SONY

3-872-304-**19** (1)

Video Communication System

Operating Instructions (Version 2.7)

Before operating the unit, please read this manual thoroughly and retain it for future reference.

IPELA

PCS-G50/G50P

MEMORY STICK

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Owner's Record

The model and the serial numbers are located at the bottom. 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-G50/G50P
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.

Manufacture	Type No.
Sony	VGP-AC19V15
Sony	PCS-AC19V6

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 reasons, do not connect the LAN port to any network devices that might have excessive voltage.

Installing batteries

Two R6 (size AA) batteries are supplied for Remote Commander.
To avoid risk of explosion, use R6 (size AA) manganese or alkaline batteries.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

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.

All interface cables used to connect peripherals must be shielded in order to comply with the limits for a computing device pursuant to Subpart B of Part 15 of FCC Rules.

This manual focuses on using ISDN lines to conduct a videoconference, but it also covers non-ISDN lines. If you use ISDN lines, consult your Sony dealer for more information.

- The ISDN service may not be available in some areas.

If you dispose the unit, consult your nearest Sony Service Center. The built-in battery must be treated as a chemical waste.

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

The manufacturer of this product is Sony Corporation, 1-7-1 Konan, Minato-ku, Tokyo, Japan.
The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

For the customers in Europe, Australia and New Zealand

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.

This apparatus shall not be used in the residential area.

For the customers in Taiwan only

廢電池請回收

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

Cleaning

Use a soft, dry cloth to gently wipe the cabinet and panel when cleaning the unit. For heavier cleaning, use a cloth lightly moistened with a mild detergent to remove the dust, and finish by wiping again with a dry cloth. Do not use volatile solvents such as alcohol, benzene, thinners, or insecticides as they may damage the surface finishes.

Note on laser beams

Laser beams may damage a CCD image sensor. You are cautioned that the surface of a CCD image sensor should not be exposed to laser beam radiation in an environment where a laser beam device is used.

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Chapter 1: Installation and Preparation

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 for System Administrator

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. and functions such as recording.

Chapter 5: Data Conference

This chapter shows you how to use the data from a computer for the conference by using the optional Data Solution Box.

Chapter 6: Videoconference Using a Whiteboard

This chapter shows how to use a whiteboard with the mimio Xi* attached for a videoconference.

* mimio® is a registered trademark of Virtual Ink Corporation of the United States.

minio Xi is a trademark of Virtual Ink Corporation of the United States.

Chapter 7: Encrypted Videoconference

This chapter shows how to conduct a videoconference using an encrypted video and audio data, and encrypted data from a computer connected to the Data Solution Box.

Chapter 8: Multipoint Videoconference

This chapter shows you how to use the Video Communication System to hold a multipoint videoconference.

You need to install MCU software in this System for a multipoint videoconference.

Chapter 9: 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 10: Web Control Function

This chapter shows you how to control the PCS-G50/G50P or set it up via a Web browser.

Appendix

The appendix contains descriptions of the controls and connectors on the components of the Video Communication System, message and troubleshooting lists, specifications, and a glossary.

Features

The PCS-G50/G50P Video Communication System is a videoconferencing system that provides natural, face-to-face communications with a remote party by transmitting and receiving images and sound via LAN (Local Area Network) or ISDN (Integrated Services Digital Network) connections.

Supports ITU-T international videoconferencing standard

The Video Communication System complies with ITU-T Recommendations defined by WTSC for easy connection with remote parties overseas.
ITU: International Telecommunication Union
WTSC: World Telecommunications Standardization Committee

Supports data conferences

Use of the optional PCSA-DSB1S Data Solution Box allows the data from a personal computer to be incorporated in the presentation or to be shown on the projector.

High transmission speeds and high-quality picture capability

The Video Communication System accepts a LAN bandwidth of up to 4096 Kbps. It also allows you to connect to as many as three ISDN lines and use 6B channels with the optional PCSA-B384S ISDN Unit, and as many as six ISDN lines and use 12B channels with the optional PCSA-B768S ISDN Unit. (When you use PRI, you can connect to one line and use 23B channels (T1) or 30B channels (E1).)

Wide range of video/audio compression format selectable

The Video Communication System supports H.264, H.263 4CIF, H.263, H.261, MPEG4, interlaced SIF (H.264/H.263) video compression formats. It also supports MPEG4 Audio, G.722.1, G.722, G.729, G.728, G723.1, and G.711 audio compression formats.

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

This system includes the “Packet Resend Request”, “Adaptive Rate Control”, and “Forward Error Correction” functions. Depending on the network status, these functions are used in Hybrid to guarantee consistent, high-quality communications.

Easy setup and operation

Help is displayed on the monitor when you need guidance. The menus used by the system administrator or those by conference participants are displayed separately.

The Video Communication System supports UPnP (Universal Plug and Play) to allow automatic NAT configuration.

Supports multipoint conference

Installing the optional PCSA-M3G50 H.323 MCU software (for LAN) or the PCSA-M0G50 H.320 MCU software (for ISDN) allows conduct of a multipoint conference.

The multipoint conference via LAN and ISDN connections mixed is also available if both the PCSA-M3G50 H.323 and PCSA-M0G50 H.320 MCU software are installed in a main terminal.

Equipped with a Memory Stick slot

The Communication Terminal 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”.

Videoconference Recording

Video and audio from a videoconference can be recorded to a “Memory Stick” and watched on a computer after the videoconference.

Videoconference Streaming

You can broadcast streaming video and audio from a videoconference. This allows people who cannot attend the videoconference to watch the proceedings over the Web using a computer. You can also select whether to broadcast both video and audio or audio only.

Triple monitor system

You can connect three monitors to the Communication Terminal, which allows you, for example, to display video from the remote party, video from your terminal, and video from a computer or whiteboard simultaneously.

Supports encrypted videoconferences

The terminal allows you to hold a strictly confidential videoconference using standard encryption, which complies with the ITU-T recommendation H.233, H.234, and H.235, or custom encryption.

An encrypted videoconference among multiple points or with cascade connection is available if all the terminals are connected via LAN. An encrypted videoconference is available via ISDN or mixed LAN and ISDN connection when using standard encryption.

Echo Cancelling Microphone

Up to 40 PCSA-A7 Microphones (optional) can be connected to one port without losing sound quality, using a cascade connection.

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).

If you install the optional MCU software as well as the SIP software, you can conduct a multipoint conference.

Supports network cameras

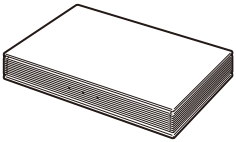
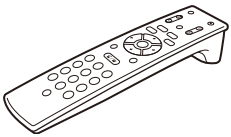
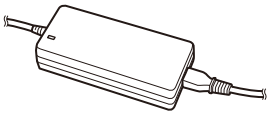
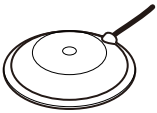
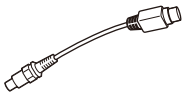
You can connect to Sony network cameras on the network from the Video Communication System. By connecting to these network cameras, you can view images from the cameras on the system, or send and receive audio between the system and cameras. This feature is available even during multipoint conferences with mixed connection types, such as conferences with mixed IP and ISDN connection.

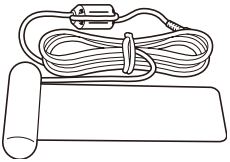
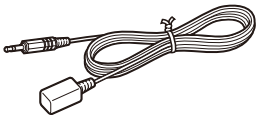
System Components

The PCS-G50/G50P 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-G50/G50P Video Communication System is the basic system of the PCS-G50/G50P Videoconferencing System. It contains the following components:

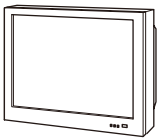
Unit	Description
PCS-PG50/PG50P Communication Terminal 	Contains the video codec, audio codec, echo canceller, network interfaces and system controller.
PCSA-CG70/CG70P Camera Unit	Camera to shoot videoconference.
PCSA-RG1 or PCS-RG70 Remote Commander 	Used to operate the Communication Terminal and Camera Unit. **Note** This manual uses illustrations of the PCSA-RG1 Remote Commander. Buttons on the PCS-RG70 that share the same name as those on the PCSA-RG1 can be used to perform the corresponding functions identically.
VGP-AC19V15 or PCS-AC19V6 AC adaptor 	Supplies power to the Communication Terminal.
PCS-A1 Microphone 	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.
Video Converter Cable 	Used to send video output from a pin terminal to a 7-pin mini DIN terminal.

Unit	Description
IR repeater 	Allows you to simultaneously turn on and off the Communication Terminal and the TV that is being used as a monitor.
Remote Control Receiver 	Connects to the Communication Terminal and receives signals from the Remote Commander. The Camera Unit can receive signals, but when the remote control receiver is connected, the receiver takes priority.

Optional Equipment

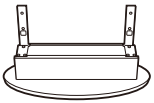
TV monitor

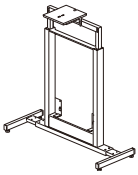
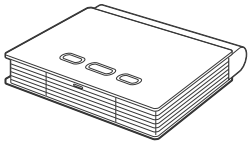
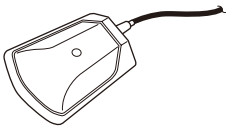
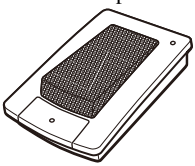
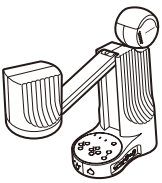
A TV or projector, etc. is required to monitor the images for videoconferencing system.

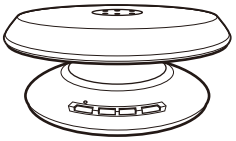
Unit	Description
TV, Projector, etc. 	Used as a monitor and speakers.

Optional equipment especially designed for use with the PCS-G50/G50P

The following optional devices are used to enhance your videoconference.

Unit	Description
PCSA-STMG70 Stand 	This stand can be used to place the Communication Terminal on end.
PCSA-STCG70 Camera Stand	Stand for the Camera Unit.

Unit	Description
PCSA-STG50 Camera Stand 	Stand for the Communication Terminal and Camera Unit when using a flat panel monitor.
PCSA-B384S ISDN Unit	Used to connect to an ISDN line. Up to three ISDN lines; 6B channels usable.
PCSA-B768S ISDN Unit	Used to connect to an ISDN line. Up to six ISDN lines; 12B channels usable.
PCSA-PRI ISDN Unit	Used to connect to an ISDN line through the PRI line interface.
PCSA-DSB1S Data Solution Box 	Use of this device allows easy connection with a computer or projector for a data conference.
PCSA-A3 Microphone 	Unidirectional microphone. It is recommended when you want to pick up the voice of a speaker directed toward the microphone.
PCSA-A7 Microphone 	Narrow coverage microphones that feature high sound quality and a built-in echo canceller. Several PCSA-A7 Microphones can be connected in cascade, without losing sound quality. Recommended when using several microphones.
PCS-DS150/DS150P Document Stand 	Camera for documents. Allows transmission of pictures to the Communication Terminal by infrared signals without connecting a cable. (Currently not available)

Unit	Description
CTE-600 Communication Transducer 	Integrated microphone/speaker system suitable for remote communication. The uni-directional microphones pick up clear voice with minimum background noise. Moreover, the omni-directional speaker outputs sound equally in all directions. (Currently not available)
PCSA-M3G50 H.323 MCU Software	Allows use for a multipoint videoconference over LAN connection.
PCSA-M0G50 H.320 MCU Software	Allows use for a multipoint videoconference over ISDN connection.
PCSA-SP1 SIP Software	Allows conduct of a videoconference using SIP.

Cables

Use the following cables to connect devices in this system.

PCS-G50/G50P Video Communication System

Cable	Part No.	Number
Camera cable (3 m (9.8 ft))	1-830-186-1x	1
S-video cable (1.5 m (4.9 ft))	1-776-078-4x	1
Audio cable (1 m (3.3 ft))	1-765-258-3x	1
Video converter cable (15 cm (0.5 ft))	1-757-517-1x	1
VISCA cable (15 cm (0.5 ft))	1-818-939-1x	1

Camera cable

S-video cable

Audio cable

Video converter cable

VISCA cable

System Configuration

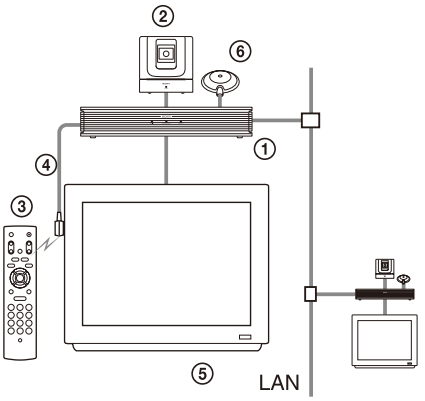
The PCS-G50/G50P Video Communication System has various system configuration capabilities using the basic components and optional equipment. This section describes the capabilities and necessary equipment for some typical configuration examples.

System Configuration via a LAN

This allows you to:

- Hold a point-to-point videoconference over LAN.
- Show still images stored on a “Memory Stick”.

System configuration



① PCS-PG50/PG50P Communication Terminal
② PCSA-CG70/CG70P Camera Unit
③ PCSA-RG1 or PCS-RG70 Remote Commander
④ Remote Control Receiver
⑤ TV monitor (not supplied)
⑥ PCS-A1 Microphone

* This diagram depicts a system configuration using the PCSA-RG1 Remote Commander.

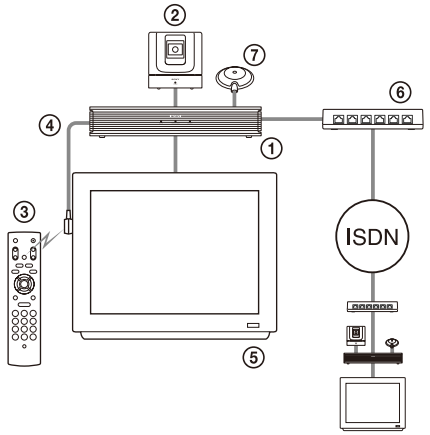
System Configuration via an ISDN

Connection to ISDN is required to use the PCSA-B384S, PCSA-B768S, or PCSA-PRI ISDN Unit especially designed for use with this system.

This allows you to:

- Hold a point-to-point videoconference over ISDN.
- Show still images stored on a “Memory Stick”.
- Hold a videoconference with high speeds and highest quality image transmission by connecting up to three ISDN lines (when using the PCSA-B384S), by connecting up to six ISDN lines (when using the PCSA-B768S) or by connecting one ISDN line (when using the PCSA-PRI).

System configuration



① PCS-PG50/PG50P Communication Terminal
② PCSA-CG70/CG70P Camera Unit
③ PCSA-RG1 or PCS-RG70 Remote Commander
④ Remote Control Receiver
⑤ TV monitor (not supplied)
⑥ PCSA-B384S, PCSA-B768S or PCSA-PRI ISDN Unit (not supplied)
⑦ PCS-A1 Microphone

* This diagram depicts a system configuration using the PCSA-RG1 Remote Commander and the PCSA-B768S ISDN Unit.

About the number of ISDN lines and B (bearer) channel

Up to three ISDN lines (6B channels) with the PCSA-B384S ISDN Unit, up to six ISDN lines (12B channels) with the PCSA-B768S ISDN Unit, or one ISDN line (23B channels (T1), 30B channels (E1)) with the PCSA-PRI ISDN Unit can be connected to one PCS-PG50/PG50P. The more channels you use for a single communication, the faster speeds and higher-quality picture you can obtain for your network communication.

Note

When connecting to the ISDN unit, use the ports in ascending order.
Yes: 1, 2, 3…
No: 1, 5, 2…

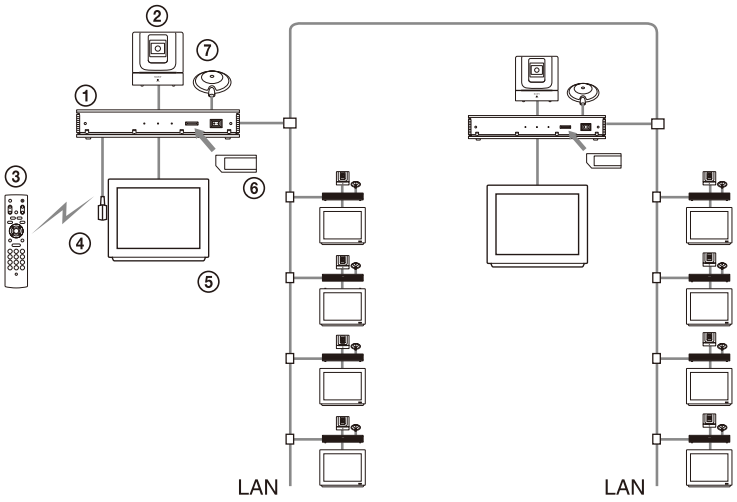
System Configuration via a LAN for Multipoint Conference

You need to install the optional PCSA-M3G50 H.323 MCU software.

This allows you to:

- Hold a multipoint videoconference among up to ten sites over LAN.
- Show still images stored on a “Memory Stick”.
- Show the still images on the second TV monitor or projector.
- Pick up a large number of participants’ voices using up to two external microphones.

System configuration



① PCS-PG50/PG50P Communication Terminal
② PCSA-CG70/CG70P Camera Unit
③ PCSA-RG1 or PCS-RG70 Remote Commander
④ Remote Control Receiver
⑤ TV monitor (not supplied)
⑥ PCSA-M3G50 H.323 MCU software (not supplied)
⑦ PCS-A1 Microphone

* This diagram depicts a system configuration using the PCSA-RG1 Remote Commander.

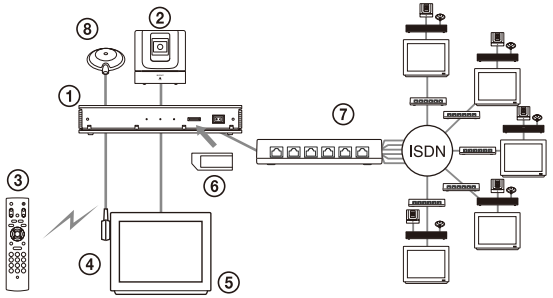
System Configuration via an ISDN for Multipoint Conference

You need to connect the optional PCSA-B384S, PCSA-B768S, or PCSA-PRI ISDN Unit especially designed for use with this system and to install the optional PCSA-M0G50 H.320 MCU software.

This allows you to:

- Hold a multipoint videoconference among up to six sites over ISDN.
- Show still images stored on a “Memory Stick”.
- Show the still images on the second TV monitor or projector.
- Pick up a large number of participants’ voices using up to two external microphones.

System configuration



① PCS-PG50/PG50P Communication Terminal
② PCSA-CG70/CG70P Camera Unit
③ PCSA-RG1 or PCS-RG70 Remote Commander
④ Remote Control Receiver
⑤ TV monitor (not supplied)
⑥ PCSA-M0G50 H.320 MCU software (not supplied)
⑦ PCSA-B384S, PCSA-B768S or PCSA-PRI ISDN Unit (not supplied)
⑧ PCS-A1 Microphone

* This diagram depicts a system configuration using the PCSA-RG1 Remote Commander and the PCSA-B768S ISDN Unit.

System Configuration via a LAN and ISDN for Multipoint Conference

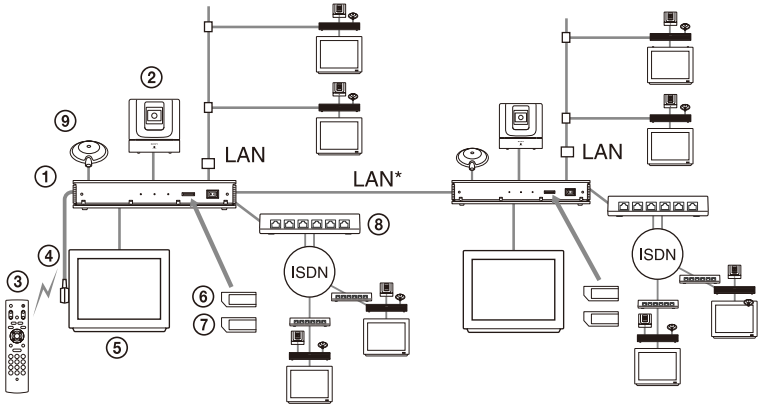
Installing the optional PCSA-M3G50 H.323 MCU software (for LAN) and PCSA-M0G50 H.320 MCU software (for ISDN) enables conduct of a multipoint conference via a LAN and ISDN mixed.

Two Communication Terminals in which MCU software is installed must be connected via a LAN.

This allows you to:

- Hold a multipoint videoconference among up to ten sites over LAN and ISDN.
- Show still images stored on a “Memory Stick”.
- Show the still images on the second TV monitor or projector.
- Pick up a large number of participants’ voices using up to two external microphones.

System configuration



① PCS-PG50/PG50P Communication Terminal
② PCSA-CG70/CG70P Camera Unit
③ PCSA-RG1 or PCS-RG70 Remote Commander
④ Remote Control Receiver
⑤ TV monitor (not supplied)
⑥ PCSA-M3G50 H.323 MCU software (not supplied)
⑦ PCSA-M0G50 H.320 MCU software (not supplied)
⑧ PCSA-B384S, PCSA-B768S or PCSA-PRI ISDN Unit (not supplied)
⑨ PCS-A1 Microphone

* Be sure to connect two Communication Terminals, with the MCU software installed, via a LAN.

* This diagram depicts a system configuration using the PCSA-RG1 Remote Commander and the PCSA-B768S ISDN Unit.

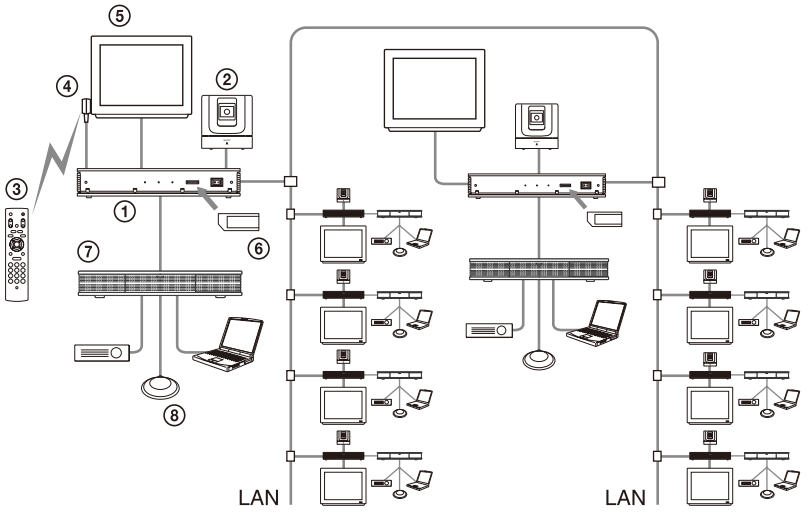
System Configuration via a LAN for Multipoint Data Conference

You need to connect the optional PCSA-DSB1S Data Solution Box especially designed to use with this system and to install the optional PCSA-M3G50 H.323 MCU software.

This allows you to:

- Hold a multipoint videoconference among up to ten sites over LAN.
- Show still images stored on a “Memory Stick”.
- Use the data from a computer or external equipment.
- Show the data from a computer or still images on the second TV monitor or projector.
- Pick up a large number of participants’ voices using up to five external microphones connected to the Data Solution Box.

System configuration



① PCS-PG50/PG50P Communication Terminal
② PCSA-CG70/CG70P Camera Unit
③ PCSA-RG1 or PCS-RG70 Remote Commander
④ Remote Control Receiver
⑤ TV monitor (not supplied)
⑥ PCSA-M3G50 H.323 MCU software (not supplied)
⑦ PCSA-DSB1S Data Solution Box (not supplied)
⑧ PCS-A1 Microphone

* This diagram depicts a system configuration using the PCSA-RG1 Remote Commander.

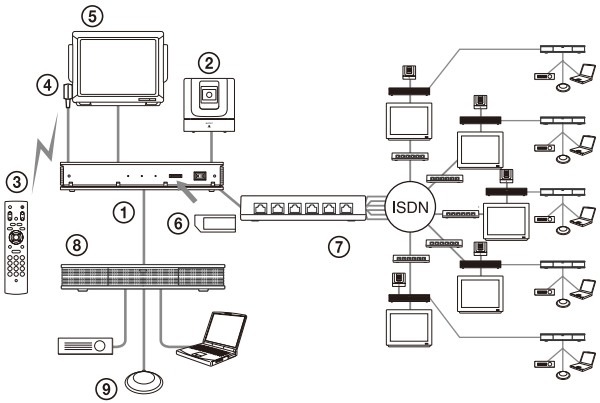
System Configuration via an ISDN for Multipoint Data Conference

You need to connect the optional PCSA-B384S, PCSA-B768S, or PCSA-PRI ISDN Unit and the PCSA-DSB1S Data Solution Box especially designed for use with this system and to install the optional PCSA-M0G50 H.320 MCU software.

This allows you to:

- Hold a multipoint videoconference among up to six sites over ISDN.
- Show still images stored on a "Memory Stick".
- Use the data from a computer or an external equipment.
- Show the data from a computer or still images on the second TV monitor or projector.
- Pick up a large number of participants' voices using up to five external microphones connected to the Data Solution Box.

System configuration



① PCS-PG50/PG50P Communication Terminal
② PCSA-CG70/CG70P Camera Unit
③ PCSA-RG1 or PCS-RG70 Remote Commander
④ Remote Control Receiver
⑤ TV monitor (not supplied)
⑥ PCSA-M0G50 H.320 MCU software (not supplied)
⑦ PCSA-B384S, PCSA-B768S or PCSA-PRI ISDN Unit (not supplied)
⑧ PCSA-DSB1S Data Solution Box (not supplied)
⑨ PCS-A1 Microphone

* This diagram depicts a system configuration using the PCSA-RG1 Remote Commander and the PCSA-B768S ISDN Unit.

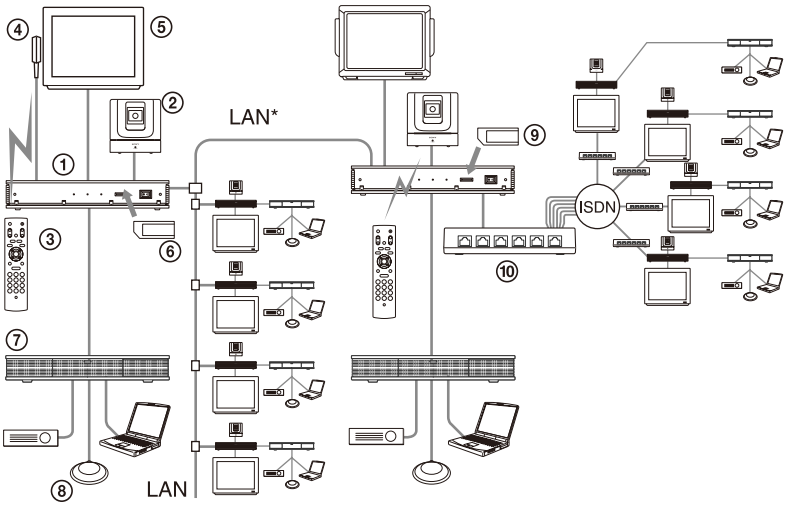
System Configuration via a LAN and ISDN for Multipoint Data Conference

Installing the optional PCSA-M3G50 H.323 MCU software, the PCSA-M0G50 H.320 MCU software, and using the optional Data Solution Box PCSA-DSB1S and ISDN Units PCSA-B384S, PCSA-B768S, or PCSA-PRI enables you to conduct multipoint mixed LAN and ISDN line multipoint data conferences. Two Communication Terminals where the MCU software is installed must be connected via a LAN in this configuration.

This allows you to:

- Hold a multipoint videoconference among up to six sites over ISDN.
- Show still images stored on a "Memory Stick".
- Use data from a computer or other such peripheral device in the videoconference.
- Show still images or computer data on the second monitor or projector used as the display device.
- Connect up to five external microphones to the Data Solution Box, allowing you to hear several participants.

System configuration



① PCS-PG50/PG50P Communication Terminal
② PCSA-CG70/CG70P Camera Unit
③ PCSA-RG1 or PCS-RG70 Remote Commander
④ Remote Control Receiver
⑤ TV monitor (not supplied)
⑥ PCSA-M3G50 H.323 MCU software (not supplied)
⑦ PCSA-DSB1S Data Solution Box (not supplied)
⑧ PCS-A1 Microphone
⑨ PCSA-M0G50 H.320 MCU software (not supplied)
⑩ PCSA-B384S, PCSA-B768S or PCSA-PRI ISDN Unit (not supplied)

* Be sure to connect two Communication Terminals, with the MCU software installed, via a LAN.

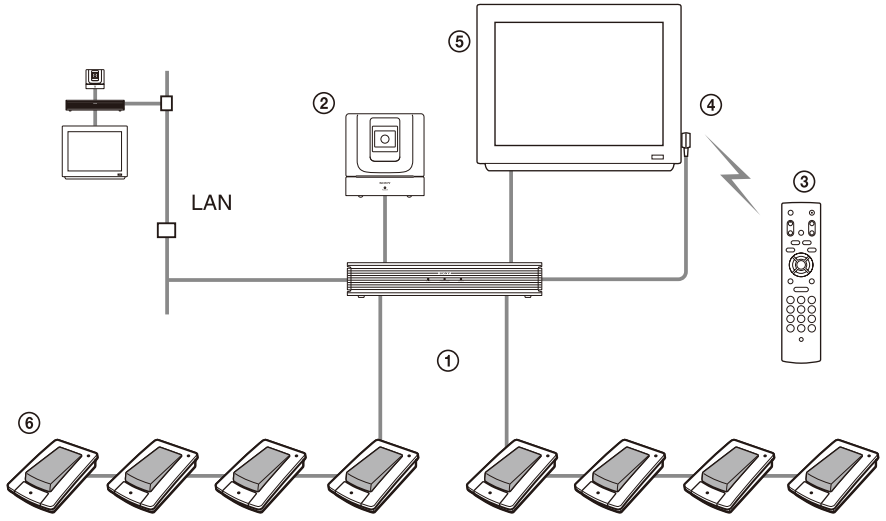
* This diagram depicts a system configuration using the PCSA-RG1 Remote Commander and the PCSA-B768S ISDN Unit.

System Configuration Using the PCSA-A7 Microphone

This allows you to:

- Connect additional microphones during a videoconference.
- Connect up to 40 PCSA-A7 Microphones to one microphone connector, using a cascade connection. PCSA-A7 Microphones can be connected in cascade, without a decrease in sound quality, ideal for large meetings.

System configuration



① PCS-PG50/PG50P Communication Terminal
② PCSA-CG70/CG70P Camera Unit
③ PCSA-RG1 or PCS-RG70 Remote Commander
④ Remote Control Receiver
⑤ TV monitor (not supplied)
⑥ PCSA-A7 Microphone (PCSA-A7P4: 4-piece set, not supplied)

* This diagram depicts a system configuration using the PCSA-RG1 Remote Commander.

Notes

- Position the Microphones about 50 cm (1.6 ft) away from the participants.
- When using speakers, do not place them in front of the microphones.

For information about PCSA-A7 Microphones, see "Using the PCSA-A7 Microphones" on page 166.

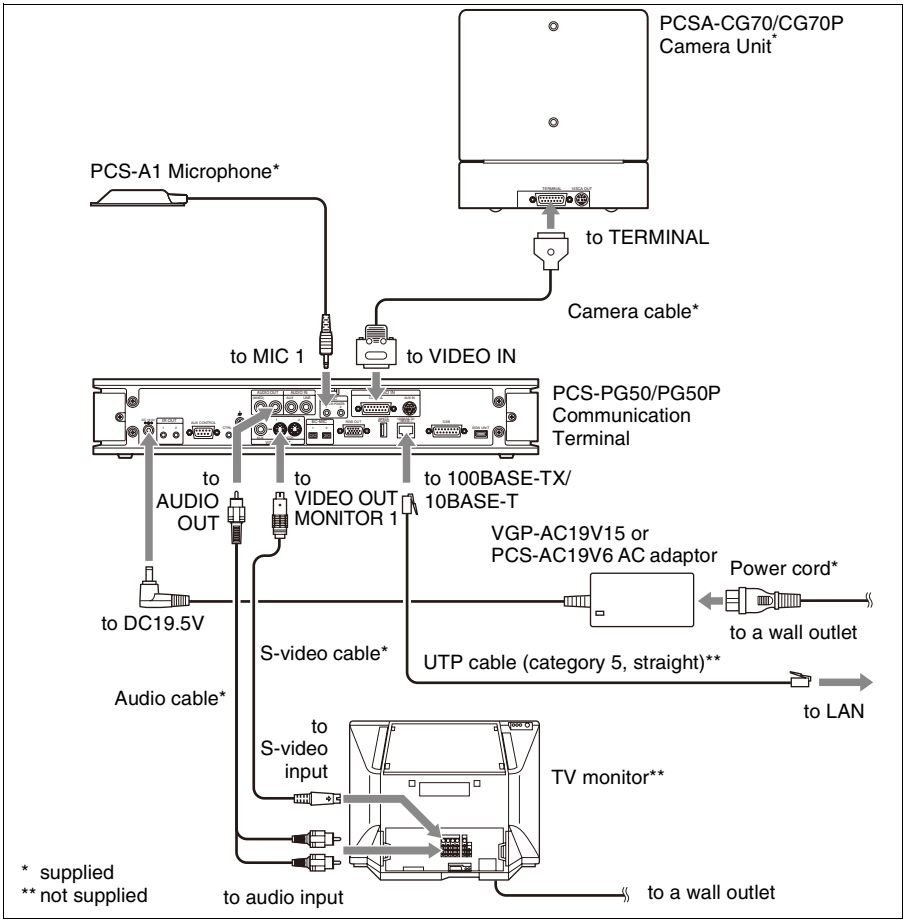
System Connections

This section describes the typical system connections.

Notes

- Be sure to turn off all the equipment before making any connections.
- Do not connect/disconnect the camera cable or the interface cable with the power on. Doing so may damage the Camera Unit, Communication Terminal or ISDN Unit.
- 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.
- Used with an ISDN Unit for the first time, the Communication Terminal may automatically upgrade the software of the ISDN Unit. While the upgrading message is displayed on the monitor screen, be sure not to turn off the Communication Terminal. Doing so may cause malfunction of the system.

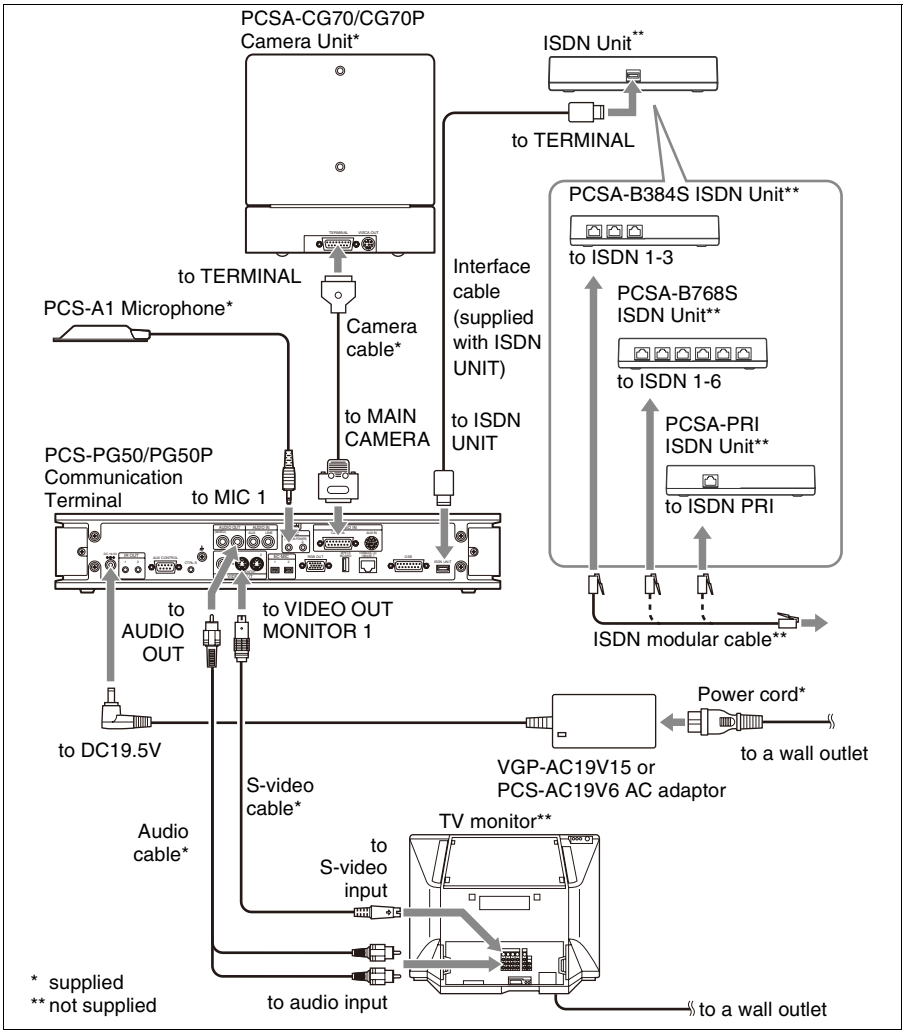
System Connection via a LAN



Notes

- The AUDIO OUT (MIXED) jack is used to make an audio recording of a conference. This is not used during regular conferences.
- The TV monitor can be connected to the RGB OUT jacks on the Communication Terminal or the Data Solution Box.

System Connection via an ISDN



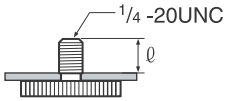
Notes

- The AUDIO OUT (MIXED) jack is used to make an audio recording of a conference. This is not used during regular conferences.
- The TV monitor can be connected to the RGB OUT jacks on the Communication Terminal or the Data Solution Box.

Attaching the PCSA-CG70/CG70P Camera Unit to a Tripod

To attach the Camera Unit to a tripod

Attach a tripod to the screw hole used for attaching a tripod on the bottom of the Camera Unit.
The tripod must be set up on a flat surface and tightened firmly by hand.
Use a tripod with screws of the following specifications.



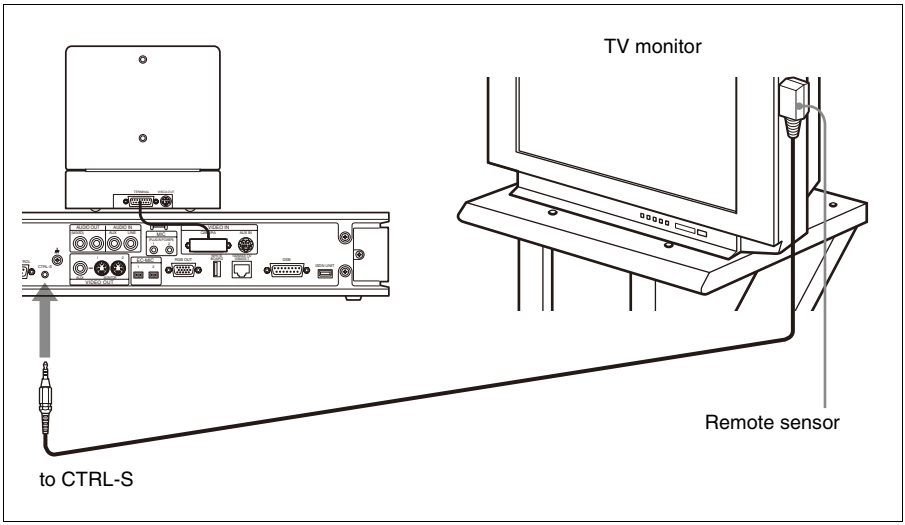
ℓ = 4.5 – 6 mm
ℓ = 0.18 – 0.24 inches

Preparing the System

Attaching the Remote Control Receiver

Most operations with the Video Communication System can be controlled with the supplied Remote Commander. To use the Remote Commander, point it to the supplied remote control receiver or the remote sensor on the Camera Unit. Connect the remote control receiver to the CTRL-S jack on the Communication Terminal. Use the supplied hook-and-loop pads to fix the remote control receiver to an object such as a monitor.

For details on connecting the Camera Unit, see "System Connections" on page 28.



Notes

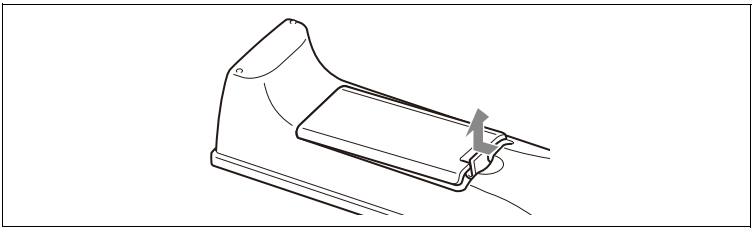
- Be careful not to hide the surface incorporating the indicator, which is the remote sensor of the remote control receiver.
- When an inverter type or brightness-adjustable type of fluorescent lamp is used in a conference room, the sensitivity of the Remote Commander may deteriorate. If the Remote Commander does not function, attach the supplied filter over the remote sensor of the remote control receiver or change the location of the remote control receiver to avoid direct light.
- The remote control receiver and the remote sensor of the Camera Unit do not function at the same time. When the remote control receiver is connected, the remote sensor of the Camera Unit becomes inactive.
- To operate the supplied camera when the Remote Control Receiver is not in use, point the Remote Commander at the connected camera.

Inserting Batteries Into the Remote Commander

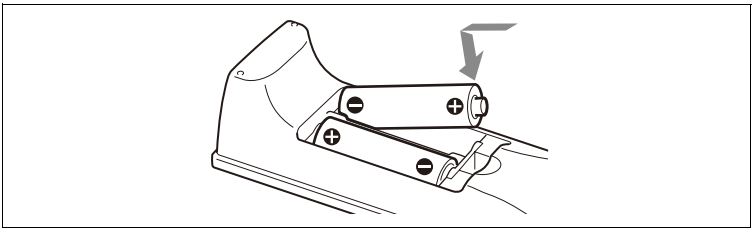
Most of the operations with the Video Communication System can be controlled with the supplied Remote Commander.

PCSA-RG1

1 Remove the battery compartment cover.



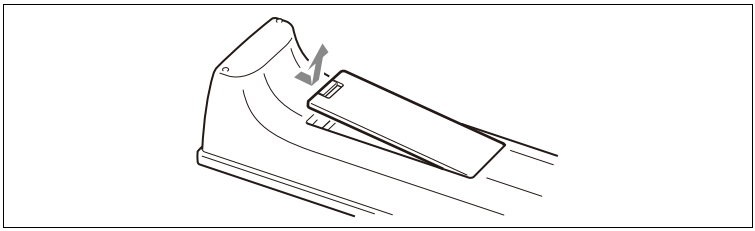
2 Insert two size AA (R6) batteries (supplied) with correct polarities into the battery compartment.



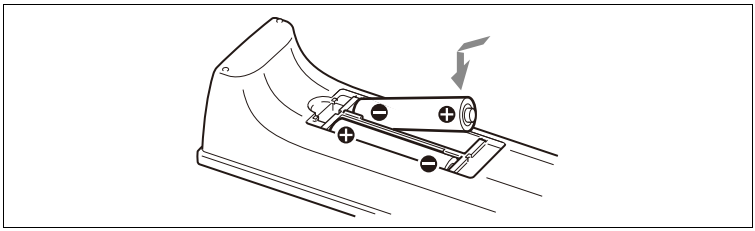
3 Replace the cover.

PCS-RG70

1 Remove the battery compartment cover.



2 Insert two size AAA (R03) batteries (supplied) with correct polarities into the battery compartment.



3 Replace the cover.

Note

Be sure to insert the batteries ⊖ side first. Inserting them forcibly ⊕ side first may damage the insulated film covering the batteries and cause a short circuit.

Battery life

When the Remote Commander does not function properly, replace both the batteries with new ones.

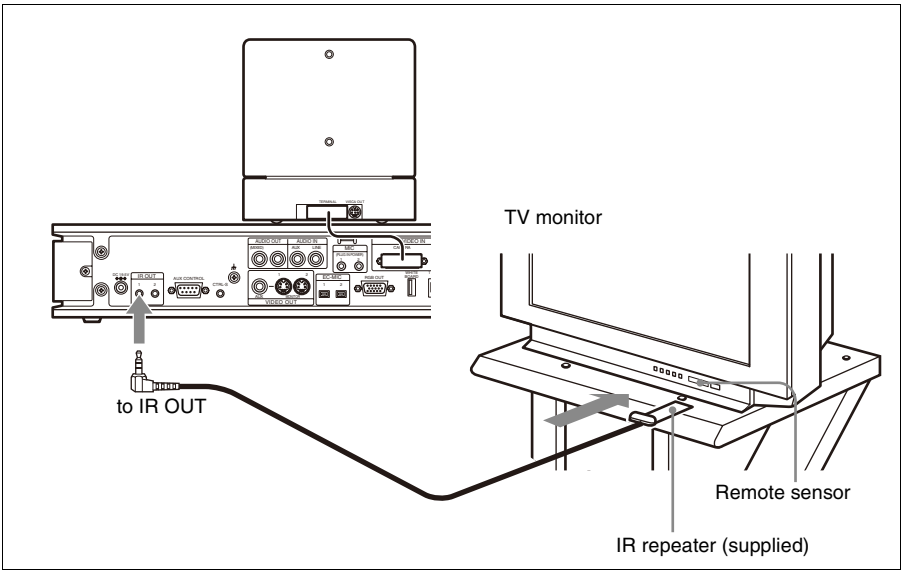
Notes on batteries

To avoid damage from possible battery leakage or corrosion, observe the following:

- Make sure to insert the batteries with the polarities in the correct direction.
- Do not mix old and new batteries, or different types of batteries.
- Do not attempt to charge the batteries.
- If you do not intend to use the Remote Commander for a long period of time, remove the batteries.
- If battery leakage occurs, clean the battery compartment and replace all the batteries with new ones.

Turning On/Off the TV Monitor Together With the Communication Terminal

If you use a Sony TV, insert the IR repeater under the remote sensor of the TV. Once you set the IR repeater, the TV will turn on or go to standby together with the Communication Terminal when you press the I/⏻ button on the supplied Remote Commander.



Note

If the TV monitor is not turned on by pressing the I/⏻ button on the Remote Commander, change the "IR Repeater Mode" setting in the General Setup menu.

For details on the "IR Repeater Mode" setting, see "General Setup Menu" on page 62.

Turning the System On/Off

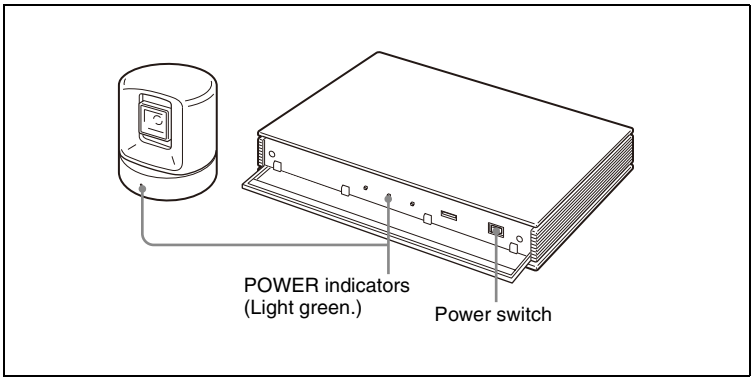
This section describes how to turn on or off the Communication Terminal.

Turning On

1 Turn on the TV monitor.
If the IR repeater is installed in the TV monitor, set the TV monitor to standby mode. The TV monitor will turn on simultaneously when the Communication Terminal is turned on.

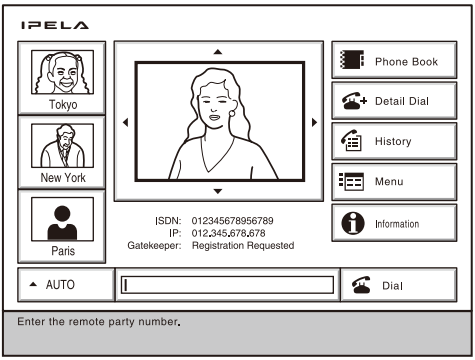
2 Turn on the power of any other equipment to be used for the videoconference.

3 Open the front panel of the Communication Terminal, and then slide the power switch on the right to the on position (I).



The Communication Terminal turns on. Three indicators on the front of the Communication Terminal and the POWER indicator on the camera light, then only the POWER indicators on both units remain on in green. The launcher menu will appear on the monitor screen and the picture shot by the local camera will also appear in the launcher menu.

Launcher menu



Notes

- After the power is turned on, the camera moves automatically for trial operation. Be careful not to catch your finger.
- If you use force to prevent the camera moving, it may not resume moving and not output a signal to the Communication Terminal. In this case, turn off the terminal, and turn it on again.
- When you turn on the power of the Communication Terminal for the first time after installation, the setup wizard will appear after the self-diagnosis is completed. Set up your system following the wizard.

  For setups using the wizard, see "Setting Up the System for the First Time — Initial Setup Wizard" on page 41.

- Used with an optional device especially designed for use with this system, such as the Data Solution Box or ISDN Unit, for the first time, the Communication Terminal may automatically upgrade the software of the connected device. While the upgrading message is displayed on the monitor screen, be sure not to turn off the Communication Terminal. Doing so may cause malfunction of the system. System malfunction may also occur when a system power-off has been caused by an accidental problem such as a power interruption during upgrading. If connection of the Data Solution Box or ISDN Unit to the Communication Terminal is not re-established even after the system power is recovered, consult a Sony dealer.

Status display

PPPoE admission status, UPnP registration status, status of IP address acquisition from DHCP, status of registration to gatekeeper, or status of registration to SIP server is displayed. The status is displayed only when registration is in progress or an error occurs. Nothing is displayed when registration succeeds.

Notes

- The statuses of multiple actions do not display simultaneously. The statuses are displayed in the following order: PPPoE admission status, UPnP registration status, status of IP address acquisition from DHCP, status of registration to gatekeeper, and status of registration to SIP server.

- The status display does not appear when “Number Display” is set to “No display” under Menu Screens of the General Setup menu.

For details on the status display, see “Status display” on page 104.

For details on the “Number Display” setting, see “General Setup Menu” on page 62.

Standby Mode Function

When “Standby Mode” under “Device Setup” on the General Setup Menu is set to “On”, the Communication Terminal will enter standby mode if you do not operate it for a specified period of time in order to save power.
When the Communication Terminal is in standby mode, the POWER indicator lights in orange.
You can turn on the Video Communication System with any button on the Remote Commander if it is in standby mode.
Once the Communication Terminal receives a call, the standby mode is automatically released.

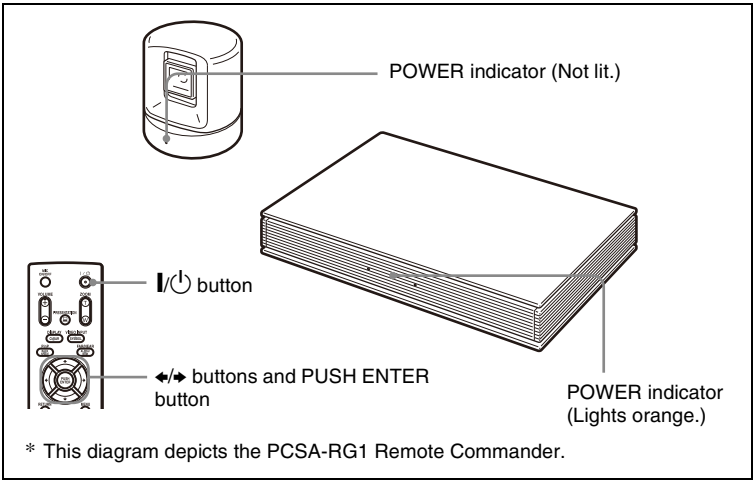
Notes

- The POWER indicator on the camera goes off when the system enters standby mode.
- If you use a Sony TV monitor with the IR repeater installed under the remote sensor, the TV monitor will enter standby mode together with the Communication Terminal.

Setting the Video Communication System to Standby Mode

1 Display the launcher menu on the monitor screen, then press the I/⏻ button on the Remote Commander.
The message “Power off?” appears on the monitor screen.

2 Press the ← or → button on the Remote Commander to select OK, and press the PUSH ENTER button.
You may press the I/⏻ button on the Remote Commander.



* This diagram depicts the PCSA-RG1 Remote Commander.

The Video Communication System enters standby mode and the POWER indicator on the Communication Terminal lights in orange. The POWER indicator on the camera goes out.
If the IR repeater is installed in a Sony TV monitor, it will go into standby together with the Video Communication System.

Note

When the Remote Control Receiver is not in use and the Communication Terminal and the Camera are separately installed, point the Remote Commander to the Camera for operations.

To cancel setting the system to standby

Select "Cancel" with the ← or → button on the Remote Commander, then press the PUSH ENTER button in step 2 above.

To release the standby mode

Press any button on the Remote Commander.

To specify the standby time

Specify the time that you want the system to remain on before entering into standby mode (1 to 99 minutes) by selecting "Device Setup" on the General Setup menu, and then setting "Standby Time". If you do not want the system to enter the standby mode, set "Standby Mode" to "Off".

For the "Standby Time" and "Standby Mode" settings, see "General Setup Menu" on page 62.

Turning Off

1 Put the system into standby mode.

2 Open the front panel of the Communication Terminal, and then slide the power switch on the right to the off position (○).

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

Note

Set the power switch on the Communication Terminal off when the system will not be used for an extended period. While the power switch is off, you cannot receive a call from a remote party.

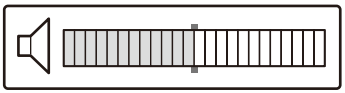
Adjusting the Volume on the TV Monitor

The procedure for volume adjustment during system setup differs from the procedure during a videoconference.
Adjust the volume on the TV monitor during system setup, and adjust the volume on the Communication Terminal when a videoconference is in progress.

Volume adjustment during setup

Before adjusting the volume on the TV monitor, set the volume on the Communication Terminal to the appropriate position.

1 Press the VOLUME +/– buttons on the Remote Commander to set the volume level on the adjustment bar displayed on the screen to the middle position.



2 Adjust the volume on the TV monitor so that you can properly hear a remote party speaking.

To adjust the picture on the TV monitor

Use the controls on the TV monitor to adjust the picture, hue, contrast, brightness or sharpness.

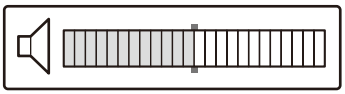
For details on picture adjustments, refer to the Operating Instructions of the TV.

Note

Do not activate the TV's surround sound feature as it may cause the echo canceller of the Communication Terminal not to function properly and make strange sounds.

Volume adjustment during a videoconference

When a videoconference is in progress, press the VOLUME +/– buttons on the Remote Commander to adjust the volume on the Communication Terminal.



Displaying Help

Pressing the HELP button on the Remote Commander displays a balloon help or a help screen to guide most operations on the monitor screen.

Note

You can hide the balloon help used for entering characters.
Press the MENU button on the Remote Commander to show the menu, and set "Character Input Help" under "Menu Screens" of the General Setup menu to "Off". (See page 62.)

Displaying the Versions and Options

You can check the version of the Communication Terminal, versions of the connected optional equipment for exclusive use with this system, and the options installed in the terminal by displaying the Status menu on the monitor screen.

For details on the Status menu, see "Information Menu" on page 79.

Setting Up the System for the First Time — Initial Setup Wizard

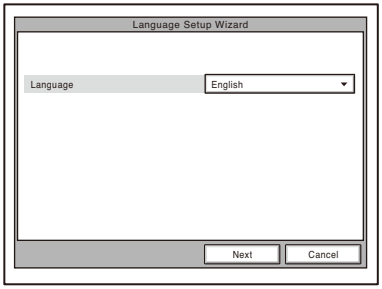
When you turn on the Communication Terminal for the first time after installation and the self-diagnosis is completed, the setup wizard appears on the monitor screen. Register your local system data with the setup wizard using the Remote Commander.

Notes

- You can change the settings made with the setup wizard later using the Setup menus.
- The setup wizard will also be displayed when you install the PCSA-B384S, PCSA-B768S, or PCSA-PRI ISDN Unit to your system - later. Perform the setup again.

1 Select the language used for the on-screen menus and messages in the Language Setup Wizard.

Language: Select one of the following languages; English, French, German, Japanese, Spanish, Italian, Simplified Chinese, Portuguese, Traditional Chinese, Korean, Dutch, Swedish, Norwegian, Danish, Finnish, Polish, Russian, Arabic, Thai, Turkish, or Welsh.



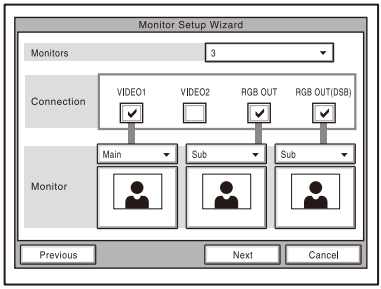
2 Use the ↑, ↓, ← or → button on the Remote Commander to select "Next", then press the PUSH ENTER button.

The Monitor Setup Wizard appears.

3 Select a monitor from which signals are output.

Note

If you select a monitor, other monitors than that you selected display no menus.



Monitors

Select the number of monitors connected to the system.

1: One monitor connected.

2: Two monitors connected.

3: Three monitors connected.

Connection

Selects the output connector to which the device to be used is connected.

VIDEO 1: Selects the device connected to the VIDEO 1 connector.

VIDEO 2: Selects the device connected to the VIDEO 2 connector.

RGB OUT: Selects the device connected to the RGB OUT connector as the main monitor.

RGB OUT (DSB): Selects the device connected to the RGB OUT connector on the Data Solution Box.

Monitor

Allows you to define the monitor connected to the corresponding connector as the main monitor or the sub monitor.

Main: Defines the monitor as the main monitor.

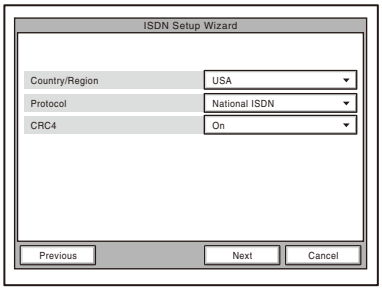
Sub: Defines the monitor as the sub monitor.

For details, see "Displaying the Picture on a Projector or Monitor" on page 191.

4 Use the ↑, ↓, ← or → button on the Remote Commander to select “Next”, then press the PUSH ENTER button.

The ISDN Setup Wizard appears when the PCSA-B384S, PCSA-B768S or PCSA-PRI ISDN Unit is connected. When the ISDN Unit is not connected, the LAN Setup Wizard is displayed. Proceed to step 11.

5 Set the following items on the ISDN line.



Country/Region: Select your country or region.

Protocol: Select the protocol of the ISDN line you are using.

CRC4: Select whether to enable CRC4. This option should normally be enabled.

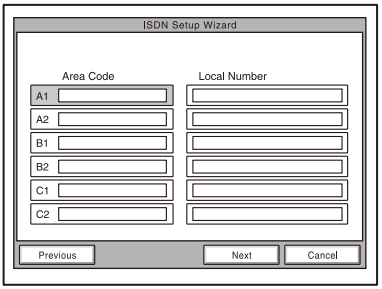
Note

The “CRC4” option appears when using the PCSA-PRI.

6 Use the ↑, ↓, ← or → button to select “Next”, then press the PUSH ENTER button.

7 Enter the telephone number of the ISDN used by the system.

When you use one ISDN line, enter the same number both in the A1 and A2 text boxes (except for the USA and Canada).



Area Code: Enter the area code. Do not enter the first “0” number.

Local Number: Enter the telephone number.

Notes

- When you select a blank text box and press the PUSH ENTER button on the Remote Commander, the content in the text box immediately above will be copied to the selected text box.
- When you use the PCSA-B384S ISDN unit and connect 2 or 3 ISDN lines, enter the telephone numbers in the B1 to C2 text boxes in addition to the A1 and A2 boxes.
- When you use the PCSA-B768S and connect 2 to 6 ISDN lines, enter the telephone numbers in the B1 to F2 text boxes in addition to the A1 and A2 boxes. To open the menu with D1 to F2 text boxes, select “Next”, then press the PUSH ENTER button.
- When you use the PCSA-PRI, Ch1 to Ch23 (T1), or Ch1 to Ch30 (E1) are displayed. Enter the telephone numbers according to the number of channels you will use.

When you select Auto SPID (only for customers in the USA and Canada)

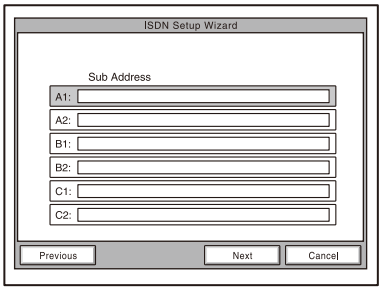
You can automatically set up the Area Code and Local Number on this page, and SPID items in the SPID menu.

8 Use the ↑, ↓, ← or → button to select “Next”, then press the PUSH ENTER button.

9 Enter the sub-addresses.

Only numbers are available for a sub-address.

When you use one ISDN line, enter the same number both in the A1 and A2 text boxes (except for the USA and Canada).

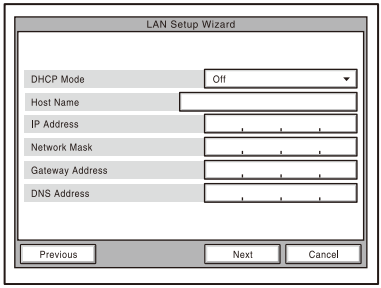


Notes

- When you use the PCSA-B384S ISDN unit and connect 2 or 3 ISDN lines, enter the sub-addresses in the B1 to C2 text boxes in addition to the A1 and A2 boxes.
- When you use the PCSA-B768S and connect 2 to 6 ISDN lines, enter the sub-addresses in the B1 to F2 text boxes in addition to the A1 and A2 boxes. To open the menu with these text boxes, select “Next”, then press the PUSH ENTER button.
- When you use the PCSA-PRI, Ch1 to Ch23 (T1), or Ch1 to Ch30 (E1) are displayed. Enter the telephone numbers according to the number of channels you will use.

10 Use the ↑, ↓, ← or → button to select “Next”, then press the PUSH ENTER button.

11 Set the following items on the LAN.



DHCP Mode

Sets the DHCP (Dynamic Host Configuration Protocol).

Auto: Automatically assigns your IP address, network mask, gateway address and DNS address.

Off: Deactivates DHCP. In this case set your IP address, network mask, gateway address and DNS address manually.

Host Name

Enter your host name (up to 30 characters).

IP Address

Enter your IP address.

Network Mask

Enter your network mask.

Gateway Address

Enter your default gateway address.

DNS Address

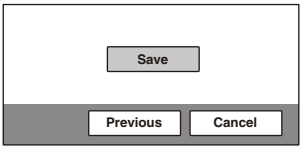
Enter your DNS (Domain Name System) server address.

Note

When you set “DHCP Mode” to “Auto”, the assigned IP address is shown in the launcher menu (page 100) or Information menu (page 79).

If you do not know how to set up the LAN configuration, contact your network administrator.

12 Use the ↑, ↓, ← or → button to select “Save”, then press the PUSH ENTER button.



The settings are saved.

To cancel the setting

Press the ↑, ↓, ← or → button to select “Cancel”, then press the PUSH ENTER button.

To go back to the previous wizard

Press the ↑, ↓, ← or → button to select “Previous”, then press the PUSH ENTER button.

Using the Menus

The Video Communication System uses the on-screen menus to make various adjustments and settings. This section describes how to adjust or set the items in the menus and gives a brief introduction of the menus.

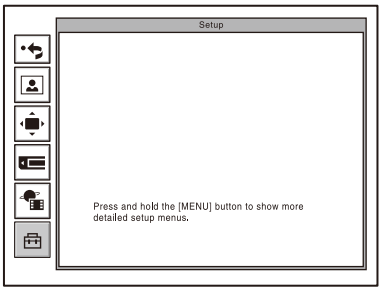
For the menu configuration, see page 319.

Operation

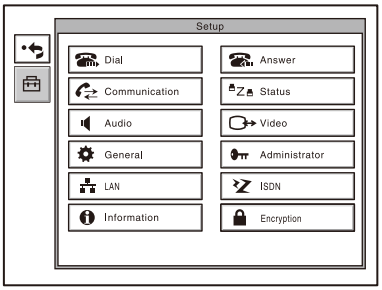
The basic operation through the menu is explained by taking the Setup menu.

1 Press the MENU button on the Remote Commander, or press the ↑, ↓, ← or → button to select “Menu” and press the PUSH ENTER button in the launcher menu.

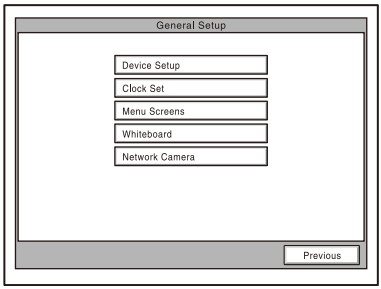
The Setup menu appears.



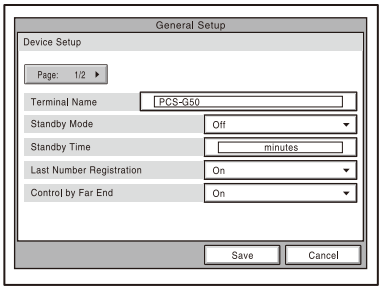
2 Press and hold the MENU button.
The Setup menu for the administrator appears.



3 Use the ↑, ↓, ← or → button on the Remote Commander to select the menu you want to set, then press the PUSH ENTER button.
The selected setup menu appears.

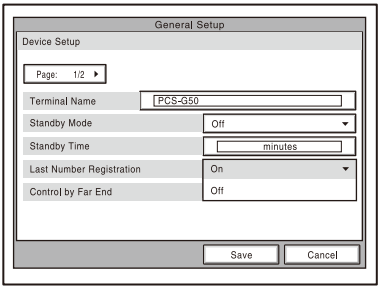


4 Use the ↑, ↓, ← or → button on the Remote Commander to select the menu you want to set, then press the PUSH ENTER button.
The selected setup menu appears.



5 Press the ↑ or ↓ button to select the item you want to set or adjust, then press the PUSH ENTER button.

When an item is selected from the list, the settings for the selected item appear.

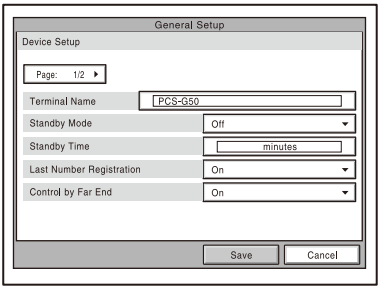


6 Press the ↑ or ↓ button to select an item from the list, then press the PUSH ENTER button.

Note

For items that require text entry, press the Remote Commander button, enter the desired text, and then press the PUSH ENTER button.

7 The selected Press the ↓ button to select “Save”, then press the PUSH ENTER button.



The selected setting is saved, and the previous screen returns.

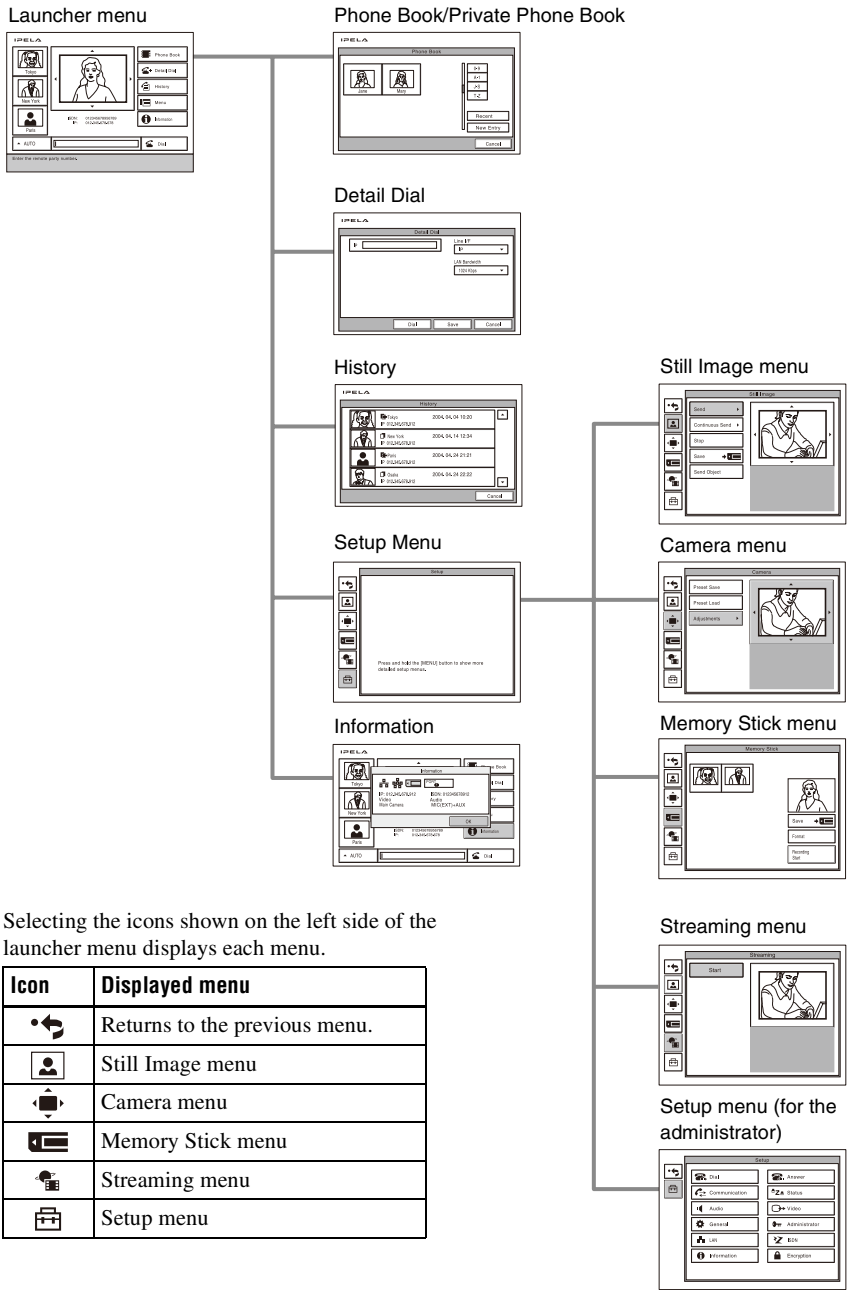
To return to the previous menu

Press the RETURN button on the Remote Commander.

Menu Configuration

The system menus are configured as outlined below.

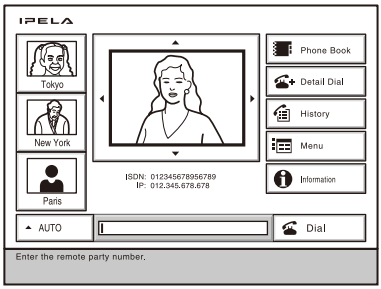
For details about menu configuration, see “Menu Configuration” on page 319.



Selecting the icons shown on the left side of the launcher menu displays each menu.

Icon	Displayed menu
	Returns to the previous menu.
	Still Image menu
	Camera menu
	Memory Stick menu
	Streaming menu
	Setup menu

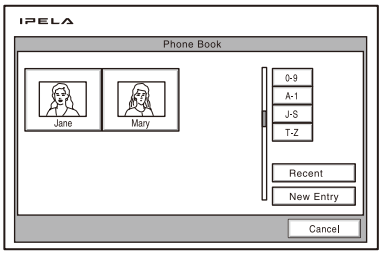
Launcher menu



The launcher menu is displayed when the Video Communication System is turned on or while not connected to a remote party.

For details on the launcher menu, see page 100.

Phone Book

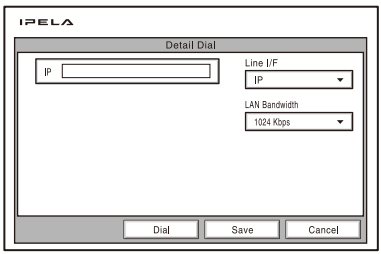


The Phone Book is used to register a remote party, or to call a registered remote party.

The Phone Book appears when you select “Phone Book” on the launcher menu.

For details on the Phone Book, see pages 82 to 85 and 110 to 112.

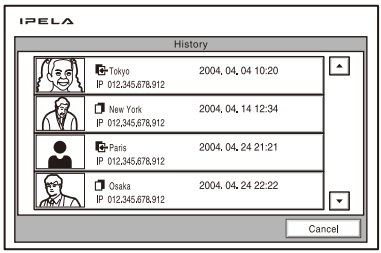
Detail Dial



The Detail Dial is used to call a remote party who is not registered in the Phone Book. The Detail Dial appears when you select “Detail Dial” on the launcher menu. The menu also appears when you press the CONNECT/ DISCONNECT (/) button on the Remote Commander.

For details on the Detail Dial, see pages 106 to 109.

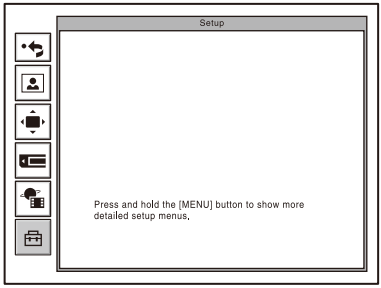
History



This menu is used to control the videoconference history information. The menu appears when you select “History” on the launcher menu.

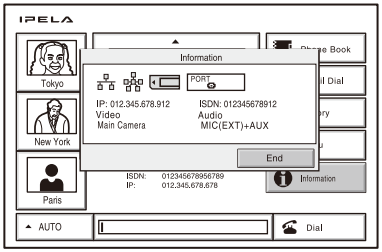
For details on the History, see page 110.

Setup menu



The menu appears when you select “Menu” on the launcher menu. The menu also appears when you press the MENU button on the Remote Commander.

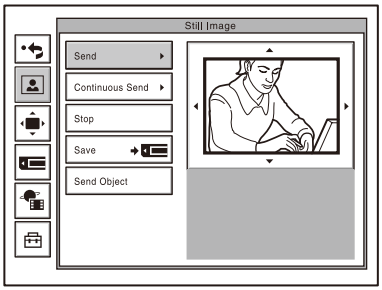
Information



This menu is used to display the current setting status of the Communication Terminal. The menu appears when you select “Information” on the launcher menu.

For details on the Information, see pages 101 to 102.

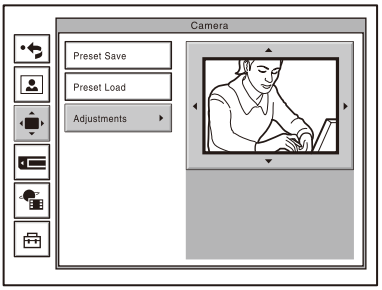
Still Image menu



The Still Image menu is used to control still images. The menu appears when you select “Menu” on the launcher menu, and then select when it appears.

For details on the Still Image menu, see pages 127 to 129 and pages 143 to 148.

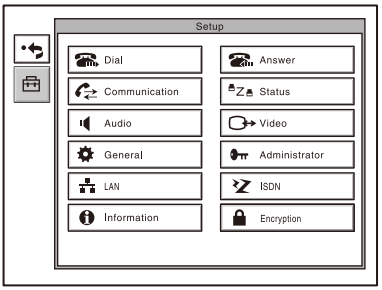
Camera menu



The Camera menu is used to adjust the camera angle or to zoom the displayed image. The menu appears when you select “Menu” on the Launcher menu, and then select when it appears.

For details on the Camera menu, see pages 121 to 125.

Setup menu (for the administrator)



The Setup menu for the administrator is used to set various detailed items on the system.

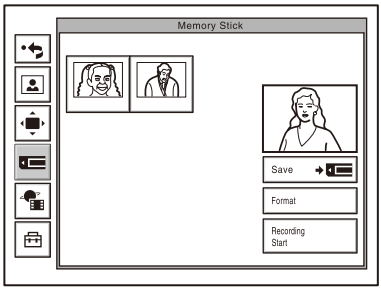
The menu can be displayed by holding down the MENU button on the Remote Commander.

Note

You can also display the Setup menu for the administrator by pressing the numeric button 9 on the Remote Commander twice while the Setup menu (Initial Setup) or the screen in communication is displayed.

For details on the Setup menu (for the administrator), see pages 51 to 82.

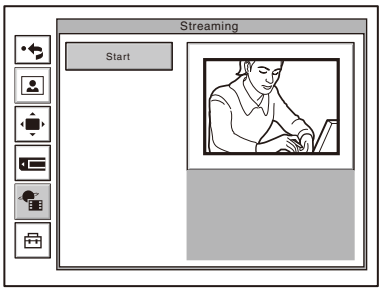
Memory Stick menu



The Memory Stick menu is used to use “Memory Sticks”. The menu is not available if there is no “Memory Stick” inserted in the Communication Terminal. The menu appears when you select “Menu” on the launcher menu, and then select when it appears.

For details on the Memory Stick menu, see pages 136 to 140 and pages 146 to 148.

Streaming menu



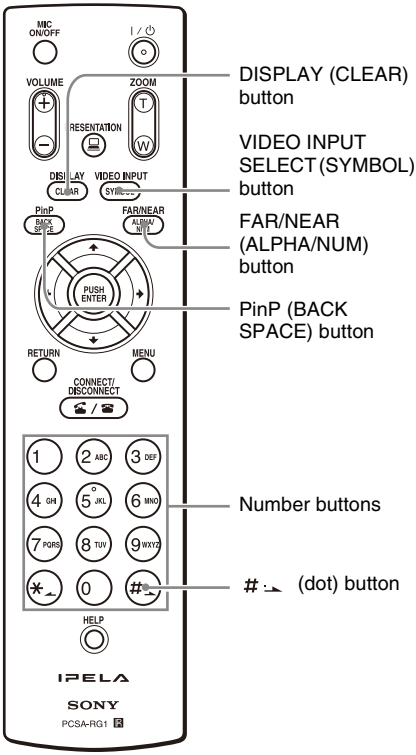
The Streaming menu is used when producing a streaming broadcast of a videoconference. The menu appears when you select “Menu” on the launcher menu, and then select when it appears.

For details on the Streaming menu, see pages 151 to 152.

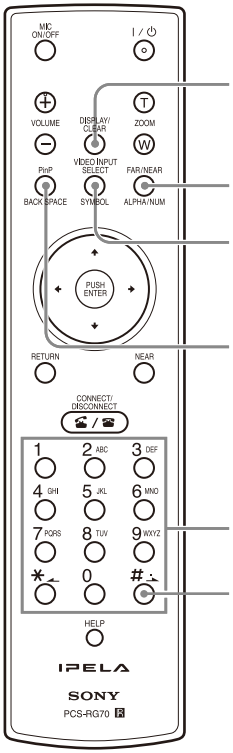
Entering Characters

This section explains how to enter the letters, numbers or symbols on the text box in the menu using the Remote Commander.

PCSA-RG1



PCS-RG70



DISPLAY (CLEAR) button

FAR/NEAR (ALPHA/NUM) button

VIDEO INPUT SELECT (SYMBOL) button

PinP (BACK SPACE) button

Number buttons

.~ (dot) button

To enter letters or numbers

1 Press the FAR/NEAR (ALPHA/NUM) button repeatedly to enable the letters or numbers to be input.

2 Press the number buttons repeatedly to enter the letters or numbers that you want.

You can enter the letter shown on each button by pressing it repeatedly.
You can enter the number shown on each button by pressing it.

To enter a symbol

Press the VIDEO INPUT SELECT (SYMBOL) button repeatedly to select the desired symbol. Pressing the 0 button repeatedly also enables you to enter a symbol.

To enter a dot (.) for an IP address

Press the # .~ button.

To delete a character

Press the PinP (BACK SPACE) button. The last entered character is deleted.

To delete all characters in a line

Move the cursor to the line to be deleted, then press the DISPLAY (CLEAR) button.

Note

When you press the HELP button on the Remote Commander to show balloon helps or help screens, you can hide only the balloon help used for entering characters.
Select “Character Input Help” from the General Setup menu, then select “Off”. (See page 62.)

Chapter 2: Registration and Setup for System Administrators

This chapter describes the registration and settings to be carried out by the system administrator.The chapter is intended to be read by the system administrator.

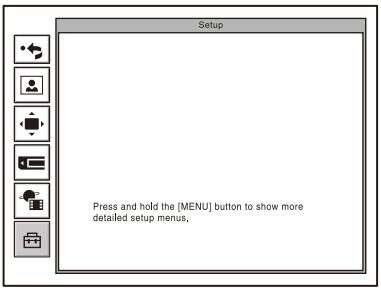
Registering Local Information

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

Opening the Setup Menu for the Administrator

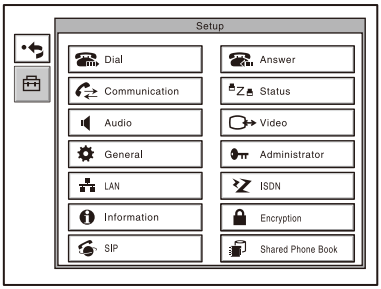
1 Press the MENU button on the Remote Commander, or use the ↑, ↓, ← or → button to select "MENU" in the launcher menu, then press the PUSH ENTER button.

The Setup menu appears on the monitor screen.



2 Hold down the MENU button.

The Setup menu for the administrator appears on the monitor screen.



Note

You can also display the Setup menu for the administrator by pressing the numeric button 9 on the Remote Commander twice while the Setup menu or the screen in communication is displayed.

Menus available in the Setup menu (Administrator)

Selecting the following items opens their respective menus.

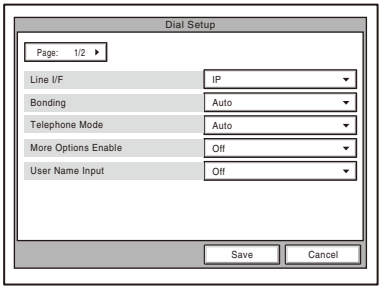
Dial: Dial Setup menu (see page 52)
Answer: Answer Setup menu (see page 54)
Communication: Communication Setup menu (see page 54)
Status: Status menu (see page 57)
Audio: Audio Setup menu (see page 59)
Video: Video Setup menu (see page 60)
General: General Setup menu (see page 62)
Administrator: Administrator Setup menu (see page 66)
LAN: LAN Setup menu (see page 71)
ISDN: ISDN Setup menu (see page 75)
Information: Information menu (see page 79)
Encryption: Encryption menu (see page 79)
SIP: SIP setup menu (see page 80)
Shared Phone Book: Shared Phone Book Setup menu (see page 81)

Notes

- The SIP setup menu only appears when the PCSA-SP1 optional SIP software is installed.
- The Shared Phone Book Setup menu appears only when "Shared Phone Book" is set to "On" in the Administrator Setup menu.

3 Use the ↑, ↓, ← or → button on the Remote Commander to select the menu you want to set, then press the PUSH ENTER button.

The selected setup menu appears.



4 Set the respective items.

For details on individual items, see the relevant menu pages.

5 After the setting is completed, use the ↑, ↓, ← or → button to select "Save", then press the PUSH ENTER button.

The setting is saved, and the Setup menu (for the administrator) is restored.

To cancel the setup

Use the ↑, ↓, ← or → button on the Remote Commander to select "Cancel", then press the PUSH ENTER button. Or press the RETURN button on the Remote Commander.

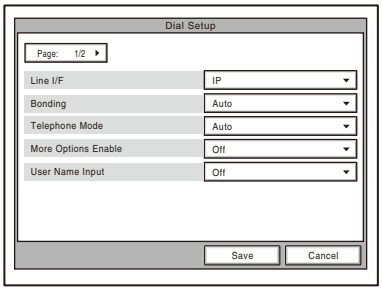
To page up or down the selected menu

Use the ↑, ↓, ← or → button on the Remote Commander to select the Page box or any one of the item, then press the → button to advance the page and the ← button to go back to the previous page.

Dial Setup Menu

The Dial Setup menu is used to set the attributes for dialing.

Page 1/2



Line I/F

Allows you to select the line interface that you normally use.

IP: Connects a videoconferencing system via a LAN.

ISDN: Connects a videoconferencing system via ISDN.

ISDN (Telephone): Connects an audio-only telephone via ISDN (voice meeting).

SIP: Connects to an IP phone using an SIP server.

Bonding*

Allows you to select whether you use a process called bonding to connect multiple ISDN lines.

Through bonding, the connection of one line enables you to automatically connect all other lines.

* Bonding (Bandwidth on Demand Interoperability Group) is a registered trademark of THE BONDING CONSORTIUM.

Auto: Automatically activates the connection through bonding if this feature is available at the remote party.

On: Always connects a remote party through bonding.

Telephone Mode

Allows you to select the audio compression format when conducting a voice meeting.

Auto: Selects an appropriate format automatically.
G.711µ-law: Selects the format based on the G.711µ-law standard.
G.711A-law: Selects the format based on the G.711A-law standard.

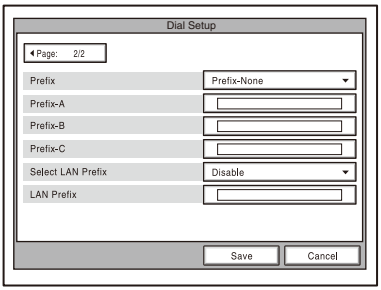
More Options Enable

Allows you to select whether you can modify individual dial lists in the Dial Setup menu.
On: Enables the setting of each dial list. When you select "More Options Enable" in the List Edit menu of the Phone Book, the Dial Setup menu appears.
Off: Enables the application of settings to all the dial lists in the Dial Setup menu simultaneously.

User Name Input

Allows you to select whether to register users names in the communications log before communication starts.
On: Select when you want to record user names. Each time dialing takes place, the user name input menu appears.
Off: Disables the recording of the user names.

Page 2/2



Prefix

Select the prefix number (call number prefixed to a line number).
Prefix-None: Select when you are not using a prefix number.
Prefix-A: Select when you use the prefix set in "Prefix-A" on page 2 of the Dial Setup menu.
Prefix-B: Select when you use the prefix set in "Prefix-B" on page 2 of the Dial Setup menu.
Prefix-C: Select when you use the prefix set in "Prefix-C" on page 2 of the Dial Setup menu.

Prefix-A

"Prefix" is set to "Prefix-A", the line number prefixed by the prefix (dial number) registered in this box is dialed.

Prefix-B

"Prefix" is set to "Prefix-B", the line number prefixed by the prefix (dial number) registered in this box is dialed.

Prefix-C

"Prefix" is set to "Prefix-C", the line number prefixed by the prefix (dial number) registered in this box is dialed.

Note

Enter "9" when this is required to make an outgoing call.

Select LAN Prefix

Allows you to select whether to use the LAN prefix.
Enable: Enable the LAN prefix.
Disable: Disable the LAN prefix.

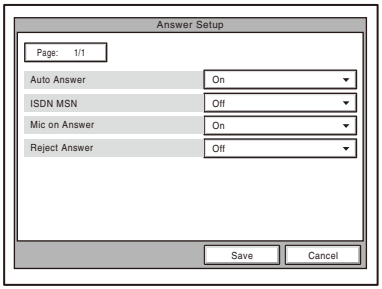
LAN Prefix

When connecting via a LAN, the information entered into this box is added to the beginning of the IP address. Select whether to use the LAN prefix in the Select LAN Prefix option.

Answer Setup Menu

The Answer Setup menu is used to set up call reception.

Page 1/1



Auto Answer

Allows you to select whether the system answers calls automatically.

Auto Answer: Answers calls automatically. When a call comes in, the line is automatically connected.

Off: Allows you to answer calls manually. When a call comes in, the phone rings. If you select "OK" in the "Respond?" message, the line is connected.

ISDN MSN

Allows you to select whether you are using the Multiple Subscriber Number.

On: Select when you use the Multiple Subscriber Number.

Off: Select when you do not use the Multiple Subscriber Number.

Mic on Answer

Allows you to select whether to transmit audio from your site when answering a call from the remote party.

On: Transmit audio when answering a call.

Off: Do not transmit audio when answering a call.

Reject Answer

Allows you to select whether to connect a remote party calling during a videoconference.

On: Disables the connection of a remote party.

Off: Enables the connection of a remote party.

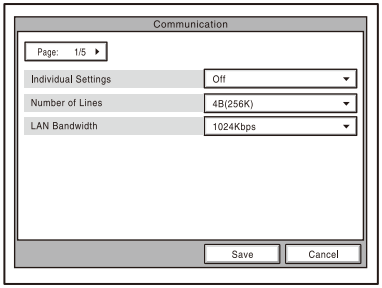
Communication Setup Menu

The Communication Setup menu is used to set up communications.

Note

Contents of the Communication Setup menu vary according to the settings configured by "Individual Settings", and to whether the MCU software (see page 212) is installed or not.

Page 1/5



Individual Settings

Allows you to select whether to perform transmission, reception, and multipoint settings individually.

On: Select to perform transmission, reception, and multipoint settings individually.

Off: Select to perform all settings simultaneously.

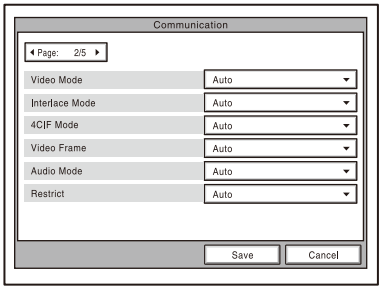
Number of Lines

Allows you to select the number of ISDN channels used in bonding calls. If you set "Individual Settings" to "On" on page 1 of the Communication Setup menu, you can perform this setting individually for transmission, reception, and multipoint conferencing.

LAN Bandwidth

Allows you to select the bandwidth used when connected to a LAN. If you set "Individual Settings" to "On" on page 1 of the Communication Setup menu, you can perform this setting individually for transmission, reception, and multipoint conferencing.

Page 2/5



Video Mode

Allows you to select the compression format of pictures sent to a remote party. If you set "Individual Settings" to "On" on page 1 of the Communication Setup menu, you can perform this setting individually for transmission, reception, and multipoint conferencing.

Auto: Send pictures matching the format of the remote site.

H.264: Send pictures based on the H.264 format.

MPEG4: Send pictures based on the MPEG4 format.

H.263+: Send pictures based on the H.263+ format.

H.261: Send pictures based on the H.261 format (when sending still images using Annex D).

SIP Video Off: Sends only audio (no pictures) when connected by SIP.

Interlace Mode

Allows you to specify whether to use the interlace SIF format in video mode.

Auto: Send video matching the format of the remote site.

On: Use the interlace SIF format.

Off: Not to use the interlace SIF format.

4CIF Mode

Allows you to specify whether to use the 4CIF format in video mode. If you set "Individual Settings" to "On" on page 1 of the Communication Setup menu, you can perform this setting individually for transmission, reception, and multipoint conferencing.

Auto: Send video matching the format of the remote site.

On: Use the 4CIF format.

Off: Not to use the 4CIF format.

Video Frame

Allows you to select the number of video frames during transmission. If you set "Individual Settings" to "On" on page 1 of the Communication Setup menu, you can perform this setting individually for transmission, reception, and multipoint conferencing.

Auto: Switch the number of frames automatically.

15fps: Send CIF format pictures at a maximum rate of 15 frames per second.

30fps: Send CIF format pictures at a maximum rate of 30 frames per second.

Audio Mode

Allows you to select the compression format of audio to be sent to a remote party. If you set "Individual Settings" to "On" on page 1 of the Communication Setup menu, you can perform this setting individually for transmission, reception, and multipoint conferencing.

Auto: Send audio matching the compression format of the remote site.

MPEG4 Audio: Send audio based on the MPEG4 AAC standard.

G.722.1: Send audio based on the G.722.1 standard.

G.722: Send audio based on the G.722 standard.

G.729: Send audio based on the G.729 standard.

G.728: Send audio based on the G.728 standard.

G.723.1: Send audio based on the G.723.1 standard.

G.711: Send audio based on the G.711 standard.

Note

When the remote videoconferencing system does not support the audio mode selected by the local site, the mode automatically becomes "G.711".

Restrict

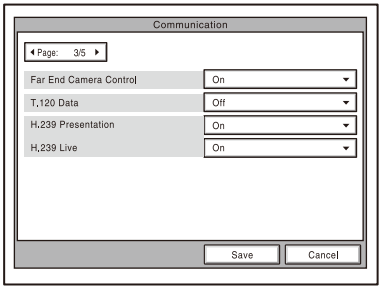
Allows you to select the ISDN transmission rate at dialing. If you set. "Individual Settings" to "On" on page 1 of the Communication Setup menu, you can perform this setting individually for transmission, reception, and multipoint conferencing.

Auto: Select when connecting a remote party via a normal ISDN line.
56K: Select when connecting a remote party located in a region or country where the ISDN transmission rate is 56 Kbps.

Note

The system is set to connect an ISDN line at the transmission rate of 64 Kbps by default. However, some countries, such as the USA, and some regions may use the ISDN transmission rate of 64 Kbps and 56 Kbps. You may not communicate with such countries or regions at 64 Kbps, so you must therefore set "Restrict" to "56K" before dialing.

Page 3/5



Far End Camera Control

Allows you to select whether to enable the control of each other's cameras from each other's site.
If you set "Individual Settings" to "On" on page 1 of the Communication Setup menu, you can perform this setting individually for transmission and reception.
On: Enables the control of each other's cameras. This is the default setting.
Off: Disables the control of each other's cameras.

T.120 Data

Allows you to select whether to perform data conferences with the T.120 standard using NetMeeting (only for ISDN connections). If you set "Individual Settings" to "On" on page 1 of the Communication Setup menu, you can perform this setting individually for transmission and reception.
On: Enables T.120 data conferences.
Off: Disables T.120 data conferences.

For details about T.120 data conferences, see "Conducting a Data Conference Using NetMeeting – T.120 Data Conference" on page 174.

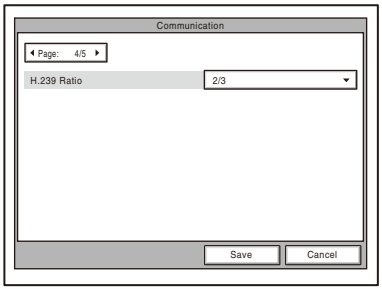
H.239 Presentation

Allows you select whether to use the presentation mode and dual video function based on the H.239 presentation standard. If you set "Individual Settings" to "On" on page 1 of the Communication Setup menu, you can perform this setting individually for transmission and reception.
On: Enables the presentation mode and dual video function based on the H.239 presentation standard.
Off: Disables the presentation mode and dual video function based on the H.239 presentation standard.

H.239 Live

Allows you to select whether to use the dual video function based on the H.239 live standard.
If you set "Individual Settings" to "On" on page 1 of the Communication Setup menu, you can perform this setting individually for transmission and reception.
If H.239 Presentation is set to "Off", this setting is disabled.
On: Enables the dual video function based on the H.239 live standard.
Off: Disables the dual video function based on the H.239 live standard.

Page 4/5



H.239 Ratio

When H.239 presentation transmissions are made with the system, the H.239 presentation data shares bandwidth with

camera images that are also being sent. This setting allows you to select how much of the total bandwidth to use for H.239 presentation data transmissions.

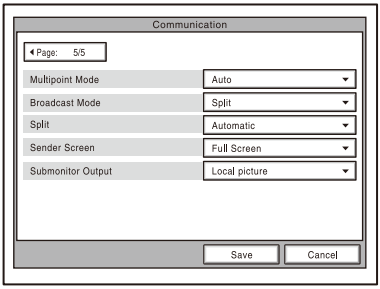
1/3: Use 1/3 of the total bandwidth for H.239 presentation data transmissions.

1/2: Use 1/2 of the total bandwidth for H.239 presentation data transmissions.

2/3: Use 2/3 of the total bandwidth for H.239 presentation data transmissions.

Page 5/5

This page is only displayed when MCU software (page 212) is installed.



Multipoint Mode

Allows you to select whether to conduct multipoint videoconferences.

Auto: Switch from two-point videoconference to multipoint videoconference automatically.

On: Always conducts a multipoint videoconference.

Broadcast Mode

Allows you to select the broadcast mode.

Split: Displays the video from the connected terminals in split windows.

Voice Activate: Detects the terminal where the speaker has the loudest voice, and sends the video from this terminal to all other terminals.

Split

Allows you to select the type of split display used to display local and remote video on a single monitor during a multipoint videoconference.

Automatic: When there are two or three terminals connected, the display is automatically split into four parts. When there are four or five terminals connected, the display is automatically split into six parts.

Six-screen Mosaic: The display is split into six parts regardless of the number of terminals connected.

Note

When there is only one terminal connected, the display switches to full screen regardless of the selection for this setting.

Sender Screen

Allows you to select the monitor display of transmitting monitors during multipoint videoconference.

Full Screen: Display the entire screen.

Automatic: When there are two or three terminals connected, the display is automatically split into four parts. When there are four or five terminals connected, the display is automatically split into six parts.

Six-screen Mosaic: The display is split into six parts regardless of the number of terminals connected.

Note

When there is only one terminal connected, the display switches to full screen regardless of the selection for this setting.

Submonitor Output

Allows you select the video to be displayed on the submonitor during a multipoint videoconference with multiple monitors connected.

Local picture: Displays video from the camera on the local site onto the submonitor.

Speaker picture: Displays video from the camera on the speaker's site onto the submonitor.

Status Menu

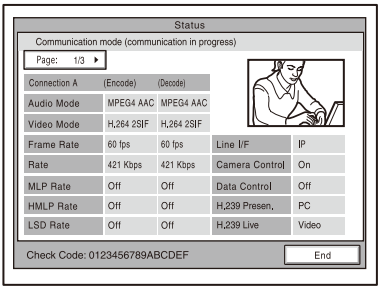
The Status menu shows the status of current communication when communication is in progress, and the status of previous communications when communication is not in progress.

The ISDN Line Status, LAN Line Status or LAN Connection Status will also be displayed depending on the line interface used.

Page 1/3

Communication Mode

One page for each point connected to the system will be displayed. The connected point is shown at the upper left corner of the page as “Connection A (or B, C....)”.
The items below are shown both in the columns for “Encode” and “Decode”. The descriptions under “Encode” show the setting status of the local system and those under “Decode” show the status of the receiving.



Audio Mode

Displays the current audio encoding format.

Video Mode

Displays the current video encoding format.

Note

The audio encoding and video encoding formats used for communication with a remote party may differ from the settings in this menu, depending on the status of videoconferencing system on the remote site.

Frame Rate

Displays the maximum frame rate of motion pictures.

Rate

Displays in real time the number of connected lines and their transfer rates.

MLP Rate

Displays the MLP (Multi Layer Protocol) rate.

HMLP Rate

Displays the HMLP (High Speed Multi Layer Protocol) rate.

LSD Rate

Displays the LSD (Low Speed Data) rate.

Line I/F

Displays the line interface being used.

Camera Control

Displays whether the unit is ready to operate both cameras.

Data Control

Displays whether the unit is ready to hold a T.120 Data conference.

H239 Presen.

Displays whether the unit is ready to use the H.239 presentation mode.

H239 Live

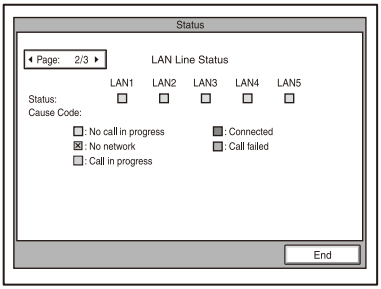
Displays whether the unit is ready to use the H.239 live compliant dual video function. The PCS-G50/G50P supports only reception of data based on the H.239 standard.

Check Code

Displays the check code when the H.235 standard encryption method is being used.

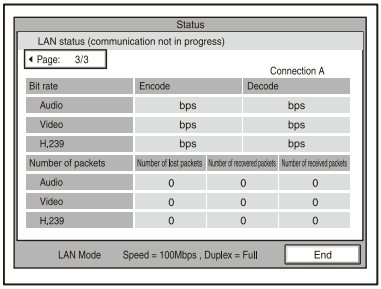
Page 2/3

This page displays the LAN Line Status.



Page 3/3

This page displays the LAN Connection Status.



Bit rate - Encode

Displays by category (audio, video, and H.239 (presentation or live)) the transfer rates for sending data.

Bit rate - Decode

Displays by category (audio, video, and H.239 (presentation or live)) the transfer rates for receiving data.

Number of packets - Lost

Displays by category (audio, video, and H.239 (dual video or DSB)) the number of packets lost during transfer on the network.

Number of packets - Recovered

Displays by category (audio, video, and H.239 (dual video or DSB)) the number of lost packets that were recovered with the system's QoS function.

Number of packets - Received

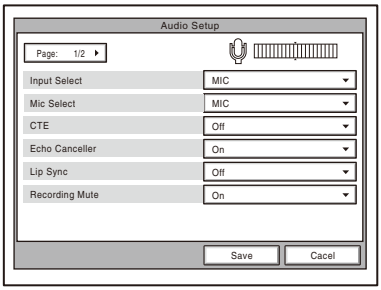
Displays by category (audio, video, and H.239 (dual video or DSB)) the number of packets received during communication.

Audio Setup Menu

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

Page 1/2

The level meter indicating the audio input level is displayed.



Input Select

Allows you to select the audio input.

MIC: Inputs audio from the microphone.

AUX: Inputs audio from auxiliary external equipment.

MIC+AUX: Inputs audio from the microphone and auxiliary external equipment.

Mic Select

Allows you to select the microphone to be used.

MIC: Uses the microphone connected to the Communication Terminal.

DSB MIC: Uses the microphone connected to the Data Solution Box.

LINE: Uses the microphone connected to the AUDIO IN LINE jack.

EC-MIC: Select this when using PCSA-A7 Microphones.

CTE

Allows you to select the input where the CTE-600 Communication Transducer (currently not available) is connected.

Off: Does not use the CTE-600 Communication Transducer (currently not available).

LINE: Inputs from the AUDIO IN LINE jack of the Communication Terminal.

DSB AUX IN: Inputs from the AUX IN jack of the Data Solution box.

Echo Canceller

Allows you to select whether to use the internal echo canceller.

On: Enables the internal echo canceller.

Off: Disables the internal echo canceller.

Lip Sync

Allows you to select whether to use the Lip Sync function.
On: Enables the Lip Sync function.
Off: Disables the Lip Sync function.

Recording Mute

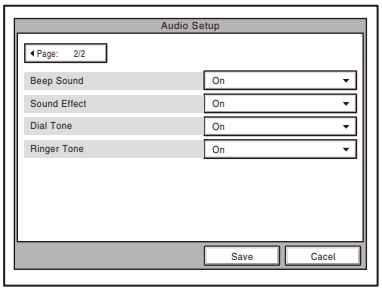
When you connect an audio recording device to the AUDIO IN AUX and AUDIO OUT (MIXED) jacks to record audio from a conference, this function reduces oscillations in sound that occur due to loop-back within audio recording devices.
On: Enables the recording mute function.
Off: Disables the recording mute function.

Notes

- When "Recording Mute" is set to "On" only signals from the AUDIO IN AUX jack are affected. Signals from the microphone or remote sites are not affected. Therefore, Recording Mute functions only when "Input Select" is set to "AUX" or "MIC+AUX."
- When connecting an audio recording device to the AUDIO IN AUX and AUDIO OUT (MIXED) jacks to record audio from a conference, set "Input Select" to "MIC" to reduce echoing to remote sites.

Page 2/2

The level meter indicating the audio input level is displayed.



Beep Sound

Allows you to select whether the system beeps each time you press a button on the Remote Commander.
On: Enables beeping.
Off: Disables beeping.

Sound Effect

Allows you to select whether to output sounds when the system starts, a videoconference starts or ends.
On: Outputs sounds.
Off: Does not output sounds.

Dial Tone

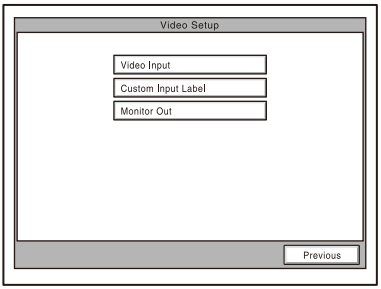
Allows you to select whether to output a ring-back and busy tones when you are dialing.
On: Outputs dial tones.
Off: Does not output dial tones.

Ringer Tone

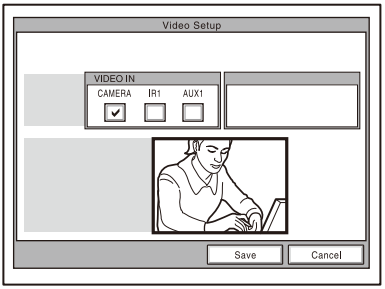
Allows you to select whether to output a ringer tone when you receive a call.
On: Outputs the ringer tone.
Off: Does not output the ringer tone.

Video Setup Menu

The following menus appear when you select "Video" on the Setup menu for the administrator. Select the desired menu.



Video Input



VIDEO IN

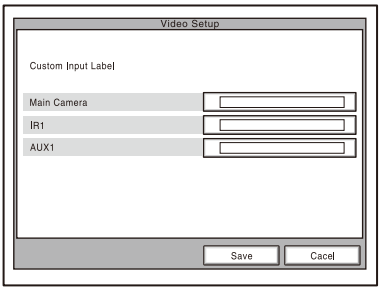
Allows you to select the video input for Input 1.

CAMERA: Selects the video signal from the device connected to the VIDEO IN connector.

IR1: Selects the video signal from the optional PCS-DS150/DS150P Document Stand (currently not available).

AUX1: Selects the video signal from the device connected to the AUX IN connector.

Custom Input Label



Allows you to set the names displayed in the Video Input Select menu.

Main Camera

Allows you to enter the name (up to 12 characters) displayed when “Main Camera” is selected in the Video Input Select screen.

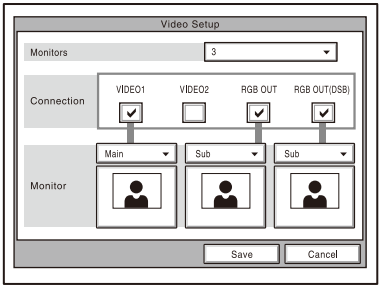
IR 1

Allows you to enter the name (up to 12 characters) displayed when “IR 1” is selected in the Video Input Select screen.

AUX1

Allows you to enter the name (up to 12 characters) displayed when “AUX1” is selected in the Video Input Select screen.

Monitor Out



Monitors

Allows you to specify the number of monitors connected to the system.

1: One monitor connected.

2: Two monitors connected.

3: Three monitors connected.

Connection

Select the connector(s) used to connect the monitor(s).

VIDEO 1: Select when the monitor is connected to the VIDEO 1 connector.

VIDEO 2: Select when the monitor is connected to the VIDEO 2 connector.

RGB OUT: Select when the monitor is connected to the RGB OUT connector of the main unit.

RGB OUT (DSB): Select when the monitor is connected to the RGB OUT connector of the Data Solution Box.

Monitor

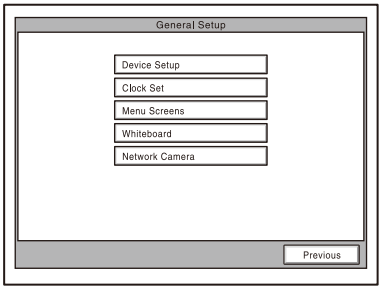
Select whether to use the connected monitor as the sub- or main monitor.

Main: The connected monitor is used as the main monitor.

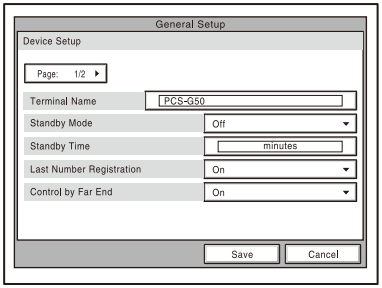
Sub: The connected monitor is used as a sub-monitor.

General Setup Menu

The following menus appear when you select “General” on the Setup menu for the administrator. Select the desired menu.



Device Setup Page 1/2



Terminal Name

Input the terminal name transmitted to remote parties (up to 30 characters).

Standby Mode

Allows you to select whether the Communication Terminal enters standby mode if idle for a specified period of time.

On: Allows the system to go on standby.

Off: Does not allow the system to go on standby.

Standby Time

Specify the time the system must remain idle before entering the standby mode. This time can be between 1 and 99 minutes.

For details on the standby mode, see “Standby Mode Function” on page 37.

Last Number Registration

Allows you to select whether to register the remote party in the Phone Book after the conference is finished.

On: If the remote party is not registered in the Phone Book, the “Register this participant in the list?” message appears on the monitor screen when conference finishes. When you select “OK”, the List Edit menu opens.

Off: The message above does not appear and remote party registration does not take place.

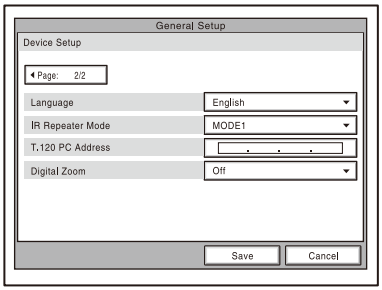
Control by Far End

When “Far End Camera Control” is set to “On” in the Communication Setup menu, you can temporarily reject the camera control command transmitted by the remote party.

On: Accepts the camera control command.

Off: Rejects the camera control command.

Device Setup Page 2/2



Language

Allows you to select the menu and display language used by the system. You can select from the following languages: English, French, German, Japanese, Spanish, Italian, Simplified Chinese, Portuguese, Traditional Chinese, Korean, Dutch, Swedish, Norwegian, Danish, Finnish, Polish, Russian, Arabic, Thai, Turkish, or Welsh.

IR Repeater Mode

Allows you to select the Remote Controller mode of the IR repeater. You should normally select “MODE 1”.

MODE 1: Select when using mode 1. This setting does not usually need to be changed.
MODE 2: Select when using mode 2. Select this mode when the system does not operate properly under "MODE 1".
MODE 3: Select when using mode 3.
MODE 4: Select when using mode 4.

T.120 PC Address

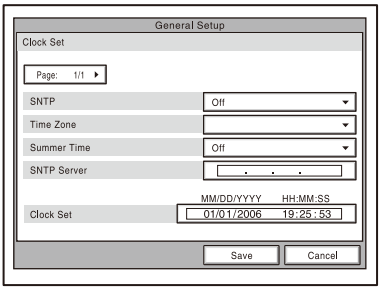
When conducting a data conference based on the T.120 standard using NetMeeting, enter the IP address of the computer. (Used for ISDN connections.)

For details on data conferences based on the T.120 standard, see "Conducting a Data Conference Using NetMeeting – T.120 Data Conference" on page 174.

Digital Zoom

Allows you to select whether to use the digital zoom function.
On: Enable the digital zoom function.
Off: Disable the digital zoom function.

Clock Set Page 1/1



SNTP

Allows you to select whether to obtain clock information from the server with SNTP.
On: Obtain clock information from the server.
Off: Do not obtain clock information from the server.

Time Zone

Allows you to select the country or region where you are using the Communication Terminal.

Summer Time

Allows you to select whether to enable the summer time setting.
On: Select during summer time.
Off: Select when not in summer time.

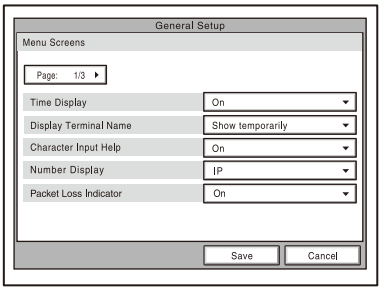
SNTP Server

Input the server address to obtain the clock information from.

Clock Set

Enter the current date and time.

Menu Screens Page 1/3



Time Display

Allows you to select whether you display the elapsed time on the monitor screen during a conference.
On: Displays the elapsed time.
Off: Does not display the elapsed time.

Note

During communication, some items that cannot be modified are also displayed.

Display Terminal Name

Allows you to select whether to display the connected terminal names on the monitor screen.
Off: Not to display the terminal names.
Show temporarily: Display the terminal names for a brief moment.
Always show: Display the terminal names.

Note

The terminal names do not display during two-point videoconferences where "Multipoint Mode" is set to "Auto" in the Communication Setup menu.

Character Input Help

Allows you to select whether to display help text when entering characters and numbers.
On: Display help.
Off: Not to display help.

Number Display

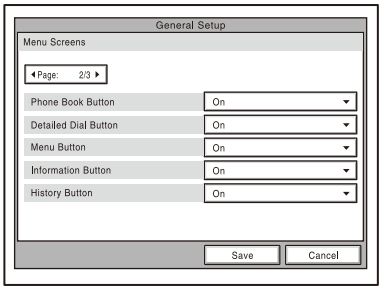
Allows you to select the identification of the local system, such as the IP or SIP number, to be displayed in the launcher menu.
SIP: User Name: Displays the user name registered in the SIP server when you conduct a conference using SIP.
SIP: Address: Displays the SIP address when you conduct a conference using SIP.
GK: User Alias: Displays the user name registered in the gatekeeper when you use the gatekeeper.
GK: User Number: Displays the user number registered in the gatekeeper when you use the gatekeeper.
NAT: Address: Displays the NAT address when you connect the system to a network using NAT.
IP: Displays the IP address.
No display: Does not display any identification, such as the IP and SIP numbers, for the system.

Packet Loss Indicator

Selects whether or not to display the Packet Loss indicator on the display if a packet loss occurs on a network.
On: Displays the Packet Loss indicator on the display if a packet loss has occurred.
Off: Does not display the Packet Loss indicator on the display even if a packet loss has occurred.

Menu Screens Page 2/3

Allows you to select whether to display menus and buttons of the launcher screen.



Phone Book Button

On: Display “Phone Book”.
Off: Not to display “Phone Book”.

Detail Dial Button

On: Display “Detail Dial”.
Off: Not to display “Detail Dial”.

Menu Button

On: Display “Menu”.
Off: Not to display “Menu”.

Information Button

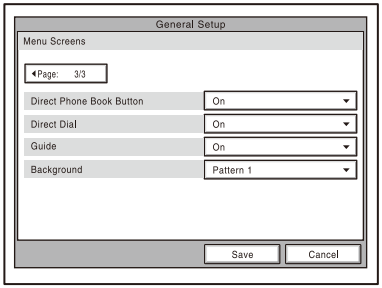
On: Display “Information”.
Off: Not to display “Information”.

History Button

On: Display “History”.
Off: Not to display “History”.

Menu Screens Page 3/3

Allows you to select whether to display menus and buttons of the launcher screen.



Direct Phone Book Button

On: Display “Direct Phone Book”.
Off: Not to display “Direct Phone Book”.

Direct Dial

On: Display the Direct Dial text box.
Off: Not to display the Direct Dial text box.

Guide

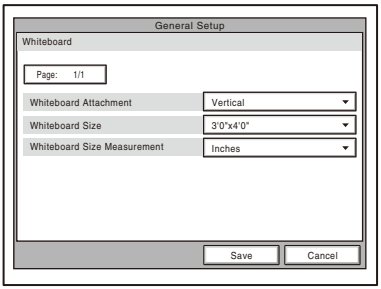
On: Display the guide.
Off: Not to display the guide.

Background

Select a background pattern for the menu.

For details on customizing the launcher menu view, see “Using the Launcher Menu” on page 100.

Whiteboard Page 1/1



Whiteboard Attachment

Allows you to select whether to attach the optional mimio-Xi vertically or horizontally on a whiteboard.

Vertical: Attaches the mimio-Xi vertically on a whiteboard.

Horizontal: Attaches the mimio-Xi horizontally on a whiteboard.

Whiteboard Size

Allows you to select the size (height × width) of the whiteboard you are using. The sizes shown in the menu change according to “Whiteboard Attachment” setting.

“Vertical” setting: Select from 2'0" × 3'0" (0.6 × 0.9 m), 3'0" × 4'0" (0.9 × 1.2 m), 4'0" × 6'0" (1.2 × 1.8 m), and 4'0" × 8'0" (1.2 × 2.4 m).

“Horizontal” setting: Select from 3'0" × 2'0" (0.9× 0.6 m), 4'0" × 3'0" (1.2 × 0.9 m), 6'0" × 4'0" (1.8 × 1.2 m), and 8'0" × 4'0" (2.4 × 1.2 m).

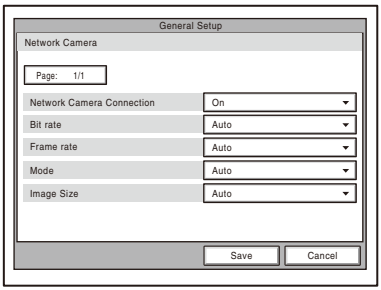
Whiteboard Size Measurement

Allows you to select whether to display the whiteboard size in inches or meters.

Inches: Displays the whiteboard size in inches.

Meters: Displays the whiteboard size in meters.

Network Camera Page 1/1



Network Camera Connection

Allows you to select whether to connect to network cameras.

On: Connect to network cameras.

Off: Do not connect to network cameras.

Bit rate

Allows you to select the bit rate for video sent from network cameras.

When “Auto” is selected, the setting on the network camera is given priority.

Frame rate

Allows you to select the frame rate for video sent from network cameras.

Auto: Give priority to the setting on the network camera.

30fps: Send pictures at a maximum rate of 30 frames per second.

15fps: Send pictures at a maximum rate of 15 frames per second.

Mode

Allows you to select the compression format for video sent from network cameras.

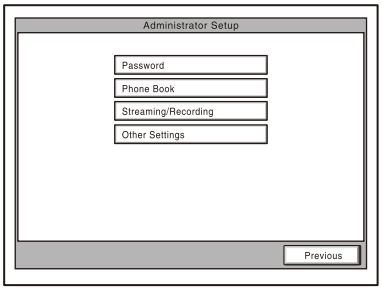
Auto: Give priority to the setting on the network camera.
H.264: Send video based on the H.264 standard.
MPEG4: Send video based on the MPEG4 standard.

Image Size

Allows you to select the display size for video sent from network cameras.
Auto: Give priority to the setting on the network camera.
160×120(QQVGA): Display in 160 pixels × 120 lines.
320×240(QVGA): Display in 320 pixels × 240 lines.

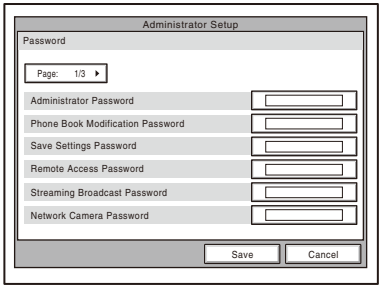
Administrator Setup Menu

The following menus appear when you select "Administrator" on the Setup menu for the administrator. Select the desired 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 menus to change the items. Entering the password is also required to access the Administrator Setup menu.

Password Page 1/3



Administrator Password

Set the system administrator password (up to 10 characters). This allows the system administrator to modify Administrator Setup and Phone Book menu items.

Note

Be aware that setting other passwords but leaving the system administrator password blank allows for modification and connection without password input.

Phone Book Modification Password

Set the password used to modify the Phone Book (up to 10 characters).

Save Settings Password

Set the password used to save settings (up to 10 characters).

Remote Access Password

Set the password to access the system through a Web browser (up to 10 characters).

Streaming Password

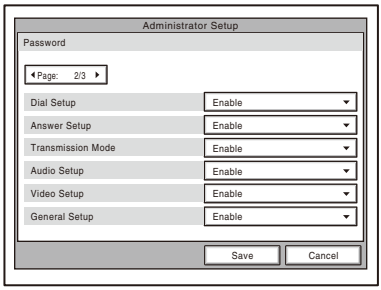
Set the password used when a remote party receives a streaming broadcast videoconference from you (up to 10 characters).

Network Camera Password

Set the password used to access the network camera list (up to 10 characters).

Password Page 2/3

Specifies whether to require a password when saving each setting.



Dial Setup

Enable: Requires the password when saving the Dial Setup settings.

Disable: Does not require the password when saving the Dial Setup settings.

Answer Setup

Enable: Requires the password when saving the Answer Setup settings.

Disable: Does not require the password when saving the Answer Setup settings.

Transmission Mode

Enable: Requires the password when saving the Communication Setup settings.

Disable: Does not require the password when saving the Communication Setup settings.

Audio Setup

Enable: Requires the password when saving the Audio Setup settings.

Disable: Does not require the password when saving the Audio Setup settings.

Video Setup

Enable: Requires the password when saving the Video Setup settings.

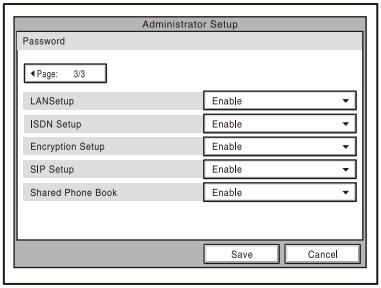
Disable: Does not require the password when saving the Video Setup settings.

General Setup

Enable: Requires the password when saving the General Setup settings.

Disable: Does not require the password when saving the General Setup settings.

Password Page 3/3



LAN Setup

Enable: Requires the password when saving the LAN Setup settings.

Disable: Does not require the password when saving the LAN Setup settings.

ISDN Setup

Enable: Requires the password when saving the ISDN Setup settings.

Disable: Does not require the password when saving the ISDN Setup settings.

Encryption Setup

Enable: Requires the password when saving the Encryption Setup settings.

Disable: Does not require the password when saving the Encryption Setup settings.

SIP Setup

Enable: Requires the password when saving the SIP Setup settings.

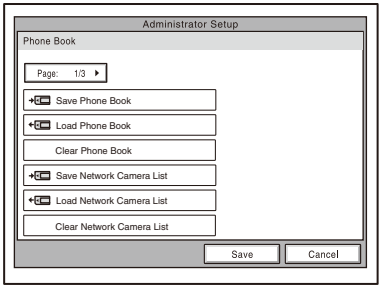
Disable: Does not require the password when saving the SIP Setup settings.

Shared Phone Book

Enable: Requires the password when saving the Shared Phone Book Setup settings.

Disable: Does not require the password when saving the Shared Phone Book Setup settings.

Phone Book Page 1/3



Note

"Save Network Camera List," "Load Network Camera List," and "Clear Network Camera List" only appear when "Network Camera Connection" under "Network Camera" of the General Setup menu is set to "On."

Save Phone Book

Allows you to save the data in the Phone Book onto a "Memory Stick." The data already on the "Memory Stick" is then overwritten.

Load Phone Book

Allows you to load the data in the Phone Book from a "Memory Stick." The data already in the Phone Book is then overwritten.

Note

When saving and loading Phone Book data, make sure that the version of the terminal from which the data was originally saved is the same as the version of the local terminal. If the versions differ, the data may not be properly recognized.

Clear Phone Book

Allows you to delete a Phone Book on the system.

Save Network Camera List

Allows you to save data for network camera lists onto a "Memory Stick." The data already on the "Memory Stick" is then overwritten.

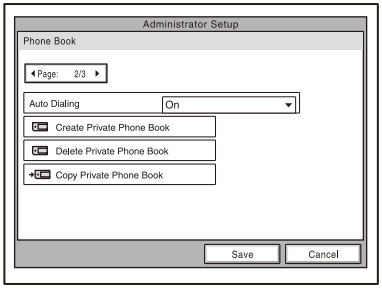
Load Network Camera List

Allows you to load data for network camera lists from a "Memory Stick." The current list data on the system is then overwritten.

Clear Network Camera List

Allows you to delete network camera lists on the system.

Private Phone Book Page 2/3



Auto Dialing

Allows you to automatically contact the remote parties of the selected Private Phone Book on a "Memory Stick" when you insert it into the system.
On: Enables automatic dialing.
Off: Disables automatic dialing.

For details, see "To dial a specified list in a Private Phone Book automatically" on page 87.

Create Private Phone Book

Allows you to create an empty folder and file for a Private Phone Book on a "Memory Stick" inserted into the system.

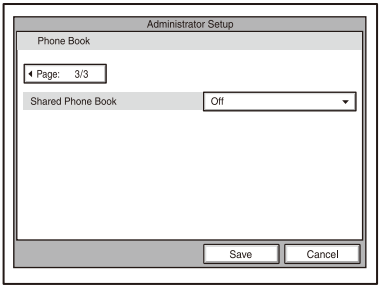
Delete Private Phone Book

Allows you to delete the Private Phone Book on a "Memory Stick" inserted into the system.

Copy to Private Phone book

Allows you to copy the entire contents of the Phone Book to a Private Phone Book on a "Memory Stick" inserted into the system.

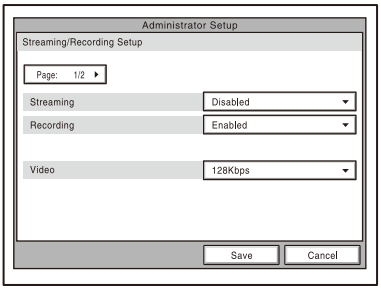
Shared Phone Book Page 3/3



Shared Phone Book

Allows you to select whether to use the Shared Phone Book located on the server.
On: Enables use of the Shared Phone Book.
Off: Disables use of the Shared Phone Book.

Streaming/Recording Page 1/2



Streaming

Select whether to enable the streaming broadcast of video and audio.
Disabled: Does not permit the streaming broadcast of a videoconference.
Enabled: Permits the streaming broadcast of a videoconference.

Recording

Select whether to enable the recording of video and audio from a videoconference to a "Memory Stick."
Disabled: Does not permit the recording of a videoconference.
Enabled: Permits the recording of a videoconference.

Video

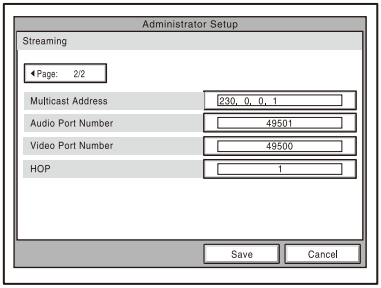
Select a bit rate for streaming and recording video.
Off: Disables the streaming and recording of video.

Note

When Off is selected, only audio can be streamed and recorded.

64Kbps: Streams and records video at 64 Kbps.
128Kbps: Streams and records video at 128 Kbps.
384Kbps: Streams and records video at 384 Kbps.
512Kbps: Streams and records video at 512 Kbps.

Streaming/Recording Page 2/2



Multicast Address

Enter the multicast address for streaming broadcasts.

Audio Port Number

Enter the audio port number for streaming broadcasts.

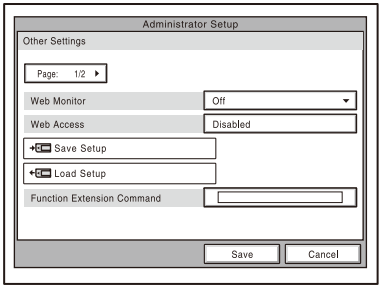
Video Port Number

Enter the video port number for streaming broadcasts.

HOP

Enter a number from 0 to 255 as the HOP for streaming broadcasts.

Other Settings Page 1/2



Web Monitor

Allows you to permit the monitoring conference status through a Web browser (automatic update of JPEG images).

On: Permits monitoring with a Web browser.

Off: Does not permit monitoring with a Web browser.

Web Access

Selects whether or not to permit accessing the PCS-G50/G50P via a Web browser or Telnet.

Disabled: Prohibits accessing via a Web browser or Telnet.

Enabled: Permits accessing via a Web browser or Telnet.

Save Setup

Saves the data for each setting to a "Memory Stick". The data for each setting saved on the "Memory Stick" is overwritten.

Notes

- It is recommended to use this function to save the settings periodically.
- Phone Book and History data are not saved.

Load Setup

Loads the data for each setting from a "Memory Stick". The data for each setting saved on the unit is overwritten.

Note

When saving and loading settings, make sure that the version of the terminal from which the data was originally saved is the same as the version of the local terminal. If the versions differ, the data may not be properly recognized.

Function Extension Command

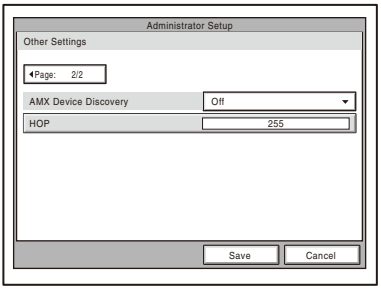
Enter the command to begin use of IPELA VC Link service.

Note

IPELA VC Link service is only available in Japan.

For more about the IPELA VC Link service, consult your Sony dealer.

Other Settings Page 2/2



AMX Device Discovery

Allows you to select whether to export AMX Device Discovery information onto the network. When the AMX system is connected to the Communication Terminal via serial connection, AMX Device Discovery information is output via that serial connection.

AMX systems are external control devices that can be used to control videoconferencing systems. When the AMX system receives the AMX Device Discovery information from the Communication Terminal, the Communication Terminal automatically falls under the control of the AMX system.

On: Enables this function.

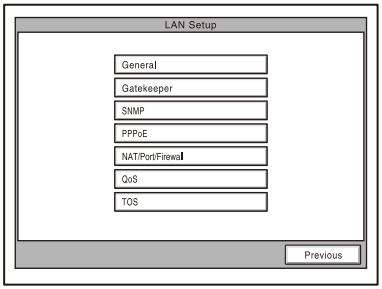
Off: Disables this function.

HOP

Enter a number from 0 to 255 as the HOP count for the data exported.

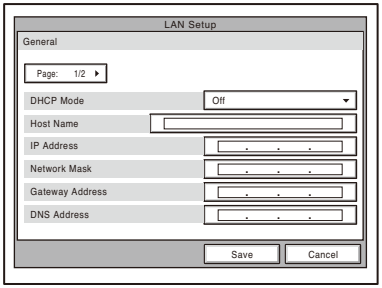
LAN Setup Menu

The following menus appear when you select “LAN” on the Setup menu for the administrator. Select the desired menu.



For details about the settings, consult your network administrator.

General Page 1/2



DHCP Mode

Allows you to select whether the Dynamic Host Configuration Protocol (DHCP) server is enabled.

Auto: The IP address network mask, gateway and DNS addresses are automatically assigned. You should confirm the assigned IP address in the launcher menu or the Information menu after the LAN connection is established.

Off: Disables the DHCP server. In this case, enter an IP address, network mask, gateway and DNS addresses.

Host Name

Enter your host name (up to 30 characters).

IP address

Enter the IP address.

Network Mask

Enter the network mask.

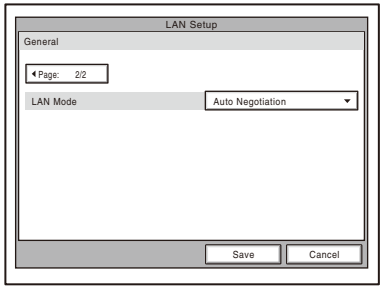
Gateway Address

Enter the default gateway address.

DNS Address

Enter the DNS (Domain Name System) address.

General Page 2/2



LAN Mode

Allows you to select the interface type and the communication mode of the LAN connection.

Auto Negotiation: The interface type and the communication mode are detected automatically.

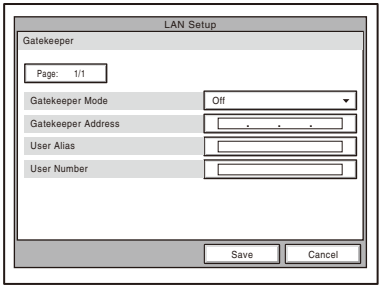
100Mbps Full Duplex: Connects via 100BASE-TX in full duplex mode.

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.

Gatekeeper Page 1/1



Gatekeeper Mode

Allows you to select whether to use the gatekeeper to control access to a LAN. Using the gatekeeper allows you to dial using the user name or user number.

Auto: Automatically detects the gatekeeper and uses it.

On: Enables the gatekeeper.

Off: Disables the gatekeeper.

Gatekeeper Address

Enter the address of the gatekeeper used when "Gatekeeper Mode" is set to "On".

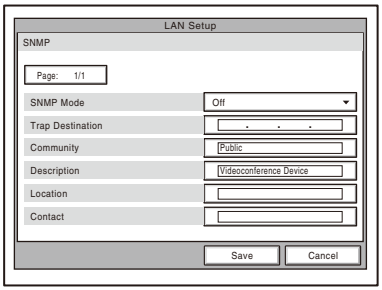
User Alias

Enter the user name (H.323 alias) registered in the gatekeeper.

User Number

Enter the user number (E.164 number) registered in the gatekeeper.

SNMP Page 1/1



SNMP Mode

Allows you to select whether the Simple Network Management Protocol (SNMP) agent is enabled.

On: Enables the SNMP agent.

Off: Disables the SNMP agent.

Trap Destination

Enter the address of the trap destination SNMP manager.

Community

Enter the community name managed by the SNMP manager (up to 24 characters). By default, this is "public" and this setting does not normally need to be changed.

Description

Enter the description of this terminal. By default, this is "Videoconference Device" and this description does not need to be changed.

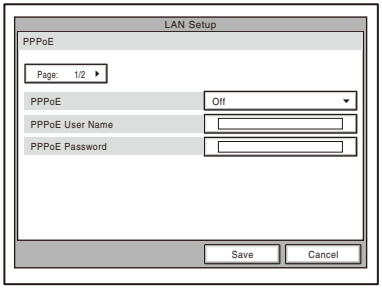
Location

Enter the location where this terminal is installed (up to 30 characters).

Contact

Enter information about the terminal administrator (up to 30 characters).

PPPoE Page 1/2



PPPoE

Allows you to select whether to use PPPoE for LAN connection. When using PPPoE, you can use the B FLET'S* or FLET'S ADSL service without connecting a router.

On: Uses PPPoE for LAN connection.

Off: Does not use PPPoE.

Notes

- Operations of PPPoE for LAN connection are presently verified only for the Japanese NTT B FLET'S and FLET'S ADSL services.
- The PPPoE registration status appears at the bottom of the screen for each page.

* "FLET'S" is a trademark of NTT East and NTT West Corporations in Japan.

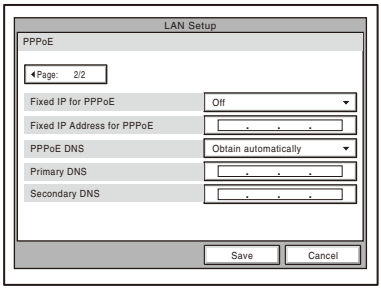
PPPoE User Name

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

PPPoE Password

Enter a password when you use PPPoE for LAN connection.

PPPoE Page 2/2



Fixed IP for PPPoE

Select whether to make a PPPoE connection using a fixed IP address.

On: Uses a fixed IP address for a PPPoE connection.

Off: Does not use a fixed IP address for a PPPoE connection.

Fixed IP Address for PPPoE

Enter an IP address when "Fixed IP for PPPoE" is set to "On".

PPPoE DNS

Allows you to select whether to obtain DNS server addresses automatically or to specify them manually when connecting to a LAN using PPPoE.

Specify Allows you to specify DNS server addresses.

Obtain automatically: Assigns DNS server addresses automatically.

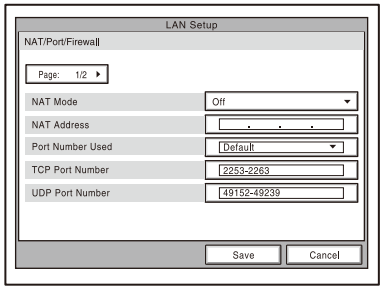
Primary DNS

Enter a primary DNS address.

Secondary DNS

Enter a secondary DNS address.

NAT/Port/Firewall Page 1/2



NAT Mode

Allows you to select whether you connect the system to a local network using Network Address Translation (NAT), which allows one IP address to be shared by several computers on the same LAN.

Auto (UPnP): Enables or disables the NAT mode by automatically detecting the use of NAT. This option is effective only when you use the UPnP router. The UPnP registration status appears at the bottom of the screen with this option.

On: Enables NAT mode.

Off: Disables NAT mode.

NAT Address

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

Port Number Used

Allows you to select whether to fix the TCP port and UDP port numbers.

Custom: Uses the port numbers set by the user.

Default: Uses the default port numbers: 2253-2255 as the TCP port number and 49152-49159 as the UDP port number.

TCP Port Number

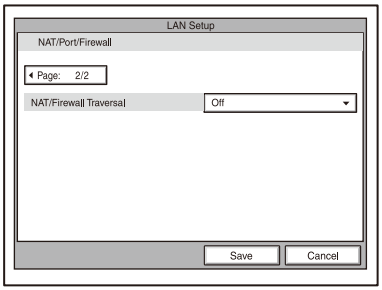
When "Port Number Used" is set to "Custom", enter the TCP port number.

UDP Port Number

When “Port Number Used” is set to “Custom”, enter the UDP port number.

For details on the port numbers used, See “List of Port Numbers Used on the PCS-PG50/PG50P” on page 312.

NAT/Port/Firewall Page 2/2



NAT/Firewall Traversal

Allows you to select whether to use H.460 to traverse firewalls and conduct conferences with terminals on other networks.

On (H.460): Enables conferences that traverse H.460 standard firewalls.

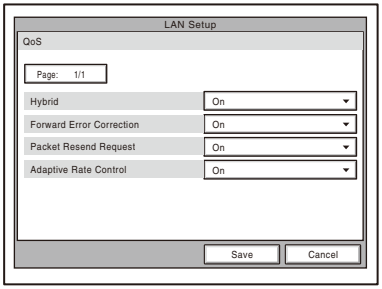
Off: Disables conferences that traverse firewalls.

Note

You must set up the gatekeeper to use this function.

For details on setting up the gatekeeper, see “Gatekeeper” on page 72.

QoS Page 1/1



Hybrid

Allows you to select whether to use forward error correction, send requests to resend packets, and use adaptive rate control depending on the network status.

On: Forward Error Correction, Packet Resend Request, or Adaptive Rate Control is used automatically depending on the network status.

Off: The three functions above are not used automatically depending on the network status.

Forward Error Correction

Allows you to select whether received packets containing errors are corrected upon reception.

On: Corrects packets.

Off: Does not correct packets.

Packet Resend Request

Allows you to select whether to request packet to be resent when packet losses occur during communication.

On: Requests packets to be resent.

Off: Does not request packets to be resent.

Adaptive Rate Control

Allows you to select whether to always optimize the LAN bandwidth.

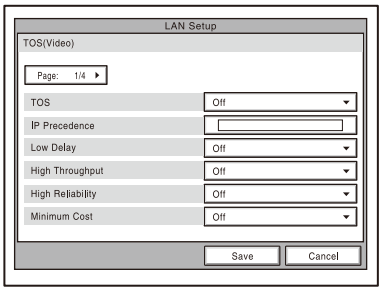
On: Always optimizes the LAN bandwidth.

Off: Does not optimize the LAN bandwidth.

Note

You can only configure “Adaptive Rate Control” when “Packet Resend Request” is set to “Off”. When “Packet Resend Request” is set to “On”, “Adaptive Rate Control” is also always set to “On”.

Type of Service (TOS) Page 1/4-4/4



Each page allows you to configure the Type of Service (TOS) field of specific types of data.

Page 1: TOS (Video)

Configure the TOS field for video data.

Page 2: TOS (Audio)

Configure the TOS field for audio data.

Page 3: TOS (Presentation)

Configure the TOS field for the RGB data output from the Data Solution Box.

Page 4: TOS (Camera Control)

Configure the TOS field for camera control signals and whiteboard pictures.

TOS

Allows you to select how to define the Type of Service (TOS) field.

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, between 0 and 7.

Low Delay

Allows you to select whether to specify the Low Delay bit rate of the TOS field.

On: Specifies the Low Delay bit rate of the TOS field.

Off: Does not specify the Low Delay bit rate of the TOS field.

High Throughput

Allows you to select whether to specify the High Throughput bit rate of the TOS field.

On: Specifies the High Throughput bit rate of the TOS field.

Off: Does not specify the High Throughput bit rate of the TOS field.

High Reliability

Allows you to select whether to specify the High Reliability bit rate of the TOS field.

On: Specifies the High Reliability bit rate of the TOS field.

Off: Does not specify the High Reliability bit rate of the TOS field.

Minimum Cost

Allows you to select whether to specify the Minimum Cost bit rate of the TOS field.

On: Specifies the Minimum Cost bit rate of the TOS field.

Off: Does not specify the Minimum Cost bit rate of the TOS field.

Diffserve

Enter the Diffserve value, between 0 and 63. This item only appears when “TOS” is set to “Diffserve”.

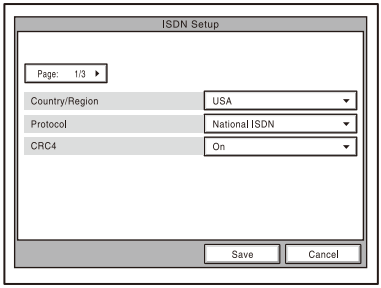
ISDN Setup Menu

The ISDN Setup menu is used to set up ISDN lines.

Note

The ISDN Setup menu only appears when the optional PCSA-B384S, PCSA-B768S or PCSA-PRI ISDN Unit is installed in your system.

ISDN Page 1/4



Country/Region

Allows you to select the country or region where you are using the Communication Terminal.

Protocol

Allows you to select the protocol of the ISDN lines to be used. You can select Japan (NTT), Euro ISDN, Euro ISDN (France), National ISDN, 5ESS (P-MP), 5ESS (P-P), or DMS-100, depending on the interface that you are using.

CRC4

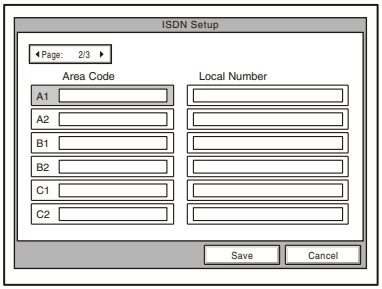
Select whether to enable CRC4. This option should normally be enabled.

Note

The “CRC4” option appears when using the PCSA-PRI.

For customers in the USA and Canada, see “SPID Settings for Customers in the USA and Canada” on page 77.

ISDN Page 2/4



Enter the area code and local number in the text boxes corresponding to the port numbers on the ISDN unit.
The text boxes correspond to the port numbers on the ISDN unit in the following way.

A1: Port 1 on the ISDN unit.
A2: Port 1 on the ISDN unit.
B1: Port 2 on the ISDN unit.
B2: Port 2 on the ISDN unit.
C1: Port 3 on the ISDN unit.
C2: Port 3 on the ISDN unit.

Area Code

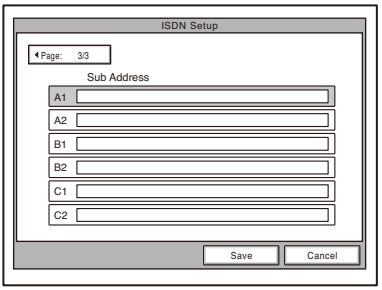
Enter the area code of the ISDN line to be used. Do not enter the first 0 of the area code.

Local Number

Enter the line number (local number) of the ISDN line to be used.

ISDN Page 3/4

The A1 to C2 fields appear.

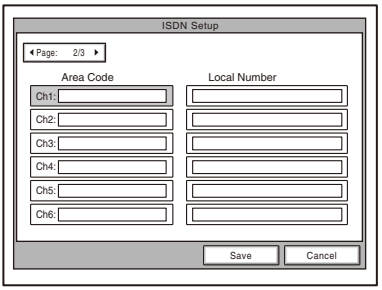


Sub Address

Enter sub-addresses when registering them. Sub-addresses can only be composed of numbers.

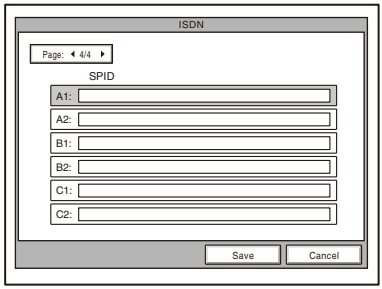
Notes

- When you select an empty field and then press the PUSH ENTER button of the Remote Commander, the setting of the previous field is copied into the selected field.
- CH1 to Ch23 (T1), Ch1 to Ch30 (E1) text boxes appear when using the PCSA-PRI ISDN Unit.



- When using the PCSA-B768S ISDN Unit, the D1 to F2 text boxes appear on the next page. Fill in the D1 to F2 text boxes according to the lines that you are using.

ISDN Page 4/4



SPID

Enter SPID (Service Profile Identifier).

For customers in the USA and Canada, see "SPID Settings for Customers in the USA and Canada" on page 77.

Auto SPID

This item is used only for customers in the USA and Canada.

For details, see "SPID Settings for Customers in the USA and Canada" on page 77.

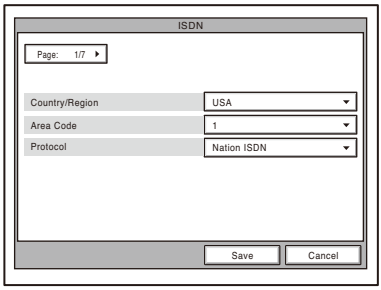
SPID Settings for Customers in the USA and Canada

If you connect to an ISDN switch type, configuration of SPID (Service Profile Identifier) is required. When you select "Auto SPID" in the ISDN Setup Wizard (See page 42), the "Area Code", "Local Number" and "SPID" setup items are automatically set. If "Auto SPID" is not available in your area, set up SPID manually using the ISDN Setup menu.

1 Open the ISDN Setup menu.

2 Enter the country code in the Country/Region Code text box depending on the network switch type you are using.

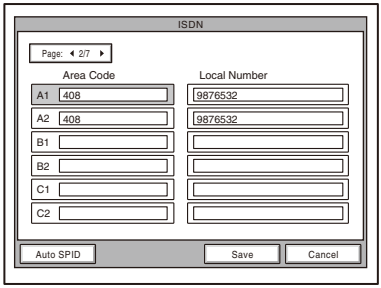
AT&T 5ESS (National ISDN), NTI DMS-100 (National ISDN): Enter "1".
AT&T 5ESS (Multipoint Custom ISDN): Enter "1*10".
AT&T 5ESS (Point-to-Point Custom ISDN): Enter "1*12".
NTI DMS-100 (Custom ISDN): Enter "1*11".



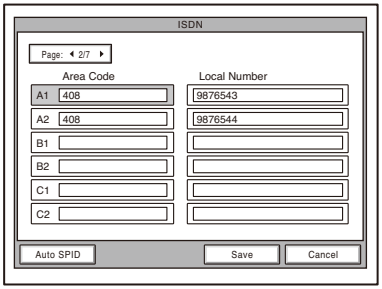
3 Open page 2 of the ISDN Setup menu to enter the LDN (Local Directory Number) in the Local Number text boxes.

When you use the AT&T 5ESS (Multipoint Custom ISDN) or AT&T 5ESS (Point-to-Point Custom ISDN) switch type

Enter the same LDNs in the A1 and A2 (B1 and B2, C1 and C2, depending on the number of lines you use) text boxes.



When you use the NTI DMS-100 (National ISDN) or NTI DMS-100 (Custom ISDN) switch type
Enter the different LDNs in the A1 and A2 (B1 and B2, C1 and C2, depending on the number of lines you use) text boxes. These switch types are given a separate number for each channel.

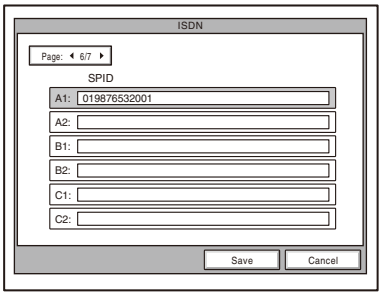


When you use the AT&T 5ESS (National ISDN) switch type
You may enter the same or different numbers in two channels.

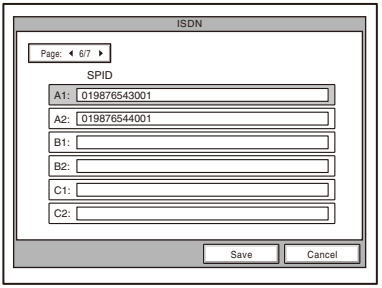
4 Open page 6 (SPID setup menu) to enter the SPID.

The SPID is generally comprised of 12 digits, including a 7 digit LDN (Local Directory Number). Be sure to enter the different SPID number in each of the A1 and A2 (B1 and B2, C1 and C2, depending on the number of lines you use) text boxes if you have entered the separate LDNs in the Local Number text boxes for each channel in step 3.

For the AT&T 5ESS (National ISDN) and AT&T 5ESS (Multipoint Custom ISDN) switch type
Enter the SPID in the A1 text box only.



For the NTI DMS-100 (National ISDN), NTI DMS-100 (Custom ISDN), AT&T 5ESS (National ISDN) switch type
Enter the different SPID numbers in the A1 and A2 text boxes.



For the AT&T 5ESS (Point-to-Point Custom ISDN) switch type
You do not need to set up the SPID, then no entry in the A1 and A2 (B1 and B2, C1 and C2, depending on the number of lines you use) is required.

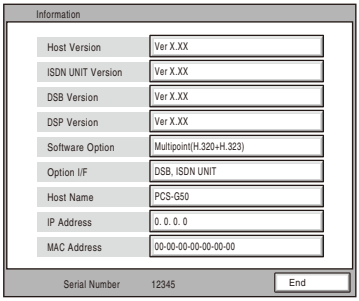
Note

If you use the PCSA-B768S ISDN unit and connect 4-6 ISDN lines, the D1-F2 text boxes are shown in pages 3 and 7 of the ISDN Setup menu. Fill in the boxes following steps 3 and 4.

5 After the settings are completed, select “Save”, then press the PUSH ENTER button.

Information Menu

The Information menu shows the versions of the Communication Terminal and the connected equipment for exclusive use, installed software versions, etc.



Host Version

Displays the software version of the Communication Terminal.

ISDN UNIT Version

Displays the version of the connected PCSA-B384S or PCSA-B768S ISDN Unit.

DSB Version

Displays the version of the connected PCSA-DSB1S Data Solution Box.

DSP Version

Displays the version of the built-in DSP (Digital Signal Processor) for audio/video codec.

Software Option

Displays the optional software installed.
None: No optional software is installed.
Multipoint (H.323): The PCSA-M3G50 H.323 MCU software (for LAN) is installed.
Multipoint (H.320): The PCSA-M0G50 H.320 MCU software (for ISDN) is installed.
Multipoint (H.320 + H.323): Both the PCSA-M0G50 and PCSA-M3G50 MCU software are installed.
SIP: The PCSA-SP1 SIP software is installed.
Multipoint (H.323), SIP: The PCSA-M3G50 MCU software and PCSA-SP1 SIP software are installed.
Multipoint (H.320), SIP: The PCSA-M0G50 MCU software and PCSA-SP1 SIP software are installed.
Multipoint (H.320 + H.323), SIP: The PCSA-M3G50 and PCSA-M0G50 MCU software and PCSA-SP1 SIP software are installed.

Option I/F

Displays the optional connected equipment.
None: No optional equipment is connected.
ISDN UNIT: The PCSA-B384S, PCSA-B768S or PCSA-PRI ISDN Unit is connected.
DSB: The PCSA-DSB1S Data Solution Box is connected.
Whiteboard: The mimio Xi is connected.

Host Name

Displays the host name.

IP Address

Displays the IP address.

MAC Address

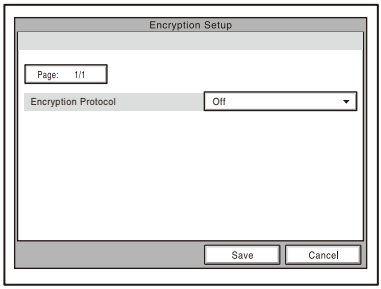
Displays the MAC address.

Serial Number

Displays the serial number.

Encryption Menu

Page 1/1



The Encryption menu is used to conduct a videoconference using the encryption function.
The encryption function allows you to hold a strictly confidential videoconference.

For details on an encrypted videoconference, see Chapter 7.

Encryption Protocol

Selects the encryption method you use.

Standard encryption: Enables use of the standard encryption method.

Proprietary encryption: Enables use of Sony's original encryption method.

Off: Disables use of the encryption function.

Encryption Mode

Displays when "Standard encryption" is selected in the "Encryption Protocol" screen.

Connect priority: Connects with encryption to a remote party with standard encrypted connection enabled. Connects without encryption to parties unable to connect with standard encryption or parties with encryption set to off.

Encrypt Priority: Connects only to remote parties with standard encrypted connection enabled.

Encryption Password

Displays when "Proprietary encryption" is selected in the "Encryption Protocol" screen.

Set the password to be entered when conducting encrypted videoconferences (13 to 20 characters).

Notes

- You cannot connect to terminals without the encryption function, terminals with encryption set to off, or terminals with different passwords.
- When "Proprietary encryption" is selected in the "Encryption Protocol" screen, connection without encryption is made to terminals with ISDN connections.
- The encryption function does not support LAN and ISDN cascade connections.

SIP Setup Menu

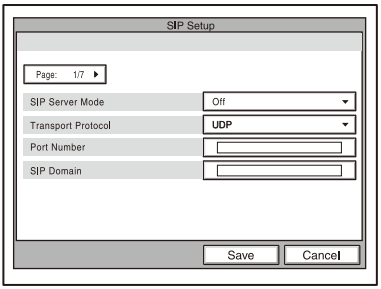
The SIP Setup menu is used to conduct a videoconference with an IP phone using the SIP (Session Initiation Protocol).

For details on a videoconference using SIP, see Chapter 9.

Note

The SIP Setup menu is available when the system has the optional PCSA-SP1 SIP software installed.

Page 1/7



SIP Server Mode

Selects whether you use a SIP server or not.

On: Enables use of the SIP server.

Off: Disables use of the SIP server.

Transport Protocol

Selects the protocol to be used for SIP.

TCP: Uses TCP (Transmission Control Protocol).

UDP: Uses UDP (User Datagram Protocol). This is the factory default setting.

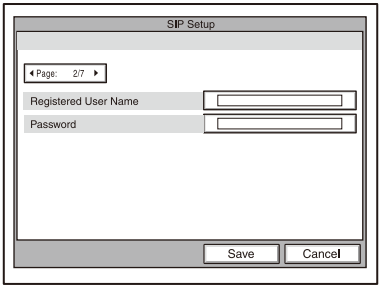
Port Number

Enter the port number to be used for SIP.

SIP Domain

Enter the SIP domain name.

Page 2/7



Registered User Name

Enter the user name for the terminal to be registered on the SIP server (up to 39 characters).

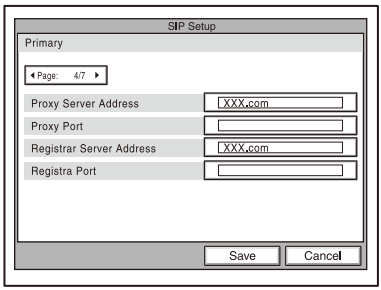
Password

Set the password for the terminal to be registered on the SIP server (up to 39 characters).

Note

When you conduct a multipoint videoconference using SIP, enter the user name and password for each terminal. Page 3/7 provides text boxes for the fourth and fifth terminals.

Page 4/7 to Page 7/7



Up to four proxy servers and registrar servers can be used. Enter the address and port number for each server.
Page 4/7 to Page 7/7 allow you to specify the first to fourth servers in order.
Page 4/7: Specifies the Primary server.
Page 5/7: Specifies the Secondary server.
Page 6/7: Specifies the Trinity server.
Page 7/7: Specifies the Fourth server.

Specify the following items for each server.

Proxy Server Address

Enter the domain name of a proxy server to be used for SIP.

Proxy Port

Enter the port number of a proxy server to be used for SIP.

Registrar Server Address

Enter the domain name of a registrar to be used for SIP.

Registrar Port

Enter the port number of a registrar to be used for SIP.

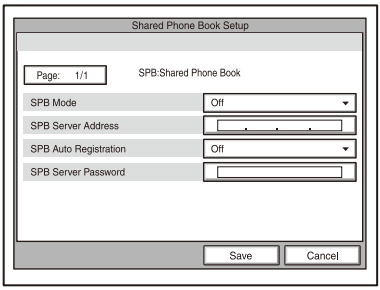
Shared Phone Book Setup Menu

This menu is used to configure settings when using the Shared Phone Book located on the server.

For details on the Shared Phone Book, see "Using the Shared Phone Book" on page 88.

Note

The Shared Phone Book Setup menu is enabled only when "Shared Phone Book" is set to "On" in the Administrator Setup menu.



SPB Mode

Selects whether to use the server managing the Shared Phone Book.
On: Enables use of the server managing the Shared Phone Book.

Off: Disables use of the server managing the Shared Phone Book.

SPB Server Address

Enter the IP address for the server managing the Shared Phone Book.

SPB Auto Registration

Selects whether information about terminals is registered automatically on the server managing the Shared Phone Book.

On: Enables automatic registration on the server managing the Shared Phone Book.

Off: Disables automatic registration on the server managing the Shared Phone Book.

SPB Server Password

Enter the password for the server managing the Shared Phone Book.

Registering a Remote Party – Phone Book

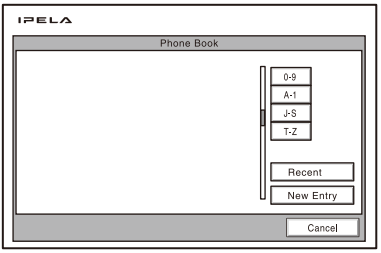
You can register the telephone number or IP address of a remote party in the Phone Book, allowing you to dial the party very easily. Up to 500 remote parties can be registered in the Phone Book. You can also store a still image such as a participant's portrait in the index list.

You can also create a Private Phone Book on a "Memory Stick" separately from the Phone Book in the Communication Terminal.

Registering a New Remote Party

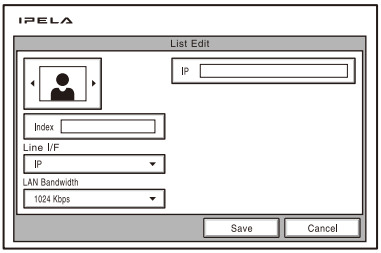
1 Use the ↑, ↓, ← or → button on the Remote Commander to select "Phone Book" in the launcher menu, then press the PUSH ENTER button.

The Phone Book opens.



2 Use the ↑, ↓, ← or → button on the Remote Commander to select "New Entry", then press the PUSH ENTER button.

The List Edit screen appears.



3 Enter the name of a remote party in the Index text box.

For character input, see "Entering Characters" on page 49.

4 Select the line interface you are using to connect to a remote party with "Line I/F".

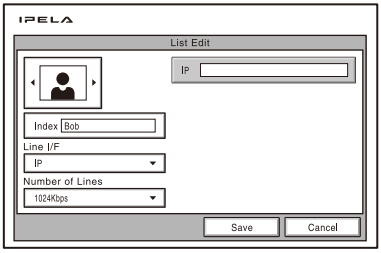
IP: Connects to a videoconferencing system on the remote site via a LAN.
ISDN: Connects to a videoconferencing system on the remote site via an ISDN line.
ISDN (Telephone): Connects to a phone on the remote site via an ISDN line for a voice meeting.
Multipoint: Connects to multipoints for a multipoint videoconference via LAN and ISDN.
SIP: Connects to an IP phone using SIP.

The List Edit menu switches according to the selected line interface.

For details on multipoint registration, see "Registering the Remote Parties in the Multipoint Connection List" on page 215.

5 Set up various items for the line on a remote site.

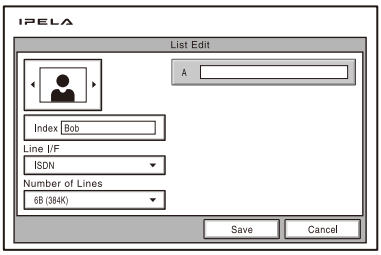
When "IP" is selected in step 4



① Enter the IP address of the remote party.
Enter the host name and domain name when using the DNS server (ex. host.domain). When using the gatekeeper, enter the user name and user number registered in the LAN Setup menu (page 71).

② Select the LAN bandwidth to be used.

When "ISDN" or "ISDN (Telephone)" is selected in step 4



① Enter the telephone number of the remote party in the telephone number text box beside "A".
When entering a sub-address, enter an asterisk (*) between the telephone number and sub-address. Only numbers are usable for a sub-address.
When "More Options Enable" is set to "On" in the Dial Setup menu (page 52), the A1, A2, B1, B2, C1 and C2 text boxes appear. Enter the number of the remote party in the A1 text box.

② Select the number of the ISDN channels to be used for dialing.

6 Select the icon or a still image stored on a “Memory Stick” to be registered in the Phone Book.

Press the ← or → button to select the icon or a still image, then press the PUSH ENTER button.

Note

You cannot select a still image unless a “Memory Stick” in which the still image is stored is inserted.

7 Use the ↑, ↓, ← or → button to select “Save”, then press the PUSH ENTER button.

The settings are registered in the Phone Book.

Note

If the “Index” field is left blank when the settings are registered, the IP address or line number is used as the name.

To connect to the remote party without using bonding

If the videoconferencing system of the remote party is not equipped with the bonding function, entering one telephone number does not allow you to connect all the line numbers used to connect to the remote party. To connect to the remote party by entering all the ISDN line numbers used, you can set the connection without using the bonding function of this system.
Set “More Options Enable” to “On” in the Dial Setup menu (page 52), select the More Options button at the lower part of the List Edit menu to open the Dial Setup menu, then set “Bonding” to “Auto”. The A1, A2, B1, B2, C1 and C2 text boxes appear in the List Edit menu. Enter all the telephone numbers for the ISDN lines selected by “Number of Lines”. Up to 6B-channel connection is available when using this method.

Note

When you set “Number of Lines” to “2B”, you can connect to the remote party by selecting “ISDN (2B)” from “Line I/F” in the Detail Dial menu.

To set up more detailed options

When “More Options Enable” is set to “On” in the Dial Setup menu, the More Options button is shown at the lower part of the List Edit menu.
Select the More Options button with the ↑, ↓, ← or → button on the Remote Commander and press the PUSH ENTER button to open a menu for more detailed dial settings. You can change the settings of the desired items.

Note

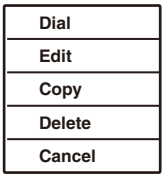
The contents set with the More Options button have priority over those set in the Detail Dial Setup menu.

Changing the Contents of the Phone Book

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

1 Open the Phone Book menu.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select the remote party to be changed in the Phone Book menu, then press the PUSH ENTER button.
The submenu appears.



3 Press the ↑ or ↓ button on the Remote Commander to select “Edit”, then press the PUSH ENTER button.
The List Edit menu appears.

4 Change the telephone number, IP address, name or setting.

5 Use the ↑, ↓, ← or → button on the Remote Commander to select “Save”, then press the PUSH ENTER button.
The correction is completed.

Copying the Setting of the Phone Book Menu

1 Open the Phone Book menu.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select the remote party to be copied in the Phone Book menu, then press the PUSH ENTER button.
The submenu appears.

3 Press the ↑ or ↓ button on the Remote Commander to select “Copy”, then press the PUSH ENTER button.
The items for the selected party are copied, and the file name is followed by “–2”. You can use the setting after modifying the necessary items.

Deleting the Registered Remote Party

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

1 Open the Phone Book menu.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select the remote party to be deleted in the Phone Book menu, then press the PUSH ENTER button.
The submenu appears.

3 Press the ↑ or ↓ button on the Remote Commander to select “Delete”, then press the PUSH ENTER button.
The message “Delete Entry?” appears.

4 Use the ↑, ↓, ← or → button on the Remote Commander to select “OK”, then press the PUSH ENTER button.
The selected party is deleted.

To cancel deleting

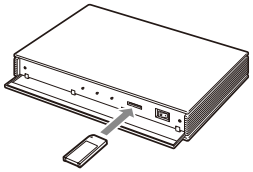
Select “Cancel” in step 4, then press the PUSH ENTER button.

Creating a Private Phone Book

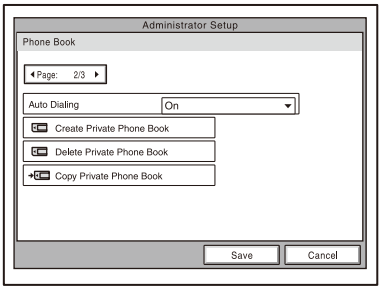
You can create your own Phone Book (Private Phone Book) on a “Memory Stick”. Once the Private Phone Book is registered, inserting the “Memory Stick” into the Communication Terminal changes the Phone Book menu to the Private Phone Book menu. You can also activate the Auto Dial feature, allowing you to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

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 on the Communication Terminal.
Insert the “Memory Stick” in the direction of the arrow with the mark facing upward.



2 Open “Private Phone Book” of the Administrator Setup menu.



For how to open the menu, see “Registering Local Information” on page 51.

3 Select “Create Private Phone Book”.
An empty folder and file for a Private Phone Book are created in the “Memory Stick”.

4 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 82.

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 85.

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 Communication Terminal, then select “Copy to Private Phone Book” from the “Private Phone Book” 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 Communication Terminal, then select “Delete Private Phone Book” from the “Private Phone Book” of the Administrator Setup menu. All the data are deleted from the inserted “Memory Stick”.

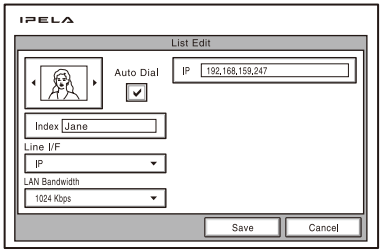
To dial a specified list in a Private Phone Book automatically

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

1 Open the Private Phone Book.

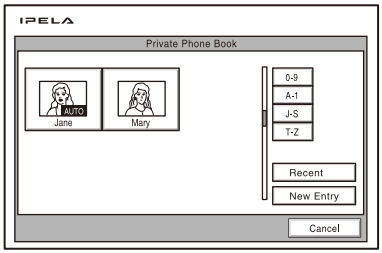
2 Use the ↑, ↓, ← or → button on the Remote Commander to select the remote party to dial automatically, then press the PUSH ENTER button.

3 Press the ↑ or ↓ button on the Remote Commander to select “Edit”, then press the PUSH ENTER button.
The List Edit menu appears.



4 Use the ↑, ↓, ← or → button on the Remote Commander to select “Auto Dial”, then press the PUSH ENTER button.

5 Use the ↑, ↓, ← or → button on the Remote Commander to select “Save”, then press the PUSH ENTER button.
The setting is registered and “AUTO” appears on the registered list.



Using the Shared Phone Book

Using the Shared Phone Book function, a phone book located on a server can be accessed by multiple Sony Video Communication System units.

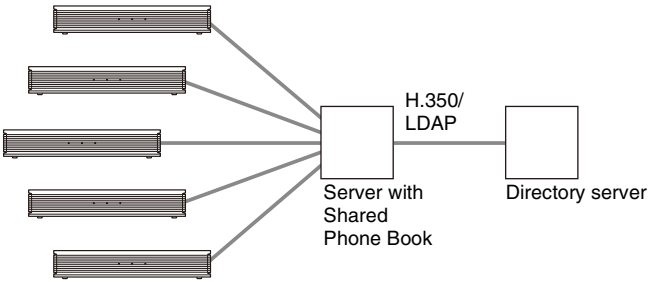
For details about settings, consult your network administrator.

Notes

- As with the regular Phone Book, you can dial a remote party registered in the Shared Phone Book. If the line interface of the registered party is multipoint, however, dialing is not possible.
- You cannot register, edit, delete, or attach images to parties in the Shared Phone Book. In addition, you cannot copy parties registered in the Shared Phone Book to the Private Phone Book.

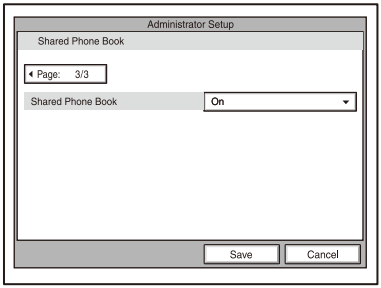
System configuration example

In this system configuration, sharing of a Phone Book using H.350 is enabled.



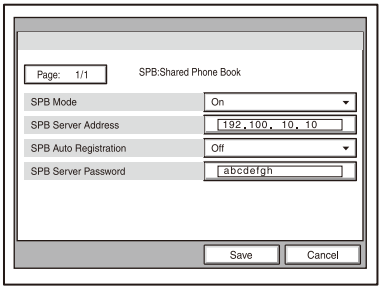
To use the Shared Phone Book

1 Set “Shared Phone Book” to “On” under the Shared Phone Book Page 3/3 screen of the Administrator Setup menu.



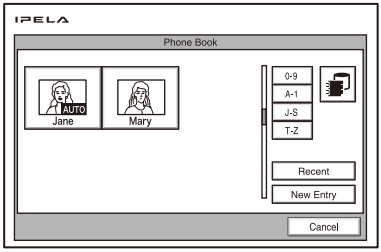
The “Shared Phone Book” button appears in the Setup menu for the administrator, and configuration for the Shared Phone Book is enabled.

2 Set “SPB Mode” to “On” in the Shared Phone Book menu, and enter the appropriate values for “SPB Server Address” and “SPB Server Password”.



To display the Shared Phone Book

Select at the right Phone Book screen, and press the PUSH ENTER button to switch the display to the Shared Phone Book.



To switch back to the Phone Book or Private Phone Book from the Shared Phone Book, perform this operation again.

The procedure for dialing registered parties from the Shared Phone Book is the same as that for the Phone Book. For details on dialing, see “To call a remote party registered in the Phone Book” on page 110.

Setting Up the Network Configurations

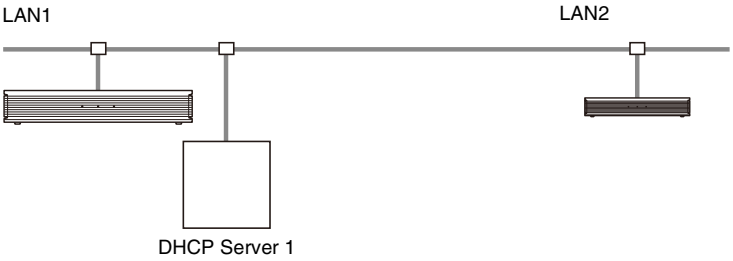
This section describes how to set up the network configurations for use with various networks.

For details on the LAN Setup menu, see "LAN Setup Menu" (page 71).

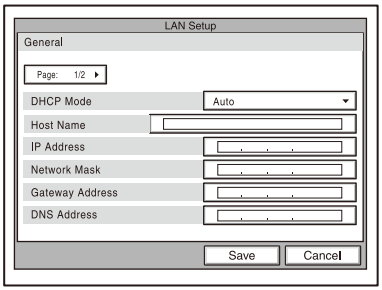
For details on configurations, consult with the system administrator.

LAN (Connecting via DHCP)

Configuration example



Set the "DHCP Mode" to "Auto" under Page 1/2 of the General screen in the LAN Setup menu.



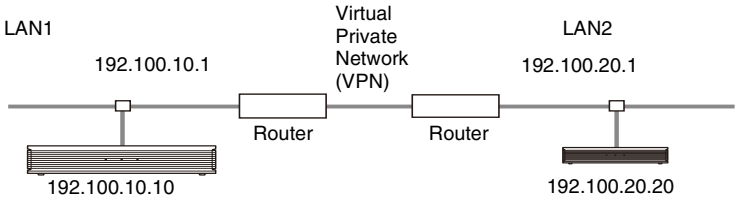
The setting has been configured properly if the IP address appears in the launcher menu.

To conduct a video conference

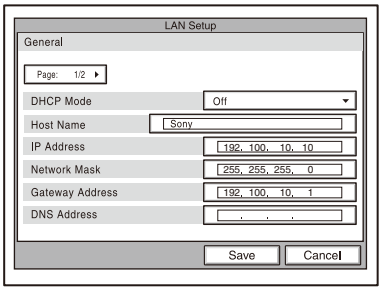
Select "IP" under "Line I/F", enter the remote party's IP address, and dial.

LAN (Connecting Through a Router)

Configuration example



Enter a name in “Host Name” under Page 1/2 of the General screen in the LAN Setup menu, and enter the appropriate values for “IP Address”, “Network Mask”, and “Gateway Address”.



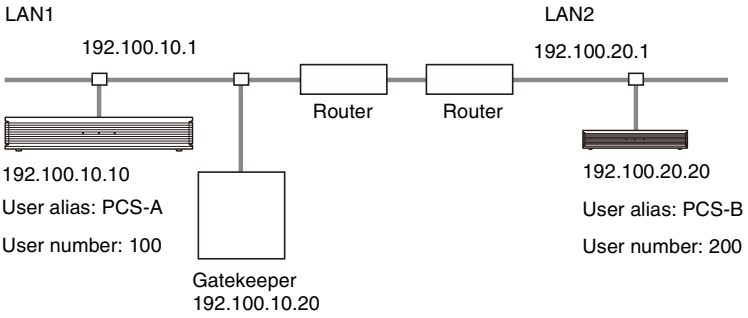
The setting has been configured properly if the correct IP address appears in the launcher menu.

To conduct a video conference

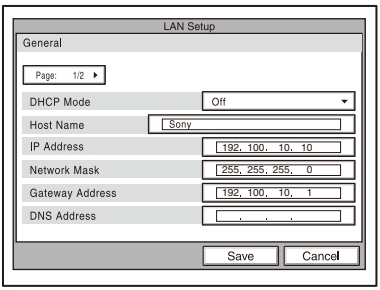
Select “IP” under “Line I/F”, enter the remote party’s IP address, and dial.

LAN (Connecting Through a Gatekeeper)

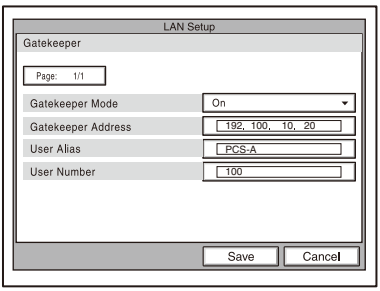
Configuration example



1 Enter a name in “Host Name” under Page 1/2 of the General screen in the LAN Setup menu, and enter the appropriate values for “IP Address”, “Network Mask”, and “Gateway Address”.



2 Set “Gatekeeper Mode” to “On” under the Gatekeeper screen of the LAN Setup menu, and enter the appropriate values for “Gatekeeper Address”, “User Alias”, and “User Number”.



The setting has been configured properly if the correct IP address appears in the launcher menu and “Registration Confirm” appears on the lower part of Page 2/2 of the General screen in the LAN Setup menu.

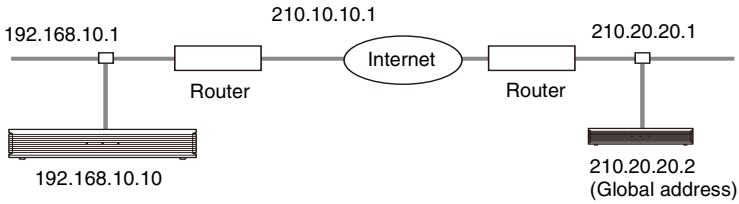
To conduct a video conference

Select “IP” under “Line I/F”, enter the user name or user number set by the remote party, and dial.

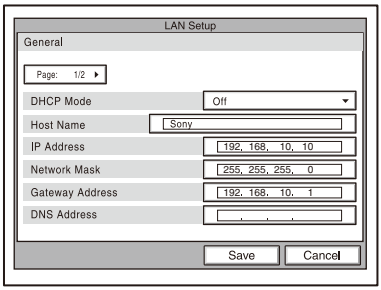
LAN (Connecting Through NAT)

Connection using NAT allows one IP address to be shared by several computers on the same LAN. This section describes how to set up videoconferences conducted in NAT and global IP environments.

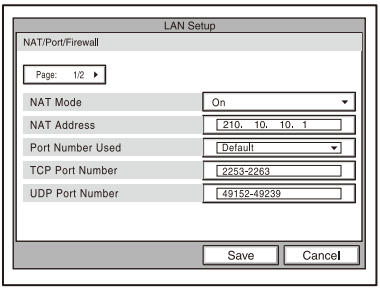
Configuration example



1 Enter a name in “Host Name” under Page 1/2 of the General screen in the LAN Setup menu, and enter the appropriate values for “IP Address”, “Network Mask”, and “Gateway Address”.



2 Set “NAT Mode” to “On” in the NAT/Port/Firewall screen of the LAN Setup menu, and enter the appropriate IP address in “NAT Address”.



The setting has been configured properly if the correct NAT address appears in the launcher menu.
To display the NAT address in the launcher menu, you must set “Number Display” to “NAT: Address” in the Menu Screens page of the General Setup menu (page 64).

3 Remote parties must configure Page 1/2 of the General screen in the LAN Setup menu in the same way.

Note

Remote parties do not need to configure the settings in the NAT/Port/Firewall screen of the LAN Setup menu as they are not in a NAT environment.

To conduct a video conference

Select “IP” under “Line I/F”, enter the remote party’s IP address, and dial.

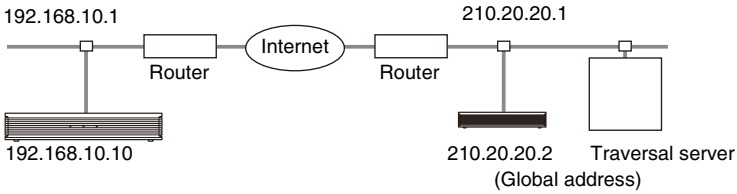
Note

When using the terminal in the NAT environment, you can connect to a remote party (global IP), but for a remote party to connect to you, you must configure your router settings. For details on router settings, consult with the system administrator.

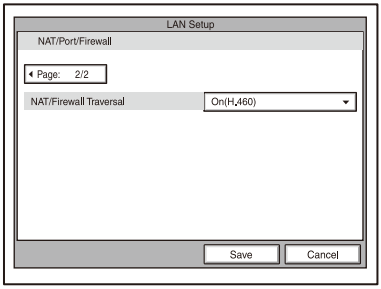
LAN (Connecting With H.460 Firewall Traversal)

You can use H.460 to traverse firewalls and conduct conferences with terminals on other networks.

Configuration example



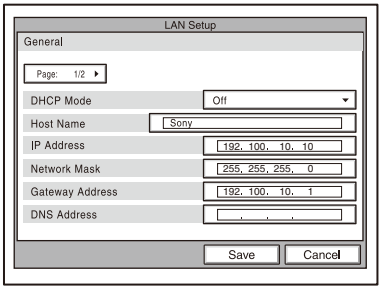
1 Set “NAT/Firewall Traversal” to “On (H.460)” in the NAT/Port/Firewall screen of the LAN Setup menu.



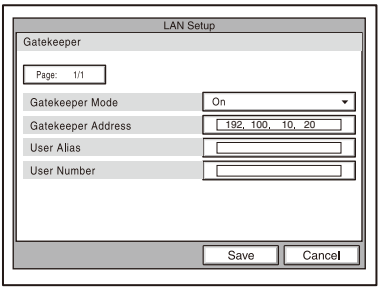
Note

You must set up the gatekeeper to use this function.

2 Enter a name in “Host Name” under Page 1/2 of the General screen in the LAN Setup menu, and enter the appropriate values for “IP Address”, “Network Mask”, and “Gateway Address”.



3 Set “Gatekeeper Mode” to “On” under the Gatekeeper screen of the LAN Setup menu, and enter the appropriate value for “Gatekeeper Address”.



The setting has been configured properly if the correct IP address appears in the launcher menu and “Registration Confirm” appears on the lower part of Page 2/2 of the General screen in the LAN Setup menu.

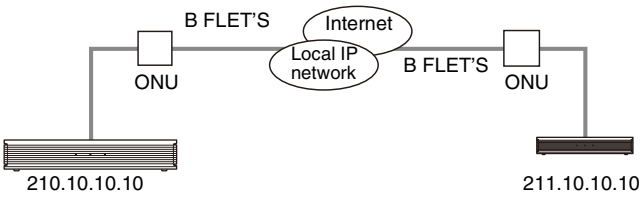
To conduct a video conference

Select “IP” under “Line I/F”, enter the IP address of the remote party, and dial.

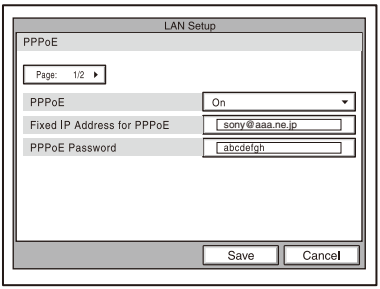
LAN (PPPoE Connections)

When using PPPoE, you can connect via LAN without a router.
A modem (using bridge mode) is required when using FLET’S ADSL.

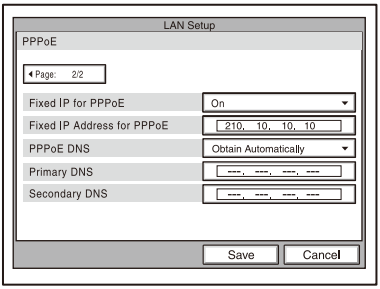
Configuration example



1 Set “PPPoE” to “On” under Page 1/2 of the PPPoE screen in the LAN Setup menu, and enter the PPPoE user name and PPPoE password given to you by the provider.



2 If you have a fixed IP from the provider, set “Fixed IP for PPPoE” to “On”, and enter your fixed IP address for PPPoE in “Fixed IP Address for PPPoE” under Page 2/2 of the PPPoE screen in the LAN Setup menu.



The setting has been configured properly if the correct IP address appears in the launcher menu.

Note

If the fixed DNS server address is specified by the provider, set “PPPoE DNS” to “Specify”, and enter the specific addresses in “Primary DNS” and “Secondary DNS”.

3 Remote parties must configure in the same way.

To conduct a video conference

Select “IP” under “Line I/F”, enter the remote party’s IP address, and dial.

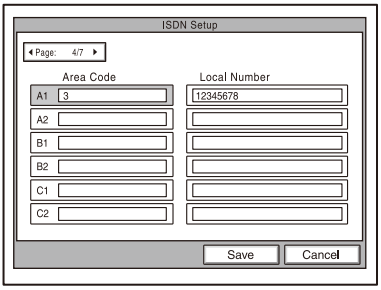
1 Enter the appropriate numbers for “Area Code” and “Local Number” in Page 2/4 of the ISDN Setup menu.

Note

Do not enter the first 0 of the area code.

For details on the ISDN Setup menu, see “ISDN Setup Menu” (page 75).

For details on configurations, consult with the system administrator.



The setting has been configured properly if the correct line number appears in the launcher menu.

2 Remote parties must configure in the same way.

Note

When connecting to the ISDN unit, use the ports in ascending order.
Yes: 1, 2, 3…
No: 1, 5, 2…

To conduct a video conference

Select “ISDN” under “Line I/F”, enter the remote party’s line number, and dial.

For details on how to start a conference, see “Starting a Conference by Calling a Remote Party” (page 99).

Chapter 3: Daily Videoconference

This chapter describes how to conduct a videoconference from start to finish after the administrator has completed various registrations and settings for the system.
The videoconference explained here is a point-to-point conference via a LAN connection or ISDN connection using the optional PCSA-B384S, PCSA-B768S or PCSA-PRI ISDN Unit.

For use of a "Memory Stick" or optional equipment, see chapter 4. To conduct a data conference using the optional PCSA-DSB1S Data Solution Box, see chapter 5. To conduct an encrypted conference, see chapter 7. To conduct a multipoint conference, see chapter 8. To hold a videoconference using an SIP server, see chapter 9.

Starting a Conference by Calling a Remote Party

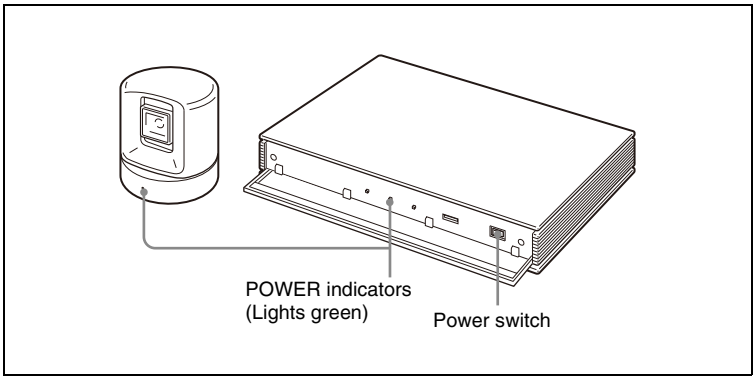
You can start a videoconference with a remote party by dialing. Once you have made a connection to the remote party, you can begin talking just as with a normal phone call and start a videoconference.

Turning On the Power

1 Turn on the TV monitor.
When the IR repeater is inserted under the remote sensor of the Sony TV, set the TV to standby mode. When the power of the Communication Terminal is turned on, the TV monitor will turn on simultaneously.

2 Turn on other equipment you are using for the videoconference.

3 Open the front panel of the Communication Terminal, and then slide the power switch on the right to the on position (**I**).
The Communication Terminal turns on.



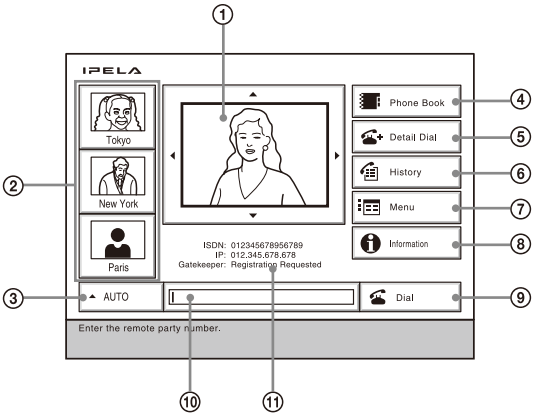
Three indicators on the front of the Communication Terminal and the POWER indicator on the camera light, then only the POWER indicators on both units remain on in green. The launcher menu will appear on the monitor screen and the picture shot by the local camera will also appear in the launcher menu.

Note

After the power is turned on, the camera moves automatically for trial operation. Be careful not to catch your finger.

Using the Launcher Menu

The launcher menu is displayed on the monitor screen when the system is turned on or while it is not connected to a remote party. The launcher menu displays the image shot by the local camera, local system status and buttons to open the menus.



① **Screen**
The image shot by the local camera is displayed.

② **Direct Phone Book button**
The Direct Phone Book function is selected when you select this button by pressing the ↑, ↓, ← or →, and then the PUSH ENTER button of the Remote Commander. This starts calling the selected remote party.

③ **Line I/F**
Select this button by pressing the ↑, ↓, ← or → button, and then the PUSH ENTER button on the Remote Commander. Items to be set are displayed. Allows you to select the type of line to be used.

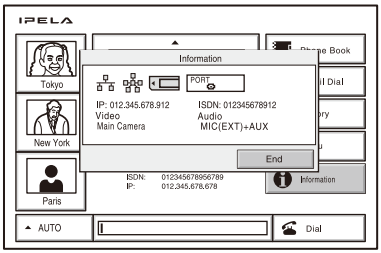
④ **Phone Book button**
The Phone Book is displayed when you select this button by pressing the ↑, ↓, ← or → button and then the PUSH ENTER button on the Remote Commander.

⑤ **Detail Dial button**
The Detail Dial appears when you select this button by pressing the ↑, ↓, ← or → button, and then the PUSH ENTER button of the Remote Commander.

⑥ **History button**
The History appears when you select this button by pressing the ↑, ↓, ← or → button, and then the PUSH ENTER button of the Remote Commander.

⑦ **Menu button**
You can display the various Setup menus when you select this button by pressing the ↑, ↓, ← or → button and then the PUSH ENTER button on the Remote Commander.

⑧ **Information button**
The Information menu appears when you select this button by pressing the ↑, ↓, ← or →, and then the PUSH ENTER button of the Remote Commander.



The following icons or text are displayed in accordance with the system configuration.

Indicator (icon)	Identification	Description
	LAN status	The indicator is shown in dark when the LAN is enabled to use, and in light when it is disabled.
	Multipoint mode	MCU software for multipoint videoconference is installed, and the “Multipoint Mode” is set to “On”.
	Memory Stick	“Memory Stick” is inserted.

Indicator (icon)	Identification	Description
	ISDN status	When the optional ISDN Unit is connected, usable ISDN port is shown.
IP:	IP address	Shows the IP address of the local system. By changing the "Number Display" setting in the Menu Screens page of the General Setup menu (page 64), you can display the gatekeeper's user name, the NAT address, etc.
ISDN:	ISDN telephone number	Shows the ISDN telephone number of the local system.
Video	Video input	The selected video input on the local system is shown. **Main Camera:** Video from the main camera. **IR1:** Video from the optional PCS-DS150/DS150P Document Stand (currently not available). **AUX1:** Video from the device connected to the AUX IN connector. **Note** The video inputs are shown as the labels set in the "Custom Input Label" of the Video Setup menu (page 60).

Indicator (icon)	Identification	Description
Audio	Audio input	The selected audio input on the local system is shown. **MIC (EXT):** Sound from an external microphone connected to the Communication Terminal. **MIC (DSB):** Sound from an external microphone connected to the optional PCSA-DSB1S Data Solution Box. **MIC (AUX):** Sound from an external microphone connected to the AUX IN jack on the optional PCSA-DSB1S Data Solution Box. **AUX:** Sound from external equipment connected to the AUDIO IN jack on the Communication Terminal. **MIC (EXT)+AUX:** Mixed sounds from an external microphone connected to the Communication Terminal and from external equipment. **MIC (DSB)+AUX:** Mixed sounds from an external microphone connected to the optional PCSA-DSB1S Data Solution Box and from external equipment. **MIC (AUX)+AUX:** Mixed sounds from an external microphone connected to the AUX IN jack on the optional PCSA-DSB1S Data Solution Box and from external equipment. **CTE (LINE):** Sound from the CTE-600 Communication Transducer (currently not available) connected to the AUDIO IN jack on the Communication Terminal. **CTE (DSB):** Sound from the CTE-600 Communication Transducer (currently not available) connected to the AUX IN jack on the optional PCSA-DSB1S Data Solution Box. **EC-MIC:** Sound from the PCSA-A7 Echo Canceling Microphone connected to the EC-MIC jack on the Communication Terminal. **EC-MIC+AUX:** Sound from the PCSA-A7 Echo Canceling Microphone connected to the EC-MIC jack on the Communication Terminal and from external equipment.

⑨ Dial button

Select this button by pressing the ↑, ↓, ← or → button, and then the PUSH ENTER button on the Remote Commander. This starts calling the remote party whose dial number is entered in the number input box.

⑩ Number input box

To call a remote party not registered in the Phone Book, select this box by pressing the ↑, ↓, ← or → button on the Remote Commander, and then enter the IP address or the ISDN line number.

⑪ Status display

PPPoE admission status, UPnP registration status, status of IP address acquisition from DHCP, status of registration to gatekeeper, or status of registration to SIP server is displayed. The status is displayed only when registration is in progress or an error occurs. Nothing is displayed when registration succeeds.

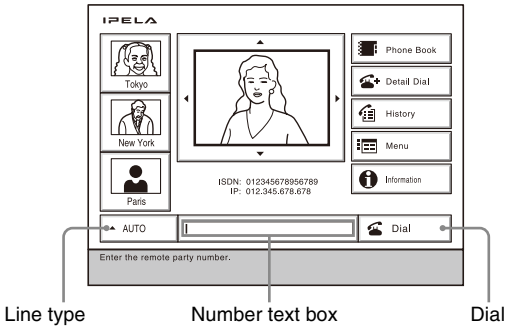
Display	Meaning
SIP: Registration Requested	Registration to the SIP server is in progress
SIP: Registration Failed	Registration to the SIP server failed
Gatekeeper: Registration Requested	Requesting registration to the gatekeeper
Gatekeeper: Registration Failed	Registration to the gatekeeper failed
DHCP: Assigning	Obtaining IP address from the DHCP server
DHCP: Assignment Failed	Failed to obtain IP address from the DHCP server
UPnP: Registration Requested	UPnP registration in progress
UPnP: Registration Failed	UPnP registration failed
PPPoE: Admitting	Admission of PPPoE in progress
PPPoE: Admission Failed	Admission of PPPoE failed

Note

The status display does not appear when “Number Display” is set to “No display” under Menu Screens of the General Setup menu.

For details on the “Number Display” setting, see “General Setup Menu” on page 62.

To call a remote party by entering their number directly



1 Use the ↑, ↓, ← or → button on the Remote Commander to select "Line I/F" from the launcher menu, then press the PUSH ENTER button.

2 Use the ↑ or ↓ button on the Remote Commander to select the type of line to be used, then press the PUSH ENTER button.

AUTO: A line for connecting is automatically selected, based on the number entered in the number text box.

IP: Connects to a videoconferencing system on the remote site via a LAN.

ISDN: Connects to a videoconferencing system on the remote site via an ISDN line.

TEL: Connects to a phone on the remote site via an ISDN line for a voice meeting.

SIP: Select this option when connecting to an IP phone using an SIP server.

3 Press the ↑, ↓, ← or → button of the Remote Commander to select the number input field, and then the PUSH ENTER button.

4 Enter the remote party's IP address or line number with the number buttons on the Remote Commander, and press the PUSH ENTER button.

5 Press the ↑, ↓, ← or → button to select "Dial", and then press the PUSH ENTER button of the Remote Commander. Or press the CONNECT/DISCONNECT (/) button on the Remote Commander.

The system begins dialing the IP address ISDN telephone number entered in step 4. "Dialing" appears on the monitor screen, and the ON LINE indicator (blue) on the Communication Terminal blinks.

When the system connects to the remote system, the message "Meeting starts!" appears on the screen, and the ON LINE indicator stops blinking and lights in blue.

Note

When “More Options Enable” in the Dial Setup menu is set to “On”, a dialog box appears after step 5.

More Options Enable: The Dial Setup menu is displayed.

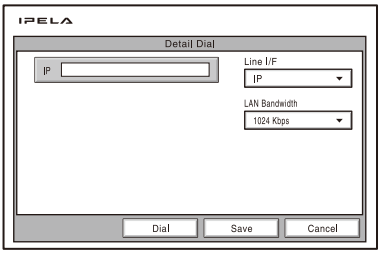
Dial: Call the remote party.

Cancel: Cancel a call.

To call a remote party not registered in the Phone Book

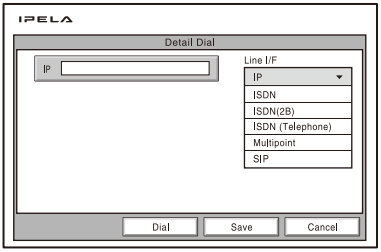
1 Use the ↑, ↓, ← or → button on the Remote Commander to select “Detail Dial”, then press the PUSH ENTER button, or press the CONNECT/DISCONNECT (/) button on the Remote Commander.

The Detail Dial menu appears on the screen.



2 Select the line interface to use for conferencing.

Use the ↑, ↓, ← or → button to select “Line I/F”, then press the PUSH ENTER button. The submenu appears. Press the ↑ or ↓ button to select the line type to be used to connect to the remote party, then press the PUSH ENTER button.



IP: Connects to the videoconferencing system of a remote party via a LAN.

ISDN: Connects to the videoconferencing system of a remote party via an ISDN.

ISDN (2B): Connects to the H.221-format videoconferencing system via 2B channels of the ISDN connection.

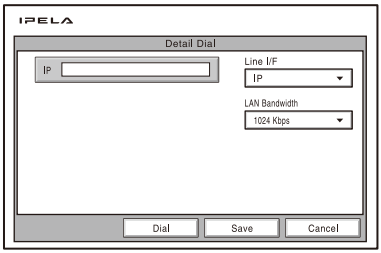
ISDN (Telephone): Connects to the phone of a remote party to conduct a voice meeting via the ISDN connection.

Multipoint: Connects to the videoconferencing system for a multipoint conference.

SIP: Connects to an SIP terminal or IP phone using SIP.

3 Configure the line.

When using the LAN



① Enter the IP address of a remote party to connect in the IP text box.

Use the ↑, ↓, ← or → button on the Remote Commander to select the IP text box, then press the PUSH ENTER button. Next, enter the IP address with the number buttons on the Remote Commander, and press the PUSH ENTER button.

Enter the host name and domain name (ex. host.domain) when using the DNS server, or enter the party's user name and user number registered in the LAN Setup menu (page 72) when using the gatekeeper, and then press the PUSH ENTER button.

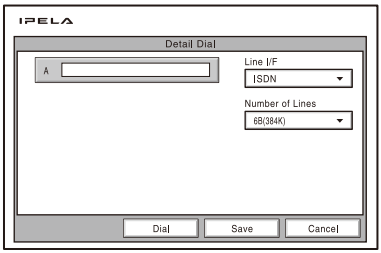
Notes

- You can enter a dot (.) with the → or # button on the Remote Commander.
- To correct an entered character, press the PinP (BACK SPACE) button on the Remote Commander. The last character entered is deleted.
- To delete the entered IP address, press the DISPLAY (CLEAR) button on the Remote Commander.

② Select the LAN bandwidth.

Use the ↑, ↓, ← or → button to select "LAN Bandwidth", then press the PUSH ENTER button. Press the ↑ or ↓ button to select the bandwidth from the displayed submenu, then press the PUSH ENTER button.

When using the ISDN



① Enter the telephone number of a remote party to connect to in the A text box.

Use the ↑, ↓, ← or → button on the Remote Commander to select the A text box, then press the PUSH ENTER button. Next, enter the telephone number with the number buttons on the Remote Commander, and press the PUSH ENTER button.

Notes

- Do not enter the prefix number in the telephone number text box, when the prefix setting is on.
- For details on prefix settings, see “Dial Setup Menu” on page 52.
- Even when you connect multiple ISDN lines (2B or more number of lines), entering one telephone number of the remote party enables you to connect all the lines used automatically.
- When you select ISDN (2B), the A1 and A2 text boxes appear. If you select the A2 text box after entering an ISDN line number in the A1 text box, you can enter a different ISDN number in the A2 text box. Pressing the PUSH ENTER button on the Remote Commander while the A2 text box is selected copies the number entered in the A1 text box to the A2 text box.
- To correct the entered number, press the PinP (BACK SPACE) button on the Remote Commander. The last entered number is deleted.
- To delete the entered ISDN telephone number, press the DISPLAY (CLEAR) button on the Remote Commander.

② Select the number of ISDN lines to use during the call.
Use the ↑, ↓, ← or → button on the Remote Commander to select “Number of Lines”, then press the PUSH ENTER button. Press the ↑ or ↓ button to select the number of channels to be used when calling a remote party from the displayed submenu, then press the PUSH ENTER button.

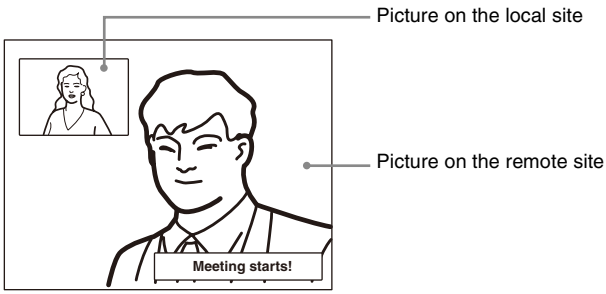
Note

To connect to the remote party by entering all the telephone numbers for the ISDN lines used

If the videoconferencing system of the remote party is not equipped with the bonding function, entering one remote party’s telephone number does not allow automatic connection of multiple ISDN lines used to connect to the remote party. To connect to the remote party by entering all the telephone numbers, register the remote party’s telephone numbers for the ISDN lines to be used referring to “Registering a Remote Party – Phone Book” in chapter 2 (page 82), then connect to the remote party according to the procedure described in “To call a remote party registered in the Phone Book” (page 110).

4 Use the ↑, ↓, ← or → button to select “Dial” in the lower part of the menu, then press the PUSH ENTER button, or press the CONNECT/DISCONNECT (/) button on the Remote Commander.
The system begins dialing the IP address or ISDN telephone number entered in step 3. “Dialing” appears on the monitor screen, and the ON LINE indicator (blue) on the Communication Terminal blinks.
When the system connects to the remote system, the message “Meeting starts!” appears on the screen, and the ON LINE indicator stops blinking and lights in blue.

Now you can start a videoconference.



To cancel dialing before connecting

While “Dialing” is displayed on the monitor screen, press the PUSH ENTER button or the CONNECT/DISCONNECT (/) button on the Remote Commander.

To save the entered IP address or ISDN line number in the Phone Book

Select “Save” with the ↑, ↓, ← or → button, then press the PUSH ENTER button on the Remote Commander. The List Edit menu is displayed. Save the address or number you entered into the Phone Book.

For details on the List Edit menu, see “Registering a Remote Party – Phone Book” on page 82.

Redial function

Once you have input the IP address or ISDN line number using the Detail Dial menu, it will be entered in the text box of the Detail Dial menu the next time you open the menu.

Note

The redial function is not available:

- Once you have turned off the power of the system or set it to standby mode.
- When you cancel dialing the entered IP address or ISDN telephone number.

To call a remote party with the Direct Phone Book button in launcher menu

1 Press the ↑, ↓, ← or → button to select the Direct Phone Book of the remote party that you want to call, and then press the PUSH ENTER button of the Remote Commander.

The submenu appears.

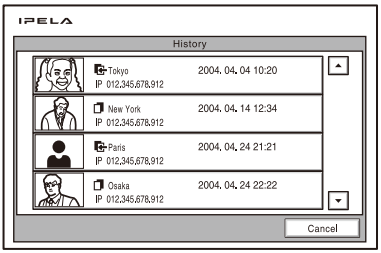
2 Select “Dial” with the ↑ or ↓ button on the Remote Commander, and press the PUSH ENTER button.

The system begins dialing the selected party.

If “More Options Enable” in the Dial Setup menu is set to “On”, you can select the “More Options” button. When you do, the Dial Setup menu appears.

To call a remote party by selecting them in the history list

1 Press the ↑, ↓, ← or → button to select “History”, and then press the PUSH ENTER button of the Remote Commander.
The History menu appears.



2 Press the ↑ or ↓ button to select the desired remote party, and then a submenu appears.

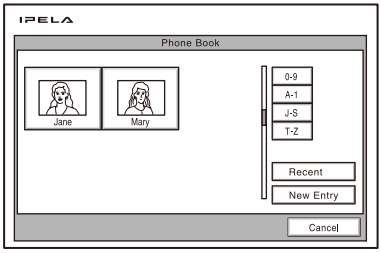
3 Press the ↑, ↓, ← or → button to select “Dial”, and then press the PUSH ENTER button of the Remote Commander.
The system begins dialing the selected party.

To set up more detailed options

When “More Options Enable” is set to “On” in the Dial Setup menu, a dialog box is displayed.
Select the More Options button with the ↑, ↓, ← or → button on the Remote Commander and press the PUSH ENTER button to open the Dial Setup menu. You can change the settings of the desired items.

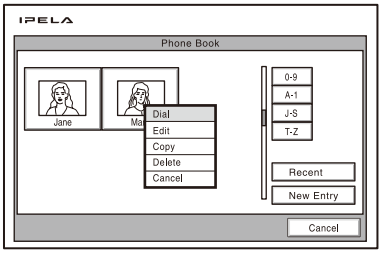
To call a remote party registered in the Phone Book

1 Use the ↑, ↓, ← or → button on the Remote Commander to select “Phone Book” in the launcher menu, then press the PUSH ENTER button.
The Phone Book appears on the monitor screen.

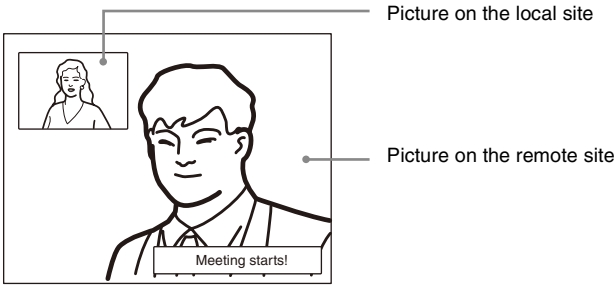


If the desired remote party does not appear, see "To search for a remote party in the Phone Book" on page 112.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select a remote party from the Phone Book, then press the PUSH ENTER button.
The submenu appears.



3 Select "Dial" with the ↑ or ↓ button on the Remote Commander, and press the PUSH ENTER button.
The system begins dialing the party selected in step 2. "Dialing" appears on the monitor screen, and the ON LINE indicator (blue) on the Communication Terminal blinks.
When the system connects to the system on the remote site, the message "Meeting starts!" appears on the screen, and the ON LINE indicator stops blinking and lights in blue.
Now you can start the videoconference.



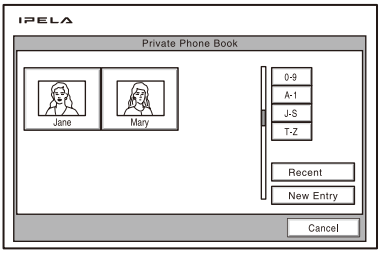
To cancel dialing before connecting

While "Dialing" is displayed on the monitor screen, press the PUSH ENTER button or the CONNECT/DISCONNECT (/) button on the Remote Commander.

To call a remote party registered in the Private Phone Book

1 Insert the "Memory Stick" that contains the Private Phone Book into the Memory Stick slot on the Communication Terminal.
The Phone Book menu changes to the Private Phone Book menu.

2 Select “Private Phone Book” in the launcher menu, and press the PUSH ENTER button.



3 Use the ↑, ↓, ← or → button on the Remote Commander to select a remote party you want to call from the Private Phone Book, then press the PUSH ENTER button.

4 Select “Dial” from the submenu and press the PUSH ENTER button, or press the CONNECT/DISCONNECT (/) button on the Remote Commander.

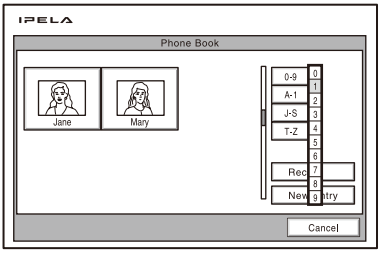
The system dials the selected remote party.

Note

If the auto dialing feature of the Private Phone Book is activated, the system begins dialing when the “Memory Stick” is inserted.

To search for a remote party in the Phone Book

The Phone Book can display up to six parties at a time on the screen.
When you select “Recent”, the Phone Book lists the six names you have most recently dialed.
Selecting the “0-9”, “A-I”, “J-S” or “T-Z” tab opens the submenu. When you select a number or letter from the submenu, up to six parties with names that begin with the selected number or letter are displayed.



Note

You can also search for remote parties by pressing the number buttons on the Remote Commander. Pressing the number button lists up to six party names which start with the alphabetical letter on the number button of the Remote Commander. Pressing the “0” button results in the same display as when “Recent” is selected.

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, the Communication Terminal rings. You need to connect the call manually before starting the conference.
You can start it whenever you are ready.

Notes

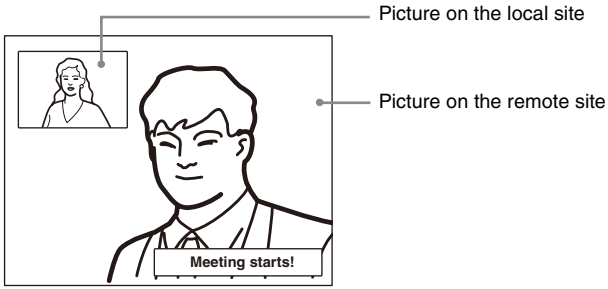
- You cannot answer the call unless the power switch on the Communication Terminal is set to on (|).
- Make sure that the TV monitor is turned on. If you insert the IR repeater under the remote sensor on the Sony TV, set the TV to standby mode.

For setting of the answer mode, see "Auto Answer" in the Answer Setup menu on page 54.

Answering a Call From a Remote Party

To answer a call in auto answer mode

When you receive a call, the Communication Terminal rings and the message "Incoming Call" appears on the monitor screen. The system is automatically connected and the picture of the remote party is displayed on the local monitor screen 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 monitor screen.
You are now ready to start a conference.



Note

See pages 116 to 135 to adjust the sound and picture during the conference.

To receive a call in manual answer mode

When you receive a call, the Communication Terminal rings and the message "Incoming call. Answer?" appears on the monitor screen.

Press ← or → to select "OK", then press the PUSH ENTER button. The system is then connected. Once the connection is made, the picture of the remote party is displayed on the local monitor screen 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 monitor screen.
You are now ready to start a conference.

Note

See pages 116 to 135 to adjust the sound and picture during the conference.

When you do not want to answer the call

Press ← or → to select "Cancel", then press the PUSH ENTER button. Ringing stops, and the connection is canceled.

When the system fails to make an ISDN connection

If the system fails to connect to the remote party, the message "Cannot complete connection (an ISDN cause code and a message are displayed here)" appears on the monitor screen.

For details on ISDN cause codes and messages, see "On-Screen Messages" on page 287.

Ending the Conference

1 Press the CONNECT/DISCONNECT (/) button on the Remote Commander.
The message "Disconnect?" appears on the monitor screen.

2 Press the ← or → button on the Remote Commander to select "OK", then press the PUSH ENTER button, or press the CONNECT/DISCONNECT (/) button on the Remote Commander again.
The system is disconnected.

Note

The power of the Communication Terminal remains on even if the system is disconnected.

To cancel disconnection of the system

Select "Cancel" with the ← or → button, then press the PUSH ENTER button.

To register the connected remote party in the Phone Book

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

Note

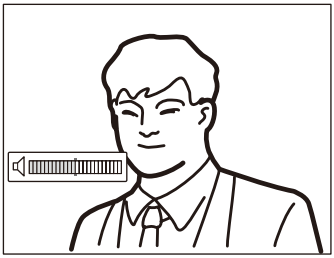
If the “Last Number Registration” is set to “Off”, the message does not appear.

For “Last Number Registration” setting, see “General Setup Menu” on page 62.

Adjusting the Sound

Adjusting the Volume

You can adjust the volume of the sound to be received from a remote party. Press the VOLUME + button on the Remote Commander to increase the volume, VOLUME – button to decrease it. The volume level indicator appears on the monitor screen. The indicator will automatically disappear if you do not operate the buttons for a certain time.



Notes

- You need to set the volume of the TV monitor to an appropriate level first.
- If feedback caused by increasing the volume occurs, decrease the volume.

Turning Off the Sound Momentarily – Muting Function

You can momentarily turn off the sound to be sent to the remote party. Press the MIC ON/OFF button on the Remote Commander.
The sound of the local party is not heard by the remote party. The “MIC OFF” indicator appears on the monitor screen.

To restore the sound

Press the MIC ON/OFF button again.
The “MIC OFF” indicator disappears and the sound is heard by the remote party.

Turning Off the Sound On Answering – Mic on Answer Function

You can turn off the sound to be sent to a remote party when you have answered a call from the remote party.
If you set “Mic on Answer” to “Off” in the Answer Setup menu, only the picture on the local party will be sent to the remote party when answering a call. The “MIC OFF” indicator appears on the monitor screen.

For the Mic on Answer setting, see “Answer Setup Menu” on page 54.

To send the sound to the remote party

Press the MIC ON/OFF button on the Remote Commander.
The “MIC OFF” indicator disappears and the sound is heard by the remote party.

Synchronizing Audio and Video – Lip Sync Function

During the conference a time lag may occur between the sound and picture to be sent to the remote party.
When you set “Lip Sync” to “On” in the Audio Setup menu, the system adjusts to synchronize audio and video. However, this may delay transmission of audio synchronized with video.

For the Lip Sync setting, see “Audio Setup Menu” on page 59.

Note

To enable the Lip Sync function of the remote party, you have to ask them to do so.

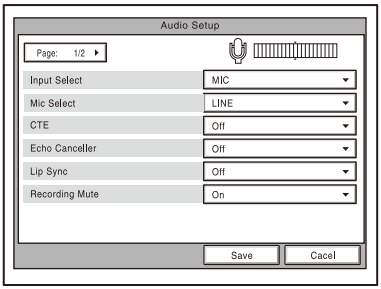
Reducing Echo – Echo Canceller

The Communication Terminal is equipped with the Echo Canceller, allowing the echo that occurs during audio transmission to be reduced.
Setting “Echo Canceller” to “On” in the Audio Setup menu activates the built-in echo canceller.

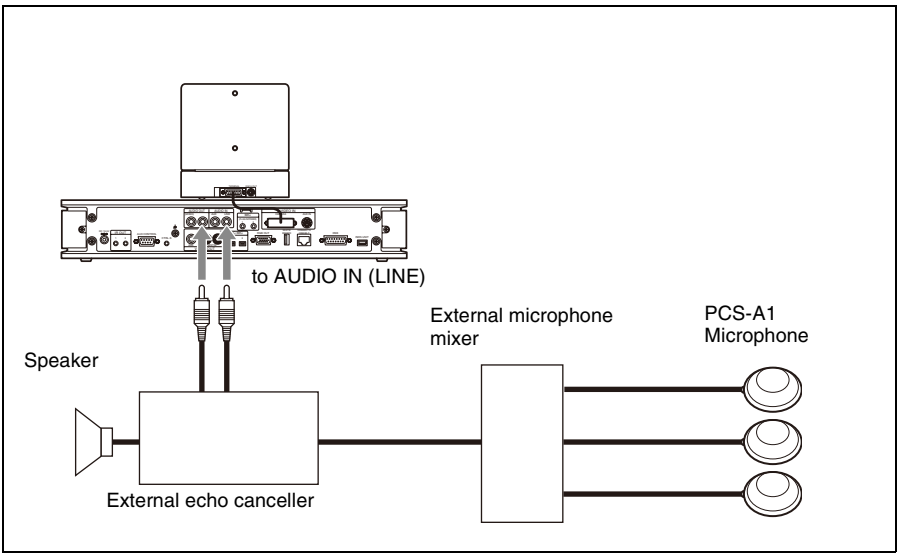
When using an external echo canceller, set “Echo Canceller” to “Off”.

For details on the Audio Setup Menu, see “Audio Setup Menu” on page 59.

Configurations for the Audio Setup menu when using an external echo canceller.



Connection example using an external echo canceller



For details on connecting the external echo canceller, refer to the operating instructions for the echo canceller you are using.

Adjusting the Camera

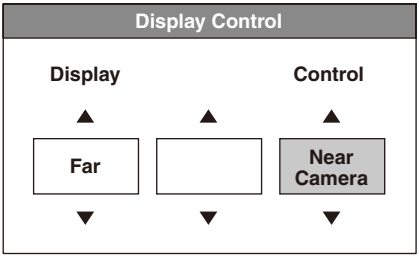
You can adjust the image shot by the local camera that is sent to the remote party to obtain the desired angle and size.
During communication you can also control the camera on the remote site to adjust the image shot by the remote camera.

Selecting the Camera To Be Controlled

Before adjustment, choose whether you control the local or remote camera.

1 Press the FAR/NEAR button on the Remote Commander.
The Display Control menu appears.

2 Press the ← or → button on the Remote Commander to select “Control”, then switch between “Far” and “Near” with the ↑ or ↓ button.



3 Press the PUSH ENTER button on the Remote Commander.
When “Far” is selected (the remote camera is selected), the FAR indicator is displayed.
When “Near” is selected (the local camera is selected), the FAR indicator does not appear.

Notes

- To control the remote camera, set “Far End Camera Control” to “On” for both the local and remote sites in the Communication Setup menu. If this setting is not configured properly, you will not be able to control the remote camera.
- 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 his camera.
- If the local and remote parties try to control the same camera at the same time, the camera may not operate correctly.

Adjusting the Camera Angle and Zoom

Determine the angle of view and the size of the picture to be displayed on the monitor screen by adjusting the angle and zoom.
You can make adjustments in the monitor screen during communication and in the launcher menu when not in communication. You can also make adjustments using the Camera menu.

Note

You can change the zoom factor by enabling or disabling the digital zoom setting.

For details on the digital zoom setting, see "Device Setup Page 2/2" on page 62.

To make adjustments during communication

1 Select the camera you want to adjust.
Press the FAR/NEAR button on the Remote Commander to open the Display Control menu, then select "Far" or "Near" under "Control".

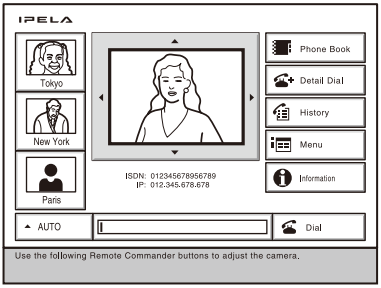
2 Press the ↑, ↓, ← or → button to adjust the camera angle.
The picture whose camera angle is adjusted is displayed in the small window or in full screen.

3 Use the ZOOM button to zoom in or out.
Press the ZOOM T (Telephoto) button to zoom in (to enlarge image), and the ZOOM W (Wide angle) button to zoom out (to obtain wider range of image).

To make adjustments using the launcher menu while not in communication

You can adjust the camera angle and zoom of the picture on the local site only.

1 Use the ↑, ↓, ← or → button to select the screen (screen frame becomes yellow), then press the PUSH ENTER button.
The color of the screen frame changes, then you can adjust the camera angle and zoom.



2 Press the ↑, ↓, ← or → button to adjust the camera angle so that the desired angle of view is obtained.

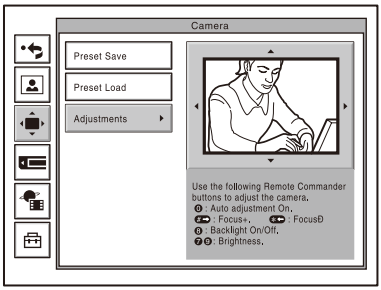
3 Use the ZOOM button to zoom in or out.
Press the ZOOM T button to zoom in (to enlarge image), and the ZOOM W button to zoom out (to obtain wider range of image).

4 Press the PUSH ENTER button.
The screen frame returns to its original color, and camera adjustment is complete.

To make adjustments using the Camera menu

1 Press the MENU button on the Remote Commander to display the Setup menu, then press the ↑ or ↓ button to select (camera) icon.
The Camera menu appears.

2 Use the ↑, ↓, ← or → button to select "Adjustments", then press the PUSH ENTER button.
The color of the screen frame changes, then you can adjust the camera angle and zoom.



3 While in communication, press the FAR/NEAR button on the Remote Commander to select the camera to be adjusted.
When the remote camera is selected, the FAR indicator is displayed.

4 Press the ↑, ↓, ← or → button to adjust the camera angle so that the desired angle of view is obtained.

5 Use the ZOOM button to zoom in or out.
Press the ZOOM T button to zoom in (to enlarge image), and the ZOOM W button to zoom out (to obtain wider range of image).

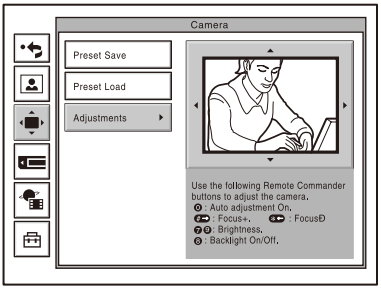
Adjusting the Focus and Brightness

Normally, the focus and brightness are automatically adjusted to obtain optimum levels. You can also adjust them manually.
It is recommended that the focus and brightness be adjusted automatically.

To set the system to camera adjustment mode

1 Press the MENU button on the Remote Commander to display the Setup menu, then press the ↑ or ↓ button to select the (camera) icon.
The Camera menu appears.

2 Use the ↑, ↓, ← or → button to select "Adjustments", then press the PUSH ENTER button.
The color of the screen frame changes, then you can adjust the camera angle and zoom.
The guidance for operations will be displayed under the screen.



3 While in communication, press the FAR/NEAR button on the Remote Commander to select the camera to be adjusted.
When the remote camera is selected, the FAR indicator is displayed.

Note

When the remote camera is selected, only manual focus adjustment is available.

To display the picture to fill the monitor screen

To display the picture in full screen while the Camera menu is displayed, select "Adjustments", press the PUSH ENTER button on the Remote Commander, and then press the PinP button. To cancel the full screen mode, press the RETURN button or PinP button on the Remote Commander.

To adjust the focus and brightness automatically

Press the number button 0 on the Remote Commander.
The "Auto Camera" indicator appears and the focus and brightness are automatically adjusted.

To adjust the focus manually

Press the # button on the Remote Commander repeatedly to move the focus point further away from the camera. The "Focus Far" indicator is displayed.
Press the * button on the Remote Commander repeatedly to move the focus point closer to the camera. The "Focus Near" indicator is displayed.

To adjust the brightness manually

Press the number button 9 on the Remote Commander repeatedly to make the picture brighter. The “Brightness +” indicator is displayed.
Press the “7” button on the Remote Commander repeatedly to make the picture darker. The “Brightness –” indicator is displayed.

To shoot the picture with backlight compensation

Use backlight compensation when shooting a subject with bright background. Each time you press the number button 8, the backlight compensation is activated or deactivated. When it is activated, the “Backlight On” indicator is displayed. When it is deactivated, the “Backlight Off” indicator is displayed.

Registering Angle and Zoom Preset Settings

Up to six settings for camera angle and zoom can be registered in the preset memory. Once you have stored the settings, you can easily recall them to move the camera.
You can preset the settings in the monitor screen while in communication, and in the launcher menu while not in communication. You can also do so using the Camera menu.

To preset the setting in the monitor screen while in communication

You can register angle and zoom presets for both the near and far end camera.

1 Select the camera whose camera angle and zoom setting you want to preset.
Press the FAR/NEAR button on the Remote Commander to open the Display Control menu, then select “Far” or “Near” under “Control”.

2 Adjust the camera angle and zoom.
Use the ↑, ↓, ← or → button to adjust the camera angle, and ZOOM button to adjust the zoom.

3 Hold down one of the number buttons 1 to 6.
The angle and zoom setting is stored in the selected number button, and the message “Registered to Preset number 1 (to 6).” appears.

To preset the setting in the launcher menu while not in communication

1 Adjust the camera angle and zoom in the launcher menu.
Use the ↑, ↓, ← or → button to select the screen and press the PUSH ENTER button, then press the ↑, ↓, ← or → button to adjust the angle and the ZOOM buttons to adjust the zoom.

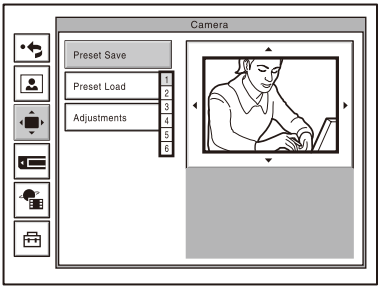
2 Hold down one of the number buttons 1 to 6.
The angle and zoom setting is stored in the selected number button, and the message “Registered to Preset number 1 (to 6).” appears.

To preset the setting using the Camera menu

1 Press the MENU button on the Remote Commander to display the Setup menu, then press the ↑ or ↓ button to select (camera) icon.
The Camera menu appears.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select “Preset Save”, then press the PUSH ENTER button.

3 Select the preset number (1 to 6) with the ↑ or ↓ button, then press the PUSH ENTER button.
The color of the screen frame changes, then you can adjust the camera angle and zoom.



4 While in communication, select the camera to be adjusted with the FAR/NEAR button on the Remote Commander.
The FAR indicator is displayed on the monitor screen when the remote camera is selected.

5 Adjust the angle and zoom.
Use the ↑, ↓, ← or → button to adjust the camera angle, and ZOOM button to adjust the zoom.

6 Press the PUSH ENTER button.
The setting is registered in the selected preset number.

Recalling the Preset Angle and Zoom Setting

You can move the camera to the preset position by recalling the preset camera angle and zoom with the monitor screen displayed while in communication. You can do the same with the launcher menu displayed while not in communication. Using the Camera menu also enables movement of the camera to the preset position.

To recall the preset setting in the monitor screen while in communication

1 Select the camera which you want to move to the preset position.
Press the FAR/NEAR button on the Remote Commander to open the Display Control menu, then select “Far” or “Near” under “Control”.

2 Press one of the number buttons 1 to 6 on the Remote Commander.
The setting of the selected preset number is recalled, and the camera moves to the preset position. The indicator appears.

To recall the preset setting in the launcher menu while not in communication

You can move the local camera to the preset position.

1 Select the screen in the launcher menu, then press the PUSH ENTER button.

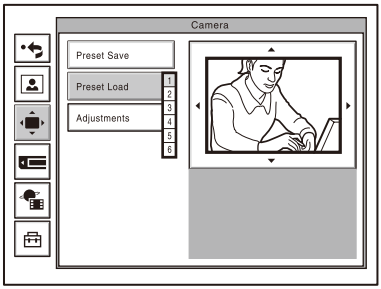
2 Press one of the number buttons 1 to 6 on the Remote Commander.
The setting of the selected preset number is recalled, and the camera moves to the preset position. The message “Preset 1 (to 6) selected” appears.

To recall the preset setting in the Camera menu

1 Display the Camera menu.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select “Preset Load”, then press the PUSH ENTER button.

3 Press the ↑ or ↓ button to select the preset number (1-6) you want to recall, then press the PUSH ENTER button.



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

On backup

The built-in lithium battery allows the system to retain registered information such as preset camera positions, even if the Communication Terminal is turned off.

Notes

- The built-in lithium battery is kept charged as long as the system is operated. If the system is not used for a long time, the battery is gradually discharged. It will be completely discharged when you do not use the system for 12 weeks. To retain the system's information, keep the battery charged.
- To recharge the battery, connect the camera to the Communication Terminal and leave both units with the power on for about 48 hours.

Sending Motion Pictures as Still Images

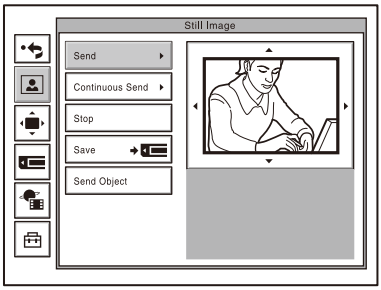
You can send motion pictures shot by the Camera as still images.
When you are sending pictures that contain lots of text, it is recommended that you send them as still images. The images become clearer than motion pictures and the texts are easy to read.

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 Open the Still Image menu.
Press the MENU button on the Remote Commander to display the Setup menu, and select the (still image) icon with the ↑ or ↓ button.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select “Send” or “Continuous Send”, then press the PUSH ENTER button.



3 Adjust the camera angle and zoom and press the PUSH ENTER button, if necessary.

For details on the adjustments of the camera angle and zoom, see “Adjusting the Camera Angle and Zoom” on page 120.

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

To stop “Continuous Send”

Press the PUSH ENTER button on the Remote Commander. Select “Stop” from the displayed submenu with the ↑ or ↓ button, then press the PUSH ENTER button.

To cancel still image display

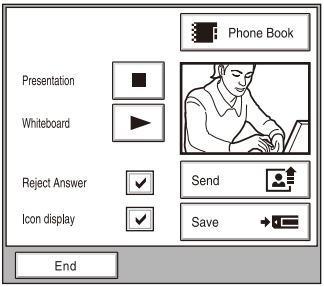
Press the PUSH ENTER button on the Remote Commander to display the submenu. Select “Clear” with the ↑ or ↓ button, then press the PUSH ENTER button.

Sending a Still Image Using the Communication Submenu

You can easily send only one image displayed on the monitor screen as a still image during communication.

1 Press the PUSH ENTER button on the Remote Commander during communication.

The communication submenu appears.



2 Press the ↑ or ↓ button on the Remote Commander to select “Send”, then press the PUSH ENTER button.

The motion picture displayed on the local monitor screen freezes, and a still picture is sent to the remote party. When transmission is finished, the message “The still image has been sent.” appears.

Note

When you are receiving a still image, you cannot send a still image to the remote party. Select “Clear”, then send the still image.

To cancel still image display

Press the PUSH ENTER button on the Remote Commander to display the communication submenu. Select “Clear” with the ↑ or ↓ button, then press the PUSH ENTER button. When a still image is displayed on the monitor screen, the “Send” indication changes to “Clear”.

To hide the communication submenu

Select “End” from the menu, then press the PUSH ENTER button.

Receiving Still Images From a Remote Party

During communication, you can receive still images taken by the remote camera if the “Far End Camera Control” on page 3 of the Communication Setup menu.

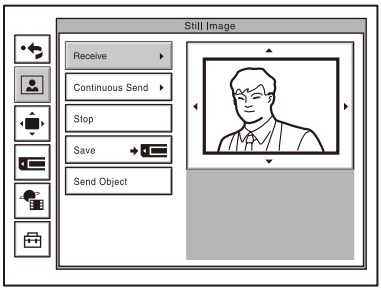
1 Open the Still Image menu.

Press the MENU button on the Remote Commander to display the Setup menu, then select the (still image) icon with the ↑ or ↓ button.

2 Press the FAR/NEAR button on the Remote Commander.

The picture shot by the remote camera and the FAR indicator appear on the monitor screen in the Still Image menu window. “Send” in the menu turns to “Receive”.

3 Use the ↑, ↓, ← or → button on the Remote Commander to select “Receive”, then press the PUSH ENTER button.



The remote picture displayed on the monitor screen is received as a still image.

To cancel still image display

Press the PUSH ENTER button on the Remote Commander to display the submenu. Select “Clear” with the ↑ or ↓ button, then press the PUSH ENTER button.

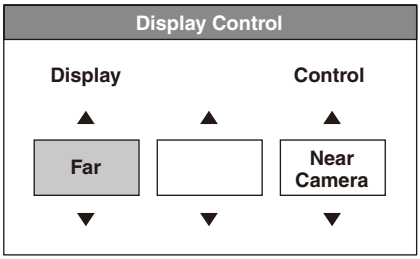
Selecting the Input Picture and Sound

You can switch the picture displayed on the monitor screen, and switch between the input picture and audio.

Switching the Displayed Picture Between the Local and Remote Pictures

1 Press the FAR/NEAR button on the Remote Commander.
The Display Control menu appears.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select “Near” or “Far” under “Display”.



3 Press the PUSH ENTER button on the Remote Commander.

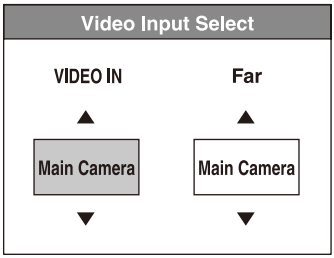
Selecting the Input Picture

1 Press the VIDEO INPUT SELECT button on the Remote Commander.
The Video Input Select menu appears.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select the video input on the local site.

Note

While in communication you can switch the video input of the remote system by selecting “Far” in the Video Input Select menu.



Main Camera: Selects the video from the main camera.
IR 1: Selects the video from the optional PCS-DS150/DS150P Document Stand (currently not available).
AUX 1: Selects the video from the device connected to the AUX IN connector.

3 Press the PUSH ENTER button on the Remote Commander.

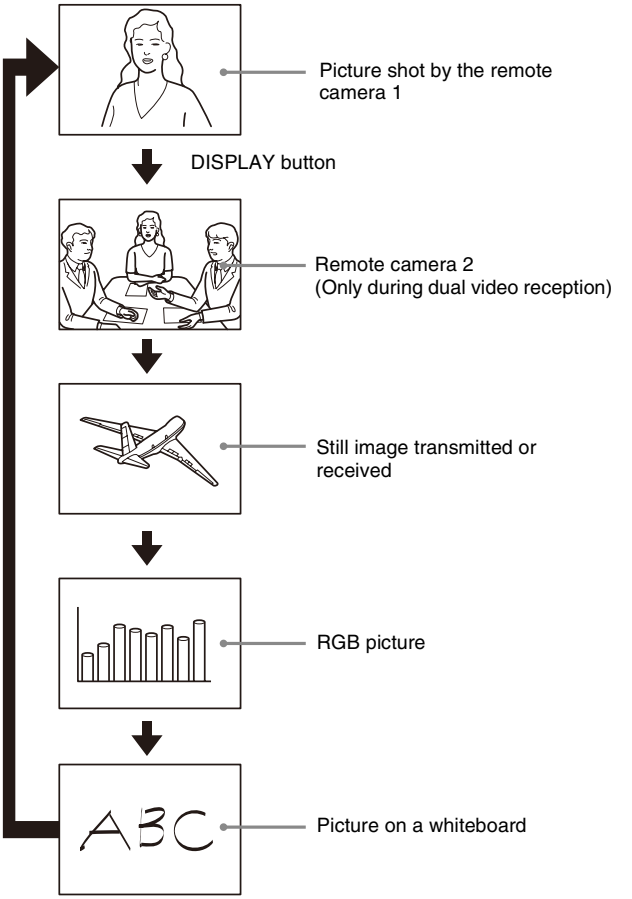
To change the video input name displayed in the Video Input Select menu

If you label “Main Camera”, “IR 1”, or “AUX1” in Custom Input Label in the Video Setup menu, the specified name for each camera is displayed in the Video Input Select menu in step 2 above. For example, you can label as such: Main, Document, Camera2, None.

For details on “Custom Input Label”, see “Video Setup Menu” on page 60.

Switching the Picture Displayed on the TV Monitor

Each press of the DISPLAY button on the Remote Commander switches the picture displayed on the monitor screen as follows:



Notes

- A still image is displayed only when it has been transmitted or received.
- An RGB picture is displayed when the RGB signal is transmitted or received to/from a computer via the optional PCSA-DSB1S Data Solution Box connected to the Communication Terminal.
- A picture on a whiteboard is displayed only when notes written on a whiteboard are transmitted or received.
- When using the dual video function, the split display also appears.

For details, see "Using Audio/Video Signals From the Connected Equipment for a Conference" on page 186 of Chapter 5 and "Chapter 6: Videoconference Using a Whiteboard" on page 193.

Switching the Sound To Be Sent to the Remote Party

You can switch the sound sent to the remote party between the sound from the microphone and that from the connected equipment. Use “Input Select” in the Audio Setup menu.

For details on the “Input Select” setting, see page 59.

Checking the Connection Status During Communication

While communication is in progress, you can confirm the connection status in the Status menu.

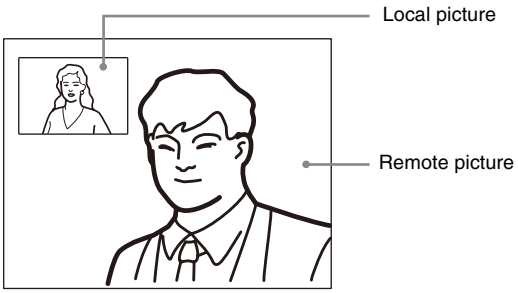
For details on displaying the status, see “Status Menu” on page 57.

Monitoring the Local Picture as a Window Picture – PinP Feature

You can display the picture shot by the local camera on your monitor screen as a window picture (Picture-in-Picture). This function enables you to check how your own party is monitored on the remote site.

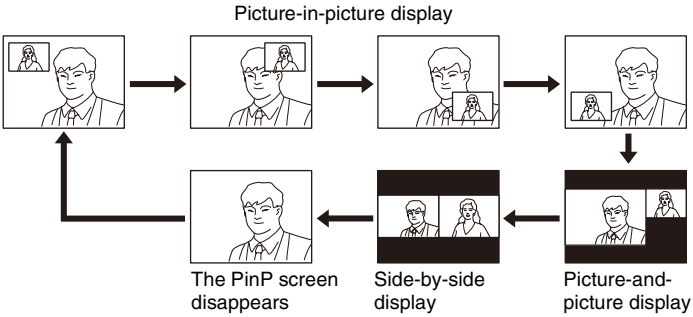
To display the window picture

Press the PinP button on the Remote Commander.
The local picture is displayed as a window picture.



To change the location of the window picture

Each press of the PinP button changes the location of the window as follows:



Full screen display

The remote picture is displayed in full screen.

Picture-in-picture display

The remote picture is displayed in full screen, while the local picture is displayed in PinP.
There are four screen positions (top left, top right, bottom left, and bottom right) for the PinP display.

Picture-and-picture display

The remote picture is displayed on the left side of the screen, while the local picture is displayed smaller to the right.

Side-by-side display

The remote picture is displayed on the left, and the local picture is displayed on the right in equal size.

Notes

- The window picture is displayed in the same location as it was last located. The window picture does not appear if it was not previously displayed.
- The window picture is not available while not in communication with a remote party.

To display the remote picture as a window picture

Press the FAR/NEAR button on the Remote Commander to open the Display Control menu and select “Near” under “Display” when the local picture is displayed as a window picture. The remote picture is displayed as a window picture with the local picture as the main picture.

Chapter 4: Videoconference With Optional Equipment

This chapter describes the various videoconferences using the optional equipment in addition to the components contained in the PCS-G50/G50P Video Communication System.

To conduct a data conference using the optional PCSA-DSB1S Data Solution Box, see chapter 5.

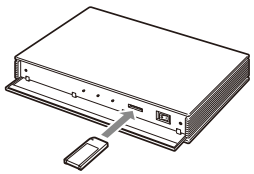
To conduct a multipoint conference, see chapter 8.

Using Still Images Stored on 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.

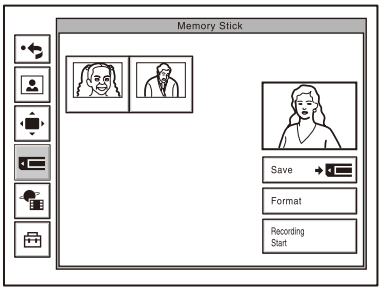
Displaying a Still Image Stored on a “Memory Stick”

1 Insert the “Memory Stick” containing the still images into the Memory Stick slot on the Communication Terminal.
Insert the “Memory Stick” in the direction of the arrow with the mark facing upward.



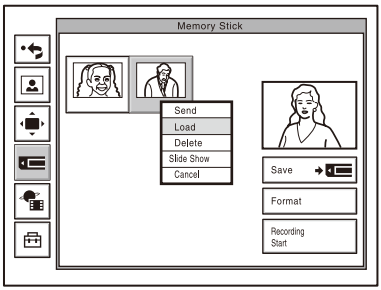
2 Open the Memory Stick menu.

Press the MENU button on the Remote Commander to display the Setup menu, and select (Memory Stick) icon with the ↑ or ↓ button.



3 Use the ↑, ↓, ← or → button on the Remote Commander to select the still image you want to display, then press the PUSH ENTER button.

The submenu appears.



4 Use the ↑ or ↓ button to select “Load”, then press the PUSH ENTER button.

The menu disappears and the selected still image is displayed on the monitor screen.

To clear the still image from the monitor screen

While the still image is displayed, press the PUSH ENTER button on the Remote Commander. The Memory Stick menu is restored.

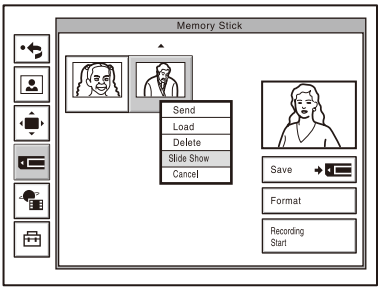
Viewing a slide show

You can view still images stored on a “Memory Stick” slide by slide.

1 Insert the “Memory Stick” into the Memory Stick slot, and display the Memory Stick menu.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select a still image from which you want to start a slide show, then press the PUSH ENTER button.

The submenu appears.



3 Use the ↑ or ↓ button on the Remote Commander to select “Slide Show”, then press the PUSH ENTER button.

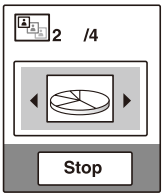
The slide show starts. During communication with a remote party, the still images are transmitted to the remote party.

The indicator is displayed on the monitor screen during the slide show.

4 Press the → button on the Remote Commander to advance a slide. Pressing the ← button goes back to the previous slide.

To select another still image during the slide show

Pressing the PUSH ENTER button during the slide show opens the submenu.



Press the ← or → button to select the desired still image, then press the PUSH ENTER button. The selected image is displayed in full screen. During communication it will be transmitted to the remote party.

To stop the slide show

While the submenu is open, select “Stop” with the ↓ button and press the PUSH ENTER button.

While the submenu is not open, press the RETURN button on the Remote Commander. The Memory Stick menu is restored.

To delete a still image

Display the Memory Stick menu, select the still image you want to delete, and press the PUSH ENTER button. Select “Delete” from the displayed submenu with the ↑ or ↓ button, then press the PUSH ENTER button. When the message “Delete File?” appears, select “OK” and press the PUSH ENTER button. The selected still image is deleted from the “Memory Stick”.

To remove the “Memory Stick”

Push the “Memory Stick” and release your finger. The “Memory Stick” will come out a little, and you can then remove it.

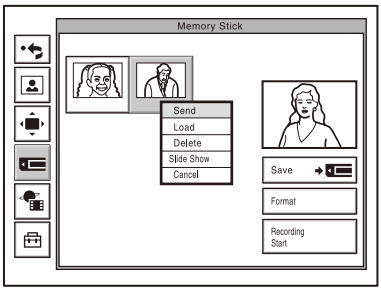
Sending a Still Image Stored on a “Memory Stick”

While in communication, 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 Communication Terminal, and display the Memory Stick menu.

For how to insert a “Memory Stick” and how to display the Memory Stick menu, see “Displaying a Still Image Stored on a “Memory Stick”” on page 136.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select the still image you want to send, then press the PUSH ENTER button.
The submenu appears.



3 Use the ↑ or ↓ button to select “Send”, then press the PUSH ENTER button.
The selected still image is displayed, and is sent to the remote party. The message “The still image has been sent.” appears on the monitor screen.

When you select “Slide Show” in step 3 above

If you select “Slide Show” from the submenu and press the PUSH ENTER button, a slide show starts from the selected still image, and it will be sent to the remote party.

For details on a slide show, see page 137.

To cancel still image display

Press the PUSH ENTER button on the Remote Commander to display the submenu. Select “Clear” with the ↑ or ↓ button, then press the PUSH ENTER button.

Notes

- The images inside one of the folders within the “Memory Stick” directory, from [\DCIM\100MSDCF] to [\DCIM\109MSDCF], will be displayed. The displayed folder goes by the following order of priority: [109MSDCF], [108MSDCF], [107MSDCF], etc.
- If a still image cannot be displayed, “JPEG” appears in its place.

Formatting a “Memory Stick”

Notes

- “Memory Sticks” formatted on a computer are not guaranteed to work with this system. Always use “Memory Sticks” formatted with the system.
- Formatting a “Memory Stick” deletes all images, addresses and other data saved on the “Memory Stick”.

To format a “Memory Stick”

Select “Memory Stick Format” in the Memory Stick menu, and the “Format a Memory Stick?” message appears. Select “OK” to format the “Memory Stick”.

When an unformatted “Memory Stick” is inserted

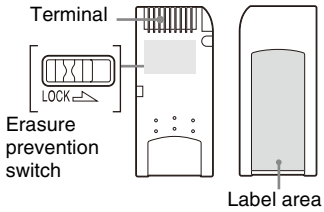
The “Format a Memory Stick?” message appears. Select “OK” to format the “Memory Stick”. Select “Cancel” to cancel the formatting operation.

For details on videoconference recording, see page 153.

“Memory Stick” Media

Notes on using “Memory Stick” media

- When you set the “Memory Stick” erasure prevention switch to “LOCK”, data cannot be recorded, edited, or deleted.



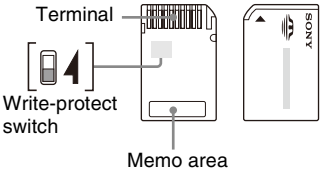
  The position and shape of the write-protect switch may differ between the various types of “Memory Stick”.
- Do not remove the “Memory Stick” while it is reading or writing data.
- Data may be damaged if:
  - The “Memory Stick” is removed or the unit is turned off while reading or writing.
  - You use the “Memory Stick” in a location subject to the effects of static electricity or electric noise.
- We recommend that you back up important data recorded on the “Memory Stick”.
- Do not affix anything other than the supplied label to the “Memory Stick” label area.
- Affix the label so that it does not stick out beyond the label area.
- When storing or carrying a “Memory Stick”, keep it in its original case.
- Do not touch the terminal of the “Memory Stick” with anything, including your fingers or metallic objects.
- 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 locations subject to:
  - Extreme heat, such as in a closed car parked in the sun.
  - Direct sunlight.
  - Humidity or corrosive substances.

About data

- When you set the “Memory Stick” erasure prevention switch to “LOCK”, data such as images and mails cannot be recorded, edited, or deleted. Be sure to unlock the switch before transferring or copying data on the unit to the “Memory Stick”, or erasing data on the “Memory Stick”.
- We recommend that you make a backup copy of important data on another “Memory Stick” or on a hard disk using a computer.

Notes on using “Memory Stick Duo”

- Use a pointed object, such as a ballpoint pen, to move the “Memory Stick Duo” write-protect switch.
- Do not write forcefully on the “Memory Stick Duo” memo area.
- When using the “Memory Stick Duo”, always connect the adaptor supplied with it before using.



Notes on using the Memory Select function

- You cannot use multiple memory blocks simultaneously or continuously.
- Never operate the Memory Select switch when the “Memory Stick” is inserted in the slot of the unit, as it may cause damage. Sony Corporation assumes no liability for failure resulting from such operation.

- Make sure that the Memory Select switch is properly positioned to the side. When the switch is not positioned properly, the unit may be damaged or malfunction.
- Before inserting the “Memory Stick” in the slot of the unit, make sure that the memory you want to use is already selected.
- A “Memory Stick” with the Memory Select function allows the user to select the internal memory of the “Memory Stick” with the selector switch. Care must be taken in the following cases as the supported devices only detect the selected memory:
  – Formatting is only processed for the selected memory.
  – The remaining space display indicates the remaining space for the selected memory only.
  – Errors are only displayed for the selected memory and are detected separately from the unselected memory.

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.

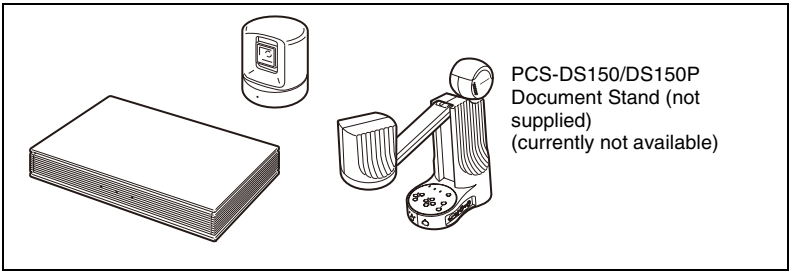
- “Memory Stick Duo” and MEMORY STICK DUO are trademarks of Sony Corporation.
- “Memory Stick” and MEMORY STICK are trademarks of Sony Corporation.
- “MagicGate Memory Stick” and MAGICGATE are trademarks of Sony Corporation.

Sending Motion Pictures From the Connected External Equipment as Still Images

You can send motion pictures from external equipment connected to the Communication Terminal as still images.
Text heavy images are clearer and easier to read when sent as still images.

Sending Motion Pictures Output From a Document Stand as Still Images

During communication motion pictures output from the optional PCS-DS150/DS150P Document Stand (currently not available) connected to the Communication Terminal can be frozen, and you can send a still image to the remote party.



To send a still image

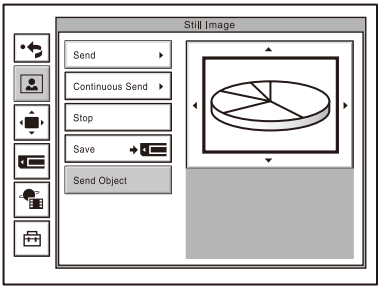
1 Shoot the image you want to send with the Document Stand.

For details how to operate the Document Stand, refer to the Operating Instructions supplied with the Document Stand.

2 Open the Still Image menu.
Press the MENU button on the Remote Commander to display the Setup menu, then select the (still image) icon with the ↑ or ↓ button.

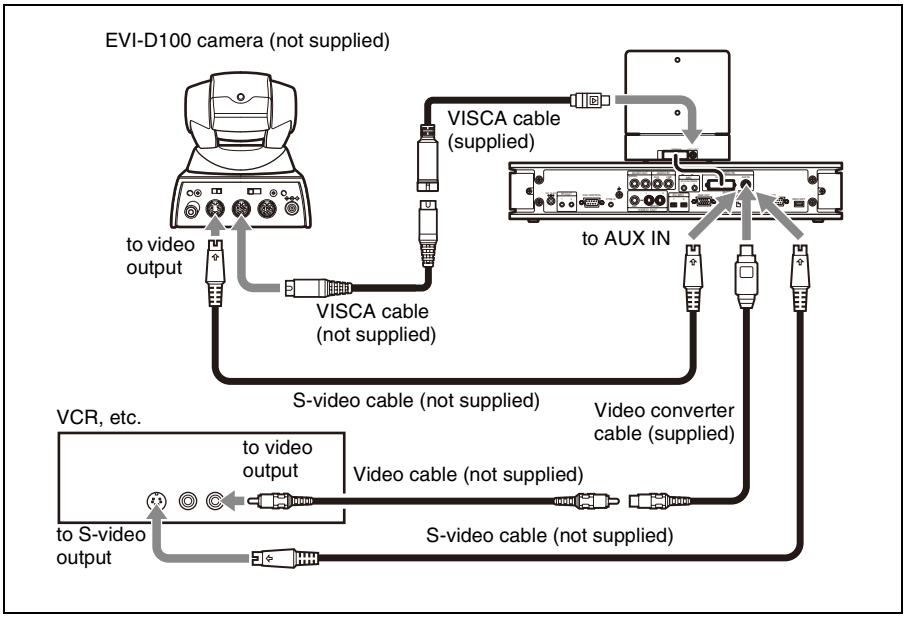
3 Use the ↑, ↓, ← or → button on the Remote Commander to select “Send Object”, then press the PUSH ENTER button.

The picture shot by the Document Stand is displayed on the monitor screen and is sent to the remote party as a still image.



Sending Motion Pictures Input From an External Camera or Other Equipment as Still Images

During communication a motion picture output from an external camera or VCR connected to the Communication Terminal can be frozen, and then sent to the remote party.



To send a still image

1 Open the Still Image menu.

Press the MENU button on the Remote Commander to display the Setup menu, then select the (still image) icon with the ↑ or ↓ button.

2 Display the picture you want to send on the monitor screen.

Press the VIDEO INPUT SELECT button on the Remote Commander to display the Video Input Select menu, then select “AUX1” under “VIDEO IN”, and press the PUSH ENTER button.

Notes

- Still images can only be sent from the device connected to the AUX IN connector.
- Selecting “IR 1” allows you to display images input from the optional PCS-DS150/DS150P Document Stand (currently not available) on the monitor.
- If you label “Main Camera”, “IR 1”, or “AUX1” in Custom Input Label in the Video Setup menu, the specified name for each camera is displayed in the Video Input Select menu.

3 Use the ↑, ↓, ← or → button on the Remote Commander to select “Send”, then press the PUSH ENTER button.

The motion picture on the monitor screen freezes, and a still picture is sent to the remote party. The still picture remains even after sending.

4 Adjust the camera angle and zoom and press the PUSH ENTER button, if necessary.

For details on the adjustments of the camera angle and zoom, see “Adjusting the Camera Angle and Zoom” on page 120.

The motion picture displayed on the local monitor screen freezes, and a still picture will be sent to the remote party. If you select “Send”, a still image is sent. When transmission is finished, the message “The still image has been sent.” appears.

When “Continuous Send” is selected, still images are sent continuously. The sending interval depends on the transmission rate and the image type.

To cancel still image display on the receiving or sending end

Select “Clear” or switch the display screen.

For details on canceling the still image display, see “To cancel still image display” on page 128.

Saving Still Images to a “Memory Stick”

You can save the picture shot by the local camera or input picture from the connected equipment or the remote picture during conference on a “Memory Stick”.

Saving Still Images Using the Still Image Menu

1 Open the Communication Terminal front panel, and then insert the “Memory Stick” used to save images into the Memory Stick slot.

2 Open the Still Image menu.

Press the MENU button on the Remote Commander to display the Setup menu, then select the (still image) icon with the ↑ or ↓ button.

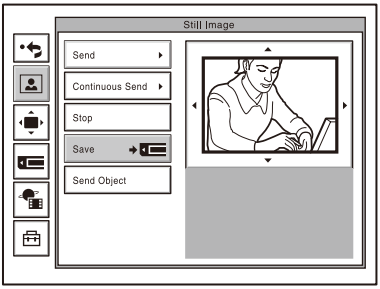
3 Display the picture you want to save on the monitor screen.

To display the picture on the local site, press the VIDEO INPUT SELECT button on the Remote Commander to display the Video Setup menu, and then select the video input you want to display.

To display the remote picture, switch to the picture on the remote site with the FAR/NEAR button on the Remote Commander, and select the desired picture.

For details on the Video Setup menu, see “Video Setup Menu” on page 60.

4 Use the ↑, ↓, ← or → button on the Remote Commander to select “Save”, then press the PUSH ENTER button.



The picture displayed on the monitor screen will be saved as a still image to the “Memory Stick”.

Notes

- Do not remove the “Memory Stick” until the data is completely loaded. If you do, the “Memory Stick” may be damaged or the Communication Terminal 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 4

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 full.” appears and you cannot save the still image file.

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

File name

The image file is saved as “DSCXXXXX.jpg” under the “\DCIM\100MSDCF” directory of the “Memory Stick”.

Compression format

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

Note

The Communication Terminal is not compatible with progressive JPEG format data.

Saving Still Images Using the Memory Stick Menu

You can save still pictures using the “Memory Stick” “Save” button displayed on the Memory Stick menu.

1 Insert the “Memory Stick” to which you are saving the images into the Memory Stick slot.

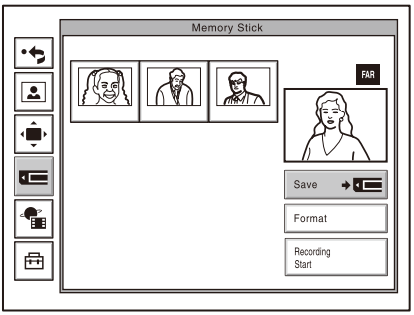
2 Display the picture you want to save.

To switch the input on the local site, press the VIDEO INPUT SELECT button on the Remote Commander to display the Video Input Select menu, select the desired picture, then press the PUSH ENTER button.
To save the remote picture, switch to the picture on the remote site with the FAR/NEAR button on the Remote Commander, and select the desired picture.

3 Open the Memory Stick menu.

Press the MENU button on the Remote Commander to display the Setup menu, then select the (“Memory Stick”) icon with the ↑ or ↓ button.

4 Use the ↑, ↓, ← or → button on the Remote Commander to select the Save button, then press the PUSH ENTER button.



The selected picture is saved to the “Memory Stick” and a thumbnail is created.

Hint

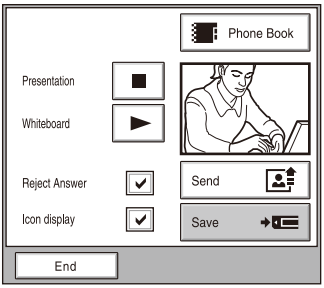
Pressing the FAR/NEAR button on the Remote Commander during a videoconference switches the display between the local and remote pictures. When the remote pictures are being displayed, the FAR icon appears.

Saving Still Images Using the Communication Submenu

You can promptly save the picture displayed on the monitor screen during communication to the “Memory Stick” as a still image.

1 During communication with the remote party press the PUSH ENTER button.

The communication submenu appears.



2 Press the ↑ or ↓ button on the Remote Commander to select “Save”, then press the PUSH ENTER button.

The displayed picture is frozen and saved to the “Memory Stick” as a still image.

After saving, the message “Still image saved to Memory Stick.” appears.

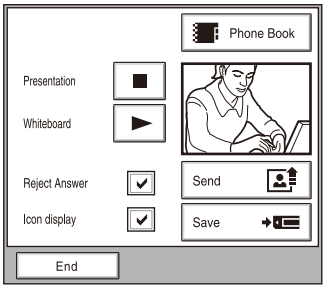
To hide the communication submenu

Select “End” in the menu, then press the PUSH ENTER button.

Using a Convenient Menu Available During Communication — the Communication Submenu

During communication with a remote party, pressing the PUSH ENTER button on the Remote Commander opens the communication submenu. The communication submenu allows you to perform operations often used during communication only by selecting the item in the menu.

Communication submenu



Selecting each item with the ↑, ↓, ← or → button and pressing the PUSH ENTER button enables the following operations:

Presentation: Sends the RGB picture input from the optional PCSA-DSB1S Data Solution Box to a remote party. After it does, the item changes to "Presentation [■]". Selecting "Presentation [■]" and pressing the PUSH ENTER button ends the transmission of the RGB picture. Only appears when the Data Solution Box is connected to the Communication Terminal.

Note

You can also start or stop transmission with the PRESENTATION button on the PCSA-RG1 Remote Commander.

For details, see "To transmit the picture from a computer to multiple points" on page 188.

Whiteboard: Sends notes written on a whiteboard with the mimio Xi attached. While it does, the item changes to "Whiteboard [►]". Selecting "Whiteboard [►]" and pressing the PUSH ENTER button ends the transmission of notes on the whiteboard. Only appears when the whiteboard with the installed mimio Xi is connected.

Reject Answer: Rejects incoming calls from other terminals during a videoconference.

Icon Display: Displays the on-screen indicators if they are not shown. While the indicators are displayed, the item changes to "Indicator [☑]". Selecting "Indicator [☑]" and pressing the PUSH ENTER button hides the indicators.

Phone Book: Shows the Phone Book menu.

Send: Sends the picture displayed on the monitor as a still image to a remote party. After it does, the item changes to “Clear”. Selecting “Clear” restores the motion picture from the camera.

Save: Saves the picture displayed on the monitor to a “Memory Stick” as a still image.

End: Clears the communication submenu.

Streaming a Videoconference

By broadcasting the live stream of a videoconference, people who cannot attend the conference can watch the proceedings over the Web using a computer.
Before broadcasting a live stream, be sure to configure the live stream permission setting.

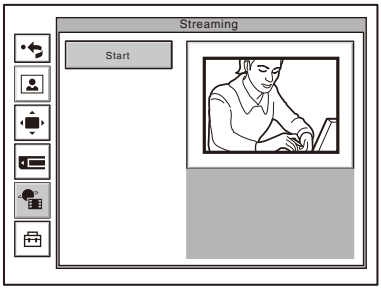
For details on viewing a streamed videoconference, see chapter 10.

For details on the streaming settings, see the "Streaming/Recording" page 69.

Starting a Streaming Broadcast

1 Press the MENU button on the Remote Commander to display the Setup menu, and then use the ↑ or ↓ button to select the (Streaming) icon.
The Streaming menu appears.

2 Use the → button on the Remote Commander to select "Start" and then press the Enter button.
The streaming broadcast starts, and the videoconference proceedings can be watched from a computer over the Web.



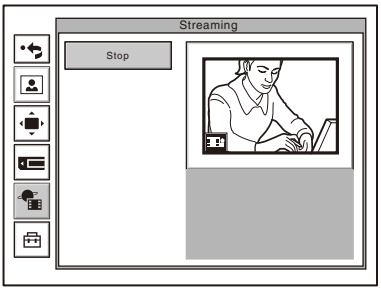
Notes

- If you start streaming before the videoconference begins, the broadcast will continue streaming after the videoconference begins.
- Depending on Web access limitations, about 10 terminals can view a streaming broadcast simultaneously. The actual number of terminals that can view the broadcast simultaneously depends on your system's operating environment.

Stopping a Streaming Broadcast

1 Press the MENU button on the Remote Commander to display the Setup menu, and then use the ↑ or ↓ button to select the (Streaming) icon.
The Streaming menu appears.

2 Use the → button on the Remote Commander to select “Stop” and then press the Enter button.
The streaming broadcast stops.



Note

Ending a videoconference while streaming is in progress does not end the streaming broadcast.

Recording a Videoconference

The video and audio of a videoconference can be saved on a “Memory Stick” in MPEG4 format. The saved videoconference can then be viewed on a computer.

Starting Recording

1 Insert the “Memory Stick” into the Memory Stick slot to display the Memory Stick menu.

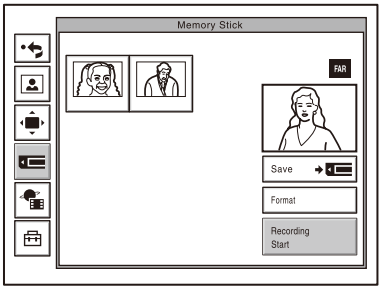
Notes

- If a dialog box appears and asks whether you want to start recording, you can start recording directly from the dialog box.
- If “Auto Dial” in the Private Phone Book is set to “On,” the dialog box does not appear.

For details on how to insert a “Memory Stick” and how to display the Memory Stick menu, see “Using Still Images Stored on a “Memory Stick” for a Videoconference” page 136.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select “Recording Start,” and then press the Enter button.
The message “Start recording?” appears.

3 Use the ↑, ↓, ← or → button on the Remote Commander to select “OK”, and press the PUSH ENTER button.
Recording to the “Memory Stick” starts.



Hint

Pressing the FAR/NEAR button on the Remote Commander during a videoconference switches the display between the local and remote pictures. When the remote pictures are being displayed, the FAR icon appears.

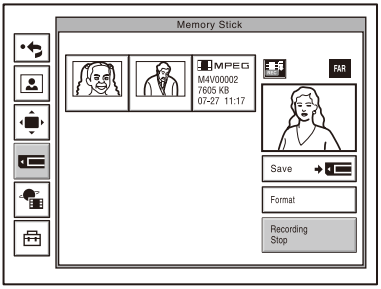
For details on the recording settings, see the “Streaming/Recording” on page 69.

Stopping Recording

1 Display the Memory Stick menu.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select "Recording Stop," and then press the Enter button.
The message "Stop recording?" appears.

3 Use the ↑, ↓, ← or → button on the Remote Commander to select "OK", and press the PUSH ENTER button.
Recording to the "Memory Stick" stops.



Notes

- If the "Memory Stick" becomes full during a recording, the recording stops and a notification message appears.
- Although the recorded MPEG4 files have the same file type name as the MPEG4 files that can be played on the PSP or other devices that support the "Memory Stick" video format, you cannot play the files on these devices even after the files are recognized and moved to the file directories of these devices.

Deleting Recorded Data

Display the Memory Stick menu, select the MPEG4 file you wish to delete, and then press the PUSH ENTER button. When the sub-menu displays, press the ↑ or ↓ button on the Remote Commander to select "Delete", and then press the PUSH ENTER button. When the message "Delete File?" appears, select "OK" and press the PUSH ENTER button. The MPEG4 file is deleted from the "Memory Stick".

Note

You cannot delete data of a videoconference that is in progress.

Using Multiple Monitors

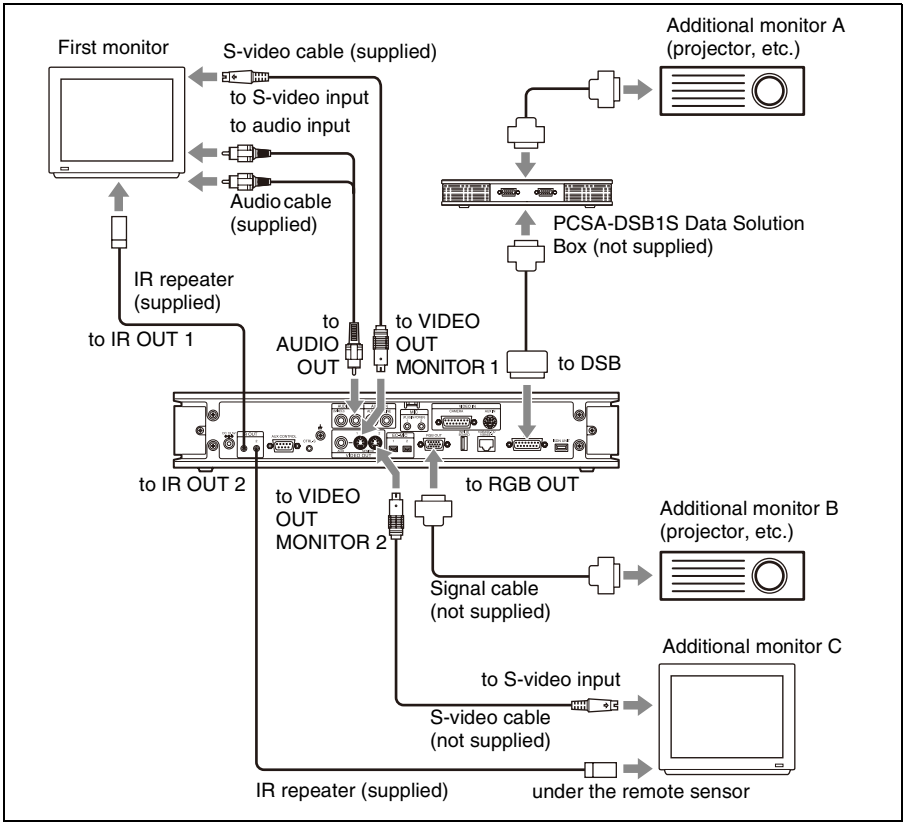
By connecting several monitors to the system, you can display different material, such as video or still images, on different monitors.

Using Two Monitors–Dual Monitor Setup

You can connect two monitors for use with the Communication Terminal.

To connect a second monitor

To connect a second monitor, simply connect it to the VIDEO OUT MONITOR 2 or RGB OUT connector of the Communication Terminal, or the RGB OUT connector of the Data Solution Box.
If your second monitor is a Sony monitor, connect the supplied IR repeater immediately under the monitor's remote sensor, and connect the other end of the IR repeater cable to the IR OUT 2 connector of the Communication Terminal.



To change the settings

Set “Monitors” in “Monitor Out” of the Video Setup menu to “2”. Next, select the connector where the second monitor is connected. To do so, set “Monitor” in “Monitor Out” of the Video Setup menu to “SUB”. Once the settings are changed, the first monitor displays video, while the second displays other images such as RGB and still images.

Note

The settings cannot be changed while transmission is in progress.

For details, see “To change the images displayed in a dual monitor setup” on page 157.

To view the picture as a window picture

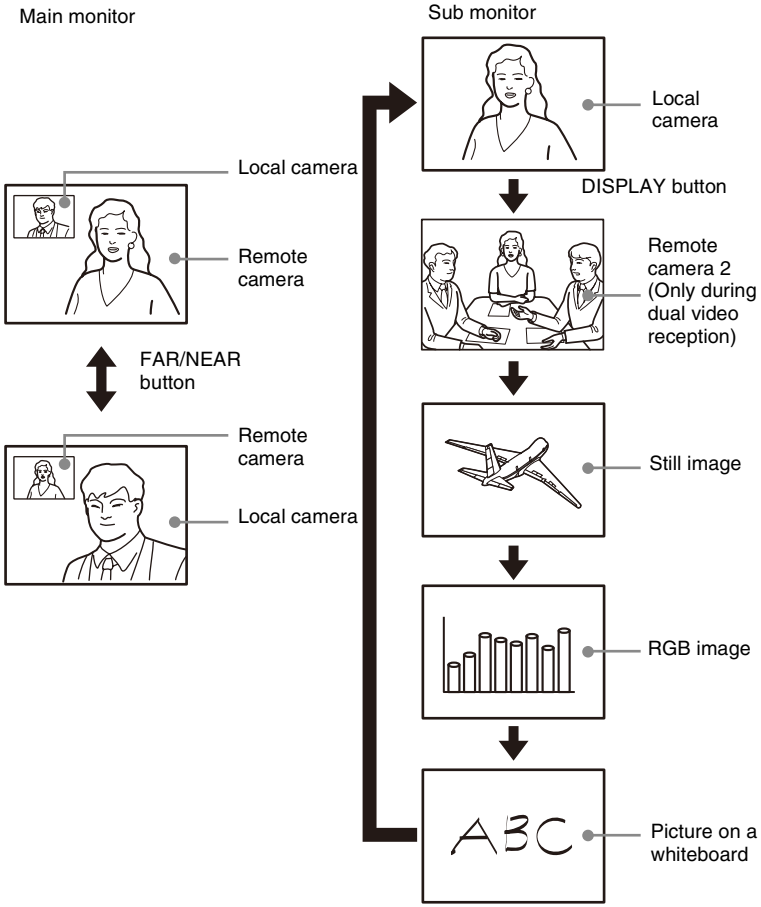
When you press the PinP button of the Remote Commander during communication, the picture appears as a smaller window picture over the display of the first monitor.

Note

You cannot perform this operation on the second monitor.

To change the images displayed in a dual monitor setup

You can display the following on the first and second monitor during transmission.



Main monitor

You can display either local or remote camera video.
When alternating between local and remote video, press the FAR/NEAR button of the Remote Commander, and then make the appropriate selection on the display control menu that appears.

Sub monitor

You can display local camera video, remote camera 2 video (when receiving dual video), received or transmitted still images, RGB images transmitted through the Data Solution Box PCSA-DSB1S, or whiteboard images.
Each time that you press the DISPLAY button of the Remote Commander, the display changes.

Note

If there is no RGB or still image feed, it is not possible to alternate the display as outlined above.

Using Three Monitors–Triple Monitor Setup

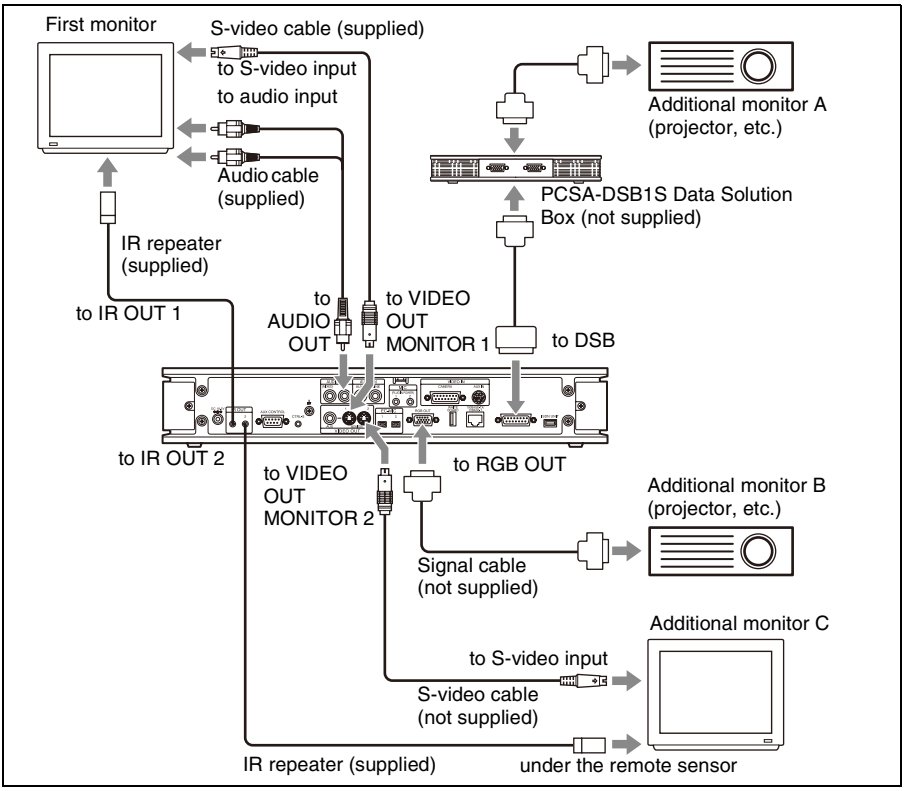
By connecting three monitors, you can use two as video-only displays.

For example

Monitor 1: Images from the remote camera
Monitor 2: Images from a computer
Monitor 3: Images from the local camera

To connect a third monitor

To connect a second and a third monitor, simply connect them to the VIDEO OUT MONITOR 2 or RGB OUT connector of the Communication Terminal, or the RGB OUT connector of the Data Solution Box.
If your second and third monitor is a Sony monitor, connect the supplied IR repeater immediately under the monitor's remote sensor, and connect the other end of the IR repeater cable to the IR OUT 2 connector of the Communication Terminal.


First monitor
S-video cable (supplied)
to S-video input
to audio input
Audio cable (supplied)
IR repeater (supplied)
to IR OUT 1
to AUDIO OUT
to VIDEO OUT MONITOR 1
to DSB
Additional monitor A (projector, etc.)
PCSA-DSB1S Data Solution Box (not supplied)
to IR OUT 2
to VIDEO OUT MONITOR 2
to RGB OUT
Additional monitor B (projector, etc.)
Signal cable (not supplied)
Additional monitor C
to S-video input
S-video cable (not supplied)
IR repeater (supplied)
under the remote sensor

To change the settings

Set “Monitors” in “Monitor Out” of the Video Setup menu to “3”. Next, you must select the connector where the second monitor is connected. To do so, set “Monitor” in “Monitor Out” of the Video Setup menu to “SUB”. Once the settings are changed, the first monitor displays video, while the second and third display video or still images.

For details, see “To change the images displayed in a triple monitor setup” on page 160.

To view the picture as a window picture

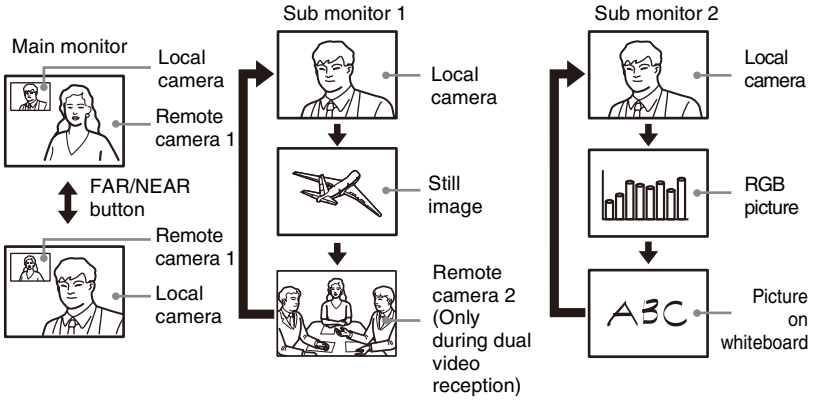
When you press the PinP button of the Remote Commander during communication, the picture appears as a smaller window picture over the display of the first monitor.

Notes

- You cannot perform this operation on the second and third monitors.
- The monitor connected to the VIDEO OUT MONITOR 1 connector is recognized as the main monitor.

To change the images displayed in a triple monitor setup

You can display the following on the monitors during communication in a triple monitor setup.



In this setup, each time that you press the DISPLAY button on the Remote Commander, the entire display structure changes in sequence.

Main monitor

You can display remote camera video.

Sub monitor 1

You can display local camera video, received or transmitted still images, or remote camera 2 video.

Sub monitor 2

You can display images such as the local camera video, RGB images transmitted through the Data Solution Box PCSA-DSB1S, or whiteboard images.

Note

If there is no RGB or still image feed, it is not possible to alternate the display as outlined above.

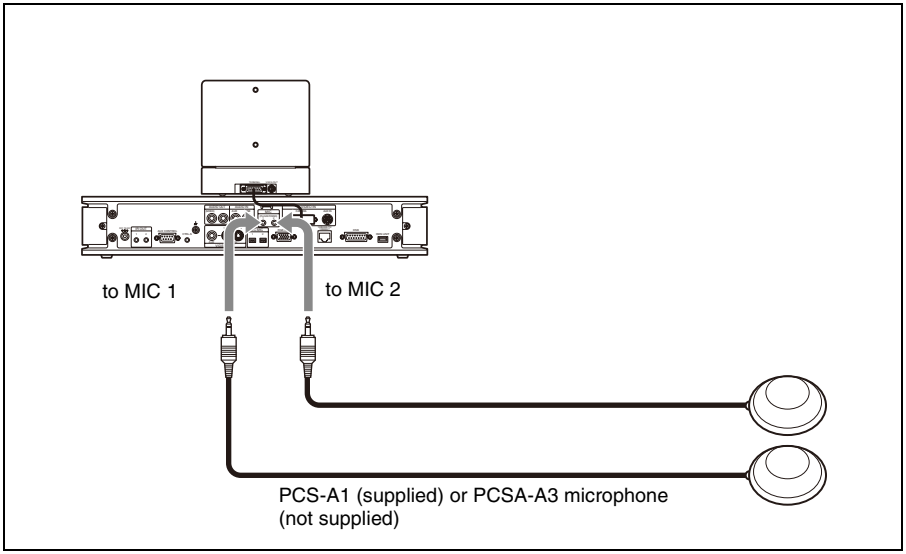
Using Multiple Microphones

You can connect several optional PCS-A1 (supplied) or PCSA-A3 (not supplied) microphones to the system, allowing more people to participate in the conference.

If you are using an echo canceling microphone, see "Using the PCSA-A7 Microphones" on page 166.

To connect the optional microphones

Connect the optional microphones to the MIC 1 and MIC 2 connectors on the Communication Terminal. Power is supplied to the microphones from the terminal.



To use the connected microphone

Set "Input Select" to "MIC" or "MIC+AUX", and "Mic Select" to "MIC" on Page 1/2 of the Audio Setup menu. (page 59.)

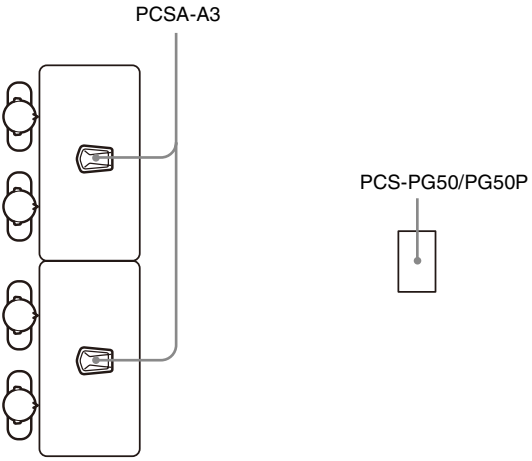
Notes on installation of the microphones

- Install microphone about 50 cm away from the participants.
- Place the microphone in a quiet, echo-free location.
- Install the speakers so that the participants do not come between it and the microphone.
- Install microphones away from equipment that may cause noise.

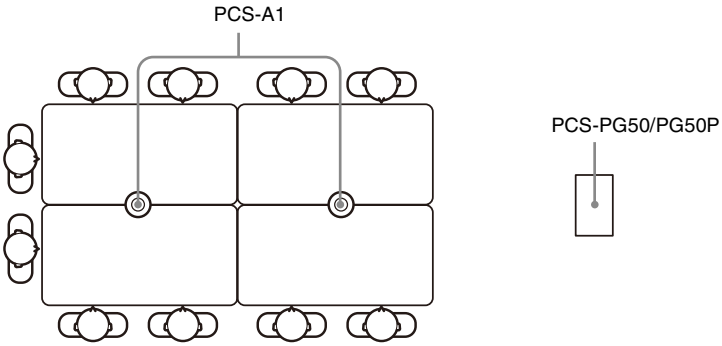
- Avoid covering the microphone, with paper for example, or carrying the microphone and moving it. If you do either, extreme noise and echo may be heard temporarily by the remote party. In this case, wait until the echo disappears.

Microphone layout examples

PCSA-A3 microphones



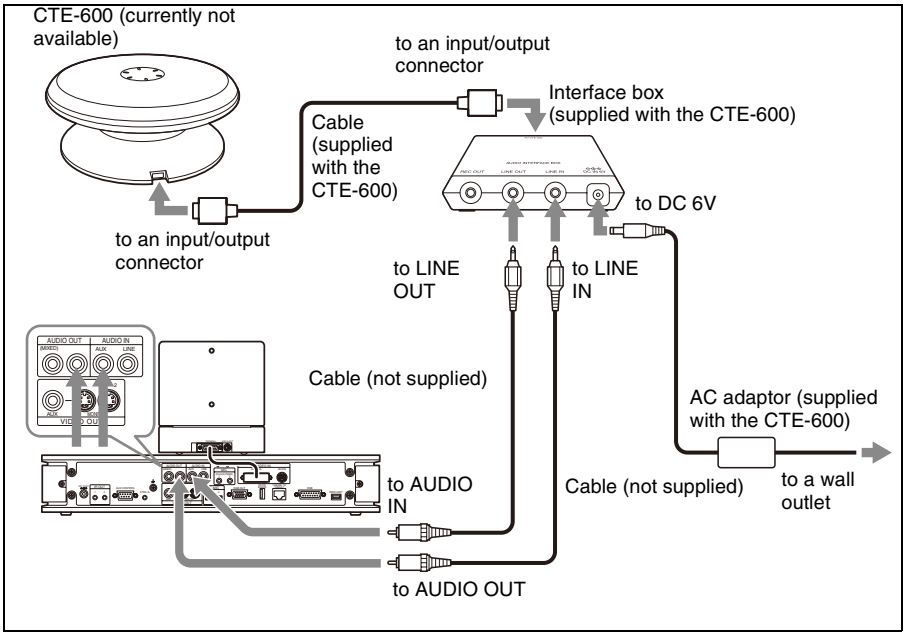
PCS-A1 microphones



Using the Communication Transducer (CTE)

The CTE-600 Communication Transducer (currently not available) is an integrated system equipped with uni-directional microphones and omni-directional acoustic speaker. The unit is enabled to pick up clear voice with minimum background noise from all directions and to emit clear sound equally in all directions.

To connect the CTE-600 Communication Transducer

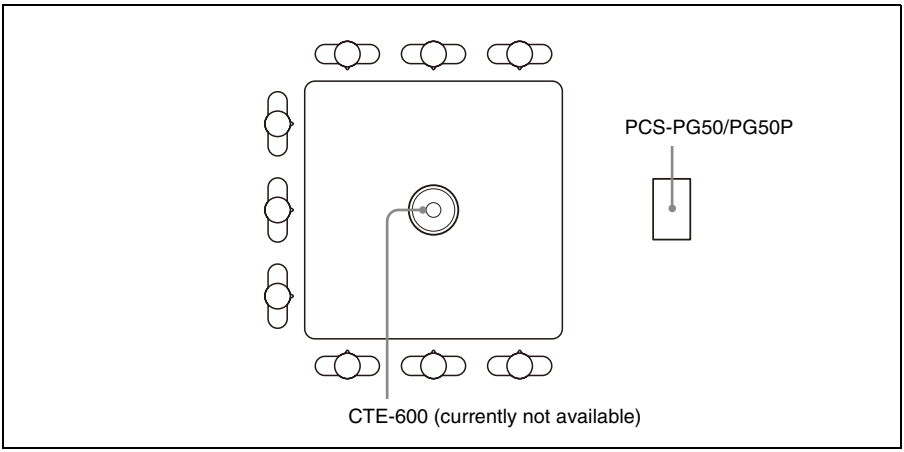


To use the Communication Transducer (CTE)

- Set “CTE” on page 1 of the Audio Setup menu to “LINE”. (page 59)
- Set the SYSTEM SELECT switch at the bottom of the Communication Transducer to “PCS”.

For detailed information on the Communication Transducer, refer to the Operating Instructions that come with the Communication Transducer.

CTE layout example



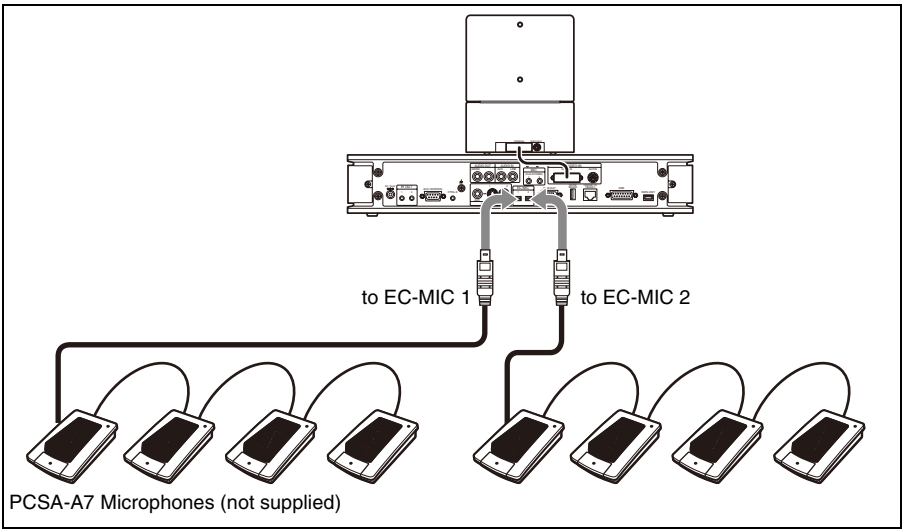
Using the PCSA-A7 Microphones

You can connect multiple PCSA-A7 Microphones (optional) to conduct a multi-participant conference.
PCSA-A7 Microphones have the following characteristics:

- A Built-in echo canceller
- Noise reduction
- High quality sound
- Several PCSA-A7 Microphones can be connected in cascade without losing sound quality

To connect the PCSA-A7 Microphones

Connect the PCSA-A7 Microphones to the EC-MIC 1 and EC-MIC 2 connectors of the Communication Terminal. Power to the Microphones is supplied by the Communication Terminal.



To use the Microphones

Set “Input Select” to “MIC” or “MIC+AUX”, and “Mic Select” to “EC-MIC” on Page 1/2 of the Audio Setup menu. (page 59).

Notes on placing the PCSA-A7 Microphones

- Position the Microphones about 50 cm (1.6 ft) away from the participants.
- When using speakers, do not place them in front of the microphones. In addition, avoid placing the speakers where participants may come between it and the microphones.

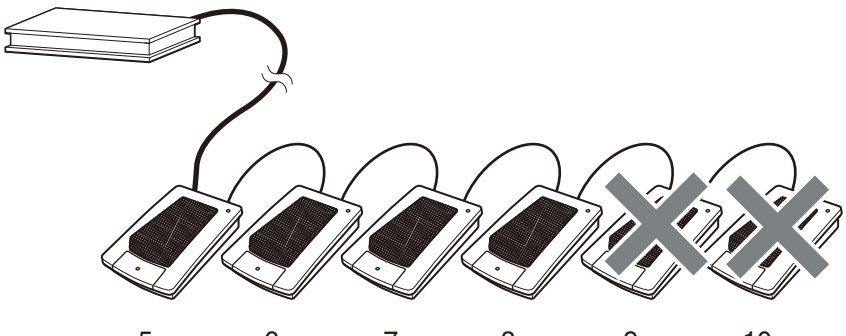
Configuration using the PCSA-A7 Microphones

Power is supplied to up to eight microphones connected to the PCS-G50/G50P Video Communication System or the AC adaptor, including cascade connections. However, using the 8-meter microphone cable counts as 4 microphones.
Power is not supplied to any connected microphones that exceed this limit. You can add more microphones, by connecting the AC adaptor to the first non-powered microphone.

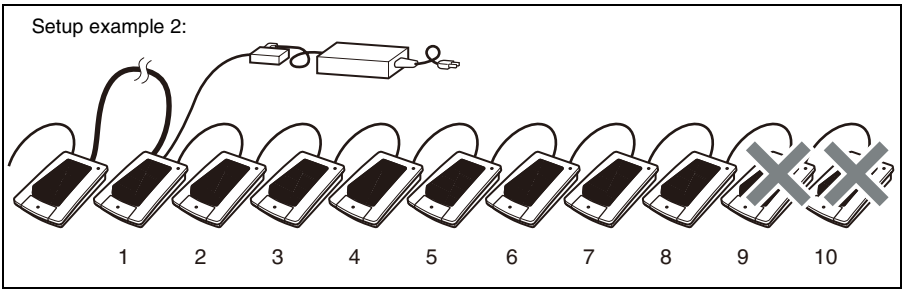
Notes

- Up to 40 PCSA-A7 Microphones can be connected to the EC-MIC 1 connector, using a cascade connection.
- The POWER LED turns off on a microphone with no power supply.

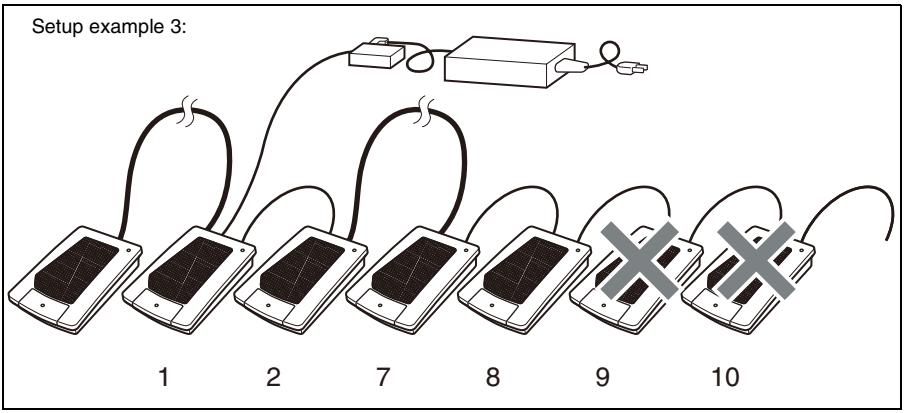
Setup example 1:



The 8-meter microphone cable counts as four microphones, and power is supplied to only the first four microphones. The same is true if the 8-meter microphone cable is used in the middle of the connections.

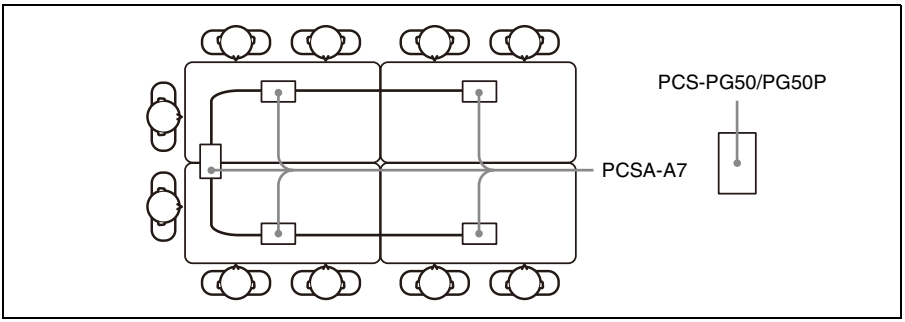


Up to eight microphones are powered by the AC adaptor, counting from the microphone connected to the AC adaptor.



The 8-meter microphone cable is used in the middle of the connections, and counts as four microphones. Up to four microphones are powered by the AC adaptor, counting from the microphone connected to the AC adaptor.

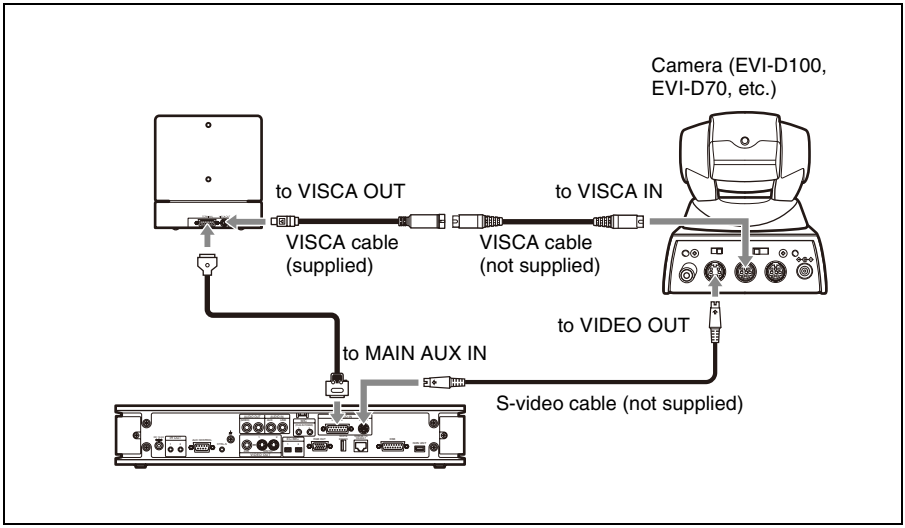
Microphones layout example



Using a Second Camera

You can connect a Sony camera, such as the EVI-D100, and the EVI-D70, as a second camera through the PCSA-CG70/CG70P Camera Unit.

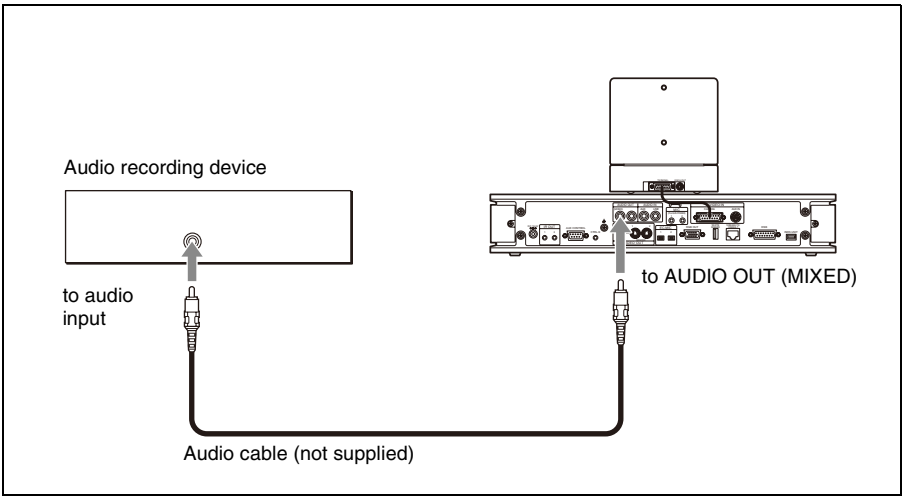
Connection example for a second camera



Recording Audio During a Conference

You can record the voices of participants on both the remote and local sites during a conference if you connect an audio recording device to the AUDIO OUT (MIXED) jack on the Communication Terminal.
This is convenient for taking minutes of the conference.

To connect an audio recording device



When recording with an audio recording device

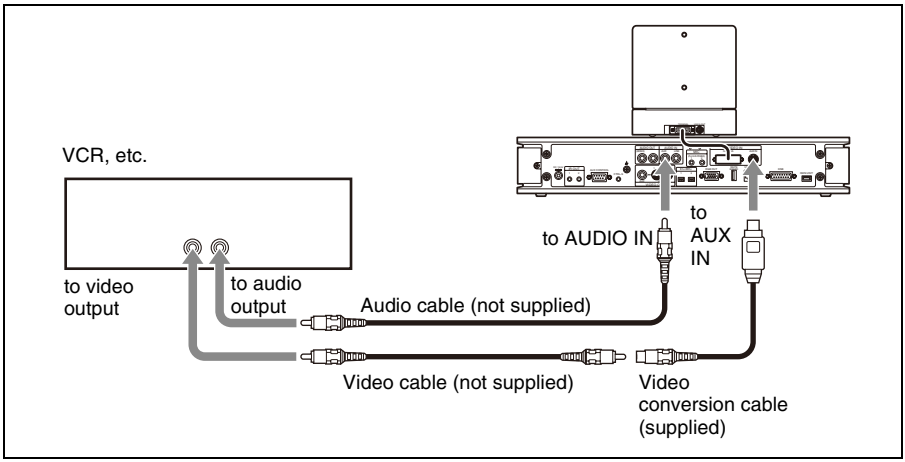
When an audio recording device is connected to both the AUDIO IN and AUDIO OUT (MIXED) jacks, set “Recording Mute” to “On” on page 1 of the Audio Setup menu to prevent from reflecting echo on a remote party. (See page 59.)

Sending Audio/Video From the External Equipment to a Remote Party

The Communication Terminal allows you to send the picture and sound output from the connected equipment such as a VCR to the remote party.

To connect the video equipment for input

The Communication Terminal is equipped with two video inputs.



To input audio/video from external equipment

To input video

Open the Video Input Select menu by pressing the VIDEO INPUT SELECT button on the Remote Commander, then select the desired video input from the "Near" text box in the menu.

To input the video from the equipment connected to the AUX IN jack, choose "AUX 1".

To input audio

Set "Input Select" to "AUX" or "MIC + AUX" on page 1 of the Audio Setup menu. (See page 59.)

When set to "AUX", the sound from the external equipment is input and the sound from a microphone is deactivated. When set to "MIC + AUX", both sounds are input.

Conducting a Conference Without the Picture – Voice Meeting

Using the PCS-G50/G50P Video Communication System, you can conduct a voice only conference via a normal phone without connecting the videoconferencing system. **(Voice Meeting)**
Basic connection procedures are the same as those for videoconferencing.

Conducting a voice meeting with a remote party not registered in the phone book

Set "Line I/F" to "ISDN(Telephone)" on page 1 of the Dial Setup menu.
During the Voice Meeting, the "Voice Only" indicator is displayed.

For "Line I/F" setting, see "To call a remote party not registered in the Phone Book" on page 106.

To register a remote party for a Voice Meeting

Set "Line I/F" to "ISDN(Telephone)" in the List Edit menu displayed from the Phone Book menu.

For registration, see "Registering a Remote Party – Phone Book" on page 82.

To set the audio compression format

Select the audio compression format by setting "Telephone Mode" on page 1 of the Dial Setup menu.
When you initiate the voice meeting, set "Telephone Mode" to "Auto". When set to "Auto", the G.711 μ-law format is automatically selected.
You need not set the audio compression format when receiving a call from the remote party.

For the "Telephone Mode" setting, see page 52.

Controlling the Remote System With the Tone Signal – DTMF Transmission

The Video Communication System enables you to control the remote system connected by transmitting the tone signal (DTMF: Dual Tone Multi Frequency) assigned to the numbers for dialing (0-9, #, *).

1 Press the * button on the Remote Commander during communication.
The DTMF menu appears on the monitor screen.

2 Press one of the number buttons (0-9, #, *) on the Remote Commander corresponding to the tone signal you want to transmit to the remote party.
The tone signal will be transmitted when the button is pressed.

3 To stop transmitting the tone signal, press the PUSH ENTER button on the Remote Commander.
The DTMF menu disappears.

Note

The microphone automatically mutes while the DTMF menu is displayed.

Conducting a Data Conference Using NetMeeting – T.120 Data Conference

Connecting the Communication Terminal to the computer with NetMeeting* installed enables conduct of a data conference in compliance with the T.120 standard of the ITU-T Recommendation via the PCS-G50/G50P Video Communication System only when it is connected over ISDN.

* NetMeeting is a registered trademark of Microsoft Corporation.

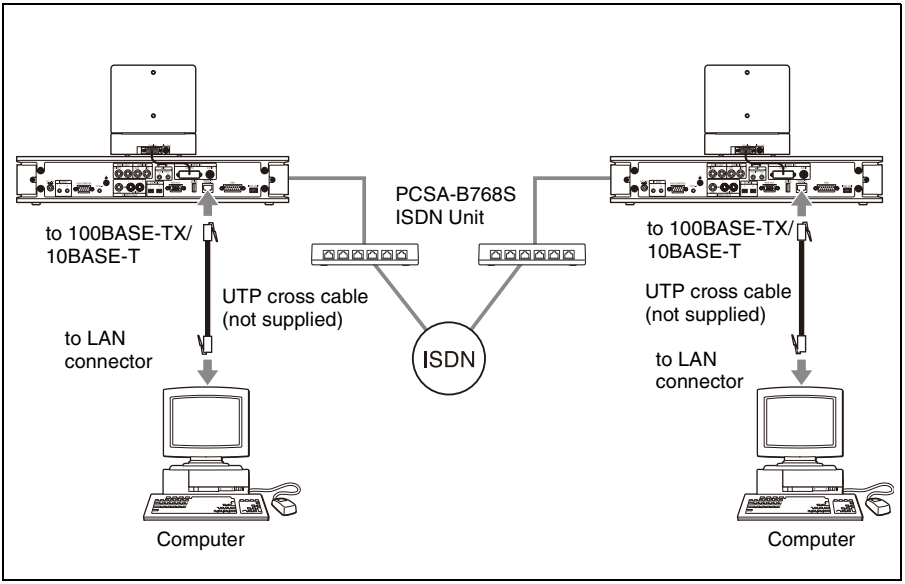
Notes

- When the Communication Terminal is used for a multipoint videoconference, the T.120 data conference is not available.
- When the PCS-G50/G50P Video Communication System is connected with a videoconferencing system at the remote party via LAN, conduct the T.120 data conference using a computer instead of the PCS-PG50/PG50P.

To connect a computer

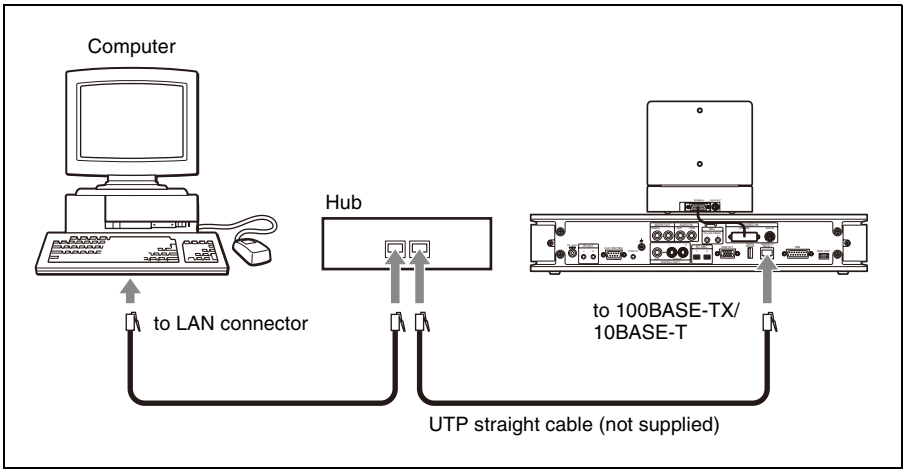
To connect a computer to the connector on the Communication Terminal

Use a commercially available UTP cross cable (category 5) to connect the LAN connector on the computer with the 100BASE-TX/10BASE-T connector on the Communication Terminal.



To connect to a computer via a hub

Connect the Communication Terminal to a computer using the UTP straight cable.



To configure the Communication Terminal

Open the “Device Setup” on page 1 of the General Setup menu, and then enter the IP address of the computer where the NetMeeting application is installed in the “T.120 PC Address” text box. (See page 63.)
Set “T.120 Data” to “On” on the Communication Setup menu. (See page 56.)

Note

We recommend that you set “Audio Mode” to “G.728” on the Communication Setup menu.

To connect to a remote party using NetMeeting

Before connecting, install the NetMeeting application in your computer.

1 Double-click the NetMeeting icon, or click “NetMeeting” from the Start menu on the computer’s window.
NetMeeting starts.

2 Set the Communication Terminal to communication mode.
Check that the “T.120” indicator is displayed on the monitor screen.

3 Click “Calling” in the NetMeeting window on the computer of either a local or remote party.

4 Enter the IP address set for the Communication Terminal in the “Address” text box of the “Call to” dialog box.

5 Click “Call”.
After a while the connection is completed.

For details on how to operate, refer to the Help menu of the NetMeeting application.

About the transmission rate

The Communication Terminal supports the following transmission rates:
MLP: 6.4 Kbps, 24 Kbps, 32 Kbps
HMLP: 62.4 Kbps, 64 Kbps, 128 Kbps.

Accessing the Communication Terminal

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

Using a Web Browser

You can control or set up the Communication Terminal by accessing it from a Web browser.

For details on the password to access or Web monitoring feature, see "Administrator Setup Menu" on page 66.

For details on Web operation, see chapter 10, "Web Control Function".

Using Telnet

You can control or set up the Communication Terminal by accessing it with Telnet.

For details on the password to access or Web monitoring feature, see "Administrator Setup Menu" on page 66.

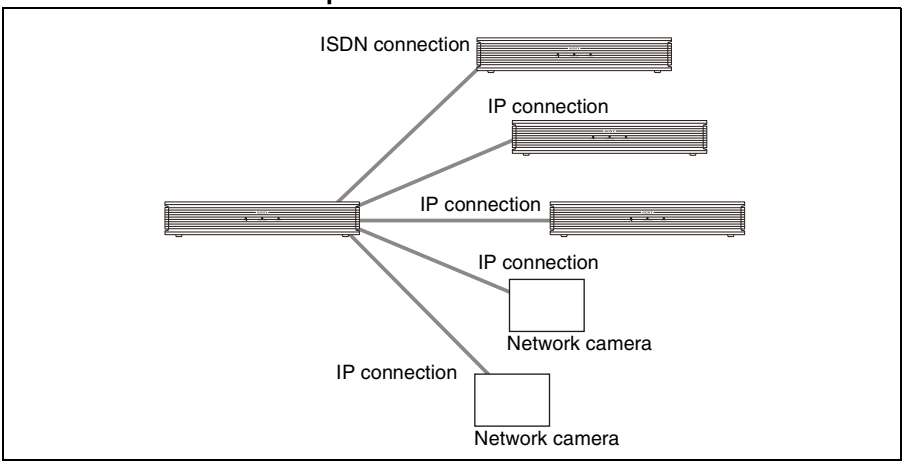
Connecting to Network Cameras

Using the Communication Terminal, you can connect to Sony network cameras on the network. By connecting to these network cameras, you can receive network camera images and control the cameras with the system, or send and receive audio between the system and cameras. This feature is available even during multipoint conferences with mixed connection types, such as conferences with mixed IP and ISDN connection.

Notes

- When a network camera connects with the Communication Terminal, the camera's settings may be changed automatically. If the network camera is also being used by other monitoring systems, connecting to the Communication Terminal may have adverse effects on the other systems. Be sure to consult the system administrator.
- When the system is connected to network cameras, the following functions are not available.
  – Sending/receiving presentation images
  – Encrypted videoconferencing
- When conducting multipoint videoconferences that include network cameras, the available functions and operations may differ depending on the restrictions configured on the network cameras. Depending on the restrictions, camera control operations may also be disabled.
- For details on supported camera models and system requirements, consult your Sony dealer.

Connection example

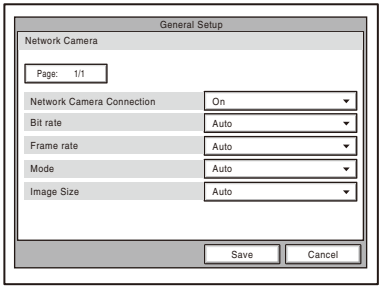


Notes

- To connect to multiple network cameras, the optional PCSA-M3G50 H.323 MCU or PCSA-M0G50 H.320 MCU software must be installed on the system.
- The total number of videoconferencing systems and network cameras connected to the system at one time cannot be more than five.
- Cascade connection with network cameras is not supported.

To configure network camera transmission settings

Set “Network Camera Connection” under “Network Camera” of the General Setup menu to “On,” and configure the appropriate settings for “Bit rate,” “Frame rate,” “Mode,” and “Image Size.”



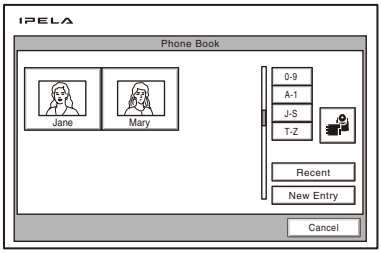
Restrict access to the network cameras

You can configure “Network Camera Password” on Page 1/3 of “Password” in the Administrator Setup menu if necessary.

To register network cameras in the network camera list

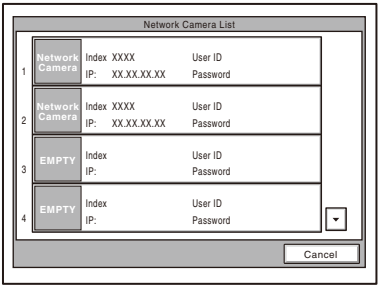
You can register up to 20 network cameras on the system.

1 Use the ↑, ↓, ← or → button on the Remote Commander to select “Phone Book” in the launcher menu, then press the PUSH ENTER button.
The Phone Book appears.



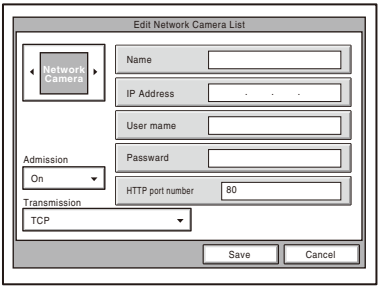
2 Use the ↑, ↓, ← or → button on the Remote Commander to select on the right side of the screen, and then press the PUSH ENTER button.

The Network Camera List appears.



3 Use the ↑, ↓, ← or → button on the Remote Commander to select the list to register to or edit, and then press the PUSH ENTER button.
The submenu appears.

4 Use the ↑ or ↓ button on the Remote Commander to select "Edit," and then press the PUSH ENTER button.
The network camera list edit screen appears.



5 Enter the "Name," "IP Address," "User Name," "Password," and "HTTP port number," and configure "Admission" and "Transmission" if necessary.

Notes

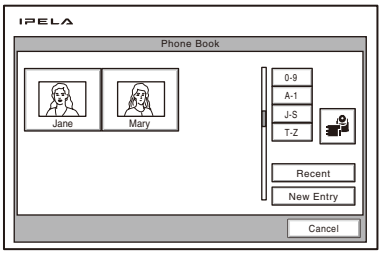
- When registering a network camera to the system, use the same "User Name" and "Password" that are configured on the network camera itself.
- When "Admission" is set to "On" and "Password" is left blank, you will be asked for the password when dialing.

6 Use the ↑, ↓, ← or → button on the Remote Commander to select "Save," then press the PUSH ENTER button.
The configured settings are registered.

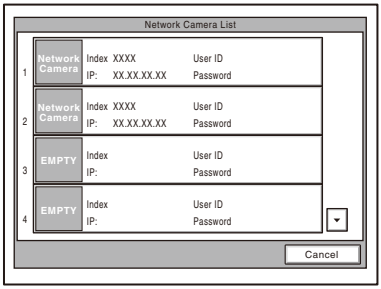
To connect to network cameras

1 Use the ↑, ↓, ← or → button on the Remote Commander to select "Phone Book" in the launcher menu, then press the PUSH ENTER button.

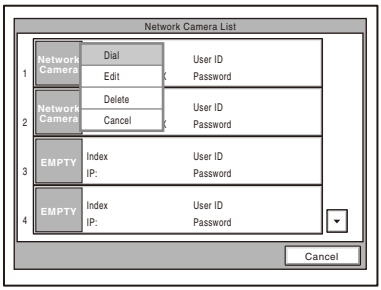
The Phone Book appears.



2 Use the ↑, ↓, ← or → button on the Remote Commander to select on the right side of the screen, and then press the PUSH ENTER button.
The Network Camera List appears.



3 Use the ↑, ↓, ← or → button on the Remote Commander to select an entry, and then press the PUSH ENTER button.
The submenu appears.



4 Use the ↑ or ↓ button on the Remote Commander to select “Dial,” and then press the PUSH ENTER button.
The system begins dialing the selected entry.
If “Admission” is set to “On” for the selected entry in the Network Camera List and “Password” is left blank, a dialog box for password entry will appear. In this case, enter the password, select “Dial,” and then press the PUSH ENTER button.

Chapter 5: Data Conference

This chapter shows you how to use the data from a computer, etc. connected to the optional PCSA-DSB1S Data Solution Box for a conference.

The optional PCSA-DSB1S Data Solution Box is equipped with various input/output connectors. For example, connecting the RGB output on a computer enables you to transmit the pictures or text data displayed on the computer to a remote party. When you connect a projector, you can display a high-resolution image from a computer on the projector at a high transmission rate. The PCSA-DSB1S is also equipped with connectors for connecting active speakers and microphones. The PCSA-DSB1S is connected with the Communication Terminal using the interface cable for exclusive use.

The party who receives the data, even if the party has no Data Solution Box or uses another videoconferencing system such as PCS-11/11P and PCS-1600, can view the computer images sent from the other party. However, the quality of the picture received varies with the components of the system. If the Data Solution Box is used by the party who receives the data, a larger number of frames per second is obtained than the system without the Data Solution Box. It allows you to obtain a high-resolution motion picture from a computer.

For details on picture quality depending on the system components, see "Picture quality of the Data Solution Box" on page 188.

For details on RGB signal specifications, see "Acceptable RGB Input/Output Signals" on page 306.

Restrictions on the IP address of the system when using the Data Solution Box

The IP address available for the PCS-G50/G50P Video Communication System is restricted when you use the Data Solution Box. Moreover, a network for communication between the Data Solution Box and the Communication Terminal should be set up to be a separate segment.
(Unusable IP address for the PCS-PG50/PG50P) = (IP address of the PCSA-DSB1S) & (Network mask)
The IP address of the PCSA-DSB1S is fixed at "192.254.1.2". If the Network mask is assumed to be "255.255.0.0", an unusable IP address is as follows:

192.254.m.n ($0 \leqq m \leqq 255$, $0 \leqq n \leqq 255$)

Note on the camera picture when using the Data Solution Box

When transmitting a signal via the Data Solution Box, the camera picture quality will be lower owing to the decreased number of frames.

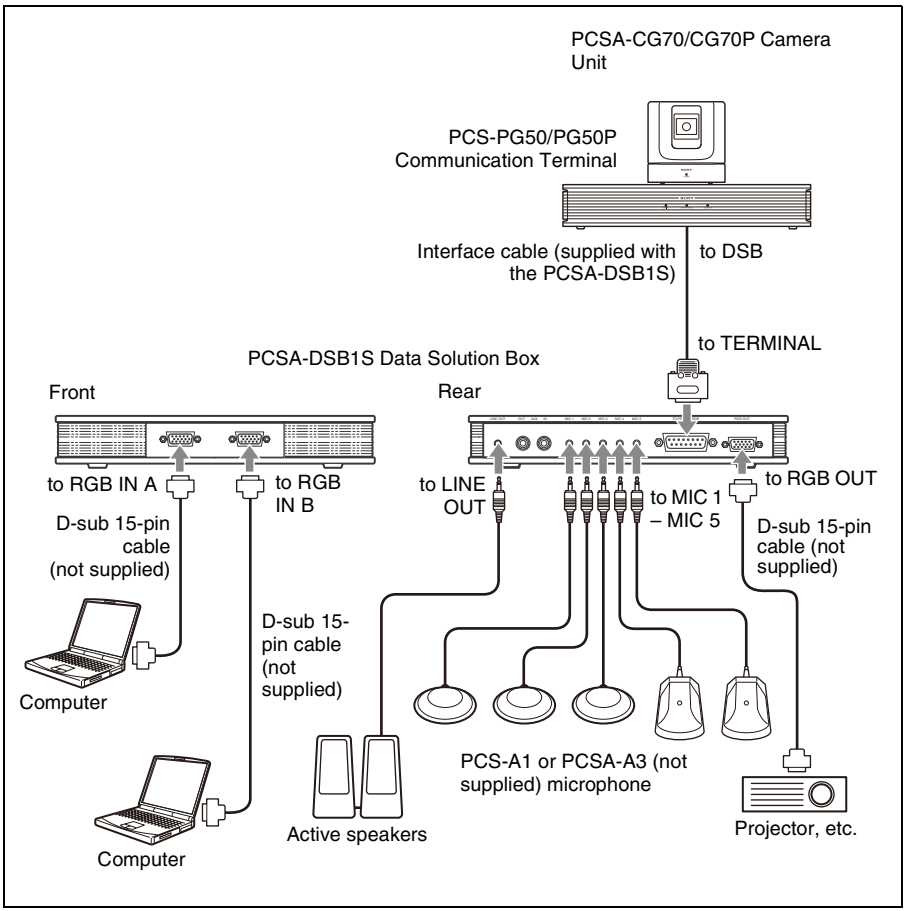
Note

When the system is connected to network cameras, presentation images cannot be sent or received.

Connection Example Using the Data Solution Box

Notes

- Do not connect/disconnect the camera cable or the interface cable with the power on. Doing so may damage the Camera Unit, Communication Terminal or Data Solution Box.
- Used with the Data Solution Box for the first time, the Communication Terminal may automatically upgrade the software of the Data Solution Box. While the upgrading message is displayed on the monitor screen, be sure not to turn off the Communication Terminal. Doing so may cause malfunction of the system.



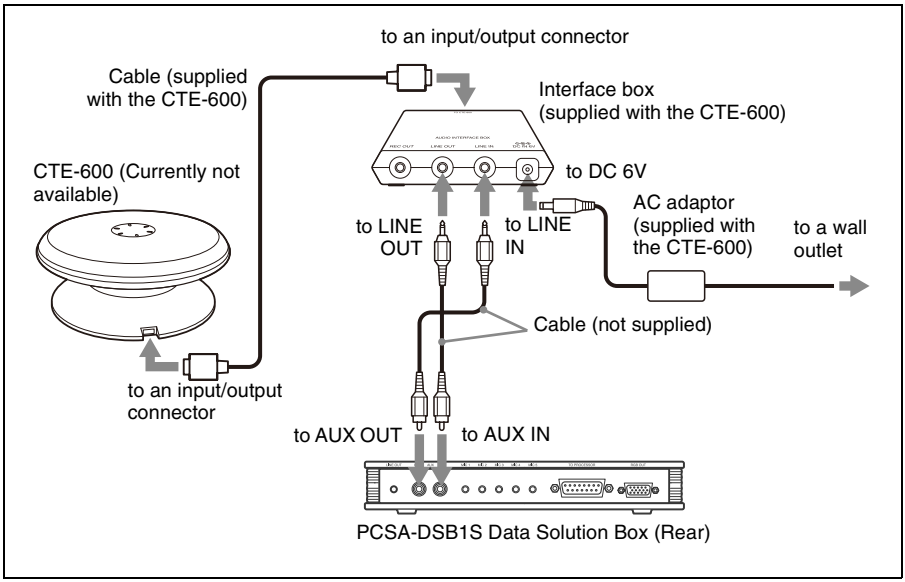
Notes on the connection example

- Power to the Data Solution Box is supplied from the PCS-PG50/PG50P Communication Terminal with a connection described above.
- Connect a projector, etc. to the RGB OUT connector on the Data Solution Box.
  This connection enables you:
  – To display the computer picture on the local site while transmitting it to the remote site.
  – To display the received computer picture with optimum picture quality.
  The received computer picture can also be output from the VIDEO OUT or RGB OUT connector on the PCS-PG50/PG50P Communication Terminal, but the computer picture while transmitting cannot be output from these connectors.

Notes on the connection of a microphone

- Up to five microphones can be connected with the Data Solution Box.
- When using external microphones, the sound transmitted to the remote party may become unclear due to noises in a conferencing room. In this case speak close to the microphone.
- When using multiple microphones, the Echo Canceller function cannot be fully utilized depending on the type of conference room. In this case, try to suppress any echo in the room or decrease the number of microphones.
- You cannot use microphones connected to the Data Solution Box together with those connected to the Communication Terminal.

Connecting the CTE-600 Communication Transducer (Currently Not Available)



To use the Communication Transducer connected to the Data Solution Box

- Set “CTE” on page 1 of the Audio Setup menu to “DSB AUX IN” (page 59).
- Set the SYSTEM SELECT switch at the bottom of the Communication Transducer to “PCS”.

Note

You cannot use two or more Communication Transducers in a room and cannot use it together with other microphones.

For detailed information on the Communication Transducer, refer to the Operating Instructions that come with the Communication Transducer.

Using Audio/Video Signals From the Connected Equipment for a Conference

Setting Before Conferencing

To use a microphone connected to the Data Solution Box

Set “Input Select” to “MIC” or “MIC+AUX”, and “Mic Select” to “DSB MIC” on Page 1/2 of the Audio Setup menu (page 59).

To use a projector, etc. connected to the RGB OUT connector on the Data Solution Box

Set “Connection” to “RGB OUT (DSB)” on page 1 of “Monitor Out” on the Video Setup menu (page 60).

Operating the System During a Conference

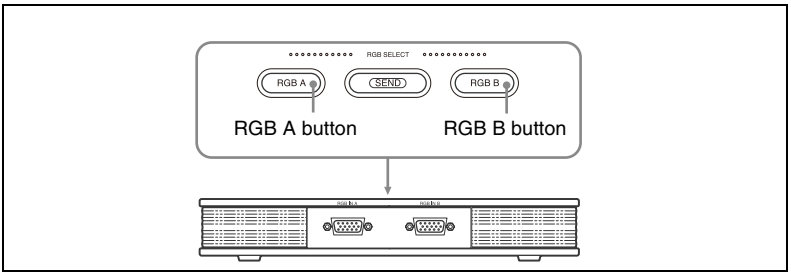
To select a picture from a computer connected to the Data Solution Box

When using the buttons on the Data Solution Box

Press the RGB A or RGB B button on the upper panel of the Data Solution Box.

To select the picture from the computer connected to the RGB IN A connector, press the RGB IN A button, or the RGB IN B button to select that from the computer connected to the RGB IN B connector.

The indicator of the selected button lights.

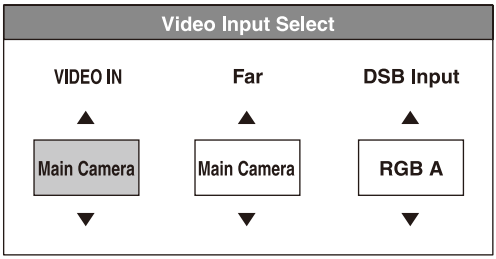


When using the Remote Commander

1 Press the VIDEO INPUT SELECT button on the Remote Commander.
The Video Input Select menu appears.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select the “RGB A” or “RGB B” input from “DSB Input”.

RGB A: Select the picture from the computer connected to the RGB IN A connector.
RGB B: Select the picture from the computer connected to the RGB IN B connector.



3 Press the PUSH ENTER button on the Remote Commander.
The indicator of the RGB A or RGB B button on the upper panel of the Data Solution Box lights according to the selected input.

Note

Even if you select the input with the RGB A and RGB B buttons on the Data Solution Box, the display in the Video Input Select menu will not change.

To transmit a picture from a computer connected to the Data Solution Box

When transmitting a picture from the computer using the PCSA-RG1 Remote Commander

Press the PRESENTATION button on the Remote Commander. Press the PRESENTATION button again to stop transmission.
You can also transmit from the communication submenu.

For details on the communication submenu, see "Using a Convenient Menu Available During Communication — the Communication Submenu" on page 149.

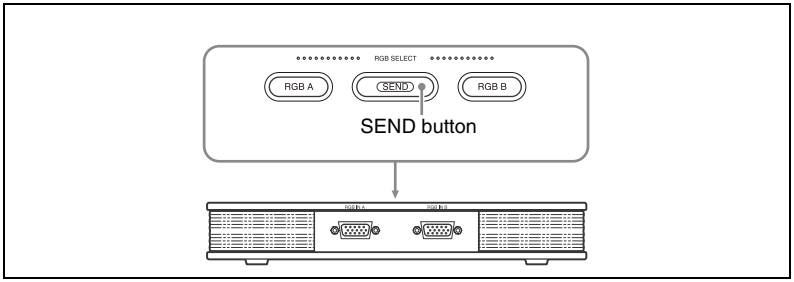
Note

This operation is not supported on the PCS-RG70 Remote Commander.

When transmitting a picture from the computer using the Data Solution Box

Press the SEND button on the upper panel of the Data Solution Box.
The indicator on the SEND button lights and the picture of the equipment selected with the RGB A or RGB B button or the VIDEO INPUT SELECT button is displayed on the projector, etc. connected to the RGB OUT connector on the Data Solution Box. The picture selected on the Data Solution Box is transmitted to the remote party simultaneously.
Such computer picture is displayed without any conversion as input to the Data Solution Box. The detailed portion of the picture transmitted to the remote party may not be clearly seen and the number of frames may be reduced.

For details on picture quality, see "Picture quality of the Data Solution Box" on page 188.



Note

While you are transmitting the computer picture, you cannot receive a still image or a computer picture from any other terminal. Ending your transmission enables you to receive it. When you are receiving a still image or computer picture from any other terminal, you cannot transmit a computer picture from equipment connected to the Data Solution Box.

To transmit the picture from a computer to multiple points

If you install the optional PCSA-M3G50 H.323 (for LAN) or PCSA-M0G50 H.320 (for ISDN) MCU software, you can transmit the picture from the computer to multiple points.

Picture quality of the Data Solution Box

The picture quality received by the remote party varies depending on the type of the terminal or connecting method, or "Monitor Out (or Sub Monitor Out)" setting on the remote site. Using the Data Solution Box on the remote site enables receipt of a high-quality computer picture with larger number of frames.

Note

For a multipoint conference, when the monitor displaying video from the Data Solution Box is connected to the VIDEO OUT1, VIDEO OUT2, or RGB OUT terminals, the ability to broadcast at 1 Mbps changes to about 1 image per second, even for terminals connected to the RGB OUT terminal on the Data Solution Box.

PinP display during Data Solution Box input

When using only one monitor and displaying RGB input images in full screen, you can press the PinP button on the Remote Commander to display video from the remote site in the smaller screen.

Note

"Connection" and "Monitors" must be set to "RGB OUT" and "1" respectively in the Monitor Out screen of the Video Setup menu.

When the PCS-PG50/PG50P is used as a receiving terminal

Monitor used to display the picture of the Data solution Box	Output connector for a computer picture on receiving terminal	Resolution	Video frame rate	Picture quality
VIDEO OUT 1 or VIDEO OUT 2	VIDEO OUT 1 or VIDEO OUT 2 on the PCS-PG50/PG50P	○	○	Outputs the signal by converting a transmitted VGA, SVGA or XGA signal into an NTSC/PAL 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.
RGB OUT	RGB OUT on the PCS-PG50/ PG50P	◎	○	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.
DSB	RGB OUT on the PCSA-DSB1S (only when the PCSA-DSB1S is enabled)	◎	◎	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 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 with an ISDN connection (three frames per second with a XGA transmission).

◎ : High, ○: Middle, △: Low

For details about the settings concerning video output from each output connector, see "Displaying the Picture on a Projector or Monitor" on page 191, and the Video Setup menu "Monitor Out" on page 61.

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

Resolution	Video frame rate	Remarks
○	○	Outputs the signal by converting a transmitted VGA, SVGA or XGA signal into an NTSC/PAL 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.

◎ : High, ○: Middle, △: Low

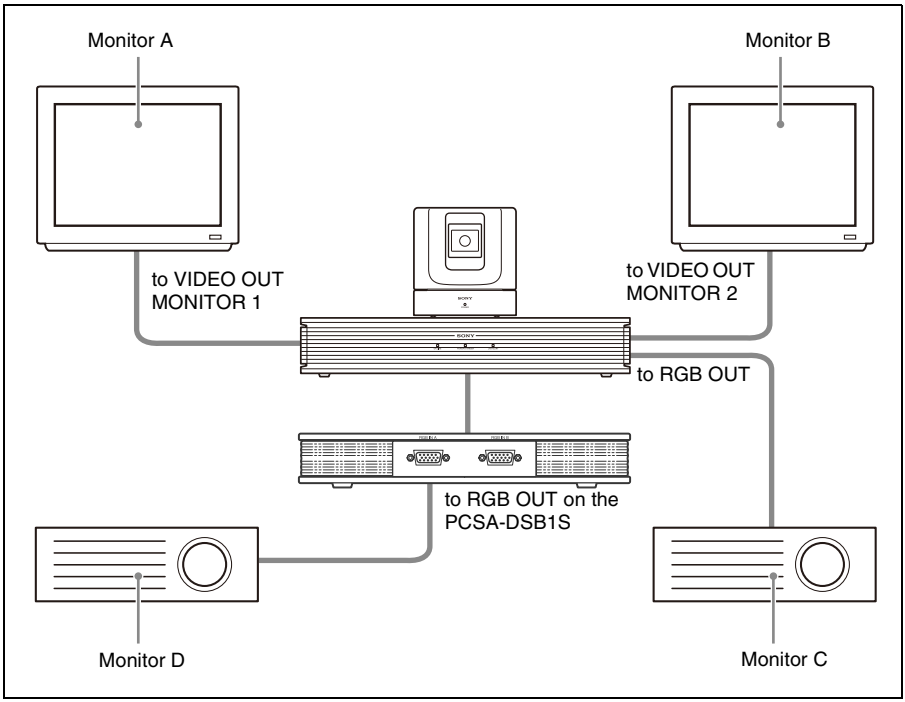
When a videoconferencing system other than the PCS-G50/G50P or PCS-11/11P such as the PCS-1600 is used

Resolution	Video frame rate	Remarks
○	△	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.

◎ : High, ○: Middle, △: Low

Displaying the Picture on a Projector or Monitor

When you connect the Data Solution Box to the Communication Terminal, connections with external monitors, etc. using the following four outputs are available. The connections allow output of the picture to one, two or three monitors selected from among four.



Outputting the Signal to One Monitor

Select the output with “Connection” under “Monitor Out” in the Video Setup menu.

VIDEO 1: Outputs the signal to the monitor (monitor A) connected to the VIDEO OUT MONITOR 1 connector of the Communication Terminal.

RGB: Outputs the signal to the monitor (monitor C) connected to the RGB OUT connector of the Communication Terminal.

DSB: Outputs the signal to a monitor (monitor D) connected to the RGB OUT connector of the Data Solution Box.

When connecting a monitor to the RGB OUT connector on the Data Solution Box

1. Connect your monitor to the RGB OUT connector of the Communication Terminal.
2. Set “Connection” in “Monitor Out” in the Video Setup menu to “RGB OUT (DSB)”.
3. Reconnect the monitor to the RGB OUT connector of the Data Solution Box.

Outputting the Signal to Two Monitors

Select to connect two monitors with “Monitors” under “Monitor Out” in the Video Setup menu, and select the main and sub monitors under “Monitor”.

The monitor selected as the main monitor is used for video.

VIDEO 1: Outputs the signal to the monitor connected to the VIDEO OUT MONITOR 1 connector (monitor A) of the Communication Terminal.

VIDEO 2: Outputs the signal to the monitor connected to the VIDEO OUT MONITOR 2 connector (monitor B) of the Communication Terminal.

RGB: Outputs the signal to the monitor (monitor C) connected to the RGB OUT connector of the Communication Terminal.

DSB: Outputs the signal to the monitor (monitor D) connected to the RGB OUT connector of the Data Solution Box.

Note

VIDEO 2 cannot be selected for the main monitor.

Outputting the Signal to Three Monitors

The first monitor for displaying motion pictures is fixed to the monitor connected to the VIDEO OUT MONITOR 1 connector of the Communication Terminal (monitor A).

Select the output to the second and third monitors with “Connection” under “Monitor Out” in the Video Setup menu.

VIDEO 2: Outputs the signal to the monitor connected to the VIDEO OUT MONITOR 2 connector (monitor B) of the Communication Terminal.

RGB: Outputs the signal to the monitor (monitor C) connected to the RGB OUT connector of the Communication Terminal.

DSB: Outputs the signal to the monitor (monitor D) connected to the RGB OUT connector of the Data Solution Box.

Chapter 6: Videoconference Using a Whiteboard

This chapter describes how to use your whiteboard for your videoconferencing system.
You can transmit and receive notes written on the whiteboard in real-time in a videoconference. You can also store the transmitted or received data in a Memory Stick as still images.
Your whiteboard is usable for a videoconference only when the optional mimio Xi* is used together with the system.

For product information on the mimio Xi, contact your nearest Sony dealer.

* mimio® is a registered trademark of Virtual Ink Corporation of the United States.
minio Xi is a trademark of Virtual Ink Corporation of the United States.

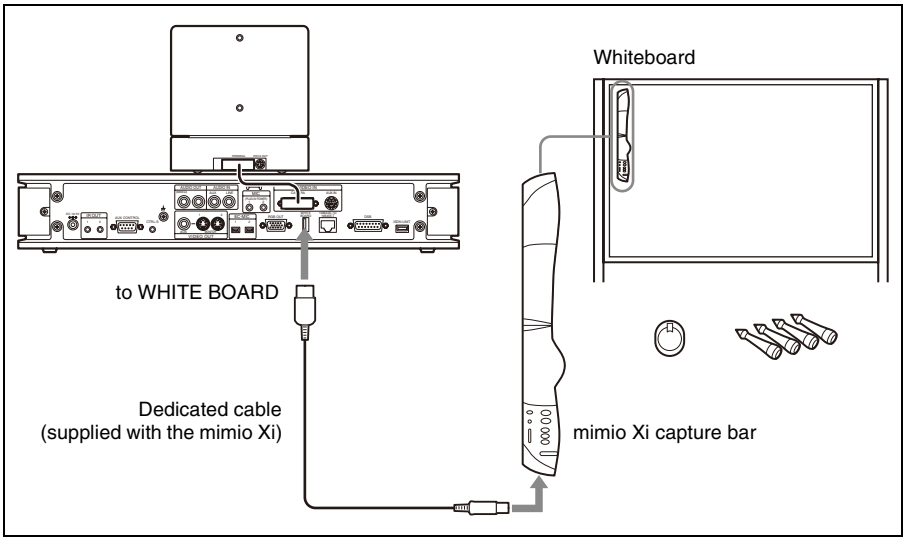
Note

Videoconferencing using the whiteboard is available only between PCS-G50/G50P systems or when a receiving terminal is PCS-G70/G70P, PCS-11/11P, PCS-1/1P, PCS-TL50, or PCS-TL30. You cannot use this function with other Sony videoconferencing systems such as PCS-1600, or other manufacturers' systems.

Connection Example With a Whiteboard

Note

Do not connect/disconnect the cable with the power on. Doing so may damage the Camera Unit, Communication Terminal or mimio Xi.

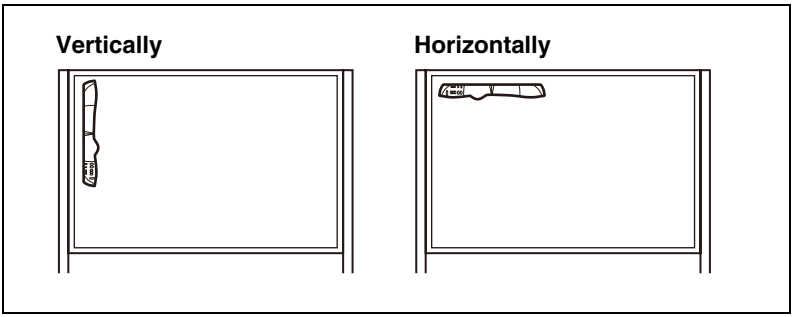


Notes on using the mimio Xi

- Do not use any cable other than the dedicated cable supplied with the recorder.
- Attach the capture bar at the upper left corner of the whiteboard.
- Use only the stylus, marker and eraser that come with the mimio Xi for writing on a whiteboard.
- Do not connect a device other than the mimio Xi to the WHITE BOARD connector on the Communication Terminal.

Attaching the mimio Xi on the Whiteboard

Attach the mimio Xi at the upper left corner of a whiteboard vertically or horizontally, then set the attachment orientation of the mimio Xi and the size of the whiteboard using the menu.



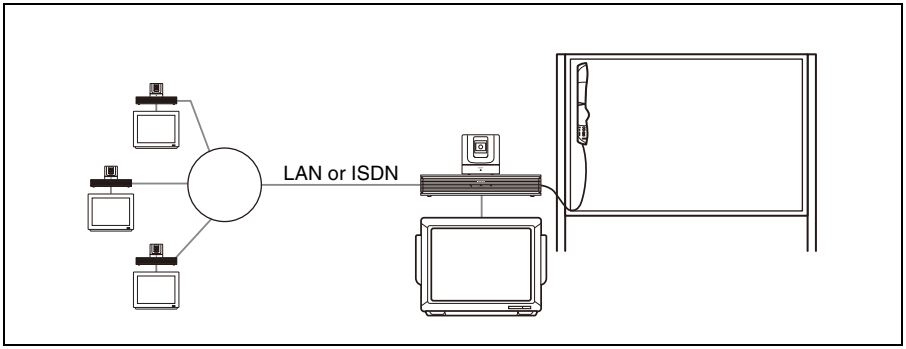
To set the attachment orientation of the mimio-Xi

According to the orientation of the mimio Xi, set “Whiteboard Attachment” to “Vertical” or “Horizontal” in “Whiteboard” of the General Setup menu (page 65).

To specify the whiteboard size to be used

After selecting “Inches” or “Meters” from “Whiteboard Size Measurement” in “Whiteboard” of the General Setup menu, select the size of the whiteboard from “Whiteboard Size” (page 65).
You can select one of the following sizes (height × width):
When you attach the mimio Xi vertically
2'0" × 3'0" (0.6 × 0.9 m), 3'0" × 4'0" (0.9 × 1.2 m), 4'0" × 6'0" (1.2 × 1.8 m), 4'0" × 8'0" (1.2 × 2.4 m)
When you attach the mimio Xi horizontally
3'0" × 2'0" (0.9 × 0.6 m), 4'0" × 3'0" (1.2 × 0.9 m), 6'0" × 4'0" (1.8 × 1.2 m), 8'0" × 4'0" (2.4 × 1.2 m)

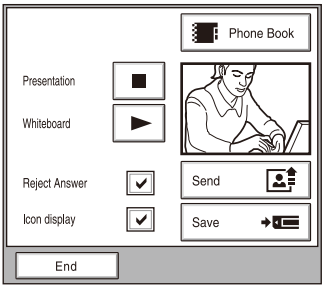
Conducting a Videoconference Using a Whiteboard



1 Start the videoconference.

2 When you intend to send the whiteboard picture, press the PUSH ENTER button on the Remote Commander to display the communication submenu on the monitor screen.

Communication submenu

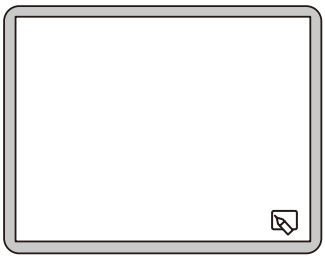


3 Press the ↑ or ↓ button on the Remote Commander to select "Whiteboard ►", then press the PUSH ENTER button.

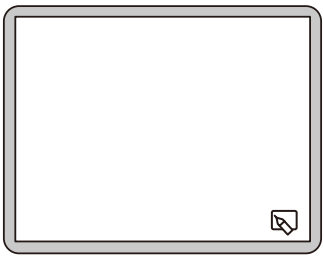
The whiteboard picture and icon appears on the monitors of both the local and remote parties.

When the local party uses the dual monitor mode, it will be displayed on the sub-monitor (second monitor).

Local monitor screen



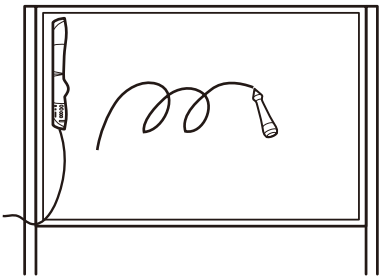
Remote monitor screen



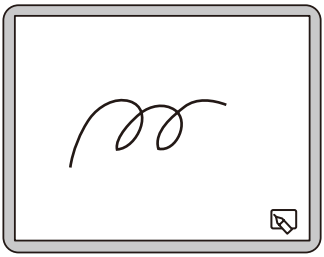
4 Write anything using the stylus, marker or eraser that come with the mimio Xi on the whiteboard.

The notes you are writing are displayed in real-time on the remote and local monitor screens.

Whiteboard



Monitors on the local and remote parties

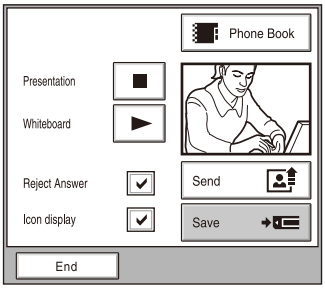


Notes

- Only one whiteboard can be used at a time. If more than two terminals use the whiteboard with the mimio Xi connected, the whiteboard picture written by the party who has turned on the whiteboard first will be displayed on the monitors of all the terminals.
- Set both “Far End Camera Control” on page 3 of the Communication Setup menu (page 56) to “On”. The whiteboard cannot be used for a videoconference this item items are set to “On” for all the participating terminals.
- If a party joins in during the middle of the multipoint conference using a whiteboard, the monitor of the party displays only the whiteboard picture written from that time. The pictures transmitted before participation are not displayed on his monitor.

To store the notes written on the whiteboard

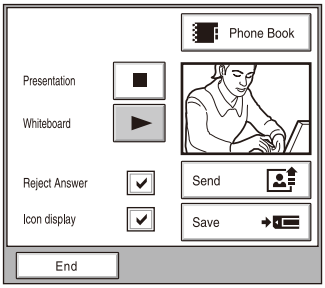
Display the communication submenu and then select “Save”.
The whiteboard picture displayed on the monitor will be stored in the “Memory Stick” as a still image.



To exit from the whiteboard mode

The whiteboard user should open the communication submenu, select “Whiteboard [►]”, then press the PUSH ENTER button.

The pictures displayed on the monitors of all the terminals switch to the normal camera pictures.
Under this circumstance, any terminal may turn on the whiteboard.



Note

Once the conference has ended, you cannot display the notes written on the monitor screen. If you want to do so, storing the notes on a “Memory Stick” is recommended. See “To store the notes written on the whiteboard”.

Chapter 7: Encrypted Videoconference

When a strictly confidential videoconference is required or a videoconference is held via the internet, the Video Communication System enables a videoconference with encrypted video, audio, and data output from the PCSA-DSB1S Data Solution Box. Conducting a videoconference using this feature is known as an encrypted videoconference.
This chapter describes how to conduct an encrypted videoconference.
The Video Communication System is equipped with standard encryption, which complies with the ITU-T recommendation H.233, H.234, and H.235, and proprietary encryption, Sony's original encryption method.
The proprietary encryption method is available only between PCS-G50/G50P Video Communication Systems or between the PCS-G70/G70P and remote parties (receivers) using the PCS-G50/G50P, PCS-11/11P, PCS-1/1P, PCS-TL50, or PCS-TL30 Video Communication Systems. You cannot conduct a proprietary encryption videoconference with Sony communication systems other than the ones listed, or with videoconferencing systems from other manufacturers.
An encrypted videoconference can be conducted using a LAN or ISDN connection with the standard encryption method but only using a LAN connection with the proprietary encryption method. The encryption feature can also be used in a multipoint conference using a LAN connection (including the cascade connection).
You cannot conduct an encrypted videoconference with the proprietary encryption method via a mixed LAN and ISDN connection.

Notes

- Streaming and recording are not available during encrypted videoconferences, whether you are using standard encryption or proprietary encryption.
- During an encrypted videoconference using proprietary encryption, camera control signals (for controlling the other party's camera) and whiteboard pictures are not encrypted.
- The PCS-G70/G70P, PCS-G50/G50P, PCS-1/1P, PCS-11/11P, PCS-TL50, and the PCS-TL30 are equipped to handle proprietary encryption.
- When the system is connected to network cameras, you cannot conduct encrypted videoconferences.

Encryption method availability

Point-to-point videoconference

Line I/F / Encryption Protocol	LAN	ISDN	SIP
Proprietary method	❍	×	❍
Standard method (H.233, H.234, H.235)	❍	❍	×

Multipoint videoconference

Line I/F / Encryption Protocol	LAN	ISDN	SIP	Mixed LAN and ISDN	Mixed LAN and SIP	Mixed ISDN and SIP
Proprietary method	❍	×	❍	×	❍	×
Standard method (H.233, H.234, H.235)	❍	❍	×	❍	×	×

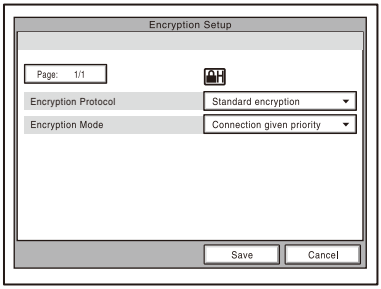
❍: Encrypted videoconference available.
× : Encrypted videoconference unavailable. The conference is conducted without encryption.

Preparing for an Encrypted Videoconference via LAN

To start an encrypted videoconference, “Standard encryption” or “Proprietary encryption” must be selected in the “Encryption Protocol” screen of the Encryption menu.

Using standard encryption

1 Select “Standard encryption” in the “Encryption Protocol” screen of the Encryption menu.

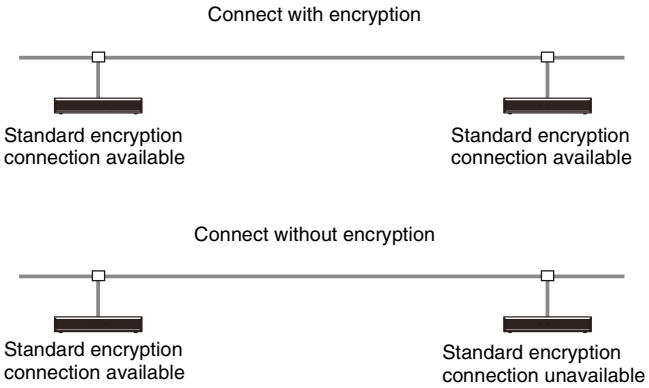


“Encryption Mode” displays on the screen.

2 Select an encryption mode.

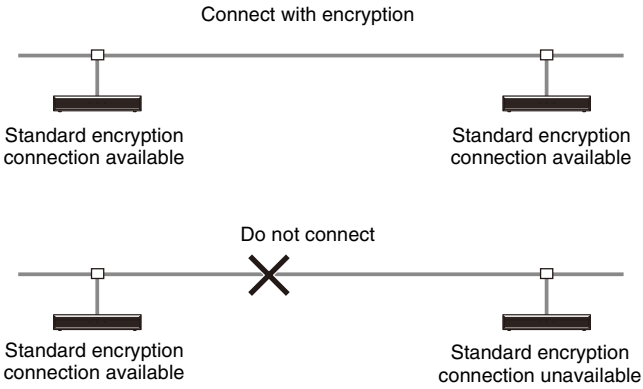
Connect priority

Connects with encryption to a remote party with standard encrypted connection enabled. Connects without encryption to parties unable to connect with standard encryption or parties with encryption set to off.



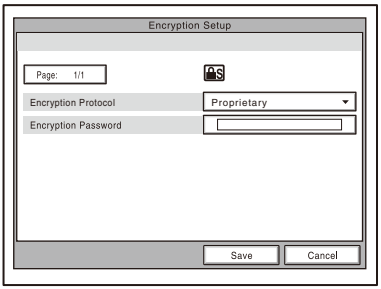
Encrypt priority

Connects only to remote parties with standard encrypted connection enabled.



Using Proprietary encryption

1 Select “Proprietary encryption” in the “Encryption Protocol” screen of the Encryption menu.



“Encryption Password” displays on the screen.

2 Enter the password (13 to 20 alphanumeric characters).

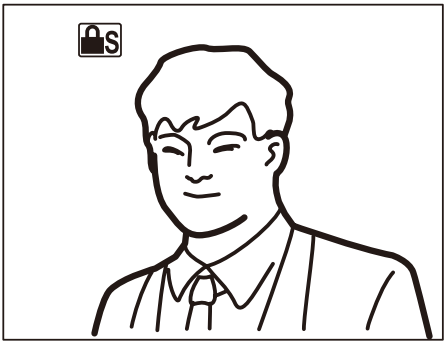
For details on settings, see “Encryption Menu” (page 79).

Notes

- When using “Proprietary encryption”, you cannot connect to terminals with a LAN connection and terminals without the encryption function, terminals with “Encryption Protocol” set to “Off”, or terminals with different encryption passwords.
- When using “Proprietary encryption”, you can connect to terminals with an ISDN connection, but the videoconference is conducted without encryption.

Starting an Encrypted Videoconference

You can start an encrypted videoconference by calling a remote party in the same manner as a daily videoconference.
During an encrypted videoconference, the encryption icons, S or H, are displayed.
When the encryption protocol is set to “Proprietary encryption”, the S icon displays, and the H icon displays when “Standard encryption” is set.



Note

If there is no icon displayed, transmitted and received data is not being encrypted. Confirm if an icon is displayed before starting a conference.

When the encrypted videoconference is disabled

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

Error Messages	Causes
The encryption feature on a far-end system is disabled.	The encryption feature on a remote system is turned off, or the encryption protocol settings on the remote system are different from those on the local system.
The entered password for the encryption feature is not correct.	The password entered on the remote system is not the same as that on the local system.
The encrypted videoconference is not available if any terminal is connected via ISDN.	While the videoconference is held via an ISDN connection, you cannot connect any terminal via the LAN connection if your encryption via LAN feature is activated.
The conference could not start because the encryption feature at the near-end side was disabled.	The encryption feature on the local system is disabled.
The conference could not start because the encryption feature at the far-end side was disabled.	The encryption feature on the remote system is disabled.

Error Messages	Causes
The conference could not start because the encryption protocol at the near-end side differed from that of the far-end side.	The encryption protocol setting on the remote system is not the same as that on the local system.
The standard encryption videoconference with SIP connection is not available.	You are connected to the remote system via SIP connection.
The proprietary encryption videoconference with ISDN connection is not available.	You are connected to the remote system via ISDN connection.

Chapter 8: Multipoint Videoconference

This chapter describes how to conduct a multipoint videoconference.
For conducting a multipoint videoconference, installation of the optional PCSA-M3G50 MCU software (for LAN connection) based on the H.323 standard or the optional PCSA-M0G50 MCU software (for ISDN connection) based on the H.320 standard is required.
Multipoint videoconference among up to ten points including the local site is available when connecting via a LAN.
When connecting via ISDN lines, you can conduct a multipoint videoconference among up to six points including the local site. You can use a normal phone at up to five points over ISDN.
A multipoint videoconference using the ISDN and LAN connections mixed is also available.

To hold a videoconference using an SIP server, see chapter 9.

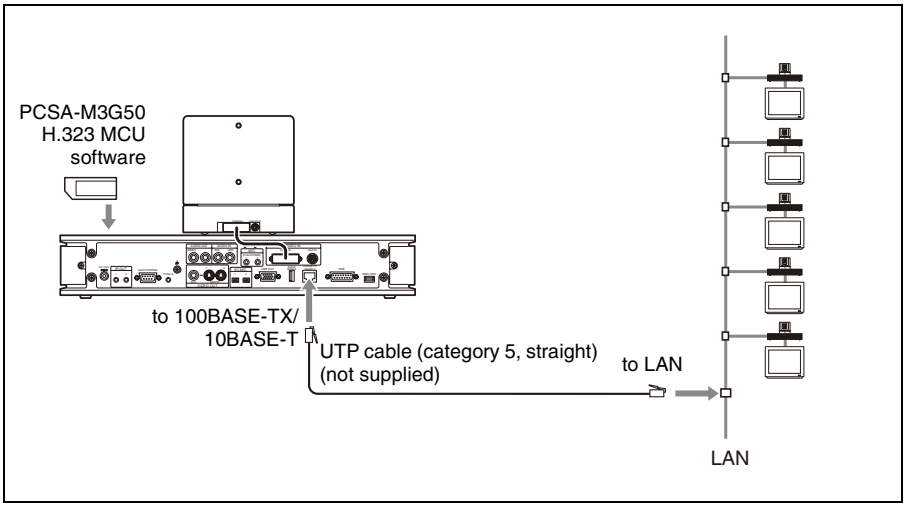
Restrictions on the use of the MCU software

- When a multipoint videoconference is held via LAN, the bandwidth is automatically set so that the total value of all the points is 4 Mbps at maximum. The bit rate for each point varies with the points you connect.
- When a multipoint videoconference is held via ISDN, the same number of channels should be used on all the points and the total channels are up to 12B. The total channels should be 23B or 30B when using the PCSA-PRI.
- The supported video modes are H.264, H.263+, and H.261 only.
- The supported audio modes are G.711, G.722, G.728, and MPEG4 AAC only.

Connection Examples for a Multipoint Videoconference

Using the LAN Connection (Up to 6 Points)

Installing the optional PCSA-M3G50 H.323MCU software in a Communication Terminal allows you to conduct multipoint videoconferences with up to six points.
If you are already conducting a two-point videoconference when a third point call, the system automatically opens a multipoint conference.

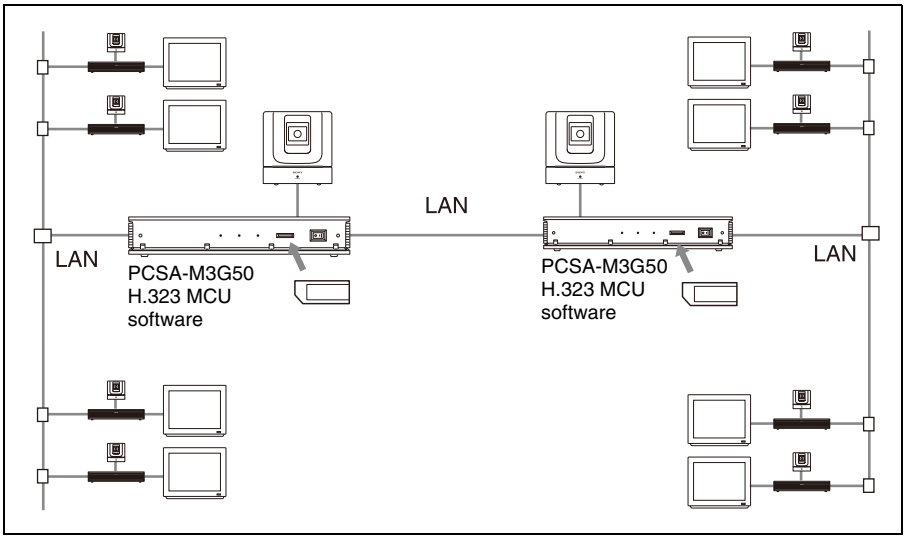


Note

For a multipoint videoconference only the Communication Terminal in which the PCSA-M3G50 H.323 MCU software can be installed is used as main terminal.

Using the Cascade Connection via LAN (Up to 10 Points)

Installing the optional PCSA-M3G50 H.323MCU software in two Communication Terminals enables cascade connection, allowing you to conduct a multipoint videoconference with up to ten points.

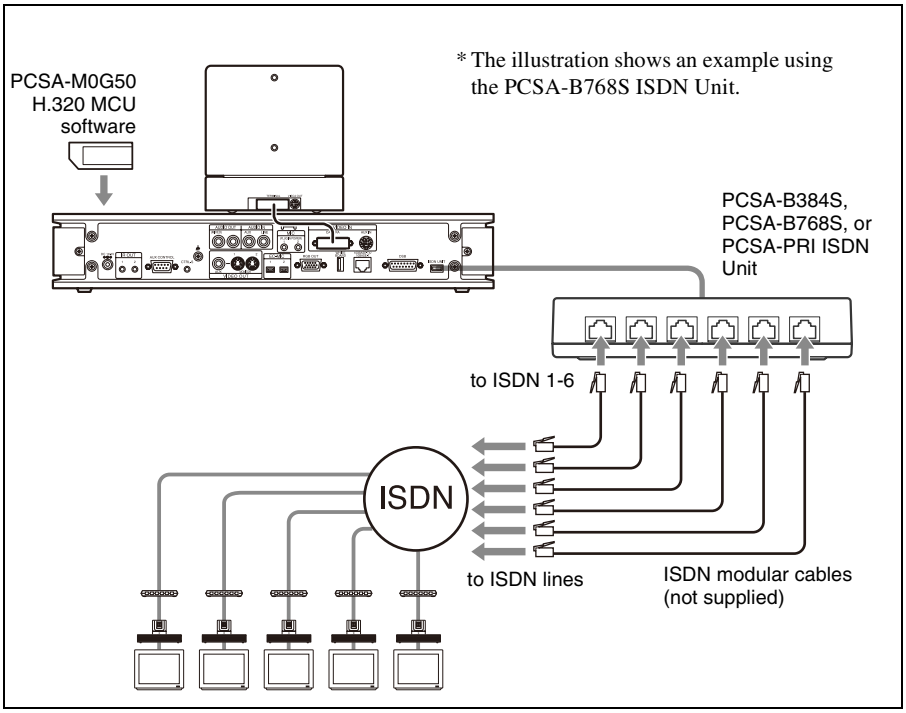


Notes

- Installing the PCSA-M3G50 H.323 MCU software into three or more Communication Terminals does not allow cascade connection. Note that the third or later terminals should set “Multipoint Mode” to “Auto” on page 4 of the Communication Setup menu.
- For cascade connection, the “Split” and “Split (Fixed)” modes are not available. Only the “Voice Activate” mode is available.
- The host terminal on the remote side must be a PCS-1/1P, PCS-G50/G50P, PCS-G70/G70P, or PCS-TL50 Video Communication System.
- When using cascade connection, you cannot connect to network cameras.

Using the ISDN Connection

Installing the optional PCSA-M0G50 H.320MCU software in one Communication Terminal allows you to conduct a multipoint videoconference with up to six points by using the optional PCSA-B768S, PCSA-PRI ISDN Unit, or a maximum of 4 points with a PCSA-B384S ISDN unit.



Notes on the number of ISDN lines used and number of remote parties for a multipoint conference

You can select the number of ISDN lines to be used for connecting the first remote point using “Number of Lines” in the Communication menu.

However, if the number of remote points connected increases as a result of dialing from the main terminal, some of the channels used for the first point will be cut off and used for the newly connected points instead. For example, if you use six ISDN lines (up to 12B channels available), 12B channels will be used for the first remote point only when no other points are connected. When the system connects to a second point, the number of channels for the first point decreases, and 6B channels will be used for both the first and second points.

If one of the remote points in a multipoint connection is disconnected, the number of channels used for the remaining points will not increase.

Note

When you are called from a remote party and the remote party has set a lower number of ISDN lines than that in this terminal, the setting on the remote party's terminal has priority.

To connect with a normal phone

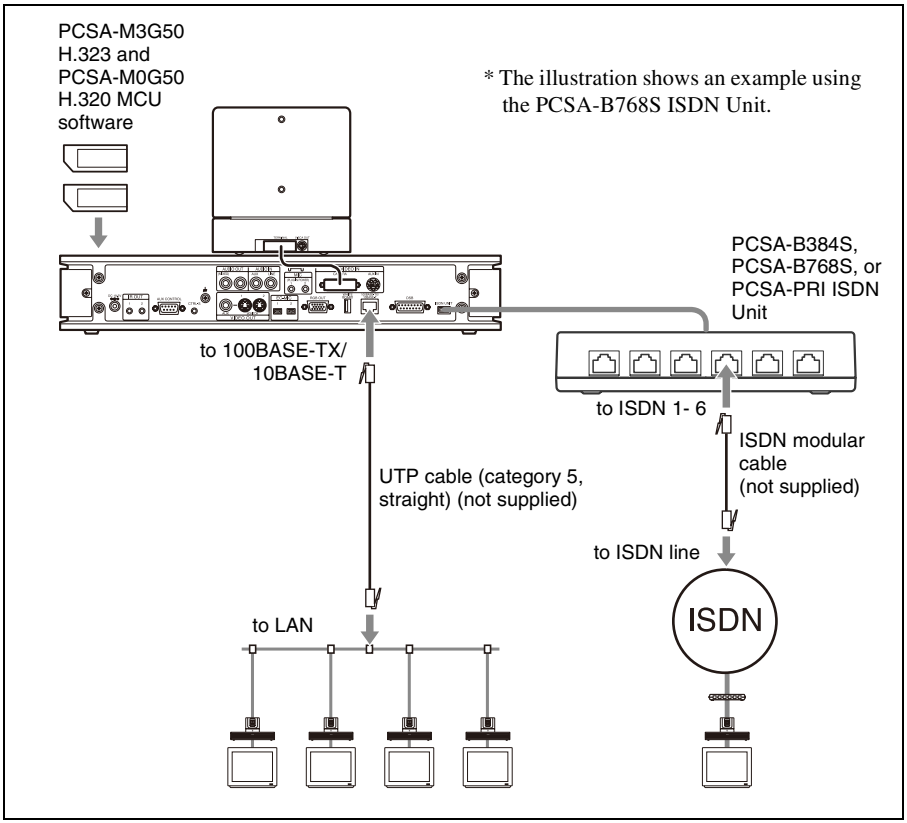
When you are using an ISDN connection, a normal phone can be connected at up to five points.
Only the 1B (64K) connection is available for a normal phone.

Notes

- When using the ISDN connections, installing the PCSA-M0G50 H.320 MCU software into two or more Communication Terminals does not allow cascade connection.
- For a multipoint videoconference only the Communication Terminal in which the PCSA-M0G50 H.320 MCU software is installed is used as the main terminal.

Using Both LAN and ISDN

Installing both the PCSA-M3G50 H.323 and PCSA-M0G50 H.320 MCU software in one Communication Terminal enables conduct of a multipoint videoconference with the terminals connected via a LAN and ISDN.

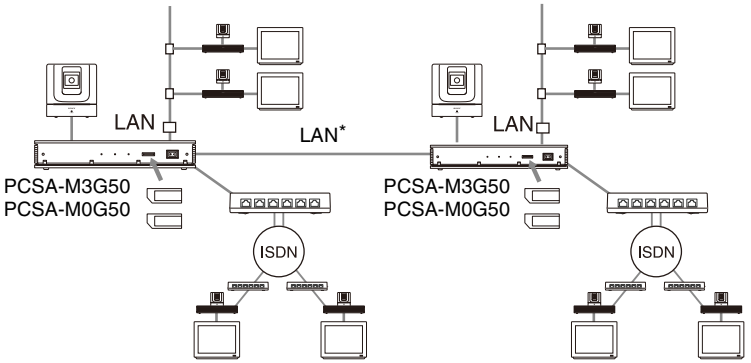


Note

The connection example above includes four terminals via the LAN connection and one terminal via the ISDN connection. There is no limitation on the number of LAN and ISDN connections.

Using the LAN Cascade and ISDN Connection

Installing both the PCSA-M3G50 H.323 and PCSA-M0G50 H.320 MCU software in two Communication Terminals enables cascade connection including two main terminals. Connecting four terminals to one main terminal allows you to conduct a multipoint videoconference via a LAN and ISDN with up to ten points.



*Be sure to connect two Communication Terminals, with the MCU software installed, via a LAN.

Notes

- Be sure to make connection between two Communication Terminals via LAN. Even if the PCSA-M0G50 H.320 MCU software is installed in both the Terminals, cascade connection via an ISDN is not available.
- For cascade connection, the “Split” and “Split (Fixed)” modes are not available. Only the “Voice Activate” mode is available.
- The host terminal on the remote side must be a PCS-1/1P, PCS-G50/G50P, PCS-G70/G70P, or PCS-TL50 Video Communication System.
- When using cascade connection, you cannot connect to network cameras.

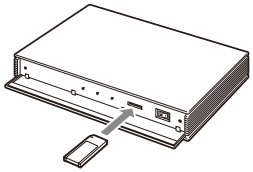
Installing the MCU Software

Notes on installing the MCU software

- You cannot install the software if the write-protect tab on the Memory Stick where the MCU software is stored is set to “LOCK”.
- Once the MCU software is installed in the Communication Terminal, the software is not used again.
- You cannot install MCU software that was copied to another Memory Stick with a computer, etc.

1 Open the front panel of the Communication Terminal, and then slide the power switch on the right to the off position (○).

2 Insert the “Memory Stick” containing the PCSA-M3G50 or PCSA-M0G50 MCU software into the Memory Stick slot.
Insert the “Memory Stick” in the direction of the arrow with the mark facing upward.

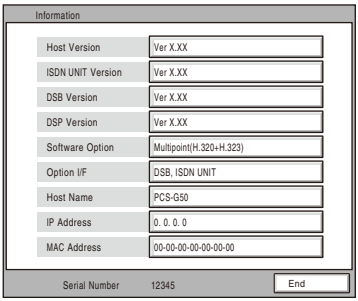


PCSA-M3G50 or PCSA-M0G50 MCU software

3 Slide the power switch on the right to the off position (**I**).
The MCU software is installed in the Communication Terminal.

To Check if the Installation of the Software Is Complete

The software installed under the “Software Options” section of the Information menu is displayed.



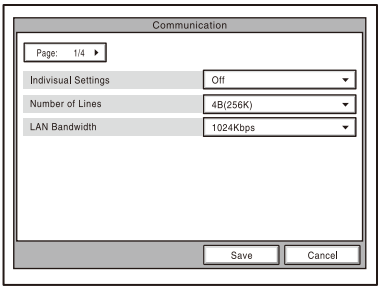
For details on the Information menu, see “Information Menu” on page 79.

Setting for a Multipoint Videoconference

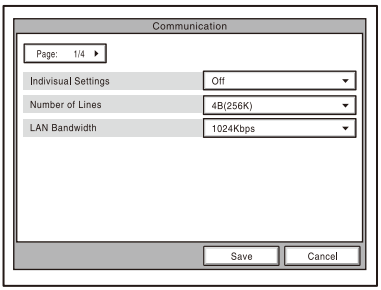
Communication Setup Menu

You can configure various multipoint videoconferencing settings in the Communication Setup menu.

1 Select the number of ISDN channels to be used for connecting with the first remote point of a multipoint videoconference in “Number of Lines” on page 1 of Communication Setup menu. The number of connectable remote points is defined by the selected number of channels and the number of ISDN lines used.



2 Select the LAN bandwidth to be used for multipoint videoconferencing in “LAN Bandwidth” on the Communication Setup menu.



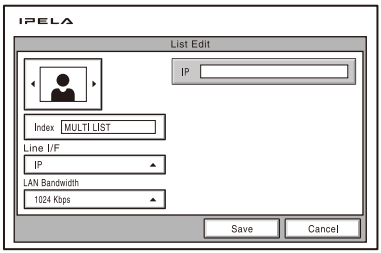
Registering the Remote Parties in the Multipoint Connection List

You can register the multipoint connection list that includes all remote parties for a multipoint videoconference in the Phone Book. It allows you to dial all the parties simultaneously.
You can enter new remote parties to register the multipoint connection list, or add the parties registered in the Phone Book to the multipoint connection list.

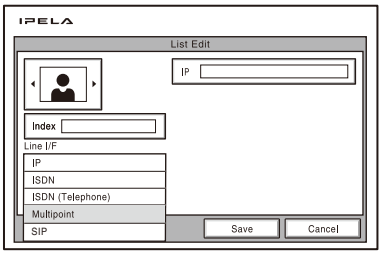
To register a multipoint connection list in the Phone Book

The basic procedure for registration is the same as the registration of a remote party for a point-to-point videoconference. For details on the procedure, see "Registering a New Remote Party" on page 82.

1 Select "New Entry" in the Phone Book menu to display the List Edit menu, then enter the name of the multipoint connection list in the Index text box.



2 Select "Multipoint" under "Line I/F".



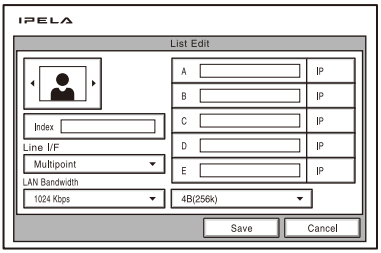
3 Select a still image to be displayed in the Phone Book.
When not selected, the icon is shown as " ".

4 Set up the line interface of the remote parties.
When PCSA-M3G50 H.323 MCU software (for LAN) is installed
Select "IP", and enter the IP addresses of all the parties for the multipoint videoconference in text boxes A to E.

When PCSA-M0G50 H.320 MCU software (for ISDN) is installed
Select "ISDN" or "TEL", and enter the line numbers or phone numbers of all the parties for the multipoint videoconference in text boxes A to E.

When both PCSA-M3G50 H.323 MCU software (for LAN) and PCSA-M0G50 H.320 MCU software (for ISDN) are installed

Select Multipoint and a drop-down list is displayed to the right of text boxes A to E.
For LAN: Select "IP" from the drop-down list, and enter the IP address.
For ISDN: Select "ISDN" from the drop-down list, and enter the line number.
For ISDN (Telephone): Select "TEL" from the drop-down list, and enter the telephone number.
For SIP: Select "SIP" from the drop-down list, and enter the address.
Enter all the parties for the multipoint videoconference.



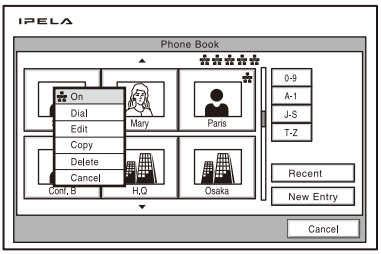
For details on the setups, see step 5 in "Registering a New Remote Party" on page 82.

5 Select "Save", then press the PUSH ENTER button.
The registration of the multipoint connection list is completed.

To specify a remote party registered in the Phone Book to the multipoint connection list

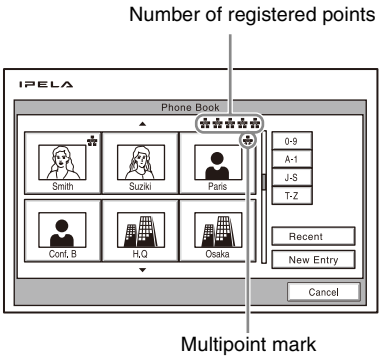
1 Use the ↑, ↓, ← or → button on the Remote Commander to select the name you want to register in the multipoint connection list.

2 Press the * button on the Remote Commander, or press the PUSH ENTER button to open the submenu, press the ↑ or ↓ button to select " On", then press the PUSH ENTER button.



The (multipoint) mark is added to the upper right of the selected name in the list and the remote party is registered in the multipoint connection list.

You can add the ✣ marks for up to five parties using the same procedure as above. A ✣ mark appears in bold in the upper portion of the Phone Book for each party you register to the multipoint connection list.



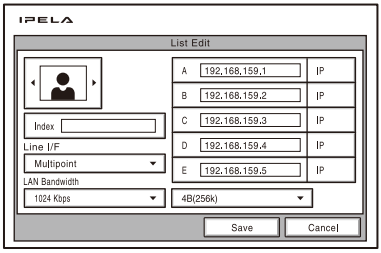
Note

To delete the ✣ mark from the name list, press the ✱ button again, or press the PUSH ENTER button to open the submenu, press the ↑ or ↓ button to select "✣ Off", then press the PUSH ENTER button.

3 Select one of the remote parties with the ✣ mark, then press the PUSH ENTER button.

4 Press the ↑ or ↓ button to select "✣ Edit" from the submenu, then press the PUSH ENTER button.

The List Edit menu appears. All the IP addresses or telephone numbers of the parties marked with ✣ are entered in the number text boxes.



5 Enter the name of the multipoint connection list in the Index text box.

6 Select "Save", then press the PUSH ENTER button.

The registration of the multipoint connection list is completed.

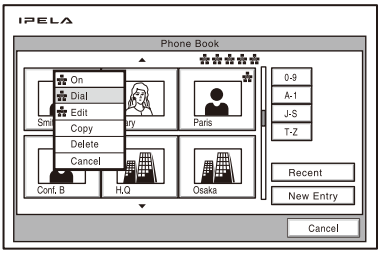
Starting a Multipoint Videoconference

Calling Remote Parties

To call remote parties registered in the multipoint connection lists

1 Select the multipoint connection list registered in the Phone Book.
The multipoint connection lists are marked with "✠ IP".

2 Press the CONNECT/DISCONNECT (✆ / ☎) button on the Remote Commander, or press the PUSH ENTER button to display the submenu, press the ↑ or ↓ button to select "✠ Dial", then press the PUSH ENTER button.

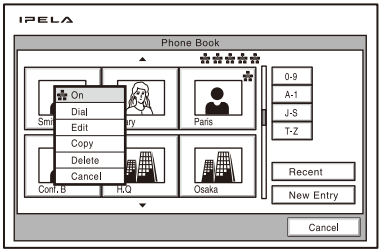


The system begins dialing the numbers of the remote parties registered in the multipoint connection list. "Dialing" appears on the monitor screen, and the ON LINE indicator (blue) on the Communication Terminal blinks.
When the system connects to all the remote points, the message "Meeting starts!" appears on the screen, and the ON LINE indicator stops blinking and lights.

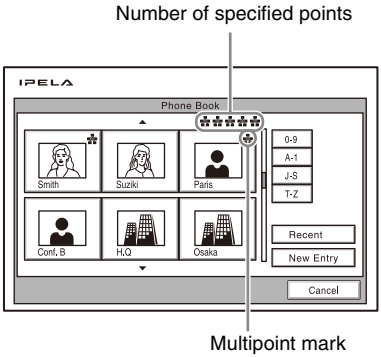
To call remote parties by selecting from the Phone Book

1 Select a remote party to which you want to connect for a multipoint videoconference from the Phone Book.

2 Press the ✱ button on the Remote Commander, or press the PUSH ENTER button to open the submenu, press the ↑ or ↓ button to select "✠ On", then press the PUSH ENTER button.



The ✣ (multipoint) mark is added to the upper left of the selected name in the Phone Book list and the remote party is specified to the party for multipoint connection.
You can add the ✣ marks for up to five parties using the same procedure as above. The ✣ marks added are displayed at the upper right corner of the Phone Book menu.



Note

To delete the ✣ mark from the name list, press the ✱ button again, or press the PUSH ENTER button to open the submenu, press the ↑ or ↓ button to select "✣ Off", then press the PUSH ENTER button.

3 Select one of the remote parties with the ✣ mark.

4 Press the CONNECT/DISCONNECT (☎ / ☎) button on the Remote Commander, or press the PUSH ENTER button to open the submenu, press the ↑ or ↓ button to select "✣ Dial", then press the PUSH ENTER button.

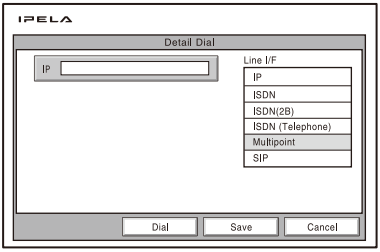
The system begins dialing the number of the remote party with the ⁂ marks. “Dialing” appears on the monitor screen, and the ON LINE indicator (blue) on the Communication Terminal blinks.
When the system connects to all the parties, the message “Meeting starts!” appears on the screen, and the ON LINE indicator stops blinking and lights.

To call remote parties not registered in the Phone Book

Basic operations are the same as those for starting a point-to-point conference. For details, see “To call a remote party not registered in the Phone Book” on page 106.

1 Select “Detail Dial” in the launcher menu to open the Detail Dial menu.

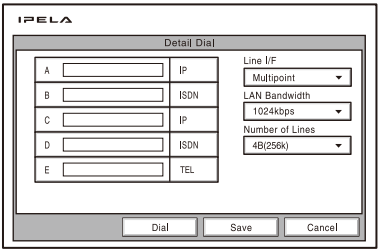
2 Set up the line interface of the remote parties.



When PCSA-M3G50 H.323 MCU software (for LAN) is installed
Select “Multipoint”, and enter the IP addresses of all the parties for the multipoint videoconference in text boxes A to E.

When PCSA-M0G50 H.320 MCU software (for ISDN) is installed
Select “Multipoint”, and enter the line numbers or phone numbers of all the parties for the multipoint videoconference in text boxes A to E.

When both PCSA-M3G50 H.323 MCU software (for LAN) and PCSA-M0G50 H.320 MCU software (for ISDN) are installed
Select “Multipoint” and a drop-down list is displayed to the right of text boxes A to E.
For LAN: Select “IP” from the drop-down list, and enter the IP address.
For ISDN: Select “ISDN” from the drop-down list, and enter the line number.
For ISDN (Telephone): Select “TEL” from the drop-down list, and enter the telephone number.
For SIP: Select “SIP” from the drop-down list, and enter the address.
Enter all the parties for the multipoint videoconference.



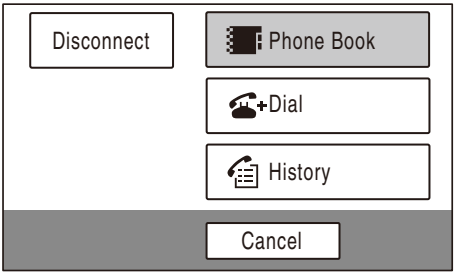
For details on the setups, see step 3 in "To call a remote party not registered in the Phone Book" on page 106.

3 Select "Dial", and press the PUSH ENTER button on the Remote Commander. You can also press the CONNECT/DISCONNECT (/) button on the Remote Commander.

The system begins dialing the numbers selected in step 2. "Dialing" appears on the monitor screen, and the ON LINE indicator (blue) on the Communication Terminal blinks.
When the system connects to all the remote parties, the message "Meeting starts!" appears on the screen, and the ON LINE indicator stops blinking and lights.

To call additional remote parties

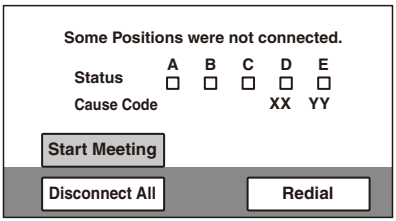
After communication begins with the first party, press the CONNECT/DISCONNECT (/) button on the Remote Controller to open the menu.



Perform one of the procedures described in "Calling a Remote Party" on page 105.

If some points are not connected

The following dialog appears. Select the desired item.



Start Meeting: Starts a conference with remote parties connected.
Disconnect All: Cancels all the connections and restores the launcher menu.
Redial: Redials the numbers of the points that you failed to connect.

Note on multipoint videoconferences using ISDN

If the number of remote points connected increases as a result of dialing from the main terminal while conducting a multipoint videoconference using ISDN, some of the channels used for the first point will be cut off and used for the newly connected points instead. For example, if you use six ISDN lines (up to 12B channels available), 12B channels will be used for the first remote point only when no other points are connected. When the system connects to a second point, the number of channels for the first point decreases, and 6B channels will be used for both the first and second points.
If one of the remote points in a multipoint connection is disconnected, the number of channels used for the remaining points will not increase.

Receiving a Call From a Remote Party

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

For details, see "Receiving a Call From a Remote Party" on page 113.

Using the Display Control

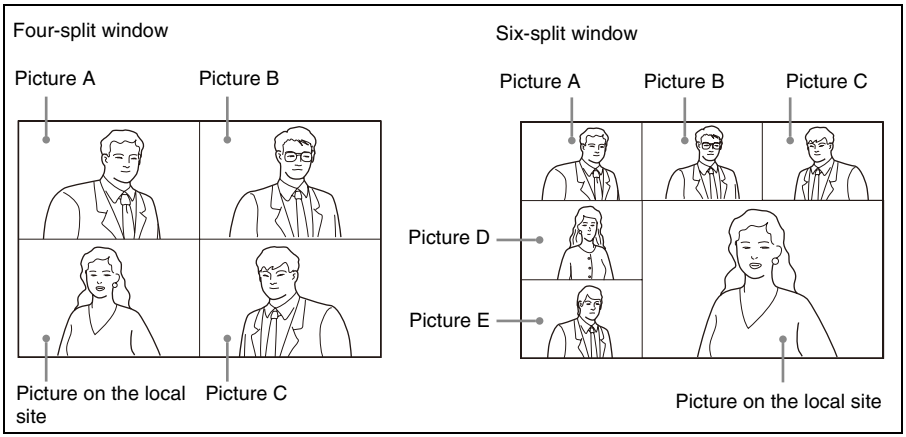
During a multipoint videoconference with the MCU software installed in the communication Terminal you can control the following operations.

What Is “Broadcast Mode”?

You can use the “Split”, “Split (Fixed)”, “Voice Activate” and “Broadcast” modes.

Split mode

This mode allows display of the pictures from the connected remote terminals and the picture of the local terminal by splitting the monitor screen.
The display is split into six, regardless of the number of terminals. You can also use “Automatic” to split the screen into four or six depending on the number of terminals. When there are two or three terminals, the display is automatically split into four. When there are four or five terminals, the display is automatically split into six.
Pictures A to C or A to E appear in connection order.



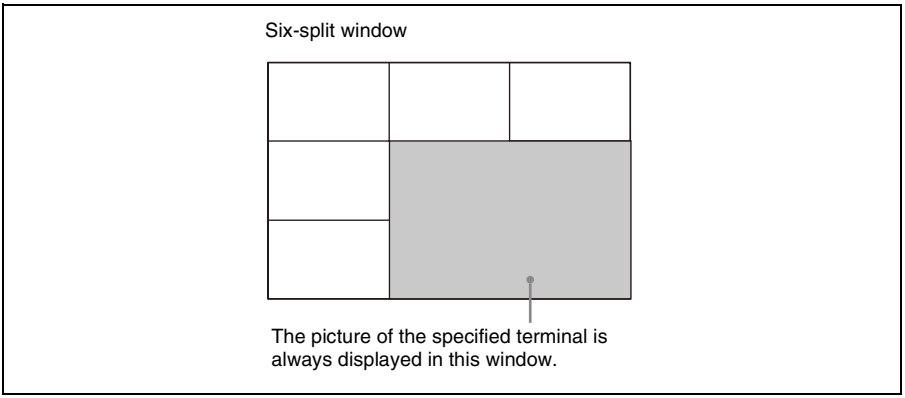
Notes

- When the six-split window is displayed, the system detects the terminal including the loudest sound among all the terminals and displays the picture of that terminal in the lower right window. The picture on the local site is then displayed in the window where the picture of the detected terminal was displayed.
- If you switch the broadcast mode from Split mode to Voice Activate mode in which a picture of a specified terminal is shown in full screen during communication, the location of Pictures A to E will be changed when the Split mode is restored.
- When there is one terminal, the display is switched to Full Screen regardless of the display setting.
- When the six-split window is displayed, the picture on the local site is always displayed in the lower right window.

- When your system is in the Split or Split (Fixed) mode, you cannot control the camera on any connected remote terminals.

Split (Fixed) mode

The pictures from the connected remote terminals and the picture of the local terminal are displayed by splitting the monitor screen as the same manner as those in the split mode.
You can specify a picture among the split windows to fix it in the lower right window for the six-split mode. Pictures other than the specified one will be displayed in the split windows in order of connecting.



Voice Activate mode

Detects the terminal with the speaker with the loudest voice among the connected terminals, and displays the picture of that terminal in full screen on all the sites. The “V.A” indicator appears when the Voice Activate mode is activated. The indicator with alphabet showing the terminal of the displayed picture also appears. The indicator is displayed while the local picture is broadcast.

Broadcast mode

You can specify the terminal to display the picture of that terminal in full screen on all the sites. The indicator with alphabet showing the terminal of the displayed picture also appears. The indicator is displayed while the local picture is broadcast.

Broadcast Modes and Displayed Windows

The chart described below shows the window displayed on the monitor screen when you select one of the Broadcast Modes. According to the connection status of your system, some modes cannot be selected. In the connection status with no window shown in the chart, the corresponding mode is not available.

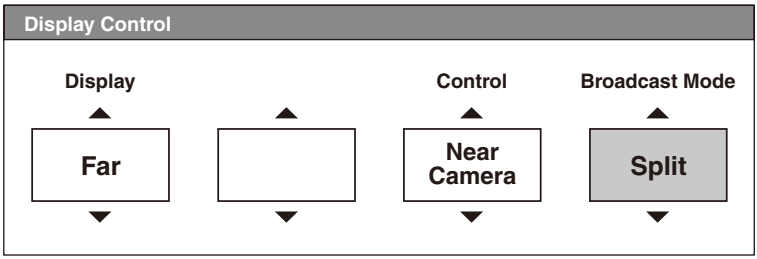
Connection status				Non-cascade connection	Cascade connection
				LAN connection (See page 206.) ISDN connection (See page 208.) LAN & ISDN connection (See page 210)	LAN cascade connection (See page 207.) LAN cascade & ISDN connection (See page 211.)
Connecting points (max.)				6	10
Broadcast Mode	Before communication	Automatic	2 or 3 terminals connected	Four-split window	–
			4 or 5 terminals connected	Six-split window	–
		Six-screen mosaic		Six-screen mosaic	–
	During communication	Split (Fixed)	2 or 3 terminals connected	–	–
			4 or 5 terminals connected	Six-split window	–
		Voice Activate		Full screen	Full screen
		Broadcast		Full screen	–

Switching the Broadcast Mode

At the beginning of the conference, the mode set for “Broadcast Mode” on page 4 of the Communication Setup menu is applied. You can change the mode during communication.

1 Press the FAR/NEAR button on the Remote Commander.
The Display Control menu appears.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select “Broadcast Mode”, then press the PUSH ENTER button.



Split: Selects the Split mode.
Split (A Fixed): Specifies the picture of the terminal connected first to fix in the Split (Fixed) mode.
Split (B Fixed): Specifies the picture of the terminal connected second to fix in the Split (Fixed) mode.
Split (C Fixed): Specifies the picture of the terminal connected third to fix in the Split (Fixed) mode.
Split (D Fixed): Specifies the picture of the terminal connected fourth to fix in the Split (Fixed) mode.
Split (E Fixed): Specifies the picture of the terminal connected fifth to fix in the Split (Fixed) mode.
Split (Near End Fixed): Fixes the local picture in the Split (Fixed) mode.
Voice Activate: Selects the Voice Activate mode.
Self Broadcast: Broadcasts the near end (local) party in the Broadcast mode.
A Broadcast: Broadcasts the picture of the terminal connected first in the Broadcast mode.
B Broadcast: Broadcasts the picture of the terminal connected second in the Broadcast mode.
C Broadcast: Broadcasts the picture of the terminal connected third in the Broadcast mode.
D Broadcast: Broadcasts the picture of the terminal connected fourth in the Broadcast mode.
E Broadcast: Broadcasts the picture of the terminal connected fifth in the Broadcast mode.

To display the local picture in the Voice Activate mode

You can display the local picture only on your monitor screen while the broadcast mode remains in Voice Activate mode.

1 Press the FAR/NEAR button on the Remote Commander.
The Display Control menu appears.

2 Use the ↑, ↓, ← or → button to select “Near” under “Display”, then press the PUSH ENTER button.
The local picture appears on your monitor screen.

To restore the Voice Activate mode

Press the FAR/NEAR button on the Remote Commander again, and select “Far” under “Display”.

Switching the Submonitor Image Display

You can switch the image that is displayed on the submonitor while a videoconference is in progress.

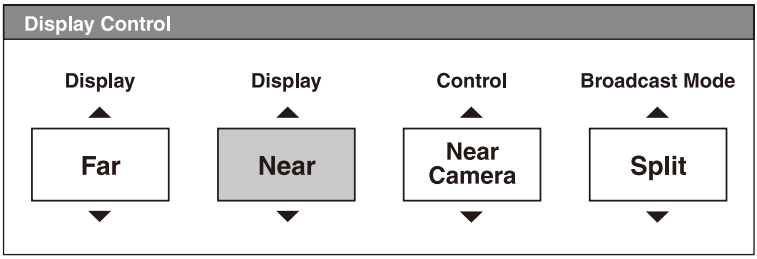
Note

To switch the submonitor image display, “Monitors” must be set to “2” or “3” in the Monitor Out screen of the Video Setup menu.

For details on monitor output, see “Monitor Out” on page 61.

1 Press the FAR/NEAR button on the Remote Commander.
The Display Control menu appears.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select “Display”, and press the PUSH ENTER button.



Far: Displays images from the remote camera.
Near: Displays images from the local camera.
Speaker: Displays images from the camera of the person speaking.
A fixed: Displays camera images from the first terminal that connected.
B fixed: Displays camera images from the second terminal that connected.
C fixed: Displays camera images from the third terminal that connected.
D fixed: Displays camera images from the forth terminal that connected.
E fixed: Displays camera images from the fifth terminal that connected.

Receiving the Broadcast Requested From Any Other Terminal

When you receive “Self Broadcast” command from one of the terminals connected, the picture of that terminal is broadcast in full screen.
When you receive “Stop Broadcast” command from one of the terminals connected, the system returns to the previous mode.

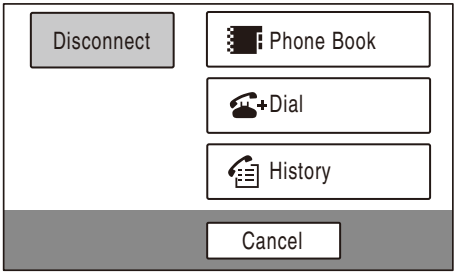
Notes

- If you have received “Self Broadcast” command from another terminal, the operation above will not be carried out.
- When you use a cascade connection, the Video Communication System supports the Voice Activate mode only.

Ending the Multipoint Videoconference

1 Press the CONNECT/DISCONNECT (/) button on the Remote Commander.

The following menu appears.

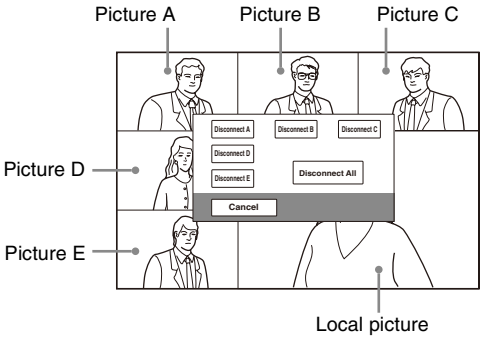


2 Use the ↑, ↓, ← or → button to select “Disconnect”, then press the PUSH ENTER button.

The screen changes to the six-split window display, and the following menu appears.

The location of the pictures in the split windows A to E (or A to C) is restored to that when the terminals were connected.

You can display the terminal names in this window if you set “Display Terminal Name” to “Show temporarily” or “Always show” in Menu Screens of the General Setup menu.



3 Use the ↑, ↓, ← or → button to select the terminal to be disconnected, then press the PUSH ENTER button.

Disconnect A: Disconnects the terminal connected first.
Disconnect B: Disconnects the terminal connected second.
Disconnect C: Disconnects the terminal connected third.
Disconnect D: Disconnects the terminal connected fourth.
Disconnect E: Disconnects the terminal connected fifth.
Disconnect All: Disconnects all the terminals.
The selected terminal is disconnected.
You can disconnect all the terminals by pressing the CONNECT/DISCONNECT (/) button.

To cancel the disconnection

Select “Cancel” in step 3, then press the PUSH ENTER button.

Notes on Secondary Terminals

If there is a terminal that is not adequate for the settings set by this system, that terminal is called the secondary terminal. Communication capabilities between the secondary terminal and this system are shown below.

- Sending/receiving audio
- Receiving video from the secondary terminal
- Disables transmission of video to the secondary terminal

For details on the secondary terminal, see the glossary on page 318.

When a normal phone is connected

The audio mode of the other terminals is not affected if a normal phone is connected or disconnected any time.

When terminals with "Far End Camera Control" set to "On" and "Off" are mixed

As the bit rate of video signals differs depending on the setting of "Far End Camera Control", the picture is not displayed on some terminals.

Note

If the setting is mixed for version 2.4 and later, the settings on all of the terminals will be considered set "Off," and the terminals will not be considered secondary terminals.

When a 56K network is mixed among the terminals if the conference is held via 64K network

The conference automatically changes to that via 56 K network. Terminals that cannot change to that network are regarded as secondary terminals, and the transmission of video is not available.

When a terminal with different audio mode is connected and its video bit rate is different

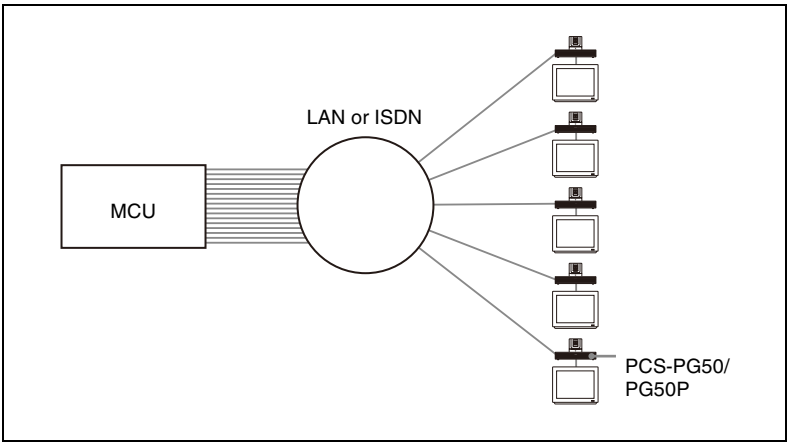
The conference is conducted in the video mode according to the terminal with the lowest video bit rate. A terminal that cannot fit this rate is regarded as a secondary terminal, and the transmission of video is not available.

When a terminal whose video mode is QCIF standard only

The system does not send video to the QCIF terminal.

Connecting the External MCU

Connecting the external MCU (Multipoint Control Unit) enables conduct of a multipoint videoconference unless the MCU software is installed into the Communication Terminal.

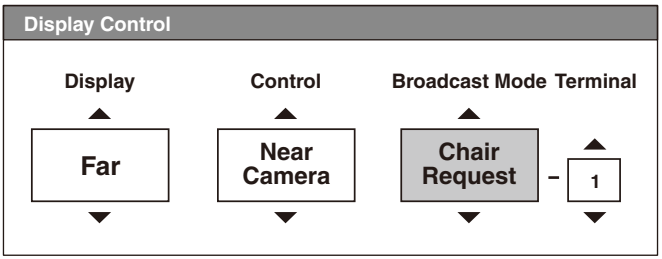


Activating the Chair Control

If the MCU for the ISDN connection is equipped with the chair control function, the chair control can be activated for up to 99 terminals connected. The chair control mode allows you to specify any terminal to display on the monitor screen, to broadcast the specified picture to all the terminals, or to broadcast the local picture to all the terminals.

1 Press the FAR/NEAR button on the Remote Commander.
The Display Control menu opens.

2 Use the ↑, ↓, ← or → button to select “Chair Request” under “Broadcast Mode”.



3 Press the PUSH ENTER button on the Remote Commander.

The chair control is activated and you can control up to 99 terminals. The chair control feature is canceled if you set “Broadcast Mode” to “Chair Release”.

Note

When you operate incorrectly, the message “MCU operation rejected.” will appear on the monitor screen.

Displaying the picture of the selected terminal

1 Open the Display Control menu.

2 Use the ↑, ↓, ← or → button to select “Receive” under “Broadcast Mode”.

3 Use the ↑, ↓, ← or → button to select the number of the terminal you want to view in the box under “Terminal”, then press the PUSH ENTER button.

The picture of the selected terminal is displayed on the local screen.

Notes

- When no terminal is selected, the picture of the smallest terminal number will be displayed.
- The terminal number is assigned to a terminal based on the information on each terminal obtained from the MCU.

To broadcast the selected picture to all terminals

1 Open the Display Control menu.

2 Use the ↑, ↓, ← or → button to select “Broadcast” under “Broadcast Mode”.

3 Use the ↑, ↓, ← or → button to select the number of the terminal you want to broadcast in the box under “Terminal”, then press the PUSH ENTER button.

The picture of the selected terminal is displayed on the local screen and is broadcast to all terminals.

To broadcast a local picture to all terminals

1 Open the Display Control menu.

2 Use the ↑, ↓, ← or → button to select “Broadcast” under “Broadcast Mode”.

3 Use the ↑, ↓, ← or → button to display “0” in the box under “Terminal”, then press the PUSH ENTER button.

The local picture is broadcast to all terminals. The indicator is shown on the monitor screen.

Exiting the chair control

1. Open the Display Control menu.
2. Use the ↑, ↓, ← or → button to select “Chair Release” under “Broadcast Mode”.
   The chair control is not available for the local party.

Multipoint Attributes

Number	Attribute	Value (H.320 MCU)	Value (H.323 MCU)
1	Maximum number of terminals that can be connected to a single MCU	5 (6 when including the local terminal)	5 (6 when including the local terminal)
2	Maximum number of concurrent (independent) conferences that can be supported in a single MCU	1	1
3	Maximum number of ports that can be connected to other MCUs	0	1
4.1	Network interfaces at each port	BRI, PRI (T1/E1)	LAN
4.2	Restricted network capability	Restrict_Required	–
5	Transmission rates available at each port	1B, 2B, 4B, 6B (BRI) 1B, 2B, 4B, 6B, 8B, 12B (PRI (T1/E1))	Total rate of all points Max. 4 Mbps
6	Audio Processor	Equipped	Equipped
6.1	mixed/switched noise/echo suppression on “silent” ports	Mixed No	Mixed No
6.2	audio algorithm at each port	G.711, G.728, G.722, MPEG4 ACC	G.711, G.728, G.722, MPEG4 ACC
7	Video Processor (motion pictures)	Equipped	Equipped
7.1	switched/mixed	Voice activated/four-split/six-split/user control	Voice activated/four-split/six-split/user control
7.2	video algorithm at each port	H.261, H.263, H.264	H.261, H.263, H.264
8	Data Processor	Equipped	Equipped
8.1	data broadcast facility, LSD data broadcast facility, HSD	Equipped No	– –
8.2	MLP Processor	Equipped	–
9	Encryption	Support	Support

Number	Attribute	Value (H.320 MCU)	Value (H.323 MCU)
10	Method of choosing Selected Communication Mode - SCM	Custom: Number of lines (1B/2B/4B/6B (up to 30B when the PCSA-PRI is used)) Audio algorithm (G.711, G.728, G.722, MPEG4 ACC) Auto: Video frame rate (7.5/10/15/30fps) Video encoding mode (CIF/QCIF) Fixed or switched automatically: Video algorithm (H.261 fixed, H.261, H.263 or H.264 switched automatically) Restrict (56K fixed/Auto)	Custom: LAN bandwidth (Total rate of all points, max. 4 Mbps) Audio algorithm (G.711, G.728, G.722, MPEG4 ACC) Auto: Video frame rate (7.5/10/15/30fps) Video encoding mode (CIF/QCIF) Fixed or switched automatically: Video algorithm (H.261 fixed, H.261, H.263 or H.264 switched automatically)
11	Capability of secondary terminals	Capable of audio sending/receiving and video receiving only. Capable of audio sending/receiving only via a normal phone.	Capable of audio sending/receiving and video receiving only. Capable of audio sending/receiving only via a normal phone.
12	Call setup provision(s)	No call/receive reservation	No call/receive reservation
13	Control capabilities	–	–
13.1	Numbering of terminals Simple chair control using BAS	No No	Equipped No
13.2	MLP facilities [refer to ITU-T T series]	No	No
13.3	H.224 (simplex data)	Equipped	Equipped
14	Cascading	No	Equipped
14.1	Fixed rates (“simple”)	No	No
14.2	Master/Slave	No	Equipped
15	Terminal identification	No	Equipped
16	MBE capability Register necessary information such as the telephone number and index number.	No	–

Chapter 9: Videoconference Using SIP

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 IETP (Internet Engineering Task Force).
For conducting a videoconference with an IP phone using SIP, installation of the optional PCSA-SP1 SIP software in the Communication Terminal and connection via a SIP server are required.
Installation of the optional MCU software allows multipoint videoconference with up to 5 IP phones.

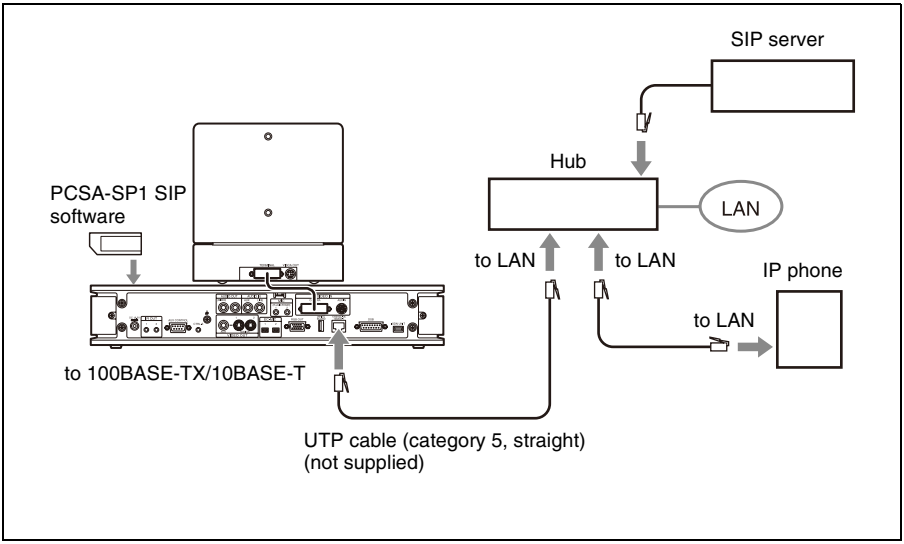
Restrictions on the use of the SIP software

Cascade connection using SIP is not supported.

Connection Examples for a Videoconference Using SIP

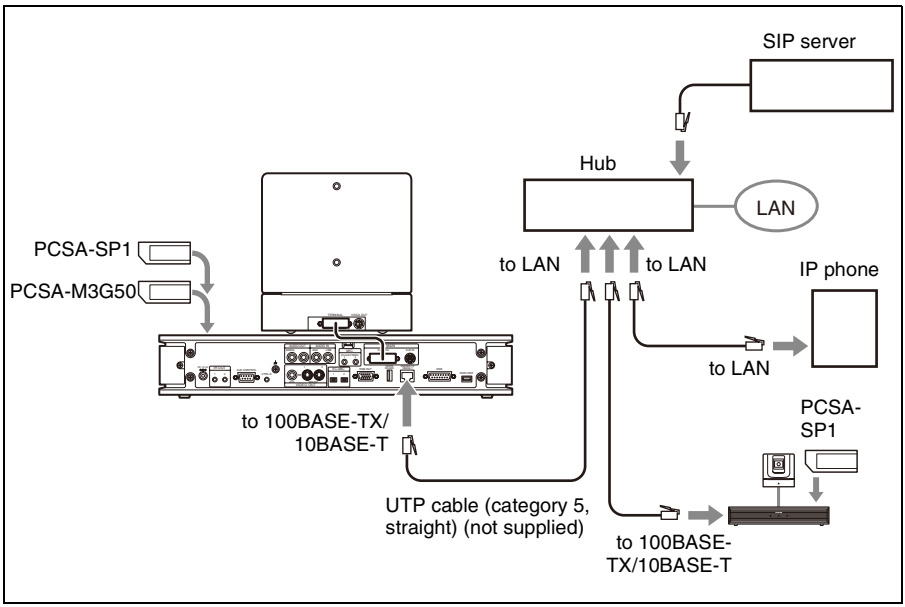
Connection Example for Point-to-Point Videoconference

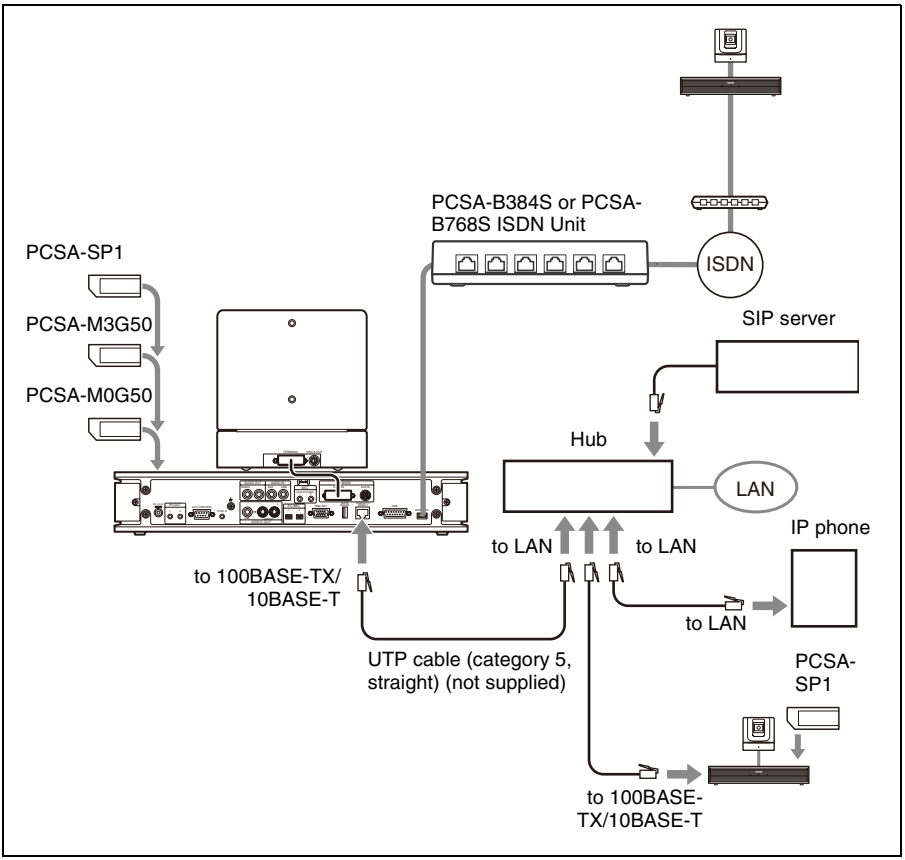
Connect the PCS-G50/G50P system in which the optional PCSA-SP1 SIP software has been installed to an IP phone and a SIP server via a hub.



Connection Examples for Multipoint Videoconference

Installation of the PCSA-SP1 SIP software and PCSA-M3G50 H.323 MCU software in the Communication Terminal allows you to conduct a multipoint videoconference among up to six points. By adding the PCSA-M0G50 H.320 MCU software, a multipoint videoconference with up to six points and mixed SIP and ISDN connection is also enabled.





Notes

- Cascade connection is not possible even if SIP software is installed in two or more Communication Terminals.
- With SIP connection, the video mode cannot be automatically changed during a conference. If a terminal with a different video mode from that of the previously connected terminal participates in the conference, that terminal is regarded as a secondary terminal and cannot receive video signals.

Preparing for a Videoconference Using SIP

Installing the SIP Software

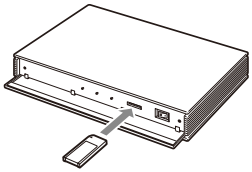
Notes on installing the SIP software

- 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 Communication Terminal, 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 Set the power switch on the front of the Communication Terminal to the off position (○).

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 with the mark facing upward.



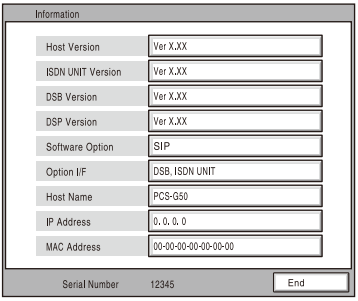
PCSA-SP1 SIP software

3 Set the power switch on the right side of the Communication Terminal to the on position (**|**).

The SIP software is installed in the Communication Terminal.

To check if the installation of the SIP software is completed

"SIP" is shown in "Software Option" of the Information menu.



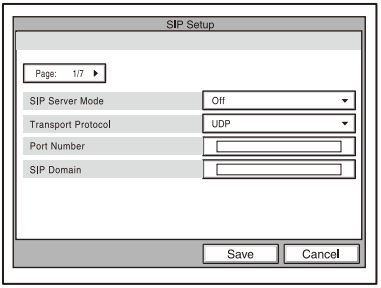
For details on the Information menu, see "Information Menu" on page 79.

Setting for SIP

You can set items regarding a videoconference using SIP in the SIP Setup menu for the administrator.

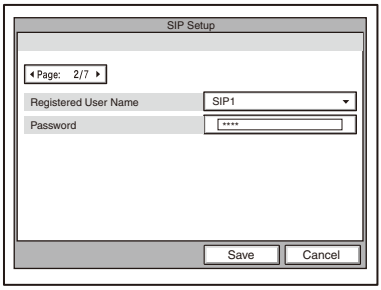
For details on the setting, see "SIP Setup Menu" on page 80.

1 Set "SIP Server Mode" to "On" on page 1 of the SIP Setup menu.



2 Select the transport protocol (TCP or UDP) to be used for SIP connection and enter the port number and SIP domain.

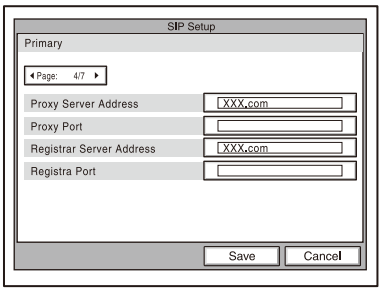
3 Enter “Registered User Name” and “Password” on page 2 of the SIP Setup menu.



Note

On the Communication Terminal with the PCSA-M3G50 H.323 MCU software installed, enter the user names and passwords for all the terminals to be connected for a multipoint videoconference. Up to 5 terminals can be registered.

4 Enter the address and port number for the SIP server on page 4 of the SIP Setup menu.

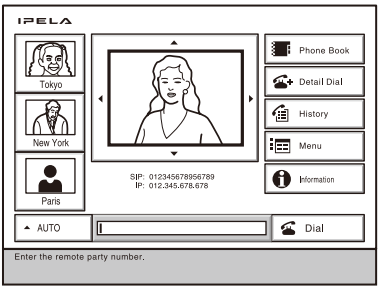


Note

Up to four SIP servers can be set up. To set up multiple SIP servers, enter the addresses and port numbers for all the SIP servers on page 4 to page 7.

5 Confirm that registration to the SIP server was performed properly.

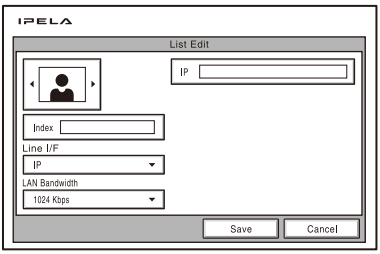
Make sure that “SIP: Registration Failed” or “SIP: Registration Requested” does not appear in the status display portion of the launcher menu.



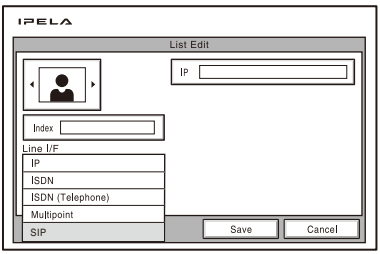
Registering Remote Parties in the Phone Book

The basic procedure for registration is the same as the registration of a remote party for a point-to-point videoconference. For details on the procedure, see steps 1 to 3 of “Registering a New Remote Party” on page 82.

1 Select “New Entry” in the Phone Book menu to display the List Edit menu, then enter the name of the remote party in the Index text box.



2 Select “SIP” under “Line I/F”.



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

4 Select the line interface icon or a still image to be displayed in the Phone Book.

5 Select “Save”, then press the PUSH ENTER button on the Remote Commander.
The registration in the Phone Book is completed.

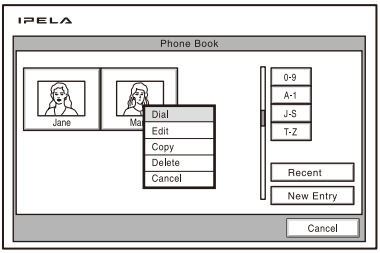
Starting a Videoconference Using SIP

Calling Remote Parties

To call a remote party registered in the Phone Book

1 Select “Phone Book” in the launcher menu, then press the PUSH ENTER button.
The Phone Book menu appears.

2 Use the ↑, ↓, ← or → button on the Remote Commander to select a remote party from the Phone Book, then press the PUSH ENTER button.
The submenu appears.



3 Use the ↑ or ↓ button on the Remote Commander to select “Dial”, then press the PUSH ENTER button, or press the CONNECT/DISCONNECT (/) button on the Remote Commander.
The system begins dialing the party selected in step 2. “Dialing” appears on the monitor screen, and the ON LINE indicator (blue) on the Communication Terminal blinks.
When the System connects to the system on the remote site, the message “Meeting starts!” appears on the screen, and the ON LINE indicator stops blinking and lights.

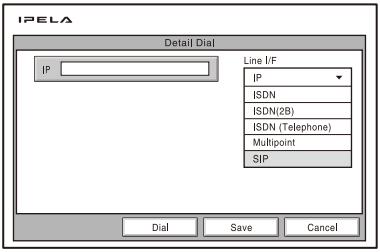
To call a remote party not registered in the Phone Book

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

For details of the procedure, see “To call a remote party not registered in the Phone Book” on page 106.

1 Select “Detail Dial” in the launcher menu to display the Dial menu.

2 Select “SIP” under “Line I/F”.



3 Enter the address of a remote party in the IP text box.
The format of the address may be the following:
- 4000 (number assigned by the SIP server)
- 4000@sip.com
- 192.168.1.1 (when not using an IP address or SIP server)

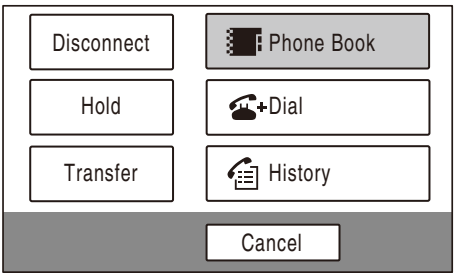
Note

An IP address can only be used when the SIP server is turned off.

4 Select “Dial”, then press the PUSH ENTER button, or press the CONNECT/DISCONNECT (/) button on the Remote Commander.
The system begins dialing the party entered in step 3. “Dialing” appears on the monitor screen, and the ON LINE indicator (blue) on the Communication Terminal blinks.
When the System connects to the system on the remote site, the message “Meeting starts!” appears on the screen, and the ON LINE indicator stops blinking and lights.

To dial the remote parties for a multipoint videoconference one by one

After staring communication with the remote party selected first, press the CONNECT/DISCONNECT (/) button on the Remote Commander to open the menu.



Select “Phone Book” or “Dial” depending on the registration status of the next remote party.
Select “Phone Book”, then perform steps 2 and 3 of the procedure shown in “To call a remote party registered in the Phone Book” on page 246, or select “Dial”, then perform steps 2 to 4 of the procedure in “To call a remote party not registered in the Phone Book” on page 246.
Repeat this procedure for each remote party.

To dial the remote parties for a multipoint videoconference simultaneously

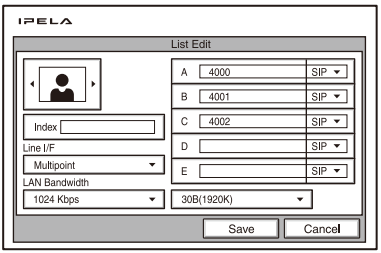
You can register a “multipoint connection list for SIP” that includes all remote parties for a multipoint videoconference using SIP in the Phone Book.
Set up the list following “Registering the Remote Parties in the Multipoint Connection List” on page 215 of Chapter 8.
Register each remote party as follows:

① Select “Multipoint” under “Line I/F”.

② Select the line interface icon “ ” (or a preferred still image).

③ Select “SIP” from the drop-down list on the right of the text box.

④ Enter the address of the remote party for SIP connection.



When you start a multipoint videoconference, select the “multipoint connection list for SIP” and press the CONNECT/DISCONNECT (/) button on the Remote Commander. The system then dials all the remote parties registered in the list.

Receiving a Call From a Remote Party

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

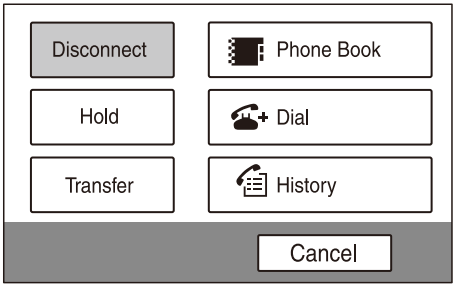
For details, see “Receiving a Call From a Remote Party” on page 113.

Putting a Call on Hold

You can put a call on hold during a point-to-point or multipoint videoconference when connected by SIP.

To put a call on hold during a point-to-point videoconference

1 Press the CONNECT/DISCONNECT (/) button on the Remote Commander during communication.
The following menu appears.



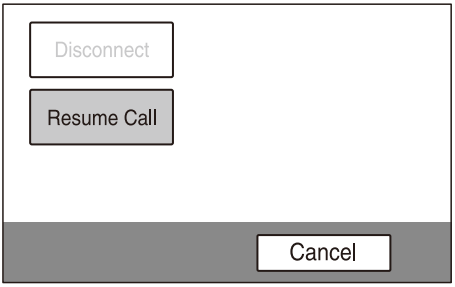
2 Select “Hold” using the ↑, ↓, ← or → button and the PUSH ENTER button on the Remote Commander.
The “Please Wait” display appears on the monitor screens of the local and remote sites.

Notes

- Dialing and answering a call are not available during a point-to-point videoconference.
- If a call in a point-to-point videoconference is held during transmission or reception of the data via the Data Solution Box or the White Board, the transmission or reception is cancelled and will not be restored after the hold mode is cancelled.

To cancel the hold mode of a point-to-point videoconference

You can cancel the hold mode only when you have operated the system to enter the hold mode.
Press the CONNECT/DISCONNECT (/) button on the Remote Commander while in the hold mode, select “Resume Call” from the menu and press the PUSH ENTER button. The hold mode is cancelled and you can continue the conference.



Note

"Resume Call" is not available when the remote party has operated the system to enter the hold mode during a point-to-point videoconference. Only "Disconnect" is available.

To put a call on hold during a multipoint videoconference

The operations to enter/cancel the hold mode are the same as those for a point-to-point videoconference.
See "To put a call on hold during a point-to-point videoconference" and "To cancel the hold mode of a point-to-point videoconference" above.

The following differences regarding the operation and display are observed during a multipoint videoconference:

- When the terminal in use is the main terminal and a call is put on hold, all the connected terminals enter the hold mode simultaneously and the "Please Wait" display appears on the monitor window of each site. However, if a multipoint videoconference is conducted and there are connected terminals with line types other than SIP, you cannot put a call on hold from the main terminal.
  When a connected terminal puts a call on hold, the "Please Wait" display appears on their screen only, and calls can no longer be put on hold from the main terminal. In such a case, you can still receive calls from other terminals. When all connected terminals put calls on hold, only the picture of this site is displayed on the monitor screen.
- When the terminal in use is a connected terminal and a call is put on hold, the "Please Wait" display appears on screen. Even if another connected terminal puts a call on hold, you can still put a call on hold from this terminal. If the main terminal puts a call on hold, all connected terminals enter hold mode. In any such case, you cannot dial or receive calls from any terminal when in hold mode.
- When a multipoint videoconference is conducted in the Voice Activate mode with the MCU software installed in the local system, and if a connected terminal being broadcast puts a call on hold, only that terminal enters the hold mode and the local picture is shown on the other terminals. If a connected terminal that is not being broadcast puts a call on hold, the broadcasting continues.

For details on the Split mode and the Voice Activate mode, see "What Is "Broadcast Mode"?" on page 223 of Chapter 8.

Notes

- Only “Resume Call” is available in the hold mode.
- Only “Disconnect” is available outside of hold mode.
- When all the receiving terminals enter the hold mode in a multipoint videoconference during transmission or reception of the data via the Data Solution Box or the White Board, the transmission or reception is cancelled and will not be restored after the hold mode is cancelled. If a connected terminal puts a call on hold but communication with other terminal(s) remains established, however, transmission or reception via the Data Solution Box or the White Board is not cancelled.

Transferring a Call

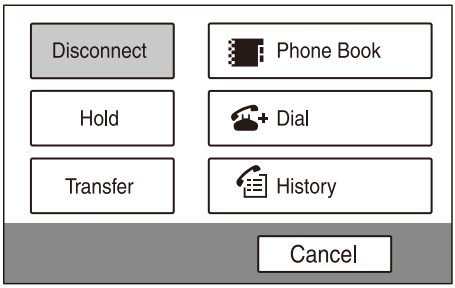
You can transfer a call to another remote party during a point-to-point videoconference when connected by SIP.

Note

Call transfer is not possible during a multipoint videoconference.

1 Press the CONNECT/DISCONNECT (/) button on the Remote Commander during communication.

The following menu appears.



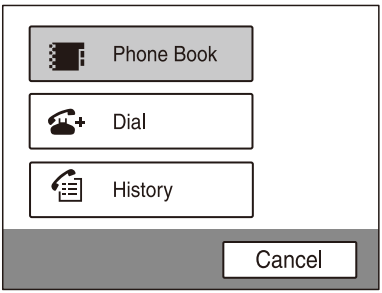
2 Select “Transfer” using the ↑, ↓, ← or → button and the PUSH ENTER button on the Remote Commander.

The remote terminal in communication enters the hold mode. The hold mode continues until the call transfer is completed.

Notes

- “Resume Call” is not available on the remote terminal in the hold mode. Only “Disconnect” is available on that terminal.
- If you operate the system to transfer a call during transmission or reception of the data via the Data Solution Box or the White Board, the transmission or reception is cancelled and will not be restored after call transfer is completed.

The following menu appears on the monitor screen of the local system.



3 Select “Phone Book” or “Dial” using the ↑, ↓, ← or → button on the Remote Commander, according to the registration of the remote party to whom you want to transfer the call, then press the PUSH ENTER button.

4 Select the remote party from the Phone Book or by using the Dial menu, then select “Dial”.

For details, see steps 2 and 3 in “To call a remote party registered in the Phone Book”(page 246) or steps 2 to 4 in “To call a remote party not registered in the Phone Book”(page 246).

Note

You can transfer a call to the remote parties with “Line I/F” set to “SIP” only.

When the system connects to the selected remote party, the picture of the remote site and the message “Call will be transferred upon disconnection” appear on the monitor screen.

5 When the remote party answers, inform that party that you are transferring a call, and then press the CONNECT/DISCONNECT (/) button on the Remote Commander.
The call is transferred and the launcher menu is restored on the monitor screen of the local system.

To cancel call transfer

Select “Cancel” from the menu and press the PUSH ENTER button on the Remote Commander.

Note

You can cancel call transfer only before the destination remote party answers. To cancel call transfer after the destination remote party has answered, ask the remote party to disconnect the line. You will then return to point-to-point videoconferencing.

Ending a Videoconference

To end a point-to-point videoconference (when the MCU software is not installed)

1. Press the CONNECT/DISCONNECT (/) button on the Remote Commander.
   The message “Disconnect?” appears on the monitor screen.

2. Press the ↑ or ↓ button on the Remote Commander to select “OK”, then press the PUSH ENTER button, or press the CONNECT/DISCONNECT (/) button again.

To end a multipoint videoconference

Operations are the same as th.ose in Chapter 8, “Ending the Multipoint Videoconference” on page 229.

Chapter 10: Web Control Function

This chapter describes the Web Control Functions used when operating the PCS-G50/G50P. The Web Control Function helps you control the PCS-G50/G50P, or change its setup configuration, using a Web browser installed on your PC, such as Internet Explorer. The following is a set of Operating Instructions for the Web Control Function.

Internet Explorer is a product of the Microsoft Corporation. Please use Version 5.0, or above (Version 6.0 recommended).

Open the Web Page

Enter the IP address assigned to the PCS-G50/G50P in the address line of your browser.
The format of an address is:
http://XXX.XXX.XXX.XXX/

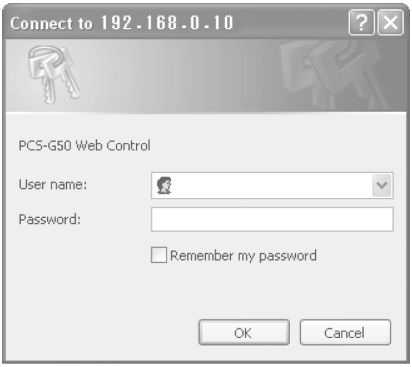
For instance, if the IP address is “192.47.100.117”, enter “http://192.47.100.117/” in the address line.

Note

When a proxy server in an external network segment has been set, the Gateway address in the PCS-G50/G50P LAN setting must also be set. Or set your Web browser proxy setting to “No Proxy” for the PCS-G50/G50P.

Identify a User

Once you reach the Web page, the following window will be displayed asking you to identify yourself as the user.



Enter one of the following user names (see below) into the “User name” box and the corresponding password into the “Password” box, then click the [OK] button.
Each character of a password is shown as “*” on the screen. When the user name and password are correct, the “Dial/Disconnect” page will come up. If an incorrect user name or password is entered three times, an error message appears on the screen.

Notes on the user name and the password

- When you enter “user” in the “User name” box and then its password (Remote Access Password) in the “Password” box, you can access and check the “Phone Book” and “Setup” pages.
- When you enter “super” in the “User name” box and then its password (Phone Book Modification Password) in the “Password” box, you can access the “Phone Book” page, change the setting of the page, and register a new entry onto the page. And you can check the “Setup” page.
- When you enter “sonypcs” in the “User name” box and then its password (Administrator Password) in the “Password” box, you can access the “Phone Book” page, change the setting of the page, and register a new entry onto the page. And you can check and modify the “Setup” page.
- When you enter “streaming” in the “User name” box and then the password (Streaming Password) of the terminal transmitting via streaming broadcast in the “Password” box, you can receive and view the contents of the transmitted conference.
- When you enter “networkcamera” in the “User name” box and then its password (Network Camera Password) in the “Password” box, you can dial from the network camera list, check or modify the registered entries, and register new entries.

- If the corresponding password is not assigned, leave the “Password” box blank and click the [OK] button.
- Administrator Setup Password, Phone Book Modification Password, Remote Access Password, Streaming Password, and Network Camera Password settings are in the Administrator Setup menu.

Select a Tool

By clicking a tool button on the top part of the page, you can jump to the corresponding tool page. A brief introduction of each tool is presented below.

[Controller]

Controls the PCS-G50/G50P using the on-screen controller, or controls using the on-screen Remote Commander in the same manner as you do with the PCSA-RG1 Remote Commander.

[Dial/Disconnect]

Calls a remote party, or ends a meeting.

[Phone Book]

Displays the dial list.
Connects from the dial list.
Registers, confirms, or edits the dial list.

For a private address book, the “Phone Book” button changes to the “Private Phone Book” button.

[Setup]

Confirms or modifies the setup.
Sends messages.
Resets the setup functions (only when “sonypcs” has been entered as the user name).

[Info]

Displays the connection status, line status, or other machine information.
Displays the “Cause Code.”
Displays the “Call Log” (only when “sonypcs” has been entered as the user name).

[Monitor]

Monitors a meeting being held with the PCS-G50/G50P over the Web.

Note

When Web Monitor is set to Off in the Administrator Setup menu, the “Monitor” page cannot be used.

[Streaming]

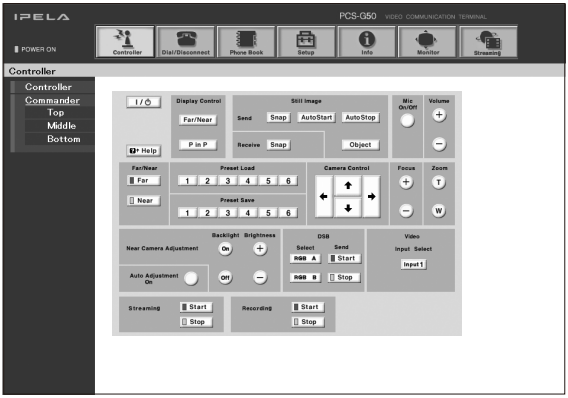
You can watch the live stream of a videoconference.

Notes

- QuickTime version 6.0 or above is needed to view a videoconference.
- When streaming is disabled in Streaming/Recording Setup, videoconferences cannot be watched. Also, if the video stream is turned off in Streaming/Recording Setup, only the audio stream of the conference is broadcast, and video cannot be watched.

How To Use “Controller”

To Control the PCS-G50/G50P From the On-Screen Controller



When you click the [Controller] button, the on-screen control panel appears. By clicking the buttons on this control panel, you can control the PCS-G50/G50P, sending still images, operating the camera, registering preset camera settings, and so on.

For example, in order to preset and load a camera setting:

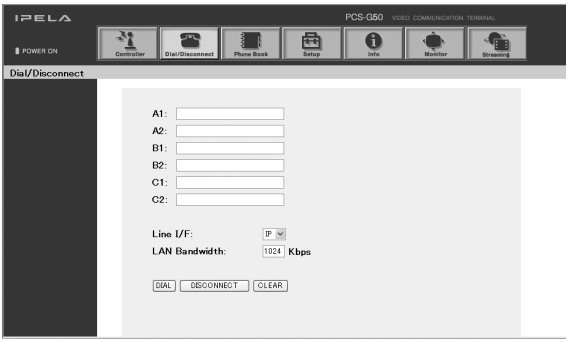
① Set the camera at the desired position using the Camera Control buttons.
② Click one of the “Preset Save” 1 to 6 buttons on the image.
③ The preset is done.
④ Click one of the “Preset Load” 1 to 6 buttons on the image to load it.

To Control the PCS-G50/G50P From the On-Screen Remote Commander

When you click Commander on the left part of the screen, the Remote Commander screen appears.

By clicking the various buttons on the Remote Commander image, you can control the unit in the same way you can when using a real Remote Commander (PCSA-RG1), operating the camera, and dialing phone numbers.

How To Use “Dial/Disconnect”



By clicking the [Dial/Disconnect] button, you can jump to the “Dial/Disconnect” page.

For Point-to-Point Videoconferences

To connect:

① Enter the telephone number(s) of a remote party into the box(es): A1 (to C2) (When using a LAN, enter an IP address or a DNS name.)
② Select the Line I/F.
③ Click the [DIAL] button.
④ The message, “Now dialing...” appears.
⑤ After the connection is made, the message, “Connect OK.” will appear, and the screen will return to the “Dial/Disconnect” page.

To disconnect:

① Click the [DISCONNECT] button.
② The message, “Now disconnecting...” appears.
③ After the disconnection is completed, the message “Disconnect OK.” will appear, and the screen will return to the “Dial/Disconnect” page.

To clear the dial number:

① Click the [CLEAR] button.
② The number(s) entered on this menu will be cleared and the screen will return to the “Dial/Disconnect” page.

For Multipoint Videoconferences

To connect:

① Select “Multipoint” for “Line I/F”.
② Enter the telephone number(s) of a remote party into the box(es) (When using a LAN, enter an IP address or a DNS name.)
③ Set the communication attributes.
④ Click the [DIAL] button.
⑤ The message, “Now dialing…” appears.
⑥ After the connection is made, the message, “Connect OK.” will appear, and the screen will return to the “Dial/Disconnect” page.

To disconnect (all remote parties at once):

① Click the [DISCONNECT] button.
② The message “Now disconnecting…” appears.
③ After the disconnection is complete, the message, “Disconnect OK.” will appear, and the screen will return to the “Dial/Disconnect” page.

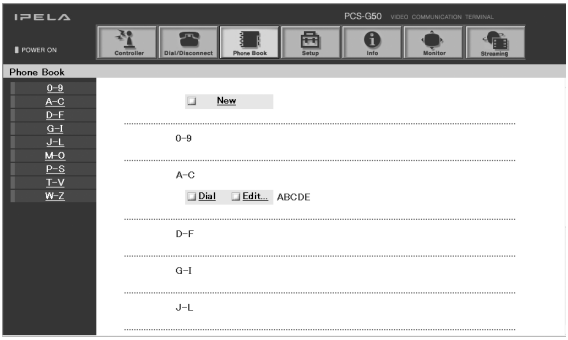
To disconnect (one party at a time):

① Click the button, (Disconnect A to E) that corresponds to the party you wish to disconnect.
② The message “Now disconnecting…” appears.
③ After the disconnection is complete, the message, “Disconnect OK.” will appear, and the screen will return to the “Dial/Disconnect” page.

To clear the dial number:

① Click the [CLEAR] button.
② The number(s) entered on this menu will be cleared and the screen will return to the “Dial/Disconnect” page.

How To Use “Phone Book”



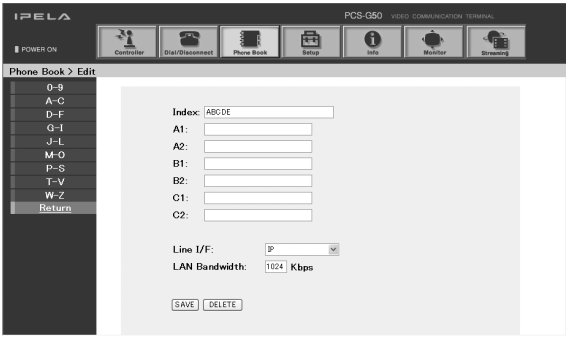
By clicking the [Phone Book] button, you can jump to the “Phone Book list” page.

To connect:

① Click ☐Dial next to the index title that you are dialing. Then, the message, “Now dialing...” will appear.

② After the connection is made, you will see the message, “Connect OK.,” and the screen will return to the list page.

“Phone Book-Edit” Page



To edit the communication attribute (only when “super” or “sonypcs” has been entered as the user name):

① Click ☐Edit... next to the index title whose communication attribute you want to edit or modify on the list page. Then, the “Phone Book-Edit” page will appear.

② Edit or modify the telephone numbers and attributes.

③ Click the [SAVE] button. After saving the changes, the screen will return to the list page.

To delete data from the Phone Book (only when “super” or “sonypcs” has been entered as the user name):

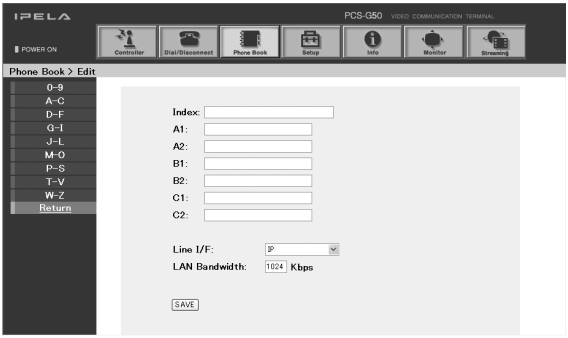
① Click ☐Edit... next to the index title whose data you want to delete on the list page. Then, the “Phone Book-Edit” page will appear.

② Click the [DELETE] button. After the deletion is complete, the list page will appear.

To return to the list page:

① Click Return on the left part of the page. The list page will appear.

“Phone Book-New” Page



To register a new point (only when “super” or “sonypcs” has been entered as the user name):

① Click ☐New on the list page.
The “Phone Book-New” page will appear.
② Enter an index title into the Index box and telephone numbers into box(es) A1 (to C2).
③ Select the Line I/F.
④ Click the [SAVE] button. After the registration is complete, the new index will be added, and the screen will return to the list page.

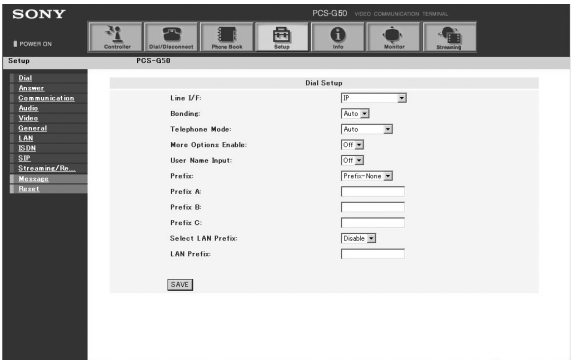
To register a new multipoint list (only when “super” or “sonypcs” has been entered as the user name):

① Click ☐New on the list page.
The “Phone Book-New” page will appear.
② Select “Multipoint” for “Line I/F”.
③ Enter an index title into the Index box and telephone numbers into box(es) A1 (to C2).
④ Set the communication attributes.
⑤ Click the [SAVE] button.
After saving is complete, the new list will be added, and the screen will return to the list page.

To return to the list page:

① Click Return on the left part of the page. The list page will appear.

How To Use “Setup”



Click the [Setup] button, and you will jump to the “Dial Setup” page.

Click Dial, Answer, Communication, Audio, Video, General, LAN, ISDN, SIP, Streaming/Recording on the left part of the screen, according to what you are setting up.

To modify the attribute (only when “sonypcs” has been entered as the user name)

① Open the page whose attributes you want to modify.
② Modify the attributes.
③ Click the [SAVE] button. After the modification is complete, the screen will return to the same page as you see in step 1.

Note

Sometimes the screen may not go back to the previous page after modifying the “LAN” page. This is not a malfunction.

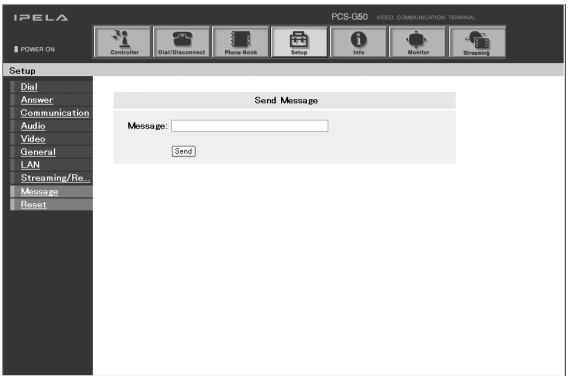
To enable More Options

① Open the “Dial Setup” page.
② Set “More Options Enable” to “On”.
③ Click the [SAVE] button. After saving is complete, the screen will return to the “Dial Setup” page.

When “More Options Enable” is set to “On”, the following settings are added to the “Dial/Disconnect” and “Phone Book” pages. For details on these settings, see “Dial Setup Menu” (page 52) and “Communication Setup Menu” (page 54).

Number of Lines: Select the number of ISDN channels
Video Mode: Select the compression format of pictures
Interlace Mode: Select whether to use interlace SIF format
4CIF Mode: Select whether to use 4CIF format
Video Frame: Select the number of video frames
Audio Mode: Select the compression format of audio
Restrict: Select the ISDN transmission rate at dialing
Prefix: Select the prefix number
Select LAN Prefix: Select whether to use the LAN prefix
Bonding: Select bonding setting
Far End Camera Control: Select whether to enable camera control
T.120 Data: Select whether to enable T.120 data conferences
H.239: Select whether you can use dual video presentation mode based on the H.239 standard

To Display the “Send Message” Page



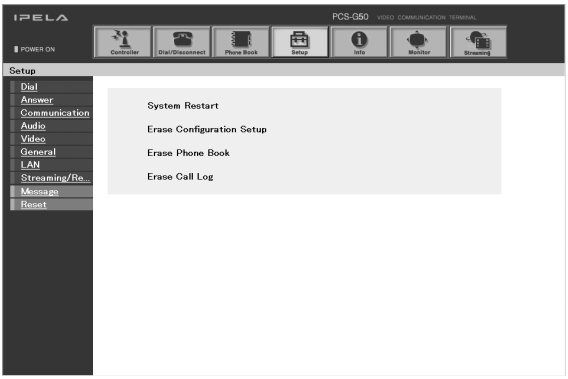
Click Message on the left side of the page.
The “Send Message” page will appear.

Enter the message you want to send into the Message box and click the [Send] button to send the message to the PCS-PG50/PG50P. After the message is sent, “message send OK.” will be displayed and the screen will return to the “Send Message” page.

Note

Messages up to 200 ASCII characters long can be sent.

To Reset the System



Click Reset on the left part of the page. The “Reset” page will appear (only when “sonypcs” has been entered as the user name).

① Click on the desired item.
A dialog box will appear.

② Click the [OK] button.

“System Restart”

Resets the PCS-PG50/PG50P.

“Erase Configuration Setup”

Returns to the factory setting values.

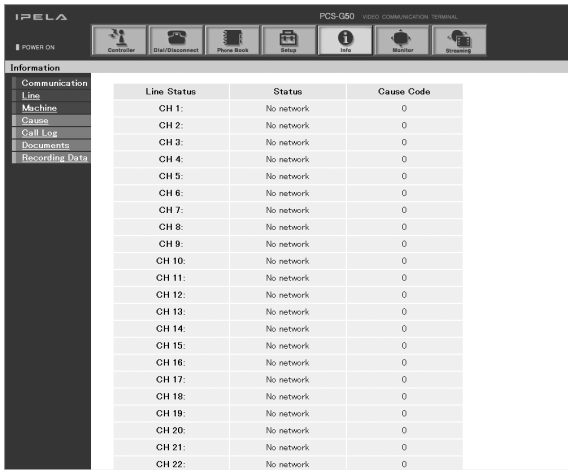
“Erase Phone Book”

Erases all information saved in the “Phone Book.”

“Erase Call Log”

Erases all information saved in the “Call Log.”

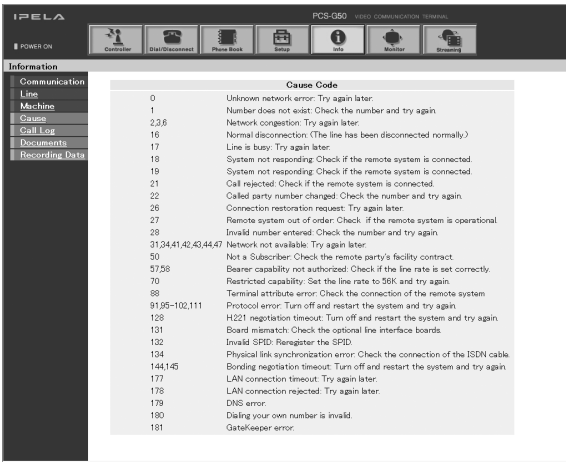
How To Use “Info”



- Click the [Info] button, and the “Information” page will appear.
- Click the [Documents] button to download the Operating Instructions (PDF format).

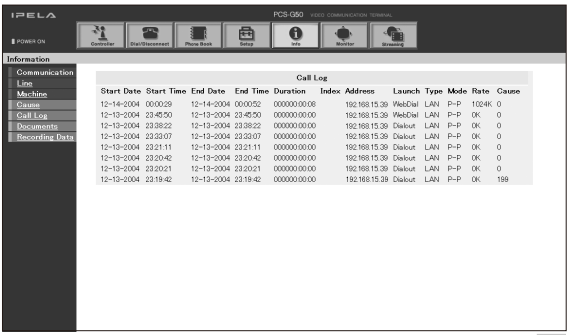
When the PCS-G50/G50P is on-line, the “Communication Status,” “Line Status,” and “Machine Information” page appears, and during otherwise, the “Line Status” and “Machine Information” page appears.

To Display the Cause Code List



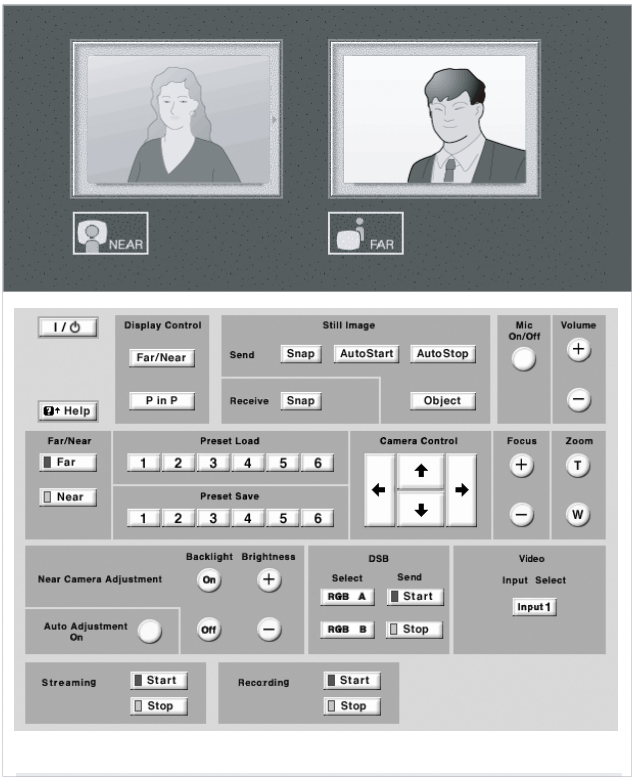
By clicking Cause on the left part of the page, you can jump to the “Cause Code” page, and see the Cause Code list.

To Display the Call Log



By clicking Call Log on the left part of the page, you can jump to the “Call Log” page (only when “sonypcs” has been entered as the user name).

Monitor a Meeting Over the Web



Click the [Monitor] button to show the monitoring window, and monitor the images from the PCS-PG50/PG50P Communication Terminal over the Web.

Notes

- When Web Monitor is set to Off in the Administrator Setup menu, the “Monitor” page cannot be used.
- Secondary video images during dual video communication do not display during Web monitoring.

Watching a Streaming Videoconference

① On the user name entry screen, enter “streaming” in the “User name” box and the Streaming Password of the terminal transmitting via streaming broadcast in the “Password” box.
The following screen appears, and all buttons except the [Streaming] button are disabled.

② Click the [Streaming] button to start the QuickTime and start watching a videoconference.

Notes

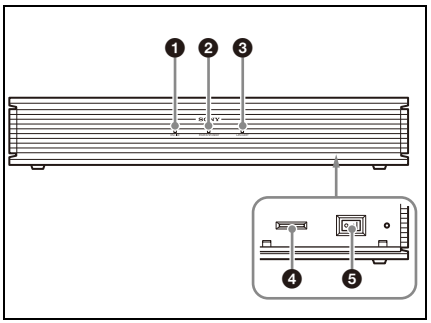
- QuickTime version 6.0 or above is needed to view a videoconference. If QuickTime is not installed on your computer, download it for free from the following Web site: http://www.apple.com/quicktime/download/
- When streaming is disabled in Streaming/Recording Setup, videoconferences cannot be watched. Also, if the video stream is turned off in Streaming/Recording Setup, only the audio stream of the conference is broadcast, and video cannot be watched.
- Depending on Web access limitations, about 10 terminals can view a streaming broadcast simultaneously. The actual number of terminals that can view the broadcast simultaneously depends on your system’s operating environment.

Appendix

Location and Function of Parts and Controls

PCS-PG50/PG50P Communication Terminal

Front



1 ON LINE indicator
Blinks during dialing or answering and lights in blue when connection is completed. It turns off when the system is disconnected.

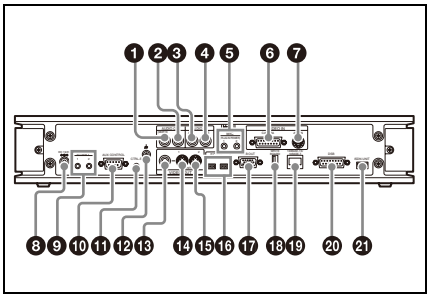
2 POWER/STANDBY indicator
Lights in green when the power switch is set to on (I). Lights in orange when the Communication Terminal is set to standby mode.

3 LAN ALERT indicator
Lights in yellow when packet error (loss) or link error occurs during communication.

4 Memory Stick slot
Insert a "Memory Stick" (not supplied) into this slot.

5 Power switch
Turns on/off the Communication Terminal. The power is on when the switch is set to the I side and off when the switch is set to the ○ side.

Rear



1 AUDIO OUT (MIXED) jack (phono jack)
Used when recording the sound to minute a conference. The mixed sounds of a local and remote parties are output from this jack.

2 AUDIO OUT jack (phono jack)
Connect to the audio input of the TV monitor.

3 AUDIO IN AUX jack (phono jack)
Connect to the audio output of the optional VCR or audio equipment.

4 AUDIO IN LINE jack (phono jack)
Used when connecting to the optional CTE-600 Communication Transducer (currently not available) or an external microphone mixer.

5 MIC1/MIC2 (PLUG IN POWER) jacks (minijack)
Connect to the optional PCS-A1 or PCSA-A3 microphone. Power is supplied to the microphone from the Communication Terminal.

6 VIDEO IN CAMERA connector
Connect to the TERMINAL connector on the rear of the Camera.

❼ VIDEO IN AUX IN connector (mini DIN 4-pin)
Connect to the video output of external video equipment.

❽ DC 19.5V jack
Connect the supplied VGP-AC19V15 or PCS-AC19V6 AC power adaptor.

❾ IR OUT 1/2 jacks
Connect the supplied IR repeater. Connect the IR repeater for the monitor connected to the VIDEO OUT MONITOR MAIN connector to the IR OUT 1 jack, and the IR repeater for the monitor connected to the VIDEO OUT MONITOR SUB connector to the IR OUT 2 jack.

❿ AUX CONTROL connector (D-sub 9-pin)
Used for maintenance service.

⓫ CTRL-S jack (minijack)
Connect to the supplied Remote Commander Signal Receptor.
The remote sensor of the Camera Unit does not operate when this connector is in use.

⓬ ⏚ (ground) terminal
Connect a ground wire.

⓭ VIDEO OUT AUX jack (phono jack)
Connect to the video input of the TV monitor or VCR.

⓮ VIDEO OUT MONITOR 1 connector (mini DIN 4-pin)
Connect to the S-video input on the TV monitor or VCR.

⓯ VIDEO OUT MONITOR 2 connector (mini DIN 4-pin)
Connect to the S-video input on the second TV monitor when the system uses the dual monitor mode.

⓰ EC-MIC jacks (1, 2)
Connect to an optional PCSA-A7 Microphone.

⓱ RGB OUT connector (D-sub 15-pin)
Connect to the RGB input of the optional projector or display unit.

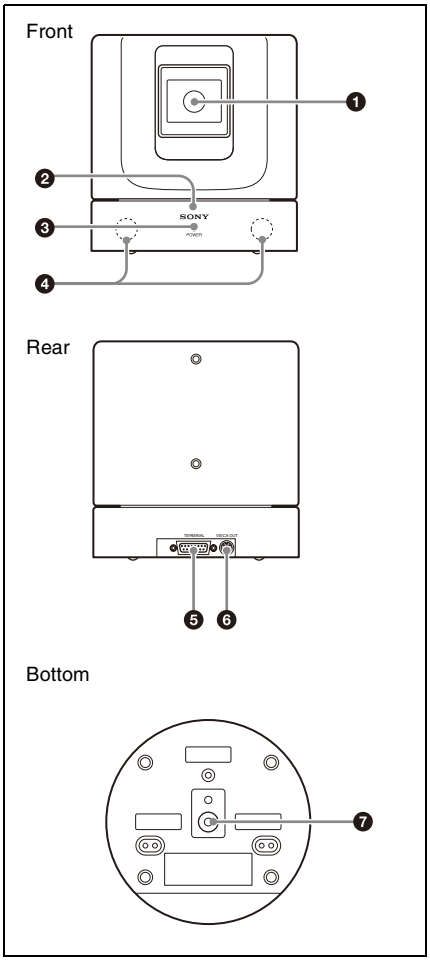
⓲ WHITE BOARD connector
Connect to the optional mimio Xi.

⓳ 100BASE-TX/10BASE-T connector (8-pin modular)
Used to conduct a conference via a LAN or an SIP. Connect to a hub or an SIP server using the category 5 cable.

⓴ DSB connector (D-sub 15-pin)
Connect to the TERMINAL connector on the optional PCSA-DSB1S Data Solution Box.

㉑ ISDN UNIT connector
Connect to the TERMINAL connector on the optional ISDN Unit such as PCSA-B384S, PCSA-B768S and PCSA-PRI.

PCSA-CG70/CG70P Camera Unit



❶ Lens

❷ Remote sensor

Point the Remote Commander to the sensor when operating this system.

❸ POWER indicator (green)

Lights when the power switch on the Communication Terminal is set to on and goes out when it is set to off or the terminal is set to standby mode.

❹ Infrared sensor

Receives the infrared wireless signal from the optional PCS-DS150/DS150P Document Stand (currently not available). The received signal is used as IR input.

❺ TERMINAL connector

Connect to the CAMERA UNIT connector on the Communication Terminal.

❻ VISCA OUT connector

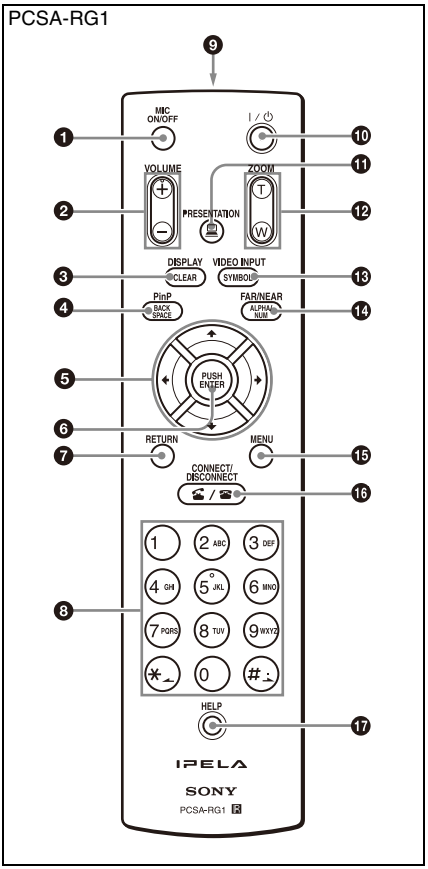
❼ Tripod hole

Use to attach the camera on a tripod.

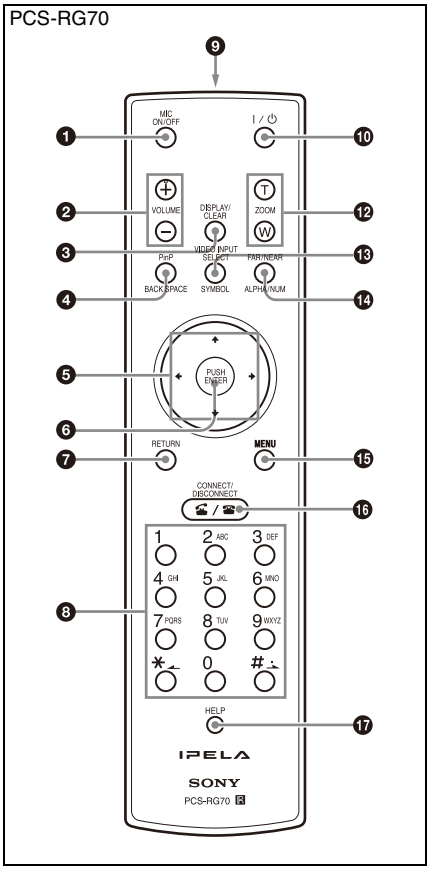
For details on the tripod screw, see "Attaching the PCSA-CG70/CG70P Camera Unit to a Tripod" on page 30.

PCSA-RG1 or PCS-RG70 Remote Commander

PCSA-RG1



PCS-RG70



You can set for a beep not to sound by pressing the button on the Remote Commander with the Audio Setup menu.

For the setting, see "Audio Setup Menu" on page 59.

❶ MIC ON/OFF button

Turns off the local sound to be sent to a remote party. To restore the sound, press the button again.

❷ **VOLUME +/– buttons**

Adjusts the volume of the sound received from a remote party.
+: to increase the volume
–: to decrease the volume

❸ **DISPLAY (CLEAR) button**

Switches the picture displayed on the monitor screen.
Deletes a line when used for character input.

❹ **PinP (BACK SPACE) button**

Displays a window picture when pressed during communication.
Each time you press this button, the location of the window picture changes.
Pressing the button displays the picture in full screen while the Camera menu opens.
When used for character input, deletes the character you entered last.

❺ **Arrow buttons (↑/↓/←/→)**

Used to select the menu or make various settings in the menu. Also used for camera angle adjustment.

❻ **PUSH ENTER button**

Executes the selection or setting in the menu and goes to the next layer.

❼ **RETURN button**

Used to return to the previous layer in the menu.

❽ **Number (0-9, #, *) buttons**

Used to enter the letters or numbers of a telephone number, etc.
Used for focus, brightness and backlight compensation adjustments.

❾ **Battery compartment (rear)**

Insert two size AA (R6) batteries. (PCSA-RG1)
Insert two size AAA (R03) batteries. (PCS-RG70)

❿ **I/⏻ (power on/off) button**

Sets the Communication Terminal to standby mode when it is turned on.
Turns on the Communication Terminal when it is in standby.

⓫ **PRESENTATION button**

Starts or stops transmission of presentation data. (only on the PCSA-RG1)

⓬ **ZOOM (T/W) buttons**

Zooms in or out.
T: to enlarge the picture
W: to reduce the picture

⓭ **VIDEO INPUT SELECT (SYMBOL) button**

Selects the video input signal. Each time you press the button, the input signal switches.
Used to enter a symbol for character input.

⓮ **FAR/NEAR (ALPHA/NUM) button**

Switches the picture on a local or remote site.
Switches the input mode between alphabets and numbers for character input.

⓯ **MENU button**

Used to display a menu.

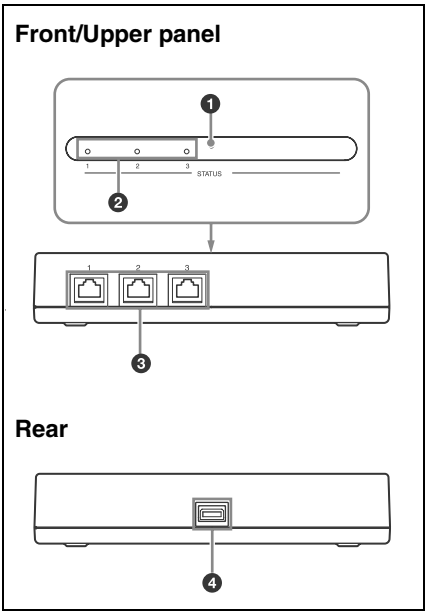
⓰ **CONNECT/DISCONNECT (☎ / ☎) button**

Used to connect or disconnect a remote party for a conference.

⓱ **HELP button**

Used to show the help guide.

PCSA-B384S ISDN Unit (Optional)



❶ POWER indicator

Lights in orange when power is supplied to the ISDN Unit. When initializing is complete, blinks in green.

❷ STATUS 1-3 indicators

Lights in orange when link synchronization of each ISDN connector is established. Lights in yellow when each ISDN line is connected.

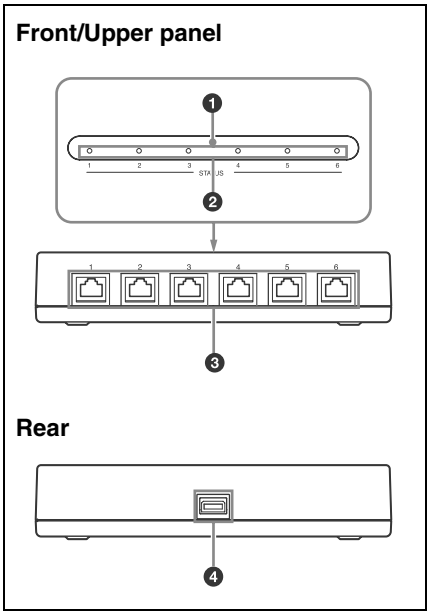
❸ ISDN 1-3 terminals (8-pin modular jack)

Connect to the ISDN lines using the ISDN modular cable.

❹ TERMINAL connector

Connect to the ISDN UNIT connector on the Communication Terminal with the interface cable supplied with the ISDN Unit.

PCSA-B768S ISDN Unit (Optional)



❶ POWER indicator

Lights in orange when power is supplied to the ISDN Unit. When initializing is complete, blinks in green.

❷ STATUS 1-6 indicators

Lights in orange when link synchronization of each ISDN connector is established. Lights in yellow when each ISDN line is connected.

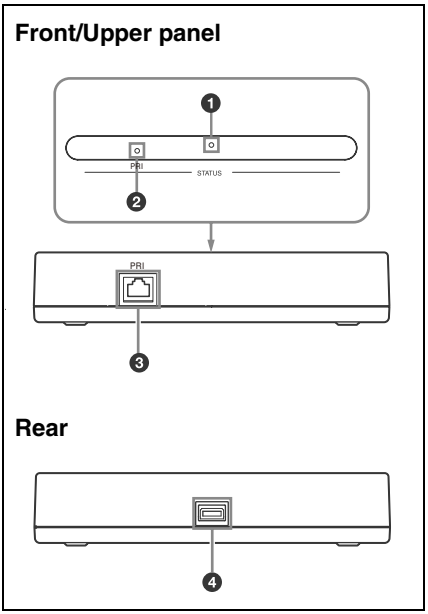
❸ ISDN 1-6 terminals (8-pin modular jack)

Connect to the ISDN lines using the ISDN modular cable.

❹ TERMINAL connector

Connect to the ISDN UNIT connector on the Communication Terminal with the interface cable supplied with the ISDN Unit

PCSA-PRI ISDN Unit (Optional)



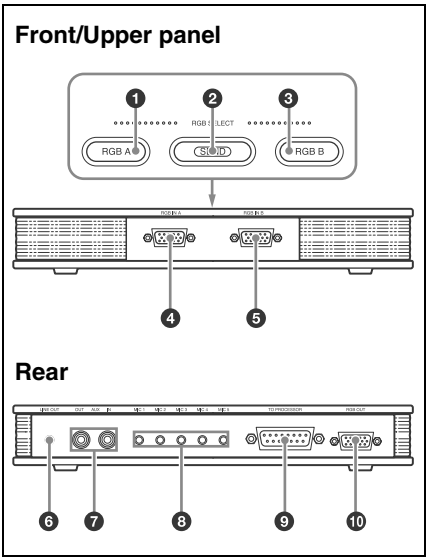
❶ POWER indicators
Lights in orange when power is supplied to the ISDN Unit. When initializing is complete, blinks in green.

❷ STATUS PRI indicator
Lights in orange when link synchronization of the ISDN connector is established. Lights in yellow when each ISDN line is connected.

❸ ISDN PRI terminal (8-pin modular jack)
Connect to the ISDN line using the ISDN modular cable.

❹ TERMINAL connector
Connect to the ISDN UNIT connector on the Communication Terminal with the interface cable supplied with the ISDN Unit.

PCSA-DSB1S Data Solution Box (Optional)



❶ RGB A input select button and indicator
Selects the video input from the video equipment connected to the RGB IN A connector.

❷ SEND button and indicator
Sends the selected input picture to the Communication Terminal.

❸ RGB B input select button and indicator
Selects the video input from the video equipment connected to the RGB IN B connector.

❹ RGB IN A connector (D-sub 15-pin)
Connects to the RGB output connector on a computer, etc.

❺ RGB IN B connector (D-sub 15-pin)
Connect to the RGB output connector on a computer, etc.

❻ LINE OUT jack (stereo minijack)

Connect to the audio input jack on the active speaker, etc.
Outputs monaural sound.

❼ AUX IN/OUT jacks (phono jack)

Connects to the optional CTE-600 Communication Transducer (currently not available).

❽ MIC 1–MIC 5 jacks (minijack)

Connect to the optional PCS-A1 or PCSA-A3 microphone.

❾ TO PROCESSOR connector (D-sub 15-pin)

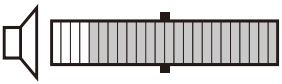
Connect to the DSB connector on the Communication Terminal using the interface cable supplied with the Data Solution Box.

❿ RGB OUT connector (D-sub 15-pin)

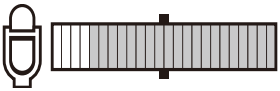
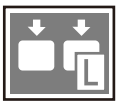
Outputs the video signal to a projector, TV monitor, etc.

Indicators

The following icons appear on the monitor depending on the functions being used.

Indicator	Name	Description
	Far camera control	Remote camera being controlled
	Chair Control	Appears when the local system holds the chair control during a multipoint videoconference via an external MCU
	Mic Off	Appears when the local microphone is turned off both during and outside of communication
	Data conference On	Appears when the T.120 data conference is available during communication
	Still image transmission	Sending still image
	Still image reception	Receiving still image
	Broadcast (local)	Video being broadcast during multipoint videoconference
	Broadcast (A to E)	Video being broadcast by the terminal (A to E) during multipoint videoconference
	Volume	Volume of remote party's voice being adjusted
	Brightness adjustment	Appears during brightness adjustment using the Camera menu

Indicator	Name	Description
 	Focus adjustment	Camera focus being adjusted automatically
	Automatic camera adjustment	Camera focus and brightness being adjusted automatically
 	Backlight On/Off	Backlight compensation function activated/deactivated
	Voice Activate mode	Voice detection function activated in broadcasting mode
 	Input Mode	Input mode currently selected
	Slide Show	Images being shown in slide show mode
	Packet Loss	Packet loss now occurring
	RGB transmission/ reception	PC images being sent or received
	Whiteboard transmission/ reception	White board data being sent or received
	Proprietary Encryption	Videoconference being held with proprietary encryption
	Standard Encryption	Videoconference being held with standard encryption

Indicator	Name	Description
	Preset Load	Appears when the preset camera setting is recalled during communication
	Audio input level	Voice input level display
	Dual video reception in H.239 Presentation	Receiving dual video in H.239 Presentation
	Dual video reception in H.239 Live	Receiving dual video in H.239 Live
	Streaming	Streaming broadcast in progress
	Recording	Recording in progress

On-Screen Messages

Check the following if a message appears on the TV monitor when operating the Communication Terminal.

Message		Meaning
Incorrect dialing setup.		Make sure the selected entry is correctly registered.
CANNOT COMPLETE CONNECTION (The following code and message appear.)		—
0	Unknown network error:	Try again later.
1	Number does not exist:	Check the number and try again.
2,3,6	Network congestion:	Try again later.
16	Normal disconnection:	(The line has been disconnected normally.)
17	Line is busy:	Try again later.
18,19	System not responding:	Check if the remote system is connected.
20	No such subscriber	Confirm the site number.
21	Call rejected:	Check if the remote system is connected.
22	Called party number changed:	Check the number and try again.
26	Connection restoration request:	Try again later.
27	Remote system out of order:	Check if the remote system is operational.
28	Invalid number entered:	Check the number and try again.
31, 34, 41 – 44, 47	Network not available:	Try again later.
50	Not a Subscriber:	Check the remote party's facility contract.
57,58	Bearer capability not authorized:	Check if "Restrict" is set correctly.
70	Restricted capability:	Set "Restrict" to "56K" and try again.
88	Terminal attribute error:	Check the connection of the remote system.
91, 95 – 102, 111	Protocol error:	Turn off and restart the system and try again.
128	H.221 negotiation timeout:	Turn off and restart the system and try again.
132	Invalid SPID:	Reregister the SPID.
134	Physical link synchronization error:	Check the connection of the ISDN cable.
144, 145	Bonding negotiation timeout:	Turn off and restart the system and try again.
177	LAN connection timeout:	Try again later.
178	LAN connection rejected:	Try again later.
179	DNS error:	Please check DNS.

Message	Meaning
180 Dialing your own number is invalid.	Please check the IP address of the remote party.
181 GateKeeper error.	Please check the IP address of the remote party.
Busy line - Connection not possible.	The telephone line of the remote party is busy and cannot be connected.
Far end inactive	The remote party operates the menu, and the still picture cannot be sent.
System not responding.	Check if the remote system is connected.
Close this menu to connect line	Close the menu when starting a conference.
Cannot establish all connections	Check the telephone number of the remote party.
Connection time out.	Wait for a while and then try dialing again.
Communication error	Wait for a while and then try dialing again.
Configuration error	Wait for a while and then try dialing again.
MCU operation rejected.	The function is not available when external MCU is connected.
Corrupted data stream-Terminating connection.	A signal error occurred. The line connections are compelled to be disconnected.
Memory full	The memory capacity of the “Memory Stick” is full.
Input title	Input an index title.
Operation disabled	—
Wrong password	The password is not correct. Enter the correct password.
01H LAN configuration error (IP address)	The IP address is not proper.
02H LAN configuration error (Netmask)	The netmask is not proper.
03H LAN configuration error (MAC address)	The MAC address is not proper.
04H LAN configuration error (DHCP error)	The IP address and netmask cannot be obtained.
05H Gatekeeper registration error	The setting of the Gatekeeper is not proper.
06H SNMP error	SNMP is not set properly.
LAN configuration error (Gatekeeper)	The setting of the Gatekeeper is not proper.
LAN configuration error (SNMP error)	The setting of the SNMP is not proper.
LAN configuration error	The settings in the LAN Setup menu are not proper.
Memory Stick error.	The format of the “Memory Stick” is wrong.
General error.	–

Message	Meaning
No Memory Stick.	Insert a “Memory Stick”.
Memory Stick write-protected.	Release the lock of the erasure prevention switch on the “Memory Stick”.
Memory full.	The data has been saved in the “Memory Stick” to its full capacity.
Memory Stick file error.	The file format of the “Memory Stick” is incorrect or abnormal.
Memory Stick file decode error.	Decoding the JPEG file has failed.
Memory Stick size error.	The file size of the “Memory Stick” is not acceptable.
There are no images recorded in the Memory Stick.	No images are recorded in the “Memory Stick”.
File error.	There is an abnormality in the file.
File size error.	The file size is not acceptable.
File decode error.	Decoding the JPEG file has failed.
Format error.	The “Memory Stick” cannot be formatted.
Settings cannot be changed during communication.	Change the setting after disconnecting the system.
The still images were not sent.	Transmission of the still images has failed.
The presentation screen can not be sent.	Transmission of the RGB data from the Data Solution Box has failed.
Multipoint connection to this participant was not made.	Multipoint connection with this party is not available.
The LAN cannot be used.	You cannot use the LAN connection.
The DATA SOLUTION BOX cannot be used.	You cannot use the Data Solution Box connected.
Unknown device is connected.	An unacceptable device is connected to the WHITE BOARD connector.
ISDN UNIT is not available.	Communication with the ISDN unit cannot be made.
No more cascade connections are enabled.	Installing the MCU software into three or more Communication Terminals does not allow cascade connection.
Cascade connection via ISDN is not available.	You cannot use cascade connection when your system is connected via ISDN.
Cannot send RGB data while receiving.	While you are receiving an RGB picture from another terminal, you cannot send an RGB picture from equipment connected to the Data Solution Box.
A still image is being sent or received. The Data Solution Box is not usable.	While you are sending or receiving a still image, you cannot send or receive the RGB picture via the Data Solution Box.

Message	Meaning
Connection with the Data Solution Box is not correct. Please reset the system.	Connection between the Communication Terminal and the Data Solution Box is not correct. Turn off the Communication Terminal, then turn it on again.
Fan in the Data Solution Box does not work properly. The Data Solution Box is not usable.	The fan equipped with the Data Solution Box is not working properly. You cannot use the Data Solution Box.
The Whiteboard cannot be used.	A videoconference with the whiteboard can be held only when the remote party uses the PCS-G50/G50P, PCS-G70/G70P, PCS-1/1P, PCS-11/11P, PCS-TL50, or PCS-TL30.
Battery in the stylus could be weak. Replace the battery.	The battery in the stylus for the whiteboard is low. Replace the battery in the stylus with a new one.
The far-end system is not compatible with the encryption feature.	When conducting an encrypted videoconference, you cannot connect to the system that is not compatible with the encryption feature.
The encryption feature on a far-end system is disabled.	When conducting an encrypted videoconference, you cannot connect to the system if the encryption feature is deactivated.
The encryption feature on a far-end system is enabled.	When conducting a daily conference, you cannot connect to the system if the encryption feature is activated.
The entered password for the encryption feature is not correct.	Enter the correct password.
The encrypted videoconference is not available if any terminal is connected via ISDN.	While conducting a videoconference via an ISDN connection, you cannot connect to any terminal via LAN connection if “Proprietary encryption” is being used.
At least thirteen characters are required as a password for the encryption feature.	You have to enter 13 to 20 characters, numbers or symbols as the password required for conduct of an encrypted videoconference.
PPPoE connection has failed.	LAN connection has failed. Check the PPPoE setting.
PPPoE server admission has failed.	Access to a network is not admitted by the PPPoE server.
Connection to the PPPoE server fails.	Check the DNS server setting.
Communication via LAN is not available. Check the LAN cable.	The connection to a LAN cannot be made. Check the LAN cable.
An IP address is not obtained via DHCP.	Check the DHCP setting.
Please dial by entering the IP address.	Be sure to enter the IP address of the remote party when dialing.
Reference to DNS has failed.	The LAN connection has failed as you entered the user name when using the domain name server. Enter the IP address.
Some trouble occurs during connection. Connection has failed.	Try to connect again.

Message	Meaning
Check the information registered to the gatekeeper.	When you use the gatekeeper mode, the registered information on gatekeeper appears in page 2/2 of the LAN Setup menu.
Connection has been rejected as the data exceeds the bandwidth of a gatekeeper.	Connection has failed as the data exceeds the bandwidth of a gatekeeper.
Gatekeeper does not respond.	Check the gatekeeper setting.
The ISDN Unit is not connected.	The ISDN Unit is not connected.
The ISDN line is invalid. Check the ISDN connection.	Check the ISDN connection.
ISDN lines are not connected correctly.	Check the ISDN connection.
Check the ISDN configuration.	Check the settings in the ISDN Setup menu.
A telephone number of a remote party has not been entered.	Enter the telephone number of the remote party.
The entered telephone number of a remote party is not correct.	Enter the correct telephone number of the remote party.
Problems connecting to a router or an ISDN connection.	The ISDN connection has not been made. There may be some problem in a router or in the ISDN connection on the remote party.
Line is busy. Try to dial again later.	Line is busy. Wait for a while and try dialing again.
A line has not been completely connected. The far-end videoconferencing system did not respond to our calling.	The videoconferencing system does not respond to the calling, and the connection has failed.
The terminal with the specified IP address does not exist, or the system is turned off.	The connection to the remote party cannot be made. You may specify a different IP address from that of the terminal or the system of the remote party is turned off.
Connection rejected.	The connection to the remote party has failed.
Call not responded.	The remote party does not respond to your calling.
H.245 Error.	Error occurs while connecting to the multiple points via LAN.
The remote terminal may not be compatible with the bonding function.	The bonding function may not be used. The remote terminal may not be equipped with this function.
The ISDN telephone number of the local party is not correctly set. Set it correctly.	Set your ISDN telephone number correctly.
The ISDN telephone number of the far-end party may be configured incorrectly.	The ISDN telephone number of the remote party may not be set correctly.
xB connection is available.	Connection has been made via xB. More channel connection than xB is not available.
PPPoE server admission has failed. Check the PPPoE User Name and Password are entered correctly.	LAN connection using PPPoE has failed. Enter the correct user name and password.

Message	Meaning
LAN configuration error. Fixed IP for PPPoE is set to On. Check the Fixed IP for PPPoE is entered correctly.	This system is set to use a fixed IP for a PPPoE connection. Enter the Fixed IP for PPPoE correctly in the LAN Setup menu.
PPPoE server admission fails. Dial again after confirmation of the PPPoE settings.	Check the PPPoE settings are complete in the LAN Setup menu, then try to dial again.
Access to the DNS server has failed. Check the PPPoE DNS settings.	Check that the PPPoE DNS settings in the LAN Setup menu are correct.
Connection to the remote party via DNS disabled. Dial using IP address.	Enter the IP address of the remote party when dialing.
Now obtaining an IP address via DHCP.	The IP address of your system is assigned automatically by the DHCP server.
LAN configuration error. Unauthorized IP address is set.	The set IP address cannot be used. Set the correct IP address again.
LAN configuration error. Unauthorized network mask is set.	The set network mask cannot be used. Set the correct network mask again.
Cannot access the DNS server. Use the IP address to dial.	Connection to the remote party using the domain name cannot be made. Enter the IP address of the remote party for dialing.
Configure the DNS address or use the IP address to dial.	Set the DNS address or enter the IP address of the remote party for dialing.
Check the user name or user number for dialing is correct.	Enter the user name or user number of the remote party correctly.
The remote terminal may not be registered in gatekeeper. Contact the gatekeeper administrator.	Contact the gatekeeper administrator for registration status of the remote party in gatekeeper.
Gatekeeper does not respond. Contact the gatekeeper administrator, or use the IP address to dial.	Connection using the user name and user number has failed. Contact the gatekeeper administrator, or dial using the IP address.
LAN configuration error. Gatekeeper Mode is set to On. Enter the gatekeeper address.	LAN connection is set to use the gatekeeper. Enter the gatekeeper address.
LAN configuration error. NAT Mode is set to On. Check the NAT address.	LAN connection is set to use NAT. Check the NAT address in the LAN Setup menu.
LAN configuration error. Unauthorized NAT address is specified. Check the NAT address.	The set NAT address cannot be used. Enter the correct NAT address in the LAN Setup menu.
LAN configuration error. Different address from NAT machines is specified. Check the NAT address.	Enter the correct NAT address in the LAN Setup menu.
LAN configuration error. Connection is not complete as the port number overlaps.	Check the TCP and UDP port numbers in the LAN Setup menu.
LAN configuration error. Connection is not complete as an invalid port number is specified.	Check the TCP and UDP port numbers in the LAN Setup menu.
Line is busy. Try to dial again later.	Connection has filed as the line is busy. Try to dial again later.

Message	Meaning
Local number is not set correctly in the ISDN Setup menu. Set it correctly. Line connected with xB (xxK).	ISDN line has been connected with xB (xxK) channel. Set the local numbers correctly in the ISDN Setup menu.
Local number setting for ISDN configuration may not be correct in the remote party. Line connected with xB (xxK).	ISDN line has been connected with xB (xxK) channel. The local numbers may not be correctly set in the remote party.
H.221 negotiation timeout. Restart the system and connect again.	Turn off your system, turn it on and try to dial again.
Dialing the same address is invalid.	You are calling the same party.
The ISDN lines fully occupied. Check Number of Lines in the Multipoint Setup menu, or check whether the ISDN cable is disconnected.	Check the number of ISDN lines is correctly set in the Multipoint Setup menu, or check the ISDN cable connection.
Regarded as a secondary terminal as the number of lines for ISDN configuration is different.	Some functions may be limited as your system is regarded as secondary terminal.
Check the line interface or the IP address is set correctly.	Select the line interface correctly or enter the correct IP address.
Dial setup error. No prefix number is entered.	The prefix is not registered in the Dial Setup menu.
Dial setup error. No prefix number for LAN is entered.	The prefix is not registered in the Dial Setup menu.
LAN configuration error. PPPoE is set to On. Check the PPPoE User Name and Password.	PPPoE is set for LAN connection. Configuration of the user name and password is required.
LAN configuration error. IP Precedence exceeds the maximum value.	Set the IP Precedence value between 0 and 7 in the LAN Setup menu.
LAN configuration error. Diffserve exceeds the maximum value.	Set the Diffserve value between 0 and 64 in the LAN Setup menu.
Connection using SIP is not available. Parameter error.	Connection using SIP cannot be made as the SIP configuration is not correct. Check the settings in the SIP Setup menu.
Connection using SIP is not available. System call error.	Connection using SIP cannot be made as this System has a problem.
Connection using SIP is not available. Memory over.	Connection using SIP cannot be made as the memory of this system is fully occupied.
Connection using SIP is not available. Initialization error.	Connection using SIP cannot be made as the initialization has failed. Check the setting.
Connection using SIP is not available. Unauthorized handle.	Connection using SIP cannot be made due to internal error.
Connection using SIP is not available. Maximum sessions over.	Connection using SIP cannot be made as the number of sites connected has been exceeded.
Connection using SIP is not available. Server internal error.	Connection using SIP cannot be made due to internal error of the SIP server.

Message	Meaning
Connection using SIP is not available. Provisional response timeout.	Connection using SIP cannot be made as there is no response from the remote party for a certain period of time.
Connection using SIP is not available. Request timeout.	Connection using SIP cannot be made as there is no response to our call from the remote party for a certain period of time.
Connection using SIP is not available. 4xx response received.	Connection using SIP cannot be made as, for example, the remote party uses a media that is not supported by this System.
Connection using SIP is not available. 5xx response received.	Connection using SIP cannot be made as an error occurs in the SIP server, etc. Check the SIP server.
Connection using SIP is not available. 6xx response received.	Connection using SIP cannot be made as, for example, the remote party cannot be found. Check the address of the remote party.
Connection using SIP is not available. Undefined error.	Connection using SIP cannot be made as unexpected error occurs.
Connection using SIP is not available. Unauthorized status.	Connection using SIP cannot be made as unexpected error occurs.
Connection using SIP is not available. Cancelled by the remote site.	Connection using SIP is not possible as the remote party has been made a call, then cancelled.
Connection using SIP is not available. Disconnected by the remote site.	Connection using SIP cannot be made as the remote party cancels your call.
Connection using SIP is not available. Rejection received.	Connection using SIP cannot be made as the remote party rejects your call.
Connection using SIP is not available. Network error.	Connection using SIP cannot be made due to network problem. Check the network status.
Connection using SIP is not available. Encrypted conference not available.	Connection using SIP cannot be made if encryption feature is enabled. Set Encryption to Off.
Connection using SIP is not available. Line is busy.	Connection using SIP cannot be made as the remote party has been connected to another.
Transferring via a line interface other than SIP is not available.	Transfer cannot be made through line interfaces other than SIP.
Current call has been transferred.	The current call has been transferred.
Call will be transferred upon disconnection.	Call will be transferred once you disconnect.
Remote party of the transfer destination disconnected.	The remote party of the transfer destination disconnected.
Remote party of the current call to be transferred disconnected.	The remote party of the current call to be transferred disconnected.
The held call has been resumed.	Hold has been canceled and the held call resumes.
The operation is not available as some line is in the hold mode.	Operation unavailable as there is a line in hold mode.
Cascade connection via SIP is not available.	You cannot use a cascade connection using SIP.

Message	Meaning
The line has disconnected as you failed in putting the call on hold.	The line has disconnected due to failure in putting the call on hold.
Settings cannot be changed during recording.	Change the setting after recording ends.
Settings cannot be changed during a streaming broadcast.	Change the setting after the streaming broadcast ends.
The search failed.	The search has failed.
Starts a conference. (The encryption feature is enabled.)	The conference starts with the encryption feature enabled.
Starts a conference. (The encryption feature is disabled.)	The conference starts with the encryption feature disabled.
The conference could not start because the encryption feature at the near-end side was disabled.	Enable the encryption feature.
The conference could not start because the encryption feature at the far-end side was disabled.	Have the far-end side enable their encryption feature.
The conference could not start because the encryption protocol at the near-end side differed from that of the far-end side.	Select the same encryption protocol as the far-end side.
The standard encryption videoconference with SIP connection is not available.	Change connection methods, or switch to proprietary encryption.
The proprietary encryption videoconference with ISDN connection is not available.	Change connection methods, or switch to standard encryption.
The system is connecting to a LAN via PPPoE.	The Video Communication System is connecting to a LAN using PPPoE.
Connection with the selected line interface is not available in the current communication mode.	Check the current communication mode.
Disconnected because reception of packets from the far-end side has stopped.	Packets were not received properly.
Cannot connect because the network camera is set to JPEG mode. Change the network camera setting.	When connecting to network cameras as a user (user level privileges), you cannot connect to cameras set to operating modes that are not supported by the system. Change the appropriate settings on the network camera.
Cannot connect because the image size for the network camera is set to VGA. Change the network camera setting.	When connecting to network cameras as a user (user level privileges), you cannot connect to cameras set to image sizes that are not supported by the system. Change the appropriate settings on the network camera.
Cannot connect due to incorrect user name or password.	Connection could not be made because the user name and password set on the system do not match the user name and password on the network camera. Change the appropriate settings.

Message	Meaning
Cannot connect because the IP address or HTTP port number of the connecting point is incorrect.	Connection could not be made because the IP address or HTTP port number set on the system does not match the IP address or HTTP port number of the network camera. Change the appropriate settings.
Cannot connect because the multicast transmission setting for the network camera is disabled.	Connection could not be made because the multicast transmission setting on the network camera is disabled. Enable the multicast transmission setting on the network camera.

The following messages indicate the state of the system. No action is required.

Message	Meaning
Meeting starts!	Connection with the remote party has been completed, and you can now start a conference.
Starting connection.	After receiving a call from the remote party the system starts connecting.
Meeting ends.	Operations for ending the conference have been completed.
Please wait.	The data is being saved.
Installation completed.	Installing the software is completed.
The still image has been sent.	A still picture has been transmitted to the remote party.
Still image transmission cancelled.	Transmission of a still image has been cancelled.
Preset 1 (–6) selected.	The camera angle and zoom setting has been changed to that registered in Preset number 1 (–6).
Still image saved to Memory Stick.	The still image has been saved to the “Memory Stick”.
Registered to Preset number 1 (–6).	The camera angle and zoom setting has been registered in Preset number 1 (–6).
Terminal A (or B, C, D, E) has disconnected.	During a multipoint videoconference the remote party A (or B, C, D, E) has been disconnected.
Site A (or B, C, D, E) has disconnected.	During a multipoint videoconference the remote party A (or B, C, D, E) has ended the conference.
The still image from the object input has been transmitted.	The still image input from the Document Stand (currently not available) has been transmitted.
The slide show is over.	The slide show has been ended.
The 1st (–5th) position has been selected.	The terminal on the 1st (–5th) site for a multipoint videoconference has been selected from the Phone Book.
The terminal participated in the conference.	The remote party of the displayed terminal participates in the multipoint videoconference.
The terminal has dropped out of the conference.	The displayed terminal ends the multipoint videoconference.

Message	Meaning
Viewing the terminal. [Terminal name]	The picture of the displayed terminal can be seen on the screen.
Now upgrading. Wait for a while. Be sure not to turn off your system while upgrading.	The software is now upgrading. Be sure not to turn off the Communication Terminal until the upgrading is complete. Doing so may cause malfunction of the system.
Cascade connection is complete.	Cascade connection with the terminals has been completed.
Cascade connection has been made. Split mode is not available.	Cascade connection with the terminals has been made. You cannot display split windows.
Use of the Private Phone Book is available.	The “Memory Stick” in which the Private Phone Book is registered has been inserted into the Communication Terminal. You can use the Private Phone Book.
Use of the Private Phone Book is not available.	The “Memory Stick” in which the Private Phone Book is registered has been removed from the Communication Terminal. You cannot use the Private Phone Book.

Troubleshooting

If the Communication Terminal does not function correctly, check the following.

Symptom	Cause	Solution
The power is not turned on.	The power switch is not set to on.	Set the power switch to on (I) (page 35).
	The batteries in the Remote Commander are low or dead.	Replace the batteries with new ones (page 32).
No sound or the volume is very low.	The volume of the system is too low.	Adjust the sound volume by pressing the VOLUME +/– buttons on the Remote Commander (page 39).
	The volume of the TV monitor is too low.	Adjust the volume of the TV monitor.
	The microphone on the remote party is turned off.	Ask the remote party to turn on the microphone.
	“Mic Select” is not set properly.	Set up “Mic Select” properly according to the microphone to be used (page 59).
	Audio input is not selected properly.	Set up “Input Select” properly (page 59).
	The microphone or external equipment is not connected correctly.	Check the connection (pages 162, 171 and 183).
Picture is blurred.	Manual focus is selected but picture remains blurred.	Adjust the focus (page 121).
	When auto focus is selected, the background is too bright, contrast is too high, or the background or the participants’ clothes contain fine line patterns.	Select manual focus and adjust manually (page 122).
No picture.	The selected picture source is not tuned on.	Turn on the selected video equipment.
	Video input is not selected properly.	Select the video input with the VIDEO INPUT SELECT button (page 130).
	The selected picture source is not correctly connected to the system.	Check the connections (page 171).
	A voice meeting is held.	This is not a malfunction.
	Movement of the camera is prevented.	Turn off the Communication Terminal, then turn it on again.

Symptom	Cause	Solution
No connection.	Wrong number was dialed.	Check the entered number.
	The setting of “Line I/F” is not correct.	Set “Line I/F” to correct interface referring to “Calling a Remote Party” (page 105).
	The registered items in the Phone Book are not correct.	Register the party correctly referring to “Registering a Remote Party – Phone Book” (page 82).
	Some of the system settings are not correct.	Set the system settings correctly referring to “Registering Local Information” (page 51).
	The IP address and network mask are not set correctly (when using LAN).	Ask the system administrator to set them correctly (page 71).
	The LAN or ISDN cable is disconnected.	Connect correctly (pages 28, 29).
	The LAN or ISDN cable is connected to the incorrect connector.	Connect correctly (pages 28, 29).
	The LAN or ISDN cable is down.	Replace the cable with a new one.
	The cable exclusively designed for the ISDN connection is used for LAN connection (when using LAN).	Use the cable for LAN connection.
	Incorrect type of cable (cross or straight cable) is used for the LAN or ISDN connection.	Use the correct type of cable.
	The DSU is turned off.	Turn on the DSU.
	If you disconnect the communication with an abnormal procedure, e.g., unplugging an ISDN cable or turning off the system during communication, you may not connect to the ISDN line for a while (when using ISDN).	Turn off the power of the system and wait for a few minutes before turning it on again.
	If you repeat plugging/unplugging or turning on/off, you may not connect to the network for a while (when using LAN).	Turn off the power of the system and wait for a few minutes before turning it on again.
	LAN connection timeout (when using LAN).	Try again later.
	Packet for videoconferencing is not acceptable under the current LAN environment (when using LAN).	Consult with the system administrator so that the packet for videoconferencing becomes acceptable under your LAN environment.

Symptom	Cause	Solution
No connection.	The remote terminal is not turned on.	Ask the remote party to turn on the terminal.
	It takes a long time for the remote party to be able to answer from the standby mode.	Ask the remote party to cancel the standby mode.
	The remote party is in communication with another party.	Call the remote party after they end the communication with another party.
	Answering the call is not permitted by the remote terminal as it is operating for setups, etc.	Ask the remote party to permit answering a call.
	The remote terminal is not set to auto answer mode.	Ask the remote party to set the terminal to auto answer mode, or to answer a call manually.
	The ISDN telephone numbers are not set up in the remote terminal (when using bonding).	Ask the remote party to set up “Area Code” and “Local Number” in the ISDN Setup menu correctly (page 76).
	The eighth digit and up of the ISDN telephone numbers are not the same when connecting using bonding (when the remote party uses the videoconference system of an older model such as the PCS-1600).	Connect without using bonding, or use the ISDN telephone numbers that are the same in the eighth digit and up.
	There is some problem with the remote terminal.	Try to dial the number of another terminal.
	A message appears on the screen.	See “On-Screen Messages“ (page 287).
Still pictures or the Phone Book cannot be saved to the “Memory Stick.”	The write-protect tab on the “Memory Stick” is set to LOCK.	Release the lock.
	The “Memory Stick” has already been recorded to full capacity.	Use another “Memory Stick.”

Specifications

PCS-PG50/PG50P Communication Terminal

This unit is compliant with ITU-T Recommendations H.320 and H.323.

Motion picture

Operating bandwidth
- 64 Kbps to 4096 Kbps (standard, LAN connection)
- 56 Kbps to 768 Kbps (when installing the PCSA-B768S, ISDN connection)
- 56 Kbps to 384 Kbps (when installing the PCSA-B384S, ISDN connection)
- 56 Kbps to 1472 Kbps (T1)
- 56 Kbps to 1920 Kbps (E1)
- (when installing the PCSA-PRI, ISDN connection)

Coding
- H.261/H.263/H.263+/H.263++/ H.263 4CIF/H.264/Interlaced SIF (ITU-T Recommendation)/ Interlaced SIF (H.264, H.263)
- MPEG4 Simple Profile (when using LAN)

Picture elements
- CIF: 352 pixels × 288 lines
- QCIF: 176 pixels × 144 lines

Color system
- NTSC (PCS-PG50)
- PAL (PCS-PG50P)
- Capable of connection between both color systems

Still Picture

Pixels
- 704 pixels × 480 lines (PCS-PG50)
- 704 pixels × 576 lines (PCS-PG50P)

Encoding
- H.261 (ITU-T Recommendation) Annex. D (4CIF)
- H.263 (special format of this system)

Sound

Bandwidth
- 14 kHz (MPEG4 Audio)
- 7 kHz (G.722/G.722.1 compliant with ITU-T Recommendation)
- 3.4 kHz (G.711/G.723.1/G.728/ G.729 compliant with ITU-T Recommendation)

Transmission rate
- 56 Kbps, 64 Kbps (G.711 compliant with ITU-T Recommendation)
- 48 Kbps, 56 Kbps, 64 Kbps (G.722 compliant with ITU-T Recommendation)
- 64 Kbps, 96 Kbps (MPEG4 Audio) (when using LAN)
- 24 Kbps, 32 Kbps (G.722.1 compliant with ITU-T Recommendation) (when using LAN)
- 16 Kbps (G.728 compliant with ITU-T Recommendation)
- 8 Kbps (G.729 compliant with ITU-T Recommendation) (when using LAN)
- 5.3 Kbps, 6.3 Kbps (G.723.1 compliant with ITU-T Recommendation) (when using LAN)
- 48 Kbps (MPEG4 Audio) (when using ISDN)

Network

Multiplexing
- Video, audio, data

Frame format
- H.221 (compliant with ITU-T Recommendation)

Interface
- LAN (standard), 64 Kbps to 4096 Kbps
- ISDN (BRI), up to 3 lines (when installing the PCSA-B384S) up to 6 lines (when installing the PCSA-B768S)
- ISDN (PRI) T1 or E1 (when installing the PCSA-PRI)

Data transmission rate
- LSD 1.2 Kbps, 4.8 Kbps, 6.4 Kbps
- MLP 6.4 Kbps, 24 Kbps, 32 Kbps
- HMLP 62.4 Kbps, 64 Kbps, 128 Kbps

LAN protocol supported
- HTTP
- FTP
- Telnet
- RTP/RTCP
- TCP/UDP
- SNMP

Remote control

Far end camera control
H.281 (compliant with ITU-T Recommendation)
Data transfer
T.120 (compliant with ITU-T Recommendation)

General

Power requirements
DC 19.5 V
Current consumption
4 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 420 × 70 × 254 mm (W × H × D) (16 5/8 × 2 7/8 × 10 in.) (not including projections except for the feet)
Mass Approx. 4.6 kg (10 lb 3 oz)
Supplied accessories
PCS-A1 Microphone (1)
PCSA-RG1 or PCS-RG70 Remote Commander (1)
Size AA (R6) or AAA (R03) batteries for Remote Commander (2)
Remote Control Receiver (1)
IR repeater (2)
S-video cable (1.5 m) (4.9 ft) (1)
Audio cable (1 m) (3.3 ft) (1)
Video converter cable (15 cm) (0.5 ft) (1)
VGP-AC19V15 or PCS-AC19V6 AC adaptor (1)
Power cord (1)
21-pin adaptor (1) (PCS-PG50P only)
CD-ROM (1)
Before Using this Unit (1)
Connection Sheet (1)
Quick connection guide/Remote Control Guide (1)
Warranty booklet (1)

PCSA-CG70/CG70P Camera Unit

Video signal
NTSC color, EIA standards (PCSA-CG70)
PAL color, CCIR standards (PCSA-CG70P)
Image device
1/4 type CCD (Charge Coupled Device)
Approx. 410,000 pixels (Effective: approx. 380,000 pixels) (PCSA-CG70)
Approx. 470,000 pixels (Effective: approx. 440,000 pixels) (PCSA-CG70P)
Lens f = 3.1 to 31 mm, F 1.8 to 2.9, Horizontal angle 6.6° to 65°
Focal distance
100 (WIDE) to 600 (TELE) mm
Minimum illumination
3.5 lux at F 1.8/50 IRE
Illumination range
3.5 lux to 100,000 lux
Horizontal resolution
470 TV lines (PCSA-CG70)
450 TV lines (PCSA-CG70P)
Pan/tilt action
Horizontal ±100°
Vertical ±25°
Dimension 130 × 139 × 130 mm (W × H × D) (5 1/8 × 5 1/2 × 5 1/8 in.) (not including projections except for the feet)
Mass Approx. 1.0 kg (2 lb. 3 oz.)
Supplied accessory
Camera cable (3 m) (9.8 ft) (1)
VISCA cable (15 cm) (0.5 ft) (1)

PCS-A1 Microphone

Bandwidth 13 kHz
Directional characteristic
Omnidirectional
Dimensions 74 × 16 × 93 mm (W × H × D) (3 × 21/32 × 3 3/4 in.)
Mass Approx. 170 g (6 oz.)
Power Plug in power
Cable length 8 m (26.2 ft)

PCSA-RG1 Remote Commander

Signal format Infrared SIRCS
Control DC 3V using two size AA (R6) batteries

PCS-RG70 Remote Commander

Signal format Infrared SIRCS
Control DC 3V using two size AAA (R03) batteries

VGP-AC19V15 AC Adaptor

Power requirements
100 to 240 V AC, 50/60 Hz, 1.6 A to 0.7 A
Output DC 19.5 V, 6.2 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 67 × 36.5 × 155 mm (W × H × D) (2 3/4 × 1 7/16 × 6 1/8 in.) (not including projections)
Mass Approx. 550 g (20.5 oz.)

PCS-AC19V6 AC Adaptor

Power requirements
100 to 240 V AC, 50/60 Hz, 1.6 A to 0.7 A
Output DC 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 × 38 × 160 mm (W × H × D) (3 1/8 × 1 1/2 × 6 5/16 in.)
Mass Approx. 570 g (20 oz.)

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 in.)
Mass Approx. 200 g (7 oz.)
Power Plug in power
Cable length 8 m (26.2 ft)

PCSA-A7P4 Microphone (4-Pack, Optional)

Dimensions 64 × 26 × 102 mm (W × H × D) (2 5/8 × 1 1/16 × 4 1/8 in.) (including the feet)
Mass Approx. 130 g (4.6 oz)
Power requirements
DC 12 V, powered by PCS-G50/G50P Communication Terminal or AC adaptor
Power consumption
less than 2.5 W (per microphone)
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)
Supplied accessories
PCSA-A7 Microphone (4)
Microphone cable (8 m, 26.3 ft) (2)
Microphone cable (1.5 m, 4.9 ft) (4)
MPA-AC1 AC adaptor (1)
Power cord (one for each region: North America, Europe, Japan)
Cord adaptor (1)
DC cord (1)
Operating Instructions (1)
B&P Warranty Booklet (1)
Warranty card (1)

PCSA-B384S ISDN Unit (Optional)

Power requirements
DC 19.5 V
Current consumption
0.3 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 166 × 34 × 128 mm (W × H × D)
(6 9/16 × 1 3/8 × 5 1/16 in.)
(not including projections except for the feet)
Mass Approx. 400 g (14 oz.)
Supplied accessories
Interface cable (5 m) (16.4 ft) (1)
Operating Instructions (1)
Warranty booklet (1)

PCSA-B768S ISDN Unit (Optional)

Power requirements
DC 19.5 V
Current consumption
0.5 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 166 × 34 × 128 mm (W × H × D)
(6 9/16 × 1 3/8 × 5 1/16 in.)
(not including projections except for the feet)
Mass Approx. 400 g (14 oz.)
Supplied accessories
Interface cable (5 m) (16.4 ft) (1)
Operating Instructions (1)
Warranty booklet (1)

PCSA-PRI ISDN Unit (Optional)

Power requirements
DC 19.5 V
Current consumption
0.3 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 166 × 34 × 128 mm (W × H × D)
(6 9/16 × 1 3/8 × 5 1/16 in.)
(not including projections)
Mass Approx. 400 g (14 oz.)
Supplied accessories
Interface cable (5 m) (16.4 ft) (1)
Operating Instructions (1)
Warranty booklet (1)

PCSA-DSB1S Data Solution Box (Optional)

Power requirements
DC 19.5 V
Current consumption
1.0 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 240 × 36 × 180 mm (W × H × D)
(9 1/2 × 1 7/16 × 7 1/8 in.)
(not including projections except for the feet)
Mass Approx. 1.1 kg (2 lb. 7 oz.)
Supplied accessories
Interface cable (10 m) (32.8 ft) (1)
Operating Instructions (1)
Warranty booklet (1)
Rear cover (1)

PCSA-M0G50 H.320 MCU Software (Optional)

Dimensions 50 × 2.8 × 21.5 mm (W × H × D) (2 × 1/8 × 7/8 in.)
Mass Approx. 4 g (0.1 oz.)
Supplied accessories
Serial number seal (1)
Operating Instructions (1)

PCSA-M3G50 H.323 MCU Software (Optional)

Dimensions 50 × 2.8 × 21.5 mm (W × H × D) (2 × 1/8 × 7/8 in.)
Mass Approx. 4 g (0.1 oz.)
Supplied accessories
Serial number seal (1)
Operating Instructions (1)

Design and specifications are subject to change without notice.

Note

Always verify that the unit is operating properly before use. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS DUE TO FAILURE OF THIS UNIT, EITHER DURING THE WARRANTY PERIOD OR AFTER EXPIRATION OF THE WARRANTY, OR FOR ANY OTHER REASON WHATSOEVER.

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Acceptable RGB Input/Output Signals

PCS-PG50/PG50P Communication Terminal (RGB OUT)

Picture element	Signal format	oh (kHz)	fV (Hz)	Dot clock (MHz)	Sync
1024 × 768	XGA VESA 60 Hz	48.363	60.004	65	H-neg V-neg

PCSA-DSB1S Data Solution Box (RGB IN A/RGB IN B)

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

PCSA-DSB1S Data Solution Box (RGB OUT)

Picture element	Signal format	fH (kHz)	fV (Hz)	Dot clock (MHz)	Sync
1024 × 768	XGA VESA 60 Hz	48.363	60.004	65	H-neg V-neg

- While the picture input from the RGB IN A or RGB IN B connector is transmitted, the picture of the input signal format (VGA, SVGA or XGA) is output from this connector.

Pin Assignments

100BASE-TX/10BASE-T jack

Modular jack

Pin	Signal	Description
1	TPOPTX+	Transmit+
2	TPONTX–	Transmit–
3	TPIPRX+	Receive+
4	NC	—
5	NC	—
6	TPINRX–	Receive–
7	NC	—
8	NC	—

ISDN UNIT connector

14-pin connector

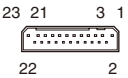
Pin	Signal	Description
1	GND	Ground
2	19.5V	19.5V
3	DCLK+	Clock+
4	DCLK–	Clock–
5	DR+	Receive data+
6	DR–	Receive data–
7	FS+	Frame sync+
8	FS–	Frame sync–
9	DX+	Transmit data+
10	DX–	Transmit data–
11	RX	Serial receive data
12	TX	Serial transmit data
13	19.5V	19.5V
14	GND	Ground

VIDEO OUT MONITOR MAIN connector

Mini-DIN 4-pin connector

Pin	Signal	Description
1	GND	Analog Ground
2	GND	Analog Ground
3	Y	Brightness Signal
4	C	Chrominance Signal

TERMINAL connector (PCSA-CG70/CG70P)



23-pin rectangular connector (male)

Pin	Signal	Description
1	19.5V	19.5V
2	NC	–
3	NC	–
4	STAND BY	Standby
5	NC	–
6	Y	Brightness signal
7	Y.GND	Brightness signal ground
8	C	Chrominance signal
9	C.GND	Chrominance signal ground
10	Video	Video signal
11	Video.GND	Video signal ground
12	NC	–
13	NC	–
14	SIRCS	Remote control data

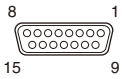
Pin	Signal	Description
15	DTR	Data terminal ready
16	TXD	Transmit data
17	RXD	Receive data
18	NC	–
19	NC	–
20	Audio+	Audio+
21	Audio–	Audio–
22	NC	–
23	GND	Ground

VIDEO IN AUX IN connector

Mini-DIN 7-pin connector

Pin	Signal	Description
1	Y.GND	Brightness signal ground
2	C.GND	Chrominance signal ground
3	Y	Brightness signal
4	C	Chrominance signal
5	COMP. GND	Composite signal ground
6	COMP. GND	Composite signal ground
7	COMP	Composite signal

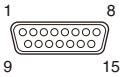
VIDEO IN CAMERA connector



D-sub 15-pin connector (female)

Pin	Signal	Description
1	Y	Brightness signal
2	Y.GND	Brightness signal ground
3	C	Chrominance signal
4	C.GND	Chrominance signal ground
5	Video	Video signal
6	Video.GND	Video signal Ground
7	TXD	Transmit data
8	RXD	Receive data
9	19.5 V	19.5 V
10	Audio+	Audio+
11	Audio–	Audio–
12	SIRCS	Remote control data
13	DTR	Data terminal ready
14	STANDBY	Standby
15	GND	Ground

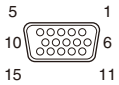
DSB connector



D-sub 15-pin (male)

Pin	Signal	Description
1	Video	Video signal
2	Video.GND	Video signal ground
3	LINE A+	Line audio+
4	LINE A–	Line audio–
5	MIC+	Microphone+
6	MIC–	Microphone–
7	TD+	Receive+
8	TD–	Receive–
9	19.5V	19.5V
10	NC	–
11	AGND	Analog ground
12	NC	–
13	RD+	Transmit data+
14	RD–	Transmit data–
15	GND	Ground

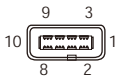
RGB OUT connector



Mini D-sub 15-pin (female)

Pin	Signal	Description
1	RED	R (red)
2	GREEN	G (green)
3	BLUE	B (blue)
4	NC	–
5	GND	Ground
6	RED.GND	R (red) signal ground
7	GREEN.GND	G (green) signal ground
8	BLUE.GND	B (blue) signal ground
9	NC	–
10	SYNC.GND	Sync signal ground
11	NC	–
12	NC	–
13	HSYNC	Horizontal sync
14	VSYNC	Vertical sync
15	NC	–

EC-MIC 1 and 2 connectors



Pin	Signal	Description
1	GND	Ground
2	TXD+	Transmit data+
3	TXD–	Transmit data–
4	NC	–
5	NC	–
6	MICDET	Microphone detect
7	GND	Ground
8	RXD+	Receive data+
9	RXD–	Receive data–

Pin	Signal	Description
10	+12 V	+12 V

Pin Assignments on Optional Board Connectors

ISDN 1-3 jacks (PCSA-B384S)
ISDN 1-6 jacks (PCSA-B768S)

Modular jack

Pin	Signal	Description
1	NC	–
2	NC	–
3	TA	Transmit+
4	RA	Receive+
5	RB	Receive–
6	TB	Transmit–
7	NC	–
8	NC	–

ISDN PRI jack (PCSA-PRI)

Modular jack

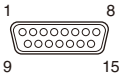
Pin	Signal	Description
1	RB	Receive–
2	RA	Receive+
3	NC	–
4	TB	Transmit–
5	TA	Transmit+
6	NC	–
7	NC	–
8	NC	–

TERMINAL connector (PCSA-B384S/PCSA-B768S/PCSA-PRI)

USB connector

Pin	Signal	Description
1	GND	Chassis ground
2	19.5V	19.5V
3	DCLK+	Clock+
4	DCLK–	Clock–
5	DR+	Transmit data+
6	DR–	Transmit data–
7	FS+	Frame sync+
8	FS–	Frame sync–
9	DX+	Receive data+
10	DX–	Receive data–
11	TX	Serial transmit data
12	RX	Serial receive data
13	19.5V	19.5V
14	GND	Ground

TERMINAL connector (PCSA-DSB1S)



D-sub 15-pin connector (male)

Pin	Signal	Description
1	Video	Video signal
2	Video.GND	Video signal ground
3	LINE A+	Line audio+
4	LINE A–	Line audio–
5	MIC+	Microphone+
6	MIC–	Microphone–
7	RD+	Receive+
8	RD–	Receive–
9	19.5V	19.5V
10	NC	–
11	AGND	Analog ground
12	NC	–
13	TD+	Transmit data+
14	TD–	Transmit data–
15	GND	Ground

List of Port Numbers Used on the PCS-PG50/PG50P

When connecting one-to-one (Default)

When "Port Number Used" is set to "Default" in the LAN Setup menu, the PCS-PG50/PG50P uses the following port numbers.
(MCU option not installed)

Signal	Port number
RAS (PCS-PG50/PG50P)	1719 (using GateKeeper)
RAS (GateKeeper)	1718 or 1719 (using GateKeeper)
Q.931 (dial)	Any number from 2253 to 2255
Q.931 (answer)	1720
H.245	Any number from 2253 to 2255
Audio RTP	49152
Audio RTCP	49153
Video RTP	49154
Video RTCP	49155
FECC RTP	49156
FECC RTCP	49157
Data conference/RTP	49158
Data conference/RTCP	49159

When connecting one-to-one (Custom: TCP Port Number 3000 and UDP Port Number 3100)

When "Port Number Used" is set to "Custom" in NAT/Port of the LAN Setup menu, the PCS-PG50/PG50P 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-PG50/PG50P uses the following port numbers.

Signal	Port number
RAS (PCS-PG50/PG50P)	1719 (using GateKeeper)
RAS (GateKeeper)	1718 or 1719 (using GateKeeper)
Q.931 (dial)	Any number from 3000 to 3002
Q.931 (answer)	1720
H.245	Any number from 3000 to 3002
Audio RTP	3100
Audio RTCP	3101
Video RTP	3102
Video RTCP	3103
FECC RTP	3104
FECC RTCP	3105
Data conference/RTP	3106
Data conference/RTCP	3107

When H.323 MCU software is installed (Default)

When "Port Number Used" is set to "Default" in NAT/Port of the LAN Setup menu, the PCS-PG50/PG50P operated as the main terminal uses the following port numbers.

Signal	Port number (First point)	Port number (N^{th} point)
RAS (PCS-PG50/PG50P)	1719 (using GateKeeper)	
RAS (Gate Keeper)	1718 or 1719 (using Gate Keeper)	
Q.931 (dial)	Any number from 2253 to 2263	
Q.931 (answer)	1720	
H.245	Any number from 2253 to 2263	
Audio RTP	49152	49152+20 × (N-1)

Signal	Port number (First point)	Port number (Nth point)
Audio RTCP	49153	49153+20 × (N-1)
Video RTP	49154	49154+20 × (N-1)
Video RTCP	49155	49155+20 × (N-1)
FECC RTP	49156	49156+20 × (N-1)
FECC RTCP	49157	49157+20 × (N-1)
Data conference/RTP	49158	49158+20 × (N-1)
Data conference/ RTCP	49159	49159+20 × (N-1)

When H.323 MCU software is installed (Custom: TCP Port Number 3000 and UDP Port Number 3100)

When “Port Number Used” is set to “Custom” in NAT/Port of the LAN Setup menu, the PCS-PG50/PG50P 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-PG50/PG50P operated as the main terminal uses the following port numbers.

Signal	Port number (First point)	Port number (Nth point)
RAS (PCS-PG50/PG50P)	1719 (using GateKeeper)	
RAS (GateKeeper)	1718 or 1719 (using Gate Keeper)	
Q.931 (dial)	Any number from 3000 to 3010	
Q.931 (answer)	1720	
H.245	Any number from 3000 to 3010	

Signal	Port number (First point)	Port number (Nth point)
Audio RTP	3100	3100+20 × (N-1)
Audio RTCP	3101	3101+20 × (N-1)
Video RTP	3102	3102+20 × (N-1)
Video RTCP	3103	3103+20 × (N-1)
FECC RTP	3104	3104+20 × (N-1)
FECC RTCP	3105	3105+20 × (N-1)
Data conference/RTP	3106	3106+20 × (N-1)
Data conference/ RTCP	3107	3107+20 × (N-1)

Note

For the RTP and RTCP signals, ranges higher than the ones listed above may be used when ports are unable to be used properly.

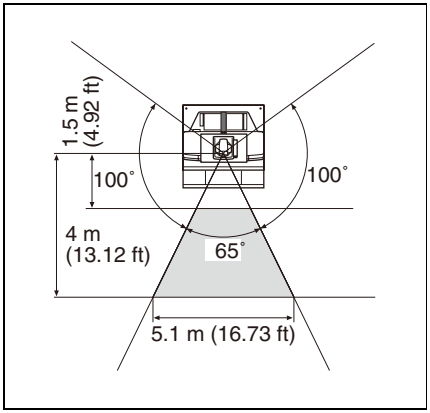
Videoconferencing Room Layout

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

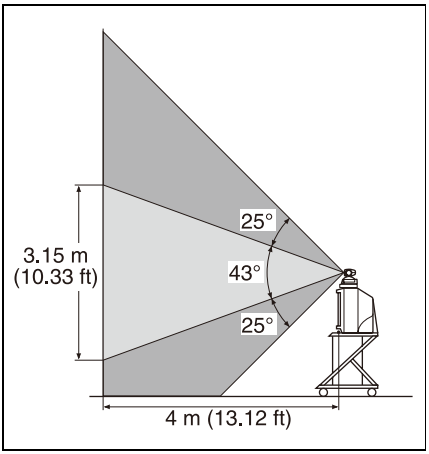
Camera Range

represents the shooting area of the camera when the zoom has been extended fully. indicates the shooting area of the camera when the left/right angling function is fully utilized. Use the measurements below as a guide for the layout of your videoconference room.

Top view (horizontal range at maximum zoom-out)



Side view (vertical range at maximum zoom-out)

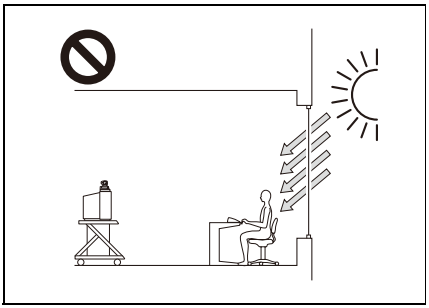


Layout Considerations

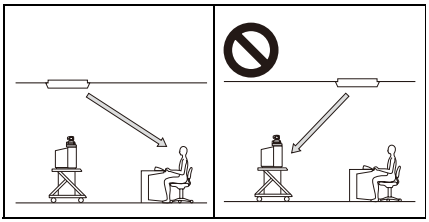
- Avoid having large, moving objects, especially people, behind the participants, as the quality of the picture transmitted to the remote party will deteriorate.
- Do not seat participants in front of a wall with fine stripe patterns.
- Choose a room where echo will not occur.
- Do not install the system near noise sources such as air conditioners or copy machines.
- Avoid placing the system in a room where there are the speakers used for an in-house broadcasting system.

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 TV monitor. Light intensity on faces should be about 300 lux or more.



If an inverter type or brightness-adjustable type of fluorescent lamp is used, the sensitivity of the Remote Commander may deteriorate.

Phenomena specific to CCD image sensors

The following phenomena that may appear in images are specific to CCD (Charge Coupled Device) image sensors. They do not indicate malfunctions.

White flecks

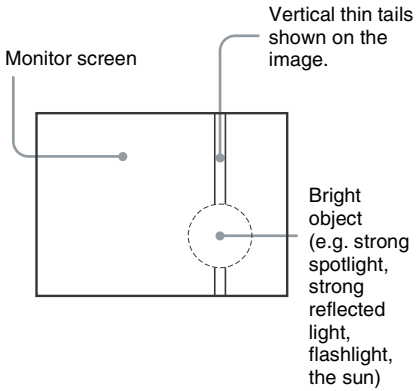
Although the CCD image sensors are produced with high-precision technologies, fine white flecks may be generated on the screen in rare cases, caused by cosmic rays, etc.
This is related to the principle of CCD image sensors and is not a malfunction.

The white flecks especially tend to be seen in the following cases:

- when operating at a high environmental temperature
- when you have raised the gain (sensitivity)

Vertical smear

When an extremely bright object, such as a strong spotlight or flashlight, is being shot, vertical tails may be produced on the screen, or the image may be distorted.



Aliasing

When fine patterns, stripes, or lines are shot, they may appear jagged or flicker.

Glossary

Bonding*

Bonding is one of the Inverse Multiplexing methods allowing the connection of the videoconferencing system with multiple ISDN lines. Dialing the first ISDN line enables you to connect all other lines. Dialing the second and later lines is done automatically by the communication between the videoconferencing systems on both sites. To use bonding, it is required that both videoconferencing systems be equipped with the bonding function and that "Area Code" and "Local Number" in the ISDN Setup menu of the answering site be set correctly. As the communication between the systems when using the bonding function is made via the ISDN numbers of the answering site, the "Area Code" and "Local Number" settings in the ISDN Setup menu are not essential at the dialing site.

* Bonding (Bandwidth on Demand Interoperability Group) is a registered trademark of THE BONDING CONSORTIUM.

BRI

An abbreviation for Basic Rate Interface. Basic interface standardized by the ITU-T. Single ISDN has two B channels and one D channel.

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

An abbreviation for Dynamic Host Configuration Protocol. Manages IP addresses in the network.

DNS

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

Echo Canceller

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.722.1

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 24 Kbps or 32 Kbps.

G.723.1

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 5.3 Kbps or 6.3 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.221

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.263 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 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.320

A videoconferencing standard for communication between different videoconferencing system.

H.323

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

HMLP

See "MLP".

I-MUX

An abbreviation for Inverse Multiplexer. This protocol allows you to transmit the data at 384 Kbps via 6B-channel.

Interlaced SIF

With TV pictures, 60 fields of pictures per second are interlaced to provide high resolution and smooth motion pictures. The conventional videoconferencing system uses CIF format pictures (352 pixel × 388 line) transmitted in 30 fields per second. In CIF format, smooth motion pictures like TV pictures cannot be obtained. In the Interlaced SIF format, interlaced SIF size pictures (352 pixel × 240 line) can be transmitted at 60 frames per second. This enables display of pictures with higher vertical resolution of 352 pixel × 480 lines, providing smooth motion picture. However, a relatively higher bit rate is required as the amount of information is twice as much as that of the CIF format.

ISDN

An abbreviation for Integrated Services Digital Network. This is a communication protocol by CCITT on transmission of integrated voice, video, and data. Bandwidths include basic (64 Kbps) and primary rate (1.544 and 2.048 Mbps).

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

Secondary terminal

Normally, a multipoint videoconference is not available unless the video and audio modes and transmission rate of the videoconferencing systems of all the sites are the same.*1 For a multipoint videoconference the terminal that can be connected in the same modes is called a primary terminal, while a secondary terminal is the terminal in which some of the functions are restricted since the connection is not enabled with the same modes. The restriction on the functions depends on the conditions described in "Notes on Secondary Terminals" under "in chapter 8 Multipoint Videoconference".
For example, this system does not transmit video signals to a terminal that has no common formats but can communicate via audio signals. In this case, the terminal in which picture viewing is not available is regarded as a secondary terminal.*2 A terminal communicated via a normal phone included in the multipoint videoconference is also called a secondary terminal. For details on secondary terminals, see "Notes on Secondary Terminals" on page 231.

*1 Difference between the NTSC and PAL color systems is permitted.

*2 Receiving the video signals from this terminal may be available with the system.

SIP

An acronym for Session Initiation Protocol. SIP is a communication control protocol used for Internet telephony, instant messaging, etc.

SNMP

An abbreviation for Simple Network Management Protocol. This protocol is for management information between the management station and the managed terminals. This enables the monitoring of Sony Video Communication Systems.

SPID

An abbreviation for Service Profile ID.

Sub-address

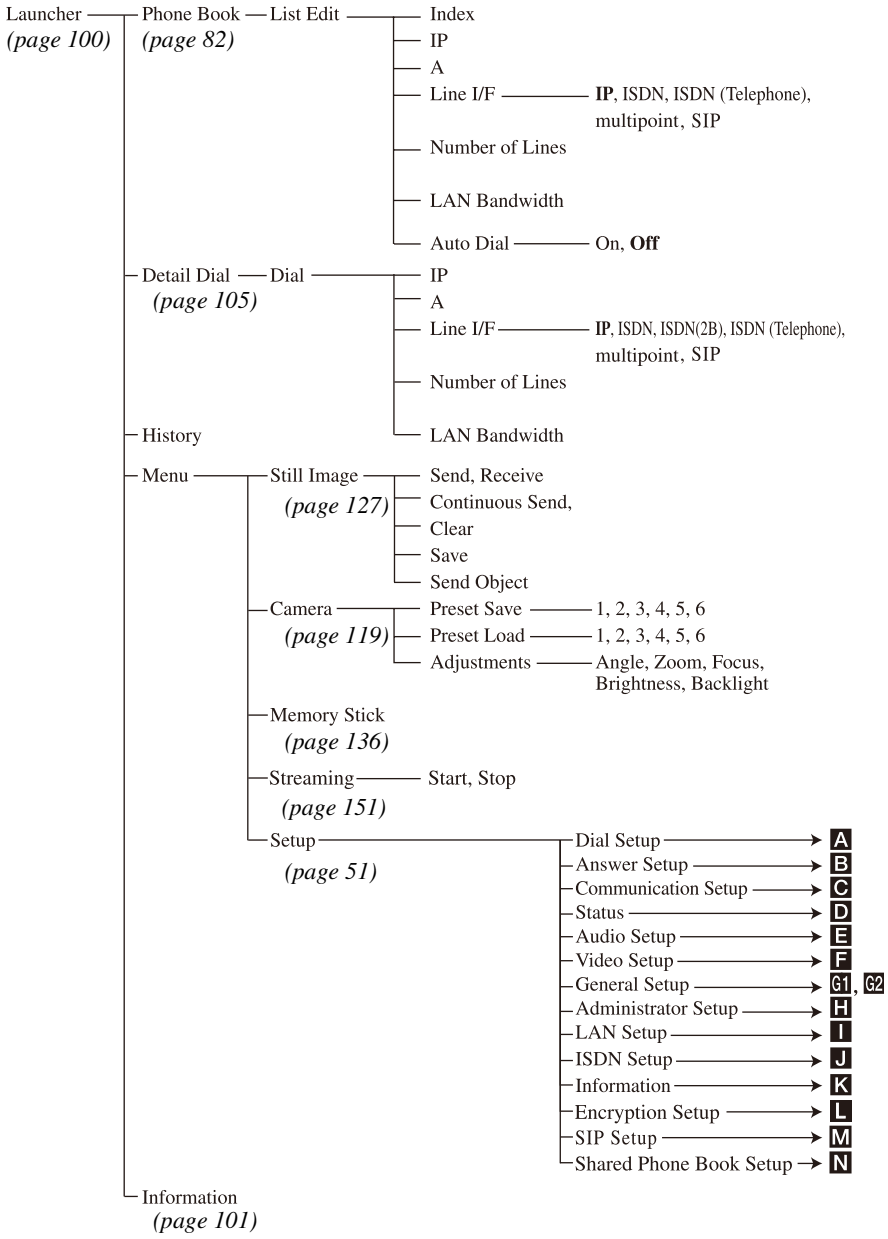
An identification number given to devices sharing a common ISDN line.

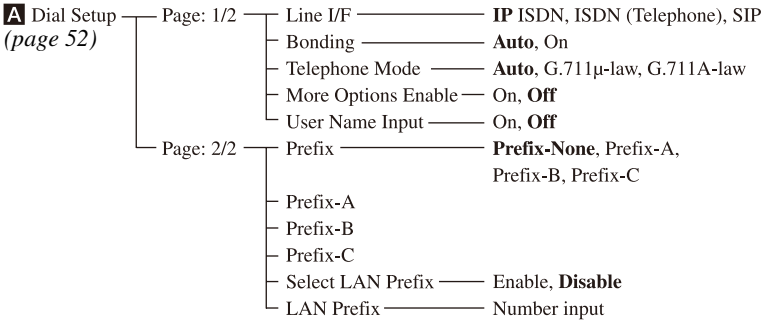
TOS

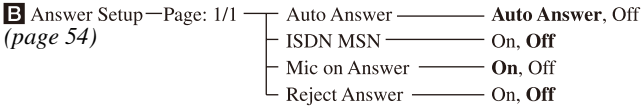
Inputting the information data in the TOS field of the IP address allows the communication system to judge the packet transmission priority, etc. It also enables change of path according to the types of service (Delay or Size).

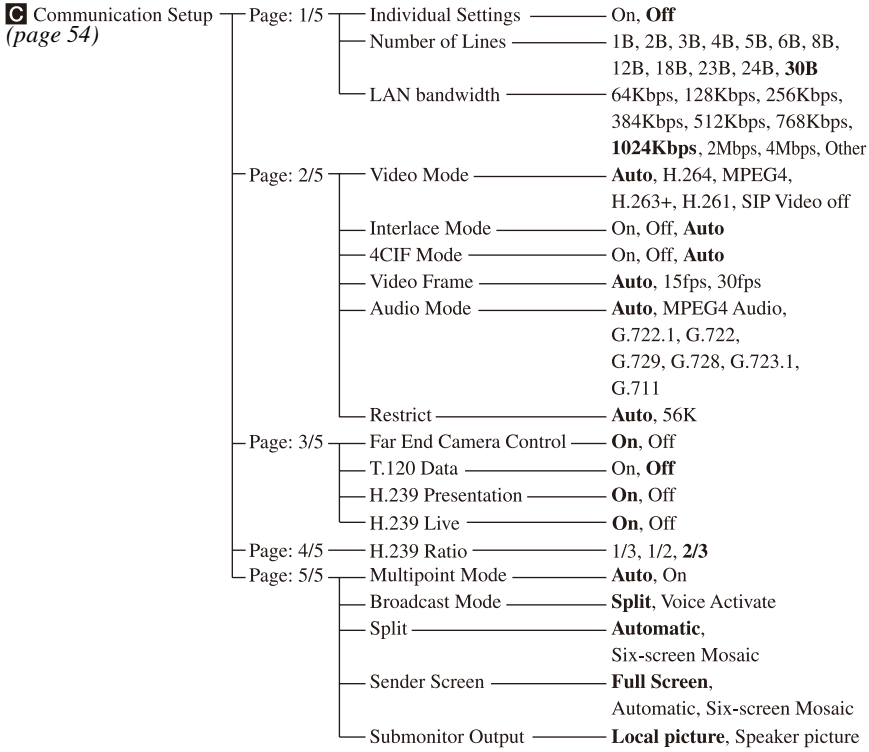
Menu Configuration

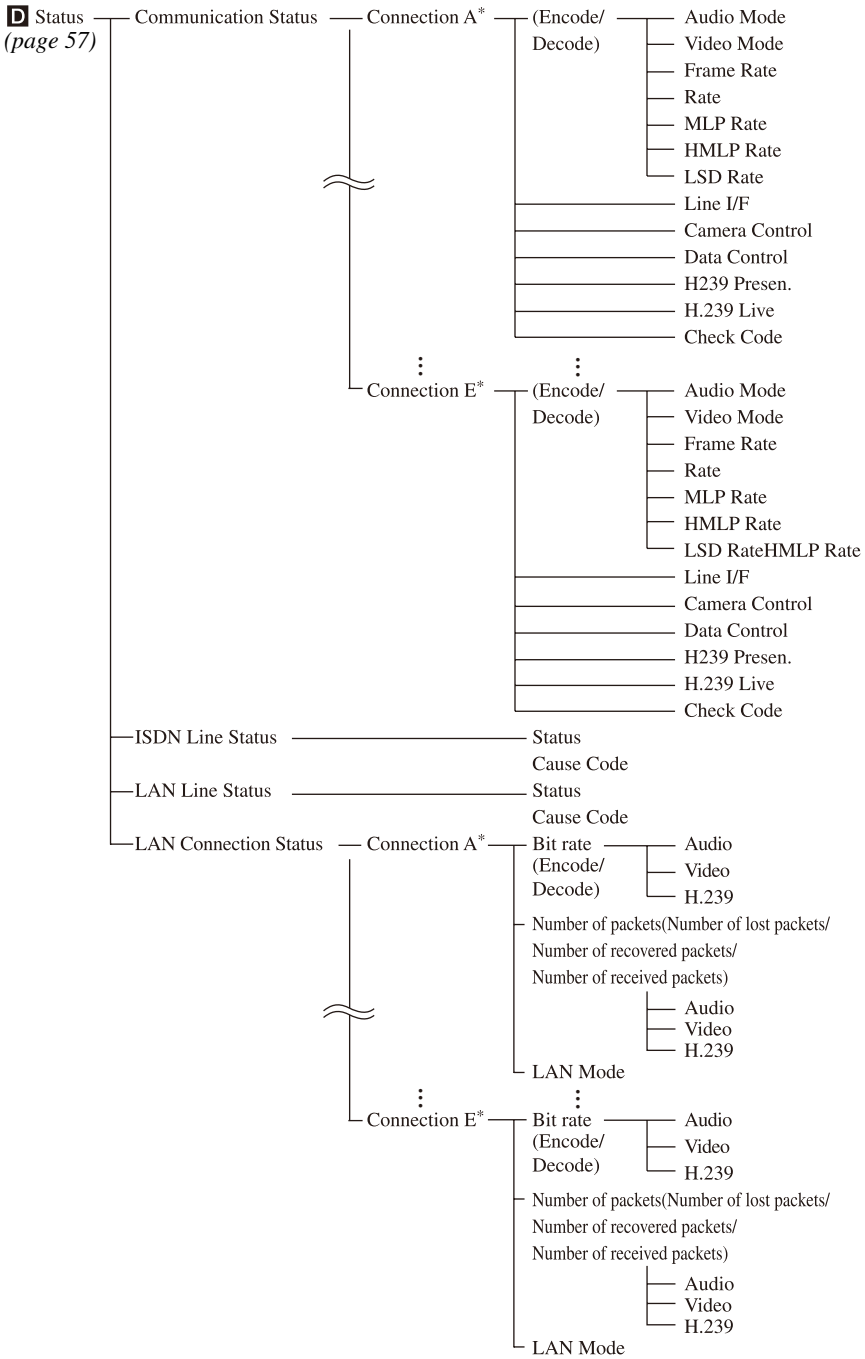
The menus of the camera are configured as described below.
For detailed information, see pages in parentheses. The initial settings of each item are bolded.



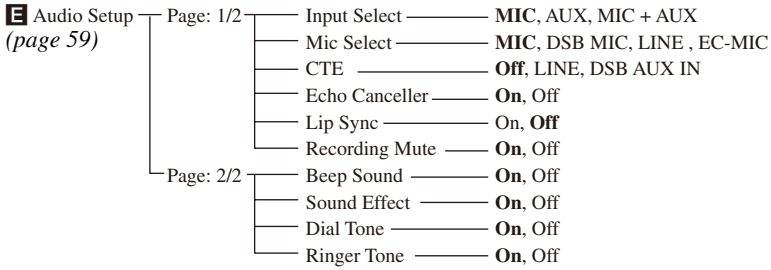

A Dial Setup
(page 52)
Page: 1/2
Line I/F
IP ISDN, ISDN (Telephone), SIP
Bonding
Auto, On
Telephone Mode
Auto, G.711µ-law, G.711A-law
More Options Enable
On, Off
User Name Input
On, Off
Page: 2/2
Prefix
Prefix-None, Prefix-A, Prefix-B, Prefix-C
Prefix-A
Prefix-B
Prefix-C
Select LAN Prefix
Enable, Disable
LAN Prefix
Number input

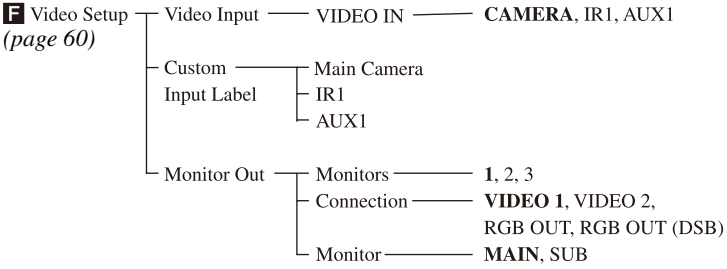

B Answer Setup
(page 54)
Page: 1/1
Auto Answer
Auto Answer, Off
ISDN MSN
On, Off
Mic on Answer
On, Off
Reject Answer
On, Off

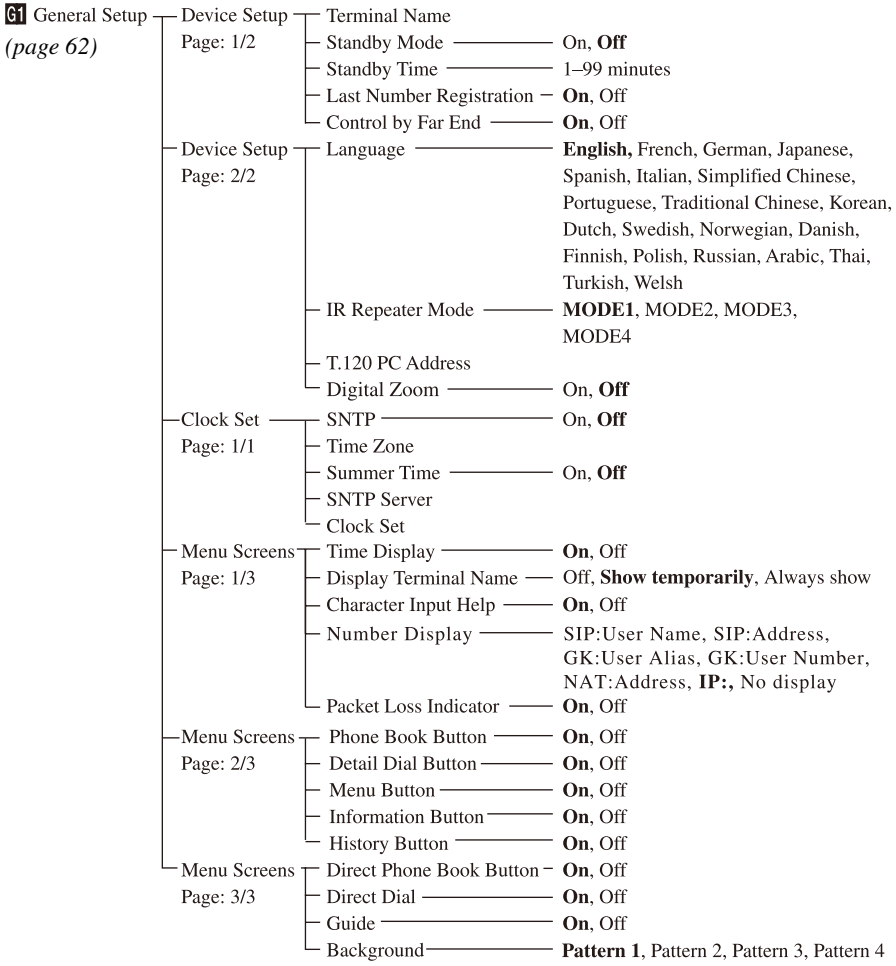

C Communication Setup
(page 54)
Page: 1/5
Individual Settings
On, Off
Number of Lines
1B, 2B, 3B, 4B, 5B, 6B, 8B, 12B, 18B, 23B, 24B, 30B
LAN bandwidth
64Kbps, 128Kbps, 256Kbps, 384Kbps, 512Kbps, 768Kbps, 1024Kbps, 2Mbps, 4Mbps, Other
Page: 2/5
Video Mode
Auto, H.264, MPEG4, H.263+, H.261, SIP Video off
Interlace Mode
On, Off, Auto
4CIF Mode
On, Off, Auto
Video Frame
Auto, 15fps, 30fps
Audio Mode
Auto, MPEG4 Audio, G.722.1, G.722, G.729, G.728, G.723.1, G.711
Restrict
Auto, 56K
Page: 3/5
Far End Camera Control
On, Off
T.120 Data
On, Off
H.239 Presentation
On, Off
H.239 Live
On, Off
Page: 4/5
H.239 Ratio
1/3, 1/2, 2/3
Page: 5/5
Multipoint Mode
Auto, On
Broadcast Mode
Split, Voice Activate
Split
Automatic, Six-screen Mosaic
Sender Screen
Full Screen, Automatic, Six-screen Mosaic
Submonitor Output
Local picture, Speaker picture

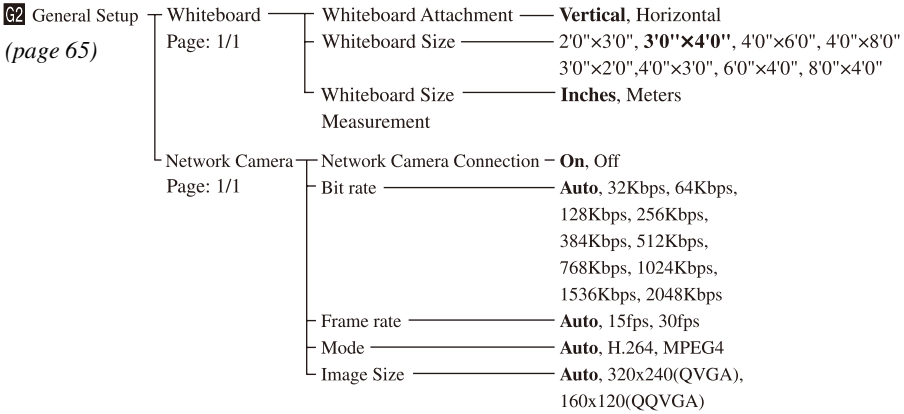


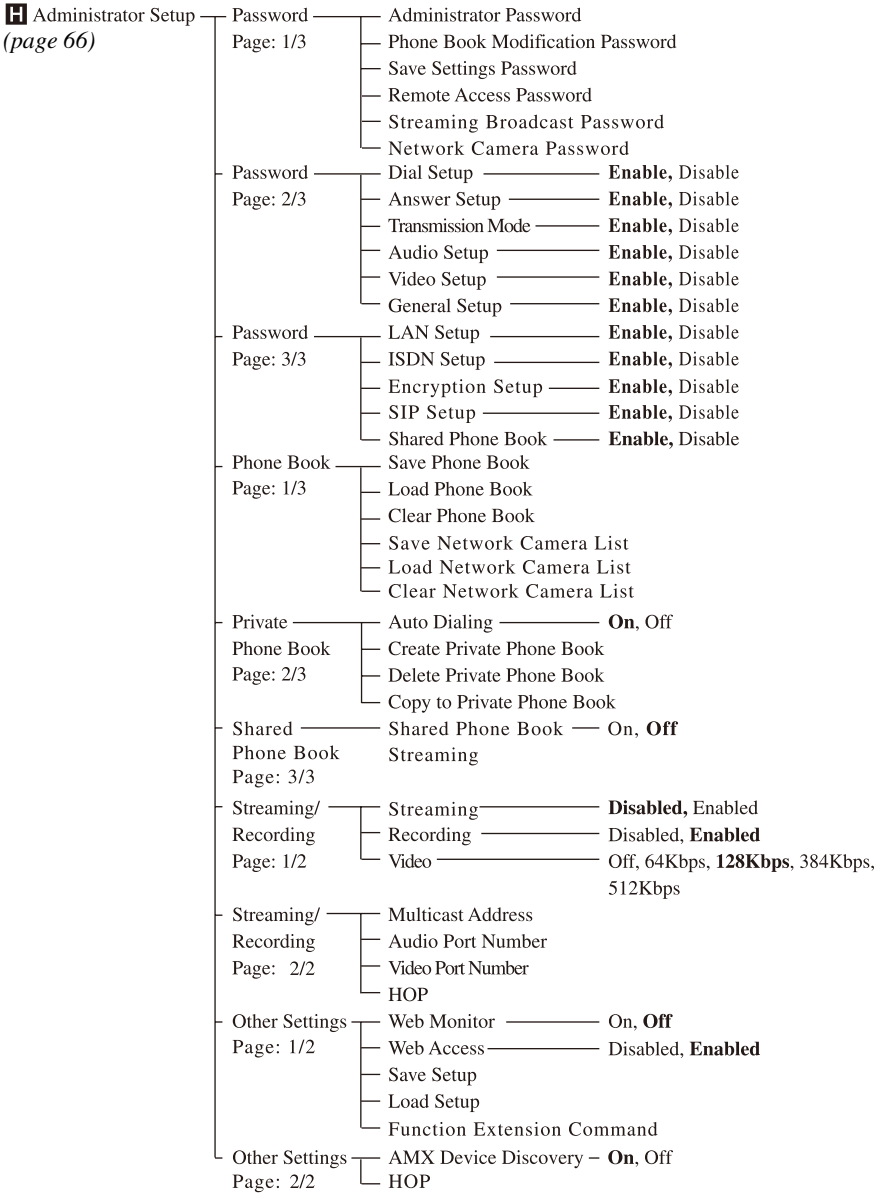
* During a multipoint videoconference Connection A to E with the terminal name appear according to the points connected.

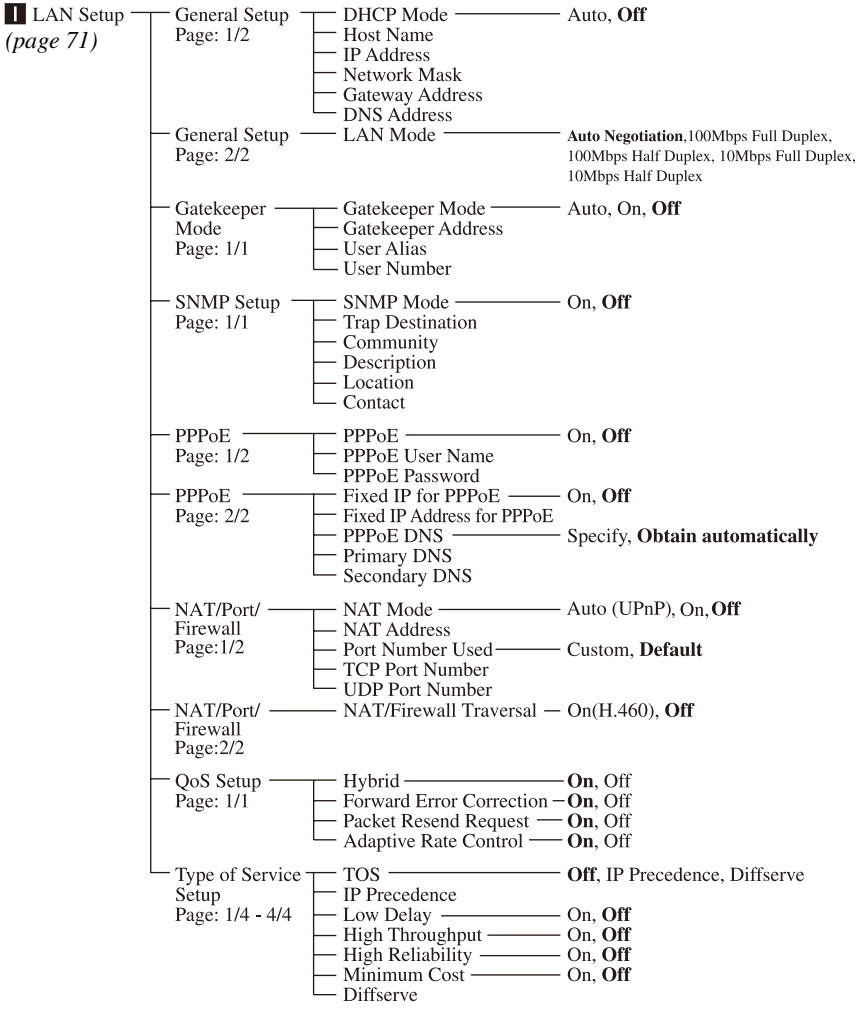

E Audio Setup
(page 59)
Page: 1/2
Input Select
MIC, AUX, MIC + AUX
Mic Select
MIC, DSB MIC, LINE , EC-MIC
CTE
Off, LINE, DSB AUX IN
Echo Canceller
On, Off
Lip Sync
On, Off
Recording Mute
On, Off
Page: 2/2
Beep Sound
On, Off
Sound Effect
On, Off
Dial Tone
On, Off
Ringer Tone
On, Off

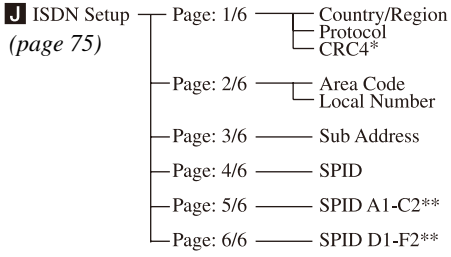

F Video Setup
(page 60)
Video Input
VIDEO IN
CAMERA, IR1, AUX1
Custom Input Label
Main Camera
IR1
AUX1
Monitor Out
Monitors
1, 2, 3
Connection
VIDEO 1, VIDEO 2,
RGB OUT, RGB OUT (DSB)
Monitor
MAIN, SUB


G1 General Setup
(page 62)
Device Setup
Page: 1/2
Terminal Name
Standby Mode
On, Off
Standby Time
1–99 minutes
Last Number Registration
On, Off
Control by Far End
On, Off
Device Setup
Page: 2/2
Language
English, French, German, Japanese, Spanish, Italian, Simplified Chinese, Portuguese, Traditional Chinese, Korean, Dutch, Swedish, Norwegian, Danish, Finnish, Polish, Russian, Arabic, Thai, Turkish, Welsh
IR Repeater Mode
MODE1, MODE2, MODE3, MODE4
T.120 PC Address
Digital Zoom
On, Off
Clock Set
Page: 1/1
SNTP
On, Off
Time Zone
Summer Time
On, Off
SNTP Server
Clock Set
Menu Screens
Page: 1/3
Time Display
On, Off
Display Terminal Name
Off, Show temporarily, Always show
Character Input Help
On, Off
Number Display
SIP:User Name, SIP:Address, GK:User Alias, GK:User Number, NAT:Address, IP:, No display
Packet Loss Indicator
On, Off
Menu Screens
Page: 2/3
Phone Book Button
On, Off
Detail Dial Button
On, Off
Menu Button
On, Off
Information Button
On, Off
History Button
On, Off
Menu Screens
Page: 3/3
Direct Phone Book Button
On, Off
Direct Dial
On, Off
Guide
On, Off
Background
Pattern 1, Pattern 2, Pattern 3, Pattern 4


G2 General Setup
(page 65)
Whiteboard
Page: 1/1
Whiteboard Attachment
Vertical, Horizontal
Whiteboard Size
2'0"×3'0", 3'0"×4'0", 4'0"×6'0", 4'0"×8'0"
3'0"×2'0",4'0"×3'0", 6'0"×4'0", 8'0"×4'0"
Whiteboard Size Measurement
Inches, Meters
Network Camera
Page: 1/1
Network Camera Connection
On, Off
Bit rate
Auto, 32Kbps, 64Kbps, 128Kbps, 256Kbps, 384Kbps, 512Kbps, 768Kbps, 1024Kbps, 1536Kbps, 2048Kbps
Frame rate
Auto, 15fps, 30fps
Mode
Auto, H.264, MPEG4
Image Size
Auto, 320x240(QVGA), 160x120(QQVGA)

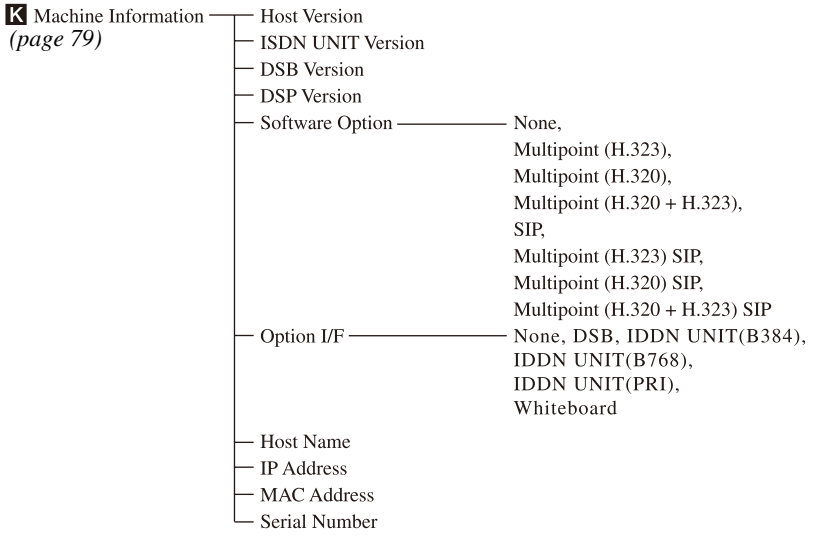

H Administrator Setup
(page 66)
Password
Page: 1/3
Administrator Password
Phone Book Modification Password
Save Settings Password
Remote Access Password
Streaming Broadcast Password
Network Camera Password
Password
Page: 2/3
Dial Setup
Enable, Disable
Answer Setup
Enable, Disable
Transmission Mode
Enable, Disable
Audio Setup
Enable, Disable
Video Setup
Enable, Disable
General Setup
Enable, Disable
Password
Page: 3/3
LAN Setup
Enable, Disable
ISDN Setup
Enable, Disable
Encryption Setup
Enable, Disable
SIP Setup
Enable, Disable
Shared Phone Book
Enable, Disable
Phone Book
Page: 1/3
Save Phone Book
Load Phone Book
Clear Phone Book
Save Network Camera List
Load Network Camera List
Clear Network Camera List
Private
Phone Book
Page: 2/3
Auto Dialing
On, Off
Create Private Phone Book
Delete Private Phone Book
Copy to Private Phone Book
Shared
Phone Book
Page: 3/3
Shared Phone Book
On, Off
Streaming
Streaming/
Recording
Page: 1/2
Streaming
Disabled, Enabled
Recording
Disabled, Enabled
Video
Off, 64Kbps, 128Kbps, 384Kbps, 512Kbps
Streaming/
Recording
Page: 2/2
Multicast Address
Audio Port Number
Video Port Number
HOP
Other Settings
Page: 1/2
Web Monitor
On, Off
Web Access
Disabled, Enabled
Save Setup
Load Setup
Function Extension Command
Other Settings
Page: 2/2
AMX Device Discovery
On, Off
HOP

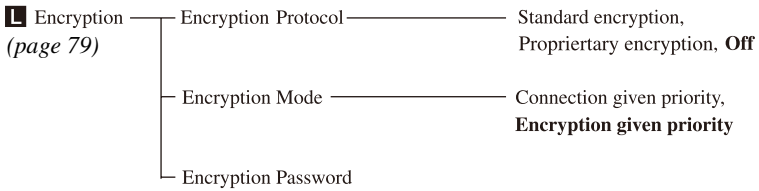


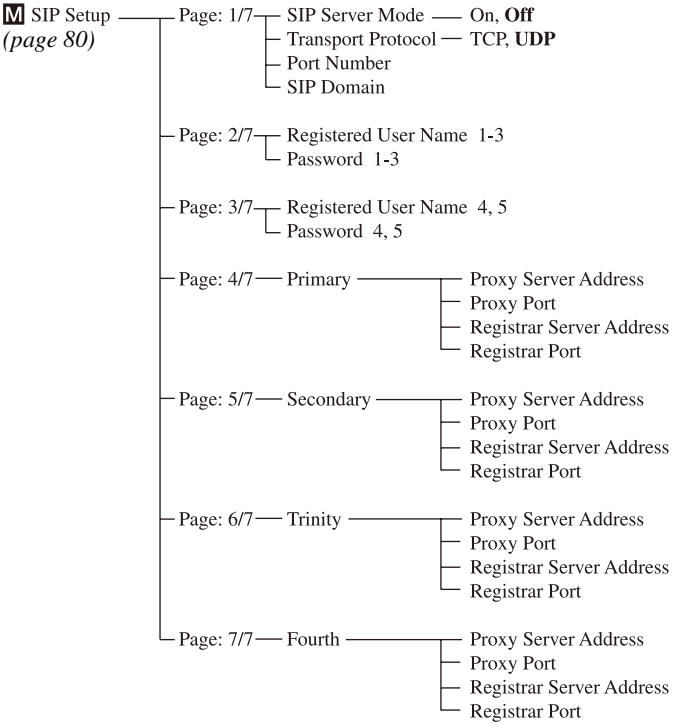


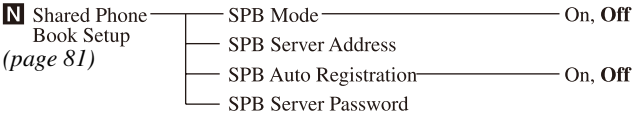
* Appears when using the PCSA-PRI (not currently sold).

** Appears only when “USA” is selected in “Country/Region”.


K Machine Information
(page 79)
Host Version
ISDN UNIT Version
DSB Version
DSP Version
Software Option
None,
Multipoint (H.323),
Multipoint (H.320),
Multipoint (H.320 + H.323),
SIP,
Multipoint (H.323) SIP,
Multipoint (H.320) SIP,
Multipoint (H.320 + H.323) SIP
Option I/F
None, DSB, IDDN UNIT(B384),
IDDN UNIT(B768),
IDDN UNIT(PRI),
Whiteboard
Host Name
IP Address
MAC Address
Serial Number


L Encryption
(page 79)
Encryption Protocol
Standard encryption,
Proprietary encryption, Off
Encryption Mode
Connection given priority,
Encryption given priority
Encryption Password


M SIP Setup
(page 80)
Page: 1/7
SIP Server Mode
On, Off
Transport Protocol
TCP, UDP
Port Number
SIP Domain
Page: 2/7
Registered User Name 1-3
Password 1-3
Page: 3/7
Registered User Name 4, 5
Password 4, 5
Page: 4/7
Primary
Proxy Server Address
Proxy Port
Registrar Server Address
Registrar Port
Page: 5/7
Secondary
Proxy Server Address
Proxy Port
Registrar Server Address
Registrar Port
Page: 6/7
Trinity
Proxy Server Address
Proxy Port
Registrar Server Address
Registrar Port
Page: 7/7
Fourth
Proxy Server Address
Proxy Port
Registrar Server Address
Registrar Port


N Shared Phone Book Setup
(page 81)
SPB Mode
On, Off
SPB Server Address
SPB Auto Registration
On, Off
SPB Server Password

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