

SONY



IPELA
INTEGRATED VISUAL COMMUNICATION



PCS-TL50P
Executive Desktop
Videoconferencing System

www.sonybiz.net/vc



PCS-TL50P

A Stylish, Powerful, All-in-one Video Communication System

- Simple operation
- Unique, easy-to-use features
- Integrated smart design

Imagine a world in which you can sit at your desk working at your PC when suddenly, instead of the phone ringing, a window pops up on your PC display and instantly you are on a videoconference call. This world of modern visual communication is no longer imaginary with the new Sony PCS-TL50P Videoconferencing System.

The all-in-one PCS-TL50P Videoconferencing System is ideal for executive offices, SOHOs (Small Office Home Office) and small offices/meeting spaces. It's very easy to install, because everything is built-in, and preprogramming the unit is also very simple with the supplied remote commander unit and intuitive GUI (Graphical User Interface). Moreover, the unit's user-friendly design makes placing and receiving calls as easy as pressing a button – even easier than making a phone call.

Boasting a large 20-inch wide-screen display that doubles as a PC monitor, the PCS-TL50P makes multitasking easy. There are several layout options available, including multiple screens and Picture-and-Picture, which can be used to display the other party while you continue to work on your PC application. By multitasking in this way, productivity can be increased twofold. What's more, the data-sharing function makes it possible to send and receive any kind of data that can be displayed on a PC.

With all of these features and more, the sleek, stylish and sophisticated PCS-TL50P makes a great addition to your office or small meeting spaces. Increased productivity and improved communication, including executive decision-making is all possible with the PCS-TL50.

* Sending data requires the optional PCSA-DSB1S Data Solution Box (DSB); however, the DSB is not required for receiving data.

EASY TO USE FEATURES

- User-Friendly Remote Commander
- Intuitive Graphical Menus
- One-click dialling
- Flexible display modes
- Memory Stick support
- QoS (Quality of Service) functions

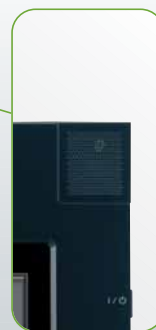
Camera



Speakers



Microphone



Main Features

All-In-One Design

Unlike typical videoconference systems, the PCS-TL50P has everything you need built into a single package that can double as a PC monitor. Its bright 20-inch wide display can properly present images in both 16:9 and 4:3 aspect ratios. The unit also has a built-in digital PTZ (Pan/Tilt/Zoom) camera that is used to precisely capture images, and a privacy shutter that can be closed at times when you prefer not to receive videoconference calls. In addition, built-in speakers and microphones provide high audio quality during videoconferences.

Easy Operation

The PCS-TL50P is thoughtfully designed with an intuitive GUI and a user-friendly remote commander unit. Displaying only required information, the menus are intuitive and easy to navigate; in addition, text messages are displayed at the bottom of the screen as a guide. Buttons on the remote commander unit are cleanly situated for ease of use. And one-touch operation makes it quick and simple to change display layouts, capture images, and place calls.

Easy Setup

With a built-in Ethernet interface, the PCS-TL50P can be configured by simply plugging it into a LAN and making a few quick settings on its intuitive setup menu. The PCS-TL50P supports datatransfer rates of up to 2 Mb/s over IP networks, making high-quality videoconferencing possible. An optional PCSA-B768S or PCSA-B384S ISDN Unit (network adapter) is available for videoconferences over ISDN networks; these units support data-transfer rates over ISDN lines at up to 768 Kb/s or 384 Kb/s, respectively.

User-Friendly One-Click Dialling

A particularly user-friendly feature of the PCS-TL50P is one-click dialling, which allows you to easily connect to any of your listed contacts with a click on the screen. By pre-programming your contact information, picture icons and contact names will appear at the bottom of the main menu. Calls are placed by pressing the button on the remote commander unit that corresponds to the picture icon. Up to 30 contacts in the phone book can be flagged for one-click dialling.

Memory Stick™ Support



Memory Stick and Memory Stick PRO support allows users to store their contact information, still image data received from videoconferencing counterparts and images from conferences on a Memory Stick. You can simply insert the Memory Stick and the unit automatically recognises and activates the user's private phonebook, eliminating the need to re-enter contact information. Memory Stick support is also of real benefit to network administrators, allowing them to store, for example, factory settings, firmware updates or other network settings and configurations on a Memory Stick and use that to update or re-configure units quickly and easily.

Data-Sharing Capabilities

Data originated on your PC can be shared with your videoconferencing counterparts, making communication even more effective. Any image that can be displayed on a PC can be sent or received in native XGA resolution, allowing all parties to share data during a videoconference.

Picture-in-Picture/Picture-and-Picture

With the choice of Picture-in-Picture or Picture-and-Picture (split screen) layout options, both near- and far-end video and/or data can be displayed in a manner that is pleasing to the eye.

Multitasking (Simultaneous Video-conference/PC or Video Display)

With the PCS-TL50P, you can continue to work on your PC even while you are on a videoconference call. This unique feature is ideal for busy executives who want to increase their productivity.

Excellent Video Quality

The PCS-TL50P complies with the ITU H.264 video codec in addition to previous versions of ITU videoconferencing codecs to maintain compatibility with legacy systems. ITU H.264 is the latest standard that offers high-picture quality at a much lower bit rate than the H.263 standard.

Superb Sound

Clear and natural-sounding audio is produced with the PCS-TL50P as it supports MPEG-4 AAC (Advanced Audio Coding) at 14 kHz. Boasting dual-integrated speakers and microphones, and a built-in echo canceller, audio quality is much higher than conventional speakerphone systems. Also, a microphone jack and a headphone jack are available for external microphone or headset use.

*MPEG-4 AAC is available with a peer-to-peer connection only.

Right side panel descriptions



Power switch and indicator
Turns the system on/off. When the power is turned on, the indicator is green.

MENU button
Displays the picture adjustment menu on screen

▲/▼ buttons
Use these buttons to select the setting item of the picture adjustment menu or adjust the selected item.

OK button
Confirms the selected item or the adjusted value.



Memory Stick™ slot
Insert a Memory Stick™ media into this slot.

Microphone jack (minijack)
Connects to the optional PCS-A1 or PCS-A3 microphone.

Headphones jack

One-Click Dialling



Accessories

PCSA-DSB1S Data Solution Box	PCSA-B768S / PCSA-B384S 6BRI ISDN Unit / 3BRI ISDN Unit	PCS-A1 / PCS-A3 Omnidirectional Microphone	PCS-323M1 & PCS-320M1 H.323/H.320 MCU Software
			
			PCSA-SCTL50 SCCP Software Upgrade Kit

Secure Videoconferencing – Advanced Encryption Standard (AES)
Secure videoconferencing over a network is possible because the PCS-TL50P supports AES. When a videoconference is initiated with the AES feature active, video, audio, and graphics are encrypted for the duration of the videoconference.

QoS (Quality of Service)
When holding a videoconference over a network, a common concern is how to maintain video and audio quality when the performance of the network is changing. The PCS-TL50P provides two advanced functions to enhance QoS over a network:

- **ADAPTIVE RATE CONTROL (ARC)**
The adaptive rate control function automatically varies the audio and video bit transfer rate to meet changing network conditions. It also selects the most appropriate frame rates, which helps prevent audio and video break-up.
- **REAL-TIME AUTO REPEAT REQUEST (ARQ)**
The Real-time ARQ function recovers lost IP packets. This is performed by buffering the packets at the encoder and resending any that are lost. This feature helps maintain the audio and video quality, and helps prevent picture collapse even under high network traffic conditions.

Transportable
The all-in-one PCS-TL50P is equipped with a handle and has a relatively light weight of 10 kg (22 lbs), making it very portable and easy to move from one room to another.

Multi-point Videoconferencing at up to 10 Sites*
Using optional MCU software, the PCS-TL50P can be configured to communicate with up to 5 videoconferencing sites simultaneously using either an IP (H.323 protocol) or ISDN (H.320 protocol) connection. It can also support videoconferences in which the connections are a combination of IP and ISDN using a unique bridging function. Moreover, two PCS-TL50P units - each installed with the optional MCU (H.323) software - can be cascaded with an IP connection to support a maximum of 10 sites. And of course, the PCS-TL50P allows users to expand from a peer-to-peer videoconference to a multi-point videoconference by simply dialing up new connections.

* The following video and audio standards are supported with multi-point videoconferencing: H.261, H.263, G.711, G.722, and G.728.
** When adding a new endpoint on the same network (IP or ISDN), the system will default to the lowest resolution video standard of all endpoints.


Wireless LAN Capability
By connecting an external wireless LAN device* to the network interface of the PCS-TL50P, the unit can be used on a wireless network.
* Please contact your local Sony sales office for a list of compatible wireless devices.

PCSA-SP1
SIP Software



Supplied Accessories

PCS-RTL50
Remote Commander



PCSA-AC19V8
AC Adaptor

User-friendly GUI



The diagram illustrates the user interface of the PCS-TL50P, showing a central video window and a bottom row of six quick-dial buttons labeled Group 1 through Group 5. Each button contains a small video thumbnail and a name: Kim, Robert, Alicia, Stephen, Brenda, and Fred. A red box highlights the 'Group 1' button, with a callout stating 'Selects a One Touch Dial on Group 1'. Other callouts include: 'Memory Stick indicator' pointing to a small icon; 'System IP and ISDN number' pointing to the display 'IP: 192.168.1.10'; 'Self view information on camera position and microphone status' pointing to a small camera icon; 'Detailed Dial' and 'Phone Book' buttons on the right; and 'One-Touch Dial' pointing to a button on the physical device shown in the bottom left corner.

IPELA

Business is changing. The vision of integrated visual communication is becoming a reality with Sony IPELA – a suite of intelligent IP-based Network Video Monitoring and Videoconferencing products and solutions

Sony IPELA utilises the rapidly expanding global IP broadband network and advanced high resolution imaging technology to offer visual communications systems that enable customers to realise the Sony vision for the workplace of the future, where better business decisions are made as a result of enhanced, real-time person-to-person and location-to-location communication.

Sony IPELA Videoconferencing solutions offer customers a complete range of great-looking, affordable and simple-to-use conferencing systems, from compact all-in-one systems to high-end solutions with advanced capabilities. All Sony IPELA Videoconferencing solutions enable groups and individuals to share high quality voice, video and PC data cost-effectively over IP.

The PCS-TL50P brings enhanced communications to the desktop, empowering users to improve communications. It is based on industry standards and can therefore easily be integrated into the corporate network.

Reality

- High video & audio quality
- Effective, live personal communication
- Personal solution at an affordable price

▶ **As close as you can get to a face-to-face meeting**

Intelligence

- Quality of service maintains video and audio levels
- Recognises wide range of protocols
- Embedded security

▶ **Your applications are enhanced by technology**

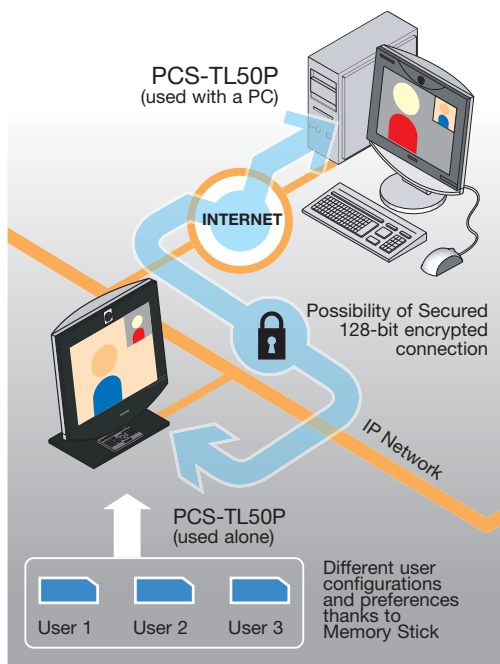
Usability

- PC, Videoconference and Video Monitor
- Easy to set-up, easy to use
- Efficient use of workspace
- Built-in multi-point capabilities to IP, ISDN or Telephone devices

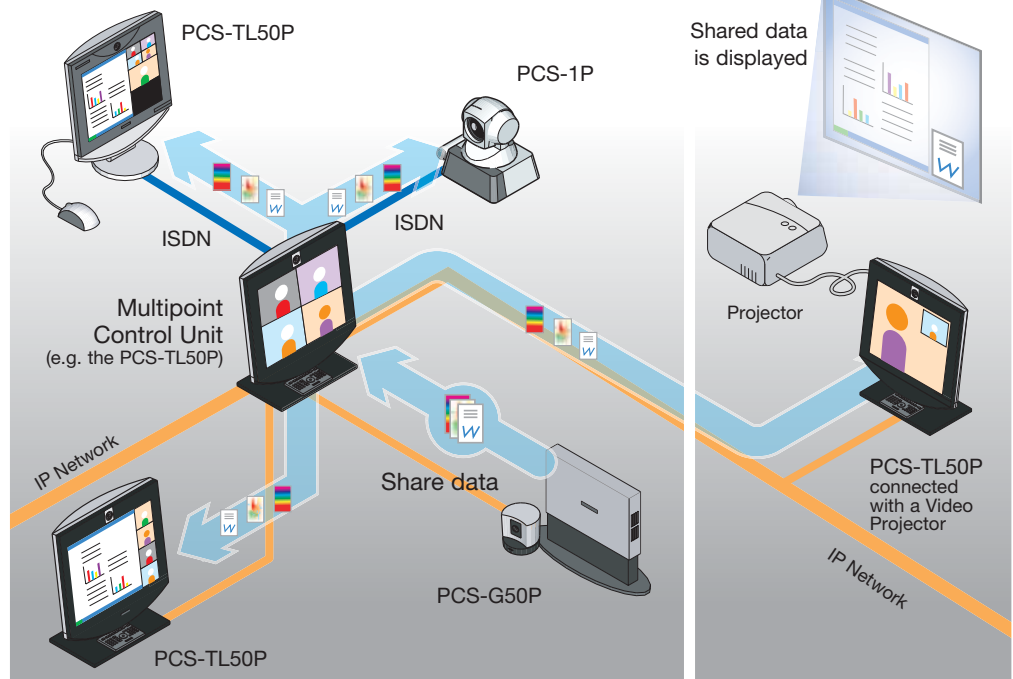
▶ **Fits on your desktop and ready to start in minutes**

Typical System Configurations

PCS-TL50P in a One-to-One Videoconference



PCS-TL50P can host and share data in a Multipoint Videoconference



PCS-TL50P Specifications

Video	
Standards	H.261, H.263, H.263+, H.263++, H.264, H.263 Interlaced SIF, MPEG-4 SP@L3
Resolution	OCIF (176 x 144), CIF (352 x 288)
Frame rate	Max. 30 frames/s
Bit rate	Up to 768 Kb/s in H.320 (Incl. audio) Up to 2 Mb/s in H.323 (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.722.1: 7.0 kHz at 24/32 kb/s (H.323) G.728: 3.4 kHz at 16 kb/s G.723.1: 3.4 kHz at 5.3/6.3 kb/s (H.323) G.729: 3.4 kHz at 8 kb/s (H.323) MPEG-4 AAC (mono) 14 kHz at 64/96 kb/s (H.323) at 48 kb/s (H.320)

Integrated Display	
LCD	20-inch Widescreen TFT
Aspect ratio	16:9
Resolution	1280 x 768 (WXGA)
Brightness	400 Cd/m ² (max.)
Response	Less than 15 ms
Contrast ratio	500:1
Viewing angle	Greater than 160°
Colors	16.7 million

Graphics	
XGA	1024 pixels x 768 lines (H.263), with PCSA-DSB1S
4CIF	704 pixels x 576 lines (H.261 Annex D, H.263)

Screen Layout	
Picture-in-Picture	Sub screen size: 4.3" (256 x 192), One of four corners
Picture-and-Picture (1)	Main screen size: 17.3" (1024 x 768) Sub screen size: 4.3" (256 x 192), Located at upper-right corner of display
Picture-and-Picture (2)	Main/Sub screen size: 10.8" (640 x 480), Side-by-side

ITU-T Standards (excludes audio/video standards)	
H.233, H.234, H.235 V3, H.320, H.323, H.221, Bonding, H.281 FECC H.225.0, H.245, T.120	

Network Protocols	
TELNET (Server), HTTP (Server), FTP (Server), SNMP (Agent) DNS (Client), DHCP (Client), RTP/RTCP, TCP/UDP	

Multipoint Capabilities	
Up to 6 sites (H.320/H.323)*, Up to 10 sites (H.320/H.323)**	
* Requires optional MCU software. IP/ISDN Bridging is possible.	
** Requires optional MCU software. Connections between base units must be IP (H.323). IP/ISDN Bridging is possible.	

Lip Synchronisation	
Manual On/Off	

Integrated Camera	
Image device	1/3 type CCD
Horizontal resolution	450 TV lines
Focal length	4.0 mm (F2.0)
Focus	Pan Focus
IRIS	Auto (Digital AGC)
Zoom ratio	x2 (Digital zoom)
Pan angle	-35° to +35° (Digital)
Tilt angle	-26° to +26° (Digital)
Preset	Up to 6 positions
S/N	48 dB
Others	Back light compensation, Auto white balance

Integrated Microphones	
Frequency response	15 kHz Unidirectional x 2

Integrated Speakers	
Output	3 W x 2
Format	Wireless SIRCS

Interface	
Video (for offline use only)	Composite input, RGB input, D-Sub 15
Audio	External microphone input (Plug in power) External headphone output (mini-jack)
Audio (for offline use only)	Line input (Stereo), RCA x 2, Line input (Stereo), mini-jack
Network	10Base-T/100Base-TX, External ISDN Unit I/F
DSB I/F	Dedicated D-Sub 15
Memory Stick	Memory Stick slot

General	
Operating temperature	5 °C to 35 °C
Operating humidity	20% to 80%
Storage temperature	-20 °C to +60 °C
Storage humidity	20% to 80%
Power requirements	AC 120 V (UC), AC 220 V to 240 V (CE), 50/60 Hz
Power consumption	DC 19.5 V, 7.7 A
Main Unit Dimensions (W x H x D)	528 x 445 x 110 mm (20 7/8 x 17 3/8 x 4 3/8 inches), excl. projections
Remote Commander	167.4 x 19 x 87.3 mm
Dimensions (W x H x D)	(6 7/8 x 7 3/8 x 3 1/2 inches), excl. projections
Main Unit Mass	10 kg (22 lbs 1 oz)
Remote Commander Mass	180 g (6.3 oz)

Supplied Accessories	
PCS-RTL50 Remote Commander	
PCS-AC19V8 AC Adaptor	
Manganese Battery for Remote Commander x2	
Operation Guide	
Quick Operation Guide	
Operation Manual CD-ROM	
Worldwide Warranty Card	

SIDE PANEL



DIMENSIONS

Unit: mm

