SONY®

Video Communication System

PCS-TL30

Connect Your Vision

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PCS-TL30

Stunning video and audio brought to you by the "**IPELA**" series of visual communication products that encompass the three-pronged concept of "Reality," "Intelligence," and "Usability." "**IPELA**" is the identity symbolizing the Sony vision for the workplace of the future, connecting people, places, and information with reality that has never before been achieved. "**IPELA**" lets you share ideas and dreams as if you are collocated when your counterpart is half-way around the world, experiencing images as if you are actually there.

Reality
- Excellent Video Quality (H.264)
- Superb Sound (MPEG-4 AAC)

Intelligence
- Encryption Function (ITU-T H.235)
- Network Quality of Service (ARC, ARQ)

Usability
- All-In-One Design
- Translucent Cascading Menu
- Mouse Operation
- Multitasking (VC/PC)

Real audiovisual communication over networks – this is business communication of the future, this is business communication brought to you today, this is "**IPELA**."

A Sleek, Personal, All-in-one Video Communication System, The PCS-TL30 – It Doubles as a PC Display and is Easy to Operate with its Single Layer GUI and Supplied Mouse

As the quality of IP networks improves, business work styles are changing to include more effective use of communication tools such as videoconferencing systems. To meet the needs of those users who choose this new work style, Sony adds the new personal use PCS-TL30 to its IPELA family of video communication systems.

The PCS-TL30 is a network ready video communication system that allows you to instantly communicate with your business counterparts over IP networks. This unit is ideal for use on individual desktops and can even be used in small meeting spaces as required. The PCS-TL30 is an all-in-one video communication system that includes a digital PTZ (Pan/Tilt/Zoom) camera, a widescreen 17.1-inch[*1] WXGA LCD that doubles as a PC monitor, speakers, and a microphone in a single lightweight and slim body.

For ease of use, the PCS-TL30 has been designed with a variety of features such as a single-layer GUI, translucent cascading menus, and simple mouse operation. You can even place a videoconference call by simply clicking on a picture icon of any of 30 people registered in your address book. What's more, the system allows you to capture and store a still image from your videoconferencing counterpart. This image can then be registered as a picture icon in your address book for one-click dialing. In addition, by installing the optional PCSA-DSM1 data solution module, the PCS-TL30 allows you to send and receive[*2] any kind of data displayed on a PC to your videoconferencing counterpart. Other features include, flexible display modes, **Memory Stick™** support, QoS features, an encryption function, and more.

The personal use PCS-TL30 can enhance effective communication by enabling you to grasp the actual situation during a videoconference. With the system's high-quality audio and video, grasping expressions, voice tones, and body language can be done as if you are meeting face-to-face. The PCS-TL30 is the affordable videoconferencing solution for personal use.
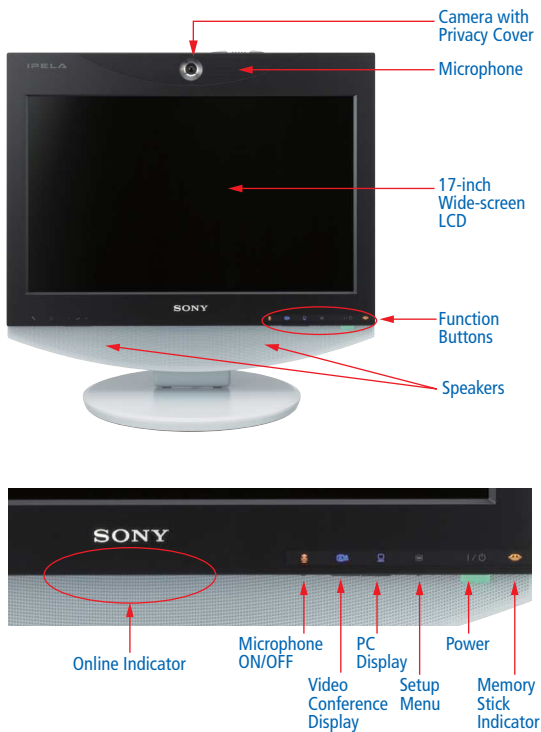

[*1] Viewable area measured diagonally.
[*2] Sending presentation data requires the optional PCSA-DSM1 Data Solution Module (DSM). Although the PCS-TL30 can receive presentation data without the DSM, it can receive this data at a higher refresh rate when the DSM installed.

FEATURES

All-In-One Design

The PCS-TL30 is an all-in-one videoconferencing system that combines a built-in camera, widescreen 17.1-inch WXGA LCD, speakers and a microphone in one compact and sleek body. What's more, it even doubles as a PC display. And the unit has a privacy cover that can be closed at times when you prefer not to be seen when a call comes through. The unit also has a height adjustment and swivel mechanism so that it can be adjusted for optimal viewing. And because the unit meets VESA standards for mounting on a bracket, it can be installed in a way that maximizes desktop workspace.

Camera with Privacy Cover

Microphone

17-inch Wide-screen LCD

Function Buttons

Speakers

Online Indicator

Microphone ON/OFF

PC Display

Power

Video Conference Display

Setup Menu

Memory Stick Indicator

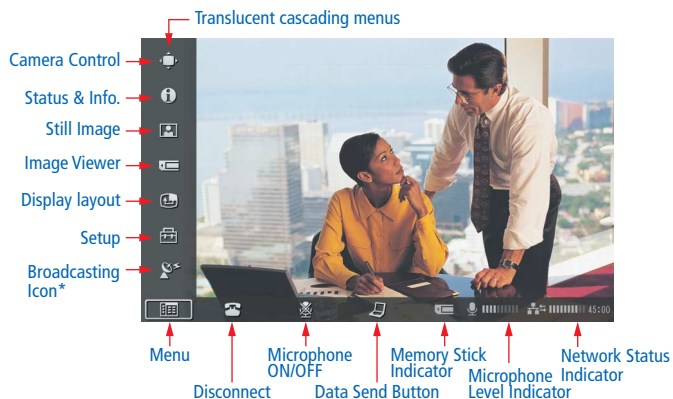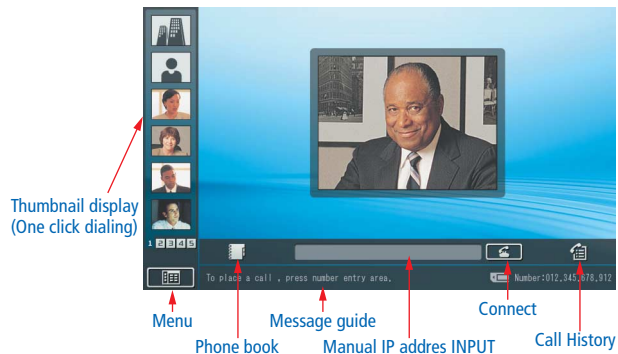## Easy Setup and Built-In Network Interface

With a built-in Ethernet interface, the PCS-TL30 can be configured by simply plugging it into a LAN and making a few quick settings on its intuitive setup menu. The PCS-TL30 supports data-transfer rates of up to 2 Mb/s over IP networks (H.323), making high-quality videoconferencing possible.

Simple Menu Structure / Easy Operation With a Mouse

The PCS-TL30 was thoughtfully designed with an intuitive GUI, utilizing translucent cascading menus and displaying all menu-items on one layer. The PCS-TL30 can be controlled by the supplied mouse, which can be connected to the PCS-TL30 directly. The mouse can also be used to control a PC by connecting a separate cable between the PCS-TL30 and the PC. For ease of use, text messages are displayed at the bottom of the screen as a guide. And the intuitive icons make it quick and easy to change display layouts, capture images, and place calls.

User-Friendly One-Click Dialing

A unique feature of the PCS-TL30 is one-click dialing, which allows you to easily connect to any of your listed contacts with a click on the screen. By preprogramming your contact information, picture icons and contact names will appear at the left side of the main menu. Up to 30 contacts for one-touch dialing can be flagged from a maximum of 300 registered contacts.
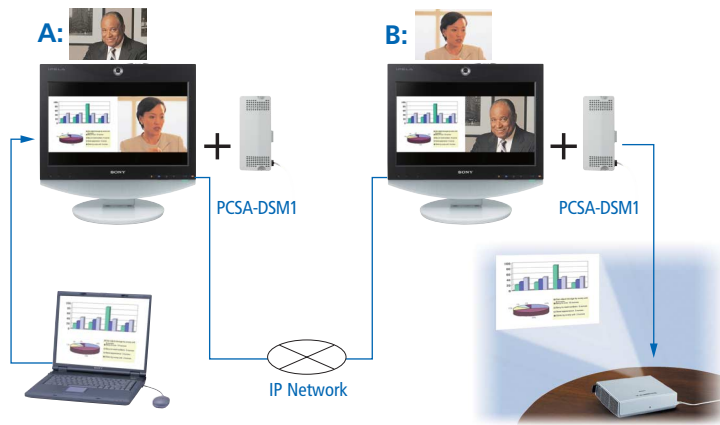
Thumbnail display (One click dialing)

Menu

Phone book

Message guide

Manual IP addres INPUT

Connect

Call History

Translucent cascading menus

Camera Control

Status & Info.

Still Image

Image Viewer

Display layout

Setup

Broadcasting Icon*

Menu

Disconnect

Microphone ON/OFF

Data Send Button

Memory Stick Indicator

Microphone Level Indicator

Network Status Indicator

* The "Broadcasting Icon" is displayed on the menu and is an available function only when participating in a multi-point videoconference.

Multitasking (Simultaneous Videoconferencing/PC)

With the PCS-TL30, you can continue to work on your PC even while you are on a videoconference call. This unique feature is ideal for businesspeople who want to increase their productivity.

Data-Sharing Capabilities

When using the optional PCSA-DSM1 Data Solution Module, which is neatly integrated into the rear of the unit, the PCS-TL30 is capable of sending or receiving[*2] any image that can be displayed on a PC (presentation data) in native XGA resolution during a videoconference. And because the PCSA-DSM1 is equipped with an RGB out connector, presentation data from the PCS-TL30 can be enlarged by connecting the unit to equipment such as a projector or a large display.

A: B:

+ +

PCSA-DSM1   PCSA-DSM1

IP Network

Memory Stick™/Memory Stick PRO™ Media Support

If multiple users choose to use a single PCS-TL30, each user can store their personal contact information on Memory Stick media cards. After inserting the Memory Stick media into the PCS-TL30, the unit automatically recognizes and activates the private phonebook,[*3] thereby eliminating the need to re-enter contact information to place a call.
In addition to the private phonebook function, the PCS-TL30 supports Memory Stick media for storing still image data received from your videoconferencing counterpart, capturing videoconference images, and for installing optional software.
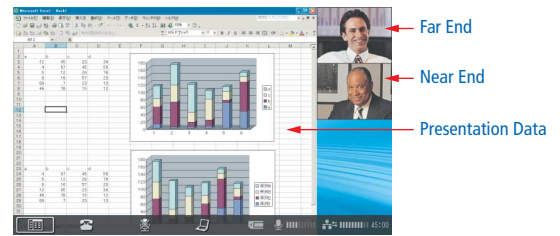
Still Image Capturing Function[*3]

The image from your videoconferencing counterpart can be captured and stored in the PCS-TL30 memory or on Memory Stick media. This image can then be easily registered in your address book as a picture icon for one-click dialing.

[*3] Scheduled availability for these functions is November 2005.

Multiple Display Modes

The PCS-TL30 has multiple display modes such as Full Screen, Picture-in-Picture, or Picture-and-Picture (including a side by side split screen). What's more, a unique 3-window layout mode is available, which displays presentation data on the left side of the screen while displaying videoconferencing images in two small windows on the right side of the screen. Any of these flexible display modes can be selected so that both videoconferencing images and presentation data can be displayed in a manner that is effective and pleasing to the eye.

Far End

Near End

Presentation Data

3-window Layout

Side-by-Side Split Screen

Excellent Video Quality

The PCS-TL30 complies with the ITU-T H.264 video codec in addition to previous versions of ITU-T videoconferencing codecs to maintain compatibility with legacy systems. ITU-T H.264 is the latest video 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-TL30 as it supports MPEG-4 AAC (Advanced Audio Coding) at 14 kHz. Boasting dual-integrated speakers and a built-in echo canceling microphone, 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.

Secure Videoconferencing

Secure videoconferencing over a network is possible because the PCS-TL30 supports 128-bit encryption. The PCS-TL30 offers two encryption modes, one that complies with the ITU-T H.235 standard, which allows encrypted communication with other H.235 compliant systems, and another that is Sony proprietary, which is ideal when connecting to other PCS Series systems and offers higher security. When either of these encryption modes is 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-TL30 provides two advanced functions to enhance QoS over a network:

Adaptive Rate Control (ARC)
The adaptive rate control function automatically varies the video bit transfer rate to meet changing network conditions. It also selects the most appropriate frame rates, which helps prevent audio and video breakup.
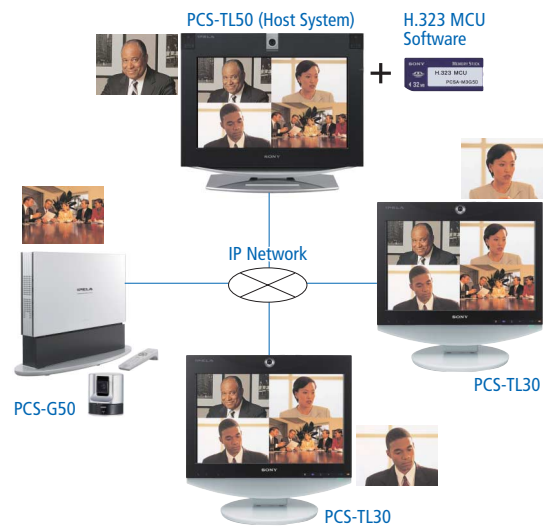
Real-Time Auto Repeat Request (ARQ)
The real-time ARQ function recovers lost IP packets. This is performed by buffering the packets at the encoder and resending any that are lost. This feature helps maintain the audio and video quality, and helps prevent picture collapse even under high network traffic conditions.
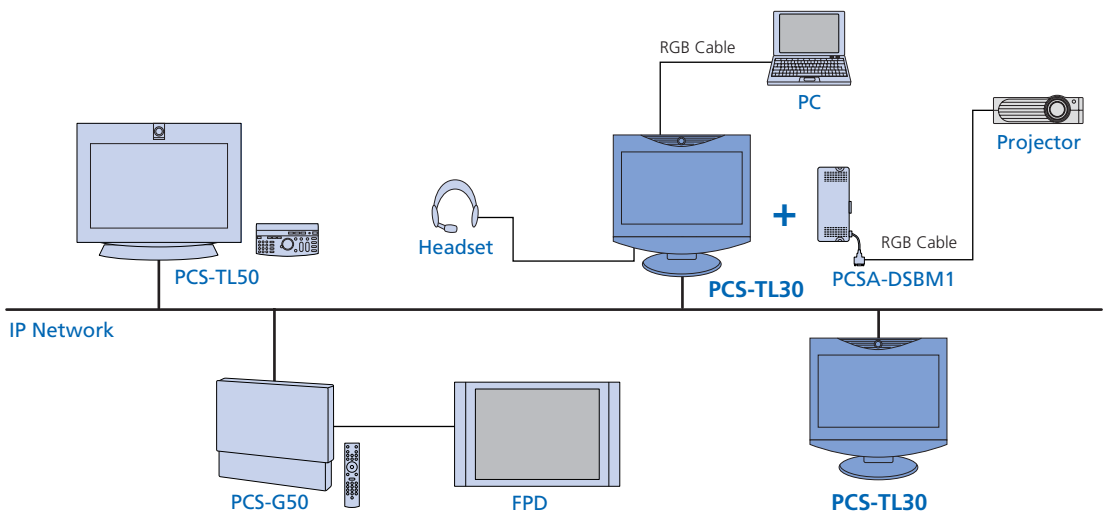
Transportable

The all-in-one PCS-TL30 is equipped with a handle and has a relatively light weight of 8 kg (17 lb 10 oz), making it portable and easy to transport.

Participation in Multi-Point Videoconferencing

The PCS-TL30, as a dependent unit, can be used to participate in multi-point videoconferences. When the PCS-TL30 is in a multi-point videoconference environment with an MCU (Multipoint Control Unit) software equipped host system, such as the PCS-TL50 or PCS-G50, the PCS-TL30 can receive multi-screen video images and audio directly from that host system. And also by using the Broadcast Mode on the unit, you can override the multi-screen video image and send your image to all of the videoconference participants as required.

SAMPLE SYSTEM CONFIGURATION

OPTIONAL ACCESSORIES

PCSA-DSM1
Data Solution Module

PCS-A1
Omnidirectional Microphone

PCSA-A3
Unidirectional Microphone

SPECIFICATIONS

PCS-TL30	
Video	
Standards	H.261, H.263, H.263+, H.263++, H.264, MPEG-4 SP@L3
Resolution	QCIF (176 x 144), CIF (352 x 288)
Frame rate	15/30 frames/s
Bit rate	Up to 2 Mb/s (2048 kb/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.728: 3.4 kHz at 16 kb/s
	G.729: 3.4 kHz at 8 kb/s
	MPEG4 AAC (mono) 14 kHz at 64/96 kb/s
Integrated Display	
LCD	17.1 inch Widescreen TFT
Resolution	1280 x 768 (WXGA)
Response	13 ms or less
Contrast ratio	600:1
Horizontal viewing angle	176°
Colors	16.7 million
Graphics	
XGA	1024 pixels x 768 lines (H.263), with PCSA-DSM1
4CIF	704 pixels x 576 lines (H.261 Annex D, H.263)
Screen Layout	
Full screen*	17.1 inch Full-screen (1280 x 768) display
Picture-in-Picture	Sub screen size (256 x 192), One of four corners
Picture-and-Picture (1)*	Main screen size (1024 x 768)
	Sub screen size (256 x 192), Located at upper right-corner of display
Picture-and-Picture (2)	Main/Sub screen size (640 x 480), Side-by-Side Split Screen
ITU-T Standards (excludes audio/video standards)	
	H.323, H.225, H.281 FECC, H.245, H.239, H.235
Network Protocols	
	TELNET (Server), HTTP (Server), FTP (Server), SNMP (Agent) DNS (Client), DHCP (Client), RTP/RTCP, TCP/UDP
Control Port	
	LAN (Ethernet), RS-232C
Lip Synchronization	
	Manual On/Off
Security	
	H.235
	Sony Proprietary AES Encryption, Password Protection
Network Features	
QoS (Quality of Service)	ARC (Adaptive Rate Control), Real-time ARQ (Auto Repeat reQuest)
	IP Precedence, DiffServ
NAT	Network Address Translation
UPnP	Universal Plug and Play

Integrated Camera	
Image device	1/3.2 inch CMOS
Number of effective pixels	Approx. 1.3 million pixels
Picture Format	4CIF
Focal length	2.3 mm (F2.8)
Focus	Pan Focus
Zoom ratio	x 3 (Digital)
Horizontal viewing angle	88°
Pan angle	-29° to +29° (Digital)
Tilt angle	-24° to +24° (Digital)
Presets	Up to 6 points
Others	Backlight compensation, Auto white balance
Integrated Microphone	
Frequency response	14 kHz, Narrow-angle directional microphone
Integrated Speakers	
Output	3 W x 2
Interface	
Video	RGB input, mini D-Sub 15-pin x 1
Audio	External microphone input (mini-jack, plug in power) x 1
	External headphone output (stereo mini-jack) x 1
Network	10Base-T/100Base-TX x 1
Memory Stick I/F	Memory Stick Slot x 1
PCSA-DSM1 Interface	Dedicated connector x 1
RS-232C	D-sub 9-pin x 1
General	
Operating temperature	5 °C to 35 °C
Operating humidity	20% to 80%
Storage temperature	-20 °C to +60 °C
Power Requirements	AC 100 to 240 V, 50/60 Hz
Power Consumption	DC 19.5 V, 6.15 A
Dimensions (W x H x D)	424 x 376 x 95.5 mm
	(16 3/4 x 14 7/8 x 3 7/8 inches), excl. stand
	424 x 419 x 258 mm
	(16 3/4 x 16 1/2 x 10 1/4 inches), incl. stand
Mass	Approx. 8 kg (17 lb 10 oz)
Supplied Accessories	
	PCS-AC19V6A or PCGA-AC19V7 (AC Adaptor)
	PCS-RMU1 (Optical Mouse)
	Quick Start Guide
	Operation Manual CD-ROM
	Worldwide Warranty Booklet
	Power Cord
PCSA-DSM1**	
Interfaces (input/output)	Dedicated connector x 1, RGB output D-sub 15-pin x 1
Dimensions (W x H x D)	107 x 250 x 34 mm
	(4 1/4 x 9 7/8 x 1 3/8 inches), excl. projections
Mass	550 g (1 lb 3 oz)

* If the PC Display Button is pressed, presentation data is displayed in the main screen (1024 x 768), and videoconferencing images are displayed in two sub screens (256 x 192 each) at the upper right-corner of the display (3-window Layout mode).

** The optional PCSA-DSM1 Data Solution Module fits into the rear of the PCS-TL30.

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