Video Communication System

Operating Instructions (Version 1.0)
Before operating the unit, please read this manual thoroughly and retain it for future reference.

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Owner’s Record

The model and the serial numbers are located at the rear. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. PCS-TL30  Serial No.________________

WARNING

To reduce a risk of fire or electric shock, do not expose this product to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

WARNING
Use the AC power adapter provided with this equipment as a power supply source.
One of the AC power adaptors listed below is supplied.

<table>
<thead>
<tr>
<th>Manufacture</th>
<th>Type No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony</td>
<td>PCS-AC19V6A</td>
</tr>
<tr>
<td>Sony</td>
<td>PCGA-AC19V7</td>
</tr>
</tbody>
</table>

Any other power sources may result in hazards such as a fire.
Disconnect device of this equipment is the mains plug of the AC adapter.
The mains plug on this equipment must be used to disconnect mains power.
Please ensure that the socket outlet is installed near the equipment and shall be easily accessible.
In the event of abnormal operations, disconnect the mains plug.

NOTICE
Use the power cord set approved by the appropriate testing organization for the specific countries where this unit is to be used.

CAUTION for LAN port
For safety reason, do not connect the LAN port to any network devices that might have excessive voltage.

For the customers in the USA

WARNING

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a computing device pursuant to Subpart B of Part 15 of FCC Rules.

For the customers in Canada

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada

For the customers in Europe

Warning
This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures. In the case that interference should occur, consult your nearest authorized Sony service facility.
Chapter 1  Installation and Preparation

Using This Manual ................................................................. 8
Features ...................................................................................... 9
System Components ................................................................. 10
  Basic System Components .................................................... 10
  Optional Equipment ............................................................. 11
Names and Functions of Parts ................................................. 11
  PCS-TL30 Video Communication System ......................... 11
  Indicator Names and Functions ........................................... 13
  Data Solution Module PCSA-DSM1 (Optional) .................... 13
System Connections ............................................................... 14
  Using the Connectors ........................................................... 14
  Notes on Connections ......................................................... 14
  System Connection via a LAN .............................................. 14
Adjusting the Height of the Display ........................................ 15
Turning the System On/Off ..................................................... 16
  Opening the Lens Cover ....................................................... 16
  Turning the system on ........................................................ 16
  Turning the system off ....................................................... 17
  Setting the Video Communication System to Standby Mode .. 17
  Adjusting the Volume ........................................................ 17
  Adjusting the Picture Quality .............................................. 17
  Displaying Help ................................................................. 17
  Displaying Version and Option Information ....................... 17
Setting Up the System for the First Time — Initial Setup Wizard 18
Using the Menu ....................................................................... 19
  Menu Configurations ............................................................ 19
  Explanation of Menus .......................................................... 20
  Entering Characters ............................................................ 22
Chapter 2  Registration and Setup

Registering Local Information .......................................................... 23
  Opening the Setup Menu ............................................................. 23
  Answer Setup menu ................................................................. 24
  Device Setup menu ................................................................. 24
  Audio Setup Menu .................................................................. 25
  Network Setup Menu .............................................................. 25
  Communication Mode Menu .................................................... 27
  Administrator Setup Menu ....................................................... 29
  Display Setup Menu ............................................................... 33

Registering a Remote Party in the Phone Book ...................... 34
  Registering a New Remote Party .............................................. 34
  Changing the Contents of the Phone Book .............................. 35
  Deleting a Registered Remote Party ........................................ 35
  Copying an Entry in the Phone Book ...................................... 35
  Creating a Private Phone Book ................................................ 36
  Checking the history of outgoing and incoming calls ............... 37

Registering a Remote Party for One Touch Dial .................. 38
  One Touch Dial registration .................................................... 38
  Registering the Private One Touch Dial .................................. 38

Chapter 3  Daily Videoconference

Starting a Conference by Calling a Remote Party ............ 39
  Turning on the Power ............................................................... 39
  Using the Launcher Menu ........................................................ 40
  Status & Info Menu ............................................................... 41
  Calling a Remote Party Using One Touch Dial .................... 42
  Calling a Remote Party by Entering the IP Address in the Launcher Menu ..................................................... 43
  Calling a Remote Party Registered in the Phone Book .......... 43

Receiving a Call from a Remote Party .................................. 44
  Answering a Call from a Remote Party ..................................... 44
  Ending the Conference ......................................................... 45

Joining a Multipoint Videoconference .................................. 46

Adjusting the Picture and Sound .......................................... 46
  Adjusting the Picture Quality .................................................. 46
  Adjusting the Volume ........................................................... 46
  Cutting Off the Sound Momentarily - Mic off Function ........ 46
  Cutting Off the Sound On Answering - Mic Off Function ...... 46
  Synchronizing Audio and Video - Lip Sync Function ............ 47
Reducing Echo - Echo Canceler .......................................................... 47

Adjusting the Camera ........................................................................ 47
Selecting the Camera to be Controlled ............................................. 47
Adjusting the Zoom and Camera Angle .............................................. 48
Adjusting the Brightness ..................................................................... 48
Presetting the Zoom and Angle Settings ............................................. 49
Recalling a Preset Zoom and Angle Setting ....................................... 49

Changing the Screen Layout ................................................................. 50
Bringing up the Screen Layout Setup menu ........................................ 50
Switching the display ........................................................................ 51

Chapter 4 Videoconference With Optional Equipment

Using Still Images Stored in a “Memory Stick” for a Videoconference ................................................. 52
Displaying a Still Image Stored on a “Memory Stick” ......................................................... 52
Sending a Still Image Stored on a “Memory Stick” ................................................................. 53

About a “Memory Stick” ........................................................................ 54
Formatting a “Memory Stick” ................................................................ 55

Sending Motion Pictures as Still Images ................................................................. 55
Sending Still Images Using the Still Image Menu ................................................. 55

Saving Still Images ............................................................................... 56
Saving Remote Pictures Automatically – Automatic Image Capture Feature ........................................ 56
Saving Still Images Using the Still Image Menu ................................................. 56

Using External Microphone and Headphones ........................................ 57

Controlling the Remote System With Tone Signals - DTMF Transmission ........................................ 58

Accessing the Video Communication System ............................................. 58
Using a Web Browser ............................................................................. 58
Using Telnet ............................................................................................ 58

Chapter 5 Data Conference Using Data Solution Module

Installing the Data Solution Module .................................................... 59
Connection Example Using the Data Solution Module ................. 61
Using Video from Connected Equipment for a Conference ........ 62
Operating the System During a Conference ........................................ 62
Chapter 6   Encrypted Videoconference via LAN

Preparing for an Encrypted Videoconference via LAN .......... 65
Starting an Encrypted Videoconference via LAN ............... 66

Chapter 7   Videoconference Using SIP

Connection Examples for a Videoconference Using SIP .............. 68
  Connection Example for Point-to-Point Videoconference .......... 68
Preparing for a Videoconference Using SIP ............................. 69
  Installing the SIP Software .................................................. 69
  Making Settings for SIP ....................................................... 69
  Registering Remote Parties in the Phone Book .................... 70
Starting a Videoconference Using SIP ..................................... 70
  Calling Remote Parties ...................................................... 70
  Receiving a Call from a Remote Party .................................. 71
  Ending a Videoconference .................................................. 71

Chapter 8   Use as Computer Display

Using as Computer Display ..................................................... 72
  Connecting to a Computer .................................................. 72
  Separate mouse ................................................................. 73
  Shared mouse ................................................................. 73
  Displaying the Picture from the Computer ......................... 74
  Displaying the Picture from the Computer during a
    Videoconference .......................................................... 74
Switching Between Videoconference Display and Computer
  Display .............................................................................. 75
Calling a Remote Party or Receiving a Call at the PC Screen ... 76
  Calling a remote party while PC screen is shown .................. 76
  Receiving a call while PC screen is shown ............................ 76
Appendix

Indicators .......................................................... 77
On Screen Messages .............................................. 78
Troubleshooting .................................................... 82
Precautions .......................................................... 83
Specifications ....................................................... 84
  Acceptable RGB Input/Output Signals ...................... 87
  Pin Assignment .................................................. 88
  Pin Assignment on Optional Board connectors .......... 89
  List of Port Numbers Used on the PCS-TL30 ............. 89
Videoconferencing Room Layout ......................... 90
Glossary ............................................................ 91
Menu Configuration ............................................. 93
Using This Manual

The chapters cover the following contents; please read the chapters that may be required for your type of videoconference.

Chapter 1: Installation and Preparation
This chapter guides you through the system configuration and information required to use your Video Communication System for the first time. It shows you how to install and connect your Video Communication System, to turn the system on/off and how to access basic on-screen menus.

Chapter 2: Registration and Setup
This chapter describes how to register and set up all the necessary items for system administrators, using the on-screen menus.

Chapter 3: Daily Videoconference
This chapter guides you through the basic operations and settings to conduct a videoconference. You will learn how to conduct a conference from start to finish. It is recommended that this chapter be read by participants in the videoconference.

Chapter 4: Videoconference With Optional Equipment
This chapter shows advanced videoconferencing using the optional equipment.

Chapter 5: Data Conference Using Data Solution Module
This chapter shows you how to integrate data from a computer or other external equipment into a videoconference by using the optional Data Solution Module.

Chapter 6: Encrypted Videoconference via LAN
This chapter shows you how to conduct a videoconference using the encryption function for video, audio, and computer data.

Chapter 7: Videoconference Using SIP
This chapter guides you how to conduct a videoconference using SIP with an IP phone, etc. Installing the optional SIP software is required for a session using SIP.

Chapter 8: Use as Computer Display
This chapter shows you how to use the Video Communication System as a computer display.

Appendix
This chapter contains message and troubleshooting lists, specifications, and glossaries.
Features

The PCS-TL30 Video Communication System is a videoconferencing system that allows natural, face-to-face communications with a remote party by transmitting and receiving images and sound via a LAN (Local Area Network).

Integrated portable Video Communication System

All necessary elements of the system such as 17-type wide-format display, camera equipped with digital pan/tilt and zoom, codec, microphones and speakers are integrated in a single compact cabinet for easy portability. The integrated design plus VESA mount capability makes it possible to set up a videoconference almost anywhere.

Up to 30 One Touch Dial entries

Remote parties to which you frequently connect can be registered in the launcher menu. You can then establish a connection simply by clicking a Dial button.

Supports worldwide standards

Full compliance with the ITU-T Recommendations defined by the WTSC (World Telecommunications Standardization Committee) assures easy connection with remote parties in any country.

Supports data conferences

Use of the optional PCSA-DSM1 Data Solution Module allows the data from a computer to be incorporated in the presentation or to be shown using a projector.

High transmission speeds and high-quality picture

The Video Communication System can handle LAN bandwidths of up to 2048 kbps.

Support for a wide range of video/audio compression formats


QoS (Quality of Service) function for optimization of bandwidth and traffic packet through network

“Packet Resend Request” and “Adaptive Rate Control” functions incorporated, allowing solution for busy network traffic or packet loss, which provides consistent high-quality communication.

Easy setup and operation

The Help menu appears on the display for guidance of operation. The menus used for the system administrator or those for conference participants are separately displayed.

Memory Stick slot equipped

The Video Communication System is equipped with a Memory Stick slot, allowing the use of still images recorded with a digital still camera and stored in the “Memory Stick”. You can create your own phone book and One Touch Dial icons in a “Memory Stick” as your private phone book. The PCS-TL30 features “Memory Stick PRO”.

Note

This version does not support still images and the Private Phone Book. Support is planned for future version upgrades.

Supports an encrypted videoconference (only for LAN connection)

When you connect to other terminals via LAN, you can start a videoconference only with the terminals that enter the preset password. This feature allows you to hold a strictly confidential videoconference. An encrypted conference among multiple points or with cascade connection is enabled if all the terminals are connected via LAN.

Supports a conference using SIP

Installing the optional PCSA-SP1 SIP software allows conduct of a conference with an IP phone, etc. using SIP (Session Initiation Protocol).

Use as computer display

The display of the Video Communication System can also be used as a computer display. If you receive a call from a remote party, the picture of the remote party can be automatically displayed even while you are using the system as a computer display.
Automatic and manual image capturing

During point-to-point communication, several still images of the remote party are automatically captured and saved in the memory of the Video Communication System. You can use these images for your Phone Book. If a “Memory Stick” is inserted, you can manually capture a still image of the remote party during communication by pressing the IMAGE CAPTURE button. The manually captured image can also be used for the Phone Book.

Note

This version does not support the saving of still images to the “Memory Stick”. Support is planned for future version upgrades.

System Components

The PCS-TL30 Video Communication System is composed of basic system components for a basic videoconference, and optional equipment for an enhanced videoconference.

Basic System Components

The PCS-TL30 Video Communication System is the basic system of the Videoconferencing System. It contains the following components:

<table>
<thead>
<tr>
<th>Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCS-TL30 Video Communication System</td>
<td>Contains the camera, display, video codec, audio codec, echo canceler, network interfaces and system controller.</td>
</tr>
<tr>
<td>Optical mouse PCS-RMU1</td>
<td>Serves for operation of the Video Communication System.</td>
</tr>
<tr>
<td>PCS-AC19V6A or PCGA-AC19V7 AC adaptor</td>
<td>Supplies power to the Video Communication System.</td>
</tr>
</tbody>
</table>

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Optional Equipment

The following optional devices are used to enhance your videoconference.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Solution Module PCSA-DSM1</td>
<td>Serves for transmitting the display image of a connected computer and also allows connection of a projector for displaying the computer image.</td>
</tr>
<tr>
<td>PCS-A1 Microphone</td>
<td>Omni-directional microphone that picks up sound relatively from all directions, allowing participants to speak from any location. It is recommended to use in a quiet situation.</td>
</tr>
<tr>
<td>PCSA-A3 Microphone</td>
<td>Unidirectional microphone. It is recommended when you want to pick up the voice of a speaker directed toward the microphone.</td>
</tr>
<tr>
<td>PCSA-SP1 SIP Software</td>
<td>Allows conduct of a videconference using SIP.</td>
</tr>
</tbody>
</table>

PCS-TL30 Video Communication System

Front view

1. Tally lamp
   Lights up when local video is being sent to the remote system.

2. Camera lens

3. Lever for lens cover

4. Microphone

5. (Volume) buttons
   Serve to adjust the volume.
   +: Increases the volume level.
   -: Decreases the volume level.

6. (Phones) jack (stereo mini jack)
   Allows connection of a pair of headphones (commercially available).

7. (Mic) jack (mini jack)
   Allows connection of the optional microphone PCS-A1 or PCSA-A3.

8. Speaker
1 Online lamp
Shows mainly the incoming/outgoing call status.

2 (Mic Off) button and indicator
Lets you suppress the sound from the local system. Press the button again to resume sending the sound to the remote system.

3 (Videoconference) button and indicator
Serves for switching from computer screen to videoconference screen.

4 (PC) button and indicator
Serves for switching to computer screen.

5 (Menu) button
Press to bring up the Setup menu.

6 1/0 (Power) switch and indicator
Turns power to the system on and off.
When using the system as a computer screen in PC mode, pressing the switch once turns the power off.
When using the system in VC mode, pressing the switch once sets the system to standby mode. To turn the power off in VC mode, press the switch again within 5 seconds of the first press.

Note
The power switch does not function during a communication session.

7 “Memory Stick” indicator
Shows the status of the “Memory Stick” slot.

Note
Do not remove the “Memory Stick” when this indicator is lit.

Rear cover
Removing this cover gives access to the connector panel. The connecting section between the stand and the display is also located behind the panel. You can adjust the height of the display by changing the screw positions.

Right side view

“Memory Stick” slot
A “Memory Stick” can be inserted here.

Connector panel
(section behind rear cover, seen from below)

DC19.5V connector
Connect the supplied AC adapter PCS-AC19V6A or PCGA-AC19V7 here.

AUDIO IN (PC sound input) jack (stereo mini jack)
Connect this jack to the audio output of a computer connected to the RGB IN connector.

RGB IN connector (15-pin mini D-sub connector)
Connect the RGB output of a computer here.

100BASE-TX/10BASE-T port (RJ-45)
Use a Category 5 LAN cable to connect this port to a hub or similar equipment.
The link data indicator (green) and 100/10 Mbps indicator (orange) are lit.
**PC port**

This connector is used when the same mouse is to be used for the PCS-TL30 and for a computer connected to the RGB IN connector. Link the connector to a USB port on the computer.

**Note**

Use a USB cable that is 3 m (10 ft.) or shorter.

**RS-232C port (9-pin D-sub connector)**

This connector is used only for servicing the system.

**Mouse port**

Connect the supplied optical mouse PCS-RMU1 here.

---

**Indicator Names and Functions**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Status</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 / * (Power)</td>
<td>Lit green</td>
<td>Power is on</td>
</tr>
<tr>
<td></td>
<td>Lit orange</td>
<td>Standby</td>
</tr>
<tr>
<td></td>
<td>Flashing orange (1-second cycle)</td>
<td>Problem with fan</td>
</tr>
<tr>
<td></td>
<td>Out</td>
<td>Power is off</td>
</tr>
<tr>
<td>Online *</td>
<td>Flasing blue (3 times per sec.)</td>
<td>Sending/receiving</td>
</tr>
<tr>
<td></td>
<td>Blue illumination lit</td>
<td>Communication in progress</td>
</tr>
<tr>
<td></td>
<td>Blue intermittent flashing</td>
<td>Missed call indication</td>
</tr>
<tr>
<td></td>
<td>Out</td>
<td>Offline (no missed call) or standby</td>
</tr>
<tr>
<td>2 (PC) *</td>
<td>Lit blue</td>
<td>Computer display</td>
</tr>
<tr>
<td></td>
<td>Lit white</td>
<td>Videoconference display</td>
</tr>
<tr>
<td></td>
<td>Out</td>
<td>Standby</td>
</tr>
<tr>
<td>3 (Videoconference) *</td>
<td>Lit blue</td>
<td>Videoconference display</td>
</tr>
<tr>
<td></td>
<td>Lit white</td>
<td>Computer display</td>
</tr>
<tr>
<td></td>
<td>Out</td>
<td>Standby</td>
</tr>
<tr>
<td>4 (Mic off) *</td>
<td>Lit orange</td>
<td>Mic off</td>
</tr>
<tr>
<td></td>
<td>Lit white</td>
<td>Mic on</td>
</tr>
<tr>
<td></td>
<td>Out</td>
<td>Standby</td>
</tr>
<tr>
<td>5 (&quot;Memory Stick&quot;)</td>
<td>Lit orange</td>
<td>Accessing “Memory Stick”</td>
</tr>
<tr>
<td></td>
<td>Out</td>
<td>Not accessing “Memory Stick”</td>
</tr>
<tr>
<td>Tally lamp</td>
<td>Lit orange</td>
<td>Camera image being sent to remote party (lens cover open)</td>
</tr>
<tr>
<td></td>
<td>Flashing orange (5-second cycle)</td>
<td>Closed image being sent to remote party (lens cover close)</td>
</tr>
<tr>
<td></td>
<td>Out</td>
<td>Camera image not being sent</td>
</tr>
<tr>
<td>Link/Data</td>
<td>Lit green</td>
<td>Link is established</td>
</tr>
<tr>
<td></td>
<td>Flashing green</td>
<td>Data is transferring</td>
</tr>
<tr>
<td></td>
<td>Out</td>
<td>Link is offline</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Status</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>100/10 Mbps</td>
<td>Lit orange</td>
<td>100 Mbps</td>
</tr>
<tr>
<td>Out</td>
<td>10 Mbps</td>
<td></td>
</tr>
</tbody>
</table>

* The indicator is lit while the system is starting up. If abnormal temperature is detected, the indicator flashes and power turns off.

**Data Solution Module PCSA-DSM1 (Optional)**

1. **Fastening screws**
   
   Used to secure the unit to the PCS-TL30.

2. **Monitor connector**
   
   Used to connect the unit to the PCS-TL30.

3. **RGB Output connector**
   
   Used to connect the unit to an external device, such as a projector.
   
   A commercially available RGB cable is required to use this connector.
   
   For information about installation in the PCS-TL30, see “Installing the Data Solution Module” on page 59.
System Connections

This section describes the typical system connections.

Using the Connectors

The connectors are in the inside of the rear cover. When using the connectors, remove the rear cover, connect cables to the connectors, and replace the rear cover.

To remove the rear cover

Pull the rear cover toward you.

To replace the rear cover

Align the four projections on the rear cover with the holes on the rear of the system, and press the cover.

Notes on Connections

- Be sure to turn off all the equipment before making any connections.
- Use the AC adaptor and the power cord supplied with this system only. Never use the other AC adaptor or power cord.
- Insert the AC plug and DC plug of the AC adaptor securely as far as they will go.
- Do not connect/disconnect a cable with the power on. Doing so may damage the Video Communication System.
- For safety, do not connect the 100BASE-TX/10BASE-T connector to a network that applies an excess voltage via the 100BASE-TX/10BASE-T connector.

System Connection via a LAN

Make connections in the order 1 - 5.

1. Video Communication System PCS-TL30
   - To mouse port
2. To 100BASE-TX/10BASE-T port
3. AC adapter PCS-AC19V6A or PCGA-AC19V7 (supplied)
4. Power cord (supplied)
5. To AC outlet (120 V AC)

- Optical mouse PCS-RMU1 (supplied)
- UTP cable Category 5 (straight cable, commercially available)
- To LAN
Adjusting the Height of the Display

The stand and the display section of the PCS-TL30 are joined by fastening screws. There are three sets of screw holes, spaced 25 mm apart. In the factory default condition, the display is fixed in the lowest position. By choosing a different set of screw holes, you can change the height of the display.

1. Remove the rear cover of the unit.

*For information on how to do this, see page 14.*

2. Remove the 4 screws with a coin or similar object, lift up the stand, and insert the positioning pin in the hole for the new stand position.

3. Reattach the 4 screws with a coin or similar object, and fasten the stand in place.

4. Attach the rear cover again.

*Note*

Before changing the height of the display as described above, be sure to turn the power off. Place the display face down on a soft cloth or similar.
Turning the System On/Off

This section describes how to turn the Video Communication System on and off. Before turning the system on, make sure that system connections have been completed correctly.

_For information on connecting the system, see the section “System Connections” on page 14._

Opening the Lens Cover

The system is equipped with a lens cover to hide the camera. Before starting a videoconference, open the lens cover by sliding the lever for lens cover on the top of the system to the right. If the lens cover is closed, the picture on the local site will not be seen on the remote site.

Turning the System On

Press the \( \text{on} / \text{off} \) (Power) switch on the PCS-TL30.

The indicator of the switch lights up in orange and power to the Video Communication System comes on. When powering on is complete, the indicator lights up in green. The launcher menu appears on the display and the picture of the local camera is also shown.

Launcher menu

When the lens cover is closed, the launcher menu appears as follows.

Notes

- The first time the power switch is pressed after the power cord is plugged into a wall outlet, it may take as long as ten seconds for the indicator on the switch to light up.
- When you turn on power to the Video Communication System for the first time after installation, the setup wizard will appear. Set up your system following the wizard.

_For information on the setup procedure using the wizard, see “Setting Up the System for the First Time — Initial Setup Wizard” on page 18._

- When an optional device especially designed for use with this system, such as the Data Solution Module, is connected for the first time, the Video Communication System may automatically upgrade the software of the connected device. While the upgrading message is displayed, be sure not to turn off the Video Communication System. Doing so may cause malfunction of the system. System malfunction may also occur when a system power-off has been caused by an
Turning the System On/Off

Chapter 1  Installation and Preparation

accidental problem such as a power interruption during upgrading. If the Data Solution Module or other equipment is not recognized properly after power is restored, consult a Sony dealer.

Turning the system off

1 Press the \( \text{(Power)} \) switch twice.

   After pressing the switch once, the message “To enter standby mode, wait for a few moments. To turn off the power, press the power switch again.” appears. Press the power switch again.

2 Turn off the power of other equipment used for the videoconference.

   **Notes**
   - Turn the power to the system off when the system will not be used for an extended period. While the power is off, you cannot receive a call from a remote party.
   - When using the system as a computer display in PC mode, the power turns off with one press of the power switch. During a conference, the power switch does not function.

Setting the Video Communication System to Standby Mode

When you press the \( \text{(Power)} \) switch on the PCS-TL30, the message “To enter stand-by mode, wait for a few moments. To turn off the power, press the power button again.” appears on the display. When you simply wait in this condition, the system will go into standby mode.

You can receive a call from a remote party in the standby mode.
To return to normal mode from standby mode, press the power switch once.

Adjusting the Volume

Press the \( \text{volume} \) button on the PCS-TL30 to set the volume level as required.

   **Note**
   The volume can be adjusted separately for the videoconference and for the computer display.

Adjusting the Picture Quality

Use the Display Setup menu to adjust the picture quality.

*For details, see the section “Display Setup Menu” on page 33.*

Displaying Help

Move the mouse cursor to the item you want to check, and right-click the mouse to display context-specific balloon help.

Displaying Version and Option Information

You can check version information for Video Communication System, any dedicated optional equipment, and the software by displaying the Status & Info menu.

*For details on the Status & Info menu, see “Status & Info Menu” on page 41.*
Setting Up the System for the First Time — Initial Setup Wizard

Design and specifications are subject to change without notice.

When you turn on the Video Communication System for the first time after installation, the setup wizard appears on the display. The items configured with the wizard can be changed later using the setup menu. Configuration items may differ depending on the software.

1. Select the language used for menus and messages from the “Language” pull-down list.

   **Language:** Available settings are English, French, German, Japanese, Spanish, Italian, Simplified Chinese, and Portuguese.

2. Click “Next”.

3. Make the following settings for the LAN.

   **Note**

   The following examples assume that English has been selected as display language.

   **DHCP Mode:** Sets the DHCP (Dynamic Host Configuration Protocol).
   - **Auto:** Automatically assigns your IP address, subnet mask, gateway address and DNS address.
   - **Off:** Deactivates DHCP. In this case you must set your IP address, subnet mask, gateway address and DNS address manually.

   **Host Name:** Enter your host name.
   **IP Address:** Enter your IP address.
   **Network Mask:** Enter your subnet mask.
   **Gateway Address:** Enter your default gateway address.
   **DNS Address:** Enter your DNS (Domain Name System) server address.

   **Note**

   When you set “DHCP Mode” to “Auto”, the assigned IP address will be shown in the launcher menu (page 20) and Status & Info menu (page 41).

   If you do not know the settings required for your LAN configuration, contact your network administrator.

4. Click “End”.

   The settings are saved.

   **To cancel the setting**
   Click “Cancel”. The settings are not saved and the launcher menu appears.

   **To go back to the previous wizard**
   Click “Back”.

18 Setting Up the System for the First Time — Initial Setup Wizard
Using the Menu

The Video Communication System uses the on-screen menus to make various adjustments and settings. This section gives a brief introduction of the menus.

Menu Configurations

The menus of this system configure as described below. For more detailed menu configurations, refer to “Menu Configuration” on page 93.

Note

This version does not support the still image and image viewer functions. Support is planned for future version upgrades.
**Menu Icons**

Selecting an icon shown on the screen displays the respective menu.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Displayed menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>📌</td>
<td>Phone Book/Private Phone Book menu</td>
</tr>
<tr>
<td>📊</td>
<td>History menu</td>
</tr>
<tr>
<td>📈</td>
<td>Camera Control menu</td>
</tr>
<tr>
<td>📊</td>
<td>Status &amp; Info menu</td>
</tr>
<tr>
<td>📇</td>
<td>Still Image menu</td>
</tr>
<tr>
<td>📇</td>
<td>Image Viewer menu</td>
</tr>
<tr>
<td>🍀</td>
<td>Setup menu</td>
</tr>
</tbody>
</table>

**Note**

This version does not support the still image and image viewer functions. Support is planned for future version upgrades.

**Explanation of Menus**

**Launcher menu**

The launcher menu appears when the Video Communication System is turned on, and when the system is not connected to a remote party.

The left side of the screen displays the One Touch Dial buttons, which give access to the One Touch Dial function, and the Menu Bar display button.

*For details on the launcher menu, see pages 40 - 43.*

*For details on the One Touch Dial function, see pages 38 and 42.*

**Phone Book/Private Phone Book menu**

The Phone Book menu is used to register a remote party, and to call a registered remote party.

The menu appears when you click 📌 on the launcher menu.

*For details on the Phone Book/Private Phone Book menu, see pages 34 - 37 and 43 - 44.*

**History menu**

Serves for checking the transmission history of incoming and outgoing calls.

To bring up the menu, click 📊 on the launcher menu.

*For details on the History menu, see page 37.*
Chapter 1  Installation and Preparation

Menu selection screen

Allows you to access menus for various settings. The screen appears when you click \( \text{on the launcher screen.} \)

Camera Control Menu

Allows you to control the camera angle and zoom. The menu appears when you click “Camera Control button” on the menu selection screen.

For details on the Camera Control menu, see pages 47 - 50.

Status & Info menu

Shows version information about the PCS-TL30 and connected dedicated optional equipment, as well as for the software options being used. The menu appears when you click “Status & Info” on the menu selection screen.

For details on the Status & Info menu, see page 41.

Still Image menu

Note

This version does not support the image viewer function. Support is planned for future version upgrades.

Image Viewer menu

Note

This version does not support the image viewer function. Support is planned for future version upgrades.

Allows you to display and transmit images stored on a “Memory Stick”.

Serves to control the still image functions. The menu appears when you click “Still Image” on the menu selection screen.

For details on the Still Image menu, see pages 55 - 57.
The menu appears when you click “Image Viewer” on the menu selection screen.

*For details on the Image Viewer menu, see pages 52 - 53.*

**Setup menu**

Allows the administrator to make various detailed settings for the system.
The menu appears when you click “Setup” on the menu selection screen.

*For details on the Setup menu, see pages 23 - 34.*

**Entering Characters**

This section explains how to enter letters, numerals or symbols into the text fields in the menu using the soft keyboard.

In situations where alphanumeric text input is required, for example when a text field in a menu is selected, a soft keyboard appears. If only numerals and symbols can be entered, a numeric keypad appears.

**To enter alphanumeric characters and symbols:**

Click the “ABC” tab on the soft keyboard and click on the character or symbol to enter. The “A/a” button toggles between upper and lower case.

---

**To confirm the alphanumeric characters and symbols entered**

After clicking the alphanumeric characters and symbols you wish to enter, click “OK”. The entry is set, and the soft keyboard closes.

**If you have made a mistake**

Click the “Back” button on the soft keyboard, and the character or symbol before the cursor will be erased. If you click “Delete all”, all the characters and symbols will be erased.
This chapter describes the general registration and settings procedures.

Registering Local Information

Before starting a conference, register the required information on the local terminals of the system using the Setup menu. This section describes how to display the Setup menus and gives an introduction to the menus.

Opening the Setup Menu

1. Click \( \text{Display menu bar} \) on the launcher menu. The menu bar appears.
2. Click “Setup” on the menu bar. The Setup menu appears.

Submenus available from the Setup menu
Selecting the respective item brings up the following menus.
- Answer Setup menu (on page 24)
- Device Setup menu (on page 24)
- Audio Setup Menu (on page 25)
- Network Setup Menu (on page 25)
- Communication Mode Menu (on page 27)
- Administrator Setup Menu (on page 29)
- Display Setup Menu (on page 33)

3. Click the button for the menu you want to access. The selected menu appears.

4. Set the respective items.

For details on setting items, see the page for the respective menu (pages 24 - 34).

5. When the setting is completed, click “Save”. The setting is saved, and the Setup menu appears again.

To cancel the setup procedure
Click “Cancel”.

To page up or down the selected menu
When a menu has several pages, a scroll bar will appear at the right side of the screen. To advance to the next page, click the Page button at the bottom of the scroll bar. To go back to the previous page, click the Page button at the top of the scroll bar.
Chapter 2  Registration and Setup

Answer Setup menu

The Answer Setup menu is used to set the system up for receiving a call.

Page 1/1

**Auto Answer**
Select whether the auto answer mode is activated.
**On:** Answers a call in auto answer mode. When a call comes in, the line is automatically connected.
**Off:** Answers a call in manual answer mode. When you are called up, the phone rings. If you click “OK” when the message “Respond?” is shown, the line is connected.

**Mic on Answer**
Select whether to transmit the sound on your site when answering a call from the remote party.
**On:** Transmits the sound when answering a call.
**Off:** Disables transmission of the sound when answering a call.

**Reject Answer**
Select whether to reject the call or not.
**On:** Reject the incoming call.
**Off:** Do not reject the incoming call.

Device Setup menu

Page 1/1

**Terminal Name**
Input the terminal name to report when the system is connected to an external multipoint videoconferencing system.

**Time Display**
Select whether to show the elapsed time on the display during the videoconference.
**On:** Elapsed time is displayed.
**Off:** Elapsed time is not displayed.

**Last Number Registration**
Select whether or not to register the remote party in the Phone Book after the videoconference has finished.
**On:** If the remote party has not yet been registered in the Phone Book, the message “Register this participant in the list?” appears on the display after the videoconference has finished. When you click “OK”, the List Edit menu opens.
**Off:** The above message does not appear.

**Language**
Select the language to show on the screen.
**English:** The display language is set to English.
**French:** The display language is set to French.
**German:** The display language is set to German.
**Japanese:** The display language is set to Japanese.
**Spanish:** The display language is set to Spanish.
**Italian:** The display language is set to Italian.
**Chinese:** The display language is set to Chinese.
**PORT:** The display language is set to Portuguese.

**Indicators**
Select whether the packet loss, mic gain, sending/receiving still image, receiving whiteboard data, sending/receiving DSM data encrypted conference in progress (Standard/SONY), transmission mode, voice only**, and network congestion indicators are shown.
**On:** Indicators are shown.
**Off:** Indicators are not shown.

* Line I/F is only enabled when using SIP.

**Clock Set**
Enter the current date and time.

Note
Some items cannot be set while a communication session is in progress.
Registering Local Information

Chapter 2  Registration and Setup

If the AC adapter is left unplugged for more than 24 hours, the date and time setting will be cleared.

Sleep Timer
Select the time interval until the standby condition is automatically activated.

The standby condition is released when the \( \text{I/\O (Power)} \) switch is pressed or a call is received.

5 minutes: The standby condition is activated when there has been no activity for 5 minutes.

15 minutes: The standby condition is activated when there has been no activity for 15 minutes.

60 minutes: The standby condition is activated when there has been no activity for 60 minutes.

None: The standby condition is not activated automatically.

LED Indicators
Select whether the LED indicators of the system are operative or not.

On: LED indicators will light.

Off: LED indicators will not light.

Even if the “Off” setting is chosen, the \( \text{I/\O (power)} \) indicator remains lit.

Audio Setup Menu

The Audio Setup Menu is used to set various audio items.

Page 1/1
The level meter indicating the audio input level is displayed.

Beep Sound
Selects whether the beep sounds when you perform a mouse operation.

On: Enables beep.

Off: Disables beep.

Sound Effect
Selects whether or not to output the sound when the system starts up, a videoconference starts, or the videoconference ends.

On: Outputs the sound.

Off: Does not output the sound.

Dial Tone
Selects whether or not to output a dial tone when you are dialing.

On: Outputs the dial tone.

Off: Does not output the dial tone.

Ringer Level
Selects the ringer volume when you receive a call.

To disable the ringer tone, select the “Off” setting.

To use the ringer tone, select one of the following settings: “Min”, “Mid”, “Loud”.

Headphone Ringer Level
Use this item to select the headphone ringer volume for incoming calls.

To disable the ringer tone, select the “Off” setting.

To use the ringer tone, select one of the following settings: “Min”, “Mid”, “Loud”.

PC Volume
Use this item to set the speaker/headphone volume for the computer display.

VC Volume
Use this item to set the speaker/headphone volume for videoconferences.

Network Setup Menu

Lets you make LAN and SIP related settings.

For details on the settings, consult with the network administrator.

For details on videoconferencing using SIP, see chapter 7.

The SIP Setup menu can be accessed only if the optional SIP software PCSA-SP1 is installed.
Chapter 2  Registration and Setup

LAN Page 1/2

DHCP Mode
Selects whether DHCP (Dynamic Host Configuration Protocol) server is enabled or not.
**Auto:** The IP address and subnet mask are automatically assigned.
In this case, confirm the assigned IP address, subnet mask, gateway address, and DNS address in the launcher menu or the Machine Information menu after the LAN connection is completed.
**Off:** Sets “DHCP Mode” to “Off”. In this case, enter the IP address, subnet mask, gateway address, and DNS address.

Host Name
Enter the host name.

IP address
Enter the IP address.

Network Mask
Enter the subnet mask.

Gateway Address
Enter the default gateway address.

DNS Address
Enter the DNS (Domain Name System) address.

LAN Page 2/2

Encryption via LAN
Select whether to use the encryption feature.
**On:** Use the LAN encryption feature. When “On” is selected, you must set the encryption protocol, connection method, and encryption password.
**Off:** Do not use the LAN encryption feature.

Encryption Protocol
Select the type of encryption protocol.
**Standard:** Use standard encryption.
**SONY:** Use Sony proprietary encryption.

Connectivity Prioritization
Select the connectivity method.
**Connection:** The connection is given priority. For terminals without LAN encryption capability or terminals where “Encryption via LAN” is set to “Off”, conduct a videoconference without encryption.
**Encryption:** The encryption is given priority. For terminals without LAN encryption capability or terminals where “Encryption via LAN” is set to “Off”, a videoconference cannot be conducted.

Encryption Password
When “SONY” has been selected, a password must be set to enable holding a videoconference using LAN encryption.
The password must be 13 - 20 characters long.

Note
When “SONY” has been selected, it will not be possible to connect to the following types of terminals: terminals without LAN encryption capability, terminals where “Encryption via LAN” is set to “Off”, terminals where a different password is set.

SIP Page 1/3

SIP Server Mode
Select whether to use SIP server.
**On:** Use SIP server.
**Off:** Do not use SIP server.
Transport protocol
Select the protocol to be used for SIP.
UDP: Use UDP (User Datagram Protocol).

Port Number
Input the port for the SIP server.

SIP Domain
Enter the SIP domain name.

Registered User Name
Enter the user name registered on the SIP server.

Password
Enter the password registered on the SIP server.

Primary
Enter parameters for the first server.

Proxy Server Address
Enter the address of a proxy server to be used.

Proxy Port
Input the port for the SIP proxy server.

Registrar Server Address
Enter the address of a registrar server to be used.

Registrar Port
Input the port for the SIP registrar server.

SIP Page 2/3

Secondary
Enter parameters for the second server.

Tertiary
Enter parameters for the third server.

SIP Page 3/3

Quaternary
Enter parameters for the fourth server.

Communication Mode Menu
Lets you make communication related settings.

Page 1/2

Encode
Video Mode
Select the compression method to be used for transmitting video information.
Auto: Match the method selected at the far-end system.
H.264: Use H.264 compliant compression.
MPEG4: Use MPEG4 compliant compression.
H.263+: Use H.263+ compliant compression.
H.261: Use H.261 compliant compression (for still image transmission [see Annex D]).
SIP:No-Video: Use only audio.

Note
For voice only, line I/F is only enabled when using SIP.
### Video Frame
Select the send video frame rate.
- **15fps**: Send CIF format video at a maximum rate of 15 frames per second.
- **30fps**: Send CIF format video at a maximum rate of 30 frames per second.

### Audio Mode
Select an audio compression method.
- **Auto**: Match the audio mode selected at the far-end system.
- **MPEG4 Audio**: Use MPEG4 compliant compression.
  - G.728: Use G.728 compliant compression.
  - G.711: Use G.711 compliant compression.
- **G.722**: Use G.722 compliant compression.
- **G.729**: Use G.729 compliant compression.
- **G.728**: Use G.728 compliant compression.
- **G.711**: Use G.711 compliant compression.

### LAN Bandwidth
Select the bandwidth to be used for transmission.
Available settings are 64 kbps, 128 kbps, 256 kbps, 384 kbps, 512 kbps, 768 kbps, 1024 kbps, 1536 kbps, 2048 kbps, and “User-specified”.

### User-specified LAN Bandwidth
When “User-specified” was selected for “LAN Bandwidth”, enter the bandwidth value here.

### Far End Camera Control
Select whether to enable far-end camera control.
- **On**: Normally this setting should be selected, to allow control of the far-end camera.
- **Off**: Disable control of the far-end camera.

### Lip Sync
Select whether to enable the Lip Sync function for synchronizing the lip movement and audio of the transmission source.
- **On**: Enable the Lip Sync function.
- **Off**: Disable the Lip Sync function.

---

### Decode

#### Video Mode
Select the compression method to be used for receiving video information.
- **Auto**: Match the method selected at the far-end system.
- **H.264**: Use H.264 compliant compression.
- **MPEG4**: Use MPEG4 compliant compression.
- **H.263+**: Use H.263+ compliant compression.
- **H.261**: Use H.261 compliant compression.
- **SIP:No-Video**: Use only audio.

#### Note
For voice only, line I/F is only enabled when using SIP.

#### Video Frame
Select the receive video frame rate.
- **15fps**: Receive CIF format video at a maximum rate of 15 frames per second.
- **30fps**: Receive CIF format video at a maximum rate of 30 frames per second.

#### Audio Mode
Select an audio compression method for reception.
- **Auto**: Match the audio mode selected at the far-end system.
- **MPEG4 Audio**: Use MPEG4 compliant compression.
  - G.728: Use G.728 compliant compression.
  - G.711: Use G.711 compliant compression.

#### Note
If the far-end videoconferencing system does not support the audio compression method selected at the PCS-TL30, the G.711 method will automatically be used.

#### LAN Bandwidth
Select the bandwidth to be used for reception.
Available settings are 64 kbps, 128 kbps, 256 kbps, 384 kbps, 512 kbps, 768 kbps, 1024 kbps, 1536 kbps, 2048 kbps, and “User-specified”.

**User-specified LAN Bandwidth**
When “User-specified” was selected for “LAN Bandwidth”, enter the bandwidth value here.

**Control by Far End**
Select whether the system should ignore camera control commands from the far-end system.
- **On**: Normally this setting should be selected, to allow control of the camera by the far-end system.
- **Off**: Disable control of the camera by the far-end system.

### Administrator Setup Menu

The Administrator Setup menu is used for the system administrators. If you have set the password with this menu, you need to enter it when accessing the setup menus or Phone Book to change the items. Entering the password is also required to access the Administrator Setup menu.

**Page 1/7**

![Administrator Setup Menu](image)

**Administrator Password**
Sets a password up to ten characters long for the system administrator. This password is needed to gain access to items in the Setup menu (excluding the Display Setup menu) and the Phone Book.

**Phone Book Modification Password**
Sets a password up to ten characters long for modifying the Phone Book.

**Remote Access Password**
Sets a password up to ten characters long for accessing this System from a Web browser or telnet. Accessing from a Web browser is also enabled by entering the administrator password.

**Web Monitor**
Selects whether or not to permit monitoring of the JPEG images of this System via a Web browser.
- **On**: Permits monitoring via a Web browser.
- **Off**: Disables monitoring.

**Web Access**
Selects whether or not to permit accessing the PCS-TL30 via a Web browser or Telnet.
- **On**: Prohibits accessing via a Web browser or Telnet.
- **Off**: Permits accessing via a Web browser or Telnet.

**Save Phone Book**
Saves the data in the Phone Book in a “Memory Stick”. The data in the “Memory Stick” will be overwritten.

**Load Phone Book**
Loads the data in the Phone Book from a “Memory Stick”. The data in the Phone Book will be overwritten.

**Create Private Phone Book**
Selects to create an empty folder and file for a Private Phone Book in an inserted “Memory Stick”.

**Delete Private Phone Book**
Selects to delete the Private Phone Book folder in the inserted “Memory Stick”.

**Copy to Private Phone Book**
Selects to copy all the contents of the Phone Book to a Private Phone Book in the inserted “Memory Stick”.

**Auto Dialing**
You can create a Private Phone Book in a “Memory Stick”. This item is used to select whether or not to automatically dial the address of a single contact on a specified list in the Private Phone Book simply by inserting the “Memory Stick”.
- **On**: Enables automatic dialing.
- **Off**: Disables automatic dialing.

---

**Note**
This version does not support accessing from a Web browser. Support is planned for future version upgrades.

**Save Phone Book**
Saves the data in the Phone Book in a “Memory Stick”. The data in the “Memory Stick” will be overwritten.

**Load Phone Book**
Loads the data in the Phone Book from a “Memory Stick”. The data in the Phone Book will be overwritten.

**Create Private Phone Book**
Selects to create an empty folder and file for a Private Phone Book in an inserted “Memory Stick”.

**Delete Private Phone Book**
Selects to delete the Private Phone Book folder in the inserted “Memory Stick”.

**Copy to Private Phone Book**
Selects to copy all the contents of the Phone Book to a Private Phone Book in the inserted “Memory Stick”.

**Auto Dialing**
You can create a Private Phone Book in a “Memory Stick”. This item is used to select whether or not to automatically dial the address of a single contact on a specified list in the Private Phone Book simply by inserting the “Memory Stick”.
- **On**: Enables automatic dialing.
- **Off**: Disables automatic dialing.

---

**Note**
This version does not support this function. Support is planned for future version upgrades.

**Save Phone Book**
Saves the data in the Phone Book in a “Memory Stick”. The data in the “Memory Stick” will be overwritten.

**Load Phone Book**
Loads the data in the Phone Book from a “Memory Stick”. The data in the Phone Book will be overwritten.

**Create Private Phone Book**
Selects to create an empty folder and file for a Private Phone Book in an inserted “Memory Stick”.

**Delete Private Phone Book**
Selects to delete the Private Phone Book folder in the inserted “Memory Stick”.

**Copy to Private Phone Book**
Selects to copy all the contents of the Phone Book to a Private Phone Book in the inserted “Memory Stick”.

**Auto Dialing**
You can create a Private Phone Book in a “Memory Stick”. This item is used to select whether or not to automatically dial the address of a single contact on a specified list in the Private Phone Book simply by inserting the “Memory Stick”.
- **On**: Enables automatic dialing.
- **Off**: Disables automatic dialing.
Page 2/7

Gatekeeper Mode
Sets whether you use the gatekeeper that controls access to a remote party.
Using the gatekeeper allows you to dial using the user name or user number.
**Auto:** Detects the gatekeeper automatically and uses it.
**On:** Enables use of the gatekeeper.
**Off:** Disables use of the gatekeeper.

Gatekeeper Address
Enter the gatekeeper address used when “Gatekeeper Mode” is set to “On”.

User Alias
Enter the user name (H.323 alias) to be registered in the gatekeeper.

User Number
Enter the user number (E.164 number) to be registered in the gatekeeper.

Page 3/7

SNMP Mode
Selects whether the SNMP (Simple Network Management Protocol) agent service is enabled or not.
**On:** Enables the SNMP agent service.
**Off:** Disables the SNMP agent service.

Trap Destination
Enter the address of the trap destination SNMP manager.

Community
Enter the community name managed by the SNMP manager. The default setting is “public”. Normally, there is no need to change.

Description
Enter the description of this system. The default setting is “Videoconference Device” and cannot be changed.

Location
Enter the location where this system is installed.

Contact
Enter information on the administrator of this system.

Page 4/7

NAT Mode
Selects whether you connect the system to a local network using NAT (Network Address Translation) that enables sharing of one global IP address for multiple computers on the same LAN.
**UPnP:** Enables the UPnP function.
**On:** Enables NAT mode.
**Off:** Disables NAT mode.

WAN IP Address
Enter the IP address of a global network to be used for NAT mode.

Packet Resend Request
Selects whether or not to request to resend the packet when a packet loss occurs during communication.
**On:** Requests resending a packet.
**Off:** Does not request resending a packet.
Adaptive Rate Control
Sets whether or not to always optimize the LAN bandwidth.

- **On**: Always optimizes.
- **Off**: Disables optimization of the LAN bandwidth.

**Note**
This setting is enabled only when “Packet Resend Request” is set to “Off”. When “Packet Resend Request” is set to “On”, this item is always set to “On”.

LAN Mode
Selects the interface type and the communication mode of the LAN connection.

- **Auto Negotiation**: The interface type and the communication mode are recognized automatically.
- **100Mbps Full Duplex**: Connects via 100BASE-TX in full duplex mode.
- **100Mbps Half Duplex**: Connects via 100BASE-TX in half duplex mode.
- **10Mbps Full Duplex**: Connects via 10BASE-T in full duplex mode.
- **10Mbps Half Duplex**: Connects via 10BASE-T in half duplex mode.

Port Number Used
Selects whether or not to fix the TCP port number and UDP port number.

- **Custom**: Uses the port numbers set by the user.
- **Default**: Uses the default port numbers, 2253 for the TCP port number and 49152 for the UDP port number.

TCP Port Number
When “Port Number Used” is set to “Custom”, enter the TCP port number.
The display shows usable port numbers.

UDP Port Number
When “Port Number Used” is set to “Custom”, enter the UDP port number.
The display shows usable port numbers.

For details on the port numbers used, see “List of Port Numbers Used on the PCS-TL30” on page 89.

TOS
Selects how to define the TOS (Type of Service) field for an IP datagram.

- **Off**: Does not define the TOS field.
- **IP Precedence**: Defines the TOS field as IP Precedence.
- **Diffserve**: Defines the TOS field as Diffserve.

**IP Precedence**
Enter the IP Precedence value (0 – 7).

**Low Delay**
Selects whether or not to specify the bit rate of Low Delay for the TOS field.

- **On**: Specifies the bit rate of Low Delay for the TOS field.
- **Off**: Does not specify the bit rate of Low Delay for the TOS field.

**High Throughput**
Selects whether or not to specify the bit rate of High Throughput for the TOS field.

- **On**: Specifies the bit rate of High Throughput for the TOS field.
- **Off**: Does not specify the bit rate of High Throughput for the TOS field.

**High Reliability**
Selects whether or not to specify the bit rate of High Reliability for the TOS field.

- **On**: Specifies the bit rate of High Reliability for the TOS field.
- **Off**: Does not specify the bit rate of High Reliability for the TOS field.

**Minimum Cost**
Selects whether or not to specify the bit rate of Minimum Cost for the TOS field.

- **On**: Specifies the bit rate of Minimum Cost for the TOS field.
- **Off**: Does not specify the bit rate of Minimum Cost for the TOS field.

**Diffserve**
Enter the Diffserve value (0 – 63).
### PPPoE
Selects whether or not to use PPPoE for LAN connection. You can use the B FLET’S or FLET’S ADSL services without connecting a router when using PPPoE.

- **On**: Uses PPPoE for LAN connection.
- **Off**: Does not use PPPoE.

#### Notes
- Operations of PPPoE for LAN connection are presently verified only for Japanese NTT B FLET’S and FLET’S ADSL services.
- “FLET’S” is a trademark of NTT East and NTT West Corporations in Japan.

#### PPPoE User Name
Enter a user name when you use PPPoE for LAN connection.

#### PPPoE Password
Enter a password when you use PPPoE for LAN connection.

#### Fixed IP for PPPoE
Selects whether or not to make a PPPoE connection using the static IP.

- **On**: Uses the static IP for a PPPoE connection.
- **Off**: Does not use the static IP for a PPPoE connection.

#### Fixed IP Address for PPPoE
Enter the static IP address when “Fixed IP for PPPoE” is set to “On”.

#### PPPoE DNS
Selects whether to obtain the DNS server addresses automatically or to specify them manually when connecting to LAN using PPPoE.

- **Specify**: Specifies the DNS server addresses.
- **Obtain automatically**: Allows you to obtain the DNS server addresses automatically.

#### Primary DNS
Enter a primary DNS address.

### Secondary DNS
Enter a secondary DNS address.

### Line I/F
Selects the line interface to be used normally.

- **IP**: Connect to a videoconferencing system on the remote site via a LAN.
- **SIP**: Connects to an IP phone or similar using SIP.

### Auto capture remote image
Select whether to automatically capture thumbnail still images of the remote party when a videoconference has started.

- **On**: Automatically capture thumbnail images.
- **Off**: Do not automatically capture thumbnail images.

### Ringer on main unit when using headphones
Select whether the ringer on the main unit also rings when headphones are in use.

- **On**: Enable ringer sound from speaker on main unit also.
  - The volume of the ringer tone depends on the headphone ringer level setting.
- **Off**: Disable ringer sound from speaker on main unit.

### H.239 (Presentation)
Selects whether to perform PC-based presentations.

- **On**: Enable PC-based presentations.
- **Off**: Disable PC-based presentations.

### Restore factory defaults
Restores the system to the factory default settings.

### Update software
Performs a software update.

### Format Memory Stick
Formats a “Memory Stick”.

---

**Notes**

- Operations of PPPoE for LAN connection are presently verified only for Japanese NTT B FLET’S and FLET’S ADSL services.
- “FLET’S” is a trademark of NTT East and NTT West Corporations in Japan.
Display Setup Menu

Lets you make display related settings. Settings are made separately for VC (videoconference) mode and PC (computer display) mode.

VC Page 1/1

**Quality Mode**
Selects the color tone of the image.
*Vivid*: Slightly bluish color tone.
*Standard*: Setting between Vivid and Pro.
*Pro*: Slightly reddish color tone.

**Picture**
Adjusts the picture contrast.
The contrast increases as the value gets larger.

**Brightness**
Adjusts the picture brightness.
The brightness increases as the value gets larger.

**Backlight**
Adjusts the brightness of the backlight.
The backlight gets brighter as the value gets larger.

**Reset**
Resets the settings to the default condition.

**Wide Mode**
Switches the display mode.
*Normal*: Shows the 4:3 image as is.
*Wide*: Stretches the 4:3 image horizontally to fit the wide screen.
*Zoom*: Enlarges the 4:3 image and then crops the top and bottom to fit the wide screen.

PC Page 1/2

**Quality Mode**
Selects the color temperature of the image.
*Low*: Sets the color temperature to Low.
*Middle*: Sets the color temperature to Middle.
*High*: Sets the color temperature to High.

**Picture**
Adjusts the picture contrast.
The contrast increases as the value gets larger.

**Brightness**
Adjusts the picture brightness.
The brightness increases as the value gets larger.

**Backlight**
Adjusts the brightness of the backlight.
The backlight gets brighter as the value gets larger.

**Reset**
Resets the settings to the default condition.

**Wide Mode**
Switches the display mode.
When a WXGA 1280 × 768 image is input, it is displayed in wide mode regardless of the display mode setting.
*Normal*: Shows the 4:3 image as is.
*Wide*: Stretches the 4:3 image horizontally to fit the wide screen.
*Zoom*: Enlarges the 4:3 image and then crops the top and bottom to fit the wide screen.
Registering a Remote Party in the Phone Book

You can register the IP address and other information for a remote party in the Phone Book, allowing you to dial the party very easily. Up to 300 remote parties can be registered in the Phone Book. You can also store a still image such as a participant’s portrait in the index list. In addition to the regular Phone Book of the Video Communication System, you can create a Private Phone Book on a “Memory Stick”.

Note
This version does not support the Private Phone Book. Support is planned for future version upgrades.

Registering a New Remote Party

1. In the launcher menu, click (Phone Book).

   The Phone Book menu opens.

2. Click “New”.

   The List Edit menu appears.

   Note
The adjustment range of the H Shift and V Shift may differ depending on the specifications of the RGB signal input.
3. Enter the name of a remote party in the Index text box.
   
   *For information on character input, see “Entering Characters” on page 22.*

4. Enter the IP address of the remote party in the IP address text box.

5. Select the line interface you are using to connect to a remote party with “Line I/F”.
   
   **IP:** Connect to a videoconferencing system on the remote site via a LAN.
   
   **SIP:** Connect to an IP phone using SIP.

   *Note*
   
   The “Line I/F” options differ depending on the software installed in the PCS-TL30. For information on SIP, see chapter 7.

6. Set the LAN bandwidth to use.

7. Select the thumbnail image to be shown in the Phone Book. Available selections are the line interface icon, a still image stored on a “Memory Stick”, or a still image automatically captured during a videoconference.

   Click ‹　› to select the image.

   If no “Memory Stick” is inserted into the system, you can select only the still images captured automatically during the previous communication.

   *For details on the automatic capturing of still images, see “Saving Remote Pictures Automatically – Automatic Image Capture Feature” on page 56.*

8. Specify whether to include the entry in the One Touch Dial list. To do this, select the group and the position within the group.

9. Click “Save”.

   The settings are registered in the Phone Book.

---

**Changing the Contents of the Phone Book**

You can change the IP address, name, or other setting registered in the Phone Book.

---

**Deleting a Registered Remote Party**

Follow the procedure below to delete a remote party from the Phone Book.

1. Open the Phone Book menu.

2. Move the mouse cursor to the entry you want to change, and click “Edit”.

   The List Edit menu appears.

3. Change the IP address, name, or other setting.

4. Click “Save”.

   The corrected entry is saved.

---

**Copying an Entry in the Phone Book**

1. Open the Phone Book menu.

2. Move the mouse cursor to the entry you want to copy, and click ‼.

   The message “Delete Entry?” appears.

3. Click “OK”.

   The selected party is deleted.

**To cancel deleting**

Click “Cancel” in step 3.

*Note*

If the deleted party has been registered for One Touch Dial, the One Touch Dial entry will also be deleted.

---

**1. Open the Phone Book menu.**

**2. Move the mouse cursor to the entry you want to copy, and click “Edit”**.

   The List Edit menu appears.

---

Registering a Remote Party in the Phone Book
3 Click “Copy”.

The data for the selected entry are copied, and the file name is followed by “-1, -2, -3”. You can use the data for another entry after modifying only the necessary items.

**Note**

Even if the copied entry was registered in the One Touch Dial, this information is not copied.

### Creating a Private Phone Book

You can create your own Phone Book (Private Phone Book) in a “Memory Stick”. Once the Private Phone Book is registered, inserting the “Memory Stick” into the system changes the Phone Book menu to the Private Phone Book menu. You can also activate the Auto Dial feature, allowing you to start dialing automatically to one of the lists simply by inserting the “Memory Stick”.

**Note**

This version does not support the Private Phone Book. Support is planned for future version upgrades.

#### To register a new remote party in a Private Phone Book

1 Insert a “Memory Stick” in which you want to register a remote party into the Memory Stick slot of the system.

   Insert the “Memory Stick” with the front facing you and in the direction of the arrow on the top.

2 Open Page 1 of the Administrator Setup menu.

3 Select “Create Private Phone Book”.

   The message “Create a Private Phone Book?” appears.

4 Use the ▲, ▼, ◀ or ▶ button on the Remote Commander to select “OK”, then press the ENTER button.

   An empty Private Phone Book is created in the “Memory Stick”.

5 Register a new remote party.

   The procedure is the same as that for registering in the Phone Book. Proceed with steps 2 to 7 in “Registering a New Remote Party” on page 34.

   The procedures for how to change the contents of the Private Phone Book, how to delete the registered remote party, or how to copy the setting of the Private Phone Book are the same as those for the Phone Book. Open the Private Phone Book menu and proceed with the steps described on page 35.

#### To copy all the contents of the Phone Book to the Private Phone Book

Insert the “Memory Stick” in which you want to store the Private Phone Book into the Memory Stick slot on the system, then select “Copy to Private Phone Book” from Page 1 of the Administrator Setup menu. All the data registered in the Phone Book are copied to the inserted “Memory Stick”.

#### To delete the Private Phone Book from the “Memory Stick”

Insert the “Memory Stick” from which you want to delete the registered Private Phone Book into the Memory Stick slot on the system, then select “Delete Private Phone
Registering a Remote Party in the Phone Book

Chapter 2  Registration and Setup

Book” from Page 1 of the Administrator Setup menu. All the data are deleted from the inserted “Memory Stick”.

To dial a specified entry of the Private Phone Book automatically

If you set “Auto Dial” in the Administrator Setup menu to “On”, you can automatically dial one of the entries in the Private Phone Book simply by inserting the “Memory Stick” on which the Private Phone Book is stored.

**Note**

Only one entry can be set for auto-dial. The most recent address for which “Auto Dial” was set to “On” will be used.

1. Open the Private Phone Book.
2. Move the mouse cursor to the remote party that you want to dial automatically, and click the “Edit”.

The List Edit menu appears.

3. Set “Auto Dial” to “On” by clicking on the setting.
4. Click “Save”.

The setting is saved and “AUTO” appears on the Private Phone Book menu list.

To exit from the Private Phone Book menu

Remove the “Memory Stick” in which the Private Phone Book is registered from the Communication Terminal. The screen returns to the Phone Book menu.

Checking the history of outgoing and incoming calls

Click on the launcher menu to bring up the History menu.

The History menu shows a list of remote parties to which the system was recently connected. When “ALL” is selected, all outgoing and incoming calls are shown in chronological order. To display only outgoing or incoming calls, select “Out” or “In”.

When the list has several pages, a scroll bar will appear at the right side of the screen. To advance to the next page, click the Page button at the bottom of the scroll bar. To go back to the previous page, click the Page button at the top of the scroll bar.

To dial a history entry

Move the mouse cursor to the entry you want to dial, and click .

To store a history entry in the Phone Book

Move the mouse cursor to the entry you want to add to the Phone Book, and click (Edit). For details, see “Changing the Contents of the Phone Book” on page 35.

To delete a history entry

Move the mouse cursor to the entry you want to delete, and click .
Registering a Remote Party for One Touch Dial

You can register remote parties in the One Touch Dial list in the launcher menu, allowing you to dial them easily at any time.
Up to 30 remote parties from the Phone Book can be registered for One Touch Dial.

One Touch Dial registration

To register a party in the One Touch Dial, you use the List Edit menu of the Phone Book.
For information on the steps for One Touch Dial registration, see the section “Registering a New Remote Party” on page 34.

To change a One Touch Dial registration from the Phone Book

If you change the contents of the Phone Book, the contents of the One Touch Dial registration also change accordingly.
For information on editing the Phone Book, see “Changing the Contents of the Phone Book” on page 35.

To delete a One Touch Dial registration from the Phone Book

Using the List Edit menu of the Phone Book, you can delete a One Touch Dial registration.
For information on the steps for One Touch Dial deletion, see the section “Registering a New Remote Party” on page 34.

To change a One Touch Dial registration from the launcher menu

1. On the launcher menu, move the mouse cursor to the entry that you want to edit, and then click “Edit”.
The List Edit menu opens.

2. Change the registration contents using the List Edit menu, and click “Save”.
The launcher menu appears again.
The launcher menu One Touch Dial contents and the Phone Book registration contents are changed at the same time.

To delete a One Touch Dial registration from the launcher menu

On the launcher menu, move the mouse cursor to the entry that you want to delete, and then click .
The launcher menu appears again, and the deleted One Touch Dial entry is grayed out.

Note
Deleting the One Touch Dial entry in this way will not delete the Phone Book entry.

Registering the Private One Touch Dial

You can register the remote parties stored in the Private Phone Book in a “Memory Stick” for your own One Touch Dial list.
Once the Private One Touch Dial list is registered, inserting the “Memory Stick” into the system changes the One Touch Dial list in the launcher menu to the Private One Touch Dial list.
The procedures of the registration, deleting and editing of One Touch Dial are the same as those for the Phone Book of the system.
Up to 30 remote parties can be registered for your Private One Touch Dial list.

Note
This version does not support Private One Touch Dial.
Support is planned for future version upgrades.
This chapter describes how to conduct a videoconference from start to finish after the administrator has completed various registrations and settings for the system. This chapter describes how to conduct a point-to-point videoconference via a LAN.

For use of a “Memory Stick” or optional equipment, see Chapter 4.

For information on how to conduct a data conference using the optional Data Solution Module PCSA-DSM1, see chapter 5.

To conduct an encrypted conference via LAN, see Chapter 6.

To conduct a videoconference using SIP, see Chapter 7.

Starting a Conference by Calling a Remote Party

You can start a videoconference with a remote party by dialing. Once you have made a connection to the remote party, you can begin talking just as with a normal phone call and start a videoconference.

For information on making a call in PC (computer display) mode, see “Calling a Remote Party or Receiving a Call at the PC Screen” on page 76.

Turning on the Power

1. Turn on the power of any equipment to be used for the videoconference.

2. Press the \( \text{I / O} \) (Power) switch on the PCS-TL30. The switch indicator lights up in green and the system turns on.
Make sure that the lens cover of the camera is open. If it is closed, slide the lever for lens cover on the top of the system to the right to open the cover. The image from the camera appears on the launcher screen.

Using the Launcher Menu

The launcher menu appears on the display when the system is turned on or while it is not connected to a remote party. The launcher menu displays the image taken by the local camera, local system status, buttons to open the menus, and the One Touch Dial list.

Screen
Shows the image from the local camera.

One Touch Dial list
When you select an entry from the list with the mouse cursor, buttons appear which let you dial, edit, or delete the entry.

Phone Book button
Clicking this button brings up the Phone Book. If a “Memory Stick” containing Private Phone Book data is inserted, the Private Phone Book appears.

Menu bar display button
Clicking this button brings up the menu selection screen.

Message
Messages for operation guidance etc. appear here.

Text box
By entering an IP address here, you can connect directly to the respective party.

Dial button
Click this button to dial the number entered in the text box.

System status indicators
These indicators show the status of the local system. ➕: The system is set to reject calls. ➖: A “Memory Stick” is inserted. Number: Shows the IP address of the local system.

History button
Clicking this button brings up the incoming/outgoing call history display.

Dial button
Clicking this button dials the selected party.

Edit button
Clicking this button brings up the List Edit menu for the selected party.

Delete button
Clicking this button brings up the List Edit menu for the selected party.

To display detailed system information
Click the menu bar display button to bring up the menu selection screen. Then click “Status & Info” from the setup menu. The Status & Info menu which shows various information about the local system and communication settings appears.
Status & Info Menu

Page 1/3

Host Version
Shows the system software version.

DSP Version
Shows the software version of the integrated video/audio codec DSP (Digital Signal Processor).

LCD Version
Shows the software version of the display panel in the PCS-TL30.

Camera Version
Shows the software version of the camera on the PCS-TL30.

AEC Version
Shows the software version of the echo canceler.

DSM Version
Shows whether the Data Solution Module PCSA-DSM1 is installed or not.

Host Name
Shows the host name.

IP Address
Shows the IP address.

MAC Address
Shows the MAC address.

Serial number
Shows the serial number of the system.

Communication Status
Shows the current communication status of the system.

Page 2/3

Line I/F*
Shows the line interface that is being used.

Camera Control*
Shows whether the far-end camera can be controlled from the system.

Audio Mode*
Shows the currently selected audio encoding method.

Video Mode*
Shows the currently selected video encoding method.

Note
The audio encoding method and video encoding method actually used for communication may be different from the settings shown, depending on the capabilities and settings of the videoconference system at the far end.

Frame Rate*
Shows the video frame rate in real time.

Rate*
Shows the transmission rate in real time.

Audio Bit Rate*
Shows the audio bit rate.

Video Bit Rate*
Shows the video bit rate.

Audio Data Packet Loss*
Shows the audio data packet loss.

Video Data Packet Loss*
Shows the video data packet loss.

Camera Control Data Packet Loss*
Shows the camera control data packet loss.
Packet Recovery Ratio*
Shows the packet recovery ratio.

Check Code*
Shown when H.235 encryption is being used.

LAN Line Status*
Shows the LAN line status.

Gatekeeper
Shows the gatekeeper status.

SIP
Shows the SIP status.

Note
Items marked with an asterisk (*) do not appear when communication is not in progress. Only pages 1 and 2 are displayed, and part of the display differs.

Calling a Remote Party Using One Touch Dial
This section describes how to call a remote party that has been registered in the One Touch Dial list.

For information on One Touch Dial registration, see page 38.

1 Click the One Touch Dial tab for the party that you want to call.

The One Touch Dial group is switched.

2 Move the mouse cursor to the entry that you want to call, and click “Dial”.

The selected party is called. The indication “Dialing (LAN)” appears on the display. When the connection is established, the indication “Meeting starts!” appears. You can now start the videoconference.

To cancel dialing before connecting
Click “Cancel”.

One Touch Dial from the Private Phone Book
Insert the “Memory Stick” in which the Private Phone Book is registered into the Memory Stick slot of the system. The Private One Touch Dial list appears in the launcher menu.
The operations for the Private One Touch Dial list are the same as those for the One Touch Dial list of the system. See “Calling a Remote Party Using One Touch Dial” on page 42.

**Note**

This version does not support this function. Support is planned for future version upgrades.

**Calling a Remote Party by Entering the IP Address in the Launcher Menu**

1. Enter the IP address of the remote party in the text box. When you click on the text box, the soft keyboard display appears. Use the display for alphanumeric entry.

   **Notes**
   - Click “Backspace” to delete the character immediately before the cursor.
   - Click “All Clear” to delete the entire entry and start over.

2. Click (Dial).

   The selected party is called. The indication “Dialing (LAN)” appears on the display. When the connection is established, the indication “Meeting starts!” appears. You can now start the videoconference.

   **To cancel dialing before connecting**
   Click “Cancel”.

**Calling a Remote Party Registered in the Phone Book**

This section describes how to call a remote party that has been registered in the Phone Book.

For information on Phone Book registration, see page 34.

1. Click (Phone Book) in the launcher menu.

   The Phone Book menu appears.

2. Move the mouse cursor to the entry that you want to call, and click “Dial”.

   The selected party is called. The indication “Dialing (LAN)” appears on the display. When the connection is established, the indication “Meeting starts!” appears. You can now start the videoconference.

   **To cancel dialing before connecting**
   Click “Cancel”.

**To call a remote party registered in the Private Phone Book**

1. Insert the “Memory Stick” on which the Private Phone Book is stored into the Memory Stick slot of the system.

   The Phone Book contents are switched to the Private Phone Book.

2. Move the mouse cursor to the entry that you want to call, and click “Dial”.

   The selected party is called.
Receiving a Call from a Remote Party

Operations for answering a call differ depending on the setting of the answer mode.

Auto answer mode

The system automatically receives a call from a remote party and you can start conferencing. Although no operation is necessary to start, the picture on the local site will be displayed on the remote site screen even if you are not ready to begin.

Manual answer mode

When there is an incoming call, a ringer tone sounds. You need to connect the call manually before starting the conference. You can start it whenever you are ready.

Note

You cannot answer the call unless the system is turned on.

For setting of the answer mode, see “Auto Answer” in the Answer Setup menu on page 24.

For information on receiving a call in PC mode, see “Calling a Remote Party or Receiving a Call at the PC Screen” on page 76.

Answering a Call from a Remote Party

To answer a call in auto answer mode

When you receive a call, a ringer tone sounds and the message “Incoming Call” appears on the display. The system is automatically connected and the picture of the remote party is displayed on the local system and the sound is heard. The picture and sound on the local site will be enabled on the remote site at the same time. The message “Meeting starts!” appears on the display. You are now ready to start a conference.

Notes

• If you receive a call when you are using the Video Communication System as a computer display, the picture of the remote party will appear automatically as a window picture.
To receive a call in manual answer mode
When you receive a call, a ringer tone sounds and the message “Incoming call. Answer?” appears on the display.

Click “OK”.
The system is then connected.
Once the connection is established, the picture of the remote party is displayed on the local system and the sound is heard. The picture and sound from the local system will be transmitted to the remote site at the same time.
The message “Meeting starts!” appears on the display.
You are now ready to start a videoconference.

For information on how to adjust the sound and camera during a videoconference, see pages 46 - 50.

When you do not want to answer the call
Click “Cancel”. The ringer tone stops.

To display the elapsed communication time
You can show the elapsed communication time on the display if the “Time Display” item in the Device Setup menu is set to “On”.
To disable this function, set the item to “Off”.

For information on the “Time Display” item, see the section “Device Setup menu” on page 24.

Ending the Conference

1 Click the  button.
The indication “Disconnect?” appears on the display.

2 Click “OK”.
The line is disconnected.

Note
The power of the system remains on even if the line is disconnected.

To cancel disconnection of the system
Click “Cancel”.

To register the connected remote party in the Phone Book
You can easily register the remote party who has just disconnected.
If the “Last Number Registration” item in the Device Setup menu is set to “On”, the message “Register this participant in the list?” appears after a videoconference with an unregistered remote party is finished. When you click “OK”, the Edit List menu appears.

Notes
• If the “Last Number Registration” item is set to “Off”, the message “Register this participant in the list?” does not appear.
• If a “Memory Stick” containing Private Phone Book data is inserted, the entry will be saved in the Private Phone Book.

For information on the “Last Number Registration” item, see the section “Device Setup menu” on page 24.
Joining a Multipoint Videoconference

The PCS-TL30 can join a multipoint videoconference as the child terminal to an MCU (Multipoint Control Unit). The procedures for initiating and accepting calls are the same as for a point-to-point videoconference. For details, see the sections “Starting a Conference by Calling a Remote Party” on page 39 and “Receiving a Call from a Remote Party” on page 44.

Note

Because the PCS-TL30 does not feature the MCU function, this system cannot be used to host a multipoint videoconference.

About broadcast mode

When participating in a multipoint videoconference, the video from the local system can be broadcast to all other participants. To do this, click “Broadcast mode” at the bottom of the menu bar, and then click “Start” in the Broadcast Mode menu. To stop broadcasting, click “Stop” in the Broadcast Mode menu.

Adjusting the Picture and Sound

Adjusting the Picture Quality

For details on the adjustment steps, see the section “Device Setup menu” on page 24.

Adjusting the Volume

You can adjust the volume of the sound to be heard during a videoconference. Press the VOLUME + button on the PCS-TL30 to increase the volume, and the VOLUME - button to decrease it. You can adjust the volume separately for a videoconference and for computer display, and store the respective settings.

Note

If increasing the volume results in acoustic feedback, decrease the volume setting.

Cutting Off the Sound Momentarily - Mic off Function

You can momentarily cut off the sound to be sent to the remote party. To do this, either press the $ (Mic off) button on the PCS-TL30, or click $ (Mic) on the display. The sound of the local system will not be heard by the remote party.

To restore the sound
Press the $ (Mic off) button on the PCS-TL30 again, or click $ (Mic) on the display.

Cutting Off the Sound On Answering - Mic Off Function

You can cut off the sound to be sent to a remote party when you have answered a call from the remote party. To do this, set the “Mic on Answer” item in the Answer Setup menu to “Off”. Only the picture of the local system will be sent to the remote party when answering a call.

For details on the “Mic on Answer” setting, see the section “Answer Setup menu” on page 24.
To send the sound to the remote party
Press the ¤ (Mic off) button on the PCS-TL30 again, or
click ¤ (Mic) on the display.

Synchronizing Audio and Video - Lip Sync Function

During a videoconference, a time lag may occur between
the sound and picture sent to the remote party. When you activate the Lip Sync function, the system automatically adjusts the synchronization of audio and video. However, this may delay the overall transmission somewhat, because the audio will be delayed to match the video.
To activate the Lip Sync function, set the “Lip Sync” item in the Communication Mode Setup menu to “On”.
For details on the “Lip Sync” setting, see the section “Communication Mode Menu” on page 27.

Note
If there is an audio/video synchronization problem in the signal sent from the remote party, you have to ask the remote party to enable the Lip Sync function at their end.

Reducing Echo - Echo Canceler

The system is equipped with an Echo Canceler function designed to reduce the echo that can occur during bidirectional audio transmission.

Adjusting the Camera

You can adjust the image shot by the local camera that is sent to the remote party to obtain the desired angle and size. During communication you can also control the camera on the remote site to adjust the image shot by the remote camera. The Camera Control menu is used to adjust the camera.

Selecting the Camera to be Controlled

Selecting a camera for control is possible only while a communication session is in progress. In any other mode, the remote camera cannot be selected.

1 On the menu selection screen, click “Camera Control”.
The Camera Control menu appears.

2 Select the camera you want to control (“Near” or “Far”).

Notes
• When controlling a remote camera, “Far End Camera Control” must be set to “On” in the Communication Mode menu of the local system, and the remote system must be set to receive camera control commands. For details on setting the remote system, refer to the operating instructions for each device.
• You cannot control the remote camera during a session if the remote control format of the remote camera is not H.281. If you cannot control the remote camera, ask the remote party about the remote control format of their camera.
• If the local and remote parties try to control the same camera at the same time, the camera may not operate correctly.
• Only the angle, zoom, and focus can be controlled on the remote camera.

## Adjusting the Zoom and Camera Angle

You can determine the size and the view angle of the picture to be displayed by adjusting the zoom and angle.

### Adjusting the display during communication

1. Right-click on the image.
   
   Zoom and angle buttons appear on the display.

   **Note**
   
   When the image is from the local camera, a (Backlight compensation) button appears. Each click of this button toggles the backlight compensation function on and off.

2. To zoom the image, click the or button under the image.

3. Click the symbols at the image edges to adjust the camera angle.

   When you move the mouse cursor out of the camera image window, the launcher screen appears again.

### Adjusting the display using the launcher menu (when communication is not in progress)

As described above, right-click the camera image. Zoom and angle buttons will appear on the display. Perform the adjustment in the preceding section.

**Note**

If the lens cover is closed, camera adjustment is not possible.

### Adjusting the display using the Camera Control menu

1. On the Camera Control menu, select the camera to adjust.

   ![Camera Control Menu](image)

   **Same Diagram Caption**

   - When communication is not in progress, the remote camera cannot be selected.
   - Sometimes the focus of the remote camera can be adjusted manually.

   *For information on how to bring up the Camera Control menu and selecting a camera, see “Selecting the Camera to be Controlled” on page 47.*

2. To zoom the image, click the or button under the image.

3. Click the symbols at the image edges to adjust the camera angle.

4. Click or the menu bar.

   The Camera Control menu closes.

### Adjusting the Brightness

The brightness can be adjusted with the Camera Control menu.

Normally, the brightness is automatically adjusted to obtain a optimum level. You can also adjust it manually. It is recommended that the brightness be adjusted automatically.
Adjusting the Camera

Chapter 3  Daily Videoconference

Only the brightness of the local camera can be adjusted.

For information on how to bring up the Camera Control menu and selecting a camera, see “Selecting the Camera to be Controlled” on page 47.

To adjust the brightness
To manually adjust the brightness, deselect the “Auto Adjust” check box of the “Brightness Adjust” item, and then click the  or  button. Click  to brighten the image or  to darken it.

To shoot the picture with backlight compensation
Use backlight compensation when shooting a subject against a bright background.
To activate backlight compensation, select the “Backlight Compensation” check box.
For the local camera, backlight compensation can also be switched on and off by clicking , which appears when making camera adjustments during communication or from the launcher menu.

To eliminate flicker
If a fluorescent lamp is connected to the same power source as the PCS-TL30, flicker may occur in the camera picture.
To eliminate the flicker, select the “Flicker Removal” check box.

Using a fixed white balance setting
In the default condition, white balance is adjusted automatically.
If you want to adjust white balance manually, select the “Adjust” check box. While draping something white, such as a piece of paper, in front of the camera, click “Start” and set the white balance to fit the ambient environment. The white balance will then be fixed to that setting.

To release the fixed setting
Select the “Auto” check box under “White Balance”.

Presetting the Zoom and Angle Settings
Up to six preset settings for zoom and camera angle can be registered in the Camera Control menu. Once you have stored the settings, you can easily recall them to move the camera.

1 In the Camera Control menu, under “Preset”, click the desired number (1 - 6).

2 Adjust the zoom and angle.

3 Click “Save”.
The setting is registered in the selected preset number.

Recalling a Preset Zoom and Angle Setting
You can use the Camera Control menu to recall a preset zoom and camera angle setting.

1 In the Camera Control menu, under “Preset Number Selection”, click the desired number (1 - 6).
Changing the Screen Layout

During a communication session, you can use the Screen Layout Setup menu to control the way video is shown on the display.

Bringing up the Screen Layout Setup menu

1. During a communication session, click the menu bar display button.

The menu bar appears.

2. In the menu bar, click \( \text{Screen Layout Setup} \).

The Screen Layout Setup menu appears.

Note

During a communication session, you can select the remote camera.

For information on how to bring up the Camera Control menu and selecting a camera, see “Selecting the Camera to be Controlled” on page 47.

2. Click “Load”.

The setting of the preset number is recalled and the camera moves to the position of that setting.

About stored adjustment settings

The PCS-TL30 retains the settings for camera zoom and angle, brightness, backlight compensation on/off and flicker on/off in non-volatile memory.

When you turn off the system and turn it on again, the camera will be adjusted using the stored settings.

Note

If the surrounding environment is dark, the frame rate may adjust to 15 fps to increase brightness.
Switching the display

1. Full screen

Only the remote video is shown as a full-screen display. During still image or data transmission, the display switches to Picture-and-Picture mode. The still image or data is shown as a full-screen display, with the remote video shown as a window picture.

2. Picture-in-Picture

The remote video is shown as a full-screen display and the local video as a window picture. During still image or data transmission, the still image or data is shown as a full-screen display, with the remote video shown as a window picture. The display position of the window picture can be set to top left, top right, bottom left, and bottom right.

3. Picture-and-Picture

The remote video is shown as a full-screen display on the left and the local video as a window picture on the right. During still image or data transmission, the still image or data is shown as a full-screen display on the left and the remote video and local video are shown as window pictures.

4. Side-by-side

The remote video is shown on the left and the local video on the right, at the same size. During still image or data transmission, the still image or data is shown on the left and the remote video on the right.

5. OK button

Stores the setting and terminates the procedure.
Using Still Images Stored in a “Memory Stick” for a Videoconference

You can display the still images stored in the optional “Memory Stick” or transmit them to a remote party.

Note
This version does not support this function. Support is planned for future version upgrades.

Displaying a Still Image Stored on a “Memory Stick”

1 Insert the “Memory Stick” containing the still images into the Memory Stick slot on the Video Communication System.

Insert the “Memory Stick” with the front facing you and in the direction of the arrow on it.

2 Display the Image viewer menu.

Click the menu bar display button to bring up the menu selection screen. Then click “Image viewer”.

This chapter describes the various videoconferences using the optional equipment in addition to the components contained in the PCS-TL30 Video Communication System.

For information on conducting a data conference using the optional Data Solution Module, see Chapter 5.
3 Select the still image you want to display, then click “Load”.

The menu disappears and the selected still image is displayed.

To display a different image
While a still image is displayed, you can click ◀ to return to the previous image or ▶ to go to the next image.

To delete a still image
On the Image viewer menu, select the image you want to delete, and click “Delete”. The selected still image is deleted from the “Memory Stick”.

To remove the “Memory Stick”
Carefully push the “Memory Stick” in. This causes it to pop out slightly, and you can then remove it.

Sending a Still Image Stored on a “Memory Stick”

During a communication session, you can send still images stored on a “Memory Stick” to the remote party.

1 Insert a “Memory Stick” into the Memory Stick slot on the Video Communication System, and display the Image viewer menu.

For information on how to insert a “Memory Stick” and how to display the Image viewer menu, see “Displaying a Still Image Stored on a “Memory Stick”” on page 52.

2 Select the still image you want to send, and click “Send”.

The selected still image is displayed, and is sent to the remote party. The message “The still image has been sent.” appears on the display.

To cancel still image display
Click “Clear”.

Number :012.345.678.912
Right-click the mouse to display a help message.
About a “Memory Stick”

What is “Memory Stick”?  
“Memory Stick” is a compact, portable and versatile IC (Integrated Circuit) recording medium with a data capacity that exceeds a floppy disk. “Memory Stick” is specially designed for exchanging and sharing digital data among “Memory Stick” compatible products. Because it is removable, “Memory Stick” can also be used for external data storage. 
“Memory Stick” is available in two sizes: standard size and compact “Memory Stick Duo” size. Once attached to a Memory Stick Duo adapter, “Memory Stick Duo” turns to the same size as standard “Memory Stick” and thus can be used with products compliant with standard “Memory Stick.”

Types of “Memory Stick”  
There are five types of “Memory Stick” depending on various uses.
- **“Memory Stick PRO”**  
The “Memory Stick PRO” is a “Memory Stick” that allows faster data transfer rates in devices that support it. It also incorporates MagicGate copyright protection technology.
- **“Memory Stick-R”**  
Data stored in this type of “Memory Stick” is not overwritten. It can be used only with equipment compatible with “Memory Stick-R”. Data that requires MagicGate copyright protection technology cannot be stored on this type.
- **“Memory Stick”**  
Any type of data except copyright-protected data that requires MagicGate copyright protection technology can be stored.
- **“MagicGate Memory Stick”**  
Equipped with the MagicGate copyright protection technology.
- **“Memory Stick-ROM”**  
Stores pre-recorded, read-only data. Recording or erasing data cannot be done with this type.
- **“Memory Stick” (with memory select function)**  
Equipped with multiple memories (128 MB). You can select the memory to use with the memory select switch on the back of the “Memory Stick”. You cannot use different memories simultaneously or continuously.

Available types of “Memory Stick” for the unit  
You can use “Memory Stick PRO”, “Memory Stick”, and “MagicGate Memory Stick” with the unit. However, because the unit does not support the MagicGate standards, data recorded with the unit is not subject to MagicGate copyright protection.

Notes on “Memory Stick Duo”  
- To use “Memory Stick Duo” with this unit, attach it to the Memory Stick Duo adapter before inserting it into the unit.
- Be sure to attach “Memory Stick Duo” to the adapter with the correct orientation.
- Be sure to insert the Memory Stick Duo adapter with the correct orientation. Otherwise, the unit may be damaged.
- Do not insert the Memory Stick Duo adapter without “Memory Stick Duo” attached. Doing so may result in malfunction of the unit.

What is MagicGate?  
MagicGate is copyright protection technology that uses encryption technology.

Format that can be displayed with this unit  
The unit can display the picture files recorded on a “Memory Stick” in the following format:
- Image files (DCF-compatible) compressed in the JPEG (Joint Photographic Experts Group) format (extension: .jpg)  
- Image files of up to 2048 × 1536 pixels can be displayed.

**Note**  
Progressive JPEG is not supported.

Before using a “Memory Stick”  
- When you set the “Memory Stick” write-protect tab to “LOCK,” data cannot be recorded, edited, or erased.
- Use a sharp object, such as a ballpoint pen, to move the “Memory Stick Duo” erasure prevention switch.
- Data may be damaged if:
  - You remove the “Memory Stick” or turn off the unit while it is reading or writing data.
  - You use the “Memory Stick” in a location subject to the effects of static electricity or electric noise.
Sending Motion Pictures as Still Images

You can send motion pictures shot by the Camera as still images. When you are sending pictures that contain lots of text, it is recommended that you send them as still images. The images become clearer than motion pictures and the texts are easy to read.

Note
This version does not support this function. Support is planned for future version upgrades.

Sending Still Images Using the Still Image Menu

While in communication with the remote party, you can send motion pictures shot by the local camera as still images. You can send one still image or still images continuously.

1 Display the Still Image menu.
   Click the menu bar display button to bring up the menu selection screen. Then click “Image viewer”.

2 Adjust the camera zoom and angle.
   For details on adjusting the zoom and camera angle, see “Adjusting the Zoom and Camera Angle” on page 48.

3 Click “Send” or “Continuous Send”.

Formatting a “Memory Stick”

Notes
- A “Memory Stick” formatted with a computer cannot be guaranteed on the Video Communication System. Make sure to use a “Memory Stick” that has been formatted with this system.
- If you format a “Memory Stick”, all data, including the still images and Phone Book, will be lost.

To format a “Memory Stick”
Click “Memory Stick Format” in the Image viewer menu. The message “Format a Memory Stick?” appears. When you click “OK”, the “Memory Stick” will be formatted.

Notes
- “Memory Stick Duo” and MEMORY STICK PRO are trademarks of Sony Corporation.
- “Memory Stick” and MEMORY STICK are trademarks of Sony Corporation.
- “MagicGate Memory Stick” and MAGIC GATE are trademarks of Sony Corporation.
- “Memory Stick-ROM” and MEMORY STICK-ROM are trademarks of Sony Corporation.
- “Memory Stick PRO” and MEMORY STICK PRO are trademarks of Sony Corporation.
- “Memory Stick R” and MEMORY STICK R are trademarks of Sony Corporation.

Notes
- Do not attach any other material than the supplied label onto the label space.
- Attach the label so that it does not stick out beyond the labeling position.
- Do not write forcefully on the “Memory Stick Duo” memo area.
- Carry and store the “Memory Stick” in its case.
- Prevent metallic objects or your finger from coming into contact with the metal parts of the connecting section.
- Do not strike, bend, or drop the “Memory Stick.”
- Do not disassemble or modify the “Memory Stick.”
- Do not allow the “Memory Stick” to get wet.
- Do not use or store the “Memory Stick” in a location that is:
  - extremely hot, such as in a car parked in the sun.
  - under direct sunlight.
  - very humid or subject to corrosive substances.

Formatting a “Memory Stick”
The local display freezes, and a still picture will be sent to the remote party. If you select “Send”, a single image is sent. When transmission is finished, the message “The still image has been sent.” appears. If you select “Continuous Send”, still images are sent continuously. The sending interval depends on the transmission rate and the image type.

To stop “Continuous Send”
Click “Clear”.

To cancel still image display
Click “Clear”.

Saving Still Images

When a “Memory Stick” is inserted beforehand, you can easily store still images sent from the remote party or still images from the local camera on the “Memory Stick”. You can use the saved images for One Touch Dial buttons and Phone Book.

Note
This version does not support the saving of still images to the “Memory Stick”. Support is planned for future version upgrades.

Saving Remote Pictures
Automatically – Automatic Image Capture Feature

The system automatically captures still images of the remote party ten times every five seconds from the beginning of each communication, and saves them in the built-in memory. The still images stored in the memory are retained until the next communication starts or the power of the system is turned off. This feature is activated when the “Memory Stick” is not inserted. Stored images can be used as thumbnail images for One Touch Dial.

Note
If it has taken a long time from dialing to establish the connection, the first captured images may be black. This is not a problem.

Saving Still Images Using the Still Image Menu

1 Display the Still Image menu.
   Click the menu bar display button to bring up the menu selection screen. Then click “Still Image”.

Note
2 Click “Save”.

The picture on the display will be saved on the “Memory Stick” as a still image.

Notes
- This version does not support this function. Support is planned for future version upgrades.
- Do not remove the “Memory Stick” until the data is completely loaded. If you do, the “Memory Stick” may be damaged or the system may cause a malfunction.
- A still image file is saved as a new file. It will not be overwritten.

When the write-protect tab on the “Memory Stick” is set to “LOCK” when you selected “Save” in step 3
The message “Memory Stick write-protected” appears and you cannot save the still image file.

When the memory of the “Memory Stick” is full
The message “Memory Stick full.” appears and you cannot save the still image file.

Image format that can be stored in a “Memory Stick”

File name
The image file is saved under the directory named “\DCIM\100MSDCF” with a file name as “DSCXXXXX.JPG”.

Compression format
This system compresses and records the recorded image data in the JPEG (Joint Photographic Experts Group) format. The file extension is “.jpg”.

Notes
- This system is not compatible with progressive JPEG format data.
- If a folder named with a larger number than 100 exists, the image file is saved in that folder.

Using External Microphone and Headphones

The built-in microphone of the PCS-TL30 is designed for picking up speech from small groups of up to about three people. The optional external microphones PCS-A1 or PCSA-A3 can also be connected.
A pair of headphones or a headset can also be used.

Notes
- The built-in microphone is disabled when an external microphone is connected.
- The built-in speakers are disconnected when headphones are connected.

Notes on installation of the microphones
- Install an external microphone more than 1 m (3.3 feet) away from this system.
- Keep the microphone about 50 cm (19 3/4 inches) away from the participants.
- Place the microphone in a quiet, echo-free location.
- Install microphones away from equipment that may cause noise.
- Avoid covering a microphone with paper, etc., or moving it. If you do either, extreme noise and echo may be heard temporarily by the remote party.
Controlling the Remote System With Tone Signals - DTMF Transmission

When dialing, tone signals (DTMF: Dual Tone Multi Frequency) assigned to the numbers for (0-9,#,*) can also be sent. Some systems are designed to allow remote control using these tones.

1. Press and hold the (menu) button for 3 seconds during a communication session.
   The DTMF soft keyboard appears on the display.

2. Click the numbers buttons that you want to send (0-9,#,*).
   When you click a button, the corresponding tone signal is transmitted to the remote party.

3. To stop transmitting tone signals, click “Close”.
   The DTMF soft keyboard disappears.

Accessing the Video Communication System

The following controls are available to access the Video Communication System. For details on each control, consult your Sony dealer.

Using a Web Browser

Accessing the IP address of the Video Communication System from a Web browser allows you to control or set up the System.
To permit accessing the Terminal, set “Web Access” to “Enabled” in the Administrator Setup Menu (page 29).

Note

This version does not support this function. Support is planned for future version upgrades.

For details on the password to access or Web monitoring feature, see “Administrator Setup Menu” on page 29.

Using Telnet

Accessing the IP address of the Video Communication System from Telnet allows you to control or set up the System.
To permit accessing the Terminal, set “Web Access” to “Enabled” in the Administrator Setup Menu (page 29).

For details on the password to access or Web monitoring feature, see “Administrator Setup Menu” on page 29.
This chapter shows you how to use the optional Data Solution Module PCSA-DSM1 to incorporate the screen display data of a computer or similar into a videoconference.

The optional Data Solution Module PCSA-DSM1 is designed for internal installation in the PCS-TL30. It allows sending the pictures or text data displayed on a computer connected to the PCS-TL30 to the remote party in a videoconference. You can also connect a projector to the Data Solution Module and display a high-resolution computer screen image sent by the remote party at the local site.

Even if no Data Solution Module is installed or if another videoconferencing system such as PCS-1/1P, PCS-11/11P, PCS-TL50, PCS-G50/G50P, PCS-G70/G70P, or PCS-1600 is used, the receiving party can view the computer images sent from the other party. However, the quality of the picture received will vary depending on the components of the system. If the Data Solution Module is installed, a higher frame rate (number of frames per second) is possible, which allows viewing high-resolution moving images from a computer.

For details on picture quality depending on the system configuration, see “Picture quality of the Data Solution Module” on page 63.

For details on RGB signal input/output specifications, see the section “Acceptable RGB Input/Output Signals” on page 87.

**Note on the camera picture when using the Data Solution Module**

When transmitting or receiving a signal via the Data Solution Module, the camera picture quality may become temporarily worse, due to the lower number of frames.

---

**Installing the Data Solution Module**

- Be sure to turn the power to all components off before starting the installation.
- When the Data Solution Module has been connected and is used for the first time, the Video Communication System may automatically upgrade the software of the Data Solution Module. While the upgrading message is displayed, never turn off the Video Communication System, to prevent the possibility of serious system damage.

1. Remove the rear cover.
   Pull the cover off towards you.

2. Remove the DSM connector cover.
3 Connect the system connector of the Data Solution Module to the DSM connector of the PCS-TL30 and secure with fastening screws.

4 Replace the rear cover of the PCS-TL30.

Push the cover in while aligning the four stubs.
Connection Example Using the Data Solution Module

Notes

- Before making any connections, be sure to turn power to all components off.
- To prevent damage to the unit, do not connect or disconnect any cable while power to the unit is turned on.
Notes on the connection example
- Power to the Data Solution Module is supplied by the Video Communication System.
- Connecting a projector or similar to the RGB OUT connector of the Data Solution Module enables the following features:
  - Displaying the received computer picture with optimum picture quality
  - Transmitting the picture of a locally connected computer to the remote party

Using Video from Connected Equipment for a Conference

Operating the System During a Conference

To transmit a picture from a computer
Click the (Send) button. The computer picture is displayed on a projector connected to the RGB OUT connector and on the Video Communication System, and it is also transmitted to the remote party.
To stop the transmission, click the same (stop) button.

The computer picture displayed on a projector and on the Video Communication System is the image as input to the Data Solution Module. However, the image transmitted to the remote party may be lacking in detail and may have dropped frames.

For details on picture quality, see “Picture quality of the Data Solution Module” on page 63.

Note
While you are transmitting a computer picture, you cannot receive a still image or a computer picture from any other terminal. Ending your transmission enables you to receive it. While you are receiving a still image or computer picture from any other terminal, you cannot transmit a computer picture.
**Picture quality of the Data Solution Module**

The picture quality received by the remote party varies depending on the type of terminal and connecting method, and the "Monitor Out (or Sub Monitor Out)" settings at the remote site. Using a Data Solution Module also on the remote site enables reception of a high-quality computer picture with a higher frame rate.

### When the PCS-TL30 is used as a receiving terminal

<table>
<thead>
<tr>
<th>Data Solution Module attached</th>
<th>Resolution</th>
<th>Video frame rate</th>
<th>Picture quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>No (Display on the PCS-TL30)</td>
<td>☐</td>
<td>☐</td>
<td>Outputs the signal by converting a transmitted VGA, SVGA or XGA signal into an XGA signal. The high-resolution picture can be obtained. The number of frames displayed per second depends on the interface transmission rate. For example, one frame per second is obtained.</td>
</tr>
<tr>
<td>Yes</td>
<td>☐</td>
<td>☐</td>
<td>Outputs the signal by converting a transmitted VGA, SVGA or XGA signal into an XGA signal. The high-resolution picture can be obtained. You can view a more vivid picture than the picture output from the display on the Video Communication System. The number of frames displayed per second depends on the interface transmission rates. For example, five frames per second are obtained at 1 Mbps.</td>
</tr>
</tbody>
</table>

**Note**

Three frames per second are obtained for a transmitted XGA signal.

<table>
<thead>
<tr>
<th>Output connector for a computer picture on receiving terminal</th>
<th>Resolution</th>
<th>Video frame rate</th>
<th>Picture quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display on the PCS-TL50</td>
<td>☐</td>
<td>☐</td>
<td>Outputs the signal by converting a transmitted VGA, SVGA or XGA signal into an XGA signal. The high-resolution picture can be obtained. The number of frames displayed per second depends on the interface transmission rate. For example, one frame per second is obtained.</td>
</tr>
<tr>
<td>RGB OUT on the PCSA-DSB1S (only when the PCSA-DSB1S is enabled)</td>
<td>☐</td>
<td>☐</td>
<td>Outputs the signal by converting a transmitted VGA, SVGA or XGA signal into an XGA signal. The high-resolution picture can be obtained. You can view more vivid picture than the picture output from the RGB OUT connector on the Video Communication System. The number of frames displayed per second depends on the interface transmission rates. For example, five frames per second are obtained at 1 Mbps.</td>
</tr>
</tbody>
</table>

**Note**

Three frames per second are obtained for a transmitted XGA signal.

☑️: High, ☐: Middle, △: Low
When the PCS-1/1P, PCS-G70, or PCS-G50 is used as a receiving terminal

<table>
<thead>
<tr>
<th>Monitor used to display the picture of the Data solution Box</th>
<th>Output connector for a computer picture on receiving terminal</th>
<th>Resolution</th>
<th>Video frame rate</th>
<th>Picture quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIDEO OUT 1 or VIDEO OUT 2</td>
<td>VIDEO OUT 1 or VIDEO OUT 2 on the PCS-PG50/PG50P</td>
<td>○</td>
<td>○</td>
<td>Outputs the signal by converting a transmitted VGA, SVGA or XGA signal into a 4CIF signal. The original high-resolution picture cannot be obtained and details cannot be clearly seen. The number of frames displayed per second depends on the interface transmission rate. For example, one frame per second is obtained at 1 Mbps.</td>
</tr>
<tr>
<td>RGB OUT</td>
<td>RGB OUT on the PCS-PG50/PG50P</td>
<td>○</td>
<td>○</td>
<td>Outputs the signal by converting a transmitted VGA, SVGA or XGA signal into an XGA signal. The high-resolution picture can be obtained. The number of frames displayed per second depends on the interface transmission rate. For example, one frame per second is obtained at 1 Mbps.</td>
</tr>
<tr>
<td>DSB</td>
<td>RGB OUT on the PCSA-DSB1S (only when the PCSA-DSB1S is enabled)</td>
<td>○</td>
<td>○</td>
<td>Outputs the signal by converting a transmitted VGA, SVGA or XGA signal into an XGA signal. You can view more vivid picture than the picture output from the RGB OUT connector on the Communication Terminal. The number of frames displayed per second depends on the interface transmission rates. For example, five frames per second is obtained at 1 Mbps (three frames per second with a XGA transmission).</td>
</tr>
</tbody>
</table>

@: High, ○: Middle, △: Low

For the settings for output of the picture from each output connector, see the Operating Instructions supplied with the PCS-1/1P, PCS-G70, or PCS-G50.

When the PCS-11/11P is used as a receiving terminal

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Video frame rate</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>○</td>
<td>○</td>
<td>Outputs the signal by converting a transmitted VGA, SVGA or XGA signal into a 4CIF signal. The original high-resolution picture cannot be obtained and details cannot be clearly seen. The number of frames displayed per second depends on the interface transmission rate. For example, one frame per second is obtained at 1 Mbps.</td>
</tr>
</tbody>
</table>

@: High, ○: Middle, △: Low

When other videoconferencing system such as the PCS-1600 is used

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Video frame rate</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>○</td>
<td>△</td>
<td>Sends and receives the pictures in 4CIF, and the original high-resolution picture cannot be obtained and detailed portion cannot be clearly seen. The number of frames displayed per second depends on the interface transmission rates. For example, one frame per several seconds is obtained.</td>
</tr>
</tbody>
</table>

@: High, ○: Middle, △: Low
When confidentiality is required for a videoconference or a videoconference is held via the Internet, the Video Communication System enables transmission and reception of encrypted video, audio, and data. Conducting a videoconference using this feature is known as an encrypted videoconference via LAN.

This chapter describes how to conduct an encrypted videoconference via LAN.

The capability to conduct an encrypted videoconference via LAN is available only when using two PCS-TL30 units, or when the remote party uses a Sony Video Communication System PCS-1, PCS-11, PCS-TL50, PCS-G50, or PCS-G70, or when the remote party uses videoconferencing equipment from other manufacturers supporting H.235 encryption.

The encryption feature can also be used in multipoint videoconference using LAN connection (including cascade connection via LAN).

Note

In an encrypted conference only video signals, audio signals, and computer picture data are encrypted. Camera control signals (for controlling the remote party’s camera) and whiteboard pictures will not be encrypted.

Preparing for an Encrypted Videoconference via LAN

To start an encrypted videoconference, you must set the “Encryption via LAN” item to “On” in the Network (LAN) Setup menu.

1. Access the Network (LAN) Setup menu and set “Encryption via LAN” to “On”.

2. Select “Encryption Protocol” and “Connectivity Method”, and enter a password using 13 to 20 alphanumeric characters or symbols in the “Encryption Password” field.

For details on how to make settings, see “Network Setup Menu” on page 25.

Notes

- When the “Encryption Protocol” is set to “Standard Encryption”, no password is necessary.
- If you set “Encryption via LAN” to “On” with encryption given priority, you cannot connect to a terminal that is not equipped with the encryption feature, to a terminal with “Encryption via LAN” set to “Off”, or to a terminal without the same password as that of your system.
Starting an Encrypted Videoconference via LAN

You can start an encrypted videoconference by calling a remote party in the same manner as a daily videoconference.

During an encrypted videoconference via LAN, either the or icon is displayed on the screen. The icon appears when “SONY” is set as the signal encryption method, and appears when it is set to “Standard”.

Note

When no icon is displayed on the screen, transmission and reception data will not be encrypted. Be sure to confirm that an icon is displayed before starting an encrypted videoconference.

When the encrypted videoconference via LAN is disabled

If the following message appears when you call a remote party, an encrypted videoconference via LAN is not available.

<table>
<thead>
<tr>
<th>Error Messages</th>
<th>Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The encryption feature on a far-end system is disabled.</td>
<td>The encryption feature via LAN on the remote system is disabled.</td>
</tr>
<tr>
<td>The entered password for the encryption feature is not correct.</td>
<td>The password entered on the remote system is not the same as that on the local system.</td>
</tr>
</tbody>
</table>
This chapter describes how to conduct a videoconference using SIP (Session Initiation Protocol). SIP is a protocol to start communication via a network standardized by IETF (Internet Engineering Task Force).
For conducting a videoconference with an IP phone using SIP, installation of the optional PCSA-SP1 SIP software in this system and connection via a SIP server are required.

Restrictions on the use of the SIP software
- The settings in the Setup menu are disabled during an SIP connection.
- The remote camera cannot be controlled during a videoconference using SIP.
- An SIP connection cannot be established when “Encryption via LAN” is set to “On” and “Standard” is selected as the signal encryption method.
Connection Examples for a Videoconference Using SIP

Connection Example for Point-to-Point Videoconference

Connect the Video Communication System in which the optional PCSA-SP1 SIP software has been installed to an IP phone and a SIP server via a hub.

![Connection Diagram]

- PCSA-SP1 SIP software
- PCS-TL30
- SIP server
- 100BASE-TX/10BASE-T
- UTP cable (category 5, straight, commercially available)
- Hub
- LAN
- IP phone

Connect the Video Communication System in which the optional PCSA-SP1 SIP software has been installed to an IP phone and a SIP server via a hub.
Preparing for a Videoconference Using SIP

Installing the SIP Software

Notes on installing the SIP software
You cannot install the software if the write-protect tab on the “Memory Stick” in which the SIP software is stored is set to “LOCK”.
• Once the SIP software is installed in the Video Communication System, the software will not be used again.
• You cannot install the SIP software which is copied to another “Memory Stick” with a computer, etc.

1 Turn the power off.

2 Insert the “Memory Stick” containing the PCSA SP1 SIP software into the Memory Stick slot.
Insert the “Memory Stick” in the direction of the arrow on it.

3 Turn the power on.
The SIP software is installed in this System.

Making Settings for SIP

You can set items regarding a videoconference using SIP under “SIP Setup” in the Network Setup menu.

1 On page 1 of “SIP Setup” on the Network Setup menu, set the “SIP Server Mode” item to “On”.

Note
The “SIP Setup” item on the Network Setup menu appears only when SIP software has been correctly installed.

2 Enter the address and SIP domain name for the SIP server that is being used (proxy server or registrar server).

Note
Make the settings for any other items as well, as required.

3 On page 2 of the Network (SIP) Setup menu, enter the “Registered User Name” and “Password”.

4 Select “Save”.
The status of the synchronization with the SIP server is displayed.
Registration Confirmed: The synchronization with the SIP server is established.
Registration Failed: The synchronization with the SIP server failed.

For details on how to make settings, see “Network Setup Menu” on page 25.
Registering Remote Parties in the Phone Book

The basic procedure for registration is the same as the registration of a remote party for a point-to-point videoconference. For details, see “Registering a New Remote Party” on page 34.

Starting a Videoconference Using SIP

Calling Remote Parties

To call a remote party using One Touch Dial

The basic procedure is the same as that for a normal point-to-point videoconference. Move the mouse cursor to the desired remote party in the One Touch Dial list and click “Dial”.

The system begins dialing the selected remote party and “Dialing” appears on the display. When the system connects to the system on the remote site, the message “Meeting starts!” appears on the display.

For details, see “Calling a Remote Party Using One Touch Dial” on page 42.

To call a remote party registered in the Phone Book

The basic procedure is the same as that for a normal point-to-point videoconference. In the Phone Book menu, move the mouse cursor to the desired remote party and click .

The system begins dialing the selected party and the indication “Dialing” appears on the display. When the connection to the remote party is established, the message “Meeting starts!” appears on the display.

For details of the procedure, see “Calling a Remote Party Registered in the Phone Book” on page 43.
To call a remote party not registered in the Phone Book

The basic procedure is the same as for a normal point-to-point videoconference.
Enter the address of a remote party in the input text box, and click the button.

Note

Make sure “SIP Server Mode” is set to “On” in SIP Setup.

Possible address formats for connection via SIP are as follows:

- 4000 (number assigned by the SIP server)
- 4000@sip.com
- 192.168.1.1 (IP address)

Some SIP servers do not support the IP address format. Check which address formats are supported by your SIP server.

The system begins dialing the selected party and the indication “Dialing” appears on the display. When the connection to the remote party is established, the message “Meeting starts!” appears on the display.

For details of the procedure, see “Calling a Remote Party by Entering the IP Address in the Launcher Menu” on page 43.

Receiving a Call from a Remote Party

Operations are the same as those for a point-to-point videoconference.

For details, see “Answering a Call from a Remote Party” on page 44.

Ending a Videoconference

The basic procedure is the same as that for a normal point-to-point videoconference.

1 Click the (Disconnect) button.

The indication “Disconnect?” appears on the display.

2 Click “OK”.

For details, see “Ending the Conference” on page 45.
When you are not conducting a videoconference, you can use the display of the Video Communication System as a computer display. This chapter describes the use of the Video Communication System other than as a videoconference terminal.

## Using as Computer Display

By connecting the Video Communication System to a computer, you can view the picture from a computer on the display of the system.

### Connecting to a Computer

Remove the rear cover of the Video Communication System and connect a computer.

_For removing the rear cover, see page 14._

When a computer is connected, you can either use a separate mouse for the PCS-TL30 and the computer, or you can link the PCS-TL30 and the computer using a USB cable (commercially available) and control both devices with the same mouse.

**Note**

Use a USB cable that is 3 m (10 ft.) or shorter.
Separate mouse

Video Communication System PCS-TL30

To mouse port

To RGB IN connector
Cable with 15-pin mini D-sub connector (commercially available)

To RGB output

Audio cable with stereo mini plug (commercially available)

To audio output

Computer

Shared mouse

Video Communication System PCS-TL30

To mouse port

To RGB IN connector
USB cable (commercially available) *

To PC port
Cable with 15-pin mini D-sub connector (commercially available)

To USB port

Audio cable with stereo mini plug (commercially available)

To RGB output

To audio output

Computer

* Use a USB cable that is 3 m (10 ft.) or shorter.
Displaying the Picture from the Computer

1. Press the \( \text{PC} \) button on the PCS-TL30.

   The display is switched to the computer screen. When PC display is selected, the speakers of the PCS-TL30 reproduce the sound from the computer in stereo (if an audio connection has been established).

2. Use the \( \text{Volume} \) buttons on the PCS-TL30 to adjust the volume of the computer sound.

3. Adjust the image quality.

   For details on the adjustment, see “Display Setup Menu” on page 33.

Displaying the Picture from the Computer during a Videoconference

If you receive a call or make a call when you are viewing the computer picture on the display, the system automatically enters the Picture-in-Picture mode and the video from the remote party is displayed as a window picture. The Screen Layout Setup menu lets you select an appropriate display mode for the videoconference.

For details on selecting the display mode, see “Switching the display” on page 51.
Switching Between Videoconference Display and Computer Display

You can use the (Menu) button, (PC) button, and (Videoconference) button at the bottom right of the unit to switch between the videoconference screen and computer screen display.

Notes

- When the PCS-TL30 is not connected to a computer, pressing the (PC) button to switch to computer display will disable the mouse.
- If a sub-picture is being displayed during a communication session, the sub-picture will remain visible also when you switch to computer display. However, the video shown on the sub-picture will be either from the remote system or the local system.
- When a separate mouse is being used for the PCS-TL30 and for the computer, the currently active mouse will depend on the current display screen. While the normal computer screen is displayed, the mouse connected to the computer is active. When other screens are displayed, the mouse connected to the PCS-TL30 is active.
Calling a Remote Party or Receiving a Call at the PC Screen

Calling a remote party while PC screen is shown

While a computer image is shown on the display of the PCS-TL30, calling a remote party is not possible. You must first switch to the videoconference screen by pressing the \( \text{[Videoconference]} \) button on the unit.

For details on calling a remote party, see “Starting a Conference by Calling a Remote Party” on page 39.

Receiving a call while PC screen is shown

When a call from a remote party is received, the procedure differs depending on whether Auto Answer or Manual Answer has been selected.

Auto Answer mode
The system automatically receives the call from the remote party and the videoconference begins. However, screen display settings cannot be changed at the PC screen. Press the \( \text{[Videoconference]} \) or \( \text{[Menu]} \) button on the unit to switch to the videoconference screen.

Manual mode
When there is an incoming call, a ringer tone sounds. You need to connect the call manually to start the conference, but this procedure is not possible at the PC screen. Press the \( \text{[Videoconference]} \) or \( \text{[Menu]} \) button on the unit to switch to the videoconference screen, and then perform the steps to connect the call.

For details on answering a call, see “Answering a Call from a Remote Party” on page 44.
## Appendix

### Indicators

The following indicators are displayed during videoconferences.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Still image being sent" /></td>
<td>Still image being sent</td>
</tr>
<tr>
<td><img src="image" alt="Still image being received" /></td>
<td>Still image being received</td>
</tr>
<tr>
<td><img src="image" alt="Whiteboard data being received" /></td>
<td>Whiteboard data being received</td>
</tr>
<tr>
<td><img src="image" alt="DSM data being sent or received" /></td>
<td>DSM data being sent or received</td>
</tr>
<tr>
<td><img src="image" alt="Videoconference being held with standard encryption" /></td>
<td>Videoconference being held with standard encryption</td>
</tr>
<tr>
<td><img src="image" alt="Videoconference being held with SONY encryption" /></td>
<td>Videoconference being held with SONY encryption</td>
</tr>
<tr>
<td><img src="image" alt="Local video being transmitted" /></td>
<td>Local video being transmitted</td>
</tr>
<tr>
<td><img src="image" alt="Shows the line status. When the line is congested, the picture or sound may be disrupted." /></td>
<td>Shows the line status. When the line is congested, the picture or sound may be disrupted.</td>
</tr>
<tr>
<td><img src="image" alt="Shows the microphone input level." /></td>
<td>Shows the microphone input level.</td>
</tr>
</tbody>
</table>
On Screen Messages

Check the following if a message appears on the display when operating the Video Communication System.

<table>
<thead>
<tr>
<th>Message</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now obtaining an IP address via DHCP.</td>
<td>The IP address of your system is assigned automatically by the DHCP server. If the assignment is not successful, check the LAN settings.</td>
</tr>
<tr>
<td>Configure the DNS address or use the IP address to dial.</td>
<td>Enter a DNS address or enter the IP address of the remote party.</td>
</tr>
<tr>
<td>Access to the DNS server has failed. Check the PPPoE DNS settings.</td>
<td>Connection to the DNS server could not be established. Check the PPPoE DNS server settings.</td>
</tr>
<tr>
<td>Cannot access the DNS server. Use the IP address to dial.</td>
<td>Domain name connection could not be established. Enter the IP address of the remote party to connect.</td>
</tr>
<tr>
<td>Connection to the remote party via DNS disabled. Dial using IP address.</td>
<td>Domain name connection could not be established. Enter the IP address of the remote party to connect.</td>
</tr>
<tr>
<td>The LAN cannot be used.</td>
<td>You cannot use the LAN connection for some reason. Check for correct cable connections and verify that the LAN link LED indicators are lit. Also check the network settings.</td>
</tr>
<tr>
<td>Communication via LAN is not available. Check LAN connection.</td>
<td>Check for correct cable connections and verify that the LAN link LED indicators are lit.</td>
</tr>
<tr>
<td>LAN configuration error. Diffserve exceeds the maximum value.</td>
<td>Set the Diffserve item in the LAN Setup menu to a value between 0 and 64.</td>
</tr>
<tr>
<td>LAN configuration error. IP Precedence exceeds the maximum value.</td>
<td>Set the IP Precedence item in the LAN Setup menu to a value between 0 and 7.</td>
</tr>
<tr>
<td>LAN configuration error. NAT Mode is set to On. Check the NAT address.</td>
<td>LAN connection via NAT is enabled. Check the NAT address.</td>
</tr>
<tr>
<td>LAN configuration error. An address different from the NAT router is specified. Check the NAT address.</td>
<td>Enter the correct NAT address from the LAN Setup menu.</td>
</tr>
<tr>
<td>LAN configuration error. PPPoE is set to On. Check the PPPoE User Name and Password.</td>
<td>The LAN connection is set to use PPPoE. A user name and password must be set.</td>
</tr>
<tr>
<td>LAN configuration error. Fixed IP for PPPoE is set to ON. Check the PPPoE Fixed IP Address.</td>
<td>Connection is set to use a fixed IP address for PPPoE. Enter the correct fixed IP address for PPPoE.</td>
</tr>
<tr>
<td>LAN configuration error. (Gatekeeper error) Check LAN configuration.</td>
<td>Gatekeeper settings are not appropriate.</td>
</tr>
<tr>
<td>LAN configuration error. Gatekeeper Mode is set to On. Enter the gatekeeper address.</td>
<td>LAN connection via gatekeeper is enabled. Enter the gatekeeper address.</td>
</tr>
<tr>
<td>LAN configuration error. Unauthorized NAT address is specified. Check the NAT address.</td>
<td>The entered NAT address is not valid. Enter the correct NAT address.</td>
</tr>
<tr>
<td>LAN configuration error. Unauthorized network mask is set.</td>
<td>The subnet mask setting is invalid.</td>
</tr>
<tr>
<td>LAN configuration error. Connection is not complete as the port number overlaps.</td>
<td>Connection to the remote party could not be established. Check whether there is a conflict (overlap) between the “TCP port number” and “UDP port number” setting in the LAN Setup menu.</td>
</tr>
<tr>
<td>LAN configuration error. Connection is not complete as an invalid port number is specified.</td>
<td>Connection to the remote party could not be established. Check the “TCP port number” and “UDP port number” setting in the LAN Setup menu.</td>
</tr>
<tr>
<td>Upgrading the LCD driver software. Please wait.</td>
<td>The LCD software version is being upgraded. Do not turn power off until the upgrade process is completed.</td>
</tr>
<tr>
<td>Message</td>
<td>Meaning</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>PPPoE server admission fails. Dial again after confirmation of the PPPoE settings.</td>
<td>Connection to the PPPoE server could not be established. Check the various PPPoE settings and dial again.</td>
</tr>
<tr>
<td>Connection to the PPPoE server fails.</td>
<td>Check the DNS server settings.</td>
</tr>
<tr>
<td>The system is connecting to a LAN via PPPoE.</td>
<td>The system is connecting to a LAN via PPPoE.</td>
</tr>
<tr>
<td>PPPoE server authentication has failed.</td>
<td>Enter the correct password.</td>
</tr>
<tr>
<td>Connection using SIP is not available. 4xx response received.</td>
<td>Connection could not be established for example because the remote party uses media not supported by the PCS-TL30.</td>
</tr>
<tr>
<td>Connection using SIP is not available. 5xx response received.</td>
<td>Connection could not be established for example because of a SIP server error. Check the SIP server.</td>
</tr>
<tr>
<td>Connection using SIP is not available. 6xx response received.</td>
<td>Connection could not be established for example because the remote party could not be found. Check the number etc. of the remote party.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Rejection received.</td>
<td>Connection could not be established because the remote party rejected the connection.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Canceled by the remote site.</td>
<td>Connection could not be established because the remote party canceled the procedure.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Disconnected by the remote site.</td>
<td>Connection could not be established because the remote party canceled the procedure.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Encrypted conference via LAN not available.</td>
<td>When LAN encryption is enabled, a SIP connection cannot be established.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Maximum presences over.</td>
<td>Connection could not be established because the number of presences was exceeded.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Provisional response timeout.</td>
<td>Connection could not be established because after sending there was no response from the remote party within the prescribed period.</td>
</tr>
<tr>
<td>Connection using SIP is not available. System call error.</td>
<td>Connection could not be established because of a system problem.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Initialization error.</td>
<td>Connection could not be established because of an initialization problem.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Unauthorized status.</td>
<td>Connection could not be established because of an undefined error.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Server internal error.</td>
<td>Connection could not be established because of an internal error.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Network error.</td>
<td>Connection could not be established because there is a network problem. Check the condition of the network.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Line is busy.</td>
<td>Connection could not be established because the line of the remote party is busy.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Parameter error.</td>
<td>Connection could not be established because of wrong settings. Check the settings on the SIP Setup menu etc.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Unauthorized handle.</td>
<td>Connection could not be established because of an internal error.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Undefined error.</td>
<td>Connection could not be established because of an undefined error.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Memory over.</td>
<td>Connection could not be established because of insufficient memory in the PCS-TL30.</td>
</tr>
<tr>
<td>Connection using SIP is not available. Request timeout.</td>
<td>Connection could not be established because there was no response from the remote party within the prescribed period.</td>
</tr>
<tr>
<td>The remote party rejects answering.</td>
<td>Check the settings of the remote party.</td>
</tr>
<tr>
<td>The encryption feature on a far-end system is disabled.</td>
<td>When attempting to start a videoconference using LAN encryption, it is not possible to connect if LAN encryption on the remote system is not turned on.</td>
</tr>
<tr>
<td>The encryption feature on a far-end system is enabled.</td>
<td>When attempting to start a normal videoconference without encryption, it is not possible to connect if LAN encryption on the remote system is turned on.</td>
</tr>
<tr>
<td>The far-end system is not compatible with the encryption feature.</td>
<td>When attempting to start a videoconference using LAN encryption, it is not possible to connect if the remote system does not support LAN encryption.</td>
</tr>
<tr>
<td>Message</td>
<td>Meaning</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The remote terminal may not be registered in gatekeeper. Contact the</td>
<td>Contact the gatekeeper administrator regarding registration of the remote party administrator.</td>
</tr>
<tr>
<td>gatekeeper administrator.</td>
<td></td>
</tr>
<tr>
<td>Call not responded.</td>
<td>Check connections of videoconferencing equipment at the remote party.</td>
</tr>
<tr>
<td>The entered password for the encryption feature is not correct.</td>
<td>Enter the correct password.</td>
</tr>
<tr>
<td>At least thirteen characters are required as a password for the</td>
<td>The password required for conducting videoconference using LAN encryption feature must be between 13 and 20 characters long.</td>
</tr>
<tr>
<td>encryption feature.</td>
<td></td>
</tr>
<tr>
<td>Temperature is abnormal. The power will turn off.</td>
<td>The system is shutting down because abnormal temperature was detected.</td>
</tr>
<tr>
<td>Check the line interface or the IP address is set correctly.</td>
<td>Check whether the line type and IP address settings in the LAN Setup menu are correct.</td>
</tr>
<tr>
<td>No camera device is detected.</td>
<td>The camera could not be detected for some reason.</td>
</tr>
<tr>
<td>GateKeeper error.</td>
<td>Check the remote party address.</td>
</tr>
<tr>
<td>Gatekeeper does not respond.</td>
<td>Check the gatekeeper settings.</td>
</tr>
<tr>
<td>Gatekeeper does not respond.</td>
<td>User name and user number were entered, but the call could not proceed. Contact the gatekeeper administrator or enter the IP address of the remote party and retry the call.</td>
</tr>
<tr>
<td>Connection has been rejected as the data exceeds the bandwidth of a</td>
<td>The connection requirements exceed the bandwidth limitations of the gatekeeper.</td>
</tr>
<tr>
<td>gatekeeper.</td>
<td></td>
</tr>
<tr>
<td>Gatekeeper registration error. Check LAN configuration.</td>
<td>Contact the gatekeeper administrator for information about gatekeeper registration for the remote party terminal.</td>
</tr>
<tr>
<td>No more entries can be registered.</td>
<td>The maximum number of entries for the Phone Book has been reached.</td>
</tr>
<tr>
<td>The system will be reset.</td>
<td>The system is restarting.</td>
</tr>
<tr>
<td>IP address does not exist, or the system is turned off.</td>
<td>Connection to the remote party could not be established. Check whether the specified IP address is correct, or have the remote party turn the power on.</td>
</tr>
<tr>
<td>Please wait.</td>
<td>Data are being saved.</td>
</tr>
<tr>
<td>Dialing your own number is invalid.</td>
<td>Check the address for the remote party.</td>
</tr>
<tr>
<td>Now upgrading. Wait for a while. Be sure not to turn off your system</td>
<td>The software version of a camera device, LCD, or other equipment is being upgraded. Do not turn power off until the upgrade process is completed.</td>
</tr>
<tr>
<td>while upgrading.</td>
<td></td>
</tr>
<tr>
<td>Still image saved to Memory Stick.</td>
<td>The still image was saved on the “Memory Stick”.</td>
</tr>
<tr>
<td>The still image has been sent.</td>
<td>Still image data were sent.</td>
</tr>
<tr>
<td>Incorrect still image format. Progressive JPEG is not supported.</td>
<td>A JPEG file on the “Memory Stick” could not be decoded. The Progressive JPEG format is not supported.</td>
</tr>
<tr>
<td>A still image is being sent or received. The Data Solution Module (DSM)</td>
<td>Wait until still image transmission is completed before using the Data Solution Module (DSM).</td>
</tr>
<tr>
<td>cannot be used.</td>
<td></td>
</tr>
<tr>
<td>Still image transmission canceled.</td>
<td>The still image transmission was canceled.</td>
</tr>
<tr>
<td>The still images were not sent.</td>
<td>The still image sending attempt failed.</td>
</tr>
<tr>
<td>The software upgrade is complete. The system will now restart.</td>
<td>The software upgrading process has completed normally.</td>
</tr>
<tr>
<td>Input title.</td>
<td>Enter an index title.</td>
</tr>
<tr>
<td>Network congestion: Try again later.</td>
<td>Available bandwidth is limited due to network congestion.</td>
</tr>
<tr>
<td>The network is heavily congested at the moment. Some pictures may</td>
<td>Data losses are occurring due to heavy network traffic. Video/audio quality may be impaired.</td>
</tr>
<tr>
<td>appear distorted.</td>
<td></td>
</tr>
<tr>
<td>Adjusting the white balance. Please wait.</td>
<td>The white balance is being adjusted. When canceled, the message will disappear, but the camera adjustment process is not canceled.</td>
</tr>
<tr>
<td>The Data Solution Module (DSM) cannot be used.</td>
<td>The Data Solution Module cannot be used.</td>
</tr>
<tr>
<td>The power will turn off. Please wait.</td>
<td>The system is shutting down.</td>
</tr>
<tr>
<td>Message</td>
<td>Meaning</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Name is not translated to IP address (DNS error). Check LAN configuration.</td>
<td>Check the DNS settings.</td>
</tr>
<tr>
<td>Reference to DNS has failed. Check LAN configuration.</td>
<td>When using a domain name server, the name for the remote party was entered, but LAN connection could not be established. Enter the IP address and dial again.</td>
</tr>
<tr>
<td>Now upgrading. Wait for a while.</td>
<td>The LCD software version is being upgraded. Do not turn power off until the upgrade process is completed.</td>
</tr>
<tr>
<td>Wrong password.</td>
<td>Enter the correct password.</td>
</tr>
<tr>
<td>Check the user name or user number for dialing is correct.</td>
<td>Enter the correct user name and user number.</td>
</tr>
<tr>
<td>Busy line - Connection not possible.</td>
<td>Cannot connect because remote party is busy.</td>
</tr>
<tr>
<td>Your system attempts to connect to other equipment than a videoconferencing system.</td>
<td>Check the number or IP address of the remote party.</td>
</tr>
<tr>
<td>File error.</td>
<td>There is a problem with the file.</td>
</tr>
<tr>
<td>File size error.</td>
<td>The file size allocation is wrong.</td>
</tr>
<tr>
<td>File decode error.</td>
<td>A JPEG file could not be decoded.</td>
</tr>
<tr>
<td>Format error.</td>
<td>The “Memory Stick” could not be formatted.</td>
</tr>
<tr>
<td>Unknown device is connected.</td>
<td>An unknown device has been connected to the mouse port.</td>
</tr>
<tr>
<td>Unknown network error: Try again later.</td>
<td>Try dialing once more.</td>
</tr>
<tr>
<td>Use of the Private Phone Book is available.</td>
<td>A “Memory Stick” containing Private Phone Book data was inserted. The Private Phone Book function can be used.</td>
</tr>
<tr>
<td>Use of the Private Phone Book is not available.</td>
<td>A “Memory Stick” containing Private Phone Book data was removed. The Private Phone Book function can no longer be used.</td>
</tr>
<tr>
<td>Preset 1 (- 6) selected.</td>
<td>Camera angle and zoom has been changed to the settings stored in preset number 1 (- 6).</td>
</tr>
<tr>
<td>Registered to Preset number 1 (- 6).</td>
<td>Camera angle and zoom settings have been stored in preset number 1 (- 6).</td>
</tr>
<tr>
<td>The presentation screen will not be sent.</td>
<td>The current presentation screen cannot be handled by the DSM. Set the PC screen resolution to XGA or lower.</td>
</tr>
<tr>
<td>White balance adjustment will be performed. Press the “Adjust Now” button and wait a few moments.</td>
<td>The white balance can be adjusted manually.</td>
</tr>
<tr>
<td>Microphone is turned off.</td>
<td>The microphone cannot be used.</td>
</tr>
<tr>
<td>Microphone is turned on.</td>
<td>The microphone can be used.</td>
</tr>
<tr>
<td>Mouse detected.</td>
<td>Mouse is connected to the Video Communication System.</td>
</tr>
<tr>
<td>No mouse is detected.</td>
<td>Mouse is not connected or connected to the PC side.</td>
</tr>
<tr>
<td>Meeting ends.</td>
<td>Steps for ending a videoconference were completed successfully.</td>
</tr>
<tr>
<td>Meeting starts!</td>
<td>Connection was established successfully and the videoconference can be started.</td>
</tr>
<tr>
<td>Memory Stick file decode error.</td>
<td>A JPEG file on the “Memory Stick” could not be decoded.</td>
</tr>
<tr>
<td>Memory Stick error.</td>
<td>The “Memory Stick” format is different.</td>
</tr>
<tr>
<td>Memory Stick file error.</td>
<td>The “Memory Stick” file format is different, or the file is damaged.</td>
</tr>
<tr>
<td>Memory Stick file size error.</td>
<td>The “Memory Stick” file size allocation is wrong.</td>
</tr>
<tr>
<td>No Memory Stick.</td>
<td>No “Memory Stick” is inserted.</td>
</tr>
<tr>
<td>Memory Stick write-protected.</td>
<td>Change the position of the LOCK slider on the rear of the “Memory Stick”.</td>
</tr>
<tr>
<td>There are no images recorded in the Memory Stick.</td>
<td>No image files are stored on the Memory Stick.</td>
</tr>
<tr>
<td>Memory Stick full.</td>
<td>There is not enough free capacity on the “Memory Stick”.</td>
</tr>
<tr>
<td>Memory full.</td>
<td>The “Flash Memory” does not have enough free space.</td>
</tr>
<tr>
<td>The cooling fan is malfunctioning.</td>
<td>There is a problem with the cooling fan.</td>
</tr>
<tr>
<td>Registration failed</td>
<td>The synchronization with the SIP server failed.</td>
</tr>
<tr>
<td>Registration Confirmed</td>
<td>The synchronization with the SIP server is established.</td>
</tr>
</tbody>
</table>
# Troubleshooting

If the Video Communication System does not function correctly, check the following:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The power is not turned on.</td>
<td>The power switch is not set to on.</td>
<td>Press the power switch on the right side (page 16).</td>
</tr>
<tr>
<td>The message “The cooling fan is abnormal. The power will turn off.” is displayed and the power of the system turns off.</td>
<td>The cooling fan built in the system has stopped.</td>
<td>Consult your Sony dealer.</td>
</tr>
<tr>
<td>No sound or the volume is very low.</td>
<td>The volume of the System is too low.</td>
<td>Adjust the sound volume by pressing the VOLUME + button on the PCS-TL30 (page 46).</td>
</tr>
<tr>
<td></td>
<td>The microphone on the remote party is turned off.</td>
<td>Ask the remote party to turn on the microphone.</td>
</tr>
<tr>
<td></td>
<td>The microphone or external equipment is not connected correctly.</td>
<td>Check the connection.</td>
</tr>
<tr>
<td>No picture.</td>
<td>The selected picture source is not tuned on.</td>
<td>Turn on the selected video equipment.</td>
</tr>
<tr>
<td></td>
<td>The selected picture source is not correctly connected to the system.</td>
<td>Check the connections.</td>
</tr>
<tr>
<td></td>
<td>A voice meeting is held.</td>
<td>This is not a malfunction.</td>
</tr>
<tr>
<td></td>
<td>Movement of the camera is prevented.</td>
<td>Turn off the Video Communication System, then turn it on again.</td>
</tr>
<tr>
<td></td>
<td>The lens cover is closed.</td>
<td>Slide the lever for lens cover to the right to open the lens cover (page 16).</td>
</tr>
<tr>
<td>No connection.</td>
<td>Wrong number was dialed.</td>
<td>Check the entered number.</td>
</tr>
<tr>
<td></td>
<td>The registered items in the Phone Book are not correct.</td>
<td>Register the party correctly referring to “Registering a Remote Party in the Phone Book” on page 34.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The IP address and network mask are not set correctly.</td>
<td>Set the system settings correctly referring to “Registering Local Information” on page 23.</td>
<td></td>
</tr>
<tr>
<td>The LAN cable is disconnected.</td>
<td>Connect correctly (page 25).</td>
<td></td>
</tr>
<tr>
<td>The LAN cable is connected to the incorrect connector.</td>
<td>Connect correctly (page 14).</td>
<td></td>
</tr>
<tr>
<td>The LAN cable is down.</td>
<td>Replace the cable with a new one.</td>
<td></td>
</tr>
<tr>
<td>The cable exclusively designed for the ISDN connection is used for LAN connection.</td>
<td>Use the cable for LAN connection.</td>
<td></td>
</tr>
<tr>
<td>Incorrect type of cable (cross or straight cable) is used for the LAN connection.</td>
<td>Use the correct type of cable.</td>
<td></td>
</tr>
<tr>
<td>If you repeat plugging/unplugging or turning on/off, you may not connect to the network for a while.</td>
<td>Turn off the power of the system and wait for a few minutes before turning it on again.</td>
<td></td>
</tr>
<tr>
<td>LAN connection timeout.</td>
<td>Try again later.</td>
<td></td>
</tr>
<tr>
<td>Packet for videoconferencing is not acceptable under the current LAN environment.</td>
<td>Consult with the system administrator so that the packet for videoconferencing becomes acceptable under your LAN environment.</td>
<td></td>
</tr>
<tr>
<td>The remote terminal is not turned on.</td>
<td>Ask the remote party to turn on the terminal.</td>
<td></td>
</tr>
<tr>
<td>It takes a long time for the remote party to be able to answer from the standby mode.</td>
<td>Ask the remote party to cancel the standby mode.</td>
<td></td>
</tr>
<tr>
<td>The remote party is in communication with another party.</td>
<td>Call the remote party after they end the communication with another party.</td>
<td></td>
</tr>
</tbody>
</table>
### Precautions

#### Operating or storage location
Avoid operating or storing the system in the following locations:
- Extremely hot or cold places
- Humid or dusty places
- Places exposed to strong vibration
- Close to sources of strong magnetism
- Close to sources of powerful electromagnetic radiation, such as radios or TV transmitters
- Noisy places

#### LCD screen
- Do not expose the LCD screen surface to the sun. Doing so may damage the screen surface.
- Do not push or scratch the LCD screen, or place objects on top of the system. The image may become uneven or the LCD panel may be damaged.
- If the system is used in a cold place, a smear may occur in the picture or the picture may become dark. This does not indicate a failure. These phenomena improve as the temperature rises.
- Ghosting may occur when still pictures are displayed continuously. It may disappear after a few moments.
- The screen and cabinet get warm when the system is in use. This is not a malfunction.

#### LCD display panel
Although the LCD display panel is made with high-precision technology, black dots may appear or bright points of light (red, blue, or green) may appear constantly on the LCD screen. Color stripes and uneven brightness may also appear when you view from specific viewing angles. This is a structural property of the LCD panel and is not a malfunction.

#### Built-in speakers
The speakers generate magnetism. To avoid damaging the data, keep magnetic tapes and disks away from the speakers.

#### Cleaning
- Before cleaning, disconnect the power cord from the AC outlet.
- The LCD screen surface is finished with a special coating. To remove dust from the screen surface, wipe gently with a soft, dry cloth.
- Do not use volatile solvents such as alcohol, benzene or thinners as they may damage the surface finishes.

<table>
<thead>
<tr>
<th>Symptom/Given Information</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No connection.</td>
<td>Answering the call is not permitted by the remote terminal as it is operating for setups, etc.</td>
<td>Ask the remote party to permit answering a call.</td>
</tr>
<tr>
<td>The remote terminal is not set to auto answer mode.</td>
<td></td>
<td>Ask the remote party to set the terminal to auto answer mode, or to answer a call manually.</td>
</tr>
<tr>
<td>There is some problem with the remote terminal.</td>
<td></td>
<td>Try to dial the number of another terminal.</td>
</tr>
<tr>
<td>A message appears on the screen.</td>
<td></td>
<td>See “On Screen Messages” on page 78.</td>
</tr>
<tr>
<td>Still pictures or the Phone Book cannot be saved to the “Memory Stick.”</td>
<td>The write-protect tab on the “Memory Stick” is set to LOCK.</td>
<td>Release the lock (page 54).</td>
</tr>
<tr>
<td>Still pictures or the Phone Book cannot be saved to the “Memory Stick.”</td>
<td>The “Memory Stick” has already been recorded to full capacity.</td>
<td>Use another “Memory Stick.”</td>
</tr>
</tbody>
</table>
• When you use chemical cleaning cloth, observe the instructions that come with it.
• Do not apply volatile solvents such as an insecticide to the screen, or allow rubber or plastic objects to touch to the screen for a long time, as they may damage the surface finishes.

Specifications

PCS-TL30 Video Communication System
This unit is compliant with ITU-T Recommendations H.323 and IETF SIP.

Motion picture
Operating bandwidth
64 kbps to 2048 kbps
Coding
MPEG4 Simple Profile
Picture elements
CIF: 352 pixels × 288 lines
QCIF: 176 pixels × 144 lines

Still Picture
Pixels
704 pixels × 576 lines
Encoding
H.263 (special format of this system)

Sound
Bandwidth
14 kHz (MPEG4 Audio)
7 kHz (G.722 compliant with ITU-T Recommendation)
3.4 kHz (G.711/G.728/G.729 compliant with ITU-T Recommendation)
Transmission rate
64 kbps, 96 kbps (MPEG4 Audio)
56 kbps, 64 kbps (G.711 compliant with ITU-T Recommendation)
48 kbps, 56 kbps, 64 kbps (G.722 compliant with ITU-T Recommendation)
16 kbps (G.728 compliant with ITU-T Recommendation)
8 kbps (G.729 compliant with ITU-T Recommendation)

Network
Multiplexing
Video, audio, data
Frame format
H.225.0 (compliant with ITU-T Recommendation)
Interface
LAN (100BASE-TX/10BASE-T)
LAN protocol supported
HTTP
FTP
Telnet
RTP/RTCP
TCP/UDP
IP
Remote control
Far end camera control
  H.281 (compliant with ITU-T Recommendation)

Camera
Image device  1/3.2 inch color CMOS (total effective pixels: approx. 1.3 million)
Lens  f = 2.3 mm
  F = 1:2.8
  Horizontal angle: approx. 88°
  Vertical angle: approx. 73°
Focal distance 300 mm
Pan/tilt/zoom function  By digital processing
Auto White Balance function built-in
Frame rate  30/15 fps, switches automatically to match ambient illumination

Display
Size  17.1-type wide
Resolution  1280 × 768 (WXGA)
Response time  13 ms or less
Contrast ratio  600 : 1
Angle of view  176 degrees or more
Number of colors  16,700,000 colors

Display controller
PinP  4 corners
PandP  Three windows
Input  Internal: Video Communication
  External RGB: Computer display
Wide mode  Normal, Zoom, Wide
RGB mode  640 × 480, 800 × 600, 1024 × 768, 1280 × 768, etc.
  Display of zoomed picture is possible.

Speaker
Speaker  3 W × 2

Microphone
Frequency range  14 kHz
Directional characteristic  Narrow-angle directional

General
Power requirements  19.5 V
Power consumption  6.15 A
Operating temperature  5°C to 35°C (41°F to 94°F)
Operating humidity  20% to 80%
Storage temperature  −20°C to +60°C (−4°F to +140°F)

Storage humidity  20% to 80% (no condensation)
Dimensions  424 × 376 × 95.5 mm (w/h/d)
  (16 3/4 × 14 7/8 × 3 7/8 inches) (not including the stand)
  424 × 419 × 258 mm (w/h/d)
  (16 3/4 × 16 1/2 × 10 1/4 inches) (including the stand)
Mass  Approx. 8 kg (17 lb 9 oz)

Supplied accessories
  Optical mouse  PCS-RMU1 (1)
  AC adaptor  PCS-AC19V6A or PCGA-AC19V7 (1)
  Power cord (1)
  CD-ROM (1)
  Quick Start Guide (1)
  Warranty booklet (1)

PCS-AC19V6A or PCGA-AC19V7 AC Adaptor
Power requirements  100 to 240 V AC, 50/60 Hz, 1.8 A
Output  19.5 V, 6.15 A
Operating temperature  5°C to 35°C (41°F to 94°F)
Operating humidity  20% to 80%
Storage temperature  −20°C to +60°C (−4°F to +140°F)
Storage humidity  20% to 80% (no condensation)
Dimensions  80 × 40 × 160 mm (w/h/d)
  (3 1/4 × 1 5/8 × 6 3/8 inches)
Mass  Approx. 800 g (1 lb 12 oz)

PCS-A1 Microphone (Optional)
Bandwidth  13 kHz
Directional characteristic  Omnidirectional
Dimensions  74 × 16 × 93 mm (w/h/d)
  (3 × 21/32 × 3 7/8 inches)
Mass  Approx. 170 g (6 oz)

Power Plug in power

PCSA-A3 Microphone (Optional)
Bandwidth  13 kHz
Directional characteristic  Unidirectional
Dimension  68 × 16 × 96 mm (w/h/d)
  (2 3/4 × 21/32 × 3 7/8 inches)
Mass  Approx. 200 g (7 oz)

Power Plug in power
Data Solution Module PCSA-DSM1 (Optional)

Power consumption
20 W max.

Operating temperature
5°C to 35°C (41°F to 94°F)

Operating humidity
20% to 80%

Storage temperature
–20°C to +60°C (–4°F to +140°F)

Storage humidity
20% to 80% (no condensation)

Dimensions
107 × 250 × 34 mm (w/h/d)
(4 1/4 × 9 7/8 × 1 3/8 inches) (not including the projected parts)

Mass
Approx. 550 g (1 lb 3 oz)

Supplied accessories
Quick Start Guide (1)
Warranty booklet (1)

PCSA-SP1 SIP Software (Optional)

Supplied accessories
Serial Number seal (1)
Operating Instructions (1)

Design and specifications are subject to change without notice.

The echo canceller of the Unit has been developed under license from Nippon Telegraph and Telephone Corporation. The Nippon Telegraph and Telephone Corporation also holds the copyright of the echo canceller software.

You may not use or sell the technologies used in the Unit in whole or in part for weapons or making weapons. All rights to software incorporated in the Unit and copies of relevant documentation belong to Nippon Telegraph and Telephone Corporation and Sony. You may not copy, reverse engineer, decompile, disassemble, or modify the technologies incorporated in the Unit.

This product uses Ricoh bitmap fonts produced and marketed by Ricoh Co., Ltd.
## Acceptable RGB Input/Output Signals

### PCS-TL30 Video Communication System (RGB IN)

<table>
<thead>
<tr>
<th>Picture element</th>
<th>Signal format</th>
<th>fH (kHz)</th>
<th>fV (Hz)</th>
<th>Dot clock (MHz)</th>
<th>Sync</th>
</tr>
</thead>
<tbody>
<tr>
<td>640 × 480</td>
<td>VGA mode</td>
<td>31.469</td>
<td>59.94</td>
<td>25.17</td>
<td>H-neg V-neg</td>
</tr>
<tr>
<td></td>
<td>Macintosh 13*</td>
<td>35</td>
<td>66.667</td>
<td>30.24</td>
<td>H-neg V-neg</td>
</tr>
<tr>
<td></td>
<td>VGA VESA 72 Hz</td>
<td>37.861</td>
<td>72.809</td>
<td>31.5</td>
<td>H-neg V-neg</td>
</tr>
<tr>
<td></td>
<td>VGA VESA 75 Hz</td>
<td>37.5</td>
<td>75</td>
<td>31.5</td>
<td>H-neg V-neg</td>
</tr>
<tr>
<td></td>
<td>VGA VESA 85 Hz</td>
<td>43.269</td>
<td>85.008</td>
<td>36</td>
<td>H-neg V-neg</td>
</tr>
<tr>
<td>800 × 600</td>
<td>SVGA VESA 56 Hz</td>
<td>35.156</td>
<td>56.25</td>
<td>36</td>
<td>H-pos V-pos</td>
</tr>
<tr>
<td></td>
<td>SVGA VESA 60 Hz</td>
<td>37.879</td>
<td>60.317</td>
<td>40</td>
<td>H-pos V-pos</td>
</tr>
<tr>
<td></td>
<td>SVGA VESA 72 Hz</td>
<td>48.077</td>
<td>72.188</td>
<td>50</td>
<td>H-pos V-pos</td>
</tr>
<tr>
<td></td>
<td>SVGA VESA 75 Hz</td>
<td>46.875</td>
<td>75</td>
<td>49.5</td>
<td>H-pos V-pos</td>
</tr>
<tr>
<td></td>
<td>SVGA VESA 85 Hz</td>
<td>53.674</td>
<td>85.061</td>
<td>56.25</td>
<td>H-pos V-pos</td>
</tr>
<tr>
<td>1024 × 768</td>
<td>XGA VESA 60 Hz</td>
<td>48.363</td>
<td>60.004</td>
<td>65</td>
<td>H-neg V-neg</td>
</tr>
<tr>
<td></td>
<td>XGA VESA 70 Hz</td>
<td>56.476</td>
<td>70.069</td>
<td>75</td>
<td>H-neg V-neg</td>
</tr>
<tr>
<td></td>
<td>XGA VESA 75 Hz</td>
<td>60.023</td>
<td>75.029</td>
<td>78.75</td>
<td>H-pos V-pos</td>
</tr>
<tr>
<td>1280 × 768</td>
<td>WXGA VESA 60 Hz</td>
<td>47.693</td>
<td>59.992</td>
<td>80.12</td>
<td>H-neg V-pos</td>
</tr>
</tbody>
</table>

* Cannot be transmitted by the Data Solution Module PCSA-DSM1

### Data Solution Module PCSA-DSM1 (RGB IN) (Connector located on PCS-TL30)

<table>
<thead>
<tr>
<th>Picture element</th>
<th>Signal format</th>
<th>fH (kHz)</th>
<th>fV (Hz)</th>
<th>Dot clock (MHz)</th>
<th>Sync</th>
</tr>
</thead>
<tbody>
<tr>
<td>640 × 480</td>
<td>VGA mode</td>
<td>31.469</td>
<td>59.94</td>
<td>25.17</td>
<td>H-neg V-neg</td>
</tr>
<tr>
<td></td>
<td>Macintosh 13*</td>
<td>35</td>
<td>66.667</td>
<td>30.24</td>
<td>H-neg V-neg</td>
</tr>
<tr>
<td></td>
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<td>37.861</td>
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</tr>
<tr>
<td></td>
<td>VGA VESA 75 Hz</td>
<td>37.5</td>
<td>75</td>
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</tr>
<tr>
<td></td>
<td>VGA VESA 85 Hz</td>
<td>43.269</td>
<td>85.008</td>
<td>36</td>
<td>H-neg V-neg</td>
</tr>
<tr>
<td>800 × 600</td>
<td>SVGA VESA 56 Hz</td>
<td>35.156</td>
<td>56.25</td>
<td>36</td>
<td>H-pos V-pos</td>
</tr>
<tr>
<td></td>
<td>SVGA VESA 60 Hz</td>
<td>37.879</td>
<td>60.317</td>
<td>40</td>
<td>H-pos V-pos</td>
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<td></td>
<td>SVGA VESA 72 Hz</td>
<td>48.077</td>
<td>72.188</td>
<td>50</td>
<td>H-pos V-pos</td>
</tr>
<tr>
<td></td>
<td>SVGA VESA 75 Hz</td>
<td>46.875</td>
<td>75</td>
<td>49.5</td>
<td>H-pos V-pos</td>
</tr>
<tr>
<td></td>
<td>SVGA VESA 85 Hz</td>
<td>53.674</td>
<td>85.061</td>
<td>56.25</td>
<td>H-pos V-pos</td>
</tr>
<tr>
<td>1024 × 768</td>
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<td>65</td>
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</tr>
<tr>
<td></td>
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<td>70.069</td>
<td>75</td>
<td>H-neg V-neg</td>
</tr>
<tr>
<td></td>
<td>XGA VESA 75 Hz</td>
<td>60.023</td>
<td>75.029</td>
<td>78.75</td>
<td>H-pos V-pos</td>
</tr>
</tbody>
</table>

### Data Solution Module PCSA-DSM1 (RGB OUT)

<table>
<thead>
<tr>
<th>Picture element</th>
<th>Signal format</th>
<th>fH (kHz)</th>
<th>fV (Hz)</th>
<th>Dot clock (MHz)</th>
<th>Sync</th>
</tr>
</thead>
<tbody>
<tr>
<td>1024 × 768</td>
<td>XGA VESA 60 Hz</td>
<td>48.363</td>
<td>60.004</td>
<td>65</td>
<td>H-neg V-neg</td>
</tr>
</tbody>
</table>

* While the picture input from the RGB IN connector is transmitted, the picture of the input signal format (VGA, SVGA or XGA) is output from this connector.
## Pin Assignment

### 100BASE-TX/10BASE-T jack

![RJ-45 jack](image)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TPOP</td>
<td>Transmit+</td>
</tr>
<tr>
<td>2</td>
<td>TPON</td>
<td>Transmit-</td>
</tr>
<tr>
<td>3</td>
<td>TPIP</td>
<td>Receive+</td>
</tr>
<tr>
<td>4</td>
<td>NC</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>NC</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>TPIN</td>
<td>Receive-</td>
</tr>
<tr>
<td>7</td>
<td>NC</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>NC</td>
<td>-</td>
</tr>
</tbody>
</table>

### RGB IN connector

![Mini D-sub 15-pin (female)](image)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RED</td>
<td>R (red)</td>
</tr>
<tr>
<td>2</td>
<td>GREEN</td>
<td>G (green)</td>
</tr>
<tr>
<td>3</td>
<td>BLUE</td>
<td>B (blue)</td>
</tr>
<tr>
<td>4</td>
<td>NC</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>GDN</td>
<td>Ground</td>
</tr>
<tr>
<td>6</td>
<td>RED. GND</td>
<td>R (red) signal ground</td>
</tr>
<tr>
<td>7</td>
<td>GREEN. GND</td>
<td>G (green) signal ground</td>
</tr>
<tr>
<td>8</td>
<td>BLUE. GND</td>
<td>B (blue) signal ground</td>
</tr>
<tr>
<td>9</td>
<td>NC</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>SYNC. GND</td>
<td>Sync signal ground</td>
</tr>
<tr>
<td>11</td>
<td>NC</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>NC</td>
<td>-</td>
</tr>
<tr>
<td>13</td>
<td>HSYNC</td>
<td>Horizontal sync</td>
</tr>
<tr>
<td>14</td>
<td>VSYNC</td>
<td>Vertical sync</td>
</tr>
<tr>
<td>15</td>
<td>NC</td>
<td>-</td>
</tr>
</tbody>
</table>

### RS-232C connector

![D-sub 9-pin (male)](image)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NC</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>RD</td>
<td>Receive</td>
</tr>
<tr>
<td>3</td>
<td>TD</td>
<td>Transmit</td>
</tr>
<tr>
<td>4</td>
<td>NC</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>6</td>
<td>NC</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>NC</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>NC</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>NC</td>
<td>-</td>
</tr>
</tbody>
</table>

### Mouse connector

![Mouse connector](image)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vbus</td>
<td>Power</td>
</tr>
<tr>
<td>2</td>
<td>-Data (D-)</td>
<td>Transmit/receive data-</td>
</tr>
<tr>
<td>3</td>
<td>+Data (D+)</td>
<td>Transmit/receive data+</td>
</tr>
<tr>
<td>4</td>
<td>GND</td>
<td>Ground</td>
</tr>
</tbody>
</table>

### PC connector

![PC connector](image)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vbus</td>
<td>Power</td>
</tr>
<tr>
<td>2</td>
<td>-Data (D-)</td>
<td>Transmit/receive data-</td>
</tr>
<tr>
<td>3</td>
<td>+Data (D+)</td>
<td>Transmit/receive data+</td>
</tr>
<tr>
<td>4</td>
<td>GND</td>
<td>Ground</td>
</tr>
</tbody>
</table>
Pin Assignment on Optional Board connectors

RGB OUT connector (PCSA-DSM1)

Pin assignment:

<table>
<thead>
<tr>
<th>Pin</th>
<th>Pin</th>
<th>Signal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>RED</td>
<td>R (red)</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>GREEN</td>
<td>G (green)</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>BLUE</td>
<td>B (blue)</td>
</tr>
<tr>
<td>4</td>
<td>NC</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>Ground</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>RED</td>
<td>GND</td>
<td>R (red) signal ground</td>
</tr>
<tr>
<td>7</td>
<td>GREEN</td>
<td>GND</td>
<td>G (green) signal ground</td>
</tr>
<tr>
<td>8</td>
<td>BLUE</td>
<td>GND</td>
<td>B (blue) signal ground</td>
</tr>
<tr>
<td>9</td>
<td>NC</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>SYNC</td>
<td>GND</td>
<td>Sync signal ground</td>
</tr>
<tr>
<td>11</td>
<td>NC</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>NC</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>HSYNC</td>
<td></td>
<td>Horizontal sync</td>
</tr>
<tr>
<td>14</td>
<td>VSYNC</td>
<td></td>
<td>Vertical sync</td>
</tr>
<tr>
<td>15</td>
<td>NC</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

List of Port Numbers Used on the PCS-TL30

When connecting one-to-one (Default)

When “Port Number Used” is set to “Default” in the Administrator Setup menu, the PCS-TL30 uses the following port numbers.

<table>
<thead>
<tr>
<th>Signal</th>
<th>Port number</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAS (PCSTL30)</td>
<td>Any number from 2253 to 2255 (using GateKeeper)</td>
</tr>
<tr>
<td>RAS (GateKeeper)</td>
<td>1718 or 1719 (using GateKeeper)</td>
</tr>
<tr>
<td>Q.931 (dial)</td>
<td>Any number from 2253 to 2255</td>
</tr>
<tr>
<td>Q.931 (answer)</td>
<td>1720</td>
</tr>
<tr>
<td>H.245</td>
<td>1720</td>
</tr>
<tr>
<td>Audio RTP</td>
<td>49152</td>
</tr>
<tr>
<td>Audio RTCP</td>
<td>49153</td>
</tr>
<tr>
<td>Video RTP</td>
<td>49154</td>
</tr>
<tr>
<td>Video RTCP</td>
<td>49155</td>
</tr>
</tbody>
</table>

When connecting one-to-one (Custom: TCP Port Number 3000 and UDP Port Number 3000)

When “Port Number Used” is set to “Custom” in the Administrator Setup menu, the PCS-TL30 uses the port numbers defined by the values entered in “TCP Port Number” and “UDP Port Number”.

For example, when “TCP Port Number” is set to “3000” and “UDP Port Number” is set to “3100”, the PCS-TL30 uses the following port numbers.

<table>
<thead>
<tr>
<th>Signal</th>
<th>Port number</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAS (PCSTL30)</td>
<td>Any number from 3000 to 3002 (using GateKeeper)</td>
</tr>
<tr>
<td>RAS (GateKeeper)</td>
<td>1718 or 1719 (using GateKeeper)</td>
</tr>
<tr>
<td>Q.931 (dial)</td>
<td>Any number from 3000 to 3002</td>
</tr>
<tr>
<td>Q.931 (answer)</td>
<td>1720</td>
</tr>
<tr>
<td>H.245</td>
<td>1720</td>
</tr>
<tr>
<td>Audio RTP</td>
<td>3100</td>
</tr>
<tr>
<td>Audio RTCP</td>
<td>3101</td>
</tr>
<tr>
<td>Video RTP</td>
<td>3102</td>
</tr>
<tr>
<td>Video RTCP</td>
<td>3103</td>
</tr>
<tr>
<td>FECC RTP</td>
<td>3104</td>
</tr>
<tr>
<td>FECC RTCP</td>
<td>3105</td>
</tr>
<tr>
<td>Data conference RTP</td>
<td>3106</td>
</tr>
<tr>
<td>Data conference RTCP</td>
<td>3107</td>
</tr>
</tbody>
</table>
Videoconferencing Room Layout

Be sure to position camera and microphone appropriately in your videoconferencing room.

Layout example

Camera Range

represents the shooting area of the camera when the zoom has been extended fully. Use the measurements below as a guide for the layout of your videoconference room.

Top view (horizontal range at maximum zoom-out)

Lighting Considerations

Do not point the camera toward a window where sunlight comes in as back lighting may decrease the contrast. If it is necessary, cover the window with a thick curtain.

Adjust room lighting so that it falls on the participants. Avoid direct light on the display. Light intensity on faces should be about 300 lux or more.

Side view (vertical range at maximum zoom-out)
Glossary

CIF
An abbreviation for Common Intermediate Format. This format allows communication between different color systems (NTSC and PAL). 352 pixels × 288 lines

Codec
An abbreviation for Coder-Decoder. An integrated device of a coder that converts an analog audio/video signal to a digital data stream and compresses it, and a decoder for expanding to restore the original analog signal.

DHCP

DNS
An abbreviation for Domain Name System. Defines the domain name system server.

Echo Canceler
Device to eliminate echo that occurs when transmitting audio.

Frame rate
The number of frames which can be encoded/decoded in one second.

G.711
Audio encoding/decoding format recommended by the ITU-T. A phone bandwidth audio signal is converted to a digital signal with a data rate of 64 kbps. It can be transmitted with a data rate of 56 kbps.

G.722
Audio encoding/decoding format recommended by the ITU-T. A 7-kHz bandwidth audio signal is converted to a digital signal with a data rate of 48 kbps, 56 kbps or 64 kbps.

G.728
Audio encoding/decoding format recommended by the ITU-T. A phone bandwidth audio signal is converted to a digital signal with a data rate of 16 kbps.

G.729
Audio encoding/decoding format recommended by the ITU-T. A phone bandwidth audio signal is converted to a digital signal with the data rate of 8 kbps.

Gatekeeper
Controls the access of H.323 videoconference devices on a network. Administers the zone, access limitation, audio/video bandwidth, and alias etc.

H.225.0
Frame structure for a 64 to 1920 kbps channel in audiovisual teleservices.

H.239
ITU-T standard for sharing data and presentations with video. This supports the dual video presentation mode, enabling endpoints to receive and transmit video and presentation data simultaneously.

H.261
Video codec for audio/visual services as p × 64 kbps. Videoconferencing standard that defines a video coding algorithm, picture format and error correcting technology for communication between different manufacturers’ video codecs.

H.263
A video coding algorithm based on the H.261 standard. This format enables communication via a lower bit rate.

H.263+
Video encoding/decoding format based on the H.261 standard, added by the Annex I to T (I, J, K …… T), that allows enhanced picture quality and error resistance. Normally, this format is a profile used with a combination of some of the Annex for H.263/H.263+.

H.264
A video coding algorithm newly standardized by the ITU-T in May 2003. This format realizes high-quality picture via a lower bit rate. It provides an equal picture quality via half as low bit rate as the H.263 format. The H.264 format is also called as MPEG4 Advanced Video Coding (AVC).

H.323
This enables communications on the non-QOS (Quality of Service) LAN.

HMLP
See “MLP”.

ITU-T
An abbreviation for International Telecommunication Union, Telecommunication Standardization Sector.

Lip synchronization
A function that synchronizes sound with motion. Sound processing is much faster than motion processing, thus sound and motion sometimes get out of step with each other.

MCU
An abbreviation for Multipoint Control Unit. When connecting a MCU, a multipoint videoconference can be held.
MLP
Data communication is also available during communication of video/audio signals between the videoconferencing systems. The MLP or HMLP is a protocol for data communication such as NetMeeting. Using the HMLP protocol allows faster data transmission.

MPEG4
A video coding algorithm recommended by the ISO/IEC based on the H.263+ standard. Adding some tools provides some improvement of picture quality compared with the H.263+ standard. The MPEG4 format is commonly used for personal computers, cellular phones, etc.

P in P
An abbreviation for “Picture in Picture.” This is a function which allows you to monitor your own party on a small window on your TV monitor.

QCIF
An abbreviation for Quater CIF. The number of pixels is a quarter than one of CIF format.
176 pixels × 144 lines

SNMP
An abbreviation for Simple Network Management Protocol. This protocol is for management information between the management station and the managed terminals.

SPID
An abbreviation for Service Profile ID.

TOS
Inputting the information data in the TOS field of the IP address allows the communication system to judge the packet transmission priority, etc. It also enables change of path according to the types of service (Delay or Size).
Menu Configuration

The menus of the camera are configured as described below. For detailed information, see pages in parentheses. The initial settings of each item are bolded.

Launcher (page 40)
One Touch Dial (page 42)
Dial, Edit, Delete

Phone Book (page 43)
List Edit
Index
Address
Line I/F
LAN Bandwidth (IP, SIP)
64kbps, 128kbps, 256kbps, 384kbps, 512kbps, 768kbps, 1024kbps, 1536kbps, 2048kbps, Default

History (page 37)
Dial, Edit, Delete

Menu
Camera Control (page 47)
Preset(1-6)
Camera Control**
Save, Load
Backlight Compensation, Flicker Removal, White Balance, Brightness Adjust, Select camera to control, Permit remote PTZ, Pan/Tilt/Zoom, Focus

Status & Info. (page 41)

Still Image (page 56)
Send
Continuous Send
Clear
Save

Image viewer (page 52)
Load
Send
Delete
Memory Stick Format

Setup
Answer
Device
Audio
Network
LAN
SIP
Communication mode setting
Administrator Setup
Display
VC
PC

* Appears only in the Private Phone Book.
** The headings that appear differ depending on if communication is in session or not. The headings also differ during a communication session depending on which camera (local or remote) is selected.
### Status & Info.

<table>
<thead>
<tr>
<th>Host Version</th>
<th>DSP Version</th>
<th>LCD Version</th>
<th>Camera Version</th>
<th>AEC Version</th>
<th>DSM Version</th>
<th>Host Name</th>
<th>IP Address</th>
<th>MAC Address</th>
<th>Serial Number</th>
<th>Communication Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Not in communication) *(page 41)*

<table>
<thead>
<tr>
<th>Gatekeeper</th>
<th>SIP</th>
</tr>
</thead>
</table>

(Please refer to page 2/2)


### Status & Info.

<table>
<thead>
<tr>
<th>Host Version</th>
<th>DSP Version</th>
<th>LCD software version</th>
<th>Camera version</th>
<th>AEC version</th>
<th>DSM Version</th>
<th>Host Name</th>
<th>IP Address</th>
<th>MAC Address</th>
<th>Serial Number</th>
<th>Communication Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Under communication) *(page 41)*

<table>
<thead>
<tr>
<th>Gatekeeper</th>
<th>SIP</th>
</tr>
</thead>
</table>

(Please refer to page 2/3)


### Line I/F

<table>
<thead>
<tr>
<th>Camera Control</th>
<th>Audio Mode</th>
<th>Video Mode</th>
<th>Frame Rate</th>
<th>Rate</th>
<th>Audio Bit Rate</th>
<th>Video Bit Rate</th>
<th>Audio Data Packet Loss</th>
<th>Video Data Packet Loss</th>
<th>Camera Control Data Packet Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Please refer to page 3/3)


### Packet Recovery Ratio

<table>
<thead>
<tr>
<th>Check Code</th>
<th>Communication Status</th>
<th>Gatekeeper</th>
<th>SIP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Please refer to page 3/3)


### Answer Setup

<table>
<thead>
<tr>
<th>Auto Answer</th>
<th>Mic on Answer</th>
<th>Reject Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>On, Off</td>
<td>On, Off</td>
<td>On, Off</td>
</tr>
</tbody>
</table>

(Please refer to page 1/1)


### Device Setup

<table>
<thead>
<tr>
<th>Terminal Name</th>
<th>Time Display</th>
<th>Last Number Registration</th>
<th>Language</th>
<th>Indicator</th>
<th>Clock Set</th>
<th>Sleep Timer</th>
<th>LED indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>On, Off</td>
<td>On, Off</td>
<td>English, French, German, Japanese, Spanish, Italian, Simplified Chinese, Portuguese</td>
<td>On, Off</td>
<td>5 min., 15 min., 60 min., Off</td>
<td>On, Off</td>
<td></td>
</tr>
</tbody>
</table>

(Please refer to page 1/1)
Audio Setup (Page:1/1) Beep Sound On, Off
Sound Effect On, Off
Dial Tone On, Off
Ringer Level Off, Min, Mid, Loud
Headphone Ringer Level Off, Min, Mid, Loud
PC Volume 0–23(11)
VC Volume 0–23(11)

LAN Setup (Page:1/2) DHCP Mode Auto, Off
Host Name
IP Address
Network Mask
Gateway Address
DNS Address

Encryption via LAN On, Off
Encryption Protocol Standard, SONY
Connectivity Prioritization Connection, Encryption
Encryption Password

SIP Setup (Page:1/3) SIP Server Mode On, Off
Transport Protocol TCP, UDP
Port Number
SIP Domain
Registered User Name
Password
Primary Proxy Server Address
Registrar Server Address
Registrar Port

Secondary Proxy Server Address
Registrar Port
Trinity Proxy Server Address
Registrar Port

Fourth Proxy Server Address
Registrar Port
### Communication Mode

- **Dial**
- **Video Mode**
  - Auto, H.264, MPEG 4, H.263+, H.261, SIP:No-Video*
  - 15fps, 30fps
- **Video Frame**
- **Audio Mode**
  - Auto, MPEG4 Audio, G.722, G.729, G.728, G.711
- **LAN Bandwidth**
  - 64kbps, 128kbps, 256kbps, 384kbps, 512kbps, 768kbps, 1024kbps, 1536kbps, 2048kbps
- **User Input**
  - LAN Bandwidth: Controle by Far End

- **Answer**
- **Video Mode**
  - Auto, H.264, MPEG 4, H.263+, H.261, SIP:No-Video*
  - 15fps, 30fps
- **Video Frame**
- **Audio Mode**
  - Auto, MPEG4 Audio, G.722, G.729, G.728, G.711
- **LAN Bandwidth**
  - 64kbps, 128kbps, 256kbps, 384kbps, 512kbps, 768kbps, 1024kbps, 1536kbps, 2048kbps
- **User Input**
  - LAN Bandwidth: Controle by Far End

- **Input LAN Bandwidth**
- **Far End Camera Control**
  - On, Off
- **Lip Sync**
  - On, Off

* Line I/F is only enabled when using SIP.
Administrator Setup (Page: 1/7)

- Administrator Password
- Phone Book Modification Password
- Remote Access Password
- Web Monitor
- Web Access
- Save Phone Book
- Load Phone Book
- Create Private Phone Book
- Delete Private Phone Book
- Copy to Private Phone Book
- Auto Dial

Administrator Setup (Page: 2/7)

- Gatekeeper Mode
- Gatekeeper Address
- User Alias
- User Number

Administrator Setup (Page: 3/7)

- SNMP Mode
- Trap Destination
- Community
- Description
- Location
- Contact

Administrator Setup (Page: 4/7)

- NAT Mode
- WAN IP Address
- Packet Resend Request
- Adaptive Rate Control
- LAN Mode
- Auto Negotiation
- Port Number Used
- TCP Port Number
- UDP Port Number

Administrator Setup (Page: 5/7)

- TOS
- IP Precedence
- Low Delay
- High Throughput
- High Reliability
- Minimum Cost
- Diffserve

Administrator Setup (Page: 6/7)

- PPPoE
- PPPoE User Name
- PPPoE Password
- Fixed IP for PPPoE
- Fixed IP Address for PPPoE
- PPPoE DNS
- Primary DNS
- Secondary DNS

Administrator Setup (Page: 7/7)

- Line I/F
- Auto capture remote image
- Ringer on main unit when using headphones
- H.239 (Presentation)
- Restore factory defaults
- Update software
- Memory Stick Format
Display Setup VC

- Quality Mode: Vivid, Standard, Pro
- Picture: 0~100 (50)
- Brightness: 0~100 (50)
- Backlight: 0~100 (70)
- Wide Mode: Normal, Wide, Zoom

Display Setup PC

- Quality Mode: Low, Middle, High
- Picture: 0~100 (50)
- Brightness: 0~100 (50)
- Backlight: 0~100 (40)
- Wide Mode: Normal, Wide, Zoom

- H Shift
- V Shift
- Phase
- Pitch
- Auto Adjust
- Screen Resolution / Refresh Rate