involving as many as 15 to 20 participants.

Memory Stick Support

Attaching Memory Stick™ media to the PCS-11/11P allows presentation documents and digital photos to be displayed in 4CIF format without connecting to a PC. In addition, an address book can be saved and edited in the Memory Stick media.

OPTIONAL ACCESSORIES

PCS-STG1
Camera Stand

Dimensions:
386 (W) x 1170 (H) x 386 (D) mm
(15 1/4 x 46 1/8 x 15 1/4 inches)
Mass: 17.5 kg (38 lb 9 oz)

PCS-STP1
Camera Stand

Dimensions:
386 (W) x 1170 (H) x 386 (D) mm
(15 1/4 x 46 1/8 x 15 1/4 inches)
Mass: 13.0 kg (28 lb 10 oz)

PCS-B768
ISDN Unit

Dimensions:
165 (W) x 34 (H) x 127 (D) mm
(6 1/2 x 1 3/8 x 5 inches)
Mass: 0.40 kg (14 oz)

PCS-B384
ISDN Unit

Dimensions:
165 (W) x 34 (H) x 127 (D) mm
(6 1/2 x 1 3/8 x 5 inches)
Mass: 0.40 kg (14 oz)

CTE-600
Communication Transducer

Dimensions:
ϕ 248 x 104 (H) mm
(ϕ 9 7/8 x 4 1/8 inches)
Mass: 1.5 kg (3 lb 5 oz)

PCS-A1
Microphone

Dimensions:
ϕ 74 x 16 (H) mm
(ϕ 3 x 21/32 inches)
Mass: 0.17 kg (6 oz)

PCS-DS150/DS150P
Document Stand

Dimensions:
120 (W) x 480 (H) x 380 (D) mm
(4 3/4 x 19 x 15 inches)
Mass: 2.6 kg (5 lb 12 oz)

EVI-D100/D100P
Communication Color Video Camera

Dimensions:
113 (W) x 120 (H) x 132 (D) mm
(4 1/2 x 4 3/4 x 5 1/4 inches)
Mass: 0.86 kg (1 lb 14 oz)

SPECIFICATIONS

Video	
Signal system	PCS-11: NTSC
	PCS-11P: PAL
Standards	H.261, H.263, H.263+, H.263++, H.264
Resolution	QCIF, CIF
Frame rate	Max. 30 frames/s
Bit rate	Up to 1 Mb/s in H.323 (Incl. audio)
	Up to 768 kb/s in H.320 (Incl. audio)

Audio	
Bandwidth and coding	G.711: 3.4 kHz at 56/64 kb/s
	G.722: 7.0 kHz at 48/56/64 kb/s
	G.728: 3.4 kHz at 16 kb/s
Echo cancellation	Reduction rate: 30 dB
	Echo path length:
	340 ms (4 kHz and below)
	110 ms (4 to 8 kHz)
	Noise suppressor included
	Automatic gain control included

Graphics	
	4CIF: 704 pixels x 576 lines (H.261 Annex D and H.263 Base)

Picture in Picture	
	Sub screen size: 1/9 (One of four corners)

ITU-T Standards	
	H.320, H.323
	H.221, H.239
	Bonding
	H.281 FECC
	H.225.0
	H.245
	T.120

Network Protocols	
	TELNET (Server)
	HTTP (Server)
	FTP (Server)
	SNMP (Agent)
	PING
	DNS (Client)
	DHCP (Client)
	RTCP
	RTP
	TCP
	ARP

Lip Synchronization	
	Manual On/Off

Camera Unit	
Image sensor	1/4 type CCD
Horizontal resolution	PCS-11: 470 TV lines
	PCS-11P: 460 TV lines
Focal length	3.1 to 31 mm (F = 1.8 to 2.9)
Focus	Auto/Manual
IRIS	Auto
Horizontal view angle	6.6 to 65 degrees
Zoom ratio	x10
Pan angle	-100 to +100 degrees (Max. 300 degrees/s)
Tilt angle	-25 to +25 degrees (Max. 125 degrees/s)
Preset	Up to 6 positions
S/N	More than 50 dB
Others	Back light shootin

Remote Commander	
	Format: Wireless SIRCS

I/F of PCS-11/11P	
Video	S-video input x 1
	Composite input x 1
	S-video output x 2
	Composite output x 1
	IR for PCS-DS150/DS150P x 1
Audio	Line input (RCA) x 1
	External microphone input (Plug in power) x 2
	Line output (RCA) x 2
	Internal microphone x 1
Network	10Base-T/100Base-TX x 1
Memory Stick	Memory Stick slot x 1
Control	RS-232C/VISCA (Mini-DIN 8-pin) for second camera x 1
	SIRCS IR output for TV monitor x 2
	IR for Remote Commander x 1

I/F of PCS-B768	
	ISDN: BRI (Basic Rate Interface) x 6

I/F of PCS-B384	
	ISDN: BRI (Basic Rate Interface) x 3

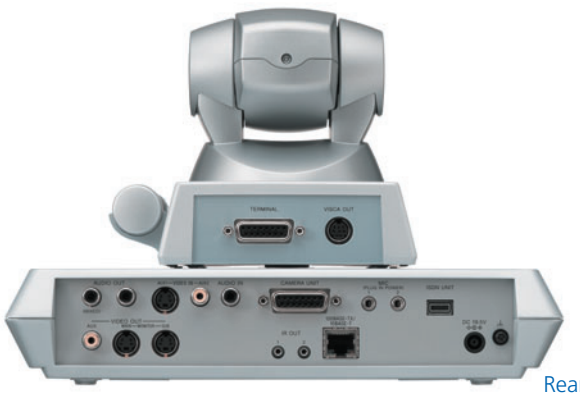
Environment	
Operating temperature	5 °C to 35 °C
Operating humidity	30% to 70%
Storage temperature	-20 °C to +55 °C
Storage humidity	25% to 75%

Power Requirement and Consumption	
Requirement	PCS-11: AC 120 V, 50/60 Hz
	PCS-11P: AC 220 V to 240 V, 50/60 Hz
Consumption	DC 19.5 V, 3.5 A

Dimensions and Weight	
Communication Terminal	258 (W) x 54 (H) x 171 (D) mm, 1.3 kg
	(10 1/4 x 2 1/4 x 6 3/4 inches, 2 lb 14 oz)
Camera Unit	147 (W) x 130 (H) x 138 (D) mm, 1.1 kg
	(5 7/8 x 5 1/8 x 5 1/2 inches, 2 lb 7 oz)
Remote Commander	50 (W) x 24 (H) x 197 (D) mm, 0.14 kg (Incl. battery)
	(2 x 31/32 x 7 7/8 inches, 5 oz (Incl. battery))

System Components and Supplied Accessories

Communication Terminal x 1
Camera Unit x 1
Remote Commander x 1
Camera Cable (0.25 m) x 1
AC Adaptor x 1
IR Repeater x 2
Manganese Battery for Remote Commander x 2
Velcro for Communication Terminal x 2
Double-faced Tape for Camera Unit x 3
Audio Cable (1.0 m) x 1
S-Video Cable (1.5 m) x 1
Operation Manual x 1
(Japanese, English, French, Spanish, Portuguese, Italian, German, Simplified Chinese)
Warranty Card x 1



Rear Panel

SONY

Sony Electronics Inc.
1 Sony Drive
Park Ridge, NJ 07656
www.sony.com/videoconferencing

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